



LIFE21-NAT-IT-LIFE
GOPROFOR MED
101074738

PRESERVING AND MANAGING FOREST HABITATS IN THE MEDITERRANEAN AREA

WORKSHOP - MONDAY DECEMBER 4, 2023



Co-funded by
the European Union



IMPLEMENTAZIONE DELLA RETE ECOLOGICA

APPLICAZIONE NEI SITI ITALIANI

MARCELLO AIRI (AGENZIA **FO.RE.S.T.A.S.**)

Forestas

Agenzia forestale regionale pro s'isvilupu de su
territòriu e de s'ambiente de sa Sardigna
Agenzia forestale regionale per lo sviluppo
del territorio e dell'ambiente della Sardegna



REGIONE AUTÒNOMA DE SARDIGNA
REGIONE AUTONOMA DELLA SARDEGNA



Siti di progetto Italiani e habitat forestali target

Toscana:

- IT5140012 Vallombrosa e Bosco di S. Antonio

Target habitat: 9260 (*Boschi di Castanea sativa*) area di impatto del progetto: 81 ha ;

- IT5180011 Pascoli montani e cespuglieti del Pratomagno

Target habitat: 9260 (*Boschi di Castanea sativa*) area di impatto del progetto 347 ha ;

Sardegna:

- ITB022212 Supramonte Di Oliena, Orgosolo E Urzulei – Su Sercone

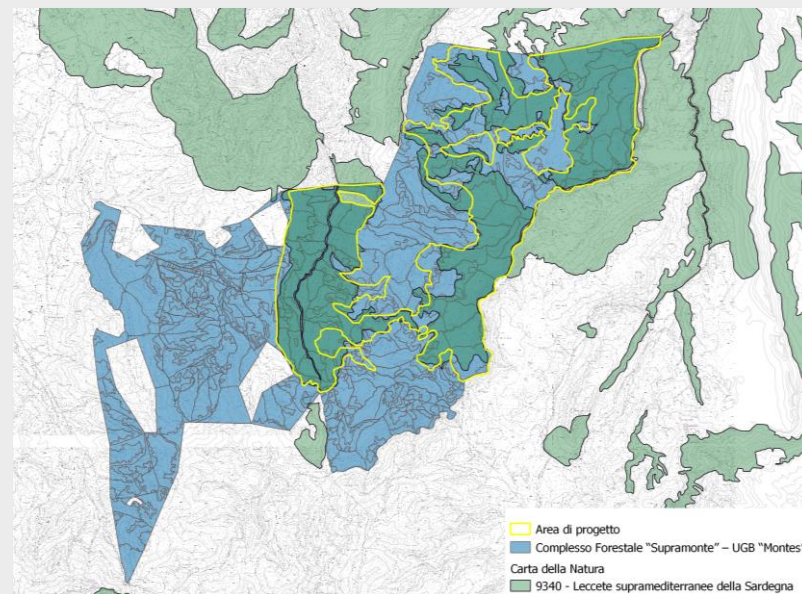
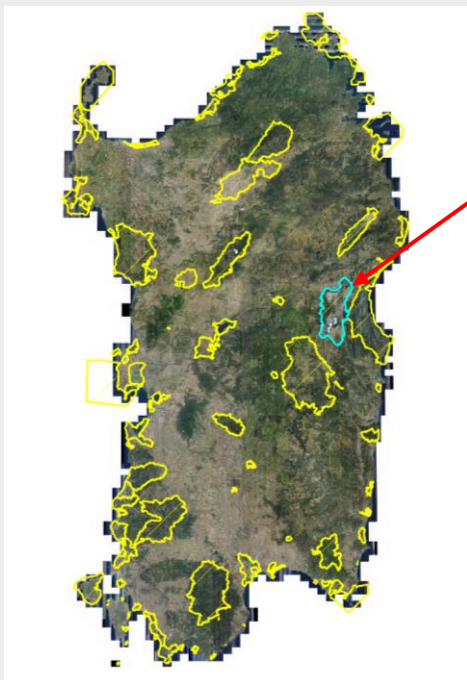
Target habitat: 9340 (*Foreste di Q. ilex e Q.rotundifolia*) area di impatto del progetto 1616 ha;

- ITB011102 Catena del Marghine e del Goceano

Target habitat: 9330 (*Foreste di Quercus suber*) area di impatto del progetto 177 ha.

Project site: ITB022212

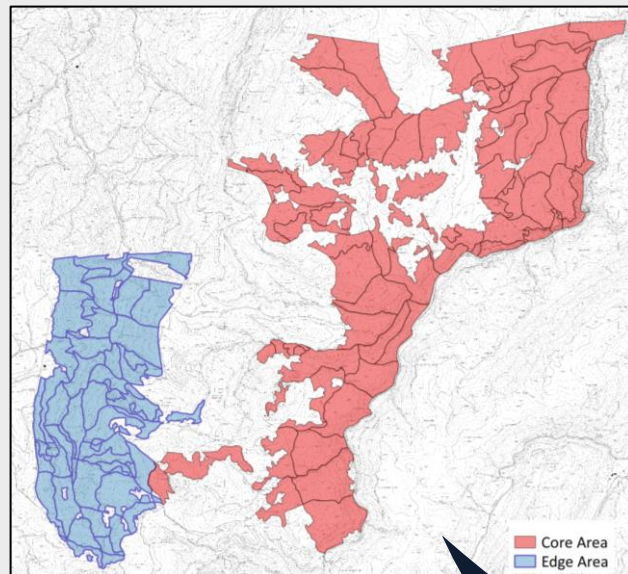
Supramonte di Oliena, Orgosolo e Urzulei - Su Sercone



