

A NATURAL RESERVE – THE SATCHINEZ SWAMPS

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Abstract

The reserve known as the Satchinez Swamps, also called the Delta of Banat is a bird reserve situated in Timiş County and concentrating incontestable eco-fauna treasures represented by a number of about 167 bird species, which have been identified within it by ornithologists during over 7 decennia of observations. This reserve is a true "oasis" providing favorable conditions for the sojourning and the nesting of certain rare species of aquatic migrating birds that go through the migrational corridor situated in the west of Romania. Unfortunately this reserve is in danger as the anthropic impact on it is a strong one, which has triggered a deterioration of the habitats, an unfavorable impact on the birds' food, the eutrophisation of the water and the clogging of the swamp, as well as the disappearance of the wet areas.

Keywords: bird reserve, swamp, wet areas, aquatic migrating birds

Introduction

According to the legislation concerning the protected Romanian areas, the reserve called "Mlaştinile de la Satchinez" (the Satchinez Swamps) is listed as a natural reserve, yet among researchers it is known, more often than not, as a bird reserve, due to the importance of this place for the birds' sojourning during their migration, and also for the reproduction of the species within this area and not only.

General overview

The natural reserve of the Satchinez Swamps is one of the 14 natural reserves in Timiş County, being as we have previously mentioned a bird reserve, along with two more such reserves situated in Timiş County, namely the Murani Swamps (Mlaştinile Murani) and the Bird Reserve from Beba Veche.

Regarding its geographic setting in Timiş County, the Satchinez Swamps Reserve is situated about 25 km north-west of Timişoara, in between the localities Satchinez and Bărăteaz (Fig. 1), in the area of Mărăşeşti-Râtu Lişului (Râtu Duţin). From a geomorphological viewpoint, the reserve is situated at the boundary between three plains with distinct geomorphological features, namely the Plain of Vinga, the Plain of Jimbolia (also called the Plain of Torontal) and the Plain of Timiş, in the riverside of ler (Apa Mare) River, an area with large swamps, meanders and deserted backwaters.

The area of the Satchinez Swamps was declared a natural reserve since 1942 through the Gazette of the Ministers' Council no. 1166. Although later on the status of this reserve has been maintained officially through different decisions and orders of the county's administrations, the protected area was gradually diminished, because of the draining and damming works of the years 1960 – 1980, whose goal was to fight off the excess of humidity in the Plain of Banat, to integrate the lands in the agricultural circuit.

Beside the above mentioned works, nearby the reserve, hydrotechnical works were also carried out, to supply with water the central area of the reserve, but these works were abandoned after 1989, given the lack of necessary funds to maintain them. So, the construction of the dam from the Sicsău Valley and the creation of the storage lake of Satchinez (Photo 1) somehow compensated for the effects of the draining through the appearance of 4 ha water surface and of significant common reed areas (Photo 2).





Photo.1. Satchinez Lake (Domășneanu, 2008). Photo. 2. Common reed area (Domășneanu, 2008).

The beneficial effect of this lake for the survival of the reserve is also completed by the importance it has for the aquatic birds of the reserve, as this wet area assures a permanent feeding and nesting place for them. So, the Satchinez Swamps, along with the lake complex, are considered a remainder of the former swamps, flooded periodically, which used to cover most of the area of the Plain of Banat.

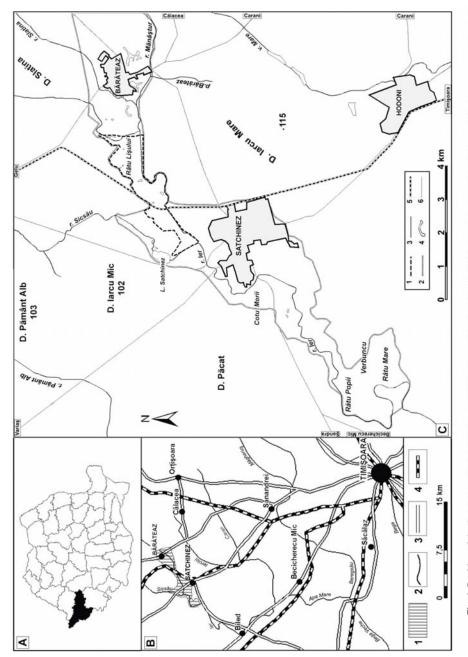


Fig. 1. Position of the Satchinez Swamps bird reserve: A Timis County; B position within the county (1,protected area; 2, hydrographic network; 3, modernized national and county roads; 4, railway); C 1, boundary of the reserve 2, boundary of the protected area; 3, river/canal; 4, lake; 5, railway; 6, roads (according to Török, 2005).

The importance of this reserve is even greater as it represents a true "oasis" in this relief unit, as most of the swampy areas of the Plain of Banat have gradually disappeared (Stănescu, 2005).

