## NATURA 2000 IN ROMANIA - A DECADE OF GOVERNANCE CHALLENGES

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#### **Abstract**

Prior to Romania's joining the European Union in 2007, the Romanian government assumed the responsibility to fully implement Community legislation in the field of nature conservation. This led to a rapid increase of protected surface areas (from 7% in 2005 to 20% in 2009) and a significant overlapping of EU and national protected areas. Due to a lack of resources, the governance of protected area transformed from state management exclusitory to a participatory one. Currently, the Romanian government is still a key actor in conservation and governance of protected area, organizing the decision-making process but delegating the responsibility for the implementation of the conservation policies to other organizations (e.g., local public bodies, enterprises, NGOs). We outline the changes in protected areas governance and highlight the emerging key non-governmental participants. Furthermore, we compare Romania's case to other governance models and discuss opportunities for a more decentralized system. A transparent decision-making approach is required for a better interconnection between all the institutions involved in the administration and also for improving governance of Natura 2000 protected areas in Romania.

**Keywords**: Birds directive, habitats directive, protected areas governance, Eastern European countries.

### 1. INTRODUCTION

The major outcome of European Union (EU) policies on biodiversity is Natura 2000 network, designed to protect species and habitats listed in two legal norms: the Directive on the conservation of natural habitats and wild fauna and flora (i.e., Habitats Directive) and the Directive on the conservation of wild birds (i.e., Birds Directive) (Council Directive 92/43/EEC 1992, Directive 2009/147/EC 2009, Evans 2012). Additionally, to implement the objectives of the Convention on Biological Conservation (CBD), in 2011, EU adopted a new

European Biodiversity Strategy (European Commission 2011), which represents a bold contribution to minimize global biodiversity loss (European Environment Agency 2010).

The European Biodiversity Strategy targets six specific goals to be achieved by 2020, as follows: 1) to adequately implement the Birds and Habitats Directives, 2) to maintain and restore ecosystems and their related services, 3) to increase participation of agriculture and forestry at maintaining and enhancing biodiversity, 4) to secure the sustainable use of fisheries resources, 5) to prevent the introduction of invasive alien species, and 6) to alleviate global biodiversity loss (European Commission 2010). As a EU member country, Romania is legally bound to both Birds and Habitate Directives following at the same time national norms and other national requirements (i.e., Government Emergency Ordinance 57/2007 regarding the natural areas regime) (Guvernul Romaniei 2007). Nevertheless, Romania is still facing difficulties to accomplish the goals established by European Biodiversity Strategy, for example financing of Natura 2000 sites administrators or custodians.

Natura 2000 network includes two categories of protected areas: Sites of Community Importance – SCIs (designated under Habitats Directive) and Special Protection Area – SPAs (designated under Birds Directive) (Evans 2012, Gruber et al., 2012). Each Member State has the authority to choose specific conservation measures aiming at achieving and maintaining a favorable conservation status of species and habitats (Popescu et al., 2014), consequently, the degree of protection may vary from site to site (Gruber et al., 2012). The 28 Member States designated 27,312 terrestrial and marine sites encompassing 1,147,956 km² with 601,393 km² terrestrial SCIs and 537,981 km² terrestrial SPAs (~18.14% of the land territory of the European Union Member States) and more than 3,000 SPAs encompassing a surface of 360,350 km² from which 283,076 km² are marine SCIs and 187,452 km² marine SPAs (~5% of the total EU marine area) (European Commission 2016). Presently, under the two Directives, are found 231 natural protected habitats, 1,563 animal species, 966 plant species, and 193 vulnerable birds (Council Directive 92/43/EEC 1992, Directive 2009/147/EC 2009).

Natura 2000 network in Europe outlines the differences among countries in terms of size and number of sites. Spain, together with France and the United Kingdom encompass 38% of total EU28 Natura 2000 area (433,925 km²) (Fuentes et al. 2011, European Commission 2016). Sweden and Italy represent the group of countries with the highest number of Natura 2000 sites, accounting for more than 43% of total number of sites (11,877 sites) (Estreguil et al., 2013).