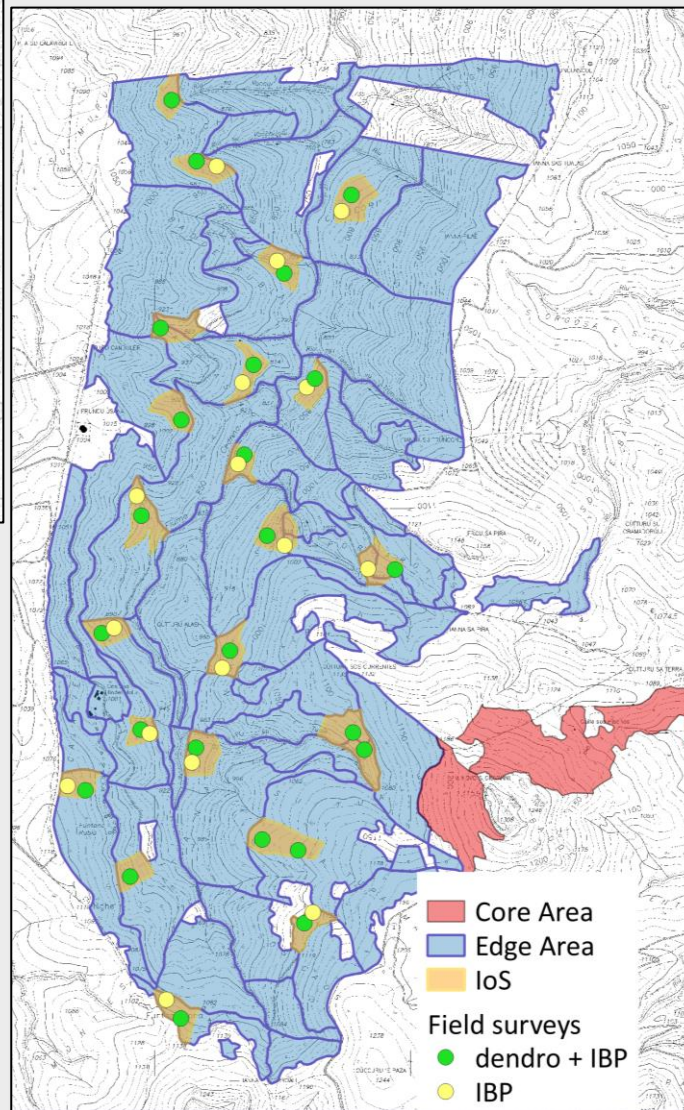
Total area 23.474 ha

- Target habitat: **9340** (Foreste di Q. ilex e Q.rotundifolia) Extension **4.695 ha**
- Project area (habitat surface): **1616 ha**
- Forest manager: Agenzia **Fo.Re.STAS** – Territorial Service of Nuoro
- Tot. Forest complex area: 4.659 ha of the "Supramonte" Forest Complex "Montes" Forest
- Type of management: planned; **conservation and production.**
- Peculiarities/problems: **grazing** in the forest contains the potential of **regeneration from seed**, climate change with **high temperatures and prolonged droughts** cause unsustainable stress from the system

Montes los and Core Area



	Surface (ha)
Core Area	1.122
Edge Area	459



N. IoS	22
IoS tot surface	35
Mean IoS surface	1,6 ha
Min. IoS surface	0,9 ha
Max. IoS surface	3,2 ha

Core Area of Montes «*Sas Baddes*»



	Surface (ha)
Core Area	1.122 ha
Edge Area	459 ha



Islands of Senescence (IdS) Most representative typologies

IdS 5: *Su Tuale/Funtana Bona*



Type 1: young coetaniform stands with a simplified structure with small diameter classes below 35 cm

