

Reedbed

Reedbeds, where extensive, support a distinctive fauna. In Wigan this includes bittern, reed warbler, water rail and several species of moth including the silky wainscot and obscure wainscot.

This BAP should be considered together with the Bittern BAP as the two are intrinsically linked.



Current status

Reedbeds are wetlands dominated by stands of common reed (*Phragmites australis*). They include areas of open water and ditches and are associated with wet grassland and carr woodland (wet, swampy woods dominated by alder and willow). Nationally there are approximately 5000ha of freshwater reedbed, made up of around 900 sites. Only 50 of these sites are greater than 20 ha.

Reedbed habitat in Wigan has always been relatively scarce and fragmented. However, within north west England approximately 25% of the freshwater reedbed habitat recorded occurs in Wigan. Only Leighton Moss in Lancashire has a larger area of reedbed. Parts of the Wigan Flashes are designated as a Site of Special Scientific Interest and presently contain approximately 50 ha of reedbeds. Most of the significant reedbeds in Wigan are designated as Sites of Biological Importance and most are managed as nature reserves.

Characteristic wildlife

Reedbeds, unless managed, are short lived in nature – reeds colonise open water, over time leaf litter builds up and the reedbed dries up and is colonised by alder and willow. Reedbeds are maintained by reed cutting, by controlled burning of the ‘litter’ and by maintaining high water levels. Other tall fen communities are important alongside the reedbeds and especially include reedmace (*Typha sp.*) fen.

The diversity in reedbed structure often depends on water within the system. Water levels are best if they vary, but should be around 30 cm deep over the bulk of the reedbed as this allows fish access to the waterbody. This also encourages invertebrates such as Pond louse (*Asellus aquaticus*) which helps to control the build up of material and prevent the reedbed drying out.

A variety of factors including size, age, water quality and geographical distribution will lead to differences in the plant, animal and invertebrate communities found in

reedbed. In Britain, species such as bittern require a matrix of reedbed in excess of 20 hectares in which to breed. Wintering bitterns will often use smaller sites but move on in spring.

In Wigan characteristic birds of reedbeds include reed bunting, water rail, reed warbler, bittern and occasional marsh harriers and bearded tits also occur.

In the UK there are 700 invertebrate species associated with reedbed, of which 40 are entirely dependent upon reedbed. Of these 40 species several are found in Wigan, silky wainscot moth, The crescent, bulrush wainscot, brown-veined wainscot, obscure wainscot, large wainscot, small wainscot and small rufous.

Amphibians use well-vegetated water bodies within the reedbed. Ample food and good cover mean that common frogs and toads can occur at high densities, they generally require small areas of open water such as pools and ditches. The eggs of frogs and toads are a food source for many animals. Smooth, palmate and great-crested newts can also be found in reedbeds but they tend to be associated with well-vegetated ditches.

Water voles and water shrews can also be found in the ditches that run through and round the body of the reedbed.

Although common reed is the main species associated with reedbeds, there are always other plants to be found. Reedmace, Lesser reedmace, yellow iris and sweet flag, bur-reed and rushes are often found where reed is less dominant. In drier stands bittersweet and marsh cinquefoil occur and, where succession has progressed, scrub species such as willow and alder become frequent.

Key Species

The following rare or threatened species are associated with reedbeds in Wigan. Species were selected on the basis that they are UK BAP Priority Species (P) or Species of Conservation Concern (C).

Water vole	<i>Arvicola terrestris</i>	P
Bittern	<i>Botaurus stellaris</i>	P
Reed bunting	<i>Emberiza schoeniclus</i>	P
Reed warbler	<i>Acrocephalus scirpaceus</i>	C
Water shrew	<i>Neomys fodiens</i>	C
Water rail	<i>Rallus aquaticus</i>	C
Silky wainscot moth	<i>Chilodes maritimus</i>	

Current Issues

- Surface and groundwater abstraction causing lowering of water levels within existing reedbeds.
- Water quality – water pollution, pesticide and heavy metal pollution.
- Population isolation as a result of fragmentation of existing areas.
- Development pressures.
- Absence of targeted management for existing reedbed habitat.
- Recreational pressures.

