

European Environment Agency (2007): European forest types. Categories and types for sustainable forest management reporting and policy. Technical report, Copenhagen

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Executive summary

The European forest types - Categories and types for sustainable forest management reporting and policy presents the findings of a study carried out by an international consortium of experts aimed at providing the Ministerial Conference on the Protection of Forests in Europe (MCPFE) with an user-friendly forest types classification. The primary goal of the scheme is to improve the MCPFE

reporting on sustainable forest management (SFM) in Europe, with special regard to forest type based SFM indicators.

The document is divided into seven chapters plus a reference chapter, the main contents of the first seven chapters are summarised below.

1. Reporting on sustainable forest management in Europe introduces the forest type issue within the overall political framework of the MCPFE process. The seven MCPFE sustainable forest management (SFM) indicators to be reported by forest types are presented (forest area, growing stock, age structure/diameter distribution, forest damage, tree species composition, naturalness, deadwood). Definition and requirements of forest types for the MCPFE indicator reporting are provided and the key-factor concept for forest types delineation is introduced: a suitable forest type classification for MCPFE reporting should identify and reflect those, natural and anthropogenic, sources of variation of forest condition that cause major shifts in state of forest type based indicators. In this respect, limitations of the forest type categorisation currently applied for MCPFE reporting (coniferous forest, broadleaved forest, mixed coniferous and broadleaved forest) are discussed.

2. The diversity of European forests outlines the main (historical and present) natural and anthropogenic factors that help in explaining the variety of forests conditions (structural, compositional) found nowadays throughout Europe.

3. Current and potential forest vegetation in Europe: an assessment seeks to give a quantitative evaluation of the anthropogenic footprint on forest physiognomy, through a cross-analysis of potential and current forest vegetation maps. Detailed statistics on the current extent and physiognomy of European forests by potential forest types

are presented.

This technical chapter is mainly designed to provide readers with specific interest in

this issue with updated figures on the major differences between current and potential forest

vegetation in Europe.

4. European forest types: the classification system deals with the presentation of the main features

of the scheme of European forest types proposed for MCPFE reporting.

Limitations of alternative

forest classification schemes are discussed.

The methodological approach used for the

development of the classification is outlined. The hierarchical classification scheme consisting of

14 categories further subdivided into 76 types is introduced. Criteria applied for the delineation

of categories and types are given, which could be synthesized in the principle of increasing

similarity in the natural conditions and levels of anthropogenic modification affecting the values

taken by forest type based MCPFE indicators.

As most compilation of national data on MCPFE indicators use National forest inventories (NFIs)

ground plot information, the use of types is recommended for stratifying NFIs plots and of

the fourteen categories for reporting data on forest type based indicators.

5. Key to the classification contains a classification key built upon criteria diagrams and additional

explanatory notes accompanying each 'decision box' (cf. also Appendix II). The classification key

is mainly intended to provide end-users (MCPFE national correspondents) with classification

rules to stratify data sources - mainly ground plots - used to assess MCPFE forest type

based indicators according to categories and types. Rules are based on information

commonly assessed in a forest inventory, i.e. tree species basal area. In this way, each country

can reclassify ground plots according to the European forest types nomenclature

and report data on indicators by the categories found in its own territory. Furthermore, a rough evaluation of the relative frequency of categories for some European countries is provided with an overview map of their distribution. The evaluation is based on a European forest types test carried out on ICP-Level I plots. The main goal of the test is to give a reasonable idea of the possible increase in the MCPFE reporting burden, that would derive from the application of the proposed categorisation. The number of categories found at country level ranges from 1 to 12 and is on average 6.

6. European forest types nomenclature: category and types descriptions presents the nomenclature of the proposed classification scheme, i.e. a descriptive frame allowing a comprehensive characterisation of the 14 categories and 76 types. The nomenclature strictly relates to the classification key (Chapter 5). Categories and types are described and documented using a descriptive frame including:

- i) class definition: key to the identification of the category; it is a general description of the category in terms of dominant forest species and biogeographical/ecological factors determining its appearance; ii) geographical distribution: present distribution of the category in relation to European biogeographical regions or to other relevant environmental references; iii) types: list and description of the most important forest ecosystems covered by the category, the descriptions include a delineation of the geographical/ecological distribution of the type, tree species composition and other structural and functional characteristics, including silviculture and past and actual human impact; iv) cross-links with Annex I Habitat Directive and EUNIS Habitat Classification, established at the type level. Descriptions are integrated with photos to further document the characteristic

features

of each category. In addition, a synopsis of the unique interplay of ecological conditions and

anthropogenic influences affecting the variation of the MCPFE forest type based indicators, at the

category level is presented.

7. Conclusions and perspectives concludes with remarks on the potential of the forest type

classification for the MCPFE reporting and future desirable efforts needed to fully exploit it.

Tartalóm:

Acknowledgements

Executive summary

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1.2 Forest types and forest biodiversity assessment

1.3 Forest types: definition and requirements for MCPFE reporting

2 The diversity of European forests

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6.2 Hemiboreal forest and nemoral coniferous and mixed broadleaved-coniferous forest

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6.2.3 Nemoral spruce forest

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6.14 Plantations and self-sown exotic forest

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6.14.2 Plantations of not-site-native species and self-sown exotic forest

7 Conclusions and perspectives

Acronyms used

References

Appendix I - Cross-analysis of forestvegetation maps - data table

Appendix II - Classification keys

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