IdS 11: *Gutturu Alasi*



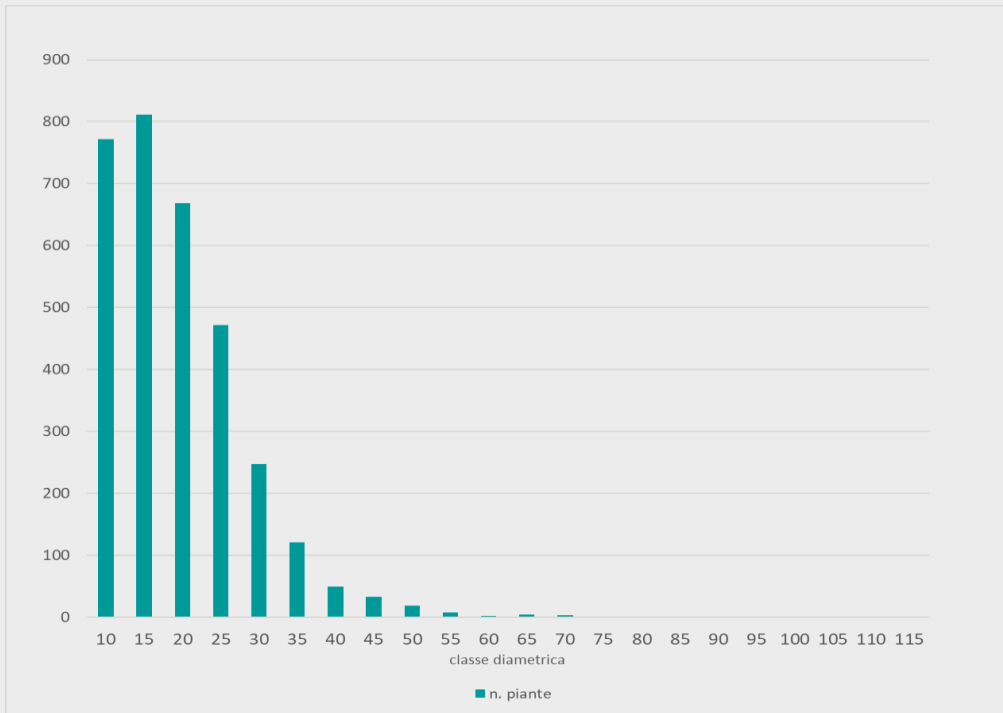
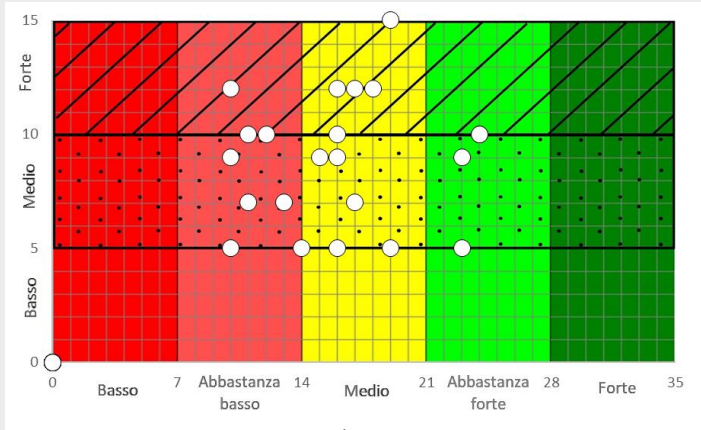
Type 2: slightly more developed peers with more articulated diametric and chronological classes than type 1

IdS 13: *Is Porcargios*

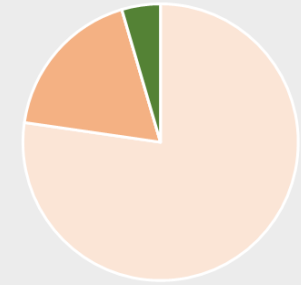


Type 3: disetaneiform, with well-distributed diametric (> 40 cm) and chronological classes, dead wood present standing and on the ground

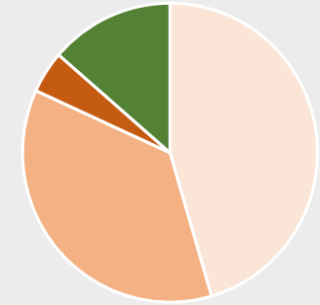
Islands of Senescence (IdS) Montes



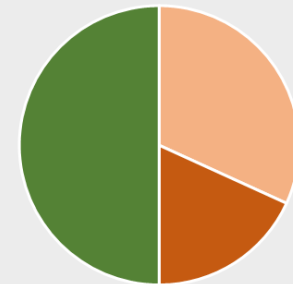
Standing deadwood



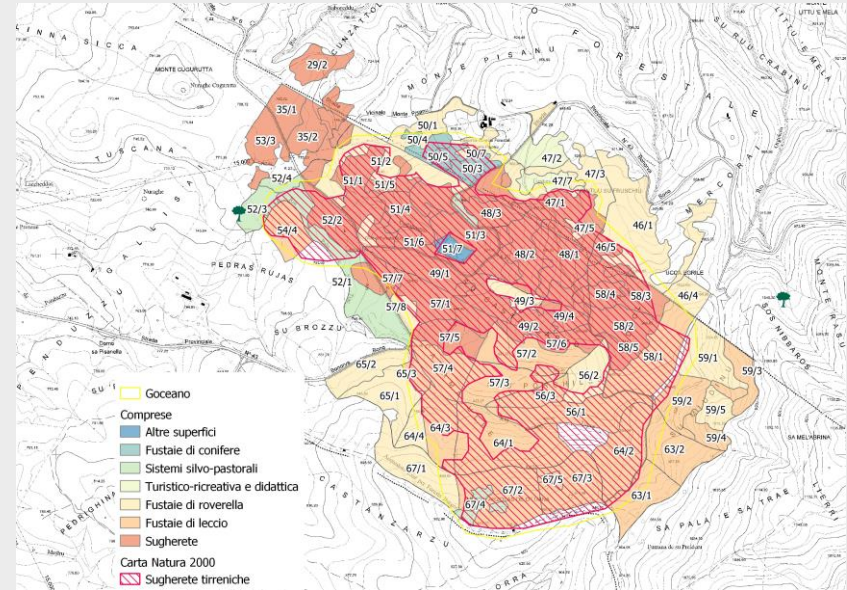
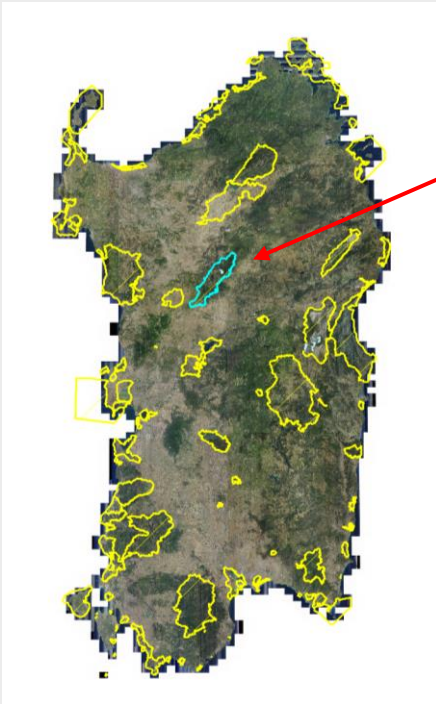
Lying deadwood



