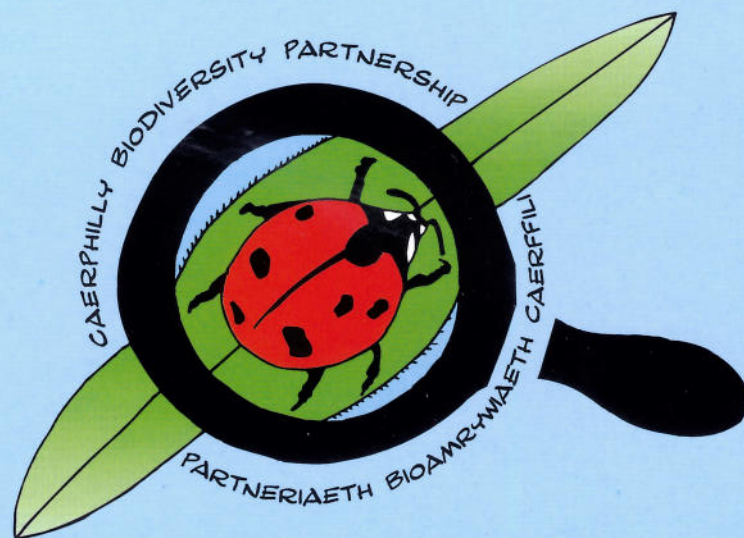




Action Plan

for Caerphilly County Borough

Species Action Plans



Biodiversity is all living things from the brightly coloured ladybird to the ancient oak tree

AMPHIBIANS SPECIES ACTION PLAN

1. INTRODUCTION

It is probable that all amphibian species have suffered large declines in population, although this is inevitably based on anecdotal evidence rather than scientific observations. For a child on a nature walk, the discovery of one of our amphibian species is often seen as something exotic and exciting. The importance of this in nurturing a wider respect for animals outside the 'mammalian norm' should not be overlooked.

The four amphibian species covered by this action plan are:

- **Common Frog** *Rana temporaria*
- **Common Toad** *Bufo bufo*
- **Palmate Newt** *Triturus helveticus*
- **Smooth Newt** *Triturus vulgaris*



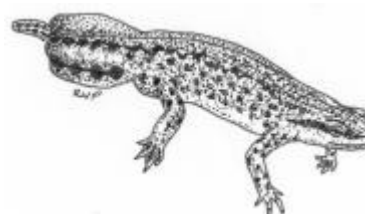
common frog © CCBC 2002

These four species require similar actions to safeguard and enhance present populations, and all are UKBAP Species of Conservation Concern³⁹. Of the remaining British amphibia, the natterjack toad *Bufo calamita* is not present in Caerphilly county borough, and as a UK BAP priority species, the great crested newt *Triturus cristatus*, is covered in a separate Species Action Plan.

Relevant Legislation/Species Status	Species			
	frog	toad	palmate newt	smooth newt
priority species (P) or species of conservation concern (S)	S	S	S	S
EC Habitats and Spp. Directive	Va	-	-	-
Berne Convention 1982	-	-	-	-
Bonn Convention 1979	-	-	-	-
CITES 1975	-	-	-	-
WCA 1981	S5	S5	S5	S5



common toad © CCBC 2002



palmate newt © CCBC 2002



smooth newt © CCBC 2002

2. CURRENT STATUS

2.1 UK and Wales

All four species require relatively unpolluted fresh water in which to spawn. The common frog and common toad are mainly terrestrial outside the spring breeding season, and require areas of rough pasture or scrub in which they find their diet of invertebrates.

Both newt species are largely aquatic throughout the year. Amphibians are pioneer species and are often among the first species to colonise new areas of standing water. They are an important link in the freshwater food web, notably as a primary food source for the grass snake *Natrix natrix*, and large waders such as the grey heron *Ardea cinerea*, as well as their larvae providing prey for the larger carnivorous invertebrates.

All four species are widespread in the UK. Within Wales there is some geographical variation, with the common toad and palmate newt most common in the west and the smooth newt more numerous in the east. The common frog is widespread over all but the highest parts of Wales.

2.2 Caerphilly County Borough

All four species are widespread within the county borough. Based on casual observations, however, it is probable that populations are becoming more fragmented and localised. In particular, the common toad seems to have suffered a significant decline.

A list of SINC sites in the county borough⁸, which could have populations of the various amphibian species, is given below (see **Map 1.1**):

3: **Tair Carreg Moor**; 6: **Mile End Pond**; 9: **Cefn Gelligaer**; 25: **Hafodrisclawdd**; 43: **Pentwyn Fields**; 44: **Princetown Meadows**; 52: **Cefn Hengoed Hillside**; 61: **Valentec Nature Reserve** (breeding common frog on this site); 74: **Nelson Ponds** (all 3 newt species known on this site); 87: **Upper Trelyn Marsh**; 101: **Pant-Ysgawen Fields**; 115: **Pwllgwinau** (all 3 species of newt present); 126: **Maesycwmmwr Meadows**; 131: **Twyn Yr Oerfel**; 140: **Coedcae Newydd**; 151: **Twmbarlwm**; 162: **Coed y Brain**; 183: **Coed Cefn-Pwll-Du** (breeding amphibians); 188: **Ty-Melyn Coppice** (breeding amphibians)

2.3 Links with Habitats

As already stated, these species all depend to some degree on the areas surrounding ponds. The habitat statement for wetlands should take account of any management proposals which may affect amphibians. The habitat statements for grassland and wet woodland will also be applicable in certain locations.

- **Wetlands** (ponds, etc)
- *Deciduous Woodlands* (wet woodland)
- *Wildlife Corridors* (hedgerows)
- *Species-rich Grasslands* (rhos pasture)
- *Common Land*
- *Post-Industrial Land*
- *Urban Habitats* (domestic gardens, unused industrial sites, public parks)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Farming practices causing loss or fragmentation of fresh water habitats due to infill or drainage.
- Pollution, particularly of watercourses.
- Road construction across migration routes between breeding ponds and terrestrial habitats causing high seasonal mortality rates.
- Urban development of habitats.

- Introduction to/colonisation of ponds by predators such as ducks and fish.
- Past practices of collecting specimens for educational purposes.
- Possible localised predation by domestic cats.

4. CURRENT ACTION

- 4.1 In the CCBC Countryside Strategy, wetlands are recognised as particularly important and the creation of new habitat is to be encouraged⁷. This policy will obviously benefit amphibian populations within the borough, although at present no specific management has been carried out.
- 4.2 Several ponds have been designated as SINCs in the county borough⁸.
- 4.3 New ponds and wetlands have been created at Penallta Country Park and Bargoed Country Park.
- 4.4 Hengoed Primary School and Nelson Infants school have created new ponds in their school grounds.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to these species.

5.2 Caerphilly Objectives and Targets

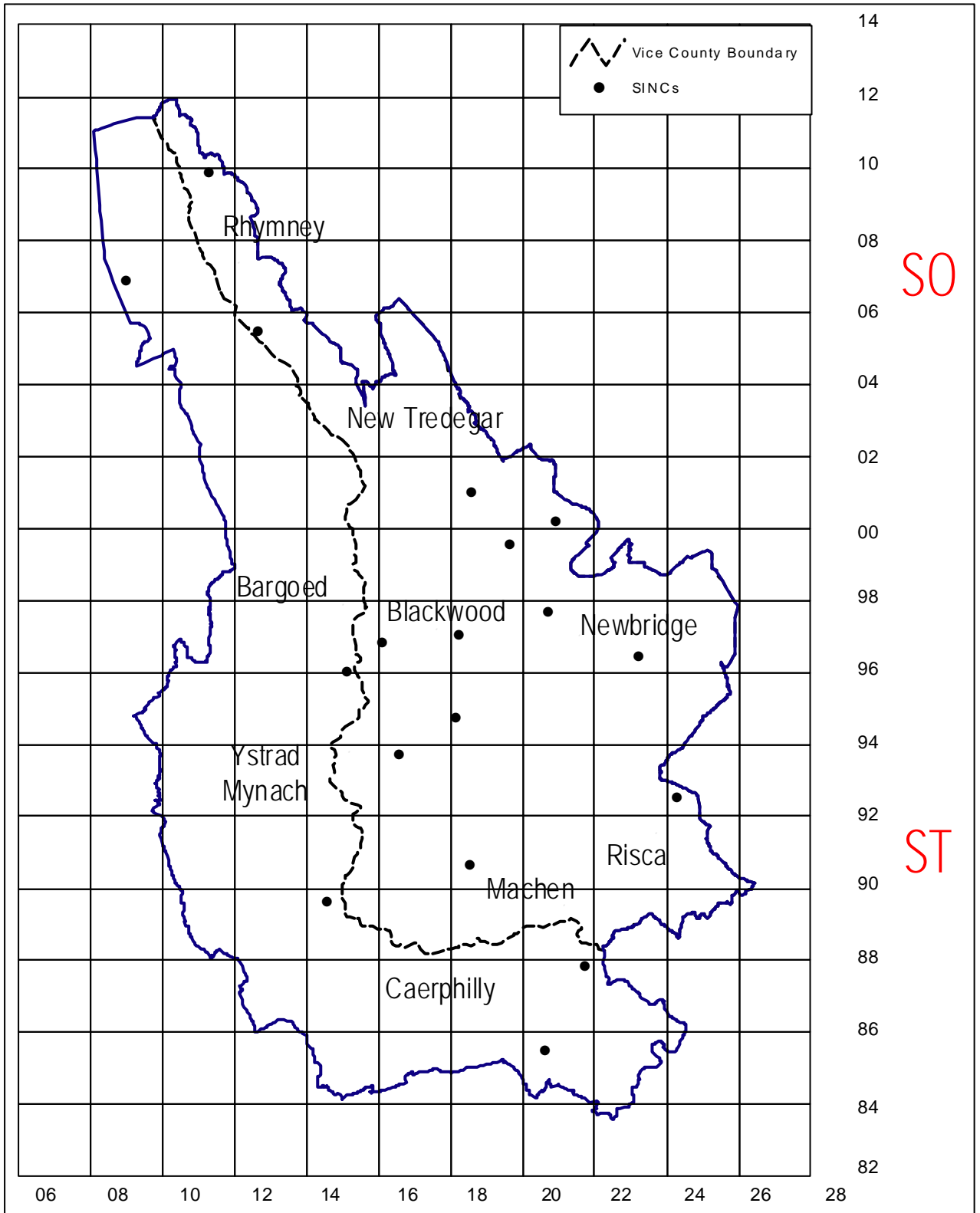
- 5.2.1 Halt probable decline of these species. (Target: 2005)
- 5.2.2 Increase both the quality and number of suitable wetland habitats. (Target: 2008)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure Policies and Strategies do not adversely affect existing breeding populations.	CCBC	CCW NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Ensure freshwater habitats receive full consideration when reviewing agri-environment schemes.	CCW	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Be aware of the importance of pond sites when considering planning applications.	CCBC	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Prevent the loss or degradation of existing breeding sites.	CCBC	GWT GLWT	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.3 Species Management and Protection											
6.3.1 Consider the construction of amphibian underpasses, where possible, particularly on roads with a high mortality rate.	CCBC	CCW	✓								✓
6.3.2 Erect temporary signs on roads known to be subject to amphibian mortalities and encourage local groups to transport amphibians safely to their ponds at critical migration times.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Raise the awareness of landowners and managers in relation to the importance of healthy pond habitats and, in particular, the problem of pollution of watercourses.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Encourage the monitoring of known sites in order to determine the rate of decline, if any, of these species. In particular, try to ascertain the present breeding status of the common toad.	CCBC	GWT GLWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.2 Set up a county borough database for amphibians.	CCBC	-		✓							
6.5.3 Target schools throughout the county borough to encourage young people to report amphibian breeding sites by setting up, for example, a 'Frog Watch' project.	CCBC	GWT GLWT			✓	✓					
6.6 Communications and Publicity											
6.6.1 Organise events and publicity to highlight the importance of amphibians in the ecosystem, and their dependence on clean ponds.	CBP	-	✓		✓		✓		✓		✓

MAP 1.1 - AMPHIBIANS



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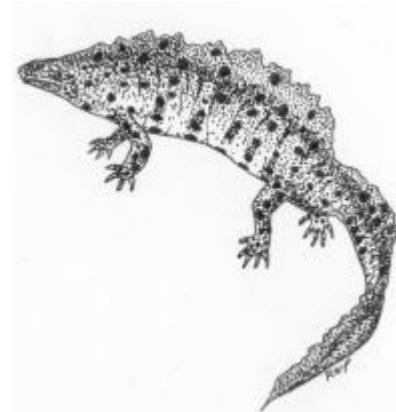
Atgynhychwyd o fapiad yr Arolwg Ordnans gyda chaniatad rheolwr Llyfrfa ei Mawrhydi hawlfraint y Goron. Mae atgynhychu heb awdurdod yn torri hawlfraint y Goron. Gall hyn arwain at erlyniad neu achos sfiil. Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

GREAT CRESTED NEWT *TRITURUS CRISTATUS* SPECIES ACTION PLAN

1. INTRODUCTION

The great crested newt is a species of national conservation concern, and is a Priority Species in the UKBAP³⁹. Its presence within Caerphilly county borough therefore makes it a species of particular local concern.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Habitats and Species Directive	Annex I Ia, IVa
Conservation Regulations 1994	Schedule 2
Berne Convention 1982	Appendix II
Bonn Convention 1979	-
CI TES 1975	-
WCA 1981	Schedules 5, 9
IUCN Red List of Threatened Animals 1994	lower risk - conservation dependent



great-crested newt © CCBC 2002

2. CURRENT STATUS

2.1 UK and Wales

The great crested newt is found throughout the UK, although it is restricted in Scotland, possibly by topography. Within Wales it is found in greatest numbers in the north, and is apparently absent from the west. The species is limited to lowland habitats due to its requirement of slow or still water, rather than the altitude. Although widely distributed, populations have declined during the past few decades throughout Europe, including Britain. Habitat loss has been the major factor in this, with many farm ponds being drained or 'choked' with vegetation. Old flooded quarry sites are often re-developed leading to local extinctions, while water pollution, particularly from certain agricultural chemicals, has also had an impact. Losses have been compensated in some instances through the colonisation of newly created pools and other water bodies.

Terrestrial habitat is critical to great crested newts. They require cover and invertebrate prey, usually provided by rough grassland and/or other semi-natural areas. Refuges such as logs, loose rock or dry stone walls provide both resting and hibernation sites. Great crested newts require substantial amounts of land to support a viable population, one hectare of good habitat supporting 250 adults. There is some evidence that areas once used for human activities ("brownfield" sites) are particularly attractive to great crested newts³.

The great crested newt is the most terrestrial of the UK newt species, only returning to ponds between March and July to breed. The rest of the year is spent in neighbouring habitats such as hedges and rough grassland. The adults are dark brown or black with an orange belly, and with their warty skin are easily distinguished from other newt species. During the breeding season the male develops conspicuous jagged crests on the back and tail, and at up to 17cm long, is the largest European newt.

The UK government has an obligation to notify Special Areas of Conservation (SAC) to protect sites of particular importance for this species.

2.2 Caerphilly County Borough

The habitat losses adversely affecting other amphibia are also likely to contribute to the decline of this species. However, there is a lack of confirmed data concerning the occurrence of the great crested newt in the county borough. There seems to be an increase in the number of sightings in recent years, although this is anecdotal and may reflect the increased profile this amphibian has received. It is sometimes the case that sightings mis-identified smooth newts in breeding condition, but conversely the terrestrial adults have, on occasions, been mistaken for lizards.

The possible affinity of this species to derelict urban land could be of significance in the post-industrial areas of the borough. At present there are two SIN C sites within the county borough where great crested newts are present⁸ (see **Map 1.2**): 115 **Pwll-Gwinau**, East of Newbridge and 74 **Nelson Pond**, Tredomen (all three newt species). Other sites include Halt Pond near Rudry and a disused quarry near Wyllie, Pontllanfraith, which have confirmed populations of the great-crested newt; two sites yet to be confirmed are Harry's Hill (south end), Aberbargoed (cSAC, SSSI and SIN C), and a garden pond at 119 Victoria Road, Fleur-de-Lys.

2.3 Links with Habitats

- **Wetlands**
- *Deciduous Woodlands* (wet woodland)
- **Wildlife Corridors** (hedgerows, dry stone walls)
- **Species-rich Grasslands**
- *Post-Industrial Land*
- **Urban Habitats** (unused industrial sites)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of breeding ponds due to infilling or drainage.
- Pollution of watercourses.
- Urban and agricultural developments leading to loss or fragmentation of terrestrial habitat.
- Introduction of/colonisation by predators, such as ducks and fish.
- Possible locally high rates of predation by domestic cats.

4. CURRENT ACTION

- 4.1 The UK SAP for this species was published in 1998. As part of Froglife's Common Species Project, the project officer assists with the development of local interested groups, as well as supporting survey and conservation work.
- 4.2 Within the county borough, a number of great crested newt sites are already designated as SIN Cs.

4.3 The profile of this important species has been raised in recent years.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

5.1.1 Where feasible, restore populations to 100 unoccupied sites each year, for the next five years, creating new ponds and managing habitat where necessary.

5.1.2 Maintain the range, distribution and viability of existing great crested newt populations.

5.2 Caerphilly Objectives and Targets

5.2.1 Maintain the range, distribution and viability of known great crested newt populations (Target: ongoing).

5.2.2 Survey and map as many suitable habitats as possible to ascertain the presence of this species (Target: 2005).

5.2.3 Make use of any opportunities to increase the number of great crested newt colonies within the borough e.g. school grounds developments, pond renovation projects, etc. (Target: ongoing).

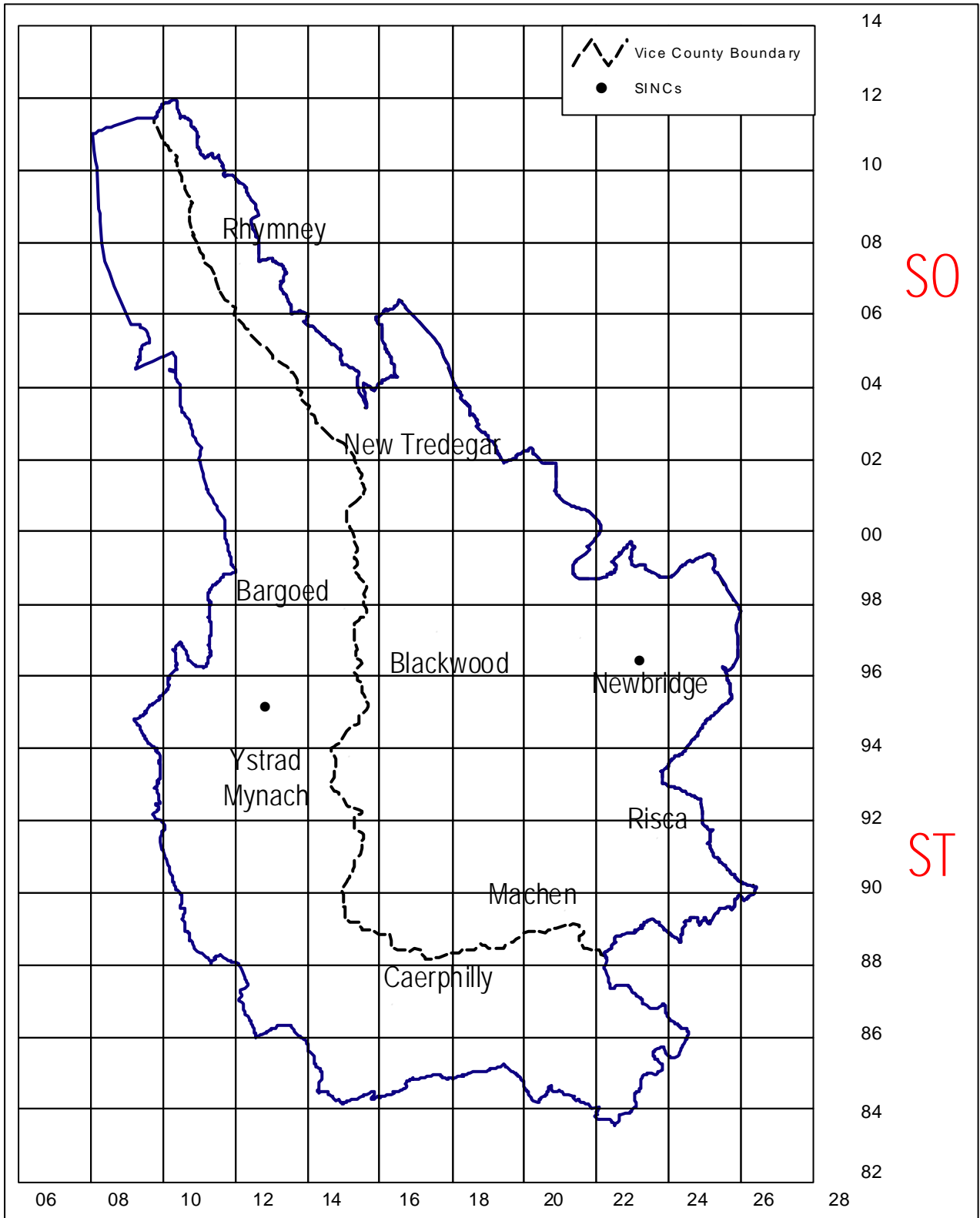
5.2.4 Raise the profile of this nationally important species among the general public and landowners, managers and planners, through talks, activities, events, etc. (Target: programme in place by 2005 and then ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 All ponds known to contain great crested newts should be recorded to allow adequate assessment of environmental impact of any new developments.	CCW	CCBC EA NMGW		✓							
6.1.2 Seek to designate key great crested newt sites as SINCC, ensuring all surrounding areas used for forage and shelter are included, with possible upgrade to SSSI status as suggested in the UK BAP.	CCBC	CCW									✓
6.1.3 Ensure agri-environment schemes such as Tir Gofal, include provisions for this species.	CCW	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.4 Promote training and licensing of those involved in practical management of associated habitats/sites	CCW	CCBC		✓		✓		✓		✓	
6.2 Site Safeguard and Management											
6.2.1 Promote favourable management on all sites.	CCW	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management (continued)											
6.2.2 Create new habitats where feasible, prioritising sites near or adjacent to existing populations.	CCBC	Gwk		✓				✓			
6.2.3 Where habitat loss is unavoidable ensure sufficient and adequate replacement habitat is provided.	CCBC	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Promote population enhancement through active management and encourage natural dispersal of the species. Control or remove predators from key sites where feasible and relocate specimens where unavoidable habitat loss occurs.	CCW	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Ensure that any development in the vicinity of suitable areas of fresh water take into account the possible presence of this species, and other relevant action plans are considered.	CCW	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Provide information to all concerned parties regarding the identification, legal obligations, habitat requirements and management of the species.	CCW	CCBC GWT GLWT		✓							
6.5 Future Research and Monitoring											
6.5.1 Organise and encourage further survey work to identify, and map, breeding sites within the county borough.	CCW	CCBC GWT GLWT	✓		✓						
6.5.2 Pass data gathered to the national bodies to be incorporated into a national database for this species.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Liaise with local conservation groups such as wildlife trust watch groups, etc. to improve information gathering.	CBP		✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Promote a wider and more sympathetic understanding of amphibian conservation through appropriate publicity and media opportunities.	CBP		✓	✓	✓	✓	✓	✓	✓	✓	✓

MAP 1.2 - GREAT CRESTED NEWT



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BARN OWL *TYTO ALBA* SPECIES ACTION PLAN

1. INTRODUCTION

The barn owl is not afforded priority status in the UKBAP, but it is a species of national and international conservation concern and is considered important locally. The presence of barn owls is a good indicator of the health of biodiversity in lowland areas; the range of habitats required for owls are vital for a wide variety of other wildlife.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	-
Berne Convention 1982	App. II
Bonn Convention 1979	-
CITES 1975	Annex A
WCA 1981	Part I Section 1; Sch. 1, 3, 9
Birds of Conservation Concern List ³⁰	Amber



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2. CURRENT STATUS

2.1 UK and Wales

The barn owl is traditionally associated with small-scale mixed farming, with nest sites in hay barns or mature hedgerow trees. It is a nocturnal predator, hunting over rough grassland, woodland edges and hedgerows.

In Wales, barn owls favour damp vole-rich grasslands and unimproved meadows, but are still found in a wide variety of farmland habitats. During the 19th century much of Wales comprised ideal habitat for this species, but the clearance of 35–50% of woodland since 1933, and the loss of around 25% of Welsh hedgerow between 1984 and 1990, has had an adverse effect on the population. The species has experienced an estimated 20–50% decline in its population over the last 20 years. The last nationwide survey (1968–1972) estimated a UK population of 4500–9000 pairs and with around 462 pairs in Wales in 1985 (reduced from 1436 pairs in 1932)³³. This decline has slowed since the 1990s, and populations are now relatively steady.

2.2 Caerphilly County Borough

The barn owl nests and breeds in tree cavities, old/derelict farm buildings and barns, pit shafts and quarry faces. It feeds mainly on small mammals such as voles, shrews and mice. They hunt mainly at night over areas of rough grassland, field margins, hedgerows, derelict land, parkland, roadside verges, water courses, woodland edge habitats and newly planted woodlands. Breeding barn owls have been recorded at scattered locations throughout the county borough, but further survey work is required to confirm the status of this species in the area.

2.3 Links with Habitats

- **Deciduous Woodlands** (woodland edge habitats)
- **Wildlife Corridors** (open fields and hedgerows)
- **Common Land**

- *Post-Industrial Land*
- **Urban Habitats** (derelict industrial areas)
- Rough grassland

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of hunting habitats through agricultural intensification, e.g. pasture management, development and afforestation, and the subsequent decline in prey species populations have had their impact on the barn owl population.
- Lack of long grass in field margins as shelter for small mammals has led to increased hunting on roadside verges, leading to an increase in road deaths.
- A lack of mature trees, in hedgerows and open farmland, for nesting and roosting sites.
- Over-use of toxic pesticides and rodenticides which get passed up through the food chain and poison the barn owl.
- Effects of climate: hard winters have led to many owls dying through starvation. This is due to the reduction in food supply - small field mammal populations fluctuate seasonally with the changing climate, and in very cold winters food can become scarce, for example on snow covered farmland.
- Increased road development and urbanisation: there is often localised barn owl decline in areas of expanding towns.
- Demolition or conversion of old agricultural buildings and the design of modern buildings makes them unsuitable as nesting sites; e.g. with no suitable ledges or entrances.
- Disturbance to nesting and roosting sites (often unintentionally) by human activities.

4. CURRENT ACTION

- 4.1 It is illegal to release a barn owl into the wild without a licence. Incorrectly released birds are often unable to survive. Under official release schemes, however, where owls have been released under controlled conditions, barn owl survival is much greater, enhancing the wild population.
- 4.2 The Barn Owl Trust is a national organisation aiming to conserve the species and its environment. It also provides a free information and advice service.
- 4.3 CCBC Planning Division have placed conditions on some barn conversions to include barn owl surveys, and if present, barn owl mitigation, in the form of boxes and working restriction. In addition, planning applicants are encouraged to consider barn owl mitigation regardless of current useage.
- 4.4 Preservation of rough grassland sites (species-rich grasslands designated as SSSI or SINIC)⁸.
- 4.5 Provision of nest boxes in some areas, for example a joint scheme between the Environment Agency and The Hawk and Owl Trust.

- 4.6 The discouragement of unnecessary grass cutting and rodenticide use.
- 4.7 Environmental and biodiversity education at schools and colleges.
- 4.8 Welsh Owl and Wildlife Sanctuary (WOWLS) Barn Owl Project - monitoring nest sites, ringing and marking of nestlings.
- 4.9 The Gwent Ornithological Society and Glamorgan Bird Club bird reports^{17, 18, 19}, and the BTO Breeding Bird Survey⁶ all contribute to the annual monitoring and recording of barn owl populations.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Determine the current status and distribution in Caerphilly county borough by 2004 and formulate a target for expansion. (Target: 2005)
- 5.2.2 Maintain current distribution and population by conserving existing foraging, nesting and breeding habitats. (Target: ongoing)
- 5.2.3 Increase numbers of breeding barn owls, by providing new foraging habitat and nesting sites. (Target: 2010 and ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure barn owls are protected and promoted through appropriate regional and local planning policies. Condition barn owl surveys and mitigation for all planning applications on barns and other agricultural buildings.	CCBC	NAWAD FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Ensure the needs of the barn owl are taken into account in local and national incentive schemes.	NAWAD	CCBC FUW NFU	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Promote the legal protection afforded to barn owls among landowners and managers, contractors and planning officers.	RSPB	CCBC GWT GLWT FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Maintain the current extent and quality of foraging habitats through appropriate management.	CCBC	GWT GLWT	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management (continued)											
6.2.2 Seek to restore/re-create suitable feeding habitats/linear features, to provide a network of foraging/breeding sites, and encourage the installation of nest boxes where appropriate.	CCBC	CCW			✓						✓
6.2.3 Encourage the use of nest boxes both in new buildings and in the renovation of existing structures.	CCBC	CCW RSPB GWT GLWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.4 Seek to include the needs of barn owls in the management of wildlife sites (SINCs).	CCBC	GWT GLWT RSPB			✓					✓	✓
6.2.5 Ensure the reclamation of former colliery sites incorporates barn owl requirements, for example using nest boxes and raptor perches in suitable locations where appropriate.	WDA	CCBC FC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Seek to create new nesting sites by providing nest boxes and safeguarding mature trees in suitable areas.	CCBC	BTO GOS GBC RSPB EA	✓			✓				✓	
6.3.2 Investigate the provisioning of nest boxes in council-owned buildings in the county borough.	CCBC		✓				✓				
6.3.3 Seek to encourage barn owl nest box sponsorship in the county borough.	CBP	RSPB	✓								
6.3.4 Seek to set up 'Barn Owl Projects' in communities or in the county borough as a whole	CBP	community groups		✓				✓			
6.3.5 Educate land managers of the need to reduce the use of rodenticides and pesticides through carefully targeted use, or alternative methods of pest control.	NAWAD	FUW NFU CCBC CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.6 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Ensure the provision of advice to relevant organisations and land-managers on the conservation of barn owls and sympathetic management of habitats.	CBP	ADAS RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4.2 Disseminate information regarding ringing of owlets and the monitoring of nest sites to interested organisations and relevant individuals.	WOWLS	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Undertake a county wide survey to determine the current status of the barn owl.	GBC GOS	BTO RSPB	✘								

✘ Survey year to be determined.

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.5 Future Research and Monitoring (continued)											
6.5.2 Establish a monitoring procedure to compare the achievements of habitat and species targets, and revise the SAP as necessary.	CBP	-			✓						
6.5.3 Encourage recording of all known breeding sites and monitor on a regular basis.	WOWLS	BTO GOS GBC CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Encourage membership of wildlife trusts and local ornithological societies.	CBP	GBC GOS GWT GLWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Provide schools and colleges in the county borough with information in order to educate children, parents and teachers about the conservation status of owls in the local area.	CBP	GGBAG GLBAG	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.3 Raise awareness of the plight of the barn owl, and use it to promote the value of hedgerow trees, field margins, hay meadows (neutral grasslands) and other habitats to the general public. Discourage the use of insecticides and rodenticides.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.4 Aim to maximise public involvement in surveys and nest box schemes whenever appropriate.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.5 Promote the exchange of information between relevant organisations, particularly the results of monitoring and ringing studies.	CBP	GBC GOS WOWLS BTO	✓	✓	✓	✓	✓	✓	✓	✓	✓

BULLFINCH *PYRRHULA PYRRHULA* SPECIES ACTION PLAN

1. INTRODUCTION

The bullfinch is a UK priority species and a UK SAP³⁹ has been written.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1; Sch. 3
Birds of Conservation Concern List ³⁰	Red



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2. CURRENT STATUS

2.1 UK and Wales

The bullfinch is a fairly common and widespread species found in woodlands, orchards, and on farmland, where it is associated with dense shrubs, scrub and untrimmed hedges.

Bullfinches feed on a variety of berries, seeds and buds of bushes and trees. However, it has decreased at an alarming rate over the last 15 years with a decline of approximately 50%. The Common Bird Census indicates there has been a 75% decline on farmland and a 47% decline in woodland between 1968 and 1991. This translates to a decrease in estimated population from 300 - 350,000 pairs in 1984 to 190,000 by 1988-91³⁷.

2.2 Caerphilly County Borough

There is no accurate data giving the current population trends of the bullfinch in the county borough, but it is still a locally common species. **Map 2.1** shows the known distribution of breeding sites in the area.

2.3 Links with Habitat

The bullfinch is a species thriving in mature hedgerows, areas of mixed scrub and wet woodlands, and often gardens.

- *Wetlands*
- **Deciduous Woodlands** (wet woodland)
- **Wildlife Corridors** (hedgerows)
- *Urban Habitats* (domestic gardens)
- Scrub

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of traditional hedgerow management and hedgerow removal.

- Loss of urban fringe and open countryside due to increasing urbanisation.

4. CURRENT ACTION

- 4.1 CCBC criteria for SIN C status include scrub, woodlands and wetlands.
- 4.2 The Hedgerow Regulations 1997 protect ancient and species-rich hedgerows.
- 4.3 The planting of native hedgerows and trees is frequently a planning requisite for new developments thus creating suitable new habitats for the species.
- 4.4 BTO national surveys⁶ are ongoing and local ornithological societies produce annual reports based on the old counties of Glamorgan (VC41) and Monmouthshire (Gwent; VC35)^{17, 18, 19}.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 In the short term, halt or reverse the decline in the numbers of bullfinches by the year 2003 so that the Breeding Bird Survey index is at least at 1996 levels.
- 5.1.2 In the long term, see a sustained recovery in numbers, so that the BBS index is at least 50% higher than 1996 levels by 2008.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain the bullfinch as a viable breeding species locally. (Target: ongoing)
- 5.2.2 Protect suitable existing habitat from adverse land management. (Target: ongoing)

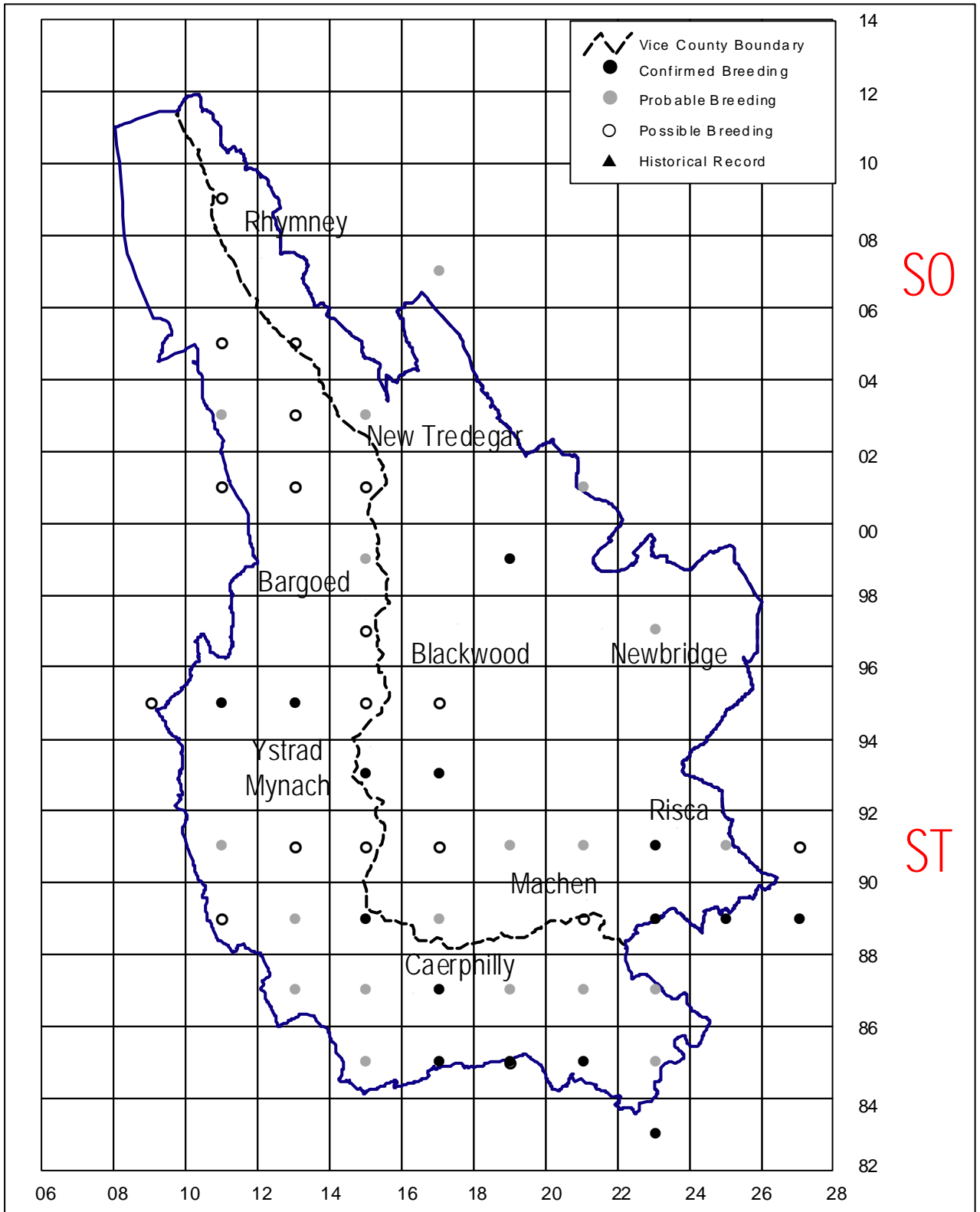
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
No action proposed.											
6.2 Site Safeguard and Management											
6.2.1 Manage land owned by CCBC in a way that is suitable for the habitat requirements of the species.	CCBC	Gwk	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Promote landscaping schemes for industrial and housing developments that provide suitable nesting habitats and native species as a source of food.	CCBC	Gwk	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.4 Advisory											
6.4.1 Promote the sensitive management of hedgerows by farmers and other land managers.	NAWAD	CCBC NFU FUW Gwk	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Regularly survey and monitor bullfinch populations in Caerphilly county borough.	GBC GOS	CCBC CCW BTO	✕	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Include images and information about the species in leaflets, posters etc. for the general public, to be made available in Country Parks and other CCBC facilities.	CBP	CCBC	✓	✓							

✕ Survey year to be determined.

MAP 2.1 - BULLFINCH



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BUZZARD *BUTEO BUTEO* SPECIES ACTION PLAN

1. INTRODUCTION

The buzzard does not have priority status in the UKBAP, but it is a UK species of conservation concern and is an easily recognised and distinctive species throughout the country. The buzzard is considered to be highly important for the promotion of biodiversity in locally.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	-
Berne Convention 1982	-
Bonn Convention 1979	App. II
CITES 1975	Annex A
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	-
Other Species Status	RDB Birds: candidate



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2. CURRENT STATUS

2.1 UK and Wales

Buzzards bred almost throughout the whole of the UK in 1800, but by 1875 they were eliminated from all but parts of western Britain.

It recovered through the early 1900s, but in 1955 populations collapsed as a result of the devastation of rabbit populations by myxomatosis. Recovery since the 1960s has been slow, and in some areas the rate of expansion has been affected by illegal persecution. By 1983 there were at least 12,000 pairs of buzzards. In the last decade the rate of spread seems to have increased with buzzards re-colonising eastern and southern Britain²⁹. In Wales it is estimated that there are between 3500 to 4500 pairs²⁹. It currently occupies around 70% of the potential breeding range in the UK²⁶.

2.2 Caerphilly County Borough

The buzzard is of local significance. It is the most widespread large bird of prey in south Wales and is commonly seen circling on broad wings across the whole of the area. It nests in tall, mature trees and hunts for food over open woodland, and other open areas, eating rabbits, birds and many types of carrion¹². It is also often seen hopping along the ground, eating worms. In Caerphilly county borough it will nest in almost any suitable mature tree in open areas, and is fairly widespread throughout, often hunting and scavenging over hillsides and along roadside verges. **Map 2.2** shows the distribution of known and possible breeding areas across the county borough. The following SINC sites have records of buzzards⁸: 45 **Cwm Afon Railway Line** and 55 **Nelson Bog** (SSSI).

2.3 Links with Habitats

- **Deciduous Woodlands** (woodland clearings, adjacent to open fields)
- **Wildlife Corridors** (mature trees, hedgerow trees and roadside verges)

- **Species-rich Grasslands**
- *Common Land*
- *Heathland*
- *Post-Industrial Land* (refuse tips)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Localised persecution may occur in some areas, especially game conservation areas where gamekeepers have been known to trap and shoot buzzards. Buzzards are the most frequent victims in the UK as a whole, accounting for 40% of all incidents between 1990 and 1998²⁹.
- Myxomatosis and other diseases, associated with prey species, have a serious effect on buzzard populations. The abundance of the various prey species is a significant factor, which can also be affected by pollution, pesticides and rodenticides, affecting the bird of prey at the end of the food chain.
- Availability of places to roost, nest and forage ultimately determines the buzzard population size. Urbanisation will continue to intrude into open countryside and may reduce the number of nesting trees and hunting habitats.

4. CURRENT ACTION

- 4.1 Many woodland sites suitable for breeding buzzards are designated as SINC⁸.
- 4.2 The RSPB are campaigning to change policies that encourage habitat degradation through agricultural practices.
- 4.3 The RSPB Investigations Unit supports investigation of crimes such as killings, by providing specialist advice and training to the police²⁹.
- 4.4 The RSPB also maintains a database of crimes against birds.
- 4.5 The UK Government Campaign Against the Illegal Poisoning of Wildlife is supported by the RSPB and other conservation and countryside organisations, they are also involved in educating farmers about the need to use chemicals properly and investigating wildlife poisoning incidents (Poisons Hotline = 0800 321 600 if you find a dead bird or other animal in suspicious circumstances)²⁹.
- 4.6 The Gwent Ornithological Society and Glamorgan Bird Club bird reports^{17, 18, 19}, and the BTO Breeding Bird Survey⁶ all contribute to the annual monitoring and recording of buzzard populations.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

5.2.1 Determine the current status and distribution in Caerphilly county borough (Target: 2004).

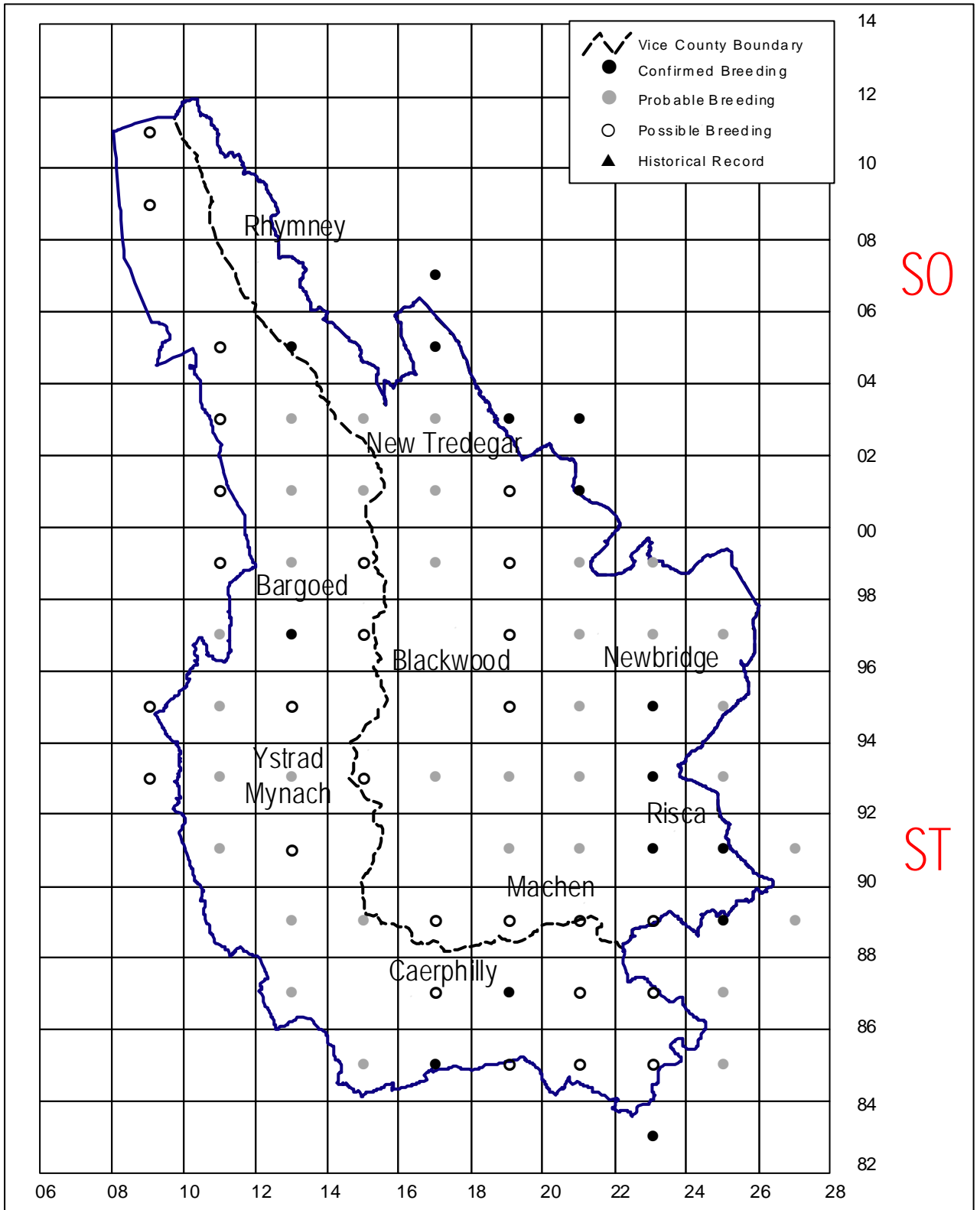
5.2.2 Maintain existing breeding pairs throughout the county borough (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Promote the protection given to buzzards among landowners/managers, contractors and planning officers.	CCBC	RSPB GWT GLWT FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Maintain the current extent and quality of mature trees, hedgerows and open grasslands through appropriate management.	CCBC	GWT, GLWT landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Identify the number of nest sites within protected sites, such as SINCs, SSSIs.	CCBC	GOS GBC Coed Cymru FC landowners	✓								✓
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Ensure the provision of advice to relevant organisations and land managers on the conservation of buzzards and sympathetic management of trees and open habitats.	NAWAD	CCBC ADAS RSPB FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Encourage recording of all known breeding sites, and monitor regularly.	GBC GOS	BTO RSPB CCBC	✓		✓		✓		✓		✓
6.5.2 Carry out a survey to determine the current status of the buzzard in Caerphilly county borough.	GBC GOS	RSPB	✕								
6.6 Communications and Publicity											
6.6.1 Encourage membership of wildlife trusts and local ornithological societies.	CBP	GWT GLWT GBC GOS	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Provide schools, colleges and youth clubs with information in order to educate children, parents and teachers about the conservation status of buzzards in their local area.	CBP	Youth forum Schools	✓			✓					✓
6.6.3 Raise awareness of buzzards, and use them to promote the value of trees and other habitats to the general public.	CBP	RSPB	✓			✓					✓
6.6.4 Aim to maximise public involvement in surveys whenever appropriate.	CBP	GBC GOS		✓				✓			

✕ Survey year to be determined.

MAP 2.2 – BUZZARD



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CURLEW *NUMENIUS ARQUATA* SPECIES ACTION PLAN

1. INTRODUCTION

The curlew has been selected for local action due to the importance of the breeding populations found in Caerphilly county borough.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	Annex I I / 2
Berne Convention 1982	App. I I
Bonn Convention 1979	App. I
CITES 1975	Annex A
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	Amber
Other Species Status	RDB Birds: RDB1a / RDB1b



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2. CURRENT STATUS

2.1 UK and Wales

The curlew is a bird of open moorland, farmland and coasts. It breeds mainly in upland areas in Britain, up to 550 metres and occasionally as high as 760 metres above sea level. Outside the breeding season, the species move to coastal areas. Curlew feed on earthworms and other invertebrates, which they find by probing the ground with their long, curved bills and by picking from the surface. Breeding pairs require damp grassland or tilled land with soft earth for feeding, but also some taller vegetation such as heather, tussocks of grass or rushes for nesting. They are therefore associated with mixed farmland, where suitable feeding, nesting and chick-rearing habitat can be found in close proximity. Birds start returning to their nest sites from February when their bubbling display calls are a feature of many parts of the area. The species generally prefers extensive unimproved habitats to improved pastures for rearing young. They become secretive during incubation but conspicuous again when luring potential predators away from their chicks.

The curlew has declined in most European countries mainly due to habitat changes linked to agricultural intensification. Long-term breeding trends are uncertain, but across the UK trends have shown a decline (Breeding Bird Survey 1994-1999). Between 1968-72 breeding birds were recorded in 1,714 ten-kilometre squares, compared with 1,354 squares in 1988-91. The most recent population estimates are 33,000-38,000 pairs in Britain²² which, when combined with Ireland's figure of 12,000 represents at least 35% of the European breeding population. The current Welsh breeding population is difficult to gauge with accuracy; 2,000 pairs are estimated². Rhos pasture and coedcae/ffridd land on the upland margins are an important habitat in Wales. The decline in mixed farming in Wales, particularly in the wetter western and upland areas, is probably a contributory factor in the decrease of numbers here.

2.2 Caerphilly County Borough

The Glamorgan bird surveys of the 1980s found the breeding stronghold of the curlew in Glamorgan was the area around Gelligaer Common, where almost 50% of the confirmed and probable breeding records occurred. The Caerphilly county borough breeding population continues eastwards from Gelligaer, with scattered pairs being found along Mynydd Bedwellte

and Cefn Manmoel ridges. The most southerly breeding pairs are found in the Mynyddislwyn area. The total breeding population in the county borough is probably about 30-50 pairs, based on the assumption that occupied tetrads hold only one or two pairs (see **Map 2.3**).

2.3 Links with Habitats

- **Species-rich Grasslands** (rhos pasture)
- *Commons*
- *Coedcae/ffridd*
- *Heathland* (upland heath)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss and fragmentation of breeding sites; agricultural improvement of grasslands with the switch from late hay to multiple silage cuts in the late 1970s to early 1980s brought about principally by re-seeding, increased fertiliser applications and drainage has led to the loss and fragmentation of breeding sites.
- Inappropriate management; over-grazing, or lack of management leading to scrub and bracken encroachment on moorland habitats.
- Recreational pressures on breeding grounds may be a factor in disturbing these birds.
- Nest predation is possibly a contributory factor affecting the species, mainly as loss of eggs to other birds, such as crows. Foxes, which are often at much higher population levels in some areas through the decline in game keeping, will also predate curlew nests.

4. CURRENT ACTION

- 4.1 Tir Gofal, run by CCW, aims to restore areas of heathland and wet grassland for the benefit of their associated wildlife.
- 4.2 Although the species is not monitored systematically, the Gwent Ornithological Society and Glamorgan Bird Club gather information from its members on the distribution of curlew and other birds, and both bodies publish annual bird reports^{17, 18, 19}.
- 4.3 BTO Breeding Bird Survey contributes to the monitoring of breeding curlew populations throughout the UK⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Gain a full understanding of the current population of the curlew in the county borough by carrying out a county wide survey on existing and historical breeding sites (Target: 2005).

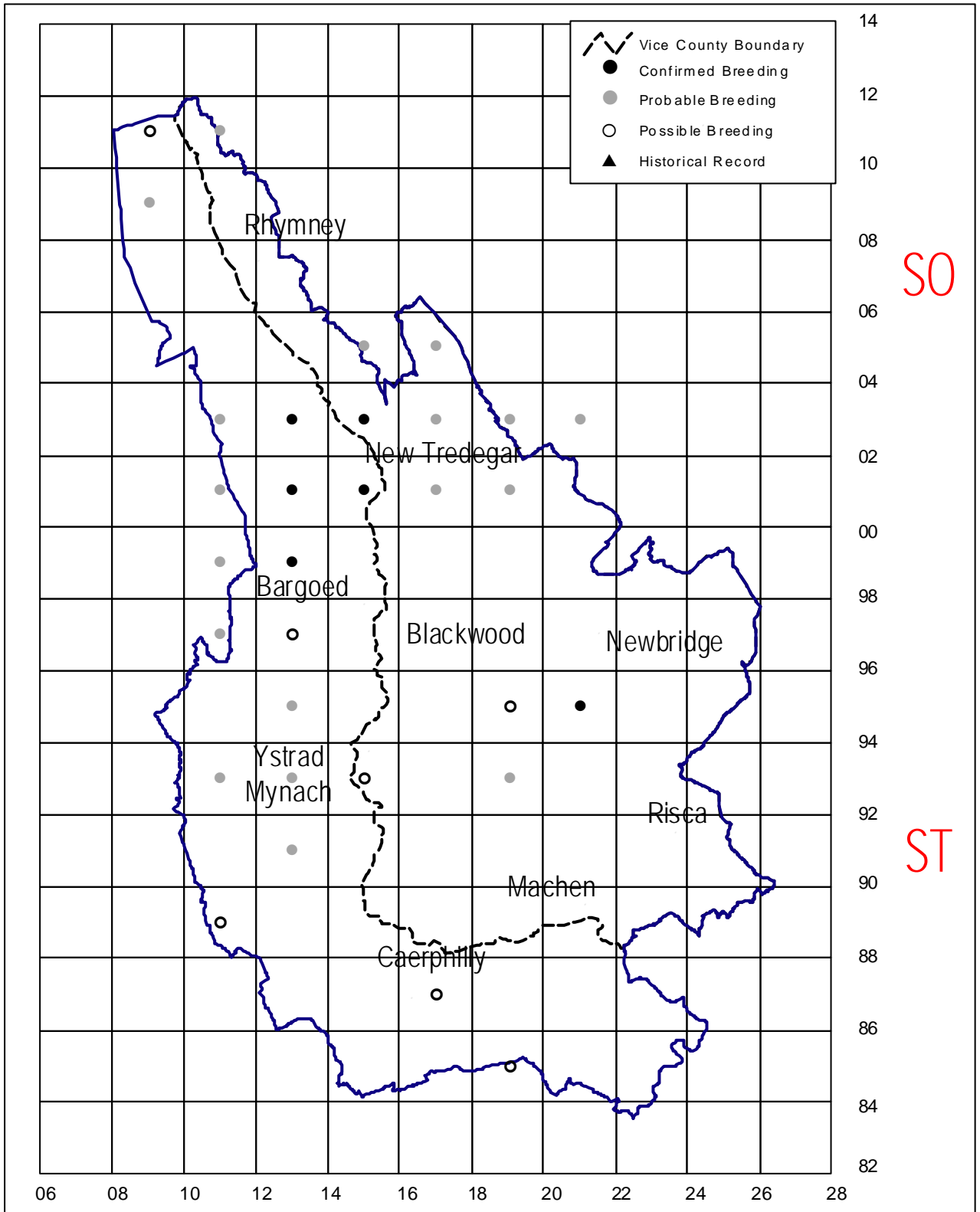
- 5.2.2 Ensure no further loss, degradation or fragmentation of breeding sites by identifying and bringing suitable habitat into appropriate management (Target: 2010 and ongoing).
- 5.2.3 Maintain the current distribution and abundance of the curlew (Target: ongoing).
- 5.2.4 Increase the number of breeding pairs by 20% from current levels (as identified in 5.2.1) (Target: 2010).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
No action proposed.	-	-									
6.2 Site Safeguard and Management											
6.2.1 Ensure the requirements of the curlew are taken into account when reviewing agri-environment schemes.	CCW	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Encourage suitable habitat restoration to link and extend existing sites where opportunities arise.	CCBC	CCW								✓	
6.2.3 Ensure development schemes do not compromise the integrity of breeding sites.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Ensure breeding sites are protected from disturbance and deterioration of habitat quality.	CCBC	CCW landowners								✓	
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Ensure planning officers are aware of the curlew's distribution and requirements within their area.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Undertake a breeding birds survey to identify present distribution.	GBC GOS	RSPB BTO	✘								
6.5.2 Collate all the known information on historical and present curlew breeding sites in Caerphilly county borough, to help target survey, monitoring and management work.	GBC GOS	CCBC RSPB			✓	✓					
6.6 Communications and Publicity											
6.6.1 Improve coordination and information sharing between all groups and individuals with knowledge of curlews and their distribution.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Publicise the decline in breeding numbers and encourage landowners and managers to manage habitats sympathetically.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

✘ Survey year to be determined.

MAP 2.3 – CURLEW



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GOSHAWK *ACCIPTER GENTILIS* SPECIES ACTION PLAN

1. INTRODUCTION

The goshawk is not afforded priority status in the UKBAP, but it is a UK Species of Conservation Concern and is significant locally.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	-
Berne Convention 1982	-
Bonn Convention 1979	App. II
CITES 1975	Annex A
WCA 1981	Part I Section 1; Sch. 1, 4
Birds of Conservation Concern List ³⁰	-
Other Species Status	RDB Birds: RDB2



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2. CURRENT STATUS

2.1 UK and Wales

The goshawk is a large and very successful woodland dwelling bird of prey. It is fairly common, but secretive in woodlands with a preference for coniferous forests with many clearings. The extensive plantings of the Forestry Commission and private individuals have provided suitable habitat for the goshawk as the trees have matured. It was once Britain's most successful bird of prey, but it was one of the first birds of prey to be persecuted and along with destruction of its habitat was driven to the edge of extinction in 1883. By the early 1950s there were no certain breeding pairs in the country, but now the goshawk population has dramatically increased with human intervention. Approximately, 450 pairs are estimated to be breeding in the UK, with 200 – 250 pairs in Wales (UK Raptor Group). However, only 15% of the potential UK breeding range is currently occupied²⁶.

2.2 Caerphilly County Borough

In the past the goshawk has been recorded in forestry plantations in the county borough. However, it appears to be in decline and further survey work of possible sites is required.

2.3 Links with Habitats

- Woodlands (mainly coniferous) with many clearings
- ***Planted Coniferous Woodlands***

3. CURRENT FACTORS AFFECTING THE SPECIES

- The main threat in Wales is from forest operations. The Forestry Commission has produced guidelines for avoiding disturbance of nests, and the key to this is to know their locations. This becomes difficult if pairs are continually changing their nesting locations as a result of nest sites being felled during the non-breeding period.
- Localised persecution by gamekeepers is generally a problem in the autumn when the young birds are dispersing from the nesting woodlands and predation on pheasants is a problem in some areas. As they start to feed on domestic racing pigeons persecution may increase.

- Loss of habitat - each pair requires a large area of uninterrupted trees, especially conifer plantations, open country to hunt and large secluded tracts of woodland to breed.
- Nest destruction and egg theft are major factors in their decline. The nests of some birds of prey such as the goshawk and the peregrine are often destroyed, usually when they contain eggs or young chicks. The loss of just one or two clutches of eggs can have a considerable impact on some species' ability to recover.

4. CURRENT ACTION

- 4.1 Known nesting pairs are fully recorded, noting success and failure.
- 4.2 All pairs are protected by legislation (see section 1).
- 4.3 The RSPB Investigations Unit supports investigation of crimes such as killings, by providing specialist advice and training to the police²⁹.
- 4.4 The RSPB also maintains a database of crimes against birds.
- 4.5 The UK Government Campaign Against the Illegal Poisoning of Wildlife is supported by the RSPB and other organisations. This involves educating farmers in the correct use of chemicals and investigating wildlife poisoning incidents (Poisons Hotline 0800 321 600)²⁹.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Determine the current status and distribution in Caerphilly county borough by 2004 and formulate a target for expansion (Target: 2005).
- 5.2.2 Maintain and increase breeding pairs throughout the county borough (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Promote the protection given to goshawks among landowners/managers, contractors and planning officers.	CCBC	RSPB GWT GLWT FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Maintain the current extent and quality of woodlands, particularly coniferous, through appropriate management.	FC	CCBC Coed Cymru landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.3 Species Management and Protection											
6.3.1 Ensure the protection of suitable nesting sites in the county borough by implementing wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Continue to ensure the protection of nest sites in forestry plantations, and work towards establishing permanent nesting retentions.	FC	-		✓							
6.4 Advisory											
6.4.1 Ensure the provision of advice to relevant organisations and landowners on the conservation of goshawks and sympathetic management of woodlands.	NAWAD	CCBC CCW RSPB FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Carry out a survey to determine the current status of the goshawk in Caerphilly county borough.	GBC GOS	BTO RSPB	✕								
6.5.2 Encourage recording of all known breeding sites and monitor regularly.	GBC GOS	BTO CCBC RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and publicity											
6.6.1 Encourage membership of local wildlife trusts/groups in Gwent, Glamorgan and areas of Caerphilly county borough.	GWT GLWT	CCBC WOWLS GOS GBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Provide schools, colleges and youth clubs with information in order to educate children, parents and teachers about the conservation of goshawks in the local area.	CCBC	Schools Youth Forum	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.3 Raise awareness of goshawks, and use them to promote the value of coniferous woodlands with the general public.	CCBC	FC RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.4 Aim to maximise public involvement in surveys where appropriate.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓

✕ Survey year to be determined.

GREEN WOODPECKER *PICUS VIRIDIS* SPECIES ACTION PLAN

1. INTRODUCTION

The green woodpecker is listed in the UKBAP as a species of conservation concern and is considered to be important in Caerphilly county borough.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	Amber



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2. CURRENT STATUS

2.1 UK and Wales

The green woodpecker is most abundant south of a line between Pembrokeshire and The Wash.

Gwent (VC35) has been identified as a stronghold of the species and within Glamorgan (VC41) it is generally regarded as scarcer in the upland valleys. Although it appears to be holding it's own throughout most of its range in Europe, fluctuations occur in northern parts and research shows an overall decline across its whole range. It is generally of an unfavourable conservation status in Europe.

2.2 Caerphilly County Borough

The green woodpecker is a species of valley oak and ash woodlands, visiting higher woodland in summer. It also frequents pasture, ffridd/coedcae and the upland commons. It needs the presence of mature trees in order to breed, but also requires close cropped turf exposed to the sun, where ants, its staple diet, are found. Breeding records occur throughout the county borough except in the far north. **Map 2.4** shows the current distribution of confirmed, probable and possible breeding green woodpecker sites, and they have been recorded in the following SINC: Cwm Afon Railway Line (45), Craig y fedw (159) and Gypsy Lane Wetland (164).

2.3 Links with Habitats

- *Wetlands*
- **Deciduous Woodlands** (upland oak and mixed ash woodlands)
- *Wildlife Corridors*
- *Species-rich Grasslands*
- *Common Land*
- *Coedcae/ffridd*
- *Heathland*
- mature trees and short turf

3. CURRENT FACTORS AFFECTING THE SPECIES

- Some steep ffridd/coedcae, which used to be rich in ant colonies, has been lost as feeding areas, due to ploughing, re-seeding and fertilising or land reclamation schemes.
- The species has shown itself to be susceptible to fatalities during hard winters.

4. CURRENT ACTION

- 4.1 The Glamorgan Bird Club and Gwent Ornithological Society both publish annual bird reports^{17, 18, 19}. The Gwent Ornithological Society has completed Atlas survey work. The BTO Breeding Bird Survey also contributes to the monitoring of the population⁶.
- 4.2 The Welsh Ornithological Society has targeted this species for research.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain the current distribution and breeding population of the green woodpecker in the county borough (Target: ongoing).
- 5.2.2 Protect and enhance suitable breeding and feeding habitats through appropriate management (Target: ongoing).

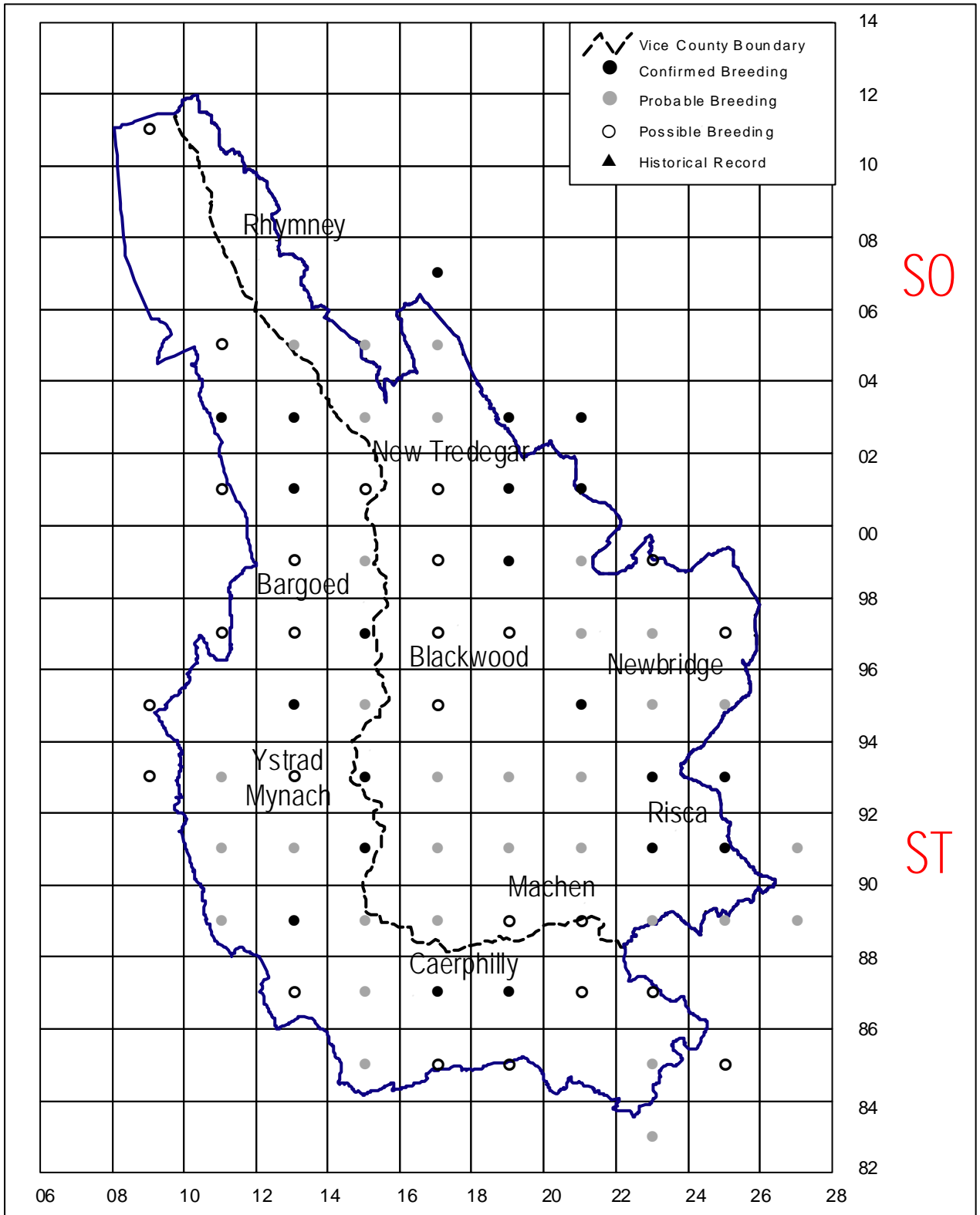
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to designate important nest and feeding sites as SINIC, benefiting the green woodpecker and a number of other species.	CCBC	-									✓
6.2 Site Safeguard and Management											
6.2.1 Seek to introduce appropriate management on SINIC sites, in particular woodland and grassland habitat.	CCBC	-			✓						✓
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Advise land managers, farmers and others of the green woodpecker's habitat requirements.	CCBC	FUW NFU NAWAD Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.5 Future Research and Monitoring											
6.5.1 Survey to identify the current status in the VC41 section of the area to augment the Gwent data, followed by continued monitoring of the whole area.	GBC	GOS CCBC	✕		✓		✓				✓
6.6 Communications and Publicity											
6.6.1 As the largest and most brightly coloured breeding woodpecker, it is an ideal example to promote biodiversity to the general public (e.g. through a public participation survey). Its links with less 'photogenic' invertebrates could be stressed to illustrate the interdependence of species.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

✕ Survey year to be determined.

MAP 2.4 - GREEN WOODPECKER



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GREY PARTRIDGE *PERDIX PERDIX* SPECIES ACTION PLAN

1. INTRODUCTION

The grey partridge is considered to be one of the bird species most in need of urgent conservation action, and is of particular concern locally due to its massive decline in the Caerphilly county borough area.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	Annex II/2, III
Berne Convention 1982	App. II
Bonn Convention 1979	-
CITES 1975	Annex A
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	Red
Other Species Status	RDB Birds: RDB3
Other Legislation	Ground Game Act 1880



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2. CURRENT STATUS

2.1 UK, Wales and Caerphilly County Borough

In areas of historic low abundance such as Caerphilly county borough, declines have sometimes exceeded 95% and it is approaching extinction in some districts. The grey partridge is a species primarily of arable farmland and unimproved grassland, preferring continuous grass or herbage not much higher than its head, flanked or interspersed with hedges, scrub or rough herbage to provide cover and for nest sites. It also seeks bare, preferably dusty ground. In Caerphilly county borough there is a cluster of records from the Cefn Gelligaer and Nelson Bog regions (see **Map 2.5**).

2.2 Links with Habitats

- **Species-rich Grasslands** (rhos pasture and other unimproved grazing meadows)
- *Coedcae/Ffridd*
- *Heathland* (upland)
- *Common Land*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Nationally, the intensification of arable farming with the reduction of food sources due to the increased use of pesticides and herbicides is of significant importance in its decline.
- The intensification of agriculture contributes to the loss of nesting sites through the removal of hedgerows and the destruction of important breeding habitats such as rough grassland. This also includes switching to silage cutting instead of haymaking.

- Reduction in winter food supplies due to autumn sown crops leading to no winter stubble fields is another nationally important factor.
- On common land, increased human disturbance during the breeding season may well be a factor in its decline, as could any increase in densities of grazing stock.
- The effects of hunting on an already depleted species will also have a significant effect.

4. CURRENT ACTION

- 4.1 The Hedgerow Regulations (1997) control the removal of hedgerows¹¹.
- 4.2 The Tir Gofal (CCW) scheme provides grant aid for farmers to encourage environmentally sensitive management.
- 4.3 The Game Conservation Trust encourages creation of suitable conditions for the species, such as providing nest sites by leaving wide field margins, chick feeding areas in conservation headlands and winter foraging sites by stubble retention.
- 4.4 Although the species is not monitored systematically, the Gwent Ornithological Society and Glamorgan Bird Club gather information from its members on the distribution of the grey partridge and other birds, and both bodies publish annual bird reports^{17, 18, 19}.
- 4.5 BTO's Breeding Bird Survey contributes to the monitoring of breeding populations⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Halt the decline by 2005.
- 5.1.2 Ensure the population is above 150,000 pairs by 2010.
- 5.1.3 Maintain, and where possible enhance, the current range of this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Halt the decline in both range and numbers by 2005.
- 5.2.2 Maintain, and where possible enhance, the current range of this species. (Target: ongoing and by 2010)

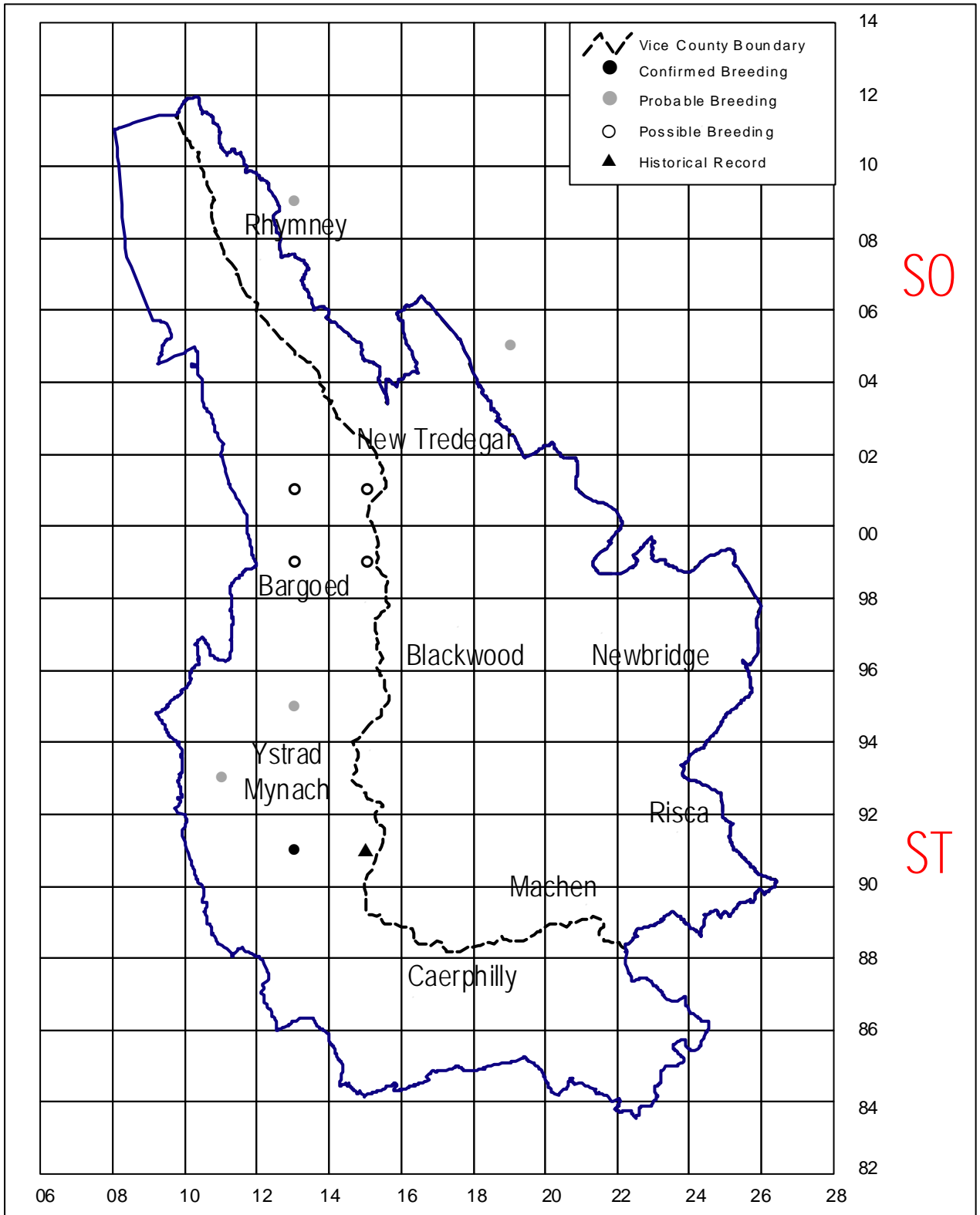
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
No action proposed at present.	-	-									

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management											
6.2.1 Consider establishing management practices on CCBC owned land to benefit the grey partridge.	CCBC	-	✓					✓			
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
No action proposed at present.	-	-									
6.5 Future Research and Monitoring											
6.5.1 Survey and monitor the residual population.	GBC GOS	CCW CCBC	✘								
6.6 Communications and Publicity											
6.6.1 Increase the provision of information and management advice to farmers and other land managers about the grey partridge, and other farmland species, and its conservation requirements.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓

✘ Survey year to be determined.

MAP 2.5 - GREY PARTRIDGE



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HOUSE SPARROW *PASSER DOMESTICA* SPECIES ACTION PLAN

1. INTRODUCTION

The house sparrow is one of the nations best known bird species, thanks to its propensity for living in close proximity to humans. It has been one of the most commonly seen birds in urban, suburban and village communities. It is not currently on the RSPB Birds of Conservation Concern amber list, however, a recent sharp fall in its population status in urban environments, linked to its long-term decline along with other farmland species, suggests it may be added.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	-
EC Birds Directive	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	-



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2. CURRENT STATUS

2.1 UK and Wales

The apparent decline of the species is generally poorly monitored by most BTO surveys although a decline of >50% was identified on Common Bird Census sites between 1970 - 1994, most of these being rural sites.

Its urban decline has been less thoroughly documented. The Garden Bird Watch showed a decline of 10% in the number of gardens it frequents in winter from 1973 to 1983 and Autumn Garden Bird Counts in Kensington showed a drastic reduction from 2603 individuals in 1925 to a very low 81 in 1995. There are regional differences in the fortunes of the species. The Breeding Bird Survey 1994-1998 reported a significant decline in England, a stable population in Scotland and a significant increase in Wales⁶.

2.2 Caerphilly County Borough

There is currently no substantial evidence to accurately measure its decline in the county borough, but its current breeding distribution is given in **Map 2.6**.

2.3 Links with Habitats

The house sparrow is a species that breeds exclusively in association with human habitation in both urban and rural areas and therefore should be considered in conjunction with the Urban Habitat Statement.

- **Urban Habitats** (domestic gardens, buildings, allotments, derelict sites)

3. CURRENT FACTORS AFFECTING THE SPECIES

- In general the declines can be linked to changes in farming practice, with increase in monoculture, use of herbicides & pesticides, change from spring to autumn sowing and

change from hay making to silage making all contributing to the decline of rural and even suburban populations.

- Urban populations may also be associated with the increasing levels of pollution from vehicle emissions affecting the availability of the arthropod food needed to feed chicks.
- Recent research indicates that additives to the new Lead Replacement Fuel may be toxic and killing birds when dissolved in their drinking water i.e. roadside puddles. Further research is currently following up this possibility in inner cities across the E.U.

4. CURRENT ACTION

- 4.1 Gwent Ornithological Society (GOS) atlas work has been completed. This will contribute to our knowledge of the status of the species in the eastern part of the county borough.
- 4.2 Both GOS and the Glamorgan Bird Club carry out regular surveys and produce annual bird reports^{17, 18, 19}.
- 4.3 BTO's Breeding Bird Survey also contributes to the regular monitoring of the breeding population⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain the current population of the house sparrow within Caerphilly county borough. (Target: ongoing)
- 5.2.2 Survey to investigate the possible decline in population in the county borough, and highlight particular areas under threat. (Target: 2004)

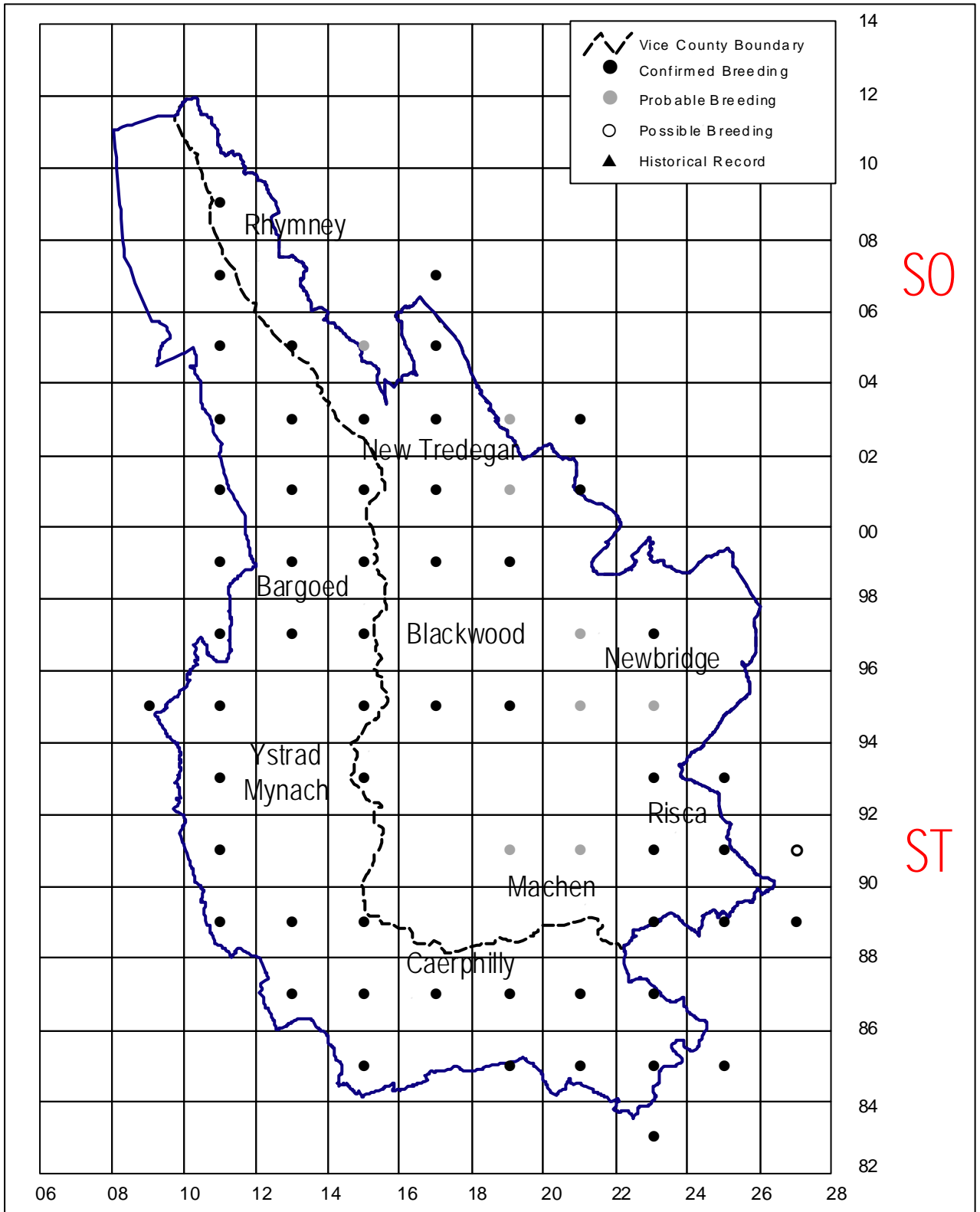
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 None proposed at this time.	-	-									
6.2 Site Safeguard and Management											
6.2.1 Ensure planning specifications for new properties and modernisation of old properties protect nests in old buildings, but also provide suitable nest sites in new and modernised buildings.	CCBC	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.4 Advisory											
6.4.1 Raise awareness of developers, planners and others involved in construction of houses and other buildings of its nesting requirements.	CBP	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey to identify the current status in Glamorgan (VC41) to augment the Gwent data currently being obtained, and then continue monitoring the whole area to identify areas of decline and local threats.	GBC	GOS CCBC	✕								
6.6 Communications and Publicity											
6.6.1 This species is an ideal candidate for use in a local survey of 'house nesting' species in association with starling, jackdaw, swallow, swift and house martin. The survey could be featured in the CCBC newsletter delivered to each household in the area.	CBP	GOS GBC BTO RSPB	✓					✓			

✕ Survey year to be determined.

MAP 2.6 - HOUSE SPARROW



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KESTREL *FALCO TINNUNCULUS* SPECIES ACTION PLAN

1. INTRODUCTION

The kestrel is not afforded priority status in the UKBAP, but it is listed as a species of conservation concern, and it is considered to be of biodiversity conservation importance locally. The UK holds approximately 15% of the European population.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	
Berne Convention (1982)	App. II
Bonn Convention (1979)	App. II
CITES (1975)	Annex A
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	Amber



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2. CURRENT STATUS

2.1 UK and Wales

The kestrel is the best-known and most common British bird of prey with 51,500 pairs²⁹. It is often seen hovering over motorway verges in search of food. However, the population has declined by more than 25% in recent years (35% in all habitats between 1971 to 1995 (RSPB)), especially in lowland England and Wales. The reason for this decline is not fully understood but could be linked to fluctuations or a reduction in prey species linked to agricultural changes. The species is currently found in all its potential UK breeding range²⁹ but has declined by 18%¹².

2.2 Caerphilly County Borough

Caerphilly county borough still appears to support relatively healthy populations of kestrels in association with coedcae/ffridd and upland areas. They nest on cliff and quarry ledges, trees, nest boxes, and disused industrial buildings. They remain in their territory throughout the year and are often seen hunting on roadside verges. Caerphilly county borough is one of the key areas for this species within former Monmouthshire (VC35), however, further work is required to confirm the status of the population in the area. The breeding distribution of the kestrel in the county borough is shown on **Map 2.7**.

2.3 Links with Habitats

- **Wildlife Corridors** (mature hedgerow trees, roadside verges)
- *Common Land*
- *Coedcae/ffridd*
- **Post-Industrial Land** (quarries, refuse tips)
- *Urban Habitats*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Kestrels can be taken by other birds of prey.
- They can suffer from poisons present in their prey species.

- Loss of nest sites through infilling of old quarry faces.
- Disturbance at nest sites by unauthorised activities, such as climbing and shooting, although this is rare.
- Distribution appears to be effected by the availability of prey species, e.g. voles.

4. CURRENT ACTION

- 4.1 The Gwent Ornithological Society and Glamorgan Bird Club gather information on the distribution of the kestrel and both groups publish annual bird reports^{17, 18, 19}.
- 4.2 GOS Atlas work is being completed.
- 4.2 BTO's Breeding Bird Survey contributes to the monitoring of breeding populations⁶.
- 4.3 The RSPB Investigations Unit supports investigation of crimes such as killings, by providing specialist advice and training to the police²⁹.
- 4.4 The RSPB also maintains a database of crimes against birds.
- 4.5 The UK Government Campaign Against the Illegal Poisoning of Wildlife is supported by the RSPB and other conservation and countryside organisations, they are also involved in educating farmers about the need to use chemicals properly and investigating wildlife poisoning incidents (Poisons Hotline = 0800 321 600 if you find a dead bird or other animal in suspicious circumstances)²⁹.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Determine the status of the kestrel population in the county borough. (Target: 2005)
- 5.2.2 Maintain the numbers of breeding pairs in the county borough. (Target: ongoing)

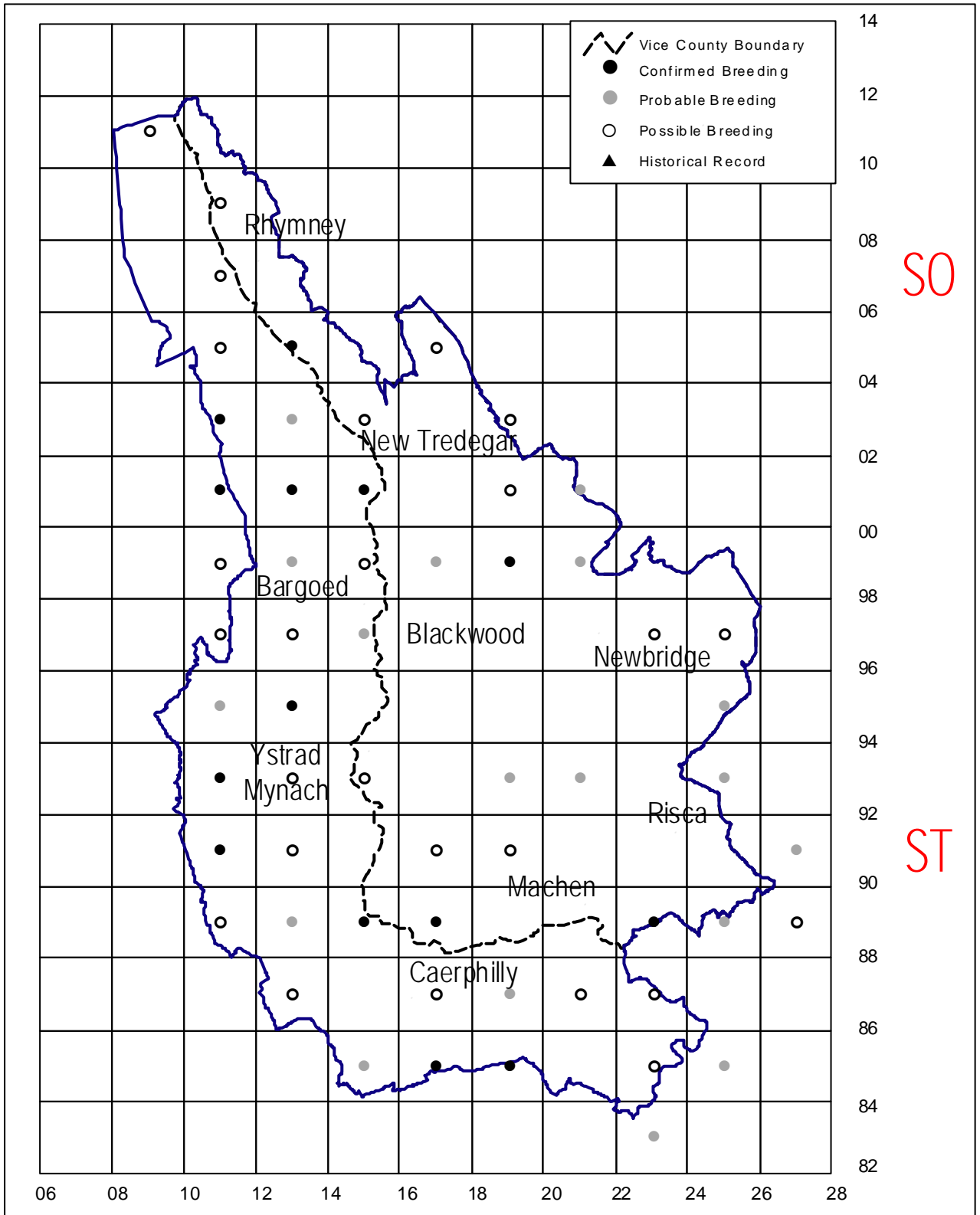
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
None proposed; all legislation is in place to protect the species at all times.	-	-									

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management											
6.2.1 Identify locations where suitable habitats exist for hunting and breeding kestrels and manage sympathetically for prey species to encourage them into the area.	CCBC	CCW	✓	✓							
6.3 Species Management and Protection											
6.3.1 Provide nest boxes in suitable locations and within reach of suitable habitats as hunting grounds.	CCBC	RSPB	✓	✓	✓					✓	
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Ensure provision of advice to relevant organisations and land managers on conservation of kestrels and sympathetic management of suitable habitats.	CBP	CCBC CCW NAWAD RSPB FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4.2 Disseminate information regarding monitoring of nest sites to interested organisations and relevant individuals (as required).	CBP	GBC GOS CCBC RSPB	✓		✓		✓		✓		✓
6.5 Future Research and Monitoring											
6.5.1 Survey populations of kestrel in the county borough to determine the current status of the species in the area and monitor trends (ringing).	GOS GBC	RSPB GWT GLWT BTO	✕								
6.6 Communications and Publicity											
6.6.1 Encourage membership of local wildlife trusts/groups in Gwent, Glamorgan and areas of Caerphilly county borough.	CBP	GWT GLWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Provide schools, colleges and youth clubs in the county borough with information in order to educate children, parents and teachers about the conservation status of birds of prey in their local area.	CCBC	Gwk Schools Youth Forum	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.3 Use publicity material to discourage the use of insecticides and rodenticides.	CBP	CCBC RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.4 Raise awareness among police, and land managers/owners and use the kestrel to promote the value of mature hedgerow trees, quarries and other habitats to the general public.	CBP	CCBC RSPB GOS GBC GWT GLWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.5 Aim to maximise public involvement in surveys and nest box schemes whenever appropriate.	CBP	RSPB CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓

✕ Survey year to be determined.

MAP 2.7 - KESTREL



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LAPWING *VANELLUS VANELLUS* SPECIES ACTION PLAN

1. INTRODUCTION

The lapwing has been identified in the UKBAP as a species of conservation concern, but not a priority species. However, there has been a significant decline in both over-wintering birds and breeding populations, and Caerphilly county borough now supports the largest breeding colony in the South Wales Valleys.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	Red



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2. CURRENT STATUS

2.1 UK and Wales

Lapwings were once a common sight on agricultural land throughout the UK with large flocks of over-wintering birds and breeding birds a common sight.

However, since 1987 the Welsh breeding lapwing population has declined by over 70% to fewer than 1700 pairs.³¹ Fewer than 33 sites in Wales now have more than 10 pairs on them, and only 5 have >20 pairs. An intensive all-Wales lapwing survey carried out in 1996-98 by the RSPB revealed only 2 areas where there was a breeding population of >50 pairs.

Changes in agricultural practices appear to be the main cause of the population crash, causing the remnant populations to relocate to marginal areas. Much evidence suggests that changes producing a dense grass growth in spring have contributed greatly to the rapid decline of the lapwing as a breeding bird in the UK. Lapwings are a species of conservation value, but their status in conservation legislation does not accurately reflect the degree of the recent decline. It is now recognised by the RSPB as of red list status following the 1998 national survey, which revealed a 48% reduction since 1988; and the RSPB have produced a species action plan for this species.

