



Three years (2010-2012)



Total budget: ~10 million €

FutDiv
becomes...
FACTS !

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*FutDiv becomes... **FACTS** !*

From "Future bioDiversity
monitoring in Europe" to...

*"Forest biodiversity
assessment across Europe:
towards an integrated system
for biodiversity monitoring"*



LIFE+ Call 2007 vs. 2008

- **CALL 2007:**

Component 1 – Nature and Biodiversity

Projects must have at least 25% of their budget earmarked for concrete actions.

LIFE+ Biodiversity proposals involving few or no concrete conservation actions will thus generally be considered ineligible.

There are however two exceptions to this rule:

Life+ Biodiversity projects for the development and testing of new biodiversity monitoring indicators do not need to include any concrete conservation actions.



LIFE+ Call 2007 vs. 2008

- **CALL 2008:**

Component 1 - Nature and Biodiversity

The core of such a project must focus on the development and testing of new biodiversity indicators. Proposals that, for example, involve much data collection or research, of which only a part is related to the development and testing of new indicators, will not benefit from this exception. Any such project should also provide clear operational guidelines on how these indicators should be applied.

Routine monitoring actions or harmonisation/standardization of established monitoring techniques/indicators will not benefit from this exception.



LIFE+ Call 2007 vs. 2008

- **CALL 2008:**

Some lessons from the 2007 Call for Proposals:

Some proposals that sought to be exempted from the 25% concrete conservation actions requirement by presenting themselves as developing new biodiversity indicators were rejected because much of the effort concerned data collection / research unrelated to the testing and development of new indicators.



LIFE+ Call 2007 & 2008

Component 2 – Environment Policy and Governance

SPECIFIC OBJECTIVES:

(c) to support the design and implementation of approaches to monitoring and assessment of the state of the environment and the factors, pressures and responses that impact on it.

PRINCIPAL OBJECTIVE: "Forests"

To provide, especially through an EU coordination network, a concise and comprehensive basis for policy relevant information on forests in relation to climate change (impact on forest ecosystems, mitigation, substitution effects), biodiversity (baseline information and protected forest areas), ...



GENERAL LESSONS LEARNED

- Component 1 (biodiversity) seems absolutely not appropriate for our project (the Commission strongly prefers the traditional LIFE Nature projects)
- Component 2 (environmental policy) is the right one, as forest biodiversity is explicitly mentioned
- If the Commission doesn't want to finance a project, it is very easy to list a lot of critics (not listed for other projects to be financed)



MAIN TRENDS IN FACTS

- Change main goal from *indicator development and testing (FutDiv)* to *implementation of monitoring, with the specific aim to collect baseline information (FACTS)*
- Emphasize contribution to provide information on conservation status of forest habitats (EC Habitat Directive)
- Make specific reference and connect actions to LIFE+ *FutMon* and FP7 *EBONE* projects (connections)

