

THE ROLE AND THE IMPORTANCE OF THE NATURA 2000 NETWORK FOR THE BIODIVERSITY CONSERVATION IN OLTENIA SW DEVELOPMENT REGION

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Abstract. The ecological network Natura 2000 is the main instrument through which the EU is trying to implement biodiversity conservation policy. The Natura 2000 network is designated on the basis of the two directives on nature protection, 2009/147/EEC Directive on conservation of wild birds and Directive 92/43/EEC on the conservation of natural habitats and of wild fauna and flora. These two directives set up throughout the EU, a network of special protection areas (SPA - designated according to the Birds Directive), sites of community importance and special areas of conservation (the latter two categories, SCI and SAC are designated under the Habitats Directive). Romania, as a member of the EU had the obligation to designate the network. The sites were designated in 2007, but the process is far from being finalized, the conclusions of the biogeographical seminars and the recent infringement procedure started by the EC indicating that Romania still has to solve some problems related to the insufficient designation of the sites for some of the habitats and species of community interest. An important percentage of the total Natura 2000 sites (over 14%) is located in the Oltenia SW Development Region, contributing to the protection of the biodiversity in the region.

Keywords: Natura 2000, SCI, SPA, biodiversity.

Rezumat. Rolul și importanța rețelei Natura 2000 în conservarea biodiversității din spațiul Regiunii de Dezvoltare SV Oltenia. Rețeaua ecologică Natura 2000 reprezintă instrumentul principal prin care Uniunea Europeană încearcă să implementeze politica din domeniul conservării biodiversității. Natura 2000 s-a constituit pe baza celor două directive din domeniul protecției naturii, Directiva 2009/147/EEC privind conservarea păsărilor sălbatice și Directiva 92/43/EEC privind conservarea habitatelor naturale și a speciilor de faună și floră sălbatică. Cele două directive stabilesc constituirea, pe întreg teritoriul UE, a unei rețele formate din arii de protecție specială avifaunistică (SPA - desemnate conform prevederilor Directivei Păsări), situri de importanță comunitară și arii speciale de conservare (ultimele două categorii, SCI și SAC sunt desemnate conform Directivei Habitate). În România, rețeaua Natura 2000 a fost desemnată în anul 2007, însă procesul nu a fost finalizat, concluziile seminariilor biogeografice precum și deschiderea procedurii de infringement împotriva României indicând anumite insuficiențe legate de acoperirea în situri a unor specii sau habitate. Din întreaga suprafață acoperită de rețeaua Natura 2000 în țara noastră, peste 14% se găsesc în Regiunea de Dezvoltare SV Oltenia, având un rol important în conservarea biodiversității din regiune.

Cuvinte cheie: Natura 2000, SCI, SPA, biodiversitate.

INTRODUCTION

The SW Development Region is composed by 5 counties and covers 29,192 square kilometers. The region is characterized by a high diversity of the relief, but also by a variety of the pedoclimatic conditions, which have induced the existence of a very important natural capital. The protection of this capital is essential in order to insure the providing of ecosystems services for the present and future generations. As from the whole surface covered by Natura 2000 sites in Romania, an important percentage (over 14%) are located in the SW Region, in this paper, the author tries to emphasize a few aspects of the importance of the Natura 2000 network for the protection of the natural capital of the SW Region. Although big Natura 2000 sites were designated in Oltenia Region, some of them covering over 80,000 hectares, the simple designation of the sites will not be sufficient for the protection of the habitats and the species without the involvement of the stakeholders and the allocation of the proper funds (MAIORANO et al., 2007).

Short history of nature protection in SW Region

Some measures for the protection of the natural capital of the SW Region started to be applied two centuries ago. Thus, after the union of Walachia and Moldavia, the so called "braniști" represent a proof of the interest of the authorities to protect some forests. C. C. Giurescu stated that "the braniști were forbidden forests where nobody was allowed to cut the forests, to mow, to graze the cattle, to hunt, to fish or to collect the fruits of the forest without the permission of the master". (SMARANDA, 2008).