Large trees



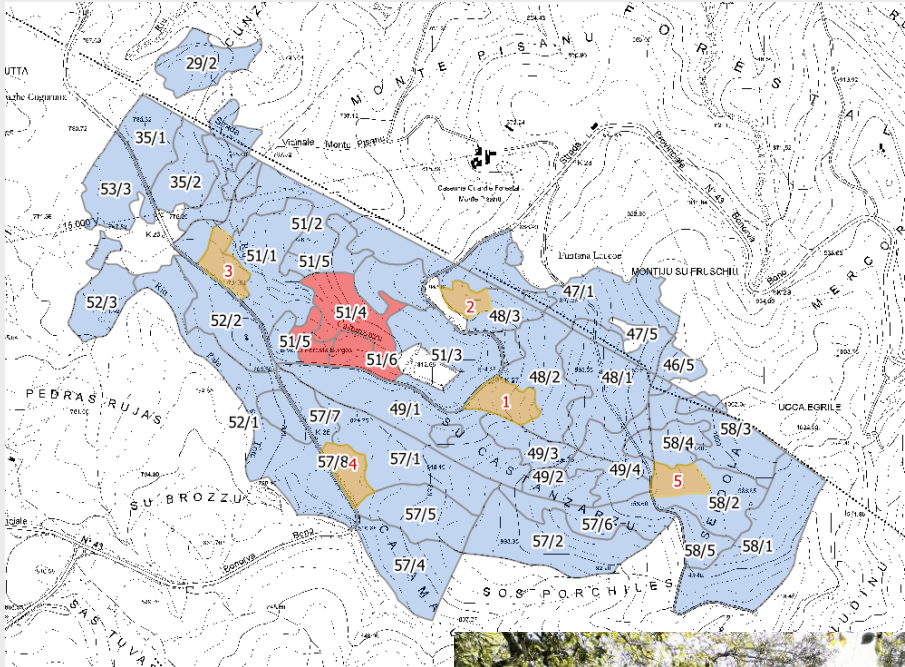
Project site: ITB011102 Catena del Marghine e del Goceano



Total area 14.976 ha

- Target habitat: **9330** (Foreste di *Quercus suber*) Extension **2.096,64** ha
- Project area (habitat surface): **177** ha
- Forest manager: Agenzia **Fo.Re.STAS** – Territorial Service of Sassari
- Tot. Forest complex area: **4.807** ha
- Peculiarities/**problems**: lack of active management on cork forests benefits **competition from competing broadleaved trees**; grazing in the forest contains the potential of **regeneration from seed**, climate change with **high temperatures and prolonged droughts** cause unsustainable stress from the system

