

Protected Areas from Bacau County

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Key words: *protected areas, endemic species, avifaunistical, endangered species, biodiversity*

Abstract: The paper presents the protected areas from Bacău County. In Bacău County are 12 protected areas. Our county (image no. 1) is located in the north eastern region of Romania, in historical province of Moldavia.

In our county are two categories of protected areas: natural reservations and avifaunistical protected areas. The fauna of the natural reservations comprises endemic, endangered or species rarely found or natural monuments.

The avifaunistical protected areas fauna is in majority formed by birds, followed by amphibians, reptiles and mammals. These areas have proper habitats for the est-european avifaunistical migration channel.

In the protected areas from Bacău are present species like: *Saxifraga cymbalaria* (endemical species), *Taxus baccata* (glacial relict), *Tetrao urogallus* (present on national list of natural monument), *Aquila chrysaetos*, *Branta ruficollis*, *Nycticorax nycticorax*, *Asio flammeus*.

Introduction

Globally the number of protected areas has been increasing significantly over the last decade, covering about 12% of the Earth's land surface, and making them one of the Earth's significant land uses.

The existing system of protected areas does not cover all biomes and species, requiring protection and they are not fulfilling their biodiversity conservation objectives.

In this direction, the specialists from „Ion Borcea” Natural Sciences Museum Complex from Bacău, initiated the procedures to declare important parts of lands and wetlands protected areas.

In Bacău are two categories of protected areas: natural reservations and avifaunistical protected areas. The fauna of the natural reservations comprises endemic, endangered or species rarely found, or natural monuments.

Values of protected areas range from the protection of natural habitats and associated flora and fauna, to the maintenance of environmental stability of surrounding regions.

In our county are 12 protected areas.

These are: - natural reservations: Nemira Mountains, Izvorul Alb, Perchiu, Lac Bălătău, Arsura, Măgura-Târgu Ocna, Buciaș and - avifaunistical protected areas: Lilieci Lake, Galbeni Lake, Bacău II Lake, Răcăciuni Lake and Berești Lake.

Materials and methods

The present paper presents the protected areas from Bacău, generally, each protected area being a potential source for a scientific debate or article.

The intention of the author is to make these interesting places known, and to increase the public interest for the protection of ecosystems, the protection of nature in general.

Results and discussions

The Nemira Mountains are part of the central group of Oriental Carpathians and 90% of their surfaces are located in Bacău County, the rest of 10% are equally parted between Covasna and Harghita Counties.

Nemira Mountains natural reservation (image no. 2) has a surface of 3491,20 ha, where are present numerous rare and protected species of flora and fauna.

The specialists had identified here 18 species of mammals, 74 species of birds, 5 species of reptiles and 5 species of amphibians. You can find and admire here species like: *Saxifraga cymbalaria* (endemic species), *Tetrao urogallus* (present on Bacău county natural monuments list), *Ursus arctos*, *Lynx lynx*.

Izvorul Alb natural reservation (image no. 3) is located in the north-western part of the Nemira Mountains. Izvorul Alb was declared natural reservation especially for the arboretum of *Taxus baccata* (glacial relict). The arboretum comprises over 300 individuals. The surface of this area is 21 ha.

Bălătău Lake appeared in the IXth century, in 1883, after a landslide (image no. 3). Until 2006 this lake occupied 4,83 ha. This protected area is the home of several protected and endangered species (like *Trientalis europea*, *Triturus montandoni*, *Perdix perdix*, *Aquila clanga*, *Rosalia alpina*, and *Cerambyx cerdo*).

Perchiu natural reservation is an area of scientific interest, with natural habitats like those from Central Moldavian table-land. These habitats evolve in forests areas. The Perchiu natural reservation occupies 206 ha, and specialists mention here species like: *Adonis vernalis*, *Dendrocopus major*, *Aquila chrysaetos*, *Sciurus vulgaris*. The biodiversity is represented by 26 species of mammals, 86 species of birds, 7 species of reptiles and 5 species of amphibians.

