Expert input sheet

Conservation and management of Continental Woodland and forest in Germany

Contributor
Stefan Müller-Kroehling, Stefan Adler

Habitat(s):
91E0 - Alluvial forests with Alnus glutinosa and Fraxinus excelsior (Alno-Padion, Alnion incanae, Salicion albae);91F0 - Riparian mixed forests of Quercus robur, Ulmus laevis and Ulmus minor, Fraxinus excelsior or Fraxinus angustifolia, along the great rivers (Ulmenion minoris)

Biogeographical region:
Continental

Member state:
Germany

Region(s) (if applicable):


Issues and pressures
• Loss of area and the natural water regime due to former cutting down of forest for agricultural land and regulation of rivers (dikes, dams).
• Little availability of land
• Drainage
• River regulation
• Changes in natural flood regime through disconnection of alluvial and riparian forest from the natural water dynamic of the watercourse.
• Changes in natural flood regimes through lowering of the groundwater table or water abstraction. This causes shifts in side conditions and especially in water inventory.
• Dyking
• Agricultural use
• Impairment of conditions for development and growth on sites with ongoing lowering of groundwater table, river development and sustainment as well as on sites with changes in natural hydrological dynamics and in spring water functions.
• Forestry operations (forestation with species that are not typical for the habitat type, removal of dead wood, use of machine that damages forest soils)
• Absence of natural regeneration as a consequence of intensive grazing (cattle, sheep) and a dense population of hoofed game on alluvial sites.

Conservation requirements
Restoration or preservation of a sufficiently high water table and thus allowing natural flooding events is the first and foremost measure.
Abandonment of utilization and cultivation - protection in unused protected areas

Establishment of calm zones around the breeding areas of sensitive birds.

In case of forestry use the following measurements should be avoided:
- Clear cutting $>0.1$ ha
- Forestation with species that are not typical for the habitat type
- Promotion of natural regeneration of species that are not typical for the habitat type
- Concentration on few tree species
- Forestry use without sufficient preservation of matured and dead wood (including trees for eyries and nest holes)
- Use of machine aside of specified extraction lines
- Use of machine on wet soils (not even on extraction lines)
- Soil cultivation
- Use of plant protection agents, fertilizers and liming
- Building or extension of forest roads
- Wood harvest or wood extractions between March and September

**Conservation management**
Lowering of dams. Creation of flood areas (polders).

**Species specific management:**
No

**Barriers and bottlenecks**
Intense land use/built-up areas, making it impossible to restore a somewhat raised water table or allow frequent flooding (under controlled circumstances).

Creation of polder areas and pushing-back of dams requires very substantial funding for land acquisition or damages to be paid to farmers to compensate for lost crops in polder areas in the event of flooding.

**Solutions and opportunities**
Increase awareness that partially deregulated rivers are also good for flood protection.

The goals and measures of the Water framework directive, the need for increased and improved flood protection and the need for better migration corridors for species under the added pressure of climate change are all incentives for an improved situation of floodplain forests.
Cross cutting issues
Immense land pressure in floodplain valleys on “land development” (build-up-areas) and intense agricultural use (corn etc.) including the growing of “renewable energy plants”, and a regime of high, co-funded subsidies.

Lessons learned / best practice

Opportunities for joint action
A sound system of incentives that are more guided by the common welfare including better flood protection, species migration and preservation of species-rich, near-natural floodplain forests can only be developed supranational.

References
-  