



LIFE Nature Projects for the Rewetting of Lake Dümmer Lowlands

Imprint

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The Lowlands of Lake Dümmer

Until 1953 the river Hunte and Lake Dümmer burst their banks every year, which caused extensive flooding of the surrounding fens. This meant that the local farmers were able to use the wet meadows for agricultural purposes only for a very short period every year. However, in this historic, cultivated landscape a large number of bird species found suitable living conditions.

In 1953 dikes were built on the Hunte and Dümmer banks. The surrounding fens were drained and agricultural use was intensified. The use as farmland led to the oxidation, reduction and degeneration of the turfs in the fens. The populations of many breeding and resting birds decreased or disappeared entirely.



Lake Dümmer lowlands

The LIFE Nature Projects

In 2000 the lowlands of Lake Dümmer were registered as a European bird sanctuary. This status will contribute to the preservation of this habitat for future generations as part of the European sanctuaries system "NATURA 2000".

Within the framework of two LIFE Nature projects, controllable rewetting of the meadows in the Lake Dümmer lowlands was achieved. Especially the habitat for meadow birds was protected and further optimised by these measures.

Through the LIFE Nature Project "Wiedervernässung des Ochsenmoores" (Rewetting of the Ochsenmoor Fen), 1,000 hectares in the southern part of the Lake Dümmer lowlands were rewet between 1998 and 2000. The cost for the necessary construction work amounted to approximately 1 million EUR.

Building on the experience of this project, the second LIFE Nature project, "Wieder-



Snipe
vernässung der Westlichen Dümmer-niederung" (Re-wetting of the western Lake Dümmer fen area), was carried out between 2002 and 2007. Approximately 3 million EUR were invested in the rewetting of 1,300 hectares in these areas to the west and northwest of the lake. The cost for the two LIFE projects was split evenly between the European Union and the federal state of Lower Saxony.

Lower Saxony has also contributed to additional measures, which rounded off the projects.

What is "LIFE"?

LIFE Nature is a financial instrument of the European Union for the protection and development of Natura 2000 sites. The European Commission selects certain projects, which aim specially at the protection of the species and habitats that determine the value of the respective areas. Generally LIFE projects run for four years and are part-funded by the EU for up to 50% of their total cost.

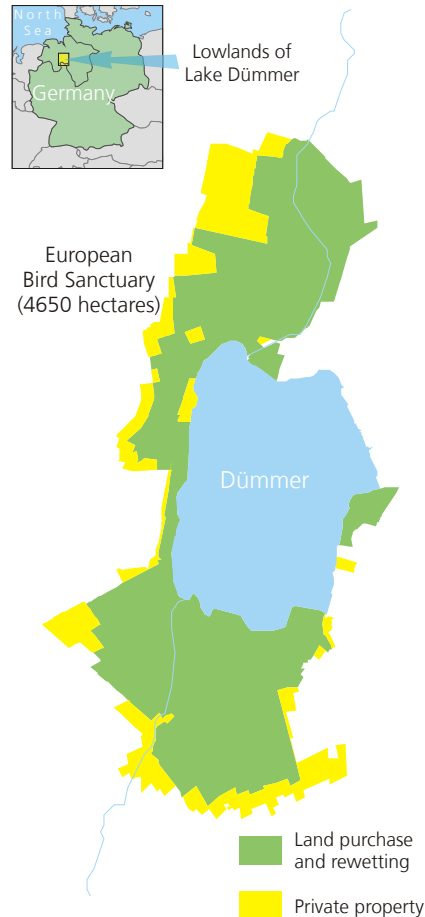


Spaces for Nature

Since 1987 a total of 2,500 hectares of agriculturally used land in the lowlands of Lake Dümmer were bought for nature conservation purposes. This meant that in the EU bird habitat "Dümmer" a large part of the fen areas could be consolidated. The last 180 hectares were made available through the LIFE projects. This was an important prerequisite for the rewetting.

Over 400 hectares of former agricultural land became grassland again, which has since been used compliant to conservation.

These measures are aimed at the development of an optimal habitat for meadow birds as well as other animal and plant species. Another goal of the development plan is that local farmers work the meadows in a sustainable fashion that is compliant with the goals of nature conservation. Interested visitors have the opportunity to experience nature without harming it.



