



Scrub Habitat Action Plan

1. Introduction

The conservation value of scrub should not be overlooked as the range of scrub habitats that exist in Britain are essential to a large number of species.

2. Current Status

2.1 Description of habitat

The nature of scrub communities has led to difficulties in defining the limits of what is meant by 'scrub'. Many scrub communities can be considered as 'seral stages in the succession from herbaceous communities to woodland' (Mortimer, 2000). Scrub may occur as primary successions on scree, cliffs and quarries, but is more widely encountered, especially in Worcestershire, as part of a secondary succession after the relaxation or cessation of grazing or other intensive management on grassland or heathland. Scrub is a very valuable component of a habitat mosaic and at a landscape scale should be given the same level of consideration as other habitats.

Most definitions of scrub describe it as vegetation dominated by shrubs or bushes, with height and growth form used to separate areas of scrub from areas of woodland. The Scrub Management Handbook definition of scrub follows that in the report for JNCC by Mortimer *et al* (2000):

'Scrub includes all stages from the scattered bushes to closed canopy vegetation, dominated by locally native or non-native shrubs and tree saplings, usually less than 5m tall, occasionally with a few scattered trees. This includes carr, scrub in the uplands and lowlands (including wood-edge habitats), montane scrub and coastal scrub.'

Scrub can be very variable in woody species composition. Elsewhere in Britain species-rich scrub habitat includes juniper (*Juniperus communis*) scrub and montane scrub. The latter includes dwarf shrub species such as ling heather (*Calluna vulgaris*), crowberry (*Empetrum nigrum*), bilberry (*Vaccinium myrtillus*), bog bilberry (*V. uliginosum*) and other, more localised species. There are small pockets of relatively species-rich scrub on Bredon Hill and a small area in the Cotswolds. Scrub which occurs as successional habitat on grassland, heathland and at woodland edges in Worcestershire is most likely to comprise readily seeding or suckering species such as birch (*Betula pendula*), ash (*Fraxinus excelsior*), hawthorn (*Crataegus monogyna*) and blackthorn (*Prunus spinosa*). In wet areas willow (*Salix sp.*) may be a frequent component. Amenity planting on highways verges may also develop into valuable scrub habitat, as will young abandoned or under-managed woodland.

The various scrub habitats can be considered under the following headings:

Scrub as a habitat on its own where there may be significant invertebrate, mammal or bird interest present, particularly:

- Hawthorn scrub supporting breeding birds such as linnet (*Carduelis cannabina*), bullfinch (*Pyrrhula pyrrhula*), turtle dove (*Streptopelia turtur*), blackcap (*Sylvia atricapilla*), whitethroat (*Sylvia communis*) and lesser whitethroat (*Sylvia curruca*).
- Blackthorn scrub for brown hairstreak (*Thecla betulae*) and long-tailed tit (*Aegithalos caudatus*).
- Damp, dense willow / hawthorn scrub for nightingale (*Luscinia megarhynchos*).

In each case there will be many other species, especially invertebrates, which would benefit from or depend on this habitat.

Scrub as part of a mosaic, including scrub / wetland mosaics on the edge of reedbeds that provide habitat for sedge warbler (*Acrocephalus schoenobaenus*) and reed warbler (*A. scirpaceus*), plus a breeding / resting area for otter (*Lutra lutra*), and scrub / heath mosaics that may support turtle dove, redpoll (*Carduelis flammea*), linnet and yellowhammer (*Emberiza citrinella*).

Scrub as a transition or edge habitat from unimproved grassland through scrub to woodland. Scrub edges also provide a refuge for grassland plant species that are intolerant of grazing.

Scrub as a feature of the overall habitat. For many species scrub is important for some part of their lifecycle. Hedgerows are a major scrub habitat and significant enhancement can be obtained by widening them. For many grassland butterflies scrub provides important shelter from the prevailing wind and helps maintain a warm micro-climate.

Isolated scrub bushes. Isolated bushes in open sites are often very significant as nest sites for birds such as grasshopper warbler (*Locustella naevia*) and as song posts for other species such as stonechat (*Saxicola torquatus*) and linnet.