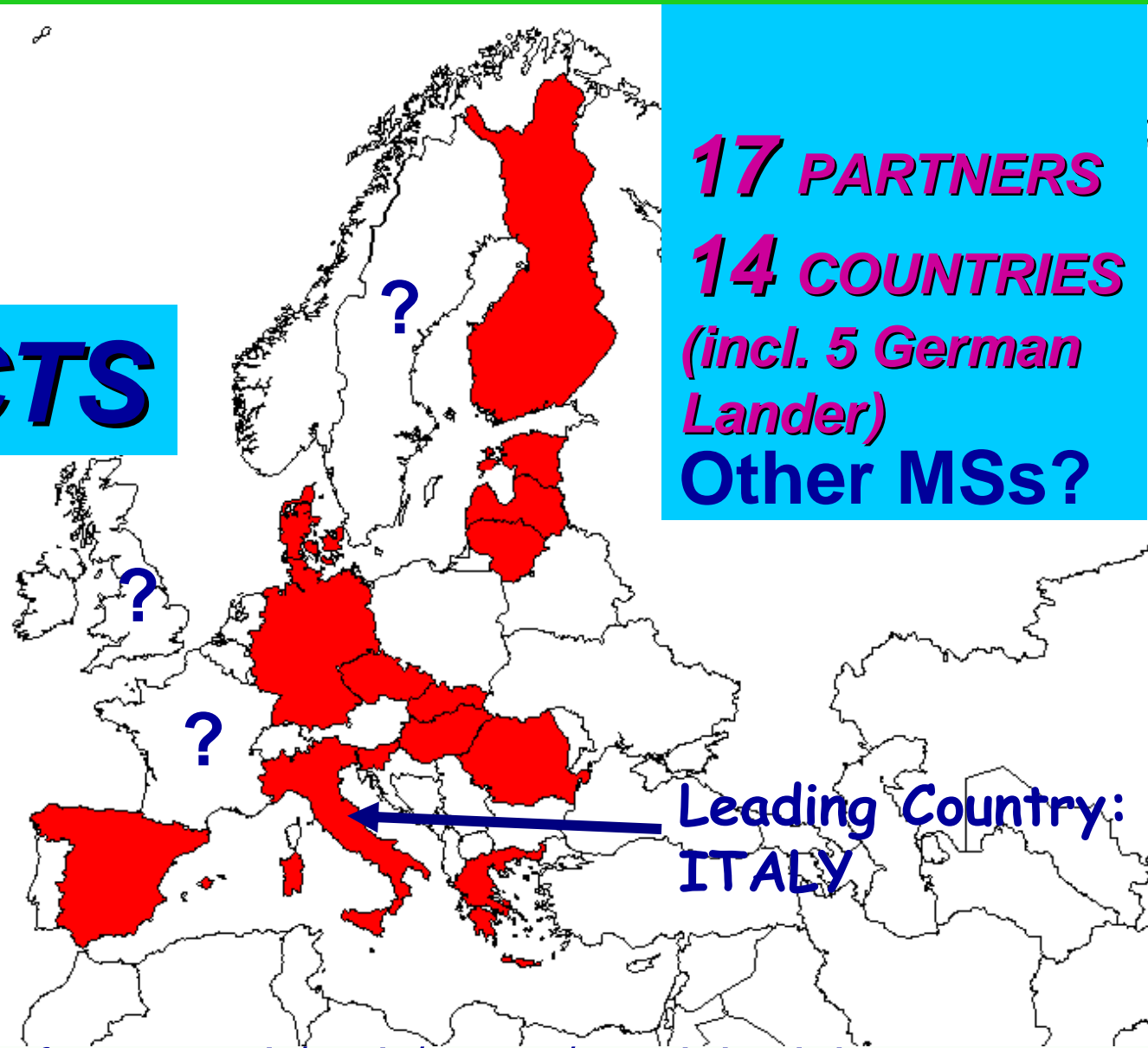




FutDiv FACTS



CRA
AGRICULTURAL RESEARCH
COUNCIL



<http://www2.corpoforestale.it/web/guest/serviziattivita/controlloecosistemiforestali/iniziativeinternazionali/fut>



FACTS MAIN PILLARS

- **Promoting integration** at all levels: NFIs, Lev. I, Lev. II and landscape level (ICP IM & LTER sites)
- **Adding landscape scale** to biodiversity survey, on the basis of core “expanded” Lev. II plots (*biodiversity cannot be only assessed at plot level!*)
- **Provide data and information** on status and trend of forest biodiversity across EU



FACTS expected results

- Provide data on status and trends of forest biodiversity on EU scale
- Clarify cause-effect relationship between pressure factors and biodiversity parameters (**SEBI2010 indicators**)
- Establish a system to detect and evaluate changes in biodiversity in forests in Europe, according to harmonised methods at all scale levels



Halting the loss of biodiversity by 2010:
proposal for a first set of indicators to monitor progress in Europe

