

1 INTRODUCTION

A hedgerow is a line of one or more woody species, which may contain gaps, and includes associated vegetation of adjacent banks, ditches and/or field margins. This Action Plan covers the whole range of hedgerow types in Hampshire. All hedgerows are valuable assets for biodiversity and landscape character, but ancient, species-rich hedgerows are generally the most important.

Hedgerows are a very important habitat for wildlife. Many, particularly ancient hedgerows (those present before the Enclosure Acts), support a great diversity of plants and animals. Hedgerows are also a highly valued and integral part of the traditional patchwork of agricultural landscapes and have great cultural and archaeological importance.

Hedgerows are identified as a priority habitat in Hampshire in *A Biodiversity Action Plan for Hampshire: Volume One*¹. The UK Biodiversity Action Plan² defines ancient and species-rich hedgerows as a key habitat nationally, and includes a costed Action Plan³ for the habitat. Hedgerows also have international importance as essential characteristics of British landscapes.

Hedgerow loss has been a cause for concern in Hampshire and elsewhere over the last 50 years, particularly in areas of arable production. Although no comprehensive study of hedgerow loss has taken place in Hampshire, smaller studies using sample parishes have shown significant hedgerow losses since 1947 in most farmed areas. However, during the early 1990s, the rate of hedgerow removal steadily declined nationally and was equalled by the rate of new hedgerow planting. Since legislation to protect hedgerows was introduced in 1997⁴, few hedgerows have been removed in Hampshire.

The purpose of this Action Plan is to secure the conservation and positive management of hedgerows in Hampshire and to apply the aims of the UK Hedgerows Habitat Action Plan at the local level.

2 CURRENT STATUS

2.1 Description of Habitat

Hedgerows in Hampshire cover a broad spectrum of type and quality. Some are rich in both woody and associated non-woody species, have well-spaced hedgerow trees and no gaps. Others are low, narrow, over-trimmed and species poor with frequent gaps. Some hedges have been allowed to grow tall and leggy, with spreading canopies but very little vegetation at the base. This latter type has frequently been allowed to develop from a traditional hedgerow into a line of trees.

There is also great variety in the presence and quality of banks, ditches, verges and field margins that are an integral part of the biodiversity value of the whole hedgerow habitat.

Hedgerows have been identified as the primary habitat for nine of the 493 Hampshire priority species, and as a secondary habitat for a further 28 species (see Appendix 1). This Action Plan has a key role to play in the conservation of these 37 species.

2.2 Distribution and Extent

The varied geology and soils of Hampshire reflect a similar variety of hedgerow types. This can be broadly summarised by the contrast between chalk and other areas. Fewer hedgerows are present on chalk landscapes where there is a predominance of large-scale arable farming. A small proportion of those hedgerows which do occur on the chalk are ancient hedgerows, although they are often subject to mismanagement or neglect. Elsewhere, on the clays and sands, much of the land is grazed and there is a higher proportion of ancient hedgerows, many under variable management.

Throughout the county, many parish boundaries, ancient roads, lanes and tracks are defined by mature ancient hedgerows. They are often found on or near these historic features and contribute significantly to their heritage and biodiversity value.

Ancient hedgerows are of great importance as they have been developing for hundreds

of years and cannot be recreated. Whilst examples of ancient hedgerows occur throughout the county, a recent study of Hampshire's historic landscape⁵ suggests that ancient hedgerows are concentrated in three Historic Landscape Types (HLTs): 'Small Irregular Assarts', 'Medium Irregular Assarts' and 'Large Irregular Assarts'. These three HLTs – all enclosures formed by the clearance of primary woodland during medieval times – occupy approximately 7% of the county, and are concentrated within the 'Mixed Farmland and Woodland' and 'Pasture and Woodland: Heath Associated' Landscape Types in north, east and south Hampshire.

HEDGEROWS AND LANDSCAPE TYPES

High densities of generally high quality hedges occur in three Landscape Types (LTs) (as defined in Volume One of the Biodiversity Action Plan for Hampshire¹): 'Mixed Farmland and Woodland', 'Pasture and Woodland: Heath Associated' and 'Pasture on Clay'.

- Examples of areas with high density, high quality hedges include a strip of land running from west of Romsey to Waterlooville, an area on the northern fringes of the county, and more discrete areas bordering the New Forest.
- Other more isolated concentrations of high quality hedges occur within the 'Chalk and Clay' and 'Clay Plateau' LTs, notably around Four Marks and at Vernham Dean.

In contrast, large parts of the 'Open Arable' and parts of the 'Chalk and Clay' LTs tend to have lower density and generally poorer quality hedgerows.

- Examples include the predominantly arable area between Winchester, Andover and Basingstoke, and smaller arable areas such as that to the south-east of Winchester.