In 1928, the first congress of the naturalists took place in Cluj Napoca and, after the congress, in 1930 the first law for the protection of the nature monuments in Romania was published. One year later, the first nature monuments were designated, but also the first reserves, including Domogled.

The first National Park, Retezat, was designated in 1935. In 1937, some species, including *Paeonia peregrina*, were included in the list of the nature monuments. *P. peregrina* is specific to the nature reserve Poiana Bujorului from Plenița Forest, situated in Dolj County.

In 1958, Peștera Muierii became the first electrified cave in Romania. Ten years later, the subcommission for the nature monuments was set up in Craiova, having the role to coordinate the nature protection activities in Oltenia's counties: Dolj, Olt, Gorj, Vâlcea, and Mehedinți. 2000 is a very important year in the Romanian nature protection

history because of the publication of Law no. 5 regarding the planning of the national territory. In section III – protected areas - 125 protected areas are mentioned in the SW Region.

In the following years, more protected areas were designated in Oltenia, including Buila Vânturarița National Park and the Geopark Platoul Mehedinți (2004), but also Defileul Jiului National Park designated in 2005.

Categories of protected areas in SW Region

In Romania, the categorization of protected areas is made by government decision and it takes into consideration the recommendations and rules of the international institutions in the field. The current classification of protected areas in Romania seeks IUCN classification (World Conservation Union) and it is established by GEO no. 57/2007 on the regime of natural protected areas, natural habitats, wild flora and fauna.

Under this classification, in the SW Region, one can identify the following categories of protected areas:

- a) Protected areas of national interest: national parks, nature parks, nature reserves, strict reserves etc.
- b) Protected areas of community interest: special protection areas, sites of community importance, special areas of conservation. This category of protected areas is included in the general designation of Natura 2000 sites.
- c) Protected areas of international interest: biosphere reserves. In Romania, there are only 3 biosphere reserves, respectively the Danube Delta, Retezat and Pietrosul Rodnei. In the region of Oltenia, this category is represented by a very small area of Retezat territory;
- d) Protected areas of local interest: local significance and are designated through the decisions of local or county councils (DONIȚĂ et al., 2005).

A more detailed classification can be found in Table 1.

Table 1. Categories of protected areas in the SW Development Region.
Tabel 1. Categoriile de arii protejate în Regiunea de Dezvoltare SV.

Category at the national level	IUCN	Other conventions, directives, conservation programmes etc	Examples
Strict reserves	I		Piatra Cloșanilor
National parks	II		Buila Vânturarița National Park, Domogled – Valea Cernei National Park
Nature parks	V		Iron Gates Natural Park
Nature reserves	IV		Poiana Bujorului of Plenița, Ciuperceni - Desa
Nature monuments	III		Lazului Cave
Biosphere Reserves		MAB-UNESCO Programme	Retezat
Special protection areas		Birds Directive	Bistret, The Jiu - The Danube confluence, Calafat – Ciuperceni - Danube
Sites of community importance		Habitats Directive	The Jiu Corridor, Nordul Gorjului de Vest, Nordul Gorjului de Est
Special areas of conservation		Habitats Directive	They will be designated in 6 years after the accession in the EU
Geoparks		UNESCO	Platoul Mehedinți Geopark

The distribution and the importance of the Natura 2000 sites in the SW Development Region

As we specified in the introduction of this paper, Oltenia region has a very important natural capital, which must be protected by many measures and actions. The variety of the geographical conditions favoured the existence of a diversity of species and habitats distributed in 2 biogeographical regions: alpine and continental.

Before the designation of the Natura 2000 network, the protected areas in Oltenia covered over 8% of the region's surface. The biggest part of the protect surface was included in the 5 national parks, 1 nature park, and a geopark (Fig. 1).

