CHAPTER 5

REEDBEDS AND SEDGEBEDS

Introduction

Reed and sedgebeds form on low-lying land where impeded drainage leads to the development of waterlogged soil or standing water. On waterlogged soils with a high organic content sedgebeds – dominated by either greater pond sedge or lesser pond sedge – develop. If the organic content is lower, or if standing water is present, reedbeds dominated by common reed are more likely to develop. Reeds will dominate in water depths of up to approximately one metre; where the water depth is greater open water communities occur. Both sedgebeds and reedbeds often support relatively few plant species, but they have distinctive animal communities.

Two UK BAP priority species – reed bunting and water vole – occur in these habitats in Bristol. A further species – greater water parsnip – previously occurred but is now extinct in Bristol. Reedbeds are identified as a priority habitat in the UK BAP.

Current Status

The distribution of reed and sedgebeds is limited by the availability of suitable low-lying land. In the past, large areas were present in the Avonmouth and Lawrence Weston areas, but most of these have been lost as a result of land drainage and development.

The largest concentration of both habitat types, at Lawrence Weston Moor, is owned by Bristol City Council and managed as a nature reserve by Avon Wildlife Trust. It is also a Site of Nature Conservation Interest (SNCI) and Local Nature Reserve. There are also some substantial reedbeds along Chittening Wharf. These are within the Severn Estuary Site of Special Scientific Interest (SSSI). Those with substantial tidal influence are covered by the Estuarine Habitats HAP. Some of the others, however, are above high tide level and fall within the remit of this plan.

Elsewhere, there are small areas around Avonmouth Sewage Works and Hoar Gout, some of which are SNCI or Wildlife Network Site (WNS) and some are managed by Avon Wildlife Trust. There are other smaller sites in the wider Avonmouth, Hallen and Lawrence Weston area, some of which are covered by SNCI or WNS designations, for example to the south of Seabank Power Station and on Hallen Marsh. Away from

Photography: Reedbed with little grebe: Paul Glendell. Branched bur-reed: AWT

the coastal strip there are small patches of reedbed, largely within the Avon Valley, for example along the New Cut and at Eastwood Farm. Most of these are within SNCIs.

Reedbeds are overwhelmingly dominated by common reed. In the centre of reedbeds this species often forms single-species stands, but there are often other plant species. The more frequent species include hedge bindweed, woody nightshade, reed sweet grass, greater pond sedge and greater reedmace. Where standing water is present common duckweed, water starwort and other aquatic species can be present. On the fringes of reedbeds, vegetation becomes more diverse, with additional species including water mint, marsh bedstraw, hairy willowherb, purple loosestrife and yellow flag.

Reedbeds have usually attracted most attention from the nature conservation community on account of their bird populations. The reedbeds in Bristol are too small to support species such as bittern and marsh harrier, but reed warbler, sedge warbler and reed bunting all breed regularly and water rail may do so. The invertebrates of Bristol's reedbeds have been little studied, but species of restricted distribution – including large wainscot moth – are known to be present.

There are two forms of sedgebed in Bristol, defined by the dominance of either greater or lesser pond sedge. The two vegetation types are very similar. As with common reed, both species can form single species stands but they can also be more diverse, particularly where they form a mosaic with marshy grassland. In these circumstances associated plants can include ragged robin, marsh marigold, meadowsweet and hemlock water-dropwort, as well as scarce species such as meadow rue, brookweed, blunt-flowered rush and slender spike-rush.

The bird interest of sedgebeds differs slightly from that of reedbeds. Sedge warblers and reed buntings breed in this habitat, and in winter birds such as common snipe, jack snipe and teal may be present, the first two sometimes in significant numbers. Information on the invertebrate interest of Bristol's sedgebeds is sparse, although short-winged conehead (a bush-cricket) can be present in large numbers.

There are several management issues associated with these habitats. They can be invasive of more botanically rich habitats, from marshy grassland to open water, and mowing or dredging may be required to limit their spread. On the other hand, depending on water regimes, both habitats may dry out and be susceptible to invasion by sallows and other trees and shrubs.

Mowing or manipulation of water levels may be required in order to prevent or reverse this trend. Changes in water levels can lead to drying out and this has led to the almost total loss of an area of this habitat type at Lamplighters Marsh. On the other hand, creation of these habitats is relatively straightforward once the correct water regime has been established and there are opportunities for habitat creation in the Avonmouth area. Habitat creation schemes should incorporate other habitats, such as open water and marshy grassland to maximise biodiversity benefits.

Greater water parsnip (*Sium latifolium*) was previously present in the Avonmouth area. Avon Wildlife Trust is at present involved in an attempt to reintroduce this species in the Gordano Valley. If this proves successful then a similar attempt at Lawrence Weston Moor may be feasible.

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Current Threats

- Loss due to changes in hydrological regimes
- Lack of management
- Development pressure

Objective 1: Identify and map all existing reed and sedgebeds and assess favourable conservation status

Target:

- All reed and sedgebeds should be identified, surveyed and assessed

Objective 2: Maintain and enhance the quality and extent of the existing resource

Target:

- No net loss in the extent of the existing habitat resource
- All reedbeds to be in favourable conservation status by 2015

Objective 3: Create new reedbed on land of low nature conservation interest

Target:

- Create a further 3 hectares of reed and sedgebeds in Bristol, focusing on the Avonmouth area by 2013

Objective 4: If feasible, re-introduce greater water parsnip

Target:

- Work towards re-establishing a viable population of greater water parsnip

Photography: Reed warbler: Paul Bowerman. Ragged robin: Darin Smith. Branched bur-reed: AWT

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REED AND SEDGEBED HABITAT ACTIONS	OBJECTIVE	DATE	IMPLEMENTORS
Identify, map, survey and assess nature conservation status (including hydrological status) of all sedge/reedbeds	1	2009	BCC, IDB, Landowners
Seek to ensure that development does not lead to a net loss of the resource	2	2008 – 2013	BCC
Work with landowners to ensure all reedbeds and sedgebeds are in favourable conservation status by 2015, prioritising those at risk	2	2009 – 2013	BCC, AWT, Landowners
Identify sites for reed and sedge bed creation, focusing on the Avonmouth area and work with developers and other partners to create new areas of reed and sedgebed	3	2010 – 2011 then ongoing	BCC, BRERC, AWT, Landowners
If the reintroduction of greater water-parsnip to the Gordano Valley is successful, prepare a feasibility plan for its reintroduction to Lawrence Weston Moor	4	2011	BCC, AWT, NE, EA