



**GoProFor**  
LIFE17 GIE/IT/000561



# Foreste e biodiversità: stato della conservazione delle foreste in Italia

*Forests and biodiversity: forest conservation status in Italy*

UNIVERSITÀ  
DEGLI STUDI  
DEL MOLISE

Marco Marchetti (UNIMOL - SISEF)



PALERMO | 11 NOVEMBRE 2019  
**LIFE E RETE NATURA 2000**  
Dall'esperienza dei Progetti verso un modello condiviso per la Gestione Forestale

**LIFE AND NATURA 2000 NETWORK**  
From Projects experience to a shared model for Forest Management

# Forest biological diversity

refers to *all life forms* found within forested areas and the ecological roles they perform. (Conference Of the Parties; COP 2 Decision II/9).



# Monitoring of Forest Biodiversity

## SFM Criteria and Indicators



**Forest Europe** growing life

Ministerial Conference on the Protection of Forests in Europe

**1. Forest Resources & Carbon**

**2. Forest Health**

**3. Productive Functions**

**4. Biological Diversity**

**5. Protective Functions**

**6. Socio-economic Functions**

**4. Biological Diversity**

**C.4 Policies, institutions & instruments**

**4.1 Diversity of tree species**

**4.2 Regeneration**

**4.3 Naturalness**

**4.4 Introduced tree species**

**4.5 Deadwood**

**4.6 Genetic resources**

**4.7 Forest fragmentation**

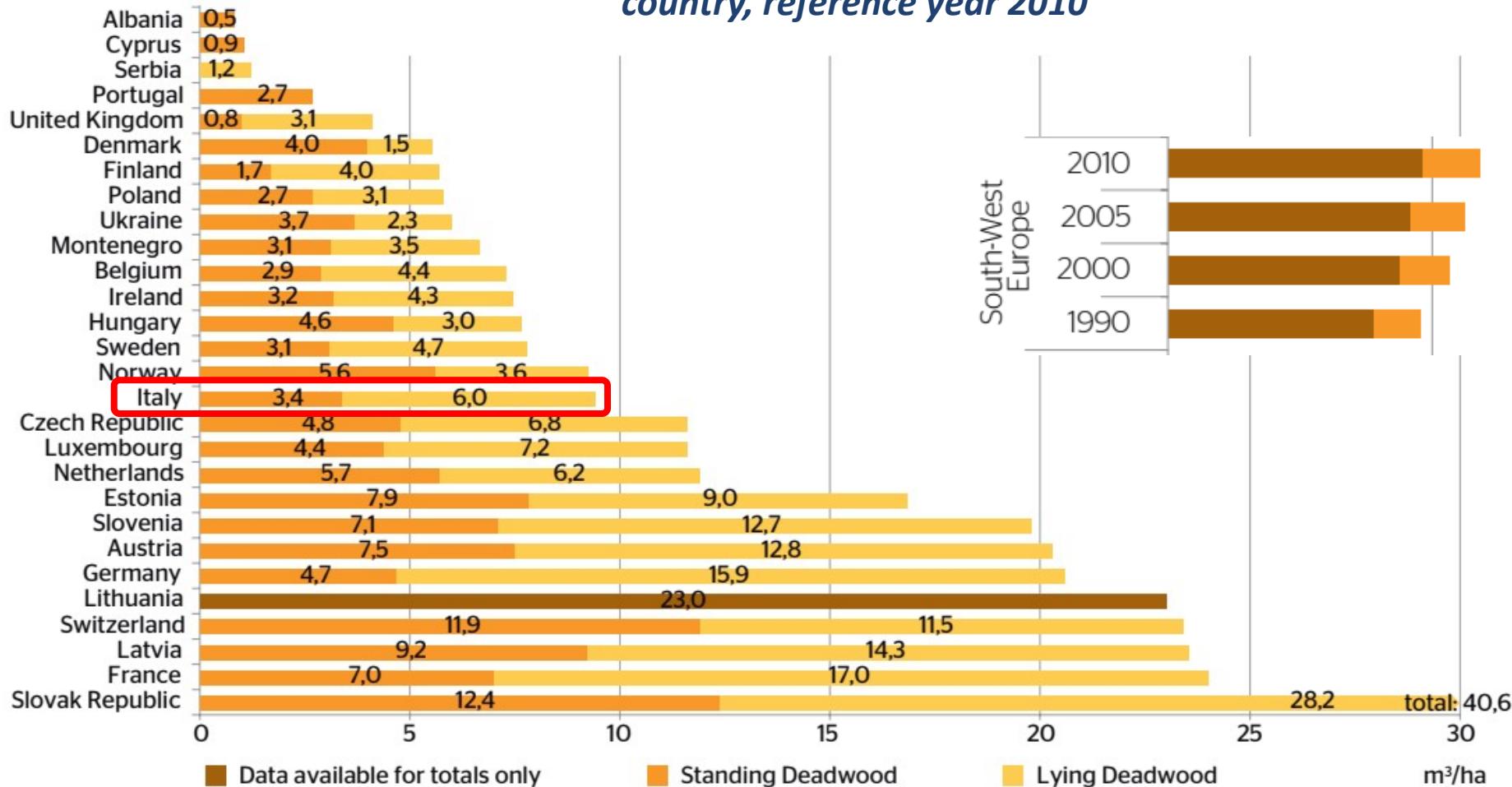
**4.8 Threatened forest species**

**4.9 Protected forests**

**4.10 Common forest bird species**

# Monitoring of Forest Biodiversity

## Forest Europe



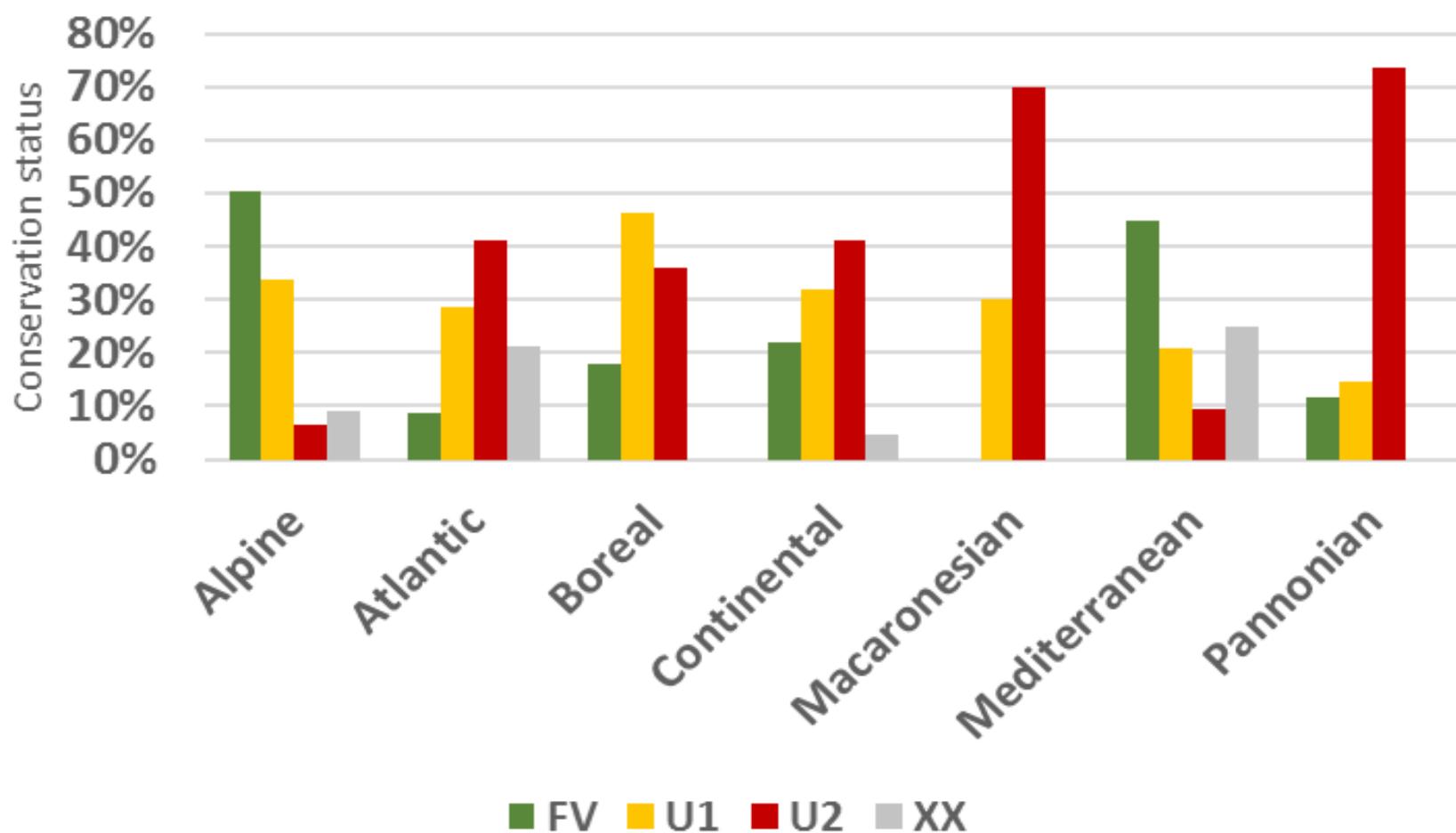
Half of the signatories reported changes, most of which were driven by the implementation of the Natura 2000 networking programme



