

Sendereihe	Reports in English
Sendefolge	Regenerating the Wetlands
Zielgruppe	ab 8. Schuljahr
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Skript

0:14

Between the ancient cities of Ely and Cambridge in East Anglia lies one of the world's most important wetland conservation projects.

0:28

The 450 hectare site is in fact the oldest conservation project in Europe and possibly the world.

0:41

As the pressure on land grows this project demonstrates how to adapt the strategies of habitat preservation to the demands of the Twenty First century.

0:54

Wicken Fen now attracts not only ecologists but many people looking for natural peace and quiet.

1:05

But it is only by chance that this site survived at all, as the destruction of the fens has taken place over a period lasting 400 years.

O-Ton Adrian Colston

1:15

In 1899 Wicken Fen was one of the few remaining fragments of wild fen that had survived the drainage of the previous 400 years. And it survived at that time because the site was terribly important to local people. They had been able to make a living from it. They'd harvested things such as this plant here –sedge- for roofing and for animal bedding. They also dug peat, which they used for fuel. But in 1899 the whole economy changed. People stopped using sedge for roofing. They began to use brick tiles. They stopped using peat and they began to use coal. As a result, this tiny remaining fragment was under threat. What should happen to it? Should it be drained for other agricultural use? Or should it stay as a wetland important for its wildlife? Well the National Trust stood in at that point and bought this piece of land for the nation, so it could be conserved for the future. Here we are over 100 years later and the site is still here.

2:15

It is quite easy to see how quickly natural wetland can be reclaimed from the ravages of intensive farming. But the role of the wetlands is more than just that of providing attractive nature reserves

O-Ton Adrian Colston

2:30

It's only in recent years that we've really begun to truly understand the importance of wetlands. Not only do they act as these big reservoirs for wildlife, but they also act as sponges. They hold water up. They clarify water and make it clear and clean. And if we lose our wetlands that sponge

effect goes, and that clearing effect goes. And water becomes more polluted. And also water will rush down river valleys then causing floods in towns and cities, and also flooding great areas of land further down as well.

3:02

The East Anglia fens with their vast network of rivers and canals, stretch from Cambridge and Ely in the south, to the North Norfolk Coast.

3:15

The effects of global warming have added a note of urgency to the role of Wetlands in East Anglia, where the fens are as low-lying as most of the Netherlands.

O- Ton Adrian Colston

3:26

I'm on the North Norfolk Coast about 100 kilometres away from Wicken Fen. And it is really here that the story of the problems Wicken Fen faces begins. On my right hand side is the North Sea and on the left are thousands of hectares of internationally important coastal grasslands and reed-beds. The problem here is that Britain is gradually tilting down in the South East. It's getting lower. On the other hand sea levels are rising because of climate change. And that means that over the next 100 years the sea is going to break through these sea defences and entirely flood this land. And these habitats will be lost. Therefore we believe very much that we should start planning now to make up for these losses in the future.

4:11

As far south as the River Cam, the whole of East Anglia was once inaccessible marsh and fen country.

4:19

The Seventeenth century Dutch engineer Van Muyden created a system of canals and water pumps to drain the fens into farmland.

4:29

The engineers left a few man-made 'washes' or flood-plains but they are few and far between.

4:38

Linked to wetland reserves, washes play an important ecological role but draining the land around them has killed off many species of wild life and made the land unstable.

4:52

Over the last 400 years the land has shrunk by about 4 metres. That means Wicken Fen, the undrained part of the land is now perched about 4 metres higher up than all the surrounding land. We're trying to keep Wicken Fen wet for the wildlife. The land behind us they are trying to keep dry in order to grow crops. So there's a direct conflict.

5:16

Just how much the land has subsided and become unstable can be seen in the precarious angle of this Pumphouse.

5:26

On the other hand just how quickly land can regenerate vegetation can be seen by comparing the fields acquired in 1993 here on the eastern edge of Wicken Fen with the land acquired and left to regenerate in 1953.

5:45

Allowing the groundwater to return has created lakes for many breeds of waterbird such as geese and ducks.

5:57

The old drainage canals too have become habitats. Wicken Fen has to be precisely managed. The success of the fen has to be measured by checking the forms of wildlife that are breeding on land and in the water.

6:15

Recording minute changes in patterns of reeds, grasses, and fish life on the reserve is a full time job which is carried out all year round.

6:26

A baby pike for instance if found healthy indicates that the water quality is sound and suitable for breeding. This in turn indicates that fish have enough insects and plants to feed on.

6:41

Healthy fish stocks indicate that there are no harmful chemicals in the ground water seeping in from neighbouring farms.

6:52

Paying close attention to the ecological balance, botanists and zoologists in Wicken monitor the keep a close eye on the number of species and sub-species of insects.