SEBI2010 Technical Report 2007

26 operative indicators



European Environment Agency



http://reports.eea.europa.eu/technical_report_2007_11

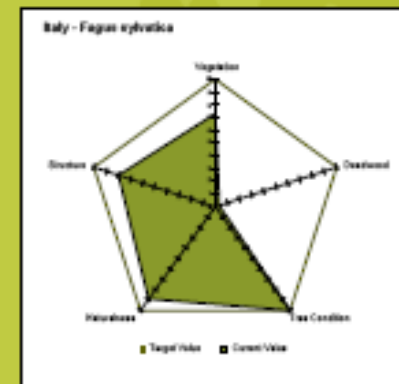
Towards a European Forest Status Indicator

The proposed European 'Forest Status Indicator (FSI)' can provide information to decision makers on forest condition (changes in quality, functionality and integrity of forest ecosystems) including progress towards halting the loss of forest biodiversity.

FSI comprise a number of indicator elements: forest structure, deadwood, crown condition, vegetation and naturalness. The indicator is proposed to be presented as a 'spider diagrams' showing the values at different times of the different elements put in relation to target values.

The data for the indicator can be provided by forest monitoring networks in Europe:

National Forest Inventories, ICP Forests and ICP Integrated Monitoring plot networks, European Long Term Ecological Research plots etc. A planned project 'Future forest biodiversity monitoring in Europe (FuDiv)' will ensure a coordinated European dataflow for the Forest Status Indicator.



Rete Nazionale Integrata
**CON.
ECO.
FOR.**
Controllo Ecosistemi Forestali

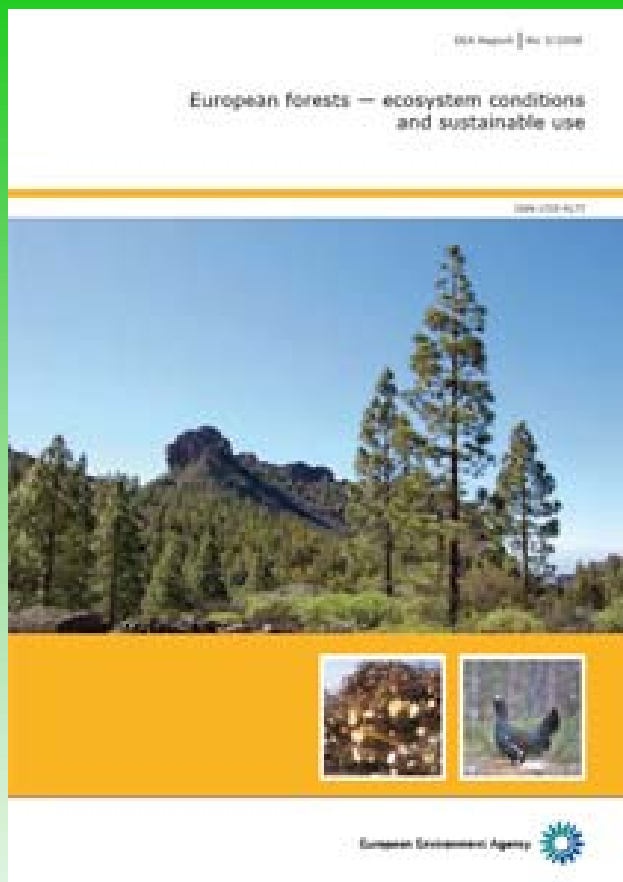
European Forest
EU Co-acting
networks

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National Forest Service, Italy
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European Forest
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<http://biodiversity-chm.eea.europa.eu>





European forests - ecosystem conditions and sustainable use

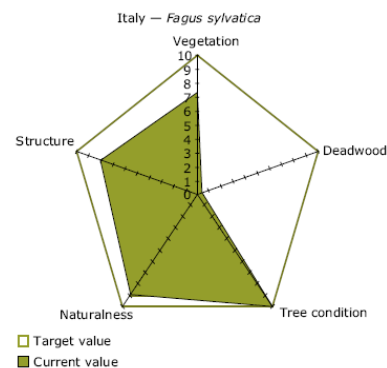
EEA Report No 3/2008

Monitoring activities supported by the EU Life+ Regulation, which entered into force in 2007, are also expected to address forest biodiversity. This monitoring will provide future data for a 'Forest Status Indicator (FSI)' based on sub-indicators identified and implemented at pan-European and national level, such as tree condition, forest structure, deadwood, plant species composition and naturalness. When fully implemented the FSI will relate the state and trends in each sub-indicator to defined targets (Figure 5.7) (Petriccione *et al.*, 2007). The planned forest monitoring may also support wider assessments of conservation status of habitats and species listed in the Annexes of the EU Habitats Directive (Sections 3.7 and 5.2).