2.2 Caerphilly County Borough

Lapwings are a common winter visitor and passing migrant in Caerphilly county borough. However, the breeding population on agricultural land is now limited to isolated pairs scattered throughout the county. The more favoured breeding sites now appear to be associated with colliery spoil tips or poorly reclaimed land, particularly those areas that have short or no vegetation, impeded drainage and access to nearby taller vegetation for cover and food. Despite a continuing decrease in breeding numbers, pairs have successfully raised young on poorly reclaimed colliery spoil at Fochriw^{17, 18}, with 15 young reported here in 1998.³² This site now supports the largest remaining colony of lapwings in the South Wales Valleys, and it is second only to the Dee Estuary

in Wales as a whole. Smaller breeding colonies occur on colliery spoil at Manmoel, Heol Ddu/Capel Gwladys, Caerphilly Common, Capel Brithdir and Waen Rhydd³⁵. (see **Map 2.8**). Although it is actually within Merthyr Tydfil county borough Isaac Morgan Cottages Pond in Cwmbargoed is used by lapwings arriving to breed at Fochriw³⁵.

Over-wintering lapwings are mainly seen along the coast (e.g. Rhymney Estuary), but there may be some movement during bad weather to inland reservoirs, and some are seen on passage in upland areas of common land in the county borough. Large post-breeding flocks can sometimes occur at Capel Gwladys/five house, Gelligaer, and at Mynydd y Capel, Bedlinog³⁵.

2.3 Links with Habitats

Lapwings are associated with a wide range of habitats, actions for these habitats should ensure that lapwing requirements are not compromised:

- **Species-rich Grasslands** (rhos pasture)
- *Common Land*
- **Post-Industrial Land** (revegetated colliery spoil, landscaped colliery spoil)
- Farmland (improved pasture, newly ploughed land)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Changes in grassland management: grazing by cattle or horses is seen as the best way of managing vegetation for lapwings; sheep are too selective and mechanical cutting is disturbing and must be timed correctly; but dense, tall grass is unsuitable for lapwings at their breeding sites. Nest failures due to trampling can occur when the density of grazing animals is too high during the breeding season.
- Agriculture: on cultivated land breeding attempts are most successful when a germinating or established crop is present, necessitating no agricultural management during the breeding season. In Gwent this is an issue as most lapwings on cultivated land will be in maize, which involves cultivation during the nesting period. The change from spring-sown to autumn-sown cereals in arable areas has resulted in a tall spring vegetation which is unsuitable for breeding lapwings (arable issues are not really relevant to Caerphilly county borough except in the far south east of the area).
- Decreasing colony size: a reduction in the number of pairs on one site means that they become less successful at defending their nest sites against predators, most notably carrion crows (*Corvus corone*)²⁰.
- Human disturbance: prevents birds from returning to their nests and leads to the chilling of eggs and exposure to predation. Disturbance can be caused by walkers, dogs, motorbikes and off-road vehicles.
- Restoration: several lapwing sites in Caerphilly county borough are on old colliery sites in the process of being restored; the final restoration often results in a sward that is too dense and too tall to support lapwings, while tree and shrub planting provides cover for predators.
- Size of site: on sites smaller than 30ha, lapwings become more susceptible to outside influences, such as predation and disturbance. Breeding success and nesting density decline in proportion to the size of site, but large sites are very rare.

- Draining; small ponds and wet areas are important for success of the lapwing colony.
- Lack of information; RSPB hold extensive data on lapwings on farmland and moorland habitats, however, there is a lack of such data for colliery tips which are an important habitat in south Wales.

4. CURRENT ACTION

- 4.1 Sites known to have breeding lapwings at Fochriw and Manmoel are identified as SINCS⁸.
- 4.2 Discussions are underway between CCBC, RSPB, and Commoners to enhance the Fochriw site to provide a larger suitable area for breeding lapwing.
- 4.3 Sites adjoining farmland (nesting sites), with cattle or horse grazing may have the potential to gain support from the Tir Gofal agri-environment scheme, for the agricultural management of farmland for the lapwing. Farmers may be able to offset the costs of appropriate management with this financial support.
- 4.4 Sympathetic stock management is also eligible for consideration for support under Tir Gofal.
- 4.5 All known breeding sites are monitored annually by BTO and RSPB.
- 4.6 The RSPB Lapwing Recovery Programme (Wales) identifies areas of importance, for example Fochriw.
- 4.7 The RSPB, in partnership with other ornithological organisations are working towards identifying the optimum distance between swards of rush vegetation and open areas; and the optimum density of the swards. They are also looking into the breeding success of lapwing colonies by counting the number of juveniles in a post-breeding flock, rather than the number of chicks. This is because of the high mortality rate of chicks before achieving juvenile age.
- 4.8 A breeding bird survey was carried out and a report prepared for the area of Penallta Tip (Penallta Community Park), with particular reference to the lapwing, and makes management recommendations³⁵.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Halt the decline in the breeding population in Caerphilly county borough. (Target: 2005)
- 5.2.2 Enhance breeding success on farmland and colliery spoil. (Target: ongoing)

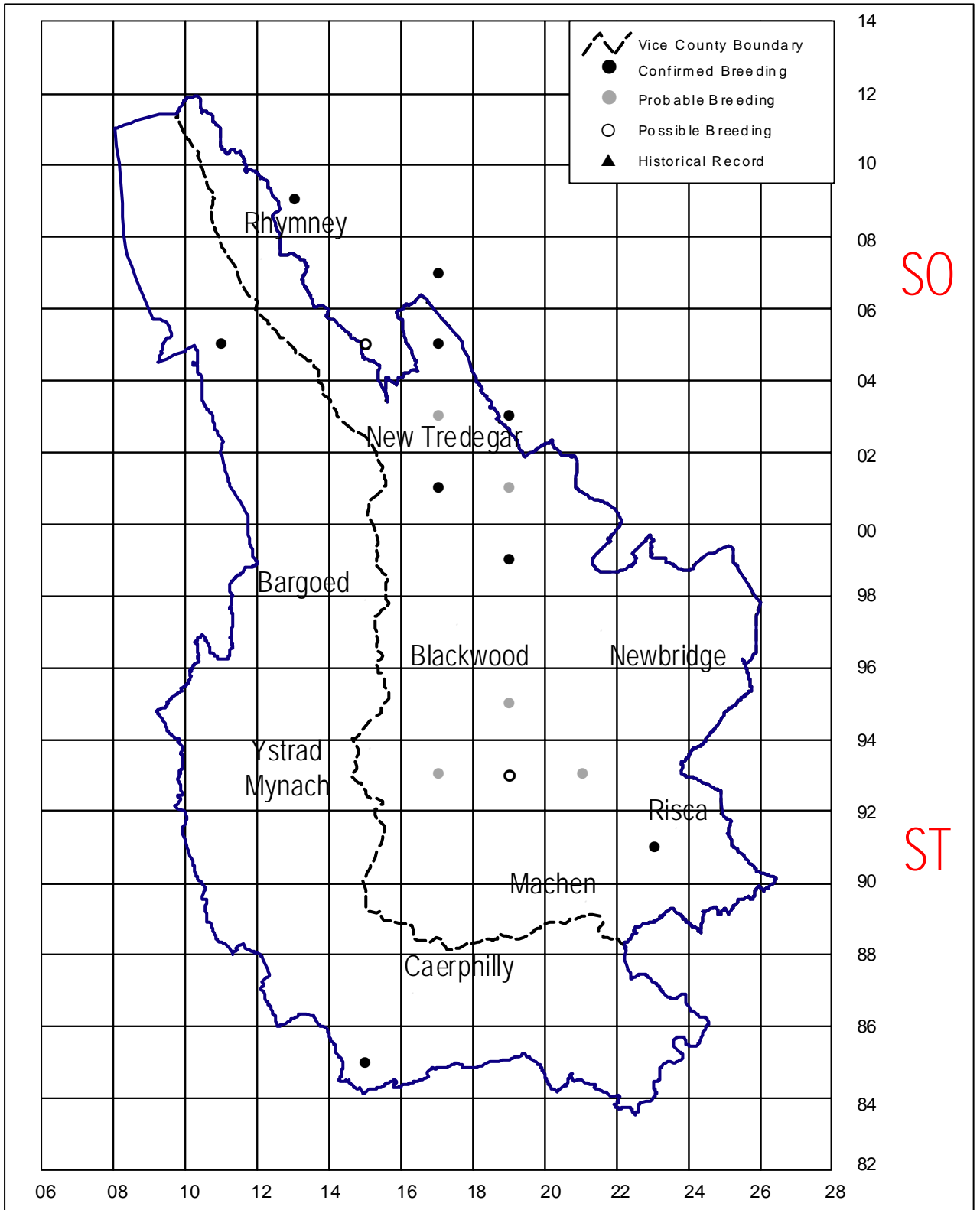
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure Policies and Strategies do not adversely affect existing breeding populations.	CCBC	WDA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Consider the requirements of the lapwing when reviewing agri-environment schemes.	CCW	NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Have regard for the significance of sites supporting breeding lapwing when considering any proposal developments and where appropriate, encourage the after-use of suitable colliery tips/spoil to favour lapwings through planning conditions.	CCBC	WDA NAWAD CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Ensure that important breeding sites are designated as SINCs and/or Local or National Nature Reserves.	CCBC	GLWT GWT RSPB									✓
6.2.2 Facilitate restoration of land reclamation sites through collaborative projects and appropriate management strategies, to maintain required habitat conditions for lapwing.	WDA	CCBC RSPB Gwk landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.3 Seek to secure appropriate management for this species on grasslands, common land and post-industrial land (colliery tips).	CCBC	landowners/ occupiers RSPB		✓		✓		✓		✓	
6.2.4 Investigate ways of reducing disturbance from footpaths, motorbikes and off-road vehicles on vulnerable sites.	Gwent Police	CCBC	✓		✓						
6.2.5 Seek to enhance areas of Parc Penallta and Fochriw for breeding lapwings, through appropriate management and restoration of vegetation and bare ground.	CCBC	Gwk RSPB commoners	✓	✓	✓						✓
6.3 Species Management and Protection											
6.3.1 Determine current food supply on key sites and manage accordingly.	CCBC	BTO GBC GOS RSPB landowners	✓								
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Raise awareness of landowners and managers of lapwing requirements in order to promote appropriate management for this species.	CBP	RSPB NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.5 Future Research and Monitoring											
6.5.1 Monitor lapwing populations in the county borough annually to improve baseline data and monitor trends.	GBC GOS	CCBC BTO RSPB GWT GLWT (volunteers)	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.2 Survey all possible sites, especially colliery tips, in the county borough for undiscovered lapwing colonies.	GBC GOS	BTO CCBC	✘								
6.5.3 Encourage farmers and members of the public to report breeding lapwing to local recorders, a list of contacts is held at CCBC.	FUW	NFU NAWAD BTO CCBC RSPB	✓		✓		✓		✓		✓
6.5.4 Secure a database for information by supporting the setting up of a local record centre.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Use this species to promote the importance of post-industrial land (e.g. old colliery tips) and common land (especially in the uplands), and their conservation requirements.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓

✘ Survey year to be determined.

MAP 2.8 - LAPWING



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Atgynhychwyd o fapiad yr Arolwg Ordnans gyda chaniatad rheolwr Llyfifa ei Mawhydi hawffraint y Goron. Mae atgynhychu heb awdurdod yn torri hawffraint y Goron. Gall hyn arwain at erlyniad neu achos sifil. Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

LINNET *CARDUELIS CANNABINA* SPECIES ACTION PLAN

1. INTRODUCTION

The linnet is a priority species in the UKBAP and a national action plan has been prepared³⁷.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	
Berne Convention 1982	App. II
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1 Sch. 3
Birds of Conservation Concern List ³⁰	Red



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2. CURRENT STATUS

2.1 UK and Wales

The status of the linnet in the south Wales Valleys is not accurately known.

The linnet was historically a common species but its numbers have declined nationally by over 50% in the last 25 years.

2.2 Caerphilly County Borough

In Glamorgan the linnet is regarded as thinly scattered in the eastern area of the coalfield, of which Caerphilly county borough is a part. Locally there is little evidence of declines of the magnitude found in other areas of the UK, although there is anecdotal evidence of some decrease. The relative health of our local populations may make them of regional or national significance in the long term. **Map 2.9** shows the current distribution of the linnet in the area.

2.3 Links with Habitats

Linnets are associated with weedy arable crops, heathland, scrub and, in particular, gorse thickets. Areas of coedcae/ffridd and upland heath on common land should be ideal habitats, although the species seems to be found at greater population densities at lower altitudes.

- *Wildlife Corridors* (disused railway lines and roadside verges)
- *Common Land*
- **Ffridd/Coedcae**
- **Heathland** (upland heath)
- Gorse stands

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of habitat to urban or industrial development.
- While agricultural intensification may be an important factor nationally it will be of less importance locally, although the use of herbicides and the lack of winter stubbles will have some effect.

- The grubbing out or burning of gorse and other scrub will remove suitable breeding habitat.

4. CURRENT ACTION

- 4.1 Farmland Bird Management Guidelines have been produced by BTO, RSPB and FWAG.
- 4.2 The Ecology and Behaviour Group at Oxford UC is analysing the BTO Breeding Bird Survey in order to study the long-term persistence of farmland birds (inc. the linnet).
- 4.3 Some upland heath has already been designated as SIN C in Caerphilly county borough⁸.
- 4.4 The Gwent Ornithological Society and Glamorgan Bird Club gather information from its members on the distribution of linnets and other birds and both bodies publish annual bird reports^{17, 18, 19}.
- 4.5 BTO's Breeding Bird Survey contributes to regular monitoring of breeding populations⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 In the short term, halt or reverse the decline in numbers of the linnet by the year 2003 so that the Breeding Bird Survey index is at least at 1996 levels.
- 5.1.2 In the long term, see a sustained recovery in numbers so that the BBS index is at least 50% higher than 1996 levels and the range has recovered to 1968 – 1972 levels by 2008.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Confirm population statistics both nationally and locally, identifying important habitats and sites in Caerphilly county borough. (Target: 2005)
- 5.2.2 Safeguard existing breeding and wintering sites. (Target: 2005 and ongoing)
- 5.2.3 Seek to enhance the linnet population in the county borough (Target: 2008)

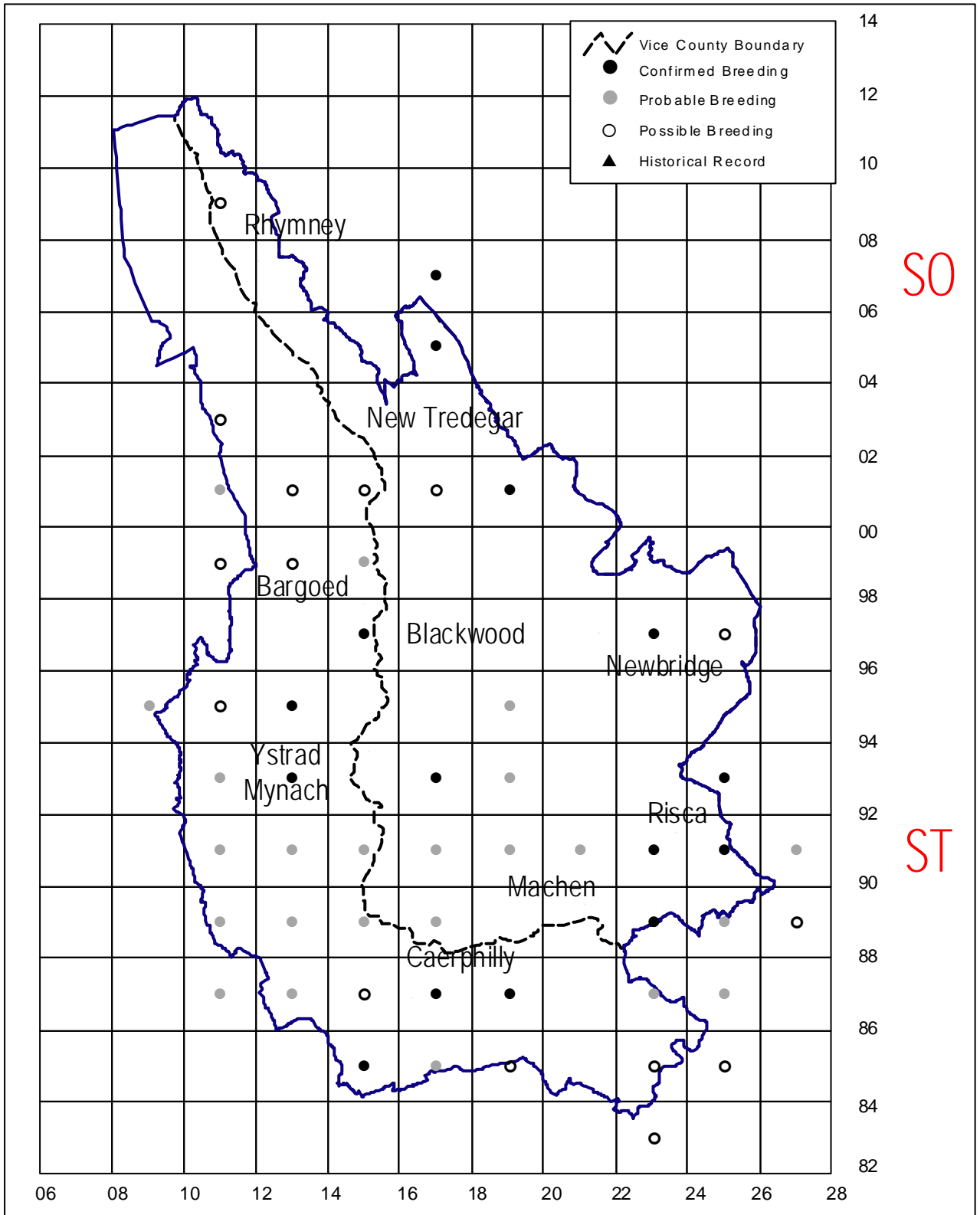
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to designate suitable breeding areas as SIN C and promote farming practices that will benefit the species.	CCBC	NAWAD FUW NFU									✓
6.2 Site Safeguard and Management											
6.2.1 Adopt sympathetic management of all CCBC land with breeding linnet and consider the planting of gorse banks along highways.	CCBC	-			✓					✓	

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Educate and inform the general public of the relative importance of our local population of linnets.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey and monitor linnets populations within the county borough.	GBC GOS	CCW BTO	✘								
6.6 Communications and Publicity											
None proposed at this time.	-	-									

✘ Survey year to be determined.

MAP 2.9 - LINNET



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LITTLE OWL *ATHENA NOCTUA* SPECIES ACTION PLAN

1. INTRODUCTION

The little owl was introduced into Britain (Kent and Northamptonshire) in the late 1800s. It is not a UKBAP priority species but is considered to be significant locally.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	-
Conservation Regulations 1994	Sch. 2
Berne Convention 1982	App. II
Bonn Convention 1979	-
CITES 1975	Annex A
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	-



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2. CURRENT STATUS

2.1 UK and Wales

The little owl colonised much of Britain following several introductions in southern England from the mid 19th century.

Monmouthshire was the first Welsh county the owl reached, with breeding reported in 1914 near Chepstow. It has since spread widely over much of England and Wales, and parts of Scotland, with the exception of areas on very high ground. Breeding numbers have declined rapidly in recent years. It is both diurnal and nocturnal, hunting small birds and mammals, and large insects, over open farmland, parks and gardens, and unused industrial areas. It breeds in hollow trees, wall cavities and old quarry crevices.

2.1 Caerphilly County Borough

This is an owl of the agricultural landscape where there are hedges, and where there are old trees and buildings, or even rabbit burrows, providing holes for nesting. It is also found in old quarries and at the moorland edge. In Gwent it is mainly absent from the major urban areas and also from the more extensive woodlands, where it may be out-competed by the larger tawny owl. There are a number of possible breeding sites in Caerphilly county borough but surveys are needed to confirm these.

2.2 Links with Habitats

- *Deciduous Woodlands* (lowland wood pasture and parkland)
- **Wildlife Corridors (hedgerows)**
- *Urban* (old buildings, unused urban industrial sites, public parks)
- *Common Land*
- *Post-Industrial Land*
- Scrub areas

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of habitat due to:
 - Over-mowing of urban grassland areas
 - Scrub clearance
 - Excessive use of insecticides and rodenticides
- Loss of nest sites such as hollow trees, old buildings and quarries.

4. CURRENT ACTION

- 4.1 Preservation of rough grassland areas, parkland management and the provision of nest boxes.
- 4.2 Education at schools and colleges.
- 4.3 Sympathetic management of sites; grass cutting, rodenticide and insecticide use.
- 4.4 Monitoring of nest sites – ringing and/or marking nestlings⁴¹.
- 4.5 The Gwent Ornithological Society and Glamorgan Bird Club gather information from its members on the distribution of little owls and other birds and both bodies publish annual bird reports^{17, 18, 19}.
- 4.6 BTO's Breeding Bird Survey contributes to regular monitoring of breeding population⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain current distribution and populations by conserving existing foraging, nesting and breeding habitats (Target: ongoing).
- 5.2.2 Identify confirmed breeding sites in the county borough (Target: 2005).
- 5.2.3 Identify possible new habitats and create a number of further nesting sites (Target: 2008).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
None proposed at this time.											

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management											
6.2.1 Maintain the current extent and quality of foraging habitats such as hedgerows, parklands, etc. through appropriate management.	CCBC	GWT GLWT CCW landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Seek to create new habitat for the species, providing a network of foraging sites and linking nesting sites.	CCBC	GWT GLWT WOWLS landowners		✓					✓		
6.3 Species Management and Protection											
6.3.1 Seek to create new nesting sites by providing nest boxes and safeguarding mature trees in suitable areas.	WOWLS	GWT GLWT CCBC		✓					✓		
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Produce advisory material for landowners and other interested parties on the requirements of owl species and sympathetic management of habitats.	CBP	WOWS	✓								
6.4.2 Disseminate information regarding ringing of owlets and the monitoring of nest sites to interested organisations and relevant individuals.	WOWLS	GBC GOS BTO	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey all possible breeding sites and habitats to identify where the little owl is or would be likely to breed and benefit from nest-site creation.	WOWLS	GBC GOS BTO	✕								
6.5.2 Monitor all known breeding sites on a regular basis.	GBC GOS	WOWLS	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Encourage membership of wildlife trusts and local ornithological societies.	CBP	GWT GLWT GOS GBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Provide schools and colleges in the county borough with information in order to educate children, parents and teachers about the conservation status of owls in the local area.	CBP	WOWLS Schools Youth Forum		✓					✓		
6.6.3 Use all relevant publicity material to discourage the use of insecticides and rodenticides.	CBP	FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓

✕ Survey year to be determined.

LONG-EARED OWL *ASIO OTUS* SPECIES ACTION PLAN

1. INTRODUCTION

Although it is not a priority species in the UKBAP, the long-eared owl is a UK species of conservation concern³⁹ and is of importance locally.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	-
Berne Convention 1982	Appendix II
Bonn Convention 1979	-
CITES 1975	Annex A
WCA 1981	Part I, Section 1
Birds of Conservation Concern List ³⁰	-



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2. CURRENT STATUS

2.1 UK and Wales

The long-eared owl is a nocturnal hunter and feeds mainly on small mammals and occasionally on small birds. It hunts over coniferous and, sometimes, deciduous woodlands and their margins.

There is a population increase in the winter months as migrant birds from the colder regions of Europe arrive in Britain. It is often seen in communal winter roosts in low scrub trees and young conifers. It breeds mainly in old woodland corvid nests, in both coniferous and deciduous woodlands. Breeding populations of the long-eared owl are contracting and declining, with numbers estimated at 2,000 – 2,500.

2.1 Caerphilly County Borough

In the Gwent/Glamorgan area the main nesting habitat is thicket/early mature stage conifers and the hunting habitats are coedcae/ffridd, rhos pasture, upland heath and re-stock areas. There is one recent record of the long eared owl in Caerphilly county borough around Cwmcarn, and a historical record from Wern Ddu. The species is thought to be under-recorded because of its nocturnal habit and is easily overlooked. More survey work is required.

2.2 Links with Habitats

- **Planted Coniferous Woodlands**
- *Deciduous Woodlands*
- *Species-rich Grasslands* (rhos pasture)
- *Coedcae/ffridd*
- *Heathland* (upland heath)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of foraging areas is one of the main factors affecting the long-eared owl, for example loss of rough grasslands through excessive cutting.
- Over-use of rodenticides and pesticides.

4. CURRENT ACTION

- 4.1 Many SIN C sites have been designated which contain woodland habitat suitable to support long-eared owls⁸.
- 4.2 The Gwent Ornithological Society and Glamorgan Bird Club gather information from its members on the distribution of long-eared owls and other birds, and both bodies publish annual bird reports^{17, 18, 19}.
- 4.3 BTO's Breeding Bird Survey contributes to regular monitoring of breeding population⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Identify and maintain current breeding numbers, and continue survey work to identify new breeding areas. (Target: ongoing)
- 5.2.2 Protect important breeding and roosting sites. (Target: ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
None proposed at this time.	-	-									
6.2 Site Safeguard and Management											
6.2.1 Maintain the current extent and quality of breeding and roosting sites, especially in coniferous woodlands, through appropriate management.	FC	CCBC, GWT, GLWT landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Maintain and seek to enhance the current extent of hunting habitats through sympathetic management of rhos pasture, ffridd and upland heath.	CCBC	GWT GLWT landowners									
6.3 Species Management and Protection											
6.3.1 Seek to create new nesting sites by providing nest baskets and safeguarding areas of conifer thicket.	WOWLS	FC GWT GLWT CCBC			✓					✓	

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.3 Species Management and Protection (continued)											
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Produce advisory material for landowners and other interested parties, about the requirements of the species and sympathetic management of habitats.	CBP	-	✓								
6.4.2 Disseminate information about ringing of owlets and the monitoring of nest sites to interested parties.	WOWLS	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Monitor nest and roost sites annually, marking young owlets	WOWLS	GBC GOS BTO	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Encourage membership of wildlife trusts and local ornithological societies.	CBP	GWT GLWT GBC GOS	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Provide schools and colleges in the county borough with information in order to educate children, parents and teachers about the conservation status of owls in the local area.	CBP	CCBC Schools Youth Forum WOWLS		✓					✓		
6.6.3 Use all relevant publicity material to discourage the use of insecticides and rodenticides.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

NIGHTJAR *CAPRIMULGAS EUROPAEUS* SPECIES ACTION PLAN**1. INTRODUCTION**

The nightjar has been declining nationally in both numbers and range for a large part of the last century and consequently it has been classified as a priority species in the UKBAP³⁷. It is therefore of local biodiversity conservation importance.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	Annex I
Berne Convention 1982	App. I I
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1 Sch. 3
Birds of Conservation Concern List ³⁰	Red
Other Species Status	RDB Birds: RDB5



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2. CURRENT STATUS**2.1 UK and Wales**

The nightjar is a breeding summer visitor to the UK and is a characteristic nocturnal bird of heathland, wood pasture, woodland edges and clearings. It was once common, but has been declining in numbers and range throughout Europe due mainly to the loss of its habitats. The species is concentrated in southern England with smaller numbers extending into Wales and as far north as central Scotland. Between national surveys in 1968-72 and 1992 there was a decline in UK range of 52%. It is a well-camouflaged species, and therefore difficult to survey. The usual method is to count the numbers of singing males and use this to estimate the total number of birds. Numbers reached a low point of 2,100 males in 1981, but have now stabilised and are increasing in some areas, including in Wales where it has experienced a 230% increase since 1981. In 1992, a national survey resulted in an estimated UK population of 3,400 males of which 193 (5-6%) were found in Wales and 61 of these were recorded in Glamorgan and Gwent.

Nightjars are essentially heathland birds; they nest on bare or sparsely vegetated patches on the ground, mainly where free-draining sandy soils exist. The heath-like conditions that arise in conifer plantations shortly after being clear-felled and replanted provide ideal habitat. Nightjars usually rear two broods per season. Two eggs are normally laid from mid-May to mid-July; chicks hatch after about 19 days and fly after about 17 days. They are reliant on the parents for food for about four weeks, feeding on flying insects such as moths, beetles and flies at dusk and dawn across a wide range of habitats. Preferred habitats are heathland, deciduous or mixed woodland, orchards, riparian and freshwater habitats, and gardens. Forests are most used where there is age diversity within the forest. Birds will travel on average 3km from nest sites to locate suitable feeding areas.

2.2 Caerphilly County Borough

Nightjars are a scarce and local breeding summer visitor; rarely recorded on passage. The Caerphilly county borough nightjar population is concentrated into two main areas, Mynydd Rudry (the Warren, Wern Ddu, Coed Coesau-whips, Coed Craig Ruperra) and the Ebbw Forest (Nant Gwyddon and Nant Carn valleys) where the species is dependent on newly planted and/or

clear felled conifer plantations for breeding sites. There are thought to be about some 10 pairs overall (Rudry area with 3 to 4, and 6 in the Ebbw Forest). **Map 2.10** shows the current breeding distribution of the nightjar in Caerphilly county borough.

2.3 Links with Habitats

- **Planted Coniferous Woodlands** - the species should also be considered in this plan as nightjar breed on the heath-like conditions of newly felled and recently restocked forestry plantations.
- **Heathland** - the requirements of the nightjar should be considered in conjunction with this plan as important breeding habitat.
- *Deciduous Woodlands* (lowland wood pasture and parkland)
- *Common Land*
- *Coedcae/Ffridd*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss and fragmentation of suitable breeding and foraging habitat.
- Unsympathetic commercial forestry - commercial forests provide good habitat for nightjars when managed appropriately, but changes in management may threaten local populations. Nightjars nest in the young stages of plantations, while there is still bare ground between the trees. If no other suitable habitat becomes available in other new or young stands, local population declines could occur as the recently planted blocks mature. Restocking forests through natural regeneration in order to meet other conservation objectives may be detrimental to nightjars.
- Decrease in large airborne insect prey as a result of intensive agriculture (indirect effects of pesticides) and/or climate change, may affect nightjar populations.
- Excessive cold and wet periods during breeding season can reduce breeding success.
- Disturbance by people and dogs during nesting. This reduces the amount of time a bird can spend incubating or feeding, and may therefore affect the likelihood of its chicks surviving. It also makes eggs and chicks more vulnerable to predators.

4. CURRENT ACTION

- 4.1 Detailed research into the ecology of nightjars nesting in Thetford Forest has been carried out by the RSPB with the Forestry Commission's help. Forest Enterprise forestry practice at Thetford is now aimed at maintaining a constant area of young plantation and edge habitats as good sites for breeding nightjars.
- 4.2 Regular breeding sites in Caerphilly county borough are monitored annually by local birdwatchers.
- 4.3 The Woodland Grant Scheme, run by the Forestry Commission, offers grants for woodland management that promotes biodiversity.

4.4 The Tir Gofal agri-environment scheme, run by CCW, aims to support the management and restoration of lowland heathland.

4.5 The Gwent Ornithological Society and Glamorgan Bird Club gathers information from its members on the distribution of nightjars and other birds and both bodies publish annual bird reports^{17, 18, 19}.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

5.1.1 Maintain a population of at least 3,400 churring males.

5.1.2 Halt the decline in range of nightjar (there were 268 occupied ten km squares in 1992).

5.1.3 Increase the numbers and range of nightjars to 4,000 churring males in at least 280 10km squares by the year 2003 (an 18% population increase and 5% range increase in 10 years).

5.1.4 In the long term (next 20 years), restore nightjar to parts of its former range in, for example, south-west England, west Midlands, north-west England, south-west Scotland and Northern Ireland.

5.2 Caerphilly Objectives and Targets

5.2.1 Gain a full understanding of the location of the nightjar population, its numbers, trends and habitat usage (Target: 2003).

5.2.2 Maintain the current distribution and abundance of nightjar in Caerphilly county borough (Target: ongoing).

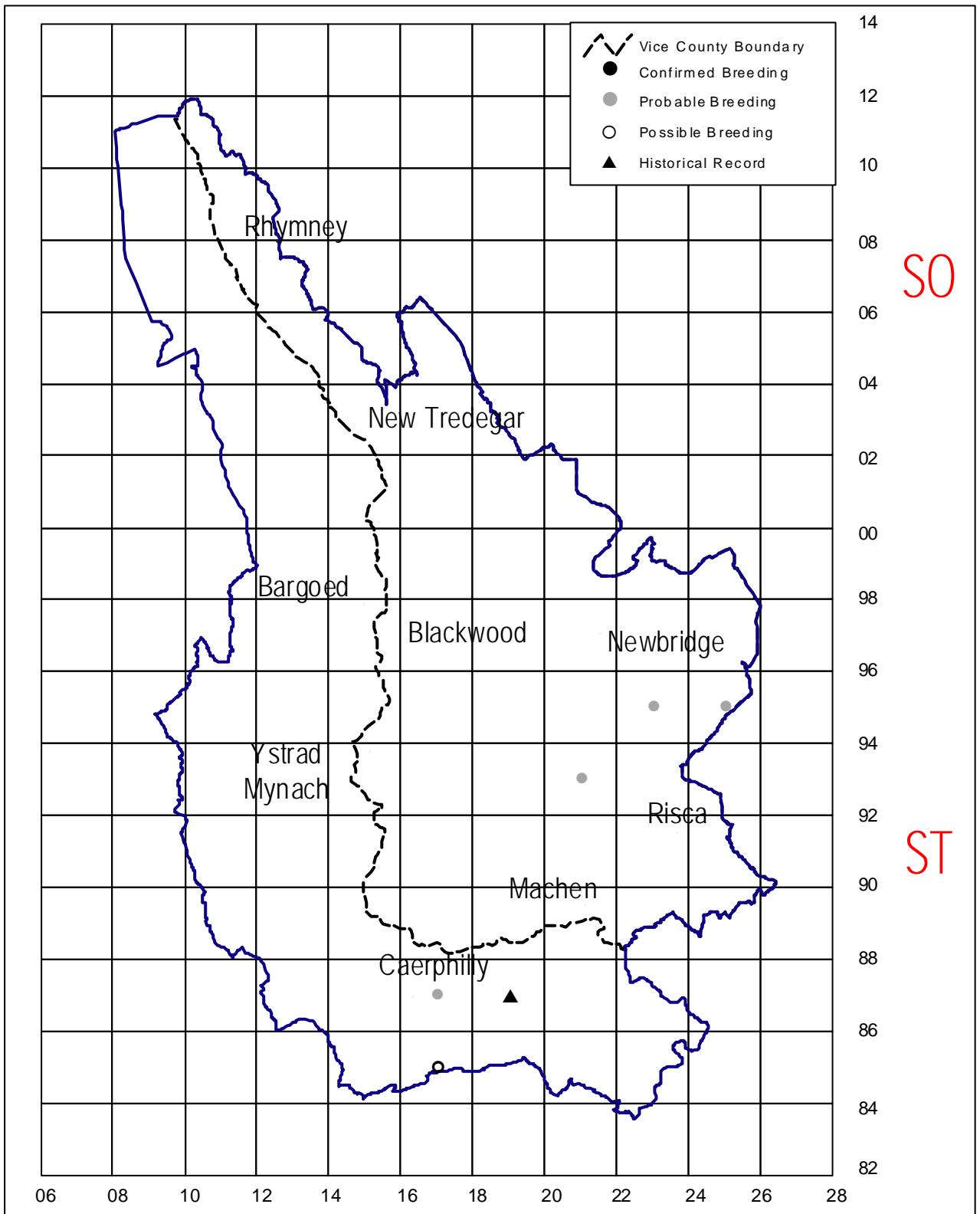
5.2.3 Increase the number of breeding pairs to 12 (a 20% increase) (Target: 2006).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure specific targets and management for the nightjar are included where applicable in all development and management plans, especially Forest Design Plans.	FC	FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Take full account of the requirements of the nightjar when considering felling and restocking proposals.	FC	FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Ensure all regularly used nesting sites are designated as SIN C.	CCBC	-									✓
6.2 Site Safeguard and Management											
6.2.1 Resist development (housing, road, industrial) on or adjacent to nightjar nesting habitat.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management (continued)											
6.2.2 Seek to defer management operations (clearing, spraying etc.) within restock areas of plantations that hold or have the potential to hold nesting nightjars to not before mid August, in order to avoid disturbance of eggs or young.	FC	FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.3 Seek to provide suitable feeding habitat within 5km of nightjar nest sites, especially by targeting Tir Gofal.	CCW	CCBC		✓					✓		
6.2.4 Incorporate habitat management prescriptions for nightjars (diversify age class structure) in FC forests.	FC	FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.5 Maintain a constant area of clear fell (age class 1 - 10 years) through Forest Design Plans.	FC	FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-									
6.4 Advisory											
6.4.1 Advise relevant parties (including private forestry companies) of the presence, legal status, and management requirements of the nightjar.	CCW	FC GWT GLWT RSPB Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Gain a complete knowledge of the numbers, distribution and habitat usage of nightjar populations in the area. Contribute to the national nightjar surveys (2003 and every 10 years thereafter).	GBC GOS	BTO RSPB	✓								
6.5.2 Establish and maintain a 5-yearly nightjar monitoring programme on FC sites, which appear to support suitable habitat.	FE	GBC GOS	✓					✓			
6.6 Communications and Publicity											
6.6.1 Improve co-ordination and information sharing between all groups and individuals with knowledge of nightjars and their distribution.	CBP	FE GBC GOS GWT GLWT	✓	✓	✓	✓	✓	✓	✓	✓	✓

MAP 2.10 - NIGHTJAR



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Atgynhychwyd o fapiad yr Arolwg Ordnans gyda chaniatad rheolwr Llyfifa ei Mawhydi hawffraint y Goron. Mae atgynhychu heb awdurdod yn torri hawffraint y Goron. Gall hyn arwain at erlyniad neu achos sifil. Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

PEREGRINE FALCON *FALCO PEREGRINUS* SPECIES ACTION PLAN

1. INTRODUCTION

The peregrine falcon is not afforded priority status in the UKBAP, but it is considered to be important for biodiversity conservation locally.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	Annex II, IV
Conservation Regulations 1994	Sch. 2
Berne Convention 1982	App. II
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1 Sch. 5
Birds of Conservation Concern List ³⁰	Amber
IUCN Red List of Threatened Animals 1994	lower risk - conservation dependent



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2. CURRENT STATUS

2.1 UK and Wales

The peregrine should be the world's most successful bird. It is an expert and powerful hunter, and is the world's fastest moving animal. However, world populations have crashed dramatically in the last decade, leaving European populations as vitally important globally. The UK holds 15% of the European population, and approximately 50% of the English/Welsh population is in Wales, mainly in and around the mining valleys.

In 1960, as a result of pigeon racers' claims that an excessive population of peregrines was responsible for losses of homing pigeons, a BTO inquiry took place. However, the results of the inquiry showed that the population had actually declined by around 40%. This decrease was attributed to the past use of DDT resulting in the thinning of eggshells. In 1963, there were approximately 360 pairs remaining in Britain. Since then, however, the British population has made a significant recovery as a result of the restriction of organochlorines and enhanced conservation efforts, including improved legal protection. There are now over 1283 pairs¹². Numbers, however, have not recovered in southeast England and east Yorkshire; whilst in northern Scotland there have been further declines in the last decade. Persecution by humans is now the only real threat to the success of the peregrine falcon population.

The species currently occupies around 95% of its potential UK breeding range²⁶, but the peregrine is now in decline in some areas of Wales, mainly in and around the mining valleys. Only 259 pairs were recorded in Wales during the last Welsh national survey in 1991. The 2001 national survey was postponed due to the foot and mouth disease epidemic, and will take place this year (2002).

2.2 Caerphilly County Borough

In Caerphilly county borough peregrines are associated with quarries and upland cliffs, with each pair holding a large hunting territory. Some birds will also use large buildings or pylons as nesting ledges, although there are no records of this in the county borough. Peregrines are

found at scattered locations throughout the county borough, but are regularly disturbed and there have been many occasions where pairs have failed to breed. In 1998, five dead peregrines were found and increased to 7 in the year 2000. All were analysed and found to contain extremely high levels of toxins, high enough to seriously affect a human handling them. These birds had been targeted because pigeons were found staked down nearby covered with the poison.

2.3 Links with Habitats

- *Common Land*
- **Post-Industrial Land** (quarries)
- *Urban Habitats* (old buildings) (tall structures)
- Sea cliffs

3. CURRENT FACTORS AFFECTING THE SPECIES

- A reduction in moorland birds has led to peregrines preying on racing pigeons as an alternative food source. Pigeon racing is a popular sport in the South Wales Valleys. The high level of persecution of peregrines in this area is thought to be due to the attempts by some pigeon owners to protect their birds.
- Poor weather, especially rain, causes the loss of eggs.
- Loss of nest sites through infilling of old quarry faces.
- Theft of eggs and chicks to supply egg collectors and falconers, although this can be discounted as a limiting factor.
- Disturbance at the nest sites by unauthorised activities, such as climbing and shooting. This is rare except to purposely target peregrines. Climbing is more of a problem in places such as the Lake District.
- Pesticides and rodenticides used on agricultural land can be passed up through the food web to the peregrine.

4. CURRENT ACTION

- 4.1 The Environment Agency (EA), Police, RSPB, NAWAD and other organisations forming the South Wales Peregrine Watch currently operates protection and monitoring schemes at known nest sites in South Wales.
- 4.2 UK surveys of peregrines (other birds of prey) are organised every 10 years by the RSPB and government agencies. The last survey was in 1991 and the 2001 survey has been postponed until 2002 due to the foot and mouth disease outbreak.
- 4.3 The RSPB Investigations Unit provides specialist advice and training to the police involved in bird crimes²⁹.
- 4.4 The UK Government Campaign Against the Illegal Poisoning of Wildlife is supported by the RSPB and other conservation and countryside organisations in investigating incidents

of wildlife poisoning (Poisons Hotline = 0800 321 600; ring if you find a dead bird or other animal in suspicious circumstances). They also educate farmers and landowners about the need to use chemicals properly²⁹.

- 4.5 The Gwent Ornithological Society and Glamorgan Bird Club gather information from its members on the distribution of peregrines and both bodies publish annual bird reports^{17, 18, 19}.
- 4.6 The BTO Breeding Bird Survey also contributes to the annual monitoring and recording of peregrine populations⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain, and where possible enhance, the number of breeding pairs in the county borough (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to designate all known nesting sites as SIN C.	CCBC	SWPW									✓
6.2 Site Safeguard and Management											
6.2.2 Seek to include the needs of peregrines in the management of SIN Cs and N/LNRs that support peregrines.	CCBC	GWT GLWT RSPB CCW	✓								✓
6.3 Species Management and Protection											
6.3.1 Encourage the reporting of all evidence of persecution to the RSPB and the South Wales and Gwent Police. There are several Wildlife Liaison Officers who deal with ongoing problems such as illegal killing, bird theft, egg collecting and disturbance.	CBP	SWPW Gwent Police RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Support and promote the Peregrine Watch scheme by reporting incidents of persecution to Wildlife Liaison Officers.	CBP	Gwent Police	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Ensure all planning permissions for quarry extensions make provision for existing nest sites and provide new nest ledges on completed quarry faces well in advance of the breeding season.	CCBC	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:									
	Lead	Partners	2003	4	5	6	7	8	9	10	11	
6.4 Advisory												
6.4.1 Educate land managers of the need to reduce the use of rodenticides and pesticides through carefully targeted use, or alternative methods of pest control.	NAWAD	FUW NFU CCBC CCW		✓								
6.4.2 Liaise with pigeon organisations to raise their awareness of the peregrine and the measures available to prevent pigeon losses and therefore avoid confrontation with the law.	CBP	(SWPW)	✓									
6.5 Future Research and Monitoring												
6.5.1 Monitor all known nesting sites annually through South Wales Peregrine Watch members, to maintain a breeding record and safeguard against persecution [results are given to RSPB and CCW].	SWPW	CCW GBC GOS BTO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.2 Monitor peregrine populations through ringing surveys, gaining important information about dispersal, recruitment and longevity.	SWPW	BTO GBC GOS		✓			✓				✓	
6.5.3 Take part in the national peregrine surveys including 2002 and every 10 years thereafter.	SWPW	BTO GBC GOS	✓									
6.6 Communications and Publicity												
6.6.1 Encourage membership of wildlife trusts and local bird clubs.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Provide schools and colleges in the county borough with information in order to educate children, parents and teachers about the conservation of the peregrine in the area.	CBP	CCBC Schools Youth Forum	✓									
6.6.3 Discourage the use of insecticides and rodenticides in any publicity material.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.4 Raise awareness of the plight of the peregrine, and use it to promote the value of quarry habitats.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.5 Raise awareness and carry out research into the problem of peregrines and pigeons. There is a need in the South Wales Valleys to ease the persecution of peregrines which could be achieved through working together with pigeon-fanciers.	CBP	-		✓								
6.6.6 Use the peregrine as a 'flagship' species to highlight and promote the well being of the countryside and hence ourselves.	CBP	-	✓									

REED BUNTING *EMBERIZA SCHOENICLUS* SPECIES ACTION PLAN

1. INTRODUCTION

The reed bunting is a UKBAP priority species and a UK SAP has been prepared³⁷. Due to a local decline in numbers it is important for biodiversity conservation locally.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	-
Berne Convention (1982)	App. II
Bonn Convention (1979)	-
CITES (1975)	-
WCA 1981	Part I Section 1 Sch. 3
Birds of Conservation Concern List ³⁰	Red



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2. CURRENT STATUS

2.1 UK and Wales

The reed bunting is commonly associated with wetland sites and farmland, but it has suffered a significant decline in national population and range within the last 23 years, with a decrease of 68% between 1975 and 1998⁶.

In addition, the reed bunting has recently been shown to be suffering reduced survival rates and breeding performance.

2.2 Caerphilly County Borough

While the impact of the national trend is not known, the numbers of this species has certainly fallen within the county borough, with reed buntings noticeably absent or fewer now in what were regarded as traditional sites. **Map 2.11** shows the distribution of the reed bunting in the county borough.

2.3 Links with Habitats

- **Wetlands** (rivers, reedbeds, canals and still waters)
- *Deciduous Woodland* (wet woodland - 'carr')
- Agricultural land, particularly wet land with more diverse habitat types

3. CURRENT FACTORS AFFECTING THE SPECIES

Threats to the reed bunting are not entirely understood, although survey work carried out by the BTO indicates a decline that coincides with a number of other bird species, many of which share a diet of cereal, grass and wildflower seeds, and also feed their young on insects. These may be affected by similar changes in agricultural practices such as:

- increased use of pesticides and fertilisers
- switch from spring sown to autumn sown crops and the consequent loss of winter stubble fields

- o more intensive use of grassland
- o a general reduction in habitat diversity on farmland due to the loss of mixed farming and increased specialisation
- o removal of hedgerows and field borders
- o drainage and improvement of wet farmland

4. CURRENT ACTION

- 4.1 The reed bunting is likely to have benefited from initiatives designed to attract or maintain other wetland species, since it readily moves into newly created wetlands. Conservation organisations have devoted considerable resources towards the acquisition and management of reedbeds, wet grassland and other wetland areas.
- 4.2 The Gwent Ornithological Society and Glamorgan Bird Club gather information from its members on the distribution of reed bunting and other birds and both bodies publish annual bird reports^{17, 18, 19}.
- 4.3 The BTO Breeding Bird Survey also contributes to the annual monitoring and recording of reed bunting populations⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 In the short term, halt or reverse the decline in numbers of the reed bunting by the year 2003 so that the Breeding Bird Survey Index is at least at 1996 levels.
- 5.1.2 In the long term, see a sustained recovery in numbers so that the BBS Index is at least 50% higher than 1996 levels, in both wetland and farmland habitats, by 2008.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain present breeding numbers where strongholds of the species currently exist (Target: ongoing) and reverse the population decline in the other areas (Target: 2010).
- 5.2.2 Protect reed bunting habitats, particularly during the breeding season (Target: ongoing).

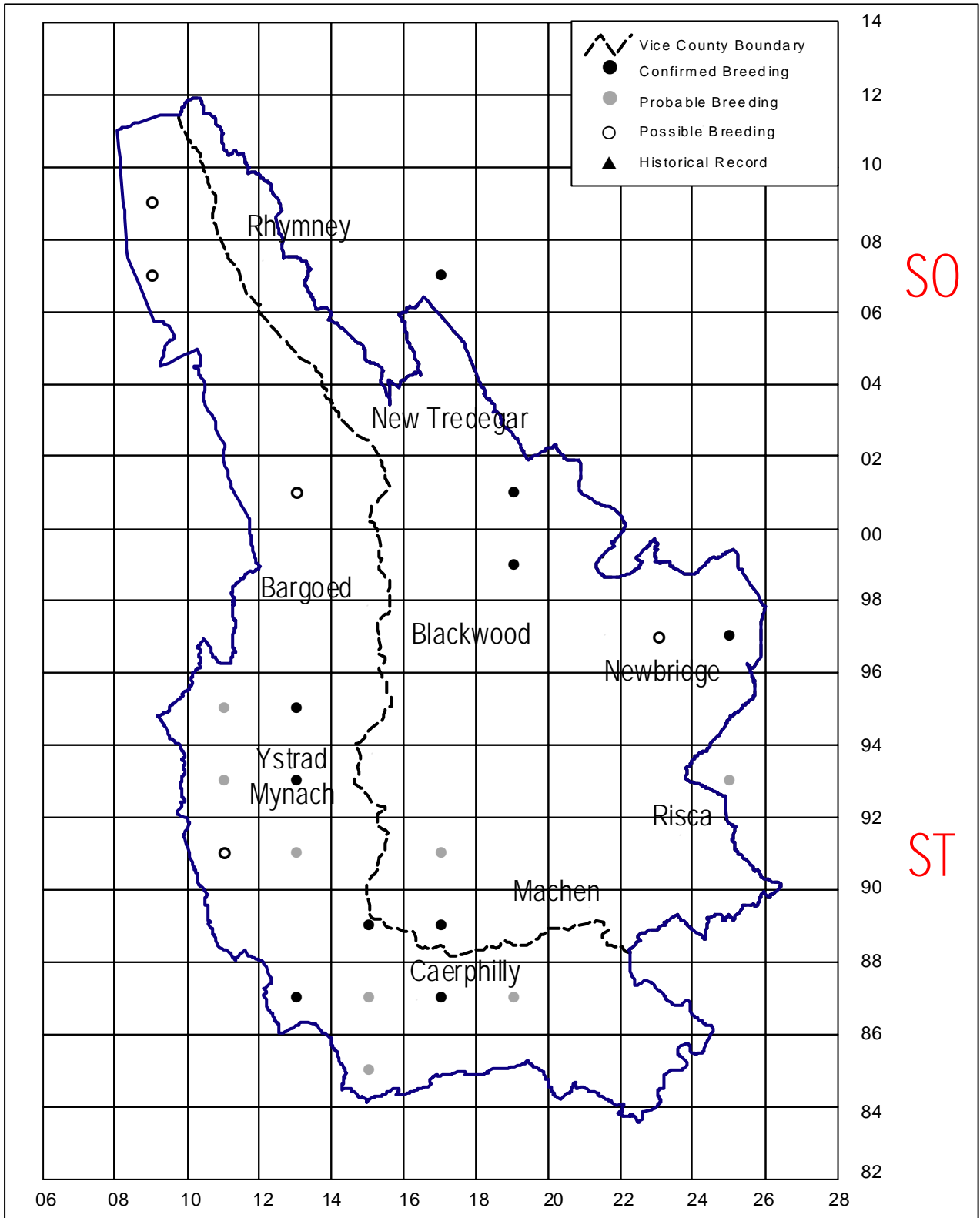
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Promote farming practices that will benefit the reed bunting, and other farmland birds.	CCW	NFU FUW RSPB NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Seek to designate sites of importance for the reed bunting and other wetland birds, as SIN, or LNR.	CCBC	CCW GWT GLWT									✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management											
6.2.1 Ensure sympathetic management and practices on wetland habitats.	EA	WW/DC CCBC CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Adopt sympathetic management on all CCBC owned land with breeding reed bunting.	CCBC	CCW		✓							
6.3 Species Management and Protection											
6.3.1 Ensure breeding sites are protected from disturbance or deterioration in habitat quality.	CCBC	CCW landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Seek to enhance the local population through appropriate management of potential sites identified through survey 6.5.2. (e.g. reedbed creation).	CCBC	CCW GWT GLWT				✓				✓	
6.3.3 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Educate and inform the general public as to the relative importance of our reed bunting population.	CBP	RSPB Schools Youth Forum	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey and monitor reed bunting within the county borough area.	GBC GOS	BTO GWT GLWT CCBC	✘								
6.5.2 Survey to identify potential new sites for the reed bunting.	GBC GOS	BTO	✘								
6.6 Communications and Publicity											
6.6.1 Produce an educational leaflet to be available at Countryside Parks and other CCBC property that highlights the importance of the species.	CBP	-		✓							

✘ Survey years to be determined.

MAP 2.11 – REED BUNTING



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Atgynhychwyd o fapiad yr Arolwg Ordnans gyda chaniatad rheolwr Llyfrfa ei Mawrhydi hawlfraint y Goron. Mae atgynhychu heb awdurdod yn torri hawlfraint y Goron. Gall hyn arwain at erlyniad neu achos sfil. Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

SKYLARK *ALAUDA ARVENSIS* SPECIES ACTION PLAN

1. INTRODUCTION

The skylark is afforded priority status in the UKBAP and a UK SAP has been written³⁹. It is therefore of importance in Caerphilly county borough.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	Annex I I / 2
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	Red



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2. CURRENT STATUS

2.1 UK and Wales

The skylark is one of the most widespread bird species in the UK with over 2 million resident breeding pairs being joined by probably a further 25 million winter visitors from the mainland of Europe. However over the last 25 years the UK population has crashed by over 50%. A pattern mirrored on the continent. Historically the species stronghold was lowland farmland. The implementation of changes in farming methods is generally quoted as the cause of this crash, especially the planting of autumn-sown rather than spring-sown cereals making the nesting habitat unsuitable. Similarly, fertilised grass may be too tall and dense for the species.

2.2 Caerphilly County Borough

Within Caerphilly county borough, as with Wales as a whole, the skylark is generally a species of the unimproved upland grasslands. As such the population declines are far less obvious, although there is some anecdotal evidence of decreasing population densities. This relative abundance makes our skylark population of great importance. **Map 2.12** shows how this bird is distributed within the county borough.

2.3 Links with Habitats

- **Species-rich Grasslands** (lowland neutral grassland and rhos pasture, often part of the upland common land)
- *Coedcae/ffridd* (grasslands within the habitat mosaics that border the commons)
- *Common Land*
- *Post-Industrial Land* (re-seeded colliery spoil and naturally revegetated colliery spoil)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Intensive management of arable land leading to a reduction of insects and weed seeds.
- Intensive management of both lowland and upland grasslands.
- High stocking rates particularly of sheep.

- Reduction in winter stubble fields due to autumn sown crops.
- Early silage cutting instead of traditional hay making destroys nests during the breeding season.
- Drainage and 'improvement' of wet grasslands.
- Increased disturbance of nesting sites on commons by the general public particularly when 'off-roading' on scramblers or in cars.
- Afforestation of the uplands.

4. CURRENT ACTION

- 4.1 Continued survey work by the BTO. The BTO Breeding Bird Survey contributes to the annual monitoring and recording of skylark populations⁶. Some survey work has already been undertaken by CCBC in Caerphilly county borough.
- 4.2 The Gwent Ornithological Society and Glamorgan Bird Club gather information from members on the distribution of skylarks and both publish annual bird reports^{17, 18, 19}.
- 4.2 RSPB/Tesco partnership in funding and preparing the UK SAP.
- 4.3 Ecological studies of the species by the RSPB.
- 4.4 The Tir Gofal agri-environment scheme may be beneficial to the species, especially in less intensively grazed areas.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Maintain present breeding numbers, wintering numbers and distribution throughout the UK.
- 5.1.2 Reverse the population decline on lowland farmland and other habitats throughout the UK, where found to be declining.
- 5.1.3 Protect the skylark's habitat, especially in the breeding season.

5.2 Caerphilly County Borough

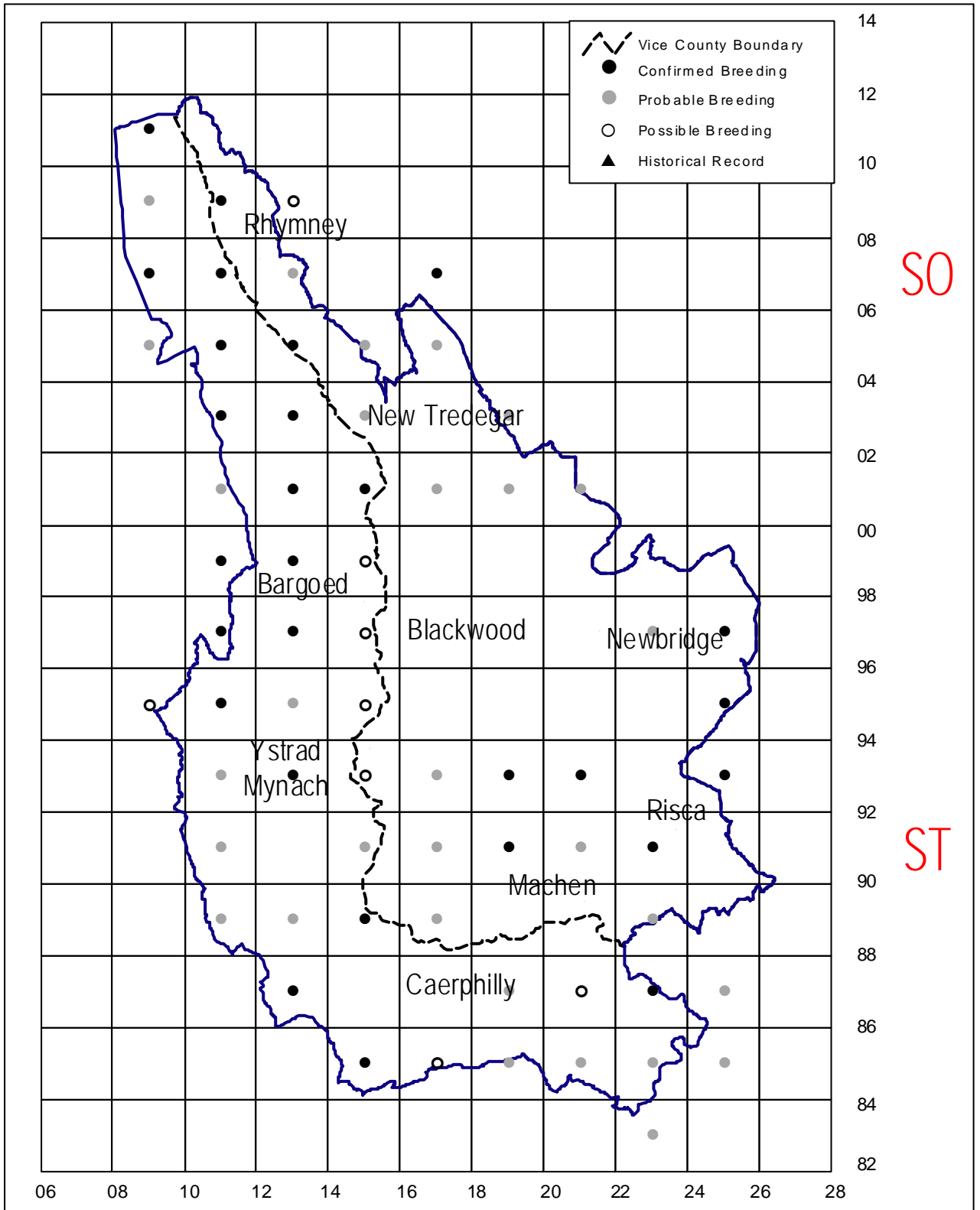
- 5.2.1 Maintain the breeding population in the remaining strongholds of the county borough (Target: ongoing).
- 5.2.2 Reverse the population decline in the county borough and investigate the possible decline in upland grasslands (Target: 2010).
- 5.2.3 Protect habitats which are important to the species (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Promote farming practices that will benefit the species, for example through the Tir Gofal Scheme.	CCW	NAWAD NFU FUW RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Adopt sympathetic management of all CCBC land with breeding skylark.	CCBC	-	✓	✓	✓						
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Educate and inform the local population as to the relative importance of our skylark population.	CBP	RSPB Schools Youth Forum	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey and monitor skylark populations within the county borough.	GBC GOS	BTO CCW	✘								
6.6 Communications and Publicity											
6.6.1 Produce a leaflet regarding the importance of the skylark for biodiversity, to be available at Countryside Parks and other CCBC properties.	CBP	-		✓							

✘ Survey year to be determined.

MAP 2.12 – SKYLARK



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Atgynhychwyd o fapiad yr Arolwg Ordnans gyda chaniatad rheolwr Llyfifa ei Mawrhydi hawffraint y Goron. Mae atgynhychu heb awdurdod yn torri hawffraint y Goron. Gall hyn arwain at erlyniad neu achos sifil. Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

SONG THRUSH *TURDUS PHILOMELOS* SPECIES ACTION PLAN

1. INTRODUCTION

The song thrush is a UK priority species and a UK SAP has been prepared³⁹. It is therefore of importance for biodiversity conservation in Caerphilly county borough.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	Annex I I / 2
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1 Sch. 3
Birds of Conservation Concern List ³⁰	Red



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2. CURRENT STATUS

2.1 UK and Wales

The song thrush is historically very common. Populations were at a stable level nationally until the mid-1970s, but subsequently there has been a severe decline, with a 73% reduction on farmland and 49% in woodland habitats.

2.2 Caerphilly County Borough

The species is still a familiar sight in the local area with records from the majority of tetrads (see **Map 2.13**), but its actual population densities are currently unknown. There is some anecdotal evidence of a local decline.

2.3 Links with Habitats

- *Deciduous Woodlands*
- *Wildlife Corridors*
- *Species-rich Grasslands*
- ***Urban Habitats***

3. CURRENT FACTORS AFFECTING THE SPECIES

- The reasons for the national decline in this species are poorly understood. Although intensification of farming practices, particularly on arable farms, may be a major factor nationally, this may be less important locally.
- The use of molluscicides e.g. slug pellets in gardens and allotments is thought to be a significant factor in the loss of the song thrush.
- Mortality of young birds due to cold wet weather in the nesting season has been shown to have a severe long-term effect on the population.

4. CURRENT ACTION

- 4.1 The Gwent Ornithological Society and Glamorgan Bird Club gather information from members on song thrush distribution and both publish annual bird reports^{17, 18, 19}.
- 4.2 The BTO Breeding Bird Survey also contributes to the annual monitoring and recording of song thrush populations⁶.
- 4.3 RSPB research is ongoing.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Halt the decline of this species in the UK by the year 2000 (UKBAP, 1995).
- 5.1.2 Maintain the range and population levels of song thrush, and where possible restore them to that of the 1970 estimate.
- 5.1.3 Identify and implement priority research in order to formulate future conservation action.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Identify the current distribution and population of the song thrush in the local area through a county-wide survey, and establish a monitoring programme (Target: 2004).
- 5.2.2 Maintain the range and population of song thrush (Target: ongoing).

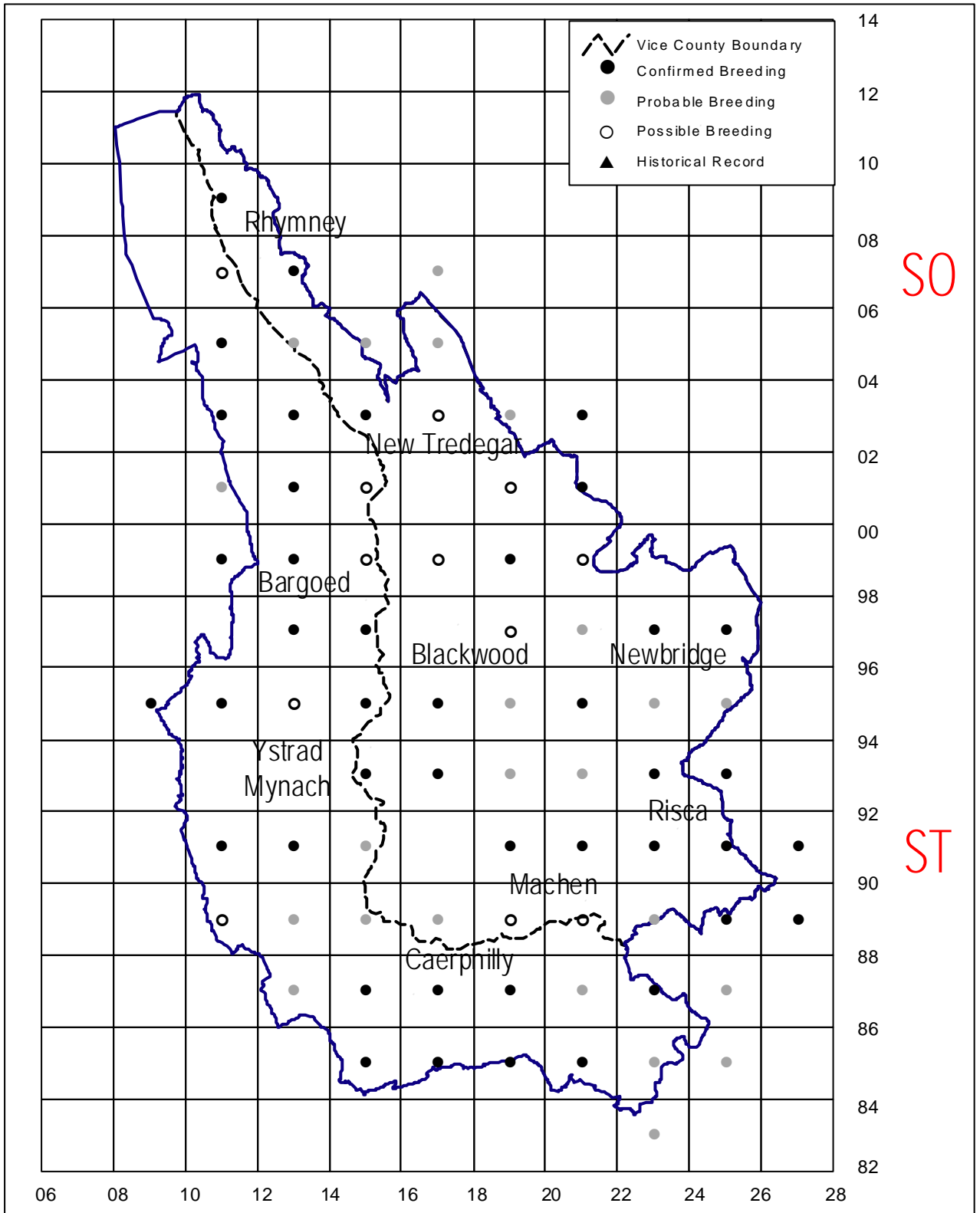
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Promote careful and limited use of molluscicides or alternative mollusc control methods on gardens and allotments (e.g. snail pellets).	CCBC	Allotment Societies Community Councils	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 None proposed, but some nesting sites would benefit from SINCC status allocated for other reasons.	(CCBC)	-									(✓)
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
No other action proposed until further survey work is undertaken to identify population distribution and numbers (Action 6.5).	-	-									

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.4 Advisory											
6.4.1 Provide appropriate advice to farmers, gardeners and householders when the results of research become available.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Identify the current status and population density of the species, for example through the use of "Walk Through Surveys" (similar to the BTO Breeding Bird Survey) of specific areas.	GBC GOS	RSPB BTO CCBC	✕								
6.6 Communications and Publicity											
6.6.1 Use as a possible 'flagship' species to raise awareness of the aims of the BAP process with the general public in a Garden and Household Bird Survey targeted at all householders in the county borough.	CBP	-	✓				✓				
6.6.2 Use the song thrush image on leaflets, posters, newsletters etc, where appropriate.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

✕ Survey year to be determined.

MAP 2.13 - SONG THRUSH



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SPOTTED FLYCATCHER *MUSCICAPA STRIATA* SPECIES ACTION PLAN**1. INTRODUCTION**

The spotted flycatcher is listed as a UK priority species and a UK SAP has been prepared³⁷.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	-
Berne Convention 1982	App. II
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	Red
Other Species Status	RDB Birds: candidate



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2. CURRENT STATUS**2.1 UK and Wales**

The spotted flycatcher is an insectivorous summer migrant. It is one of the latest summer visitors to arrive each year with only a few birds being recorded before mid-April; the main influx being in early May.

They remain in Britain for only a short time and birds start leaving in August and have usually left after second broods by mid-September. They breed in open woodland habitats throughout the UK. Preferred habitats are mature broadleaved woodland (essentially woodland edge and glades), hedgerows with mature trees, parkland, large gardens, churchyards, cemeteries and particularly wooded watersides that are rich in the large flying insects (especially Diptera and Hymenoptera) which form the majority of the spotted flycatcher's diet. The bird takes prey from the air mainly by flying out from a perch, catching the insect and returning to the perch to swallow it. They are fairly tolerant of disturbance and will use open-fronted nest boxes on houses, especially where overgrown by climbing plants.

The spotted flycatcher is well distributed throughout Wales although it generally avoids high ground above 260 meters and its distribution is patchy in the western peninsulas of Pembrokeshire, Llŷn and Anglesey. Evidence in Wales is too scant to show just how much the decline in the UK applies to Wales, however, a decline of up to 25% has been recorded in the breeding population of north Breconshire since the 1980s.

It has been in decline in the UK since the early 1960s; the Common Bird Census data showed a 78% decline in woodland and a 78% decline on farmland between 1972 and 1996. The Breeding Bird Survey also shows a significant decline (23%) in numbers between 1994-98.

2.1 Caerphilly County Borough

In Glamorgan, regularly monitored areas indicated that breeding numbers declined in the 1980s, with populations being sustained at the lower levels into the 1990s. Data collected in the former Islwyn area of Caerphilly county borough by the Gwent Ornithological Society during 1998-2000

indicates a dramatic decline in the distribution of breeding birds when compared to records collected during 1981-85. Birds were recorded in thirteen tetrads compared to 21 previously suggesting a possible reduction of 38%. **Map 2.14** shows the current breeding population distribution in the county borough.

2.2 Links with Habitats

- **Deciduous Woodlands** (lowland wood pasture and parkland, wet woodland)
- **Wildlife Corridors** (hedgerows)
- **Urban Habitats** (gardens)

3. CURRENT FACTORS AFFECTING THE SPECIES

The reasons for the species decline are not clear, but they may include:

- **Loss of nest sites:** many spotted flycatchers nest in large trees and there has been a large-scale loss of these in woodland, parks and hedgerows (especially following Dutch elm disease), which are favoured habitats. However, there is no qualitative data on the effect of these losses.
- **Weather effects:** the key factor appears to be summer weather conditions as more birds breed early if temperatures are warmer.
- **Migration:** the spotted flycatcher passes through the Sahel region en route to wintering grounds in southern Africa. Drought in Sahel or the wintering areas could be a factor in the decline, but no clear link has been established.

4. CURRENT ACTION

- 4.1 Some aspects of broadleaved woodland management, particularly the creation and maintenance of clearings and wide rides, will have benefited the species.
- 4.2 Provision of nest-boxes (usually for other species) will have helped the species, especially in areas where there is a dearth of natural sites.
- 4.3 Although the species is not monitored systematically, the Gwent Ornithological Society and Glamorgan Bird Club gathers information from its members on the distribution of spotted flycatcher and other birds and both bodies publish annual bird reports^{17, 18, 19}.
- 4.4 The BTO Breeding Bird Survey also contributes to the monitoring and recording of spotted flycatcher populations⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 In the short term, halt or reverse the decline in numbers of the spotted flycatcher by the year 2003 so that Breeding Bird Survey index is at least at 1996 levels.

5.1.2 In the long term, see a sustained recovery in numbers so the Breeding Bird Survey index is at least 50% higher than 1996 levels. (Target: 2008).

5.2 Caerphilly Objectives and Targets

5.2.1 Identify the current population distribution and number in the county borough through appropriate survey work (Target: 2005).

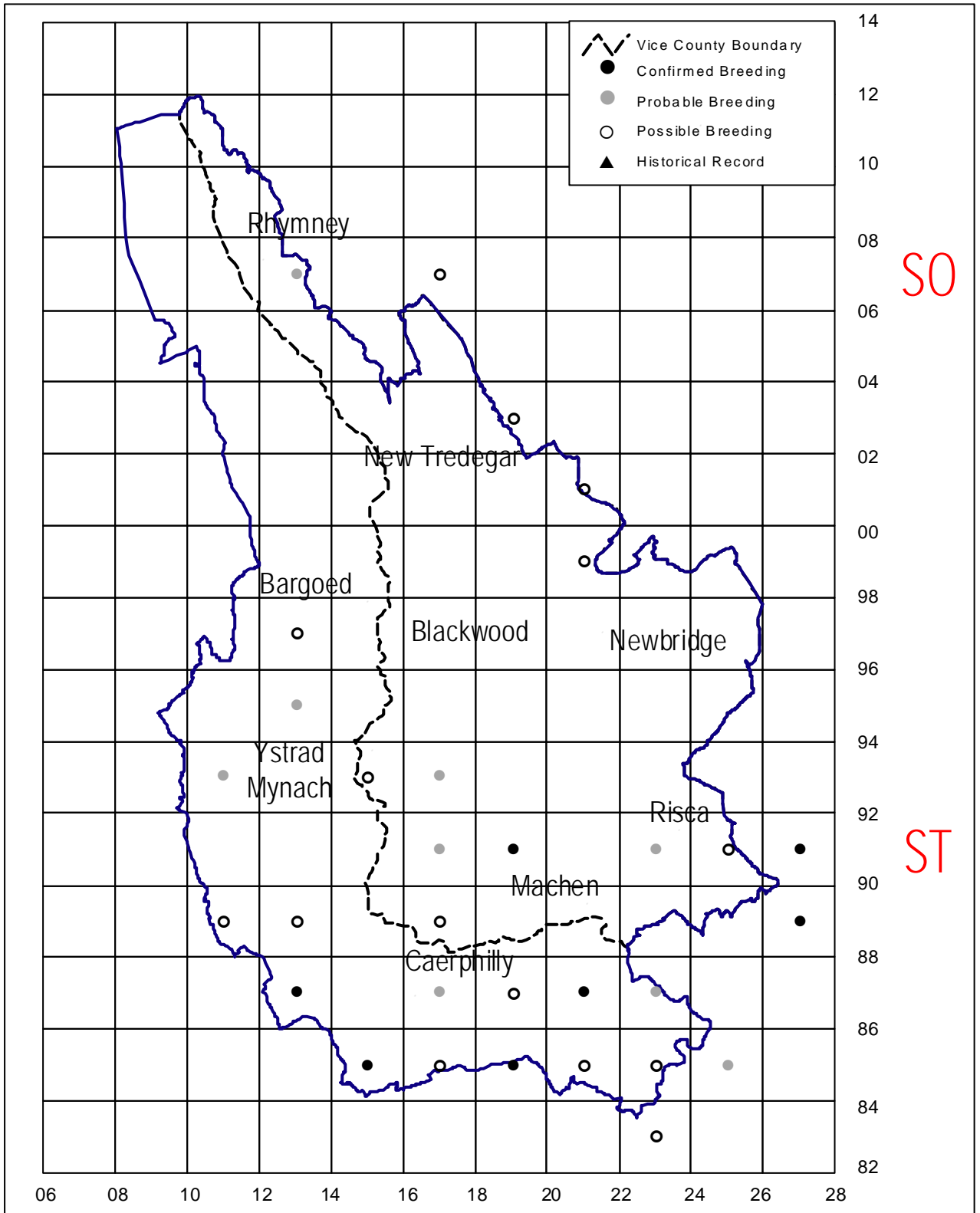
5.2.2 Maintain the current distribution of the species in the county borough and seek to increase the local population size and range (identified in 5.2.1) by 50% (Target: 2010).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to designate areas of importance (breeding sites) as SINCLNR.	CCBC	CCW									✓
6.2 Site Safeguard and Management											
6.2.1 Seek to protect sites that regularly support breeding spotted flycatchers such as deciduous woodlands, wildlife corridors (hedgerows) and urban habitats.	CCW	CCBC GWL GLWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Identify potential new sites for this species and encourage appropriate habitat management; maintain and/or create woodland glades and rides, manage hedgerows, churchyards, etc.	CCW	FC CCBC Coed Cymru			✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Consider the requirements of nesting spotted flycatchers when providing nest-boxes in nature reserves, country parks and other suitable sites and habitats.	CCBC	Coed Cymru landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Raise awareness of the needs of this species in general advice on woodland and farmland management, including provision of broadleaved stands with an open canopy and open spaces, such as rides and tree falls.	CCW	FC NAWAD NFU FUW CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Encourage appropriate monitoring through the continuation of the Breeding Bird Survey (BTO/JNCC/ RSPB) and local ornithological society survey work. Develop better understanding of the population and range of species over the county.	GBC GOS	BTO RSPB	✕	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Consider targeting this species for a "public-participation" survey.	CBP		✓								

✕ Survey year to be determined.

MAP 2.14 - SPOTTED FLYCATCHER



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TREE SPARROW *PASSER MONTANUS* SPECIES ACTION PLAN

1. INTRODUCTION

The tree sparrow has been declining nationally in both numbers and range for a large part of the last century and consequently it has been classified as a priority species in the UKBAP³⁷. It has therefore been selected for action in Caerphilly county borough.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	Red
Other Species Status	RDB Birds: candidate



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2. CURRENT STATUS

2.1 UK and Wales

The tree sparrow is found across the UK normally on lowland or low upland farmland.

However its distribution is patchy and with prolonged fluctuations involving inexplicable colonisations, and desertions of well established areas. The main populations are found across the Midlands, southern and eastern England, the species being almost absent in the western parts of the UK. Tree sparrows appear to undergo irregular fluctuations in numbers. There was an 85% decline in numbers in Britain between the two breeding atlas periods (1968-72 and 1988-91), the largest decline of any common species during this period. The tree sparrow's range also decreased by 20% during the same period the largest losses being in Wales and Scotland.

The species is a breeding resident in Wales, in small numbers with a patchy distribution, and absent from most western areas. Its stronghold has always been in the Marches, in those counties bordering the west Midlands. Tree sparrows nest in holes in trees, usually having 2-3 broods. The clutch size varies between 2-7, (frequently 5) with 11-14 day incubation and 15-20 day fledging periods. Acceptable habitat includes pollarded willows and other trees with nest-holes along lowland watercourses; free standing trees along roadsides or in groups in parks, cemeteries, or farmland; woodlands, especially where they are small, isolated in open country with well-spaced mature broad-leaved trees. They feed predominantly on the ground, eating seeds, berries and buds, and rough grassland supports important seed sources.

2.2 Caerphilly County Borough

Tree sparrows in Caerphilly county borough are now very uncommon. Small numbers are occasionally recorded on autumn passage, but generally, upland areas in the county are not suitable for the species and although it has never been common in the industrial valleys, their status here is now thought to be unstable. Historically, the area has had residential breeding colonies in suitable habitat along river valleys, especially the Sirhowy and lower Rhymney valleys.

Data collected by the Gwent Ornithological Society during 1998–2000 shows a dramatic decline in distribution when compared to survey details collected during 1981–85¹⁹. Only one of the eight tetrads in the Sirhowy valley had tree sparrow records and a former stronghold in the Crosskeys/Risca area appears to have been lost completely.

No recent survey has been conducted in the lower Rhymney river valley, however one tetrad bordering the area has had tree sparrow recorded recently during the breeding season, therefore it is possible that a residual population still exists in this area (see **Map 2.15**).

2.3 Links with Habitats

- **Deciduous Woodlands** (lowland wood pasture and parkland, wet woodland)
- **Wildlife Corridors** (roadside verges, railway lines)

3. CURRENT FACTORS AFFECTING THE SPECIES

Little is known about the factors affecting numbers of tree sparrow, but their recent decline has occurred at the same time as decreases in the numbers and/or ranges of other farmland birds which share its diet of grass, wildflower and cereal seeds, and also feed their young on insects. It is likely therefore that the reasons associated with the decrease in breeding numbers are:

- Changing agricultural practices - increased use of herbicides; shift from spring-sown to autumn-sown crops and consequent loss of winter stubble in fields; more intensive management of grassland; and the general reduction of habitat diversity on farmland due to the loss of mixed farming and increased specialisation.
- Availability of nests sites may be a limiting factor for this hole-nesting species.
- Long-term changes in climate, which may be a factor in the species retreat to the east.

4. CURRENT ACTION

- 4.1 UK BAP priority species³⁷ and implementation of the UK SAP.
- 4.2 Nest box schemes have been implemented in some areas.
- 4.3 Although the species is not monitored systematically, the Gwent Ornithological Society and Glamorgan Bird Club gathers information from its members on the distribution of tree sparrow and other birds and both bodies publish annual bird reports^{17, 18, 19}.
- 4.4 The BTO Breeding Bird Survey also contributes to the monitoring and recording of tree sparrow populations⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 In the short term, halt or reverse the decline in numbers of the tree sparrow by the year 2003 so that the Breeding Bird Survey index is at least at 1996 levels.

- 5.1.2 In the long term, see a sustained recovery, so that the BBS index is at least 50% higher than 1996 levels, and a measurable increase in range is achieved by 2008.

5.2 Caerphilly Objectives and Targets

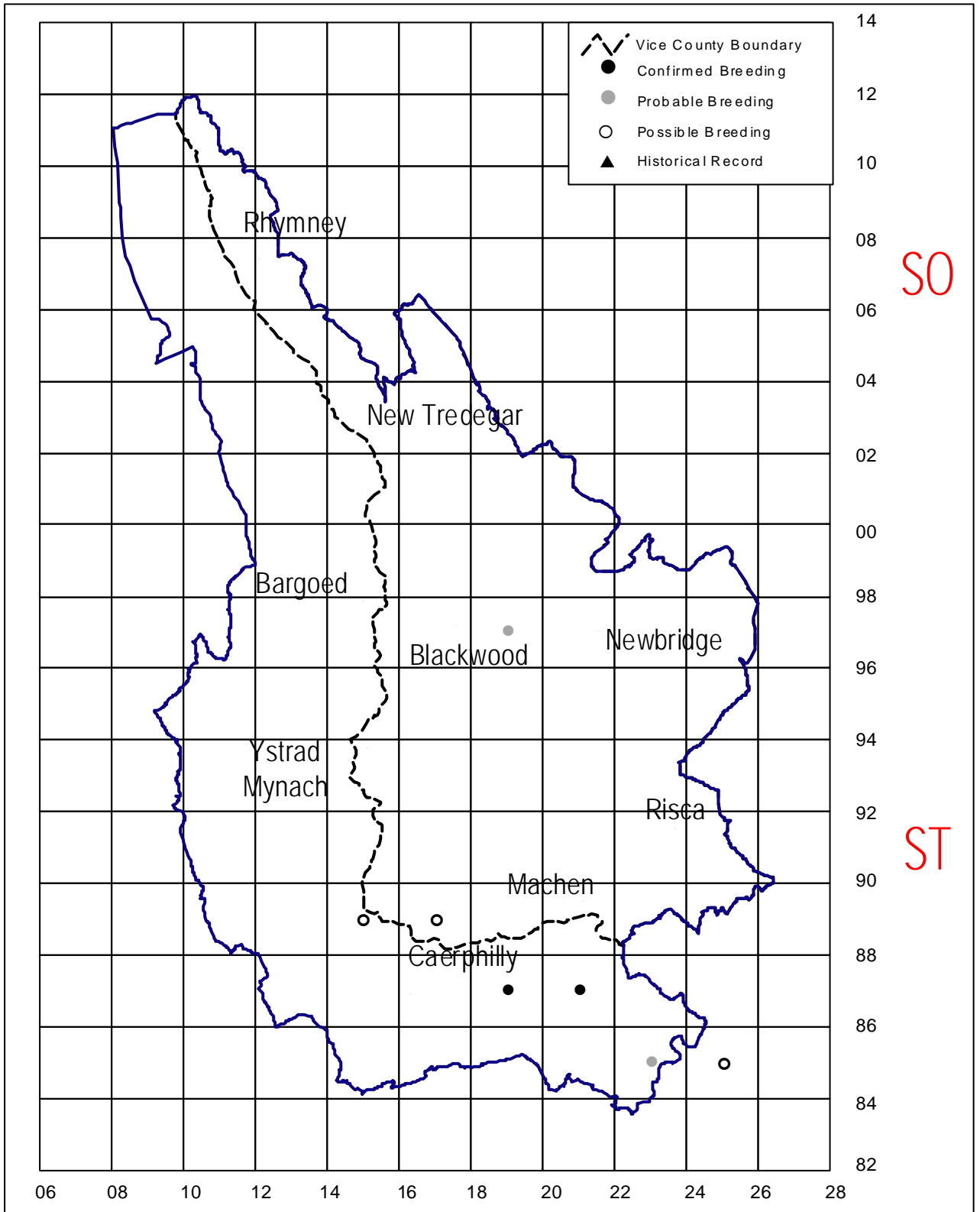
- 5.2.1 Gain a full understanding of the current population of tree sparrow in Caerphilly county borough by carrying out a county wide survey on existing and historical breeding sites by 2005.
- 5.2.2 Maintain the current distribution and abundance of tree sparrow. (Target: ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Introduce specific targets for increasing the number of breeding pairs in the light of survey results.	CBP	-			✓						
6.2.1 Seek to designate all regularly used nesting sites as SINCLNR.	CCBC	CCW									✓
6.2 Site Safeguard and Management											
None proposed at this time.	-	-									
6.3 Species Management and Protection											
6.3.1 Consider the scope for introducing management measures where tree sparrow colonies still exist, e.g. including the provision of nest boxes, retention of dead trees, encouragement of pollarding and the provision of winter feeding.	CCW	CCBC Coed Cymru FC	✓	✓							
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Advise land managers on management for tree sparrows, taking account of findings of research resulting from UK BAP.	CCW	NAWAD FC CCBC Coed Cymru RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Undertake a local breeding bird survey to cover suitable habitats.	GBC GOS	RSPB BTO	✕								
6.5.2 Collate all the known information on breeding sites (historic and existing) in the county borough to target survey, monitoring and habitat management.	GBC GOS	BTO RSPB CCW	✓								
6.6 Communications and Publicity											
6.6.1 Improve co-ordination and information sharing between all groups and individuals with knowledge of tree sparrow and their distribution.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓

✕ Survey year to be determined.

MAP 2.15 - TREE SPARROW



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WETLAND BIRDS SPECIES ACTION PLAN

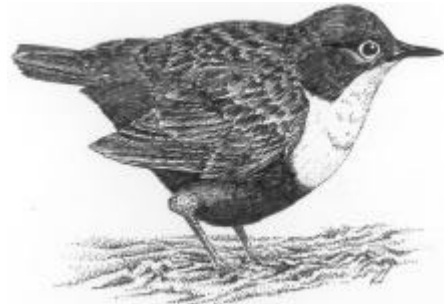
1. INTRODUCTION

This Species Action Plan covers three bird species that are generally associated with similar wetland habitats, and are important indicators of the quality of the wetland environment.

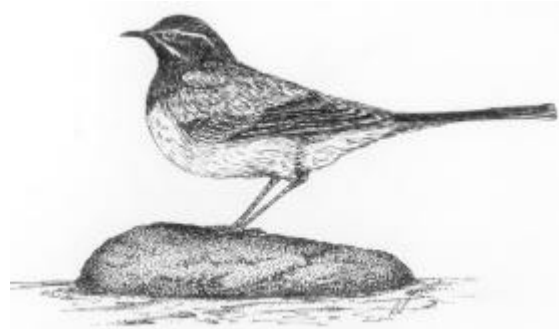
The three species are:

- **Dipper** *Cinclus cinclus*
- **Grey wagtail** *Motacilla cinerea*
- **Kingfisher** *Alcedo atthis*

Relevant Legislation/Species Status			
	Dipper	Grey wagtail	Kingfisher
priority species (P) or species of conservation concern (S)	S	S	S
EC Birds Directive 1979	-	-	Annex 1
Berne Convention 1982	App. II	App. II	App. II
Bonn Convention 1979	-	-	-
CITES 1975	-	-	-
WCA 1981	Part I Section 1	Part I Section 1	Part I Section 1 Sch. 1
Birds of Conservation Concern List ³⁰	-	-	Amber
Other Species Status	RDB Birds: candidate	-	-



dipper © CCBC 2002



grey wagtail © CCBC 2002

2. CURRENT STATUS

2.1 Caerphilly County Borough

The dipper, grey wagtail and kingfisher all require a high quality of water with good populations of aquatic invertebrates or small fish. Since the demise of the coal mining industry in south Wales, rivers have all but returned to their former state, holding healthy populations of invertebrates, and a wide variety of fish species.



kingfisher © CCBC 2002

All of these wetland birds are also good indicators of the quality and health of the aquatic environment. They are currently found along the rivers and streams within the county borough, and both the grey wagtail and kingfisher are frequently found alongside areas of still water. Only the dipper is confined to river and stream channels, requiring areas of swift moving water commonly associated with the upper and parts of the middle reaches of river courses. **Maps 2.16** (dipper), **2.17** (grey wagtail) and **2.18** (kingfisher) show the current population distribution of these species in Caerphilly county borough.

2.2 Links with Habitats

- **Wetlands (rivers and streams)**
- **Wetlands** (lakes and reservoirs) - grey wagtail and kingfisher
- *Common Land* (wet areas)
- Wet farmland - grey wagtail
- Rock faces bordering rivers and streams (used as nest sites)
- Man-made features (post-industrial; retaining walls, dressed stone channelling and bridges (following or crossing water courses - used as nest sites) - dipper and grey wagtail

3. CURRENT FACTORS AFFECTING THE SPECIES

- Lack of suitable nest sites can limit the breeding density (dipper).
- Rapid river level changes within the county borough means that safe and undisturbed nest sites may be a limiting population factor.
- Modifications to river channels and embankments contribute further to river level rise and may remove or reduce suitable nest sites for wagtails and kingfishers.
- Bridge renovation may deprive dippers and grey wagtails of nest sites, but the incorporation of nest cavities/ledges in bridge and wall-retaining works maintains nesting sites.
- Accidental discharge of raw sewage from ageing sewage pipes reduce water quality and have an effect upon aquatic food sources, particularly on rivers where the sewage pipe is constructed either on or adjacent to the river bed.
- Industrial effluent discharges can have profound effects upon all aquatic populations, particularly accidental or intentional discharges of concentrated chemical solutions.
- Mine water discharge.

4. CURRENT ACTION

- 4.1 All three species will have benefited from work undertaken by the EA over the past decade. Modifications to river channels, the creation of weirs and the management of bank-side trees and vegetation have all assisted in providing a more suitable environment for fish and aquatic invertebrates. The provision of large block stone river defences has inadvertently provided additional nesting areas for all three species, as well as creating suitable perches for feeding. The weirs also create new areas of relatively still water and riffle, allowing a possible expansion of the range of dippers along the length of the rivers.
- 4.2 The Gwent Ornithological Society and Glamorgan Bird Club gather information from their members on the distribution of these wetland birds and both bodies publish annual bird reports^{17, 18, 19}. The BTO Breeding Bird Survey also contributes to the monitoring and recording of these wetland bird species⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to these species.

5.2 Caerphilly Objectives and Targets

5.2.1 Survey all suitable watercourses to develop a better picture of the number of breeding pairs or territories held (Target: 2005).

5.2.2 Maintain present breeding populations of these species (Target: ongoing).

5.2.3 Provide relevant data to planners, developers and organisations involved in river maintenance work, to allow consideration or mitigation where work is carried out on or near watercourses (Target: ongoing).