The distribution of the protected areas before the designation of the Natura 2000 sites was not equal; most of them were concentrated in the North and North-West of the region. The other categories of protected areas (nature reserves, nature monuments etc.) covered less than 1% of the region surface.

Because of their big surface and the existing data, the national and the nature parks were the basement for the designation of Natura 2000 sites. Available data about the habitats and the species in the parks were used to elaborate the Standard Data Forms for the Natura 2000 sites. Thus, 28 sites of community importance and 14 special protection areas were established in the SW Region. The whole Natura 2000 network covers 21% of the Oltenia's surface (Fig. 2), a percentage that is bigger than the national average – 17.8%.

With this percentage, the SW Region is on the third place among the other development regions: 31% in the Central Region, 27% in the SE Region, 17% in the W Region, 16% in the NW Region, 9% in the S Region, 5.5% in the NE Region and, finally, about 5% in Bucharest Region.

The designation of the Natura 2000 network in the SW Region increased the total surface covered by protected areas from 8%, at it was in 2006, to 23% at it is today (Fig. 3). The analysis of the distribution of the sites at the county level shows that in 4 of the 5 counties of the region, the Natura 2000 network had an important role in increasing the surface covered by protected areas. The most important increase was in Gorj County, where the protected surface increased with more than 29% (Fig. 4).

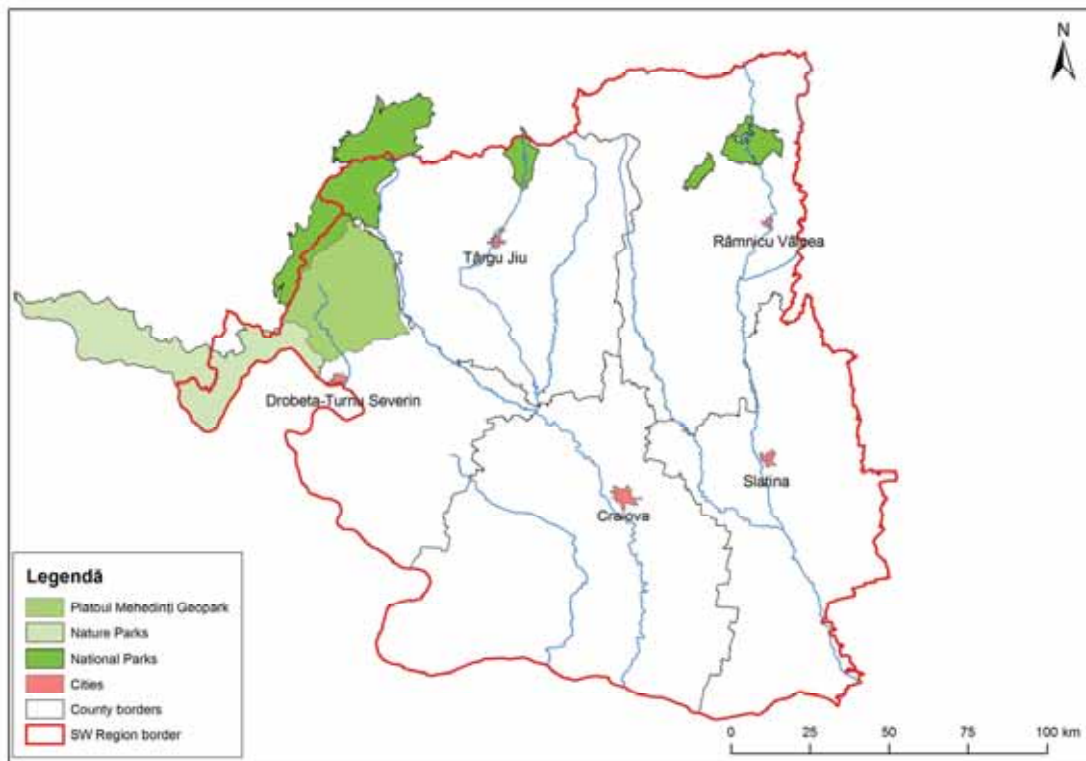


Figure 1. National and nature parks in the SW Region.

