

COST Action E27

Protected Forest Areas in Europe - Analysis and Harmonisation (PROFOR) Results, Conclusions and Recommendations

Classification Systems used for the Reporting on Protected Forest Areas (PFAs)

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1. The IUCN Protected Area Management Categories

1.1. Origin and objectives of the classification system

Since the 1970s through its Commission on National
Parks and Protected areas, IUCN has provided inter-

national guidance on the categorisation of protected
areas. The primary scope of these guidelines is
(IUCN, 1994):

- to alert governments to the importance of
protected areas
- to encourage governments to develop systems of
protected areas with management aims tailored to
national and local circumstances



Caption: Atlantic oak forest in Union Wood, Co. Sligo, Ireland (Photo courtesy of: Kris Vandekerkhove)

- to reduce the confusion which has arisen from the adoption of many different terms to describe different kinds of protected areas
- to provide international standards to help global and regional accounting and comparisons between countries
- to provide a framework for the collection, handling and dissemination of data about protected areas
- to improve communication and understanding between all those engaged in conservation

The current set of Protected Area Management Categories of IUCN were developed in the 1980s and further improved in the 1990s, and eventually published in 1994. Since then, they have been widely applied and referenced. As previously stated, the IUCN typology is mainly designed to facilitate the evaluation and categorisation of protection regimes of individual protected areas, thereby creating a common understanding of protection regimes. It is considered as a form of 'official recognition' or 'certificate' for protected sites at an individual level. They are also designed to be used as a classification tool for international reporting (providing a common basis of understanding).

The IUCN classification system was developed for Protected Areas in general, and not for specific ecosystems or biotypes such as Protected Forest Areas (PFAs).

1.2. Overview of the IUCN Protected Area Management Categories

The IUCN system encompasses one overall definition and six categories. The following definition is taken from (IUCN, 1994): (EUROPARC & IUCN,

IUCN definition of a protected area:

an area of land and/or sea especially dedicated to the protection and maintenance of biological diversity, and of natural and associated cultural resources, and managed through legal or other effective means.

No site can be considered to be a protected area unless it meets this general definition

Within this definition, IUCN further classifies protected areas into six management categories, ranging from strictly protected nature reserves to areas that combine biodiversity protection with a range of other functions, such as resource management and the protection of traditional human cultures. The six categories are:

Category Ia: Strict nature reserve/wilderness protection area: managed mainly for science or wilderness protection - an area of land and/or sea possessing some outstanding or representative ecosystems, geological or physiological features and/or species, available primarily for scientific research and/or environmental monitoring

Category Ib: Wilderness area: protected area managed mainly for wilderness protection - large area of unmodified or slightly modified land and/or sea, retaining its natural characteristics and influence, without permanent or significant habitation, which is protected and managed to preserve its natural condition

Category II: National park: protected area managed mainly for ecosystem protection and recreation - natural area of land and/or sea designated to (a) protect the ecological integrity of one or more ecosystems for present and future generations, (b) exclude exploitation or occupation inimical to the purposes of designation of the area and (c) provide a foundation for spiritual, scientific, educational, recreational and visitor opportunities, all of which must be environmentally and culturally compatible

Category III: Natural monument: protected area managed mainly for conservation of specific natural features - area containing specific natural or natural/cultural feature(s) of outstanding or unique value because of their inherent rarity, representativeness or aesthetic qualities or cultural significance

Category IV: Habitat/Species management area: protected area managed mainly for conservation through management intervention - area of land and/or sea subject to active intervention for management purposes so as to ensure the maintenance of habitats to meet the requirements of specific species

Category V: Protected landscape/seascape: protected area managed mainly for landscape/seascape conservation or recreation - area of land, with coast or sea as appropriate, where the interaction of people and nature over time has produced an area of distinct character with significant aesthetic, ecological and/or cultural value, and often with high biological diversity. Safeguarding the integrity of this traditional interaction is vital to the protection, maintenance and evolution of such an area

Category VI: Managed resource protected area: protected area managed mainly for the sustainable use of natural resources - area containing predominantly unmodified natural systems, managed to ensure long-term protection and maintenance of biological diversity, while also providing a sustainable flow of natural products and services to meet community needs

IUCN stresses that the number assigned to a category does not reflect its importance: all categories are needed for conservation and sustainable development. They do imply a gradation of human intervention.

