

Current Status - UK and Local

The status of scrub habitat is not particularly well monitored, partly because of its transitional nature, partly because it is hard to define and partly because of a lack of value afforded to it. The Countryside Survey estimated that there was roughly 200km² of scrub in Scotland in 1990 but this may have altered considerably because of changes in farming practices. Scrub increased in Britain between the World Wars, and some agricultural land was abandoned since the end of World War 2, however, agricultural intensification has accelerated and many marginal habitats have been taken into production. This may change in the future, with changes in farming subsidies, changes in climate and demand for products such as biofuel.

Currently detailed information about important quality scrub habitat is lacking for the local area so it will be one of our first priorities to determine where these good habitats exist. Obvious hawthorn scrub areas are present on the steeper slopes within Gleniffer Braes Country Park, at Gavin near Howwood, at Ferneze and on the slopes above Greenock and Gourrock but work is needed to determine the quality of this resource.

Ecology and Management

Scrub in Britain is almost entirely the product of human activities. Land has been cleared for grazing or development and then a reduction of this activity has allowed scrub to encroach on the open ground.

Scrub can be defined by the stage of development it has reached, as it moves from open stands, to closed canopy and then onwards towards secondary woodland. These stages may be influenced by a number of factors, including timing from when succession started, human intervention such as cutting or burning and the climate. As a scrub habitat moves beyond the primary stages of development, it usually becomes more diverse, with species such as hawthorn, bramble and elder becoming prominent, depending on the soil type and other environmental factors.



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Scrub habitat can be created as part of landscape planting schemes, though these are often of a greater uniformity and contain a higher proportion of non-native species than naturally developing scrub.

Scrub provides an important habitat for many species, including UK BAP and Red Data Book Species such as Song Thrush (*Turdus philomelos*) and Bullfinch (*Pyrrhula pyrrhula*). Diverse scrub is the most valuable for wildlife, with variation in age, species and structure influencing the different species that use the habitat.

Scrub edges and glades are particularly important habitats for grazing mammals like deer or hare and are often rich in flowering plants, though these may soon be out-competed by taller vegetation. The flowers provide nectar for insects and seeds for birds and mammals, whilst taller herbs and grasses growing along the edge of scrub offer shelter for small mammals such as the field vole (*Microtus agrestis*), nest sites for birds and hunting areas for Barn Owls (*Tyto alba*) and Kestrels (*Falco tinnunculus*).

Scrub is an important habitat for a number of bird species, with use seeming to be determined by vegetation structure and species composition. Yellowhammers, (*Emberiza citrinella*), Linnets (*Carduelis cannabina*) and Grasshopper Warblers (*Locustella naevia*) favour young, scattered scrub. Dunnocks (*Prunella modularis*) use low growing, closed-canopy scrub and in Scotland Willow Warblers (*Phylloscopus trochilus*) attain higher densities in tall hawthorn scrub. Song Thrushes (*Turdus philomelos*) and Bullfinches (*Pyrrhula pyrrhula*) favour mature stands of scrub, however, most bird species use a mosaic of vegetation, with different areas for feeding and nesting.

In Strathclyde, Lesser Whitethroats (*Sylvia curruca*), a LBAP species, are recorded in areas where mature hawthorn scrub is interspersed with a dense mosaic of Bramble, Dog Rose, Gorse and Willow.

Factors causing loss or decline

Factors which could contribute to the loss of scrub habitat include:

- ★ Removal to prevent the loss of grazing or grassland habitat
- ★ Removal to extend arable fields
- ★ Development pressure
- ★ Natural succession of existing habitat to woodland. Invasive species such as Japanese Knotweed and Giant Hogweed



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SCRUB

Scrub is often defined by the presence of shrubs, stunted trees or thick understorey plants like brambles, although the extent of the coverage of these can vary considerably. Dense scrub may consist of hawthorn or gorse, whilst scattered scrub that is more open includes a wide range of woody species such as willow and birch. The scrub vegetation is usually less than 5m in height, though there may be a few, scattered trees which are taller than this.

Scrub is generally regarded as a transitional habitat, as open habitats, such as former industrial sites, become colonised by successional species. If this process were to continue, the scrub would develop into woodland. On the other hand an environmental change, for example increasing the water level of the site or re-introduction of grazing, may halt or stabilise this process. Scrub often exists as a mosaic with grassland and other vegetation

It should be noted that scrub is a transitional habitat and is naturally in a state of flux. For example, whilst one area of scrub may be lost to development, elsewhere, scrub may be created through a reduction in grazing. The best scrub habitat in the LBAP area usually comprises species-rich mature hawthorn scrub. In the past the habitat value of scrub has often been overlooked, particularly in regards to new developments on brownfield sites that have been vacant for long enough for good habitats to develop.

Opportunities and Current Action

Gleniffer Braes Country Park has been identified as a site with potential for habitat enhancement. Plans are in progress to create new areas of scrub and manage the existing areas within the park to improve the quality of the habitat. The best quality scrub in the LBAP area is usually dominated by Hawthorn with occasional Blackthorn (or Gorse in more coastal locations). Ideally the shrubs should be hand pruned in the first 5 years of growth to maximise branching before being allowed to grow freely to 4m high with an overgrown look to their shape. Furthermore, the most important scrub habitat is usually fairly open in places which allows light to penetrate, so that a diverse, dense understorey can develop. This creates a diverse microhabitat which will, in turn, provide a range of conditions to suit a more diverse range of species.

Management tools to create, enhance or restore good quality scrub habitat will include new planting of shrubs and ground flora species, thinning dark dense stands or modifying the species composition.

Strategic projects like the Glasgow and Clyde Valley Green Network Partnership's, Integrated Habitats Network study have aspirations to increase connectivity between important habitats. This would help some species to migrate or disperse but has particular significance today as the effects of climate change may require species to move more rapidly to cope with an increasingly changeable environment. Scrub has the potential to provide wildlife corridors via scrub nodules connected by hedgerows which could improve connectivity to a range of habitats, such as woodlands or grasslands. LBAP partners will work with developers to ensure that existing scrub is retained wherever possible and landscaping schemes are of nature conservation value.

Objectives and Targets

Objective 1	To determine current extent and status of existing scrub habitats.
Objective 2	Maintain the current extent and quality of scrub habitat
Objective 3	To increase the total extent of quality scrub habitat within the LBAP area
Objective 4	Promote scrub for its biodiversity value

We will achieve these Objectives by:

Action	Actioned by	Timescale
Identify existing quality sites within the LBAP area	LAs SOC RSPB	2009 - ongoing
Develop policy of preventing further loss in extent and quality of existing quality scrub habitat	LAs	2009 - ongoing
Identify sites available for habitat enhancement, management and restoration	SNH LAs SOC	2009 - ongoing
Promote management practices which enhance and restore scrubland	SNH RSPB	2009 - ongoing
Organise promotional events to raise awareness of the importance of scrub for biodiversity	Rangers PNHS	2009 - ongoing

Links with other Local Biodiversity Action Plans

Unimproved Grasslands, Broadleaved and Mixed Woodland, Lesser Whitethroat