Hedges tend to be scarce or absent in 'Heathland and Forest' and 'Scarps: Downland' LTs.

The distribution of hedgerows in Hampshire was fully audited in the late 1990s, using aerial photographs taken in 1996 and 1997. This study included the mapping of all hedgerows and their classification into one of four hedgerow types (see Appendix 2). The results of this study are held by Hampshire County Council on a geographical information system (GIS).

Hampshire has a total hedgerow length of 15,040 km in just under 90,000 separately classified lengths. This figure does not include hedges that occur in gardens and open spaces of villages and urban areas, or hedges under 100 metres in length. Taking these into account, total hedgerow length in Hampshire is likely to be in excess of 15,500 km. Hampshire occupies 2.8% of England, and has 4.6% of England's hedgerows based on national estimates of hedgerow length³. The hedgerow resource of Hampshire is therefore significant at the national scale.

Elsewhere in Europe, well-hedged areas are limited to the *bocage* areas of France, the Republic of Ireland, Northern Italy, the Austrian Alps and parts of Greece⁶. Set in this context, the hedges of the UK, and specifically Hampshire, are internationally important.

2.3 Legislation and Site Designation

Under the Hedgerows Regulations 1997, it is illegal to remove or destroy most countryside hedgerows without notifying and obtaining permission from the local planning authority (the district or unitary council).

The Hedgerows Regulations offer considerable protection for species-rich hedgerows against physical removal and destruction by bad management. Nevertheless, they do not cover hedges under 30 years of age, 'garden' hedges, or those being considered as part of an application for development.

SUMMARY OF THE HEDGEROWS REGULATIONS PROCESS

- A landowner must submit a 'Hedgerow Removal Notice' to the local planning authority (LPA), giving reasons.
- The LPA evaluates the importance of the hedgerow against a set of historical and wildlife criteria.
- If the hedgerow qualifies as important, the LPA takes into account reasons given for removal, before either issuing a permanent 'Hedgerow Retention Notice', or permitting hedgerow removal.
- The LPA cannot refuse consent to remove a hedgerow that is not defined as important.
- Certain hedges, such as those marking boundaries of dwellings or those under 30 years old, are exempted from the Regulations and receive no legal protection.

The most recent comprehensive national review of the Hedgerows Regulations was published by CPRE in April 1999⁷. The review covers the first year of operation of the Regulations, and reveals that in England 23.8% of hedgerows proposed for removal were protected by hedgerow retention notices. In the south-east region 15.2% of hedgerows proposed for removal were protected. These figures reflect the percentage of hedges qualifying as 'important' under the Hedgerows Regulations criteria.

In Hampshire, 8 of the 29 hedgerows (27.6%) evaluated under the Regulations have been protected by retention notices: a figure above the national average and well above the regional figure, but lower than the neighbouring regions of the south-west (33.1%) and East Anglia (39.2%).

Hedgerows are often included in Sites of Special Scientific Interest (SSSIs) and Sites of Importance for Nature Conservation (SINCs), both as boundary features and as integral site features. Where hedgerows are included within SSSIs, the cutting of hedgerows is listed as a 'Potentially Damaging Operation' (PDO), which requires landowners to liaise with English Nature on management practice. This is not the case for SINCs, where hedges are normally protected from development by local planning authority (LPA) policies but receive no protection from any potentially damaging management practices.

There are no SSSIs specifically designated to protect important hedgerows, although a small number of hedgerow SINCs do exist. International conservation designations in Hampshire relate mostly to coastal and heathland sites, and therefore include few hedgerows.

Only one Hampshire priority species primarily associated with hedgerow habitats – barberry carpet moth (Appendix 1, Table 1) – is specifically protected under UK wildlife legislation through its listing on Schedule 5 of the Wildlife and Countryside Act 1981. A number of species for which hedgerows are a secondary habitat (Appendix 1, Table 3) are similarly protected: six bat species (pipistrelle, serotine, barbastrelle, Bechstein's, greater horseshoe and grey long-eared), dormouse, and great crested newt. In addition, the dormouse and all bats are protected under the EU Habitats Directive 1992.