Figura 1. Parcurile naționale și parcurile naturale din Regiunea de SV. (original).

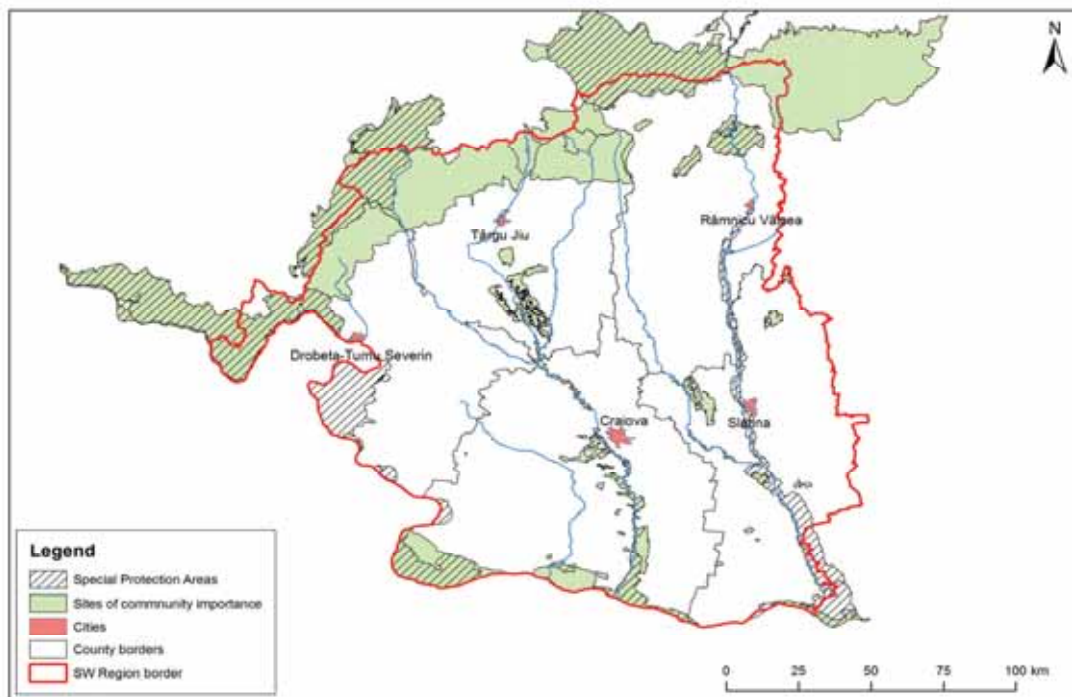


Figure 2. Natura 2000 network in the SW Region.

Figura 2. Rețeaua Natura 2000 în Regiunea de SV. (original).

But the importance of the Natura 2000 network in the SW Region does not consist only in the increase of the protected surface. The main aspects related to the role that the SPA's and the SCI's play for the nature protection in the SW Region are:

- the designation of the Natura 2000 sites in Oltenia increased the number of the protected species and habitats. Thus, in the SCI's there are protected 60 habitats, 18 fish species, 42 species of invertebrates, 18 mammals, 7 species of

amphibians and reptiles, and 25 plant species (Ministry of Environment and Forests – Natura 2000 database). The habitats belong to different classes, from salt and gypsum inland steppes, freshwater habitats, temperate heath and scrubs, natural and semi-natural grassland formations to forest, rocky habitats, and caves. In the SPA's designated in the SW region, 82 bird species are protected. It would be interesting to find out if the population of these species and the habitats are sufficiently protected in the designated sites or if it is necessary to design other or higher areas (STĂNCIOIU et al., 2008);