# Monitoring of Forest Biodiversity

## Natura 2000

*Conservation status assessed per biogeographical region (2007-2012 period). Favourable “FV”, Unfavourable-Inadequate “U1”, Unfavourable-Bad “U2”, Unknown “XX”.*



# Monitoring of Forest Biodiversity

## National Forest Inventory

*Total deadwood  
in ITALY*

$8.7 \text{ m}^3 \text{ha}^{-1}$

<https://www.sian.it>



Standing  
deadwood

$5 \text{ m}^3 \text{ha}^{-1}$

Lying  
deadwood

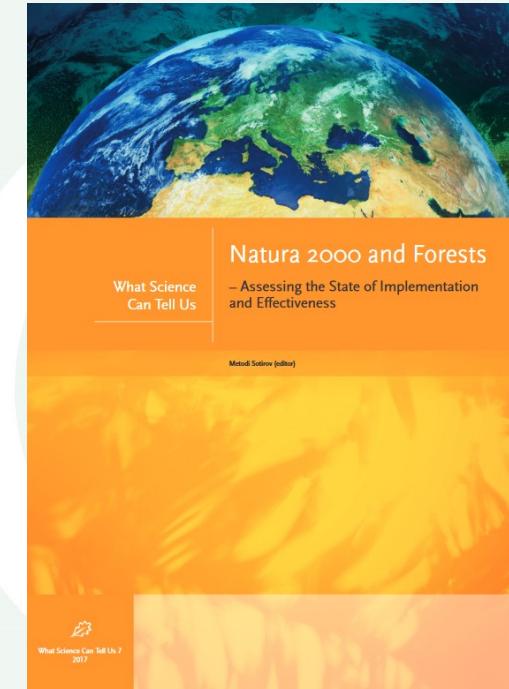
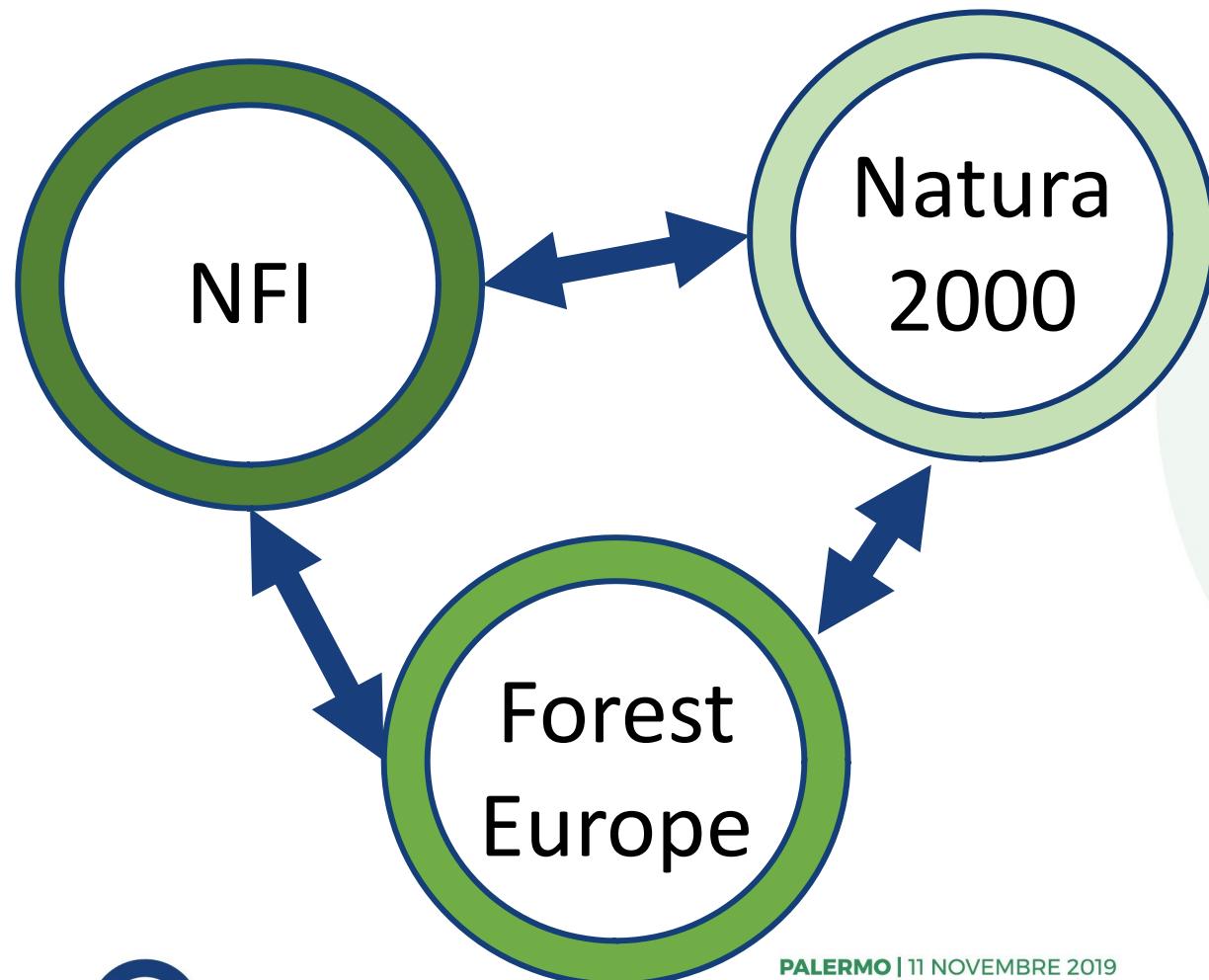
$1.9 \text{ m}^3 \text{ha}^{-1}$