The necesity to adopt a concept which would comprise not only all the actors involved in the management process of protected areas but also to capture all the decisional process and interactions among them (i.e., governance of protected areas), came into focus within the V<sup>th</sup> IUCN World Parks Congress held in Durban, South Africa in 2003 (IUCN 2017). Governance is defined as the interaction among organizations, processes, and traditions that regulate power, responsibilities, and decisions making (Graham et al., 2003). In governance of protected areas, the state tends to decentralize responsibilities and favor a participatory approach for identifying priorities, objectives, and management processes (Lausche et al. 2011). The mechanism of governance as reflected in definition of IUCN, involves the interactions which can be exploited as partnerships based on collaboration among actors proved to be more successful (Prager 2015) even if this envisages higher costs (Margerum and Robinson, 2015).

In many Western European countries, legislative and budgetary responsibilities for nature conservation are transferred to the regional level, e.g., Italian and French regions, Spanish autonomous communities, while in Eastern Europe the powers are more centralised (Borrini-Feyerabend et al., 2013). In Eastern Europe the common model is "delegated governance", which may be further divided into "less centralized" (i.e., management is transferred from top level to a subordinate level within the same institutional group, e.g., Ministry of Environment

to local Environmental Protection Agencies) and more "delegated" (i.e., management is transferred to organizations that do not belong to the same institution, e.g., Ministry of Environment to an non-governmental organization) (Stanciu and Ionita, 2014).

The objective of the paper is to review the process of implementation of Natura 2000 network in Romania, and the changes in protected areas governance, highlighting the emerging key participants. Additionally, we compare Romania's case to other governance models and discuss opportunities for a more decentralized system approach.

# 2. NATURA 2000 IN ROMANIA

Prior to 1990, Romanian authorities designated approximately 4% of national territory as protected areas (Ioja et al. 2010), but failed to enforce their protection (Primack et al. 2008). After the end of the communism regime (year 1989) there were negligible changes aimed to improve enforcement and lacking any focus on habitat and species conservation (Hartel et al. 2010).

The process of joining the European Union was a key moment in the development of conservation planning activities leading to a rapid increase of Romanian protected areas (Ioja et al. 2010, Stringer and Paavola 2013). Romania is falling under the mainstream of worldwide countries, having most of the protected areas established and managed by the government authorities (Balasinorwala 2014). During the pre-accession process, Romania was under significant pressure to intensify efforts towards biodiversity conservation by implementing Natura 2000 network. As noticed in its 1999 report, the European Commission highlighted the weak administrative capacity of Romanian environmental agencies as a part of the Chapter 22 Environment of the negotiations (European Commission 2000), but also emphasized the efforts made to harmonize the Romanian legislation with the Community acquis. One year later, in the annual regular report "the need to prepare for the Natura 2000 network" is highlighted (European Commission 2001), while the 2003 report, noted the need of "the data collection for the identification of sites and special protection areas" (European Commission 2003). Although the public opinion provides support to environmental actions, it was not the same in Romania at the beginning of Natura 2000 network implementation. The lack of communication and cooperation experience of Romanian authorities combined with other types of conflicts identified related to Natura 2000 decision-making and management (European Commission 2009) lead to a negative attitude in particular of local communities and authorities towards designation of new protected areas.

The Romanian Ministry of Environment, through its National Agency for Environmental Protection and local Agencies for Environmental Protection, led the process of Natura 2000 sites designation. These agencies were charged with submitting the required Standard Data Forms for each candidate site (Papp and Tóth, 2007). After compiling the national list, the European Commission checked for gaps in protection at the biogeographical level (Evans 2012).

