

Involving volunteers in participatory conservation of biodiversity in Rodna Mountains National Park, Romania

Contact name

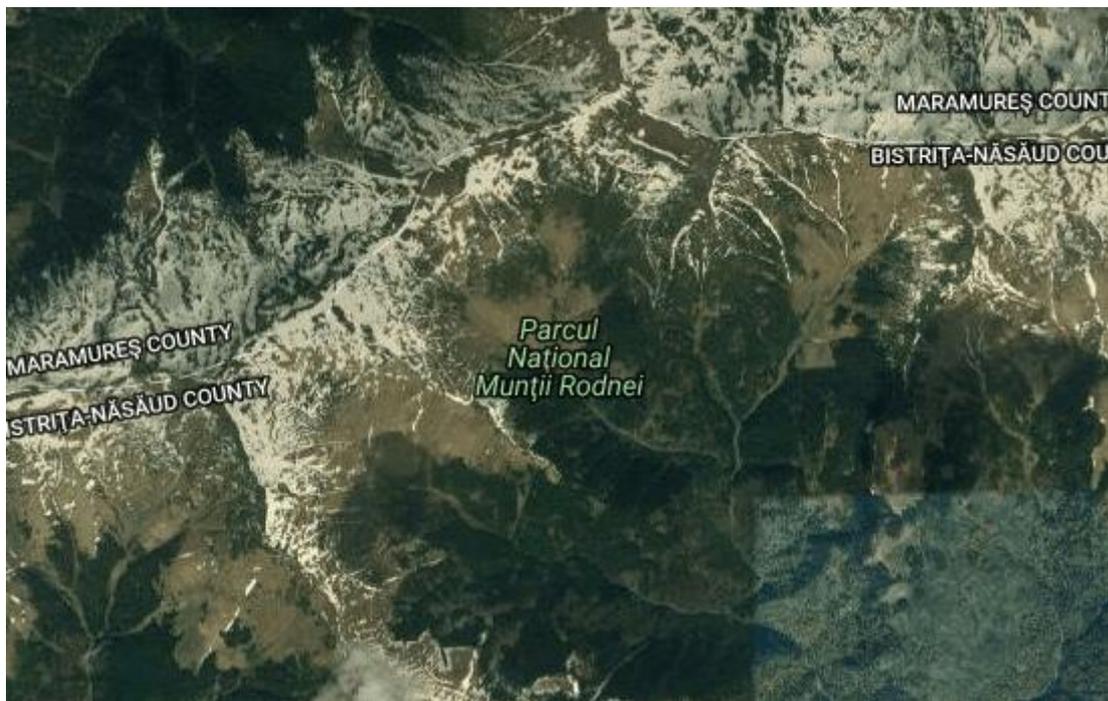
Biol. Dr. Claudiu Iusan

Institution name

Rodnei Mountains National Park Administration (Biosphere Reserve)

Region & country

Romania, Eastern Carpathians, Bistrita-Nasaud and Maramures Counties



Summary

The Rodna Mountains National Park was established in 1990 extends across 47.000 ha of the territory, being one important biodiversity hot-spot in the Carpathian mountains. During the period 2004-2017, The Rodna Mountains National Park Administration implemented more than 26 projects in partnership with 35 institutions (universities, NGOs, museums, county councils, mayors, ministries, national and international agencies, administrations and custodians of protected areas etc.). The total budget accessed was 4.403.500 euros in partnership with other stakeholders through more than 15 funding sources.

At Rodna Mountains National Park, over 7.450 volunteers were involved in various park activities, with priority being given to the inventory, mapping and monitoring of biodiversity. Most volunteers came from the surrounding localities of the Rodna Mountains and only a small part came from the countryside.



Monitoring of medicinal plant species. Photo by Claudiu Iusan.

Background of the project

Natural protected areas in Romania account for 23% of the country's surface area, and forests represent 45% of the national forest fund. National and natural parks account only for 5% of Romanian's surface (www.biodiversitate.mmediu.ro).

Since 2004, the Rodna Mountains National Park Administration has joined and implemented numerous projects focused on the involvement of volunteers and stakeholders in biodiversity conservation activities, being an example of volunteer engagement in protected areas both at national and international level.

