

MINIMUM CONSERVATION MEASURES FOR LUNCA POGANISULUI PROTECTED AREA

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Abstract: *The anthropic activities together with the demographic growth and the overexploitation of the natural resources represent the most important way of the biodiversity degradation, leading to the extinction of a large numbers of species. The main causes that lead to loss of the biodiversity are determined by the fragmentation, degradation and destruction of habitats, pollution, global climate changes, overexploitation, invasive species and diseases. Under these circumstances, the application of some measures for the biodiversity conservation becomes necessary and also an essential condition for life maintaining on Earth. Due to its geographical position, Romania has a rich and unique biodiversity both at the genetic level and at the ecosystems and species level. Lunca Pogănișului protected area, with an area of 75.5 hectares, is located in the west of Romania, in center of the Banat Region, at the limit of Sacoșu Turcesc and Tormac villages, with coordinates 45° 35 'N and respectively 21° 30' E. The main aim of the establishment of the 2736 Lunca Pogănișului protected natural area is to conserve the habitats and the species with national and community interest, declared under Directive 92/43/EEC on the conservation of natural habitats and wild fauna and flora. Lunca Pogănișului was declared a nature reserve, the objective of this reservation is the protection of variegated tulip species (*Fritillaria meleagris*), Mediterranean species of the Lily Family. The anthropic influence caused by: grazing, agriculture, chemical treatments, collection of biological material, illegal cutting of colorful tulips and woody vegetation, illegal storing of waste, presents a negative influence on the natural development of the protected ecosystems on the area surface. The destruction of the habitats and species from the Lunca Pogănișului national interest protected area requires the implementation of some conservation measures. Local population know a few things about the status of the protected area, a lot of local people don't even know of the existence of the protected natural area. The aim of this paper is to propose a minimum set of conservation measures for 2736 Lunca Pogănișului national interest protected area, measures that lead to a better long-term conservation of the species and habitats present in the area.*

Key words: *conservation measures; natural area; Lunca Pogănișului; *Fritillaria meleagris**

INTRODUCTION

Right after being set up, protected areas must be managed in such a way to preserve the natural values and even the cultural ones existing on the territory. An effective and efficient management of the protected area allows the prevention and even the elimination of possible negative effects that might occur as a consequence of numerous pressures and potential threats (ERIKA STANCIU, FLORENTINA FLORESCU, 2009).

According to the Romanian law, the natural protected area means: the terrestrial area and/or sea in which there are species of wild animals, biogeographical, landscape, geological and paleontological elements and formations, with ecological, scientific or special cultural value, having a specific protection and conservation statute, based on legal provisions (OUG 57/2007)

The main objective of building protected areas is to maintain and, should it be the case, rebuild natural values and cultural threatened. Areas are mainly set up for preserving the biodiversity and the natural and cultural values.

However, people don't hesitate to practice agriculture, grub and develop mining activities as they believe governmental areas are "the property of all" anybody can take whatever is needed and "nobody" offers to intervene. The situation can become critical and because of this the protected areas must be managed actively in order to prevent degradation (PRIMACK et al, 2008).

Lunca Pogănişului is a protected area of national interest. The main objective for which the area is considered protected is the preservation of the specie Variegated Tulip (*Fritillaria meleagris*).

The protected natural area of national interest, 2736 Lunca Pogănişului, is mentioned in Annex 1 – the protected area of national interest and nature monuments* from law 5/2000, and according to the classification I.U.C.N., it belongs to the third category.

Lunca Pogănişului, an area of 75.5 ha, is located in the Western part of Romania, in the centre of Banat region, at the limit of the localities Sacoşu Turcesc and Tormac, having the following coordinates 45° 35' N and 21° 30' E.

The main purpose of setting up the protected natural area 2736 Lunca Pogănişului is to preserve the habitats and species of national and community interest, according to Directive 92/43/CEE regarding the preservation of natural habitats and species of wild flora and fauna.

The entropic influence determined by: grazing, agriculture, chemical treatments, sampling of biological materials, illegal picking of the variegated tulip, illegal logging of woody vegetation, illegal dumping of waste influence negatively the natural development of the protected ecosystems on the protected area Lunca Pogănişului. The destruction of habitats and species from the protected area require taking preservation measures. The local population has a limited knowledge on the statute of protected areas, many of the inhabitants are not aware of the fact that the territory is a natural protected area.

