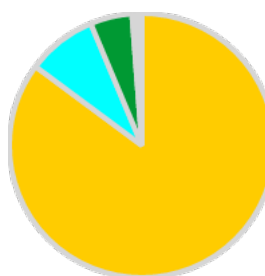


Site conditions

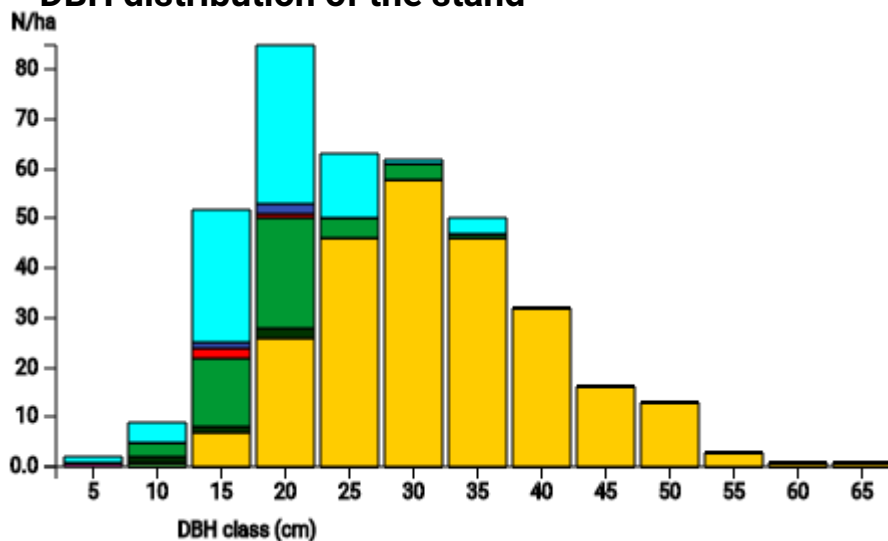
Altitude: 870 m.a.s.l.
 Geology / Bedrock: Alluvial and mixed beds
 Soil type: Cambisol – Leptosol with Luvisol of the Central Appenino Mountains.
 Natural forest community: Aceri obtusati-Quercu cerridis sigmetum
 Mean annual temperature: 12.4 C;
 Mean annual precipitation: 1154 mm; Ownership: State-owned Agency "Sala"; Establishment: 2020

Tree species distribution by volume (in %)



- Turkey oak: 85.1 %
- European hop-hornbeam: 8.5 %
- Italian maple: 5.1 %
- manna ash: 0.6 %
- field maple: 0.3 %
- hornbeam: 0.3 %
- common beech: 0 %
- downy oak: 0 %

DBH distribution of the stand



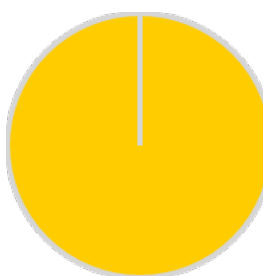
Initial stand (details by tree species)

Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
European hop-hornbeam	81	3	34.6	2647	1669	101
Italian maple	47	1.8	20.8	1588	917	65
Turkey oak	249	24.7	346.4	26500	7807	401
common beech	1	0	0.2	16	0	0
downy oak	1	0	0.1	10	0	0
field maple	4	0.1	1.4	104	115	6
hornbeam	3	0.1	1.3	101	24	1
manna ash	3	0.1	2.3	174	38	4
Total	389	29.9	407.1	31140	10570	578

Removed trees

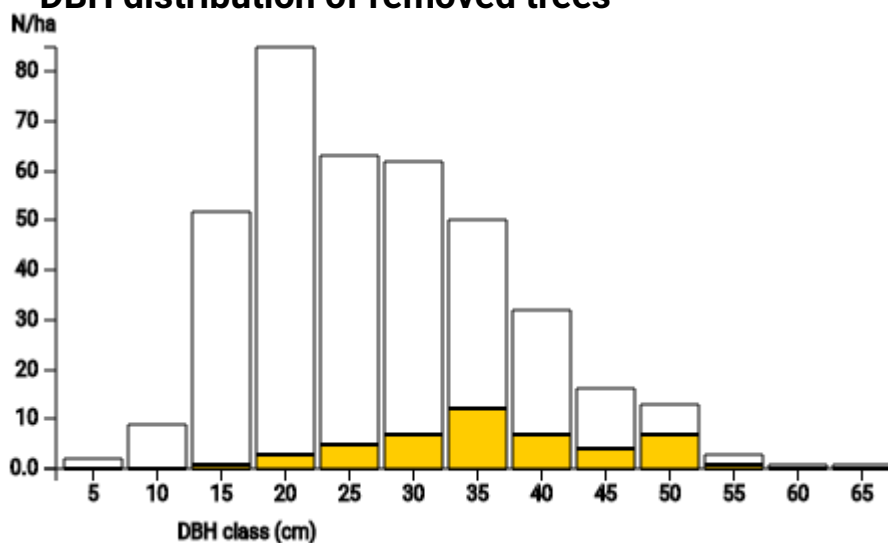
Volume: 81.6 m³
 Basal area: 5.6 m²
 Economic value: 6241 €
 Habitat value: 1552 pts.

