

Site 25 – Neustädter Binnenwasser

25.1 Change of the site by project activities:

The project aimed on the restoration of salt meadows at the site by grazing, restoration of the hydrology and preparation of water level increase by a hydrological survey.

Just before the project proposal was prepared the Stiftung Naturschutz was able to buy over 120 ha in the western half of the project site. These areas were used before as arable land and as meadows and pastures. For the agricultural land use the site were deeply drained by ditches and are pump drained below sea level had now value for meadow birds at all. Wetter parts as the salt meadows were abandoned for many years and overgrown by *Phragmites*-Reed.

The number of breeding meadow birds was very low and only remaining on a small meadow which was continuously grazed at the lagoon Neustädter Binnenwasser. Around that area east of the railway track the grazing area was extended to all reed beds on former salt meadows. The reed was nearly completely removed by summer grazing. Some of the smaller plots separated by deep ditches reed bed was remaining in 2010. The cattle did not have really good access to these plots due to wet and small passages. So in 2010 new passages were built and it is hoped to increase the grazing in remaining plots with reed beds.

In the western half of the site blocking of ditches and breaking of drains together with the restoration of depressions created some nice flooding in early spring throughout the newly grazed pastures. But half of the soil is peaty and therefore many flooding and depressions last not until the breeding season for meadow birds starts. Further the soil is very fertile and the grass is growing very fast. So the grazing pressure was steadily increased to counteract this. Further the cattle were concentrated in the wettest parts to keep the vegetation short enough for meadow birds.

The overgrown salt meadows west of the railway track were still dominated by reed in 2010 even when the reed was only half as high compared to the situation before. So it was decided to support



Aerial photo from 2005



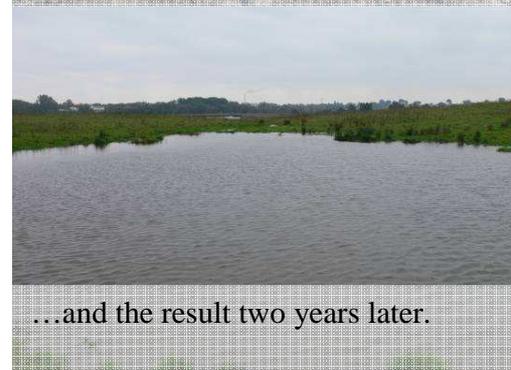
Former reed bed



Reactivated wet meadows in the pump draining area



Re-activation of a formerly filled in natural depression....



... and the result two years later.

the grazing by additionally mowing in autumn. It is hoped that the increased number of cattle will have better effect on the former salt meadows.

The state monitoring by B. Koop was carried out in 2010 for the site. The general trend in the meadow bird population is not sufficient. From the extensive grazing and the conversion from arable to grassland birds as *Larius collurio* and *Saxicola rubetra* benefited. On the other hand Lapwing and Redshank have been decreasing when comparing data from 2006 and 2010 down to 2 pairs breeding of each species in the project site. "This might a reaction to predation, because at other sites more breeders were found as e.g. at Eichholzniederung or on Fehmarn." (orally B. Koop) So it is important to manage the site further for these birds to have a possibility for return, when at other sites predation occurs.

At the site a reserve population of *Apium repens* was tried to establish. The chosen depression turned out to provide not the perfect conditions because it dries up so deeply, when there is long time no rain. So *A. repens* became established but is not developing perfectly.

25.2 Remaining challenges and actions:

After finishing the hydrological survey it is planned to talk to the water board about increasing water levels. The grazing impact has to be increased in 2011 and the mowing of reed beds has to be repeated at other plots. Further fine tuning measures as blocking or filling in ditches had to be identified or evaluated in 2011.

In 2011 the site was evaluated again for the result of an *A. repens* reserve population. The specie went extinct at the release place probably due to dry soil conditions. The site was evaluated according to better locations. Based on this evaluation it is planned to try a second establishment in 2012.

The grazing improved the conditions in remnants of old upper salt meadows. *Succisa pratensis*, *Centaurea jacea*, *Genista anglica*, *Campanula rotundifolia*, etc.

25.3 Public perception:

The municipality of Neustadt has the main focus on the development of tourism along the coast. The project site in the hinterland along the highway to



Building passages 2010



Finished passages 2010



Cattle passages 2011



Reed mowing 2010



Result of reed mowing in 2011

Fehmarn is not in the main focus. Despite that the municipality of Neustadt has identified the site as a valuable site for hiking. It was planned to create a new hiking path on the dike. This was refused by the Stiftung Naturschutz because this will bring more disturbances to the centre of the nature reserve in areas which might have valuable meadow bird breeding sites in future. Further the dike is wished to be taken away in future. Then a path on the dike would be a problem. The arguments were accepted by the municipality and finally the project was cancelled due to other reasons.

The VHS week excursion in 2010 was remarkably good accepted by about 40 visitors also from the municipality administration of Neustadt and the mayor of Altenkrempe.

In 2011 the official management plan implementation process started in good atmosphere with the municipalities Neustadt and Altenkrempe.



Grazing improved flowering horizon in upper salt meadow 2011