

GERMANY

Improving the environment and the countryside

Location

Tegel, Berlin

Programming period

2007 - 2013

Axis / Priority

Axis 4 – LEADER

Funding (EUR)

Total budget 119 810

EAFRD 47 801

National/Regional 72 009

Project duration

2014 – 2015

Project promoter

Bezirksamt Reinickendorf

von Berlin

Contact

Frau Dr. Dohme-Wigger

gisela-dohme-wigger@reinickendorf.berlin.de

A herd of water buffalo helps preserve biodiversity and wetland landscape in a Natura 2000 area in Berlin, Germany.

Summary

In the 'Tegeler Fließ' Natura 2000 area in the Berlin region of Germany, preserving the marsh areas - home to a multitude of species - was identified as a priority. One of the biggest threats to this habitat is the encroachment of woody vegetation. An RDP-funded project was set-up to introduce water buffalo grazing to the area, replacing the need for mechanical mowing.



Funds were put towards building enclosures for the herd, constructing drinking spots and installing signs. Initially nine water buffalo were successfully introduced in 2015 and gradually expanded.

Results

Water buffalo have been proven very successful in keeping back the growth of bushes and woody plants, maintaining open wetland, conserving biodiversity and protecting the landscape in a Natura 2000 zone.

The costs of grazing water buffalo are much lower than mechanical mowing.

Water buffalo grazing has become a regional crowd puller, attracting visitors from Berlin city and beyond.

Lessons & Recommendations

- ❑ Public acceptance for this kind of project has been very enthusiastic and informing residents from the early phases of the project is very important for increasing acceptance.
- ❑ Using native animals or species which are well adapted to the local environment, such as water buffaloes in this case, can be a very cost effective solution for nature conservation and landscape management.
- ❑ Scientific monitoring of grazing projects with buffaloes has just begun and should be extended urgently.
- ❑ Implementing all-year grazing for landscape management along with the animal welfare legislation might require adapting the legal framework for animal husbandry.

Context

The "Tegeler Fließtal" is one of the largest continuous Natura 2000 sites in the Berlin region covering an area of 377 ha. The Natura 2000 area is named after the semi-natural river Tegeler Fließ which is located in the north of Berlin and crosses the entire urban area from east to west for a length of 9.9 km. The river flows into Lake Tegel and the catchment area of the river covers 172 km².

The Natura 2000 area is composed of the landscape conservation area "Tegeler Fließ" (254 ha), the nature conservation area "Niedermoorwiesen" (55.9 ha) and the nature reserve "Kalktuffgelände" (75.5 ha) and forms one of the most beautiful natural landscapes in Berlin.

The whole area offers a home to six species of the Habitats Directive and nine species of the EU Birds Directive in twelve different habitat types, as well as plants such as the *Dianthus superbus*. Representatives of the animal world include otters, beavers and birds like the Barred warbler. There are also eleven of the 13 amphibian and reptilian species detected in Berlin, and species of butterflies which were thought extinct in Berlin.

The area is further improved or kept at its high standard by various care measures. A central challenge is the maintenance of the various types of marsh areas, by means of extensive mowing or grazing, in order to prevent vegetation encroachment. In recent years the spread of trees has been an increasing threat to the habitats of species of animals and plants that live in the marsh areas.

Objectives

The main objective of the project is the preservation of the biodiversity of the habitats in the Tegeler Fließtal.

The management and development plan for the landscape conservation area Tegeler Fließ required to prevent further vegetation encroachment and spreading of trees.

The concrete objective of the project was to use water buffaloes as "landscape conservationist on four legs", as a cost-effective alternative to mechanical care.

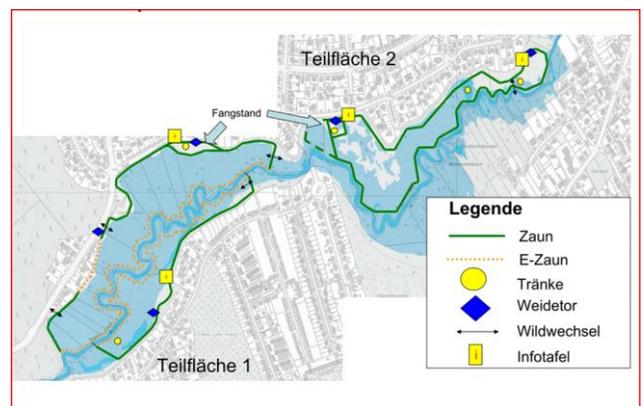
Activities

Water buffaloes are excellent natural lawn mowers in this valuable protected area. Water buffaloes feel comfortable in wetlands, marshes and overgrown river valleys, in contrast to common cattle, which quickly develop problems with their hooves on such surfaces. They are particularly good food utilizers and do not stop at rough-

textured and low-grade pasture such as reeds, rushes or reeds. Through grazing, wallowing and forming trampled trails on the pasture, they maintain the open landscape and support the development of small structures, which in turn are habitats for insects, amphibians or birds. In order to regulate their body temperature, water buffaloes are dependent on wallows, especially in the summer. Since the animals have fewer perspiration glands than cattle, they have to visit these wallows or marshy spots for cooling on hot days.

