

Guidance for the management of Scrub and habitat mosaics on previously developed land

General objectives

- Manage scrubland habitat for those species to which it is most suited and which occur in the vicinity of the site.
- Maintain and develop links to other areas important for wildlife, for example, hedges, woodland, heath and flowering grasslands.

Important features to maintain and develop:

- An open structure with scattered shrubs or groups of shrubs. The density of shrub cover may vary greatly from almost open grassland to something approaching a woodland edge habitat.
- A variety of shrub species of differing heights, which produce flowers and berries.
- Flowering grassland; this may vary from rank growth on richer soils to more open species-rich vegetation on poorer soils.
- Wet or damp areas with associated wildflowers, grasses and sometimes reeds.
- Derelict built structures which might be important nesting or roosting habitats.
- Links to other habitats.

Priority species' groups for which habitat is important

Birds

Barn Owl (lowlands only)
 Bullfinch
 Dunnock
 Grasshopper warbler
 Grey Partridge
 Kestrel
 Linnet
 Reed bunting
 Swallow
 Tree Sparrow
 Twite (uplands only)
 Willow tit
 Yellow Hammer

Mammals

Brown hare
 All bat species

Invertebrates

Wall brown

Amphibians

Great-crested newt
 Common toad

Other species' groups for which habitat important

- Butterflies, moths, other grassland invertebrates and, where ponds occur nearby, amphibians.

Maintaining and improving the habitat

- Before undertaking habitat management work try to find out which priority species are using the area and manage sites accordingly.
- Scrublands naturally develop into woodland although this can take a long time. If this process is to be halted, it is necessary to remove some trees and shrubs from time to

time. Vigorous and quick growing non-native species such as sycamore, should be removed as soon as possible.

- Species diversity can be increased by planting additional shrub species, particularly in denser scrub habitats where fruit trees will be of benefit.
- Where there is a dominance of rank grassland, some of this can be cut and raked off annually to reduce nutrients in the soil. This favours the growth of wildflowers which can be planted to increase diversity. To reduce nutrients to a level at which wildflowers will thrive will take several years. A continual annual cut and removal of material will also be necessary. Do note that some species, such as meadow brown butterflies, favour uncut rough grassland.
- Creating ponds will add immensely to the value of the habitat (adjacent to, but not in, wet areas is especially appropriate). Ponds sited in the open away from trees and shrubs may attract different species to those sheltered by shrubs.

Note: In some cases, it may be more practical to maintain an area of scrub as part of a broader management rotation within a site

Species to plant

Trees

Crab apple

Shrubs

Blackthorn

Dog/Field rose

Gorse

Hawthorn

Note: For woodland edge species (especially where there are shrubs and trees) and native meadow species, scrub should normally develop naturally without human intervention. However, in some cases there may be advantages to planting additional species.

Wildflowers

- Woodland edge species (especially where there are shrubs and trees) and native meadow species.
- For information on the correct species to plant look for the Natural History Museum's Postcode Plant Database at www.nhm.ac.uk or write to The Natural History Museum, Cromwell Road, London, SW7 5BD, UK.

Extending the habitat

- The value of these areas can be increased by forming links with areas of woodland, heath, other hedgerows or by creating new habitats adjacent to the site.
- Useful complementary habitats include flowering grassland (especially with ponds and south facing aspect).
- Species rich grassland should not be planted with trees or shrubs.