



SCRUB & CARR

1. INTRODUCTION

Scrub is the intermediate stage between grassland and dry woodland and carr is the intermediate stage between wetland and wet woodland. Both are important habitats in our sub-region, especially where they form part of larger habitat mosaics. Scrub is composed of woody species such as willows, hawthorns, blackthorn and roses, or young trees such as birches, oaks, sycamore or aspen.

As well as occurring in patches, scrub can also evolve as a linear feature along railway lines, water-courses, along site boundaries (particularly where there are unmanaged banks or cuttings) and through the neglect of hedges. The density and height of scrub will depend upon the age, history and physical conditions of the site. For example, the spoil-heaps of our Lias quarries can be extremely dry in summer which tends to favour scattered rose and hawthorn scrub, whereas more fertile damper soils will favour dense-hawthorns or blackthorn. Drier acidic soils favour birches and gorses, especially silver birch and common gorse, whereas wetter acidic soils favour downy birch. Aspen scrub is an important component of some of our ancient woods. Broom scrub occurs on many post-industrial sites and gorse can also occur as a characteristic component of clay-capped slopes in the Cotswolds and their outlying hills (e.g. Napton). Carr is typically composed of willows, and usually grades into open swamp or a carr-swamp mosaic. The speed with which scrub and carr develops varies, with factors of grazing, ground hydrology and chemistry, gradients, plant competition, physical disturbance and fire all having an influence.



Claybrookes Marsh © Steve Falk

Scrub and carr serve many important functions. They are a food source for many plant-eating insects (especially that comprised of oak, willows and birch), some of which are species-specific. They are a major source of blossom from March onwards, which is vital for many insects breeding nearby (e.g. dead wood breeding flies and beetles or mining bees nesting in open habitats). Some species will specialise on certain shrubs e.g. *Andrena praecox* (the host of the BAP cuckoo bee *Nomada ferruginata*) on willow. Scrub and carr can afford shelter to adjacent habitats and provide sheltered hibernation sites in winter. The habitats are also important providers of nesting and roosting sites for many birds including linnet and the berry-bearing species are a vital food source for wintering birds. Many species of bird and insect require scrub or carr as one of several habitat components and cannot survive at a site lacking them, even if their other requirements are present e.g. green hairstreak butterfly. However, scrub and carr can severely reduce the biological, landscape and historical interest and diversity of a site if they become too extensive and result in a loss of valuable open habitats.

The conservation management of scrub and carr is also included within a number of other habitat action plans. Their separate treatment here is intended to provide a better understanding of their value and inform the management of sites where scrub is a major component.

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| 2. OUR OBJECTIVES & TARGETS | Target |
| A. To identify areas of scrub/carr within Habitat Biodiversity Audit maps and maintain up-to-date information on the distribution and approximate coverage afforded by such habitat. | by 2005 |
| B. To maximise our knowledge of the important scrub and carr sites and ensure they are appropriately designated (e.g. SINC or SSSIs). | by 2010 |
| C. To maintain the extent and improve the condition of semi-natural habitats in and around scrub and carr, with priority given to those olding UK Biodiversity Action Plan Priority Species, Red Data Book, Nationally Scarce and Regionally Scarce species. | 2003-2015 |
| D. To promote the maintenance of extent and expansion of wildlife habitat including scrub and carr following unavoidable development of land. | 2003-2015 |
| E. Development of a policy framework for retention or creation Of wildlife habitat including scrub and carr to include local planning documents. | 2003-2015 |
| F. To promote the importance of scrub and carr to encourage good management practice and to share knowledge. | 2003-2015 |
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ASSOCIATED HABITAT PLANS

- Ponds, Lakes & Reservoirs
- Reedbeds
- Fen & Swamp
- Canals
- Lowland Grassland (all types)
- Woodlands
- Quarries & Gravel Pits
- Disused Industrial & Railway Land

ASSOCIATED SPECIES PLANS

- Rare Bumblebees

3. NATIONAL BAP OBJECTIVES & TARGETS

There are no specific BAP objectives or targets for scrub, though it is alluded to in certain Habitat Action Plans and some Species Action Plans.