Natura 2000 network in Romania was gradually implemented in four stages. In the first stage, after joining EU, 14% of Romania's territory was designated as SCIs, two years later the network was significantly enlarged by adding the first SPAs, covering an additional 12% of Romania's area. In these two stages, nearly 96% of pre-Natura 2000 system represented by national protected areas was included in Natura 2000 (Ioja et al., 2010). The third stage occurred in 2011, when the newly established SCIs increased to 17% and the new SPAs to 15% of Romania's territory. Combined, the new designated sites, as part of the Natura 2000 network, increased the protected surface areas to 22.56% of Romania. The process continued in 2016, when 54 SCIs (18% of Romania's territory) (Ministerul Mediului Apelor si Padurilor 2016a) and 22 SPAs (Guvernul Romaniei 2016) were added to Natura 2000

network in Romania, achieving a high degree of sufficiency objective (i.e., ranges of species and habitats are sufficiently covered by the existing sites, (Papp and Tóth, 2007)).

To date, Romania's Natura 2000 network includes 606 sites (435 Sites of Community Importance declared under Habitat Directive and 171 Special Protection Areas declared under Birds Directive) covering a surface of 55,647 km² (22.56% from Romania's terrestrial area) (Table 1, Figure 1) (EIONET Central Data Repository 2016), being close to the assumed goals. These sites encompass five EU Biogeographical regions: Alpine, Continental, Pannonian, Black Sea, and Steppic.

Year of designation	Sites of Community Importance	Special Protection Areas
2007	273 (32,833 km²)	-
2009	273 (32,833 km²)	109 (28,384 km²)
2011	382 (39,375 km <sup>2</sup> )	149 (35,348 km²)

435 (41,966 km<sup>2</sup>)

171 (35,348 km<sup>2</sup>)<sup>2</sup>

**Table 1.** Progress in implementing Natura 2000 in Romania (cumulative number of sites and surface)<sup>1</sup>

2016

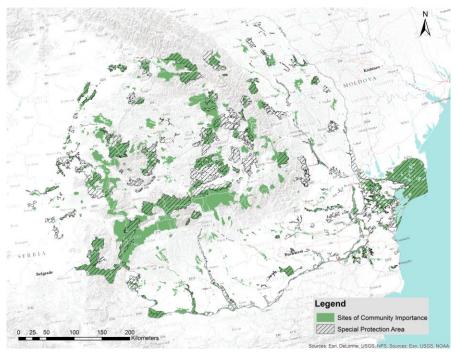


Figure 1. Natura 2000 network in Romania (data as per January 2016).

Romanian Natura 2000 network protects 88 natural and semi-natural habitats, 236 rare, threatened or endemic plants, mammals, reptiles, amphibians, fish, and invertebrates species (under Habitats Directive) and 108 birds species (under Birds Directives) (EIONET 2014). Under Article 11 of the Habitats Directive, Romania has to monitor the conservation status of the natural habitats and species and to report to the European Commission every six years according to Article 17 of the same Directive (Council Directive 92/43/EEC 1992). The reporting process for Birds Directive is foreseen in Article 12 (Directive 2009/147/EC 2009).

<sup>&</sup>lt;sup>1</sup> EIONET Central Data Repository (http://cdr.eionet.europa.eu/ro/eu/n2000)

<sup>&</sup>lt;sup>2</sup> Surface not yet updated

These mandatory reports benchmark the implementation of the two Directives, and propose improvement measures for the conservation activities.

In 2013, Romania conducted a first assessment of the conservation status of habitats and species (EIONET 2014). Although most of the habitats were assessed favorably in terms of surfaces included in Natura 2000, in Pannonian, Steppic and Alpine biogeographical regions, the structure, functions and future prospects needs to be expanded near term by implementing additional management activities. A lower number of habitats were assessed as having an overall inadequate and bad conservation status, particularly for the Black Sea, Marine Black Sea, Pannonian, Continental, and Alpine habitats (EIONET 2014).

As shown in Figure 2, the conservation status of most of the species was assessed as inadequate, including future prospects and overall conservation status. These evaluations are confirmed by independent studies, as, for example, reptiles and amphibians (Popescu et al., 2013).

