

Lowland fens have become increasingly rare in Britain as a result of loss through drainage and intensive farming practices and under management, resulting in excessive scrub coverage. They are very important for wildlife, often being very rich in plant species, and provide excellent habitat for birds, amphibians and a range of invertebrates including dragonflies and aquatic beetles. They also help purify water, reduce the flood risk of surrounding land by acting a buffer zone and as a carbon store.

General guidelines for the management of Lowland Fen:

Many of the fens found in Devon are also known as tall-herb fens which are usually dominated by plants such as meadowsweet, yellow flag iris and hemlock water-dropwort. Reed beds are also classed by conservationists as fens but are unusual in Devon. For further advice on managing reed beds contact DBRC.

Grazing with hardy native cattle is very Important in the management of these wetland habitats. Cattle are less selective grazers than other animals and are happy to eat the larger plant species found in fens that sheep or horses may find unpalatable.

Grazing helps to reduce the dominance of taller plants as well as preventing the spread of scrub. Grazing should be of low intensity so that the vegetation maintains a range of heights and is not reduced to a low uniform height. Low intensity grazing also reduces the risk of cattle trampling the nests of ground nesting birds using the fen.

Yellow flag iris



Note: Some of the recommendations on this leaflet may not be permitted under Stewardship agreements. Contact your local Natural England Adviser for further advice if required.

Lowland fen in Mid Devon



Grazing is best carried out between May and late September, though needs to be flexible depending on seasonal weather conditions. Grazing during the spring will help to reduce the growth of competitive species of plant allowing space and light for the more delicate wildflowers.

As the ground gets wetter consider lowering stock densities to avoid poaching, removing the cattle altogether when this threatens to become excessive.

Although some small areas of poaching can be beneficial in allowing plants to grow in new areas, too much will promote the spread of weed species such as nettle and creeping thistle. Lower stock densities later in the year will also allow plants to flower and set seed.

Cattle welfare should be considered where there are large areas of open water, ditches & wet ground to avoid animals drowning / getting stuck.

Some areas may be avoided by cattle, resulting in the vegetation becoming rank and unpalatable. Cutting may be a suitable option in these areas although it is recommended that further advice is sought before carrying out any cutting or mowing work as certain fen communities may react unfavourably to this type of management.

Protecting the water levels in fens is critical for their value as a habitat. As such no additional drainage work should be carried out. Existing drains and ditches may need occasional clearing to prevent silt build up.



Birds nest found within lowland fen

Scrub encroachment can be a problem if left unchecked, eventually turning the fen into wet woodland. However small amounts of scrub can add diversity and will support insects and birds not found in open fen communities. In general scrub cover in the region of 10-20% will add value to a site, especially if it is managed to maintain a range of ages and structures.

Invasive aquatic and terrestrial species can colonise wetlands, and care should be taken to avoid these colonising fens. Seek advice from the Environment Agency if invasive plants such as Japanese knotweed, Himalayan balsam & *Crassula* colonise your land. There are legal requirements relating to many of these species as they are spread easily and you could be breaking the law if they are not disposed of correctly.

Fens are vulnerable to nutrient enrichment, which usually occur as a result of run off from surrounding agricultural land or urban areas. If possible avoid using fertilizer in surrounding fields or consider leaving a 'buffer zone' around fen habitats to minimise the impact of excess nutrient and/or harmful chemicals contaminating the site.

Burning may be useful in the restoration of fens but is not recommended as a general management practice.

Avermectin boluses for parasite control in cattle prevent the development of insect populations that rapidly break down the dung. Such insects are a vital food supply for bats. Choose sensitive alternatives (details can be obtained from Natural England in their leaflet *Managing Landscapes for the Greater Horseshoe Bat: detailed recommendations*).

Sources of further information and funding may be available from:

Natural England: Countryside Stewardship management options/capital works grants
Web address: <https://www.gov.uk/countryside-stewardship-grants>
Email: devon@naturalengland.org.uk
Tel: 0300 0601110

Devon Wildlife Trust: Has a number of projects providing free advice to farmers and landowners across many parts of the county
Website: <http://www.devonwildlifetrust.org/our-projects>
Tel: 01409 221823

Farming and Wildlife Advisory Group
Website: www.fwag.org.uk/devon
Email: admin@fwagsw.org.uk

JNCC: Management of UK Lowland Wetland Habitats
Website: <http://www.jncc.defra.gov.uk/page-5859>

