

PRIORITY HABITAT FACTSHEET



*Redgrave and Lopham Fens (Paul Holmen),
Reed Buntings, Fen Raft Spider (both Neil Rolph).*

Lowland Fens

Water-logged areas of land dominated by reeds, rushes and sedge with a complex system of plant and animal communities.

They include open pools, wet hollows, mown areas, tussocky areas with deep litter and transitions to swamp and wet woodland, making a very diverse habitat.

They contain one third of all native plant species, thousands of invertebrate species and more than half the UK's dragonfly species.

IMPORTANCE FOR WILDLIFE

Pools of open water in the fens can support rich growths of stonewort, which are rather like pond seaweeds, and insectivorous plants called bladderworts with branching roots carrying bladder-like traps to ensnare insects. Fens are home to the great raft spider, which survives in just four sites in the UK. They support many marshland flowers, thousands of invertebrate species as well as a large number of aquatic beetles. Drier areas are home to a wide range of mammals including water shrew and water vole.

Blood-vein (Stuart Read).



IMPORTANT ASSOCIATED SPECIES

Birds

Common Grasshopper Warbler *Locustella naevia*
Reed Bunting *Emberiza schoeniclus*

Mammals

Noctule Bat *Nyctalus noctula*
Daubentons Bat *Myotis daubentonii**
Nathusius' Pipistrelle Bat *Pipistrellus nathusii**
Soprano Pipistrelle Bat *Pipistrellus pygmaeus*
Harvest Mouse *Micromys minutus*
Water Vole *Arvicola terrestris*
Water Shrew *Neomys fodiens**

Bees and Wasps

Large Garden Bumblebee *Bombus ruderatus*
Moss Carder Bee *Bombus muscorum*
Fen Mason-wasp *Odynerus simillimus*

Beetles

Scarce Four-dot Pin-palp
Bembidion quadripustulatum
Pashford Pot Beetle *Cryptocephalus exiguus*
Zircon Reed Beetle *Donacia aquatica*

Dragonflies

Norfolk Hawker *Aeshna isosceles*

Flies

Broads Long-legged Fly *Dolichopus laticola*
Clubbed Big-headed Fly *Dorylomorpha clabiferora*
Black Fungus Gnat *Asindulum nigrum*

Molluscs

Little Whirlpool Ram's-horn Snail *Anisus vorticulus*
Shining Ram's-horn Snail *Segmentina nitida*
Large-mouthed Valve Snail *Valvata macrostoma*
Desmoulin's Whorl Snail *Vertigo moulinsiana*
Narrow-mouth Whorl Snail *Vertigo angustior*

Moths

Water-dock Case-bearer *Coleophora hydrolapathella*
The Concolorous *Chortodes extrema*
Grey Dagger *Acronicta psi***
Knot Grass *Acronicta rumicis***
Brown-spot Pinion *Agrochola litura***
Ear Moth *Amphipoea oculaea***
Mouse Moth *Amphipyra tragopoginis***

Large Nutmeg *Apamea anceps***
Dusky Brocade *Apamea remissa***
Garden Tiger *Arctia caja***
Dark Brocade *Apamea remissa***
Minor Shoulder Knot *Brachylochia viminalis***
Mottled Rustic *Caradrina morpheus***
Haworth's Minor *Celaena haworthii***
Crescent *Celaena leucostigma***
Small Square-spot *Diarsia rubi***
Small Phoenix *Ecliptopera silaceata***
Double Dart *Graphiphora augur***
Rustic *Hoplodrina blanda***
Rosy Rustic *Hydraecia micacea***
Dot Moth *Melanchra persicariae***
Rosy Minor *Mesoligia literosa***
Shoulder-striped Wainscot *Mythimna comma***
Oblique Carpet *Orthonama vittata***
Powdered Quaker *Orthosia gracilis***
Shaded Broad-bar *Scotopteryx chenopodiata***
White Ermine *Spilosoma lubricipeda***
Buff Ermine *Spilosoma luteum***
Hedge Rustic *Tholera cespitis***
Blood-vein *Timandra comae***
Oak Hook-tip *Watsonalla binaria* (oak trees)**
Sallow *Xanthia icteritia***
Dark-barred Twin-Spot Carpet *Xanthorhoe ferrugata***