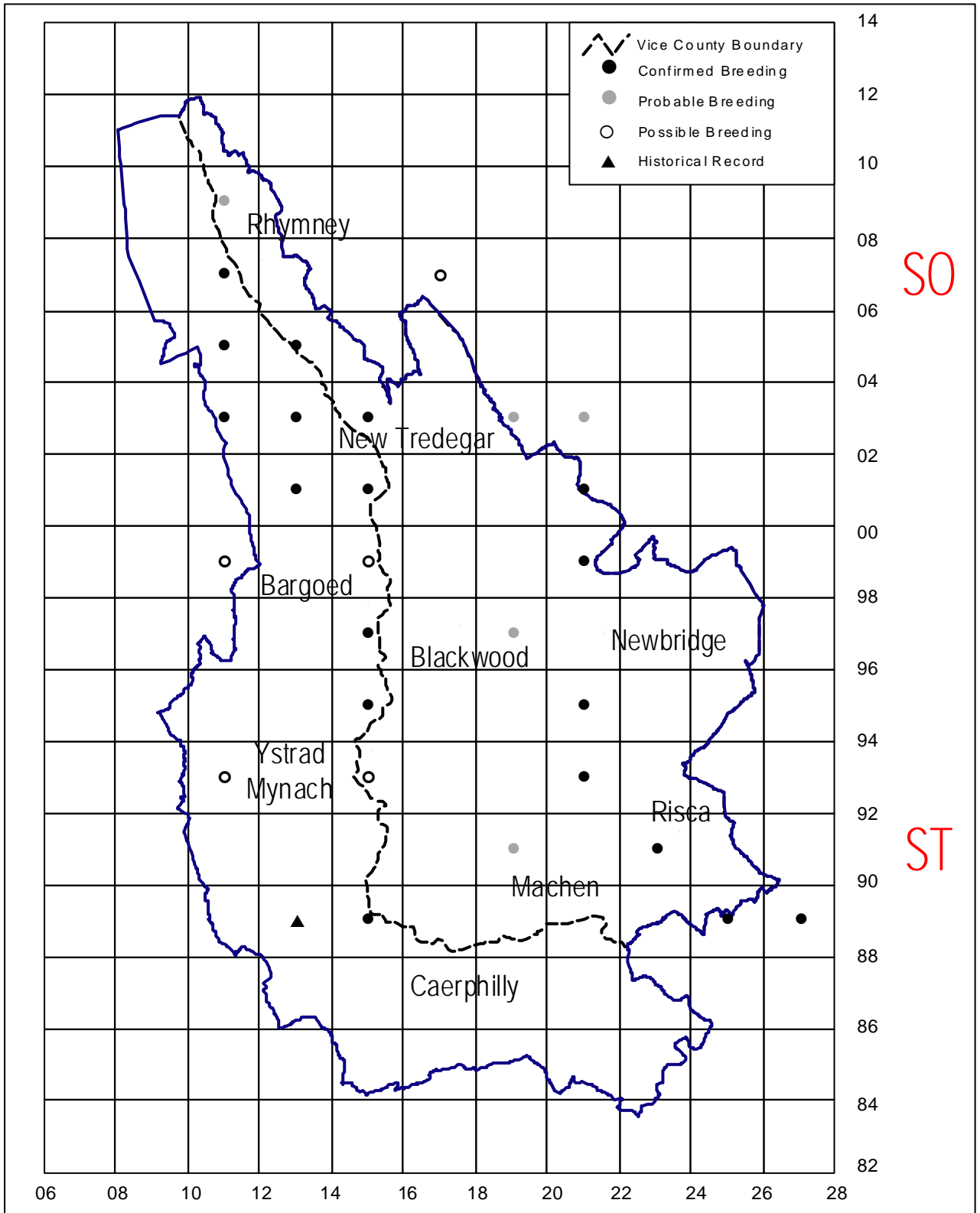
6. ACTION AND KEY TARGETS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to designate important sites with significant numbers of wetland birds as SINCLNR.	CCBC	CCW									✓
6.2 Site Safeguard and Management											
6.2.1 Adopt and promote a sympathetic approach to the management of riparian habitats.	EA	CCBC landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Encourage the provision of nest boxes on bridges for the dipper and grey wagtail. Introduce a nest box scheme after suitable sites have been identified in action 6.5.2.	CCBC	EA Schools volunteers				✓					
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Educate and inform the general public of the requirements and importance of these species, particularly their importance as environmental indicators for the state of our watercourses.	EA	GWT GLWT CCBC RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey all suitable watercourses to identify the current distribution of these species in the county borough.	GBC GOS	BTO	✕								
6.5.2 Continue to monitor these species in the county borough.	GBC GOS	BTO	✓	✓	✓	✓	✓	✓	✓	✓	✓

✕ Survey year to be determined.

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.6 Communications and Publicity											
6.6.1 Produce and disseminate information leaflets to Country Parks and other CCBC property/facilities.	CBP	-		✓							

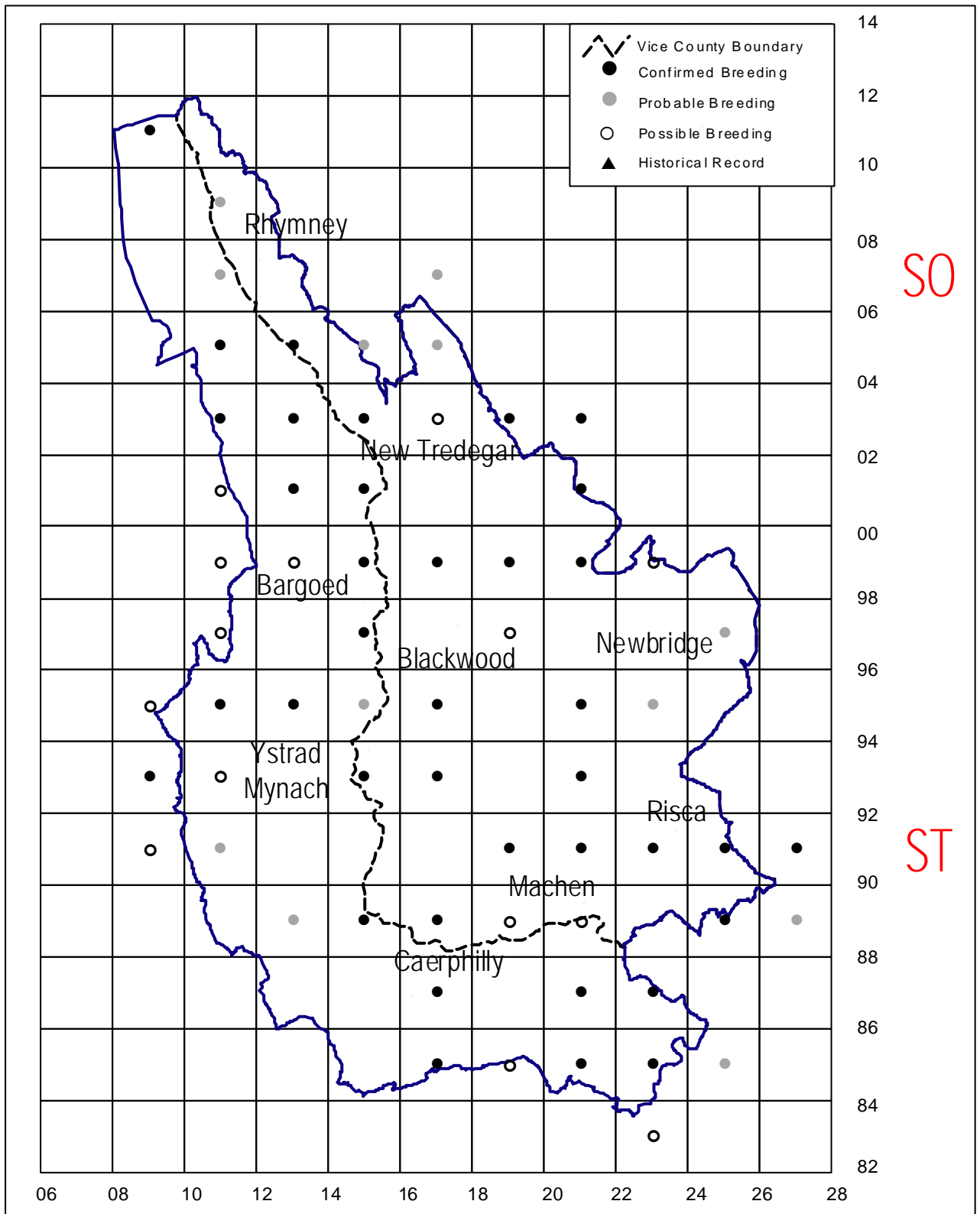
MAP 2.16 - DIPPER



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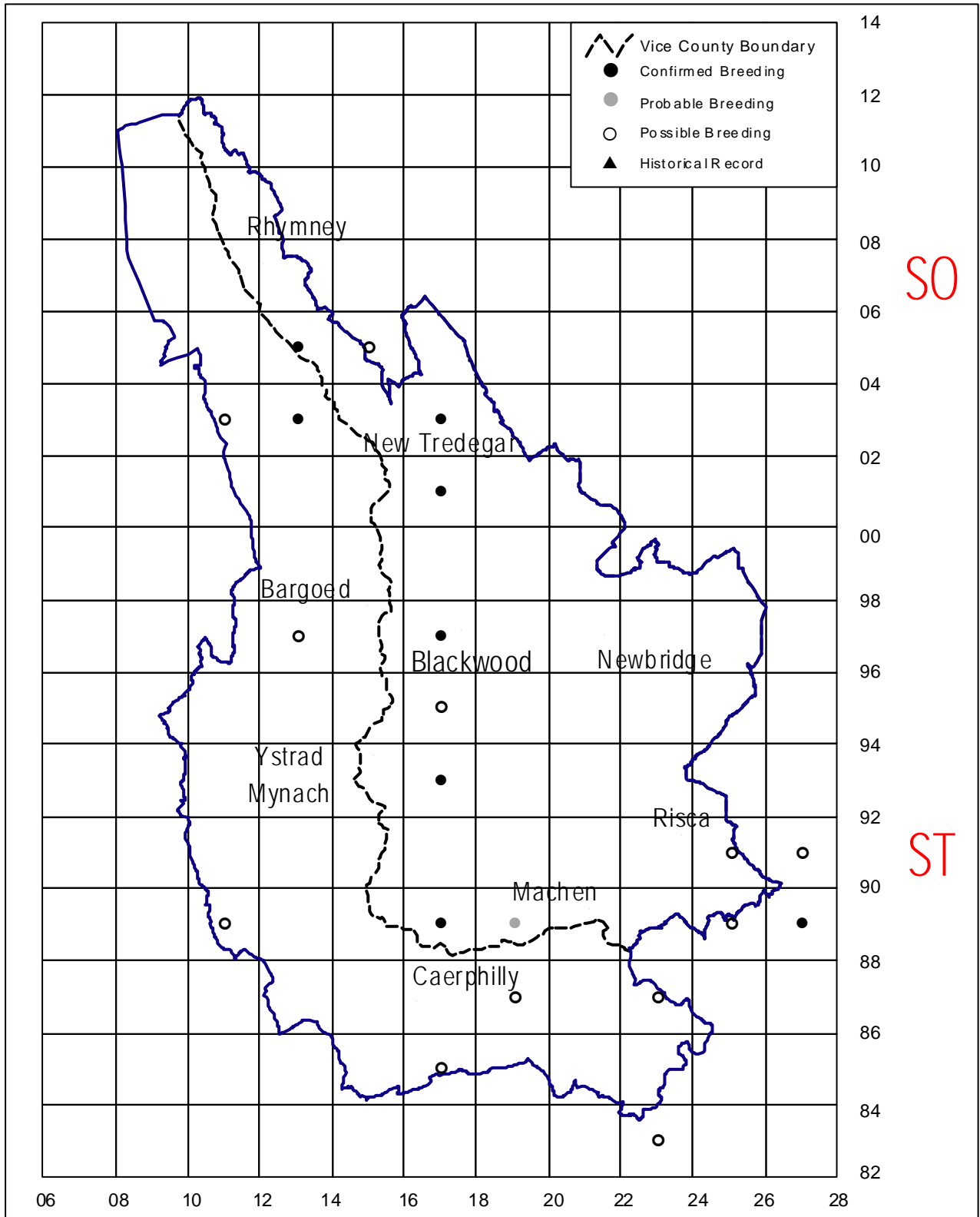
MAP 2.17 - GREY WAGTAIL



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MAP 2.18 - KINGFISHER



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YELLOWHAMMER *EMBERIZA CITRINELLA* SPECIES ACTION PLAN

1. INTRODUCTION

Although not a UK priority species, the yellowhammer has been identified as a locally important species.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	-
Berne Convention 1982	App. I I
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1 Sch. 3
Birds of Conservation Concern List ³⁰	Amber



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2. CURRENT STATUS

2.1 UK and Wales

The yellowhammer was once a common and widespread species throughout Wales. However, over the last few decades it appears to have declined considerably in inland areas; by 25-49% in the last 25 years. It is now relatively common only on mixed farmland on the coastal strip. The main diet of the yellowhammer is seeds, but they often take insects to feed their chicks, including moths, beetles and butterflies.

2.2 Caerphilly County Borough

Yellowhammers were also once a common and widespread species in Caerphilly county borough, but it is in decline. It is still reported from some areas of ffridd/coedcae in the county borough. Although these sites are not important nationally, they are of importance locally as the species is now uncommon within the area. The breeding distribution of yellowhammers in the county borough is shown on **Map 2.19**.

2.3 Links with Habitats

- *Ffridd/Coedcae*
- *Wildlife Corridors* (hedgerows)
- *Deciduous Woodlands* (open woods)
- *Heathland*
- Gorse, hawthorn and other scrub

3. CURRENT FACTORS AFFECTING THE SPECIES

- Land management factors, particularly the loss of mixed farming in Wales, may have contributed to their decline.
- The loss of winter stubble fields (particularly in the south of the county borough) robs them of a source of food (seeds) during the winter months.

- The increased use of herbicides removes the weeds that they rely on for seeds.
- The increased use of pesticides reduces the numbers of insects with which to feed their chicks.
- Inappropriate management and loss of bushy hedgerows, scrub and ffridd in which yellowhammers nest is also a significant factor.

4. CURRENT ACTION

- 4.1 New ESA prescription encourages the retention of winter stubble and growth of spring sown cereals.
- 4.2 The species will benefit from provisions under the Tir Gofal agri-environment scheme, including the retention and sensitive management of hedgerows.
- 4.3 Farmland and bird management guidelines have been produced jointly by BTO, RSPB and FWAG.
- 4.4 The Hedgerow Regulations, 1997, will protect ancient and/or species-rich hedgerows likely to be favoured by the species¹¹.
- 4.5 Census work by BTO⁶ monitors the extent of the decline nationally and the Ecology and Behaviour Group from Oxford University are currently analysing this information.
- 4.6 Gwent Ornithological Society and Glamorgan Bird Club produce annual bird reports^{17, 18, 19} and Census work for a new Gwent Breeding Bird Atlas has been completed.
- 4.7 Some birds may have benefited incidentally from initiatives carried out for other species such as the linnet that are associated with similar habitats.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

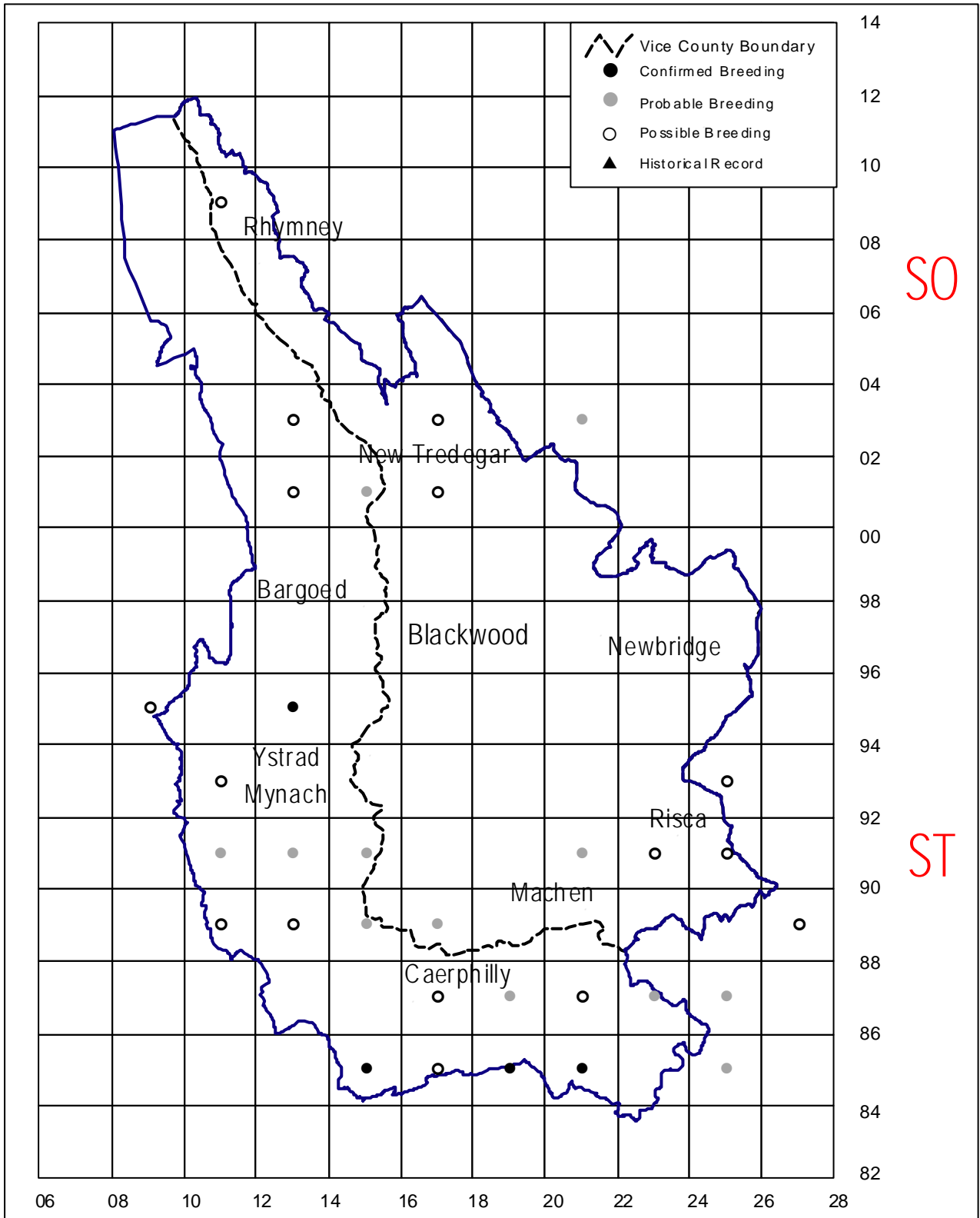
- 5.2.1 Halt the decline of this species (Target 2005).
- 5.2.2 Maintain the current local population through appropriate management of suitable habitats (Target: ongoing).
- 5.2.3 Increase the range of the yellowhammer (Target: 2008).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:									
	Lead	Partners	2003	4	5	6	7	8	9	10	11	
6.1 Policy and Legislation												
6.1.1 Seek to provide SINC status to suitable breeding areas and promote farming practices that will benefit the species.	CCBC	NAWAD NFU FUW RSPB										✓
6.2 Site Safeguard and Management												
6.2.1 Adopt sympathetic management of all CCBC land with the potential for colonisation by yellowhammer and actively promote habitat creation at suitable sites.	CCBC	-							✓			
6.2.2 Promote the importance of low-clipped, bushy hedgerows as breeding sites for the yellowhammer, and other birds.	GWT GLWT	CCBC RSPB landowners Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection												
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory												
6.4.1 Inform all relevant groups of the conditions required by yellowhammer.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring												
6.5.1 Survey and monitor yellowhammer populations within the county borough.	GBC GOS	BTO	✕		✓		✓		✓			✓
6.6 Communications and Publicity												
6.6.1 The yellowhammer is a suitable candidate as a 'flagship' species for the LBAP process. It is attractive and easily identified by the general public. Produce information leaflets to be held in CCBC Country Parks and other facilities.	CBP	-	✓						✓			

✕ Survey year to be determined.

MAP 2.19 - YELLOW HAMMER



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2. BIRDS INDEX

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BARN OWL *TYTO ALBA* SPECIES ACTION PLAN

1. INTRODUCTION

The barn owl is not afforded priority status in the UKBAP, but it is a species of national and international conservation concern and is considered important locally. The presence of barn owls is a good indicator of the health of biodiversity in lowland areas; the range of habitats required for owls are vital for a wide variety of other wildlife.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	-
Berne Convention 1982	App. II
Bonn Convention 1979	-
CITES 1975	Annex A
WCA 1981	Part I Section 1; Sch. 1, 3, 9
Birds of Conservation Concern List ³⁰	Amber



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2. CURRENT STATUS

2.1 UK and Wales

The barn owl is traditionally associated with small-scale mixed farming, with nest sites in hay barns or mature hedgerow trees. It is a nocturnal predator, hunting over rough grassland, woodland edges and hedgerows.

In Wales, barn owls favour damp vole-rich grasslands and unimproved meadows, but are still found in a wide variety of farmland habitats. During the 19th century much of Wales comprised ideal habitat for this species, but the clearance of 35–50% of woodland since 1933, and the loss of around 25% of Welsh hedgerow between 1984 and 1990, has had an adverse effect on the population. The species has experienced an estimated 20–50% decline in its population over the last 20 years. The last nationwide survey (1968–1972) estimated a UK population of 4500–9000 pairs and with around 462 pairs in Wales in 1985 (reduced from 1436 pairs in 1932)³³. This decline has slowed since the 1990s, and populations are now relatively steady.

2.2 Caerphilly County Borough

The barn owl nests and breeds in tree cavities, old/derelict farm buildings and barns, pit shafts and quarry faces. It feeds mainly on small mammals such as voles, shrews and mice. They hunt mainly at night over areas of rough grassland, field margins, hedgerows, derelict land, parkland, roadside verges, water courses, woodland edge habitats and newly planted woodlands. Breeding barn owls have been recorded at scattered locations throughout the county borough, but further survey work is required to confirm the status of this species in the area.

2.3 Links with Habitats

- **Deciduous Woodlands** (woodland edge habitats)
- **Wildlife Corridors** (open fields and hedgerows)
- **Common Land**

- *Post-Industrial Land*
- **Urban Habitats** (derelict industrial areas)
- Rough grassland

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of hunting habitats through agricultural intensification, e.g. pasture management, development and afforestation, and the subsequent decline in prey species populations have had their impact on the barn owl population.
- Lack of long grass in field margins as shelter for small mammals has led to increased hunting on roadside verges, leading to an increase in road deaths.
- A lack of mature trees, in hedgerows and open farmland, for nesting and roosting sites.
- Over-use of toxic pesticides and rodenticides which get passed up through the food chain and poison the barn owl.
- Effects of climate: hard winters have led to many owls dying through starvation. This is due to the reduction in food supply - small field mammal populations fluctuate seasonally with the changing climate, and in very cold winters food can become scarce, for example on snow covered farmland.
- Increased road development and urbanisation: there is often localised barn owl decline in areas of expanding towns.
- Demolition or conversion of old agricultural buildings and the design of modern buildings makes them unsuitable as nesting sites; e.g. with no suitable ledges or entrances.
- Disturbance to nesting and roosting sites (often unintentionally) by human activities.

4. CURRENT ACTION

- 4.1 It is illegal to release a barn owl into the wild without a licence. Incorrectly released birds are often unable to survive. Under official release schemes, however, where owls have been released under controlled conditions, barn owl survival is much greater, enhancing the wild population.
- 4.2 The Barn Owl Trust is a national organisation aiming to conserve the species and its environment. It also provides a free information and advice service.
- 4.3 CCBC Planning Division have placed conditions on some barn conversions to include barn owl surveys, and if present, barn owl mitigation, in the form of boxes and working restriction. In addition, planning applicants are encouraged to consider barn owl mitigation regardless of current useage.
- 4.4 Preservation of rough grassland sites (species-rich grasslands designated as SSSI or SINIC)⁸.
- 4.5 Provision of nest boxes in some areas, for example a joint scheme between the Environment Agency and The Hawk and Owl Trust.

- 4.6 The discouragement of unnecessary grass cutting and rodenticide use.
- 4.7 Environmental and biodiversity education at schools and colleges.
- 4.8 Welsh Owl and Wildlife Sanctuary (WOWLS) Barn Owl Project - monitoring nest sites, ringing and marking of nestlings.
- 4.9 The Gwent Ornithological Society and Glamorgan Bird Club bird reports^{17, 18, 19}, and the BTO Breeding Bird Survey⁶ all contribute to the annual monitoring and recording of barn owl populations.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Determine the current status and distribution in Caerphilly county borough by 2004 and formulate a target for expansion. (Target: 2005)
- 5.2.2 Maintain current distribution and population by conserving existing foraging, nesting and breeding habitats. (Target: ongoing)
- 5.2.3 Increase numbers of breeding barn owls, by providing new foraging habitat and nesting sites. (Target: 2010 and ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure barn owls are protected and promoted through appropriate regional and local planning policies. Condition barn owl surveys and mitigation for all planning applications on barns and other agricultural buildings.	CCBC	NAWAD FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Ensure the needs of the barn owl are taken into account in local and national incentive schemes.	NAWAD	CCBC FUW NFU	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Promote the legal protection afforded to barn owls among landowners and managers, contractors and planning officers.	RSPB	CCBC GWT GLWT FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Maintain the current extent and quality of foraging habitats through appropriate management.	CCBC	GWT GLWT	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management (continued)											
6.2.2 Seek to restore/re-create suitable feeding habitats/linear features, to provide a network of foraging/breeding sites, and encourage the installation of nest boxes where appropriate.	CCBC	CCW			✓						✓
6.2.3 Encourage the use of nest boxes both in new buildings and in the renovation of existing structures.	CCBC	CCW RSPB GWT GLWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.4 Seek to include the needs of barn owls in the management of wildlife sites (SINCs).	CCBC	GWT GLWT RSPB			✓					✓	✓
6.2.5 Ensure the reclamation of former colliery sites incorporates barn owl requirements, for example using nest boxes and raptor perches in suitable locations where appropriate.	WDA	CCBC FC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Seek to create new nesting sites by providing nest boxes and safeguarding mature trees in suitable areas.	CCBC	BTO GOS GBC RSPB EA	✓			✓				✓	
6.3.2 Investigate the provisioning of nest boxes in council-owned buildings in the county borough.	CCBC		✓				✓				
6.3.3 Seek to encourage barn owl nest box sponsorship in the county borough.	CBP	RSPB	✓								
6.3.4 Seek to set up 'Barn Owl Projects' in communities or in the county borough as a whole	CBP	community groups		✓				✓			
6.3.5 Educate land managers of the need to reduce the use of rodenticides and pesticides through carefully targeted use, or alternative methods of pest control.	NAWAD	FUW NFU CCBC CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.6 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Ensure the provision of advice to relevant organisations and land-managers on the conservation of barn owls and sympathetic management of habitats.	CBP	ADAS RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4.2 Disseminate information regarding ringing of owlets and the monitoring of nest sites to interested organisations and relevant individuals.	WOWLS	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Undertake a county wide survey to determine the current status of the barn owl.	GBC GOS	BTO RSPB	✘								

✘ Survey year to be determined.

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.5 Future Research and Monitoring (continued)											
6.5.2 Establish a monitoring procedure to compare the achievements of habitat and species targets, and revise the SAP as necessary.	CBP	-			✓						
6.5.3 Encourage recording of all known breeding sites and monitor on a regular basis.	WOWLS	BTO GOS GBC CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Encourage membership of wildlife trusts and local ornithological societies.	CBP	GBC GOS GWT GLWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Provide schools and colleges in the county borough with information in order to educate children, parents and teachers about the conservation status of owls in the local area.	CBP	GGBAG GLBAG	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.3 Raise awareness of the plight of the barn owl, and use it to promote the value of hedgerow trees, field margins, hay meadows (neutral grasslands) and other habitats to the general public. Discourage the use of insecticides and rodenticides.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.4 Aim to maximise public involvement in surveys and nest box schemes whenever appropriate.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.5 Promote the exchange of information between relevant organisations, particularly the results of monitoring and ringing studies.	CBP	GBC GOS WOWLS BTO	✓	✓	✓	✓	✓	✓	✓	✓	✓

BULLFINCH *PYRRHULA PYRRHULA* SPECIES ACTION PLAN

1. INTRODUCTION

The bullfinch is a UK priority species and a UK SAP³⁹ has been written.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1; Sch. 3
Birds of Conservation Concern List ³⁰	Red



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2. CURRENT STATUS

2.1 UK and Wales

The bullfinch is a fairly common and widespread species found in woodlands, orchards, and on farmland, where it is associated with dense shrubs, scrub and untrimmed hedges.

Bullfinches feed on a variety of berries, seeds and buds of bushes and trees. However, it has decreased at an alarming rate over the last 15 years with a decline of approximately 50%. The Common Bird Census indicates there has been a 75% decline on farmland and a 47% decline in woodland between 1968 and 1991. This translates to a decrease in estimated population from 300 – 350,000 pairs in 1984 to 190,000 by 1988-91³⁷.

2.2 Caerphilly County Borough

There is no accurate data giving the current population trends of the bullfinch in the county borough, but it is still a locally common species. **Map 2.1** shows the known distribution of breeding sites in the area.

2.3 Links with Habitat

The bullfinch is a species thriving in mature hedgerows, areas of mixed scrub and wet woodlands, and often gardens.

- *Wetlands*
- **Deciduous Woodlands** (wet woodland)
- **Wildlife Corridors** (hedgerows)
- *Urban Habitats* (domestic gardens)
- Scrub

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of traditional hedgerow management and hedgerow removal.

- Loss of urban fringe and open countryside due to increasing urbanisation.

4. CURRENT ACTION

- 4.1 CCBC criteria for SIN C status include scrub, woodlands and wetlands.
- 4.2 The Hedgerow Regulations 1997 protect ancient and species-rich hedgerows.
- 4.3 The planting of native hedgerows and trees is frequently a planning requisite for new developments thus creating suitable new habitats for the species.
- 4.4 BTO national surveys⁶ are ongoing and local ornithological societies produce annual reports based on the old counties of Glamorgan (VC41) and Monmouthshire (Gwent; VC35)^{17, 18, 19}.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 In the short term, halt or reverse the decline in the numbers of bullfinches by the year 2003 so that the Breeding Bird Survey index is at least at 1996 levels.
- 5.1.2 In the long term, see a sustained recovery in numbers, so that the BBS index is at least 50% higher than 1996 levels by 2008.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain the bullfinch as a viable breeding species locally. (Target: ongoing)
- 5.2.2 Protect suitable existing habitat from adverse land management. (Target: ongoing)

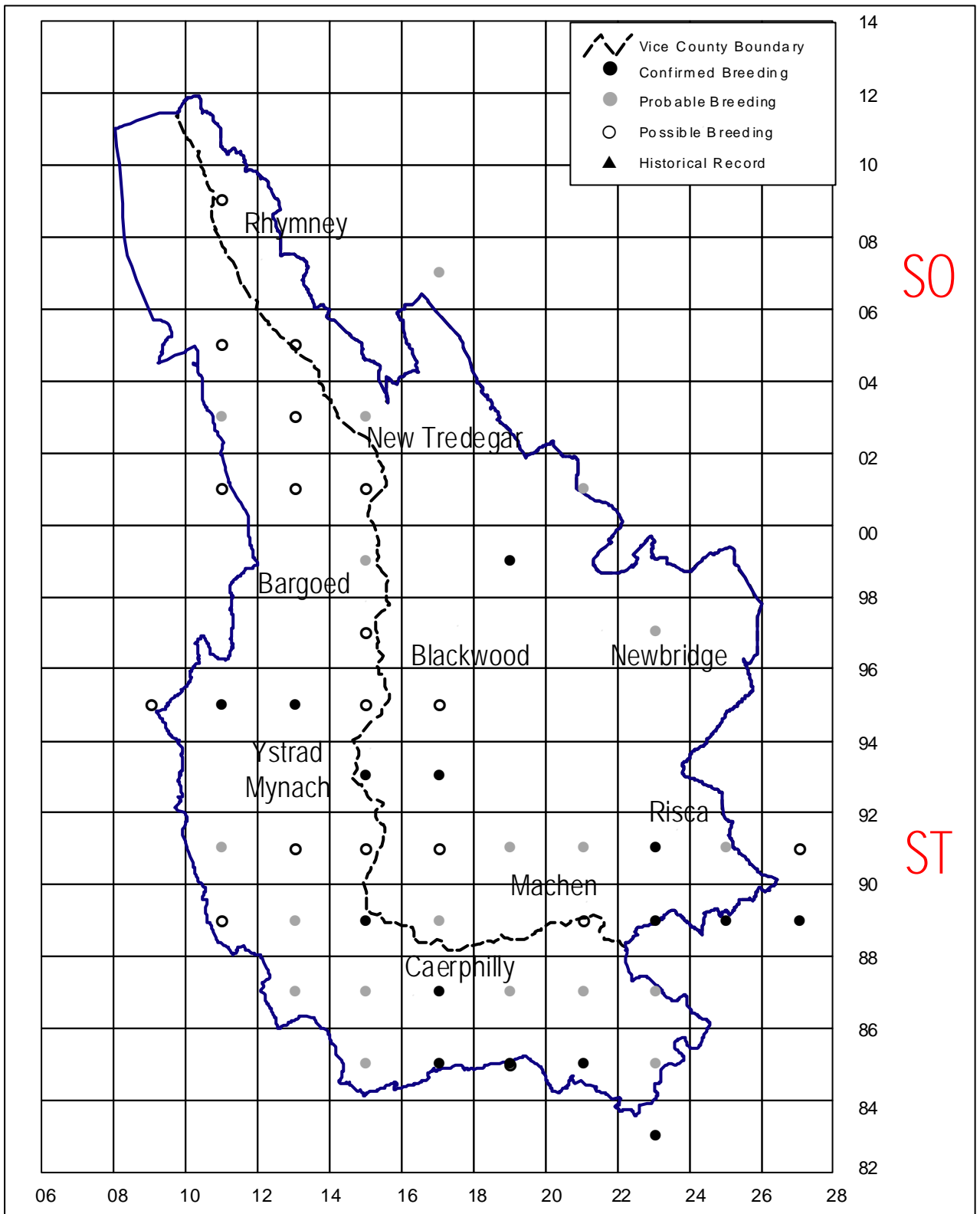
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
No action proposed.											
6.2 Site Safeguard and Management											
6.2.1 Manage land owned by CCBC in a way that is suitable for the habitat requirements of the species.	CCBC	Gwk	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Promote landscaping schemes for industrial and housing developments that provide suitable nesting habitats and native species as a source of food.	CCBC	Gwk	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.4 Advisory											
6.4.1 Promote the sensitive management of hedgerows by farmers and other land managers.	NAWAD	CCBC NFU FUW Gwk	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Regularly survey and monitor bullfinch populations in Caerphilly county borough.	GBC GOS	CCBC CCW BTO	✕	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Include images and information about the species in leaflets, posters etc. for the general public, to be made available in Country Parks and other CCBC facilities.	CBP	CCBC	✓	✓							

✕ Survey year to be determined.

MAP 2.1 - BULLFINCH



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BUZZARD BUTEO BUTEO SPECIES ACTION PLAN**1. INTRODUCTION**

The buzzard does not have priority status in the UKBAP, but it is a UK species of conservation concern and is an easily recognised and distinctive species throughout the country. The buzzard is considered to be highly important for the promotion of biodiversity in locally.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	-
Berne Convention 1982	-
Bonn Convention 1979	App. II
CITES 1975	Annex A
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	-
Other Species Status	RDB Birds: candidate



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2. CURRENT STATUS**2.1 UK and Wales**

Buzzards bred almost throughout the whole of the UK in 1800, but by 1875 they were eliminated from all but parts of western Britain.

It recovered through the early 1900s, but in 1955 populations collapsed as a result of the devastation of rabbit populations by myxomatosis. Recovery since the 1960s has been slow, and in some areas the rate of expansion has been affected by illegal persecution. By 1983 there were at least 12,000 pairs of buzzards. In the last decade the rate of spread seems to have increased with buzzards re-colonising eastern and southern Britain²⁹. In Wales it is estimated that there are between 3500 to 4500 pairs²⁹. It currently occupies around 70% of the potential breeding range in the UK²⁶.

2.2 Caerphilly County Borough

The buzzard is of local significance. It is the most widespread large bird of prey in south Wales and is commonly seen circling on broad wings across the whole of the area. It nests in tall, mature trees and hunts for food over open woodland, and other open areas, eating rabbits, birds and many types of carrion¹². It is also often seen hopping along the ground, eating worms. In Caerphilly county borough it will nest in almost any suitable mature tree in open areas, and is fairly widespread throughout, often hunting and scavenging over hillsides and along roadside verges. **Map 2.2** shows the distribution of known and possible breeding areas across the county borough. The following SINC sites have records of buzzards⁸: 45 **Cwm Afon Railway Line** and 55 **Nelson Bog** (SSSI).

2.3 Links with Habitats

- **Deciduous Woodlands** (woodland clearings, adjacent to open fields)
- **Wildlife Corridors** (mature trees, hedgerow trees and roadside verges)

- **Species-rich Grasslands**
- *Common Land*
- *Heathland*
- *Post-Industrial Land* (refuse tips)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Localised persecution may occur in some areas, especially game conservation areas where gamekeepers have been known to trap and shoot buzzards. Buzzards are the most frequent victims in the UK as a whole, accounting for 40% of all incidents between 1990 and 1998²⁹.
- Myxomatosis and other diseases, associated with prey species, have a serious effect on buzzard populations. The abundance of the various prey species is a significant factor, which can also be affected by pollution, pesticides and rodenticides, affecting the bird of prey at the end of the food chain.
- Availability of places to roost, nest and forage ultimately determines the buzzard population size. Urbanisation will continue to intrude into open countryside and may reduce the number of nesting trees and hunting habitats.

4. CURRENT ACTION

- 4.1 Many woodland sites suitable for breeding buzzards are designated as SINC⁸.
- 4.2 The RSPB are campaigning to change policies that encourage habitat degradation through agricultural practices.
- 4.3 The RSPB Investigations Unit supports investigation of crimes such as killings, by providing specialist advice and training to the police²⁹.
- 4.4 The RSPB also maintains a database of crimes against birds.
- 4.5 The UK Government Campaign Against the Illegal Poisoning of Wildlife is supported by the RSPB and other conservation and countryside organisations, they are also involved in educating farmers about the need to use chemicals properly and investigating wildlife poisoning incidents (Poisons Hotline = 0800 321 600 if you find a dead bird or other animal in suspicious circumstances)²⁹.
- 4.6 The Gwent Ornithological Society and Glamorgan Bird Club bird reports^{17, 18, 19}, and the BTO Breeding Bird Survey⁶ all contribute to the annual monitoring and recording of buzzard populations.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

5.2.1 Determine the current status and distribution in Caerphilly county borough (Target: 2004).

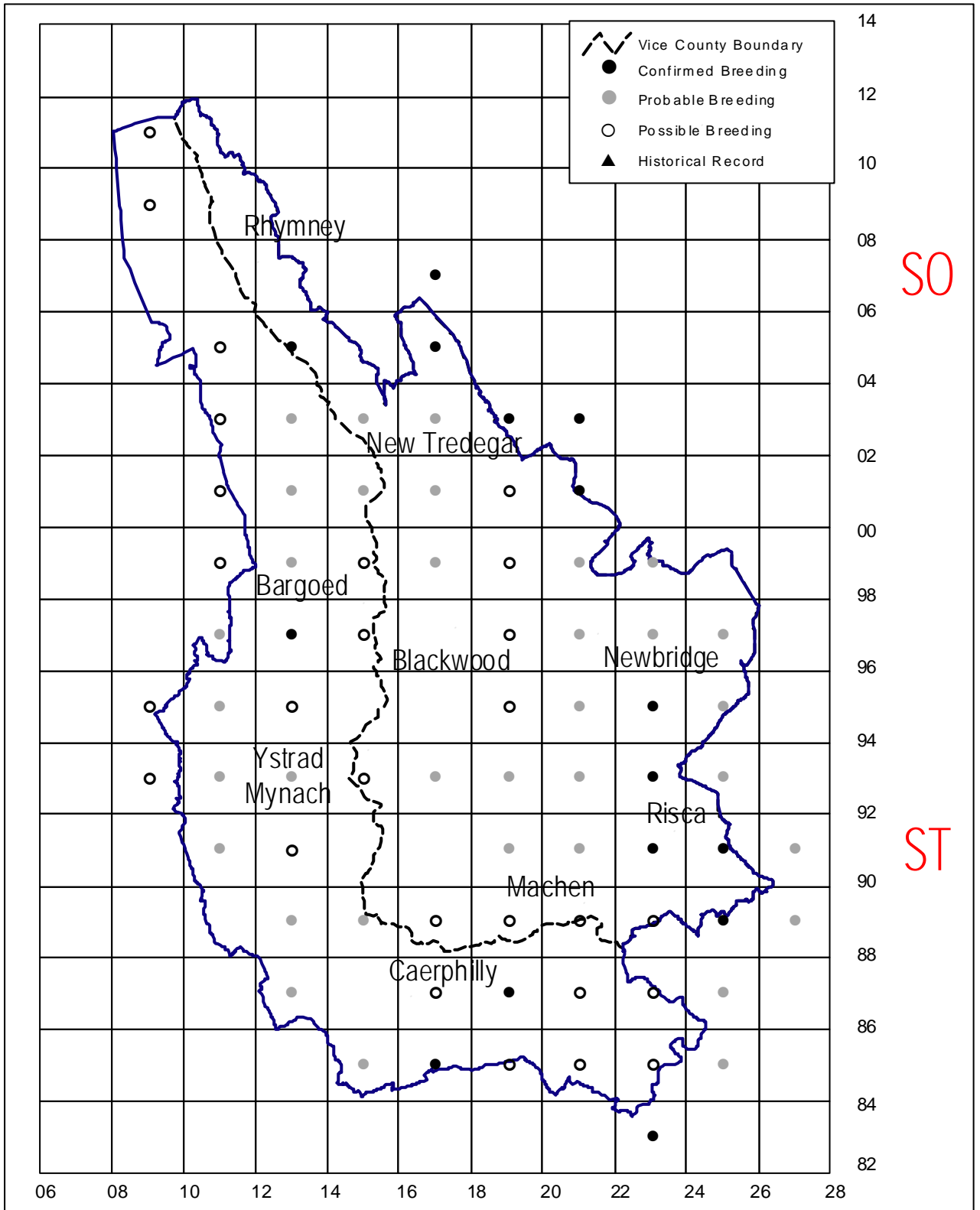
5.2.2 Maintain existing breeding pairs throughout the county borough (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Promote the protection given to buzzards among landowners/managers, contractors and planning officers.	CCBC	RSPB GWT GLWT FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Maintain the current extent and quality of mature trees, hedgerows and open grasslands through appropriate management.	CCBC	GWT, GLWT landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Identify the number of nest sites within protected sites, such as SINCs, SSSIs.	CCBC	GOS GBC Coed Cymru FC landowners	✓								✓
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Ensure the provision of advice to relevant organisations and land managers on the conservation of buzzards and sympathetic management of trees and open habitats.	NAWAD	CCBC ADAS RSPB FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Encourage recording of all known breeding sites, and monitor regularly.	GBC GOS	BTO RSPB CCBC	✓		✓		✓		✓		✓
6.5.2 Carry out a survey to determine the current status of the buzzard in Caerphilly county borough.	GBC GOS	RSPB	✕								
6.6 Communications and Publicity											
6.6.1 Encourage membership of wildlife trusts and local ornithological societies.	CBP	GWT GLWT GBC GOS	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Provide schools, colleges and youth clubs with information in order to educate children, parents and teachers about the conservation status of buzzards in their local area.	CBP	Youth forum Schools	✓			✓					✓
6.6.3 Raise awareness of buzzards, and use them to promote the value of trees and other habitats to the general public.	CBP	RSPB	✓			✓					✓
6.6.4 Aim to maximise public involvement in surveys whenever appropriate.	CBP	GBC GOS		✓				✓			

✕ Survey year to be determined.

MAP 2.2 – BUZZARD



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Atgynhychwyd o fapiad yr Arolwg Ordnans gyda chaniatad rheolwr Llyfifa ei Mawhydi hawffraint y Goron. Mae atgynhychu heb awdurdod yn torri hawffraint y Goron. Gall hyn arwain at erlyniad neu achos sifil. Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

CURLEW *NUMENIUS ARQUATA* SPECIES ACTION PLAN

1. INTRODUCTION

The curlew has been selected for local action due to the importance of the breeding populations found in Caerphilly county borough.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	Annex I I / 2
Berne Convention 1982	App. I I
Bonn Convention 1979	App. I
CITES 1975	Annex A
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	Amber
Other Species Status	RDB Birds: RDB1a / RDB1b



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2. CURRENT STATUS

2.1 UK and Wales

The curlew is a bird of open moorland, farmland and coasts. It breeds mainly in upland areas in Britain, up to 550 metres and occasionally as high as 760 metres above sea level. Outside the breeding season, the species move to coastal areas. Curlew feed on earthworms and other invertebrates, which they find by probing the ground with their long, curved bills and by picking from the surface. Breeding pairs require damp grassland or tilled land with soft earth for feeding, but also some taller vegetation such as heather, tussocks of grass or rushes for nesting. They are therefore associated with mixed farmland, where suitable feeding, nesting and chick-rearing habitat can be found in close proximity. Birds start returning to their nest sites from February when their bubbling display calls are a feature of many parts of the area. The species generally prefers extensive unimproved habitats to improved pastures for rearing young. They become secretive during incubation but conspicuous again when luring potential predators away from their chicks.

The curlew has declined in most European countries mainly due to habitat changes linked to agricultural intensification. Long-term breeding trends are uncertain, but across the UK trends have shown a decline (Breeding Bird Survey 1994-1999). Between 1968-72 breeding birds were recorded in 1,714 ten-kilometre squares, compared with 1,354 squares in 1988-91. The most recent population estimates are 33,000-38,000 pairs in Britain²² which, when combined with Ireland's figure of 12,000 represents at least 35% of the European breeding population. The current Welsh breeding population is difficult to gauge with accuracy; 2,000 pairs are estimated². Rhos pasture and coedcae/ffridd land on the upland margins are an important habitat in Wales. The decline in mixed farming in Wales, particularly in the wetter western and upland areas, is probably a contributory factor in the decrease of numbers here.

2.2 Caerphilly County Borough

The Glamorgan bird surveys of the 1980s found the breeding stronghold of the curlew in Glamorgan was the area around Gelligaer Common, where almost 50% of the confirmed and probable breeding records occurred. The Caerphilly county borough breeding population continues eastwards from Gelligaer, with scattered pairs being found along Mynydd Bedwellte

and Cefn Manmoel ridges. The most southerly breeding pairs are found in the Mynyddislwyn area. The total breeding population in the county borough is probably about 30-50 pairs, based on the assumption that occupied tetrads hold only one or two pairs (see **Map 2.3**).

2.3 Links with Habitats

- **Species-rich Grasslands** (rhos pasture)
- *Commons*
- *Coedcae/ffridd*
- *Heathland* (upland heath)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss and fragmentation of breeding sites; agricultural improvement of grasslands with the switch from late hay to multiple silage cuts in the late 1970s to early 1980s brought about principally by re-seeding, increased fertiliser applications and drainage has led to the loss and fragmentation of breeding sites.
- Inappropriate management; over-grazing, or lack of management leading to scrub and bracken encroachment on moorland habitats.
- Recreational pressures on breeding grounds may be a factor in disturbing these birds.
- Nest predation is possibly a contributory factor affecting the species, mainly as loss of eggs to other birds, such as crows. Foxes, which are often at much higher population levels in some areas through the decline in game keeping, will also predate curlew nests.

4. CURRENT ACTION

- 4.1 Tir Gofal, run by CCW, aims to restore areas of heathland and wet grassland for the benefit of their associated wildlife.
- 4.2 Although the species is not monitored systematically, the Gwent Ornithological Society and Glamorgan Bird Club gather information from its members on the distribution of curlew and other birds, and both bodies publish annual bird reports^{17, 18, 19}.
- 4.3 BTO Breeding Bird Survey contributes to the monitoring of breeding curlew populations throughout the UK⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Gain a full understanding of the current population of the curlew in the county borough by carrying out a county wide survey on existing and historical breeding sites (Target: 2005).

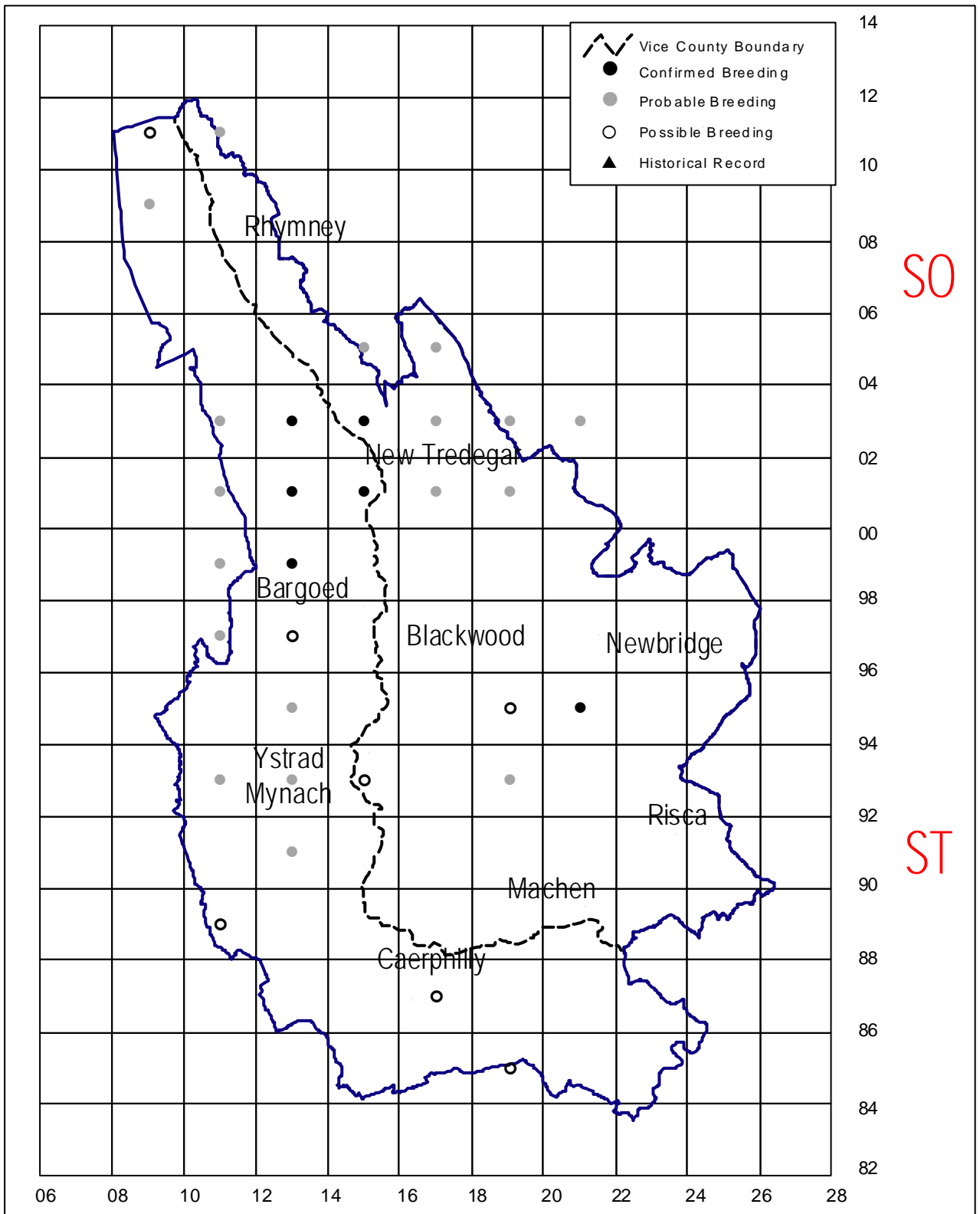
- 5.2.2 Ensure no further loss, degradation or fragmentation of breeding sites by identifying and bringing suitable habitat into appropriate management (Target: 2010 and ongoing).
- 5.2.3 Maintain the current distribution and abundance of the curlew (Target: ongoing).
- 5.2.4 Increase the number of breeding pairs by 20% from current levels (as identified in 5.2.1) (Target: 2010).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
No action proposed.	-	-									
6.2 Site Safeguard and Management											
6.2.1 Ensure the requirements of the curlew are taken into account when reviewing agri-environment schemes.	CCW	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Encourage suitable habitat restoration to link and extend existing sites where opportunities arise.	CCBC	CCW								✓	
6.2.3 Ensure development schemes do not compromise the integrity of breeding sites.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Ensure breeding sites are protected from disturbance and deterioration of habitat quality.	CCBC	CCW landowners								✓	
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Ensure planning officers are aware of the curlew's distribution and requirements within their area.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Undertake a breeding birds survey to identify present distribution.	GBC GOS	RSPB BTO	✘								
6.5.2 Collate all the known information on historical and present curlew breeding sites in Caerphilly county borough, to help target survey, monitoring and management work.	GBC GOS	CCBC RSPB			✓	✓					
6.6 Communications and Publicity											
6.6.1 Improve coordination and information sharing between all groups and individuals with knowledge of curlews and their distribution.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Publicise the decline in breeding numbers and encourage landowners and managers to manage habitats sympathetically.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

✘ Survey year to be determined.

MAP 2.3 – CURLEW



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GOSHAWK *ACCIPTER GENTILIS* SPECIES ACTION PLAN

1. INTRODUCTION

The goshawk is not afforded priority status in the UKBAP, but it is a UK Species of Conservation Concern and is significant locally.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	-
Berne Convention 1982	-
Bonn Convention 1979	App. II
CITES 1975	Annex A
WCA 1981	Part I Section 1; Sch. 1, 4
Birds of Conservation Concern List ³⁰	-
Other Species Status	RDB Birds: RDB2



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2. CURRENT STATUS

2.1 UK and Wales

The goshawk is a large and very successful woodland dwelling bird of prey. It is fairly common, but secretive in woodlands with a preference for coniferous forests with many clearings. The extensive plantings of the Forestry Commission and private individuals have provided suitable habitat for the goshawk as the trees have matured. It was once Britain's most successful bird of prey, but it was one of the first birds of prey to be persecuted and along with destruction of its habitat was driven to the edge of extinction in 1883. By the early 1950s there were no certain breeding pairs in the country, but now the goshawk population has dramatically increased with human intervention. Approximately, 450 pairs are estimated to be breeding in the UK, with 200 – 250 pairs in Wales (UK Raptor Group). However, only 15% of the potential UK breeding range is currently occupied²⁶.

2.2 Caerphilly County Borough

In the past the goshawk has been recorded in forestry plantations in the county borough. However, it appears to be in decline and further survey work of possible sites is required.

2.3 Links with Habitats

- Woodlands (mainly coniferous) with many clearings
- ***Planted Coniferous Woodlands***

3. CURRENT FACTORS AFFECTING THE SPECIES

- The main threat in Wales is from forest operations. The Forestry Commission has produced guidelines for avoiding disturbance of nests, and the key to this is to know their locations. This becomes difficult if pairs are continually changing their nesting locations as a result of nest sites being felled during the non-breeding period.
- Localised persecution by gamekeepers is generally a problem in the autumn when the young birds are dispersing from the nesting woodlands and predation on pheasants is a problem in some areas. As they start to feed on domestic racing pigeons persecution may increase.

- Loss of habitat - each pair requires a large area of uninterrupted trees, especially conifer plantations, open country to hunt and large secluded tracts of woodland to breed.
- Nest destruction and egg theft are major factors in their decline. The nests of some birds of prey such as the goshawk and the peregrine are often destroyed, usually when they contain eggs or young chicks. The loss of just one or two clutches of eggs can have a considerable impact on some species' ability to recover.

4. CURRENT ACTION

- 4.1 Known nesting pairs are fully recorded, noting success and failure.
- 4.2 All pairs are protected by legislation (see section 1).
- 4.3 The RSPB Investigations Unit supports investigation of crimes such as killings, by providing specialist advice and training to the police²⁹.
- 4.4 The RSPB also maintains a database of crimes against birds.
- 4.5 The UK Government Campaign Against the Illegal Poisoning of Wildlife is supported by the RSPB and other organisations. This involves educating farmers in the correct use of chemicals and investigating wildlife poisoning incidents (Poisons Hotline 0800 321 600)²⁹.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Determine the current status and distribution in Caerphilly county borough by 2004 and formulate a target for expansion (Target: 2005).
- 5.2.2 Maintain and increase breeding pairs throughout the county borough (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Promote the protection given to goshawks among landowners/managers, contractors and planning officers.	CCBC	RSPB GWT GLWT FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Maintain the current extent and quality of woodlands, particularly coniferous, through appropriate management.	FC	CCBC Coed Cymru landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.3 Species Management and Protection											
6.3.1 Ensure the protection of suitable nesting sites in the county borough by implementing wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Continue to ensure the protection of nest sites in forestry plantations, and work towards establishing permanent nesting retentions.	FC	-		✓							
6.4 Advisory											
6.4.1 Ensure the provision of advice to relevant organisations and landowners on the conservation of goshawks and sympathetic management of woodlands.	NAWAD	CCBC CCW RSPB FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Carry out a survey to determine the current status of the goshawk in Caerphilly county borough.	GBC GOS	BTO RSPB	✘								
6.5.2 Encourage recording of all known breeding sites and monitor regularly.	GBC GOS	BTO CCBC RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and publicity											
6.6.1 Encourage membership of local wildlife trusts/groups in Gwent, Glamorgan and areas of Caerphilly county borough.	GWT GLWT	CCBC WOWLS GOS GBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Provide schools, colleges and youth clubs with information in order to educate children, parents and teachers about the conservation of goshawks in the local area.	CCBC	Schools Youth Forum	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.3 Raise awareness of goshawks, and use them to promote the value of coniferous woodlands with the general public.	CCBC	FC RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.4 Aim to maximise public involvement in surveys where appropriate.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓

✘ Survey year to be determined.

GREEN WOODPECKER *PICUS VIRIDIS* SPECIES ACTION PLAN

1. INTRODUCTION

The green woodpecker is listed in the UKBAP as a species of conservation concern and is considered to be important in Caerphilly county borough.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	Amber



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2. CURRENT STATUS

2.1 UK and Wales

The green woodpecker is most abundant south of a line between Pembrokeshire and The Wash.

Gwent (VC35) has been identified as a stronghold of the species and within Glamorgan (VC41) it is generally regarded as scarcer in the upland valleys. Although it appears to be holding it's own throughout most of its range in Europe, fluctuations occur in northern parts and research shows an overall decline across its whole range. It is generally of an unfavourable conservation status in Europe.

2.2 Caerphilly County Borough

The green woodpecker is a species of valley oak and ash woodlands, visiting higher woodland in summer. It also frequents pasture, ffridd/coedcae and the upland commons. It needs the presence of mature trees in order to breed, but also requires close cropped turf exposed to the sun, where ants, its staple diet, are found. Breeding records occur throughout the county borough except in the far north. **Map 2.4** shows the current distribution of confirmed, probable and possible breeding green woodpecker sites, and they have been recorded in the following SINC: Cwm Afon Railway Line (45), Craig y fedw (159) and Gypsy Lane Wetland (164).

2.3 Links with Habitats

- *Wetlands*
- **Deciduous Woodlands** (upland oak and mixed ash woodlands)
- *Wildlife Corridors*
- *Species-rich Grasslands*
- *Common Land*
- *Coedcae/ffridd*
- *Heathland*
- mature trees and short turf

3. CURRENT FACTORS AFFECTING THE SPECIES

- Some steep ffridd/coedcae, which used to be rich in ant colonies, has been lost as feeding areas, due to ploughing, re-seeding and fertilising or land reclamation schemes.
- The species has shown itself to be susceptible to fatalities during hard winters.

4. CURRENT ACTION

- 4.1 The Glamorgan Bird Club and Gwent Ornithological Society both publish annual bird reports^{17, 18, 19}. The Gwent Ornithological Society has completed Atlas survey work. The BTO Breeding Bird Survey also contributes to the monitoring of the population⁶.
- 4.2 The Welsh Ornithological Society has targeted this species for research.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain the current distribution and breeding population of the green woodpecker in the county borough (Target: ongoing).
- 5.2.2 Protect and enhance suitable breeding and feeding habitats through appropriate management (Target: ongoing).

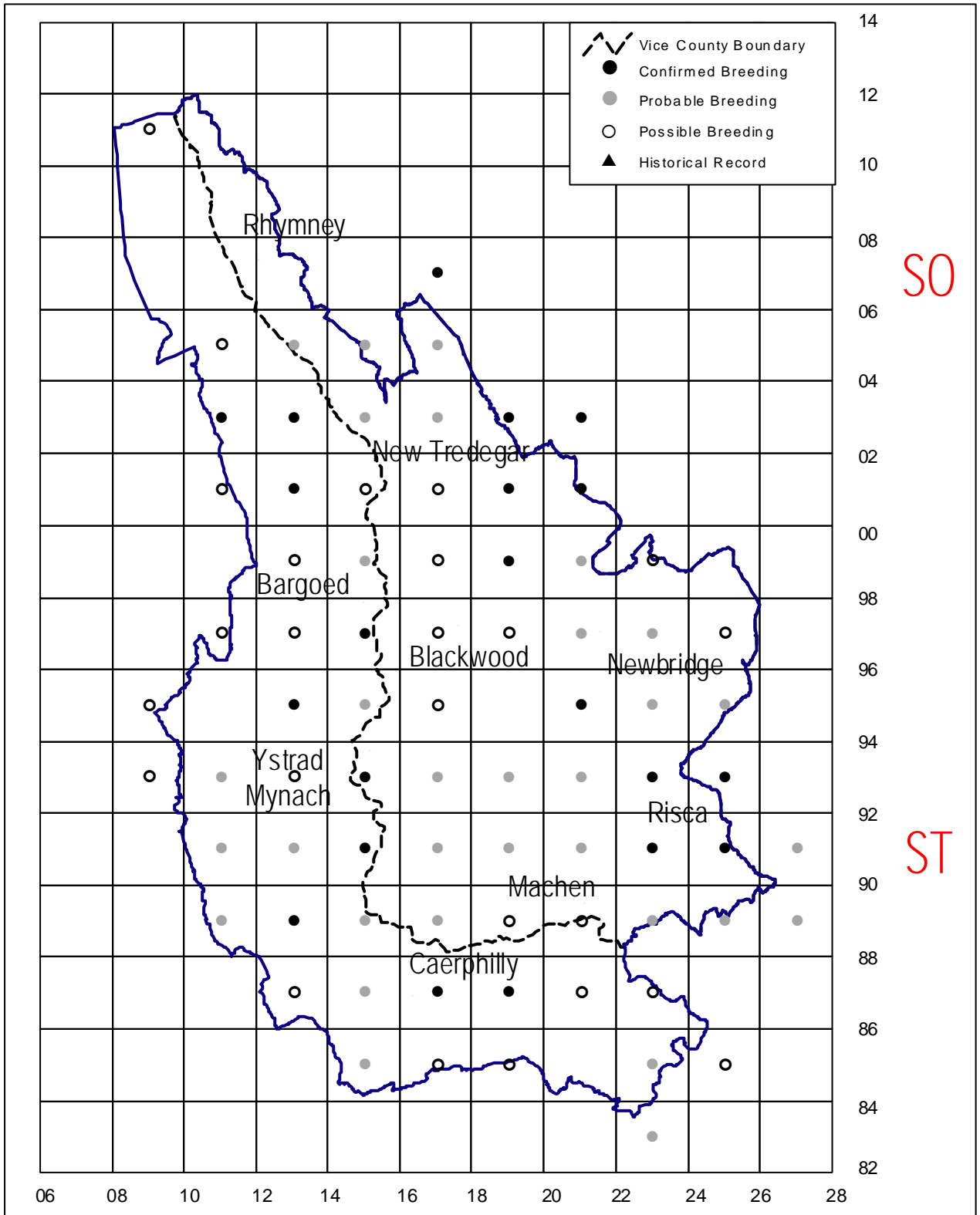
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to designate important nest and feeding sites as SINIC, benefiting the green woodpecker and a number of other species.	CCBC	-									✓
6.2 Site Safeguard and Management											
6.2.1 Seek to introduce appropriate management on SINIC sites, in particular woodland and grassland habitat.	CCBC	-			✓						✓
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Advise land managers, farmers and others of the green woodpecker's habitat requirements.	CCBC	FUW NFU NAWAD Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.5 Future Research and Monitoring											
6.5.1 Survey to identify the current status in the VC41 section of the area to augment the Gwent data, followed by continued monitoring of the whole area.	GBC	GOS CCBC	✘		✓		✓				✓
6.6 Communications and Publicity											
6.6.1 As the largest and most brightly coloured breeding woodpecker, it is an ideal example to promote biodiversity to the general public (e.g. through a public participation survey). Its links with less 'photogenic' invertebrates could be stressed to illustrate the interdependence of species.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

✘ Survey year to be determined.

MAP 2.4 - GREEN WOODPECKER



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GREY PARTRIDGE *PERDIX PERDIX* SPECIES ACTION PLAN

1. INTRODUCTION

The grey partridge is considered to be one of the bird species most in need of urgent conservation action, and is of particular concern locally due to its massive decline in the Caerphilly county borough area.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	Annex II/2, III
Berne Convention 1982	App. II
Bonn Convention 1979	-
CITES 1975	Annex A
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	Red
Other Species Status	RDB Birds: RDB3
Other Legislation	Ground Game Act 1880



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2. CURRENT STATUS

2.1 UK, Wales and Caerphilly County Borough

In areas of historic low abundance such as Caerphilly county borough, declines have sometimes exceeded 95% and it is approaching extinction in some districts. The grey partridge is a species primarily of arable farmland and unimproved grassland, preferring continuous grass or herbage not much higher than its head, flanked or interspersed with hedges, scrub or rough herbage to provide cover and for nest sites. It also seeks bare, preferably dusty ground. In Caerphilly county borough there is a cluster of records from the Cefn Gelligaer and Nelson Bog regions (see **Map 2.5**).

2.2 Links with Habitats

- **Species-rich Grasslands** (rhos pasture and other unimproved grazing meadows)
- *Coedcae/Ffridd*
- *Heathland* (upland)
- *Common Land*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Nationally, the intensification of arable farming with the reduction of food sources due to the increased use of pesticides and herbicides is of significant importance in its decline.
- The intensification of agriculture contributes to the loss of nesting sites through the removal of hedgerows and the destruction of important breeding habitats such as rough grassland. This also includes switching to silage cutting instead of haymaking.

- Reduction in winter food supplies due to autumn sown crops leading to no winter stubble fields is another nationally important factor.
- On common land, increased human disturbance during the breeding season may well be a factor in its decline, as could any increase in densities of grazing stock.
- The effects of hunting on an already depleted species will also have a significant effect.

4. CURRENT ACTION

- 4.1 The Hedgerow Regulations (1997) control the removal of hedgerows¹¹.
- 4.2 The Tir Gofal (CCW) scheme provides grant aid for farmers to encourage environmentally sensitive management.
- 4.3 The Game Conservation Trust encourages creation of suitable conditions for the species, such as providing nest sites by leaving wide field margins, chick feeding areas in conservation headlands and winter foraging sites by stubble retention.
- 4.4 Although the species is not monitored systematically, the Gwent Ornithological Society and Glamorgan Bird Club gather information from its members on the distribution of the grey partridge and other birds, and both bodies publish annual bird reports^{17, 18, 19}.
- 4.5 BTO's Breeding Bird Survey contributes to the monitoring of breeding populations⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Halt the decline by 2005.
- 5.1.2 Ensure the population is above 150,000 pairs by 2010.
- 5.1.3 Maintain, and where possible enhance, the current range of this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Halt the decline in both range and numbers by 2005.
- 5.2.2 Maintain, and where possible enhance, the current range of this species. (Target: ongoing and by 2010)

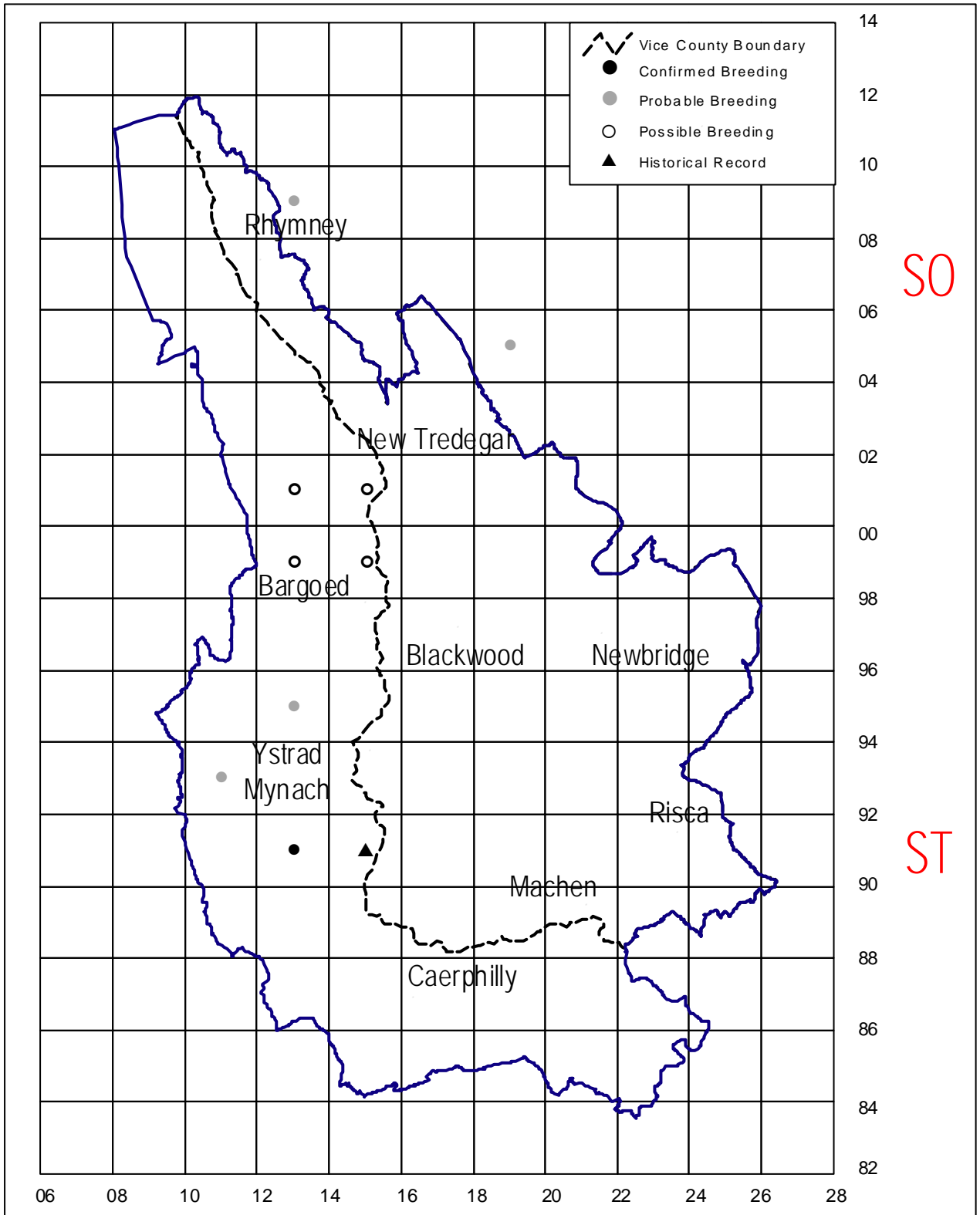
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
No action proposed at present.	-	-									

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management											
6.2.1 Consider establishing management practices on CCBC owned land to benefit the grey partridge.	CCBC	-	✓					✓			
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
No action proposed at present.	-	-									
6.5 Future Research and Monitoring											
6.5.1 Survey and monitor the residual population.	GBC GOS	CCW CCBC	✘								
6.6 Communications and Publicity											
6.6.1 Increase the provision of information and management advice to farmers and other land managers about the grey partridge, and other farmland species, and its conservation requirements.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓

✘ Survey year to be determined.

MAP 2.5 - GREY PARTRIDGE



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HOUSE SPARROW *PASSER DOMESTICA* SPECIES ACTION PLAN

1. INTRODUCTION

The house sparrow is one of the nations best known bird species, thanks to its propensity for living in close proximity to humans. It has been one of the most commonly seen birds in urban, suburban and village communities. It is not currently on the RSPB Birds of Conservation Concern amber list, however, a recent sharp fall in its population status in urban environments, linked to its long-term decline along with other farmland species, suggests it may be added.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	-
EC Birds Directive	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	-



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2. CURRENT STATUS

2.1 UK and Wales

The apparent decline of the species is generally poorly monitored by most BTO surveys although a decline of >50% was identified on Common Bird Census sites between 1970 - 1994, most of these being rural sites.

Its urban decline has been less thoroughly documented. The Garden Bird Watch showed a decline of 10% in the number of gardens it frequents in winter from 1973 to 1983 and Autumn Garden Bird Counts in Kensington showed a drastic reduction from 2603 individuals in 1925 to a very low 81 in 1995. There are regional differences in the fortunes of the species. The Breeding Bird Survey 1994-1998 reported a significant decline in England, a stable population in Scotland and a significant increase in Wales⁶.

2.2 Caerphilly County Borough

There is currently no substantial evidence to accurately measure its decline in the county borough, but its current breeding distribution is given in **Map 2.6**.

2.3 Links with Habitats

The house sparrow is a species that breeds exclusively in association with human habitation in both urban and rural areas and therefore should be considered in conjunction with the Urban Habitat Statement.

- **Urban Habitats** (domestic gardens, buildings, allotments, derelict sites)

3. CURRENT FACTORS AFFECTING THE SPECIES

- In general the declines can be linked to changes in farming practice, with increase in monoculture, use of herbicides & pesticides, change from spring to autumn sowing and

change from hay making to silage making all contributing to the decline of rural and even suburban populations.

- Urban populations may also be associated with the increasing levels of pollution from vehicle emissions affecting the availability of the arthropod food needed to feed chicks.
- Recent research indicates that additives to the new Lead Replacement Fuel may be toxic and killing birds when dissolved in their drinking water i.e. roadside puddles. Further research is currently following up this possibility in inner cities across the E.U.

4. CURRENT ACTION

- 4.1 Gwent Ornithological Society (GOS) atlas work has been completed. This will contribute to our knowledge of the status of the species in the eastern part of the county borough.
- 4.2 Both GOS and the Glamorgan Bird Club carry out regular surveys and produce annual bird reports^{17, 18, 19}.
- 4.3 BTO's Breeding Bird Survey also contributes to the regular monitoring of the breeding population⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain the current population of the house sparrow within Caerphilly county borough. (Target: ongoing)
- 5.2.2 Survey to investigate the possible decline in population in the county borough, and highlight particular areas under threat. (Target: 2004)

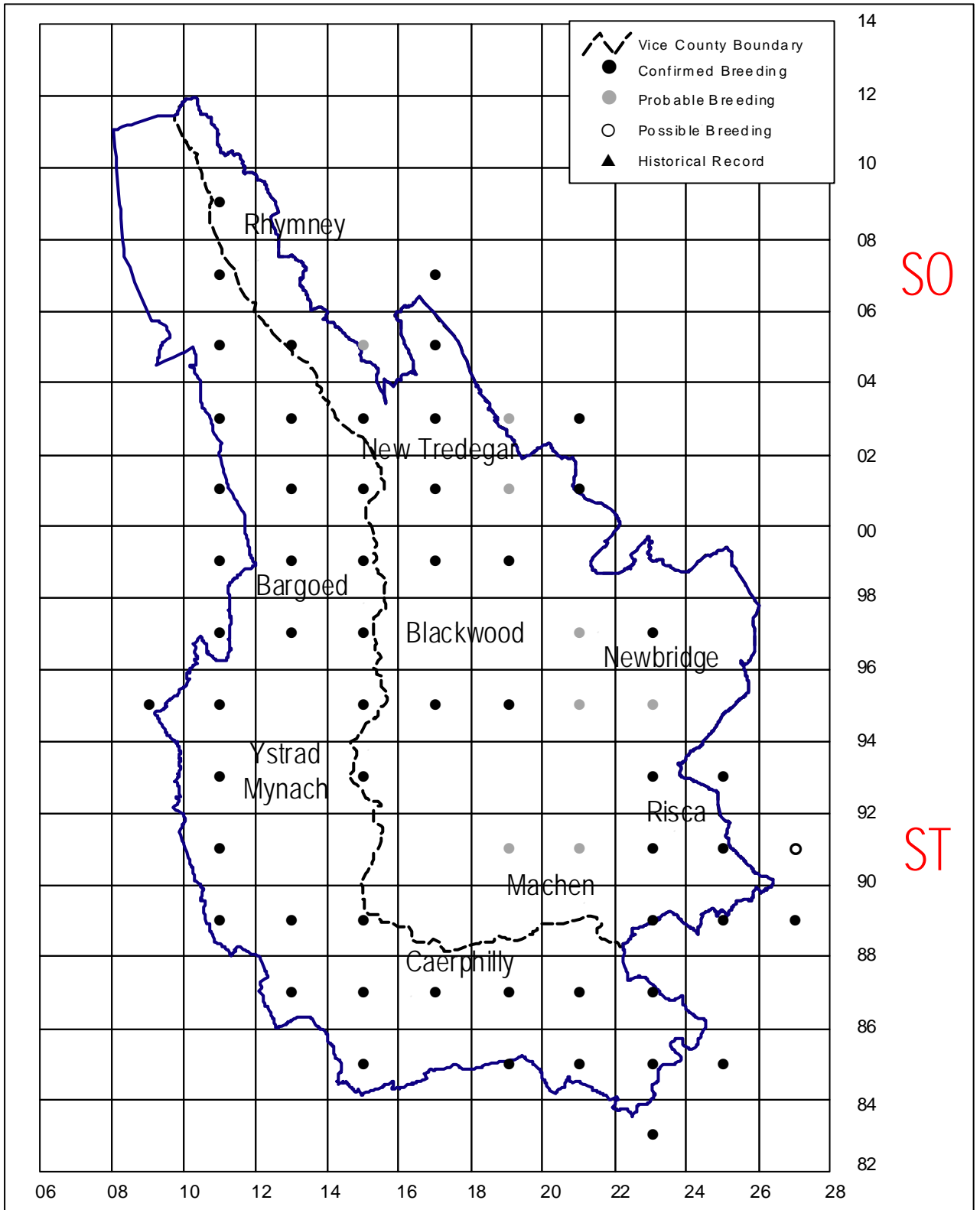
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 None proposed at this time.	-	-									
6.2 Site Safeguard and Management											
6.2.1 Ensure planning specifications for new properties and modernisation of old properties protect nests in old buildings, but also provide suitable nest sites in new and modernised buildings.	CCBC	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.4 Advisory											
6.4.1 Raise awareness of developers, planners and others involved in construction of houses and other buildings of its nesting requirements.	CBP	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey to identify the current status in Glamorgan (VC41) to augment the Gwent data currently being obtained, and then continue monitoring the whole area to identify areas of decline and local threats.	GBC	GOS CCBC	✕								
6.6 Communications and Publicity											
6.6.1 This species is an ideal candidate for use in a local survey of 'house nesting' species in association with starling, jackdaw, swallow, swift and house martin. The survey could be featured in the CCBC newsletter delivered to each household in the area.	CBP	GOS GBC BTO RSPB	✓					✓			

✕ Survey year to be determined.

MAP 2.6 - HOUSE SPARROW



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KESTREL *FALCO TINNUNCULUS* SPECIES ACTION PLAN

1. INTRODUCTION

The kestrel is not afforded priority status in the UKBAP, but it is listed as a species of conservation concern, and it is considered to be of biodiversity conservation importance locally. The UK holds approximately 15% of the European population.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	
Berne Convention (1982)	App. II
Bonn Convention (1979)	App. II
CITES (1975)	Annex A
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	Amber



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2. CURRENT STATUS

2.1 UK and Wales

The kestrel is the best-known and most common British bird of prey with 51,500 pairs²⁹. It is often seen hovering over motorway verges in search of food. However, the population has declined by more than 25% in recent years (35% in all habitats between 1971 to 1995 (RSPB)), especially in lowland England and Wales. The reason for this decline is not fully understood but could be linked to fluctuations or a reduction in prey species linked to agricultural changes. The species is currently found in all its potential UK breeding range²⁹ but has declined by 18%¹².

2.2 Caerphilly County Borough

Caerphilly county borough still appears to support relatively healthy populations of kestrels in association with coedcae/ffridd and upland areas. They nest on cliff and quarry ledges, trees, nest boxes, and disused industrial buildings. They remain in their territory throughout the year and are often seen hunting on roadside verges. Caerphilly county borough is one of the key areas for this species within former Monmouthshire (VC35), however, further work is required to confirm the status of the population in the area. The breeding distribution of the kestrel in the county borough is shown on **Map 2.7**.

2.3 Links with Habitats

- **Wildlife Corridors** (mature hedgerow trees, roadside verges)
- *Common Land*
- *Coedcae/ffridd*
- **Post-Industrial Land** (quarries, refuse tips)
- *Urban Habitats*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Kestrels can be taken by other birds of prey.
- They can suffer from poisons present in their prey species.

- Loss of nest sites through infilling of old quarry faces.
- Disturbance at nest sites by unauthorised activities, such as climbing and shooting, although this is rare.
- Distribution appears to be effected by the availability of prey species, e.g. voles.

4. CURRENT ACTION

- 4.1 The Gwent Ornithological Society and Glamorgan Bird Club gather information on the distribution of the kestrel and both groups publish annual bird reports^{17, 18, 19}.
- 4.2 GOS Atlas work is being completed.
- 4.2 BTO's Breeding Bird Survey contributes to the monitoring of breeding populations⁶.
- 4.3 The RSPB Investigations Unit supports investigation of crimes such as killings, by providing specialist advice and training to the police²⁹.
- 4.4 The RSPB also maintains a database of crimes against birds.
- 4.5 The UK Government Campaign Against the Illegal Poisoning of Wildlife is supported by the RSPB and other conservation and countryside organisations, they are also involved in educating farmers about the need to use chemicals properly and investigating wildlife poisoning incidents (Poisons Hotline = 0800 321 600 if you find a dead bird or other animal in suspicious circumstances)²⁹.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Determine the status of the kestrel population in the county borough. (Target: 2005)
- 5.2.2 Maintain the numbers of breeding pairs in the county borough. (Target: ongoing)

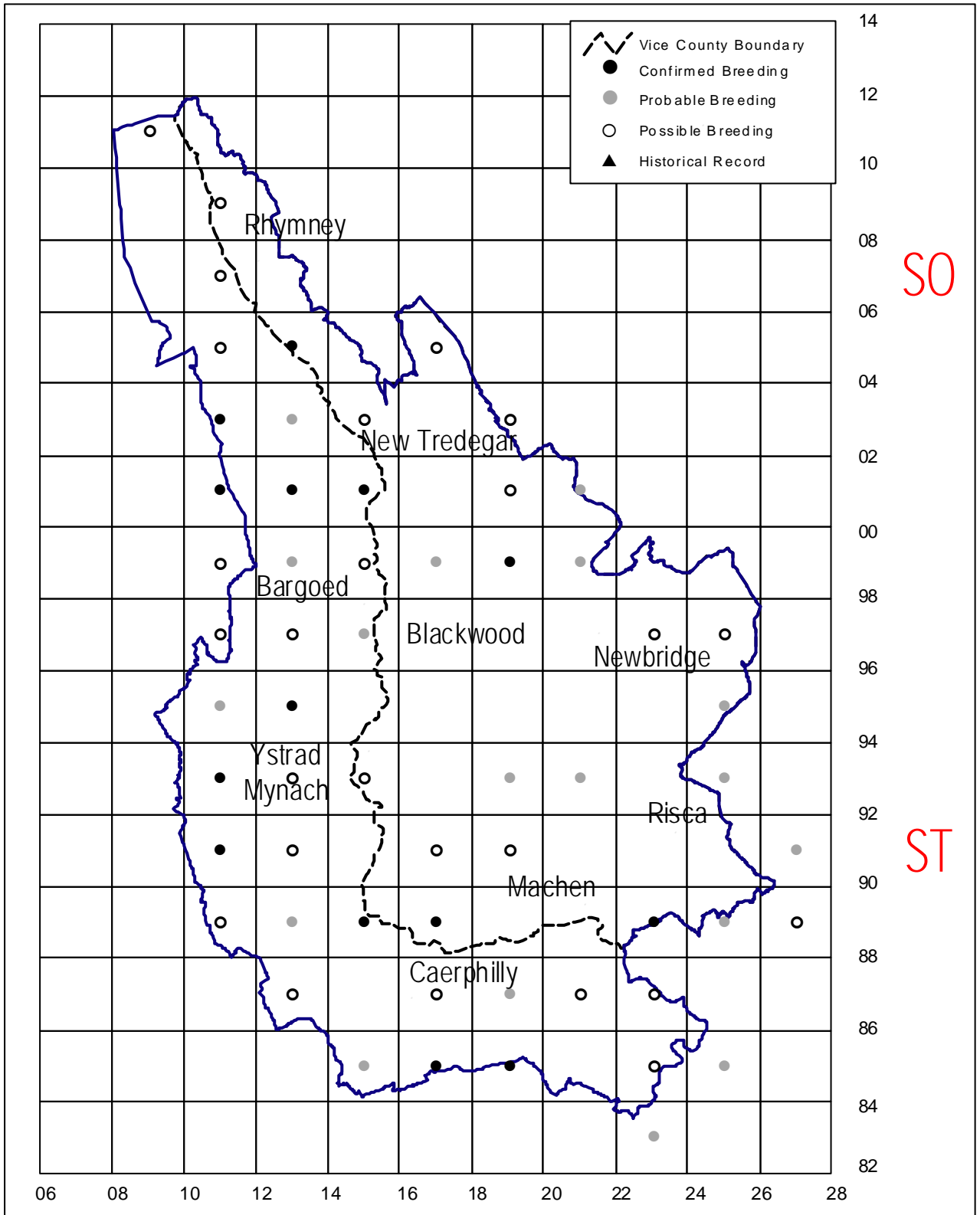
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
None proposed; all legislation is in place to protect the species at all times.	-	-									

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management											
6.2.1 Identify locations where suitable habitats exist for hunting and breeding kestrels and manage sympathetically for prey species to encourage them into the area.	CCBC	CCW	✓	✓							
6.3 Species Management and Protection											
6.3.1 Provide nest boxes in suitable locations and within reach of suitable habitats as hunting grounds.	CCBC	RSPB	✓	✓	✓					✓	
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Ensure provision of advice to relevant organisations and land managers on conservation of kestrels and sympathetic management of suitable habitats.	CBP	CCBC CCW NAWAD RSPB FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4.2 Disseminate information regarding monitoring of nest sites to interested organisations and relevant individuals (as required).	CBP	GBC GOS CCBC RSPB	✓		✓		✓		✓		✓
6.5 Future Research and Monitoring											
6.5.1 Survey populations of kestrel in the county borough to determine the current status of the species in the area and monitor trends (ringing).	GOS GBC	RSPB GWT GLWT BTO	✕								
6.6 Communications and Publicity											
6.6.1 Encourage membership of local wildlife trusts/groups in Gwent, Glamorgan and areas of Caerphilly county borough.	CBP	GWT GLWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Provide schools, colleges and youth clubs in the county borough with information in order to educate children, parents and teachers about the conservation status of birds of prey in their local area.	CCBC	Gwk Schools Youth Forum	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.3 Use publicity material to discourage the use of insecticides and rodenticides.	CBP	CCBC RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.4 Raise awareness among police, and land managers/owners and use the kestrel to promote the value of mature hedgerow trees, quarries and other habitats to the general public.	CBP	CCBC RSPB GOS GBC GWT GLWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.5 Aim to maximise public involvement in surveys and nest box schemes whenever appropriate.	CBP	RSPB CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓

✕ Survey year to be determined.

MAP 2.7 - KESTREL



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LAPWING *VANELLUS VANELLUS* SPECIES ACTION PLAN

1. INTRODUCTION

The lapwing has been identified in the UKBAP as a species of conservation concern, but not a priority species. However, there has been a significant decline in both over-wintering birds and breeding populations, and Caerphilly county borough now supports the largest breeding colony in the South Wales Valleys.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	Red



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2. CURRENT STATUS

2.1 UK and Wales

Lapwings were once a common sight on agricultural land throughout the UK with large flocks of over-wintering birds and breeding birds a common sight.

However, since 1987 the Welsh breeding lapwing population has declined by over 70% to fewer than 1700 pairs.³¹ Fewer than 33 sites in Wales now have more than 10 pairs on them, and only 5 have >20 pairs. An intensive all-Wales lapwing survey carried out in 1996-98 by the RSPB revealed only 2 areas where there was a breeding population of >50 pairs.

Changes in agricultural practices appear to be the main cause of the population crash, causing the remnant populations to relocate to marginal areas. Much evidence suggests that changes producing a dense grass growth in spring have contributed greatly to the rapid decline of the lapwing as a breeding bird in the UK. Lapwings are a species of conservation value, but their status in conservation legislation does not accurately reflect the degree of the recent decline. It is now recognised by the RSPB as of red list status following the 1998 national survey, which revealed a 48% reduction since 1988; and the RSPB have produced a species action plan for this species.

2.2 Caerphilly County Borough

Lapwings are a common winter visitor and passing migrant in Caerphilly county borough. However, the breeding population on agricultural land is now limited to isolated pairs scattered throughout the county. The more favoured breeding sites now appear to be associated with colliery spoil tips or poorly reclaimed land, particularly those areas that have short or no vegetation, impeded drainage and access to nearby taller vegetation for cover and food. Despite a continuing decrease in breeding numbers, pairs have successfully raised young on poorly reclaimed colliery spoil at Fochriw^{17, 18}, with 15 young reported here in 1998.³² This site now supports the largest remaining colony of lapwings in the South Wales Valleys, and it is second only to the Dee Estuary

in Wales as a whole. Smaller breeding colonies occur on colliery spoil at Manmoel, Heol Ddu/Capel Gwladys, Caerphilly Common, Capel Brithdir and Waen Rhydd³⁵. (see **Map 2.8**). Although it is actually within Merthyr Tydfil county borough Isaac Morgan Cottages Pond in Cwmbargoed is used by lapwings arriving to breed at Fochriw³⁵.

Over-wintering lapwings are mainly seen along the coast (e.g. Rhymney Estuary), but there may be some movement during bad weather to inland reservoirs, and some are seen on passage in upland areas of common land in the county borough. Large post-breeding flocks can sometimes occur at Capel Gwladys/five house, Gelligaer, and at Mynydd y Capel, Bedlinog³⁵.

2.3 Links with Habitats

Lapwings are associated with a wide range of habitats, actions for these habitats should ensure that lapwing requirements are not compromised:

- **Species-rich Grasslands** (rhos pasture)
- *Common Land*
- **Post-Industrial Land** (revegetated colliery spoil, landscaped colliery spoil)
- Farmland (improved pasture, newly ploughed land)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Changes in grassland management: grazing by cattle or horses is seen as the best way of managing vegetation for lapwings; sheep are too selective and mechanical cutting is disturbing and must be timed correctly; but dense, tall grass is unsuitable for lapwings at their breeding sites. Nest failures due to trampling can occur when the density of grazing animals is too high during the breeding season.
- Agriculture: on cultivated land breeding attempts are most successful when a germinating or established crop is present, necessitating no agricultural management during the breeding season. In Gwent this is an issue as most lapwings on cultivated land will be in maize, which involves cultivation during the nesting period. The change from spring-sown to autumn-sown cereals in arable areas has resulted in a tall spring vegetation which is unsuitable for breeding lapwings (arable issues are not really relevant to Caerphilly county borough except in the far south east of the area).
- Decreasing colony size: a reduction in the number of pairs on one site means that they become less successful at defending their nest sites against predators, most notably carrion crows (*Corvus corone*)²⁰.
- Human disturbance: prevents birds from returning to their nests and leads to the chilling of eggs and exposure to predation. Disturbance can be caused by walkers, dogs, motorbikes and off-road vehicles.
- Restoration: several lapwing sites in Caerphilly county borough are on old colliery sites in the process of being restored; the final restoration often results in a sward that is too dense and too tall to support lapwings, while tree and shrub planting provides cover for predators.
- Size of site: on sites smaller than 30ha, lapwings become more susceptible to outside influences, such as predation and disturbance. Breeding success and nesting density decline in proportion to the size of site, but large sites are very rare.

- Draining; small ponds and wet areas are important for success of the lapwing colony.
- Lack of information; RSPB hold extensive data on lapwings on farmland and moorland habitats, however, there is a lack of such data for colliery tips which are an important habitat in south Wales.

