# Environment: habitat and conservation

Survival of Wicken Fen

### Voice Over

Succession is an ongoing natural process. If humans didn't manage the fen, succession would continue and much of the land here would be covered with bushes and trees. This would greatly reduce the diversity of habitats available, and therefore the diversity of species. Management of succession is a key reason why biodiversity at this fen is so high.

## Joanna Freeland, Open University

Management is important at Wicken Fen because it in effect halts the progression of succession at different stages. If there wasn't any management succession would just continue through to the what's termed 'the climax' which, in most places in the UK, is forest.

## Adrian Calston, Property Manager

What we're trying to do at Wicken is hold those different areas of succession so that we can have the whole range of the different habitats from the open water, through the meadows, through the sedge fields and also the areas of scrub and by doing that, that really enables us to have the maximum diversity on the site.

## Voice Over

The sedge harvest is another of the key management tools used on the fen. By cutting the fen sedge fields on a regular basis, succession is halted before trees and bushes can grow. This type of management is very intensive. It requires a considerable amount of time and labour. Maintaining the fen solely through such intensive methods is unrealistic. The cost alone makes it prohibitive. So the management committee at Wicken is also using other ways of halting succession. Large herbivores, like cattle, have been used for many years. Using grazing animals like these provides a cost-effective and environmentally-friendly way of maintaining open fen. More recently a herd of wild ponies has been brought to Wicken.

### Carol Laidlaw, Warden

The area before the ponies was introduced was covered by large trees and scrub and small bushes and we've done quite a lot of work manually cutting the trees down to try and revert the land. The ponies are here to keep on top of the work we've already previously done and as they move through an area, obviously that will have an impact, so we should see quite a mosaic of habitats, sedge fields punctuated with grass meadows, reed fields again punctuated with sedge.

## Voice Over

Grazers represent a more sustainable way of managing the existing fen, but even management techniques like this may not be enough to guarantee its long-term future. One of the main threats to the fen is its situation in the middle of farmland. Unlike the fen itself, the surrounding farms have been drained so that crops can be grown. Drainage effectively shrinks the soil. This means the fen now stands at a higher level than the neighbouring land.

## Martin Lester, Head Warden

The site is perched somewhere in the region of two to three metres or more above the surrounding farmland and which means that when you're trying to manage a wetland in those sort of conditions, water is very difficult to keep in, you can't stack it up with the best will in the world, which has meant that much of the site is actually now surrounded with a waterproof membrane to keep the water in. So hydrology is a big problem for us.

## Voice Over

Maintaining water levels is not the only problem the site is faced with.

#### Martin Lester, Head Warden

Wicken is fairly close to a number of small villages but it's also quite close to Cambridge, Ely and Newmarket and potentially that that number of people close on the doorstep, could be a problem.

#### Voice Over

Potential threats like encroachment could have a devastating impact on Wicken Fen. Because it is so small, even contained disasters may wipe out a significant proportion of the reserve, in the process eliminating habitats and species.

### Adrian Calston, Property Manager

Really, somewhere like Wicken Fen at the moment could almost be described as a paper handkerchief, a tiny, little area now in a sea of different type of landscape by a very agricultural landscape. If we're going to try and maintain the species that we've got here, we really need to try and expand the fen and give greater scale for these species to actually live on so that they can move out and spread and have a better chance of survival into the future. And as a result of that, the National Trust has drawn up this vision really for Wicken Fen for the next one hundred years and it involves acquiring land around the fen, gradually restoring that back to some form of wetland and we hope to over the next one hundred years create that much larger area, which will act as the buffer for the fen, you have a chance for wildlife.

### Voice Over

This increasing scale means the reserve can support larger populations of species within a diversity of habitats and these larger populations are less likely to go extinct. On the other hand, if the area of Wicken Fen isn't increased, it'll be less likely to survive in the long term, seriously depleting biodiversity levels in the UK.

### Joanna Freeland, Open University

The significance of Wicken Fen is that it's one of the very few areas of fenland remaining in the UK and it's home to a huge diversity of species, many of which can be found only in this type of fenland. If we lost a place like Wicken Fen we would lose a huge number of species along with it and the UK as a whole does not have a huge amount of biodiversity and to lose a place as important as this would put a real dent in all of the UK's biodiversity.

### Adrian Calston, Property Manager

If Wicken Fen was lost tomorrow we would certainly see seven thousand species disappear from this part of the world. A number of those species are now incredibly rare in the UK, maybe one or two other sites, so we would see some species almost being pushed to extinction in the UK. And what we would also see, I think, with the loss of Wicken is the failure of conservation and if we fail at Wicken it's really only time then before we fail everywhere else.

#### **Voice Over**

High levels of species diversity rely on several factors: a range of habitats, the preservation of food webs and in the case of Wicken, management of the fen. The National Trust plan to increase the size of the nature reserve at Wicken accommodates all these factors and will increase the chances that the fen's unique biodiversity, will survive.