



Danube Transnational Programme

coop MDD

Report: Study Visit to Biosphere Reserve Elbe



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coop MDD Study Visit to the Biosphere Reserve Flusslandschaft Elbe 29.05.-01.06.2017

Introductory Presentation and Visitor Center

Monday, May 29th, 15:30 – 18:00

Guide: Stefan Fischer (Biosphere Reserve MittelElbe)

As a start into the study visit, Stefan Fischer (Leader of the Northern part of the BR MittelElbe in Saxony-Anhalt) gave a general presentation about the BR MittelElbe, as a part of the BR Flusslandschaft Elbe that stretches over 5 Federal States in Germany. The ppt is attached to this report. The discussion afterwards was intensive, several topics found big attention in the coop MDD partnership:

- **Cooperation and Management Planning:**
Each Federal State has its own management authority for the BR. However, there are at least twice per year meetings on Director's level for coordination (mainly upcoming projects, but also exchange on ideas, problems, etc.). Sometimes, various expert staff also participates, depending on the topic.
There is no joint management plan for the 5-states-BR; even for each single one there is not always a management plan. However, there is a rough joint & shared idea of the further development of the area across the administrative boundaries. In Saxony-Anhalt, they currently work on Natura2000 management plans (which largely overlap the BR boundaries).
- **Partners of the Biosphere Reserve / Agriculture:**
There are standardized criteria within the Nationale Naturlandschaften (all BRs, National Parks, etc. in Germany) for building up partnerships with businesses in the region. Those businesses can be agriculture, gastronomy, accommodation, guiding, craftsmen, etc. The criteria ask for nature-friendly and sustainable production/services. In return, those businesses are promoted by the Nationale Naturlandschaften, their networking in the region with other businesses is supported, and they can use the joint branding.
- **Joint promotion / branding:**
In Germany, the Nationale Naturlandschaften (see above) do all have a very similar logo (three concentric circles in different colours), and do some joint branding and promotion, as well as joint projects (e.g. the business partner certification, see above).
- **Bike Tourism:**
The Elbe Bike Trail is a well-known touristic product/destination across federal state boundaries, where the Biosphere Reserve is involved/promoted, but the BR administration is not involved in its promotion or development. This is done by the tourism stakeholders themselves. There is a separate website and maps for this Bike Trail, as well as partly (or in the future?) mobile apps.

After the discussion, the group was taken on a tour through the visitor center, that was established two years ago at the occasion of a bigger event in the region (Gartenausstellung).

For this reason, in the first year there were nearly double the amount of visitors as in the second year. Now, it seems to stabilize.



Excursion on River Revitalization along the Havel River

Tuesday, May 30th, 09:00 – 14:00

Guides: Guido Puhlmann (Biosphere Reserve Mittelbe), Rocco Buchta (NABU)

The excursion, on the boat of a local fisherman, took the group upstream the Havel River, to visit several restoration areas.

Natural characteristics and historic changes: The Biosphere Reserve Flusslandschaft Mittelbe is one of the largest and most famous wetland areas in Germany. The area of the Havel River in the north is distinct because it is an area where three rivers come together that are all recent rivers (they are all in complete plains; no terraces were built yet). It is a huge wetland area that collects waters from the surrounding rivers. It has a very long flooding time – from April until August. In 19th century the first dykes were built and since then first villages existed. Havel is a navigable river and was intensively used during DDR times. To protect the agricultural land from the waves of the ships, the embankments were constructed (not to protect from the river dynamics, because these are very low due to minimal altitude change of the surface). Also for navigation, 5 dams were built to regulate that there is always enough water in the navigation channel (mainly in winter). Nowadays, there are no cargo shipping but only leisure boats or some small cruises. The dams are therefore managed in a more ecological way and opened for about 100 days a year, but there is no discussion to take them away completely.

The **restoration project** visited consists of 15 restoration complexes, where different measures are combined: reconnections of river branches and of (natural) flood channels, taking away river embankment and small dykes that are located directly at the river shore, initialization of floodplain forest. During the excursion, complexes 1, 2 and 4 were visited. The ultimate goal is to reconnect all river branches (45 in total) and take away all the embankments (80% of the river shores are embanked, 20% are not). Through the reconnections and opening of small river-shore dykes, the continuously flooded area will be enlarged. Another goal is to bring more sand into the river (and not take anything out anymore). The sand and gravel from the embankments and small dykes that are deconstructed and from the channels/branches that are dugged out, are therefore brought to other parts of the river to form small islands.

The project is done in the framework of the “Chance Natur” funding line, which funds so-called “Naturschutzgroßprojekte” (large-scale nature protection projects, that are of national importance). The project began in 2005, where until 2009 the planning was finished in cooperation with all stakeholders of the region. From 2010 until 2015 the permission procedures took place; in 2015 finally the restoration actions could start. The whole project should be finalized by 2030.

The total project budget is € 50 Mio. Within Chance Natur, 75% always come from the national budget. The rest is financed 10-15% from the federal states budget, and 10-15% by an NGO. The projects are always led by NGO's (the public bodies are not allowed to be the project leaders).