Residual  
Stumps

$1.5 \text{ m}^3 \text{ha}^{-1}$

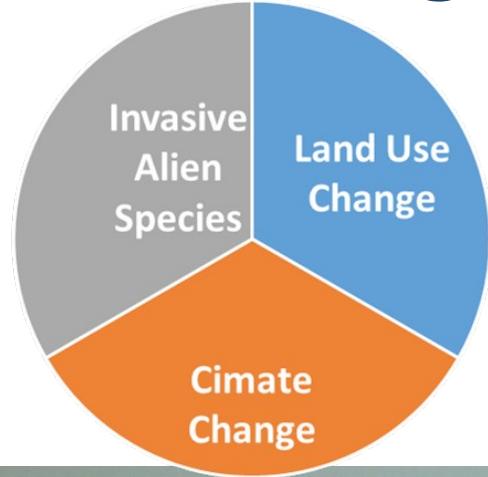
# Monitoring of Forest Biodiversity

Improve the interconnection among monitoring systems

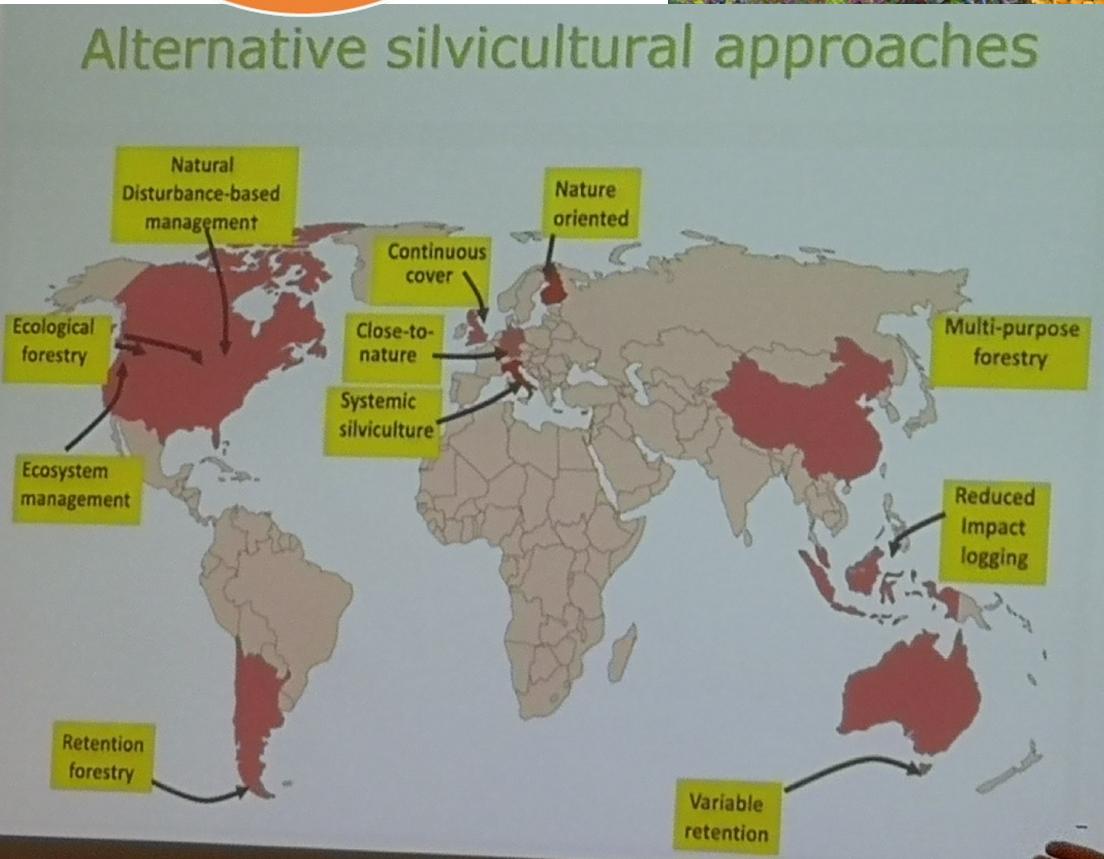


Temporal scale  
Type of data  
Methods

# Monitoring of Forest Biodiversity



## Alternative silvicultural approaches



*Stato della BIODIVERSITÀ in Italia*

*Contributo alla strategia nazionale per la biodiversità*

Ministero dell'Ambiente  
e delle Fatture del Territorio

DPN DIREZIONE PER LA  
PROTEZIONE DELLA NATURA

Società Botanica Italiana

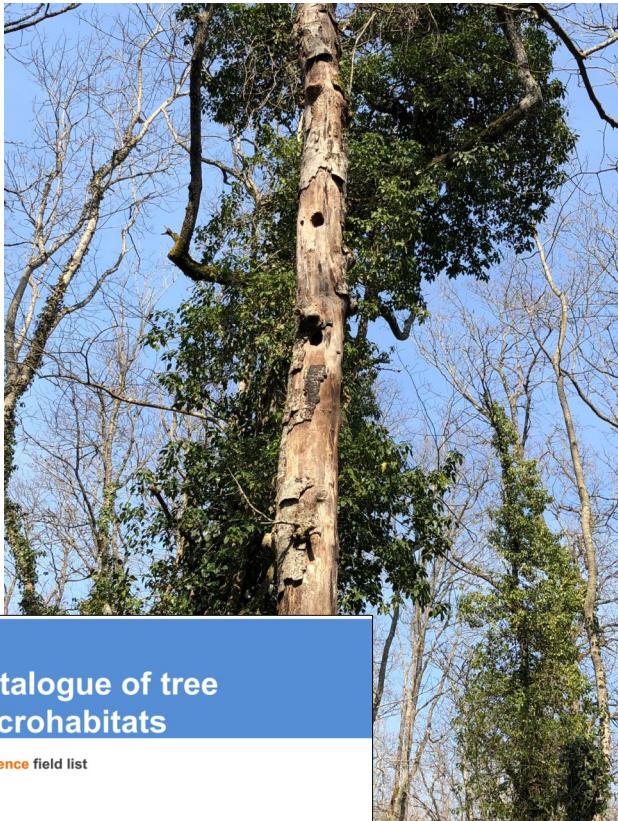