2000) provided additional guidelines for interpretation and application of this system in Europe. A summary of the most important aspects is outlined and discussed in chapter 3.4.

Finally, further guidance on the use of IUCN Protected Area Categories for the assessment of Protected Forest Areas is also given in (Dudley & Phillips, 2006).

1.3. Use of IUCN-categories for the reporting on PFA in Europe

The European concept of forest protection is much more complex and varied than in other Continents that contain huge areas of untouched forests. Within Europe there are large differences in historic use, area, socio-economic importance and public pressures on forests. This is also reflected in the various approaches to protection and conservation of forests and forest biodiversity.

In remote, sparsely populated areas (like the Carpathian Mountains, Nordic countries), vast forest areas, not significantly altered by human intervention, are still present. Conservation here is primarily focused on rather large, non-intervention areas. In densely populated areas of Europe, forest area was

much reduced resulting in fragmented forest areas, greatly altered by human interference. In addition, the ownership of the forest is very fragmented. Conservation is mainly focused on small areas with high conservation value. Consequently, restrictions and protection regimes are linked to the management history and ownership of the area and are different to the large, non-intervention areas.

The IUCN classification system is more appropriate for protection regimes in vast, untouched, continuous forest areas. Some of these IUCN-categories are therefore of limited use in Europe. Moreover, this system is subject to wide interpretation, and can cause confusion; the differences between the various categories, and the criteria for their application is not always very clear. This may not cause a problem for the assignment of individual sites, as a process of assessment, negotiation and subsequently assignment by IUCN can be provided on a site by site basis.

However, problems do occur when the IUCN categories are used for other purposes, such as the reporting and production of country statistics, as occurred in the TBFRA 2000-reporting process.

As a follow-up to Sustainable Forest Management (SFM) initiatives (i.e. Ministerial Conferences, Rio-declaration, etc.) FRA decided to include 'criteria and