Removed trees (N in %)



- Turkey oak: 100 %
- common beech: 0 %
- downy oak: 0 %
- field maple: 0 %
- Italian maple: 0 %
- manna ash: 0 %
- hornbeam: 0 %
- European hop-hornbeam: 0 %

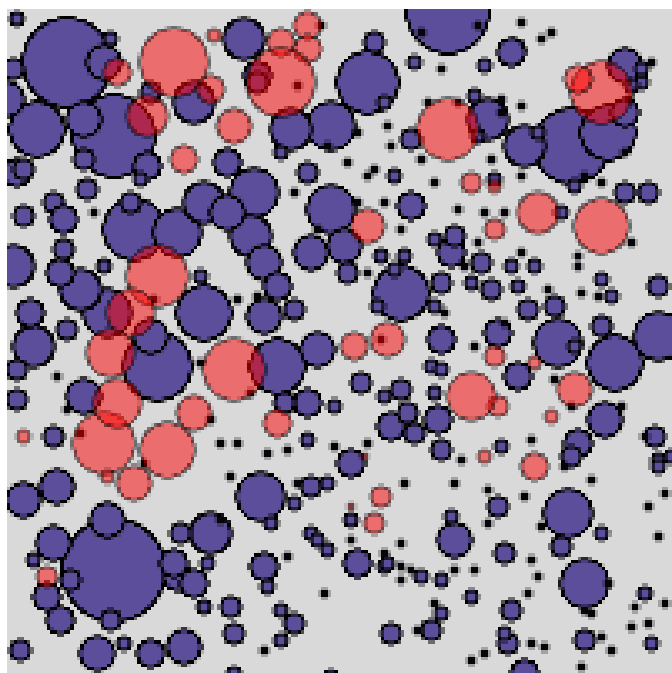
DBH distribution of removed trees



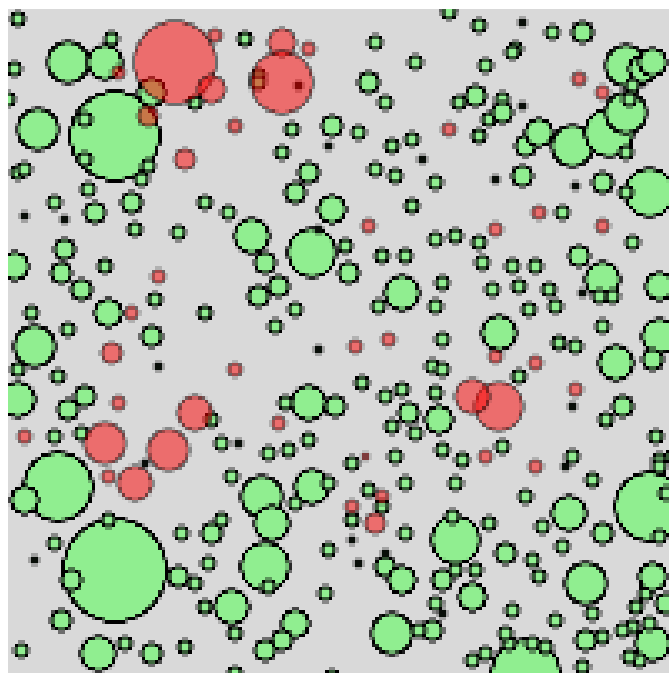
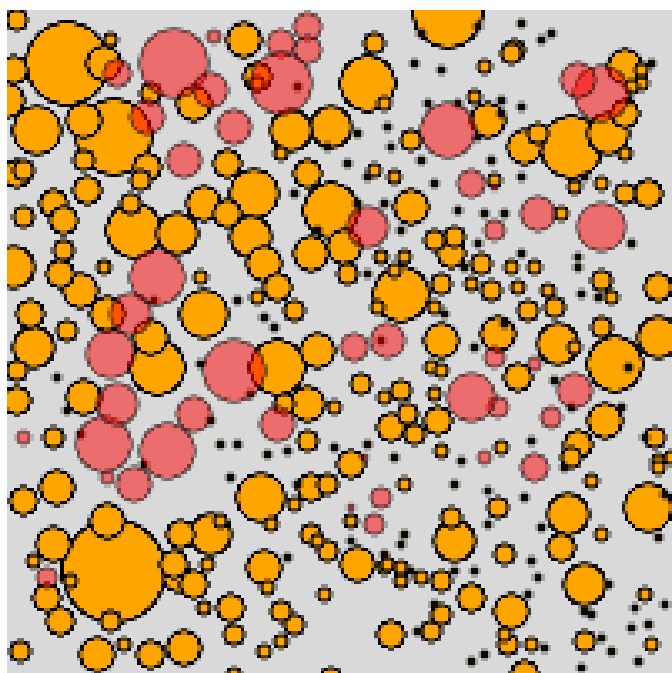
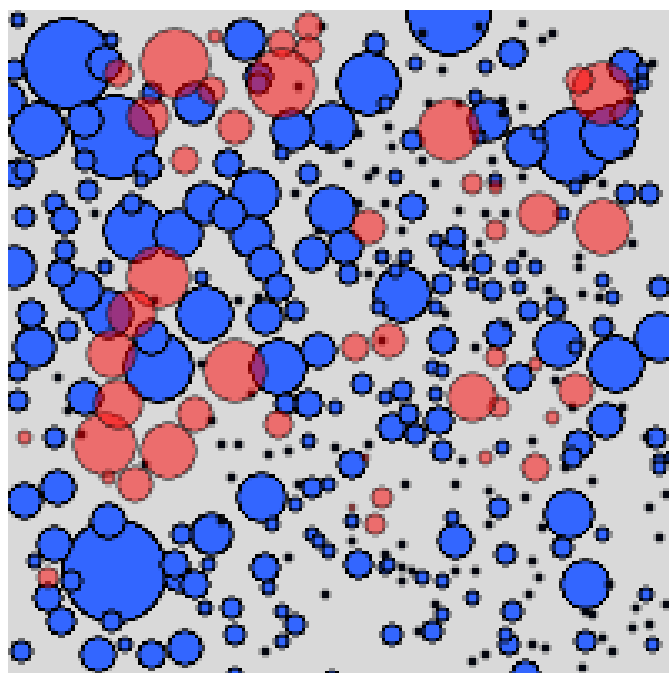
Removed trees (details by tree species)

Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
European hop-hornbeam	0	0	0	0	0	0
Italian maple	0	0	0	0	0	0
Turkey oak	47	5.6	81.6	6241	1552	80
common beech	0	0	0	0	0	0
downy oak	0	0	0	0	0	0
field maple	0	0	0	0	0	0
hornbeam	0	0	0	0	0	0
manna ash	0	0	0	0	0	0
Total	47	5.6	81.6	6241	1552	80

Economic value [EUR]



Habitat value

Basal area [m²]Volume [m³]**Description:**

Red circles (removed trees); circle size according to numerical values (e.g. large circles mean high values); trees with very low values (e.g. habitat value "0") are not visible.

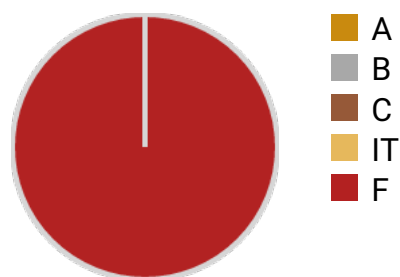
Economic values

Total value of removed trees: 6241 €
 Percentage of total stand value: 20 %
 Stand value after harvest: 24898 €

Economic value by tree species [€]

Tree species	Total	Per m ³
common beech	0	0
downy oak	0	0
Turkey oak	6241	77
field maple	0	0
Italian maple	0	0
manna ash	0	0
hornbeam	0	0
European hop-hornbeam	0	0
Total	6241	77

Wood quality distribution (m³ in %)



Quality class	m ³	%
A	0	0
B	0	0
C	0	0
Industrial Timber	0	0
Fuelwood	81.6	100

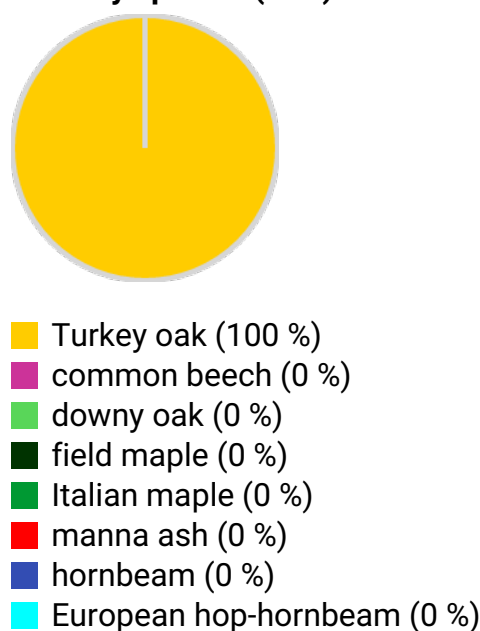
Habitat values

Total habitat value of removed trees: 1552 pts.
 Percentage of total stand value: 14.7 %
 Stand value after harvest: 9018 pts.

Habitat value by tree species [pts.]

Tree species	Total	Per m ³	Microhabitats [N]
common beech	0	0	0
downy oak	0	0	0
Turkey oak	1552	19	80
field maple	0	0	0
Italian maple	0	0	0
manna ash	0	0	0
hornbeam	0	0	0
European hop-hornbeam	0	0	0
Total	1552	19	80

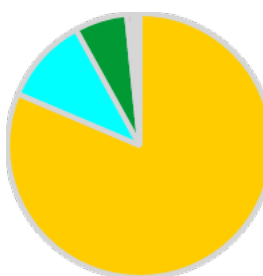
Habitat value (points) of removed trees by species (in %)



Remaining stand

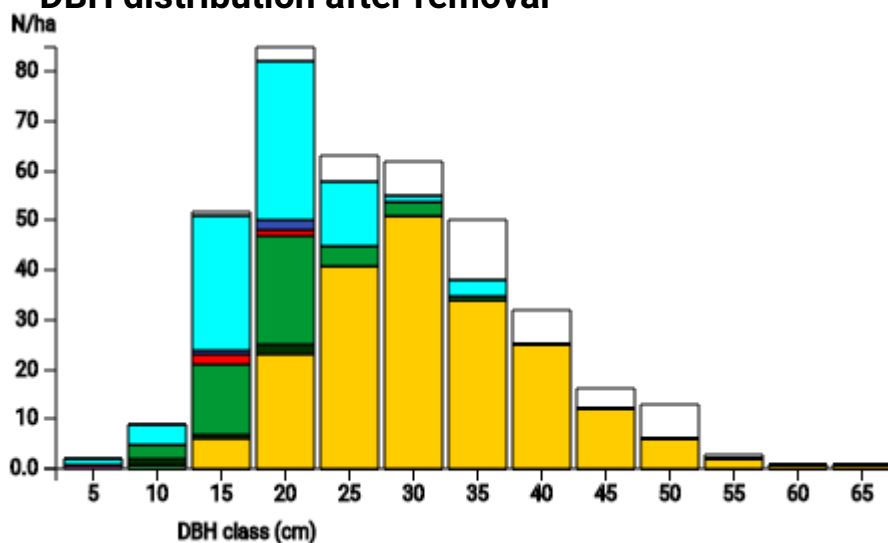
Volume: 325.4 m³
 Basal area: 24.3 m²
 Economic value: 24898 €
 Habitat value: 9018 pts.