3 CURRENT FACTORS AFFECTING THE HABITAT

In recent years the rate of hedgerow removal has decreased, and concern has shifted to neglect and poor management. Factors currently affecting hedgerows in Hampshire include:

Farm economics:

- Lack of financial incentives to encourage good management practices
- Use of 'cheaper' alternatives such as fencing for stock-proofing
- Reduction in use of labour-intensive management methods such as hedge laying
- Use of agri-chemicals and subsequent spray-drift or run-off
- Increased use of contractors who may not take such care and pride in the stewardship of land, including appropriate hedgerow management

Development:

- Increased demand for housing/industrial development and associated infrastructure, leading to hedgerow loss

Lack of awareness and training:

- Limited information on good management practices and their cost-benefits
- Limited awareness of hedgerows as important wildlife habitats
- Lack of information on the benefits of new planting and choice of hedgerow species
- Inappropriate management or destruction of associated features such as field margins, headlands and ditches

Lack of Financial Incentives:

- Limited Government funding for schemes promoting good management practices
- Limited local authority funding for good management practices, new planting and restoration
- Limited funding for training in traditional management practices

Despite all the current factors affecting hedgerows, many farmers/landowners are becoming increasingly aware of environmental issues, especially through the work of organisations such as FWAG. The limited funding sources available have enabled some land managers to develop more favourable methods of management, restoration and new planting programmes.

HABITAT ACTION PLAN

MANAGEMENT PRACTICES WHICH ADVERSELY AFFECT HEDGEROWS

Many of the current factors affecting hedgerows result in inappropriate hedgerow management. In turn, many of these management practices have a deleterious effect on the biodiversity of hedgerows.

Annual trimming

- Reduces the habitat quality for birds and invertebrates
- Reduces flowers and fruits compared with trimming at 2 –3 year intervals

Trimming to the same height

- Encourages the shrubs to grow into a 'mushroom' shape – slow annual growth encourages good branching

Trimming in late summer and autumn

- Reduces fruit available for winter food for birds and invertebrates
- Can result in disturbance of some late-nesting birds

Lack of care when trimming

- Damages or removes standard trees, producing a less diverse structure
- Removes too much vegetation, reducing habitat bulk

Agrochemical use

- Direct spray or spray drift causes death of sensitive flora and fauna, reducing the diversity of species and quality of the habitat
- Incorrect choice and/or use of herbicide when planting or gapping-up reducing the diversity of species and quality of the habitat
- Can result in contamination of ditches where Local Environmental Risk Assessment for Pesticides (LERAP) is not conducted or is incorrectly applied

Misapplication of fertiliser

- Fertiliser applied into or close to a hedge encourages rank vegetation and gaps at the base

Inappropriate management of field margin or headland

- A buffer between farm crop and hedge is necessary, especially to protect from fertiliser and pesticide contamination.

4 CURRENT ACTION**4.1 Site and Species Protection**

- The provisions and impacts of the Hedgerows Regulations 1997 are highlighted in section 2.3. A review of the Regulations was initiated soon after their introduction in 1997, in recognition of the small number of hedges being protected. The Review Group reported their findings in 1998⁸ and the results of a sample survey to test newly revised criteria were published in 1999⁹. New draft Regulations are anticipated during 2000.
- English Nature are currently reviewing SSSIs in England and the list of SINCs in Hampshire is under constant review; these reviews may lead to more hedgerows being protected within designated sites. As part of the SINC review, additional hedgerows or hedgerow systems may be afforded SINC status.

4.2 Habitat Management and Programmes of Action

- Agri-environment schemes offer payments towards the cost of hedge restoration and planting. The two main schemes are:
 - Environmentally Sensitive Areas – ESAs were initiated nationally in 1987. In Hampshire there are three ESAs totalling approximately 14,000 hectares: the western end of the *South Downs* (designated 1988), *Test Valley* (1988) and *Avon Valley* (1993). Grants are available for hedgerow planting, laying, coppicing and protective fencing, as well as for tree planting.
 - Countryside Stewardship Scheme – Since the launch of CSS in 1991, 150 km of hedgerows in Hampshire have been brought into restorative management. The scheme is oversubscribed despite the required minimum 10-year commitment.

- Some Local Authorities (e.g. Basingstoke and Deane Borough Council) provide grants for hedgerow planting, restoration or management.
- Codes of good practice are contained in leaflets and other publications by the Farming and Wildlife Advisory Group (FWAG) and the British Trust for Conservation Volunteers (BTCV). Land managers can obtain hedgerow management advice from FWAG and from the Habitat Management Advisory Project (HMAP) – a joint Hampshire County Council and Hampshire Wildlife Trust project which provides advice to managers of SINC.s.
- BTCV provide advice, support and training on hedgerow management and planting for a range of audiences from schools, community groups and parish councils to landowners. BTCV and its affiliated groups undertake many hedgerow management tasks each year, some as part of formal training courses. Hampshire Wildlife Trust’s Local Environment Initiative provides a similar advice and support service for local communities on a range of wildlife issues including hedgerow management and planting.

4.3 Action for Species

Table 1 (Appendix 1) gives details of priority species in Hampshire found primarily in hedgerows. Action proposed in this Plan will be the principal means of conserving most of these species, although two species – tree sparrow and barberry carpet moth – will have their own Species Action Plans (SAPs). In some cases additional action plans and programmes will also contribute to conserving priority species: for example, UK Species Action Plans (UK SAP), Butterfly Conservation Regional Action Plans (BC RAP) and the English Nature Species Recovery Programme (EN SRP).