Lilieci Lake (image no. 4) is an avifaunistical protected area with habitats spreading over 262 ha that are home for 160 species of birds, and is an important area, as a part of the est-european avifaunistical migration channel. In this area of waters and wetlands, are present 22 mammal species, 4 species of reptiles, 7 species of amphibians, and 19 species of fishes. Frequently here are present species like *Cygnus Cygnus* and *Accipiter nisus*. Lilieci lake (beside the other lakes) is an important link in conserving the biodiversity, and the natural habitats for the entire eastern area from european continent, due to nutritional and shelter conditions that is offering.

The avifaunistical protected area Bacău II Lake (image no. 5) is located in Bistrița meadow (is the last lake on the row) and covers a surface of 202 ha. Bacău II Lake comprises habitats with big importance in est-european avifaunistical migration channel. This area has a rich biodiversity: over 147 species of birds (40% passage species, 36% summer species and

24% sedentary species), 22 mammal species, 5 species of reptiles (especially *Emys orbicularis* and *Natrix natrix*), and 22 species of fishes. You can see here beautiful species of birds like *Egreta alba* and *Brantha rufficollis*.

Galbeni Lake protected area (image no. 7) is important for the shelter offered to over 168 species of birds (30% summer guests, 51% passage species. Is located in the middle flow of Siret river, downstream the confluence of Siret and Bistrița rivers. The specialists have mentioned 14 mammal species that live on the watersides, 4 species of reptiles, 7 species of amphibians, and 24 species of fishes. Is an important area that offers food, rest and shelter for the birds flying through est-european avifaunistical migration channel. The length of this lake is 6300m and occupies a surface of 1123 ha. Frequently are present here *Lacerta agillis*, *Pica pica*, *Accipiter gentilis*.

Răcăciuni Lake (image no. 8) occupies over 2004 ha, with a length of 13 ha and a width that varies between 800 and 2000 meters. Is part of the lakes chain from Siret, Răcăciuni Lake being located downstream Galbeni Lake. This protected area is the southernmost lake on Siret meadow. The Răcăciuni Lake area is characterized by an intense seasonal life. Upstream, the vegetation is natural, well represented. From 168 species of birds 32% are summer guests, and 49% passage species. On water sides, live 6 species of reptiles, 7 species of amphibians (like *Bufo bufo*), and 22 species of fishes.

Berești Lake (image no. 9) is located on Siret river and on its entire surface (1800 ha) are important habitats for est-european avifaunistical migration channel. The lake vegetation is recent, and cosmopolite. The specialists have mentioned for this protected area 148 species of birds (like *Alcedo atthis*, *Asio flammeus*), 23 species of fishes, 7 species of amphibians, 4 species of reptiles (like *Emys orbicularis* and *lacerta agillis*) and 19 species of mammals (*Myotis myotis* and *Vulpes vulpes*).

Arsura natural reservation (image no. 10) was declared protected area especially for the old forest that comprises beech with a cover of 100%, and trees over 120 years old on an occupied surface of over 312 ha. The biodiversity of this area is represented by 9 species of amphibians, 7 species of reptiles (like *Elaphe longissima*), 75 species of birds (like *Ciconia nigra*, *Motacilla alba*) and 28 species of mammals (like *Felis sylvestris*, *Cervus dama*).

Măgura-Târgu Ocna is a natural reservation, with protected species of flora and fauna with great scenery value. Occupies 82,91ha, in the area of Măgura Peak, downstream the place where the Slănic flows into Trotuș. Are present here a big number of mammals species (196 species - like *Capreolus capreolus*, *Vulpes vulpes*), 67 species of birds (like *Aegithalos caudatus*), 2 species of reptiles (*Vipera berus* and *Lacerta agillis*) and 7 species of amphibians (*Pelobates fuscus*, *Salamandra salamandra*).

Buciaș natural reservation is composed by 471 ha of keystones and waterfalls with high scenery value. The fauna from this protected area is dominated by birds (58 species like *Turdus torquatus*), followed by mammals (24 species – like *Martes martes*, *Canis lupus*), amphibians (7 species – like *Salamandra salamandra*, *Triturus vulgaris*), and reptiles (5 species – like *Vipera berus*).

Conclusions

A protected area is an area of land and/or water especially dedicated to the protection and maintenance of biological diversity and of natural and associated cultural resources, managed through legal or other effective means.