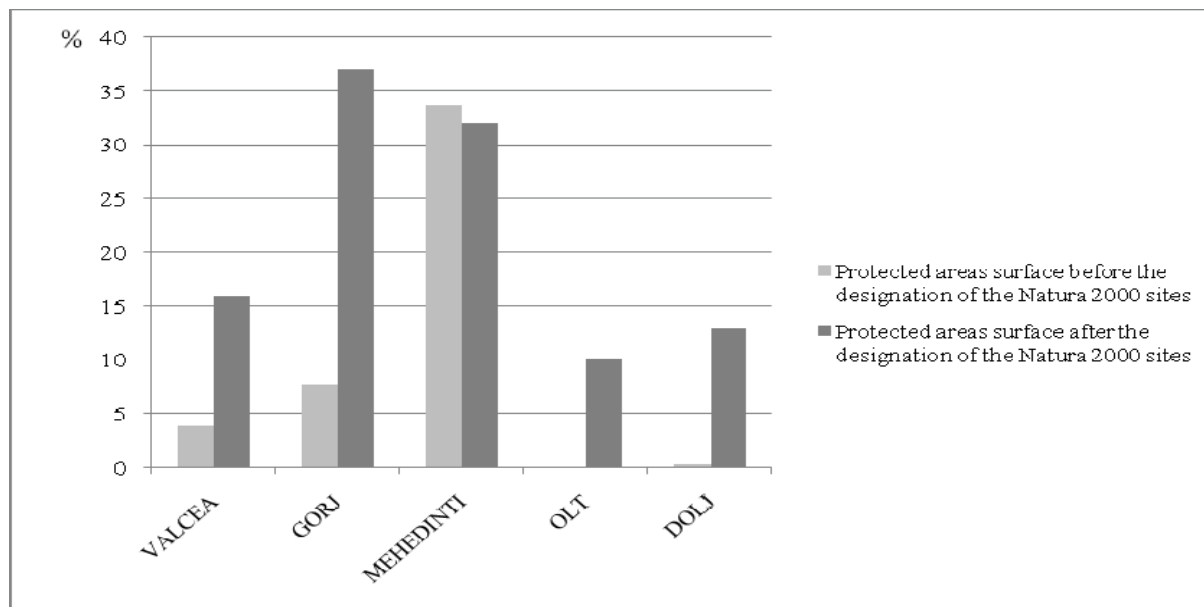


Figure 3. Protected areas surface before and after the designation of Natura 2000 network by counties.
Figura 3. Suprafața acoperită de arii protejate la nivel de județ, înainte și după desemnarea rețelei Natura 2000.

- before the Natura 2000 network designation, most of the protected areas were distributed in the N and NW of the region. Now, the map of the distribution of protected area shows that many sites were designated along the Danube river (south of the region), but also along the major rivers – the Jiu, the Olt – and in the NE of the Region. Also, if before the Natura 2000 network designation, most of the sites were in the mountain areas, now the situation is more equilibrate, many Natura 2000 sites being designated in the plain and hilly areas;

- the last remnant forests in the plain area were included and they are now protected in the Natura 2000 sites. The main protected forest habitats in these sites are Luzulo-Fagetum beech forests (Natura 2000 code – 9110), Asperulo – Fagetum beech forests (9130), Eastern white oak woods (a priority habitat), Euro-Siberian steppic woods with *Quercus* spp. (also, a priority habitat) etc. Some of the last remnant forest were included, for example, in the SCI Coridorul Jiului. The following forests – Sarului, Studinița, Topana, Vlădila had not any protection status before the designation of Natura 2000 network, but they are designated now as SCI's for forest habitats;

- the designation of the big sites in the north of the region (Nordul Gorjului de Est, Nordul Gorjului de Vest, Frumoasa etc.) created a long corridor of protected areas from the Danube river to the Olt valley. This corridor is just a part of another one, which extends from the Danube River to the Prahova valley. The corridor is very important for the cohesion of the habitats and for the movement of the animals.