Table 3 (Appendix 1) lists those Hampshire priority species that occur in hedgerows but whose main habitat is **not** hedgerows. Although action in this Hedgerows HAP may contribute to the conservation of these species, other HAPs have key responsibility for their conservation. Eleven of the species on Table 3 have been identified as requiring a SAP.

Several of the priority species identified in Appendix 1 are already the subject of specific conservation efforts. An example is brown hairstreak, which benefits from blackthorn management on the private Cholderton Estate and at HWT’s Noar Hill Reserve.

4.4 Survey, Research and Monitoring

- There is currently no formal survey programme concentrating on hedgerows throughout Hampshire. The Hampshire Habitat Survey (a consortium-funded survey programme co-ordinated by Hampshire Wildlife Trust) briefly surveys many hedgerows each year as part of its annual survey programme. Information from these surveys, along with data gathered through Hedgerows Regulations assessments, is held by the LPAs and in the Hampshire Biological Record (HBR) at Hampshire County Council. Hampshire Wildlife Trust is currently considering the establishment of a community-based hedgerow survey project.
- A small number of intensive, localised hedgerow surveys have been undertaken, for example by Eastleigh Borough Council. Data from these surveys is held by the Council and also on the HBR.
- In 1996, Hampshire County Council and a number of district councils funded an aerial photographic survey of hedgerows throughout the county (see 2.2 and Appendix 2). This provides baseline information for monitoring future hedgerow change.
- There is currently no known research focusing on hedgerows in Hampshire.



5 OBJECTIVES

The overall aim of this Plan is to protect and enhance the biodiversity of hedgerows in Hampshire. This broad aim translates into the specific objectives set out below. Where feasible, objectives have been allocated targets against which achievement can be measured: for example, total areas to be restored or dates for completion. The 'Proposed Action' table in section 6 identifies the action to be taken to meet these objectives.

HABITAT ACTION PLAN

	OBJECTIVE	PROPOSED ACTIONS
A	Ensure no further net loss of hedgerows: All hedgerow loss (through removal or neglect) should be mitigated by the planting of replacement hedges by 2005.	1-5,17,26,32
B	Increase the extent of hedgerows: Promote new hedgerow planting and re-planting of former hedgerows to re-create 100 km of hedgerow by 2005.	2,4,11, 15-17,32
C	Enhance the habitat value of hedgerows:	
C1	Promote good hedgerow management practices: Aim to achieve the favourable management of 50% of hedges in Hampshire by 2005 and 80% by 2010.	2,4,7-17,19, 21,29,32
C2	Maintain or increase the number of hedgerow trees: Ensure the management and retention of existing trees, and encourage management of new trees to achieve a balanced age structure and species mix. Ensure no net reduction in hedgerow trees by 2005.	1,6-10,12,15- 17,32
D	Ensure the requirements of all priority species found in hedgerow habitats are met	13,14,17-20, 25,32
E	Improve knowledge of hedgerows in Hampshire through survey, research and monitoring: Increase available information and enhance understanding of the hedgerow resource of Hampshire	17,18,20- 27,32
F	Promote the value of hedgerows and greater awareness of hedgerow issues: Communicate with key sectors including landowners, local authorities, schools and community groups, and increase the availability of hedgerow advice.	8-10,16- 18,28-32

6 PROPOSED ACTION

The following table lists the actions required to achieve the objectives set out in this Plan. Each action has been assigned to one or more 'Key Partners'. Key Partners are those organisations that are expected to take responsibility for the delivery of the actions assigned to them, according to the targets set in this Plan. Other organisations may also be involved in the delivery of action, and they have been indicated in the 'Others' column.

Key to symbols in Action Table:

- ◆ To be completed by the indicated year. Work can commence at any time before the due date, at the discretion of the Key Partner.
- ◆⇄ Design or production of a plan/strategy to be completed by this year and then followed by its implementation.
- ➡ To start by the indicated year and usually followed by ongoing work. A start arrow in year 2000 can indicate a new action or a new impetus to existing work.
- ⇄ Work that has already begun and is ongoing.

