REGULATIONS REGARDING THE MANAGEMENT OF FORESTS INCLUDED IN NATURAL PROTECTED AREAS

Gheorghe M. TUDORAN\textsuperscript{1}

\textbf{Abstract:} In territories occupied by the natural protected areas, there can be constituted, considering the protection measures intensity order, the following internal zones: A. Strict protection zone, presenting an integral protection regime; B. Integral protection zones, where any activities regarding the exploitation or utilization of natural resources are forbidden, as well as any land utilization forms except those provided by law and management plans; C. Buffer zones (which are named sustainable conservation zones in national parks and sustainable management zones in natural parks) for which sustainable management measures are provided; D. Sustainable development zones.

\textbf{Key words:} forest management, natural protected areas, internal zoning.

1. Introduction

Natural protected areas are represented by terrestrial, aquatic and/or underground zones constituted in order to protect and maintain biological diversity of the natural resources, presenting special ecological, scientific and cultural values \cite{1}.

Romania owns an extremely diverse natural patrimony if the relief, flora and fauna are to be considered. Its special value demanded the construction of natural protected areas to cover all the ecosystems diversity at national level. The natural protected areas network has been periodically updated; the updating process is the consequence of the identification of new natural patrimony values as well as the identification of modifications performed in the protection management of the mentioned values.

2. Materials and research methodology

For management purposes of forests included in natural protected areas the knowledge regarding the regulations of laws which enforce the management regime is required. Thus, there have been studied the respective normative acts, especially the regulations provided by O.U.G. no. 57/2007 regarding the natural protected areas, natural habitats conservation and regime of wild flora and fauna with further modifications and completions, approved through Law 49/2011, which regulates the natural regime of protected areas, including their internal zoning.

\textsuperscript{1} Department of Forest Engineering, Forest Management and Terrestrial Measurements, \textit{Transilvania} University of Braşov.
3. Management of natural protected areas

3.1. Legislative framework regarding the management of natural protected areas

Presently, the legislative frame which regulates the management of natural protected areas consists of several normative acts such as:
- Law no. 5 /2000 regarding the approval of National Territory Organization Plan – 3rd Section – protected areas;
- G.D no. 2151/2004 and H.GD. no. 1581/2005 regarding the institution of the regime of natural protected area for new zones;
- O.U.G. no. 57/2007 regarding the regime of natural protected areas, natural habitats conservation, wild flora and fauna, with further modifications and completions, approved through Law 49/2011 etc.

The management of the natural protected areas is presented, at its extents, in Annex 1 of O.U.G. no. 57/2007 [6]. According to O.U.G. no.57/2007 specifications, the main natural protected areas categories are: a) scientific reservations; b) natural parks; c) natural monuments; d) natural reservations; e) natural parks; f) biosphere reservations; g) wetlands of international importance; h) natural sites of the natural universal patrimony; i) special conservation areas; j) special protection of avifauna areas; k) sites of European importance l) geoparks.

At European level, the legal frame is represented by European Commission sites directives:
- O.U.G. No. 57/2007 transposing European directives into practice. It establishes the categories of protected areas from the national network, a management similar system categories I - V IUCN. O.U.G. does not clarify guidelines on the management system of special areas of conservation and the bird protection areas and generally their management. The lack of these clear provisions generated some difficulties since their establishment and delimitation in the field and also led to a choice of a more stringent management of some sites. This is why it has made it difficult to maintain the conservation status of habitats of species for which the site has been appointed.

3.2. Administration of natural protected areas

The administration of natural protected areas is performed by special constituted administration structures having juridical personality.

The responsibilities regarding the administration modalities of natural protected areas and other natural patrimony assets which are the subject of special protection and conservation regime belong by case, to:
- Ministry of Environment and Forests in case of natural protected areas declared by Law, by Government Decision or Central Public Authority for Environmental Ordinances;
- Administration of „Danube Delta “ Biosphere Reservation in case of mentioned reservation;
- Public Local Administration Authorities in case of natural protected areas declared by their ordinances.