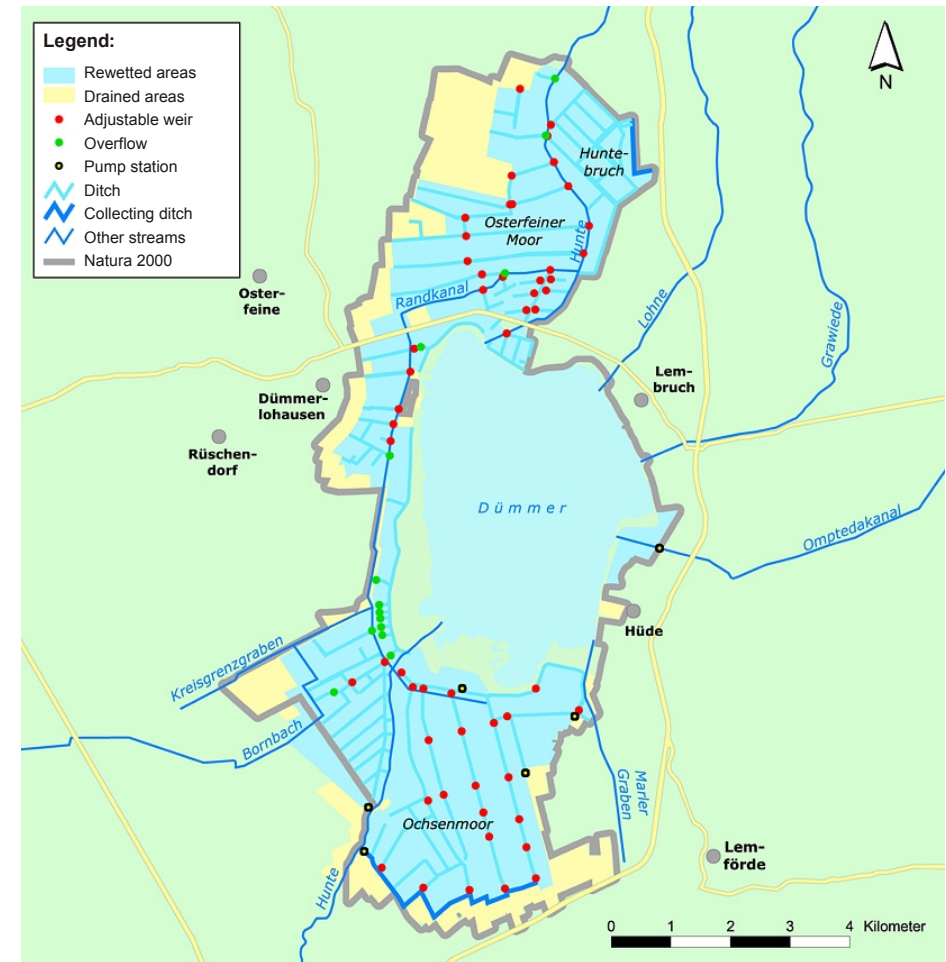
Targets of the LIFE Projects

- Consolidating 2,500 hectares of fens
- Rewetting the fens
- Developing a habitat for meadow birds
- Ensuring a sustainable usage of the grasslands
- Creating quiet areas for breeding and resting birds
- Creating wet reed beds in peripheral areas
- Integrating people through the "Experience Nature" programme and by providing information
- International cooperation in the European Network "Natura 2000"

The Rewetting

Controllable weirs were built into the drainage ditches. Water levels can now be adjusted and set to levels that were typical for the area before dikes were built on the river Hunte and Lake Dümmer. Flooding in winter and slow step-by-step drainage during early and late spring recreate suit-

able habitats for numerous species of meadow birds, which were threatened with extinction. At the same time the local farmers can use the meadows during the summer and in this way the formerly intensively farmed land can continue to be used for grazing and mowing.