Remaining trees by volume (m³ in %)



- Turkey oak: 81.4 %
- European hop-hornbeam: 10.6 %
- Italian maple: 6.4 %
- manna ash: 0.7 %
- field maple: 0.4 %
- hornbeam: 0.4 %
- common beech: 0.1 %
- downy oak: 0 %

DBH distribution after removal



Remaining stand (details by tree species)

Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
European hop-hornbeam	81	3	34.6	2647	1669	101
Italian maple	47	1.8	20.8	1588	917	65
Turkey oak	202	19.1	264.8	20258	6255	321
common beech	1	0	0.2	16	0	0
downy oak	1	0	0.1	10	0	0
field maple	4	0.1	1.4	104	115	6
hornbeam	3	0.1	1.3	101	24	1
manna ash	3	0.1	2.3	174	38	4
Total	342	24.3	325.5	24898	9018	498

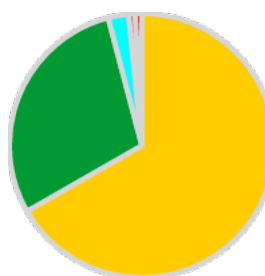
Retention treesVolume: 25.4 m³

Elite trees: 18

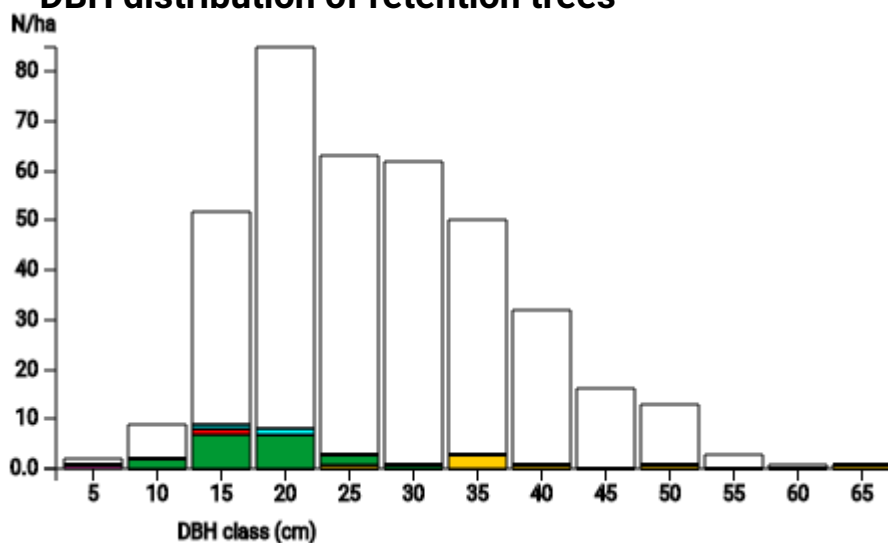
Habitat trees: 4

Economic value: 1947 €

Habitat value: 787 pts.

Retention trees by volume (m³ in %)

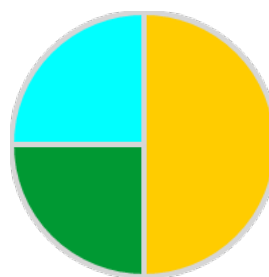
- Turkey oak: 66.7 %
- Italian maple: 29.2 %
- European hop-hornbeam: 2.5 %
- common beech: 0.8 %
- manna ash: 0.8 %
- downy oak: 0 %
- field maple: 0 %
- hornbeam: 0 %

DBH distribution of retention trees**Retained trees (details by tree species)**

Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
European hop-hornbeam	2	0.1	0.6	48	15	2
Italian maple	19	0.7	7.4	569	392	28
Turkey oak	7	1.1	17	1298	350	21
common beech	1	0	0.2	16	0	0
downy oak	0	0	0	0	0	0
field maple	0	0	0	0	0	0
hornbeam	0	0	0	0	0	0
manna ash	1	0	0.2	16	30	2
Total	30	1.9	25.4	1947	787	53

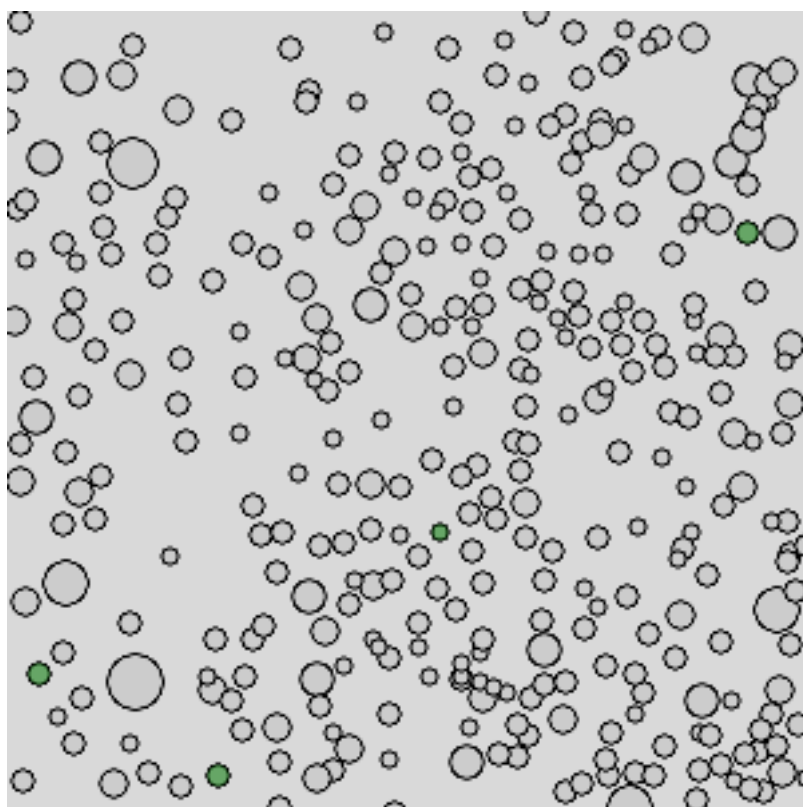
Number of habitat trees	[N]	4
Habitat value	pts.	65
	[% of total]	0.6
Economic value	[€]	296
	[% of total]	1
Number of microhabitats	[N]	4
	[% of total]	0.7

