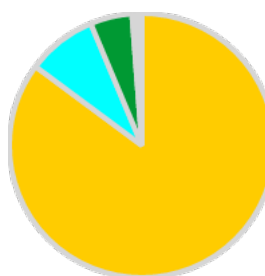


Site conditions

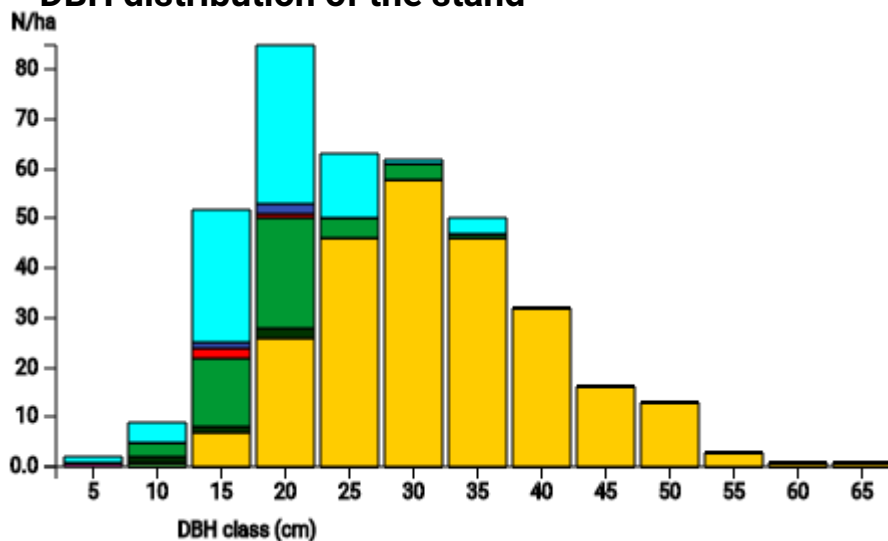
Altitude: 870 m.a.s.l.
 Geology / Bedrock: Alluvial and mixed beds
 Soil type: Cambisol – Leptosol with Luvisol of the Central Appenino Mountains.
 Natural forest community: Aceri obtusati-Quercu cerridis sigmetum
 Mean annual temperature: 12.4 C;
 Mean annual precipitation: 1154 mm; Ownership: State-owned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



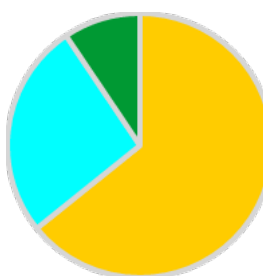
Initial stand (details by tree species)

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

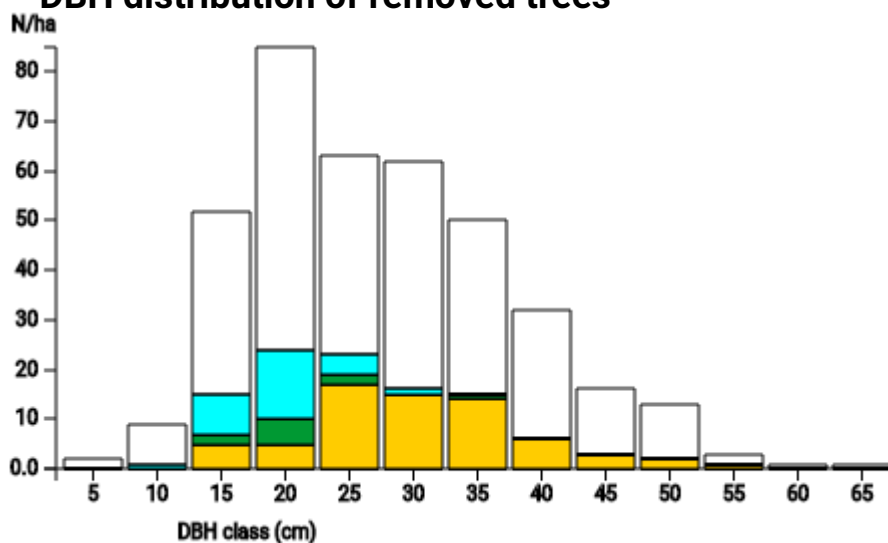
Volume: 101.7 m³
 Basal area: 7.5 m²
 Economic value: 7785 €
 Habitat value: 2611 pts.