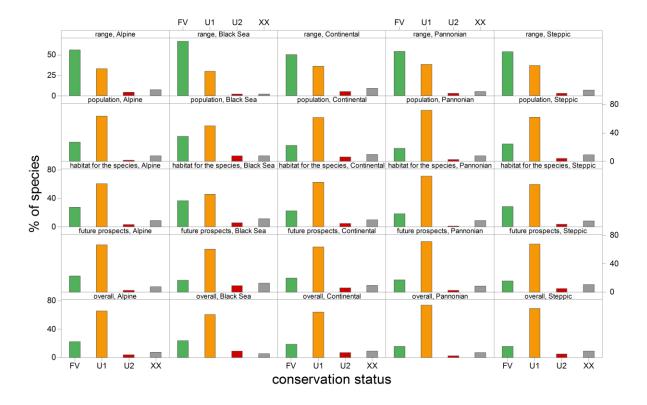


Figure 2. Conservation status of species protected under Habitats Directive (FV = favourable status, U1 = Unfavourable – Bad, U2 = Unfavourable – Inadequate, XX – Not evaluated)<sup>1</sup>

<sup>1</sup>EIONET Biogeographical assessments of conservation status of species and habitats under Article 17 of the Habitats Directive (2007-2012)

This demonstrates that even if Romania performed satisfactorily in terms of including species and habitats under Natura 2000 constraints, there is a significant delay in adopting specific programs and actions to improve the conservation status of the biodiversity (Milieu Ltd, 2016).

### 3. GOVERNANCE OF NATURA 2000 IN ROMANIA

The governance of Natura 2000 network in Romania includes activities such as: designation, management, and evaluation of Sites of Community Importance and Special Protection Areas (Stanciu and Ionita, 2014). These processes require multiple actors with various skills (Table

2); for example: The Ministry of Environment, National Environmental Protection Agency, local Environmental Protection Agencies, Romanian Academy, research and educational institutions, non-governmental organizations, and other stakeholders. National Environmental Protection Agency is the key institution, as it is designed as the competent authority, being authorized to provide technical support for drafting policies and ensuring that all other actors comply with the rules for good governance (Stanciu and Ionita, 2014). However, the interaction of governance actors is more complicated than the suggested top-down approach; non-governmental organizations, research and educational institutions having a pivotal role for implementing concrete conservation programs (Nita et al. 2016).

Table 2. Institutional responsibilities towards Natura 2000 in Romania

Ministry of Environment	National Environmental Protection Agency
<ul> <li>Organize and coordinate development of Romanian Protected Area Network</li> <li>Ensure the management of protected areas and control of the activities and interactions</li> <li>Coordinate, monitor and controls the activity of managers or custodians of protected areas</li> </ul>	<ul> <li>Monitor the management activity of protected areas</li> <li>Participate to evaluation committee for the awarding of custody and administration of protected areas</li> <li>Endorse regulations, conservation measures and management plans of protected areas</li> <li>Coordinate the administration of protected areas not taken in custody</li> <li>Nature Conservation and Biodiversity Department</li> </ul>
	<ul> <li>Enforce the legislation in the field of nature conservation, biodiversity and sustainable development</li> <li>Coordinate strategies and environmental policies implementation at regional and local level in the field of nature conservation, biodiversity and sustainable development</li> <li>Coordinate the administration of protected areas not taken in custody</li> </ul>

Commencing in 2016, the governance approach was changed again, by establishing a new authority, the National Agency of Protected Areas, aiming at coordination of protected areas management. This new system might provide an improved institutional framework in the future, however, this is uncertain, as the agency will have only a supervisory role, while the management plans will be implemented by other independent organizations, including NGOs (i.e., custodians of protected area) but without regular funding. From this perspective, taking into account the lack of administrative capacity, we can assume that the implementation of Natura 2000 network come to reassert the lack of experience regarding Natura 2000 protected areas governance in Romania.