In our county are 12 protected areas: natural reservations: Nemira Mountains, Izvorul Alb, Perchiu, Lac Bălătău, Arsura, Măgura-Târgu Ocna, Buciaș and avifaunistical protected areas: Lilieci Lake, Galbeni Lake, Bacău II Lake, Răcăciuni Lake and Berești Lake.

In this direction, since 2004 Bacău County has 9712.44 ha (97.1244 km²=1,47%) of protected areas from the entire surface of 6603 km² Bacău County represents 2.8% from the entire surface of Romania.

With this paper, the author wants to make these interesting places known, and to increase the public interest and awareness for the protection of ecosystems, the protection of nature in general.

References (selective)

- Albotă M. București 1983. *Munții Noștri*. Editura Sport Turism.
- Burduja C. & co. Bacău 1971 *Flora și vegetația dealului Perchiu* în Studii și Comunicări, Muzeul de Științele Naturii Bacău.
- Complexul Muzeal de Științele Naturii „Ion Borcea” Bacău 2002. *Propunere pentru înființarea Rezervației Naturale Perchiu*. Bacău.
- Complexul Muzeal de Științele Naturii „Ion Borcea” Bacău 2002. *Propunere pentru înființarea Rezervației Naturale Arsura*. Bacău.
- Complexul Muzeal de Științele Naturii „Ion Borcea” Bacău 2002. *Propunere pentru înființarea Ariei de protecție specială avifaunistică Lacul Berești, jud. Bacău*.
- Complexul Muzeal de Științele Naturii „Ion Borcea” Bacău 2002. *Propunere pentru înființarea Ariei de protecție specială avifaunistică Lacul Răcăciuni, jud. Bacău*.
- Complexul Muzeal de Științele Naturii „Ion Borcea” Bacău 2002. *Propunere pentru înființarea Ariei de protecție specială avifaunistică Lacul Galbeni, jud. Bacău*.
- Complexul Muzeal de Științele Naturii „Ion Borcea” Bacău 2002. *Propunere pentru înființarea Ariei de protecție specială avifaunistică Lacul Bacău II, jud. Bacău*.
- Complexul Muzeal de Științele Naturii „Ion Borcea” Bacău 2002. *Propunere pentru înființarea Ariei de protecție specială avifaunistică Lacul Lilieci, jud. Bacău*.
- Complexul Muzeal de Științele Naturii „Ion Borcea” Bacău 2003. *Propunere pentru înființarea Ariei de protecție specială avifaunistică Lac Bălătău, jud. Bacău*.
- Complexul Muzeal de Științele Naturii „Ion Borcea” Bacău 2003. *Propunere pentru înființarea Rezervației Naturale Mixte Nemira*.
- Complexul Muzeal de Științele Naturii „Ion Borcea” Bacău 2003. *Propunere pentru înființarea Rezervației Naturale Izvorul Alb*.
- Complexul Muzeal de Științele Naturii „Ion Borcea” Bacău 2003. *Propunere pentru înființarea Rezervației Naturale Buciaș*.
- Complexul Muzeal de Științele Naturii „Ion Borcea” Bacău 2003. *Propunere pentru înființarea Rezervației Naturale Măgura – Tg. Ocna*.
- Gabriela Gurău Iași 2004. *The biodiversity of cerambicids (Coleoptera, Cerambycidae) from Nemira Mountains and their ecological significance* - doctoral thesis – Al. I. Cuza University of Iași.
- Hotărârea Guvernului nr. 2151/2004 (M.O. nr. 38/12.01.2005) privind instituirea regimului de arie naturală protejată pentru noi zone.
- Legea nr. 345 din 19 iulie 2006 - privind regimul ariilor naturale protejate, conservarea habitatelor naturale, a florei și faunei sălbatice (modifică și completează O.U.G. nr. 236 / 2000).
- Ordin nr. 552/2003 (M.O. nr.648 din 11.IX.2003) al ministrului agriculturii, pădurilor, apelor și mediului privind aprobarea zonării interioare a parcurilor naționale și a parcurilor naturale, din punct de vedere al necesității de conservare a diversității biologice.
- Ordin nr. 494/2005 privind procedura de încredințare a administrării sau de atribuire a custodiei ariilor naturale protejate.