



***ICP Forests Expert Panel Biodiversity and Ground
Vegetation / COST Action E 43 WG 3***

***Joint workshop on Assessment of Biodiversity
in Forests in Europe***

Introduction and goals

Bruno Petriccione, Ph.D.

ITALIAN FOREST SERVICE - CONECOFOR BOARD
***Co-chairman of ICP Forests Expert Panel on Biodiversity
and ground vegetation***



MAIN GOALS

- Further development of the indicators
- Discussion and scientific review of each indicator
- Evaluate usefulness of each proposed indicator according to SEBI2010 criteria and other systems (e.g., Hagan & Whitman, 2006)
- Selection of the **most reliable methods** and the most suitable **assessment frequency** at each different level (***NFIs, Lev. I, Lev. II, landscape***)
- Contribute to re-drafting a project proposal for future biodiversity monitoring in Europe



EFMP

(European Forest Monitoring Project)

module *FutDiv*

(Future Biodiversity Monitoring in Europe)

LEVEL	FOREST TYPE	STRUCTURE	TREE SPECIES	GROUND VEGETAT.	DEADWOOD	LICHENS	NATURALNESS	OTHERS
Level II	MCPFE/EEA Forest types	Tree coordinates (100 plots)	All trees on plot	2 -3 repetitions	ForestBIOTA (selection of plots)		elaboration of harmonized system envisaged	discussions ongoing: invertebrates, soil biological diversity, birds, fungi..?
Level I	BioSoil					Macro-lichens/ indicator species?		
NFIs	Proposal for adoption of MCPFE/EEA forest types as reference	Indices based on dbh and height, partly tree coordinates	All trees in sampling unit	12 countries acquire information on some herbs and grasses	90% of EU NFI's inventory at least coarse woody debris.	11 countries acquire information on some lichens	10 countries acquire information on naturalness	
Remote sensing	Forest maps	Pilot projects e.g. habitats	Conifers / deciduous	NO	NO	NO	Fragmentation index	Landscape diversity



SEBI 2010 10 evaluation criteria

1. **Policy relevant and meaningful**
2. **Biodiversity relevant**
3. **Scientifically sound and methodologically well founded**
4. **Progress towards 2010 target**
5. **Broad acceptance and understandability**
6. **Affordable monitoring, available/routinely collected data**
7. **Affordable modeling**
8. **Spatial and temporal coverage of data**
9. **National scale and representativeness of data**
10. **Sensitive**

Category	Indicators	Scoring									
		1	2	3	4	5	6	7	8	9	10
DRIVERS											
PRESSURES											
STATUS	NATURALNESS	3	3	2	3	2	1	1	1	1	3

TOT.
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Hagan & Whitman (2006) five evaluation criteria

- **Scientific merit** – *well-established relationship between the indicator and the biodiversity component of interest*
- **Ecological breadth** – *good correlation with many other biodiversity components that are not being measured*
- **Practicality** – *suitability of measurement (time, cost)*
- **Utility** – *ability of policy makers to take a decision on the basis of the indicator values*
- **Relevance** – *how well the indicator represents the biodiversity values*