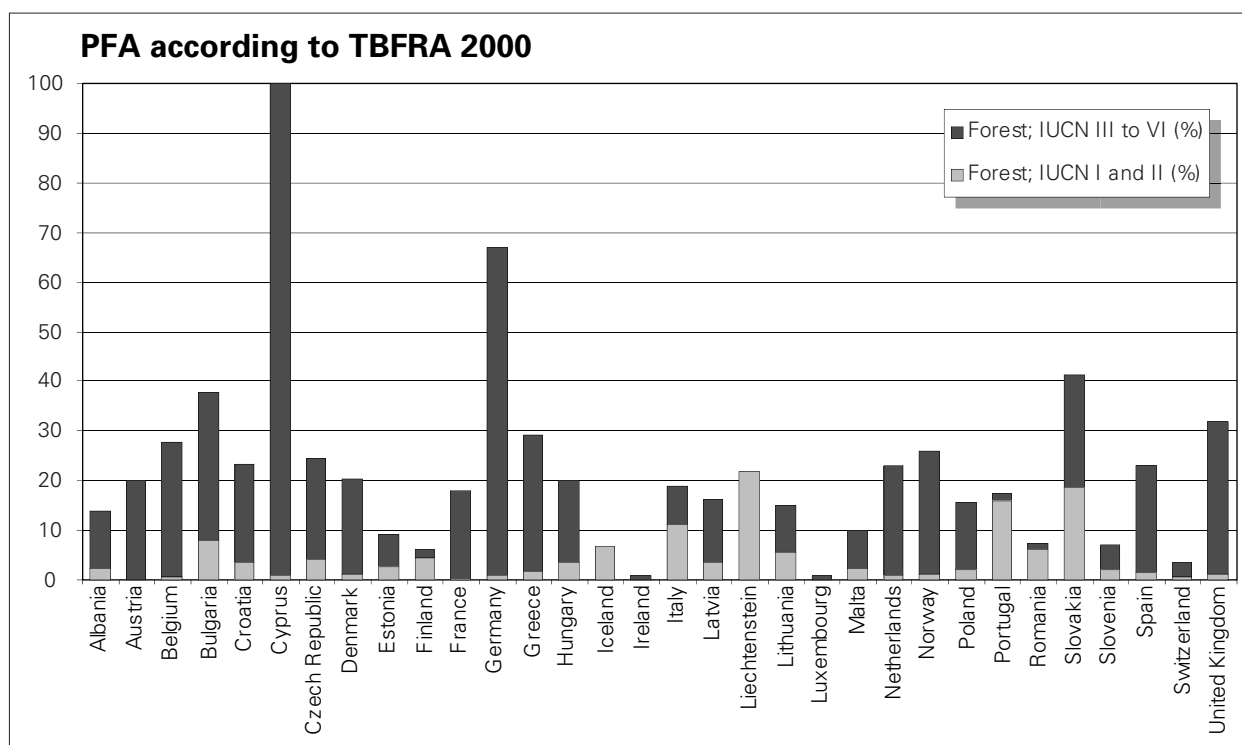


Figure 1:

Reported figures for Protected Forest Area (relative to the total forest area), as reported in the Temperate and Boreal Forest Resource Assessment (FAO) 2000.

indicators of SFM in their Forest Resource Assessments, one of these indicators being the area of forest within certain protection regimes. It was agreed to use the existing IUCN Protected Area Management Categories for this purpose, as they were readily available and developed for worldwide use. The six categories were merged in two classes, one covering primarily the strictly protected forest areas (non-intervention), and the other covering all remaining IUCN management categories. Hence, the TBFRA 2000 questionnaire contained a table (i.e. Table 8) to be filled by country experts stating the 'area of Forest and other wooded land by IUCN-categories: (I-II) and (III-VI).

The assessment of national forest protection regimes to the IUCN-typology was left to national or regional reporting teams, that were often not familiar with the IUCN categories. This enquiry produced a wide range of results, depending on the 'strictness' of interpretation by the country experts of the IUCN-categories, especially categories III-VI. As shown in the graph below, reported figures varied from less than 1 % to 100% of the forest area, depending on the strictness of interpretation of the protection categories. These results, are clearly not harmonised between countries, and do not reflect the actual protection efforts in the different countries.

These figures are therefore of limited use for monitoring, assessment and reporting purposes, as was also admitted in the main report of TBFRA (UN-ECE/FAO, 2000, p. 232), and the UNECE/FAO discussion paper, number 33 (Dudley & Stolton, 2003).

2. MCPFE Assessment Guidelines for protected and protective forest and other wooded land in Europe

2.1. Origin and objectives

The Ministerial Process on the Protection of Forests in Europe aims to improve the status of forest in all its signatory countries. In its 'resolutions' the Ministerial Conferences commit to a number of general objectives to improve forest condition. At the same time, monitoring, assessment and reporting on these aspects is needed. Therefore, the signatory countries committed themselves to monitor the development in their countries by agreeing on a set of criteria and indicators for Sustainable Forest Management (MCPFE, 2002). One of the 9 indicators for the crite-

riterion 'C4: Maintenance, conservation and appropriate enhancement of biological diversity in forest ecosystems' is indicator '4.9: Protected forest'. This means that countries are required to monitor, assess and report on the total PFA that occurs in the country, both in absolute (ha) and relative (%) figures (MCPFE, 2002).

Originally, the results collected by TBFRA - using the IUCN classification system - were used for reporting in Europe. As the results on PFAs were very diverse, the Vienna Liaison Unit in Austria of the Ministerial Conference on the Protection of Forests in Europe (MCPFE) initiated in 1999 to produce new guidelines for the assessment of PFAs in Europe, that better reflect the European situation (MCPFE Liaison Unit Vienna, 1999a, 1999b). An ad hoc MCPFE technical group on Classification of Protected Areas designed a specific set of assessment guidelines, using 5 classes of protection for the purpose of producing harmonised statistics.

These new assessment guidelines were officially endorsed at the Ministerial Conference in Vienna in 2003, and included as Annex 2 to the Vienna Resolution No. 4 (Conserving and enhancing Forest Biological Diversity in Europe) (MCPFE, 2003a, 2003b).