ACTION		DELIVERY BY		YEAR						MEETS OBJ.
				◆ = complete by ◆⇄ = design by and implement ➡ = start by ⇄ = ongoing						
		Key Partner	Others	2000	2001	2002	2003	2004	2010	
Habitat Protection										
1	Ensure the strengthening of the Hedgerows Regulations through comments on new draft Regulations (due 2000)	HCC	HWT, DCs	◆						A, C2
2	Ensure that the importance of hedgerows is taken into account in planning decisions (which fall outside the remit of the Hedgerows Regulations)	LAs	HWT, EN	⇄	⇄	⇄	⇄	⇄	⇄	A, B, C1
3	Establish criteria for the identification of appropriate species-rich and ancient hedgerows as Sites of Importance for Nature Conservation (SINCs)	HCC	HWT, DCs, EN		◆					A
4	Ensure that suitable hedgerows are identified as SINCs	HCC	HWT, DCs, EN		➡					A, B, C1
5	Review the protection afforded to hedgerows when included within Sites of Special Scientific Interest (SSSIs)	EN			◆					A
6	Use Tree Preservation Orders (TPOs) to protect threatened hedgerow trees	DCs		⇄	⇄	⇄	⇄	⇄	⇄	C2
Habitat Management, Incentive Schemes and Other Resources										
7	Ensure favourable management of hedgerows which lie within or mark the boundaries of SSSIs	EN		➡						C1, C2
8	Promote the favourable management of hedgerows	HMAP								C1, C2,

within and alongside SINCS				⇔	⇔	⇔	⇔	⇔	⇔	F
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ACTION		DELIVERY BY		YEAR						MEETS OBJ.
				◆ = complete by ◆⇔ = design by and implement ➡ = start by ⇔ = ongoing						
		Key Partner	Others	2000	2001	2002	2003	2004	2010	
Habitat Management, Incentive Schemes and Other Resources (continued)										
9	Promote the favourable management of hedgerows outside designated sites	FWAG	HWT, NFU, CLA, BTCV, MAFF/FRCA	⇔	⇔	⇔	⇔	⇔	⇔	C1, C2, F
10	Promote the favourable management of verges, ditches, field margins and other land alongside hedgerows	FWAG	HWT, NFU, CLA, BTCV, MAFF/FRCA HMAP, LAs	⇔	⇔	⇔	⇔	⇔	⇔	C1, C2, F
11	Re-create previously removed hedgerows and re-plant gaps in existing hedgerows, using appropriate species (preferably of local provenance) ⁽¹⁰⁾	NFU	MAFF/FRCA FWAG, HMAP, HCC, HWT	➡						B, C1
12	Maximise the retention and wide age structure of hedgerow trees	NFU	MAFF/FRCA FWAG, HWT	⇔	⇔	⇔	⇔	⇔	⇔	C1, C2
13	Endeavour to take account of the conservation requirements of hedgerows and their associated priority species when reviewing and adjusting agri-environment schemes.	MAFF/FRCA		➡						C1, D
14	Endeavour to ensure that agri-environment schemes are adequately funded and targeted to meet the needs of hedgerows and their associated priority species	MAFF/FRCA		➡						C1, D
15	Endeavour to establish small grant schemes to enable land managers to undertake hedgerow management including laying, coppicing, gapping-up and re-planting	LAs						◆⇔		B, C1, C2
16	Provide information to managers of hedgerows on the availability of grants and incentive schemes	FWAG	MAFF/FRCA HWT, HMAP	⇔	⇔	⇔	⇔	⇔	⇔	B, C1, C2, F
17	Maximise funding for implementation of this action plan from organisations outside the BAP Partnership in UK and Europe	HCC		➡						A-F
Species Action										
18	Encourage land managers and advisors to ascertain which priority species (if any) are found in the hedgerows with which they are involved and promote and/or implement favourable management	HWT	MAFF/FRCA LAs, FWAG, HMAP	➡						D, E, F

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Hedgerows

19	Prepare species action plans for species associated with hedgerows that are not adequately covered by this Plan or others, as identified in Appendix 1. In addition, implement site management plans for priority species that are restricted to Hampshire or that occur at less than three sites (<i>brown hairstreak, Goodyear's elm, small eggar moth and barberry carpet moth</i>)	HWT	LAs, NFU, CLA			◆⇄				C1, D
20	Prepare and implement specific action programmes for remaining priority species if they are still in decline in 2004.	HWT	LAs, NFU, CLA					➡		D
21	Develop a strategy for monitoring priority species in hedgerows	HWT	EN, LAs, NFU, CLA			◆⇄				D, E
Survey, Research and Monitoring										
22	Define good hedgerow management practices for the varying requirements of Hampshire's differing hedgerow types	FWAG	NFU, CLA, HCC, EN			◆				C1, E
23	Initiate a programme of hedgerow survey which prioritises the key landscapes for ancient hedgerows, as identified in the Hampshire Historic Landscape Assessment (see 2.2.)	HCC	HWT, LAs					◆⇄		E
24	Undertake a repeat classification of hedgerows from aerial photographs, for comparison against the 1997 base-line	HCC	DCs						◆	E
25	Establish a system for monitoring the effectiveness of grants, agri-environment schemes and advice to landowners in achieving biodiversity gains	HWT	LAs					◆⇄		E
26	Select and monitor 'flagship species' to act as indicators of the success of hedgerow conservation efforts	HWT							◆⇄	D, E
27	Monitor the effectiveness of the Hedgerow Regulations in protecting Hampshire's hedgerow resource	HCC	DCs	⇄	⇄	⇄	⇄	⇄	⇄	A, E
28	Review existing (and possibly commission new) research into the comparative costs and benefits of different hedgerow management techniques	FWAG	MAFF/FRCA NFU, CLA					➡		E
29	Ensure that all relevant data on hedgerows is incorporated into the Hampshire Biological Record and is fed into the National Biodiversity Network	HCC	HWT, EN, DCs, CPRE	⇄	⇄	⇄	⇄	⇄	⇄	E
Communication and Publicity										
30	Effectively inform land managers of the benefits and costs of good hedgerow management	FWAG	MAFF/FRCA NFU, CLA, HMAP							F
31	Establish demonstration sites as a tool for informing hedgerow managers of good practice	NFU	CLA, MAFF/FRCA							C1, F