Monte Pisanu Ios and Core Area



N. IoS	5
Mean IoS surface	In progress..
Min. IoS surface	
Max. IoS surface	

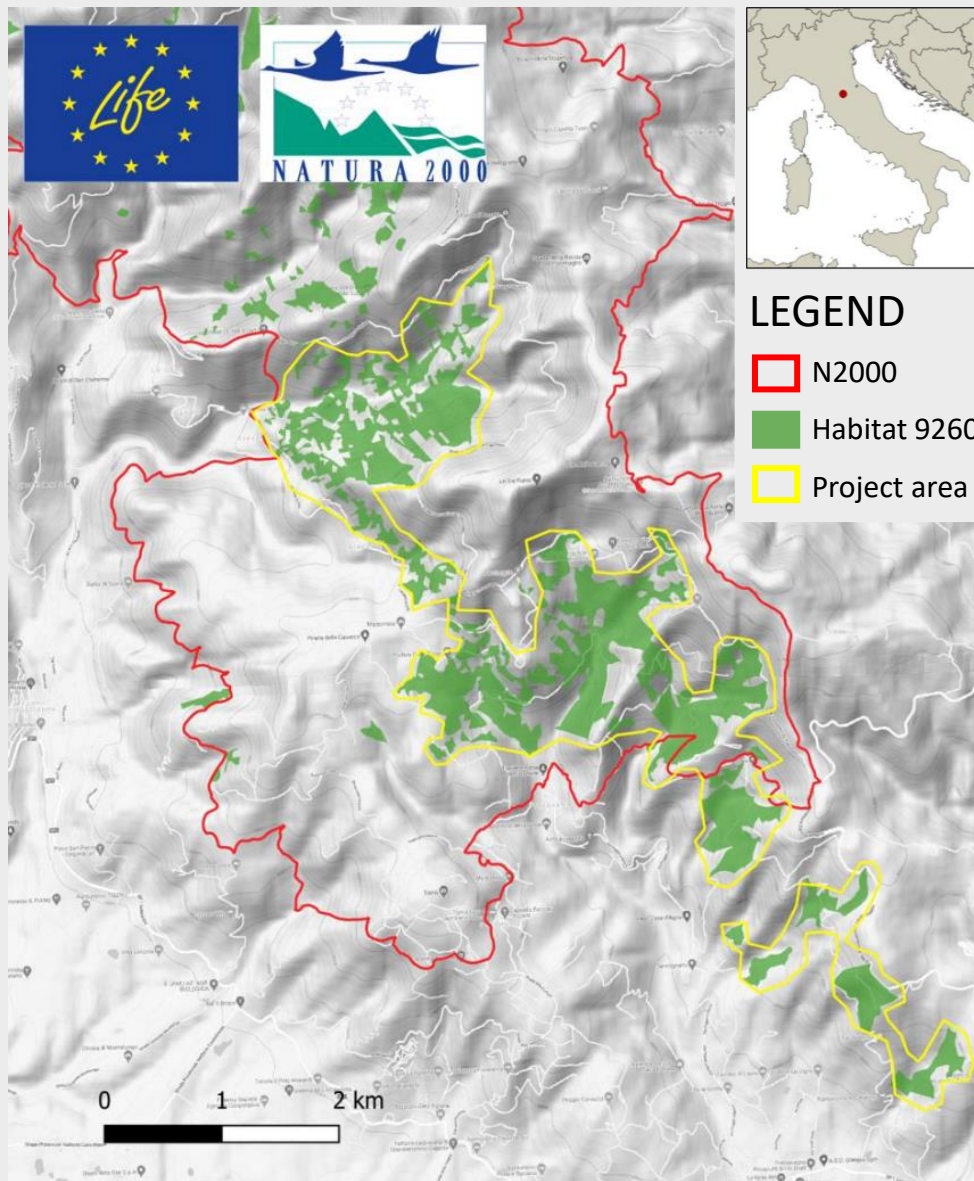
IoS Characterization (IBP + Dendro Reliefs)
In progress...

IoS Characterization (IBP + Dendro Reliefs)
In progress...



	Surface (ha)
Core Area	7
Edge Area	165
IoS tot surface	5

IT5180011 «Pascoli montani e cespuglieti del Pratomagno»

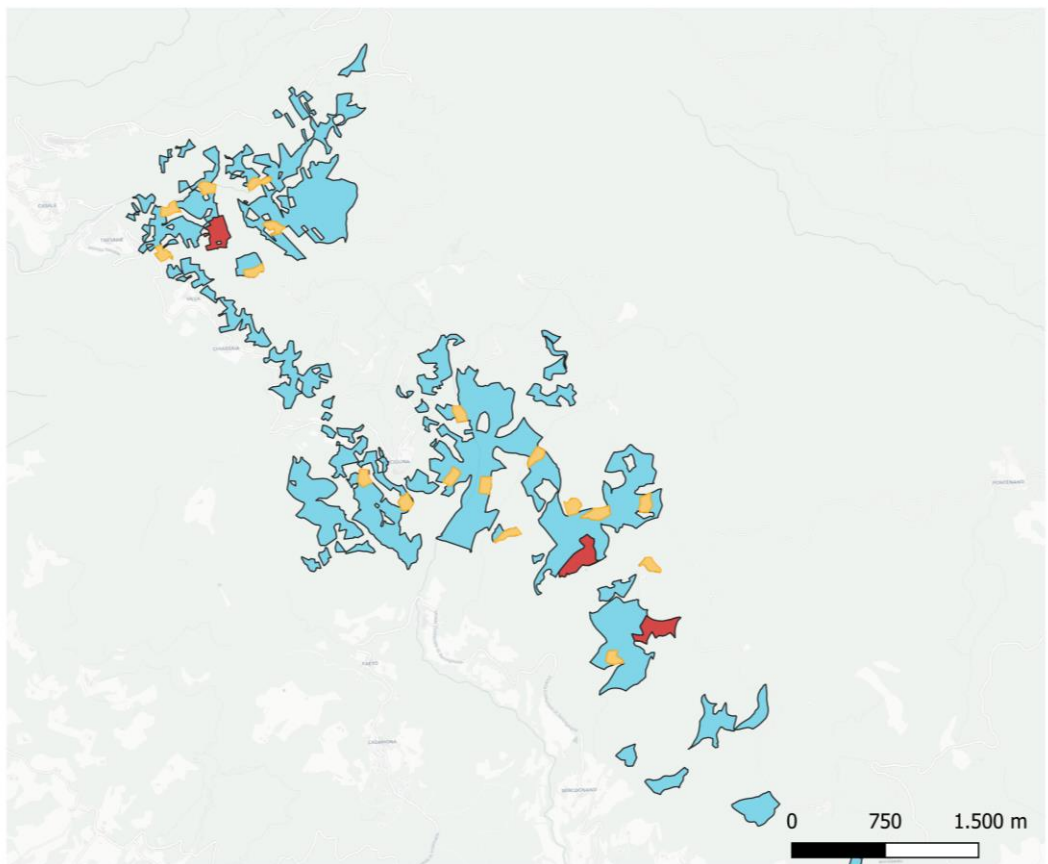


Target habitat: 9260 - Chestnut

Location	Tuscany (Arezzo)
N2000 data	
Code	IT5180011
Name	Pascoli Montani e Cespuglieti del Pratomagno
Surface	6753 ha
Habitat surface	1726,92 ha
Manager	Tuscany Region
Forest complex data	
Forest complex	Pratomagno-Valdarno
Forest manager	Unione dei Comuni Pratomagno
Surface	3.288 ha
Chestnut surface	350,17 ha
Management	High forests and coppices with old fruit chestnut trees
Critical elements	Poor state of health, attributable both to the spread of pathogens (cortical cancer and ink-sickness) and to thermophilic and arid stationary characteristics