2.2. Overview of the MCPFE-assessment guidelines

The MCPFE-Assessment guidelines for PFAs are defined and explained as follows (MCPFE 2003b):

Overview of MCPFE-assessment guidelines (MCPFE, 2003a,b):

General principles

"Protected and protective forest and other wooded land have to comply with the following general principles in order to be assigned according to the MCPFE Assessment Guidelines:

- Existence of legal basis
- Long term commitment (minimum 20 years)
- Explicit designation for the protection of biodiversity, landscapes and specific natural elements or protective functions of forest and other wooded land

"Explicit designation" in the context of these guidelines comprises both:

- Designations defining forest and other wooded land within fixed geographical boundaries delineating a specific area
- Designations defining forest and other wooded land not within fixed geographical boundaries, but as specific forest types or vertical and horizontal zones in the landscape"

In addition to the regimes complying to these principles, the MCPFE takes account of protected and protective forest and other wooded land based on voluntary contributions without legal basis. As far as possible, these forests and other wooded lands should be assigned to the same classes as used for the legally based regimes. However, data on these forests and other wooded lands should be compiled separately.

MCPFE- Class 1:

Main Management Objective 'biodiversity'

1.1: No active intervention

- the main management objective is biodiversity
- no active, direct human intervention is taking place
- activities other than limited public access and non-destructive research, non-detrimental to the management objective are prevented in the protected area

1.2: Minimum intervention

- the main management objective is biodiversity
- human intervention is limited to a minimum
- activities other than listed below are prevented in the protected area :
 - ungulate/game control
 - control of diseases/insect outbreaks*
 - public access
 - fire intervention
 - non-destructive research, non-detrimental to the management objective
 - subsistence resource use **

* in case of expected large disease/insect outbreaks control measures using biological methods are allowed provided that no other adequate control possibilities in buffer zone are feasible

** subsistence use to cover the needs of indigenous people and local communities, in so far as it will not adversely affect the objectives of management.

1.3: Conservation through active management

- the main management objective is biodiversity
- a management with active interventions directed to achieve the specific conservation goal of the protected area is taking place
- any resource extraction, harvesting, silvicultural measures detrimental to the management objective as well as other activities negatively affecting the conservation goal are prevented in the protected area

MCPFE Class 2:

Main Management Objective 'protection of landscape and specific natural elements'

- interventions are clearly directed to achieve the management goals landscape diversity, cultural, aesthetic, spiritual and historical values, recreation, specific natural elements
- the use of forest resources is restricted
- a clear long-term commitment and an explicit designation as specific protection regime, defining a limited area is existing
- activities negatively affecting characteristics of landscapes or/and specific natural elements mentioned are prevented in the protected area

MCPFE Class 3:

Main Management Objective 'protective functions'

- The management is clearly directed to protect soil and its properties or water quality and quantity or other forest ecosystem functions, or to protect infrastructure and managed natural resources against natural hazards
- Forests and other wooded lands are explicitly designated to fulfil protective functions in management plans or other legally authorised equivalents
- any operation negatively affecting soil or water or the ability to protect other ecosystem functions, or the ability to protect infrastructure and managed natural resources against natural hazards is prevented

The Liaison Unit also produced a table that facilitates linkage of the MCPFE system with the IUCN-classification system. It also provided a link to the Common Database on Designated Areas (CDDA) of the European Environmental Agency (EEA).

MCPFE CLASSES		EEA*	IUCN**
1: Management Objective "Biodiversity"	1.1: "No Active Intervention"	A	I
	1.2: "Minimum Intervention"	A	II, (IV)
	1.3: "Conservation Through Active Management"	A	IV, (V)
2: Management Objective "Protection of Landscapes and Specific Natural Elements"	B	III, (V, VI)	
3: Management Objective "Protective Functions"	(B)	n.a.	

* References as identified in the Standard Data Form of the Natura 2000 and Emerald networks, and used in the same way in the framework of the Common Database on Designated Areas (CDDA), managed by the EEA on behalf of two other organisations (Council of Europe and UNEP-WCMC). The groups (A, B) are related to designation types and not to individual sites.

** Indicative reference:

- The equivalence of IUCN Categories may vary according to the specific management objective (of the forested part) of each individual protected area. A technical consultation process with IUCN and its World Commission on Protected Areas (WCPA) is underway to ensure full comparability between the MCPFE and IUCN systems.
- IUCN Categories III, V and VI have biodiversity conservation as their primary management objective. However, they fit more easily under MCPFE Class 2 than 1.

The area of forest and other wooded land assigned to the classes 1 and 2 should not be summed up with the data collected under class 3 to avoid double counting.