4. CURRENT ACTION

- 4.1 Sites known to have breeding lapwings at Fochriw and Manmoel are identified as SINCS⁸.
- 4.2 Discussions are underway between CCBC, RSPB, and Commoners to enhance the Fochriw site to provide a larger suitable area for breeding lapwing.
- 4.3 Sites adjoining farmland (nesting sites), with cattle or horse grazing may have the potential to gain support from the Tir Gofal agri-environment scheme, for the agricultural management of farmland for the lapwing. Farmers may be able to offset the costs of appropriate management with this financial support.
- 4.4 Sympathetic stock management is also eligible for consideration for support under Tir Gofal.
- 4.5 All known breeding sites are monitored annually by BTO and RSPB.
- 4.6 The RSPB Lapwing Recovery Programme (Wales) identifies areas of importance, for example Fochriw.
- 4.7 The RSPB, in partnership with other ornithological organisations are working towards identifying the optimum distance between swards of rush vegetation and open areas; and the optimum density of the swards. They are also looking into the breeding success of lapwing colonies by counting the number of juveniles in a post-breeding flock, rather than the number of chicks. This is because of the high mortality rate of chicks before achieving juvenile age.
- 4.8 A breeding bird survey was carried out and a report prepared for the area of Penallta Tip (Penallta Community Park), with particular reference to the lapwing, and makes management recommendations³⁵.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Halt the decline in the breeding population in Caerphilly county borough. (Target: 2005)
- 5.2.2 Enhance breeding success on farmland and colliery spoil. (Target: ongoing)

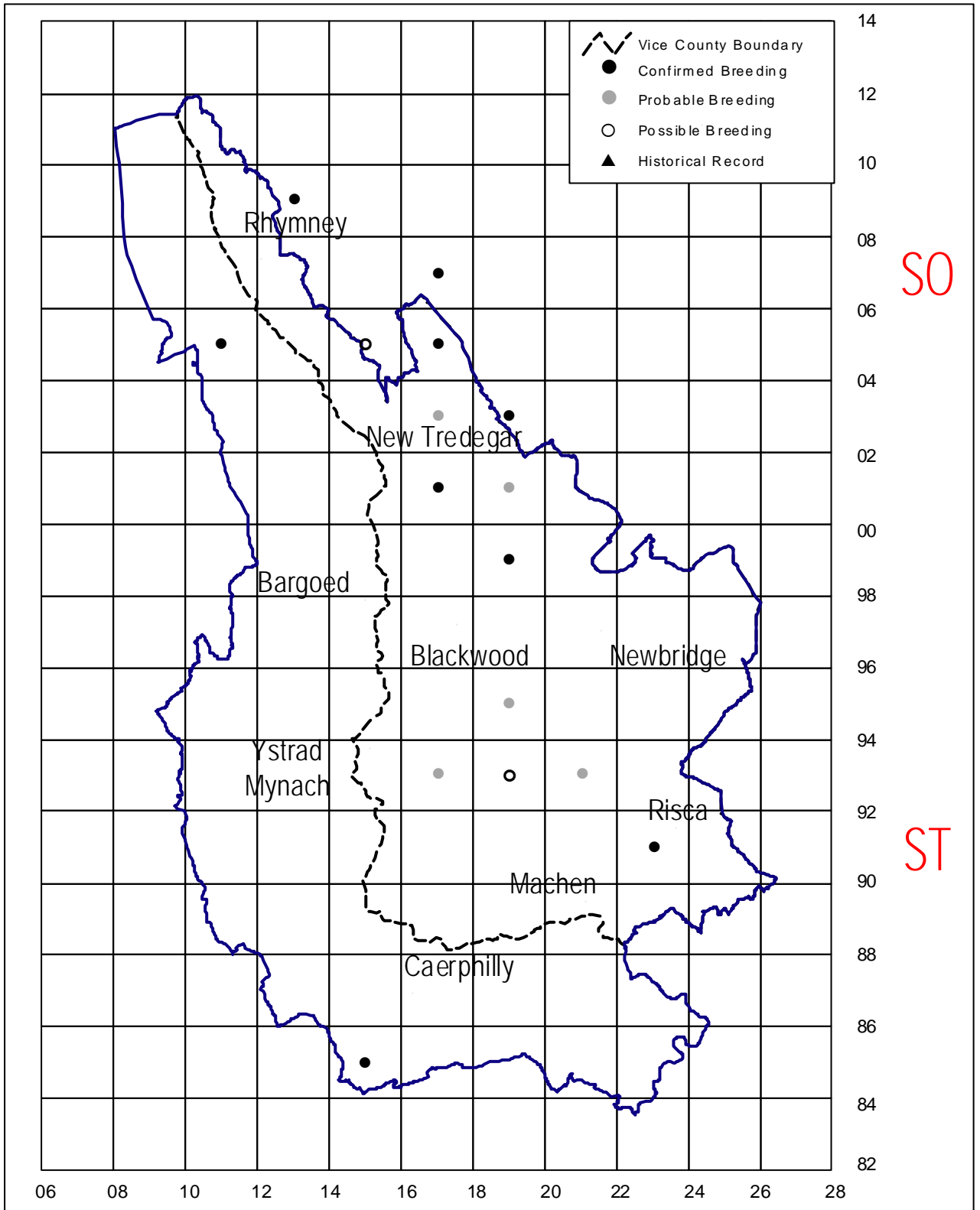
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure Policies and Strategies do not adversely affect existing breeding populations.	CCBC	WDA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Consider the requirements of the lapwing when reviewing agri-environment schemes.	CCW	NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Have regard for the significance of sites supporting breeding lapwing when considering any proposal developments and where appropriate, encourage the after-use of suitable colliery tips/spoil to favour lapwings through planning conditions.	CCBC	WDA NAWAD CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Ensure that important breeding sites are designated as SINCs and/or Local or National Nature Reserves.	CCBC	GLWT GWT RSPB									✓
6.2.2 Facilitate restoration of land reclamation sites through collaborative projects and appropriate management strategies, to maintain required habitat conditions for lapwing.	WDA	CCBC RSPB Gwk landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.3 Seek to secure appropriate management for this species on grasslands, common land and post-industrial land (colliery tips).	CCBC	landowners/ occupiers RSPB		✓		✓		✓		✓	
6.2.4 Investigate ways of reducing disturbance from footpaths, motorbikes and off-road vehicles on vulnerable sites.	Gwent Police	CCBC	✓		✓						
6.2.5 Seek to enhance areas of Parc Penallta and Fochriw for breeding lapwings, through appropriate management and restoration of vegetation and bare ground.	CCBC	Gwk RSPB commoners	✓	✓	✓						✓
6.3 Species Management and Protection											
6.3.1 Determine current food supply on key sites and manage accordingly.	CCBC	BTO GBC GOS RSPB landowners	✓								
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Raise awareness of landowners and managers of lapwing requirements in order to promote appropriate management for this species.	CBP	RSPB NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.5 Future Research and Monitoring											
6.5.1 Monitor lapwing populations in the county borough annually to improve baseline data and monitor trends.	GBC GOS	CCBC BTO RSPB GWT GLWT (volunteers)	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.2 Survey all possible sites, especially colliery tips, in the county borough for undiscovered lapwing colonies.	GBC GOS	BTO CCBC	✘								
6.5.3 Encourage farmers and members of the public to report breeding lapwing to local recorders, a list of contacts is held at CCBC.	FUW	NFU NAWAD BTO CCBC RSPB	✓		✓		✓		✓		✓
6.5.4 Secure a database for information by supporting the setting up of a local record centre.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Use this species to promote the importance of post-industrial land (e.g. old colliery tips) and common land (especially in the uplands), and their conservation requirements.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓

✘ Survey year to be determined.

MAP 2.8 - LAPWING



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LINNET *CARDUELIS CANNABINA* SPECIES ACTION PLAN

1. INTRODUCTION

The linnet is a priority species in the UKBAP and a national action plan has been prepared³⁷.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	
Berne Convention 1982	App. II
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1 Sch. 3
Birds of Conservation Concern List ³⁰	Red



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2. CURRENT STATUS

2.1 UK and Wales

The status of the linnet in the south Wales Valleys is not accurately known.

The linnet was historically a common species but its numbers have declined nationally by over 50% in the last 25 years.

2.2 Caerphilly County Borough

In Glamorgan the linnet is regarded as thinly scattered in the eastern area of the coalfield, of which Caerphilly county borough is a part. Locally there is little evidence of declines of the magnitude found in other areas of the UK, although there is anecdotal evidence of some decrease. The relative health of our local populations may make them of regional or national significance in the long term. **Map 2.9** shows the current distribution of the linnet in the area.

2.3 Links with Habitats

Linnets are associated with weedy arable crops, heathland, scrub and, in particular, gorse thickets. Areas of coedcae/ffridd and upland heath on common land should be ideal habitats, although the species seems to be found at greater population densities at lower altitudes.

- *Wildlife Corridors* (disused railway lines and roadside verges)
- *Common Land*
- **Ffridd/Coedcae**
- **Heathland** (upland heath)
- Gorse stands

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of habitat to urban or industrial development.
- While agricultural intensification may be an important factor nationally it will be of less importance locally, although the use of herbicides and the lack of winter stubbles will have some effect.

- The grubbing out or burning of gorse and other scrub will remove suitable breeding habitat.

4. CURRENT ACTION

- 4.1 Farmland Bird Management Guidelines have been produced by BTO, RSPB and FWAG.
- 4.2 The Ecology and Behaviour Group at Oxford UC is analysing the BTO Breeding Bird Survey in order to study the long-term persistence of farmland birds (inc. the linnet).
- 4.3 Some upland heath has already been designated as SIN C in Caerphilly county borough⁸.
- 4.4 The Gwent Ornithological Society and Glamorgan Bird Club gather information from its members on the distribution of linnets and other birds and both bodies publish annual bird reports^{17, 18, 19}.
- 4.5 BTO's Breeding Bird Survey contributes to regular monitoring of breeding populations⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 In the short term, halt or reverse the decline in numbers of the linnet by the year 2003 so that the Breeding Bird Survey index is at least at 1996 levels.
- 5.1.2 In the long term, see a sustained recovery in numbers so that the BBS index is at least 50% higher than 1996 levels and the range has recovered to 1968 – 1972 levels by 2008.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Confirm population statistics both nationally and locally, identifying important habitats and sites in Caerphilly county borough. (Target: 2005)
- 5.2.2 Safeguard existing breeding and wintering sites. (Target: 2005 and ongoing)
- 5.2.3 Seek to enhance the linnet population in the county borough (Target: 2008)

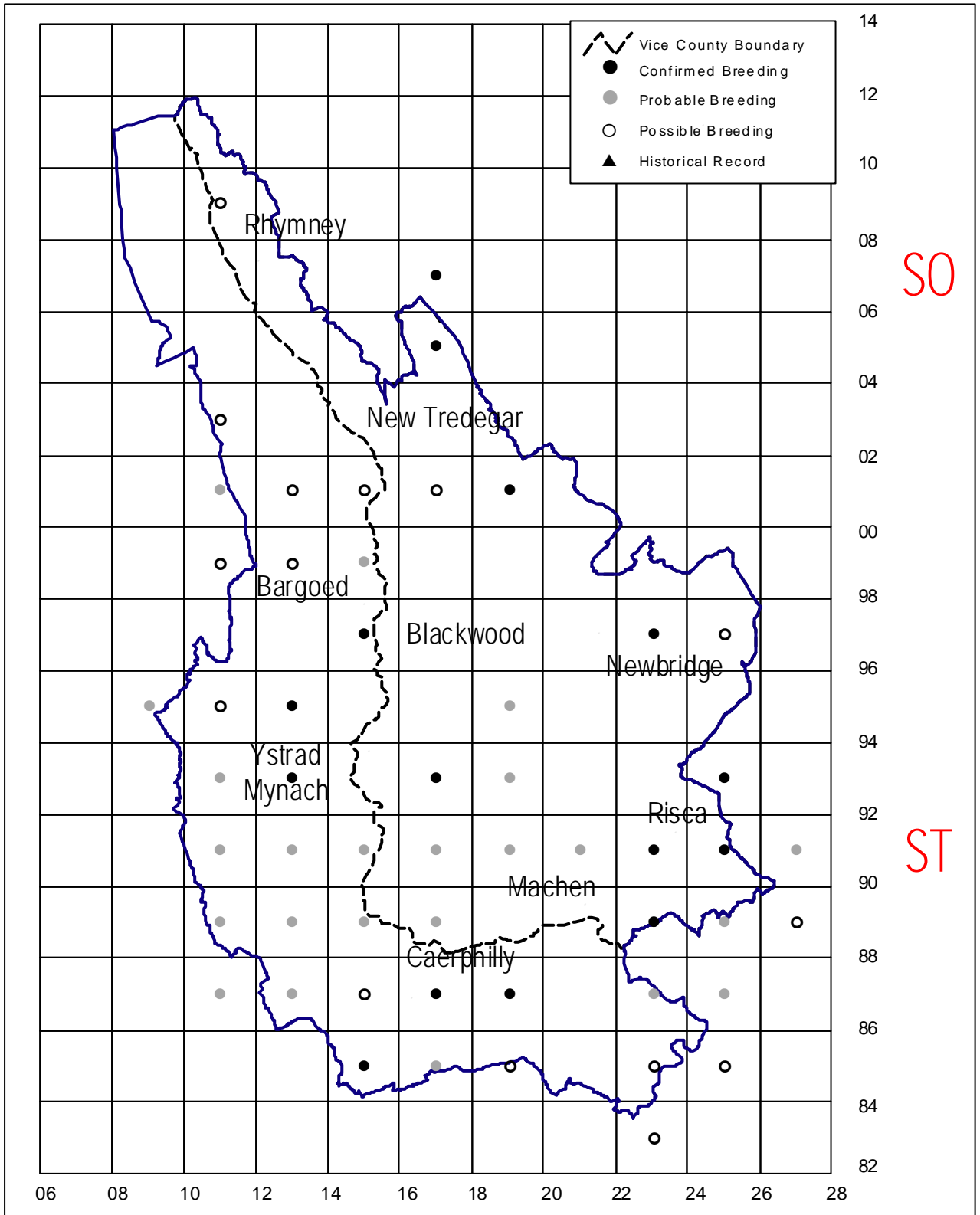
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to designate suitable breeding areas as SIN C and promote farming practices that will benefit the species.	CCBC	NAWAD FUW NFU									✓
6.2 Site Safeguard and Management											
6.2.1 Adopt sympathetic management of all CCBC land with breeding linnet and consider the planting of gorse banks along highways.	CCBC	-			✓					✓	

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Educate and inform the general public of the relative importance of our local population of linnets.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey and monitor linnets populations within the county borough.	GBC GOS	CCW BTO	✘								
6.6 Communications and Publicity											
None proposed at this time.	-	-									

✘ Survey year to be determined.

MAP 2.9 - LINNET



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Atgynhychwyd o fapiad yr Arolwg Ordnans gyda chaniatad rheolwr Llyfifa ei Mawhydi hawffraint y Goron. Mae atgynhychu heb awdurdod yn torri hawffraint y Goron. Gall hyn arwain at erlyniad neu achos sifil. Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

LITTLE OWL *ATHENA NOCTUA* SPECIES ACTION PLAN

1. INTRODUCTION

The little owl was introduced into Britain (Kent and Northamptonshire) in the late 1800s. It is not a UKBAP priority species but is considered to be significant locally.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	-
Conservation Regulations 1994	Sch. 2
Berne Convention 1982	App. II
Bonn Convention 1979	-
CITES 1975	Annex A
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	-



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2. CURRENT STATUS

2.1 UK and Wales

The little owl colonised much of Britain following several introductions in southern England from the mid 19th century.

Monmouthshire was the first Welsh county the owl reached, with breeding reported in 1914 near Chepstow. It has since spread widely over much of England and Wales, and parts of Scotland, with the exception of areas on very high ground. Breeding numbers have declined rapidly in recent years. It is both diurnal and nocturnal, hunting small birds and mammals, and large insects, over open farmland, parks and gardens, and unused industrial areas. It breeds in hollow trees, wall cavities and old quarry crevices.

2.1 Caerphilly County Borough

This is an owl of the agricultural landscape where there are hedges, and where there are old trees and buildings, or even rabbit burrows, providing holes for nesting. It is also found in old quarries and at the moorland edge. In Gwent it is mainly absent from the major urban areas and also from the more extensive woodlands, where it may be out-competed by the larger tawny owl. There are a number of possible breeding sites in Caerphilly county borough but surveys are needed to confirm these.

2.2 Links with Habitats

- *Deciduous Woodlands* (lowland wood pasture and parkland)
- **Wildlife Corridors (hedgerows)**
- *Urban* (old buildings, unused urban industrial sites, public parks)
- *Common Land*
- *Post-Industrial Land*
- Scrub areas

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of habitat due to:
 - Over-mowing of urban grassland areas
 - Scrub clearance
 - Excessive use of insecticides and rodenticides
- Loss of nest sites such as hollow trees, old buildings and quarries.

4. CURRENT ACTION

- 4.1 Preservation of rough grassland areas, parkland management and the provision of nest boxes.
- 4.2 Education at schools and colleges.
- 4.3 Sympathetic management of sites; grass cutting, rodenticide and insecticide use.
- 4.4 Monitoring of nest sites – ringing and/or marking nestlings⁴¹.
- 4.5 The Gwent Ornithological Society and Glamorgan Bird Club gather information from its members on the distribution of little owls and other birds and both bodies publish annual bird reports^{17, 18, 19}.
- 4.6 BTO's Breeding Bird Survey contributes to regular monitoring of breeding population⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain current distribution and populations by conserving existing foraging, nesting and breeding habitats (Target: ongoing).
- 5.2.2 Identify confirmed breeding sites in the county borough (Target: 2005).
- 5.2.3 Identify possible new habitats and create a number of further nesting sites (Target: 2008).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
None proposed at this time.											

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management											
6.2.1 Maintain the current extent and quality of foraging habitats such as hedgerows, parklands, etc. through appropriate management.	CCBC	GWT GLWT CCW landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Seek to create new habitat for the species, providing a network of foraging sites and linking nesting sites.	CCBC	GWT GLWT WOWLS landowners		✓					✓		
6.3 Species Management and Protection											
6.3.1 Seek to create new nesting sites by providing nest boxes and safeguarding mature trees in suitable areas.	WOWLS	GWT GLWT CCBC		✓					✓		
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Produce advisory material for landowners and other interested parties on the requirements of owl species and sympathetic management of habitats.	CBP	WOWS	✓								
6.4.2 Disseminate information regarding ringing of owlets and the monitoring of nest sites to interested organisations and relevant individuals.	WOWLS	GBC GOS BTO	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey all possible breeding sites and habitats to identify where the little owl is or would be likely to breed and benefit from nest-site creation.	WOWLS	GBC GOS BTO	✕								
6.5.2 Monitor all known breeding sites on a regular basis.	GBC GOS	WOWLS	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Encourage membership of wildlife trusts and local ornithological societies.	CBP	GWT GLWT GOS GBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Provide schools and colleges in the county borough with information in order to educate children, parents and teachers about the conservation status of owls in the local area.	CBP	WOWLS Schools Youth Forum		✓					✓		
6.6.3 Use all relevant publicity material to discourage the use of insecticides and rodenticides.	CBP	FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓

✕ Survey year to be determined.

LONG-EARED OWL *ASIO OTUS* SPECIES ACTION PLAN

1. INTRODUCTION

Although it is not a priority species in the UKBAP, the long-eared owl is a UK species of conservation concern³⁹ and is of importance locally.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	-
Berne Convention 1982	Appendix II
Bonn Convention 1979	-
CITES 1975	Annex A
WCA 1981	Part I, Section 1
Birds of Conservation Concern List ³⁰	-



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2. CURRENT STATUS

2.1 UK and Wales

The long-eared owl is a nocturnal hunter and feeds mainly on small mammals and occasionally on small birds. It hunts over coniferous and, sometimes, deciduous woodlands and their margins.

There is a population increase in the winter months as migrant birds from the colder regions of Europe arrive in Britain. It is often seen in communal winter roosts in low scrub trees and young conifers. It breeds mainly in old woodland corvid nests, in both coniferous and deciduous woodlands. Breeding populations of the long-eared owl are contracting and declining, with numbers estimated at 2,000 – 2,500.

2.1 Caerphilly County Borough

In the Gwent/Glamorgan area the main nesting habitat is thicket/early mature stage conifers and the hunting habitats are coedcae/ffridd, rhos pasture, upland heath and re-stock areas. There is one recent record of the long eared owl in Caerphilly county borough around Cwmcarn, and a historical record from Wern Ddu. The species is thought to be under-recorded because of its nocturnal habit and is easily overlooked. More survey work is required.

2.2 Links with Habitats

- **Planted Coniferous Woodlands**
- *Deciduous Woodlands*
- *Species-rich Grasslands* (rhos pasture)
- *Coedcae/ffridd*
- *Heathland* (upland heath)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of foraging areas is one of the main factors affecting the long-eared owl, for example loss of rough grasslands through excessive cutting.
- Over-use of rodenticides and pesticides.

4. CURRENT ACTION

- 4.1 Many SIN C sites have been designated which contain woodland habitat suitable to support long-eared owls⁸.
- 4.2 The Gwent Ornithological Society and Glamorgan Bird Club gather information from its members on the distribution of long-eared owls and other birds, and both bodies publish annual bird reports^{17, 18, 19}.
- 4.3 BTO's Breeding Bird Survey contributes to regular monitoring of breeding population⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Identify and maintain current breeding numbers, and continue survey work to identify new breeding areas. (Target: ongoing)
- 5.2.2 Protect important breeding and roosting sites. (Target: ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
None proposed at this time.	-	-									
6.2 Site Safeguard and Management											
6.2.1 Maintain the current extent and quality of breeding and roosting sites, especially in coniferous woodlands, through appropriate management.	FC	CCBC, GWT, GLWT landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Maintain and seek to enhance the current extent of hunting habitats through sympathetic management of rhos pasture, ffridd and upland heath.	CCBC	GWT GLWT landowners									
6.3 Species Management and Protection											
6.3.1 Seek to create new nesting sites by providing nest baskets and safeguarding areas of conifer thicket.	WOWLS	FC GWT GLWT CCBC			✓					✓	

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.3 Species Management and Protection (continued)											
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Produce advisory material for landowners and other interested parties, about the requirements of the species and sympathetic management of habitats.	CBP	-	✓								
6.4.2 Disseminate information about ringing of owlets and the monitoring of nest sites to interested parties.	WOWLS	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Monitor nest and roost sites annually, marking young owlets	WOWLS	GBC GOS BTO	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Encourage membership of wildlife trusts and local ornithological societies.	CBP	GWT GLWT GBC GOS	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Provide schools and colleges in the county borough with information in order to educate children, parents and teachers about the conservation status of owls in the local area.	CBP	CCBC Schools Youth Forum WOWLS		✓					✓		
6.6.3 Use all relevant publicity material to discourage the use of insecticides and rodenticides.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

NIGHTJAR *CAPRIMULGAS EUROPAEUS* SPECIES ACTION PLAN**1. INTRODUCTION**

The nightjar has been declining nationally in both numbers and range for a large part of the last century and consequently it has been classified as a priority species in the UKBAP³⁷. It is therefore of local biodiversity conservation importance.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	Annex I
Berne Convention 1982	App. I I
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1 Sch. 3
Birds of Conservation Concern List ³⁰	Red
Other Species Status	RDB Birds: RDB5



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2. CURRENT STATUS**2.1 UK and Wales**

The nightjar is a breeding summer visitor to the UK and is a characteristic nocturnal bird of heathland, wood pasture, woodland edges and clearings. It was once common, but has been declining in numbers and range throughout Europe due mainly to the loss of its habitats. The species is concentrated in southern England with smaller numbers extending into Wales and as far north as central Scotland. Between national surveys in 1968-72 and 1992 there was a decline in UK range of 52%. It is a well-camouflaged species, and therefore difficult to survey. The usual method is to count the numbers of singing males and use this to estimate the total number of birds. Numbers reached a low point of 2,100 males in 1981, but have now stabilised and are increasing in some areas, including in Wales where it has experienced a 230% increase since 1981. In 1992, a national survey resulted in an estimated UK population of 3,400 males of which 193 (5-6%) were found in Wales and 61 of these were recorded in Glamorgan and Gwent.

Nightjars are essentially heathland birds; they nest on bare or sparsely vegetated patches on the ground, mainly where free-draining sandy soils exist. The heath-like conditions that arise in conifer plantations shortly after being clear-felled and replanted provide ideal habitat. Nightjars usually rear two broods per season. Two eggs are normally laid from mid-May to mid-July; chicks hatch after about 19 days and fly after about 17 days. They are reliant on the parents for food for about four weeks, feeding on flying insects such as moths, beetles and flies at dusk and dawn across a wide range of habitats. Preferred habitats are heathland, deciduous or mixed woodland, orchards, riparian and freshwater habitats, and gardens. Forests are most used where there is age diversity within the forest. Birds will travel on average 3km from nest sites to locate suitable feeding areas.

2.2 Caerphilly County Borough

Nightjars are a scarce and local breeding summer visitor; rarely recorded on passage. The Caerphilly county borough nightjar population is concentrated into two main areas, Mynydd Rudry (the Warren, Wern Ddu, Coed Coesau-whips, Coed Craig Ruperra) and the Ebbw Forest (Nant Gwyddon and Nant Carn valleys) where the species is dependent on newly planted and/or

clear felled conifer plantations for breeding sites. There are thought to be about some 10 pairs overall (Rudry area with 3 to 4, and 6 in the Ebbw Forest). **Map 2.10** shows the current breeding distribution of the nightjar in Caerphilly county borough.

2.3 Links with Habitats

- **Planted Coniferous Woodlands** - the species should also be considered in this plan as nightjar breed on the heath-like conditions of newly felled and recently restocked forestry plantations.
- **Heathland** - the requirements of the nightjar should be considered in conjunction with this plan as important breeding habitat.
- *Deciduous Woodlands* (lowland wood pasture and parkland)
- *Common Land*
- *Coedcae/Ffridd*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss and fragmentation of suitable breeding and foraging habitat.
- Unsympathetic commercial forestry - commercial forests provide good habitat for nightjars when managed appropriately, but changes in management may threaten local populations. Nightjars nest in the young stages of plantations, while there is still bare ground between the trees. If no other suitable habitat becomes available in other new or young stands, local population declines could occur as the recently planted blocks mature. Restocking forests through natural regeneration in order to meet other conservation objectives may be detrimental to nightjars.
- Decrease in large airborne insect prey as a result of intensive agriculture (indirect effects of pesticides) and/or climate change, may affect nightjar populations.
- Excessive cold and wet periods during breeding season can reduce breeding success.
- Disturbance by people and dogs during nesting. This reduces the amount of time a bird can spend incubating or feeding, and may therefore affect the likelihood of its chicks surviving. It also makes eggs and chicks more vulnerable to predators.

4. CURRENT ACTION

- 4.1 Detailed research into the ecology of nightjars nesting in Thetford Forest has been carried out by the RSPB with the Forestry Commission's help. Forest Enterprise forestry practice at Thetford is now aimed at maintaining a constant area of young plantation and edge habitats as good sites for breeding nightjars.
- 4.2 Regular breeding sites in Caerphilly county borough are monitored annually by local birdwatchers.
- 4.3 The Woodland Grant Scheme, run by the Forestry Commission, offers grants for woodland management that promotes biodiversity.

4.4 The Tir Gofal agri-environment scheme, run by CCW, aims to support the management and restoration of lowland heathland.

4.5 The Gwent Ornithological Society and Glamorgan Bird Club gathers information from its members on the distribution of nightjars and other birds and both bodies publish annual bird reports^{17, 18, 19}.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

5.1.1 Maintain a population of at least 3,400 churring males.

5.1.2 Halt the decline in range of nightjar (there were 268 occupied ten km squares in 1992).

5.1.3 Increase the numbers and range of nightjars to 4,000 churring males in at least 280 10km squares by the year 2003 (an 18% population increase and 5% range increase in 10 years).

5.1.4 In the long term (next 20 years), restore nightjar to parts of its former range in, for example, south-west England, west Midlands, north-west England, south-west Scotland and Northern Ireland.

5.2 Caerphilly Objectives and Targets

5.2.1 Gain a full understanding of the location of the nightjar population, its numbers, trends and habitat usage (Target: 2003).

5.2.2 Maintain the current distribution and abundance of nightjar in Caerphilly county borough (Target: ongoing).

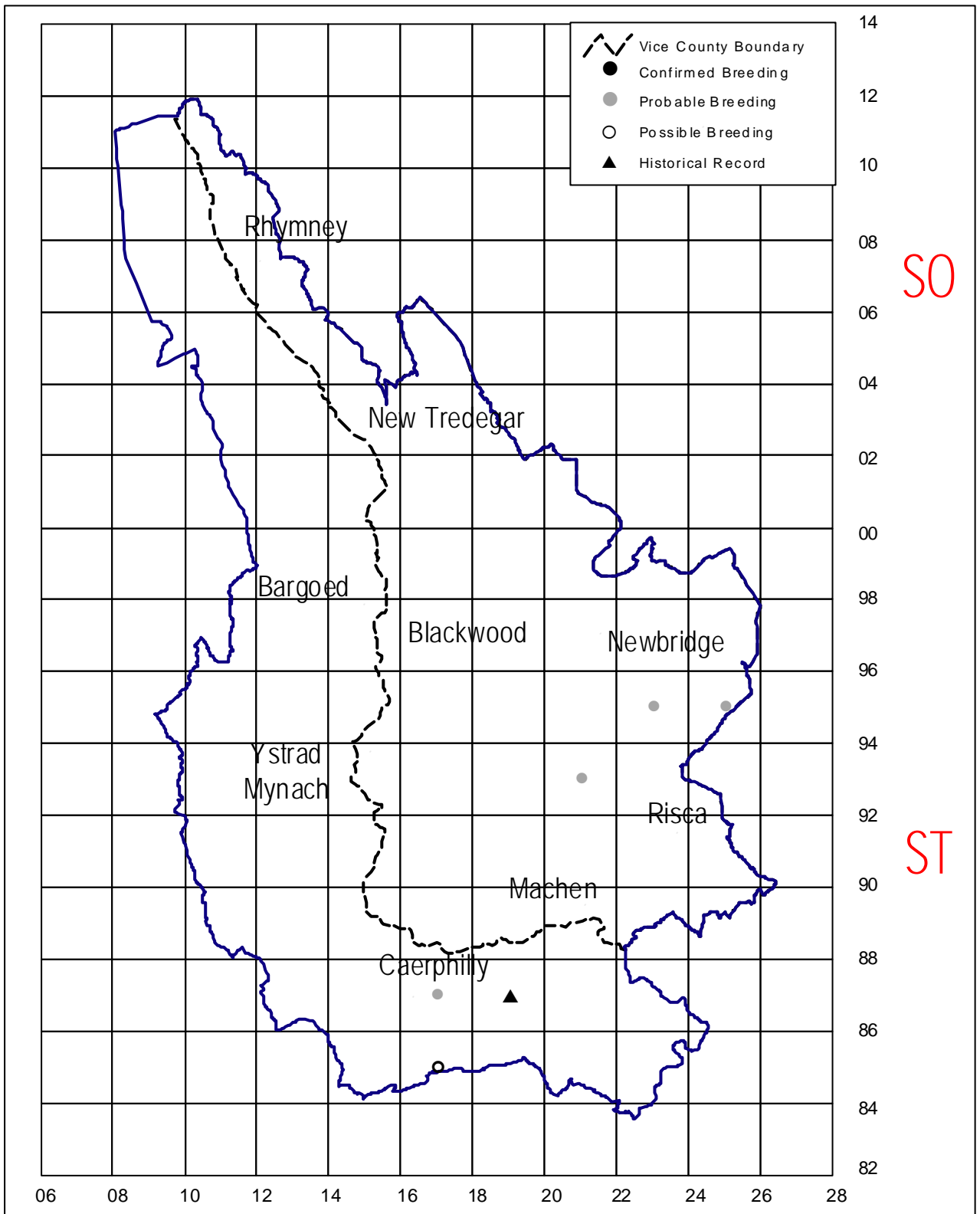
5.2.3 Increase the number of breeding pairs to 12 (a 20% increase) (Target: 2006).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure specific targets and management for the nightjar are included where applicable in all development and management plans, especially Forest Design Plans.	FC	FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Take full account of the requirements of the nightjar when considering felling and restocking proposals.	FC	FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Ensure all regularly used nesting sites are designated as SIN C.	CCBC	-									✓
6.2 Site Safeguard and Management											
6.2.1 Resist development (housing, road, industrial) on or adjacent to nightjar nesting habitat.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management (continued)											
6.2.2 Seek to defer management operations (clearing, spraying etc.) within restock areas of plantations that hold or have the potential to hold nesting nightjars to not before mid August, in order to avoid disturbance of eggs or young.	FC	FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.3 Seek to provide suitable feeding habitat within 5km of nightjar nest sites, especially by targeting Tir Gofal.	CCW	CCBC		✓					✓		
6.2.4 Incorporate habitat management prescriptions for nightjars (diversify age class structure) in FC forests.	FC	FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.5 Maintain a constant area of clear fell (age class 1 - 10 years) through Forest Design Plans.	FC	FE	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-									
6.4 Advisory											
6.4.1 Advise relevant parties (including private forestry companies) of the presence, legal status, and management requirements of the nightjar.	CCW	FC GWT GLWT RSPB Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Gain a complete knowledge of the numbers, distribution and habitat usage of nightjar populations in the area. Contribute to the national nightjar surveys (2003 and every 10 years thereafter).	GBC GOS	BTO RSPB	✓								
6.5.2 Establish and maintain a 5-yearly nightjar monitoring programme on FC sites, which appear to support suitable habitat.	FE	GBC GOS	✓					✓			
6.6 Communications and Publicity											
6.6.1 Improve co-ordination and information sharing between all groups and individuals with knowledge of nightjars and their distribution.	CBP	FE GBC GOS GWT GLWT	✓	✓	✓	✓	✓	✓	✓	✓	✓

MAP 2.10 - NIGHTJAR



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Atgynhychwyd o fapiad yr Arolwg Ordnans gyda chaniatad rheolwr Llyfifa ei Mawhydi hawffraint y Goron. Mae atgynhychu heb awdurdod yn torri hawffraint y Goron. Gall hyn arwain at erlyniad neu achos sifil. Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

PEREGRINE FALCON *FALCO PEREGRINUS* SPECIES ACTION PLAN

1. INTRODUCTION

The peregrine falcon is not afforded priority status in the UKBAP, but it is considered to be important for biodiversity conservation locally.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	Annex II, IV
Conservation Regulations 1994	Sch. 2
Berne Convention 1982	App. II
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1 Sch. 5
Birds of Conservation Concern List ³⁰	Amber
IUCN Red List of Threatened Animals 1994	lower risk - conservation dependent



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2. CURRENT STATUS

2.1 UK and Wales

The peregrine should be the world's most successful bird. It is an expert and powerful hunter, and is the world's fastest moving animal. However, world populations have crashed dramatically in the last decade, leaving European populations as vitally important globally. The UK holds 15% of the European population, and approximately 50% of the English/Welsh population is in Wales, mainly in and around the mining valleys.

In 1960, as a result of pigeon racers' claims that an excessive population of peregrines was responsible for losses of homing pigeons, a BTO inquiry took place. However, the results of the inquiry showed that the population had actually declined by around 40%. This decrease was attributed to the past use of DDT resulting in the thinning of eggshells. In 1963, there were approximately 360 pairs remaining in Britain. Since then, however, the British population has made a significant recovery as a result of the restriction of organochlorines and enhanced conservation efforts, including improved legal protection. There are now over 1283 pairs¹². Numbers, however, have not recovered in southeast England and east Yorkshire; whilst in northern Scotland there have been further declines in the last decade. Persecution by humans is now the only real threat to the success of the peregrine falcon population.

The species currently occupies around 95% of its potential UK breeding range²⁶, but the peregrine is now in decline in some areas of Wales, mainly in and around the mining valleys. Only 259 pairs were recorded in Wales during the last Welsh national survey in 1991. The 2001 national survey was postponed due to the foot and mouth disease epidemic, and will take place this year (2002).

2.2 Caerphilly County Borough

In Caerphilly county borough peregrines are associated with quarries and upland cliffs, with each pair holding a large hunting territory. Some birds will also use large buildings or pylons as nesting ledges, although there are no records of this in the county borough. Peregrines are

found at scattered locations throughout the county borough, but are regularly disturbed and there have been many occasions where pairs have failed to breed. In 1998, five dead peregrines were found and increased to 7 in the year 2000. All were analysed and found to contain extremely high levels of toxins, high enough to seriously affect a human handling them. These birds had been targeted because pigeons were found staked down nearby covered with the poison.

2.3 Links with Habitats

- *Common Land*
- **Post-Industrial Land** (quarries)
- *Urban Habitats* (old buildings) (tall structures)
- Sea cliffs

3. CURRENT FACTORS AFFECTING THE SPECIES

- A reduction in moorland birds has led to peregrines preying on racing pigeons as an alternative food source. Pigeon racing is a popular sport in the South Wales Valleys. The high level of persecution of peregrines in this area is thought to be due to the attempts by some pigeon owners to protect their birds.
- Poor weather, especially rain, causes the loss of eggs.
- Loss of nest sites through infilling of old quarry faces.
- Theft of eggs and chicks to supply egg collectors and falconers, although this can be discounted as a limiting factor.
- Disturbance at the nest sites by unauthorised activities, such as climbing and shooting. This is rare except to purposely target peregrines. Climbing is more of a problem in places such as the Lake District.
- Pesticides and rodenticides used on agricultural land can be passed up through the food web to the peregrine.

4. CURRENT ACTION

- 4.1 The Environment Agency (EA), Police, RSPB, NAWAD and other organisations forming the South Wales Peregrine Watch currently operates protection and monitoring schemes at known nest sites in South Wales.
- 4.2 UK surveys of peregrines (other birds of prey) are organised every 10 years by the RSPB and government agencies. The last survey was in 1991 and the 2001 survey has been postponed until 2002 due to the foot and mouth disease outbreak.
- 4.3 The RSPB Investigations Unit provides specialist advice and training to the police involved in bird crimes²⁹.
- 4.4 The UK Government Campaign Against the Illegal Poisoning of Wildlife is supported by the RSPB and other conservation and countryside organisations in investigating incidents

of wildlife poisoning (Poisons Hotline = 0800 321 600; ring if you find a dead bird or other animal in suspicious circumstances). They also educate farmers and landowners about the need to use chemicals properly²⁹.

- 4.5 The Gwent Ornithological Society and Glamorgan Bird Club gather information from its members on the distribution of peregrines and both bodies publish annual bird reports^{17, 18, 19}.
- 4.6 The BTO Breeding Bird Survey also contributes to the annual monitoring and recording of peregrine populations⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain, and where possible enhance, the number of breeding pairs in the county borough (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to designate all known nesting sites as SINC.	CCBC	SWPW									✓
6.2 Site Safeguard and Management											
6.2.2 Seek to include the needs of peregrines in the management of SINCs and N/LNRs that support peregrines.	CCBC	GWT GLWT RSPB CCW	✓								✓
6.3 Species Management and Protection											
6.3.1 Encourage the reporting of all evidence of persecution to the RSPB and the South Wales and Gwent Police. There are several Wildlife Liaison Officers who deal with ongoing problems such as illegal killing, bird theft, egg collecting and disturbance.	CBP	SWPW Gwent Police RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Support and promote the Peregrine Watch scheme by reporting incidents of persecution to Wildlife Liaison Officers.	CBP	Gwent Police	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Ensure all planning permissions for quarry extensions make provision for existing nest sites and provide new nest ledges on completed quarry faces well in advance of the breeding season.	CCBC	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:									
	Lead	Partners	2003	4	5	6	7	8	9	10	11	
6.4 Advisory												
6.4.1 Educate land managers of the need to reduce the use of rodenticides and pesticides through carefully targeted use, or alternative methods of pest control.	NAWAD	FUW NFU CCBC CCW		✓								
6.4.2 Liaise with pigeon organisations to raise their awareness of the peregrine and the measures available to prevent pigeon losses and therefore avoid confrontation with the law.	CBP	(SWPW)	✓									
6.5 Future Research and Monitoring												
6.5.1 Monitor all known nesting sites annually through South Wales Peregrine Watch members, to maintain a breeding record and safeguard against persecution [results are given to RSPB and CCW].	SWPW	CCW GBC GOS BTO	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.2 Monitor peregrine populations through ringing surveys, gaining important information about dispersal, recruitment and longevity.	SWPW	BTO GBC GOS		✓			✓				✓	
6.5.3 Take part in the national peregrine surveys including 2002 and every 10 years thereafter.	SWPW	BTO GBC GOS	✓									
6.6 Communications and Publicity												
6.6.1 Encourage membership of wildlife trusts and local bird clubs.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Provide schools and colleges in the county borough with information in order to educate children, parents and teachers about the conservation of the peregrine in the area.	CBP	CCBC Schools Youth Forum	✓									
6.6.3 Discourage the use of insecticides and rodenticides in any publicity material.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.4 Raise awareness of the plight of the peregrine, and use it to promote the value of quarry habitats.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.5 Raise awareness and carry out research into the problem of peregrines and pigeons. There is a need in the South Wales Valleys to ease the persecution of peregrines which could be achieved through working together with pigeon-fanciers.	CBP	-		✓								
6.6.6 Use the peregrine as a 'flagship' species to highlight and promote the well being of the countryside and hence ourselves.	CBP	-	✓									

REED BUNTING *EMBERIZA SCHOENICLUS* SPECIES ACTION PLAN

1. INTRODUCTION

The reed bunting is a UKBAP priority species and a UK SAP has been prepared³⁷. Due to a local decline in numbers it is important for biodiversity conservation locally.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	-
Berne Convention (1982)	App. II
Bonn Convention (1979)	-
CITES (1975)	-
WCA 1981	Part I Section 1 Sch. 3
Birds of Conservation Concern List ³⁰	Red



2. CURRENT STATUS

2.1 UK and Wales

The reed bunting is commonly associated with wetland sites and farmland, but it has suffered a significant decline in national population and range within the last 23 years, with a decrease of 68% between 1975 and 1998⁶.

In addition, the reed bunting has recently been shown to be suffering reduced survival rates and breeding performance.

2.2 Caerphilly County Borough

While the impact of the national trend is not known, the numbers of this species has certainly fallen within the county borough, with reed buntings noticeably absent or fewer now in what were regarded as traditional sites. **Map 2.11** shows the distribution of the reed bunting in the county borough.

2.3 Links with Habitats

- **Wetlands** (rivers, reedbeds, canals and still waters)
- *Deciduous Woodland* (wet woodland - 'carr')
- Agricultural land, particularly wet land with more diverse habitat types

3. CURRENT FACTORS AFFECTING THE SPECIES

Threats to the reed bunting are not entirely understood, although survey work carried out by the BTO indicates a decline that coincides with a number of other bird species, many of which share a diet of cereal, grass and wildflower seeds, and also feed their young on insects. These may be affected by similar changes in agricultural practices such as:

- increased use of pesticides and fertilisers
- switch from spring sown to autumn sown crops and the consequent loss of winter stubble fields

- o more intensive use of grassland
- o a general reduction in habitat diversity on farmland due to the loss of mixed farming and increased specialisation
- o removal of hedgerows and field borders
- o drainage and improvement of wet farmland

4. CURRENT ACTION

- 4.1 The reed bunting is likely to have benefited from initiatives designed to attract or maintain other wetland species, since it readily moves into newly created wetlands. Conservation organisations have devoted considerable resources towards the acquisition and management of reedbeds, wet grassland and other wetland areas.
- 4.2 The Gwent Ornithological Society and Glamorgan Bird Club gather information from its members on the distribution of reed bunting and other birds and both bodies publish annual bird reports^{17, 18, 19}.
- 4.3 The BTO Breeding Bird Survey also contributes to the annual monitoring and recording of reed bunting populations⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 In the short term, halt or reverse the decline in numbers of the reed bunting by the year 2003 so that the Breeding Bird Survey Index is at least at 1996 levels.
- 5.1.2 In the long term, see a sustained recovery in numbers so that the BBS Index is at least 50% higher than 1996 levels, in both wetland and farmland habitats, by 2008.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain present breeding numbers where strongholds of the species currently exist (Target: ongoing) and reverse the population decline in the other areas (Target: 2010).
- 5.2.2 Protect reed bunting habitats, particularly during the breeding season (Target: ongoing).

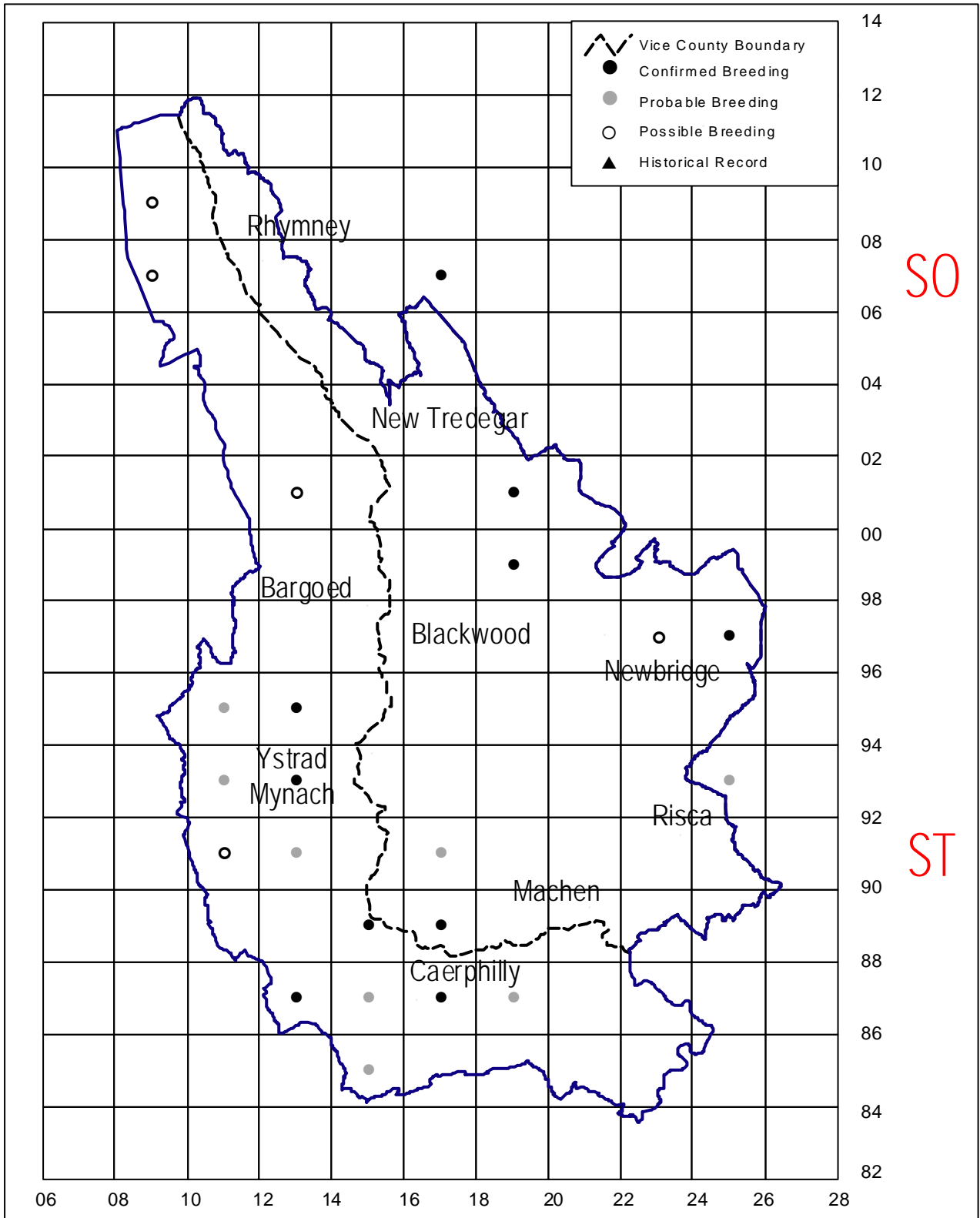
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Promote farming practices that will benefit the reed bunting, and other farmland birds.	CCW	NFU FUW RSPB NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Seek to designate sites of importance for the reed bunting and other wetland birds, as SIN, or LNR.	CCBC	CCW GWT GLWT									✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management											
6.2.1 Ensure sympathetic management and practices on wetland habitats.	EA	WW/DC CCBC CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Adopt sympathetic management on all CCBC owned land with breeding reed bunting.	CCBC	CCW		✓							
6.3 Species Management and Protection											
6.3.1 Ensure breeding sites are protected from disturbance or deterioration in habitat quality.	CCBC	CCW landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Seek to enhance the local population through appropriate management of potential sites identified through survey 6.5.2. (e.g. reedbed creation).	CCBC	CCW GWT GLWT				✓				✓	
6.3.3 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Educate and inform the general public as to the relative importance of our reed bunting population.	CBP	RSPB Schools Youth Forum	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey and monitor reed bunting within the county borough area.	GBC GOS	BTO GWT GLWT CCBC	✘								
6.5.2 Survey to identify potential new sites for the reed bunting.	GBC GOS	BTO	✘								
6.6 Communications and Publicity											
6.6.1 Produce an educational leaflet to be available at Countryside Parks and other CCBC property that highlights the importance of the species.	CBP	-		✓							

✘ Survey years to be determined.

MAP 2.11 – REED BUNTING



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Atgynhychwyd o fapiad yr Arolwg Ordnans gyda chaniatod rheolwr Llyfrfa ei Mawrhydi hawlfraint y Goron. Mae atgynhychu heb awdurdod yn torri hawlfraint y Goron. Gall hyn arwain at erlyniad neu achos sfil. Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

SKYLARK *ALAUDA ARVENSIS* SPECIES ACTION PLAN

1. INTRODUCTION

The skylark is afforded priority status in the UKBAP and a UK SAP has been written³⁹. It is therefore of importance in Caerphilly county borough.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	Annex I I / 2
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	Red



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2. CURRENT STATUS

2.1 UK and Wales

The skylark is one of the most widespread bird species in the UK with over 2 million resident breeding pairs being joined by probably a further 25 million winter visitors from the mainland of Europe. However over the last 25 years the UK population has crashed by over 50%. A pattern mirrored on the continent. Historically the species stronghold was lowland farmland. The implementation of changes in farming methods is generally quoted as the cause of this crash, especially the planting of autumn-sown rather than spring-sown cereals making the nesting habitat unsuitable. Similarly, fertilised grass may be too tall and dense for the species.

2.2 Caerphilly County Borough

Within Caerphilly county borough, as with Wales as a whole, the skylark is generally a species of the unimproved upland grasslands. As such the population declines are far less obvious, although there is some anecdotal evidence of decreasing population densities. This relative abundance makes our skylark population of great importance. **Map 2.12** shows how this bird is distributed within the county borough.

2.3 Links with Habitats

- **Species-rich Grasslands** (lowland neutral grassland and rhos pasture, often part of the upland common land)
- *Coedcae/ffridd* (grasslands within the habitat mosaics that border the commons)
- *Common Land*
- *Post-Industrial Land* (re-seeded colliery spoil and naturally revegetated colliery spoil)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Intensive management of arable land leading to a reduction of insects and weed seeds.
- Intensive management of both lowland and upland grasslands.
- High stocking rates particularly of sheep.

- Reduction in winter stubble fields due to autumn sown crops.
- Early silage cutting instead of traditional hay making destroys nests during the breeding season.
- Drainage and 'improvement' of wet grasslands.
- Increased disturbance of nesting sites on commons by the general public particularly when 'off-roading' on scramblers or in cars.
- Afforestation of the uplands.

4. CURRENT ACTION

- 4.1 Continued survey work by the BTO. The BTO Breeding Bird Survey contributes to the annual monitoring and recording of skylark populations⁶. Some survey work has already been undertaken by CCBC in Caerphilly county borough.
- 4.2 The Gwent Ornithological Society and Glamorgan Bird Club gather information from members on the distribution of skylarks and both publish annual bird reports^{17, 18, 19}.
- 4.2 RSPB/Tesco partnership in funding and preparing the UK SAP.
- 4.3 Ecological studies of the species by the RSPB.
- 4.4 The Tir Gofal agri-environment scheme may be beneficial to the species, especially in less intensively grazed areas.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Maintain present breeding numbers, wintering numbers and distribution throughout the UK.
- 5.1.2 Reverse the population decline on lowland farmland and other habitats throughout the UK, where found to be declining.
- 5.1.3 Protect the skylark's habitat, especially in the breeding season.

5.2 Caerphilly County Borough

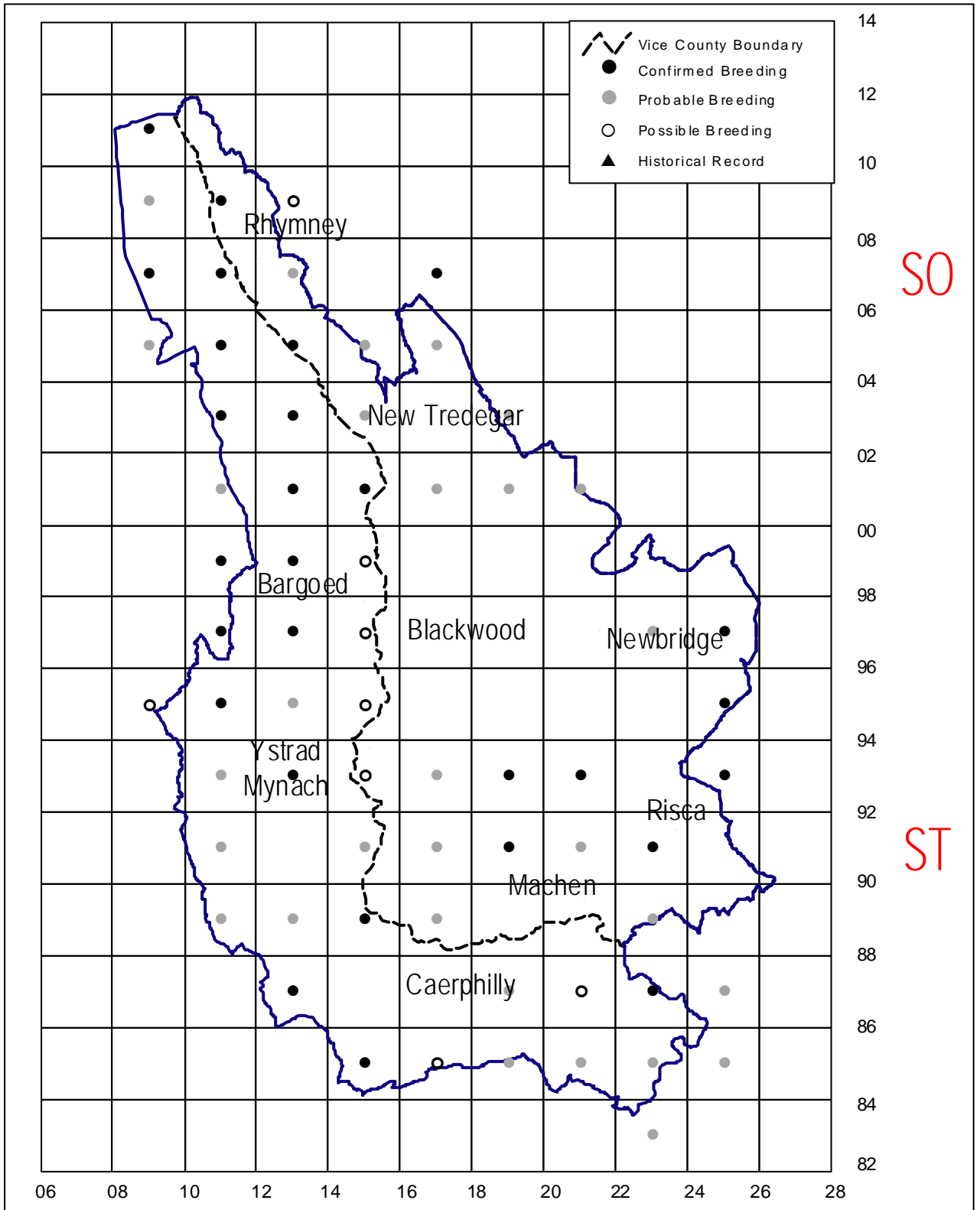
- 5.2.1 Maintain the breeding population in the remaining strongholds of the county borough (Target: ongoing).
- 5.2.2 Reverse the population decline in the county borough and investigate the possible decline in upland grasslands (Target: 2010).
- 5.2.3 Protect habitats which are important to the species (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Promote farming practices that will benefit the species, for example through the Tir Gofal Scheme.	CCW	NAWAD NFU FUW RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Adopt sympathetic management of all CCBC land with breeding skylark.	CCBC	-	✓	✓	✓						
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Educate and inform the local population as to the relative importance of our skylark population.	CBP	RSPB Schools Youth Forum	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey and monitor skylark populations within the county borough.	GBC GOS	BTO CCW	✕								
6.6 Communications and Publicity											
6.6.1 Produce a leaflet regarding the importance of the skylark for biodiversity, to be available at Countryside Parks and other CCBC properties.	CBP	-		✓							

✕ Survey year to be determined.

MAP 2.12 – SKYLARK



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SONG THRUSH *TURDUS PHILOMELOS* SPECIES ACTION PLAN

1. INTRODUCTION

The song thrush is a UK priority species and a UK SAP has been prepared³⁹. It is therefore of importance for biodiversity conservation in Caerphilly county borough.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	Annex I I / 2
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1 Sch. 3
Birds of Conservation Concern List ³⁰	Red



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2. CURRENT STATUS

2.1 UK and Wales

The song thrush is historically very common. Populations were at a stable level nationally until the mid-1970s, but subsequently there has been a severe decline, with a 73% reduction on farmland and 49% in woodland habitats.

2.2 Caerphilly County Borough

The species is still a familiar sight in the local area with records from the majority of tetrads (see **Map 2.13**), but its actual population densities are currently unknown. There is some anecdotal evidence of a local decline.

2.3 Links with Habitats

- *Deciduous Woodlands*
- *Wildlife Corridors*
- *Species-rich Grasslands*
- ***Urban Habitats***

3. CURRENT FACTORS AFFECTING THE SPECIES

- The reasons for the national decline in this species are poorly understood. Although intensification of farming practices, particularly on arable farms, may be a major factor nationally, this may be less important locally.
- The use of molluscicides e.g. slug pellets in gardens and allotments is thought to be a significant factor in the loss of the song thrush.
- Mortality of young birds due to cold wet weather in the nesting season has been shown to have a severe long-term effect on the population.

4. CURRENT ACTION

- 4.1 The Gwent Ornithological Society and Glamorgan Bird Club gather information from members on song thrush distribution and both publish annual bird reports^{17, 18, 19}.
- 4.2 The BTO Breeding Bird Survey also contributes to the annual monitoring and recording of song thrush populations⁶.
- 4.3 RSPB research is ongoing.

5. OBJECTIVES AND TARGETS**5.1 UK Objectives and Targets**

- 5.1.1 Halt the decline of this species in the UK by the year 2000 (UKBAP, 1995).
- 5.1.2 Maintain the range and population levels of song thrush, and where possible restore them to that of the 1970 estimate.
- 5.1.3 Identify and implement priority research in order to formulate future conservation action.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Identify the current distribution and population of the song thrush in the local area through a county-wide survey, and establish a monitoring programme (Target: 2004).
- 5.2.2 Maintain the range and population of song thrush (Target: ongoing).

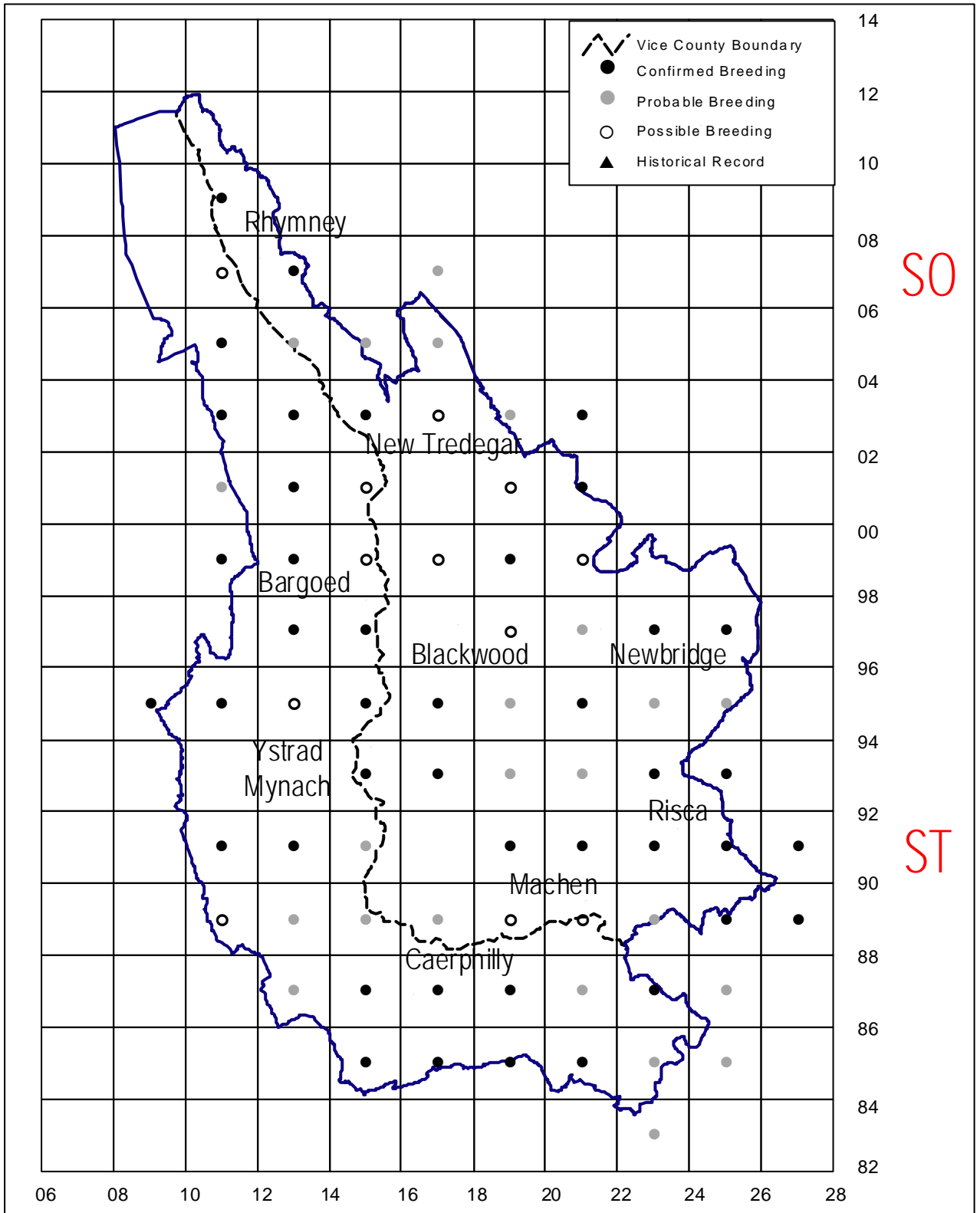
6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Promote careful and limited use of molluscicides or alternative mollusc control methods on gardens and allotments (e.g. snail pellets).	CCBC	Allotment Societies Community Councils	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 None proposed, but some nesting sites would benefit from SINC status allocated for other reasons.	(CCBC)	-									(✓)
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
No other action proposed until further survey work is undertaken to identify population distribution and numbers (Action 6.5).	-	-									

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.4 Advisory											
6.4.1 Provide appropriate advice to farmers, gardeners and householders when the results of research become available.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Identify the current status and population density of the species, for example through the use of "Walk Through Surveys" (similar to the BTO Breeding Bird Survey) of specific areas.	GBC GOS	RSPB BTO CCBC	✕								
6.6 Communications and Publicity											
6.6.1 Use as a possible 'flagship' species to raise awareness of the aims of the BAP process with the general public in a Garden and Household Bird Survey targeted at all householders in the county borough.	CBP	-	✓					✓			
6.6.2 Use the song thrush image on leaflets, posters, newsletters etc, where appropriate.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

✕ Survey year to be determined.

MAP 2.13 - SONG THRUSH



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SPOTTED FLYCATCHER *MUSCICAPA STRIATA* SPECIES ACTION PLAN**1. INTRODUCTION**

The spotted flycatcher is listed as a UK priority species and a UK SAP has been prepared³⁷.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	-
Berne Convention 1982	App. II
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	Red
Other Species Status	RDB Birds: candidate



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2. CURRENT STATUS**2.1 UK and Wales**

The spotted flycatcher is an insectivorous summer migrant. It is one of the latest summer visitors to arrive each year with only a few birds being recorded before mid-April; the main influx being in early May.

They remain in Britain for only a short time and birds start leaving in August and have usually left after second broods by mid-September. They breed in open woodland habitats throughout the UK. Preferred habitats are mature broadleaved woodland (essentially woodland edge and glades), hedgerows with mature trees, parkland, large gardens, churchyards, cemeteries and particularly wooded watersides that are rich in the large flying insects (especially Diptera and Hymenoptera) which form the majority of the spotted flycatcher's diet. The bird takes prey from the air mainly by flying out from a perch, catching the insect and returning to the perch to swallow it. They are fairly tolerant of disturbance and will use open-fronted nest boxes on houses, especially where overgrown by climbing plants.

The spotted flycatcher is well distributed throughout Wales although it generally avoids high ground above 260 meters and its distribution is patchy in the western peninsulas of Pembrokeshire, Llŷn and Anglesey. Evidence in Wales is too scant to show just how much the decline in the UK applies to Wales, however, a decline of up to 25% has been recorded in the breeding population of north Breconshire since the 1980s.

It has been in decline in the UK since the early 1960s; the Common Bird Census data showed a 78% decline in woodland and a 78% decline on farmland between 1972 and 1996. The Breeding Bird Survey also shows a significant decline (23%) in numbers between 1994-98.

2.1 Caerphilly County Borough

In Glamorgan, regularly monitored areas indicated that breeding numbers declined in the 1980s, with populations being sustained at the lower levels into the 1990s. Data collected in the former Islwyn area of Caerphilly county borough by the Gwent Ornithological Society during 1998-2000

indicates a dramatic decline in the distribution of breeding birds when compared to records collected during 1981-85. Birds were recorded in thirteen tetrads compared to 21 previously suggesting a possible reduction of 38%. **Map 2.14** shows the current breeding population distribution in the county borough.

2.2 Links with Habitats

- **Deciduous Woodlands** (lowland wood pasture and parkland, wet woodland)
- **Wildlife Corridors** (hedgerows)
- **Urban Habitats** (gardens)

3. CURRENT FACTORS AFFECTING THE SPECIES

The reasons for the species decline are not clear, but they may include:

- **Loss of nest sites:** many spotted flycatchers nest in large trees and there has been a large-scale loss of these in woodland, parks and hedgerows (especially following Dutch elm disease), which are favoured habitats. However, there is no qualitative data on the effect of these losses.
- **Weather effects:** the key factor appears to be summer weather conditions as more birds breed early if temperatures are warmer.
- **Migration:** the spotted flycatcher passes through the Sahel region en route to wintering grounds in southern Africa. Drought in Sahel or the wintering areas could be a factor in the decline, but no clear link has been established.

4. CURRENT ACTION

- 4.1 Some aspects of broadleaved woodland management, particularly the creation and maintenance of clearings and wide rides, will have benefited the species.
- 4.2 Provision of nest-boxes (usually for other species) will have helped the species, especially in areas where there is a dearth of natural sites.
- 4.3 Although the species is not monitored systematically, the Gwent Ornithological Society and Glamorgan Bird Club gathers information from its members on the distribution of spotted flycatcher and other birds and both bodies publish annual bird reports^{17, 18, 19}.
- 4.4 The BTO Breeding Bird Survey also contributes to the monitoring and recording of spotted flycatcher populations⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 In the short term, halt or reverse the decline in numbers of the spotted flycatcher by the year 2003 so that Breeding Bird Survey index is at least at 1996 levels.

5.1.2 In the long term, see a sustained recovery in numbers so the Breeding Bird Survey index is at least 50% higher than 1996 levels. (Target: 2008).

5.2 Caerphilly Objectives and Targets

5.2.1 Identify the current population distribution and number in the county borough through appropriate survey work (Target: 2005).

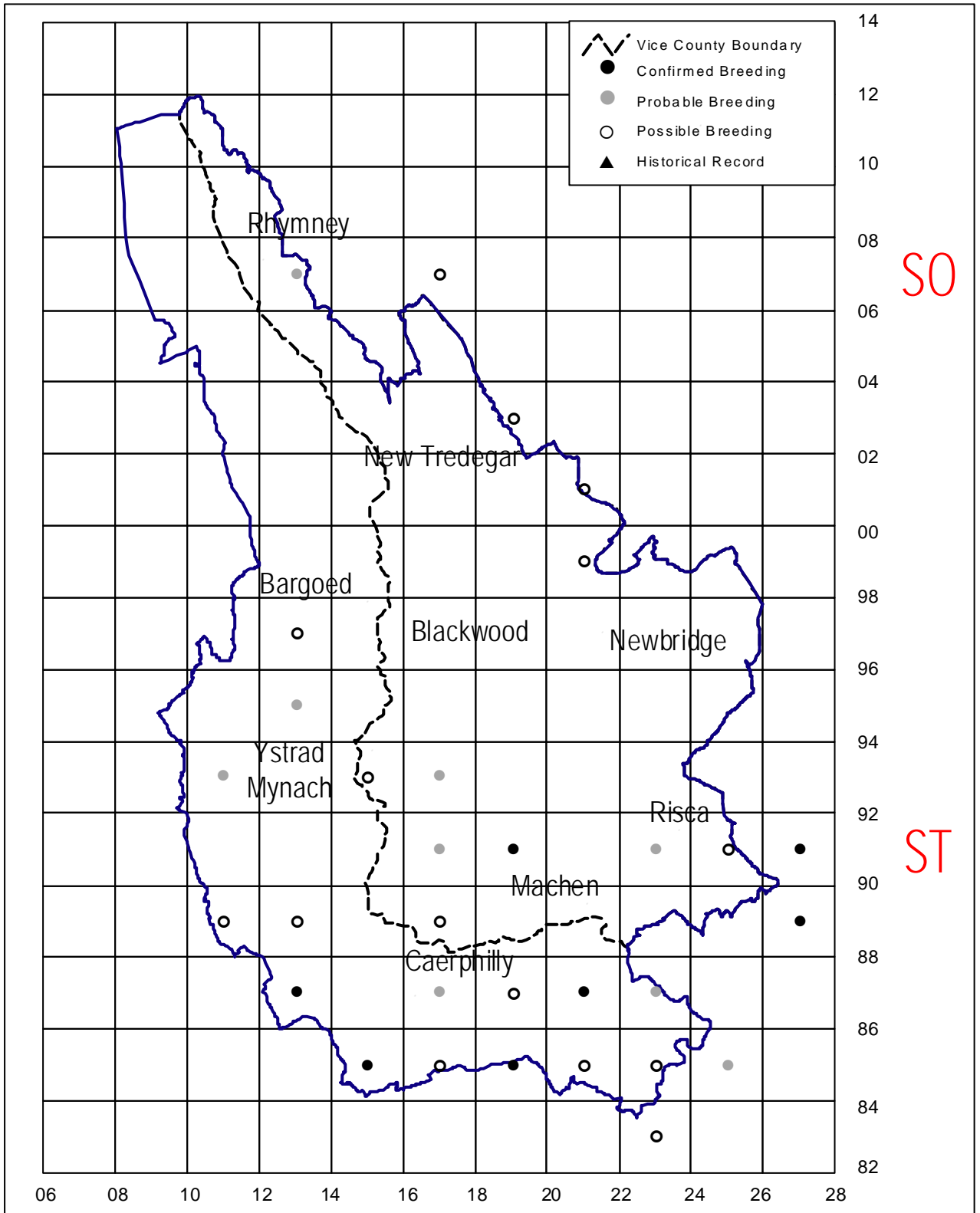
5.2.2 Maintain the current distribution of the species in the county borough and seek to increase the local population size and range (identified in 5.2.1) by 50% (Target: 2010).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to designate areas of importance (breeding sites) as SINCLNR.	CCBC	CCW									✓
6.2 Site Safeguard and Management											
6.2.1 Seek to protect sites that regularly support breeding spotted flycatchers such as deciduous woodlands, wildlife corridors (hedgerows) and urban habitats.	CCW	CCBC GWL GLWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Identify potential new sites for this species and encourage appropriate habitat management; maintain and/or create woodland glades and rides, manage hedgerows, churchyards, etc.	CCW	FC CCBC Coed Cymru			✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Consider the requirements of nesting spotted flycatchers when providing nest-boxes in nature reserves, country parks and other suitable sites and habitats.	CCBC	Coed Cymru landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Raise awareness of the needs of this species in general advice on woodland and farmland management, including provision of broadleaved stands with an open canopy and open spaces, such as rides and tree falls.	CCW	FC NAWAD NFU FUW CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Encourage appropriate monitoring through the continuation of the Breeding Bird Survey (BTO/JNCC/ RSPB) and local ornithological society survey work. Develop better understanding of the population and range of species over the county.	GBC GOS	BTO RSPB	✕	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Consider targeting this species for a "public-participation" survey.	CBP		✓								

✕ Survey year to be determined.

MAP 2.14 - SPOTTED FLYCATCHER



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TREE SPARROW *PASSER MONTANUS* SPECIES ACTION PLAN

1. INTRODUCTION

The tree sparrow has been declining nationally in both numbers and range for a large part of the last century and consequently it has been classified as a priority species in the UKBAP³⁷. It has therefore been selected for action in Caerphilly county borough.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	P
EC Birds Directive 1979	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1
Birds of Conservation Concern List ³⁰	Red
Other Species Status	RDB Birds: candidate



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2. CURRENT STATUS

2.1 UK and Wales

The tree sparrow is found across the UK normally on lowland or low upland farmland.

However its distribution is patchy and with prolonged fluctuations involving inexplicable colonisations, and desertions of well established areas. The main populations are found across the Midlands, southern and eastern England, the species being almost absent in the western parts of the UK. Tree sparrows appear to undergo irregular fluctuations in numbers. There was an 85% decline in numbers in Britain between the two breeding atlas periods (1968-72 and 1988-91), the largest decline of any common species during this period. The tree sparrow's range also decreased by 20% during the same period the largest losses being in Wales and Scotland.

The species is a breeding resident in Wales, in small numbers with a patchy distribution, and absent from most western areas. Its stronghold has always been in the Marches, in those counties bordering the west Midlands. Tree sparrows nest in holes in trees, usually having 2-3 broods. The clutch size varies between 2-7, (frequently 5) with 11-14 day incubation and 15-20 day fledging periods. Acceptable habitat includes pollarded willows and other trees with nest-holes along lowland watercourses; free standing trees along roadsides or in groups in parks, cemeteries, or farmland; woodlands, especially where they are small, isolated in open country with well-spaced mature broad-leaved trees. They feed predominantly on the ground, eating seeds, berries and buds, and rough grassland supports important seed sources.

2.2 Caerphilly County Borough

Tree sparrows in Caerphilly county borough are now very uncommon. Small numbers are occasionally recorded on autumn passage, but generally, upland areas in the county are not suitable for the species and although it has never been common in the industrial valleys, their status here is now thought to be unstable. Historically, the area has had residential breeding colonies in suitable habitat along river valleys, especially the Sirhowy and lower Rhymney valleys.

Data collected by the Gwent Ornithological Society during 1998–2000 shows a dramatic decline in distribution when compared to survey details collected during 1981–85¹⁹. Only one of the eight tetrads in the Sirhowy valley had tree sparrow records and a former stronghold in the Crosskeys/Risca area appears to have been lost completely.

No recent survey has been conducted in the lower Rhymney river valley, however one tetrad bordering the area has had tree sparrow recorded recently during the breeding season, therefore it is possible that a residual population still exists in this area (see **Map 2.15**).

2.3 Links with Habitats

- **Deciduous Woodlands** (lowland wood pasture and parkland, wet woodland)
- **Wildlife Corridors** (roadside verges, railway lines)

3. CURRENT FACTORS AFFECTING THE SPECIES

Little is known about the factors affecting numbers of tree sparrow, but their recent decline has occurred at the same time as decreases in the numbers and/or ranges of other farmland birds which share its diet of grass, wildflower and cereal seeds, and also feed their young on insects. It is likely therefore that the reasons associated with the decrease in breeding numbers are:

- Changing agricultural practices - increased use of herbicides; shift from spring-sown to autumn-sown crops and consequent loss of winter stubble in fields; more intensive management of grassland; and the general reduction of habitat diversity on farmland due to the loss of mixed farming and increased specialisation.
- Availability of nests sites may be a limiting factor for this hole-nesting species.
- Long-term changes in climate, which may be a factor in the species retreat to the east.

4. CURRENT ACTION

- 4.1 UK BAP priority species³⁷ and implementation of the UK SAP.
- 4.2 Nest box schemes have been implemented in some areas.
- 4.3 Although the species is not monitored systematically, the Gwent Ornithological Society and Glamorgan Bird Club gathers information from its members on the distribution of tree sparrow and other birds and both bodies publish annual bird reports^{17, 18, 19}.
- 4.4 The BTO Breeding Bird Survey also contributes to the monitoring and recording of tree sparrow populations⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 In the short term, halt or reverse the decline in numbers of the tree sparrow by the year 2003 so that the Breeding Bird Survey index is at least at 1996 levels.

- 5.1.2 In the long term, see a sustained recovery, so that the BBS index is at least 50% higher than 1996 levels, and a measurable increase in range is achieved by 2008.

5.2 Caerphilly Objectives and Targets

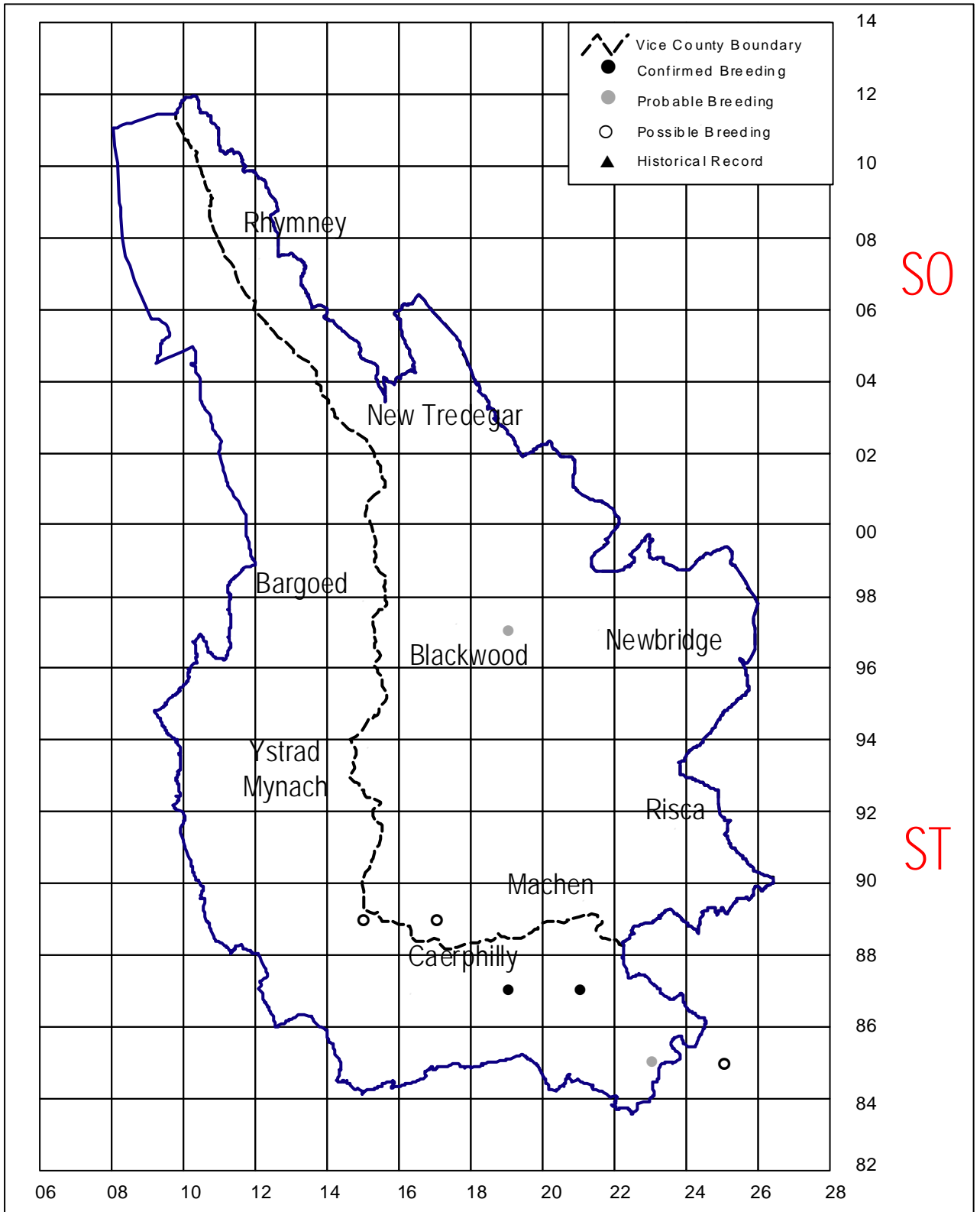
- 5.2.1 Gain a full understanding of the current population of tree sparrow in Caerphilly county borough by carrying out a county wide survey on existing and historical breeding sites by 2005.
- 5.2.2 Maintain the current distribution and abundance of tree sparrow. (Target: ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Introduce specific targets for increasing the number of breeding pairs in the light of survey results.	CBP	-			✓						
6.2.1 Seek to designate all regularly used nesting sites as SINCLNR.	CCBC	CCW									✓
6.2 Site Safeguard and Management											
None proposed at this time.	-	-									
6.3 Species Management and Protection											
6.3.1 Consider the scope for introducing management measures where tree sparrow colonies still exist, e.g. including the provision of nest boxes, retention of dead trees, encouragement of pollarding and the provision of winter feeding.	CCW	CCBC Coed Cymru FC	✓	✓							
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Advise land managers on management for tree sparrows, taking account of findings of research resulting from UK BAP.	CCW	NAWAD FC CCBC Coed Cymru RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Undertake a local breeding bird survey to cover suitable habitats.	GBC GOS	RSPB BTO	✘								
6.5.2 Collate all the known information on breeding sites (historic and existing) in the county borough to target survey, monitoring and habitat management.	GBC GOS	BTO RSPB CCW	✓								
6.6 Communications and Publicity											
6.6.1 Improve co-ordination and information sharing between all groups and individuals with knowledge of tree sparrow and their distribution.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓

✘ Survey year to be determined.

MAP 2.15 - TREE SPARROW



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WETLAND BIRDS SPECIES ACTION PLAN

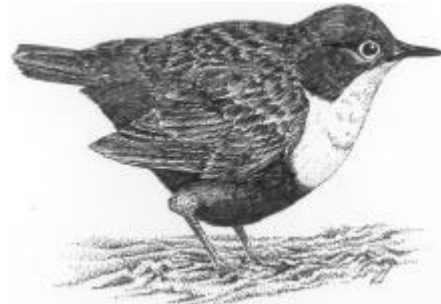
1. INTRODUCTION

This Species Action Plan covers three bird species that are generally associated with similar wetland habitats, and are important indicators of the quality of the wetland environment.

The three species are:

- Dipper *Cinclus cinclus*
- Grey wagtail *Motacilla cinerea*
- Kingfisher *Alcedo atthis*

Relevant Legislation/Species Status			
	Dipper	Grey wagtail	Kingfisher
priority species (P) or species of conservation concern (S)	S	S	S
EC Birds Directive 1979	-	-	Annex 1
Berne Convention 1982	App. II	App. II	App. II
Bonn Convention 1979	-	-	-
CITES 1975	-	-	-
WCA 1981	Part I Section 1	Part I Section 1	Part I Section 1 Sch. 1
Birds of Conservation Concern List ³⁰	-	-	Amber
Other Species Status	RDB Birds: candidate	-	-



dipper © CCBC 2002



grey wagtail © CCBC 2002

2. CURRENT STATUS

2.1 Caerphilly County Borough

The dipper, grey wagtail and kingfisher all require a high quality of water with good populations of aquatic invertebrates or small fish. Since the demise of the coal mining industry in south Wales, rivers have all but returned to their former state, holding healthy populations of invertebrates, and a wide variety of fish species.



kingfisher © CCBC 2002

All of these wetland birds are also good indicators of the quality and health of the aquatic environment. They are currently found along the rivers and streams within the county borough, and both the grey wagtail and kingfisher are frequently found alongside areas of still water. Only the dipper is confined to river and stream channels, requiring areas of swift moving water commonly associated with the upper and parts of the middle reaches of river courses. **Maps 2.16** (dipper), **2.17** (grey wagtail) and **2.18** (kingfisher) show the current population distribution of these species in Caerphilly county borough.

2.2 Links with Habitats

- **Wetlands (rivers and streams)**
- **Wetlands** (lakes and reservoirs) - grey wagtail and kingfisher
- *Common Land* (wet areas)
- Wet farmland - grey wagtail
- Rock faces bordering rivers and streams (used as nest sites)
- Man-made features (post-industrial; retaining walls, dressed stone channelling and bridges (following or crossing water courses - used as nest sites) - dipper and grey wagtail

3. CURRENT FACTORS AFFECTING THE SPECIES

- Lack of suitable nest sites can limit the breeding density (dipper).
- Rapid river level changes within the county borough means that safe and undisturbed nest sites may be a limiting population factor.
- Modifications to river channels and embankments contribute further to river level rise and may remove or reduce suitable nest sites for wagtails and kingfishers.
- Bridge renovation may deprive dippers and grey wagtails of nest sites, but the incorporation of nest cavities/ledges in bridge and wall-retaining works maintains nesting sites.
- Accidental discharge of raw sewage from ageing sewage pipes reduce water quality and have an effect upon aquatic food sources, particularly on rivers where the sewage pipe is constructed either on or adjacent to the river bed.
- Industrial effluent discharges can have profound effects upon all aquatic populations, particularly accidental or intentional discharges of concentrated chemical solutions.
- Mine water discharge.

4. CURRENT ACTION

- 4.1 All three species will have benefited from work undertaken by the EA over the past decade. Modifications to river channels, the creation of weirs and the management of bank-side trees and vegetation have all assisted in providing a more suitable environment for fish and aquatic invertebrates. The provision of large block stone river defences has inadvertently provided additional nesting areas for all three species, as well as creating suitable perches for feeding. The weirs also create new areas of relatively still water and riffle, allowing a possible expansion of the range of dippers along the length of the rivers.
- 4.2 The Gwent Ornithological Society and Glamorgan Bird Club gather information from their members on the distribution of these wetland birds and both bodies publish annual bird reports^{17, 18, 19}. The BTO Breeding Bird Survey also contributes to the monitoring and recording of these wetland bird species⁶.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to these species.

5.2 Caerphilly Objectives and Targets

5.2.1 Survey all suitable watercourses to develop a better picture of the number of breeding pairs or territories held (Target: 2005).

5.2.2 Maintain present breeding populations of these species (Target: ongoing).

5.2.3 Provide relevant data to planners, developers and organisations involved in river maintenance work, to allow consideration or mitigation where work is carried out on or near watercourses (Target: ongoing).

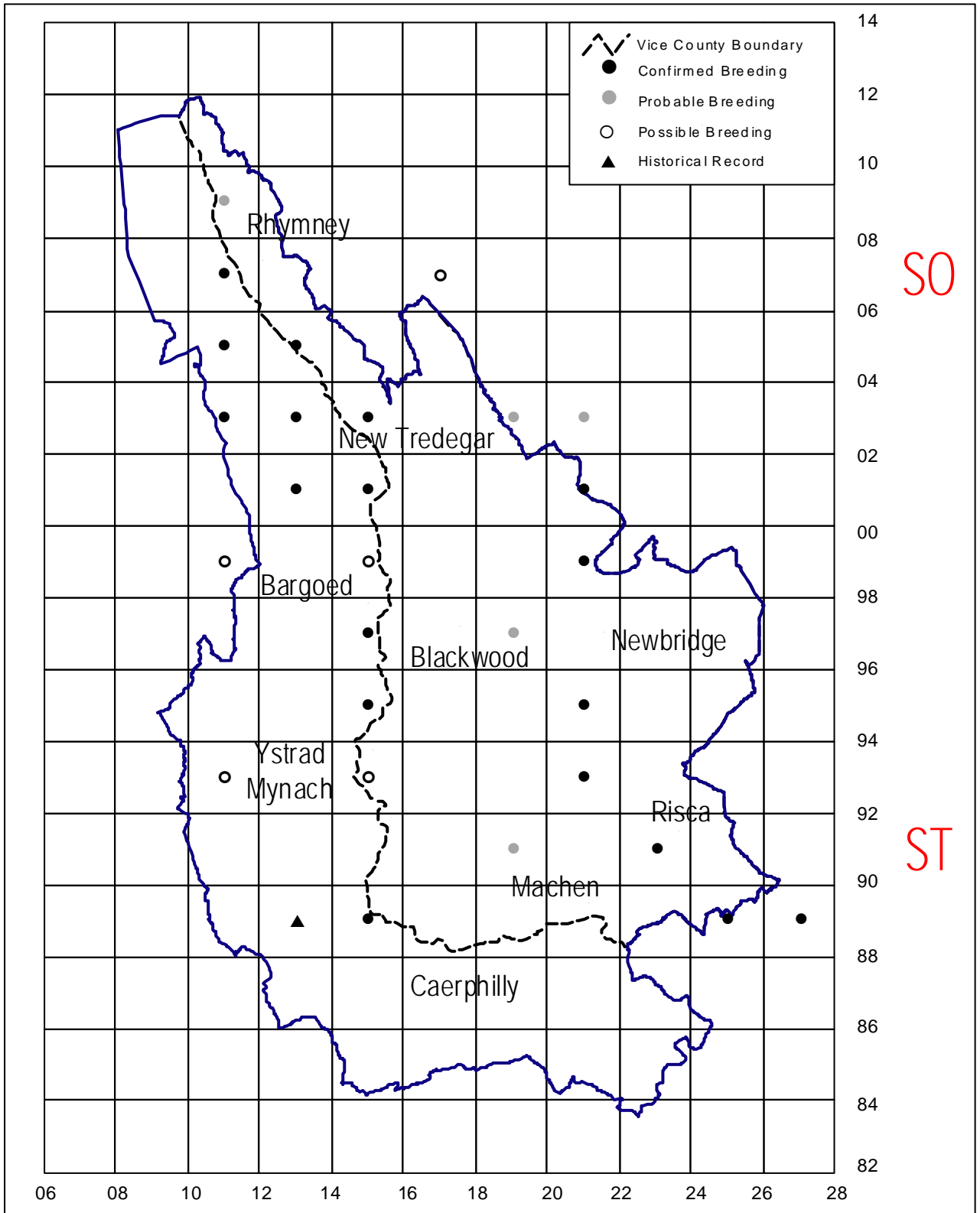
6. ACTION AND KEY TARGETS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to designate important sites with significant numbers of wetland birds as SINCLNR.	CCBC	CCW									✓
6.2 Site Safeguard and Management											
6.2.1 Adopt and promote a sympathetic approach to the management of riparian habitats.	EA	CCBC landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Encourage the provision of nest boxes on bridges for the dipper and grey wagtail. Introduce a nest box scheme after suitable sites have been identified in action 6.5.2.	CCBC	EA Schools volunteers				✓					
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Educate and inform the general public of the requirements and importance of these species, particularly their importance as environmental indicators for the state of our watercourses.	EA	GWT GLWT CCBC RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey all suitable watercourses to identify the current distribution of these species in the county borough.	GBC GOS	BTO	✘								
6.5.2 Continue to monitor these species in the county borough.	GBC GOS	BTO	✓	✓	✓	✓	✓	✓	✓	✓	✓

✘ Survey year to be determined.