Although the Natura 2000 network covers an important surface in Oltenia, this is not enough to maintain a favorable conservation status for the habitats and species included in these sites. The management of the sites will not reach its targets without the implication of the stakeholders and without the allocation of the proper funds. For the moment, in Romania, the nature protection field has no budget allocated from the Government. The management of the protected areas network, including Natura 2000 sites, is made by other institutions, NGO's or even individuals. This situation is also specific to the SW Region: 2 SCI's, Frumoasa and Nordul Gorjului de Vest, have an administration structure and 15 other sites (SCI's and SPA's) have a caretaker (a person, a NGO or another institution who take care about the management of the sites). Without the implication of these factors, the Natura 2000 sites in Oltenia Region will not accomplish their role of protection.

ACKNOWLEDGEMENT

This paper was elaborated within the framework of the project POSDRU/6/1.5/S/24 “Suport financiar pentru studii doctorale privind complexitatea din natură, mediu și societatea umană”.

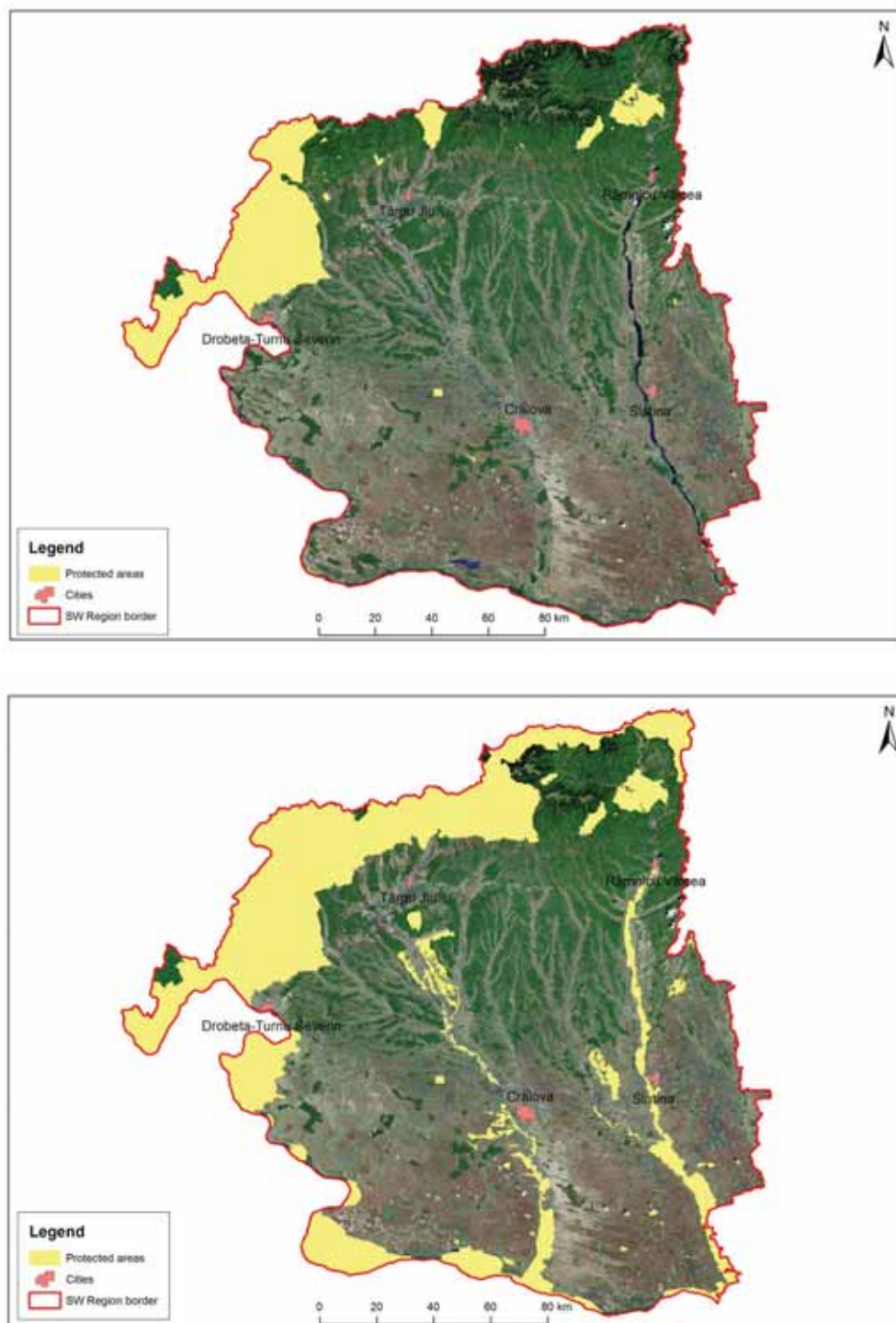


Figure 4. Protected areas surface in the SW Region, before (top) and after (bottom) the designation of the Natura 2000 network.
Figura 4. Suprafața acoperită de arii protejate în Regiunea de SV, înainte (sus) și după (jos) desemnarea rețelei Natura 2000.
(original).

REFERENCES

- DONIȚĂ N., POPESCU A., PAUCĂ-COMĂNESCU MIHAELA, MIHĂILESCU SIMONA, BIRIȘ I. A. 2005. *Habitatele din România*. Edit. Tehnică Silvică. București. 496 pp.
- MAIORANO L., FALCUCCI ALESSANDRA, GARTON E. O., BOITANI L. 2007. *Contribution of the Natura 2000 network to biodiversity conservation in Italy*. *Conservation Biology*. **21**(6): 1433-1444.