Habitat tree distribution by species (N in %)

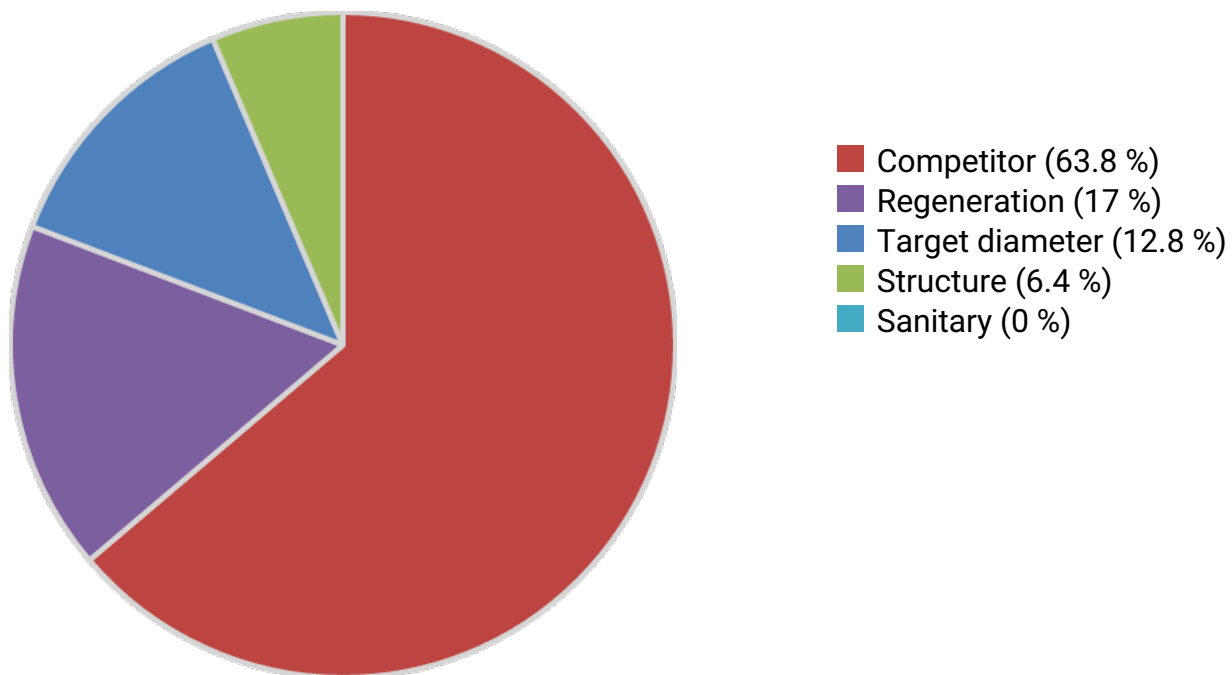


■ Turkey oak: 50 %
■ Italian maple: 25 %
■ European hop-hornbeam: 25 %
■ common beech: 0 %
■ downy oak: 0 %
■ field maple: 0 %
■ manna ash: 0 %
■ hornbeam: 0 %