IMPLEMENTATION OF THE ECOLOGICAL NETWORK

IT5180011 Pascoli montani e cespuglieti del Pratomagno
Habitat 9260



Islands of Senescence
 Core Area
 Edge Area

	N°	ha	%
Core Area	3	12	3,5
IoS	18	20	5,8
Edge Area		315	90,8
Project impact (ha)		347	100

Surface characterised by structural samples and IBP

In progress...

	N°	ha	%
Core Area	0/3	0	0
IoS	8/18	11,4	57

CORE AREAS (3 CAs)



Typology: fruit chestnut groves in which large individuals are still present

Mean diameter class

CA①: 40/45 cm

CA②: 40 cm

CA③: 85 cm

Data from Forest Management Plan

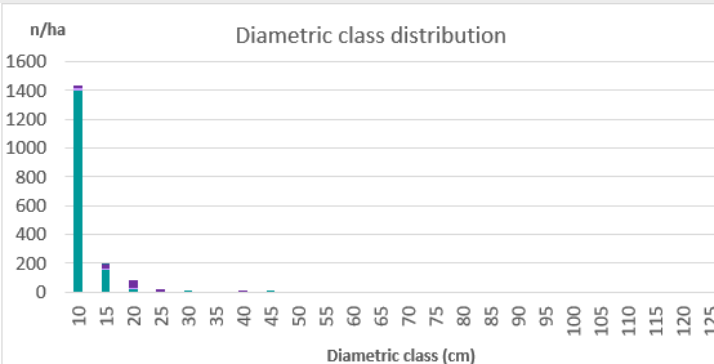
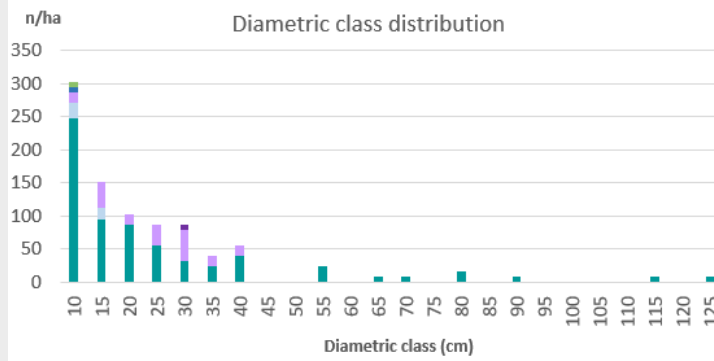
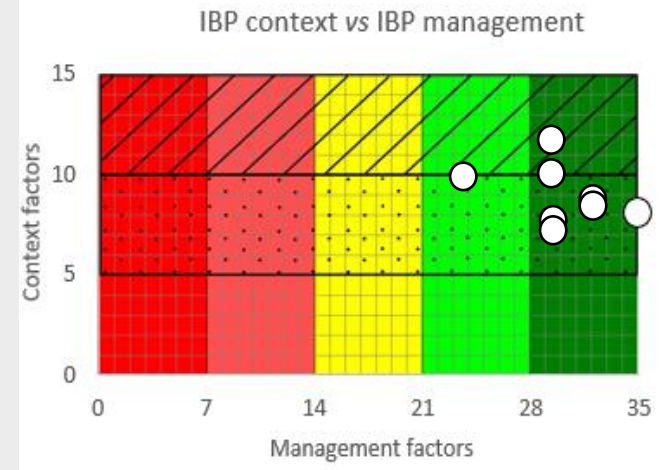
Relevant presence of **laying** and **standing large deadwood**



SENESCENCE ISLANDS



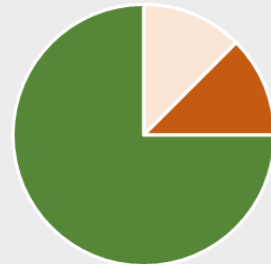
IoS	Mean DBH	n/ha
10	19,2	1.328,9
11	14,8	1.726,8
12	11,0	1.774,6
14	16,2	1.384,6
15	17,5	779,9
16	23,9	907,2
17	23,9	509,3
18	14,1	1.225,5