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.6 Communications and Publicity											
6.6.1 Produce and disseminate information leaflets to Country Parks and other CCBC property/facilities.	CBP	-		✓							

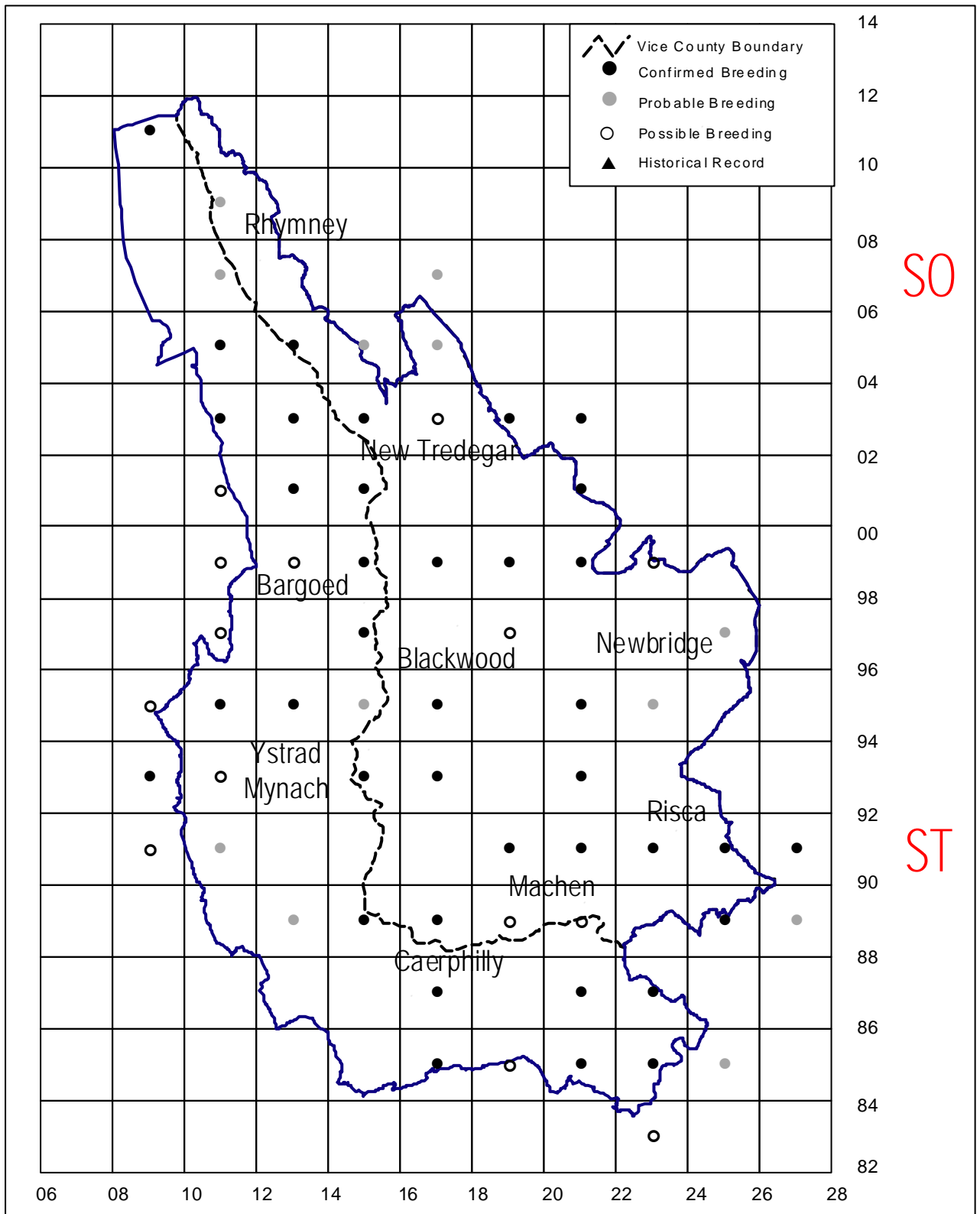
MAP 2.16 - DIPPER



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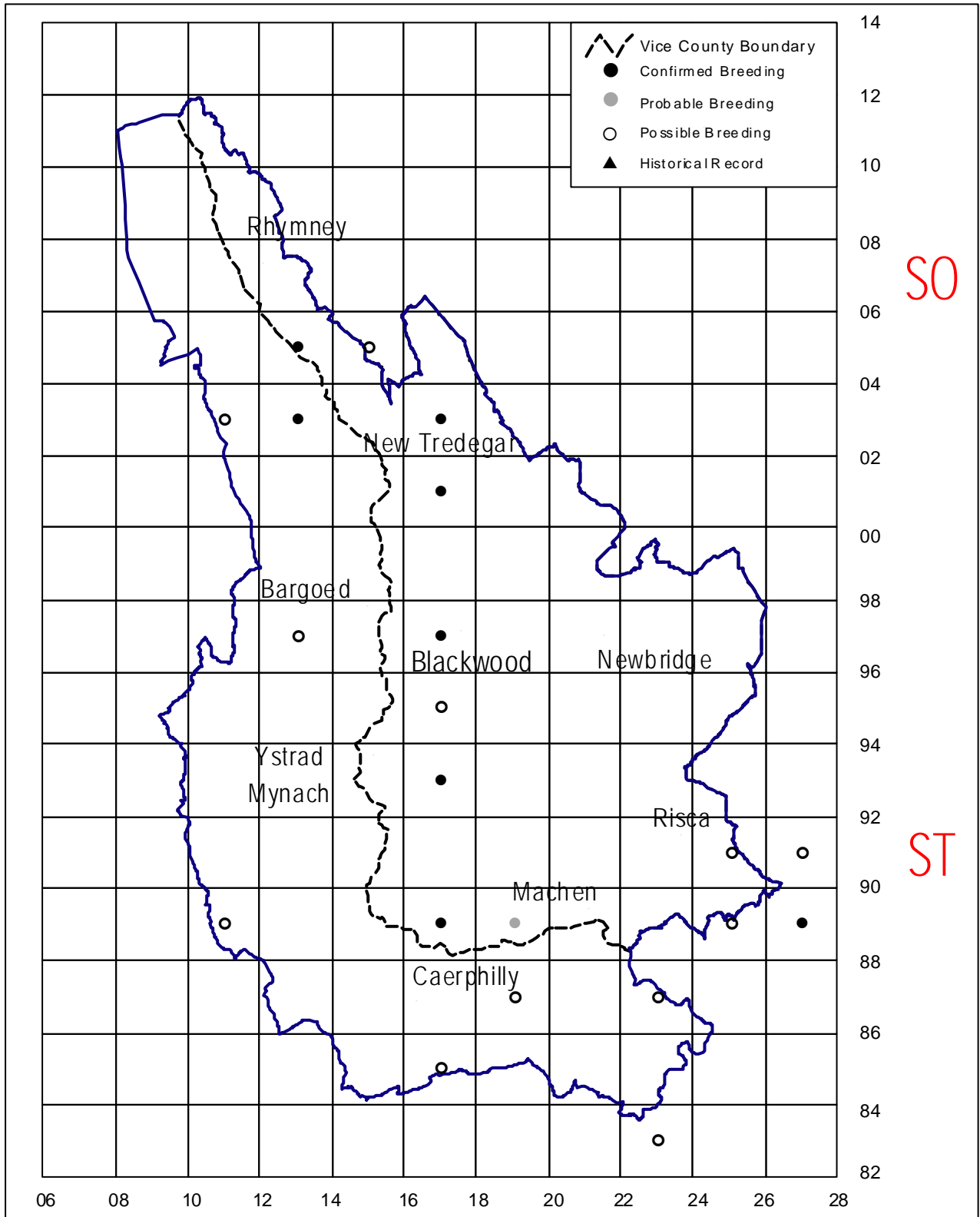
MAP 2.17 - GREY WAGTAIL



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MAP 2.18 - KINGFISHER



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YELLOWHAMMER *EMBERIZA CITRINELLA* SPECIES ACTION PLAN

1. INTRODUCTION

Although not a UK priority species, the yellowhammer has been identified as a locally important species.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Birds Directive 1979	-
Berne Convention 1982	App. I I
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I Section 1 Sch. 3
Birds of Conservation Concern List ³⁰	Amber



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2. CURRENT STATUS

2.1 UK and Wales

The yellowhammer was once a common and widespread species throughout Wales. However, over the last few decades it appears to have declined considerably in inland areas; by 25-49% in the last 25 years. It is now relatively common only on mixed farmland on the coastal strip. The main diet of the yellowhammer is seeds, but they often take insects to feed their chicks, including moths, beetles and butterflies.

2.2 Caerphilly County Borough

Yellowhammers were also once a common and widespread species in Caerphilly county borough, but it is in decline. It is still reported from some areas of ffridd/coedcae in the county borough. Although these sites are not important nationally, they are of importance locally as the species is now uncommon within the area. The breeding distribution of yellowhammers in the county borough is shown on **Map 2.19**.

2.3 Links with Habitats

- *Ffridd/Coedcae*
- *Wildlife Corridors* (hedgerows)
- *Deciduous Woodlands* (open woods)
- *Heathland*
- Gorse, hawthorn and other scrub

3. CURRENT FACTORS AFFECTING THE SPECIES

- Land management factors, particularly the loss of mixed farming in Wales, may have contributed to their decline.
- The loss of winter stubble fields (particularly in the south of the county borough) robs them of a source of food (seeds) during the winter months.

- The increased use of herbicides removes the weeds that they rely on for seeds.
- The increased use of pesticides reduces the numbers of insects with which to feed their chicks.
- Inappropriate management and loss of bushy hedgerows, scrub and ffridd in which yellowhammers nest is also a significant factor.

4. CURRENT ACTION

- 4.1 New ESA prescription encourages the retention of winter stubble and growth of spring sown cereals.
- 4.2 The species will benefit from provisions under the Tir Gofal agri-environment scheme, including the retention and sensitive management of hedgerows.
- 4.3 Farmland and bird management guidelines have been produced jointly by BTO, RSPB and FWAG.
- 4.4 The Hedgerow Regulations, 1997, will protect ancient and/or species-rich hedgerows likely to be favoured by the species¹¹.
- 4.5 Census work by BTO⁶ monitors the extent of the decline nationally and the Ecology and Behaviour Group from Oxford University are currently analysing this information.
- 4.6 Gwent Ornithological Society and Glamorgan Bird Club produce annual bird reports^{17, 18, 19} and Census work for a new Gwent Breeding Bird Atlas has been completed.
- 4.7 Some birds may have benefited incidentally from initiatives carried out for other species such as the linnet that are associated with similar habitats.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

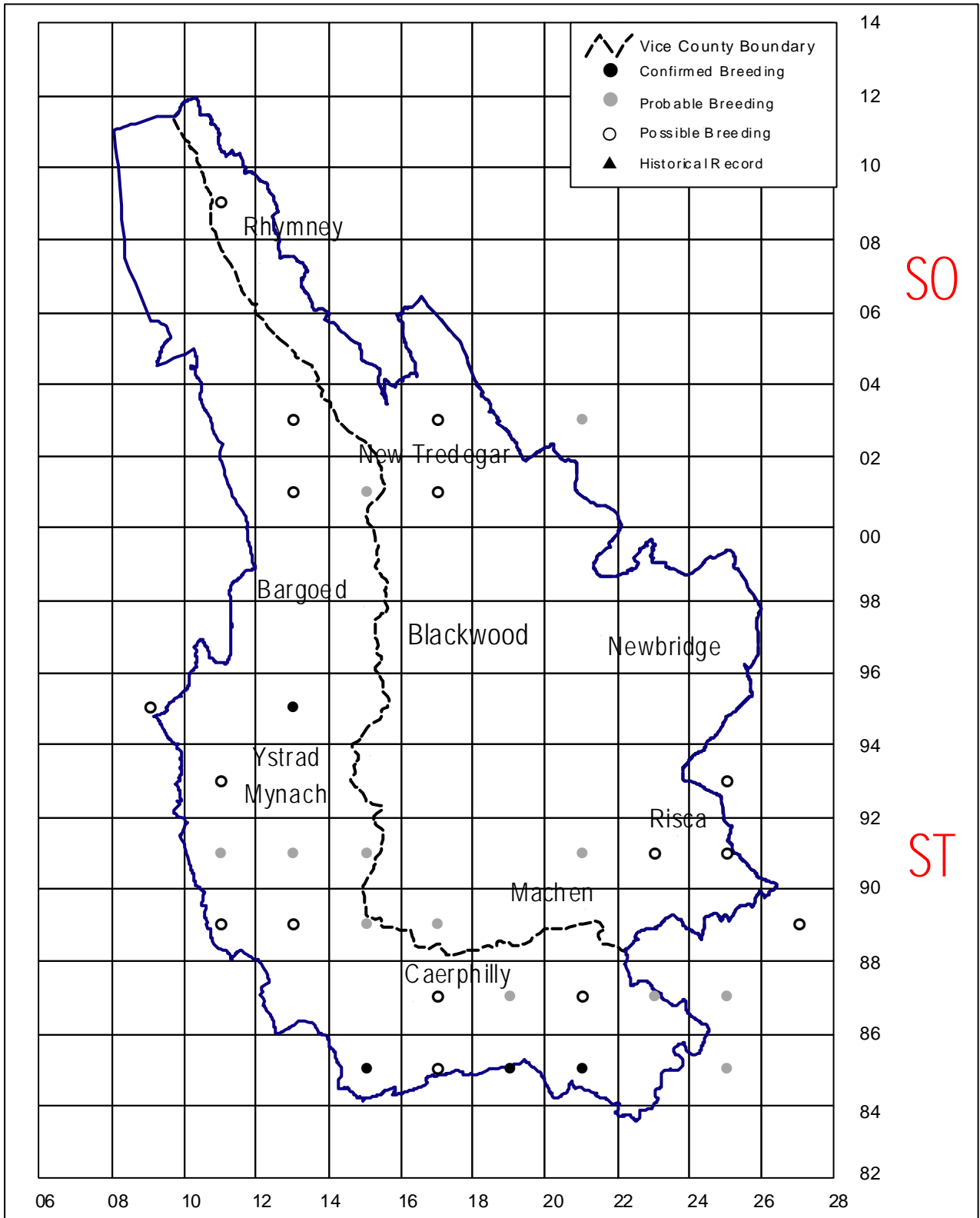
- 5.2.1 Halt the decline of this species (Target 2005).
- 5.2.2 Maintain the current local population through appropriate management of suitable habitats (Target: ongoing).
- 5.2.3 Increase the range of the yellowhammer (Target: 2008).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:									
	Lead	Partners	2003	4	5	6	7	8	9	10	11	
6.1 Policy and Legislation												
6.1.1 Seek to provide SINC status to suitable breeding areas and promote farming practices that will benefit the species.	CCBC	NAWAD NFU FUW RSPB										✓
6.2 Site Safeguard and Management												
6.2.1 Adopt sympathetic management of all CCBC land with the potential for colonisation by yellowhammer and actively promote habitat creation at suitable sites.	CCBC	-							✓			
6.2.2 Promote the importance of low-clipped, bushy hedgerows as breeding sites for the yellowhammer, and other birds.	GWT GLWT	CCBC RSPB landowners Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection												
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory												
6.4.1 Inform all relevant groups of the conditions required by yellowhammer.	CBP	RSPB	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring												
6.5.1 Survey and monitor yellowhammer populations within the county borough.	GBC GOS	BTO	✕		✓		✓		✓			✓
6.6 Communications and Publicity												
6.6.1 The yellowhammer is a suitable candidate as a 'flagship' species for the LBAP process. It is attractive and easily identified by the general public. Produce information leaflets to be held in CCBC Country Parks and other facilities.	CBP	-	✓						✓			

✕ Survey year to be determined.

MAP 2.19 - YELLOW HAMMER



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Atgynhychwyd o fapiaid yr Arolwg Ordnans gy da chaniatod rheolwr Llyfrfa ei Mawrhydi hawlfraint y Goron. Mae atgynhychu heb awdurdod yn torri hawlfraint y Goron. Gall hyn arwain at erlyniad neu achos sifil. Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

NATIVE WILD FISH SPECIES ACTION PLAN

1. INTRODUCTION

There are 38 species of freshwater fish native to Great Britain, which can be found living in habitats such as streams, rivers, ponds and lakes. Migratory fish are those that feed in the sea and breed in freshwater. This plan covers the native wild fish species listed below, both resident freshwater and migratory species. Although no UK species action plans have been prepared they are seen as important for biodiversity conservation locally, particularly in relation to the quality of the rivers and streams of Caerphilly county borough.

Resident Species:

- **Brook lamprey** *Lampetra planeri*
- **Bullhead** *Cottus gobio*
- **Native brown trout** *Salmo trutta*
- **Stone loach** *Noemacheilus barbatulus*
- **Three-spined stickleback** *Gasterosteus aculeatus*

Migratory Species:

- **Common eel** *Anguilla anguilla*
- **Salmon** *Salmo salar*
- **Sea Trout** *Salmo trutta*

Relevant Legislation/Species Status			
	brook lamprey	bullhead	salmon
priority species (P) or species of conservation concern (S)	S	S	S
EC Habitats and Species Directive	Annex II a	Annex II a	Annex II a, I Va
Conservation Regulations 1994	-	-	Sch. 3
Berne Convention 1982	App. III	-	-
Bonn Convention 1979	-	-	-
CITES 1975	-	-	-
WCA 1981			
IUCN Red List of Threatened Animals 1994	lower risk – least concern	-	-
Other legislation			Salmon and Fisheries Act 1975

2. CURRENT STATUS

2.1 RESIDENT SPECIES

2.1.1 Brook Lamprey

This is not strictly a fish, although it lives in water, has an eel-like shape and is popularly regarded as a fish. It is placed in the class of jawless fish because it has no gill covering, no pectoral or pelvic fins and it has an open disc-like sucker mouth.



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It spawns in freshwater and the young can be found in rivers and streams, but they eventually migrate to the sea, from which the adults later return to spawn⁴. Unlike the other two species of lamprey, the brook lamprey is not parasitic on other fish, but in fact it does not feed at all as an adult. The species has been identified as a species of conservation concern in the UK and

there are a number of casual records in the Rudry area of Caerphilly county borough. However, further survey work is required to determine its distribution throughout the area.

2.1.2 Bullhead

This is a freshwater fish usually found in running water, mainly on stony beds, but also around lakeshores and in muddy streams throughout England, Wales and southern Scotland.



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It skulks under large, hollow stones or in dense weed beds, only emerging into open water at night. It feeds on insect larvae and crustaceans⁴. Its distribution in Caerphilly county borough is not known, and surveys are needed to identify the current status of bullheads in the area.

2.1.3 Native Brown Trout

Although trout vary considerably in colour, size and shape, there is only one native species. The typical brown trout of smaller rivers and lakes ranges from light olive to black, with white, golden or silvery bellies. There are always dark spots on the back, often with a light halo.



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In larger rivers and lakes the fish tend to be more silvery. Smaller fish eat mainly insects, snails and crustaceans, while larger trout will eat other fish. Spawning takes place during the winter, usually on gravel banks washed by running water⁴. The eggs sink into the gravel and hatch in about 77 days at 6 °C. Survey work is required to determine the distribution of brown trout in Caerphilly county borough.

2.1.4 Stone Loach

This species is abundant in running water, particularly shallow, stony streams, throughout Britain apart from the Scottish Highlands. Its back is dark olive or blue-black, its sides are buff and there are brown spots over the whole body.



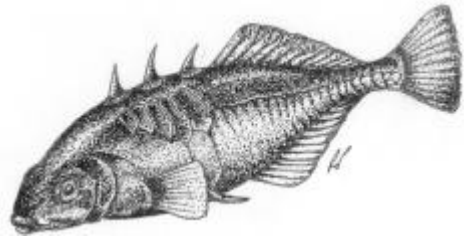
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It can grow to a length of 5". Although mainly active at night, it can often be seen in daylight darting through shallow water if the stones under which it hides are overturned. It feeds mainly on insect larvae, worms and algae, and is preyed upon by trout, eels and sometimes birds. It is sensitive to pollution and so its presence in a stream is considered a sign of good water quality⁴. Its current distribution in the county borough is not known and further surveys are required.

2.1.5 3-spined Stickleback

Probably the most familiar freshwater fish in the British Isles, the stickleback is found in rivers, lakes and ponds throughout Britain, except in mountainous regions. It is also seen in salt water; in estuaries, rock pools and brackish dykes. They can grow up to 4" long, but most measure less than 2.5". They have 3 dorsal spines in front of the dorsal fin, the upper parts are blue-black or green, with paler colours below.

Sticklebacks eat worms, insects and crustaceans, and in turn are eaten by pike, perch, otters and kingfishers⁴. This species is known to occur in ponds, lakes and streams in the county borough, but surveys are required to identify its current distribution.



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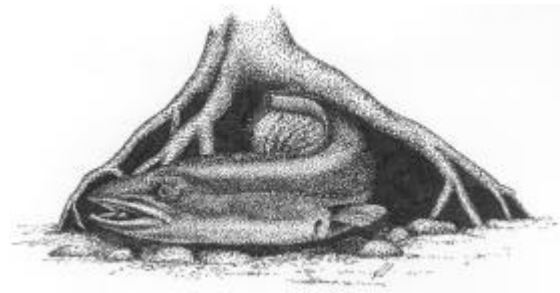
2.2 MIGRATORY SPECIES

Since the demise of the coal mining industry within South Wales, many of the rivers within Caerphilly county borough have returned to a condition close to that prior to the industrial revolution. Cleaner, higher quality water has resulted in the return of migratory fish species such as the common eel, salmon and sea trout. It is vitally important that river channels, riparian habitats and water quality are maintained or improved in order to allow a continued growth in migratory fish populations.

Both salmon and sea trout are declining nationally. Most salmon and sea trout rivers in England and Wales are in the northeast, west and southwest. The Environment Agency is introducing fish annually into the rivers Ebbw (including the Sirhowy) and Rhymney to supplement the spawning of wild fish in an attempt to restore the stocks of migratory salmonid populations.

2.2.1 Common eel

The eel is very common around Britain and is present in most rivers, streams and lakes that are accessible from the sea. Eels are a key species in the ecology of many freshwater habitats because they are important predators of invertebrates (insects, snails, crayfish), small fish and frogs and prey for otters and some birds, especially in the rivers of West Wales where there are few large fish.

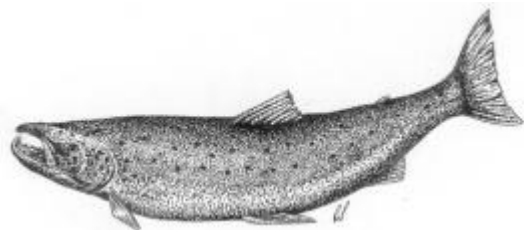


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They can live out of water and may travel overland for short distances in the autumn when the ground is saturated, breathing aerated water carried in their gills. The abundance of the eel in Europe has declined since the 1970s, which is thought to be related in part to the position of the Gulf Stream currents running from the spawning grounds near the Caribbean (Sargasso Sea) to the coast of Europe. Other factors influencing the eel stock are pollution, barriers to freshwater migration as well as over fishing. The distribution of the common eel in Caerphilly county borough is not accurately known, and further survey work is therefore required.

2.2.2 Salmon

Although the salmon breeds in freshwater, much of its life is spent at sea. It returns thousands of miles to its native stream each year to breed. They begin breeding in late November, and egg laying continues until February.

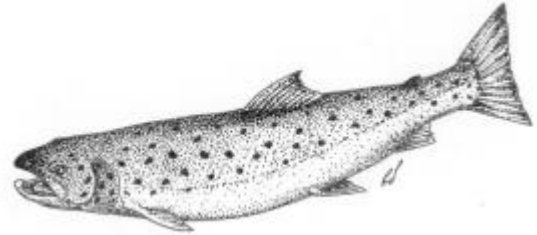


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'Fry' hatch in March/early April, emerging from the gravel in about a month and migrating to the sea for 1 – 4 years around the European coastline but return to spawn in around a year. After spawning many of the adults die, although some recover in the sea and return to spawn again⁴. There has been a decline in the abundance of salmon in many rivers since the 1960s, a pattern seen in many other areas of the North Atlantic. Despite this general decline, some estuaries have shown significant increases since the 1970s because of improving water quality, access and active management of freshwater habitats. In Caerphilly county borough, the Sirhowy and Rhymney rivers now see small numbers of salmon returning to spawn. Salmon have recently (Nov/Dec. 2000) been found spawning in tributary streams of the river Rhymney.

2.2.3 Sea Trout

Sea trout are the migratory form of the brown trout (see 2.1.3), sharing the same scientific name (*Salmo trutta*), but spending some time in the sea before returning to spawn in freshwater. Research has shown that this is due to a number of factors.



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These factors are mainly genetic, for example, the offspring of sea trout will also be migratory, and environmental; the sea is a relatively rich feeding ground compared to many rivers, attracting fish in impoverished catchments. The Sirhowy and Rhymney rivers now also see moderate numbers of sea trout (or 'sewin') within Caerphilly county borough.

2.3 Links with Habitats

- **Wetlands** (rivers and streams, ponds, lakes and reservoirs)

The requirements of native wild fish should be considered in conjunction with the Wetland Habitat Statement and future HAPs.

3. CURRENT FACTORS AFFECTING THE SPECIES

The Environment Agency has identified a number of factors that effect water quality and consequently fish stocks in the Eastern Valleys LEAP¹⁵ area. They include:

- Water Quality Decline
 - unsatisfactory discharges from CSOs
 - inadequate sewerage system
 - impact of pollution from industry
 - the impact of minewater from abandoned coal mines
 - inadequate sewerage infrastructure
 - pollution risk from agricultural waste and sewage sludge to land
- Eutrophication
- Siltation of spawning sites by organic matter
- Problems of water borne litter and sewage derived litter
- Potential impact of road improvement schemes on the natural environment
- Degradation of river corridors and wetland habitats
- Competition from introduced roach
- Predation by introduced non-native ruffe

Other factors affecting **migratory species**:

- Over-exploitation of stocks at sea and within estuaries by commercial fishermen (over-fishing)
- Pollution of water courses by raw sewage, industrial and agricultural effluent discharges and bioaccumulation of organic chemicals
- Accidental disturbance or destruction of spawning grounds by agricultural and industrial practices
- Deposition of atmospheric pollutants into catchment areas resulting in the acidification of water courses
- Physical barriers to movement of species up river to their spawning grounds
- Loss of freshwater habitat
- Infection by the swim bladder parasite

4. CURRENT ACTION

- 4.1 The EA has produced Local Environment Action Plans (LEAPs) for the period 2000 to 2005, within which a number of issues are documented. Caerphilly county borough falls within the boundaries of the Eastern Valleys LEAP¹⁵, and migratory fish are dealt with in Issue EA/12. Action includes the identification of species and habitats; the promotion of rivers and their improvement; the monitoring of fish populations, etc.
- 4.2 Although no action plans have been written for migratory fish in general, EA plans are currently being developed for migratory salmonid species on a catchment-by-catchment basis.
- 4.3 The EA is responsible for the management of eel fisheries in Wales and has recently published a consultation document on its proposal for a national eel management strategy.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to these species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Determine the current status of native wild fish, both resident and migratory species, in the county borough by 2005.
- 5.2.2 Improve knowledge of the biology, management and fishery of native wild fish (Target: 2005).
- 5.2.3 Improve stocks of native wild fish (Target: 2010).
- 5.2.4 Increase numbers of migratory fish returning to the rivers to spawn (numbers to be determined following surveys of existing stock) (Target: 2008).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Promote the conservation of river corridors and the creation and improvement of wetlands via consent procedures and planning responses.	EA	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Recommend refusal of planning permission in areas where development is likely to increase the risk of unacceptable environmental impact.	EA	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Identify presence and distribution of significant rivers, streams, lakes and reservoirs.	EA	CCBC CCW			✓						
6.2.2 Improve fisheries habitat and access for brown trout through targeted collaborative projects.	EA	CCBC		✓	✓	✓	✓	✓	✓	✓	✓
6.2.3 Maintain, improve and develop habitats and access for fish.	EA	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.4 Encourage greater involvement of anglers in the maintenance of fisheries: promote catch-release for wild fish; encourage bag trout and self-help catch record monitoring of fish via rod catch logbook schemes.	EA	Anglers KWT WW/DC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.5 Improve quality of high altitude lake fisheries by regular restocking and management of coarse fish pops.	EA	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.6 Carry out pollution prevention programme based on inspections and follow-up actions to reduce the risks to the environment.	EA	CCBC		✓		✓		✓		✓	
6.2.7 Identify, prioritise and review mine waters requiring remediation and contaminated surface water outfalls.	EA	CCBC		✓			✓			✓	
6.3 Species Management and Protection											
6.3.1 Continue to support and promote the Afonydd Glan (Clean Rivers) litter project.	CBP	(KWT)	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Educate local populations of the needs of fish species within the river systems of the county borough.	EA	CCBC Anglers KWT	✓	✓	✓						✓
6.5 Future Research and Monitoring											
6.5.1 Initiate fish surveys amongst the county borough's angling clubs, to document all catches of fish including migratory, resident, coarse and game.	EA	KWT CCBC WW/DC	✓								
6.5.2 Continue to monitor populations of native wild fish and undertake regular monitoring surveys of coarse fish populations in rivers, using a combination of fishery survey techniques and angler (creel) surveys.	EA	Anglers KWT	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.5 Future Research and Monitoring (continued)											
6.5.3 Encourage reporting of catches by anglers to the EA or a local contact, so that fish populations and distributions are continually monitored.	EA	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.4 Regularly monitor Trehir Tip.	CCBC	EA	✓		✓		✓		✓		✓
6.6 Communications and Publicity											
6.6.1 Improve communication between anglers/angling clubs and the EA, particularly in reporting and discussing fish populations, problems and solutions.	CBP	Anglers	✓								
6.6.2 Promote the importance of clean rivers and streams in the county borough among the general public; e.g. increase number of river care groups.	CBP	KWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.3 Improve awareness and understanding of the river system by providing information to anglers but making it more widely available.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

BADGER *MELES MELES* SPECIES ACTION PLAN

1. INTRODUCTION

Although the badger is not a priority species in the UKBAP it is listed as a species of conservation concern. It is a victim of persecution in Caerphilly county borough and is therefore considered an important species for conservation locally.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Habitats and Species Directive	-
Conservation Regulations 1994	-
Berne Convention 1982	Appendix III
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Sch. 6
Other Legislation	Protection of Badgers Act 1992



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2. CURRENT STATUS

2.1 UK and Wales

The badger has a widespread distribution, in woodlands and farmland areas throughout Britain and Wales. However, due to various pressures it has become rare and even extinct in some areas. A national study conducted in the mid-1990s (Bristol University) suggested that badger numbers are generally stable in the UK, but some areas of South Wales were shown to be declining²⁵.

2.2 Caerphilly County Borough

The badger is known throughout most of the county borough, in deciduous and coniferous woodlands. However, there are few records for the northern part of the Rhymney Valley, where there are less wooded areas. They can be quite numerous on lower slopes and pasture, and are found in both rural and urban areas. As it is nocturnal, regular observations are rare.

2.3 Links with Habitats

- **Deciduous Woodlands**
- *Planted Coniferous Woodland*
- *Species-rich Grasslands*
- *Wildlife Corridors* (hedgerows)
- *Common Land*
- *Post-Industrial Land* (re-vegetated colliery tips)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of habitat through urbanisation and road construction, in particular feeding habitat such as grassland. Increased road casualties and incidents of sett disturbance is also linked to existing and new housing, road and industrial developments (the number of badgers being killed on the roads is not accurately recorded).

- Deliberate mortality from persecution by farmers, land managers and members of the public because of worries about livestock, through the 'sport' of badger baiting, involving the digging of setts and setting of dogs onto the captured badger.
- Lack of knowledge of the species and its habitat and conservation requirements, particularly livestock farmers.

4. CURRENT ACTION

- 4.1 Membership of local badger groups (Gwent, Glamorgan). These groups carry out monitoring and surveillance of setts in an attempt to deter and reduce digging and lamping incidents. Badger Groups and local constabulary liaise with landowners and farmers.
- 4.2 Gwent Police (Wildlife Liaison Officers) enforce national legislation such as the WCA 1981 and the Badger Act 1992, particularly in circumstances of sett disturbance and persecution.
- 4.3 EN has produced a useful leaflet entitled *Badger Guidelines for Developers*¹³.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain the current populations of badgers on known sites in the county borough. (Target: ongoing)
- 5.2.2 Carry out survey work to identify further sites (in particular, the northern Rhymney Valley) and as a part of the planning process for any new developments. (Target: 2003 and ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to ensure that badgers are taken into account in all new roads, bridges, industrial, commercial and residential developments.	CCBC	GBdG GLBdG	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Protect and prevent further loss of feeding habitats. Pursue planning refusals or satisfactory mitigation where proposed development threatens to erode these vital areas.	CCBC	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.3 Species Management and Protection											
6.3.1 Ensure badger surveys are undertaken before any developments are given planning permission and as part of a routine monitoring scheme.	CCBC	GBdG, GLBdG	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Encourage people to report persecutions, digging, baiting, sett disturbance, etc. to the police and the local badger groups, providing an emergency contact number in any publicity materials and other items.	GBdG GLBdG	Gwent Police	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.3 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Produce and disseminate information about badgers to farmers and other landowners and land managers, including sympathetic habitat management advice and information on the behaviour of the species on farmland and in relation to the safety of livestock.	CBP	GLBdG Coed Cymru	✓	✓							
6.5 Future Research and Monitoring											
6.5.1 Continue to monitor all existing sites for population density, behaviour and any possible threats such as badger-digging/baiting evidence.	GBdG GLBdG	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.2 Seek to expand sett monitoring and surveying to further deter digging and lamping activities through local group and possible community groups.	GBdG GLBdG	-	✓								
6.6 Communications and Publicity											
6.6.1 Encourage membership of badger groups and/or local wildlife trusts to promote the badger in the area.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Provide schools and colleges in the county borough with information in order to educate children, parents and teachers about the conservation status of badgers in the local area. Promote the need for reporting of sightings, road accidents and sett disturbance incidents to local Badger Groups.	CBP	Schools, Youth Forum		✓							

BATS SPECIES ACTION PLAN

1. INTRODUCTION

The UKBAP identifies five British bats as UK priorities (with UK SAPs) and a further nine as Species of Conservation Concern³⁹. The species included in this action plan are listed below including three UK priorities (*) and the rest are species of conservation concern:

- **Brown Long Eared Bat** *Plecotus auritus*
- **Daubentons Bat** *Myotis daubentonii*
- **Greater Horseshoe Bat*** *Rhinolophus ferrumequinum**
- **Lesser Horseshoe Bat*** *Rhinolophus hipposideros**
- **Natterer's Bat** *Myotis nattereri*
- **Noctule** *Nyctalus noctula*
- **Pipistrelle Bat*** *Pipistrellus pipistrellus**
- **Whiskered/Brandts Bat** *Myotis mystacinus/Myotis brandtii*

Relevant Legislation/Species Status								
	brown long eared	daubentons	greater horseshoe	lesser horseshoe	natterers	noctule	pipistrelle	whiskered
priority (P) or species of conservation concern (S)	S	S	P	P	S	S	P	S
EC Habitats and Species Directive	IVa	IVa	IIa, IVa	IIa, IVa	IVa	IVa	IVa	IVa
Conservation Regs 1994	2	2	2	2	2	2	2	2
Berne 1982	II	II	II	II	II	II	III	II
Bonn 1979	II	II	II	II	II	II	II	II
CITES 1975	-	-	-	-	-	-	-	-
WCA 1981	Sch. 5, 6	Sch. 5, 6	Sch. 5, 6	Sch. 5, 6	Sch. 5, 6	Sch. 5, 6	Sch. 5, 6	Sch. 5, 6

2. CURRENT STATUS

2.1 UK and Wales

All British bats are insectivorous and feed in habitats such as woodland, scrub, along hedgerows, wetlands, watercourses/water bodies and species-rich grasslands. All bats need warm breeding sites in summer and cold, safe hibernation sites in winter. Each species travels between summer and winter roosts every year. Relatively little is known about the current status of bats, although it is widely acknowledged that all bat species are declining nationally.

2.2 Caerphilly County Borough

With its diverse landscape and its history of past mining activities, Caerphilly county borough provides suitable habitats for most bat species. Of the fourteen species of bat in Britain, eight species have been recorded in the county borough.

2.2.1 Brown long-eared bat

This medium sized bat is the second most common species and is widespread through the whole of Britain. It mainly feeds on moths, beetles, flies, bugs, earwigs and spiders and, remarkably will sometimes land on the ground to catch or handle prey. This bat also flies close to the

ground, making them vulnerable to attack by predators, such as the domestic cat. It is probably the most commonly seen species in attics of houses with medium to large open spaces. Summer roosts are found in older buildings, barns, churches and trees. Caves, tunnels, mines, icehouses and probably trees provide their winter roosts. This bat is reliant on open woodland, parkland and orchards. Although little data currently exists, brown long-eared bats are known to be breeding in the county borough and are probably quite common, but a survey is needed to confirm this.

2.2.2 Daubenton's bat

Daubenton's bat is a medium sized bat, often associated with water habitats. In Britain it is a fairly widespread bat, feeding on insects from and close to the waters' surface. Food sources include small flies, caddisflies and mayflies. Summer roosts are commonly found in trees, but also in tunnels, under bridges, caves and mines. Winter roosts are in caves, mines and other underground sites. It has been recorded in Caerphilly county borough, although a more detailed survey will be needed to determine breeding sites, hibernation sites and population status.

2.2.3 Greater horseshoe bat

This very rare bat is heavily reliant on species rich grassland, woodland and hedgerows. It feeds on large insects including chafers, dung-beetles moths and crane flies. Greater Horseshoe bats are traditionally cave dwellers but many now use large houses and churches. There are currently 35 recognised maternity and all year roosts and 369 hibernation sites in the UK. Caerphilly has no confirmed maternity or hibernation roosts but there is a male roost in the county borough.

2.2.4 Lesser horseshoe Bat

This is a rare bat that feeds on insects in the woodland canopy, with a heavy reliance on hedgerows. It is traditionally a cave dweller but is now more reliant on man-made roosts such as attics in houses and churches however, it will also utilise smaller spaces than the greater horseshoe bat. Lesser horseshoes feed on smaller flying insects such as craneflies, flies and small moths. There is one known site for lesser horseshoe bats in Caerphilly county borough, although it is not known if they are breeding. This species is widespread but uncommon in Wales and South- West England.

2.2.5 Natterers bat

This medium sized bat is generally scarce, although widespread. Habitats include open woodland, parkland, hedgerows and along waterside vegetation feeding on flies, moths, spiders and other small insects. Summer roosts are often found in old stone buildings with large wooded beams such as castles, manor houses and churches, or older large timbered barns. They are traditionally tree roosting species and will occasionally use bat boxes. The preferred winter roosts of natterers are the cool entrances of mines and caves but they will hibernate in many underground shelters. They usually hibernate singularly or in small groups, which may include other species. Again, little is known about this bat, except that its presence has been recorded in the county borough, therefore more survey work is required.

2.2.6 Noctule bat

The noctule is one of the largest British bats and has a scattered distribution. It is not common and is dependant on woodland, parkland, pasture, water and forest edges where it feeds primarily on moths, dung and chafer beetles, mayflies and winged ants. Most food is caught on the wing. They are opportunist feeders and can be seen feeding on moths around street lamps in urban areas. They very seldom roost in buildings, preferring instead rot holes and woodpecker holes in trees. When found in buildings, they roost behind tiles, large soffits; and occasionally in

tall disused industrial chimneys and cavities in bridges. Hibernation occurs mainly in trees or rock fissures and hollows, but also in bat boxes and buildings. Noctules are declining throughout Britain. They have been confirmed as present and breeding in Caerphilly county borough, in association with diverse habitats of large open countryside such as ancient woodlands, post-industrial sites and suburban areas.

2.2.7 Pipistrelle bat (*Pipistrellus* spp.)

The pipistrelle is Britain's most common and smallest bat. Often associated with human habitation. It feeds on small flying insects such as midges, caddis flies, mosquitoes, mayflies, lacewings and small moths. Habitat requirements are water, marshy areas, in open woodland and at woodland edge, farmland, hedgerows and urban areas. Pipistrelles are crevice dwellers mainly and prefer to roost in confined spaces in buildings such as behind hanging tiles, weatherboards and soffits and in cavity walls, rarely roosting in attic spaces. They will sometimes fly during the day to catch insects. Winter roosts are often isolated individuals or small groups in crevices in buildings and trees. In Caerphilly county borough, as in the rest of the UK, the pipistrelle is probably widespread and numerous, although it has undergone significant declines in the last 25 years. Pipistrelle bats have recently been divided into two separate species, the common pipistrelle (*P. pipistrellus*) and the soprano pipistrelle (*P. pygmaeus*). The two species are widely distributed throughout Caerphilly county borough but the exact distribution is not yet known.

2.2.8 Whiskered/Brandts bat

These two species were only separated as distinct species in 1970. They are extremely difficult to differentiate and have a superficial resemblance to pipistrelles. They are probably under-recorded for this reason. They rely on wooded country, often near water and feed on moths and other small insects and spiders. Summer roosting sites are mainly buildings and tree and winter hibernation sites are largely unknown, although small numbers have been recorded in caves and tunnels. Whiskered and brandts bats are found throughout England and Wales. One whiskered bat has been found in Caerphilly county borough, although no breeding or hibernation roosts have yet been confirmed.

2.3 Links with Habitats

- *Wetlands* (water courses and water bodies)
- ***Deciduous Woodland***
- Forestry action plans
- ***Wildlife Corridors*** (hedgerows)
- *Species-rich Grasslands*
- *Common Land*
- *Post-Industrial Land*
- *Urban Habitats*
- Orchards, parklands, and scrub

3. CURRENT FACTORS AFFECTING THE SPECIES

Threats to these species are poorly understood, but low population density, low reproduction rates and an aversion by the public to sharing their properties with bats, make them particularly vulnerable.

- Loss and fragmentation of habitats. Hedgerow removal was probably a significant factor in the decline of most bat species, although this trend is being slowed by the introduction of the Hedgerow Regulations 1997.
- Loss of and damage to roosting sites:
 - Loss of summer, and occasionally winter roosts in buildings through disturbance and/or non-tolerance by human residents.
 - Loss or disturbance of winter hibernation sites, in buildings, caves, disused mine shafts and tunnels, houses, pill boxes and cellars through disturbing recreational activity and maintenance/inspection of structures.
 - Loss of summer and winter roost sites in trees because of the degradation of woodland structure and through the felling of veteran trees in woodland and parkland.
- Reduction in insect prey because of intensive farming methods, overgrazing and the use of pesticides.
- Use of toxic chemicals in timber treatment and in new timbers.
- Significant increase in the numbers of domestic cats causing increased predation.

4. CURRENT ACTION

- 4.1 Current legislation exists to protect bats and bat roosts.
- 4.2 CCW, CCBC, bat groups and the wildlife trusts are working together to raise the profile of bats.
- 4.3 Use of agri-environment schemes such as Tir Gofal and organic food production to reduce stocking densities and pesticide use.
- 4.4 Enhancement of habitat by the addition of bat boxes.
- 4.5 Public awareness raising through bat walks and talks arranged by Caerphilly county borough council in country parks.
- 4.6 Monitoring of selected breeding sites.
- 4.7 Education of demolition companies, industries, timber treatment companies, home insulation companies, tree surgeons, and cavers and pot-holers.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Maintain the current range and population.
- 5.1.2 In the long term, expand the current range through natural re-colonisation and landscape enhancement into areas where research shows that climate and landscape features are suitable.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Establish the baseline status and distribution of all species of bat occurring in Caerphilly county borough. (Target: 2005)
- 5.2.2 Halt the decline in the breeding population in Caerphilly county borough. (Target: 2005)
- 5.2.3 Enhance roosting sites (including hibernation sites) and important feeding habitats, where necessary, particularly around maternity roosts with the aim of increasing population levels within the county borough. (Target: ongoing)
- 5.2.4 Enhance breeding success through protection of roost sites. (Target: ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure consideration of maternity and hibernation roost sites and the surrounding habitat when developing structure plans and assessing planning applications. Provide alternative roost sites to mitigate any loss, and survey on planning applications for old buildings.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Ensure routine survey of mines or other underground sites due for closure or change of use, or otherwise considered vulnerable, with a view to protecting any bat colonies identified.	CCW	GBG GLBG CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Ensure that all Policies and Strategies do not adversely affect bats and their roosts. Develop a strategy for the consideration of bats within CCBC work, such as tree management and design of bridges.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.4 Work with the EA to ensure that bats are included in LEAPs.	CCW	EA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.5 Seek to designate important roosts and feeding areas as SSSI/SINC/LNR.	CCW	CCBC			✓					✓	✓
6.2 Site Safeguard and Management											
6.2.1 Ensure important roost sites are protected through liaison with owners.	CCW	GBG GLBG CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Encourage the use of low toxicity timber treatments in all buildings and encourage 'bat-friendly' design features in new buildings and other structures, and in the renovation of existing structures.	CCW	Coed Cymru FC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.3 Raise awareness among those managing trees and woodlands about bats and encourage appropriate management, particularly of land adjacent to important roosts.	CCBC	Coed Cymru FC CCW	✓			✓			✓		

Action	Key Partners		Year to be complete or in place by:									
	Lead	Partners	2003	4	5	6	7	8	9	10	11	
6.2 Site Safeguard and Management (continued)												
6.2.4 Enhance existing underground sites to make them more suitable for hibernating bats. Where appropriate promote the construction of purpose built hibernacula and the 'grilling' of cave and disused tunnel entrances to protect important hibernation sites.	CCW	CCBC GBG GLBG	✓	✓	✓						✓	✓
6.2.5 Develop a good code of practice in relation to the conservation and management of trees that are of value to bats.	CCBC	CCW	✓									
6.2.6 Enhance bat habitat, where appropriate by the addition of bat boxes to trees and buildings and promote the restoration or re-creation of insect rich habitats.	CCW	GBG GLBG CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.7 Consider the use of management agreements to improve important habitats or roosts.	CCBC	CCW	✓									
6.3 Species Management and Protection												
6.3.1 Continue to protect known breeding roosts and hibernacula from development, destruction and disturbance through maintaining and improving current training procedures for those who may come into contact with bats.	CCW	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Establish a bat group in Caerphilly county borough.	CBP	GBG GLBG		✓								
6.3.3 Install artificial roosts such as bat boxes and bat bricks and monitor these in important sites.	CBP	GBG GLBG	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.4 Encourage members of the public, local businesses, consultancies and other wildlife/environmental groups to report bat sightings. Coordinate the collation of records obtained by the above to produce a database of information.	CBP	GBG GLBG	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.5 Continue to implement wildlife legislation.	Gwent Police	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory												
6.4.1 Increase tolerance of the bat by raising awareness of the conservation importance of bats to landowners and householders.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4.2 Continue to support and contribute to the current network that provides bat conservation advice.	GBG GLBG	CCW CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4.3 Advise householders on the use of less harmful pesticides for timber treatment, choice of timber and the timing of the works.	Coed Cymru	FC CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.4 Advisory (continued)											
6.4.4 Advise on the location of important maternity roosts and hibernacula (where appropriate) and stress the importance of habitat management for the surrounding areas, to encourage provision for the species in old buildings and on best tree management practices in the vicinity of important bat sites, particularly to: project officers for WGS and Tir Gofal; organisations associated with the care and restoration of old buildings; organisations engaged in underground activities (research and recreation); Environment Agency (along water courses); tree surgeons, tree wardens and foresters; key landowners and house-holders, vesters; and other relevant organisations.	CCW	CCBC CADW SCW GWT GLWT GBG GLBG FC EA Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey to estimate the relative numbers in differing habitats and roost types, particularly churches, mine-shafts, caves and ice-houses. Continue to search for maternity roosts and hibernation sites, mating roosts, underground sites and satellite or minor summer sites to provide estimates of local population size and to determine the extent of species decline. Undertake a survey of maternity roosts to determine distribution of the two pipistrelle bat phenotypes (this may be part of a national scheme). Assess the importance of each site with a view to establishing protection for key sites.	CCW	GBG GLBG	✓		✓	✓	✓	✓	✓	✓	✓
6.5.2 Undertake research to identify the habitat requirements, ecology and appropriate management of feeding areas to maintain bat populations. The findings should be used to develop guidelines and policies for habitat protection, creation and management around roost sites.	CCW	GBG GLBG		✓							
6.5.3 Develop and maintain a database for bat records and support setting up a Local Record Centre.	CBP	GBG GLBG	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.4 Participate in national monitoring schemes, but carry out additional monitoring as necessary to establish a baseline survey of summer roosts. Survey and monitor known and potential underground sites.	GBG / GLBG	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

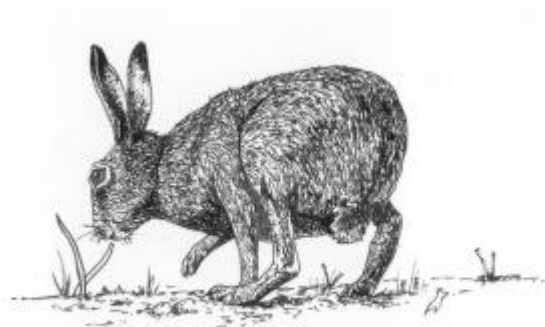
Action	Key Partners		Year to be complete or in place by:									
	Lead	Partners	2003	4	5	6	7	8	9	10	11	
6.6 Communications and Publicity												
6.6.1 Raise awareness of the conservation importance of large old houses, farm buildings, churches and old trees as roost and hibernation sites amongst the general public, land managers and businesses.	CBP	GBG GLBG	✓	✓	✓						✓	✓
6.6.2 Operate a programme of educational activities and events, and publicity for locally important species, working towards changing the public's perception of bats.	CBP	GBG GLBG	✓	✓	✓						✓	✓
6.6.3 Promote the legal status and conservation importance of bats to landowners, builders, CCBC staff and others whose actions may affect bats.	CBP	GBG GLBG	✓	✓	✓						✓	✓

BROWN HARE *LEPUS EUROPAEUS* SPECIES ACTION PLAN

1. INTRODUCTION

The brown hare is a familiar mammal of open countryside throughout most of Britain. It is primarily nocturnal and feeds on grasses, cereals and root crops. It is a UK priority species with a UK SAP³⁹ and CCW has identified it as a priority in Wales.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	P
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	Appendix III
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	-
Other Legislation	Ground Game Act 1880
	Hare Protection Act 1911
Other Species Status	RDB Mammals (1993)



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2. CURRENT STATUS

2.1 UK and Wales

The brown hare is widespread throughout the UK and Ireland, although its numbers have declined substantially since the 1960s. Current brown hare population estimates range between 800,000 - 1,250,000, only 20% of the estimated hare population that occurred in 1880. The Ground Game Act 1880 affords the species limited protection during the breeding period, from the beginning of March – end of July.

2.2 Caerphilly County Borough

The current population in Caerphilly county borough is not known, as a detailed survey of the area has never been undertaken. There are a few known sites for the brown hare in the county borough, but it is likely that it is under-recorded due to several factors, including its nocturnal habits, possible confusion with the rabbit and because it is not considered rare or threatened.

2.3 Links with Habitats

- **Species-rich Grasslands** (lowland neutral, acid and wet grasslands; rhos pasture)
- **Heathland** (lowland heath)
- **Common Land**
- **Arable fields**

2.4 Links with Other Species

Other species that share similar habitats to the brown hare include:

- *Grey Partridge*
- *Skylark*
- *Song thrush*
- *Tree Sparrow*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Conversion of grassland to arable farmland.
- Loss of general habitat diversity in the agricultural landscape, such as field margins and hedgerows as well as crop diversity.
- Intensive farmed land (includes high stocking rates and improvement of grassland through reseeded, fertilising, ploughing, levelling and improving drainage).
- Changes in planting and cropping regimes.
- Wet springs are thought to have adverse effects on breeding performance.
- Changes in the fox population, as they are a key predator of leverets.

4. CURRENT ACTION

- 4.1 Sympathetic management under the Tir Gofal agri-environment scheme benefit hares.

5. OBJECTIVES AND TARGETS**5.1 UK Objectives and Targets**

- 5.1.1 Maintain the current range and population.
- 5.1.2 In the long term, expand the current range through natural re-colonisation and landscape enhancement into areas where research shows that climate and landscape features are suitable.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Establish the baseline status and distribution of the brown hare in Caerphilly county borough. (Target: 2004)
- 5.2.2 Halt the decline of the breeding population in Caerphilly county borough (Target: 2005).
- 5.2.3 Enhance breeding sites and important feeding areas with the aim of increasing hare population levels within the county borough. (Target: ongoing)
- 5.2.4 Enhance breeding success through protection of breeding sites. (Target: ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure Policies and Strategies do not adversely affect hares.	CCW	CCBC WDA	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation (continued)											
6.1.2 Ensure that consideration is given to breeding sites and the surrounding habitat when developing structure plans and assessing planning applications; and establish mechanisms to ensure a regular survey of suitable grasslands allotted for development.	CCBC	CCW WDA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Consider the requirements of hares when reviewing agri-environment schemes, such as Tir Gofal and Woodland Grant Schemes /Woodland Improvement Grants (CCW, NAWAD, FC) and in habitat creation/reclamation schemes (WDA).	CCW	NAWAD FC WDA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.4 Consider designating sites with breeding brown hare populations as SINCs, SSSIs or LNRs.	CCW	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.5 Work with the EA to ensure the needs of hares are taken into account in LEAPs.	CCW	EA CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Review management of habitats owned and managed by CCBC. Develop a good code of practice in relation to the conservation and management of grasslands which are of value to hares.	CCBC	CCW		✓							
6.2.2 Consider the use of management agreements (Local Authority and Tir Gofal, etc) to improve important habitats.	CCW	CCBC			✓						
6.3 Species Management and Protection											
6.3.1 Introduce favourable management of existing sites.	CCBC	CCW WDA FC NAWAD	✓								
6.3.2 Liaise with neighbouring Wildlife Trusts/Local Authorities/FWAG to formulate a recruitment strategy.	CBP	-				✓					
6.3.3 Encourage members of the public, local businesses, consultancies and other wildlife / environmental groups to report hare sightings.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.4 Coordinate the collation of records obtained by members of the public and other sources within the region to produce a database of information from which distribution maps can be produced.	CBP	-		✓							
6.3.5 Continue to implement wildlife legislation.	Gwent Police	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Advise project officers for WGS and Tir Gofal of the location of key breeding sites, their importance and surrounding area habitat management.	CCW	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.4 Advisory (continued)											
6.4.2 Raise awareness of hares and advise key landowners and managers, and other relevant organisations in the vicinity of important populations on appropriate habitat management for conservation.	CCW	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Carry out a county-wide survey to provide estimates of population size and distribution.	CCW	CCBC GWT GLWT Mammal Soc.		✓							
6.5.2 Develop guidelines and policies for habitat protection, creation and management on and around breeding sites.	CCW	CCBC			✓						
6.5.3 Search for and assess the importance of breeding sites with a view to establishing protection for key sites.	CCW	CCBC GWT GLWT			✓						
6.5.4 Develop and maintain a database for hare records.	CBP	(CCW)	✓								
6.5.5 Participate in national monitoring schemes.	CBP	(CCW CCBC)	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Provide leaflet on species and habitat management.	CBP	-			✓						
6.6.2 Operate a programme of educational activities and events to raise awareness of hare conservation issues amongst the general public, land managers and businesses. Consider using relevant organisations and appropriate media sources.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

DORMOUSE *MUSCARDINUS AVELLANARIUS* SPECIES ACTION PLAN

1. INTRODUCTION

The dormouse has been identified in the UKBAP as a priority species and a national plan has been prepared³⁹. It is therefore of biodiversity conservation locally.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S) (1998)	P
EC Habitats Directive	Annex I Va
Conservation Regs 1994	Sch. 2
Berne Convention 1982	-
Bonn Convention 1979	App. III
CITES 1975	-
WCA 1981	Sch. 5
IUCN Red List of Endangered Animals 1994	lower risk – near threatened



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2. CURRENT STATUS

2.1 UK and Wales

Dormice feed on fruit, insects, flowers, pollen and nuts, spending the day asleep in

nests constructed as much as 5m above the ground. However, during the winter they hibernate in nests at or below the woodland floor. Hibernation lasts until about April or May and breeding takes place during the summer with an average female dormouse rearing one or two litters a year, each usually of about 4 young.

There has been a significant decline in numbers of this species throughout Britain in recent years. The dormouse does not occur in Scotland or Northern Ireland, and in Wales there are few known populations. It has become extinct in up to 7 English counties (comprising half its former range) in the past 100 years. It is absent from the north, except for small populations in Cumbria and Northumberland, and although dormice are still widespread in southern counties (Devon to Kent) they are patchily distributed. Population densities everywhere are less than 10 adults per hectare, even in good habitats.

2.2 Caerphilly County Borough

As throughout Britain, the dormouse in Caerphilly county borough is widely scattered with low density, small populations. The southern part of the county is an important area for the dormouse where several known populations exist although this may be due in part to a bias in surveying. Woodlands with a high proportion of hazel are most frequently found to support dormice. Hazel nuts are an important part of the dormouse's diet, the smooth inner edge of the hole gnawed in them serves as a telltale sign of dormouse feeding activity.

2.3 Links with Habitats

The dormouse usually inhabits deciduous woodlands with a well-developed shrub layer and overgrown hedgerows and is an agile climber using stems and branches as pathways.

- **Deciduous Woodlands**
- *Wildlife Corridors* (hedgerows)

The requirements of this species should be considered in all woodland and forestry action plans.

3. CURRENT FACTORS AFFECTING THE SPECIES

- Changes in woodland management practice, notably cessation of hazel coppicing and stock incursion into woodland.
- Fragmentation of woodland leaving isolated non-viable populations, short distances, possibly as little as 100m form absolute barriers to dispersal unless arboreal roosts are available.
- Inappropriate woodland management usually because the presence of dormice is not known.
- Destruction of ancient semi-natural woodland.
- Continual climatic variations. Wet and cool summers dramatically reduce the survival prospects of newly born animals.

4. CURRENT ACTION

- 4.1 Sites where dormice are present have been identified as SINCs⁸.
- 4.2 Schemes such as the Hedgerow Renovation Scheme and Tir Gofal encourage positive management for the dormouse through the maintenance and renovation of hedgerows.
- 4.3 The Hedgerow Regulations 1997 protect hedgerows that may be important for the dormouse.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Maintain and enhance dormouse populations in all the counties where they still occur.
- 5.1.2 Re-establish self-sustaining populations in at least 5 counties where they have been lost.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain and enhance the dormouse population in Caerphilly county borough (Target: halt the decline by 2005).
- 5.2.2 Enhance breeding success through putting up dormouse boxes and promoting positive woodland management (Target: ongoing).
- 5.2.3 Re-establish self-sustaining populations in suitable areas through woodland management (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure Policies and Strategies do not adversely affect existing populations.	CCW	CCBC NAWAD FC WDA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Consider the requirements of dormice when reviewing agri-environment schemes, such as Tir Gofal and Woodland Grant Schemes / Woodland Improvement Grants.	CCW	NAWAD FC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Seek to designate important breeding sites as SINc, SSSI or LNR.	CCW	CCBC GWT GLWT									✓
6.2 Site Safeguard and Management											
6.2.1 Sites supporting dormice should be identified and advice provided to land managers on appropriate management.	CCW	CCBC Coed Cymru FC Gwk landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Grant aid and incentive schemes such as WGS, Coed Cymru and Tir Gofal should be used to encourage owners to manage suitable habitats sensitively.	CCW	CCBC Coed Cymru NAWAD FC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.3 Manage woodlands and hedgerows to maintain current populations and prevent further habitat fragmentation.	CCW	FC GWT GLWT CCBC Coed Cymru landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.4 Ensure dormice are fully considered when assessing any development which may impact upon the species paying particular attention to its protection under UK and European legislation, including the Hedgerow Regulations 1997.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.5 Ensure dormice are fully considered during any woodland/forestry management which may affect the species.	FC	Coed Cymru NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.6 Ensure European and UK dormouse legislation is applied when assessing any hedgerow removal notice which may affect the dormouse.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.7 Seek to include dormouse requirements in all relevant management plans, agri-environment schemes and tenancy, or similar agreements.	CCW	CCBC NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Extend current dormouse nest box schemes.	GWT GLWT	CCBC CCW Coed Cymru Gwk	✓								
6.3.2 Continue to implement wildlife legislation.	Gwent Police	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Raise awareness of landowners and managers to dormouse requirements in order to promote appropriate management.	CCW	CCBC FC GWT GLWT VWT Gwk Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.4 Advisory (continued)											
6.4.2 Support training in conservation of dormice both for land managers and advisors and to provide advice on sympathetic management for dormice.	CCW	CCBC FC GWT GLWT VWT Gwk Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey to identify further dormouse populations and pass information gathered during survey and monitoring to JNCC in order that it can be incorporated in a national database and contribute to the maintenance of an up-to-date red list (e.g. take part in the 'Great Nut Hunt' national survey).	CCW	JNCC CCBC GWT GLWT landowners general public	✓		✓		✓		✓		✓
6.6 Communications and Publicity											
6.6.1 Ensure that landowners, agencies and the local authority are aware of the requirements of dormice, especially the impact of woodland and hedgerow management and the effects of habitat fragmentation.	CBP	-	✓								
6.6.2 Raise public awareness of dormice through production of leaflets and guided walks to promote dormouse conservation.	CBP		✓			✓			✓		

EUROPEAN OTTER *LUTRA LUTRA LUTRA* SPECIES ACTION PLAN

1. INTRODUCTION

The European otter *Lutra lutra lutra* is a UKBAP priority species which suffered a dramatic decline in the 1960s³⁹.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	P
EC Habitats Directive	Annex IIa, IVa
Conservation Regs 1994	Sch. 2
Berne Convention 1982	App. II
Bonn Convention 1979	-
CI TES 1975	Annex A
WCA 1981	Sch. 5, 6



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2. CURRENT STATUS

2.1 UK and Wales

Otters utilise all wetland habitats, including rivers and streams, lakes and ponds, but also ditches, marshes, reedbeds, swamps and wet woodland alongside watercourses. They feed mainly on fish but will also take amphibians and crustaceans, and occasionally small birds and mammals. Generally nocturnal, they require dense cover for lying-up during the day and for breeding, normally provided by tree root cavities, riverbank burrows, scrub or tall waterside vegetation.

The otter population decline in the 1960s was attributed mainly to the use of organochloride pesticides, such as DDT in agriculture, but they are also affected by hunting and habitat fragmentation. The decline in south Wales probably occurred during the period of industrialisation in which many rivers were polluted, destroying the food supply. National surveys have indicated a gradual general recovery since the late 1980s, and in recent years repeated surveys carried out by the Vincent Wildlife Trust have demonstrated that otters are generally widespread throughout Wales. There are good populations in the North and South, and since the last national survey there is evidence of a spread into the South Wales Valleys.

2.2 Caerphilly County Borough

The otter is known to be present in the county borough, but the exact distribution has not yet been identified. The 1991 Vincent Wildlife Trust otter survey found positive signs of otters on the Rhymney and Bargoed-Rhymney rivers, and the lower reaches of the Ebbw. Other surveys have found signs on the Nant Bargoed, and most rivers in the area probably now support otters. Lying-up or rest sites are quite widespread but no breeding sites have been confirmed. Two artificial holts were built on the Sirhowy to help the re-colonisation of otters in this area.

2.3 Links with Habitats

- **Wetlands** (rivers, streams, ponds, reedbeds, swamps, lakes and reservoirs)
- *Deciduous Woodlands* (wet woodland)
- *Species-rich Grasslands* (rhos pasture)
- Dense scrub

3. CURRENT FACTORS AFFECTING THE SPECIES

- Lack of prey due to poor water quality and poor habitat.
- Riparian habitat loss due to development along the river corridors and grazing pressure.
- Incidental deaths, mainly road traffic accidents.
- Disturbance due to development close to rivers and wetlands.
- Pollution of watercourses, both physical and chemical.

4. CURRENT ACTION

- 4.1 The Wildlife Trust's Welsh Water Otters and Rivers Project was launched in April 2000, and is based with the Glamorgan Wildlife Trust in the South Wales area. An advisory leaflet for landowners was produced in 2000.
- 4.2 The Environment Agency published an *Otters and Rivers Handbook* in December 1999.
- 4.3 Actions for otters are included in the Environment Agency LEAPs¹⁵ and the Agency considers impacts on otters when dealing with applications for work in or adjacent to rivers.
- 4.4 Road traffic accident black spots have been identified in Wales.
- 4.5 Highways Agency has produced guidance on mitigation work for otters in new road and bridge construction works.
- 4.6 Rehabilitation facilities for injured or orphaned otters are available locally.
- 4.7 Keep Wales Tidy runs educational programmes for its river care groups (Clean Rivers Project) including otter survey and otter holt construction training days.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Maintain and expand existing otter populations.
- 5.1.2 By 2010, restore breeding otters to all catchments and coastal areas where they have been recorded since 1960.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Clarify the current status and distribution of the European otter in Caerphilly County Borough. (Target: 2004)

- 5.2.2 Protect existing populations and encourage natural recolonisation through appropriate management, restoration and re-creation of suitable habitats, in particular breeding sites. (Target: 2008 and ongoing)
- 5.2.3 Reduce the threat of road traffic accidents in the county borough. (Target: 2005 and ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure the UDP and LEAPs contain policies and actions to protect otters and their habitats.	CCBC	CCW EA	✓								✓
6.1.2 Seek to designate important breeding sites as SINC, SSSI or LNR.	CCBC	CCW	✓								✓
6.2 Site Safeguard and Management											
6.2.1 Identify important areas of otter habitat/breeding sites and safeguard through management agreements.	CCBC	EA CCW GWT GLWT	✓								
6.2.2 Ensure that all new road/bridge construction/other developments do not have adverse effects on otters.	CCBC	CCW EA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.3 Seek to improve or create otter habitat as opportunities arise.	EA	KWT CCBC CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Facilitate mitigation to safeguard otters on roads, e.g. underpasses.	CCBC	CCW NAW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Continue to require otter surveys and mitigation for planning applications.	CCBC	CCW EA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.3 Continue to implement wildlife legislation.	Gwent Police	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Provide advice on otter conservation and habitat management to landowners, developers, anglers, fisheries and farmers.	EA	CCBC CCW KWT VWT		✓							
6.5 Future Research and Monitoring											
6.5.1 Undertake surveys to monitor the distribution of otters.	EA	CCW VWT KWT GWT GLWT		✓			✓			✓	
6.5.2 Continue to provide training for river care groups, and other interested groups and individuals.	KWT	EA	✓		✓		✓		✓		✓
6.5.3 Support the setting up of a local record centre for South Wales, and seek to establish an otter database with information on distribution, nature and condition of breeding sites.	CBP	(EA CCW)	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Raise public awareness of otters and the importance of reporting sightings/road kills.	CBP	-	✓			✓			✓		

WATER VOLE *ARVICOLA TERRESTRIS* SPECIES ACTION PLAN

1. INTRODUCTION

The water vole is a UKBAP priority species³⁹ and is in urgent need of action both nationally and in Caerphilly county borough.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S) (1998)	P
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981 (as amended)	Sch. 5



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2. CURRENT STATUS

2.1 UK and Wales

The water vole is found throughout mainland Britain in a variety of bank side habitats and is the UK's largest vole. It was once considered a widespread and common riparian mammal, but it has declined dramatically over the past 40 years. It was estimated that by the year 2000 there would have been a 94% loss in the number of water voles since 1939. This is mainly attributed to habitat deterioration and pollution of watercourses. The explosion of the mink population in Britain has also had an impact because they commonly feed on water voles.

The water vole inhabits slow-moving rivers, streams, ditches and ponds, particularly those with well-developed banks. Unusually for a small mammal, the water vole is more active during the day than at night. It feeds on grass and waterside vegetation, and is a skilled swimmer, both underwater and on the surface. Breeding takes place in underground tunnels and therefore an adequate bank in which to dig a series of burrows is necessary. It also requires slow-moving waters in order to escape from predators. It is now an offence to damage, destroy or obstruct access to the habitats the water vole uses for shelter, or to disturb the species whilst occupying such habitats.

2.2 Caerphilly County Borough

Although it is likely to occur in the county borough records are scarce. A sample survey carried out by the Vincent Wildlife Trust in 1989-1990 recorded water voles on the Monmouth-Brecon Canal between Abergavenny and Brecon, however no survey has been undertaken on the Crumlin section of the canal.

Evidence of the species has been found at several sites away from traditional main rivers, occurring in wet pastures and fen sites, and it has been recorded in the following SINC⁸:

- 55: **Nelson Bog (SSSI)**
- 119: **Tir Waun Meadows**
- 164: **Gypsy Lane Wetland**

Further work is needed to confirm the importance of these and other sites in the county borough.

2.3 Links with Habitats

- **Wetlands** (rivers and streams, ponds, fens, reedbeds, lakes and reservoirs)
- *Species-rich Grasslands* (rhos pasture)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Lack of data on the distribution of the species may have led to accidental loss of the species from some areas.
- Loss and fragmentation of habitats.
- Predation, especially by the American mink (*Mustela vison*).
- Alteration of watercourses, e.g. culverting, diversions, and water abstractions, and flood defence maintenance work.
- Erosion of bank habitats, resulting from the trampling and overgrazing of bankside vegetation.
- Pollution of watercourses and poisoning by rodenticides.

4. CURRENT ACTION

- 4.1 Actions for water voles are included in LEAPs, including the Eastern Valleys LEAP covering the river catchment area for Caerphilly county borough¹⁵.
- 4.2 The Environment Agency considers impacts on water voles when dealing with applications for work in or adjacent to rivers.
- 4.3 The Vincent Wildlife Trust conducted a national survey for water voles in 1989-90, and there is ongoing research by the Environment Agency and Wildlife Trusts.
- 4.4 The VWT re-surveyed the 2,970 sites which comprise the Water Vole Survey of Britain in 1996-98.
- 4.5 The *Water Vole Conservation Handbook* provides practical management advice to developers, conservation organisations, planners and water engineers, etc¹⁴.
- 4.6 British Waterways have prepared a corporate BAP which will include positive actions to protect the water vole.
- 4.7 The Rhiw 2 Mill river care group (KWT) are managing ditch habitat adjacent to the River Sirhowy in order to encourage water voles back to the area.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Maintain the current distribution and abundance of the species in the UK.

- 5.1.2 Ensure water voles are present throughout their 1970s range by the year 2010, considering habitat management and possible translocation of populations to areas from where they have been lost.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Clarify the current status and distribution of the water vole in Caerphilly county borough. (Target: 2004)
- 5.2.2 Maintain the current species population and distribution. (Target: ongoing)
- 5.2.3 Enhance, restore and create water vole habitat, setting population recovery targets according to local threats. (Target: 2010)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure the UDP and LEAPs contain adequate conservation policies and actions to protect water voles and their habitats.	CCW	CCBC EA	✓								✓
6.1.2 Seek to designate important breeding areas as SINC, SSSI or LNR.	CCW	CCBC	✓								✓
6.2 Site Safeguard and Management											
6.2.1 Identify important areas of water vole habitat, particularly breeding sites and safeguard through management agreements.	CCBC	EA CCW GWT GLWT VWT KWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Seek to improve or create water vole habitat as opportunities arise, in particular to reduce the fragmentation of habitats in the county borough.	CCW	EA CCBC GWT GLWT KWT	✓								
6.2.3 Limit the use of herbicides on bankside/semi-aquatic vegetation, and provide information on best practice. Also consider the use of rodenticides.	EA	CCW	✓								
6.3 Species Management and Protection											
6.3.1 Continue to require surveys and mitigation for planning applications potentially affecting the species.	CCBC	CCW EA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Investigate the distribution of mink in the county borough. Assess whether mink controls would benefit water vole recovery/re-colonisation.	EA	CCBC CCW KWT GWT GLWT VWT	✓								
6.3.3 Consider a reintroduction programme once suitable habitats have been identified, further to investigation of status and distribution (6.5.1).	CCW	EA CCBC GWT GLWT		✓							
6.3.4 Continue to implement wildlife legislation.	Gwent Police	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.4 Advisory											
6.4.1 Provide advice and information on water vole conservation and habitat management to key groups, including landowners, anglers, developers and farmers.	EA	VWT KWT CCBC FUW NFU GWT GLWT NAWAD	✓								
6.4.2 Develop guidance notes on the use of rodenticides in areas of known water vole activity, circulating to pest controllers, farmers and agri-businesses.	CCBC	CCW EA		✓							
6.5 Future Research and Monitoring											
6.5.1 Undertake surveys to identify the distribution of water voles and mink. It may be possible to link otter, water vole and mink survey work and base a countywide survey on river care group areas.	EA	KWT river care groups VWT CCBC GWT GLWT	✓		✓		✓		✓		✓
6.5.2 Continue to provide training for river care groups, and other interested groups, in identifying evidence of water vole and mink.	KWT	river care groups	✓			✓			✓		
6.5.3 Regularly monitor known key sites/colonies of water voles annually.	EA	KWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.4 Support the setting up of a local record centre for south Wales, and seek to establish a database for information.	CBP	VWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Raise public awareness of the water vole in the county borough, their decline and the need for conservation.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

YELLOW-NECKED MOUSE *APODEMUS FLAVICOLLIS* SPECIES ACTION PLAN**1. INTRODUCTION**

The yellow-necked mouse is not a priority species in the UKBAP but its southwesterly distribution in the UK makes the South Wales population particularly important. It is considered an important species for conservation in Caerphilly county borough.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	-
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	-



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2. CURRENT STATUS**2.1 UK and Wales**

The yellow-necked mouse is a nocturnal species of deciduous woodlands and parklands. It feeds on fruits, berries, buds, insects and seeds collected from ground level and in trees of around 20 metres. Its distribution is mainly restricted to the south and west of England and South Wales, but even here much suitable woodland areas are apparently without them.

2.2 Caerphilly County Borough

Recent surveys have found most populations and highest densities in well-drained broadleaved deciduous woodland areas, probably some of the highest densities of southern Europe. It could also be found in some suitable hedgerows and gardens, but there has been no systematic survey undertaken on this species in the county borough.

2.3 Links with Habitats

- **Deciduous Woodlands** (mixed deciduous/broadleaved woodlands on well-drained banks and slopes)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Felling of broadleaved woodlands and replanting with conifers.
- Over-use of rodenticides.
- Clearing of fallen timber nest sites.
- Parks are often kept 'too tidy'.

4. CURRENT ACTION

- 4.1 Sympathetic woodland and parks management.

4.2 Provision of nest boxes specially designed for mice.

4.3 Annual monitoring of known breeding sites⁴¹.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

5.2.1 Maintain the unique population density of this mouse by protecting broadleaved woodland and parkland habitats in the county borough. (Target: ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
None proposed at this time.	-	-									
6.2 Site Safeguard and Management											
6.2.1 Maintain the current extent and quality of foraging habitats through appropriate management.	CCBC	Coed Cymru landowners	✓								
6.2.2 Seek to create new nesting sites for the species by providing nest boxes and maintaining the diversity of structure of broadleaved woodlands, for example, leaving fallen trees.	CCBC	Coed Cymru landowners	✓								
6.3 Species Management and Protection											
6.3.1 Identify and protect key breeding and feeding areas.	GWT GLWT	VWT CCBC		✓							
6.4 Advisory											
6.4.1 Produce and disseminate advice to local authority staff and private woodland and parkland managers.	CCBC	Coed Cymru	✓								
6.5 Future Research and Monitoring											
6.5.1 Monitor all known breeding and feeding sites on a regular basis.	GWT GLWT	VWT CCBC		✓		✓		✓		✓	
6.6 Communications and Publicity											
6.6.1 Provide information to schools and colleges, and other interested organisations and individuals.	CBP	GWT GLWT Schools Youth Forum			✓						

4. MAMMALS INDEX

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* = UK priority species

BADGER *MELES MELES* SPECIES ACTION PLAN

1. INTRODUCTION

Although the badger is not a priority species in the UKBAP it is listed as a species of conservation concern. It is a victim of persecution in Caerphilly county borough and is therefore considered an important species for conservation locally.

Relevant Legislation/Species Status	
priority species (P) or species of conservation concern (S)	S
EC Habitats and Species Directive	-
Conservation Regulations 1994	-
Berne Convention 1982	Appendix III
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Sch. 6
Other Legislation	Protection of Badgers Act 1992



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2. CURRENT STATUS

2.1 UK and Wales

The badger has a widespread distribution, in woodlands and farmland areas throughout Britain and Wales. However, due to various pressures it has become rare and even extinct in some areas. A national study conducted in the mid-1990s (Bristol University) suggested that badger numbers are generally stable in the UK, but some areas of South Wales were shown to be declining²⁵.

2.2 Caerphilly County Borough

The badger is known throughout most of the county borough, in deciduous and coniferous woodlands. However, there are few records for the northern part of the Rhymney Valley, where there are less wooded areas. They can be quite numerous on lower slopes and pasture, and are found in both rural and urban areas. As it is nocturnal, regular observations are rare.

2.3 Links with Habitats

- **Deciduous Woodlands**
- *Planted Coniferous Woodland*
- *Species-rich Grasslands*
- *Wildlife Corridors* (hedgerows)
- *Common Land*
- *Post-Industrial Land* (re-vegetated colliery tips)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of habitat through urbanisation and road construction, in particular feeding habitat such as grassland. Increased road casualties and incidents of sett disturbance is also linked to existing and new housing, road and industrial developments (the number of badgers being killed on the roads is not accurately recorded).

- Deliberate mortality from persecution by farmers, land managers and members of the public because of worries about livestock, through the 'sport' of badger baiting, involving the digging of setts and setting of dogs onto the captured badger.
- Lack of knowledge of the species and its habitat and conservation requirements, particularly livestock farmers.

4. CURRENT ACTION

- 4.1 Membership of local badger groups (Gwent, Glamorgan). These groups carry out monitoring and surveillance of setts in an attempt to deter and reduce digging and lamping incidents. Badger Groups and local constabulary liaise with landowners and farmers.
- 4.2 Gwent Police (Wildlife Liaison Officers) enforce national legislation such as the WCA 1981 and the Badger Act 1992, particularly in circumstances of sett disturbance and persecution.
- 4.3 EN has produced a useful leaflet entitled *Badger Guidelines for Developers*¹³.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain the current populations of badgers on known sites in the county borough. (Target: ongoing)
- 5.2.2 Carry out survey work to identify further sites (in particular, the northern Rhymney Valley) and as a part of the planning process for any new developments. (Target: 2003 and ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to ensure that badgers are taken into account in all new roads, bridges, industrial, commercial and residential developments.	CCBC	GBdG GLBdG	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Protect and prevent further loss of feeding habitats. Pursue planning refusals or satisfactory mitigation where proposed development threatens to erode these vital areas.	CCBC	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.3 Species Management and Protection											
6.3.1 Ensure badger surveys are undertaken before any developments are given planning permission and as part of a routine monitoring scheme.	CCBC	GBdG, GLBdG	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Encourage people to report persecutions, digging, baiting, sett disturbance, etc. to the police and the local badger groups, providing an emergency contact number in any publicity materials and other items.	GBdG GLBdG	Gwent Police	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.3 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Produce and disseminate information about badgers to farmers and other landowners and land managers, including sympathetic habitat management advice and information on the behaviour of the species on farmland and in relation to the safety of livestock.	CBP	GLBdG Coed Cymru	✓	✓							
6.5 Future Research and Monitoring											
6.5.1 Continue to monitor all existing sites for population density, behaviour and any possible threats such as badger-digging/baiting evidence.	GBdG GLBdG	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.2 Seek to expand sett monitoring and surveying to further deter digging and lamping activities through local group and possible community groups.	GBdG GLBdG	-	✓								
6.6 Communications and Publicity											
6.6.1 Encourage membership of badger groups and/or local wildlife trusts to promote the badger in the area.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Provide schools and colleges in the county borough with information in order to educate children, parents and teachers about the conservation status of badgers in the local area. Promote the need for reporting of sightings, road accidents and sett disturbance incidents to local Badger Groups.	CBP	Schools, Youth Forum		✓							

BATS SPECIES ACTION PLAN

1. INTRODUCTION

The UKBAP identifies five British bats as UK priorities (with UK SAPs) and a further nine as Species of Conservation Concern³⁹. The species included in this action plan are listed below including three UK priorities (*) and the rest are species of conservation concern:

- **Brown Long Eared Bat** *Plecotus auritus*
- **Daubentons Bat** *Myotis daubentonii*
- **Greater Horseshoe Bat*** *Rhinolophus ferrumequinum**
- **Lesser Horseshoe Bat*** *Rhinolophus hipposideros**
- **Natterer's Bat** *Myotis nattereri*
- **Noctule** *Nyctalus noctula*
- **Pipistrelle Bat*** *Pipistrellus pipistrellus**
- **Whiskered/Brandts Bat** *Myotis mystacinus/Myotis brandtii*

Relevant Legislation/Species Status								
	brown long eared	daubentons	greater horseshoe	lesser horseshoe	natterers	noctule	pipistrelle	whiskered
priority (P) or species of conservation concern (S)	S	S	P	P	S	S	P	S
EC Habitats and Species Directive	IVa	IVa	IIa, IVa	IIa, IVa	IVa	IVa	IVa	IVa
Conservation Regs 1994	2	2	2	2	2	2	2	2
Berne 1982	II	II	II	II	II	II	III	II
Bonn 1979	II	II	II	II	II	II	II	II
CITES 1975	-	-	-	-	-	-	-	-
WCA 1981	Sch. 5, 6	Sch. 5, 6	Sch. 5, 6	Sch. 5, 6	Sch. 5, 6	Sch. 5, 6	Sch. 5, 6	Sch. 5, 6

2. CURRENT STATUS

2.1 UK and Wales

All British bats are insectivorous and feed in habitats such as woodland, scrub, along hedgerows, wetlands, watercourses/water bodies and species-rich grasslands. All bats need warm breeding sites in summer and cold, safe hibernation sites in winter. Each species travels between summer and winter roosts every year. Relatively little is known about the current status of bats, although it is widely acknowledged that all bat species are declining nationally.

2.2 Caerphilly County Borough

With its diverse landscape and its history of past mining activities, Caerphilly county borough provides suitable habitats for most bat species. Of the fourteen species of bat in Britain, eight species have been recorded in the county borough.

2.2.1 Brown long-eared bat

This medium sized bat is the second most common species and is widespread through the whole of Britain. It mainly feeds on moths, beetles, flies, bugs, earwigs and spiders and, remarkably will sometimes land on the ground to catch or handle prey. This bat also flies close to the

ground, making them vulnerable to attack by predators, such as the domestic cat. It is probably the most commonly seen species in attics of houses with medium to large open spaces. Summer roosts are found in older buildings, barns, churches and trees. Caves, tunnels, mines, icehouses and probably trees provide their winter roosts. This bat is reliant on open woodland, parkland and orchards. Although little data currently exists, brown long-eared bats are known to be breeding in the county borough and are probably quite common, but a survey is needed to confirm this.

2.2.2 Daubenton's bat

Daubenton's bat is a medium sized bat, often associated with water habitats. In Britain it is a fairly widespread bat, feeding on insects from and close to the waters' surface. Food sources include small flies, caddisflies and mayflies. Summer roosts are commonly found in trees, but also in tunnels, under bridges, caves and mines. Winter roosts are in caves, mines and other underground sites. It has been recorded in Caerphilly county borough, although a more detailed survey will be needed to determine breeding sites, hibernation sites and population status.

2.2.3 Greater horseshoe bat

This very rare bat is heavily reliant on species rich grassland, woodland and hedgerows. It feeds on large insects including chafers, dung-beetles moths and crane flies. Greater Horseshoe bats are traditionally cave dwellers but many now use large houses and churches. There are currently 35 recognised maternity and all year roosts and 369 hibernation sites in the UK. Caerphilly has no confirmed maternity or hibernation roosts but there is a male roost in the county borough.

2.2.4 Lesser horseshoe Bat

This is a rare bat that feeds on insects in the woodland canopy, with a heavy reliance on hedgerows. It is traditionally a cave dweller but is now more reliant on man-made roosts such as attics in houses and churches however, it will also utilise smaller spaces than the greater horseshoe bat. Lesser horseshoes feed on smaller flying insects such as craneflies, flies and small moths. There is one known site for lesser horseshoe bats in Caerphilly county borough, although it is not known if they are breeding. This species is widespread but uncommon in Wales and South- West England.

2.2.5 Natterers bat

This medium sized bat is generally scarce, although widespread. Habitats include open woodland, parkland, hedgerows and along waterside vegetation feeding on flies, moths, spiders and other small insects. Summer roosts are often found in old stone buildings with large wooded beams such as castles, manor houses and churches, or older large timbered barns. They are traditionally tree roosting species and will occasionally use bat boxes. The preferred winter roosts of natterers are the cool entrances of mines and caves but they will hibernate in many underground shelters. They usually hibernate singularly or in small groups, which may include other species. Again, little is known about this bat, except that its presence has been recorded in the county borough, therefore more survey work is required.

2.2.6 Noctule bat

The noctule is one of the largest British bats and has a scattered distribution. It is not common and is dependant on woodland, parkland, pasture, water and forest edges where it feeds primarily on moths, dung and chafer beetles, mayflies and winged ants. Most food is caught on the wing. They are opportunist feeders and can be seen feeding on moths around street lamps in urban areas. They very seldom roost in buildings, preferring instead rot holes and woodpecker holes in trees. When found in buildings, they roost behind tiles, large soffits; and occasionally in

tall disused industrial chimneys and cavities in bridges. Hibernation occurs mainly in trees or rock fissures and hollows, but also in bat boxes and buildings. Noctules are declining throughout Britain. They have been confirmed as present and breeding in Caerphilly county borough, in association with diverse habitats of large open countryside such as ancient woodlands, post-industrial sites and suburban areas.

2.2.7 Pipistrelle bat (*Pipistrellus* spp.)

The pipistrelle is Britain's most common and smallest bat. Often associated with human habitation. It feeds on small flying insects such as midges, caddis flies, mosquitoes, mayflies, lacewings and small moths. Habitat requirements are water, marshy areas, in open woodland and at woodland edge, farmland, hedgerows and urban areas. Pipistrelles are crevice dwellers mainly and prefer to roost in confined spaces in buildings such as behind hanging tiles, weatherboards and soffits and in cavity walls, rarely roosting in attic spaces. They will sometimes fly during the day to catch insects. Winter roosts are often isolated individuals or small groups in crevices in buildings and trees. In Caerphilly county borough, as in the rest of the UK, the pipistrelle is probably widespread and numerous, although it has undergone significant declines in the last 25 years. Pipistrelle bats have recently been divided into two separate species, the common pipistrelle (*P. pipistrellus*) and the soprano pipistrelle (*P. pygmaeus*). The two species are widely distributed throughout Caerphilly county borough but the exact distribution is not yet known.

2.2.8 Whiskered/Brandts bat

These two species were only separated as distinct species in 1970. They are extremely difficult to differentiate and have a superficial resemblance to pipistrelles. They are probably under-recorded for this reason. They rely on wooded country, often near water and feed on moths and other small insects and spiders. Summer roosting sites are mainly buildings and tree and winter hibernation sites are largely unknown, although small numbers have been recorded in caves and tunnels. Whiskered and brandts bats are found throughout England and Wales. One whiskered bat has been found in Caerphilly county borough, although no breeding or hibernation roosts have yet been confirmed.

2.3 Links with Habitats

- *Wetlands* (water courses and water bodies)
- ***Deciduous Woodland***
- Forestry action plans
- ***Wildlife Corridors*** (hedgerows)
- *Species-rich Grasslands*
- *Common Land*
- *Post-Industrial Land*
- *Urban Habitats*
- Orchards, parklands, and scrub

3. CURRENT FACTORS AFFECTING THE SPECIES

Threats to these species are poorly understood, but low population density, low reproduction rates and an aversion by the public to sharing their properties with bats, make them particularly vulnerable.

- Loss and fragmentation of habitats. Hedgerow removal was probably a significant factor in the decline of most bat species, although this trend is being slowed by the introduction of the Hedgerow Regulations 1997.
- Loss of and damage to roosting sites:
 - Loss of summer, and occasionally winter roosts in buildings through disturbance and/or non-tolerance by human residents.
 - Loss or disturbance of winter hibernation sites, in buildings, caves, disused mine shafts and tunnels, houses, pill boxes and cellars through disturbing recreational activity and maintenance/inspection of structures.
 - Loss of summer and winter roost sites in trees because of the degradation of woodland structure and through the felling of veteran trees in woodland and parkland.
- Reduction in insect prey because of intensive farming methods, overgrazing and the use of pesticides.
- Use of toxic chemicals in timber treatment and in new timbers.
- Significant increase in the numbers of domestic cats causing increased predation.

4. CURRENT ACTION

- 4.1 Current legislation exists to protect bats and bat roosts.
- 4.2 CCW, CCBC, bat groups and the wildlife trusts are working together to raise the profile of bats.
- 4.3 Use of agri-environment schemes such as Tir Gofal and organic food production to reduce stocking densities and pesticide use.
- 4.4 Enhancement of habitat by the addition of bat boxes.
- 4.5 Public awareness raising through bat walks and talks arranged by Caerphilly county borough council in country parks.
- 4.6 Monitoring of selected breeding sites.
- 4.7 Education of demolition companies, industries, timber treatment companies, home insulation companies, tree surgeons, and cavers and pot-holers.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Maintain the current range and population.
- 5.1.2 In the long term, expand the current range through natural re-colonisation and landscape enhancement into areas where research shows that climate and landscape features are suitable.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Establish the baseline status and distribution of all species of bat occurring in Caerphilly county borough. (Target: 2005)
- 5.2.2 Halt the decline in the breeding population in Caerphilly county borough. (Target: 2005)
- 5.2.3 Enhance roosting sites (including hibernation sites) and important feeding habitats, where necessary, particularly around maternity roosts with the aim of increasing population levels within the county borough. (Target: ongoing)
- 5.2.4 Enhance breeding success through protection of roost sites. (Target: ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure consideration of maternity and hibernation roost sites and the surrounding habitat when developing structure plans and assessing planning applications. Provide alternative roost sites to mitigate any loss, and survey on planning applications for old buildings.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Ensure routine survey of mines or other underground sites due for closure or change of use, or otherwise considered vulnerable, with a view to protecting any bat colonies identified.	CCW	GBG GLBG CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Ensure that all Policies and Strategies do not adversely affect bats and their roosts. Develop a strategy for the consideration of bats within CCBC work, such as tree management and design of bridges.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.4 Work with the EA to ensure that bats are included in LEAPs.	CCW	EA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.5 Seek to designate important roosts and feeding areas as SSSI/SINC/LNR.	CCW	CCBC			✓					✓	✓
6.2 Site Safeguard and Management											
6.2.1 Ensure important roost sites are protected through liaison with owners.	CCW	GBG GLBG CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Encourage the use of low toxicity timber treatments in all buildings and encourage 'bat-friendly' design features in new buildings and other structures, and in the renovation of existing structures.	CCW	Coed Cymru FC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.3 Raise awareness among those managing trees and woodlands about bats and encourage appropriate management, particularly of land adjacent to important roosts.	CCBC	Coed Cymru FC CCW	✓			✓			✓		

Action	Key Partners		Year to be complete or in place by:									
	Lead	Partners	2003	4	5	6	7	8	9	10	11	
6.2 Site Safeguard and Management (continued)												
6.2.4 Enhance existing underground sites to make them more suitable for hibernating bats. Where appropriate promote the construction of purpose built hibernacula and the 'grilling' of cave and disused tunnel entrances to protect important hibernation sites.	CCW	CCBC GBG GLBG	✓	✓	✓						✓	✓
6.2.5 Develop a good code of practice in relation to the conservation and management of trees that are of value to bats.	CCBC	CCW	✓									
6.2.6 Enhance bat habitat, where appropriate by the addition of bat boxes to trees and buildings and promote the restoration or re-creation of insect rich habitats.	CCW	GBG GLBG CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.7 Consider the use of management agreements to improve important habitats or roosts.	CCBC	CCW	✓									
6.3 Species Management and Protection												
6.3.1 Continue to protect known breeding roosts and hibernacula from development, destruction and disturbance through maintaining and improving current training procedures for those who may come into contact with bats.	CCW	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Establish a bat group in Caerphilly county borough.	CBP	GBG GLBG		✓								
6.3.3 Install artificial roosts such as bat boxes and bat bricks and monitor these in important sites.	CBP	GBG GLBG	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.4 Encourage members of the public, local businesses, consultancies and other wildlife/environmental groups to report bat sightings. Coordinate the collation of records obtained by the above to produce a database of information.	CBP	GBG GLBG	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.5 Continue to implement wildlife legislation.	Gwent Police	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory												
6.4.1 Increase tolerance of the bat by raising awareness of the conservation importance of bats to landowners and householders.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4.2 Continue to support and contribute to the current network that provides bat conservation advice.	GBG GLBG	CCW CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4.3 Advise householders on the use of less harmful pesticides for timber treatment, choice of timber and the timing of the works.	Coed Cymru	FC CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

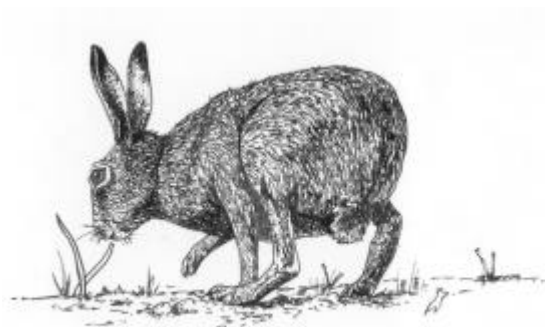
Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.4 Advisory (continued)											
6.4.4 Advise on the location of important maternity roosts and hibernacula (where appropriate) and stress the importance of habitat management for the surrounding areas, to encourage provision for the species in old buildings and on best tree management practices in the vicinity of important bat sites, particularly to: project officers for WGS and Tir Gofal; organisations associated with the care and restoration of old buildings; organisations engaged in underground activities (research and recreation); Environment Agency (along water courses); tree surgeons, tree wardens and foresters; key landowners and house-holders, vesters; and other relevant organisations.	CCW	CCBC CADW SCW GWT GLWT GBG GLBG FC EA Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey to estimate the relative numbers in differing habitats and roost types, particularly churches, mine-shafts, caves and ice-houses. Continue to search for maternity roosts and hibernation sites, mating roosts, underground sites and satellite or minor summer sites to provide estimates of local population size and to determine the extent of species decline. Undertake a survey of maternity roosts to determine distribution of the two pipistrelle bat phenotypes (this may be part of a national scheme). Assess the importance of each site with a view to establishing protection for key sites.	CCW	GBG GLBG	✓		✓	✓	✓	✓	✓	✓	✓
6.5.2 Undertake research to identify the habitat requirements, ecology and appropriate management of feeding areas to maintain bat populations. The findings should be used to develop guidelines and policies for habitat protection, creation and management around roost sites.	CCW	GBG GLBG		✓							
6.5.3 Develop and maintain a database for bat records and support setting up a Local Record Centre.	CBP	GBG GLBG	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.4 Participate in national monitoring schemes, but carry out additional monitoring as necessary to establish a baseline survey of summer roosts. Survey and monitor known and potential underground sites.	GBG / GLBG	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:									
	Lead	Partners	2003	4	5	6	7	8	9	10	11	
6.6 Communications and Publicity												
6.6.1 Raise awareness of the conservation importance of large old houses, farm buildings, churches and old trees as roost and hibernation sites amongst the general public, land managers and businesses.	CBP	GBG GLBG	✓	✓	✓						✓	✓
6.6.2 Operate a programme of educational activities and events, and publicity for locally important species, working towards changing the public's perception of bats.	CBP	GBG GLBG	✓	✓	✓						✓	✓
6.6.3 Promote the legal status and conservation importance of bats to landowners, builders, CCBC staff and others whose actions may affect bats.	CBP	GBG GLBG	✓	✓	✓						✓	✓

BROWN HARE *LEPUS EUROPAEUS* SPECIES ACTION PLAN**1. INTRODUCTION**

The brown hare is a familiar mammal of open countryside throughout most of Britain. It is primarily nocturnal and feeds on grasses, cereals and root crops. It is a UK priority species with a UK SAP³⁹ and CCW has identified it as a priority in Wales.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	P
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	Appendix III
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	-
Other Legislation	Ground Game Act 1880
	Hare Protection Act 1911
Other Species Status	RDB Mammals (1993)



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2. CURRENT STATUS**2.1 UK and Wales**

The brown hare is widespread throughout the UK and Ireland, although its numbers have declined substantially since the 1960s. Current brown hare population estimates range between 800,000 - 1,250,000, only 20% of the estimated hare population that occurred in 1880. The Ground Game Act 1880 affords the species limited protection during the breeding period, from the beginning of March – end of July.