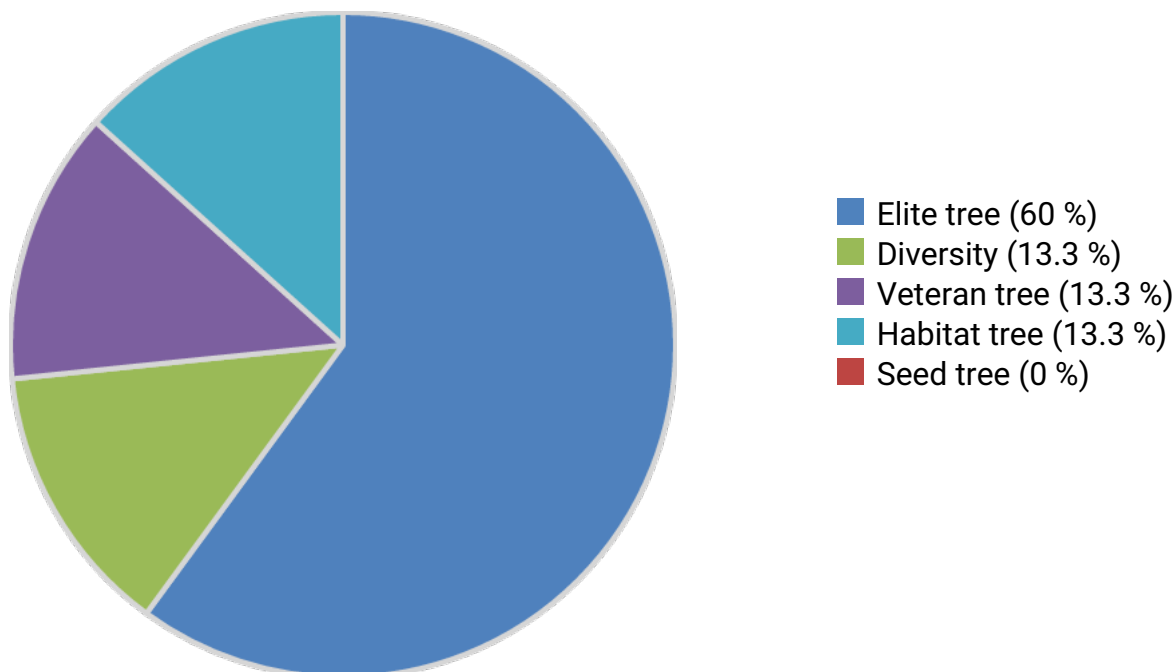
Spatial distribution of habitat trees



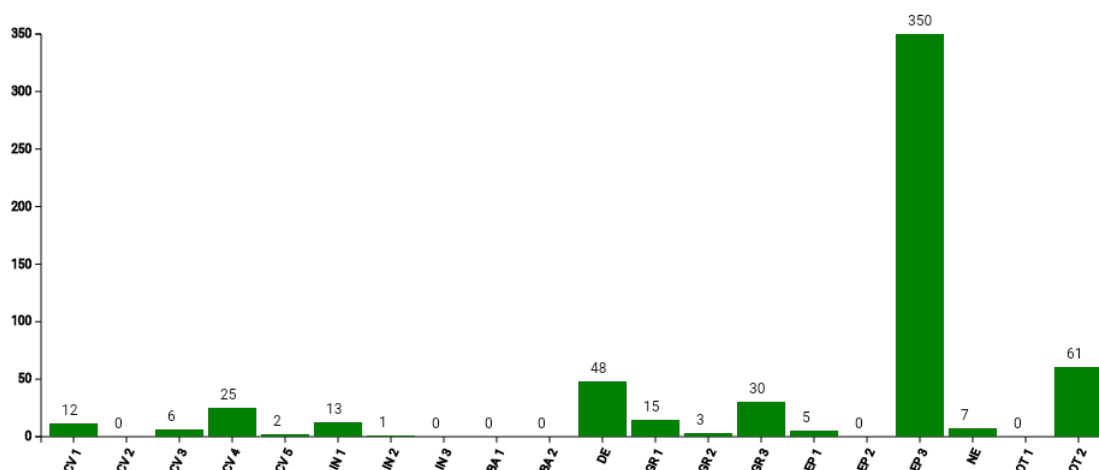
Reasons for removal



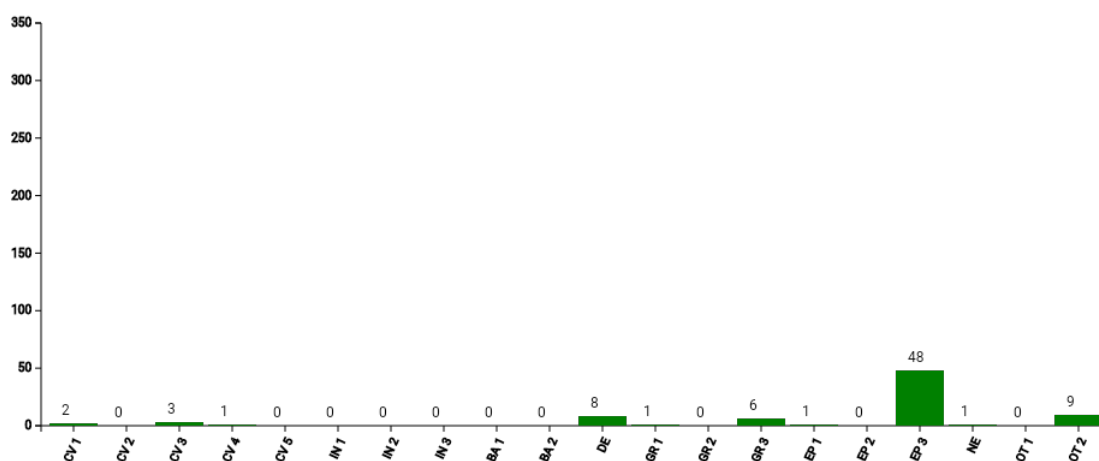
Reasons for retention



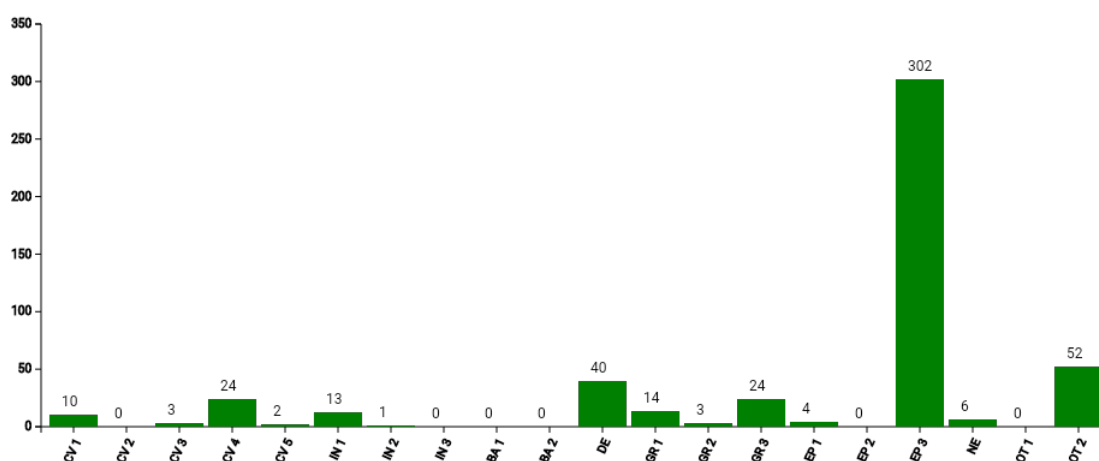
Distribution of tree microhabitats by code (N total)