Standing deadwood



Large trees

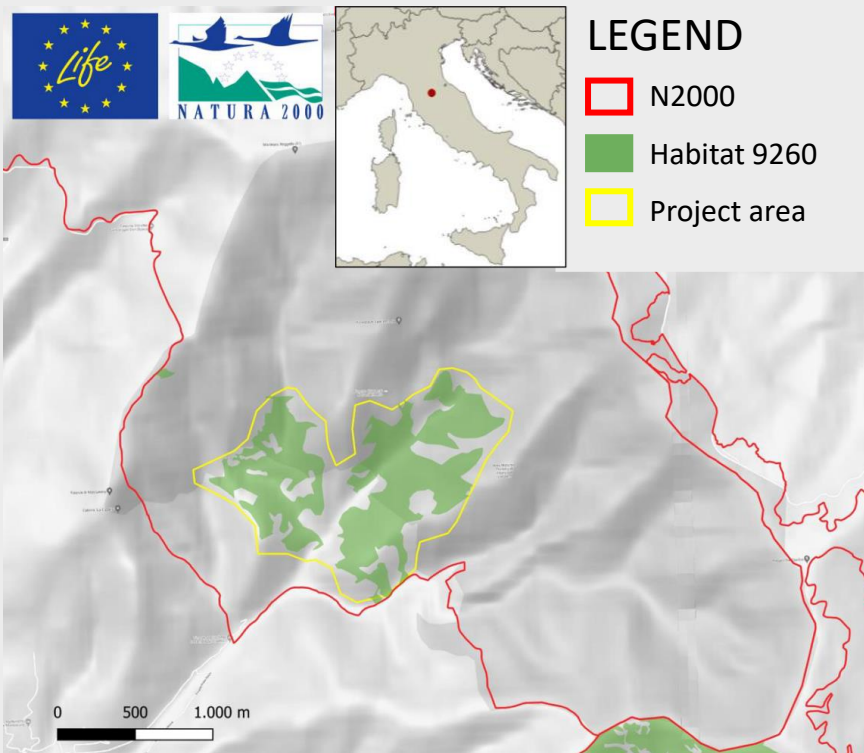


Laying deadwood



- 0
- 1
- 2
- 5

IT5140012 «Vallombrosa e Bosco di S. Antonio»



LEGEND

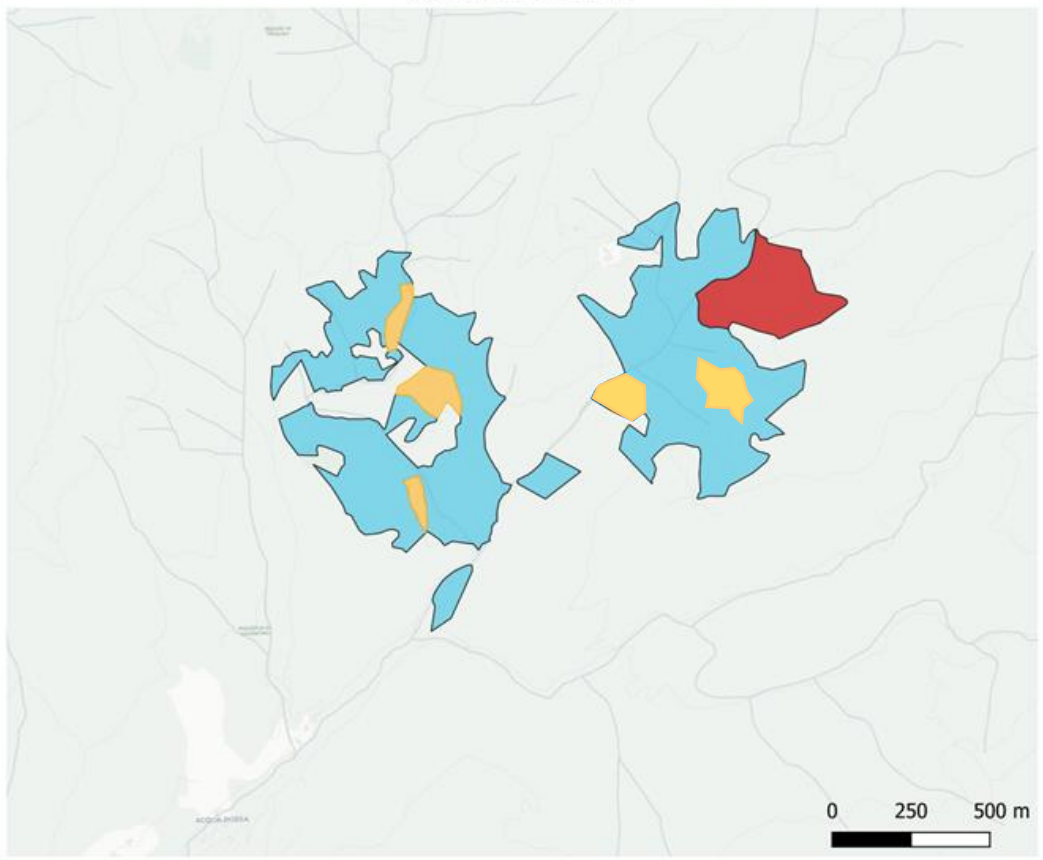
- N2000
- Habitat 9260
- Project area

Location	Tuscany (Florence)
N2000 data	
Code	IT5140012
Name	Vallombrosa e Bosco di S. Antonio
Surface	2697 ha
Habitat surface	107,32 ha
Manager	Tuscany Region
Forest complex data	
Forest complex	Foresta di Sant'Antonio
Forest manager	Unione dei Comuni Valdarno e Valdisieve
Surface	900 ha
Chestnut sur.	144,6 ha
Management	Predominant naturalistic management for the conservation of structural and floristic biodiversity
Critical elements	Poor phytosanitary condition: cortical canker and ink disease

Target habitat: 9260 - Chestnut

IMPLEMENTATION OF THE ECOLOGICAL NETWORK

IT5140012 Vallombrosa e Bosco di S. Antonio
Habitat 9260



Islands of Senescence
 Core Area
 Edge Area

	N°	ha	%
Core Area	1	9	11,1
IoS	5	6	7,4
Edge Area		66	81,5
Project impact (ha)		81	100

Surface characterised by structural samples and IBP

In progress...