7:05

However idyllic insect life at Wicken may seem, there are still far fewer species than there were here a century ago. Species loss is an indicator of environmental change far beyond the boundaries of the fen reserve.

7:24

Wicken Fen managers have imported wild fen ponies from Holland and spend a lot of time monitoring their progress.

7:34

Fen ponies disappeared here at least 100 years ago, and their role in regenerating the landscape is more than just cosmetic.

7:45

As herbivores or grazing animals they change the ecological balance by eating some grasses, leaving others, and in the process fertilising the soil.

7:58

After two cold winters the ponies are perfectly healthy. This is another key indicator that the natural fen vegetation is in good shape.

8:10

What surprises most outsiders, is to see staff at Wicken removing trees and bushes, mostly young woodland known as scrub.

8:20

If left to regenerate itself, newly acquired land will turn into woodland and keep the land dry but also create new habitats. Fen policy is now to remove nearly all the scrub, which worries some visitors.

O-Ton Kevin James

8:35

We are really removing the scrub to reveal the fen underneath. This is an area of land that has been left for about 50 years, and the scrub has grown up and killed off most of the vegetation. By removing the trees, we're allowing the light to come in here, and we are allowing the natural fen to regenerate.

8:50

But surely burning the scrub just adds to global warming?

O- Ton Kevin James

9:03

Well it is difficult. We have to burn off the trees here. It's the only way we can get rid of the trees from the site. The amount of gas they emit when they're burning is really (sort of) negligible compared to the amount of fenland that we've got here.

9.19

As the first fen drainage schemes came from Holland so did the techniques of regenerating the fens on a large scale. Using these methods the Dutch have regenerated 5000 hectares of fen landscape.

9.30

As the work is so physically hard what is it that attracts educated young people to this outdoor life?

O-Ton Carol Laidlaw

9:39

It's one of the foremost fenland nature reserves in Britain if not Europe. Working in this site brings with it its own satisfaction I suppose. The bad things are; the winter. Because it's a fenland site, that means it's very wet. In the winter the water levels rise. We can be working in conditions where we are in mud up to our thighs, and it's raining, and you start in the morning and it's cold, and it's wet, and it doesn't improve as the day goes on. But overall I would say that - even though there's that bad point, and it can be incredibly difficult to get yourself to keep on working in those conditions - days like this when the weather is beautiful and you are getting a lot of work done, it's tremendously satisfying.

10:45

Once the scrub has been removed and the sedge allowed to regenerate, the work does not stop there.

10:55

After three years the older sedge begins to die off and rot choking other kinds of vegetation.

11:05

Any so called natural fen is in fact a landscape created and managed by human activity over the centuries.

11:15

As the fen farmers of old, the fen staff also remove the sedge to provide animal feed and for the thatched roofs of the traditional buildings preserved here for visitors.

11:28

The original fen workers' houses have been restored and preserved on site.

11:42

Wicken Fen is now able to expand, as the local farmers are in economic trouble. Adrian is surveying the state of farmland acquired in 2001.

11:52

The National Trust plans to buy up huge tracts of land over the next 100 years as a matter of ecological urgency, as the government is unlikely to provide huge Dutch style dykes and flood barriers.

O-Ton Adrian Colston

12:06

Well we've just acquired this piece of land here which is 170 hectares. The (total) land we had before that was 350 hectares. This land here was growing crops last year and in the next 5 years we hope to put it back to reed-beds and wet grasslands.

12:26

Reversing the process of land drainage, the first steps taken to turn ex-intensive farmland back into fen land and reed beds actually involve planned flooding.

O-Ton Adrian Colston

12:38

You can see behind me here we have a structure we have just installed, which is a sluice. Very soon we will add pieces of wood into that sluice. That will then back the water up and that water will then rise in the ditch. That will create land on each side to become wetter. That will encourage reeds which are already beginning to come back to grow. Then that will begin to create the new wetland.

13:00

Another main reason that Wicken fen also has to expand is because small is not beautiful.

13:10

The battle has not been won to preserve natural species of wildlife within most conventional nature reserves.

13:22

New research on the size of reserves has forced ecologists to rethink their strategies.

O-Ton Adrian Colston

13:32

What we've found over the last 100 years is that being only 300 hectares in size has meant that have lost a lot of species. The site is too small and too isolated. We need to make the site considerably larger to buffer what we already have, but also, to create new habitats.

13:50

As the nearby Cambridge is the fastest growing high-tech-city in Europe, there is pressure to build on fenland.

13:58

Wicken Fen project not only points out the dangers of doing this but stresses the value of creating large areas for both people and nature to share, linking waterways to reserves and farms.