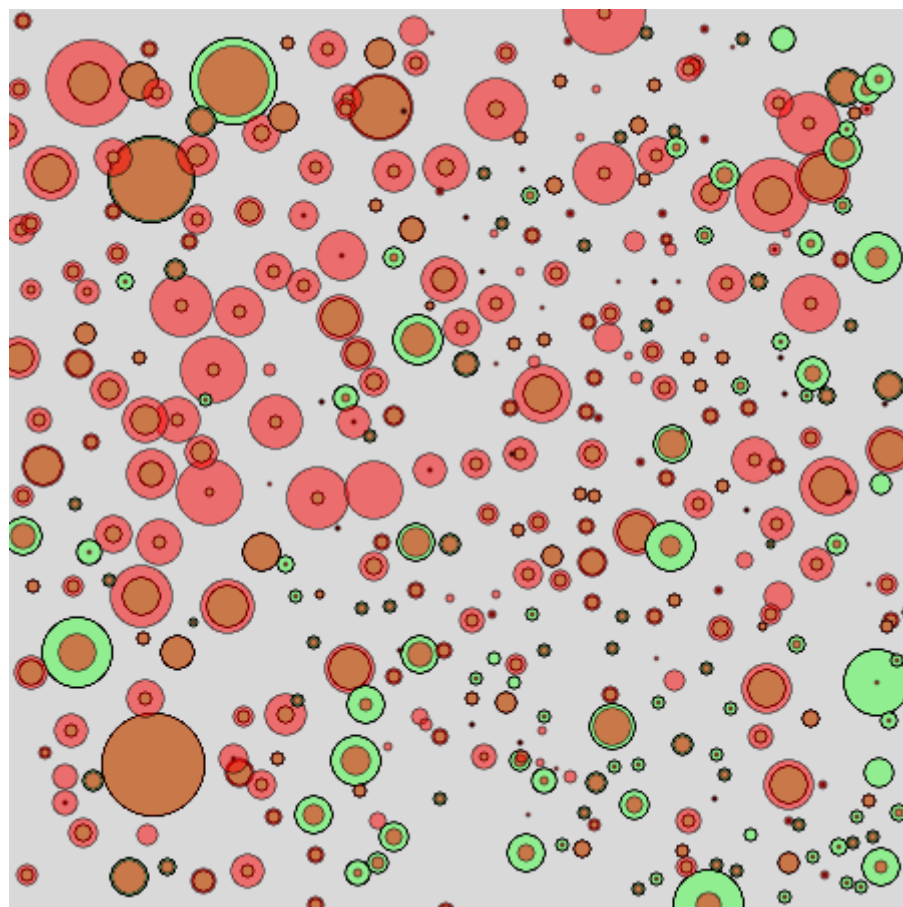
Removed tree microhabitats by code (N removed)



Remaining tree microhabitats by code (N after harvest)



For more details on codes consult the field guide "Catalogue of tree microhabitats" or the tree microhabitat app.

Conflict trees (stand data)**Description:**

Overlay of economic and habitat value: red circles (economic value), green circles (habitat value); circle size according to numerical values (e.g. large circles mean high values); trees with very low values are not visible. Trees where both values overlap considerably represent so called "conflict trees".