	N°	ha	%
Core Area	0/1	0	0
IoS	3/5	3,6	60%

CORE AREA



Maturity^①: stands with a prevalent age between 66 and 71 years

Average diameter^①: 28-31 cm

Large plants^②: presence of areas with DBH > 67.5 cm and H > 27 m

Temporal continuity^③: fruit chestnut grove in which large individuals are still present



Forest typology	Type of culture	Prevalent age	Mean DBH	G/ha	V/ha
Acidophilic chestnut	Transitional high forest	71	31	43	424
Acidophilic chestnut	Transitional high forest	66	28	31	372

① *data from the Forest Management Plan*

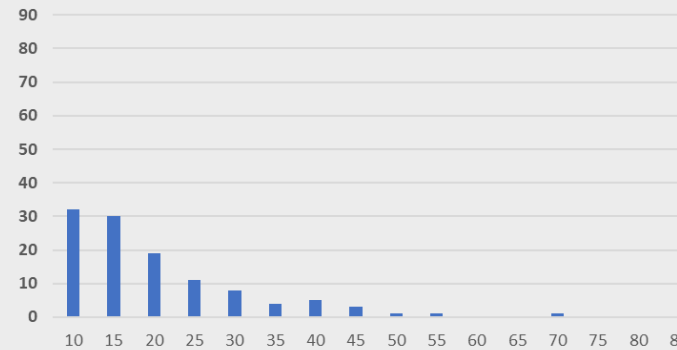
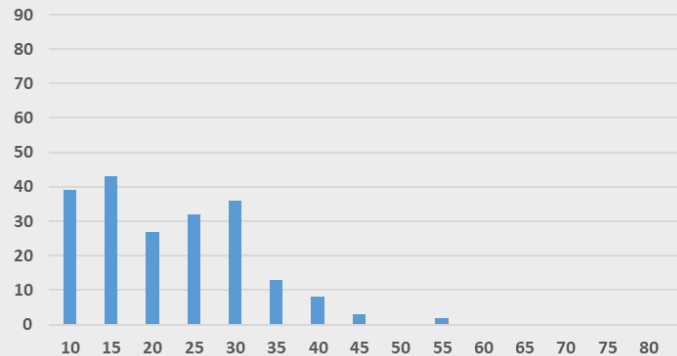
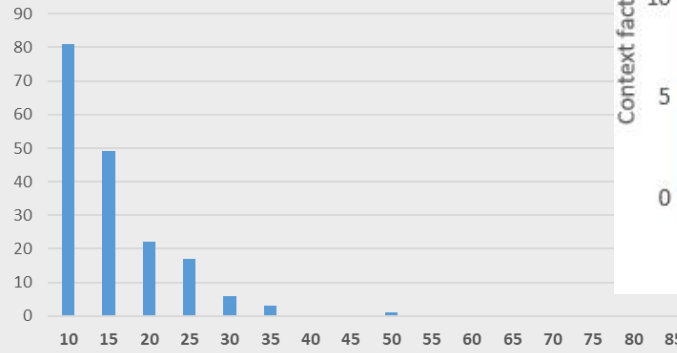
② *LiDAR*

③ *1954 GAI flight*

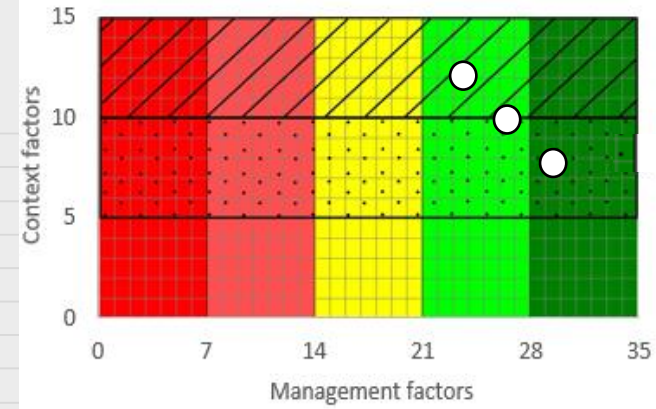
SENESCENCE ISLANDS



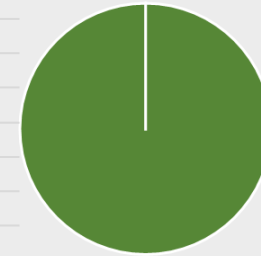
Diametric class distribution



IBP context vs IBP management



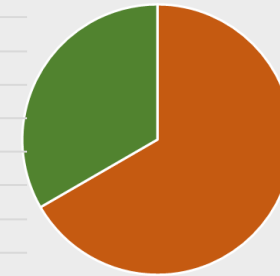
Standing deadwood



Large trees



Laying deadwood



- 0
- 1
- 2
- 5



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