To date, according to the Ministry of Environment database (Ministerul Mediului Apelor si Padurilor, 2016b), only 55% (239 sites: 188 SCIs and 51 SPAs,) from a total of 531 Natura 2000 sites established prior 2016 are under the custody of NGO's (110 sites), state owned companies (59), public authorities (44), private companies (18), universities and research organizations (8 sites) (Ministerul Mediului Apelor si Padurilor, 2016b). A high number of Natura 2000 sites are officially administrated by the local Environmental Protection Agencies, but without allocated resources. The lack of involvement of the Romanian state in the management field is due to shortage in financial and human resources and the lack of field experience. This is evident in accessing conservation funds, such as LIFE Nature, where

NGOs and universities performed more effectively than public authorities (Nita et al., 2016). The low number of sites under control might be due to the vague legislation language but also due to the lack of a well trained staff. This is comparable to other environmental issues, such as protection of landscape (Nita et al., 2015). All these issues lead to inadequate management of protected areas (Kati et al., 2015) and consequently to poor conservation programs that are reflected in regional developments and in terms of policy prospect, that require favorable support at the national level (Korres et al., 2013).

A fundamental document for implementing efficient conservation measures is the personalized management plan for each protected site (Thomas and Middleton, 2003). By law, in 2000, the Romanian government clarified the purposes and management of national protected areas (Appleton 2002). Aimed to ensure the conservation measures as well to protect natural resources, the management plans usually include an introductory part along with the context of the plan. After this introduction, the first chapter is dedicated to the description of the protected area, followed by a section with the management goals and objectives as well as the actions and manner in which they will be implemented. The preparation of management plans is unwieldy in Romania, due to a combination of factors; overlapping of protected areas (e.g., national parks, sites of community interests and special protected area covering the same area), organizational diversity of custodians, lack of political support, gaps in knowledge, and diverse bureaucracy for approving the plans. Thus, in four years (2012-2015) the Ministry of Environment approved only 10 management plans, while in the first 6 months of 2016 more than 210 obtained approval, covering ~500 Natura 2000 sites, including those without a custodian (Ministerul Mediului Apelor si Padurilor, 2016c).

In Romania, the governance system is hierarchical and highly centralized, although there are examples of management adaptation at the local level. The governance process may be characterized by a mix, a transition from governance by government to shared governance where the participation of local communities is included where the management administration and design need to be customised taking into account the existent social, economic, political and ecological context (Bennett 2014).

## 4. CONCLUSIONS

After 1990, Romanian authorities started to enhance the conservation status of species and habitats of national interest by increasing the protected surface areas. However, these efforts were not followed by any appropriate administration or financing support (Ioja et al., 2010). After joining the European Union, in Romania, the conservation policies were directed towards creating a Natura 2000 network, but at a faster pace than older European Union members (Evans, 2012), which led to uncertainty in what type of governance systems fits the Romanian legislation and institutional framework. The Ministry of Environment faced new challenges in managing them due to the larger expansion of protected areas in size and number. This was also an opportunity for the scientific community, as well for the NGOs, to significantly contribute to the new governance system, which is today, characterized by an increased public participation in decision making.

However, considerable improvements in managing Romanian protected areas should be made by incorporating a coherent, unitary, and collaborative approach among Government Departments and Agencies, public authorities, landowners, non-governmental organizations, researchers and other interested stakeholders. This may be performed by creating a predictive financing system for management activities, as well as a more flexible legal framework that envisages updating management plans (Hochkirch et al., 2013). The responsible authorities should consider improving the transparency of the governing process in order to increase the

connection among the institutions involved in the management process of protected areas and to maintain a constructive dialog with all involved stakeholders. Furthermore, the political instability and repetead changes of the Ministry of Environment jurisdictions have a negative impact on the governance of protected areas and thus, influence the implementation of the Birds and Habitats Directives. Although the governance mechanism of Natura 2000 protected areas in Romania completes 10 years of implementation and significant progress has been made, improvements still needs to be done in order to implement policy and governance actions in the light of environmental conservation.

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