On the basis of the experiences and results with comparable grazing projects in the region and beyond, the competent authorities (Berlin Senate Administration for Urban Development and Environment, District office Reinickendorf) concluded that compared to mechanised grazing, the use of water buffaloes is a much more cost-effective way to maintain the valuable ecosystem.

In terms of specific activities supported, a prerequisite for grazing water buffaloes is the fencing of the area and other preparatory measures, e.g. the installation of drinking spots. The planning and implementation of these preparatory measures was carried out in close consultation with the authorities and experts on keeping water buffaloes. For example, it was necessary to ensure that the enclosures were set up on sites which are easy to reach even at high water levels and that the appropriate required distances to the Tegeler Fließ are maintained. These preparatory measures were co-financed through the EAFRD. In concrete terms, the enclosure of 25.4 ha in the Tegeler Fließ (see map), the construction of three self-drinking spots and the set up of warning signs were funded.



Following the implementation of the preliminary measures, the first grazing season started with nine water buffaloes in May 2015.

The grazing is not supported by the EAFRD and is carried out by the Landschaftspflegeverband Spandau in cooperation with the farmer Querhammer, the owner of the water buffaloes. It is an ecological farm specializing in landscape management and has the relevant experience with the keeping and marketing of water buffaloes (www.doeberitzerheide-galloways.de).

The grazing season is from April till November and then the buffalos are moved into their winter quarters as the high water levels in the winter months do not allow for a year-round grazing.

The farmer as the owner of the animals is responsible for their welfare. This includes, for example, the herd composition, regular checks, veterinary examinations, the transport and, if necessary, the feeding of the animals.

The Monitoring of the grazing is coordinated by the Senate Administration and the Landschaftspflegeverband. Too many livestock can lead to overgrazing or eutrophication (over-fertilization), too few livestock to reforestation. In order to monitor the success of the measure, grazing protocols are carried out. In addition vegetation analysis will be carried out on a multiannual basis.

The project was supplemented by intensive press and public relations work. Already in December 2014 the citizens in the area were informed about the planned grazing of the Tegeler Fließ with water buffaloes. The response and the interest was so great that the information event had to be repeated because not all interested people fitted into the room. Shortly before the start of the first grazing season, another information event was held in April 2015 to resolve fears and to answer residents' questions. The actual start of the grazing season with the water buffaloes also attracted much interest from the local population as well as the local media and was observed by 500 guests.

After the first grazing season, a public evaluation was carried out in December 2015 and a conclusion was drawn from the district administration, the farmer and the senate administration for urban development and the environment. In addition to these information events, a website has been set up, informing about the project and providing information on where the animals are, as well as viewing points for the observation of the animals.



“The grazing of the Tegeler Fließ is not only an opportunity for the preservation of biodiversity in this valuable protected area (using comparatively few financial resources), but it also helps to raise the awareness of the population on this important issue.”

Dr. Dohme Wigger

Main Results

After the two grazing seasons of 2015 and 2016, the conclusions of the project managers and stakeholders are positive. The central project objectives, to suppress the bushes and the development of woody plants and to keep the moistened meadows open could be achieved. Thus, the project contributes to nature conservation and landscape conservation, the conservation and development of biodiversity as well as to the European protected area network Natura 2000.

The medium and long-term effects of extensive water buffalo breeding on flora and fauna can not yet be estimated after two years of grazing and will be further examined in the future.

The costs of grazing are much lower compared to the mechanical care of the area. In addition, water buffalo grazing has become a regional attraction, informing the population of Berlin city and beyond on the protection of nature and natural experiences in the unique natural landscape of the Tegeler Fließ.

In summary, this nature conservation project of the Reinickendorf district, with the support of the Senate Administration for Urban Development and the Environment of the State of Berlin, combines ecological, economic, social and ethical concerns to protect biodiversity.

Key lessons

The greatest surprise for the project initiators was the exceptionally positive response from the population and the media as well as the public perception of the grazing project. Numerous articles have appeared in the local press and the project was voted "EAFRD Project of the Month August" in 2015. The advanced courses of biology and geography of the Gabriele-von-Bülow grammar school have also taken on the topic and established a remarkable website on grazing with water buffaloes.

The early involvement and information for residents clearly increased the acceptance of the project, so that so far hardly any vandalism damage was recorded.

From the content point of view it can be stated that water buffaloes occupy their own ecological niche in Europe, which makes them very suitable for nature conservation

projects and agriculture in wet terrain. They are best adapted to mosaic landscapes with streams, reeds, wetland and woody plants. Due to their strong pressure on woody plants, they are very well able to push back the vegetation encroachment of protected areas and grassland. Similar to other European pastoral animals with low population densities and all-year pasture, they are very well suited for use in species protection. Birds, amphibians and insects, in particular, benefit from nature-orientated grazing with water buffaloes.

The scientific monitoring of grazing projects with buffaloes has just begun and should be extended urgently.

In order to be able to adequately implement all-year grazing for landscape management inline with the animal welfare legislation, the legal framework for such animal husbandry must be modified.



Additional sources of information

<https://www.berlin.de/ba-reinickendorf/politik-und-verwaltung/aemter/umwelt-und-naturschutzamt/artikel.307160.php#news>

www.eler.brandenburg.de/sixcms/detail.php/714184

<http://gvb.wasserbueffel.square7.de>

www.doeberitzerheide-galloways.de