Removed trees (N in %)



- Turkey oak: 64.2 %
- European hop-hornbeam: 26.4 %
- Italian maple: 9.4 %
- common beech: 0 %
- downy oak: 0 %
- field maple: 0 %
- manna ash: 0 %
- hornbeam: 0 %

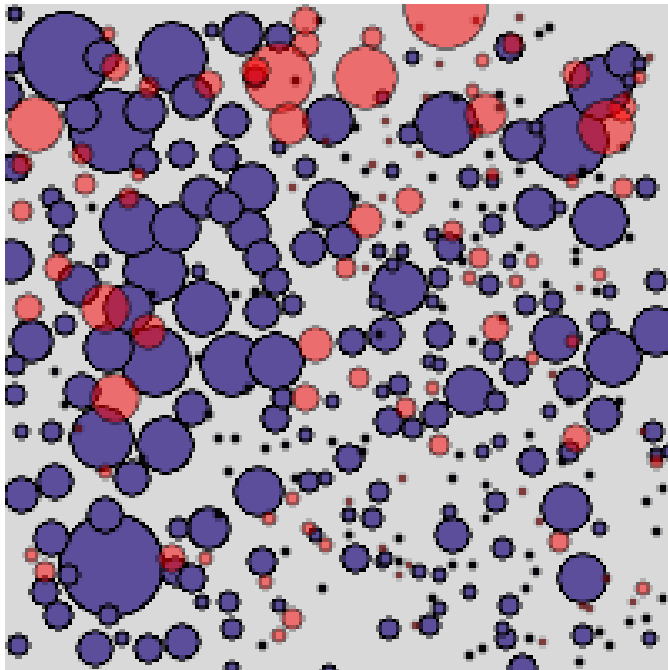
DBH distribution of removed trees



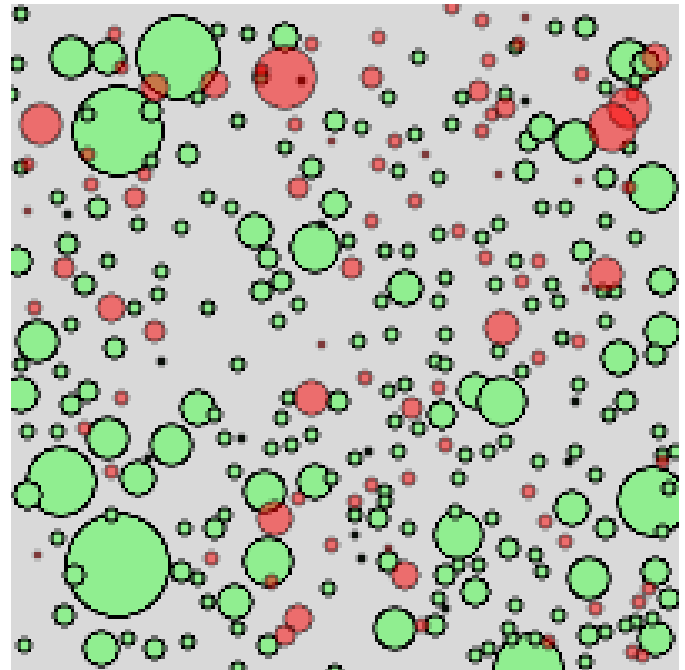
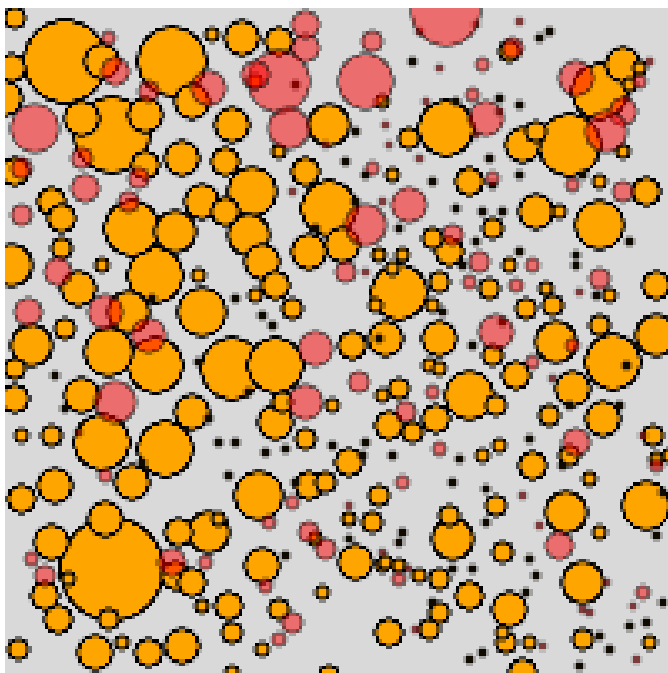
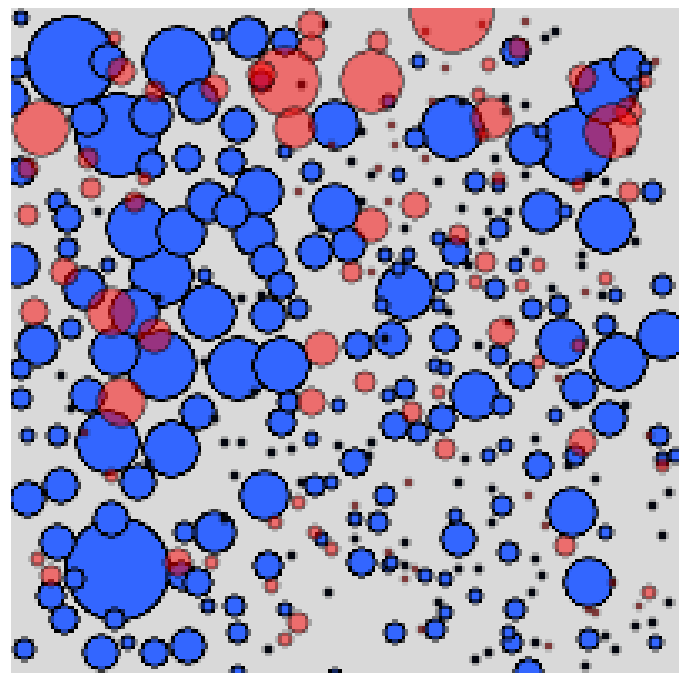
Removed trees (details by tree species)

Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
European hop-hornbeam	28	1	12.1	924	579	36
Italian maple	10	0.5	6	457	163	13
Turkey oak	68	6	83.7	6404	1869	94
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	106	7.5	101.8	7785	2611	143

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.

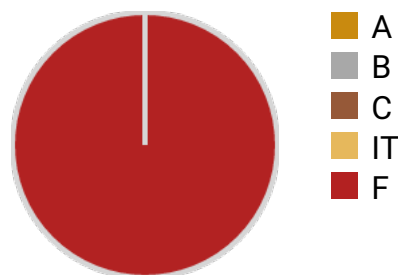
Economic values

Total value of removed trees: 7785 €
 Percentage of total stand value: 25 %
 Stand value after harvest: 23355 €

Economic value by tree species [€]

Tree species	Total	Per m ³
common beech	0	0
downy oak	0	0
Turkey oak	6404	76
field maple	0	0
Italian maple	457	77
manna ash	0	0
hornbeam	0	0
European hop-hornbeam	924	77
Total	7785	76

Wood quality distribution (m³ in %)



