Abstract

The Fundu Mare Island from the Natural Park “The Small Wetland of Braila” having a surface of 1945 ha whereby 1015 ha are covered by terrestrial habitats and 930 ha are covered by aquatic habitats (the mains are Chiriloaia lake and Misaila lake) have a manifold functions, one of these is to provide specific habitats for reproduction and breeding for Danube semimigratory and limnique fish species and also for one birds colony of Ardeidae which totalised 400 birds belong of 9 aquatic species.

Due to the natural processes of mineral and organic sedimentation as well due to the use for fisheries of lakes, the hydography and the hydrology of lakes is now heavy modified. Thus, the alimentation canal (Paioasa) situated up-stream is natural barred and does not supply the lakes with water in a flooded periods. In the present the water is carry in by evacuation canal (Hocioaia), situated down-stream, when the quotes of the Danube are higher than 250 cm at Braila. This atypical water supplying situation does not fulfill an optimal flooding of the Fundu Mare Island. That generate many hydrological, ecological consequences few of them are: the sedimentation process is much higher than the washing mud process, the aquatic habitats are diminuated, the period of fish reproduction migration are late for, the duration of fish breeding in a floodplain areas is smaller.

The natural process of sedimentation and excessive developing of macrophytes, which was accelerated by indirect antropic activities, caused the decreasing of water retention capacity of the lakes and thus the low survival of aquatic communities (especially fish) and of aquatic birds. In 2007 and 2008 years, due to the low level of Danube water in summer period, due to the high temperature, the lakes was dry up in summer period, though for two months (May-July) the evacuation canal was barred through a weir biled by log and stone.

The Fundu Mare Island has at national level the status of Integat Protected Area and at international level has the status of Ramsar Area. In 2006, The EU Committee for LIFE NATURA Projects approved the project The Conservation, Reconstruction and Biodiversity Management in the Small Wetland of Braila done by the Natural Park Administration in collaboration Bucharest University—Systems Ecologic Department. This project will be finished of the end of 2010 year. The aim of the project is to guarantee long-term conservation of priority habitats and species of European importance. One of the objectives of this project is the restoration of natural hydrological regime influenced by sedimentation in the lakes of Fundu Mare Island. That means to restore the connectivity of alimentation canal to allow the water of Danube River to supply the lakes. Even those in the summer period the lakes will dry up because the level of bottom is higher than level of Danube River in summer period. In this situation the building of a concrete weir across the evacuation canal seem to be a solution for the maintaining of aquatic ecosystem as much as possible in the summer period. The pros and cons reasoning for building this weir are presented in this paper and will be exposed to the debate.