Rewetting measures in the lowlands of Lake Dümmer

The Rewetting



Controllable weir

50 weirs help to block 80km of ditches. The rewetting can therefore be controlled on various levels. The water level and the duration of the blocking are different in the individual areas. This means that different waterlogging situations can exist in the gross area, which meets the diverse



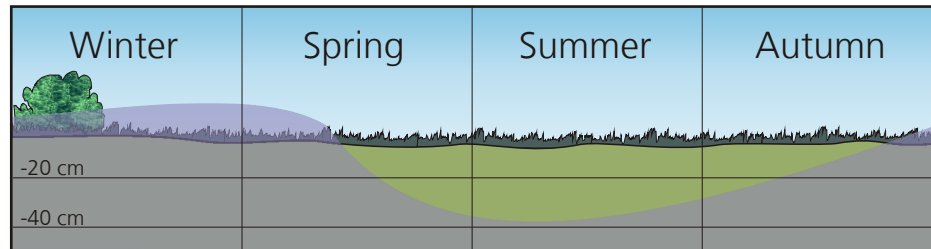
Wet grasslands in winter



Damming of overflow

requirements of all meadow bird species. Snipe and ruff for example breed in spring and prefer extremely wet breeding places, while the curlew needs less wet areas.

Through the rewetting the turf degradation in the soil can be reduced to a minimum. When the area gets flooded in winter, the turf body gets saturated with water. Until summer the water levels are lowered to no more than 40cm below ground level. The meadows dry sufficiently to be used for grazing or mowing.



Water levels throughout the year

Nature Conservation and Farming in Accordance

Use by Farmers

The wet grassland areas continue to be used by the farmers, as the meadow birds need an open habitat with short grass. The conservation areas are leased out to over 100 local farmers in the surrounding villages. They use the wet grassland for haymaking or as pasture in accordance to conservation. In areas where birds are breeding, the grass is cut only after the chicks are fully fledged, or alternatively very few animals graze there. The area is managed by the local nature conservation centre Naturschutzstation Dümmer. The staff ensures that the conservation goals of the EU bird habitat are achieved and that at the same time the farmers remain part of the project through their usage and maintenance of the meadows in a manner consistent with nature conservation.



Grazing in wet grassland



Baler with special tyres

Special machinery

To ensure a sustainable usage of the grasslands in a fashion that supports nature conservation in extremely wet areas, special maintenance equipment was sourced.



Bale trailer with special tyres

Fences

150km of new fences were built in the grassland areas. This ensures that even areas which can hardly be used commercially continue to be used by the farmers and are well maintained.



150 km of new fences were built

Nature Conservation - Making People Part of the Project

The population in the area is encouraged to be part of the project. Various facilities were created for interested visitors in search of recreation, which enable them to experience nature in the Dümmer wetlands.

Two nature trails were created at the lake and display the special natural features of the Dümmer lowlands to cyclists and walkers.



Nature trail on the banks of Lake Dümmer

In the nature conservation centre Naturschutzstation Dümmer a new permanent exhibition was established. Through partially interactive facilities visitors can learn about the development of the Dümmer lowlands and their significance for inter-



Permanent exhibition in the conservation centre

national nature conservation and the protection of endangered species today. In this context it is also explained how the farmers use the lowlands in a way that supports nature conservation and how the area will be further developed. A very impressive film about the lowlands of Lake Dümmer and the LIFE project was produced and can be watched in the new exhibition.

The breeding birds and especially the resting birds in winter need large quiet areas. In the core area of the Lake Dümmer lowlands approximately 30km of former farm roads were therefore closed down and re-naturalised. Through the closure of the remaining paths, especially during the winter season, enough quiet zones for resting birds are created. Whenever possible, the paths remain open for visitors.

Within the framework of different funded projects, new walking trails and observation points were built in low-noise areas. Thus nature conservation has a significant part in developing the lowlands of Lake Dümmer into an attractive destination for tourists and holidaymakers.



Bird watching platform in the fen

The European Network NATURA 2000



Another part of the LIFE projects was an active exchange of experiences with other national and international nature conservation organisations. This collaboration contributed to the creation of the European Network Natura 2000.

Bird counts and monitoring show that after only a few years, nature conservation has achieved significant success. Species-rich wet meadows continue to develop, where many breeding bird species that had disappeared have returned to the wet grasslands. The populations of meadow birds are increasing and some species have

a very high yearly fledging success, something that has become rare in many European areas.

Returned Bird Species

The following bird species disappeared and did not breed in the Lake Dümmer lowlands any more after the dikes were built in 1953. Since the beginning of the nature conservation measures they have returned to the wet grasslands as breeding birds.

- White Stork
- Gadwall Duck
- Teal
- Garganey
- Shoveler
- Corncrake
- Spotted Crake
- Common Redshank
- Ruff
- Short-eared Owl
- Stonechat



White Storks



Black-tailed Godwit