The administration modalities are established by considering:
- Natural protected area category;
– Natural protected area extensions and complexity of management objectives;
– Scientific and technical capacity as well as financial requirements and possibilities for attainment of conservation objectives.

Administration is carried out by [5]:

a) Special constituted administration structures, under Ministry of Environment and Forests;

b) Special constituted administration structures, under autonomic bodies, companies and national or commercial companies, public local administration authorities, private and public research and education institutions, museums, nongovernmental organizations constituted according to law and situated under the methodological coordination of the Central Authority for Environment and Forest Protection;

c) Administration structures constituted on the basis of public or public-private co-management partnerships, in which the central public authority (through specialty directions or subordinated institutions) is a partner in the administration of functioning structures;

d) Institutions under central public authority for environment and forests protection, especially delegated for this purpose (scientific reservations, natural reservations, nature monuments, and geoparks, sites of European importance, special conservation areas, avifauna special protection areas as well as the other assets from the natural patrimony which present special protection regime and were not taken into custody;

e) Physical and juridical persons having custodian qualities;

f) Administration of the "Danube Delta" biosphere reservation.

Special constituted administration structures, having juridical personality, are obligatorily assigned to each biosphere reservation, national and natural park, and, by case, for one or more universal natural patrimony sites, special conservation areas, special avifauna protection areas, European importance sites and international importance wetlands.

The special constituted administration structures are represented by own administrations with qualified employed personnel who perform the administration according to management plans and organization and functioning regulations, under the guidance of a scientific board; along with the above mentioned, there are functioning administration consultative boards.

The administration of natural protected areas network is enforced by de GEO no. 57/2007 3rd Section, Art. 16 – 21.

4. Low Enforcement of forests included in natural protected areas through management

4.1. Natural protected areas and management units

Article 24, paragraph (1) of O.U.G. no. 57/2007 with further modifications and completions, approved through Law 49/2011, states: „Forest management plans of management units/properties which are a component part of natural protected areas will be obligatorily revised in a 12 months term from the management plan approval. Until the forest management plan review, there will not be applied any measures by the forest fund administrator except those complying with specific legislation of natural protected areas and effective management plans”.

The management unit constitutes the base unit for which there are elaborated/revised forest management plans [3-5], as stated by the Forest Code (Art. 20 paragraph (1)). By considering the above mentioned, no matter the extension of a certain natural
protected area as well as the included owners, the forest management must be elaborated at management units level, according to the above mentioned regulations [2].

4.2. Forest management, the main instrument for the management of forests included in natural protected areas

According to article 22, paragraph (1) from O.U.G. no. 57/2007, with further modifications and completions, approved through Law 49/2011, the internal zoning of natural protected areas is performed through a management plan. According to the regulations presented in the mentioned article, the management plan is elaborated by natural protected areas administrators and is approved by the Ministry of Environment and Forests. The law states that territorial organization plans, national and local development plans, “as well as all other exploitation/utilization plans of resources belonging to natural protected areas will be harmonised by the issuing authorities with the management plan regulations”.

There can be observed from above that, in order to provide a normal development of the forest management activities in case of forests included in natural protected areas, a management plan for these areas is necessary.

There has to be considered the fact that, according to the Ordinance, „forest management plans of management units/properties contained by a natural protected area will be obligatorily revised in a 12 months term from the management plans’ approval. Until the review of the forest management, there will not be applied any measures by the forest fund administrator except those complying with specific legislation of natural protected areas and effective management plans”.

Management planning has regulations to ensure proper management of protected areas categories. Until the advent O.U.G. No. 57/2007 and legislation of other protected areas the management was the specific instrument which provided an appropriate management system to their needs. Currently, for most protected areas the management plan remains the only sustainable plan by developing specific management plans.