The results are less diverse than those of TBFRA 2000. Thus, they appear more reliable than those

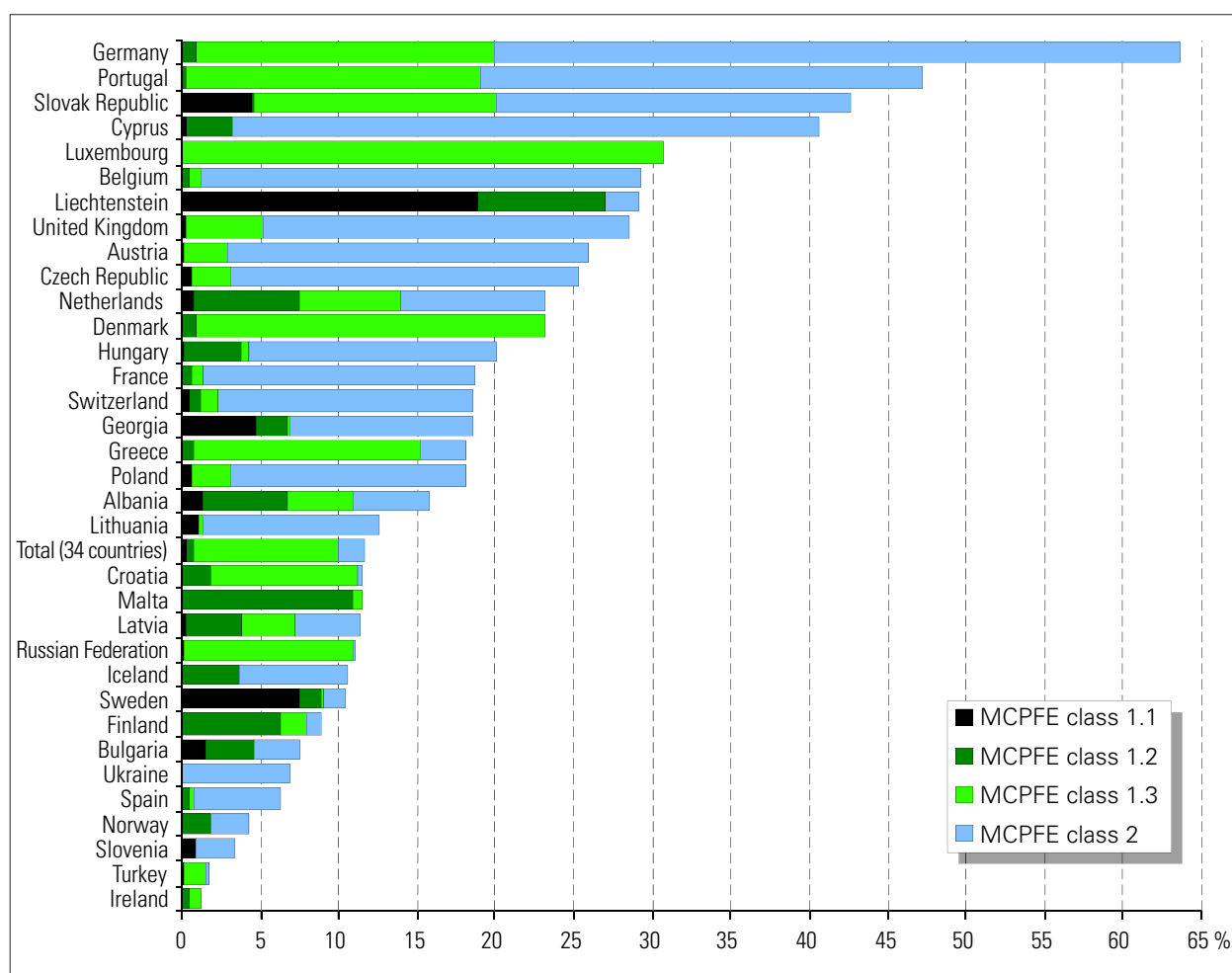


Figure 3:

Reported data on PFAs in Europe using the MCPFE classification system (excluding class 3: protective forests).

Note: Ukraine was provided data only on MCPFE class 2; information on MCPFE classes 1.1 to 1.3 is not available. In Germany and Portugal all Natura 2000 areas are under class 1.3

produced by TBFA 2000 using the IUCN categories. However, the range of results is still very wide and variable and their reliability appears questionable. In the following chapter, this is further elaborated.

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