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Hedgerows

32	Raise general awareness of hedgerow issues through the promotion of projects and schemes and the production of promotional material	HWT	CPRE	↔	↔	↔	↔	↔	↔	F
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ACTION	DELIVERY BY	YEAR						MEETS OBJ.		
		◆ = complete by ◆↔ = design by and implement ▶ = start by ↔ = ongoing								
	Key Partner	Others	2000	2001	2002	2003	2004	2010		
Communication and Publicity (continued)										
33	Involve local communities in the conservation of hedgerows through information gathering and management projects	BTCV	HWT, CPRE	▶						F
34	Support actions identified in the Education and Awareness Action Plan relevant to hedgerows	HCC	HWT, BTCV, DCs, NFU, CLA	▶						F
35	Investigate the possibility of establishing a hedgerow forum for Hampshire to act as a focus for implementing this action plan	HWT	CPRE, HCC	▶						A-F

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KEY TO ORGANISATIONS

BTCV British Trust for Conservation Volunteers
 CLA County Landowners' Association
 CPRE Council for the Protection of Rural England
 DCs District/Borough Councils and Unitary Authorities
 EN English Nature
 FRCA Farming and Rural Conservation Agency
 FWAG Farming and Wildlife Advisory Group

HCC Hampshire County Council
 HMAP Habitat Management Advisory Project (HCC/HWT)
 HWT Hampshire Wildlife Trust
 MAFF Ministry of Agriculture, Fisheries and Food
 LAs Local authorities (DCs/HCC)
 NFU National Farmers' Union

APPENDIX 1

Key to abbreviations in Tables 1 and 2 – see 'Action in addition to HAP' and 'Status/Protection'

Abbreviation	Definition
ACTION IN ADDITION TO HAP (Other Plans Relevant to Priority Species)	
UK SAP	Species Action Plan prepared under UK Biodiversity programme
UK Grouped SAP	Species catered for by a grouped Species Action Plan prepared under UK Biodiversity programme
UK Species Statement	Conservation of species generally achieved through HAPs. Statement prepared under UK Biodiversity programme to link the relevant Plans.
No Plan	Species removed from revised UK priority list. No Action Plan / Species Statement produced
BC RAP	Butterfly Conservation Regional Action Plan
BC NAP	Butterfly Conservation National Action Plan
PROTECTION: European (EC Habitats Directive)	
Annex II	Designation of protected areas for animals and plants listed
Annex IV	Special protection for animals and plants listed
Annex V	Control of exploitation of animals and plants listed
PROTECTION: British (Wildlife and Countryside Act 1981)	
Sch. 1	Special protection for birds listed
Sch. 5	Special protection for animals listed
Sch. 5 (sale)	Protection against sale for animals listed (Schedule 5 section 9 (5))
Sch. 8	Special protection for plants listed
STATUS: International (International Union for the Conservation of Nature)	
IUCN VU	Vulnerable – Species facing high risk of extinction
IUCN LR/cd	Lower Risk / conservation dependent species – Species that do not satisfy the criteria for 'Critically Endangered', 'Endangered' or 'Vulnerable'. They are 'conservation dependent' if they are the focus of specific conservation programmes, which if stopped, would result in the taxon qualifying for one of the threatened categories within a period of five years.
IUCN LR/nt	Lower Risk / near threatened species – Species that do not qualify for 'conservation dependent' but are close to 'Vulnerable' status
IUCN DD	Data Deficient – Insufficient data to make a direct or indirect assessment of a species status, based on its distribution and/or population status.
STATUS: British – Mammals (Red Data Book)	
RDB	Mammal species listed in the British Red Data Book
STATUS: British – Plant and Fungi (Red Data Book and associated)	
RDB Cr	Critically Endangered – Extremely high risk of extinction in the near future
RDB En	Endangered – Very high risk of extinction in the near future
RDB V	Vulnerable – High risk of extinction in the medium-term future
RDB K	Insufficient data to assess status
NS	Nationally Scarce – Plants not on red list but occurring in 16 to 100 10x10 km squares
NT	Near Threatened – Plants not on red list but occurring in 15 or fewer 10x10 km squares
STATUS: British – Invertebrates (Red Data Book and associated)	
RDB En	Endangered – In danger of extinction
RDB V	Vulnerable – Declining or occurring in a vulnerable habitat. Usually occurs in less than 16 10x10 km squares
RDB R	Rare – Not declining but occurring in less than 16 10x10 km squares
RDB K	Insufficiently known – Suspected, but not definitely, Endangered, Vulnerable or Rare
NS (a)	Nationally Scarce – Occurring in 16 to 30 10x10 km squares (for well recorded species)
NS (b)	Nationally Scarce – Occurring in 31 to 100 10x10 km squares (for well recorded species)
STATUS: Royal Society for the Protection of Birds (Birds of Conservation Concern)	
Red List	Various criteria, including a 50% decline in breeding population or range over last 25 years
Amber List	Various criteria, including a 25-49% decline in breeding population or range over last 25 years