- SMARANDA J. 2008. *Managementul turismului în ariile naturale protejate*. Edit. Risoprint. Cluj-Napoca. 410 pp.

- STĂNCIOIU P. T., LAZĂR G., TUDORAN G. M., BOZGA ȘT. B., PREDOIU G., ȘOFLETEA N. 2008. *Habitatele forestiere de interes comunitar incluse în proiectul LIFE05NAT/RO/000176: habitate prioritare alpine, subalpine și forestiere din România: măsuri de gospodărire*. Edit. Universității Transilvania. Brașov. 184 pp.
- ***. Directiva Păsări 2009/147/EEC privind conservarea păsărilor sălbatice.
www.sgg.ro/nlegislativ/docs/2010/08/nv6zpf37mj8rdc2yhws1.pdf (accesed: April 6, 2010)
- ***. Directiva Habitatare 92/43/EEC privind conservarea habitatelor naturale și a speciilor de faună și floră sălbatică.
www.apmgr.ro/.../legi/legislatie%20bio.htm (accesed: April 6, 2010)
- ***. *Hotărârea Guvernului nr. 1284/2007 privind declararea ariilor de protecție specială avifaunistică ca parte integrantă a rețelei Natura 2000 în România*. Publicat în Monitorul Oficial al României nr. 793/31.X.2007. Partea I.
- ***. *Legea nr. 5/2000 privind aprobarea Planului de amenajare a teritoriului național – Secțiunea a III-a – zone protejate*. Publicat în Monitorul Oficial al României nr. 152/12.IV.2000. Partea I.
- ***. *Ordonanța de Urgență a Guvernului, nr. 57/2007 privind regimul ariilor naturale protejate, conservarea habitatelor naturale, a florei și faunei sălbatice*. Publicat în Monitorul Oficial al României nr. 442/29.VI.2007. Partea I.
- ***. *Ordinul ministrului mediului și dezvoltării durabile nr.1964/2007 privind instituirea regimului de arie naturală protejată a siturilor de importanță comunitară, ca parte integrantă a rețelei ecologice europene Natura 2000 în România*. Publicat în Monitorul Oficial al României nr. 98/7.II.2007. Partea I.
- ***. National Environmental Agency – Protected Areas Database.

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Received: May 3, 2010
Accepted: August 28, 2010