4. CURRENT STATUS

Scrub is a very widespread habitat, which generally occurs in small patches or as linear features, making measurement of its true coverage almost impossible. It also tends to occur amongst other habitats, and its local provision can vary markedly from one decade to another according to management practices. Large areas of scrub have developed within many quarries (e.g. Nelsons Quarry and Ufton Fields), old industrial sites (e.g. Claybrookes Marsh), larger railway or canal cuttings/embankments, and in association with some areas of grassland, heathland and woodland. Carr is far more restricted in extent, with larger examples including the Alvecote Pools complex, Brandon Marsh, Kingsbury Water Park (and similar sites within the Tame Valley), Claybrookes Marsh and Ufton Fields.

4.1 Legal and Policy Status

Several SSSIs and LNRs contain substantial areas of scrub or carr, including Alvecote Pools, Brandon Marsh, Coleshill and Bannerly Pools, Copmill Hill, Claybrookes Marsh, Harbury Railway Cutting, Stockton Railway Cutting & Quarry, Whitacre Heath and Ufton Fields. Scrub and carr are also components of several country parks (e.g. Coombe, Kingsbury Water Park, and the Burton Dassett Hills); also many designated and soon-to-be designated SINCs, which receive non-statutory protection through the planning system.

4.2 Current Factors Affecting The Habitat

- **Neglect** – this can result in scrub and carr becoming over-dominant and reducing the ecological value of a wildlife site. Neglect can also result in scrub evolving into woodland with a different ecology (e.g. different woody species, fewer blossoms and berries etc). Scrub and carr tend to be most valuable where they exist in a variety of forms within a larger habitat mosaic.
- **Excessive clearance** – can result in the loss of food (e.g. foliage, blossoms and berries) and shelter. Whilst scrub and carr can usually be encouraged to re-develop, the specialist animal species that depended upon it may have become extinct as a result of such clearance. Rotational/piecemeal scrub management that ensures some provision of undisturbed scrub and which encourages a range of growth forms, is recommended.
- **Development** – especially of brown-field land supporting extensive scrub e.g. Foleshill Gas Works in Coventry, or the conversion of informal green space to formal green-space without scrub.
- **Fires** – especially within urban areas. Fires however, can sometimes produce the same positive end result as piecemeal management.
- **Water Pollution** – can result in the loss of carr in particular.
- **Drainage of wetlands** – can change the ecology of carr and accelerate its succession to scrub and woodland.

5. CURRENT LOCAL ACTION

- Survey work and designation - many sites containing scrub and carr have been subject to a long history of wildlife recording, though the data is of varying scope, detail and age. The data is being used to determine the designation of new SINC's and has resulted in some fairly recent SSSI designation (e.g. Claybrooks Marsh).
- Established management - most active within the SSSIs, LNRs, Wildlife Trust reserves and country parks – most of which will have management plans and a work programme of management activity. The damaging effects of excessive scrub encroachment are now recognised, and substantial scrub has recently been removed from Claybrookes Marsh, Harbury Cutting, Stockton Cutting and Ashlawn Cutting – improving conditions for various scarce flowers and insects, whilst maintaining a sensible minimum provision.
- Habitat creation - the development of limited scrub and carr is encouraged at some nature conservation sites and is happening naturally at some relatively young informal wildlife sites e.g. old industrial areas, quarries etc.
- Education - the LNRs and many of the Wildlife Trust reserves host an impressive programme of educational events for all age groups. This often includes scrub clearance, during which the value of scrub and problems of excessive scrub encroachment are discussed.
- Advice provision - this is currently available from a number of organisations and groups for a range of issues e.g. Warwickshire Museum and Warwickshire Wildlife Trust for various species and management aspects, Natural England for SSSIs, FWAG and DEFRA for Countryside Stewardship and the Environment Agency for various wetland or landfill-related issues.