Table 1 - Hampshire priority species found primarily in hedgerows

Scientific name	Common name	Group	Status/Protection	Habitat/Ecology	Hants Distribution	Specific management requirements	Action in addition to HAP	Hants SAP?
<i>Passer montanus</i>	tree sparrow	Birds	RSPB Red List	Hedgerows and arable land, particularly on chalk	Very rare in Hampshire. Sparsely distributed, particularly on chalk in the north of the county.	Benefits from spring sown cereal and the retention of winter stubbles	UK SAP	yes
<i>Pyrrhula pyrrhula</i>	bullfinch	Birds	RSPB Red List	Hedgerows and farmland	Widespread	-	UK SAP	no
<i>Satyrrium w-album</i>	white-letter hairstreak	Butterflies	Sch. 5 (sale), NS (b)	Hedgerows, groups of trees; requires Elm including sucker regrowth.	Widespread, 3no - 5no colonies	Requires elm, vulnerable to dutch elm disease and removal of hedgerows	no	no
<i>Thecla betulae</i>	brown hairstreak	Butterflies	Sch. 5 (sale), NS (b)	Hedgerows, woodland and wooded commons with continuous supply of regenerating Blackthorn	Rare in Hants, only 2-3 sites	Hedge cutting to encourage regeneration but avoid complete removal of Blackthorn scrub	UK SAP	no
<i>Ulmus minor ssp. angustifolia</i>	Goodyer's elm	Flw Plants	-	Hedges on river terraces, gravels and clay	National stronghold; confined to SW Hampshire	Elm disease has destroyed all mature trees but suckers common	no	no
<i>Eriogaster lanestris</i>	small eggar moth	Moths	NS (b)	Hedgerows or scrub with Hawthorn/ Blackthorn	Martin Down only	Avoid complete scrub removal on grasslands where species is present	UK SAP, BC RAP	no
<i>Hypena rostralis</i>	buttoned snout	Moths	NS (a)	Larvae feed on Hop, particularly plants sprawling across the ground. The adults hibernate in man-made shelters and caves	Widespread but local in Hants, mostly near coast.	Restoration of a network of habitats, to combat potential isolation effects. Protection of food plant	UK SAP, BC RAP	no
<i>Pareulype berberata</i>	barberry carpet	Moths	Sch. 5, RDB En	Hedgerows with native barberry.	National stronghold; one site only (confidential and protected)	Avoid removal of native barberry	UK SAP, BC RAP	yes
<i>Trichopteryx polycommata</i>	barred tooth-striped	Moths	NS (b)	Calcareous grassland, on hedgerows and scrub containing privet; also in woodland	Once abundant around crab wood; but privet bushes + moth may be gone; breeding colony at Broughton Down.	Care must be taken with scrub control on calcareous grassland	UK SAP	yes

Hedgerows

Table 2 - Priority species, thought to be extinct in Hampshire, which are primarily associated with hedgerows

No extinct species primarily associated with hedgerows.