biodiversity. The pan-European Common Bird Monitoring Scheme offers a pan-European indicator on common bird populations, for which work is in progress to include forest birds (Section 3.7). Several activities are on-going to bring European bird and forest monitoring communities together to investigate how to best combine assessment methods as well as existing data. Finland, France and Portugal have active cooperation between the national forest inventories and monitoring of forest bird populations, which allows correlation between forestry and bird population trends (ETC BD, 2005).

In spite of all these efforts there is still, in relation to the needs for managing the forests, an unsatisfactory knowledge of forest ecosystems and forest biodiversity throughout Europe. In particular the European-level information on biodiversity composition — both species and gene pools — needs to be strengthened (Sections 3.7 and 3.8). To capture the variation in European forests, data to serve assessment of forest ecosystem conditions and forest biological diversity should be collected according to the European Forest Types (Section 3.3). This information should help to set solid targets and elaborate sustainable management schemes of the forest ecosystems. More extensive and spatially-related knowledge on biodiversity may also help to prioritise actions (Table 2.2). This would also help in developing new approaches such as identifying 'high nature value forests'. The experiences and organisational structures of existing programmes that monitor forests should be maintained, and where appropriate, encouraged to include wider aspects related to biological diversity. Finally it is also necessary to carry out the ecological research needed to understand what is happening.








Figure 5.7 An example of presenting the Forest Status Indicator: beech forest in Italy








Source: Petriccione, 2007.



Table 2.1 A preliminary assessment of European forest biodiversity with respect to the 2010 biodiversity target and headline biodiversity indicators

EU 2010 headline biodiversity indicator	Preliminary assessment	Comment
1. Trends in the abundance and distribution of selected species		Forest birds show a variety of population trends. Some large mammal predators are expanding in range but the most threatened cat species (the Iberian lynx) is found in Europe (Section 3.7).
2. Change in status of threatened and/or protected species		A number of forest species are threatened (Section 3.7).
3. Trends in extent of selected biomes, ecosystems and habitats		Forest Status Indicator (Section 3.2). The extent of forest is increasing but is still below the 2010 target.
4. Trends in genetic diversity of domesticated animals, cultivated plants, and fish species of major socio-economic importance		There are considerable differences between countries in the efforts to conserve forest tree genetic diversity and concerns remain about maintaining genetic variation. However, the European Forest Genetic Resources Programme (EUFORGEN) has been established to promote a European forest genetic conservation strategy (Sections 3.8 and 5.4).
5. Coverage of protected areas		Forest areas are increasingly being protected (Section 5.2).
6. Nitrogen deposition		Nitrogen deposition of long-range air pollution is increasing in large areas of Europe. There is growing evidence of negative effects on biodiversity (Section 4.6).
7. Trends in invasive alien species		Although few alien tree species used in forest plantations are considered invasive, there are many other alien species threatening European forest biodiversity (Section 4.5).
8. Impact of climate change on biodiversity	?	Adapting to climate change is a major future challenge (Section 4.7).
9. Marine Trophic Index		Not considered in this report.