In adopting appropriate objectives for the management regime for which the protected areas were established it is necessary within the forest management guidelines, the review of existing functional criteria, which is related to protected areas, and also formulating new criteria.

To fully meet the requirements of the protected areas management it is necessary, in each protected area planning, for the personnel involved in developing the management plan to acknowledge the protected area management plan in question. If this plan has not been yet developed there should be provided information regarding: the limits of the protected area concerned (the map of protected area), the objectives for which the protected area was established, the distribution of specific habitats or species populations and internal zoning of the protected area. During collection of field data the staff should receive assistance both scientifically and administratively.

5. Internal zoning of the forests included in natural protected areas

Internal zoning stated by law refers, especially, to the complex natural protected areas categories: national parks, natural parks, biosphere reservations, geoparks [6]. From careful analysis of art. 22 of O.U.G. 57/2007 it results that - as far as woods are concerned - in the national
and natural parks there may be established, as appropriate, in order of the intensity protection measures for conservation and sustainable management [6], the following internal areas (Table 5.1 and Figure 1). Such delimitation is likely to ensure proper management conditions of strictly protected and fully protected zones, according to the scientific objectives for which they were established. On the contrary, the delineation of areas near the sustainable area development without buffer zones disrupts their protection regime.

**Internal zoning of the natural protected areas**  
Table 1

<table>
<thead>
<tr>
<th>Zones denomination</th>
<th>Regulation content</th>
</tr>
</thead>
</table>
| A. Strict protection zones             | There is forbidden:  
– Development of any human activity, except the research and ecological-ecotourism educational activities. |
| B. Integral protection zones           | There are forbidden:  
– Any exploitation or utilization form of the natural resources, as well as terrains usage which is not compatible with the protection and/or conservation purpose;  
– Construction and investment activities, except those assigned to natural protected area administration and/or scientific research or national security. |
|                                        | There are permitted the following activities:  
– Permitted activities from strict protection zones;  
– Localization and operative extinguishment of fires;  
– Removal of some effects of calamities, under approval of scientific board as well as with approval of central public authority of environment and forests protection;  
– Monitoring and mass production prevention regarding harmful biotic factors, under the approval of the scientific board;  
– Ecological reconstruction interventions of the natural ecosystems and rehabilitation of some non-conforming or degraded ecosystems, under approval of natural protected area administration, scientific board, and central public authority. |
| C. Buffer zones:                       | There are permitted the following activities:  
– any of those permitted in A and B zones;  
– traditional activities regarding the utilization of renewable resources (other than wood), by considering the limit of productive capacity and support of the respective ecosystems;  
– activities regarding the care and management of the young stands, conservation and hygiene activities;  
– the application of high-intensity treatments that promote natural regeneration of stands.  
These zones are ensuring the transition between integral protection zones and sustainable development zones.  
In special conservation zones from national parks, the first row of whole parcels bordering the strict and integral protection zones is delimited as protection strips. |
| D. Sustainable development zones       | There are permitted the following activities:  
– any of those permitted in A, B and C zones;  
– hunting, sports and industrial fishing, fishery;  
– traditional activities regarding agriculture, farming, zoo culture, non-renewable mineral exploitations and other traditional activities carried out by local communities;  
– activities regarding the care and management of the young stands, conservation and hygiene activities;  
– the application of high-intensity treatments that promote natural regeneration of stands. |
6. Conclusions

The general framework for the management of forests included in protected areas, according to current specific legislation is designed with standards / technical instructions for forest management. Currently these rules contain comprehensive functional criteria which - through appropriate adjustments – ensure for the forests included in protected areas, the design of an appropriate management regime according to their requirements. After the advent of latest additions to the legislation of protected areas, those rules were reviewed for the purposes of applying the respective legislation, so that the draft new rules contain specific provisions for forest planning and management of forests included in protected areas. The conclusion arises that these rules provide the necessary conditions to implement the management regime of forests included in protected areas, namely of the provisions of the management plans.

References