



Reedbed

Reedbeds are amongst the most important habitats for birds in the UK. Where extensive, they support a distinctive breeding bird assemblage, which includes bittern, marsh harrier, bearded tit, reed warbler, sedge warbler, water rail and reed bunting.

Current status

Reedbeds are wetlands dominated by stands of common reed where the water table is at or above ground level for most of the year. They often include areas of open water and ditches. Small areas of wet grassland and carr woodland may also be associated with them. Nationally there are 5000ha of reedbed, made up of around 900 sites. Only 50 of these sites are greater than 20ha.

Within Cumbria it is likely that reedbed habitat has always been naturally relatively scarce and fragmented and less than 220 ha was recorded by Kelly and Perry (1990). Reedbeds are found in almost all the Natural Areas in Cumbria.

Eleven Sites of Special Scientific Interest in Cumbria contain reedbeds greater than 2ha in area, including one National Nature Reserve. Most of the significant reedbeds in Cumbria are designated as SSSIs and many are managed as nature reserves.

Characteristic wildlife

The term reedbed is often used to describe areas ranging from marginal fringes along river systems to

extensive blocks in lowland and coastal plains. Although true reedbed is dominated by common reed, stands of other species such as reed canary-grass and yellow iris are sometimes also referred to as reedbeds. Large sites dominated by these other species have been included within this plan despite not being 'true' reedbed.

The variation in reedbed structure often depends on water levels within the system. Reedbeds which normally have 20cm or more of surface water in summer are referred to as 'reedswamp'. These areas are often of high invertebrate and bird interest but with little botanical diversity. 'Reedfen', where water levels tend to be at or below surface level during the summer, are often far more botanically complex and diverse.

A variety of factors such as size, age, water quality, geographical distribution etc. will lead to differences in the plant, animal and invertebrate communities found in reedbed. In Britain, species such as bittern appear to require reedbed in excess of 20 hectares in which to breed. Wintering bitterns will often use smaller sites but invariably move on in spring. Both marsh harriers and bearded tits are able to nest in smaller reedbeds than bitterns. In the case of marsh

harriers, their main requirements are for a secure nesting site and wet ditches to hunt along. Bearded tits require well-established drier reedbeds where the litter has accumulated.

In Cumbria characteristic birds of reedbeds include reed bunting, water rail, reed warbler; however occasional marsh harriers and even bitterns do occur.

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

Otters can be associated with reedbeds especially where a healthy eel population is found.

Water voles and water shrews can also be found in the ditches which run through and round the body of the reedbed, however both species are rare in Cumbria, although water shrews may be under-recorded.

In the UK there are 700 invertebrate species associated with reedbed, of which 40 are entirely dependent upon reedbed. Of these 40 species only one is found in Cumbria, the silky wainscot moth.

Common frogs and toads are often found in reedbeds but generally only where fish are absent.

Key species

The following rare or threatened species are associated with reedbeds in Cumbria. Species were selected on the basis that they are UK BAP Priority Species (marked P) or species of County importance in Cumbria. Where species of County importance are also UK BAP Species of Conservation Concern, they are marked C.

water vole	<i>Arvicola terrestris</i>	P
European otter	<i>Lutra lutra</i>	P
bittern	<i>Botaurus stellaris</i>	P
reed bunting	<i>Emberiza schoeniclus</i>	P
a reed beetle	<i>Donacia aquatica</i>	P
silky wainscot moth	<i>Chilodes maritimus</i>	

Best management practice

In Cumbria most reedbeds are unmanaged, however without management reedbeds may 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 appropriate management will be site specific and dependant on the species that currently use or are to be encouraged to use the reedbed.

The key elements of a reedbed management are water levels, water - reed interfaces, reed/vegetation management including reed cutting, scrub management, reed litter depths. Specialist advice should be sought prior to reedbed management to ensure best management practice for a specific site.

Current issues

- Drainage of existing reedbed and associated wetlands with agricultural intensification.
- Surface and groundwater abstraction causing lowering of water levels within existing reedbeds.
- Water quality - diffuse or point source pollution.
- Population isolation as a result of fragmentation of existing areas.
- Development pressures.
- Absence of targeted management for existing reedbed habitat.
- Recreational pressures.

Current action

- The Environment Agency, English Nature and Royal Society for the Protection of Birds are currently collaborating on a lowland wetland project in the North of England to identify sites which have a realistic potential for wetland creation/restoration including reedbed and wet grassland.
- The Environment Agency encourages protection of reedbed sites through its Local Environment Agency Plans and within the Shoreline Management Plan process.
- The Environment Agency has produced Water Level Management Plans for many important wetland sites including reedbeds.
- The Environment Agency, English Nature and Cumbria County Council seek to highlight and

promote the importance of reedbeds through the planning process.

- Small-scale reedbed creation for water quality improvement is supported by the Environment Agency where appropriate.
- Cumbria Wildlife Trust/Local Authority programme of survey and designation of County Wildlife Sites, including reedbeds, to be completed by 2005.
- A national Heritage Lottery bid is currently being drawn up for reedbed/wet grassland/fen restoration and creation by English Nature and partners. Sites in Cumbria will be investigated as part of this bid.
- The English Nature Action for Bittern Project has provided funding for reedbed rehabilitation and extension in England.
- Royal Society for the Protection of Birds has a priority programme for reedbed rehabilitation and creation on existing reserves and are creating new reedbeds on land of low nature conservation interest purchased by the society.
- Monitoring of populations of key reedbed species is carried out annually by a range of statutory and voluntary organisations.

