



LIFE21-NAT-IT-LIFE
GOPROFOR MED
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PRESERVING AND MANAGING FOREST HABITATS IN THE MEDITERRANEAN AREA

WORKSHOP - MONDAY DECEMBER 4, 2023



Co-funded by
the European Union



Structural indicators

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Other dendrometric and structural indicators

Objective: to develop structural indicators that will complement T.2.2.1, to assess the degree of “disturbance” of forest structure compared to a “natural” or “close to natural” structure.

Forest
structure

Deadwood

Tree
microhabitats

Collect/verify
existing
documentation

- ✓ Field surveys centred on the sampling units of Task 2.1

- ✓ Structural indicators of past and present management

Quantify structural diversity with objective & quantitative data



Collect/verify existing documentation

COMPLETED

Available data provided for all sites
T2.2.2 → T222_structural indicators

- ✓ **Habitat type:** Natura 2000 code
- ✓ **Property:** property of the area where the plots are located
- ✓ **Current silvicultural system (I):** high forest; coppice
- ✓ **Current silvicultural system (II):** simple clearcutting; retention clearcutting; shelterwood; selection; simple coppice; coppice with standards; unmanaged.
- ✓ **Regeneration:** planting; seeding; natural regeneration; coppice.
- ✓ Area managed through **planned silvicultural practices** (yes/no)
- ✓ Forest stand with **no interventions since more than 100 years** (yes/no)
- ✓ Time since **last silvicultural intervention** at the time of sampling
- ✓ **Type of last silvicultural intervention:** even-aged final harvest; even-aged intermediate cutting; uneven-aged entry.
- ✓ **Stand age** (for even-aged forests)



Field surveys for dendrometric indicators and TreMs

Forest structure

Standing trees (alive, dead, snags & stumps):

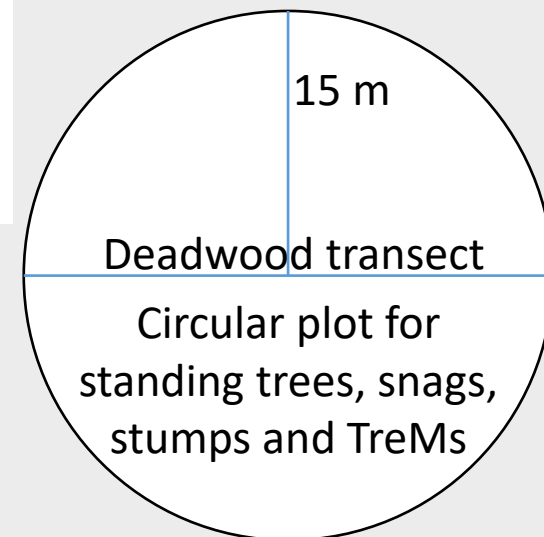
- ✓ Species;
- ✓ Tree type;
- ✓ Social position;
- ✓ DBH;
- ✓ Decay class;
- ✓ Height (20% of standing trees)

Deadwood

Lying deadwood present along a 30 m transect that crosses the plot: record length, diameter and decay class.

Tree microhabitats

Record presence of tree-related microhabitats on all living trees, classified in 7 macro-categories



Suggested team: 3 people
Time required: 2-3 hours per plot



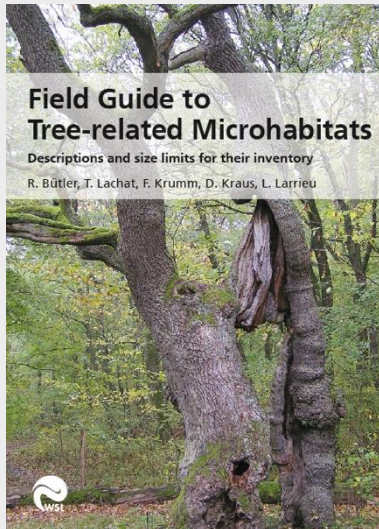
Delivery submission: Feb. 24

Finish data collection Dec. 23 → submit data (file in T2.2.2 → T2_structure_TreMs_V3)
via email (ettore.dandrea@cnr.it, livia.zapponi@cnr.it)



Preliminary observations:

- survey protocol - successfully applied in most project areas.
- tree microhabitats: presence of several TreMs on *Quercus ilex* that do not meet the threshold requirements of the field guide (e.g., canopy deadwood, dendrotelms and other cavities), possible bias?
- deadwood presence: the transect data as an index (survey effort issue).



Aknowledgements

We would like to thank all project partners that directly and indirectly contributed to the surveys, and in particular:

- DREAM
- Centre National de la Propriété Forestière
- The Goulandris Natural History Museum / Greek Biotope Wetland Centre
- Greek Forest Service
- Agenzia Forestale Regionale per lo Sviluppo del Territorio e dell'Ambiente della Sardegna



THE GOULANDRIS NATURAL HISTORY MUSEUM
GREEK BIOTOPE/WETLAND CENTRE

