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# Aquatic warbler



Arnaud Le Nevé



Mike Lane (rspb-images.com)

Aquatic warblers roost in reedbeds (right and background) and feed in adjacent areas of transition habitat (low vegetation and pond). Management is essential to maintain this habitat.

## BACKGROUND

The aquatic warbler is a migratory species breeding predominantly in sedge fen mires in eastern Europe and Belarus and wintering south of the Sahara in west Africa. The juveniles in particular migrate west in short hops along the Channel coast in autumn (July to October), using wetlands in Brittany to build body fat before flying to Africa. A small number also use the south coast of England during migration.

Aquatic warbler is the only globally threatened passerine in mainland Europe. It has been lost from the western part of its range in Europe, mainly due to habitat loss. Only 10,500 – 14,200 vocalising males were recorded across four sites. These sites support over 80% of the global population.

Numbers on migration in the UK declined from c30 per annum prior to 2000 to about 10 per annum in the last decade.

## WHAT DO AQUATIC WARBLERS NEED?

Management recommendations are focused on providing roosting and feeding habitat during this crucial migration period in the UK.

Aquatic warblers have two main requirements on migration. They roost in reedbeds and then move to feed in a range of other adjacent wetland habitats.

Whilst suitable areas of reedbed may be available for roosting birds, the feeding habitat is often absent or occurs only in small amounts in wetland sites in southern England.

Targeted management can enhance both the quantity and quality of this feeding habitat and should be a focus of conservation action, along with the creation of additional areas of reedbed for roosting.

### Feeding habitat and use

Aquatic warblers feed on or close to the ground or water on large invertebrates: dragonflies and damselflies, flies, spiders, grasshoppers, crickets and beetles. These invertebrates are often most abundant in a highly varied and diverse wetland mosaic. Reedbed areas may provide additional foraging areas for aphids and other insects.

Although aquatic warblers use saline sites, it is thought that the greatest abundance of suitable food occurs in freshwater habitats. These are usually mesotrophic or slightly eutrophic.

### Habitat structure

The feeding habitat usually has three distinct vegetation layers, which combine to form a highly varied and food-rich mosaic:

- 1) an open or sparse ground layer allowing the birds to move around to forage for food.

- 2) a medium strata 0.5-1.0 m of rushes, club-rushes and sedges such as soft rush *Juncus effusus* or glaucous bulrush *Schoenoplectus tabernaemontani*.
- 3) an uppermost layer of sparse reed of 1.0-1.5 m in height (if present).

This complex habitat mosaic is often absent or present only in small areas on many floodplain wetland sites. Management has traditionally focused on maintaining specific habitat types (grazing marsh, reedbed, lagoons etc), rather than creating the more intricate and dynamic habitat mosaic that aquatic warblers need. Conversely, a lack of management of existing feeding sites can lead to scrub encroachment and a reduction in habitat structure and diversity, which may reduce their value for aquatic warbler.

## HOW CAN I ENCOURAGE AQUATIC WARBLERS?

Aim for areas of diverse wetland vegetation, with a complex structure and an abundance of insects.

Diverse 'blue-zones' or transition zones of reedbed/fen/grazing marsh can provide such habitat and benefit other wildlife.

### Restoration of habitat

Ensure the area to be restored is adjacent to an existing reedbed so that suitable roosting sites are available. The area needs to be part of a floodplain that can be inundated by water or stands within 1-20 cm depth of water in summer.

Restore reedbed by cutting in August and September and removing arisings.

Restore grazed wet meadows by removing cattle in late summer.

This can be applied to both freshwater and brackish sites, although freshwater sites seem to be preferred. An invertebrate survey is recommended.

### Maintenance of habitat

Monitor the structure annually and cut when the reeds are increasing again. This may be once every two/three years depending on whether the site is eutrophic or mesotrophic.

Periodic (once every two/three years) summer grazing may also produce suitable habitat.

### Management by machinery

Advantages: Clear large areas quickly, easier to remove arisings.

Disadvantages: The ground needs to be fairly firm and dry, and is more costly at the beginning.

### Management by hand

Advantages: The ground can be wetter and it is generally cheaper.

Disadvantages: Smaller areas provided and more difficult to remove vegetation and find the people to do the work.

## OTHER SPECIES THAT BENEFIT

**Birds:** (feeding and/or nesting habitat) teal, garganey, bittern, water rail, spotted crane, snipe, yellow wagtail, bluethroat, sedge warbler and reed bunting.

**Large invertebrates:** Odonata (dragonflies and damselflies), Dolichopodids (flies), arachnids (spiders) including Clubiona species, Orthoptera (grasshoppers and crickets) and Coleoptera (beetles).

**Plants:** Juncus (rush), Scirpus (club-rush), Carex species (sedges) and orchids.

## KEY POINTS

- Aquatic warblers need feeding and roosting habitat adjacent to each other.
- Ideal feeding habitat comprises a complex mosaic of wetland vegetation, rich in insects.
- Diverse 'blue-zones' or transition zones of reedbed/fen/grazing marsh can provide such habitat and benefit a wide range of wildlife.
- In reedbeds, create fringes of suitable habitat through reed cutting in August to promote a diversity of plant growth.
- On floodplain grazing marsh, leave areas adjacent to reedbeds ungrazed for two/three years.
- Ongoing management should be carried out in August through cutting (appropriate grazing may also have the same effect).
- Prevent scrub and bulrushes encroaching over areas.

The management described in this leaflet may be eligible for funding through Environmental Stewardship. Contact your local Natural England adviser for details.



The Aquatic Warbler Project is part of Action For Birds in England, a conservation partnership between Natural England and the RSPB

You can get further information on managing your land for wildlife from:



RSPB Conservation Management Advice  
UK Headquarters, The Lodge, Sandy,  
Bedfordshire, SG19 2DL

01767 680551  
[www.rspb.org.uk](http://www.rspb.org.uk)

BirdLife International Aquatic Warbler Conservation Team  
[www.aquaticwarbler.net](http://www.aquaticwarbler.net)

### Floodplain grazing marsh

When established, pulse graze/cut once every three years in August

### Reedbed

When established, pulse graze/cut once every three years in August

Cut once every three years when established in August

Water levels 0 - 20 cm

Ditch or Pool

Reedbed margin