Quality class	m ³	%
A	0	0
B	0	0
C	0	0
Industrial Timber	0	0
Fuelwood	101.8	100

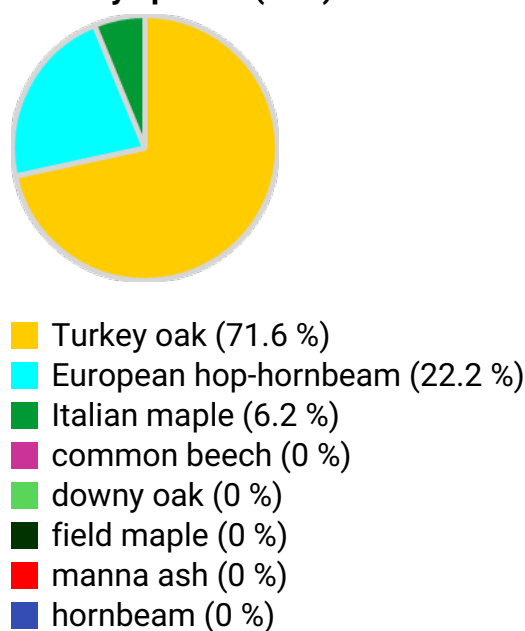
Habitat values

Total habitat value of removed trees: 2611 pts.
 Percentage of total stand value: 24.7 %
 Stand value after harvest: 7959 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	1869	22.3	94
field maple	0	0	0
Italian maple	163	27.3	13
manna ash	0	0	0
hornbeam	0	0	0
European hop-hornbeam	579	48	36
Total	2611	25.7	143

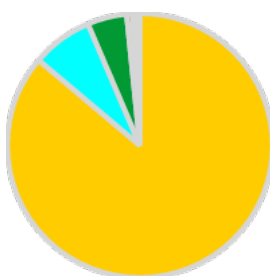
Habitat value (points) of removed trees by species (in %)



Remaining stand

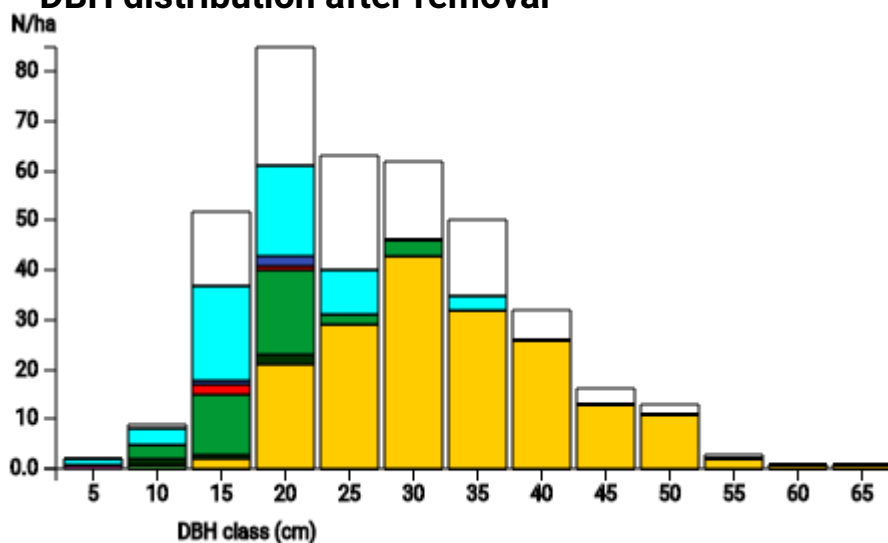
Volume: 305.3 m³
 Basal area: 22.3 m²
 Economic value: 23355 €
 Habitat value: 7959 pts.

