

## The lower Danube floodplain forests – aspects of conservation

### Die flussbegleitenden Wälder der unteren Donau – Aspekte des Naturschutzes

**Anton DRESCHER & Bohdan PROTS**

In the lower Danube reach in Romania between the mouth of Ialomița and the Black Sea huge wetlands with large areas covered with riverine forests are still preserved (see satellite photos with google earth), whereas in the part of the reach up to the Iron Gate the lowlands along the orographic left bank are to a great part deforested. The hydrodynamics with periodical flooding and the morphodynamics are not altered in a remarkable amount. The importance of the area is underlined by

- the largest remnants of forested floodplains
    - the natural network of arms and island despite of the Sulina arm
    - remarkable areas of old growth forests on stands with different water balance
    - a canopy rich in woody species and lianas
    - a high restoration potential of the transformed poplar stands
- dealing with conservation of floodplain forest and their vegetation the following main questions arise:
- Where and how large areas are covered with natural vegetation are left?
- What is the state of hydrodynamics within the investigated reach of the river?
- Why are the areas so important?
- What are the threads – today and in the future?

Nevertheless both protected areas (Danube Delta with 5,800 km<sup>2</sup> and the Balta Mică a Brăilei Natural Park with 175.29 km<sup>2</sup>) are threatened by

- perpetuated penetration by alien species from old plantations (poplar hybrids) and immigrated/planted individuals of *Acer negundo* L., *Ailanthus al-*

*tissima* (Mill.) Swingle, *Amorpha fruticosa* L., *Fraxinus americana* L., *Fraxinus pennsylvanica* Marsh., that are well adapted to the ecological conditions overgrazing in protected areas by a large number of wild horses or illegal grazing of cattle

The largest and most valuable biodiversity sites of the Lower Danube floodplain of Romania are Letea (2,825 ha) and Caraorman (2,250 ha) both strictly protected areas of the Danube Delta Biosphere Reserve.

The forests unique for Europe are situated on old dune system of the historical seashore. Stripes of forest of 10 to 250 meters in width and several kilometres long ("hasmac") in the dune valleys show a different soil water balance and species composition depending on the distance to the ground water table. The stands are often formed by huge individuals of *Quercus robur* L., *Q. pedunculiflora* K. Koch, *Populus alba* L., *Populus nigra* L., *Fraxinus angustifolia* Vahl, *Fraxinus pallisiae* Wilmott. Lianas (e.g., *Periploca graeca* L., *Vitis vinifera* subsp. *sylvestris* (C.C.Gmel.) Hegi) play a much greater role than in central European riverine forests. As well as in Caraorman the forests have been used by the local population in the past. Although these strictly protected areas are fenced, grazing still occurs and especially by wild horses and in areas where the fence is demolished.

Most of the other sites along Danube between Călărași and Braila are degraded by poplar plantations in a large scale. The restoration potential is still very high because of the natural hydro- and morphodynamics. The available resources will prevent a restoration in the near future.

**address:**

Anton DRESCHER  
Hoteigasse 6  
A-8010 Graz

**email:**

anton.drescher@uni-graz.at

# ZOBODAT - [www.zobodat.at](http://www.zobodat.at)

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Sauteria-Schriftenreihe f. systematische Botanik, Floristik u. Geobotanik](#)

Jahr/Year: 2008

Band/Volume: [16](#)

Autor(en)/Author(s): Drescher Anton, Prots Bohdan

Artikel/Article: [The lower Danube floodplain forersts - aspects of conservation 299-300](#)