90% of the area is used for agriculture, only 10% are really protected. The **ownership of the flooded area** is partly public, partly owned by NABU (transferred from the state or purchased), and partly by farmers. Farmers receive subsidies because of more difficult farming in the flooded areas, if it is their own land. If they rent it e.g. from NABU, then they pay very little money for the use of the area, but need to obey to certain criteria for nature protection.



Excursion on Forest Management and Dyke Relocation in Lödderitzer Forst

Thursday, June 1st, 13:00 – 18:00

Guides: Holger Gabriel (Biosphere Reserve Mittelbe), Astrid Eichhorn (WWF Germany)

The project “Mittlere Elbe” is also a “Naturschutzgroßprojekt”, with a budget of € 33 Mio, financed 75% by national funds, 15% by the federal state, and 10% by WWF.

It includes the **dyke relocation** away from the river Elbe into the hinterland. The length of the new dyke is 7.315 m. The old dyke is opened at 10 spots. The smallest opening is about 100m long, the largest opening is about 650 m long. The former floodplain (300 hectares) and the new floodplains (600 hectares) together build a floodplain area with the size of 900 hectares. The new dyke is 70 cm higher than the old dyke in order to accommodate the raised statistical height of the 100 year flood. The 110.000 m³ soil, which is carried away from the openings, is used for three different purposes:

1. 30.000 m³ are put on the old dyke (the river should eat away this material over time)
2. Refilling of existing soil extraction sites (where material was taken for the new dyke)
3. Intercalated to build new relocated dykes

The steel of the removed sheet piles, which were installed in the dyke after the flood in the year 2002, will be sold and the earned money will be used to co-finance the project “Mittlere Elbe”. The first dyke-opening was done in April 2017, the last one will be finished by November 2017. The new 600 hectares of floodplain are a new part of the biosphere reserve’s core zone (until two years ago, they were buffer zone). The former farmland within this new core zone is bought and owned by WWF Germany. An (artificial) removal of the complete dyke is not foreseen because of economical, ecological and hydrological reasons.

A further measure of the project “Mittlere Elbe” is the **lowering of existing roads** which cut existing creeks.

The **main tree species of the floodplain forest** are:

1. *Quercus robur*, *Fraxinus excelsior*, *Ulmus minor* (=main tree species)
2. *Acer campestre*, *Malus sylvestris*, *Pyrus pyraster*
3. *Picea pungens*, *Pinus sylvestris* (<1%) survived floods on dry locations

As compensation measure (as a result of the undertaken environmental impact assessment) for the new dyke it was necessary to reforest 16 hectares of land. 11 hectares were reforested with 80.000 siblings of oak trees, which were grown by seeds of the oaks in the existing floodplain. Another, one-time, compensation measure was to ring invasive species within the “old” core zone.

Since 1997 the Lödderitzer Forst is part of the biosphere reserve and is now the **largest connected floodplain forest** along the river Elbe. 95% is state owned, 5% is owned by the private sector. The last 5% can be purchased in the future as well. For this land purchase, 4,5% of land transfer tax have to be paid, afterwards only very minor “running” costs have to be paid. Parts of the former forest were already part of the biosphere reserve’s core zone, now all of the 900 hectares of forest are core zone. For harmonizing the “old” and the “new” core zone the management plan of the forest (“Forstfachplan”) and the management plan of the biosphere reserve were overlaid to filter their overlaps. The result was that fighting invasive species, reforestation, and reduction of clearcutting are the overlapping interests. However, few of the resulting actions were implemented. The current goal within the **new core zone** is to **re-establish a natural floodplain forest affected by floods again** (through the opening of the dyke). This will also have an effect on the species composition: Nowadays

the amount of oaks in the forest is high in number because of the former forest management and wouldn't be that high in a natural floodplain forest.

Before the conversion into core zone two years ago, a part of the area was buffer zone and used for **extensive forestry**. The clearcuts were reduced from 3-5 ha to 0,5-1ha. Mostly, only single trees or small groups were taken out. This reduction of clearcut size was also in the interest of the foresters (they said it is economically more profitable).

Beside forestry measures the **dismantling of forestry roads** which are now mostly out of use, is part of the project. This is done by extraction of stones of the substructure, so that they are dismantling themselves over time and cannot bear machines anymore. Within the 900 ha forest, one of the existing paths will be sustained for recreational purposes. Because of legal security reasons cutting of "dangerous" branches are undertaken (also in the core zone); which is why the number of paths needs to be limited/reduced.

In the meaning of the "Prozessschutz" (protection of natural dynamics) by the nature protection law, **hunting** would be restricted. But if it is necessary to sustain and support the development of the core zone (e.g. because the too high number of deer hinders the natural forest development), **game management** is undertaken. For example once or twice a year a big hunt is done in the core and buffer zone to reduce the numbers of wild boar and deer. Beside that, one hunter hunts at one place (at the dyke) throughout the whole year. By doing so, the protection of the farmland outside the dykes against too high numbers of wildlife (wild boar, deer) is taken into considerations.