At present, the zone where the protected area of the actual reserve is sums up 122 ha being characterized by the existence of certain swamps with a permanent character alternating with areas covered in common reed, ponds, hayfields and clusters of willows (Fig. 2), favorable conditions for the sojourning and nesting of certain rare aquatic migrating bird species which go through the migratory corridor in the west of the country, while its buffer zone, which totals 1072 ha, is represented by swamps and ponds with a permanent and temporary character, the Satchinez storage lake, Balta Bărăteaz, Balta Mare, Balta Zootehnie, Balta Verbuncu and areas covered in common reed, areas that represent a feeding place for numerous bird species, but also agricultural lands and localities (http://www.apmtm.ro/lifesatchinez/).

The reserve holds undeniable eco-fauna treasures, such as *Egretta* garzetta, declared a monument of nature, a bird most of the protectionist and bird research preoccupations from Satchinez have focused on, *Egretta alba*, a monument of nature, *Phalacrocorax pygmaeus*, a monument of nature, *Himantopus himantopus*, a monument of nature, *Nycticorax nycticorax*, *Botaurus stellaris*, *Ixobrychus minutus*, *Ardea purpurea*, *Ardea cinerea*, *Tachybaptus (Podiceps) ruficollis*, *Podiceps cristatus*, wild duck, *Gallinula chloropus*, *Fulica atra*, *Rallus aquaticus*, *Porzana porzana*, *Vanellus vanellus*, etc. Among the birds of prey have been recorded: *Circus aeruginosus*, *Falco vespertinus*, *Falco tinnunculus*, *Falco subbuteo*, *Asio flammeus*, *Athene noctua*, etc. (Stănescu, 2005).

The number of the bird species identified by the ornithologists during over 7 decennia of observations on the Satchinez Swamps reserve is 167, of which about 100 species are frequently present in Satchinez, around 42 species are expected to return on and on, and can be declared as birds "of the area", and the rest, which is actually not so significant, is represented by species that appeared sporadically or accidentally in the reserve (Stănescu, 2005).

Unfortunately, the status of this reserve is endangered, as all the anthropic activities of the last 40 years, in or near the reserve, were not legally accounted for.

The analysis of the modifications in space and time of the last 40 years shows that the future evolution of the protected area is not a favorable one for the birds present here; the tendency of clogging of the swamp and the increasing anthropic pressure, correlated to the climatic changes are the reasons that, in the absence of adequate measures, will trigger the disappearance of this reserve in time.

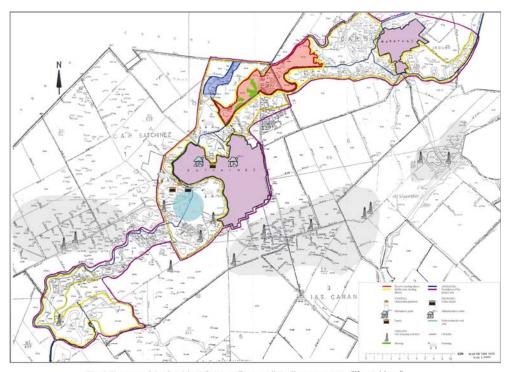


Fig. 2. The map of the Satchinez Swamps Reserve (http://www.apmtm.ro/lifesatchinez/).

So, a "salvation" for the reserve was the starting in the year 1999 of the project ("The conservation of the natural wet habitat of the Satchinez Swamps", by the Environmental Protection Inspectorate of Timişoara, opportunity provided by the program LIFE of the European Union between 1999 and 2002 (http://www.apmtm.ro/lifesatchinez/).

The project allowed the realization between 1999 and 2001 of a scientific study highlighting the evolution of the aquatic birds populations, which confirmed the idea that the initial area of the buffer zone is not enough to assure the necessary food for the aquatic birds populations. For this reason, administrative approaches were made to enlarge the area of the reserve, adding new marshes, water areas or areas with temporary humidity excess to it. During the same period a documentary was shot, catching different aspects in the life of the water birds during the ecological seasons (Stănescu, 2005). Another goal proposed by the project was the organization of certain actions meant to educate and to raise the awareness of the local communities regarding the importance of the protection of this reserve, a goal which came true through the arrangement of an information office in the locality of Satchinez. This project was finalized through the realization of the management plan

of the Satchinez reserve, which establishes the main goals and rules of administration of the area for its long-term conservation (Stănescu, 2005).

The project elaborated and carried out by the Environmental Protection Agency of Timişoara during the period 2002 – 2005 aimed to implement the management plan, to realize certain hydrotechnical works in the buffer areas to extend the wet lands, to modernize the administrative center of the reserve, to realize a complex ecological study, to make the reserve known nationally and worldwide and to edit a work published in 2005 entitled *Mlaştinile de la Satchinez* (The Satchinez Swamps).

Conclusions

The conclusion mentioned by the authors of the work *Mlaştinile de la Satchinez* (The Satchinez Swamps) is a sad one for the future of this reserve. Dan Stănescu states that the anthropic impact on this reserve is high and almost none of the rules mentioned by its management plan has been respected. Moreover, the deterioration of the habitats, the fact that the birds' food has been affected, the eutrophisation of the water and the clogging of the swamp, leading to the disappearance of the wet areas, are nothing else but the effects of the anthropic activities, which leave their mark on this "oasis" from the west of Romania, so vital for the birds sojourning here.

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