## *In situ conservation*

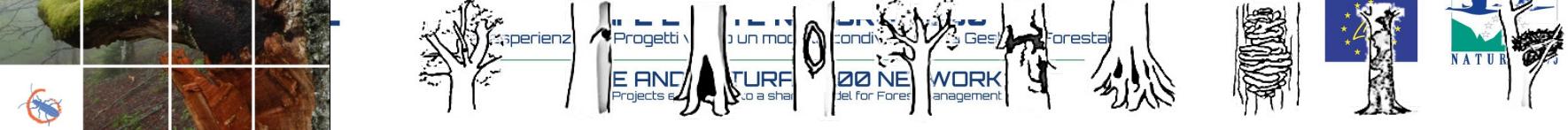
## Protected areas

# Monitoring of Forest Biodiversity

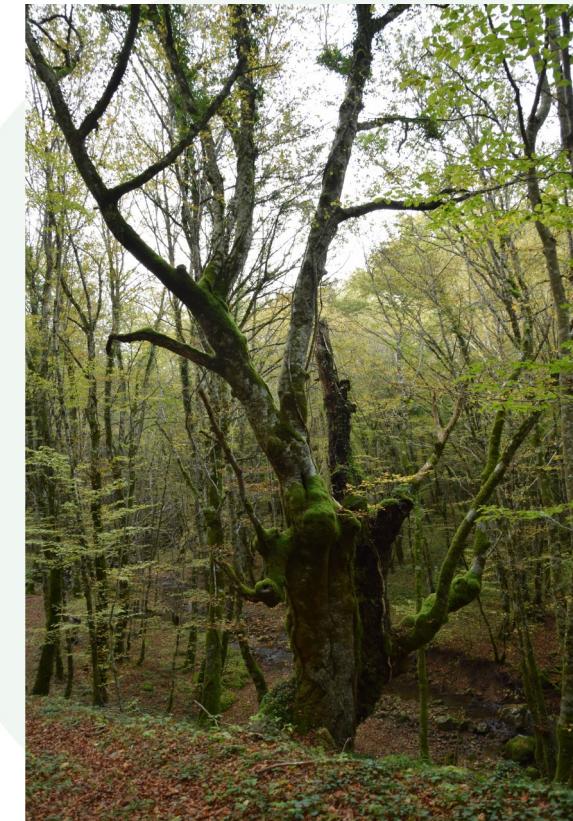
## Hidden biodiversity



2016 - 64 TreMs



## Tree-related Microhabitat



# Monitoring of Forest Biodiversity

## Integrate Forest Management

Ministry of Environment and Food of Denmark Nature Agency  
Chair of the European Network Integrate

Multiple scales for nature conservation in sustainable forest management:  
**integration and segregation**

First event: Integrating Nature Conservation and Involving People in SFM  
29 – 31 October 2019 . Rold Forest, Denmark