10. Connectivity/fragmentation of ecosystems	?	The overall forest area is stable or slightly increasing. However, landscape structure (measured by satellite) shows that forest pattern is dynamic. Changes are occurring in development stages 'within-forest' and the effects of this remain to be assessed (Section 3.4).
11. Water quality in aquatic ecosystems		Not considered in this report.
12. Area of forest, agricultural, fishery and aquaculture ecosystems under sustainable management		In European forests, felling is significantly lower than the increment. Deadwood, an important aspect of forest quality, is low but increasing (Sections 3.6 and 4.2). The MCFPE has established a framework for sustainable forest management which is well-reflected in national forest policies (Section 5.1).
13. Ecological footprint of European countries		Not considered in this report (but see reference to FLEGT in Section 5.3).
14. Percentage of European patent applications for inventions based on genetic resources		Not considered in this report.
15. Funding to biodiversity		Funding to protect and manage forest biodiversity, as well as to monitor forests, is being increasingly made available through the EU Life programme (Sections 3.7, 5.2 and 5.4). EU research funding related to forest biodiversity is also increasing (Section 5.4).
16. Public awareness and participation	?	Maintaining and enhancing public awareness of forests, their biodiversity and cultural values is identified as a major future challenge (Section 2.2).

Notes: Key:  Positive trend;  Stable or no clear trend;  Negative trend; ? No information.

This assessment followed the structural framework of the headline biodiversity indicators identified in Europe in line with the CBD.

Source: Indicator framework from CBD, 2006a, EEA, 2007c.



FutDiv parameters to be collected at four levels of investigation

LEVEL	FOREST TYPES	STRUCTURE	TREE SPECIES	GROUND VEGETATION	DEADWOOD	LICHENS	ENVIRONMENTAL QUALITY (NATURALNESS)	INVERTEBRATES
Level II	MCPFE/EEA Forest types	Tree coordinates (<u>core plots</u>)	All trees on plot	ICP Forests Manual (<u>core plots</u>)	ForestBIOTA methods plus random walk (<u>core plots, stratified by forest types</u>)		Method based on the reference plot (Petriccione, 2006) (<u>core plots</u>)	Window traps for key <i>Coleoptera</i> families (<u>core plots, stratified by biogeographical Region / forest type</u>)
Level I	BioSoil (biodiversity methods)					ForestBIOTA & BioAssess methods, but macro-lichens only	Method of five classes, to be precisely defined (ref.: Bohn map; tree species nativeness as defined by EEA Report on Forest types)	Simplified methodology, after testing on Lev. II
NFIs	FACTS: methods available, to be adapted							NO
Landscape (extended Lev. II, IM and LTER sites)	Forest maps	Pilot projects (habitats) ?	Conifers / broadleaves	NO	NO	Effects of surrounding landscape on species richness on the plot	Functional approach (<u>extended core Lev. II plots</u>)	NO