2.2 Caerphilly County Borough

The current population in Caerphilly county borough is not known, as a detailed survey of the area has never been undertaken. There are a few known sites for the brown hare in the county borough, but it is likely that it is under-recorded due to several factors, including its nocturnal habits, possible confusion with the rabbit and because it is not considered rare or threatened.

2.3 Links with Habitats

- **Species-rich Grasslands** (lowland neutral, acid and wet grasslands; rhos pasture)
- **Heathland** (lowland heath)
- **Common Land**
- **Arable fields**

2.4 Links with Other Species

Other species that share similar habitats to the brown hare include:

- *Grey Partridge*
- *Skylark*
- *Song thrush*
- *Tree Sparrow*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Conversion of grassland to arable farmland.
- Loss of general habitat diversity in the agricultural landscape, such as field margins and hedgerows as well as crop diversity.
- Intensive farmed land (includes high stocking rates and improvement of grassland through reseeding, fertilising, ploughing, levelling and improving drainage).
- Changes in planting and cropping regimes.
- Wet springs are thought to have adverse effects on breeding performance.
- Changes in the fox population, as they are a key predator of leverets.

4. CURRENT ACTION

- 4.1 Sympathetic management under the Tir Gofal agri-environment scheme benefit hares.

5. OBJECTIVES AND TARGETS**5.1 UK Objectives and Targets**

- 5.1.1 Maintain the current range and population.
- 5.1.2 In the long term, expand the current range through natural re-colonisation and landscape enhancement into areas where research shows that climate and landscape features are suitable.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Establish the baseline status and distribution of the brown hare in Caerphilly county borough. (Target: 2004)
- 5.2.2 Halt the decline of the breeding population in Caerphilly county borough (Target: 2005).
- 5.2.3 Enhance breeding sites and important feeding areas with the aim of increasing hare population levels within the county borough. (Target: ongoing)
- 5.2.4 Enhance breeding success through protection of breeding sites. (Target: ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure Policies and Strategies do not adversely affect hares.	CCW	CCBC WDA	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation (continued)											
6.1.2 Ensure that consideration is given to breeding sites and the surrounding habitat when developing structure plans and assessing planning applications; and establish mechanisms to ensure a regular survey of suitable grasslands allotted for development.	CCBC	CCW WDA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Consider the requirements of hares when reviewing agri-environment schemes, such as Tir Gofal and Woodland Grant Schemes /Woodland Improvement Grants (CCW, NAWAD, FC) and in habitat creation/reclamation schemes (WDA).	CCW	NAWAD FC WDA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.4 Consider designating sites with breeding brown hare populations as SINCs, SSSIs or LNRs.	CCW	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.5 Work with the EA to ensure the needs of hares are taken into account in LEAPs.	CCW	EA CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Review management of habitats owned and managed by CCBC. Develop a good code of practice in relation to the conservation and management of grasslands which are of value to hares.	CCBC	CCW		✓							
6.2.2 Consider the use of management agreements (Local Authority and Tir Gofal, etc) to improve important habitats.	CCW	CCBC			✓						
6.3 Species Management and Protection											
6.3.1 Introduce favourable management of existing sites.	CCBC	CCW WDA FC NAWAD	✓								
6.3.2 Liaise with neighbouring Wildlife Trusts/Local Authorities/FWAG to formulate a recruitment strategy.	CBP	-				✓					
6.3.3 Encourage members of the public, local businesses, consultancies and other wildlife / environmental groups to report hare sightings.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.4 Coordinate the collation of records obtained by members of the public and other sources within the region to produce a database of information from which distribution maps can be produced.	CBP	-		✓							
6.3.5 Continue to implement wildlife legislation.	Gwent Police	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Advise project officers for WGS and Tir Gofal of the location of key breeding sites, their importance and surrounding area habitat management.	CCW	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.4 Advisory (continued)											
6.4.2 Raise awareness of hares and advise key landowners and managers, and other relevant organisations in the vicinity of important populations on appropriate habitat management for conservation.	CCW	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Carry out a county-wide survey to provide estimates of population size and distribution.	CCW	CCBC GWT GLWT Mammal Soc.		✓							
6.5.2 Develop guidelines and policies for habitat protection, creation and management on and around breeding sites.	CCW	CCBC			✓						
6.5.3 Search for and assess the importance of breeding sites with a view to establishing protection for key sites.	CCW	CCBC GWT GLWT			✓						
6.5.4 Develop and maintain a database for hare records.	CBP	(CCW)	✓								
6.5.5 Participate in national monitoring schemes.	CBP	(CCW CCBC)	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Provide leaflet on species and habitat management.	CBP	-			✓						
6.6.2 Operate a programme of educational activities and events to raise awareness of hare conservation issues amongst the general public, land managers and businesses. Consider using relevant organisations and appropriate media sources.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

DORMOUSE *MUSCARDINUS AVELLANARIUS* SPECIES ACTION PLAN

1. INTRODUCTION

The dormouse has been identified in the UKBAP as a priority species and a national plan has been prepared³⁹. It is therefore of biodiversity conservation locally.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S) (1998)	P
EC Habitats Directive	Annex I Va
Conservation Regs 1994	Sch. 2
Berne Convention 1982	-
Bonn Convention 1979	App. III
CITES 1975	-
WCA 1981	Sch. 5
IUCN Red List of Endangered Animals 1994	lower risk – near threatened



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2. CURRENT STATUS

2.1 UK and Wales

Dormice feed on fruit, insects, flowers, pollen and nuts, spending the day asleep in

nests constructed as much as 5m above the ground. However, during the winter they hibernate in nests at or below the woodland floor. Hibernation lasts until about April or May and breeding takes place during the summer with an average female dormouse rearing one or two litters a year, each usually of about 4 young.

There has been a significant decline in numbers of this species throughout Britain in recent years. The dormouse does not occur in Scotland or Northern Ireland, and in Wales there are few known populations. It has become extinct in up to 7 English counties (comprising half its former range) in the past 100 years. It is absent from the north, except for small populations in Cumbria and Northumberland, and although dormice are still widespread in southern counties (Devon to Kent) they are patchily distributed. Population densities everywhere are less than 10 adults per hectare, even in good habitats.

2.2 Caerphilly County Borough

As throughout Britain, the dormouse in Caerphilly county borough is widely scattered with low density, small populations. The southern part of the county is an important area for the dormouse where several known populations exist although this may be due in part to a bias in surveying. Woodlands with a high proportion of hazel are most frequently found to support dormice. Hazel nuts are an important part of the dormouse's diet, the smooth inner edge of the hole gnawed in them serves as a telltale sign of dormouse feeding activity.

2.3 Links with Habitats

The dormouse usually inhabits deciduous woodlands with a well-developed shrub layer and overgrown hedgerows and is an agile climber using stems and branches as pathways.

- **Deciduous Woodlands**
- *Wildlife Corridors* (hedgerows)

The requirements of this species should be considered in all woodland and forestry action plans.

3. CURRENT FACTORS AFFECTING THE SPECIES

- Changes in woodland management practice, notably cessation of hazel coppicing and stock incursion into woodland.
- Fragmentation of woodland leaving isolated non-viable populations, short distances, possibly as little as 100m form absolute barriers to dispersal unless arboreal roosts are available.
- Inappropriate woodland management usually because the presence of dormice is not known.
- Destruction of ancient semi-natural woodland.
- Continual climatic variations. Wet and cool summers dramatically reduce the survival prospects of newly born animals.

4. CURRENT ACTION

- 4.1 Sites where dormice are present have been identified as SINCs⁸.
- 4.2 Schemes such as the Hedgerow Renovation Scheme and Tir Gofal encourage positive management for the dormouse through the maintenance and renovation of hedgerows.
- 4.3 The Hedgerow Regulations 1997 protect hedgerows that may be important for the dormouse.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Maintain and enhance dormouse populations in all the counties where they still occur.
- 5.1.2 Re-establish self-sustaining populations in at least 5 counties where they have been lost.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Maintain and enhance the dormouse population in Caerphilly county borough (Target: halt the decline by 2005).
- 5.2.2 Enhance breeding success through putting up dormouse boxes and promoting positive woodland management (Target: ongoing).
- 5.2.3 Re-establish self-sustaining populations in suitable areas through woodland management (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure Policies and Strategies do not adversely affect existing populations.	CCW	CCBC NAWAD FC WDA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Consider the requirements of dormice when reviewing agri-environment schemes, such as Tir Gofal and Woodland Grant Schemes / Woodland Improvement Grants.	CCW	NAWAD FC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Seek to designate important breeding sites as SINc, SSSI or LNR.	CCW	CCBC GWT GLWT									✓
6.2 Site Safeguard and Management											
6.2.1 Sites supporting dormice should be identified and advice provided to land managers on appropriate management.	CCW	CCBC Coed Cymru FC Gwk landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Grant aid and incentive schemes such as WGS, Coed Cymru and Tir Gofal should be used to encourage owners to manage suitable habitats sensitively.	CCW	CCBC Coed Cymru NAWAD FC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.3 Manage woodlands and hedgerows to maintain current populations and prevent further habitat fragmentation.	CCW	FC GWT GLWT CCBC Coed Cymru landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.4 Ensure dormice are fully considered when assessing any development which may impact upon the species paying particular attention to its protection under UK and European legislation, including the Hedgerow Regulations 1997.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.5 Ensure dormice are fully considered during any woodland/forestry management which may affect the species.	FC	Coed Cymru NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.6 Ensure European and UK dormouse legislation is applied when assessing any hedgerow removal notice which may affect the dormouse.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.7 Seek to include dormouse requirements in all relevant management plans, agri-environment schemes and tenancy, or similar agreements.	CCW	CCBC NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Extend current dormouse nest box schemes.	GWT GLWT	CCBC CCW Coed Cymru Gwk	✓								
6.3.2 Continue to implement wildlife legislation.	Gwent Police	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Raise awareness of landowners and managers to dormouse requirements in order to promote appropriate management.	CCW	CCBC FC GWT GLWT VWT Gwk Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.4 Advisory (continued)											
6.4.2 Support training in conservation of dormice both for land managers and advisors and to provide advice on sympathetic management for dormice.	CCW	CCBC FC GWT GLWT VWT Gwk Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey to identify further dormouse populations and pass information gathered during survey and monitoring to JNCC in order that it can be incorporated in a national database and contribute to the maintenance of an up-to-date red list (e.g. take part in the 'Great Nut Hunt' national survey).	CCW	JNCC CCBC GWT GLWT landowners general public	✓		✓		✓		✓		✓
6.6 Communications and Publicity											
6.6.1 Ensure that landowners, agencies and the local authority are aware of the requirements of dormice, especially the impact of woodland and hedgerow management and the effects of habitat fragmentation.	CBP	-	✓								
6.6.2 Raise public awareness of dormice through production of leaflets and guided walks to promote dormouse conservation.	CBP		✓			✓			✓		

EUROPEAN OTTER *LUTRA LUTRA LUTRA* SPECIES ACTION PLAN

1. INTRODUCTION

The European otter *Lutra lutra lutra* is a UKBAP priority species which suffered a dramatic decline in the 1960s³⁹.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	P
EC Habitats Directive	Annex IIa, IVa
Conservation Regs 1994	Sch. 2
Berne Convention 1982	App. II
Bonn Convention 1979	-
CI TES 1975	Annex A
WCA 1981	Sch. 5, 6



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2. CURRENT STATUS

2.1 UK and Wales

Otters utilise all wetland habitats, including rivers and streams, lakes and ponds, but also ditches, marshes, reedbeds, swamps and wet woodland alongside watercourses. They feed mainly on fish but will also take amphibians and crustaceans, and occasionally small birds and mammals. Generally nocturnal, they require dense cover for lying-up during the day and for breeding, normally provided by tree root cavities, riverbank burrows, scrub or tall waterside vegetation.

The otter population decline in the 1960s was attributed mainly to the use of organochloride pesticides, such as DDT in agriculture, but they are also affected by hunting and habitat fragmentation. The decline in south Wales probably occurred during the period of industrialisation in which many rivers were polluted, destroying the food supply. National surveys have indicated a gradual general recovery since the late 1980s, and in recent years repeated surveys carried out by the Vincent Wildlife Trust have demonstrated that otters are generally widespread throughout Wales. There are good populations in the North and South, and since the last national survey there is evidence of a spread into the South Wales Valleys.

2.2 Caerphilly County Borough

The otter is known to be present in the county borough, but the exact distribution has not yet been identified. The 1991 Vincent Wildlife Trust otter survey found positive signs of otters on the Rhymney and Bargoed-Rhymney rivers, and the lower reaches of the Ebbw. Other surveys have found signs on the Nant Bargoed, and most rivers in the area probably now support otters. Lying-up or rest sites are quite widespread but no breeding sites have been confirmed. Two artificial holts were built on the Sirhowy to help the re-colonisation of otters in this area.

2.3 Links with Habitats

- **Wetlands** (rivers, streams, ponds, reedbeds, swamps, lakes and reservoirs)
- *Deciduous Woodlands* (wet woodland)
- *Species-rich Grasslands* (rhos pasture)
- Dense scrub

3. CURRENT FACTORS AFFECTING THE SPECIES

- Lack of prey due to poor water quality and poor habitat.
- Riparian habitat loss due to development along the river corridors and grazing pressure.
- Incidental deaths, mainly road traffic accidents.
- Disturbance due to development close to rivers and wetlands.
- Pollution of watercourses, both physical and chemical.

4. CURRENT ACTION

- 4.1 The Wildlife Trust's Welsh Water Otters and Rivers Project was launched in April 2000, and is based with the Glamorgan Wildlife Trust in the South Wales area. An advisory leaflet for landowners was produced in 2000.
- 4.2 The Environment Agency published an *Otters and Rivers Handbook* in December 1999.
- 4.3 Actions for otters are included in the Environment Agency LEAPs¹⁵ and the Agency considers impacts on otters when dealing with applications for work in or adjacent to rivers.
- 4.4 Road traffic accident black spots have been identified in Wales.
- 4.5 Highways Agency has produced guidance on mitigation work for otters in new road and bridge construction works.
- 4.6 Rehabilitation facilities for injured or orphaned otters are available locally.
- 4.7 Keep Wales Tidy runs educational programmes for its river care groups (Clean Rivers Project) including otter survey and otter holt construction training days.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Maintain and expand existing otter populations.
- 5.1.2 By 2010, restore breeding otters to all catchments and coastal areas where they have been recorded since 1960.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Clarify the current status and distribution of the European otter in Caerphilly County Borough. (Target: 2004)

- 5.2.2 Protect existing populations and encourage natural recolonisation through appropriate management, restoration and re-creation of suitable habitats, in particular breeding sites. (Target: 2008 and ongoing)
- 5.2.3 Reduce the threat of road traffic accidents in the county borough. (Target: 2005 and ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure the UDP and LEAPs contain policies and actions to protect otters and their habitats.	CCBC	CCW EA	✓								✓
6.1.2 Seek to designate important breeding sites as SIN C, SSSI or LNR.	CCBC	CCW	✓								✓
6.2 Site Safeguard and Management											
6.2.1 Identify important areas of otter habitat/breeding sites and safeguard through management agreements.	CCBC	EA CCW GWT GLWT	✓								
6.2.2 Ensure that all new road/bridge construction/other developments do not have adverse effects on otters.	CCBC	CCW EA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.3 Seek to improve or create otter habitat as opportunities arise.	EA	KWT CCBC CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Facilitate mitigation to safeguard otters on roads, e.g. underpasses.	CCBC	CCW NAW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Continue to require otter surveys and mitigation for planning applications.	CCBC	CCW EA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.3 Continue to implement wildlife legislation.	Gwent Police	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Provide advice on otter conservation and habitat management to landowners, developers, anglers, fisheries and farmers.	EA	CCBC CCW KWT VWT		✓							
6.5 Future Research and Monitoring											
6.5.1 Undertake surveys to monitor the distribution of otters.	EA	CCW VWT KWT GWT GLWT		✓			✓			✓	
6.5.2 Continue to provide training for river care groups, and other interested groups and individuals.	KWT	EA	✓		✓		✓		✓		✓
6.5.3 Support the setting up of a local record centre for South Wales, and seek to establish an otter database with information on distribution, nature and condition of breeding sites.	CBP	(EA CCW)	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Raise public awareness of otters and the importance of reporting sightings/road kills.	CBP	-	✓			✓			✓		

WATER VOLE *ARVICOLA TERRESTRIS* SPECIES ACTION PLAN

1. INTRODUCTION

The water vole is a UKBAP priority species³⁹ and is in urgent need of action both nationally and in Caerphilly county borough.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S) (1998)	P
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981 (as amended)	Sch. 5



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2. CURRENT STATUS

2.1 UK and Wales

The water vole is found throughout mainland Britain in a variety of bank side habitats and is the UK's largest vole. It was once considered a widespread and common riparian mammal, but it has declined dramatically over the past 40 years. It was estimated that by the year 2000 there would have been a 94% loss in the number of water voles since 1939. This is mainly attributed to habitat deterioration and pollution of watercourses. The explosion of the mink population in Britain has also had an impact because they commonly feed on water voles.

The water vole inhabits slow-moving rivers, streams, ditches and ponds, particularly those with well-developed banks. Unusually for a small mammal, the water vole is more active during the day than at night. It feeds on grass and waterside vegetation, and is a skilled swimmer, both underwater and on the surface. Breeding takes place in underground tunnels and therefore an adequate bank in which to dig a series of burrows is necessary. It also requires slow-moving waters in order to escape from predators. It is now an offence to damage, destroy or obstruct access to the habitats the water vole uses for shelter, or to disturb the species whilst occupying such habitats.

2.2 Caerphilly County Borough

Although it is likely to occur in the county borough records are scarce. A sample survey carried out by the Vincent Wildlife Trust in 1989-1990 recorded water voles on the Monmouth-Brecon Canal between Abergavenny and Brecon, however no survey has been undertaken on the Crumlin section of the canal.

Evidence of the species has been found at several sites away from traditional main rivers, occurring in wet pastures and fen sites, and it has been recorded in the following SINCs⁸:

- 55: **Nelson Bog (SSSI)**
- 119: **Tir Waun Meadows**
- 164: **Gypsy Lane Wetland**

Further work is needed to confirm the importance of these and other sites in the county borough.

2.3 Links with Habitats

- **Wetlands** (rivers and streams, ponds, fens, reedbeds, lakes and reservoirs)
- *Species-rich Grasslands* (rhos pasture)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Lack of data on the distribution of the species may have led to accidental loss of the species from some areas.
- Loss and fragmentation of habitats.
- Predation, especially by the American mink (*Mustela vison*).
- Alteration of watercourses, e.g. culverting, diversions, and water abstractions, and flood defence maintenance work.
- Erosion of bank habitats, resulting from the trampling and overgrazing of bankside vegetation.
- Pollution of watercourses and poisoning by rodenticides.

4. CURRENT ACTION

- 4.1 Actions for water voles are included in LEAPs, including the Eastern Valleys LEAP covering the river catchment area for Caerphilly county borough¹⁵.
- 4.2 The Environment Agency considers impacts on water voles when dealing with applications for work in or adjacent to rivers.
- 4.3 The Vincent Wildlife Trust conducted a national survey for water voles in 1989-90, and there is ongoing research by the Environment Agency and Wildlife Trusts.
- 4.4 The VWT re-surveyed the 2,970 sites which comprise the Water Vole Survey of Britain in 1996-98.
- 4.5 The *Water Vole Conservation Handbook* provides practical management advice to developers, conservation organisations, planners and water engineers, etc¹⁴.
- 4.6 British Waterways have prepared a corporate BAP which will include positive actions to protect the water vole.
- 4.7 The Rhiw 2 Mill river care group (KWT) are managing ditch habitat adjacent to the River Sirhowy in order to encourage water voles back to the area.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Maintain the current distribution and abundance of the species in the UK.

5.1.2 Ensure water voles are present throughout their 1970s range by the year 2010, considering habitat management and possible translocation of populations to areas from where they have been lost.

5.2 Caerphilly Objectives and Targets

5.2.1 Clarify the current status and distribution of the water vole in Caerphilly county borough. (Target: 2004)

5.2.2 Maintain the current species population and distribution. (Target: ongoing)

5.2.3 Enhance, restore and create water vole habitat, setting population recovery targets according to local threats. (Target: 2010)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure the UDP and LEAPs contain adequate conservation policies and actions to protect water voles and their habitats.	CCW	CCBC EA	✓								✓
6.1.2 Seek to designate important breeding areas as SINC, SSSI or LNR.	CCW	CCBC	✓								✓
6.2 Site Safeguard and Management											
6.2.1 Identify important areas of water vole habitat, particularly breeding sites and safeguard through management agreements.	CCBC	EA CCW GWT GLWT VWT KWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Seek to improve or create water vole habitat as opportunities arise, in particular to reduce the fragmentation of habitats in the county borough.	CCW	EA CCBC GWT GLWT KWT	✓								
6.2.3 Limit the use of herbicides on bankside/semi-aquatic vegetation, and provide information on best practice. Also consider the use of rodenticides.	EA	CCW	✓								
6.3 Species Management and Protection											
6.3.1 Continue to require surveys and mitigation for planning applications potentially affecting the species.	CCBC	CCW EA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Investigate the distribution of mink in the county borough. Assess whether mink controls would benefit water vole recovery/re-colonisation.	EA	CCBC CCW KWT GWT GLWT VWT	✓								
6.3.3 Consider a reintroduction programme once suitable habitats have been identified, further to investigation of status and distribution (6.5.1).	CCW	EA CCBC GWT GLWT		✓							
6.3.4 Continue to implement wildlife legislation.	Gwent Police	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.4 Advisory											
6.4.1 Provide advice and information on water vole conservation and habitat management to key groups, including landowners, anglers, developers and farmers.	EA	VWT KWT CCBC FUW NFU GWT GLWT NAWAD	✓								
6.4.2 Develop guidance notes on the use of rodenticides in areas of known water vole activity, circulating to pest controllers, farmers and agri-businesses.	CCBC	CCW EA		✓							
6.5 Future Research and Monitoring											
6.5.1 Undertake surveys to identify the distribution of water voles and mink. It may be possible to link otter, water vole and mink survey work and base a countywide survey on river care group areas.	EA	KWT river care groups VWT CCBC GWT GLWT	✓		✓		✓		✓		✓
6.5.2 Continue to provide training for river care groups, and other interested groups, in identifying evidence of water vole and mink.	KWT	river care groups	✓			✓			✓		
6.5.3 Regularly monitor known key sites/colonies of water voles annually.	EA	KWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.4 Support the setting up of a local record centre for south Wales, and seek to establish a database for information.	CBP	VWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Raise public awareness of the water vole in the county borough, their decline and the need for conservation.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

YELLOW-NECKED MOUSE *APODEMUS FLAVICOLLIS* SPECIES ACTION PLAN**1. INTRODUCTION**

The yellow-necked mouse is not a priority species in the UKBAP but its southwesterly distribution in the UK makes the South Wales population particularly important. It is considered an important species for conservation in Caerphilly county borough.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	-
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	-



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2. CURRENT STATUS**2.1 UK and Wales**

The yellow-necked mouse is a nocturnal species of deciduous woodlands and parklands. It feeds on fruits, berries, buds, insects and seeds collected from ground level and in trees of around 20 metres. Its distribution is mainly restricted to the south and west of England and South Wales, but even here much suitable woodland areas are apparently without them.

2.2 Caerphilly County Borough

Recent surveys have found most populations and highest densities in well-drained broadleaved deciduous woodland areas, probably some of the highest densities of southern Europe. It could also be found in some suitable hedgerows and gardens, but there has been no systematic survey undertaken on this species in the county borough.

2.3 Links with Habitats

- **Deciduous Woodlands** (mixed deciduous/broadleaved woodlands on well-drained banks and slopes)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Felling of broadleaved woodlands and replanting with conifers.
- Over-use of rodenticides.
- Clearing of fallen timber nest sites.
- Parks are often kept 'too tidy'.

4. CURRENT ACTION

- 4.1 Sympathetic woodland and parks management.

4.2 Provision of nest boxes specially designed for mice.

4.3 Annual monitoring of known breeding sites⁴¹.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

5.2.1 Maintain the unique population density of this mouse by protecting broadleaved woodland and parkland habitats in the county borough. (Target: ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
None proposed at this time.	-	-									
6.2 Site Safeguard and Management											
6.2.1 Maintain the current extent and quality of foraging habitats through appropriate management.	CCBC	Coed Cymru landowners	✓								
6.2.2 Seek to create new nesting sites for the species by providing nest boxes and maintaining the diversity of structure of broadleaved woodlands, for example, leaving fallen trees.	CCBC	Coed Cymru landowners	✓								
6.3 Species Management and Protection											
6.3.1 Identify and protect key breeding and feeding areas.	GWT GLWT	VWT CCBC		✓							
6.4 Advisory											
6.4.1 Produce and disseminate advice to local authority staff and private woodland and parkland managers.	CCBC	Coed Cymru	✓								
6.5 Future Research and Monitoring											
6.5.1 Monitor all known breeding and feeding sites on a regular basis.	GWT GLWT	VWT CCBC		✓		✓		✓		✓	
6.6 Communications and Publicity											
6.6.1 Provide information to schools and colleges, and other interested organisations and individuals.	CBP	GWT GLWT Schools Youth Forum			✓						

5. REPTILES INDEX

Species Action Plan	Page
Adder	1
Grass Snake	5
Slow Worm and Common Lizard	9

* = UK priority species

ADDER VIPER BERUS SPECIES ACTION PLAN

1. INTRODUCTION

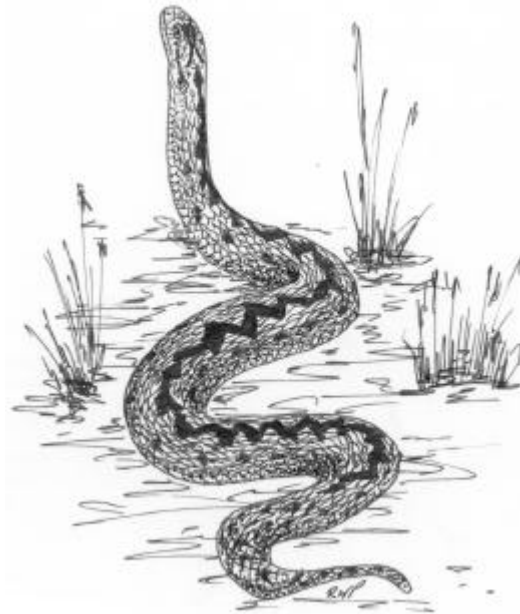
Although there is no UK SAP for the adder, it is a UK species of conservation concern³⁹, and along with the three other reptile species found in the county borough, it plays a vital part in the area's ecology. Furthermore, the educational value of these species cannot be underestimated. Many natural history walks are enlivened by a glimpse of something 'exotic', and countless budding naturalists develop their interest through encounters with wild reptiles. The wider concept of environmental education can often be made more attractive by approaching from a reptilian direction.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S) (1998)	S
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention (1982)	-
Bonn Convention (1979)	-
CI TES (1975)	-
WCA (1981)	Sch. 5, 9

2. CURRENT STATUS

2.1 UK and Wales

The adder is the most widely distributed of the European snakes, mainly due to its varied diet and tolerance of cold conditions. It is found throughout mainland UK, on habitats ranging from sand dunes, woodland margins and wetlands, to upland heaths.



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Adders require adequate basking and hibernation sites, and are often found in areas of sparse vegetation where they may utilise the burrows of small rodents. It hibernates communally, deeper in the ground than other British reptiles, and emerges earlier in the spring. Basking areas are near to hibernation sites and must be free of shading vegetation. They slough soon after emerging, the cast skins indicating their presence. Adders are the easiest of British snakes to record often basking in very visible sites, and requiring only a light tread and slow approach. They prefer humid, moist conditions, with muggy days after rainfall being most profitable for survey work. Adders often bask communally, males and females being easily distinguished by colour differences. The adder basks at a lower temperature than other British reptiles (8°C to 16°C). Within Wales there are significant colonies associated with the coastal sand dune systems and open heathland of the west.

2.2 Caerphilly County Borough

The adder is well distributed throughout in the county borough, often associated with commons and forestry plantations characteristic of the area. However, there is a lack of accurate data, although there seems to be a general decline in reptiles in the county borough. No systematic survey has been undertaken of adder populations.

2.3 Links with Habitats

The adder's ability to colonise most habitats means that this action plan should be considered in conjunction with those for the majority of terrestrial habitats, in particular:

- *Planted Coniferous Woodlands*
- **Wildlife Corridors**
- *Common Land*
- *Heathland*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of habitat due to development.
- Loss of suitable basking sites due to natural succession (may be a consequence of management changes on common land).
- Loss of suitable basking sites due to intentional afforestation.
- Direct persecution by humans.

4. CURRENT ACTION

Although there are various initiatives in operation, little is being done at the present time, either nationally or locally.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable for this species.

5.2 Caerphilly Objectives and Targets

5.2.1 Halt any decline in adder populations within the county borough.

5.2.2 Actively manage sites where succession may pose a threat to resident adders.

5.2.3 Continue to improve public perception of the adder.

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.2 Seek to designate sites with breeding populations of three or more species of reptile as SINC.	CCBC	-									✓
6.2 Site Safeguard and Management											
6.2.1 Manage habitats to prevent vegetation from shading out existing colonies through natural succession.	CCBC	GWT GLWT	✓								

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management (continued)											
6.2.2 Ensure forest plantation schemes do not endanger existing populations.	FC	-	✓								
6.2.3 Seek to include the maintenance of suitable open areas in agri-environment schemes wherever possible.	CCW	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Encourage natural colonisation of new sites to link fragmented habitats.	CCBC	-		✓							
6.3.2 Provide relocation sites for populations where disturbance to habitat is unavoidable.	CCBC	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.3 Adders pose a limited threat to public safety; provide relocation for any individuals or colonies that may be in danger of persecution.	CCBC	CCW RSPCA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.4 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Provide advice to all concerned parties on sympathetic management of adder habitats.	CBP	GWT GLWT	✓								
6.5 Future Research and Monitoring											
6.5.1 Set up a Caerphilly county borough records database for reptiles, including the adder.	CBP	-		✓							
6.5.2 Develop an effective way to monitor known sites for population fluctuations.	CBP	-		✓							
6.5.3 Encourage a county wide survey of reptile sites to accurately ascertain present status and distribution, and input data into the county borough database.	CBP	-	✓								
6.6 Communications and Publicity											
6.6.1 Liaise with local wildlife and community groups to educate members about the adder (other snakes/reptiles) in an attempt to dispel inbuilt fears.	CBP	local community/ wildlife groups	✓								
6.6.2 Promote, through publicity, media and events, a wider and more sympathetic understanding of reptile conservation.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

GRASS SNAKE *NATRIX NATRIX* SPECIES ACTION PLAN

1. INTRODUCTION

The grass snake is a UKBAP species of conservation concern³⁹ and is one that has undoubtedly suffered large population losses over the last 30 years. The presence of grass snakes is an indication of the health of a habitat, and it is an ideal species to encourage younger generations to participate in pond reclamation and management projects.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S) (1998)	S
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention (1982)	-
Bonn Convention (1979)	-
CITES 1975	-
WCA (1981)	Sch. 5



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2. CURRENT STATUS

2.1 UK and Wales

Grass snakes are the most nervous of the British reptiles, often basking partially covered by vegetation. Along with their cryptic coloration, this can make them difficult to see.

The young are found in September, often basking near to, or on the vegetation pile from which they emerged. Grass snakes bask at higher temperatures than other British reptiles (between 12°C and 20°C). The grass snake is found throughout mainland England and Wales, although it is virtually absent from Scotland, and is not found in Ireland. It is likely that this distribution is determined by climate, as the grass snake is much less cold tolerant than the adder. Within Wales the species is widespread, but restricted to suitable habitats.

2.2 Caerphilly County Borough

The grass snake is found throughout the county borough but is certainly suffering a decline in population. There are a number of sites where they have disappeared within the last decade, although the causes are not always apparent. There has been no systematic survey of the grass snake in the county borough.

2.3 Links with habitats

The grass snake, due to its restricted diet, is only found in association with wetland or flowing water habitats. The health of these habitats, especially the fish and amphibian populations within, is crucial to the grass snake. Any Habitat Statement/Action Plan concerning water or wetlands should be read in conjunction with this species action plan.

- **Wetlands**
- *Species-rich Grasslands* (Rhos pasture)
- *Common Land*
- *Post-Industrial Land*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of habitat to pollution, development or natural succession
- Loss of prey species (see Amphibians SAP)
- Loss of suitable egg-laying sites
- Unintentional disturbance of egg sites, for example in compost heaps.
- Persecution

4. CURRENT ACTION

- 4.1 Management and creation of new wetlands will have benefitted the grass snake, although little has been done to specifically benefit the grass snake.
- 4.2 Rescue Programmes: sometimes the only option after disturbance to breeding sites is to hatch the eggs artificially, dramatically reducing the mortality rate, and providing healthy well-nourished juveniles for restocking wild populations or new sites. A number of captive bred individuals were released into a purpose built habitat in the grounds of Parc Cwm Darran in the late 1980s. No accurate monitoring has been done but the species is still present on that site.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Halt the decline in grass snake populations. (Target: 2005)
- 5.2.2 Identify present locations of colonies through local knowledge, historical evidence and surveys, and maintain and improve these sites. (Target: 2003)
- 5.2.3 Monitor present sites to identify possible local threats to the population in the county borough. (Target: ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to designate sites with three or more species of breeding reptiles as SIN C.	CCBC	-									✓

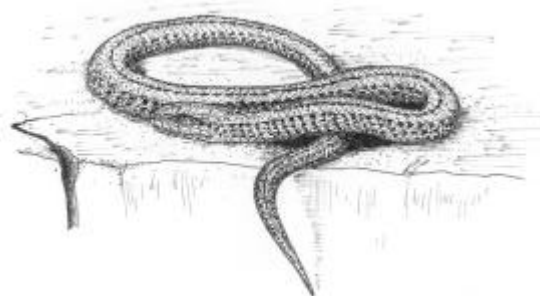
Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management											
6.2.1 In conjunction with habitat action plans for wetlands, ensure sites are protected from pollution, development, natural succession etc.	CCBC	EA KWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Take any opportunities that arise to create new grass snake habitat e.g. school grounds, pond creation.	CCBC	Gwk KWT Schools		✓			✓			✓	
6.3 Species Management and Protection											
6.3.1 Encourage, through active management, the natural colonisation of new habitats, for example, using displaced specimens, or captive bred individuals from rescue programs.	CCBC	GWT GLWT	✓						✓		
6.3.2 Continue rescue programmes for disturbed breeding grass snake eggs and provide a relocation service for any individuals or populations that are threatened by unavoidable development or persecution.	CBP	(CCBC GWT GLWT CMCS)	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.3 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Provide advice to landowners etc. on the importance of fresh water habitats and their surroundings to grass snake survival.	CBP	(KWT EA CMCS)	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4.2 Provide reassurance, information and advice to persons living in the vicinity of grass snake colonies.	CBP	(CMCS)	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Set up county database for reptiles.	CCBC	-		✓							
6.5.2 Carry out surveys to ascertain sites and population sizes, and input data into the county borough database.	CBP	CMCS	✓			✓			✓		
6.6 Communications and Publicity											
6.6.1 Promote reptile conservation and improve public image through events and activities.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Liaise with local wildlife groups to encourage reptile awareness.	CBP	local community / wildlife groups	✓	✓	✓	✓	✓	✓	✓	✓	✓

SLOW WORM AND COMMON LIZARD SPECIES ACTION PLAN

1. INTRODUCTION

The **slow worm** (*Anguis fragilis*) is one of only three species of lizard found in the UK. It is unusual in that it is legless, bearing a superficial resemblance to a snake. It has undoubtedly suffered a population decline over the last few decades and for this reason, as well as being one of the few reptiles often found by children on nature rambles, it has been included in a local action plan. The **common lizard** (*Lacerta vivipara*) is similar to the slow worm in many of its requirements and pressures, and is therefore included in this species action plan.

Relevant Legislation/Species Status	
	slow worm and common lizard
priority species (P) or species of conservation concern (S) ³⁹	S
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention (1982)	-
Bonn Convention (1979)	-
CITES (1975)	-
WCA (1981)	Sch. 5



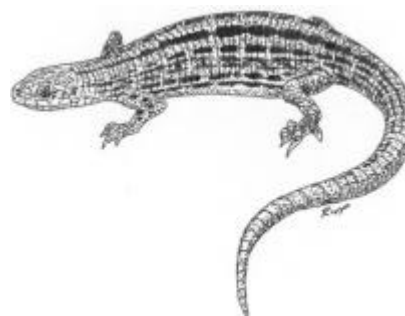
slow worm

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2. CURRENT STATUS

2.1 UK and Wales

Slow worms were ubiquitous in the UK until a few decades ago. There seems to have been a significant decline in numbers, although this is based mainly on anecdotal evidence. Within Wales, the species is widespread, but appears to be in decline. Slow worms like well-vegetated areas with good cover from predation. They are very rarely seen in the open, but are often found beneath steel sheets. These may be placed in areas to help confirm the presence of this species.



common lizard

© CCBC 2002

Although secretive slow worms seldom flee before they are discovered. They are easily distinguished from British snakes by their smooth, almost cylindrical body, very small scales and uniform grey or brown coloration. Like many other lizards, slow worms shed their tails when stressed, and if capture is necessary, they should be handled with great care. Slow worms are ovoviviparous (the method of reproduction in which the young develop from eggs retained in the mother's body), with eggs hatching on laying to reveal coppery gold young with bold dark brown sides.

Common lizards are agile, alert and extremely fast when warm. They rely on cryptic camouflage, lying motionless before fleeing to cover. This rapid movement is often all that betrays their presence. Common lizards are often found along railway lines and in the vicinity of old dry-stone walls, in which they hibernate (not communally). They are active at lower temperatures than the grass snake, though not as low as the adder, basking between 9°C and 18°C. Common lizards are much less easily observed than the slow worm and for that reason are less commonly recorded on a

site. However, this species is found throughout the UK and is notable in being Ireland's only reptile. Within Wales, it is often found along old railway lines where the bare ballast provides basking and hunting sites.

Surveys for both species ought to be undertaken during the months April/May and September, when there is adequate sun but the nights are cool enough to require basking during the day. The optimum season is spring when there is an increase in mating activity and the best times of day are 0900 to 1100, and 1600 to 1900, when reptiles are most likely to be basking in open locations. Most reptiles are deaf to a large part of a human's audible range, but are easily alerted by heavy footfalls and sudden dramatic movements.

2.2 Caerphilly County Borough

Both species are widespread within the county borough, although it is likely that both have suffered a decline in numbers over recent years. Old industrial sites and railway lines are found throughout the county borough and may be locally important for these species. Further surveys are required to confirm the status of the species in the county borough

2.3 Links with Habitats

These species require a varied diet of invertebrates, which may be found in most habitats. They both require a degree of direct sunlight, although the slow worm lies beneath dead vegetation, scrap-metal and other rubbish to receive the heat indirectly. All Habitat Statements/Action Plans should consider whether these species are present.

- **Wildlife Corridors** (hedgerows railway lines, stone walls)
- **Post-Industrial Land**
- *Common Land*
- *Urban Habitats*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of suitable habitat due to development, natural succession, etc.
- Loss of suitable hibernation sites due to decline in traditional farm practices (less long-term storage of manure, loss of dry-stone walls).
- Persecution, particularly of the slow worm.
- Probable locally high rates of predation by domestic cats.

4. CURRENT ACTION

- 4.1 Other than small-scale educational projects and talks, no action is currently taking place within the borough.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to these species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Obtain quantitative data on location and numbers of both species through local knowledge, historical evidence and survey.
- 5.2.2 Halt the probable decline of these species and monitor present sites for possible threats to the population.
- 5.2.3 Use every opportunity to promote the conservation of, and improve public conception of reptiles.
- 5.2.4 Improve existing habitats which may be suitable for future species colonisation.

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to designate sites with three or more species of breeding reptiles as SINC.	CCBC	-									✓
6.2 Site Safeguard and Management											
6.2.1 Prevent loss or degradation of existing sites.	CBP	-	✓								
6.2.2 Encourage provision for reptiles on any new habitat developments, for example, school grounds.	CCBC	Gwk CMCS GWT GLWT	✓								
6.3 Species Management and Protection											
6.3.1 Encourage, through provision of suitable cover, the colonisation of new areas by these species.	CBP	(CCBC CMCS GWT GLWT)			✓						
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-									
6.4 Advisory											
6.4.1 Raise awareness of the conservation requirements of these species among landowners and managers.	CBP	-	✓								
6.4.2 Provide a support and problem solving service to landowners, especially allotment owners, on methods of management sympathetic to reptiles.	CBP (CMCS)	Allotment societies landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Set up a county database for reptiles, and support the setting up of a Local Record Centre to hold and give access to useful information.	CCBC			✓							
6.5.1 Carry out surveys to ascertain sites and population sizes and input the data into the county borough database.	CBP	(GWT GLWT CMCS CCBC)	✓			✓			✓		

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.6 Communications and Publicity											
6.6.1 Promote reptile conservation and improve public image through events and activities.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Liaise with local wildlife groups to encourage reptile awareness.	CBP	local groups	✓	✓	✓	✓	✓	✓	✓	✓	✓

5. REPTILES INDEX

Species Action Plan	Page
Adder	1
Grass Snake	5
Slow Worm and Common Lizard	9

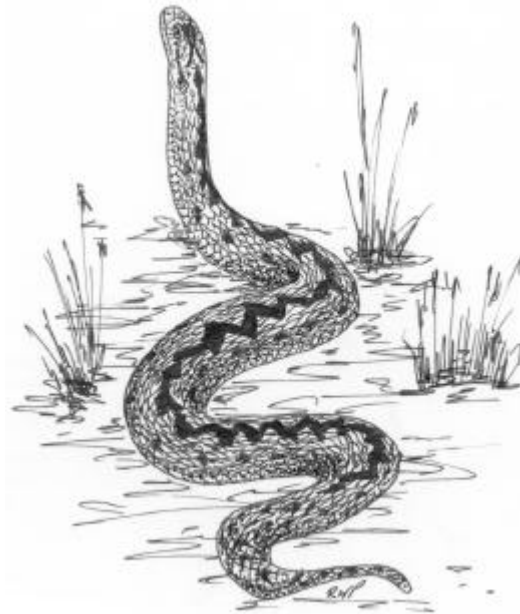
* = UK priority species

ADDER VIPER BERUS SPECIES ACTION PLAN

1. INTRODUCTION

Although there is no UK SAP for the adder, it is a UK species of conservation concern³⁹, and along with the three other reptile species found in the county borough, it plays a vital part in the area's ecology. Furthermore, the educational value of these species cannot be underestimated. Many natural history walks are enlivened by a glimpse of something 'exotic', and countless budding naturalists develop their interest through encounters with wild reptiles. The wider concept of environmental education can often be made more attractive by approaching from a reptilian direction.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S) (1998)	S
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention (1982)	-
Bonn Convention (1979)	-
CI TES (1975)	-
WCA (1981)	Sch. 5, 9



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2. CURRENT STATUS

2.1 UK and Wales

The adder is the most widely distributed of the European snakes, mainly due to its varied diet and tolerance of cold conditions. It is found throughout mainland UK, on habitats ranging from sand dunes, woodland margins and wetlands, to upland heaths.

Adders require adequate basking and hibernation sites, and are often found in areas of sparse vegetation where they may utilise the burrows of small rodents. It hibernates communally, deeper in the ground than other British reptiles, and emerges earlier in the spring. Basking areas are near to hibernation sites and must be free of shading vegetation. They slough soon after emerging, the cast skins indicating their presence. Adders are the easiest of British snakes to record often basking in very visible sites, and requiring only a light tread and slow approach. They prefer humid, moist conditions, with muggy days after rainfall being most profitable for survey work. Adders often bask communally, males and females being easily distinguished by colour differences. The adder basks at a lower temperature than other British reptiles (8°C to 16°C). Within Wales there are significant colonies associated with the coastal sand dune systems and open heathland of the west.

2.2 Caerphilly County Borough

The adder is well distributed throughout in the county borough, often associated with commons and forestry plantations characteristic of the area. However, there is a lack of accurate data, although there seems to be a general decline in reptiles in the county borough. No systematic survey has been undertaken of adder populations.

2.3 Links with Habitats

The adder's ability to colonise most habitats means that this action plan should be considered in conjunction with those for the majority of terrestrial habitats, in particular:

- *Planted Coniferous Woodlands*
- **Wildlife Corridors**
- *Common Land*
- *Heathland*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of habitat due to development.
- Loss of suitable basking sites due to natural succession (may be a consequence of management changes on common land).
- Loss of suitable basking sites due to intentional afforestation.
- Direct persecution by humans.

4. CURRENT ACTION

Although there are various initiatives in operation, little is being done at the present time, either nationally or locally.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable for this species.

5.2 Caerphilly Objectives and Targets

5.2.1 Halt any decline in adder populations within the county borough.

5.2.2 Actively manage sites where succession may pose a threat to resident adders.

5.2.3 Continue to improve public perception of the adder.

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.2 Seek to designate sites with breeding populations of three or more species of reptile as SINC.	CCBC	-									✓
6.2 Site Safeguard and Management											
6.2.1 Manage habitats to prevent vegetation from shading out existing colonies through natural succession.	CCBC	GWT GLWT	✓								

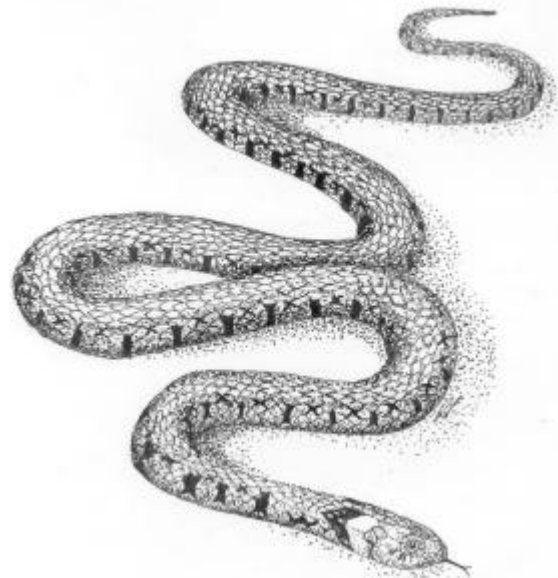
Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management (continued)											
6.2.2 Ensure forest plantation schemes do not endanger existing populations.	FC	-	✓								
6.2.3 Seek to include the maintenance of suitable open areas in agri-environment schemes wherever possible.	CCW	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Encourage natural colonisation of new sites to link fragmented habitats.	CCBC	-		✓							
6.3.2 Provide relocation sites for populations where disturbance to habitat is unavoidable.	CCBC	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.3 Adders pose a limited threat to public safety; provide relocation for any individuals or colonies that may be in danger of persecution.	CCBC	CCW RSPCA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.4 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Provide advice to all concerned parties on sympathetic management of adder habitats.	CBP	GWT GLWT	✓								
6.5 Future Research and Monitoring											
6.5.1 Set up a Caerphilly county borough records database for reptiles, including the adder.	CBP	-		✓							
6.5.2 Develop an effective way to monitor known sites for population fluctuations.	CBP	-		✓							
6.5.3 Encourage a county wide survey of reptile sites to accurately ascertain present status and distribution, and input data into the county borough database.	CBP	-	✓								
6.6 Communications and Publicity											
6.6.1 Liaise with local wildlife and community groups to educate members about the adder (other snakes/reptiles) in an attempt to dispel inbuilt fears.	CBP	local community/ wildlife groups	✓								
6.6.2 Promote, through publicity, media and events, a wider and more sympathetic understanding of reptile conservation.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

GRASS SNAKE *NATRIX NATRIX* SPECIES ACTION PLAN

1. INTRODUCTION

The grass snake is a UKBAP species of conservation concern³⁹ and is one that has undoubtedly suffered large population losses over the last 30 years. The presence of grass snakes is an indication of the health of a habitat, and it is an ideal species to encourage younger generations to participate in pond reclamation and management projects.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S) (1998)	S
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention (1982)	-
Bonn Convention (1979)	-
CITES 1975	-
WCA (1981)	Sch. 5



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2. CURRENT STATUS

2.1 UK and Wales

Grass snakes are the most nervous of the British reptiles, often basking partially covered by vegetation. Along with their cryptic coloration, this can make them difficult to see.

The young are found in September, often basking near to, or on the vegetation pile from which they emerged. Grass snakes bask at higher temperatures than other British reptiles (between 12°C and 20°C). The grass snake is found throughout mainland England and Wales, although it is virtually absent from Scotland, and is not found in Ireland. It is likely that this distribution is determined by climate, as the grass snake is much less cold tolerant than the adder. Within Wales the species is widespread, but restricted to suitable habitats.

2.2 Caerphilly County Borough

The grass snake is found throughout the county borough but is certainly suffering a decline in population. There are a number of sites where they have disappeared within the last decade, although the causes are not always apparent. There has been no systematic survey of the grass snake in the county borough.

2.3 Links with habitats

The grass snake, due to its restricted diet, is only found in association with wetland or flowing water habitats. The health of these habitats, especially the fish and amphibian populations within, is crucial to the grass snake. Any Habitat Statement/Action Plan concerning water or wetlands should be read in conjunction with this species action plan.

- **Wetlands**
- *Species-rich Grasslands* (Rhos pasture)
- *Common Land*
- *Post-Industrial Land*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of habitat to pollution, development or natural succession
- Loss of prey species (see Amphibians SAP)
- Loss of suitable egg-laying sites
- Unintentional disturbance of egg sites, for example in compost heaps.
- Persecution

4. CURRENT ACTION

- 4.1 Management and creation of new wetlands will have benefitted the grass snake, although little has been done to specifically benefit the grass snake.
- 4.2 Rescue Programmes: sometimes the only option after disturbance to breeding sites is to hatch the eggs artificially, dramatically reducing the mortality rate, and providing healthy well-nourished juveniles for restocking wild populations or new sites. A number of captive bred individuals were released into a purpose built habitat in the grounds of Parc Cwm Darran in the late 1980s. No accurate monitoring has been done but the species is still present on that site.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Halt the decline in grass snake populations. (Target: 2005)
- 5.2.2 Identify present locations of colonies through local knowledge, historical evidence and surveys, and maintain and improve these sites. (Target: 2003)
- 5.2.3 Monitor present sites to identify possible local threats to the population in the county borough. (Target: ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to designate sites with three or more species of breeding reptiles as SIN C.	CCBC	-									✓

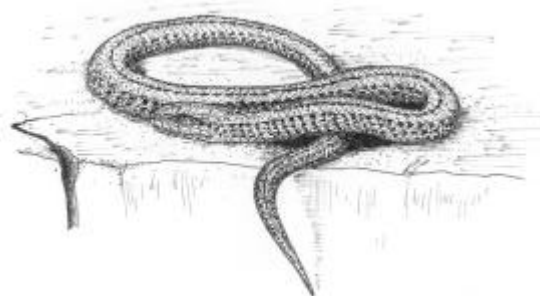
Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.2 Site Safeguard and Management											
6.2.1 In conjunction with habitat action plans for wetlands, ensure sites are protected from pollution, development, natural succession etc.	CCBC	EA KWT	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Take any opportunities that arise to create new grass snake habitat e.g. school grounds, pond creation.	CCBC	Gwk KWT Schools		✓			✓			✓	
6.3 Species Management and Protection											
6.3.1 Encourage, through active management, the natural colonisation of new habitats, for example, using displaced specimens, or captive bred individuals from rescue programs.	CCBC	GWT GLWT	✓						✓		
6.3.2 Continue rescue programmes for disturbed breeding grass snake eggs and provide a relocation service for any individuals or populations that are threatened by unavoidable development or persecution.	CBP	(CCBC GWT GLWT CMCS)	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.3 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Provide advice to landowners etc. on the importance of fresh water habitats and their surroundings to grass snake survival.	CBP	(KWT EA CMCS)	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4.2 Provide reassurance, information and advice to persons living in the vicinity of grass snake colonies.	CBP	(CMCS)	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Set up county database for reptiles.	CCBC	-		✓							
6.5.2 Carry out surveys to ascertain sites and population sizes, and input data into the county borough database.	CBP	CMCS	✓			✓			✓		
6.6 Communications and Publicity											
6.6.1 Promote reptile conservation and improve public image through events and activities.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Liaise with local wildlife groups to encourage reptile awareness.	CBP	local community / wildlife groups	✓	✓	✓	✓	✓	✓	✓	✓	✓

SLOW WORM AND COMMON LIZARD SPECIES ACTION PLAN

1. INTRODUCTION

The **slow worm** (*Anguis fragilis*) is one of only three species of lizard found in the UK. It is unusual in that it is legless, bearing a superficial resemblance to a snake. It has undoubtedly suffered a population decline over the last few decades and for this reason, as well as being one of the few reptiles often found by children on nature rambles, it has been included in a local action plan. The **common lizard** (*Lacerta vivipara*) is similar to the slow worm in many of its requirements and pressures, and is therefore included in this species action plan.

Relevant Legislation/Species Status	
	slow worm and common lizard
priority species (P) or species of conservation concern (S) ³⁹	S
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention (1982)	-
Bonn Convention (1979)	-
CITES (1975)	-
WCA (1981)	Sch. 5



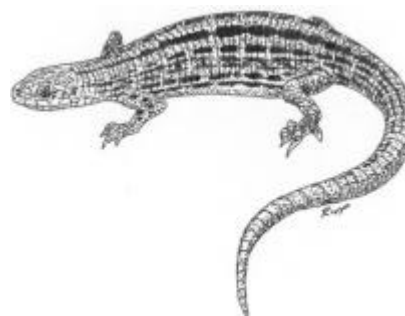
slow worm

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2. CURRENT STATUS

2.1 UK and Wales

Slow worms were ubiquitous in the UK until a few decades ago. There seems to have been a significant decline in numbers, although this is based mainly on anecdotal evidence. Within Wales, the species is widespread, but appears to be in decline. Slow worms like well-vegetated areas with good cover from predation. They are very rarely seen in the open, but are often found beneath steel sheets. These may be placed in areas to help confirm the presence of this species.



common lizard

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Although secretive slow worms seldom flee before they are discovered. They are easily distinguished from British snakes by their smooth, almost cylindrical body, very small scales and uniform grey or brown coloration. Like many other lizards, slow worms shed their tails when stressed, and if capture is necessary, they should be handled with great care. Slow worms are ovoviviparous (the method of reproduction in which the young develop from eggs retained in the mother's body), with eggs hatching on laying to reveal coppery gold young with bold dark brown sides.

Common lizards are agile, alert and extremely fast when warm. They rely on cryptic camouflage, lying motionless before fleeing to cover. This rapid movement is often all that betrays their presence. Common lizards are often found along railway lines and in the vicinity of old dry-stone walls, in which they hibernate (not communally). They are active at lower temperatures than the grass snake, though not as low as the adder, basking between 9°C and 18°C. Common lizards are much less easily observed than the slow worm and for that reason are less commonly recorded on a

site. However, this species is found throughout the UK and is notable in being Ireland's only reptile. Within Wales, it is often found along old railway lines where the bare ballast provides basking and hunting sites.

Surveys for both species ought to be undertaken during the months April/May and September, when there is adequate sun but the nights are cool enough to require basking during the day. The optimum season is spring when there is an increase in mating activity and the best times of day are 0900 to 1100, and 1600 to 1900, when reptiles are most likely to be basking in open locations. Most reptiles are deaf to a large part of a human's audible range, but are easily alerted by heavy footfalls and sudden dramatic movements.

2.2 Caerphilly County Borough

Both species are widespread within the county borough, although it is likely that both have suffered a decline in numbers over recent years. Old industrial sites and railway lines are found throughout the county borough and may be locally important for these species. Further surveys are required to confirm the status of the species in the county borough

2.3 Links with Habitats

These species require a varied diet of invertebrates, which may be found in most habitats. They both require a degree of direct sunlight, although the slow worm lies beneath dead vegetation, scrap-metal and other rubbish to receive the heat indirectly. All Habitat Statements/Action Plans should consider whether these species are present.

- **Wildlife Corridors** (hedgerows railway lines, stone walls)
- **Post-Industrial Land**
- *Common Land*
- *Urban Habitats*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Loss of suitable habitat due to development, natural succession, etc.
- Loss of suitable hibernation sites due to decline in traditional farm practices (less long-term storage of manure, loss of dry-stone walls).
- Persecution, particularly of the slow worm.
- Probable locally high rates of predation by domestic cats.

4. CURRENT ACTION

- 4.1 Other than small-scale educational projects and talks, no action is currently taking place within the borough.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to these species.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Obtain quantitative data on location and numbers of both species through local knowledge, historical evidence and survey.
- 5.2.2 Halt the probable decline of these species and monitor present sites for possible threats to the population.
- 5.2.3 Use every opportunity to promote the conservation of, and improve public conception of reptiles.
- 5.2.4 Improve existing habitats which may be suitable for future species colonisation.

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to designate sites with three or more species of breeding reptiles as SINC.	CCBC	-									✓
6.2 Site Safeguard and Management											
6.2.1 Prevent loss or degradation of existing sites.	CBP	-	✓								
6.2.2 Encourage provision for reptiles on any new habitat developments, for example, school grounds.	CCBC	Gwk CMCS GWT GLWT	✓								
6.3 Species Management and Protection											
6.3.1 Encourage, through provision of suitable cover, the colonisation of new areas by these species.	CBP	(CCBC CMCS GWT GLWT)			✓						
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-									
6.4 Advisory											
6.4.1 Raise awareness of the conservation requirements of these species among landowners and managers.	CBP	-	✓								
6.4.2 Provide a support and problem solving service to landowners, especially allotment owners, on methods of management sympathetic to reptiles.	CBP (CMCS)	Allotment societies landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Set up a county database for reptiles, and support the setting up of a Local Record Centre to hold and give access to useful information.	CCBC			✓							
6.5.1 Carry out surveys to ascertain sites and population sizes and input the data into the county borough database.	CBP	(GWT GLWT CMCS CCBC)	✓			✓			✓		

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.6 Communications and Publicity											
6.6.1 Promote reptile conservation and improve public image through events and activities.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Liaise with local wildlife groups to encourage reptile awareness.	CBP	local groups	✓	✓	✓	✓	✓	✓	✓	✓	✓

6. BEES, WASPS AND ANTS INDEX

Species Action Plan	Page
Red Wood Ant*	1

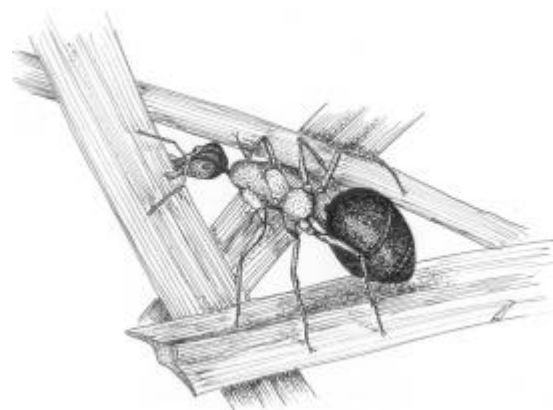
* = UK priority species

RED WOOD ANT *FORMICA RUFA* SPECIES ACTION PLAN

1. INTRODUCTION

The red wood ant has been identified in the UKBAP as a priority species³⁷. A national SAP will be prepared for this species, but at the time of writing it had not been published. Targets and actions for this plan may therefore require amending following publication of the national plan.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S) (1998)	P
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CI TES 1975	-
WCA 1981	-
IUCN Red List of Threatened Animals 1994	lower risk - near threatened



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2. CURRENT STATUS

2.1 UK and Wales

The red wood ant is a characteristic species of open woodlands and is particularly common in southern England¹⁶. The abundance of nests in certain locations in England (often containing many hundreds of nests) has masked a general trend of decline in its distribution. This species is thinly scattered in lowland woods across Wales, and was once probably more common in Welsh woodlands that were coppiced to provide fuel for iron and lead furnaces¹⁶. The status of the red wood ant in Wales is poorly known and from available records in 1994 it appeared that this species had been recorded from only 28 sites in Wales since 1980. Of these sites a third had less than 5 nests and only two sites are known to support colonies with more than 20 nests¹⁶. Further surveys since this time (pers. com. CCW) have identified a total of 950 nests in Wales. Gwent appears to be the stronghold for this species in Wales with 550 nests recorded.

2.2 Caerphilly County Borough

Records for Caerphilly county borough are scarce and appear to be confined to the east and south of the county. Two sites in the east are known to support red wood ant nests, one in broadleaved woodland (Coed Poeth) and the other in conifer plantation (Coed Sara), recorded in 1998 and 1999 and supporting 3 and 5 nests respectively. Both sites lie within SINC's designated by CCBC⁸. Colonies were historically recorded in the south of the county borough but there is only one recent record (1995) in Draethen Woods. The red wood ant is generally found below 200m in Wales, however in Caerphilly county borough they are recorded between 200 and 300m. They could therefore be associated with any dry coniferous or broadleaved woodland habitat which lie below 300m.

2.3 Links with Habitats

Red wood ants require a good food supply, particularly from aphid honeydew and a relatively warm nest temperature. They therefore site their nests in, or within easy reach of, woodland, often on the woodland edge or in sunny clearings or rides. This is particularly true of dense coniferous and broadleaved woodlands, and the species can be found in young plantations before the increase in shade leads to their decline. Wet woodland is not suitable for this species.

- **Deciduous Woodlands** (lowland beech and yew woodland)
- *Planted Coniferous Woodland*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Neglect of woodland management: the red wood ant appears to be very poor at colonising adjacent habitats once its nest site has become over-shaded. This appears to be the major future threat to the red wood ant in the future.
- Neglect of coppice: The cessation of coppicing as a form of woodland management has historically led to a decline in red wood ants in the county borough. Very few woodlands in Caerphilly now actively carry out coppicing as a form of management.
- Invasion of woodland by bracken: Where bracken invades clearings, the fronds create shade reducing the suitability of woodland clearings for red wood ants.
- Use of insecticides near nests: Not thought to be a particular problem in Caerphilly county borough.
- The collection of cocoons as fish or bird food: This may have been a factor in their decline in the past, however because the species is now so rare in the county borough and therefore difficult to find, this is no longer likely to be a current problem.
- Fire: Woodlands and bracken on the valley sides in South Wales are often subjected to burning by children, particularly during the Easter holidays or on sunny weekends in early spring. Red wood ants nests are often inadvertently destroyed.
- Disturbance by grazing stock: Many types of woodland in Caerphilly county borough are open to grazing and this may have led to the decline of this species in some parts of the county.
- Vandalism: Destruction of nests by children may have contributed to their decline.

4. CURRENT ACTION

- 4.1 Two sites known to have red wood ant colonies have been designated as SINCS⁸.
- 4.2 Woodland owners are encouraged to revive traditional management such as coppicing, where appropriate, by Coed Cymru.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not available at the time of writing.

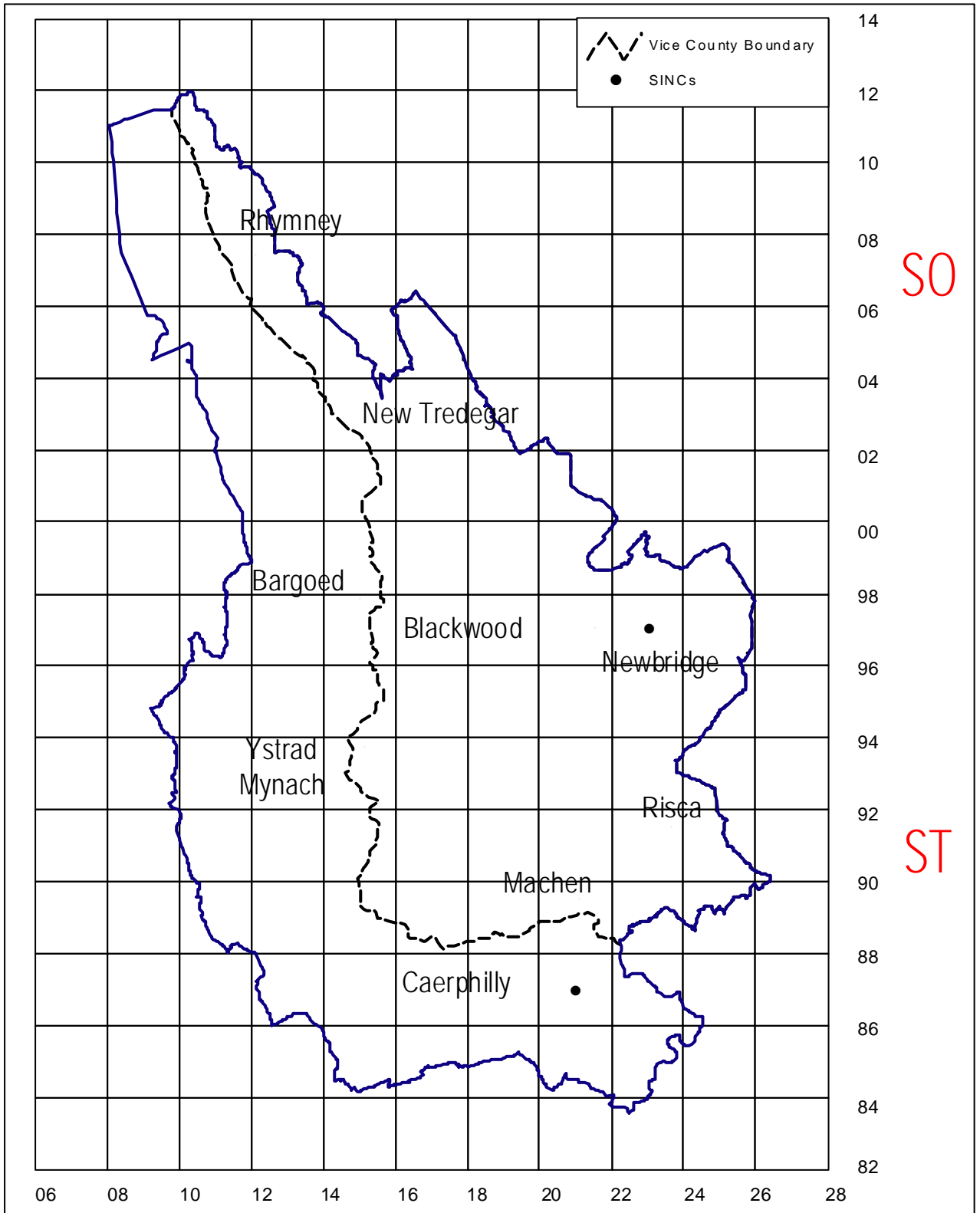
5.2 Caerphilly Objectives and Targets

- 5.2.1 Ensure existing colonies are safeguarded in Caerphilly county borough. (Target: ongoing)
- 5.2.2 Increase habitat suitable to support the red wood ant. (Target: ongoing)

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure Policies and Strategies do not adversely effect existing populations.	CCBC	Coed Cymru FC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Consider the requirements of the red wood ant when reviewing woodland management schemes.	FC	Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Ensure any newly discovered sites supporting the red wood ant are designated as SINc, LNR or other nature reserves.	CCBC	GWT GLWT CCW	✓								✓
6.2 Site Safeguard and Management											
6.2.1 Manage existing sites sympathetically to benefit the red wood ant.	FE	Coed Cymru landowners	✓								
6.2.3 Encourage the maintenance of rides and glades in woodlands close to known populations.	FE	Coed Cymru	✓								
6.2.4 Ensure nests are not damaged during woodland management activities.	FE	Landowners	✓								
6.3 Species Management and Protection											
6.3.1 Determine the location of favoured honeydew producing trees at existing nest sites and ensure they are retained during woodland management activities.	FE	Coed Cymru landowners CCW			✓						
6.4 Advisory											
6.4.1 Raise the awareness of landowners of the red wood ant's requirements in order to promote appropriate management.	CCBC	Coed Cymru FE	✓								
6.5 Future Research and Monitoring											
6.5.1 Search for new sites supporting red wood ant colonies and encourage landowners and members of the public to report sightings of red wood ant nests to the CCBC Ecologist.	CCBC	(CBP)	✓	✓	✓						
6.5.2 Monitor existing populations annually to monitor trends	CCBC	FE landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.3 Create a database for information and support the setting up of an LRC.	CCBC	(CBP)	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Raise awareness of this species in schools near existing sites to discourage vandalism.	CCBC	CCW GWT GLWT Gwk	✓	✓	✓	✓					

MAP 6.1 - RED WOOD ANT



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Atgynhychwyd o fapiad yr Arolwg Ordnans gyda chaniatad rheolwr Llyfrfa ei Mawrhydi hawlfraint y Goron. Mae atgynhychu heb awdurdod yn torri hawlfraint y Goron. Gall hyn arwain at erlyniad neu achos sfil. Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

8. BUTTERFLIES AND MOTHS INDEX

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Buttoned Snout moth*	3
Double Line moth*	5
High Brown Fritillary butterfly*	9
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Pearl-Bordered Fritillary butterfly*	21
Waved Carpet moth*	25

* = UK priority species

BORDERED GOTHIC MOTH *HELIOPHOBUS RETICULATA* SPECIES ACTION PLAN

1. INTRODUCTION

The bordered gothic moth is classified as *Nationally Scarce* and is a UKBAP priority species³⁸.

2. CURRENT STATUS

2.1 UK, Wales and Caerphilly County Borough

The bordered gothic moth is associated with open, mainly calcareous (or possibly with underlying calcareous rock) grassland sites, but the larval ecology in the wild is unknown. The seedpods of *Silene* species, such as the bladder campion (*Silene vulgaris*) and possibly soapwort (*Saponaria officinalis*) are suggested food plants, based on observations in captivity.

This moth was widely distributed, but always local, in England and Wales from Yorkshire southwards, but its range has declined substantially since the 1960s and it is now reported mainly from the Portland area of Dorset, from the Breckland of East Anglia (where it has become scarce in the last decade) and occasional specimens from South Wales.

Most known sites are open to full sun and comprise downland, limestone grassland, rough open ground, sea cliffs or quarries. However, a full countywide survey for this moth is required.

2.2 Links with other action plans

This action plan should be considered in conjunction with lowland calcareous grassland.

- **Species-rich Grasslands** (lowland calcareous grassland)
- *Post-Industrial Land* (quarries)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Changes in the management of calcareous grasslands.
- The unimproved grassland sites this moth favours remain targets for development.

4. CURRENT ACTION

4.1 No current action apart from recording by the Glamorgan Moth Recording Group.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

5.1.1 Maintain the population size at all known sites (Target: ongoing).

5.1.2 Restore viable populations to 5 additional sites nationally, within the historic range, by 2010.

5.2 Caerphilly Objectives and Targets

5.1.2 I identify and maintain the current distribution and range. (Target: 2005 and ongoing)

- 5.2.2 Identify additional sites for species reintroductions by 2008, and seek to restore viable populations to suitable site(s) by 2011.

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Include the requirements of the species, where possible, when preparing or revising prescriptions for relevant agri-environment schemes.	CCW	NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Ensure the habitat requirements of the bordered gothic are taken into account in relevant development policies, plans and proposals.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Seek to designate local sites as SINC where there are significant populations of this moth.	CCBC	CCW									✓
6.2 Site Safeguard and Management											
6.2.1 Ensure all occupied and adjacent suitable habitat is appropriately managed (when requirements are known), e.g. through site management agreements or uptake of relevant agri-environment schemes.	CCW	NAWAD FC	✓	✓	✓						
6.2.2 Increase available habitat wherever possible, on known sites and adjacent sites, and attempt to link up fragments of habitat.	CCW	NAWAD FC CCBC		✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Reintroduce the bordered gothic to suitable sites within the historic range, if necessary, to restore a number of additional viable populations.	CCW	(BC)						✓			✓
6.4 Advisory											
6.4.1 Liaise with landowners and managers to raise awareness of the species and the importance of beneficial management for its conservation.	CCBC	BC CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Undertake surveys to determine the current distribution.	GMRG MBMG	BC CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.2 Pass information gathered during survey work and monitoring of species to a central database for incorporation into national and international databases.	GMRG MBMG	BC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Promote opportunities for the appreciation of the bordered gothic and the conservation issues associated with its habitat.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

BUTTONED SNOOT MOTH *HYPENA ROSTRALIS* SPECIES ACTION PLAN

1. INTRODUCTION

The buttoned snout moth is a UKBAP priority species³⁸ and is classified as *Nationally Scarce*.

2. CURRENT STATUS

2.1 UK and Wales

This moth was formerly widespread throughout southern Britain, including South Wales, and northwards to Lincolnshire. It has declined significantly and now occurs mainly in river valleys in southeast England, such as the Thames Basin, and on estuaries and other scattered sites around the coastal counties of England and South Wales. In South Wales records are widely spread but at a low density.

2.2 Caerphilly County Borough

Buttoned snout larvae feed on hop (*Humulus lupulus*), particularly plants sprawling across the ground. The adults hibernate in man-made shelters, outbuildings and in caves. There is a need for beneficial management on existing sites and a full survey of the county borough to identify all undiscovered populations. It would also be beneficial to the species to restore a whole network of habitat, if necessary with introductions of the species.

2.3 Links with Habitats

- *Wetlands*
- **Urban Habitats** (old buildings, unused urban/industrial land)

3. CURRENT FACTORS AFFECTING THE SPECIES

- In parts of England a decline in commercial hop growing has affected the species.
- In South Wales the main factor is loss of habitat and hibernation sites due to the redevelopment of derelict urban sites.

4. CURRENT ACTION

4.1 No current action, apart from limited recording by light trapping.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

5.1.1 Maintain the population size at all known sites.

5.1.2 Enhance the population size at all known sites by 2010.

5.1.3 Restore self-sustaining populations to 5 additional sites within the historic range by 2010.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Identify and maintain the current population distribution and size (Target: 2005 and ongoing).
- 5.2.2 Enhance the population size at all identified sites (Target: 2008).
- 5.2.3 Identify additional sites within the historic range and seek to restore populations to suitable sites (Target: 2011).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Where possible, include species requirements when preparing or revising prescriptions for agri-environment schemes.	CCW	NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Where possible, include species requirements when preparing or revising prescriptions for derelict land schemes.	WDA	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Ensure all occupied and nearby habitat is managed appropriately, e.g. through site management agreements or uptake of relevant agri-environment schemes.	CCW	NAWAD CCBC	✓		✓				✓		
6.2.2 Increase available habitat on known sites and adjacent sites in an attempt to link up existing fragments of habitat.	CCW	NAWAD CCBC	✓						✓		
6.3 Species Management and Protection											
6.3.1 Ensure habitat requirements are taken into account in relevant development policies, plans and proposals, including the redevelopment of derelict urban sites.	CCBC	WDA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Reintroduce the species to suitable sites to restore a number of additional populations, if necessary.	CCW	BC									✓
6.4 Advisory											
6.4.1 Liaise with landowners/managers to inform them about the species and beneficial management for its conservation.	CCW	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Surveys to identify current distribution.	GMRG MBMG	BC	✓	✓							
6.5.2 Survey to identify suitable habitats in the historic range.	BC	GMRG MBMG									
6.5.3 Pass information gathered during survey and monitoring to a central database for incorporation into national databases.	GMRG MBMG	CCW BC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Promote opportunities for the appreciation of the species and conservation issues associated with its habitat.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

DOUBLE LINE MOTH *MYTHIMNA TURCA* SPECIES ACTION PLAN

1. INTRODUCTION

The double line moth is a UKBAP priority species³⁸ and is classified as *Nationally Scarce*.

2. CURRENT STATUS

2.2 UK and Wales

The double line moth occurs in wet grasslands, woodland clearings and rides. It is able to survive in exposed situations such as open moorland and coastal grassland in southwest England, but in South Wales the species is often associated with rhos pasture. Little is known about its ecology, other than the larvae feed at night on grasses such as common bent, creeping soft-grass and cock's foot. In the UK it is now mainly confined to southern and western Wales, and southwest England (Somerset, Dorset and Cornwall), where it is chiefly associated with wet grassland. It has been recorded in open woodland in southeast England, but has now largely disappeared from this habitat, perhaps due to changes in management (see section 3).

2.2 Caerphilly County Borough

The county of Glamorgan appears to be a stronghold for the species, but to date only two Gwent records are known. In both counties, covering Caerphilly county borough it is probably under recorded, so a full survey is therefore required.

2.3 Links with Habitats

- *Species-rich Grasslands* (rhos pasture – wet grasslands)
- *Deciduous Woodlands* (woodland rides and glades)

2.4 Links with Other Plans

It is likely that the implementation of this action plan will have benefits for other species of wet grasslands, including the *marsh fritillary butterfly*.

3. CURRENT FACTORS AFFECTING THE SPECIES

- Changes in woodland management resulting in the shading out of woodland rides and glades.
- Agricultural improvement of wet grasslands (rhos pasture) and over-grazing.
- Abandonment of traditional cattle grazing.

4. CURRENT ACTION

4.1 No current action apart from recording by the Glamorgan Moth Recording Group.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

5.1.3 Maintain the population size at all known sites (ongoing).

5.1.2 Restore viable populations to 5 former woodland sites by 2010.

5.2 Caerphilly Objectives and Targets

5.2.1 Identify and maintain the current population distribution and range (Target: by 2004 and ongoing).

5.2.2 Identify possible woodland sites for species re-introduction schemes (Target: 2008).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Where possible, include species requirements when preparing or revising prescriptions for agri-environment schemes.	CCW	NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Incorporate the requirements of the species into relevant development policies, plans and proposals.	CCBC	WDA FC NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Seek to designate sites with significant populations as SIN C.	CCBC	CCW									✓
6.2 Site Safeguard and Management											
6.2.1 Ensure all occupied habitat is appropriately managed, e.g. through site management agreements or the uptake of relevant agri-environment schemes.	CCW	NAWAD FC	✓	✓	✓	✓	✓	✓			
6.3 Species Management and Protection											
6.3.1 Reintroduce the double line to a number of suitable former woodland sites.	CCW	FC Coed Cymru						✓			✓
6.3.2 Encourage appropriate management of all rhos pasture, including grazing schemes.	CCW	CCBC	✓	✓	✓	✓	✓	✓			
6.4 Advisory											
6.4.1 Raise the awareness of landowners/managers about the species' requirements and the importance of beneficial management for its conservation.	CCW	NAWAD FC Coed Cymru GWT GLWT	✓		✓						
6.5 Future Research and Monitoring											
6.5.1 Undertake surveys to determine the current status of the species.	GMRG MBMG	BC CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.2 Conduct targeted autecological research to inform habitat management and reintroductions (for 6.3.1).	CCW	BC	✓	✓	✓						
6.5.3 Establish a regular monitoring programme for this species on key sites.	GMRG MBMG	BC CCW		✓	✓	✓					
6.5.4 Pass information gathered during survey/monitoring work to a central database for incorporation into national databases. Support a South Wales LRC.	GMRG MBMG	BC	✓	✓	✓	✓	✓	✓	✓	✓	✓

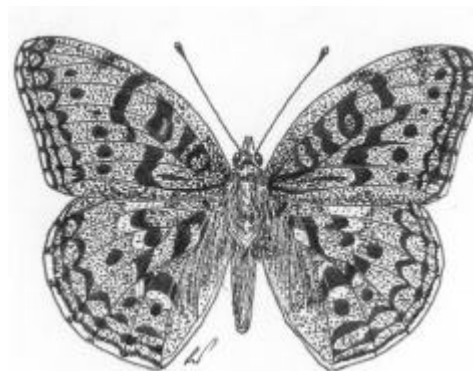
Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.6 Communications and Publicity											
6.6.1 Promote opportunities for the appreciation of the species and conservation issues associated with its habitat. This may be achieved by articles within the appropriate journals and publicity leaflets, etc.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

HIGH BROWN FRITILLARY *ARGYNNIS ADIPPE* SPECIES ACTION PLAN

1. INTRODUCTION

The high brown fritillary butterfly is a UKBAP priority species in severe decline³⁹. It occurs in Glamorgan and may still exist in Caerphilly county borough as specialised habitat is still found in the area.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	P
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CI TES 1975	-
WCA 1981	Sch. 5
Other Species Status	RDB Insects - vulnerable



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2. CURRENT STATUS

2.1 UK and Wales

The high brown fritillary was formerly widespread and locally abundant across much of England and Wales. It has, however, declined rapidly in the last 50 years and is now extinct over 94% of its former range. In 1994 only 51 definite colonies were known, many of these were very small and possibly not viable in isolation. The remaining centres of distribution are the bracken slopes of Dartmoor, Exmoor, Herefordshire and Glamorgan. It also occupies the coppiced woodland limestone outcrops of Morecombe Bay. It is still widespread across Europe, although it may have suffered local declines.

2.2 Caerphilly County Borough

High brown fritillaries may still occur in Caerphilly county borough, although confirmed records have not been made since 1992. The coedcae/ffridd of the valley sides in the county borough are a favoured habitat. Violets thrive in the summer bracken canopy, particularly on those with a warm microclimate usually associated with a southerly aspect. In the late 1980s records regularly flowed from the Brynawel area, where extensive areas of bracken still occur. There are also unconfirmed records from other parts in the south and into neighbouring boroughs. Adults are strong fliers and are normally observed on nectar sources such as marsh thistles or buddleia, not necessarily adjacent to breeding locations. The breeding location of the adults previously observed in the Brynawel area has not been confirmed.

2.3 Links with Habitats

- *Coedcae/ffridd*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Reduction of coppicing: In addition to bracken slopes, the species used to thrive in coppiced woodland generally, not just that on limestone outcrops. The decline in coppicing has left the species dependent in Wales and south-western Britain on bracken habitats.

- Agricultural improvement: Intensification of agriculture combined with a negative perception of bracken has led to considerable loss of this habitat type. Until just a few years ago FC were still actively encouraging removal of bracken in Wales.
- Cessation of grazing and traditional forms of bracken management: Bracken stands need to be extensively grazed, preferably by cattle, to prevent them becoming too dense thus shading out the violet food plants on which the breeding cycle depends. The shift in balance of stock to sheep and their overall huge increase in numbers in Wales in the last twenty years has tended to lead to two equally unfavourable extremes: either sparse and overgrazed bracken slopes lacking diversity of plant species (including violets) or dense impenetrable bracken stands where the violets are shaded out. Also bracken cutting for bedding has declined substantially, again leading to too dense stands.
- Climate Change: Since 1996 a series of unfavourable seasons of weather (warm, damp winter and spring, followed by wetter summers) has caused dramatic falls in the numbers of adults recorded from all monitored sites in the UK. In South Wales, over this period, the species appears to have declined in adult numbers by >90% and disappeared from some colonies discovered in the mid 1990s, leaving one known breeding colony near Bridgend.

4. CURRENT ACTION

- 4.1 Arrangements are being made to provide training in assessment of high brown fritillary habitat and its condition. This should enable more targeted survey work to begin.
- 4.2 Leaflets are now available from Butterfly Conservation (BC) to publicise the potential of bracken habitats for fritillary butterflies.
- 4.3 BC high brown fritillary training days; e.g. habitat requirements.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Halt the current decline and maintain at least 50 self-sustaining populations.
- 5.1.2 Restore suitable habitat within its former range and encourage up to 10 additional sites by 2005, using re-introductions if necessary.
- 5.1.3 Ensure a minimum number of colonies are protected within SSSIs.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Survey and assess condition of potential habitat, particularly the Brynawel area (Target: 2003).
- 5.2.2 Restore and manage potential habitat into good condition (Target: 2005 and ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure Policies and Strategies do not adversely affect potential or known habitat.	CCW	CCBC WDA FC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Consider the requirements of high brown fritillaries when reviewing agri-environment schemes, with particular attention to the issue of bracken control.	CCW	NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Following further survey and research (at UK level) identify the ecological requirements of this species and encourage the uptake of incentives for favourable land management on existing and potential sites.	BC	CCW CCBC FC		✓							
6.2 Site Safeguard and Management											
6.2.1 Encourage favourable management of habitat for the species on all confirmed and potential sites.	CCW	CCBC FC		✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Determine suitable management of particular sites and habitats, depending on the results obtained after completion of necessary research (6.5.1 and 6.5.2).	CCBC	farmers and landowners			✓	✓	✓	✓	✓	✓	✓
6.3.2 Continue to implement wildlife legislation.	Gwent Police	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Raise the awareness of landowners and managers to habitat and species requirements in order to promote management for high browns.	BC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey habitat condition of the significant areas of bracken in the county borough particularly those well-established areas with a warm (close to southerly) aspect below 150m.	BC	CCW CCBC BC	✓								
6.5.2 Survey the areas in 6.5.1 for adult fritillary butterflies including sites with historical records of any such species (licensed specialists).	BC	CCW		✓							
6.5.3 Encourage farmers, walkers and members of the public to report any fritillary butterfly sightings promptly.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Promote the importance and wildlife value of bracken slopes and coedcae/ffridd for this butterfly species.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

MARSH FRITILLARY *EURODRYAS AURINIA* SPECIES ACTION PLAN

1. INTRODUCTION

The marsh fritillary butterfly is a UKBAP priority species³⁹ still occurring in much of Wales, particularly the south and west. It is a typical butterfly of the classic Welsh landscape habitat of purple moor-grass and rush pasture (known in Wales and this LBAP as "rhos pasture").

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	P
EC Habitats Directive	Annex II a
Conservation Regs 1994	Sch. 2
Berne Convention 1982	App. II
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Sch. 5



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2. CURRENT STATUS

2.1 UK and Wales

The marsh fritillary butterfly is declining in almost every European country and is now extinct in northern Belgium. The UK is now believed to be one of the major European strongholds for the species, but even here it has declined substantially over the last 150 years. In Britain, its range has reduced by over 62%, and it has recently disappeared from most of eastern England and eastern Scotland. It is still quite widespread in parts of southwest England and Wales, but colonies are estimated to be disappearing at a rate of well over 10% per decade.

In the early 1990s there were thought to be 111 colonies in Wales, of which at least 35 were in Glamorgan and 3 in Gwent. More recent records show that there are 140 colonies extant in Wales, with 40 sites in Glamorgan but one appears to have been lost in Gwent. Recent work by CCW shows that, of the significant southeast Wales population, a very high proportion of sites are neither protected nor suitably managed.

The marsh fritillary breeds in two main habitats, damp neutral or acid grasslands (rhos pastures) and dry chalk and calcareous grasslands. The former type tends to be used regularly in Wales. Colonies are mostly small and prone to extinction; therefore extensive networks of habitat patches that permit re-colonisation are essential to their long-term survival.

2.1 Caerphilly County Borough

There are three known regular sites for the marsh fritillary in Caerphilly county borough, where it is at the eastern edge of its current Welsh range. One of these sites is one of only a handful in Wales that are classified as "very large" (more than 500 adults or more than 250 larval webs found in a season). CCBC is a significant landowner on all three sites.

2.2 Links with Habitats

This species predominantly utilises rhos pasture habitat in Wales. It does breed to some extent in other habitats that contain its food plant - devil's bit scabious (*Succisa pratense*).

- **Species-rich Grasslands (rhos pasture)**, neutral grassland; particularly MG5c)
- **Heathland** (wet heath (mainly M15 in Wales, although M16 does occur)
- Mosaics of mire (M25, etc) and acid grasslands (U4) with bracken.

3. CURRENT FACTORS AFFECTING THE SPECIES

- Agricultural improvement of marshy (and other) grasslands.
- Development on suitable habitats, including:
 - afforestation
 - coal open-cast extraction
 - landfill operations
 - land reclamation schemes
 - roads
 - residential housing
 - employment related development
- Changes in grazing stock and practice, including:
 - BSE crisis causing decline of extensive cattle grazing
 - Huge increase in sheep grazing (sheep selectively graze the foodplant)
 - Neglect or loss of grazing altogether causing scrub invasion
 - Promotion of foreign cattle breeds, less suited than hardy Welsh blacks to grazing purple moor grass dominated habitat
- Increasing fragmentation and isolation of habitat.
- Lack of full survey data on habitat suitability and condition.
- Lack of awareness of importance of habitat.

4. CURRENT ACTION

- 4.1 The three currently known sites are all identified as SINCs, but two of them are also SSSIs and one is also a candidate SAC.
- 4.2 Discussions are underway between CCW and CCBC to arrange appropriate grazing/other management at the one "large" site.
- 4.3 The "large" site has just been designated as a candidate (European) Special Area of Conservation (SAC) and is being monitored annually by CCW.
- 4.4 Some survey of other potential habitat has been carried out by CCW and is currently being evaluated.
- 4.5 There are plans to survey habitat in the extreme west and south of Caerphilly county borough.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Halt current decline and maintain the present range of the species.
- 5.1.2 Maintain at least five large populations within 20 pre-determined key areas.

5.1.3 Ensure a minimum number of colonies are protected within SSSI s.

5.2 Caerphilly Objectives and Targets

5.2.1 Ensure favourable habitat management on all known sites (Target: 2004).

5.2.2 Survey all potential habitat, assess its condition and, where appropriate, implement or encourage measures to maintain in appropriate condition (Target: 2005).

5.2.3 Protect all suitable habitat including habitat which is not necessarily occupied by marsh fritillaries in order to provide additional sites (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Promote favourable land management on occupied grasslands and habitats of a suitable/potentially suitable condition within dispersal range of existing or recent populations, through management agreements and appropriate schemes (Tir Gofal).	CCW	CCBC NAWAD BC NFU FUW Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Discourage the afforestation of occupied sites, sites within dispersal distance of them and indeed other sites of >0.5 ha of potentially suitable habitat.	FC	CCW CCBC NAWAD Coed Cymru	✓	✓							
6.1.3 Set the criteria for and identify key areas within which large populations will be maintained.	CCW	CCBC BC	✓	✓							
6.2 Site Safeguard and Management											
6.2.1 Bring all known CCBC sites into favourable management by 2004.	CCBC	CCW	✓	✓							
6.2.2 Encourage favourable management of all known sites and potential sites, to encourage the formation of a network, a significant percentage of which are, at any one time, in good condition for the species.	CCBC	CCW BC NFU FUW Coed Cymru			✓						
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Ensure information on species distribution and appropriate habitat management is available to all those who do or could play a role in its conservation and recovery.	CCW	CCBC BC Coed Cymru NFU FUW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey all potential habitat, assess its condition and make recommendations for maintenance measures.	BC	CCW CCBC			✓						

Action	Key Partners		Year to be complete or in place by:									
	Lead	Partners	2003	4	5	6	7	8	9	10	11	
6.5 Future Research and Monitoring (continued)												
6.5.2 Encourage further research on habitat management and assess the impact of such management on other important species associated with the same habitats.	BC	CCW CCBC GWT GLWT				✓						
6.5.3 Carry out regular monitoring of a network of sites being actively managed.	BC	CCW CCBC				✓	✓	✓	✓	✓	✓	✓
6.5.4 Pass information gathered during survey and monitoring of this species to JNCC or BRC via CCW so it can be incorporated into national databases, and support a South Wales LRC.	BC	CCW CCBC			✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity												
6.6.1 Promote opportunities for the appreciation and conservation of the marsh fritillary and its habitat, and use the butterfly to illustrate the problems of habitat fragmentation.	BC	CCBC CCW GWT GLWT NFU FUW FC Coed Cymru NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

OTHER MOTHS SPECIES ACTION PLAN

1. INTRODUCTION

This action plan covers 12 species which are not UKBAP priority species, but for which modern (post-1970) records exist and are felt to merit action, either because they are nationally notable (Na or Nb) or are important in a Welsh context (medium priority)²¹ (L). These are:

• Bleached Pug	<i>Eupithecia expallidata</i>	Nb
• Blomer's Rivulet	<i>Discoloxia blomeri</i>	Nb
• Broom-Tip	<i>Chesias rufata</i>	Nb
• Cloaked Carpet	<i>Euphyia biangulata</i>	Nb
• Devon Carpet	<i>Lampropteryx otregiata</i>	Nb
• Great Oak Beauty	<i>Boarmia roboaria</i>	Nb
• Lead-Coloured Pug	<i>Eupithecia plumbeolata</i>	Nb
• Little Thorn	<i>Cepphis advennaria</i>	Nb
• Northern Drab	<i>Orthosia opima</i>	L
• Satin Lutestring	<i>Tetheella fluctuosa</i>	L
• Thyme Pug	<i>Eupithecia distinctaria</i>	Nb
• White-Marked	<i>Cerastis leucographa</i>	L

2. CURRENT STATUS

The majority of these moth species are associated with mature, fairly open, semi-natural woodland, the rest vary between heathland, woodland and other habitats, including urban.