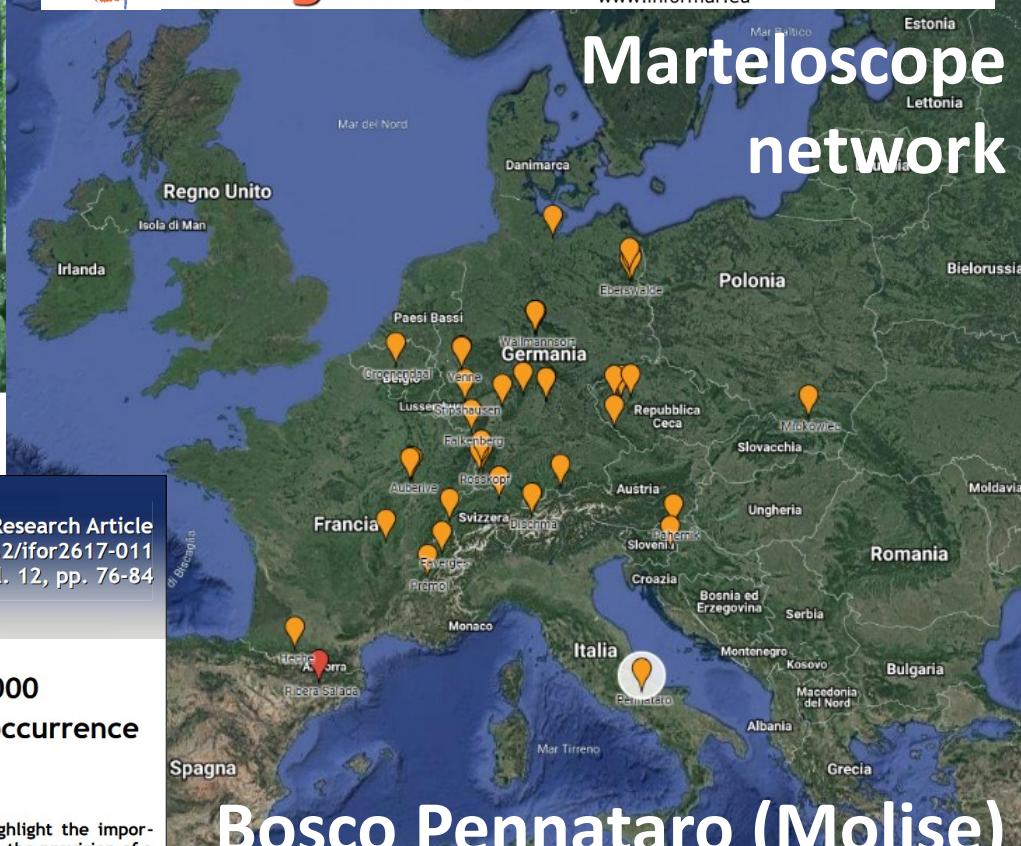


**INFORMAR**  
Integrated Forest Management Learning Architecture  
[www.informar.eu](http://www.informar.eu)



**EFI**

**Marteloscope network**



Research Article  
doi: 10.3832/ifor2617-011  
vol. 12, pp. 76-84

Biodiversity conservation and wood production in a Natura 2000 Mediterranean forest. A trade-off evaluation focused on the occurrence of microhabitats

Giovanni Santopuoli <sup>(1-2-3)</sup>,  
Marco di Cristofaro <sup>(2)</sup>,  
Daniel Kraus <sup>(4)</sup>,  
Andreas Schuck <sup>(5)</sup>,  
Bruno Lasserre <sup>(2)</sup>,  
Marco Marchetti <sup>(1-2)</sup>

The most significant European forest-related strategies highlight the importance of multifunctional forests for human wellbeing, due to the provision of a wide range of goods