Context in relation to other plans:

UK Habitat Action Plans

There is a UK Biodiversity Action Plan for reedbeds in Biodiversity: the UK Steering Group Report (1995), which sets the following UK objectives and targets:

- Identify and rehabilitate by the year 2000 the priority areas of existing reedbed (targeting those of 2 ha or more) and maintain this thereafter by active management. [This target will provide habitat for 40 pairs of bitterns and provide optimum conditions for other reedbed species and should be targeted in the south-east.]
- Create 1,200 ha of new reedbed on land of low nature conservation interest by 2010. [The creation of new reedbed should be in blocks of at least 20 ha with priority for creation in areas near to existing habitat, and linking wherever possible. The target should provide habitat for an estimated 60 breeding pairs of bitterns boosting the numbers to previous levels. It should be targeted in the south-east of Britain.]

National Lead Agency

National lead agency for reedbed is English Nature.

Local contacts

Environment Agency - Judith Bennett.

Phone: 01768 866666.

English Nature - Paul Glading.

Phone: 01539 792800.

Associated plans in the Cumbria BAP

The following Cumbria species and habitat action plans are of relevance to reedbeds:

Phase I

- water vole
- variable damselfly
- wet woodland
- purple moor-grass and rush pasture
- lowland raised mire
- basin mire
- coastal plan
- mesotrophic standing waters
- rivers and streams

Phase II

- coastal and flood-plain grazing marsh
- swamps and tall herb fen
- valley mires
- oligotrophic standing waters
- standing waters on marl
- coastal saltmarsh
- saline lagoons

References

Kelly and Perry 1990, Wildlife Habitat in Cumbria. Nature Conservancy Council.

Objectives, targets and proposed actions for reedbeds in Cumbria

Broad Objective A	Maintain and improve the quality of existing reedbed sites			
Operational Objective	Action Required	Suggested organisational involvement	Time-scale	Type
1 Ensure all significant reedbeds have appropriate statutory or Wildlife Site designations	1 Identify and incorporate into database/GIS all existing reedbed in Cumbria.	EA, EN, RSPB, CWT, LDNPA	M	RM
	2 Review and designate appropriate reedbeds as SSSI.	EN	M	SS
	3 Identify as Wildlife Sites the most important areas for wildlife in the County outside of statutory sites, including areas of reedbeds, by 2006.	CWT, LAs	L	SS
2 Protect existing reedbed sites from drainage and over abstraction	1 Use Environment Agency consents to protect reedbeds from over abstraction, drainage or pollution.	EA, statutory and non statutory consultees	O	SS
3 Promote appropriate management of existing reedbed	1 Ensure reedbed is considered in the setting up of new agri-environment agreements and in any revision of existing agreements to ensure that, where possible, the habitat is brought into favourable management to contribute to national BAP and local Natural Area targets for the habitat.	MAFF, EN, RSPB		
	2 Invertebrate and other surveys may be required to determine if existing management successful or appropriate.	EN, CWT, RSPB	M	RM
	3 Ensure best management practice is applied to all reedbeds under conservation management by 2005 and other priority non-statutory sites by 2010.	EN, CWT, NT, RSPB, ECCP, FWAG	M/L	A/ SS
	4 Provide advice on management grants to owners of Wildlife Sites with reedbed by 2008.	CWT, FWAG	L	A
	5 Raise awareness of value of reedbed of all sizes to landowners.	RSPB, EA, EN, CWT, DCs, LDNPA, FWAG	O	CP

Broad Objective A		Maintain and improve the quality of existing reedbed sites		
Operational Objective	Action Required	Suggested organisational involvement	Time-scale	Type
4 Rehabilitate sites as appropriate	1 Identify landowners and mechanisms available to facilitate appropriate management.	EN, DCs, LDNPA, EA, CWT, RSPB	O	SS
Broad Objective B		Create new reedbed		
Operational Objective	Action Required	Suggested organisational involvement	Time-scale	Type
1 Create at least 270ha of new wet reedbed in Cumbria	1 Develop existing lowland wetland project to create new reedbeds in Cumbria: identify appropriate area(s), liaise with landowners, identify constraints, draw up and implement plan of action.	EN, EA, RSPB, CWT	S/M	SS
2 Promote small scale reedbed creation (<10ha)	1 Promote reedbed creation through land-owning/land managing organisations.	EN, RSPB, EA, ECCP, NWW	M	SS
	2 Provision for management and creation of reedbed within agri-environment schemes.	MAFF	S	SS
3 Monitor the status and management of reedbed habitat within Cumbria	1 Develop an agreed strategy to monitor the extent and quality of existing reedbeds and the establishment of new ones.	EN, RSPB, EA, CWT, LDNPA	M	RM
4 Promote reedbed creation on minerals and waste sites	1 Promote reedbed creation on minerals and waste sites, through negotiation and appropriate planning conditions and/or obligations.	CCC, RSPB, EA, EN	M	SS

Key to Tables

Suggested organisational involvement: Key Deliverers in bold type; Partners in plain type.

CCC = Cumbria County Council; CLA = Country Landowners Association; CWT = Cumbria Wildlife Trust; EA = Environment Agency; ECCP=East Cumbria Countryside Project; EN = English Nature; FWAG = Farming and Wildlife Advisory Group; LAs = Local Authorities; LDNPA = Lake District National Park Authority; MAFF = Ministry of Agriculture, Fisheries and Food; NFU = National Farmers Union; NWW = North West Water; RSPB = Royal Society for the Protection of Birds.

Timescale: O=ongoing; S=short term (2000-2001); M=medium (2002-2005); L=long (2006-2010).

Type: Type of action; PL=Policy & Legislation; SS=Site Safeguard & Management; SP=Species Management and Protection (species plans only); A=Advisory; RM=Research & Monitoring; CP=Communications and Publicity.