Remaining trees by volume (m³ in %)



- Turkey oak: 86 %
- European hop-hornbeam: 7.4 %
- Italian maple: 4.8 %
- 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	53	2	22.5	1723	1090	65
Italian maple	37	1.4	14.8	1130	754	52
Turkey oak	181	18.7	262.7	20096	5938	307
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	283	22.3	305.3	23355	7959	435

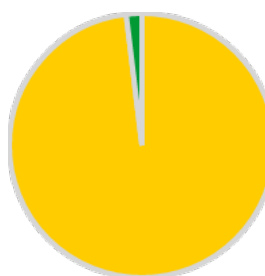
Retention treesVolume: 63.7 m³

Elite trees: 31

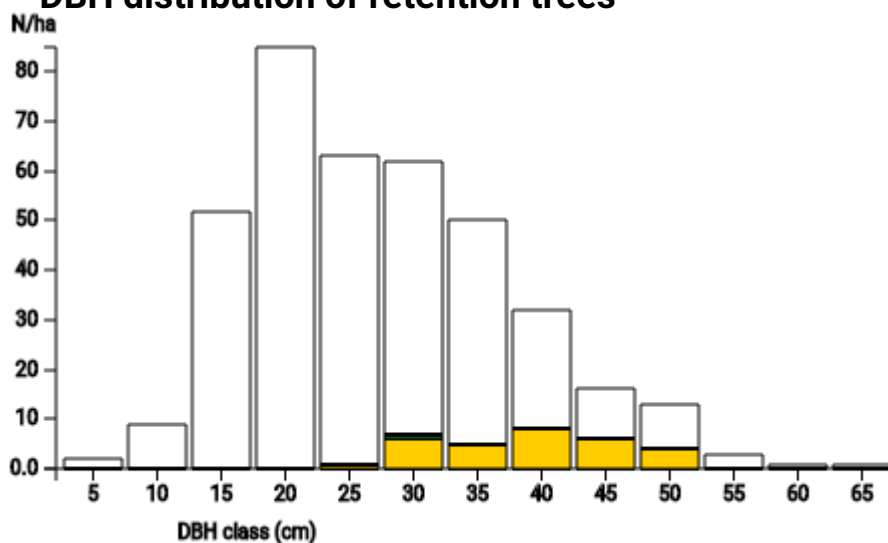
Habitat trees: 0

Economic value: 4874 €

Habitat value: 927 pts.

Retention trees by volume (m³ in %)









Turkey oak: 98.1 %
Italian maple: 1.9 %
common beech: 0 %
downy oak: 0 %
field maple: 0 %
manna ash: 0 %
hornbeam: 0 %
European hop-hornbeam: 0 %

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

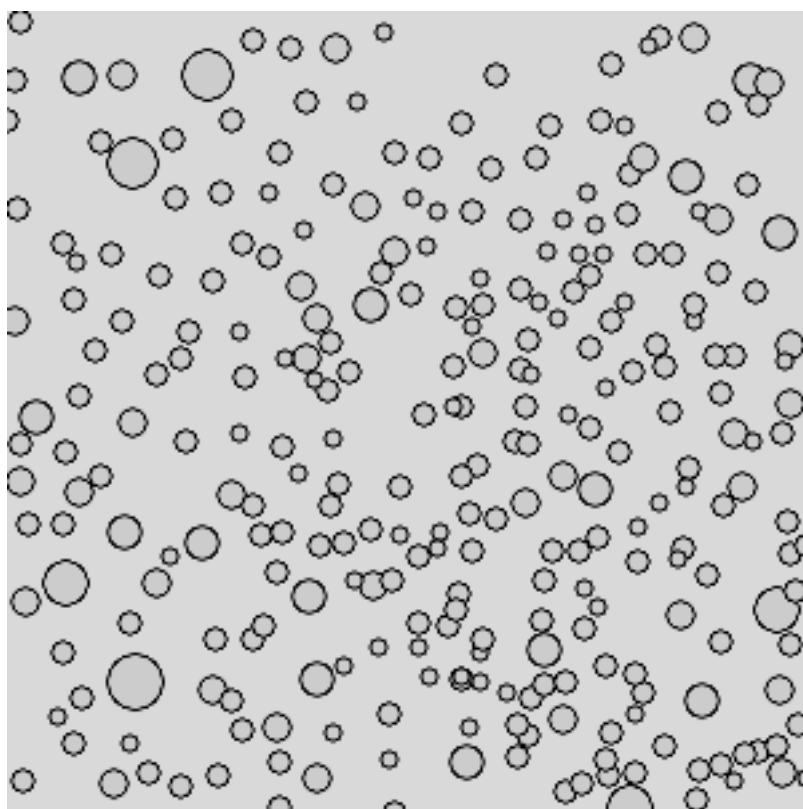
Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
European hop-hornbeam	0	0	0	0	0	0
Italian maple	1	0.1	1.2	93	40	2
Turkey oak	30	4.1	62.5	4780	887	48
common beech	0	0	0	0	0	0
downy oak	0	0	0	0	0	0
field maple	0	0	0	0	0	0
hornbeam	0	0	0	0	0	0
manna ash	0	0	0	0	0	0
Total	31	4.2	63.7	4874	927	50