Best Management Practice

Without management reedbeds will naturally dry out and turn to woodland in the medium to long term. Operations such as reed cutting, scrub control and water level management will slow down or reverse this process.

The main objective of reedbed management is to achieve:

- A range of reed/fen communities (dependent on site conditions) is desirable – achieved through rotational cutting.
- Development of reedbed fringe communities, which are suitable for a range of associated species, increasing the amount of reed/water interface with suitable ditches and pools.
- Prevention of seral scrub succession.
- Development of water quality monitoring for invertebrate communities and flora and fauna.
- Development of pocket reedbeds.
- Management of non-native weed species as required.
- Control of disturbance and damage by human influence.

Current Action

Recent schemes in Wigan have been implemented to bring reedbeds into more positive management regimes. These schemes have allowed a total of 50 ha of reedbed to be brought into active management. Approximately 24ha of this is newly created reedbed.

A working group will oversee the development and implementation of the BAP. This partnership is formed by: English Nature, Greater Manchester Ecology Unit, Lancashire Wildlife Trust, RSPB, Wigan Council and Wigan Leisure and Culture Trust

Related Action Plans

UKBAPs:

Reedbed
Bittern

GMBAPs:

Bittern

Wigan BAPs:

Bittern
Wet Woodland
Water Vole

Objectives, actions and targets

Strategic Objective: Protect, develop and monitor reedbeds in Wigan		
Operational objective	Action Required	Timescale
1. Determine the current distribution and quality of reedbed in Wigan	<ul style="list-style-type: none"> Collect and collate records of reedbed and produce distribution map to establish accurate baseline 	2006
	<ul style="list-style-type: none"> Assess all reedbed using standardised and repeatable methodology 	2006
	<ul style="list-style-type: none"> Establish a database accessible by all relevant partners 	2006
2. Protect existing reedbed	<ul style="list-style-type: none"> Recognise and protect reedbed through policies in plans and strategies e.g. UDP, SPG, Nature Conservation Strategy 	Ongoing
	<ul style="list-style-type: none"> Assess all relevant planning applications for their impact on reedbed 	Continuous process
	<ul style="list-style-type: none"> Encourage appropriate water abstraction policies 	Continuous process
	<ul style="list-style-type: none"> Safeguard all reedbed sites through designation as SBI, LNR, SSSI or SPA 	2007
	<ul style="list-style-type: none"> Designate Hey Brook as a SSSI 	2008
	<ul style="list-style-type: none"> Produce management plans for all SSSI and SBI reedbeds 	2007
3. Investigate opportunities for creation of new reedbed	<ul style="list-style-type: none"> Identify areas for potential expansion of reedbed habitat 	2007
	<ul style="list-style-type: none"> Encourage landowners/managers to participate in appropriate schemes to fund management and habitat creation 	Ongoing
4. Monitor reedbed resource	<ul style="list-style-type: none"> Develop monitoring procedure 	2006
	<ul style="list-style-type: none"> Monitor reedbed quality and quantity 	Ongoing
	<ul style="list-style-type: none"> Monitor water quality 	Ongoing
	<ul style="list-style-type: none"> Develop links with universities and encourage research on reedbed and associated habitats 	Annual review

Management Objective: Create and maintain reedbeds in Wigan

Operational objective	Action Required	Timescale
1. Protect existing reedbed	<ul style="list-style-type: none">• Implement management plans for SSSI and SBI reedbeds• Protect reedbeds from disturbance through management• Control invasive species to maintain high quality reedbeds	2008 Continuous process Review annually
2. Develop new reedbed	<ul style="list-style-type: none">• Investigate opportunities for reedbed creation initiatives	2008
3. Manage existing and newly created reedbed	<ul style="list-style-type: none">• Investigate opportunities for reedbed management/maintenance• Identify funding for development and management/maintenance of reedbed• Develop good practice examples in current reedbed management	2008 Ongoing Review annually
4. Promote conservation value of reedbeds	<ul style="list-style-type: none">• Raise the profile of reedbed and improve community awareness of its wildlife value• Encourage community involvement in conservation of and access to reedbed sites• Promote examples of good practice in reedbed management	Review annually Annual reedbed event Ongoing