Spiders

Rosser's Sac-spider *Clubiona rosserae*
Fen Raft Spider *Dolomedes plantarius*
Swamp Lookout Spider *Notioscopus sarcinatus*

Fungi

Frogbit smut *Tracya hydrocharidis*

Plants

Flat Sedge *Blysmus compressus*
Early Marsh-orchid (cream flowered)
Dactylorhiza incarnata subsp. *ochroleuca*
Tubular Water-dropwort *Oenanthe fistulosa*
Greater Water-parsnip *Sium latifolium*
Marsh Stitchwort *Stellaria palustris*

*Suffolk Priority species

**Priority - Research Only. Common and widespread, but rapidly declining.

FACTORS AFFECTING HABITAT IN SUFFOLK

- Drainage for conversion to intensive agriculture. Past drainage of surrounding areas of land lowering the water table and drying out remnant fen habitats
- Excessive water abstraction from aquifers drying up or reducing spring line flows, lowering water tables and affecting water quality
- Nutrients from agricultural run-off and other sources leading to a change in plant communities
- Afforestation within the catchment areas can lead to drying
- Lack of appropriate management to prevent drying, deterioration in herb richness, scrub encroachment and succession to woodland.



HABITAT MANAGEMENT ADVICE

- **Maintain structural diversity:** Management rotation ensures longer and shorter vegetation is present at all times. Any natural transition zones between fen and other habitats such as wet woodland, bog, saltmarsh, reedbed and open water should be conserved as some species may require these.
- Retain and create shallow-profiled water margins and ditch-sides and avoid excessive clearance of marginal vegetation. It is important to allow some ditches to become choked as this is needed by a number of specialised species.
- Scrub encroachment should be prevented, but scattered bushes and trees such as willows provide a valuable resource for invertebrates.
- A reasonably high water level should be maintained, but water levels should be allowed to fluctuate seasonally where applicable.
- The application of fertilisers within the water catchment may have a detrimental effect on water quality. If possible nearby landowners should restrict the use of fertilisers and create buffer strips on adjacent land.
- Grazing should aim to create a diverse structure of vegetation where grasses and herbs can flower and set seed. If a traditional mowing pattern has been in place for a long time it should stay the same, as invertebrates will be well adapted to it.
- Litter piles should be sited in both sunny and shady situations, but not in areas likely to flood, they are important over-wintering sites for many insects. Many species are associated with deep litter layers, so it is important to retain some deep litter.
- Many ground beetles prefer bare ground within fens. Active management such as turf stripping may be required to generate suitable conditions. Small-scale peat cutting to create early succession fen conditions may be essential to provide habitat.

Early Marsh Orchid (Stuart Read).



VISION FOR SUFFOLK

1. Improve knowledge of extent and quality of lowland fens.
2. Maintain the existing extent of lowland fens to ensure no net loss.
3. Re-create lowland fens as opportunities arise.
4. Encourage the restoration and improvement of degraded lowland fens.



WHERE TO FIND FURTHER INFORMATION

Buglife – advice on managing BAP habitats

- <https://www.buglife.org.uk/resources/habitat-management/fens>

Buglife – Notable invertebrates associated with lowland fens (pdf)

- <https://cdn.buglife.org.uk/2019/07/1120Notable20invertebrates20associated20with20fens.pdf>

Fen Management Handbook (pdf)

- <https://www.nature.scot/sites/default/files/Publication%202011%20-%20Fen%20Management%20Handbook.pdf>

JNCC Habitat Description (pdf)

- <https://data.jncc.gov.uk/data/6fe22f18-fff7-4974-b333-03b0ad819b88/UKBAP-BAPHabitats-27-LowlandFens.pdf>

MAGIC website – interactive mapping information including designations • <https://magic.defra.gov.uk/>

Making Space for Nature, a Review of England's Wildlife Sites and Ecological Network 16 Sep 2010.

- Chaired by Professor Sir John Lawton CBE FRS. Defra website (pdf) • <https://webarchive.nationalarchives.gov.uk/ukgwa/20130402151656/http://archive.defra.gov.uk/environment/biodiversity/documents/201009space-for-nature.pdf>

Natural Environment White Paper June 2011 – *The Natural Choice: securing the value of nature* (pdf)

- https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/228842/8082.pdf

Suffolk Wildlife Trust Habitats Explorer • <https://www.suffolkwildlifetrust.org/habitats/wetlands/lowland-fen>

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