6. PROPOSED LOCAL ACTIONS **(some dates amended – Core Steering Group – Feb 2008)**

ACTION	Lead	Partners	By	Meets objective
Policy & Legislation				
PL1. Ensure that all relevant habitat policy is included in Local Planning Documents (see ODPM Planning Policy Statement PPS9)	LBAPSG	NWBC RBC WDC CCC SDC	2003-2015	A
PL2. Continue to publicise the high ecological value of some brown-field sites containing scrub and carr and lobby for their appropriate policy-based protection.	WWT	NE WM	ongoing 2003-2015	A
PL3. Ensure that any site meeting the relevant criteria is considered for designation as an SSSI.	NE	WWT WM	2005	B

PL4. Ensure that any site meeting the relevant criteria is considered for designations as a SINC .	WSP	WWT NE WM LAs	2005	B
Site / Species Safeguard & Management				
SM1. Actively work to ensure that development proposals do not reduce the nature conservation value of existing sites, propose appropriate compensatory measures where such damage is unavoidable.	LBAPSG	WWT SDC WDC RBC CCC NWBC	2003- 2015	B,C
SM2. Actively work to ensure that all SSSI-quality sites are subject of up-to-date management plans that account for all the key areas of interest.	WCC	WWT WM LAs	2005	B,C
SM3. Actively work to ensure that water level management plans prepared for all wetland SSSIs are designed to provide optimal hydrological conditions to sustain all elements of the habitat.	NE	WWT CCC NWBC EA RBC SDC WDC	2003- 2015	B
SM4. Consider scrub and carr in any restoration plans and other strategic plans affecting sites.	LBAPSG	LOs EA WWT SDC WDC RBC CCC NWBC	2003- 2015	D, E
SM5. Produce a list of potential projects which involve the conservation of scrub and carr and for which grant-aid can be sought.	WM	NE WWT	2003	B,C
SM6. Promote up-to-date management plans that account for all the key areas of interest for all SINC-quality sites.	WSP	WWT WM LAs	2005	B,C
SM7. Actively recommend measures to increase the extent of connectivity and maintain options to expand area of habitat.	LBAPSG	WCC LAs WWT NE	2008- 2015	D
Advisory				
A1. Inform landowners/managers of the ecological importance of scrub and carr on their sites and advise appropriate management and information on suitable grant aid.	WM	RSPB NE EA WWT FWAG	2004	F

A2. Inform landowners and managers of adjacent land, about the ecological importance of scrub and carr, where it is thought that this will benefit vulnerable species or assemblages, or provide continuation of habitat between sites.	FWAG	WWT EA WM	2004	B
A3. Produce an introductory leaflet on scrub and carr for site owners listing sources of advice and grants.	WM	WWT EA FWAG	2005	B
Research & Monitoring				
RM1. Continue to survey and monitor scrub and carr sites, especially where BAP species are present. Attempt to secure access to those known sites not yet surveyed. Monitor changes in the habitat using appropriate techniques.	WBRC	RSPB NE EA HBA WWT	2003- 2015	E
RM2. Monitor losses and gains of habitat at a broad, quantitative level.	HBA	WM NE WWT	2005	A
RM3. Continue monitoring key animal species such as <i>Nomada ferruginata</i> , linnet and green hairstreak.	WBRC	WWT BC	2003- 2015	A
Communication, Education & Publicity				
CP1. Increase public awareness of the importance of, and threats to, scrub and carr and the need for conservation action.	WWT	NE WM EA RSPB FWAG	2003- 2015	B

Abbreviations: BC – Butterfly Conservation, CCC – Coventry City Council, EA - Environment Agency, NE – Natural nEngland, FWAG – Farming and Wildlife Advisory Group, HBA – Habitat Biodiversity Audit, LO – Landowner, NWBC – North Warwickshire Borough Council, RBC – Rugby Borough Council, RSPB - Royal Society for the Protection of Birds, SDC – Stratford District Council, WDC – Warwick District Council, WBRC – Warwickshire Biological Record Centre, WM – Warwickshire Museum, WSP – Wildlife Sites Project, WWT – Warwickshire Wildlife Trust.

7. REFERENCES (see LBAP Bibliography web page)

8. FURTHER INFORMATION (see separate Links web page for links to web sites)

UK Lowland Calcareous Grassland Biodiversity Action Plan no.12

UK Wet Woodland Action Plan no.4

Buglife (2004) Information on the habitat-management requirements of key invertebrates . CD-Rom £34.99 from Beverley Doyle by email at:

beverley.doyle@buglife.org.uk

9. CONTACT

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