2.1 Bleached Pug

Woodland rides and clearings are an important habitat for this species, where it feeds on goldenrod flowers. It is under-recorded since it is a small, not easily identified moth.

2.2 Blomer's Rivulet

This is a Wych Elm feeder, hence found in woodlands with this tree species. South Wales and the Wye valley are well-known areas for this species. Although less numerous than it was prior to Dutch Elm Disease in the 1970s, it still appears to be well established.

2.3 Broom-tip

This moth is mainly found on rough grassland, heathland, and "waste ground", where broom (*Cytisus scoparius*) flourishes. It is declining due to loss of habitat.

2.4 Cloaked Carpet

The cloaked carpet moth is found in mature woodland, particularly edge habitats, and mature hedgerows, where it feeds on chickweed and stitchwort. After years of a significant decrease in numbers, there are recent signs of a slight recovery in South Wales.

2.5 Devon Carpet

This species is associated with damp woodland, where it feeds on common marsh bedstraw (*Galium palustre*) and possibly other *Galium* species. It is probably currently under-recorded because of its similarity to the water carpet moth.

2.6 Great Oak Beauty

This species is an oak feeder, often to be found in oak woodlands.

2.7 Lead-coloured Pug

This species is found in sheltered heathland and open woodland where its food plant the common cow-wheat (*Melampyrum pratense*) occurs. A flourishing colony used to occur at Penllwyn Grasslands SSSI in Caerphilly county borough.

2.8 Little Thorn

This species feeds on bilberry, and so occurs in open woodlands where it flourishes. However, where bilberry does not occur the alternative food plants are currently unknown. Its population is decreasing.

2.9 Northern Drab

The northern drab is found on downland and heathland, and on a variety of food plants such as willow, birch, ragwort and mugwort. However, it is particularly scarce in the Gwent area, at the edge of its range.

2.10 Satin Lutestring

This moth occurs mainly in woodland rides and open woods containing birches, on which it feeds. It is of very local occurrence, with South Wales representing the nation stronghold, and currently has a stable population in Caerphilly county borough.

2.11 Thyme Pug

Mainly found in rocky areas and on limestone hills where the larvae feed on the flowers of thyme. It may be able to subsist on garden plants.

2.12 White-marked

The white-marked moth is found in deciduous woodland, and has a mixed diet, for example of willow, dock and stitchwort. It is uncommon, with South Wales representing the national stronghold for this species.

2.13 Links with Habitats

- *Deciduous Woodlands* (wet woodland, upland oak woodland; woodland rides and glades)
- *Urban* (e.g. gardens, unused urban/industrial land ("brownfield sites"))
- *Wildlife Corridors* (hedgerows)
- *Heathland*
- *Post-Industrial Land* (quarries, "waste ground")

3. CURRENT FACTORS AFFECTING THESE SPECIES

- Open woodland is important for a number of these moths, eight of them have been affected by the disappearance of traditional coppicing and wide woodland rides.
- The planting of conifers has also reduced the suitability of habitats.
- Loss of rough areas where the food plants grow to agriculture, forestry and development (**broom-tip, lead-coloured pug**).

4. CURRENT ACTION

4.1 In South Wales, there has been limited survey work by light trapping.

5. OBJECTIVES AND TARGETS**5.1 UK Objectives and Targets**

Not applicable for these species.

5.2 Caerphilly Objectives and Targets

5.2.1 Enhance the overall population size of each species in the county borough by 2011.

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Encourage appropriate woodland management in occupied sites, for e.g. through the Woodland Grant Scheme.	FC	Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Where appropriate, include the requirements of the species when preparing or revising prescriptions for woodland grant schemes.	FC	Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Where possible, ensure all occupied habitats are appropriately managed, for example through site management agreements or uptake of relevant woodland grant schemes.	FC	Coed Cymru WDA CCBC	✓								✓
6.2.2 Where possible, enhance habitat at known sites, where most of the potentially suitable woodland is in the responsibility of Forest Enterprise.	FE	CCBC		✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Ensure the habitat requirements of the broom-tip and lead-coloured pug are considered in relevant development policies, plans and proposals for urban sites.	CCBC	WDA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
None proposed at this time.	-	-									
6.5 Future Research and Monitoring											
6.5.1 Continue to monitor the populations and distribution of these species in the county borough.	GMRG MBMG	BC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
None proposed at this time.	-	-									

PEARL-BORDERED FRITILLARY *BOLORIA EUPHROSYNE* SPECIES ACTION PLAN

1. INTRODUCTION

The pearl-bordered fritillary butterfly is a UKBAP priority species in rapid decline³⁹, and has not been recorded in Glamorgan since 1990 at its last known site in Caerphilly county borough. It has very specialised habitat requirements, and some suitable habitat may still occur in the area.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	P
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Sch. 5
Other Species Status	Nationally Notable



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2. CURRENT STATUS

2.1 UK and Wales

The pearl-bordered fritillary was formerly widespread and locally abundant across much of Britain, but it has declined very rapidly in the last 50 years in the south of England and Wales. It is still widespread and abundant in northwest England and in the Highlands of Scotland. In both southern England and Wales few large colonies are known, many are small and highly vulnerable to extinction with a loss rate typically of around 40% per decade.

In England, the species breeds both in coppiced woodland and on bracken slopes with violets. In Wales its remaining colonies are scattered, on bracken slopes and commons, with a small number in coastal Ceredigion, an apparently isolated site in Radnorshire and several colonies in Montgomeryshire. It does however still occur in Herefordshire and Gloucestershire.

2.2 Caerphilly County Borough

Pearl-bordered fritillaries may still occur in Caerphilly county borough, although given the loss in the last 15 years of most other sites in southeast Wales, it seems very unlikely. In the late 1980s records regularly flowed from Draethen Forest where it appeared to breed in a clearing with a northerly aspect with scattered bracken and unshaded rock strewn areas. This type of habitat is known to be suitable only for a temporary period for this species and it may be that it colonised from previously more suitable habitat in the area.

Potentially suitable extensive areas of bracken still occur in Caerphilly county borough, particularly on slopes with a warm microclimate usually associated with a somewhat southerly aspect. Areas with violets thriving in the summer bracken canopy are favoured. The ffridd/coedcae of the valley sides and other bracken stands may be particularly important for this species.

2.3 Links with habitat

- *Ffridd/Coedcae* (often on/adjacent to *Common Land*)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Reduction of coppicing and other changes in woodland management practice leading to fewer clearings which are farther apart, consequently impeding colonisation. The decline in coppicing has left the species dependent on well-drained bracken habitats in Wales and southwest Britain.
- Cessation of grazing and traditional forms of bracken management: bracken stands need to be extensively grazed, preferably by cattle, to prevent them becoming too dense thus shading out the violet foodplants on which the breeding cycle depends. The shift in balance of stock to sheep and their overall huge increase in numbers in Wales in the last twenty years has tended to lead to two equally unfavourable extremes: either sparse and overgrazed bracken slopes lacking diversity of plant species (including violets) or dense impenetrable bracken stands where the violets are shaded out. Also bracken cutting for bedding has declined substantially, again leading to too dense stands.
- Agricultural improvement: intensification of agriculture combined with a negative perception of bracken has led to considerable loss of this habitat type. Until just a few years ago the FC were still actively encouraging removal of bracken in Wales.

4. CURRENT ACTION

- 4.1 Arrangements are being made to provide training in assessment of high brown fritillary habitat (which is similar to that for pearl-bordered fritillary) and its condition. This should enable more targeted survey work to begin, potentially of benefit for both species.
- 4.2 Leaflets are now available from BC to publicise the potential of bracken habitats for fritillary butterflies.
- 4.3 BC are currently surveying suitable habitat on behalf of Rhondda Cynon Taff County Borough Council. Some sites are located within Caerphilly county borough.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Halt the current decline by the year 2005, through viable networks of populations in core areas of distribution.
- 5.1.2 Encourage restoration of suitable habitats throughout its former range with the long-term aim of re-introducing the species to at least 3 sites per previously occupied county.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Survey and assess condition of potential habitat in Caerphilly county borough, particularly the Draethen area (Target: 2004).
- 5.2.2 Restore and manage potential habitat into good condition (Target: 2006).

- 5.2.3 Re-introduce the species to suitable sites where habitat in good condition has been identified and is actively maintained. (Target: 2011)*

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure Policies and Strategies do not adversely affect potential or known habitat.	CCBC	CCW WDA FC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Consider the requirements of pearl-bordered fritillaries when reviewing agri-environment schemes, with particular attention to the issue of bracken control.	CCW	NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Encourage favourable management of sites in recently occupied and potentially suitable areas, including appropriate woodland management, e.g. through the Woodland Grant Scheme.	BC	CCW CCBC Coed Cymru CMCS	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Following feasibility assessments and habitat restoration, seek to restore populations to at least 3 sites in Caerphilly county borough. Discuss with BGCBC the opportunity for coordinated action in the neighbouring area where the species also formerly occurred in last 20 years.*	BC	BGCBC CCBC CCW			✓	✓	✓	✓	✓	✓	✓
6.3.2 Continue to implement wildlife legislation.	Gwent Police	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Raise the awareness of landowners and managers of pearl-bordered fritillary conservation requirements in order to promote favourable habitat management.	BC	CCBC CCW NFU FUW NAWAD CMCS	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey significant areas of bracken in the county borough for potential habitat, particularly those well-established and well-drained areas with a warm (close to southerly) aspect below 150m.	BC	-	✓	✓							
6.5.2 Encourage farmers, walkers and members of the public to report any fritillary butterfly sightings promptly.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

* This objective and subsequent action should be considered carefully in the light of survey and habitat condition assessment results, together with a realistic view of restoration and management success, in accordance with the current version of Butterfly Conservation's *Policy on Introductions and Re-introductions*⁵ and in consultation with the Glamorgan Biodiversity Advisory Group (GLBAG).

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.6 Communications and Publicity											
6.6.1 Promote the importance and wildlife value of bracken slopes and coedcae/ffridd for this butterfly species, e.g. through the production of a 'Biodiversity Briefing Note'.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

WAVED CARPET MOTH *HYDRELIA SYLVATA* SPECIES ACTION PLAN

1. INTRODUCTION

The waved carpet moth is classified as *Nationally Scarce* and is a UKBAP priority species³⁸.

2. CURRENT STATUS

2.1 UK, Wales, and Caerphilly County Borough

The waved carpet occurs in coppiced woods with a long history of active coppice, and in open sunny areas with younger growth of the larval food plants present. The food plants are alder, birch, willow and blackthorn, and, in Kent, sweet chestnut. The adult moths fly in June and July, resting by day among bushes and occasionally on tree-trunks. The larvae feed between July and August in most years and pupate in September to over-winter as a pupa in an earthen cell until emergence the following July. In Britain the waved carpet is a highly localised species with post-1980 records concentrated in five main areas: Devon, Cornwall and Dorset; the borders of Hampshire, Sussex and Surrey; East Sussex and Kent; Gloucestershire and south Wales.

Historically this species was recorded over much of England and Wales but the species has declined following the widespread cessation of active coppice management. The moth appears to exist at low density over much of its range and is likely to be under-recorded, for instance, it probably occurs more widely in Wales than records suggest.

2.2 Associated Habitats

- *Deciduous Woodlands* (lowland beech and yew woodland)

2.3 Links with Other Species

It is likely that implementation of this action plan will have benefits for other species of *lowland coppiced woodlands*, including the **drab looper** (*Minoa murinata*), the **orange upperwing** (*Jodia croceago*), the **clay fan-foot** (*Paracolax tristalis*), the **argent and sable** (*Rheumaptera hastate*), the **square-spotted clay** (*Xestia rhomboidea*) and the **common fan-foot** (*Pechipogo strigilata*).

3. CURRENT FACTORS AFFECTING THE SPECIES

- The loss of young re-growth due to the decline of coppicing in the lowlands.
- The loss of broadleaved woodland due to replanting with conifers.

4. CURRENT ACTION

- 4.1 Forestry Commission *Coppice for Butterflies* Challenge (Woodland Improvement Grant) scheme has targeted five areas; the Wye Valley, Sussex/Surrey/Hampshire, Western Greensand, Southern High Weald, Morecambe Bay Limestone and East Kent.
- 4.2 In South Wales there has been limited survey work by light trapping.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

5.1.1 Maintain the range of this species, concentrating particularly on strong populations within the core areas.

5.1.2 Enhance the overall population size in each occupied area by 2010.

5.2 Caerphilly Objectives and Targets

5.2.1 Identify and maintain the current population distribution and range (Target: ongoing).

5.2.2 Identify existing sites requiring protection and appropriate management to enhance the occupied area in the county borough (Target: 2011).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Encourage appropriate woodland management in occupied sites, for example through the Woodland Grant Scheme.	FC	Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Where appropriate, include the requirements of the species when preparing or revising prescriptions for woodland grant schemes.	FC	Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Seek to designate important waved carpet sites as SIN C.	CCBC	CCW									✓
6.1.4 Consider notifying SSSIs on sites holding key populations of the species where this is necessary to secure their long term protection and appropriate management.	CCW	CCBC	✓								✓
6.2 Site Safeguard and Management											
6.2.1 Where possible ensure that occupied habitat is appropriately managed, for example through site management agreements or uptake of relevant woodland Grant Schemes.	FC	CCW Coed Cymru	✓								✓
6.2.2 Where possible, increase the available habitat at known sites and attempt to link up existing fragments of habitat. Most of the suitable habitat is the responsibility of FE, with whom particularly close liaison should be established.	CCW	FE FC Coed Cymru CCBC		✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
None proposed at this time.											
6.4 Advisory											
6.4.1 Advise landowners and managers of the presence of this species and the importance of beneficial management for its conservation.	CCW	NAWAD FUW NFU	✓	✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.5 Future Research and Monitoring											
6.5.1 Undertake surveys to determine current distribution.	BC	GMRG MBMG CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.2 Establish a regular monitoring programme for the species.	BC	GMRG MBMG		✓	✓	✓					
6.5.3 Assess the impact of the <i>Coppice for Butterflies Challenge</i> on this species.	BC	CCW			✓	✓	✓				
6.5.4 Conduct targeted autecological research to inform habitat management, including the age of coppice after cutting which is preferred by the moth, the length of time such cut areas remain suitable, mobility and population structure.	CCW	BC	✓	✓	✓						
6.5.5 Pass information gathered during survey and monitoring of this species to a central database for incorporation in national and international databases. Support an LRC for South Wales.	BC	GMRG MBMG	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Promote opportunities for the appreciation of the species and the conservation issues associated with its habitat. This should be achieved via articles within appropriate journals as well as by a publicity leaflet.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

BORDERED GOTHIC MOTH *HELIOPHOBUS RETICULATA* SPECIES ACTION PLAN

1. INTRODUCTION

The bordered gothic moth is classified as *Nationally Scarce* and is a UKBAP priority species³⁸.

2. CURRENT STATUS

2.1 UK, Wales and Caerphilly County Borough

The bordered gothic moth is associated with open, mainly calcareous (or possibly with underlying calcareous rock) grassland sites, but the larval ecology in the wild is unknown. The seedpods of *Silene* species, such as the bladder campion (*Silene vulgaris*) and possibly soapwort (*Saponaria officinalis*) are suggested food plants, based on observations in captivity.

This moth was widely distributed, but always local, in England and Wales from Yorkshire southwards, but its range has declined substantially since the 1960s and it is now reported mainly from the Portland area of Dorset, from the Breckland of East Anglia (where it has become scarce in the last decade) and occasional specimens from South Wales.

Most known sites are open to full sun and comprise downland, limestone grassland, rough open ground, sea cliffs or quarries. However, a full countywide survey for this moth is required.

2.2 Links with other action plans

This action plan should be considered in conjunction with lowland calcareous grassland.

- **Species-rich Grasslands** (lowland calcareous grassland)
- *Post-Industrial Land* (quarries)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Changes in the management of calcareous grasslands.
- The unimproved grassland sites this moth favours remain targets for development.

4. CURRENT ACTION

4.1 No current action apart from recording by the Glamorgan Moth Recording Group.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

5.1.1 Maintain the population size at all known sites (Target: ongoing).

5.1.2 Restore viable populations to 5 additional sites nationally, within the historic range, by 2010.

5.2 Caerphilly Objectives and Targets

5.1.2 I identify and maintain the current distribution and range. (Target: 2005 and ongoing)

- 5.2.2 Identify additional sites for species reintroductions by 2008, and seek to restore viable populations to suitable site(s) by 2011.

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Include the requirements of the species, where possible, when preparing or revising prescriptions for relevant agri-environment schemes.	CCW	NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Ensure the habitat requirements of the bordered gothic are taken into account in relevant development policies, plans and proposals.	CCBC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Seek to designate local sites as SINC where there are significant populations of this moth.	CCBC	CCW									✓
6.2 Site Safeguard and Management											
6.2.1 Ensure all occupied and adjacent suitable habitat is appropriately managed (when requirements are known), e.g. through site management agreements or uptake of relevant agri-environment schemes.	CCW	NAWAD FC	✓	✓	✓						
6.2.2 Increase available habitat wherever possible, on known sites and adjacent sites, and attempt to link up fragments of habitat.	CCW	NAWAD FC CCBC		✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Reintroduce the bordered gothic to suitable sites within the historic range, if necessary, to restore a number of additional viable populations.	CCW	(BC)						✓			✓
6.4 Advisory											
6.4.1 Liaise with landowners and managers to raise awareness of the species and the importance of beneficial management for its conservation.	CCBC	BC CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Undertake surveys to determine the current distribution.	GMRG MBMG	BC CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.2 Pass information gathered during survey work and monitoring of species to a central database for incorporation into national and international databases.	GMRG MBMG	BC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Promote opportunities for the appreciation of the bordered gothic and the conservation issues associated with its habitat.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

BUTTONED SNOOT MOTH *HYPENA ROSTRALIS* SPECIES ACTION PLAN

1. INTRODUCTION

The buttoned snout moth is a UKBAP priority species³⁸ and is classified as *Nationally Scarce*.

2. CURRENT STATUS

2.1 UK and Wales

This moth was formerly widespread throughout southern Britain, including South Wales, and northwards to Lincolnshire. It has declined significantly and now occurs mainly in river valleys in southeast England, such as the Thames Basin, and on estuaries and other scattered sites around the coastal counties of England and South Wales. In South Wales records are widely spread but at a low density.

2.2 Caerphilly County Borough

Buttoned snout larvae feed on hop (*Humulus lupulus*), particularly plants sprawling across the ground. The adults hibernate in man-made shelters, outbuildings and in caves. There is a need for beneficial management on existing sites and a full survey of the county borough to identify all undiscovered populations. It would also be beneficial to the species to restore a whole network of habitat, if necessary with introductions of the species.

2.3 Links with Habitats

- *Wetlands*
- **Urban Habitats** (old buildings, unused urban/industrial land)

3. CURRENT FACTORS AFFECTING THE SPECIES

- In parts of England a decline in commercial hop growing has affected the species.
- In South Wales the main factor is loss of habitat and hibernation sites due to the redevelopment of derelict urban sites.

4. CURRENT ACTION

4.1 No current action, apart from limited recording by light trapping.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

5.1.1 Maintain the population size at all known sites.

5.1.2 Enhance the population size at all known sites by 2010.

5.1.3 Restore self-sustaining populations to 5 additional sites within the historic range by 2010.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Identify and maintain the current population distribution and size (Target: 2005 and ongoing).
- 5.2.2 Enhance the population size at all identified sites (Target: 2008).
- 5.2.3 Identify additional sites within the historic range and seek to restore populations to suitable sites (Target: 2011).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Where possible, include species requirements when preparing or revising prescriptions for agri-environment schemes.	CCW	NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Where possible, include species requirements when preparing or revising prescriptions for derelict land schemes.	WDA	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Ensure all occupied and nearby habitat is managed appropriately, e.g. through site management agreements or uptake of relevant agri-environment schemes.	CCW	NAWAD CCBC	✓		✓				✓		
6.2.2 Increase available habitat on known sites and adjacent sites in an attempt to link up existing fragments of habitat.	CCW	NAWAD CCBC	✓						✓		
6.3 Species Management and Protection											
6.3.1 Ensure habitat requirements are taken into account in relevant development policies, plans and proposals, including the redevelopment of derelict urban sites.	CCBC	WDA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Reintroduce the species to suitable sites to restore a number of additional populations, if necessary.	CCW	BC									✓
6.4 Advisory											
6.4.1 Liaise with landowners/managers to inform them about the species and beneficial management for its conservation.	CCW	CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Surveys to identify current distribution.	GMRG MBMG	BC	✓	✓							
6.5.2 Survey to identify suitable habitats in the historic range.	BC	GMRG MBMG									
6.5.3 Pass information gathered during survey and monitoring to a central database for incorporation into national databases.	GMRG MBMG	CCW BC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Promote opportunities for the appreciation of the species and conservation issues associated with its habitat.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

DOUBLE LINE MOTH *MYTHIMNA TURCA* SPECIES ACTION PLAN

1. INTRODUCTION

The double line moth is a UKBAP priority species³⁸ and is classified as *Nationally Scarce*.

2. CURRENT STATUS

2.2 UK and Wales

The double line moth occurs in wet grasslands, woodland clearings and rides. It is able to survive in exposed situations such as open moorland and coastal grassland in southwest England, but in South Wales the species is often associated with rhos pasture. Little is known about its ecology, other than the larvae feed at night on grasses such as common bent, creeping soft-grass and cock's foot. In the UK it is now mainly confined to southern and western Wales, and southwest England (Somerset, Dorset and Cornwall), where it is chiefly associated with wet grassland. It has been recorded in open woodland in southeast England, but has now largely disappeared from this habitat, perhaps due to changes in management (see section 3).

2.2 Caerphilly County Borough

The county of Glamorgan appears to be a stronghold for the species, but to date only two Gwent records are known. In both counties, covering Caerphilly county borough it is probably under recorded, so a full survey is therefore required.

2.3 Links with Habitats

- *Species-rich Grasslands* (rhos pasture – wet grasslands)
- *Deciduous Woodlands* (woodland rides and glades)

2.4 Links with Other Plans

It is likely that the implementation of this action plan will have benefits for other species of wet grasslands, including the *marsh fritillary butterfly*.

3. CURRENT FACTORS AFFECTING THE SPECIES

- Changes in woodland management resulting in the shading out of woodland rides and glades.
- Agricultural improvement of wet grasslands (rhos pasture) and over-grazing.
- Abandonment of traditional cattle grazing.

4. CURRENT ACTION

4.1 No current action apart from recording by the Glamorgan Moth Recording Group.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

5.1.3 Maintain the population size at all known sites (ongoing).

5.1.2 Restore viable populations to 5 former woodland sites by 2010.

5.2 Caerphilly Objectives and Targets

5.2.1 Identify and maintain the current population distribution and range (Target: by 2004 and ongoing).

5.2.2 Identify possible woodland sites for species re-introduction schemes (Target: 2008).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Where possible, include species requirements when preparing or revising prescriptions for agri-environment schemes.	CCW	NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Incorporate the requirements of the species into relevant development policies, plans and proposals.	CCBC	WDA FC NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Seek to designate sites with significant populations as SIN C.	CCBC	CCW									✓
6.2 Site Safeguard and Management											
6.2.1 Ensure all occupied habitat is appropriately managed, e.g. through site management agreements or the uptake of relevant agri-environment schemes.	CCW	NAWAD FC	✓	✓	✓	✓	✓	✓			
6.3 Species Management and Protection											
6.3.1 Reintroduce the double line to a number of suitable former woodland sites.	CCW	FC Coed Cymru						✓			✓
6.3.2 Encourage appropriate management of all rhos pasture, including grazing schemes.	CCW	CCBC	✓	✓	✓	✓	✓	✓			
6.4 Advisory											
6.4.1 Raise the awareness of landowners/managers about the species' requirements and the importance of beneficial management for its conservation.	CCW	NAWAD FC Coed Cymru GWT GLWT	✓		✓						
6.5 Future Research and Monitoring											
6.5.1 Undertake surveys to determine the current status of the species.	GMRG MBMG	BC CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.2 Conduct targeted autecological research to inform habitat management and reintroductions (for 6.3.1).	CCW	BC	✓	✓	✓						
6.5.3 Establish a regular monitoring programme for this species on key sites.	GMRG MBMG	BC CCW		✓	✓	✓					
6.5.4 Pass information gathered during survey/monitoring work to a central database for incorporation into national databases. Support a South Wales LRC.	GMRG MBMG	BC	✓	✓	✓	✓	✓	✓	✓	✓	✓

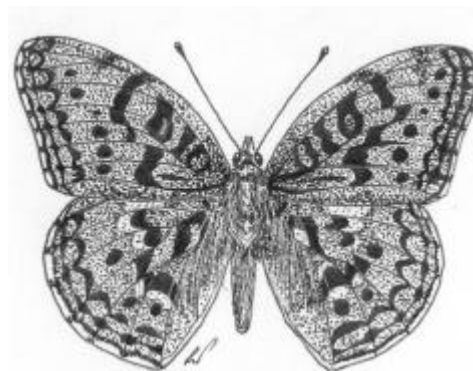
Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.6 Communications and Publicity											
6.6.1 Promote opportunities for the appreciation of the species and conservation issues associated with its habitat. This may be achieved by articles within the appropriate journals and publicity leaflets, etc.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

HIGH BROWN FRITILLARY *ARGYNNIS ADIPPE* SPECIES ACTION PLAN

1. INTRODUCTION

The high brown fritillary butterfly is a UKBAP priority species in severe decline³⁹. It occurs in Glamorgan and may still exist in Caerphilly county borough as specialised habitat is still found in the area.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	P
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CI TES 1975	-
WCA 1981	Sch. 5
Other Species Status	RDB Insects - vulnerable



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2. CURRENT STATUS

2.1 UK and Wales

The high brown fritillary was formerly widespread and locally abundant across much of England and Wales. It has, however, declined rapidly in the last 50 years and is now extinct over 94% of its former range. In 1994 only 51 definite colonies were known, many of these were very small and possibly not viable in isolation. The remaining centres of distribution are the bracken slopes of Dartmoor, Exmoor, Herefordshire and Glamorgan. It also occupies the coppiced woodland limestone outcrops of Morecombe Bay. It is still widespread across Europe, although it may have suffered local declines.

2.2 Caerphilly County Borough

High brown fritillaries may still occur in Caerphilly county borough, although confirmed records have not been made since 1992. The coedcae/ffridd of the valley sides in the county borough are a favoured habitat. Violets thrive in the summer bracken canopy, particularly on those with a warm microclimate usually associated with a southerly aspect. In the late 1980s records regularly flowed from the Brynawel area, where extensive areas of bracken still occur. There are also unconfirmed records from other parts in the south and into neighbouring boroughs. Adults are strong fliers and are normally observed on nectar sources such as marsh thistles or buddleia, not necessarily adjacent to breeding locations. The breeding location of the adults previously observed in the Brynawel area has not been confirmed.

2.3 Links with Habitats

- *Coedcae/ffridd*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Reduction of coppicing: In addition to bracken slopes, the species used to thrive in coppiced woodland generally, not just that on limestone outcrops. The decline in coppicing has left the species dependent in Wales and south-western Britain on bracken habitats.

- Agricultural improvement: Intensification of agriculture combined with a negative perception of bracken has led to considerable loss of this habitat type. Until just a few years ago FC were still actively encouraging removal of bracken in Wales.
- Cessation of grazing and traditional forms of bracken management: Bracken stands need to be extensively grazed, preferably by cattle, to prevent them becoming too dense thus shading out the violet food plants on which the breeding cycle depends. The shift in balance of stock to sheep and their overall huge increase in numbers in Wales in the last twenty years has tended to lead to two equally unfavourable extremes: either sparse and overgrazed bracken slopes lacking diversity of plant species (including violets) or dense impenetrable bracken stands where the violets are shaded out. Also bracken cutting for bedding has declined substantially, again leading to too dense stands.
- Climate Change: Since 1996 a series of unfavourable seasons of weather (warm, damp winter and spring, followed by wetter summers) has caused dramatic falls in the numbers of adults recorded from all monitored sites in the UK. In South Wales, over this period, the species appears to have declined in adult numbers by >90% and disappeared from some colonies discovered in the mid 1990s, leaving one known breeding colony near Bridgend.

4. CURRENT ACTION

- 4.1 Arrangements are being made to provide training in assessment of high brown fritillary habitat and its condition. This should enable more targeted survey work to begin.
- 4.2 Leaflets are now available from Butterfly Conservation (BC) to publicise the potential of bracken habitats for fritillary butterflies.
- 4.3 BC high brown fritillary training days; e.g. habitat requirements.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Halt the current decline and maintain at least 50 self-sustaining populations.
- 5.1.2 Restore suitable habitat within its former range and encourage up to 10 additional sites by 2005, using re-introductions if necessary.
- 5.1.3 Ensure a minimum number of colonies are protected within SSSIs.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Survey and assess condition of potential habitat, particularly the Brynawel area (Target: 2003).
- 5.2.2 Restore and manage potential habitat into good condition (Target: 2005 and ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure Policies and Strategies do not adversely affect potential or known habitat.	CCW	CCBC WDA FC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Consider the requirements of high brown fritillaries when reviewing agri-environment schemes, with particular attention to the issue of bracken control.	CCW	NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Following further survey and research (at UK level) identify the ecological requirements of this species and encourage the uptake of incentives for favourable land management on existing and potential sites.	BC	CCW CCBC FC		✓							
6.2 Site Safeguard and Management											
6.2.1 Encourage favourable management of habitat for the species on all confirmed and potential sites.	CCW	CCBC FC		✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Determine suitable management of particular sites and habitats, depending on the results obtained after completion of necessary research (6.5.1 and 6.5.2).	CCBC	farmers and landowners			✓	✓	✓	✓	✓	✓	✓
6.3.2 Continue to implement wildlife legislation.	Gwent Police	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Raise the awareness of landowners and managers to habitat and species requirements in order to promote management for high browns.	BC	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey habitat condition of the significant areas of bracken in the county borough particularly those well-established areas with a warm (close to southerly) aspect below 150m.	BC	CCW CCBC BC	✓								
6.5.2 Survey the areas in 6.5.1 for adult fritillary butterflies including sites with historical records of any such species (licensed specialists).	BC	CCW		✓							
6.5.3 Encourage farmers, walkers and members of the public to report any fritillary butterfly sightings promptly.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Promote the importance and wildlife value of bracken slopes and coedcae/ffridd for this butterfly species.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

OTHER MOTHS SPECIES ACTION PLAN

1. INTRODUCTION

This action plan covers 12 species which are not UKBAP priority species, but for which modern (post-1970) records exist and are felt to merit action, either because they are nationally notable (Na or Nb) or are important in a Welsh context (medium priority)²¹ (L). These are:

• Bleached Pug	<i>Eupithecia expallidata</i>	Nb
• Blomer's Rivulet	<i>Discoloxia blomeri</i>	Nb
• Broom-Tip	<i>Chesias rufata</i>	Nb
• Cloaked Carpet	<i>Euphyia biangulata</i>	Nb
• Devon Carpet	<i>Lampropteryx otregiata</i>	Nb
• Great Oak Beauty	<i>Boarmia roboaria</i>	Nb
• Lead-Coloured Pug	<i>Eupithecia plumbeolata</i>	Nb
• Little Thorn	<i>Cepphis advennaria</i>	Nb
• Northern Drab	<i>Orthosia opima</i>	L
• Satin Lutestring	<i>Tetheella fluctuosa</i>	L
• Thyme Pug	<i>Eupithecia distinctaria</i>	Nb
• White-Marked	<i>Cerastis leucographa</i>	L

2. CURRENT STATUS

The majority of these moth species are associated with mature, fairly open, semi-natural woodland, the rest vary between heathland, woodland and other habitats, including urban.

2.1 Bleached Pug

Woodland rides and clearings are an important habitat for this species, where it feeds on goldenrod flowers. It is under-recorded since it is a small, not easily identified moth.

2.2 Blomer's Rivulet

This is a Wych Elm feeder, hence found in woodlands with this tree species. South Wales and the Wye valley are well-known areas for this species. Although less numerous than it was prior to Dutch Elm Disease in the 1970s, it still appears to be well established.

2.3 Broom-tip

This moth is mainly found on rough grassland, heathland, and "waste ground", where broom (*Cytisus scoparius*) flourishes. It is declining due to loss of habitat.

2.4 Cloaked Carpet

The cloaked carpet moth is found in mature woodland, particularly edge habitats, and mature hedgerows, where it feeds on chickweed and stitchwort. After years of a significant decrease in numbers, there are recent signs of a slight recovery in South Wales.

2.5 Devon Carpet

This species is associated with damp woodland, where it feeds on common marsh bedstraw (*Galium palustre*) and possibly other *Galium* species. It is probably currently under-recorded because of its similarity to the water carpet moth.

2.6 Great Oak Beauty

This species is an oak feeder, often to be found in oak woodlands.

2.7 Lead-coloured Pug

This species is found in sheltered heathland and open woodland where its food plant the common cow-wheat (*Melampyrum pratense*) occurs. A flourishing colony used to occur at Penllwyn Grasslands SSSI in Caerphilly county borough.

2.8 Little Thorn

This species feeds on bilberry, and so occurs in open woodlands where it flourishes. However, where bilberry does not occur the alternative food plants are currently unknown. Its population is decreasing.

2.9 Northern Drab

The northern drab is found on downland and heathland, and on a variety of food plants such as willow, birch, ragwort and mugwort. However, it is particularly scarce in the Gwent area, at the edge of its range.

2.10 Satin Lutestring

This moth occurs mainly in woodland rides and open woods containing birches, on which it feeds. It is of very local occurrence, with South Wales representing the nation stronghold, and currently has a stable population in Caerphilly county borough.

2.11 Thyme Pug

Mainly found in rocky areas and on limestone hills where the larvae feed on the flowers of thyme. It may be able to subsist on garden plants.

2.12 White-marked

The white-marked moth is found in deciduous woodland, and has a mixed diet, for example of willow, dock and stitchwort. It is uncommon, with South Wales representing the national stronghold for this species.

2.13 Links with Habitats

- *Deciduous Woodlands* (wet woodland, upland oak woodland; woodland rides and glades)
- *Urban* (e.g. gardens, unused urban/industrial land ("brownfield sites"))
- *Wildlife Corridors* (hedgerows)
- *Heathland*
- *Post-Industrial Land* (quarries, "waste ground")

3. CURRENT FACTORS AFFECTING THESE SPECIES

- Open woodland is important for a number of these moths, eight of them have been affected by the disappearance of traditional coppicing and wide woodland rides.
- The planting of conifers has also reduced the suitability of habitats.
- Loss of rough areas where the food plants grow to agriculture, forestry and development (**broom-tip, lead-coloured pug**).

4. CURRENT ACTION

4.1 In South Wales, there has been limited survey work by light trapping.

5. OBJECTIVES AND TARGETS**5.1 UK Objectives and Targets**

Not applicable for these species.

5.2 Caerphilly Objectives and Targets

5.2.1 Enhance the overall population size of each species in the county borough by 2011.

6. ACTION AND KEY PARTNERS

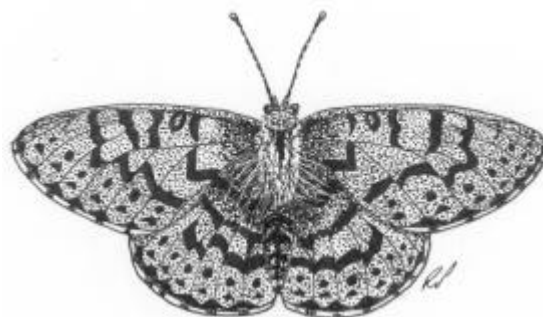
Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Encourage appropriate woodland management in occupied sites, for e.g. through the Woodland Grant Scheme.	FC	Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Where appropriate, include the requirements of the species when preparing or revising prescriptions for woodland grant schemes.	FC	Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Where possible, ensure all occupied habitats are appropriately managed, for example through site management agreements or uptake of relevant woodland grant schemes.	FC	Coed Cymru WDA CCBC	✓								✓
6.2.2 Where possible, enhance habitat at known sites, where most of the potentially suitable woodland is in the responsibility of Forest Enterprise.	FE	CCBC		✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Ensure the habitat requirements of the broom-tip and lead-coloured pug are considered in relevant development policies, plans and proposals for urban sites.	CCBC	WDA	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
None proposed at this time.	-	-									
6.5 Future Research and Monitoring											
6.5.1 Continue to monitor the populations and distribution of these species in the county borough.	GMRG MBMG	BC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
None proposed at this time.	-	-									

PEARL-BORDERED FRITILLARY *BOLORIA EUPHROSYNE* SPECIES ACTION PLAN

1. INTRODUCTION

The pearl-bordered fritillary butterfly is a UKBAP priority species in rapid decline³⁹, and has not been recorded in Glamorgan since 1990 at its last known site in Caerphilly county borough. It has very specialised habitat requirements, and some suitable habitat may still occur in the area.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	P
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Sch. 5
Other Species Status	Nationally Notable



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2. CURRENT STATUS

2.1 UK and Wales

The pearl-bordered fritillary was formerly widespread and locally abundant across much of Britain, but it has declined very rapidly in the last 50 years in the south of England and Wales. It is still widespread and abundant in northwest England and in the Highlands of Scotland. In both southern England and Wales few large colonies are known, many are small and highly vulnerable to extinction with a loss rate typically of around 40% per decade.

In England, the species breeds both in coppiced woodland and on bracken slopes with violets. In Wales its remaining colonies are scattered, on bracken slopes and commons, with a small number in coastal Ceredigion, an apparently isolated site in Radnorshire and several colonies in Montgomeryshire. It does however still occur in Herefordshire and Gloucestershire.

2.2 Caerphilly County Borough

Pearl-bordered fritillaries may still occur in Caerphilly county borough, although given the loss in the last 15 years of most other sites in southeast Wales, it seems very unlikely. In the late 1980s records regularly flowed from Draethen Forest where it appeared to breed in a clearing with a northerly aspect with scattered bracken and unshaded rock strewn areas. This type of habitat is known to be suitable only for a temporary period for this species and it may be that it colonised from previously more suitable habitat in the area.

Potentially suitable extensive areas of bracken still occur in Caerphilly county borough, particularly on slopes with a warm microclimate usually associated with a somewhat southerly aspect. Areas with violets thriving in the summer bracken canopy are favoured. The ffridd/coedcae of the valley sides and other bracken stands may be particularly important for this species.

2.3 Links with habitat

- *Ffridd/Coedcae* (often on/adjacent to *Common Land*)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Reduction of coppicing and other changes in woodland management practice leading to fewer clearings which are farther apart, consequently impeding colonisation. The decline in coppicing has left the species dependent on well-drained bracken habitats in Wales and southwest Britain.
- Cessation of grazing and traditional forms of bracken management: bracken stands need to be extensively grazed, preferably by cattle, to prevent them becoming too dense thus shading out the violet foodplants on which the breeding cycle depends. The shift in balance of stock to sheep and their overall huge increase in numbers in Wales in the last twenty years has tended to lead to two equally unfavourable extremes: either sparse and overgrazed bracken slopes lacking diversity of plant species (including violets) or dense impenetrable bracken stands where the violets are shaded out. Also bracken cutting for bedding has declined substantially, again leading to too dense stands.
- Agricultural improvement: intensification of agriculture combined with a negative perception of bracken has led to considerable loss of this habitat type. Until just a few years ago the FC were still actively encouraging removal of bracken in Wales.

4. CURRENT ACTION

- 4.1 Arrangements are being made to provide training in assessment of high brown fritillary habitat (which is similar to that for pearl-bordered fritillary) and its condition. This should enable more targeted survey work to begin, potentially of benefit for both species.
- 4.2 Leaflets are now available from BC to publicise the potential of bracken habitats for fritillary butterflies.
- 4.3 BC are currently surveying suitable habitat on behalf of Rhondda Cynon Taff County Borough Council. Some sites are located within Caerphilly county borough.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Halt the current decline by the year 2005, through viable networks of populations in core areas of distribution.
- 5.1.2 Encourage restoration of suitable habitats throughout its former range with the long-term aim of re-introducing the species to at least 3 sites per previously occupied county.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Survey and assess condition of potential habitat in Caerphilly county borough, particularly the Draethen area (Target: 2004).
- 5.2.2 Restore and manage potential habitat into good condition (Target: 2006).

- 5.2.3 Re-introduce the species to suitable sites where habitat in good condition has been identified and is actively maintained. (Target: 2011)*

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Ensure Policies and Strategies do not adversely affect potential or known habitat.	CCBC	CCW WDA FC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Consider the requirements of pearl-bordered fritillaries when reviewing agri-environment schemes, with particular attention to the issue of bracken control.	CCW	NAWAD	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2 Site Safeguard and Management											
6.2.1 Encourage favourable management of sites in recently occupied and potentially suitable areas, including appropriate woodland management, e.g. through the Woodland Grant Scheme.	BC	CCW CCBC Coed Cymru CMCS	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.1 Following feasibility assessments and habitat restoration, seek to restore populations to at least 3 sites in Caerphilly county borough. Discuss with BGCBC the opportunity for coordinated action in the neighbouring area where the species also formerly occurred in last 20 years.*	BC	BGCBC CCBC CCW			✓	✓	✓	✓	✓	✓	✓
6.3.2 Continue to implement wildlife legislation.	Gwent Police	CCW	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
6.4.1 Raise the awareness of landowners and managers of pearl-bordered fritillary conservation requirements in order to promote favourable habitat management.	BC	CCBC CCW NFU FUW NAWAD CMCS	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Survey significant areas of bracken in the county borough for potential habitat, particularly those well-established and well-drained areas with a warm (close to southerly) aspect below 150m.	BC	-	✓	✓							
6.5.2 Encourage farmers, walkers and members of the public to report any fritillary butterfly sightings promptly.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

* This objective and subsequent action should be considered carefully in the light of survey and habitat condition assessment results, together with a realistic view of restoration and management success, in accordance with the current version of Butterfly Conservation's *Policy on Introductions and Re-introductions*⁵ and in consultation with the Glamorgan Biodiversity Advisory Group (GLBAG).

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.6 Communications and Publicity											
6.6.1 Promote the importance and wildlife value of bracken slopes and coedcae/ffridd for this butterfly species, e.g. through the production of a 'Biodiversity Briefing Note'.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

WAVED CARPET MOTH *HYDRELIA SYLVATA* SPECIES ACTION PLAN

1. INTRODUCTION

The waved carpet moth is classified as *Nationally Scarce* and is a UKBAP priority species³⁸.

2. CURRENT STATUS

2.1 UK, Wales, and Caerphilly County Borough

The waved carpet occurs in coppiced woods with a long history of active coppice, and in open sunny areas with younger growth of the larval food plants present. The food plants are alder, birch, willow and blackthorn, and, in Kent, sweet chestnut. The adult moths fly in June and July, resting by day among bushes and occasionally on tree-trunks. The larvae feed between July and August in most years and pupate in September to over-winter as a pupa in an earthen cell until emergence the following July. In Britain the waved carpet is a highly localised species with post-1980 records concentrated in five main areas: Devon, Cornwall and Dorset; the borders of Hampshire, Sussex and Surrey; East Sussex and Kent; Gloucestershire and south Wales.

Historically this species was recorded over much of England and Wales but the species has declined following the widespread cessation of active coppice management. The moth appears to exist at low density over much of its range and is likely to be under-recorded, for instance, it probably occurs more widely in Wales than records suggest.

2.2 Associated Habitats

- *Deciduous Woodlands* (lowland beech and yew woodland)

2.3 Links with Other Species

It is likely that implementation of this action plan will have benefits for other species of *lowland coppiced woodlands*, including the **drab looper** (*Minoa murinata*), the **orange upperwing** (*Jodia croceago*), the **clay fan-foot** (*Paracolax tristalis*), the **argent and sable** (*Rheumaptera hastate*), the **square-spotted clay** (*Xestia rhomboidea*) and the **common fan-foot** (*Pechipogo strigilata*).

3. CURRENT FACTORS AFFECTING THE SPECIES

- The loss of young re-growth due to the decline of coppicing in the lowlands.
- The loss of broadleaved woodland due to replanting with conifers.

4. CURRENT ACTION

- 4.1 Forestry Commission *Coppice for Butterflies* Challenge (Woodland Improvement Grant) scheme has targeted five areas; the Wye Valley, Sussex/Surrey/Hampshire, Western Greensand, Southern High Weald, Morecambe Bay Limestone and East Kent.
- 4.2 In South Wales there has been limited survey work by light trapping.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

5.1.1 Maintain the range of this species, concentrating particularly on strong populations within the core areas.

5.1.2 Enhance the overall population size in each occupied area by 2010.

5.2 Caerphilly Objectives and Targets

5.2.1 Identify and maintain the current population distribution and range (Target: ongoing).

5.2.2 Identify existing sites requiring protection and appropriate management to enhance the occupied area in the county borough (Target: 2011).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Encourage appropriate woodland management in occupied sites, for example through the Woodland Grant Scheme.	FC	Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.2 Where appropriate, include the requirements of the species when preparing or revising prescriptions for woodland grant schemes.	FC	Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.1.3 Seek to designate important waved carpet sites as SIN C.	CCBC	CCW									✓
6.1.4 Consider notifying SSSIs on sites holding key populations of the species where this is necessary to secure their long term protection and appropriate management.	CCW	CCBC	✓								✓
6.2 Site Safeguard and Management											
6.2.1 Where possible ensure that occupied habitat is appropriately managed, for example through site management agreements or uptake of relevant woodland Grant Schemes.	FC	CCW Coed Cymru	✓								✓
6.2.2 Where possible, increase the available habitat at known sites and attempt to link up existing fragments of habitat. Most of the suitable habitat is the responsibility of FE, with whom particularly close liaison should be established.	CCW	FE FC Coed Cymru CCBC		✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
None proposed at this time.											
6.4 Advisory											
6.4.1 Advise landowners and managers of the presence of this species and the importance of beneficial management for its conservation.	CCW	NAWAD FUW NFU	✓	✓	✓	✓	✓	✓	✓	✓	✓

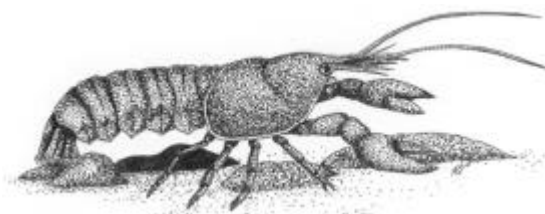
Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.5 Future Research and Monitoring											
6.5.1 Undertake surveys to determine current distribution.	BC	GMRG MBMG CCBC	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5.2 Establish a regular monitoring programme for the species.	BC	GMRG MBMG		✓	✓	✓					
6.5.3 Assess the impact of the <i>Coppice for Butterflies Challenge</i> on this species.	BC	CCW			✓	✓	✓				
6.5.4 Conduct targeted autecological research to inform habitat management, including the age of coppice after cutting which is preferred by the moth, the length of time such cut areas remain suitable, mobility and population structure.	CCW	BC	✓	✓	✓						
6.5.5 Pass information gathered during survey and monitoring of this species to a central database for incorporation in national and international databases. Support an LRC for South Wales.	BC	GMRG MBMG	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6 Communications and Publicity											
6.6.1 Promote opportunities for the appreciation of the species and the conservation issues associated with its habitat. This should be achieved via articles within appropriate journals as well as by a publicity leaflet.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓

WHITE-CLAWED CRAYFISH *AUSTROPOTAMOBIOUS PALLIPES* SPECIES ACTION PLAN

1. INTRODUCTION

The white-clawed crayfish is a UKBAP priority species³⁹ and is important for biodiversity conservation nationally and locally. It is the only native freshwater crayfish in Britain.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	P
EC Habitats Directive	Annex I Ia, Va
Conservation Regs 1994	
Berne Convention 1982	III
Bonn Convention 1979	
CITES 1975	
WCA 1981	Sch. 5
IUCN Red List of Endangered Animals 1994	globally threatened



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2. CURRENT STATUS

2.1 UK and Wales

The white-clawed crayfish was formerly widespread in France, Spain and Italy, but populations are now confined to a diminishing number of areas. It is widespread in clean, calcareous streams, rivers and lakes in England and along the Welsh border, and some areas of Northern Ireland. However, populations have been lost since the 1970s⁹, and apart from a single record in Pembrokeshire, its current distribution is restricted to eastern parts of Wales. These are concentrated in the Wye (its Welsh stronghold), Severn and Usk catchments⁹, but the EA survey (see 4.1) confirmed a major decline even in these areas. Its absence from most of West Wales is probably linked to its preference for calcium-rich, well-oxygenated waters and its tendency to avoid more acidic catchments⁹. Adults can have a body length of up to 10 or 12cm. It is mostly active at night when it feeds upon insect larvae, water snails and tadpoles, and during the day it hides under large stones or in riverbank burrows.

2.2 Caerphilly County Borough

Although there is some anecdotal evidence, no confirmed records of this crayfish species have been made in the county borough. There are some records in the Brecon Beacons National Park adjacent to Caerphilly county borough which suggests that it may occur in the area, but a full survey of rivers, particularly slow-moving clean, unpolluted waters, and parts of the canal, for the species as no such work has been formerly undertaken.

2.3 Links with Habitats

- **Wetlands** (rivers and streams, canals)

3. CURRENT FACTORS AFFECTING THE SPECIES

- Habitat modifications and management of water bodies.
- Water pollution, particularly from sheep dip chemicals and other pesticides.

- Direct competition for food and habitat from the 3 non-native crayfish species.
- Crayfish plague, a disease caused by the fungus *Aphanomyces astaci* is carried by some North American crayfish including the signal crayfish *Pacifastacus leniusculus*. Spores from the fungus can be transmitted by a variety of other means, including water, fish and damp equipment. The white-clawed crayfish is particularly vulnerable to this disease.

4. CURRENT ACTION

- 4.1 CCW surveys in the River Wye catchment area strongly indicate a population decline and the EA survey (2000) of the River Wye and Usk confirmed this.
- 4.2 A national conservation strategy has been developed which advocates controls on crayfish farming to minimise the threat from crayfish plague, eradicate alien crayfish and improve water quality of occupied catchments.
- 4.3 A JNCC action plan was published in 1994 for the conservation of this crayfish species.
- 4.4 MAFF are to use fisheries legislation to regulate the keeping of non-native species to protect the native crayfish and habitats in England, Wales (NAWAD) and Scotland.
- 4.5 The three non-native species of crayfish are listed on Schedule 9 of the WCA 1981, which makes it an offence to release them or allow them to escape into the wild.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

- 5.1.1 Attempt to maintain the present distribution of this species by limiting the spread of crayfish plague, limiting the spread of non-native species, and by maintaining appropriate habitat conditions.

5.2 Caerphilly Objectives and Targets

- 5.2.1 Identify the current distribution and population of the white-clawed crayfish in the county borough (Target: 2004).
- 5.2.2 Maintain and enhance the distribution of the white-clawed crayfish (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:									
	Lead	Partners	2003	4	5	6	7	8	9	10	11	
6.1 The only necessary action at present is to commission a survey of rivers, streams and the canal in order to identify the current status of the species in the county borough.	EA	CCW CCBC	✓	✓								

BLUEBELL *HYACINTHOIDES NON-SCRIPTA* SPECIES ACTION PLAN**1. INTRODUCTION**

The bluebell is an internationally important species with a high proportion of its European population in Britain. It is an excellent symbol of woodland conservation and a species for which the UK has a genuine global responsibility. It has been identified as a locally important native flowering plant in Caerphilly county borough, but as populations vary with the amount of ancient woodland remaining it is important Caerphilly maintains its proportion of the European population.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	S
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CI TES 1975	
WCA 1981	Part I, Section 13 Sch. 8



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2. CURRENT STATUS**2.1 UK and Wales**

Bluebell woodlands are a speciality of the British Isles and the Atlantic fringe of northern France. The moist oceanic climate of the UK evidently provides ideal conditions for the bluebell and it holds a third of the world's population²⁷.

The bluebell has been identified as a locally significant species found in woodlands, hedgerows and pasture (derelict woodland).

2.2 Caerphilly County Borough

The bluebell is an attractive and well-known flowering plant indicative of ancient woodlands. In Caerphilly county borough it is also associated with hedgerows, colliery spoil and under bracken (*Pteridium aquilinum*) on heathland and ffridd/coedcae. In spring hillsides with carpets of blue can be seen throughout the county borough. Bluebells have been recorded on the following SIN C sites⁸ (Map 16.1):

30:	Llwyn-Bach Woodland	35:	Pen y Waun
40:	Pen-y-Fan Fach Grassland	52:	Cefn Hengoed Hillside
63:	Blackwood Riverside Woodlands	126:	Maescwmmer Meadows
127:	Mynydd Bach Slopes	133:	Craig y Prisiad Woodlands
148:	Cwm Gofapi Woods	152:	Darran Woodland
166:	Pont-y-Pandy	170:	Cefn Onn Ridge
182:	Tudor Gardens Quarry	183:	Coed Cefn-Pwll-Du
190:	Thornhill Quarries		

2.3 Links with Habitats

- **Deciduous Woodlands**
- **Wildlife Corridors** (hedgerows, roadside verges)
- *Common Land*
- **Ffridd/Coedcae**
- *Heathland*
- *Post-Industrial Land* (broadleaved woodlands on spoil tips and quarries)
- *Urban Habitats*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Although apparently abundant in some locations, the species has been declining due to loss of habitat, for example loss of woodland through the replanting of broadleaved woodland with conifers, and hedgerows.
- A decline in traditional woodland management can lead to shading out of bluebells.
- Physical damage to bulbs and leaves by trampling, heavy grazing and shading.
- Urban encroachment and a 'tidy park' mentality can threaten bluebells in urban locations, for example through regular mowing, including during flowering period.
- In some areas bluebells have been commercially removed. The inclusion of the species into the Wildlife and Countryside Act 1981 was specifically to legislate against this.
- Picking bluebell flowers is undesirable and can weaken colonies.
- The planting of the Spanish bluebell in gardens and parks has led to cross-pollination and hybridization of the native bluebell. This is a very real problem in urban and suburban woods and hedgerows.
- Trampling in woodlands and other habitats in areas open to the public. Bluebells are affected by trampling which occurs where there are large numbers of visitors. Seed production is harmed, but damage can be minimised by persuading visitors to use set paths around the edges of bluebell stands¹.

4. CURRENT ACTION

- 4.1 The forestry Authority produce guidelines and brochures to raise awareness of the wildlife value of woodland.
- 4.2 Existing woodland management schemes generally cater well for the requirements of the bluebell.
- 4.3 Records have been collected by Glamorgan and Gwent Wildlife Trusts, and also by CCBC as part of the SINC surveys.
- 4.4 Ancient woodlands, species-rich secondary woodlands and ffridd are SINC selection criteria; this will include many woods and slopes with bluebells⁸.

- 4.5 Coed Cymru are actively promoting good woodland management practice in Caerphilly county borough, and ground flora improvements accompany good management.
- 4.6 The Hedgerow Regulations 1997 have brought hedgerows into the planning process¹¹ and ensure the retention of a number of ancient and species-rich hedges.
- 4.7 CCBC Parks Services regularly include the bluebell in designs and tenders.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

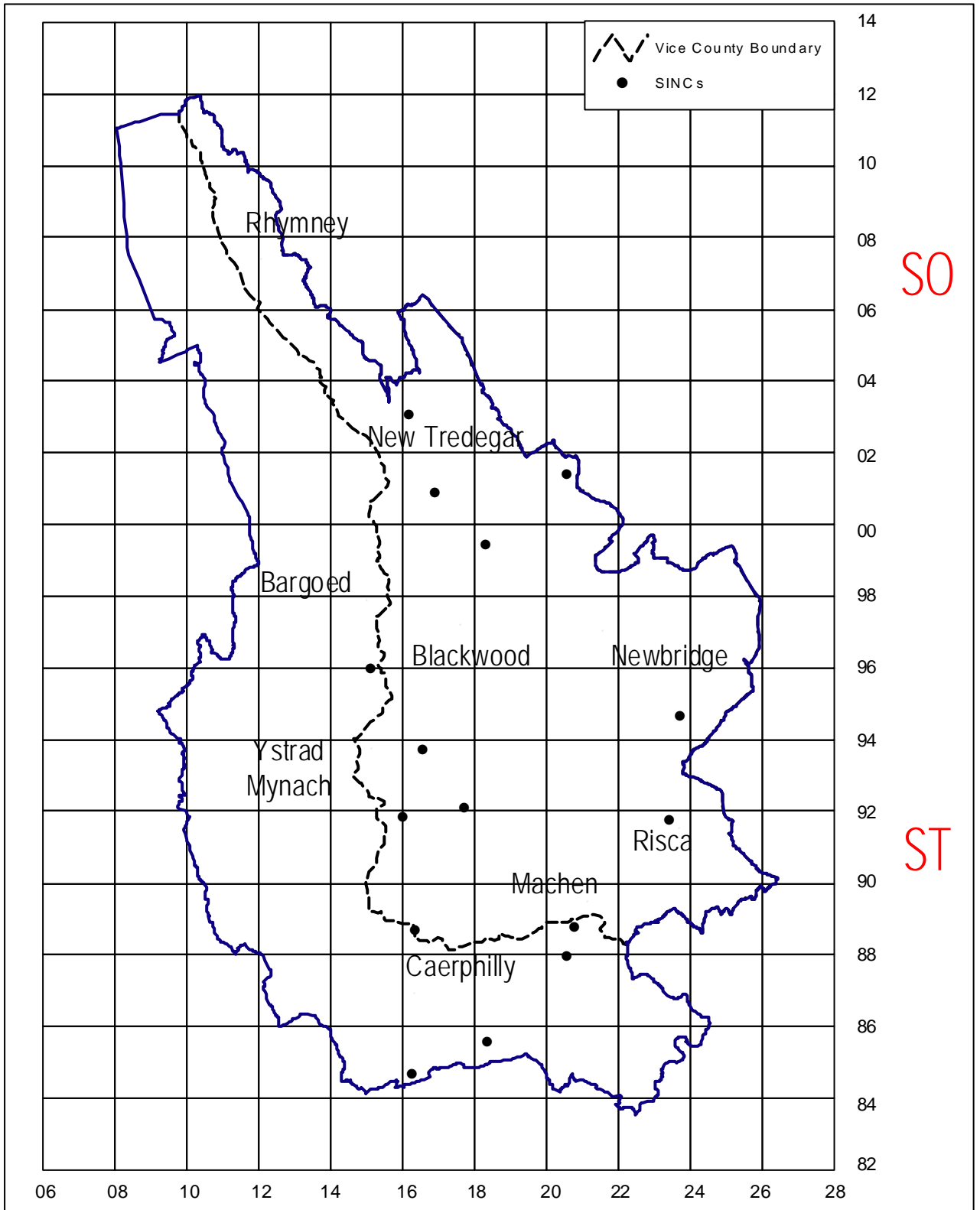
- 5.2.1 Maintain the present population and distribution of bluebells, and encourage the spread to new native woodlands (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to designate all ancient woodland bluebell sites >2 ha as SIN C.	CCBC	-									✓
6.3.2 Seek to designate areas of ffridd / coedcae and heathland with significant stands of the bluebell as SI NC.	CCBC	-									✓
6.2 Site Safeguard and Management											
6.2.1 Manage all Council owned bluebell sites sympathetically.	CCBC	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Identify ownership of all ancient woodland sites.	CCBC	CCW FC Coed Cymru	✓	✓	✓						
6.3 Species Management and Protection											
6.3.1 Encourage ancient woodland landowners to enter woodland grant schemes.	CCBC	Coed Cymru		✓	✓	✓					
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.2 Ensure appropriate management of woodlands, ffridd, heathland and hedgerows, including the modification of existing woodland management plans to stop work in the spring and early summer bulb-recharge period.	FC	CCBC Coed Cymru		✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.3 Species Management and Protection (continued)											
6.3.3 Re-plant suitable former ancient woodland sites with appropriate structure and ground flora.	FC	Coed Cymru CCBC			✓	✓	✓				
6.4 Advisory											
6.4.1 Raise awareness of landowners and managers of the bluebell and their appropriate management, the damage to woodlands caused by deer and other livestock, and the need for fencing.	CBP	landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Monitor known bluebell sites in the county borough to improve baseline data and trends.	BSB I	-	✓					✓			✓
6.6 Communications and Publicity											
6.6.1 Generate publicity highlighting the threats to bluebells and how local people can help, in particular reporting sightings of uprooting to the Police.	CBP	Gwent Police	✓	✓	✓						
6.6.2 Encourage members of the public to check the source when purchasing bluebell bulbs.	CBP	Garden Centres	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.3 Emphasise the importance of people staying on paths when walking in woodlands.	CBP	landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓

MAP 16.1 – BLUEBELL



SO

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SPECIES STATEMENT

COMMON REED *PHRAGMITES AUSTRALIS*

The common reed is predominantly associated with reedbeds and swamp, and so is highlighted in the **Wetlands Habitat Statement**.

The common reed has been identified as a locally common plant species of some significance and so there will be specific actions and targets for the species within the eventual *Reedbed Habitat Action Plan*, to be prepared at a later date.

SINCs in Caerphilly county borough⁸:

55: **Nelson Bog (SSSI)**



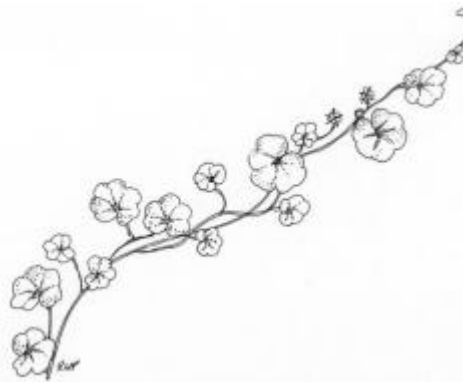
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CORNISH MONEYWORT *SIBTHORPIA EUROPAEA* SPECIES ACTION PLAN

1. INTRODUCTION

The Cornish moneywort has been identified as a locally significant species.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	-
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I, Section 13
Other Species Status	Nationally Scarce



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2. CURRENT STATUS

2.1 UK and Wales

The Cornish moneywort is a small indiscrete plant of damp ditch-sides, walls and roadsides. It is only found in Britain and West France, and nationally it is a very localised species. In Britain its main centre of population is Cornwall, south Devon and Exmoor. In Wales only 9 sites exist, the main population occurs in the Taff Ely area, with a few records from southwest Wales. It is a very local species, known only from a small area around Llantrisant, Ponypridd and Caerphilly on the southern fringe of the Uplands⁴⁰.

2.2 Caerphilly County Borough

The Cornish moneywort is a native species found amongst damp grassy heaths, damp rocks and walls, and moist shady roadsides. It is a very local species, known only in a small area of Glamorgan, and only recorded in Gwent on the bank of the Nant-y-Draenog in Caerphilly county borough. This site is a SIN C (C10.134) and is described as a narrow stream valley woodland and acid grassland area, south of the Nant-y-Draenog reservoir⁸ (see **Map 16.2**).

2.3 Links with Habitats

- Wetland features
- *Deciduous Woodlands* (wet woodland)

3. CURRENT FACTORS AFFECTING THE SPECIES

- The species is nationally scarce in South Wales (but very locally frequent).
- Its preferred habitat is vulnerable to drainage and intensive mechanized ditch clearances.
- It is also likely to depend on stock grazing, to keep ditch sides open and unshaded. The cessation of grazing may be a major factor in its apparent decline.
- More survey and assessment work is required to establish the current population and distribution accurately.

4. CURRENT ACTION

4.1 The Cornish moneywort site in Caerphilly county borough is designated as a SIN C⁸.

5. OBJECTIVES AND TARGETS**5.1 UK Objectives and Targets**

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

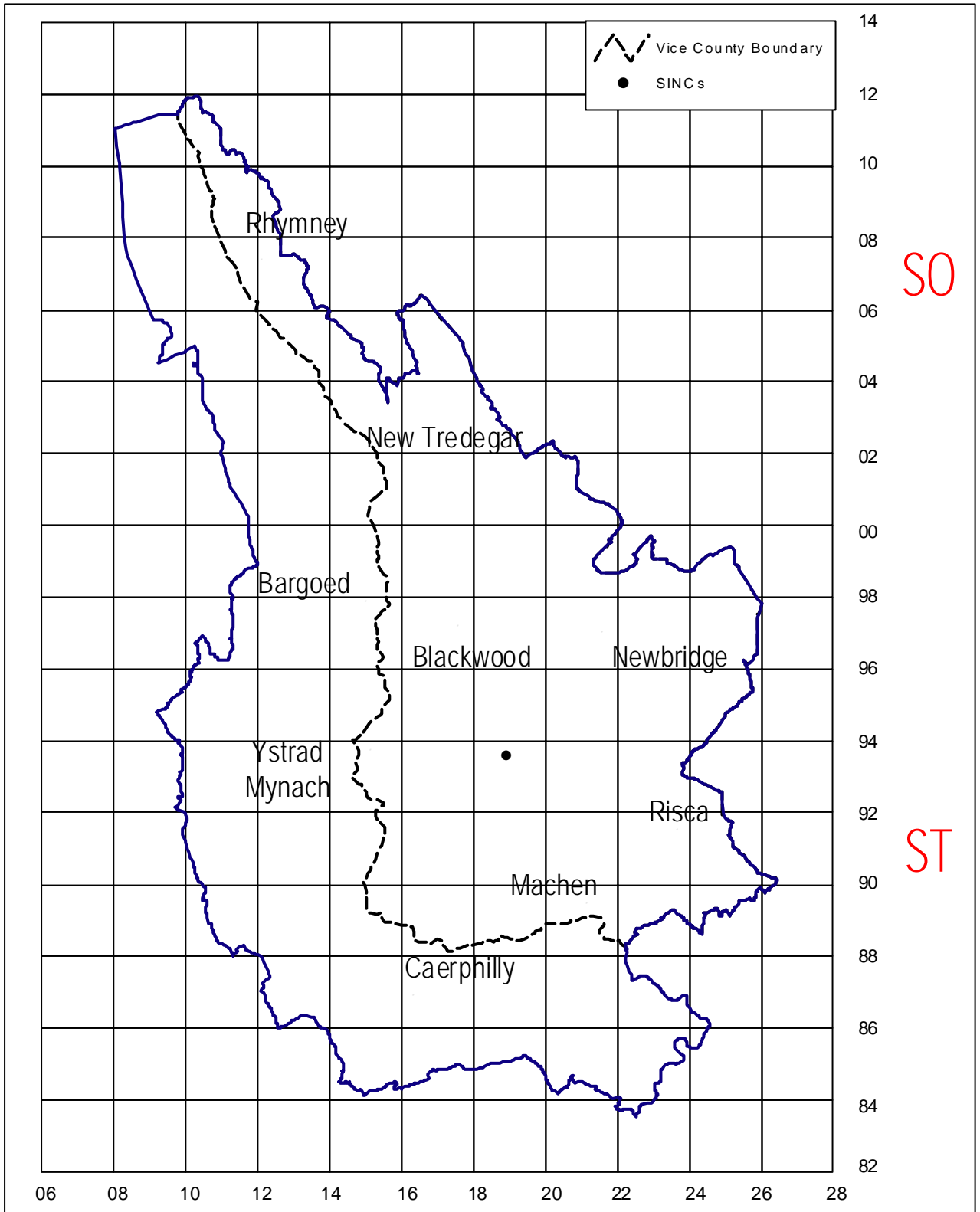
5.2.1 Re-survey the only recorded site to establish population distribution and assess the possibility of encouraging its spread (Target: 2002).

5.2.2 Maintain the current population and distribution of the Cornish moneywort, and encourage the spread to new sites (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:										
	Lead	Partners	2003	4	5	6	7	8	9	10	11		
6.1 Policy and Legislation													
6.1.1 Seek to designate sites as SIN C.	CCBC	-										✓	
6.2 Site Safeguard and Management													
6.2.1 Encourage the appropriate management of the woodland at Nant-y-Draenog in order to maintain the current population of the species and potentially increase its distribution.	CCBC	landowner	✓										
6.3 Species Management and Protection													
6.3.1 Ensure the sensitive management and protection of the whole Nant-y-Draenog SIN C.	CCBC	landowner	✓	✓									
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
6.4 Advisory													
6.4.1 Offer advice on conservation, management and grazing, and identify management plan options with the landowner.	CCBC	Landowner Coed Cymru	✓	✓	✓								
6.5 Future Research and Monitoring													
6.5.1 Re-survey all historical sites.	BSBI	-	✓	✓									
6.5.2 Monitor sites every 5 years.	BSBI	-	✓				✓					✓	
6.6 Communications and Publicity													
6.6.1 Disseminate survey and monitoring information to BSBI, CCW, NMWC, CCBC, and the landowner.	CBP	BSBI	✓				✓					✓	
6.6.2 Inform landowners of the existence of the Cornish moneywort and its biodiversity significance.	CBP	BSBI	✓				✓					✓	

MAP 16.2 - CORNISH MONEYWORT



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 Mae atgynhychu heb awdurdod yn torri hawffraint y Goron. Gall hyn arwain at erlyniad neu achos sifil.
 Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

COWSLIP *PRIMULA VERIS* SPECIES ACTION PLAN

1. INTRODUCTION

The cowslip has been identified as an important flowering plant species in Caerphilly county borough. It is not listed in the UKBAP, but is considered to be rare locally.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	-
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I, Section 13
Other Species Status	-



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2. CURRENT STATUS

2.1 UK and Wales

The cowslip is a native species to Britain and is quite frequent throughout England and Wales. It is mainly found in pastures and meadows, grassy habitats, scrub and open woodland, on banks and roadsides, and mainly on dry calcareous soils. It is often locally abundant and can be found cultivated in gardens.

2.2 Caerphilly County Borough

In the former Rhymney Valley district of the county borough it is found on the edges of meadows, but it has only been recorded in the south on basic soils and a railway line embankment in Maesycwmmmer, and is considered rare in the north²⁸. It is usually common in old pastures and meadows, on field banks, roadsides and railway embankments, on base-rich soils, but there are very few recent records so further survey work and public involvement is required. However, there are a few SINC sites in the county borough where the cowslip has been noted⁸, these are listed below (see **Map 16.3**): 168: **Caerphilly Common**, 170: **Cefn Onn Ridge**, 172: **Rudry Woodlands** and 185: **Blaengwynlais Meadows**.

2.3 Links with Habitats

- **Wildlife Corridors** (hedgerows, roadside verges and railways)
- *Common Land*
- *Post-Industrial Land*
- *Urban Habitats*

3. CURRENT FACTORS AFFECTING THE SPECIES

- No recent survey work has been undertaken to identify current distribution of the cowslip.
- Wildflower picking can be a problem in some areas.

- Unfavourable management of roadside verges and other habitats, such as pastures, where they have been improved for agriculture. This has led to the loss of a large proportion of former cowslip strongholds.

4. CURRENT ACTION

- 4.1 Some countywide surveys have been undertaken by BSBI, but no recent surveys.
- 4.2 Several sites supporting cowslips have been designated as SINCs⁸.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

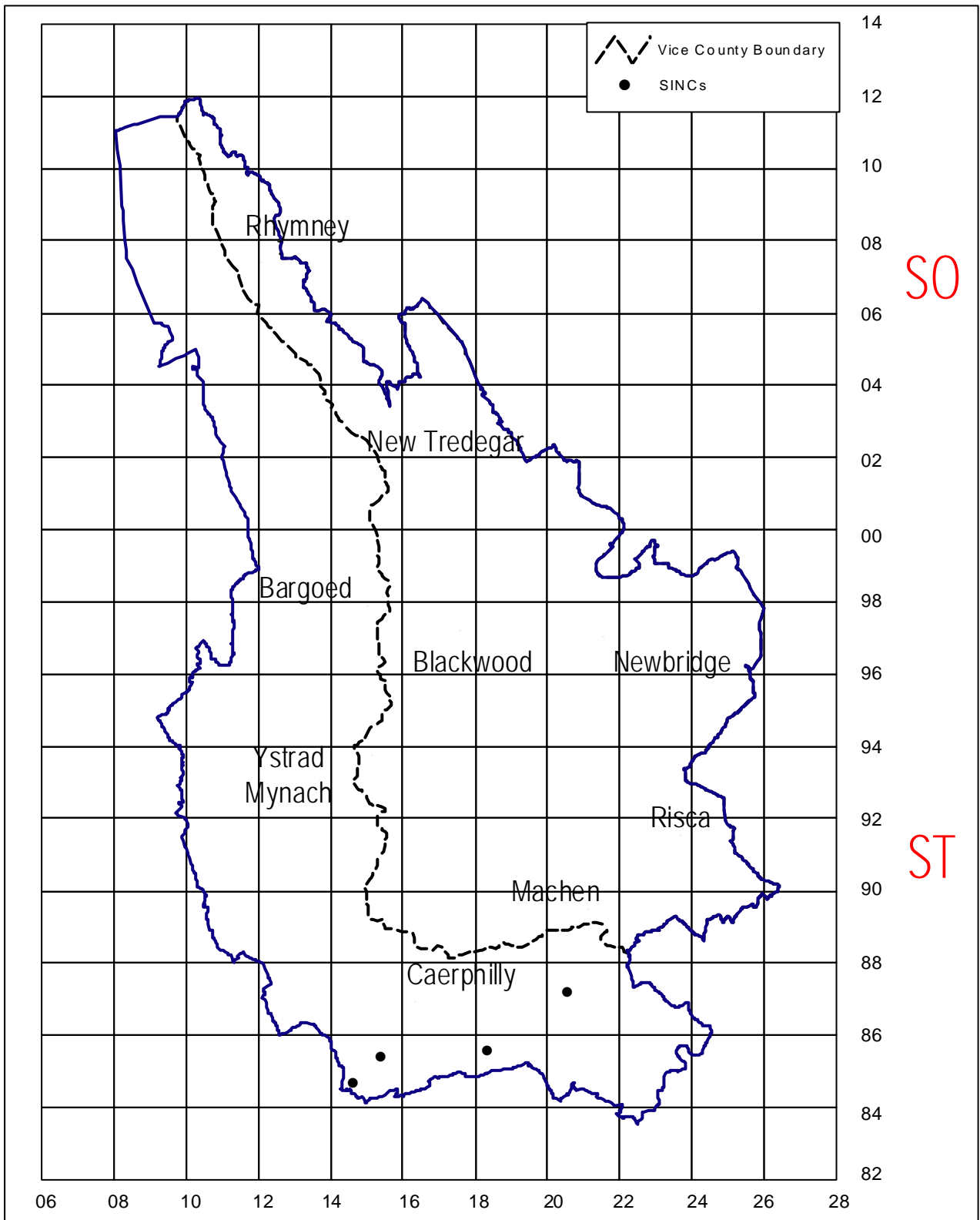
- 5.2.1 Carry out a county borough-wide survey for the species, and encourage reports of sightings from the general public (Target: 2005).
- 5.2.2 Maintain and enhance the population and distribution of the cowslip, and encourage spread into new areas (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
None proposed at this time.	-	-									
6.2 Site Safeguard and Management											
None proposed at this time.	-	-									
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
None proposed at this time.	-	-									
6.5 Future Research and Monitoring											
6.5.1 Survey all possible habitat to establish current status and identify important areas.	BSBI	CCBC	✓	✓	✓						
6.5.2 Monitor all established sites on a five-yearly basis.	BSBI	-	✓				✓				✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.6 Communications and Publicity											
6.6.1 Disseminate survey and monitoring information to BSBI, CCW, National Museum of Wales, CCBC, and landowners, and any other relevant information to the general public.	CBP	BSBI libraries schools	✓				✓				✓
6.6.2 Inform landowners of the biodiversity importance of cowslips.	CBP	landowners	✓				✓				✓

MAP 16.3 - COWSLIP



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ORCHIDS ORCHIDACEAE SPECIES ACTION PLAN

1. INTRODUCTION

Orchids have been identified as important plants in Caerphilly county borough. They are an attractive part of the landscape and many are instantly recognisable. They can also be indicative of ecologically important habitats, but many are in decline due to human activities. The orchid species included in this action plan are listed below:

- **Bee Orchid** *Ophrys apifera*
- **Common spotted-orchid**
Dactylorhiza fuchsii
- **Early purple orchid** *Orchis mascula*
- **Frog orchid** *Coeloglossum viride*
- **Green-winged orchid** *Orchis morio*
- **Heath spotted-orchid**
Dactylorhiza maculata
- **Pyramidal orchid**
Anacamptis pyramidalis
- **Southern marsh orchid**
Dactylorhiza praetermissa

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	-
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I, Section 13

2. CURRENT STATUS

2.1 UK and Wales

The orchid family *Orchidaceae* is one of the largest families of flowering plants, comprising some 20,000 species throughout the world, and displays a diversity of flower structure few other plant families can match. Their distribution ranges from desert to rain forest, and this ecological complexity, along with their popularity worldwide, instigate a need for orchid conservation⁴². Only the fen orchid is a priority species in the UKBAP³⁹, but does not occur in Caerphilly county borough. Some of the habitats supporting the species covered by this SAP, however, are identified as priorities, including dry calcareous and wet grasslands, bogs and marshes, and native coniferous and deciduous woodlands³⁹.

2.2 Caerphilly County Borough

There are a number of records for some orchid species in the county borough, for example several species have been recorded at SINC 75: **Ton-y-pistyll Fields**⁸. The current status of the different orchid species covered by this action plan is outlined below.

2.2.1 Bee Orchid

The bee orchid is a native species of limestone/calcareous grasslands, sometimes found on roadsides, banks and in open woods. It may also occur in quarries and on railway cuttings in Caerphilly county borough. It is an infrequent species, usually occurring in small numbers, mainly in the south and east of England and Wales, being rare in the north of England and in Ireland.



bee orchid (detail of single flower)

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In Caerphilly county borough the bee orchid has recently been recorded at the Pontymister Industrial Estate, Risca (BSBI) (**Map 16.4**), but further survey throughout the county borough is required to establish its distribution and status.

2.2.2 Common spotted-orchid

This orchid is also a native species to Britain, occurring on base-rich marshes and marshy meadows. It is widely distributed, but usually in rather small populations in the uplands. It has also been recorded in Wales in grassy habitats and open woods, generally on calcareous soils. It is probably the commonest of the marsh orchids, often found in large colonies. In the Rhymney Valley it is found mainly on damp pastures, marshes and streamsides, on basic flushes.



common spotted-orchid (detail of single flower)
© CCBC 2002

It is widespread and frequent, particularly in the southern Rhymney Valley on calcareous soils²⁸ and has been recently recorded on the Pontymister Industrial Estate. SINCs in Caerphilly county borough⁸: (**Map 16.5**) 65: **Pen-Rhiw Bengi Marsh**, 66: **Nant Philkins Fields**, 68: **Cwm Dows Valley** and 93: **Aberbargoed Fields** (SSSI).

2.2.3 Early purple-orchid

This is a frequent native species, to be found in woodland, often of beech and oak, scrub, grassland and roadside verges. It has also been recorded in hedgerows and quarries in Wales as a whole. It is locally common throughout Britain, and in the Rhymney Valley area of Caerphilly county borough it occurs in damp grassland and woodland. It is rare in the north and mid-valley areas, but more frequent on calcareous soils in the south²⁸.



early purple-orchid (detail of single flower)
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SINCs⁸ (**Map 16.6**): 172: **Rudry Woodlands** and 79: **Penmaen Carr** (also a GWT reserve).

2.2.4 Frog orchid

This species is native in Britain but is considered rare in some parts. It is mainly found in pastures and on calcareous grassland. It is scarce in South Wales, particularly the Glamorgan region, with very few recent records, for example, Caerphilly Common (L. Reynolds, 1946)⁴⁰. It can also be found in grassland and woodland margins, and has been recorded in Wales as a whole in quarries, on stonewalls, bogs, heathland, waste ground and roadside verges.



frog orchid (detail of single flower)
© CCBC 2002

There is only one recent record for the frog orchid in the south of the county borough.

2.2.5 Green-winged orchid

The green-winged orchid is a native, widespread, but rapidly declining species of unimproved managed hay meadows, including calcareous grassland and pastures. Most inland meadow populations have been destroyed through ploughing, but a few fragments survive on roadsides and above quarries⁴⁰. It is therefore scarce in Wales, and in Glamorgan it is mainly restricted to the coastal fringe, with only 4 colonies known in the mid and south of the area.



green-winged orchid (detail of single flower)
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It has been recorded in Wales as a whole in grassy habitats, open scrub, sometimes in abandoned quarries and sand pits, marshland and wetland. It is a locally significant species, but there are no recent records for Caerphilly county borough.

2.2.6 Heath spotted-orchid

The heath spotted-orchid is a beautiful native species found mainly in acid grassland, heathland, spoil tips and rhos pasture. It is a good indicator of valuable grassland and heathland habitats. It is a locally significant species, but populations are decreasing. It is locally abundant where damp meadows and moorland occur, and in the Rhymney Valley it occurs on wet heath, bog and peaty marshes on acid soils. It is fairly common in the north, but rare to frequent in the south²⁸.

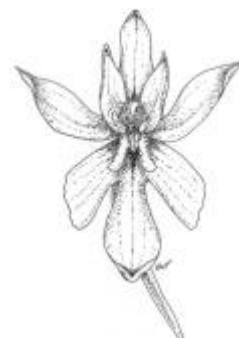


heath spotted-orchid (detail of single flower)
© CCBC 2002

SINCs⁸ (Map 16.7): 94: **Penllwyn Grasslands** (SSSI), 19: **Y Graig Mire** and 93: **Aberbargoed Fields** (SSSI).

2.2.6 Pyramidal orchid

This is a native species of limestone grassland, but it is scarce or only found in small numbers. It has been recently recorded only from coastal sites⁴⁰. However, in Wales it is often associated with grassy habitats, generally rough unimproved meadows and pastures, banks, roadsides and open woodland rides, generally on calcareous soils. It is one of the commonest orchids in northwest Europe and is found throughout much of Britain.



pyramidal orchid (detail of single flower)
© CCBC 2002

It has been recorded near Hafrodryns in the county borough, but no systematic surveys have been undertaken.

2.2.7 Southern marsh-orchid

This is another native orchid species, mainly found in base-rich marshy meadows and marshy waste ground. It is common in the lowlands of western Glamorgan, where it often colonises disturbed waste ground. In Wales it is found on base-rich or calcareous soils, in damp meadows, marshes and fens; it is confined to the south and east of Britain. In the Rhymney Valley marshes, damp roadsides and railways are important habitats; the southern marsh-orchid is very local but widespread²⁸.



southern marsh-orchid (detail of single flower)

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SINCs: (Map 16.8): 13: **Nant Bargod Flush** and 56: **Brooklands Marsh**.

2.3 Links with Habitats

These orchid species have been recorded in many different types of habitat including:

- *Wetlands* (marshes and bogs),
- *Deciduous Woodlands* (woodland rides and glades)
- **Species-rich Grasslands** (calcareous and acid grasslands)
- **Wildlife Corridors** (hedgerows, railways, roadsides and walls)
- *Common Land*
- *Heathland*
- *Post-industrial land* (quarries, waste-ground)

3. CURRENT FACTORS AFFECTING THE SPECIES

- The main reason for the decline in orchids is habitat loss, due to alteration, destruction and fragmentation.
- Sites have been lost due to agricultural improvements, intensification and abandonment.
- Many urban fringe sites will be affected by residential or employment allocations or development.
- The management of roadsides, railways, hedgerows and walls may effect some orchids (wildlife corridors).
- Over-collecting: removal for trade, horticulture and amateur collections.
- Drainage of wetland areas (**heath spotted-orchid, southern marsh-orchid**).

4. CURRENT ACTION

- 4.1 The IUCN/SSC Orchid Specialist Group (OSG) is preparing an Action Plan for Orchidaceae⁴². It is using information from many experts in the field, which will provide the underlying principles for orchid conservation. Action is recommended for the local level, but they are also using general actions that can be applied to all species.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to these species.

5.2 Caerphilly Objectives and Targets

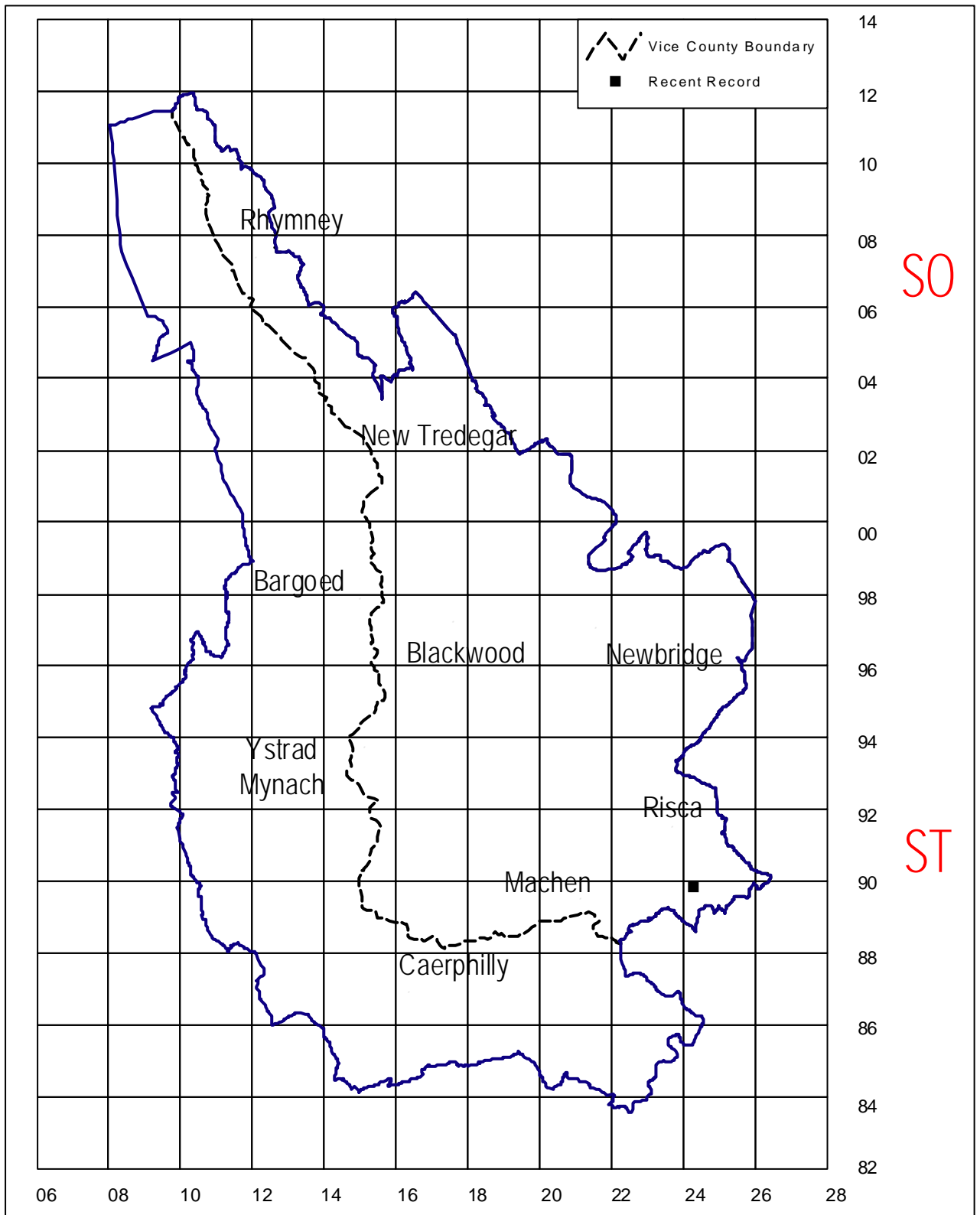
5.2.1 Identify the current distribution for these orchid species in the county borough and monitor habitats/known sites (Target: 2003 and ongoing).