Removed trees

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Turkey oak (13) Quercus cerris	56.5	0.25	3.7	281	144	Regeneration
Turkey oak (10) Quercus cerris	54	0.23	3.5	269	106	Regeneration
Turkey oak (78) Quercus cerris	52	0.21	3.1	238	24	Competitor
Turkey oak (101) Quercus cerris	51	0.2	3.3	253	66	Competitor
Turkey oak (317) Quercus cerris	51	0.2	3.2	249	24	Competitor
Turkey oak (57) Quercus cerris	51	0.2	3.4	258	24	Competitor
Turkey oak (306) Quercus cerris	50	0.2	3.2	246	24	Competitor
Turkey oak (100) Quercus cerris	50	0.2	2.9	219	69	Competitor
Turkey oak (351) Quercus cerris	47	0.17	2.9	224	24	Competitor
Turkey oak (183) Quercus cerris	46	0.17	2.3	179	60	Competitor
Turkey oak (81) Quercus cerris	46	0.17	2.6	195	40	Regeneration
Turkey oak (86) Quercus cerris	45	0.16	2.4	183	24	Structure
Turkey oak (69) Quercus cerris	43	0.15	2.4	184	24	Competitor
Turkey oak (360) Quercus cerris	43	0.15	1.9	149	24	Competitor
Turkey oak (25) Quercus cerris	41.5	0.14	2.1	157	36	Regeneration
Turkey oak (87) Quercus cerris	41	0.13	1.8	142	60	Competitor
Turkey oak (349) Quercus cerris	40.5	0.13	2	154	24	Competitor
Turkey oak (158) Quercus cerris	40	0.13	1.7	126	24	Competitor
Turkey oak (32) Quercus cerris	40	0.13	1.4	110	36	Regeneration
Turkey oak (108) Quercus cerris	39.5	0.12	1.8	134	54	Competitor
Turkey oak (90) Quercus cerris	39	0.12	1.6	121	28	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Quercus cerris						
Turkey oak (175) Quercus cerris	38.5	0.12	1.7	127	24	Competitor
Turkey oak (23) Quercus cerris	38	0.11	1.8	140	24	Target diameter
Turkey oak (305) Quercus cerris	38	0.11	1.6	123	24	Competitor
Turkey oak (20) Quercus cerris	38	0.11	1.6	123	50	Regeneration
Turkey oak (6) Quercus cerris	36	0.1	1.4	111	0	Competitor
Turkey oak (8) Quercus cerris	35.5	0.1	1.3	98	24	Competitor
Turkey oak (14) Quercus cerris	35.5	0.1	1.6	122	24	Regeneration
Turkey oak (5) Quercus cerris	35.5	0.1	1.5	118	52	Competitor
Turkey oak (203) Quercus cerris	35.5	0.1	1.4	105	28	Competitor
Turkey oak (169) Quercus cerris	35	0.1	1.6	122	24	Target diameter
Turkey oak (337) Quercus cerris	34	0.09	1.1	87	0	Competitor
Turkey oak (182) Quercus cerris	33.5	0.09	1.2	90	81	Competitor
Turkey oak (134) Quercus cerris	33	0.09	1.2	94	0	Competitor
Turkey oak (223) Quercus cerris	32	0.08	1	79	24	Target diameter
Turkey oak (240) Quercus cerris	31.5	0.08	1	78	36	Target diameter
Turkey oak (181) Quercus cerris	31	0.08	0.9	68	0	Competitor
Turkey oak (168) Quercus cerris	30	0.07	1	74	24	Competitor
Turkey oak (355) Quercus cerris	29.5	0.07	0.9	72	24	Competitor
Turkey oak (204) Quercus cerris	28	0.06	0.8	58	24	Competitor
Turkey oak (105) Quercus cerris	27	0.06	0.7	53	24	Structure

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Turkey oak (3) Quercus cerris	25	0.05	0.6	49	24	Regeneration
Turkey oak (107) Quercus cerris	25	0.05	0.6	47	24	Structure
Turkey oak (173) Quercus cerris	24	0.05	0.6	44	24	Competitor
Turkey oak (335) Quercus cerris	23	0.04	0.6	44	0	Competitor
Turkey oak (220) Quercus cerris	21.5	0.04	0.4	28	6	Target diameter
Turkey oak (238) Quercus cerris	19	0.03	0.2	18	24	Target diameter

Retention trees

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Turkey oak (133) Quercus cerris	68	0.36	5.4	409	174	Veteran tree
Turkey oak (326) Quercus cerris	53	0.22	3.9	299	66	Veteran tree
Turkey oak (167) Quercus cerris	43.5	0.15	2.4	181	24	Veteran tree
Turkey oak (148) Quercus cerris	39	0.12	1.8	137	24	Habitat tree
Turkey oak (345) Quercus cerris	38	0.11	1.3	101	24	Diversity
Turkey oak (172) Quercus cerris	37	0.11	1.5	118	24	Elite tree
Italian maple (329) Acer opalus	34	0.09	1.1	85	84	Veteran tree
Italian maple (330) Acer opalus	29.5	0.07	1	73	24	Habitat tree
Turkey oak (135) Quercus cerris	26	0.05	0.7	53	14	Habitat tree
Italian maple (375) Acer opalus	25.5	0.05	0.6	43	28	Elite tree
Italian maple (331) Acer opalus	24	0.05	0.5	39	40	Elite tree
Italian maple (201) Acer opalus	24	0.05	0.5	37	28	Elite tree
European hop-hornbeam (207) Ostrya carpinifolia	23	0.04	0.4	33	3	Habitat tree
Italian maple (178) Acer opalus	22	0.04	0.4	28	38	Elite tree
Italian maple (89) Acer opalus	22	0.04	0.3	23	4	Elite tree
Italian maple (193) Acer opalus	21.5	0.04	0.4	29	4	Elite tree
Italian maple (65) Acer opalus	21	0.04	0.3	24	24	Elite tree
Italian maple (377) Acer opalus	20	0.03	0.3	25	7	Elite tree
Italian maple (88) Acer opalus	19	0.03	0.3	24	28	Elite tree
Italian maple (347) Acer opalus	18.5	0.03	0.3	22	4	Elite tree
Italian maple (180)	18.5	0.03	0.3	22	12	Elite tree

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Acer opalus						
Italian maple (343) Acer opalus	18	0.03	0.3	20	4	Elite tree
Italian maple (376) Acer opalus	17.5	0.02	0.3	20	24	Elite tree
European hop-hornbeam (109) Ostrya carpinifolia	17.5	0.02	0.2	15	12	Diversity
Italian maple (372) Acer opalus	17.5	0.02	0.3	21	4	Elite tree
Italian maple (9) Acer opalus	17	0.02	0.2	15	7	Elite tree
mannan ash (43) Fraxinus ornus	15	0.02	0.2	16	30	Diversity
Italian maple (389) Acer opalus	14	0.02	0.2	12	4	Elite tree
Italian maple (237) Acer opalus	12.5	0.01	0.1	7	24	Elite tree
common beech (7) Fagus sylvatica	9	0.01	0.2	16	0	Diversity