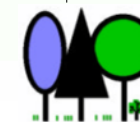
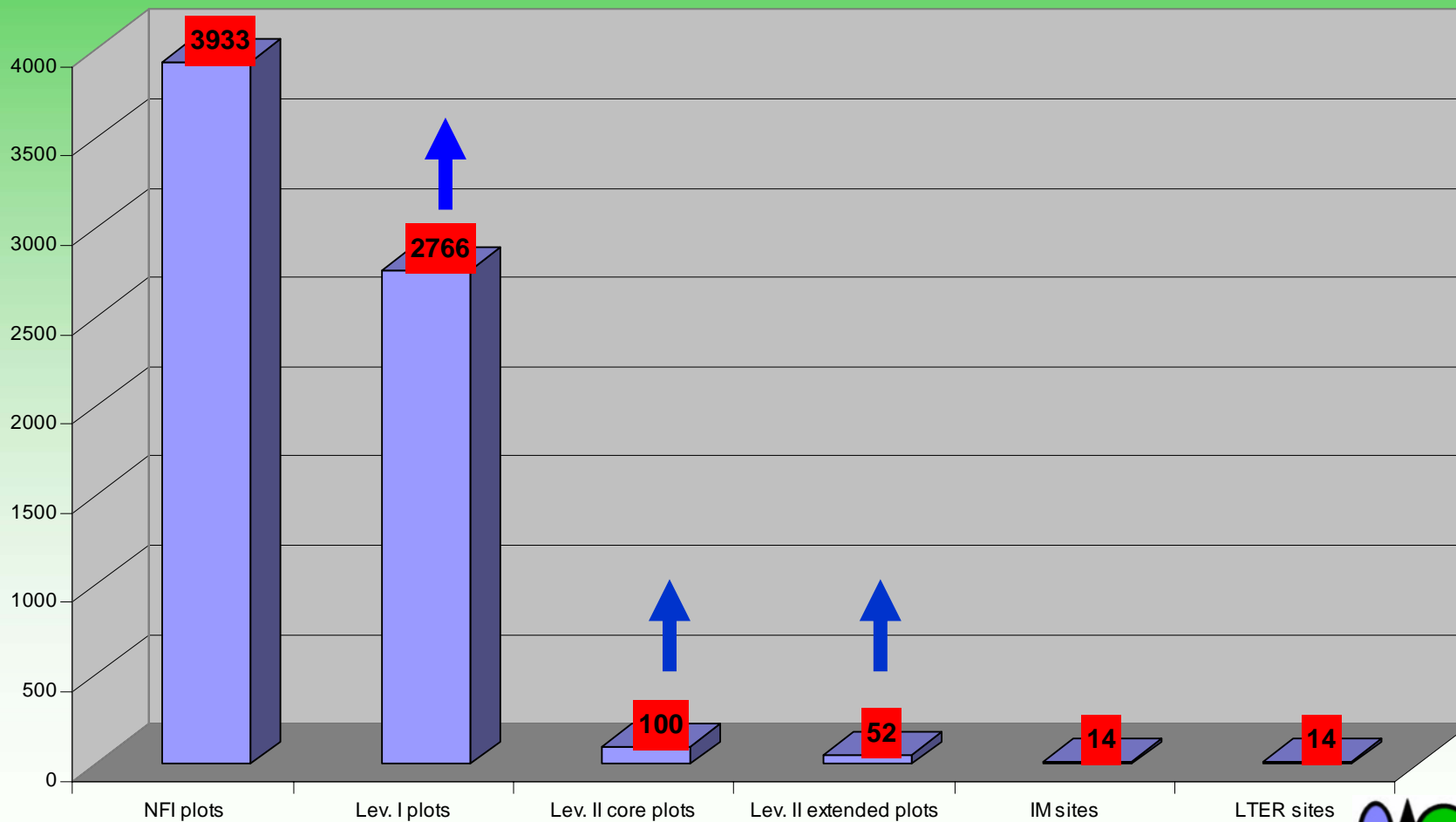
FIRENZE WORKSHOP MINUTES AND PRESENTATIONS:

http://www.aisf.it/biodv/joint_meeting.htm



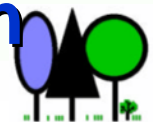


FACTS network



FACTS networks

- **NFIs: 4.000 sites** (tot. with available biodiversity data: 2-300.000 sites, scattered years) – **method harmonisation**
- **Lev. I: 3.000 plots** (BioSoil, year 2006-7: 4.000) – **repetition in 2010 (trend analysis)**
- **Lev. II: 150-200** (ForestBIOTA, year 2004-5: 120 plots; FutMon D2, years 2009-2010: 210 plots) – **repetition in 2010, except for GV (trend analysis), cause-effect analysis with FutMon data**
- **IM & LTER: 30-50 sites** (tot. with available biodiversity data: 40-140 sites, scattered years) – **method harmonisation**



WHAT TO DO NOW?

- Confirmation of partners agreement to re-submit a revised version of the project proposal under LIFE+ component 2:
by the 20th of October
- Project revision (contents + format) -
CB + ABs: **by the 31st of October**
- New official signed forms from the ABs:
by the 10th of November
- Project official submission:
by the 21st of November



**EU/FAO/MCPFE
EUROPEAN FOREST WEEK**

SIDE EVENT

***“Climate change and forest
biodiversity: a challenge and a
possible opportunity for forest
sustainable management”***

organised by the Italian Forest Service - CONECOFOR

***Rome (FAO), the 23rd of October
14:30-16:00***