5.2.2 Maintain and enhance all existing populations of orchids and their associated plant communities and ensure that important habitats are managed appropriately (ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:									
	Lead	Partners	2003	4	5	6	7	8	9	10	11	
6.1 Policy and Legislation												
6.1.1 Seek to designate important habitats supporting orchids, such as species-rich grassland, heath, wetland, and rhos pasture, as SI NC.	CCBC	-										✓
6.2 Site Safeguard and Management												
6.2.1 Encourage the appropriate management of sites with populations of these orchid species and associated plant communities.	CCBC	FC GWT GLWT Coed Cymru landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection												
6.3.1 Ensure protection is given to orchid species in the county borough and management is sensitive to the ecological requirements of the species.	CCBC	NAWAD Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory												
6.4.1 Provide advice, information and training on grants, incentive schemes, and appropriate management techniques to owners and managers.	CBP	Coed Cymru landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring												
6.5.1 Monitor known orchid sites regularly.	BSBI	CCBC	✓				✓					✓
6.6 Communications and Publicity												
6.6.1 Raise awareness of the need to conserve species-rich grasslands, and other important orchid habitats through the use of traditional agricultural practices.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Raise awareness of the conservation importance of orchids as indicators of important habitats.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

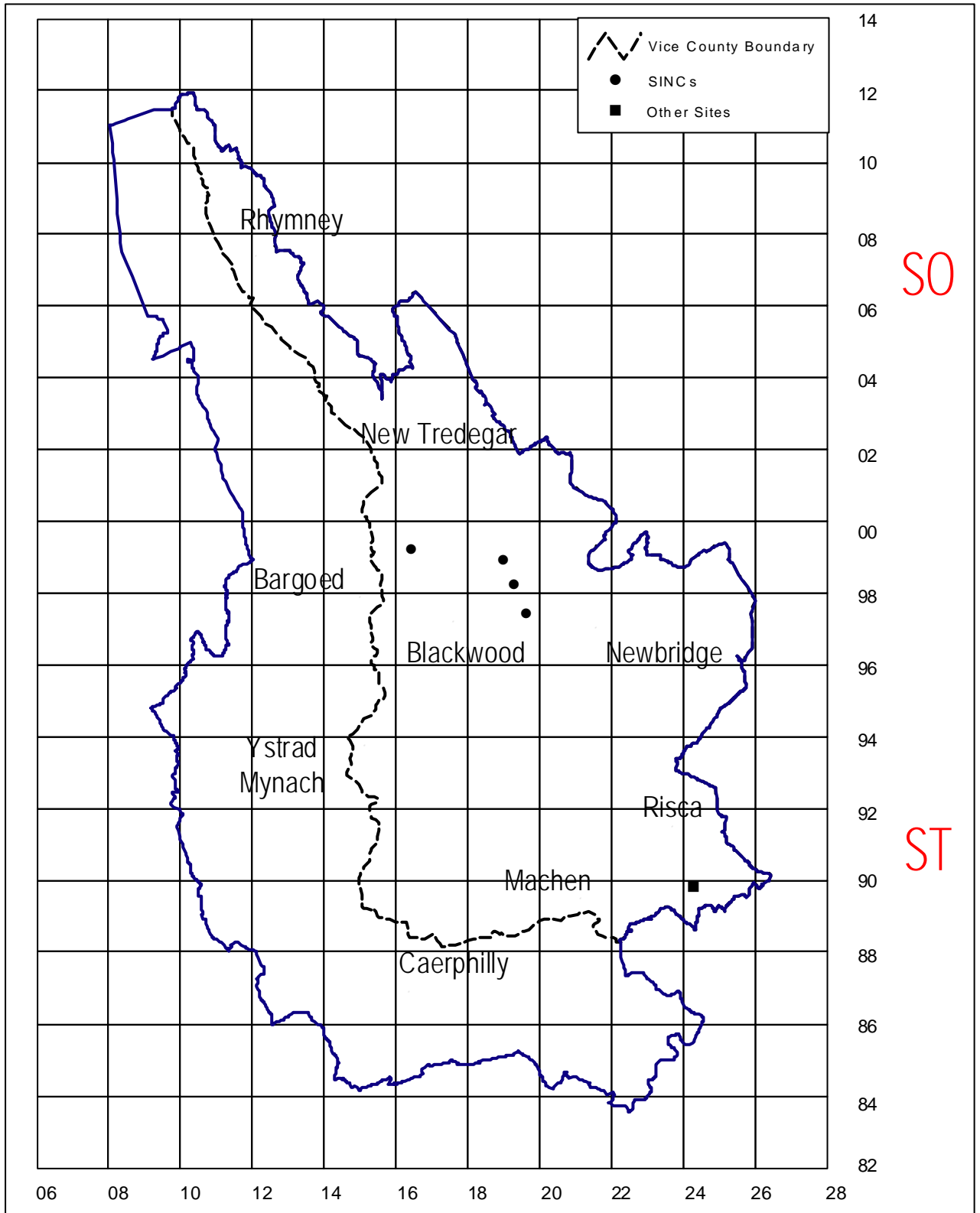
MAP 16.4 - BEE ORCHID



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 Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

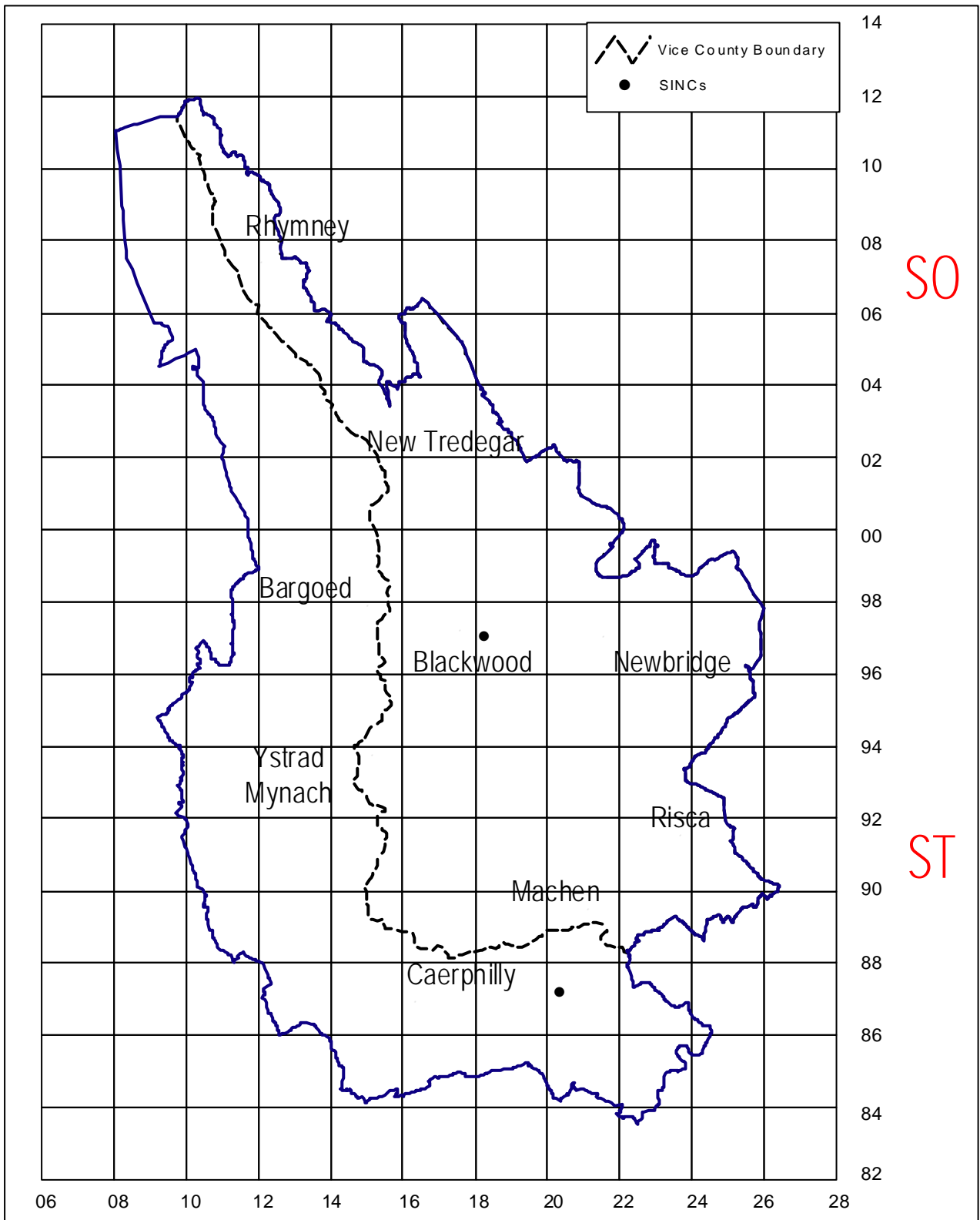
MAP 16.5 - COMMON SPOTTED - ORCHID



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 Mae atgynhychu heb awdurdod yn torri hawffraint y Goron. Gall hyn arwain at erlyniad neu achos siffl.
 Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

MAP 16.6 - EARLY PURPLE- ORCHID



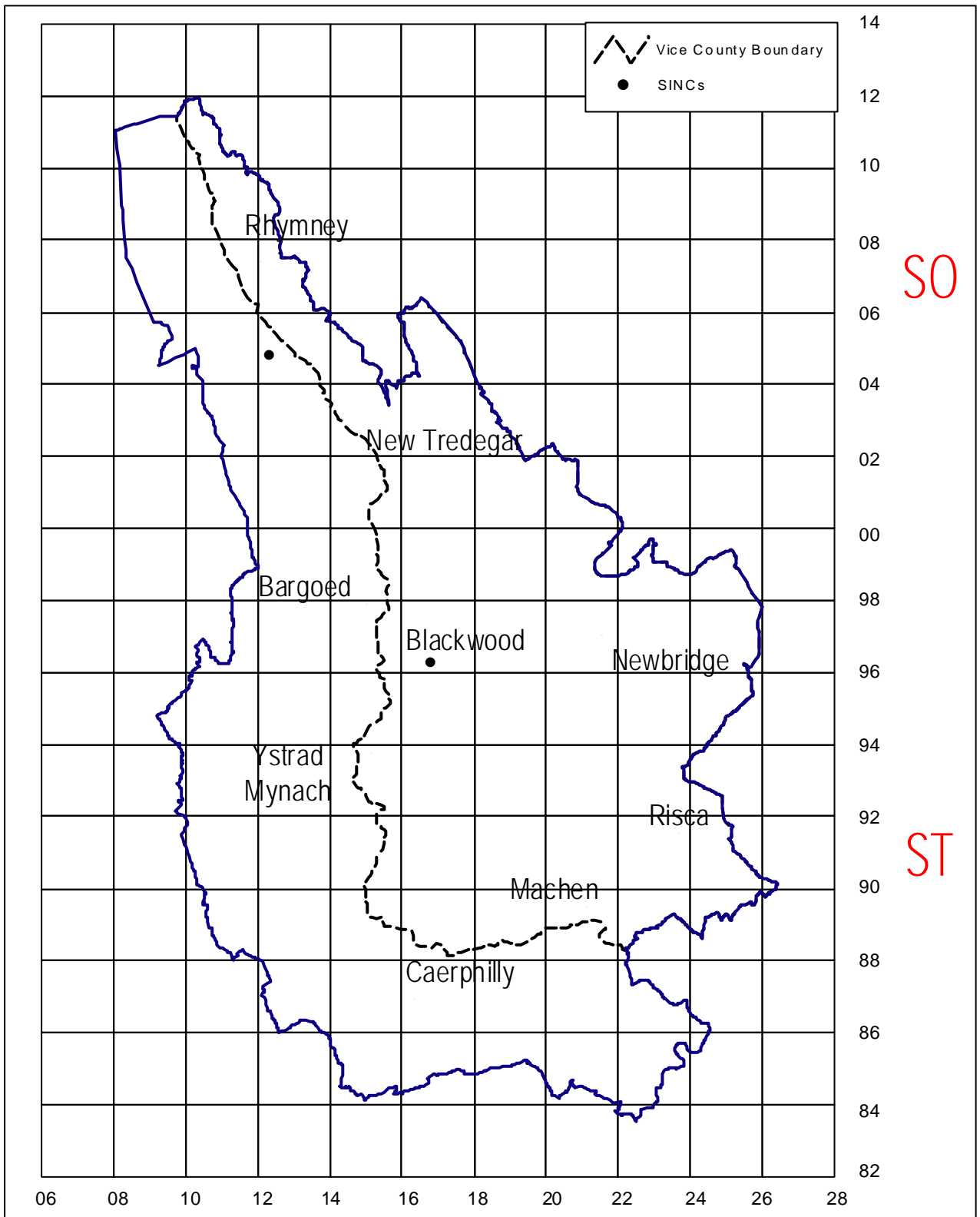
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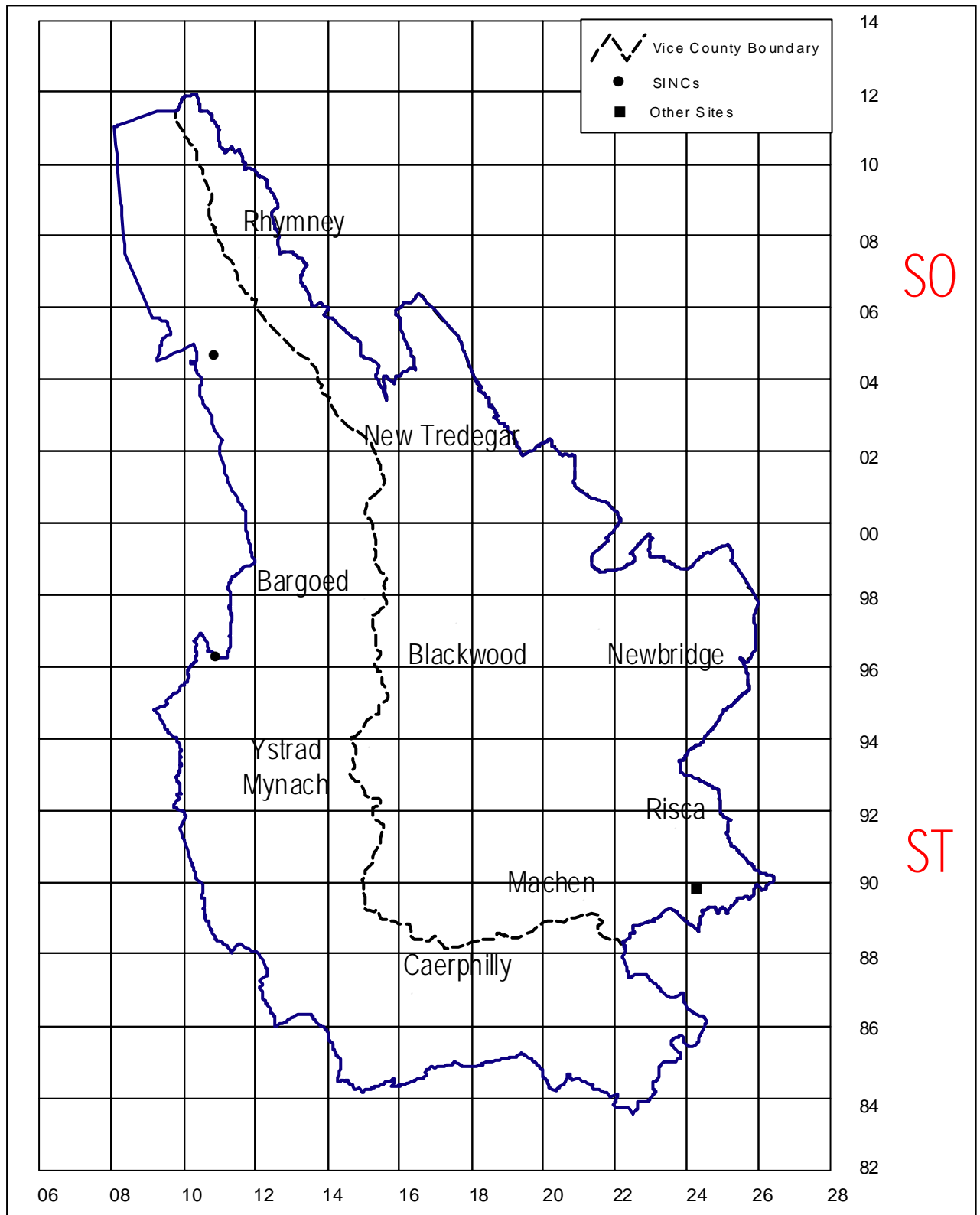
MAP 16.7 - HEATH SPOTTED - ORCHID



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Atgynhychwyd o fapiad yr Arolwg Ordnans gyda chaniatod rheolwr Llyfrfa ei Mawrhydi hawlfraint y Goron.
 Mae atgynhychu heb awdurdod yn torri hawlfraint y Goron. Gall hyn arwain at erlyniad neu achos sfiil.
 Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

MAP 16.8 - SOUTHERN MARSH - ORCHID



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SPECIES STATEMENT

YELLOW RATTLE *RHIANTHUS MINOR*

The yellow rattle is predominantly associated with lowland neutral grasslands and so is highlighted in the **Species-Rich Grasslands Habitat Statement**.

The species has been identified as a locally common plant species of some significance to the area. It is found mainly in meadows and on railway lines, where neutral grassland occurs.

There will be specific actions and targets for the yellow-rattle within the *Lowland Neutral Grassland Habitat Action Plan*, to be prepared at a later date.

SINCs in Caerphilly county borough⁸:

- 21: **Manmoel Meadows**
- 70: **Cyncoed Fields**
- 76: **Chapel Pastures**
- 83: **Trelyn Woodland and Meadow**
- 183: **Coed Cefn-Pwll-Du**



yellow rattle (detail of single flower)

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BLUEBELL *HYACINTHOIDES NON-SCRIPTA* SPECIES ACTION PLAN**1. INTRODUCTION**

The bluebell is an internationally important species with a high proportion of its European population in Britain. It is an excellent symbol of woodland conservation and a species for which the UK has a genuine global responsibility. It has been identified as a locally important native flowering plant in Caerphilly county borough, but as populations vary with the amount of ancient woodland remaining it is important Caerphilly maintains its proportion of the European population.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	S
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CI TES 1975	
WCA 1981	Part I, Section 13 Sch. 8



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2. CURRENT STATUS**2.1 UK and Wales**

Bluebell woodlands are a speciality of the British Isles and the Atlantic fringe of northern France. The moist oceanic climate of the UK evidently provides ideal conditions for the bluebell and it holds a third of the world's population²⁷.

The bluebell has been identified as a locally significant species found in woodlands, hedgerows and pasture (derelict woodland).

2.2 Caerphilly County Borough

The bluebell is an attractive and well-known flowering plant indicative of ancient woodlands. In Caerphilly county borough it is also associated with hedgerows, colliery spoil and under bracken (*Pteridium aquilinum*) on heathland and ffridd/coedcae. In spring hillsides with carpets of blue can be seen throughout the county borough. Bluebells have been recorded on the following SIN C sites⁸ (Map 16.1):

30:	Llwyn-Bach Woodland	35:	Pen y Waun
40:	Pen-y-Fan Fach Grassland	52:	Cefn Hengoed Hillside
63:	Blackwood Riverside Woodlands	126:	Maescwmmer Meadows
127:	Mynydd Bach Slopes	133:	Craig y Prisiad Woodlands
148:	Cwm Gofapi Woods	152:	Darran Woodland
166:	Pont-y-Pandy	170:	Cefn Onn Ridge
182:	Tudor Gardens Quarry	183:	Coed Cefn-Pwll-Du
190:	Thornhill Quarries		

2.3 Links with Habitats

- **Deciduous Woodlands**
- **Wildlife Corridors** (hedgerows, roadside verges)
- *Common Land*
- **Ffridd/Coedcae**
- *Heathland*
- *Post-Industrial Land* (broadleaved woodlands on spoil tips and quarries)
- *Urban Habitats*

3. CURRENT FACTORS AFFECTING THE SPECIES

- Although apparently abundant in some locations, the species has been declining due to loss of habitat, for example loss of woodland through the replanting of broadleaved woodland with conifers, and hedgerows.
- A decline in traditional woodland management can lead to shading out of bluebells.
- Physical damage to bulbs and leaves by trampling, heavy grazing and shading.
- Urban encroachment and a 'tidy park' mentality can threaten bluebells in urban locations, for example through regular mowing, including during flowering period.
- In some areas bluebells have been commercially removed. The inclusion of the species into the Wildlife and Countryside Act 1981 was specifically to legislate against this.
- Picking bluebell flowers is undesirable and can weaken colonies.
- The planting of the Spanish bluebell in gardens and parks has led to cross-pollination and hybridization of the native bluebell. This is a very real problem in urban and suburban woods and hedgerows.
- Trampling in woodlands and other habitats in areas open to the public. Bluebells are affected by trampling which occurs where there are large numbers of visitors. Seed production is harmed, but damage can be minimised by persuading visitors to use set paths around the edges of bluebell stands¹.

4. CURRENT ACTION

- 4.1 The forestry Authority produce guidelines and brochures to raise awareness of the wildlife value of woodland.
- 4.2 Existing woodland management schemes generally cater well for the requirements of the bluebell.
- 4.3 Records have been collected by Glamorgan and Gwent Wildlife Trusts, and also by CCBC as part of the SINC surveys.
- 4.4 Ancient woodlands, species-rich secondary woodlands and ffridd are SINC selection criteria; this will include many woods and slopes with bluebells⁸.

- 4.5 Coed Cymru are actively promoting good woodland management practice in Caerphilly county borough, and ground flora improvements accompany good management.
- 4.6 The Hedgerow Regulations 1997 have brought hedgerows into the planning process¹¹ and ensure the retention of a number of ancient and species-rich hedges.
- 4.7 CCBC Parks Services regularly include the bluebell in designs and tenders.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

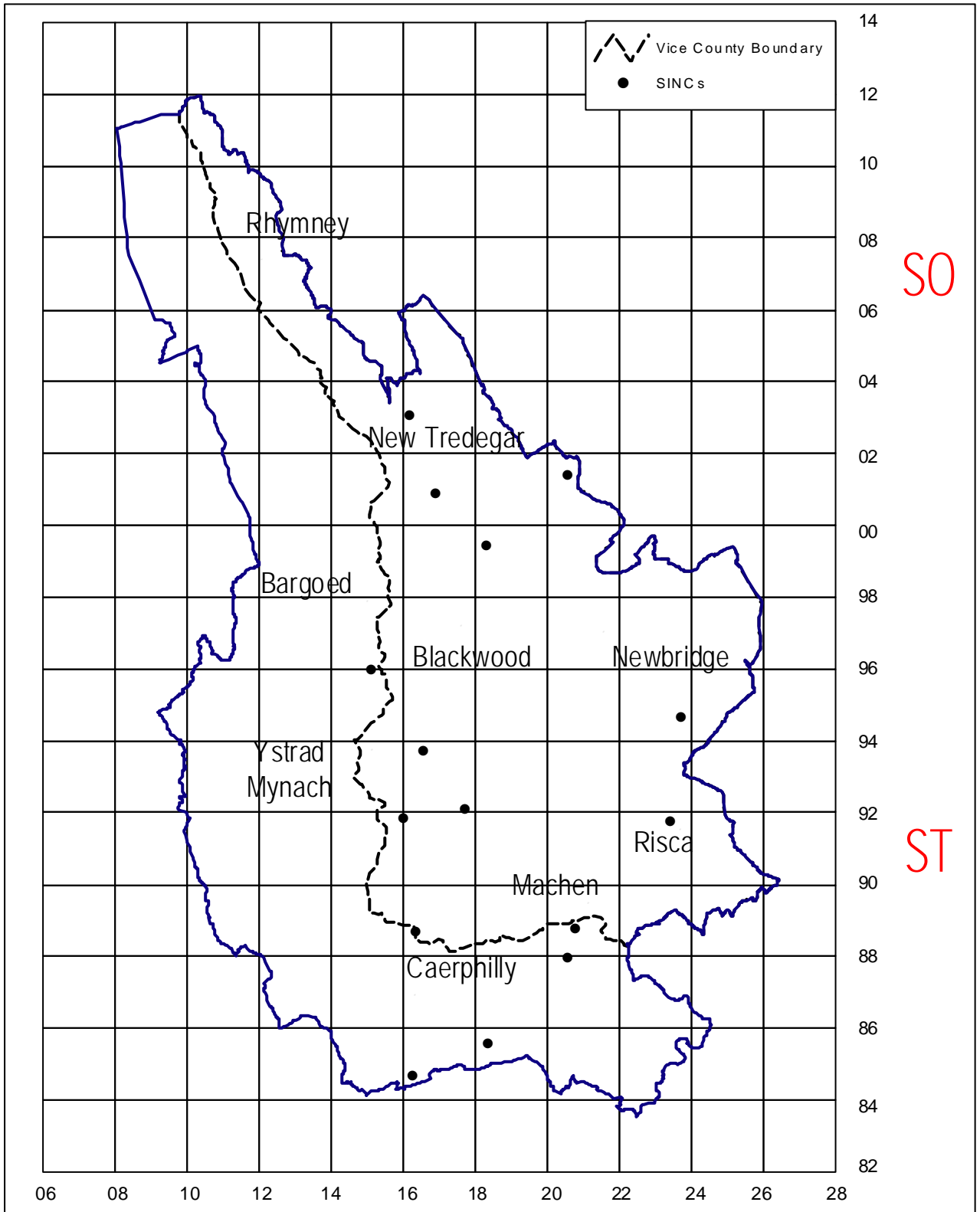
- 5.2.1 Maintain the present population and distribution of bluebells, and encourage the spread to new native woodlands (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
6.1.1 Seek to designate all ancient woodland bluebell sites >2 ha as SIN C.	CCBC	-									✓
6.3.2 Seek to designate areas of ffridd / coedcae and heathland with significant stands of the bluebell as SI NC.	CCBC	-									✓
6.2 Site Safeguard and Management											
6.2.1 Manage all Council owned bluebell sites sympathetically.	CCBC	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.2.2 Identify ownership of all ancient woodland sites.	CCBC	CCW FC Coed Cymru	✓	✓	✓						
6.3 Species Management and Protection											
6.3.1 Encourage ancient woodland landowners to enter woodland grant schemes.	CCBC	Coed Cymru		✓	✓	✓					
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection											
6.3.2 Ensure appropriate management of woodlands, ffridd, heathland and hedgerows, including the modification of existing woodland management plans to stop work in the spring and early summer bulb-recharge period.	FC	CCBC Coed Cymru		✓	✓	✓	✓	✓	✓	✓	✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.3 Species Management and Protection (continued)											
6.3.3 Re-plant suitable former ancient woodland sites with appropriate structure and ground flora.	FC	Coed Cymru CCBC			✓	✓	✓				
6.4 Advisory											
6.4.1 Raise awareness of landowners and managers of the bluebell and their appropriate management, the damage to woodlands caused by deer and other livestock, and the need for fencing.	CBP	landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring											
6.5.1 Monitor known bluebell sites in the county borough to improve baseline data and trends.	BSB I	-	✓				✓				✓
6.6 Communications and Publicity											
6.6.1 Generate publicity highlighting the threats to bluebells and how local people can help, in particular reporting sightings of uprooting to the Police.	CBP	Gwent Police	✓	✓	✓						
6.6.2 Encourage members of the public to check the source when purchasing bluebell bulbs.	CBP	Garden Centres	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.3 Emphasise the importance of people staying on paths when walking in woodlands.	CBP	landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓

MAP 16.1 – BLUEBELL



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SPECIES STATEMENT

COMMON REED *PHRAGMITES AUSTRALIS*

The common reed is predominantly associated with reedbeds and swamp, and so is highlighted in the **Wetlands Habitat Statement**.

The common reed has been identified as a locally common plant species of some significance and so there will be specific actions and targets for the species within the eventual *Reedbed Habitat Action Plan*, to be prepared at a later date.

SINCs in Caerphilly county borough⁸:

55: **Nelson Bog (SSSI)**



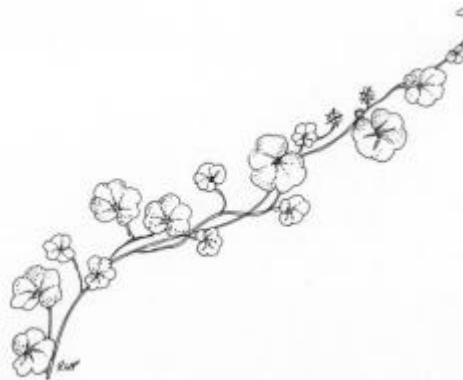
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CORNISH MONEYWORT *SIBTHORPIA EUROPAEA* SPECIES ACTION PLAN

1. INTRODUCTION

The Cornish moneywort has been identified as a locally significant species.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	-
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I, Section 13
Other Species Status	Nationally Scarce



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2. CURRENT STATUS

2.1 UK and Wales

The Cornish moneywort is a small indiscrete plant of damp ditch-sides, walls and roadsides. It is only found in Britain and West France, and nationally it is a very localised species. In Britain its main centre of population is Cornwall, south Devon and Exmoor. In Wales only 9 sites exist, the main population occurs in the Taff Ely area, with a few records from southwest Wales. It is a very local species, known only from a small area around Llantrisant, Ponypridd and Caerphilly on the southern fringe of the Uplands⁴⁰.

2.2 Caerphilly County Borough

The Cornish moneywort is a native species found amongst damp grassy heaths, damp rocks and walls, and moist shady roadsides. It is a very local species, known only in a small area of Glamorgan, and only recorded in Gwent on the bank of the Nant-y-Draenog in Caerphilly county borough. This site is a SIN C (C10.134) and is described as a narrow stream valley woodland and acid grassland area, south of the Nant-y-Draenog reservoir⁸ (see **Map 16.2**).

2.3 Links with Habitats

- Wetland features
- *Deciduous Woodlands* (wet woodland)

3. CURRENT FACTORS AFFECTING THE SPECIES

- The species is nationally scarce in South Wales (but very locally frequent).
- Its preferred habitat is vulnerable to drainage and intensive mechanized ditch clearances.
- It is also likely to depend on stock grazing, to keep ditch sides open and unshaded. The cessation of grazing may be a major factor in its apparent decline.
- More survey and assessment work is required to establish the current population and distribution accurately.

4. CURRENT ACTION

4.1 The Cornish moneywort site in Caerphilly county borough is designated as a SIN C⁸.

5. OBJECTIVES AND TARGETS**5.1 UK Objectives and Targets**

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

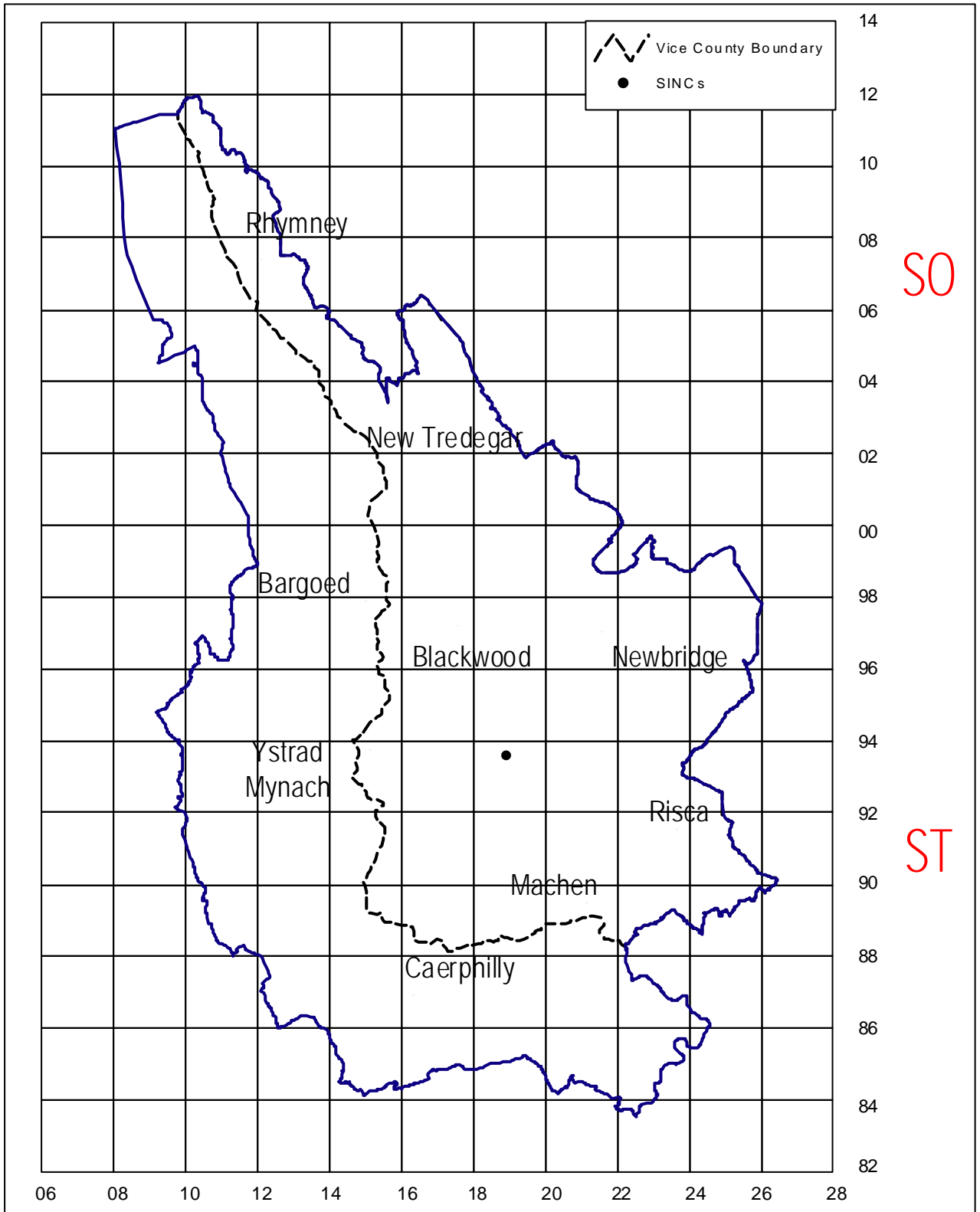
5.2.1 Re-survey the only recorded site to establish population distribution and assess the possibility of encouraging its spread (Target: 2002).

5.2.2 Maintain the current population and distribution of the Cornish moneywort, and encourage the spread to new sites (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:										
	Lead	Partners	2003	4	5	6	7	8	9	10	11		
6.1 Policy and Legislation													
6.1.1 Seek to designate sites as SIN C.	CCBC	-										✓	
6.2 Site Safeguard and Management													
6.2.1 Encourage the appropriate management of the woodland at Nant-y-Draenog in order to maintain the current population of the species and potentially increase its distribution.	CCBC	landowner	✓										
6.3 Species Management and Protection													
6.3.1 Ensure the sensitive management and protection of the whole Nant-y-Draenog SIN C.	CCBC	landowner	✓	✓									
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
6.4 Advisory													
6.4.1 Offer advice on conservation, management and grazing, and identify management plan options with the landowner.	CCBC	Landowner Coed Cymru	✓	✓	✓								
6.5 Future Research and Monitoring													
6.5.1 Re-survey all historical sites.	BSBI	-	✓	✓									
6.5.2 Monitor sites every 5 years.	BSBI	-	✓				✓					✓	
6.6 Communications and Publicity													
6.6.1 Disseminate survey and monitoring information to BSBI, CCW, NMWC, CCBC, and the landowner.	CBP	BSBI	✓				✓					✓	
6.6.2 Inform landowners of the existence of the Cornish moneywort and its biodiversity significance.	CBP	BSBI	✓				✓					✓	

MAP 16.2 - CORNISH MONEYWORT



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COWSLIP *PRIMULA VERIS* SPECIES ACTION PLAN

1. INTRODUCTION

The cowslip has been identified as an important flowering plant species in Caerphilly county borough. It is not listed in the UKBAP, but is considered to be rare locally.

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	-
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I, Section 13
Other Species Status	-



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2. CURRENT STATUS

2.1 UK and Wales

The cowslip is a native species to Britain and is quite frequent throughout England and Wales. It is mainly found in pastures and meadows, grassy habitats, scrub and open woodland, on banks and roadsides, and mainly on dry calcareous soils. It is often locally abundant and can be found cultivated in gardens.

2.2 Caerphilly County Borough

In the former Rhymney Valley district of the county borough it is found on the edges of meadows, but it has only been recorded in the south on basic soils and a railway line embankment in Maesycwmmmer, and is considered rare in the north²⁸. It is usually common in old pastures and meadows, on field banks, roadsides and railway embankments, on base-rich soils, but there are very few recent records so further survey work and public involvement is required. However, there are a few SINC sites in the county borough where the cowslip has been noted⁸, these are listed below (see **Map 16.3**): 168: **Caerphilly Common**, 170: **Cefn Onn Ridge**, 172: **Rudry Woodlands** and 185: **Blaengwynlais Meadows**.

2.3 Links with Habitats

- **Wildlife Corridors** (hedgerows, roadside verges and railways)
- **Common Land**
- **Post-Industrial Land**
- **Urban Habitats**

3. CURRENT FACTORS AFFECTING THE SPECIES

- No recent survey work has been undertaken to identify current distribution of the cowslip.
- Wildflower picking can be a problem in some areas.

- Unfavourable management of roadside verges and other habitats, such as pastures, where they have been improved for agriculture. This has led to the loss of a large proportion of former cowslip strongholds.

4. CURRENT ACTION

- 4.1 Some countywide surveys have been undertaken by BSBI, but no recent surveys.
- 4.2 Several sites supporting cowslips have been designated as SINCs⁸.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to this species.

5.2 Caerphilly Objectives and Targets

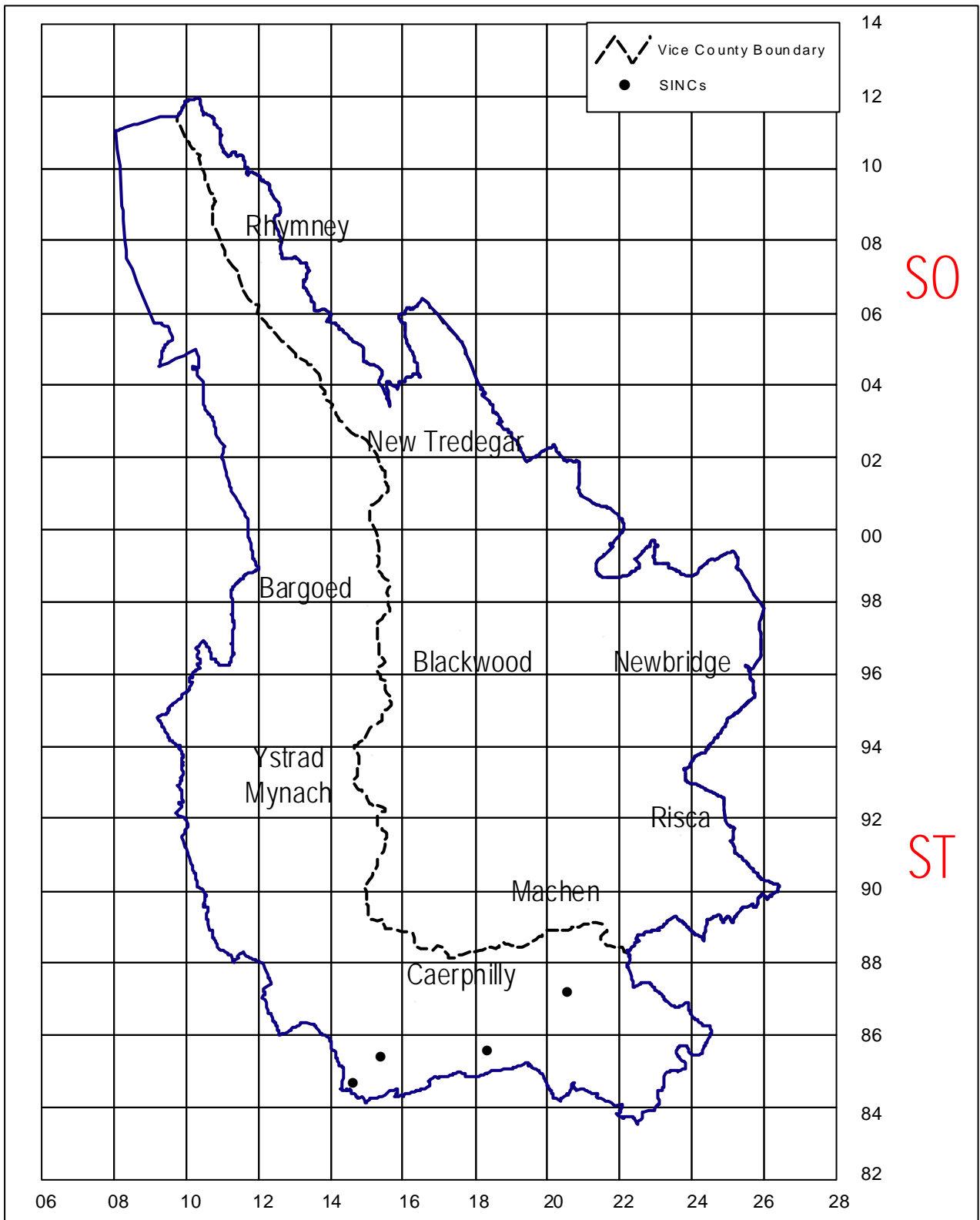
- 5.2.1 Carry out a county borough-wide survey for the species, and encourage reports of sightings from the general public (Target: 2005).
- 5.2.2 Maintain and enhance the population and distribution of the cowslip, and encourage spread into new areas (Target: ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.1 Policy and Legislation											
None proposed at this time.	-	-									
6.2 Site Safeguard and Management											
None proposed at this time.	-	-									
6.3 Species Management and Protection											
6.3.1 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory											
None proposed at this time.	-	-									
6.5 Future Research and Monitoring											
6.5.1 Survey all possible habitat to establish current status and identify important areas.	BSBI	CCBC	✓	✓	✓						
6.5.2 Monitor all established sites on a five-yearly basis.	BSBI	-	✓				✓				✓

Action	Key Partners		Year to be complete or in place by:								
	Lead	Partners	2003	4	5	6	7	8	9	10	11
6.6 Communications and Publicity											
6.6.1 Disseminate survey and monitoring information to BSBI, CCW, National Museum of Wales, CCBC, and landowners, and any other relevant information to the general public.	CBP	BSBI libraries schools	✓				✓				✓
6.6.2 Inform landowners of the biodiversity importance of cowslips.	CBP	landowners	✓				✓				✓

MAP 16.3 - COWSLIP



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 Mae atgynhychu heb awdurdod yn torri hawlfraint y Goron. Gall hyn arwain at erlyniad neu achos sfiil.
 Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

ORCHIDS ORCHIDACEAE SPECIES ACTION PLAN

1. INTRODUCTION

Orchids have been identified as important plants in Caerphilly county borough. They are an attractive part of the landscape and many are instantly recognisable. They can also be indicative of ecologically important habitats, but many are in decline due to human activities. The orchid species included in this action plan are listed below:

- **Bee Orchid** *Ophrys apifera*
- **Common spotted-orchid**
Dactylorhiza fuchsii
- **Early purple orchid** *Orchis mascula*
- **Frog orchid** *Coeloglossum viride*
- **Green-winged orchid** *Orchis morio*
- **Heath spotted-orchid**
Dactylorhiza maculata
- **Pyramidal orchid**
Anacamptis pyramidalis
- **Southern marsh orchid**
Dactylorhiza praetermissa

Relevant Legislation/Species Status	
priority (P) or species of conservation concern (S)	-
EC Habitats Directive	-
Conservation Regs 1994	-
Berne Convention 1982	-
Bonn Convention 1979	-
CITES 1975	-
WCA 1981	Part I, Section 13

2. CURRENT STATUS

2.1 UK and Wales

The orchid family *Orchidaceae* is one of the largest families of flowering plants, comprising some 20,000 species throughout the world, and displays a diversity of flower structure few other plant families can match. Their distribution ranges from desert to rain forest, and this ecological complexity, along with their popularity worldwide, instigate a need for orchid conservation⁴². Only the fen orchid is a priority species in the UKBAP³⁹, but does not occur in Caerphilly county borough. Some of the habitats supporting the species covered by this SAP, however, are identified as priorities, including dry calcareous and wet grasslands, bogs and marshes, and native coniferous and deciduous woodlands³⁹.

2.2 Caerphilly County Borough

There are a number of records for some orchid species in the county borough, for example several species have been recorded at SINC 75: **Ton-y-pistyll Fields**⁸. The current status of the different orchid species covered by this action plan is outlined below.

2.2.1 Bee Orchid

The bee orchid is a native species of limestone/calcareous grasslands, sometimes found on roadsides, banks and in open woods. It may also occur in quarries and on railway cuttings in Caerphilly county borough. It is an infrequent species, usually occurring in small numbers, mainly in the south and east of England and Wales, being rare in the north of England and in Ireland.



bee orchid (detail of single flower)

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In Caerphilly county borough the bee orchid has recently been recorded at the Pontymister Industrial Estate, Risca (BSBI) (**Map 16.4**), but further survey throughout the county borough is required to establish its distribution and status.

2.2.2 Common spotted-orchid

This orchid is also a native species to Britain, occurring on base-rich marshes and marshy meadows. It is widely distributed, but usually in rather small populations in the uplands. It has also been recorded in Wales in grassy habitats and open woods, generally on calcareous soils. It is probably the commonest of the marsh orchids, often found in large colonies. In the Rhymney Valley it is found mainly on damp pastures, marshes and streamsides, on basic flushes.



common spotted-orchid (detail of single flower)
© CCBC 2002

It is widespread and frequent, particularly in the southern Rhymney Valley on calcareous soils²⁸ and has been recently recorded on the Pontymister Industrial Estate. SINCs in Caerphilly county borough⁸: (**Map 16.5**) 65: **Pen-Rhiw Bengi Marsh**, 66: **Nant Philkins Fields**, 68: **Cwm Dows Valley** and 93: **Aberbargoed Fields** (SSSI).

2.2.3 Early purple-orchid

This is a frequent native species, to be found in woodland, often of beech and oak, scrub, grassland and roadside verges. It has also been recorded in hedgerows and quarries in Wales as a whole. It is locally common throughout Britain, and in the Rhymney Valley area of Caerphilly county borough it occurs in damp grassland and woodland. It is rare in the north and mid-valley areas, but more frequent on calcareous soils in the south²⁸.



early purple-orchid (detail of single flower)
© CCBC 2002

SINCs⁸ (**Map 16.6**): 172: **Rudry Woodlands** and 79: **Penmaen Carr** (also a GWT reserve).

2.2.4 Frog orchid

This species is native in Britain but is considered rare in some parts. It is mainly found in pastures and on calcareous grassland. It is scarce in South Wales, particularly the Glamorgan region, with very few recent records, for example, Caerphilly Common (L. Reynolds, 1946)⁴⁰. It can also be found in grassland and woodland margins, and has been recorded in Wales as a whole in quarries, on stonewalls, bogs, heathland, waste ground and roadside verges.



frog orchid (detail of single flower)
© CCBC 2002

There is only one recent record for the frog orchid in the south of the county borough.

2.2.5 Green-winged orchid

The green-winged orchid is a native, widespread, but rapidly declining species of unimproved managed hay meadows, including calcareous grassland and pastures. Most inland meadow populations have been destroyed through ploughing, but a few fragments survive on roadsides and above quarries⁴⁰. It is therefore scarce in Wales, and in Glamorgan it is mainly restricted to the coastal fringe, with only 4 colonies known in the mid and south of the area.



green-winged orchid (detail of single flower)
© CCBC 2002

It has been recorded in Wales as a whole in grassy habitats, open scrub, sometimes in abandoned quarries and sand pits, marshland and wetland. It is a locally significant species, but there are no recent records for Caerphilly county borough.

2.2.6 Heath spotted-orchid

The heath spotted-orchid is a beautiful native species found mainly in acid grassland, heathland, spoil tips and rhos pasture. It is a good indicator of valuable grassland and heathland habitats. It is a locally significant species, but populations are decreasing. It is locally abundant where damp meadows and moorland occur, and in the Rhymney Valley it occurs on wet heath, bog and peaty marshes on acid soils. It is fairly common in the north, but rare to frequent in the south²⁸.

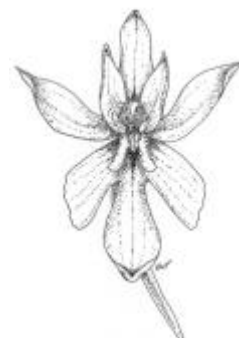


heath spotted-orchid (detail of single flower)
© CCBC 2002

SINCs⁸ (Map 16.7): 94: **Penllwyn Grasslands** (SSSI), 19: **Y Graig Mire** and 93: **Aberbargoed Fields** (SSSI).

2.2.6 Pyramidal orchid

This is a native species of limestone grassland, but it is scarce or only found in small numbers. It has been recently recorded only from coastal sites⁴⁰. However, in Wales it is often associated with grassy habitats, generally rough unimproved meadows and pastures, banks, roadsides and open woodland rides, generally on calcareous soils. It is one of the commonest orchids in northwest Europe and is found throughout much of Britain.



pyramidal orchid (detail of single flower)
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It has been recorded near Hafrodryns in the county borough, but no systematic surveys have been undertaken.

2.2.7 Southern marsh-orchid

This is another native orchid species, mainly found in base-rich marshy meadows and marshy waste ground. It is common in the lowlands of western Glamorgan, where it often colonises disturbed waste ground. In Wales it is found on base-rich or calcareous soils, in damp meadows, marshes and fens; it is confined to the south and east of Britain. In the Rhymney Valley marshes, damp roadsides and railways are important habitats; the southern marsh-orchid is very local but widespread²⁸.



southern marsh-orchid (detail of single flower)

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SINCs: (Map 16.8): 13: **Nant Bargod Flush** and 56: **Brooklands Marsh**.

2.3 Links with Habitats

These orchid species have been recorded in many different types of habitat including:

- *Wetlands* (marshes and bogs),
- *Deciduous Woodlands* (woodland rides and glades)
- **Species-rich Grasslands** (calcareous and acid grasslands)
- **Wildlife Corridors** (hedgerows, railways, roadsides and walls)
- *Common Land*
- *Heathland*
- *Post-industrial land* (quarries, waste-ground)

3. CURRENT FACTORS AFFECTING THE SPECIES

- The main reason for the decline in orchids is habitat loss, due to alteration, destruction and fragmentation.
- Sites have been lost due to agricultural improvements, intensification and abandonment.
- Many urban fringe sites will be affected by residential or employment allocations or development.
- The management of roadsides, railways, hedgerows and walls may effect some orchids (wildlife corridors).
- Over-collecting: removal for trade, horticulture and amateur collections.
- Drainage of wetland areas (**heath spotted-orchid, southern marsh-orchid**).

4. CURRENT ACTION

- 4.1 The IUCN/SSC Orchid Specialist Group (OSG) is preparing an Action Plan for Orchidaceae⁴². It is using information from many experts in the field, which will provide the underlying principles for orchid conservation. Action is recommended for the local level, but they are also using general actions that can be applied to all species.

5. OBJECTIVES AND TARGETS

5.1 UK Objectives and Targets

Not applicable to these species.

5.2 Caerphilly Objectives and Targets

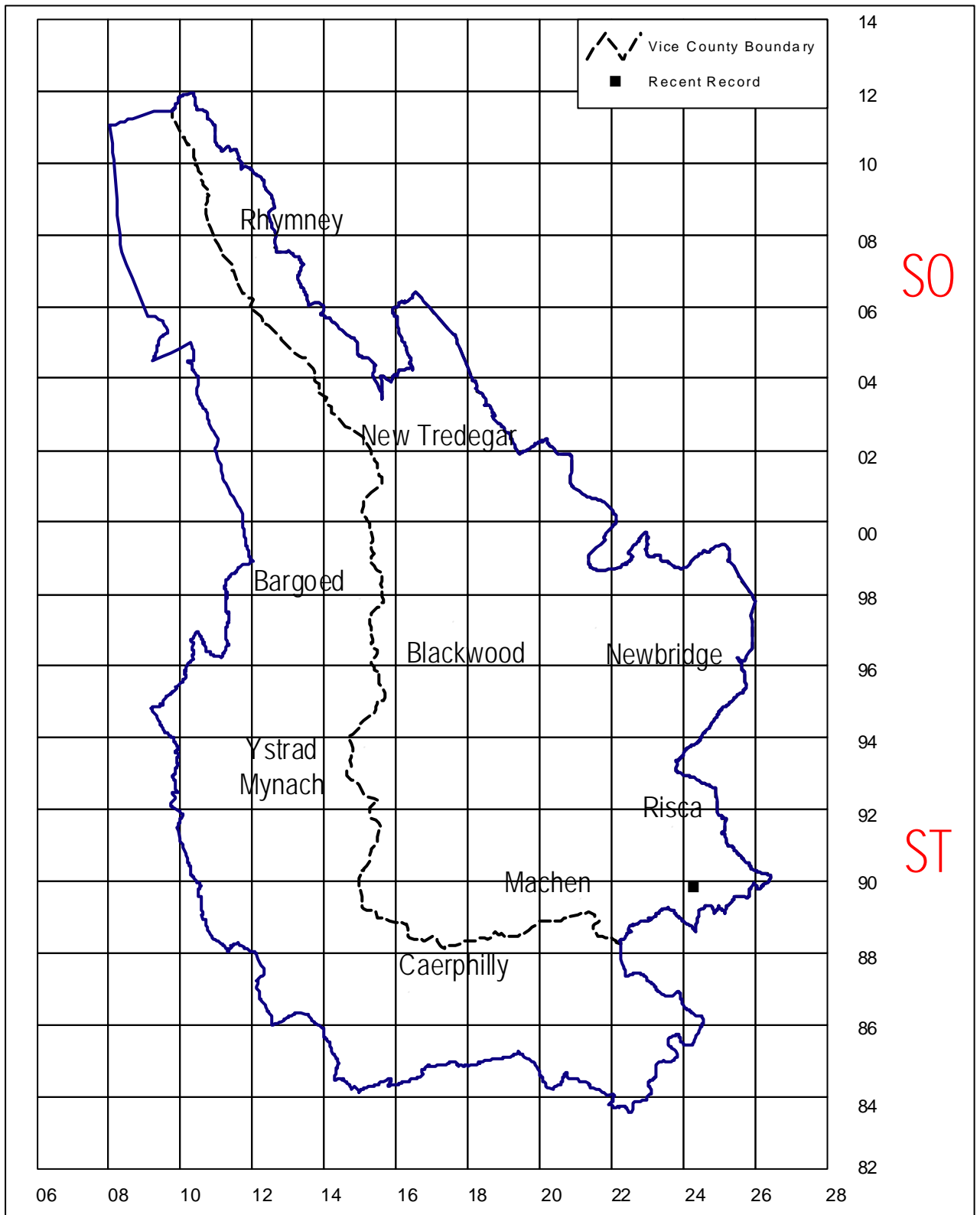
5.2.1 Identify the current distribution for these orchid species in the county borough and monitor habitats/known sites (Target: 2003 and ongoing).

5.2.2 Maintain and enhance all existing populations of orchids and their associated plant communities and ensure that important habitats are managed appropriately (ongoing).

6. ACTION AND KEY PARTNERS

Action	Key Partners		Year to be complete or in place by:									
	Lead	Partners	2003	4	5	6	7	8	9	10	11	
6.1 Policy and Legislation												
6.1.1 Seek to designate important habitats supporting orchids, such as species-rich grassland, heath, wetland, and rhos pasture, as SI NC.	CCBC	-										✓
6.2 Site Safeguard and Management												
6.2.1 Encourage the appropriate management of sites with populations of these orchid species and associated plant communities.	CCBC	FC GWT GLWT Coed Cymru landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3 Species Management and Protection												
6.3.1 Ensure protection is given to orchid species in the county borough and management is sensitive to the ecological requirements of the species.	CCBC	NAWAD Coed Cymru	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.3.2 Continue to implement wildlife legislation.	Gwent Police	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.4 Advisory												
6.4.1 Provide advice, information and training on grants, incentive schemes, and appropriate management techniques to owners and managers.	CBP	Coed Cymru landowners	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.5 Future Research and Monitoring												
6.5.1 Monitor known orchid sites regularly.	BSBI	CCBC	✓				✓					✓
6.6 Communications and Publicity												
6.6.1 Raise awareness of the need to conserve species-rich grasslands, and other important orchid habitats through the use of traditional agricultural practices.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
6.6.2 Raise awareness of the conservation importance of orchids as indicators of important habitats.	CBP	-	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓

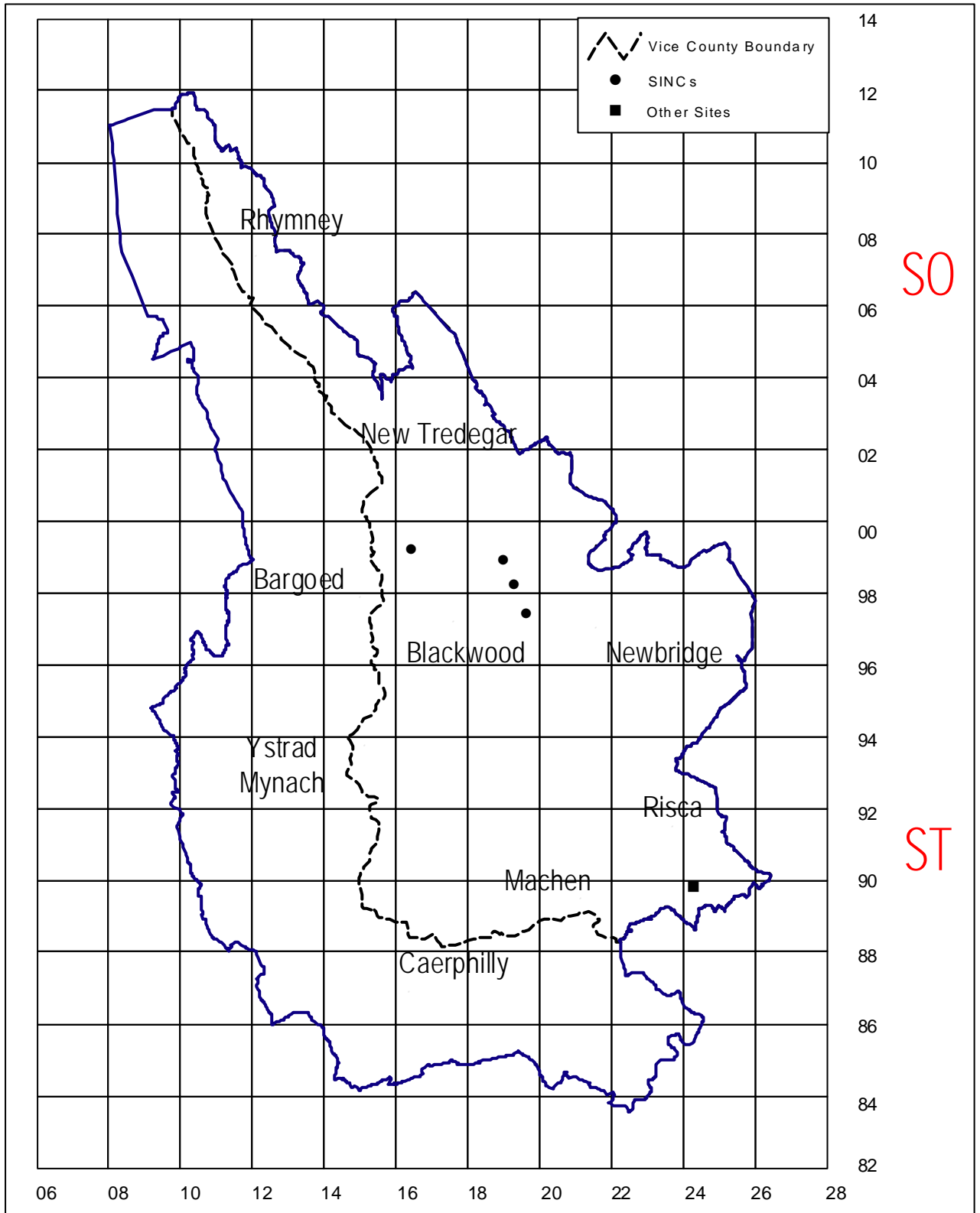
MAP 16.4 - BEE ORCHID



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 Caerphilly County Borough Council, LA09004L, 2001.

Atgynhychwyd o fapiad yr Arolwg Ordnans gyda chaniatad rheolwr Llyfrfa ei Mawhydi hawffraint y Goron.
 Mae atgynhychu heb awdurdod yn torri hawffraint y Goron. Gall hyn arwain at erlyniad neu achos siffl.
 Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

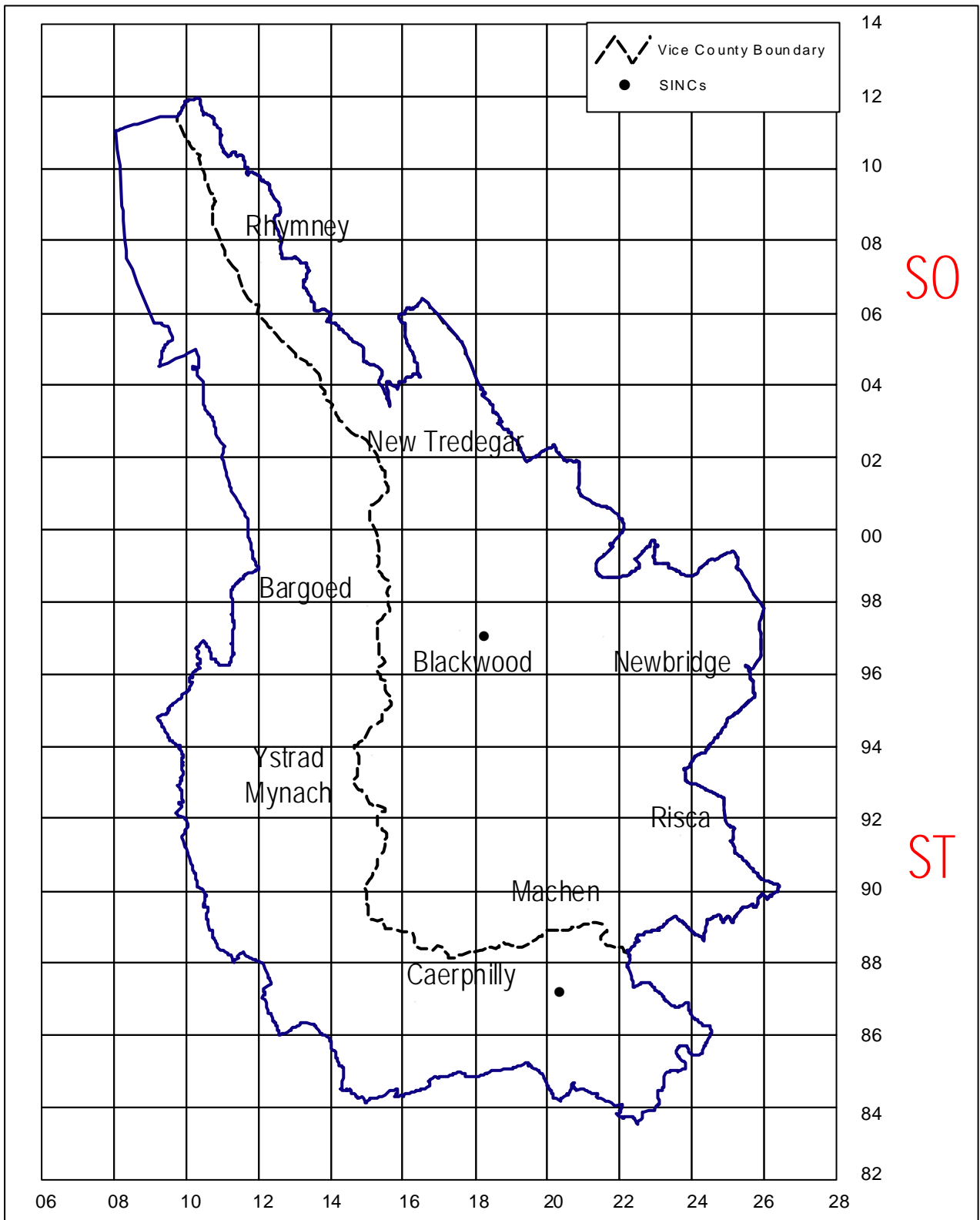
MAP 16.5 - COMMON SPOTTED - ORCHID



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Atgynhychwyd o fapiad yr Arolwg Ordnans gyda chaniatad rheolwr Llyfrfa ei Mawhydi hawffraint y Goron.
 Mae atgynhychu heb awdurdod yn torri hawffraint y Goron. Gall hyn arwain at erlyniad neu achos siffl.
 Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

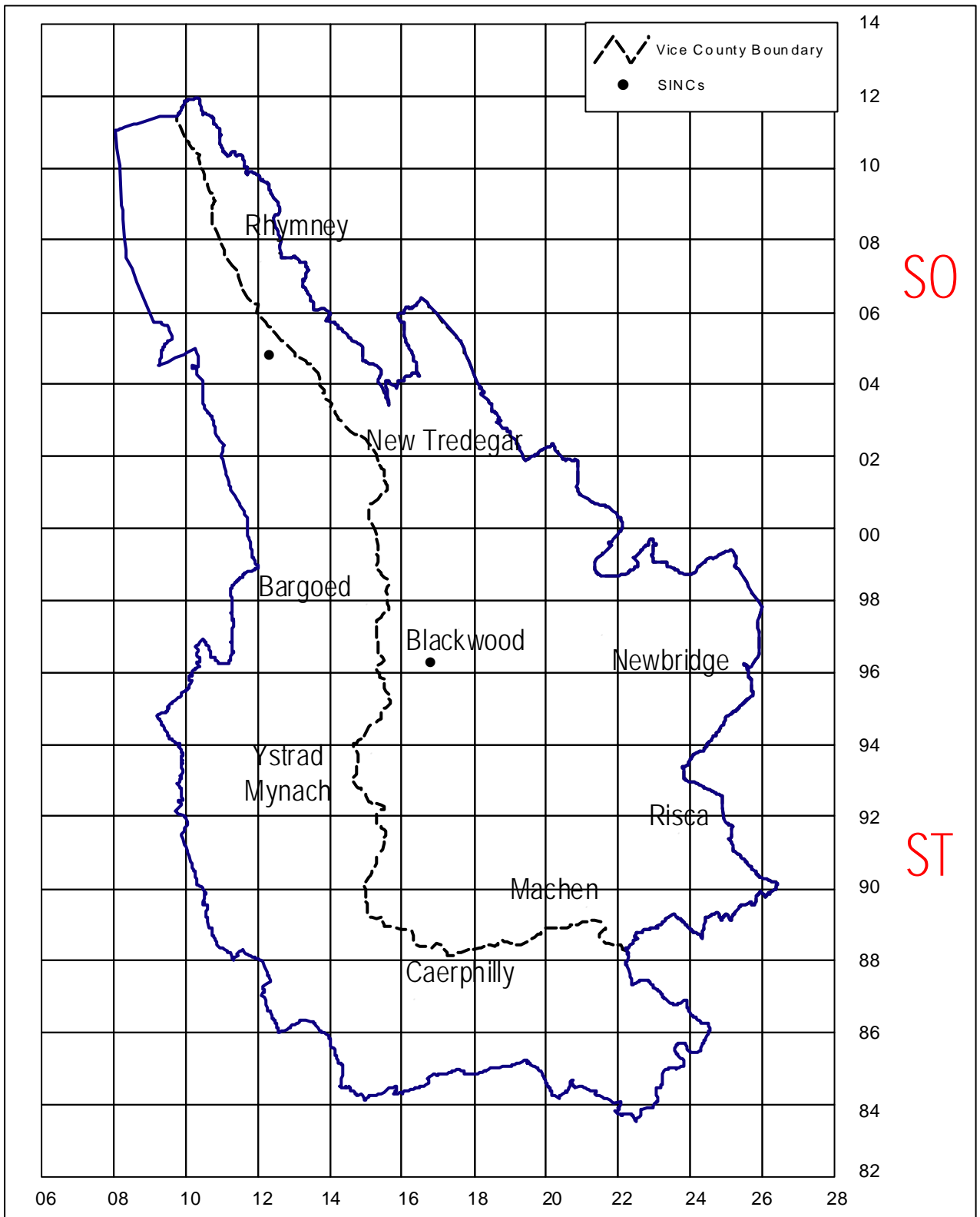
MAP 16.6 - EARLY PURPLE- ORCHID



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Atgynhychwyd o fapiad yr Arolwg Ordnans gyda chaniatod rheolwr Llyfrfa ei Mawrhydi hawlfraint y Goron. Mae atgynhychu heb awdurdod yn torri hawlfraint y Goron. Gall hyn arwain at erlyniad neu achos sfiil. Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

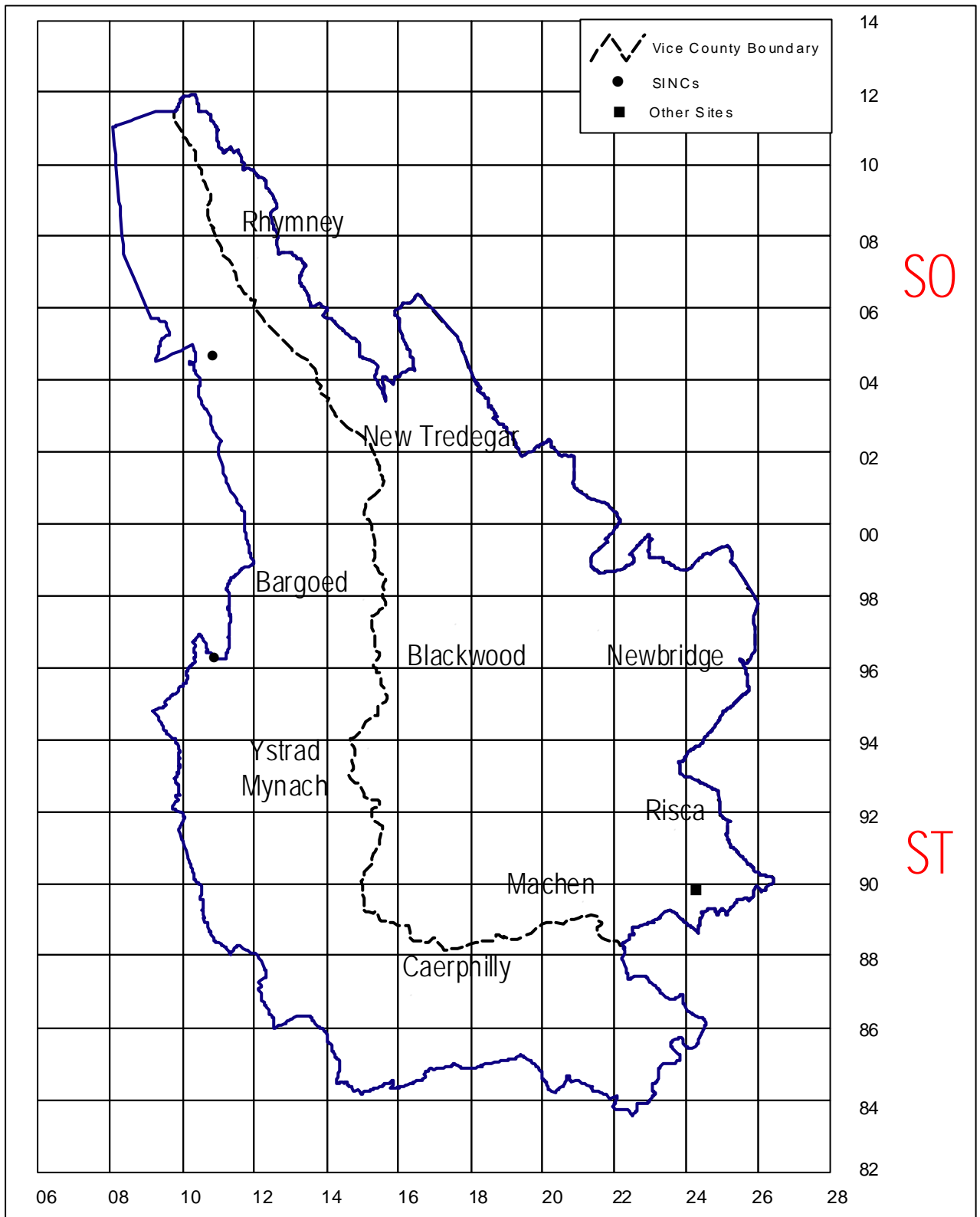
MAP 16.7 - HEATH SPOTTED - ORCHID



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 Caerphilly County Borough Council, LA09004L, 2001.

Atgynhychwyd o fapiad yr Arolwg Ordnans gyda chaniatod rheolwr Llyfrfa ei Mawrhydi hawlfraint y Goron.
 Mae atgynhychu heb awdurdod yn torri hawlfraint y Goron. Gall hyn arwain at erlyniad neu achos sfiil.
 Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

MAP 16.8 - SOUTHERN MARSH - ORCHID



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Atgynhychwyd o fapiad yr Arolwg Ordnans gyda chaniatad rheolwr Llyfrfa ei Mawhydi hawffraint y Goron. Mae atgynhychu heb awdurdod yn torri hawffraint y Goron. Gall hyn arwain at erlyniad neu achos siffl. Cyngor Bwrdeistref Sirol Caerffili, LA09004L, 2001.

SPECIES STATEMENT

YELLOW RATTLE *RHIANTHUS MINOR*

The yellow rattle is predominantly associated with lowland neutral grasslands and so is highlighted in the **Species-Rich Grasslands Habitat Statement**.

The species has been identified as a locally common plant species of some significance to the area. It is found mainly in meadows and on railway lines, where neutral grassland occurs.

There will be specific actions and targets for the yellow-rattle within the *Lowland Neutral Grassland Habitat Action Plan*, to be prepared at a later date.

SINCs in Caerphilly county borough⁸:

- 21: **Manmoel Meadows**
- 70: **Cyncoed Fields**
- 76: **Chapel Pastures**
- 83: **Trelyn Woodland and Meadow**
- 183: **Coed Cefn-Pwll-Du**



yellow rattle (detail of single flower)

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APPENDIX 1: ABBREVIATIONS

ADAS	Agricultural Development and Advisory Service
BAP	Biodiversity Action Plan
BBNP	Brecon Beacons National Park
BC	Butterfly Conservation
BDS	British Dragonfly Society
BGCBC	Blaenau Gwent County Borough Council
BSBI	Botanical Society of the British Isles
BTCV	British Trust for Conservation Volunteers
BTO	British Trust for Ornithology
BW	British Waterways
CADW	CADW Welsh Historic Monuments
CBP	Caerphilly Biodiversity Partnership
CCB	Caerphilly county borough
CCBC	Caerphilly county borough council
CCC	Cardiff County Council
CCW	Countryside Council for Wales
CROWA	Countryside and Rights of Way Act 2000
CMCS	Caerphilly Mountain Countryside Service
DC/WW	Dwr Cymru/Welsh Water
DETR	Department of the Environment, Transport and the Regions (now DEFRA)
DEFRA	Department of the Environment, Farming and Rural Affairs
EA	Environment Agency (Cymru/Wales)
EC	European Community
EN	English Nature
FC	Forestry Commission
FE	Forest Enterprise
FEI	Forest Education Initiative
FUW	Farmers Union of Wales
GBC	Glamorgan Bird Club
GBG	Gwent Bat Group
GBgG	Gwent Badger Group
GGBAG	Greater Gwent Biodiversity Action Group
GLBG	Glamorgan Bat Group
GLBAG	Glamorgan Biodiversity Advisory Group (or GlamBAG)
GLBgG	Glamorgan Badger Group
GLWT	Glamorgan Wildlife Trust
GMRG	Glamorgan Moth Recording Group
GOS	Gwent Ornithological Society
GWT	Gwent Wildlife Trust
Gwk	Groundwork Caerphilly
HAP	Habitat Action Plan
HS	Habitat Statement
IUCN	International Union for the Conservation of Nature and Natural Resources (World Conservation Union)
JNCC	Joint Nature Conservation Committee
KWT	Keep Wales Tidy Campaign
LA21	Local Agenda 21

LANDMAP	Landscape Assessment and Decision Making Process
LBAP	Local Biodiversity Action Plan
LEAP	Local Environment Agency Plan
LNR	Local Nature Reserve
LRC	Local Records Centre
MBMG	Monmouthshire Butterfly and Moth Group
MCC	Monmouthshire County Council
NAW	National Assembly for Wales
NAWAD	National Assembly for Wales Agriculture Department
NBN	National Biodiversity Network
NFU	National Farmers Union
NMWC	National Museum of Wales, Cardiff
NT	National Trust
NVC	National Vegetation Classification
RCT	Ruperra Conservation Trust
RDB	Red Data Book
RIGS	Regionally Important Geological Sites
RSPB	Royal Society for the Protection of Birds
RSPCA	Royal Society for the Protection of Animals
SAC	Special Area of Conservation (cSAC candidate Special Area of Conservation)
SAP	Species Action Plan
SCW	Sports Council for Wales
SINC	Site of Importance for Nature Conservation
SLA	Special Landscape Area
SNH	Scottish Natural Heritage
SSSI	Site of Special Scientific Interest
SWPW	South Wales Peregrine Watch
TCBC	Torfaen County Borough Council
TPO	Tree Preservation Order
UA	Unitary Authority
UDP	Unitary Development Plan
UKBAP	United Kingdom Biodiversity Action Plan
UKBG	United Kingdom Biodiversity Group
UKLIAG	United Kingdom Local Issues Advisory Group
VWT	Vincent Wildlife Trust
WCA	Wildlife and Countryside Act 1981
WDA	Welsh Development Agency
WT	Woodland Trust
WOWLS	Welsh Owl and Wildlife Sanctuary

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 Skylark p. 97
 Grey Partridge p. 105
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FURTHER READING

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APPENDIX 3: WILDLIFE LEGISLATION AND STATUS CATEGORIES

Below is a description of the legislation that protects some of the species and habitats included in this LBAP and some of the related terms used. In order to highlight the current legal status of species the relevant legislation is included in SAPs.

Reference

Freshfields' Environment Group (Ed.) (2000) *Tolley's Environmental Law Issue 9*. Tolley, Croydon, Surrey.

1. INTERNATIONAL LEGISLATION

1.1 World Conservation Strategy 1980

This was produced by the International Union for the Conservation of Nature (IUCN), United Nations Environment Programme, and the World Wide Fund for Nature. It states that conservation is essential for future economic and social development, and should not be dealt with as a separate issue.

Convention

An international agreement through which nations agree to work together co-operatively to implement certain defined policies or take other action.

Countries enter into international conventions voluntarily, but once a country has signed a convention it agrees to be bound by its specified terms and conditions. A number of international conventions to which the UK is a party have had an impact on the development of UK wildlife law.

1.2 Convention on International Trade in Endangered Species of Wild Fauna and Flora 1975 (CITES)

This prohibits or regulates international trade in species that are threatened with extinction or likely to become so and are subject to significant trade, whether they are alive or dead. Its main aims are for a ban on commercial trade in species listed in Appendix 1, and for control to be exercised over trade in species listed in Appendix 2, so to prevent it being detrimental to the species. This is implemented by the **Endangered Species (Import and Export) Act 1976**, which makes it an offence to import or export anything listed in Schedule 1 (animals and birds), or Schedule 2 (plants) [Section 1], except where appropriate licences have been obtained. It is also an offence to sell, advertise for sale or have in one's possession for the purpose of sale, anything imported contrary to Section 1, or anything listed in Schedules 4 and 5 [Section 4].

1.3 Convention on Biological Diversity 1992

This convention was signed by the UK Prime Minister and 150 other Heads of State or Governments in Rio de Janeiro, June 1992; known as the Earth Summit (United Nations Conference on Environment and Development). Under Article 6A of the convention signatories must develop national strategies, plans or programmes for the conservation and sustainable use of biodiversity. The Biodiversity Action Plan process is the UK Government's strategy.

1.4 Ramsar Convention on the Conservation of Wetlands of International Importance 1975

This promotes the conservation and wise use of wetlands, particularly those supporting internationally significant numbers of water birds. It imposes a general duty on all contracting

parties to promote the conservation of wetlands and waterfowl, particularly by establishing nature reserves.

2. EUROPEAN LEGISLATION

2.1 Bonn Convention on the Conservation of Migratory Species of Wild Animals 1979

This requires the protection of certain endangered migratory species and encourages separate international agreements covering particular species. An agreement covering the Conservation of Bats in Europe came into force in January 1994, and deals with the need to protect bats and their feeding and roosting areas.

- Appendix I obligations on range states of migratory species to prohibit the taking of listed animals and to take protective measures to conserve species
- Appendix II range states are encouraged to conclude international agreements to benefit listed species

2.2 Berne Convention on the Conservation of European Wildlife and Natural Habitats 1982

This requires contracting parties to ensure the conservation of the habitats of wild flora and fauna, especially those rare species listed within its appendices. It also requires special attention to be given to the protection of areas of importance for migratory species.

- Appendix I special protection for listed plant species, including prohibition of deliberate picking, collecting, cutting, uprooting, and as appropriate, possessing and sale.
- Appendix II special protection for listed animal species and their habitats, including all forms of deliberate capture, keeping and killing; deliberate damage to or destruction of breeding or resting sites; deliberate disturbance, etc.
- Appendix III exploitation of listed animal species to be subject to regulation, including closed seasons and/or other procedures regulating the exploitation; temporary or local prohibition of exploitation as appropriate in order to restore satisfactory population levels; and the regulation of sale, keeping for sale, transporting for sale or offering for sale, live or dead wild animals.

European Directive

EC legal instrument, binding all Member States, but leaving the methods of implementation to national Governments, and therefore, must be incorporated into national legislation.

The provisions of the Conventions above underlie the European Directives (below) and therefore the UK's wildlife legislation.

2.3 EC Directive on the Conservation of Wild Birds 1979 ('Birds Directive' 79/409/EEC)

This Directive aims to protect bird species within the European Union through the conservation of populations of threatened wild birds, their nests, eggs and the habitats they use. It imposes a specific duty to take special measures to maintain a sufficient diversity of habitat for all European bird species (Article 3) and a more specific duty to those habitats of listed rare or vulnerable, and all migratory, species. These measures include the designation of Special Protection Areas (SPAs) (Article 4). As a result it had a role in shaping the Wildlife and Countryside Act 1981, Part I.

- Annex I birds which are the subject of special conservation measures concerning their habitat in order to ensure their survival and reproduction in their area of distribution. As appropriate, Special Landscape Areas to be established to assist conservation measures.
- Annex II/1 birds which may be potentially hunted under national legislation within the geographical land and sea area to which the Directive applies. (NB. some species are protected by the national legislation of some Member States although hunting would be potentially legal under the Directive)
- Annex II/2 birds which may be potentially hunted under national legislation only within certain specified Member States (NB. some species are protected under national legislation of some Member States, although hunting would potentially be legal under the Directive).
- Annex III/1 birds (or parts/derivatives of) which may be sold, kept for sale or transported for sale provided they have been legally killed, captured or otherwise legally acquired.
- Annex III/2 birds (or parts/derivatives of) which may be sold, kept for sale or transported for sale provided they have been legally killed, captured or otherwise legally acquired, provided authorisation has been granted by the relevant Member State.
- Annex III/3 birds which, in 1979, the EC were charged with carrying out studies to assess the biological status of and the effects of marketing on such status (NB. no longer operative as these studies have been undertaken).

2.4 EC Directive on the Assessment of the Effects of Certain Public and Private Projects on the Environment 1985 ("*EIA Directive*")

This requires Environmental Impact Assessments (EIA) to be carried out on certain types of development that might have significant adverse environmental impacts, including an assessment of the nature conservation implications of such projects. New Regulations came into force in the UK on 14th March 1999 [Town and Country Planning (Environmental Impact Assessment) (England and Wales) Regulations 1999, SI No. 293].

2.5 EC Directive on the Conservation of Natural Habitats and of Wild Fauna and Flora 1992 ('*Habitats and Species Directive*' 92/43/EEC)

This aims to contribute towards ensuring biodiversity within the EU's overall goal of sustainable development. It promotes the conservation of certain key habitats and species by requiring Member States to take measures to maintain or restore natural habitats and populations of wild species at a favourable conservation status. To this end, sites of European importance for listed habitats and species are to be designated as Special Areas of Conservation (SACs), which, together with SPAs, will form a European network of sites known as "Natura 2000". Article 7 modifies the Birds Directive to ensure their compatibility.

- Annexes IIa and IIb designation of protected areas for listed plants and animal species
- Annexes IVa and IVb special protection for animal and plant species listed
- Annexes Va and Vb exploitation of listed animal and plant species is subject to management where necessary

3. NATIONAL LEGISLATION

3.1 Protection of Animals Act 1911

Protects captive animals from various forms of abuse, and protects wild animals temporarily held in captivity. The RSPCA often uses the Act to prosecute people guilty of cruelty.

3.2 Salmon and Freshwater Fisheries Act 1975

3.3 Wildlife and Countryside Act 1981⁺

The WCA provides the most recent and comprehensive legislation covering a broad range of wildlife conservation matters to implement EC directives and conventions; SSSI management agreements; protection for notable and listed species of flora and fauna. This Act amended and strengthened earlier legislation (Protection of Birds Acts of 1954, 1964 and 1967; and Conservation of Wild Creatures and Wild Plants Act 1975), and is brought up-to-date regularly to ensure the most endangered animals are on the schedule.

Part I of the Act deals separately with birds, animals and plants. In many cases the precise extent of the protection afforded depends on whether a bird, animal or plant is listed on a Schedule. It also includes general enforcement provisions under its various Sections.

Protection of Birds (Part I, Sections 1 - 8)

Basic offences against birds are set out under Section 1:

- intentionally killing, injuring or taking any wild bird;
- intentionally taking, damaging or destroying the nest of a wild bird whilst it is in use or being built;
- intentionally taking or destroying a wild bird's egg;
- possession of part or whole of a wild bird, live or dead, or of a wild bird's egg, though there is a defence if it is shown that the bird or egg has not been killed or taken in contravention of the law; and
- intentionally disturbing a bird listed in Schedule 1 whilst it is building a nest, or is in, on or near the nest, containing eggs or young, or intentionally disturbing the dependent young of such a bird

Protection of Other Animals (Part I, Sections 9 - 13)

Unlike the situation for birds, only the wild animals listed in Schedule 5 are protected by the Act. This includes all indigenous bats, most reptiles and amphibians, but only a small selection of mammals, fish, butterflies and other animals. It is an offence to:

- intentionally kill, injure or take any animal listed in Schedule 5
- have in your possession or control all or part of such animals, alive or dead
- sell, offer or advertise for sale, all or part of the animals, alive or dead
- intentionally damage, destroy or obstruct the access to any structure or place used for shelter or protection by an animal listed Schedule 5
- disturb a schedule 5 animal whilst it is occupying such a structure

Protection of Plants (Part I, Section 13)

It is an offence to intentionally pick, uproot or destroy the wild plants included in Schedule 8 and for unauthorised people to intentionally uproot any wild plant (not included on

⁺ The Countryside and Rights of Way (CROW) Act 2000 makes amendments to this (see 3.10).

Schedule 8). Therefore, all wild plants are protected by the WCA from intentional picking, uprooting or destruction.

Schedules

- 1 lists birds which are protected by special penalties
- 2 lists birds which are protected during the close season (1 Feb to 31 August) but which may be killed or taken outside this period
- 3 lists birds which may be sold alive at all times if ringed and bred in captivity
- 4 lists birds which must be registered and ringed if kept in captivity
- 5 lists animals (other than birds) which are protected from disturbance, injury, intentional destruction, taking, sale, and possession or controlling (live or dead)
- 6 lists animals (other than birds) which may not be killed or taken by certain methods
- 8 lists plants which are protected from intentional picking, uprooting or destruction; selling, offering for sale; possessing or transporting for purpose of sale; advertising for buying or selling.
- 9 lists animal and plant species for which release into the wild is prohibited

3.4 Environmental Protection Act 1990

This established the country conservation councils; including Countryside Council for Wales, English Nature (Nature Conservancy Council for England), and the Joint Nature Conservation Committee, succeeding the Nature Conservancy Council. It also includes limited additional measures for the protection of SSSIs.

3.5 Protection of Badgers Act 1992

This consolidated all previous badger legislation by providing comprehensive protection for badgers and their setts, with a requirement that any authorised sett disturbance or destruction is only carried out under licence. It is an offence to wilfully kill, injure or take a badger, or attempting to do them; possess a dead badger; cruelly ill-treat a badger, using badger tongs, or digging for a badger; sell, offer for sale, or have possession of a live badger; mark or attach a marking device to a badger, except under licence. It is also an offence to interfere with a badger sett that displays signs of current use by damaging, destroying, obstructing access, allowing a dog to enter or disturbing a badger occupying it. This may be committed either intentionally or by being reckless as to those consequences. There are exceptions, as results of lawful operations, etc.

3.6 UK Biodiversity Action Plan (UK Government 1994)

This represents the first national action plan for the implementation of the Convention on Biological Diversity, to which the UK Government became a signatory in June 1992. The document provides a programme of activity and commitment to ensure the conservation, and where possible, the enhancement of biodiversity within the UK. Detailed action plans were published for priority species and habitats through the UK Biodiversity Steering Group in 1995, and were subsequently endorsed by the government. Further action plans are currently in production, and a 5-year review document has been published.

3.7 The Conservation (Natural Habitats &c.) Regulations 1994

These regulations implement the *Habitats and Species Directive* in Great Britain (Statutory Instrument No. 2716). They build on the existing nature conservation legislation (Wildlife and Countryside Act) for the protection of habitats and species listed in the Directive and apply its considerations in respect of development control and other regulatory legislation.

Regulations

- 39 Creates offences for the European protected species listed in Schedule 2, e.g. to deliberately capture, kill, disturb; take, destroy eggs; damage or destroy the breeding or resting site; keep, transport, sell, exchange or offer for sale/exchange, any live or dead species, or anything derived from the animal. Exceptions are set out in Regulation 40.
- 41 Prohibits certain cruel or unfair methods of killing or taking wild animals of the protected species listed, or of the additional species of mammals or fish listed in Schedule 3 to the Regulations.
- 43 It is an offence to deliberately pick, collect, cut, uproot or destroy; keep, transport, sell, exchange, or offer to sell or exchange the 9 European protected species of plant listed on Schedule 4.
- 44 - 46 These provide for licences to be granted for specified purposes by the appropriate authority, but only where satisfied that there is no alternative and that the action authorised will not be detrimental to the maintenance of the favourable conservation status of the species concerned.

Schedules

- 2 European protected species of animal (where the natural range includes GB) - including all bats and cetaceans, and such other species as the otter and great crested newt.
- 3 Animals that may not be killed or taken in certain ways
- 4 European protected species of plant (natural range includes GB)

3.8 Wild Mammals (Protection) Act 1996

Supplements offences under the Wildlife and Countryside Act 1981, providing general protection against cruelty for all mammals, excluding only those domestic or captive animals which are protected by the Protection of Animals Act 1911. Section 1 of the Wild Mammals Act makes it an offence to mutilate, kick, beat, nail, stab, burn, stone, crush, drown, drag or asphyxiate any wild mammal with intent to inflict unnecessary suffering. There are defences concerning mercy killing, statutory authorisation and the lawful use of poisons, traps, dogs and snares.

3.9 Hedgerow Regulations 1997

These are designed to implement the provisions of the Environment Act 1995, in relation to the protection of important hedgerows. Landowners are required to submit to the local planning authority a Hedgerow Removal Notice in advance of the removal of the hedge. Strict criteria are used to assess the importance of a hedge, based on historic, wildlife and landscape interest, to determine whether or not it should be protected.

3.10 Countryside and Rights of Way Act 2000

Part III Nature Conservation and Wildlife Protection

Section 74 (Conservation of Biological Diversity) requires the National Assembly for Wales (and other Government departments in Great Britain) to conserve biodiversity in accordance with the Convention on Biological Diversity. They must publish a list(s) of species and habitats that are of principal importance, in consultation with the Countryside Council for Wales (English Nature in

England, etc), in order to take and promote practical steps to conserve these species. The lists must be kept under review, and modified and re-published accordingly.

Section 81 (Enforcement of Wildlife Legislation) - **Schedule 12** of this section makes amendments to the Wildlife and Countryside Act 1981. In relation to England and Wales, regulations under the European Communities Act 1972, for the implementation of some statutory instruments listed, may create offences punishable with imprisonment for a term not exceeding 6 months.

4. SPECIES STATUS CATEGORIES

The categories used in some SAPs to describe the current status (rarity) of species are defined below.

4.1 National Status

Nationally Rare species

Species of very limited national occurrence and distribution. They are defined as those species known to occur in 15 or fewer of the 10 x 10 km Ordnance Survey grid squares that divide Great Britain.

Nationally Scarce species

Species of limited national occurrence and distribution. They are defined as those species known to occur in 16 - 100 km Ordnance Survey grid squares that divide Great Britain.

Endemic

Taxa which are not known to occur naturally outside Britain. Species within this category may also be in any of the other RDB categories or not threatened at all.

Nationally Notable

Na (Nationally Scarce, Grade A)	Very restricted national distribution; species recorded from 16- 30 of the 10 km squares in Britain since 1980.
Nb (Nationally Scarce, Grade B)	Restricted national distribution; species recorded from 31 - 100 of the 10km squares in Britain since 1980.

Local

Localised within Britain; known from 101 - 300 of the 10 km squares in Britain since 1980. Covers both species, which are patchily distributed throughout Britain, and species that are confined to particular areas but generally distributed within these (*species can be abundant where they occur and yet have a very restricted national distribution*).

4.2 Red Data Book (RDB) species

A species listed in catalogues published by the International Union for the Conservation of Nature (IUCN), national agencies or county-level organisations, listing rare, endangered or species vulnerable to extinction globally, nationally or within counties. There are 3 categories based on the degree of threat:

RDB1 (Endangered)	species are in danger of extinction and whose survival is unlikely if the causal factors continue operating (Criteria: species which are known as only a single population within one 10km square of the National Grid)
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- RDB2 (Vulnerable) species likely to move into the Endangered category in the near future if the causal factors continue (Criteria: species which are (a) declining throughout their range, (b) in vulnerable habitats and (c) whose populations are low)
- RDB3 (Rare) species with small populations that are not presently endangered or vulnerable, but are at risk (Criteria: species which only exist in 15 or fewer 10km squares)

Red Data Book of Birds

- RDB1a breeding in internationally significant numbers (>20% of the north-west Europe population)
- RDB1b non-breeding in internationally significant numbers (>20% of the north-west Europe population)
- RDB2 rare breeder (<300 pairs)
- RDB3 declining breeder (>50% sustained decline since 1960)
- RDB4a localised breeder (>50% of the population in the ten most populated areas). Rare breeders are not included here unless they are additionally vulnerable because of confinement to vulnerable habitats.
- RDB4b localised non-breeder (>50% of the population in the ten most populated areas).
- RDB5 special category - show cause for concern or declining numbers but inadequate data to quantify the extent of the problem.
- RDB candidate (candidate species)

4.3 International Union for the Conservation of Nature (IUCN, 1994)

IUCN - Extinct

When there is no reasonable doubt that the last individual has died.

IUCN - Extinct in the Wild

When it is known to survive only in cultivation, in captivity or as a naturalised population(s) well outside the past range. Presumed extinct in the wild when exhaustive surveys in known and/or expected habitat, at appropriate times throughout its range have failed to record an individual. Surveys should be over a time frame appropriate to the species' lifecycle and life form.

IUCN - Critically Endangered

When a species is facing extremely high risk of extinction in the wild in the immediate future, as defined by any of the criteria used (A - E)

IUCN - Endangered

When it is not critically endangered, but is facing high risk of extinction in the wild in the near future, as defined by criteria (A - E).

IUCN - Vulnerable

When it is not critically endangered or endangered but it is facing a high risk of extinction in the wild in the medium-term future, as defined by criteria A - E.

IUCN - Lower Risk

When it has been evaluated but does not satisfy the criteria for any of the categories, *Critically Endangered*, *Endangered* or *Vulnerable*. Species included in this category can be separated into 3 sub-categories (below). Additionally, in Britain, *Nationally Scarce* is also a sub-category of *Lower Risk*.

IUCN - Lower risk - conservation dependent

Species which are the focus of a continuing species-specific or habitat-specific conservation programme targeted towards the species in question, the cessation of which would result in the species qualifying for one of the threatened categories above within a period of 5 years.

IUCN - Lower risk - least concern

Species which do not qualify for *Lower Risk (conservation dependent)* or *Lower risk (near threatened)* or *Nationally Scarce* (in Britain).

IUCN - Lower risk - near threatened

Species which do not qualify for *Lower Risk (conservation dependent)* but which are close to qualifying for *Vulnerable*. In Britain this category includes those which occur in 15 or fewer hectads but do not qualify as *Critically Endangered*, *Endangered* or *Vulnerable*.

IUCN - Data Deficient

Species for which there is inadequate information to make a direct, or indirect, assessment of its risk of extinction based on its distribution and/or population status. A species in this category may be well studied, and its biology well known, but appropriate data on abundance and/or distribution are lacking. *Data Deficient* is therefore not a category of threat or lower risk. Listing of taxa/species in this category indicates that more information is required and acknowledges the possibility that future research will show that a threatened category is appropriate.

IUCN - Not Evaluated

When the species status has not yet been assessed against the criteria.