2.2 Distribution and extent

The Worcestershire Habitat Inventory (WHI) records 554 hectares (ha) of scrub woodland, however this is limited to scrub with a continuous closed canopy over an area >0.25 ha. This figure will be an underestimate of the true extent of scrub habitat as it is likely to not include transitional scrub between open habitats and woodland. The boundaries at this transition are frequently unclear and remote sensing techniques struggle to define or classify it.

The Malvern Hills Trust does monitor scrub extent within the boundaries of its jurisdiction. 59 ha are currently mapped comprising common gorse (*Ulex europaeus*) scrub on the lowland commons, western gorse (*Ulex gallii*) scrub on the hills and hawthorn-blackthorn scrub common everywhere.

2.3 Protection of the habitat

At present there is no legislation specifically protecting scrub habitat except where species of flora or fauna present have specific protection. The Bredon Hill Site of Special Scientific Interest (SSSI) citation notes the importance of hawthorn scrub as a nectar source for the rare invertebrates, in particular saproxylic invertebrates (those requiring dead or decaying wood for all or part of their life-

cycle), for which the site is so important. Bredon Hill is designated as a European Special Area of Conservation (SAC) for the presence of one of those saproxylic insects (the violet click beetle *Limoniscus violaceus*).

2.4 Summary of important sites

Bredon Hill SAC/SSSI contains species-rich hawthorn scrub important for breeding birds and invertebrates.

The **Malvern Hills SSSI** is significant for the scrub-grassland mosaic and also the isolated scrub in open habitats.

Old Hills Common and New Coppice Local Wildlife Site (LWS) contains scrub as part of a woodland / grassland mosaic.

Grimley Brick Pits SSSI contains areas of alder and willow carr scrub important for breeding warblers.

Cherry Orchard Local Nature Reserve, in the floodplain of the River Severn at Diglis, Worcester, has developed an important grassland and scrub mosaic through natural succession that is now managed by Worcester City Council.

Grafton Wood SSSI, Trench Wood SSSI, Rabbit Wood SSSI and Roundhill Wood are all remnants of the Feckenham Forest and all four sites have an important scrub component to them. Grafton, Roundhill and Rabbit Woods are significant for being the core population area of the brown hairstreak butterfly. Management of both Grafton Wood and Trench Wood is focused primarily on butterflies and woodland birds, and in particular scrub warblers.

Bishampton Bank LWS is a 4km-long linear stretch of woodland and scrub.

The scrub / wetland mosaic at **Oakley Pool SSSI** is noted particularly for its willow scrub around the reedbeds.

Hartlebury Common SSSI is a scrub / heath mosaic that was selected for notification as one of the most important areas of dry dwarf shrub heathland surviving in the West Midlands. Scrub species found here include heather, bell heather (*Erica cinerea*), gorse, western gorse and broom (*Cytisus scoparius*). Dwarf shrub heath habitat can be important for bryophytes and lichens (Milsom *et al.*, 2003).

Kinver Edge SSSI, part of which falls within Worcestershire, was also selected for its dwarf shrub heath community.

The **Wyre Forest** contains a transitional mixture of grassland, scrub and woodland important for breeding birds and invertebrates.

Arrow Valley Country Park in Redditch is important for its areas of scrub, which form part of a mosaic with woodland, grassland and wetland habitats.

3. Current factors affecting the habitat

- There is a general lack of awareness of the importance of even species-poor scrub to the nature conservation interest of a site. The presence of scrub is seen as negative on many sites.
- Management for other habitats is often incompatible with the continued presence of scrub and the encroachment of scrub onto other habitats that are viewed as more important typically leads to the scrub being removed rather than managed for its own sake.
- Grazing needs to be carefully managed on sites with a scrub component. Under-grazing speeds succession to woodland, whereas over-grazing prevents scrub regeneration and growth.
- Browsing by deer within woodlands and on the woodland edge can have a detrimental effect on regeneration and the structure of scrub / woodland understory habitat.
- There is a lack of scrub creation on land adjacent to woodland or of permitting a scrub woodland edge habitat to develop and remain.
- Lack of transitional scrub habitat as a component of a landscape-scale mosaic that would contribute to supporting a wider variety of species.