Table 3 - Priority species, found primarily in other habitats, but which occur in hedgerows

Scientific name	Common name	Group	Primary HAP	Hants SAP?
<i>Triturus cristatus</i>	great crested newt	Amphibians	Dependent on many habitats, mosaic/landscape species	yes
<i>Lucanus cervus</i>	stag beetle	Beetles	Ancient semi-natural woodland	yes
<i>Malachius aeneus</i>	scarlet malachite beetle	Beetles	Pasture woodland, parkland	no
<i>Carduelis cannabina</i>	linnet	Birds	Arable land	no
<i>Luscinia megarhynchos</i>	nightingale	Birds	Ancient semi-natural woodland	no
<i>Miliaria calandra</i>	corn bunting	Birds	Arable land	no
<i>Perdix perdix</i>	grey partridge	Birds	Arable land	no
<i>Streptopelia turtur</i>	turtle dove	Birds	Arable land	no
<i>Turdus philomelos</i>	song thrush	Birds	Dependent on many habitats, mosaic/landscape species	yes
<i>Apatura iris</i>	purple emperor	Butterflies	Ancient semi-natural woodland	no
<i>Dioctria cothurnata</i>	a robber fly	Flies	Pasture woodland, parkland	no
<i>Arabis glabra</i>	tower mustard	Flw Plants	Heathland, acid grassland, bog	no
<i>Apodemus flavicollis</i>	yellow-necked mouse	Mammals	Ancient semi-natural woodland	no
<i>Barbastellus barbastellus</i>	barbastelle bat	Mammals	Dependent on many habitats, mosaic/landscape species	yes
<i>Eptesicus serotinus</i>	Serotine bat	Mammals	Dependent on many habitats, mosaic/landscape species	yes
<i>Micromys minutus</i>	harvest mouse	Mammals	Arable land	no
<i>Muscardinus avellanarius</i>	dormouse	Mammals	Ancient semi-natural woodland	yes
<i>Myotis bechsteinii</i>	Bechstein's bat	Mammals	Dependent on many habitats, mosaic/landscape species	yes
<i>Pipistrellus pipistrellus</i>	pipistrelle bat	Mammals	Dependent on many habitats, mosaic/landscape species	yes
<i>Plecotus austriacus</i>	grey long-eared bat	Mammals	Dependent on many habitats, mosaic/landscape species	no
<i>Rhinolophus ferrumequinum</i>	greater horseshoe bat	Mammals	Dependent on many habitats, mosaic/landscape species	yes
<i>Melagona scutillare</i>	a millipede	Millipedes	Ancient semi-natural woodland	no
<i>Ashfordia granulata</i>	a snail	Molluscs	Lowland wet grassland	no
<i>Ena montana</i>	mountain bulin snail	Molluscs	Ancient semi-natural woodland	no
<i>Cosmia diffinis</i>	white spotted pinion	Moths	Ancient semi-natural woodland	no
<i>Cossus cossus</i>	goat moth	Moths	Ancient semi-natural woodland	no
<i>Cucullia lychnitis</i>	striped lychnis	Moths	Road verges	yes
<i>Noctua orbona</i>	lunar yellow underwing	Moths	Lowland calcareous grassland	no

APPENDIX 2

During 1996/97 Hampshire County Council (with financial support from several district councils) commissioned a study to identify and classify all hedgerows over 100 metres in length in Hampshire using aerial photographs taken during 1996. All hedgerows were mapped and classified into one of four hedgerow types:

- 1 **Poor, narrow hedges:** usually badly stocked or gappy; often less than 1 metre wide.
- 2 **Managed hedges (up to 2.5 metres high):** usually containing shrubs and coppiced shrubs; usually side trimmed and/or top trimmed; typically 1-2 metres high.
- 3 **Managed hedges (2.5-5 metres high):** usually tall, bushy, canopied hedges with shrubs or coppiced shrubs; may contain some standard trees, but essentially multi-stemmed growth.
- 4 **Treed hedges (not less than 2-3 trees per 100 metres):** sometimes continuously treed; hedgerow category between trees not recorded. [This category contains well-managed hedges with good numbers of standards and also neglected hedges which are becoming lines of trees with a declining understorey].

HABITAT
ACTION
PLAN

REFERENCES

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- 4 **The Hedgerows Regulations**, Statutory Instrument No. 1160, HMSO, 1997.
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- 7 **Hedging Your Bets**, Council for the Protection of Rural England, 1999.
- 8 **Review of the Hedgerows Regulations 1997**, Department of the Environment, Transport and the Regions, 1998.
- 9 **Research into Proposed Criteria Defining 'Important' Hedgerows**, Department of the Environment, Transport and the Regions, 1999.
- 10 **The Hampshire Landscape** [and accompanying poster 'Conserving Landscape Character' which includes a matrix of appropriate species], Hampshire County Council, 1993.

This Plan is one of many Habitat, Species and Topic Action Plans being prepared by the Hampshire Biodiversity Partnership. It will be monitored by the Partnership and fully reviewed and updated in 2004.

This habitat action plan has been prepared by Bob Winfield, Adam Rowe and the Hedgerows HAP Working Group on behalf of the Hampshire Biodiversity Partnership.

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