and services. However, managing competing aims, such as timber production, economic drivers and biodiversity conservation is often difficult for practitioners. In order to assess the loss and gain of ecosystem services caused by forestry, trade-off evaluation has been increasingly used to aid decision-making. In this study, four silvicultural scenarios are simulated using the Marteloscope approach to evaluate the trade-offs between biodiversity

RE 2019  
RA 2000  
diviso per la Gestione Forestale

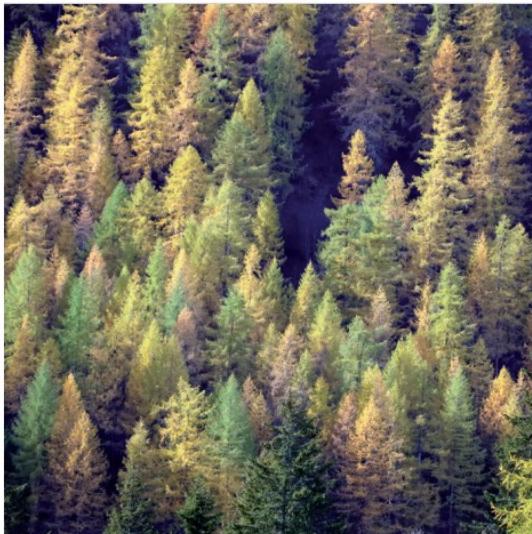


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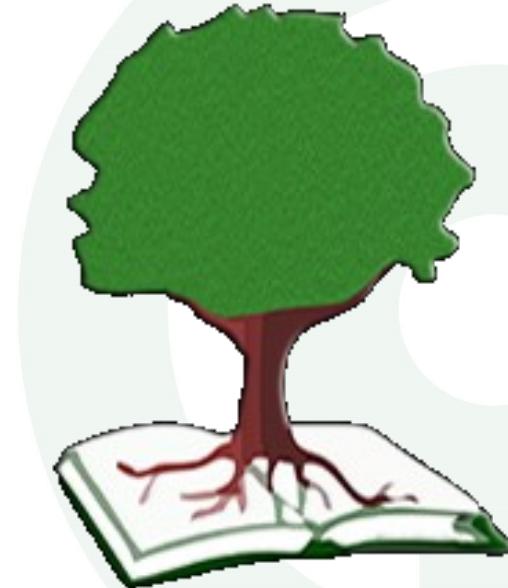
# Manifesto per il Paesaggio agrario e forestale italiano





Aalborg, Denmark

# Thank you



[marchettimarco@unimol.it](mailto:marchettimarco@unimol.it)