4. Current Action

4.1 Local protection

Some SSSIs are notified specifically for their woodland/scrub and grassland/scrub mosaics. Scrub as an edge habitat is also highly valued. The presence of scrub-using species such as nightingale and grasshopper warbler or nationally or regionally scarce, Red Data Book or Schedule 5 (Wildlife and Countryside Act 1981 (as amended)) invertebrate species can also prompt SSSI designation.

Local Wildlife Sites are non-statutory but help identify valuable sites that receive some protection within local planning policy.

4.2 Habitat management and programmes of action

The **Scrub Management Handbook** was published as a single source of reference for managing scrub and maximising its value to wildlife, as well as controlling scrub where other, more valuable, habitats are threatened by scrub encroachment.

Agri-environment schemes have offered payments for the maintenance, restoration and creation of successional areas and scrub, and capital payments for scrub management. Schemes have also included options for the management of woodland edges, management of scrub on archaeological sites and field corner management, which could involve scrub habitat.

Although nightingales have been lost from all but a very small number of locations in Worcestershire, several sites in the south of the county are being

managed to provide suitable areas of scrub should they return, in particular the **National Trust**-owned Croome Park.

The blackthorn scrub and hedgerows in and around Grafton Wood are managed by **Butterfly Conservation** and **Worcestershire Wildlife Trust** on a coppice rotation to benefit the brown hairstreak butterfly, with no more than one third of the blackthorn cut at any one time. Several areas in the wood have also been planted with blackthorn to increase the total habitat available to the butterfly.

Rotational management of the scrub habitat within the Bredon Hill NNR is being carried out by **Natural England** to diversify the age structure of the species present although the current extent of the scrub is being maintained to save encroachment onto the limestone grassland.

The management regimes undertaken by the **Malvern Hills Trust** on the hills and surrounding commons are a mixture of rotational cutting to create a mosaic of different age classes of scrub together with works to remove invading secondary woodland that threatens the scrub habitats. Areas of dense scrub, scattered scrub and low scrub are maintained through active management including livestock grazing. These different scrub types provide habitat for many priority species including turtle dove, grasshopper warbler, stonechat, dormouse (*Muscardinus avellanarius*), adder (*Vipera berus*), common lizard (*Lacerta vivipara*) and a range of invertebrates.

4.3 Survey, research and monitoring

Most survey and monitoring programmes involving scrub are concerned with species utilising the habitat. In Worcestershire specific examples include:

- Research on the timing and location of brown hairstreak egg-laying has been undertaken by **Butterfly Conservation** volunteers since 1969 on the blackthorn hedgerows at Grafton Wood using timed egg counts.
- In the past **Worcestershire Wildlife Trust** has carried out monitoring of grass snake (*Natrix natrix*) and slow-worm (*Anguis fragilis*) at Trench Wood, the results showing that the presence and location of both species has direct links to the scrub management and its structural diversity.

The latest, most comprehensive review of the conservation value of scrub was carried out by Mortimer *et al* (2000).

5. Associated Plans

Adder, Dormouse, Nightingale, High Brown Fritillary, Brown Hairstreak, Farmland Birds.

6. Conservation Aim

The presence and management of scrub is viewed as an essential component of a balanced habitat mosaic and its importance to numerous species, in particular birds and pollinators, is recognised.

7. Conservation Objectives

- Maintain the extent and favourable condition of scrub habitat within the Bredon Hill SAC
- Raise the profile and improve understanding of the biodiversity value of scrub
- Encourage the management of scrub as part of a landscape-scale habitat mosaic to provide diversity of vegetation structure at the transition between woodland and grassland as well as a standalone component
- Promote the importance of scrub in providing a nectar source for pollinating insects
- Promote the inclusion of scrub within Green Infrastructure plans to provide diversity of habitat structure

References and further information

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RSPB guide to the management of scrub for birds <https://www.rspb.org.uk/our-work/conservation/conservation-and-sustainability/farming/advice/managing-habitats/scrub/>