The aim of the present paper is to propose a set of minimum measures for preserving the protected area of national interest 2736 Lunca Pogănişului, measures that would entail a better preservation on the long run regarding the species and habitats present in the area.

Custody protected area Lunca Pogănişului is owned by USAMVB Timisoara custody by convention no. 303/12.12.2011

MATERIAL AND METHODS

The main materials used in elaboration of the present paper were: the national and community in force legislative documents in the field of nature protection and ecological biodiversity

RESULTS AND DISCUSSIONS

General measures for preserving the national interest protected natural area Lunca Pogănişului:

- Creating the regulations and the management plan for the natural protected area, according to current law, in a transparent way by consulting and involving the interested parties;
- Managing the protected natural area based on the custody convention and according to legal provisions, to the management plan and the regulations of the protected area;

- Ensuring the proper training for people involved in the custody activity;
- Carrying out a communication and promoting strategy of actions made in order to raise awareness and inform the population regarding the necessity of protecting the natural area and the purpose of the protected natural areas;
- Making information boards with the description of the natural area, the main preservation measures and offenses for breaches of regulations;
- The inventory of the natural patrimony of the protected area and the continuous monitoring of the preservation statute;
- The land delimitation of the protected area and placing terminals and marking;
- Creating and updating a data base in order to improve the support system of assisting decisions in the field of the protected area and reporting to national and international institutions;
- Implementing the necessary measures in order to ensure an efficient protection of the natural area protected and the values of cultural and natural patrimony;
- Keeping the original purpose of any construction, equipment or facilities purchased from the funds received during any custody, for proper management of the protected area, which will remain in the inventory/patrimony of the protected area;
- Creating a visiting strategy and the visiting infrastructure;
- Placing containers for the selective collection of waste;
- Achieving protocols or partnerships with schools on the protected area and involving them in educational activities organized in the occasion of different events;
- Accessing European grants needed for achieving, promoting and implementing the management of the natural protected area.

Specific measures for preserving species and habitats in the natural protected area:

- Creating an inventory and mapping all the species of community and national interest;
- Establishing the preservation statute of the above mentioned;
- Preserving or re-establishing, in a state of favourable conservation, the natural habitats, species in the flora and fauna of national and community interest;
- Preserving the natural landscape;
- Correcting the natural reservation limits by including those surfaces with representative habitats and viable populations of variegated tulip;
- Connecting the areas that make up the natural reservation, for a better management and creating a control or surveillance system;
- Marking the limits on the field so that they are visible and understood by everybody;
- Decreasing and controlling the sources of domestic pollution;

- Banning car access, especially heavy vehicles, in the area of forests with variegated tulips;
- Controlling the exploitation of the natural resources;
- Strict control of illegal extraction of timber;
- Banning the clear cutting of mesh and strips;
- Keeping their traditional use of land;
- Identifying all threats to species and habitats;
- Limiting or prohibiting, as appropriate, economic activities near hibernation sites, nesting, feeding;
- Raising awareness of the locals regarding the natural protected area Lunca Pogănişului (*Fritillaria meleagris*) at least by creating information boards in localities and access ways in the protected areas;
- Sanctioning the potential irregularities.

Punctual measures for preserving the variegated tulip:

- Banning the forest vegetation in parcels with variegated tulip;
- Controlling strictly the illegal extraction of timber;
- Restricting grazing and access of livestock in forest vegetation parcels;
- Banning the waste storage of any nature on the protected area;
- Banning access to tractors and other vehicles in the forest;
- Banning the collection and harvesting of plant bulbs;
- Banning ignition in the forest.

CONCLUSIONS

Fritillaria meleagris L. present in Lunca Pogănişului is declared monument of nature being one of the rarest and most beautiful flowers in Romania, preserved as monument of nature.

Entropic activities present in the protected areas lead to degradation of the habitats and the extinction of the variegated tulip.

Integrating the preservation measures in the protected area Lunca Pogănişului will lead to a better preservation on the long run of species and habitats present in the area, including the preservation of the variegated tulip.

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