The need to analyze the involvement of stakeholders in the management of a protected area stems from the outstanding results achieved so far by the National Park Administration at national and international level in the field of participatory conservation of biodiversity.

Participatory monitoring is a powerful approach that can improve the effectiveness of information gathering, transparency of decision-making processes and policy implementation, as well as achieve some human development objectives. This approach is increasingly being used to support biodiversity conservation and management (Danielsen F. *et al*, 2000).

Solution and actions taken

Participation ranges from passive participation, where people are told what is going to happen and their responses are not taken into account, to self-mobilisation, where people take initiatives independently from external institutions (Pretty 1994).

Participatory protected area management (also known as collaborative management) is generally referred to a situation in which some or all of the relevant stakeholders in a protected area are

involved in a substantial way in the implementation of management activities (Borrini-Feyerabend, 1996).

Rodna National Park is a protected area of national interest that corresponds to the II category IUCN (National Park) located in northern Romania, in the central part of Rodna Mountains. The importance of this park resides both on the geology and geo-morphology of the mountains, as well as the presence of many species of fauna and flora, endemisms and glacial relics (www.parcrodna.ro).

Examples of good practices at regional, national and international level include: non-formal education methods, training and collecting biological information on a voluntary basis, thus contributing to the ecological education of people involved and conservative biodiversity management.

Other institutions or parties involved

Local people are valuable actors in assessing and monitoring biodiversity, because:

- they are knowledgeable on wildlife, plants and natural resources derived from its use along generations;
- most monitoring systems within protected areas, and many from outside them, are focused on protected species of wildlife and plants.

The Rodna Mountains National Park Administration in collaboration with the ECO RODNA Association (a non-governmental organization comprising over 1.000 volunteers, teachers, researchers around the protected area) has implemented numerous projects to obtain financial support to create and develop an interactive process of volunteer involvement in biodiversity conservation in the Rodna Mountains (Table 1). More than 15 funding sources have been accessed to ensure effective management of the protected area.

Results

The Rodna Mountains National Park Administration implemented a total of 26 projects between 2004 and 2017 in partnership with 35 institutions (universities, NGOs, museums, county councils, city halls, ministries, national and international agencies, administrations and custodians of protected areas etc.). Over 7.450 volunteers were involved in the Rodna Mountains National Park in various activities, being the priority areas the inventory, mapping and monitoring of biodiversity.

These are some of the indicators that support the success of this initiative:

- Publication of **28 field guides** about flora and fauna (birds, mammals, bugs, grasshoppers, dragonflies, lizards and snakes, fishes, trees and shrubs, glacial lakes, caves, flowers), photo albums and management guides (monitoring key species with volunteers, monitoring habitats, participatory monitoring) have been edited and. (<https://www.parcrodna.ro/pagina/biblioteca-virtuala-a-pnmr>)
- Creation of **4 thematic trails** (such as “Chamois trail”, Horses Waterfall, Fountain of Ratafoi etc.);
- Organisation of **20 Junior Ranger camps** with more than 600 youngsters;
- Establishment of **2 scientific documentations** for increasing the protection status of some wilderness areas;
- Publication of the **first monograph** of the park with an inventory of biodiversity which is over-passing 8.000 species of flora and fauna;

- Involvement of more than **200 foreign volunteers**;
- Assessment of the **conservation status of 70 species of community interest** from Rodna Mountains Natura 2000 site by using new techniques as video cameras with infrared sensors, lighting traps for moths and bugs, life-traps for small mammals, ultrasound detectors for bats and locusts, bioacoustics, bat nets, fishing nets, Barber traps etc.

Volunteers from outside the community bring extra resources into the area, both directly and indirectly. They help to maintain key economic assets for the community and to raise awareness on what the area has to offer. But they can also act as a bridge between protected area managers and the communities within and around their park, which benefits both parts.

Challenges

The main problem was to ensure a permanent funding for the monitoring activities and motivated personnel for supervising the process.

Lessons learned

The volunteering management model developed and implemented by the Rodna Mountains National Park Administration is supported through various sources of funding and is a complex process whose results are appreciated at national and international level.

The Administration of the National Park Rodna Mountains, in collaboration with local stakeholders, has developed an efficient and performing volunteer management model for biodiversity conservation in Romania, which can be promoted as good participative management example of protected areas both at national and international level.

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Website(s)

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