Number of habitat trees	[N]	0
Habitat value	pts.	0
	[% of total]	0
Economic value	[€]	0
	[% of total]	0
Number of microhabitats	[N]	0
	[% of total]	0

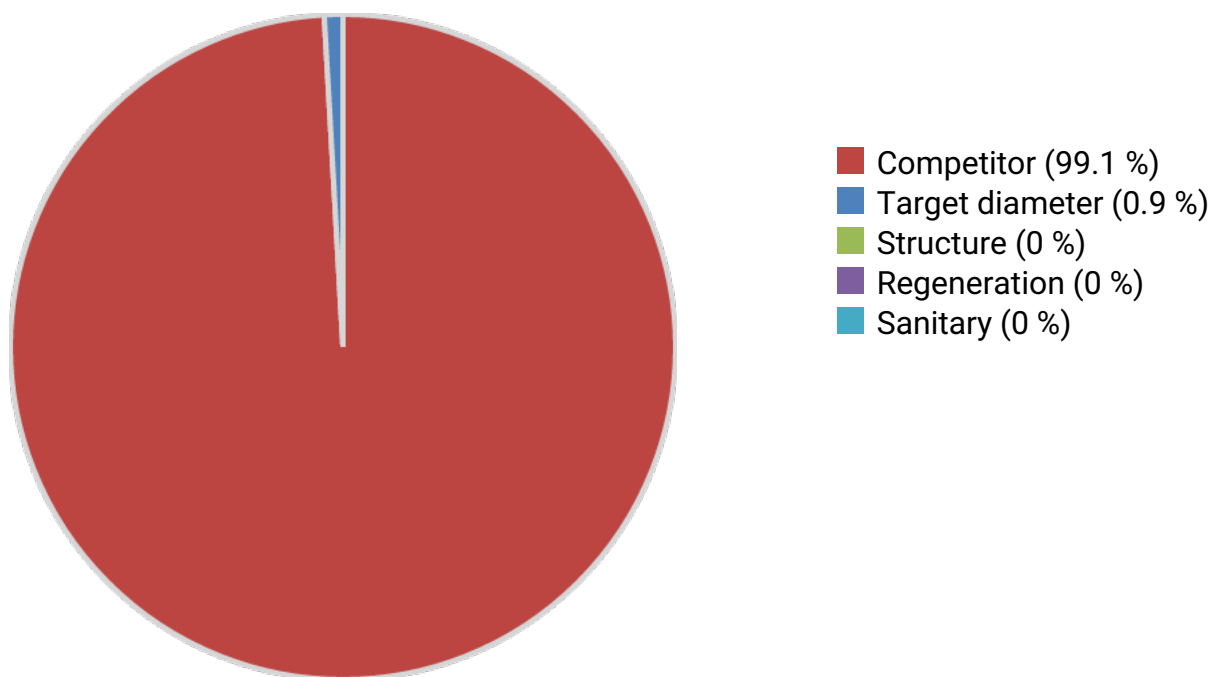
Habitat tree distribution by species (N in %)

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

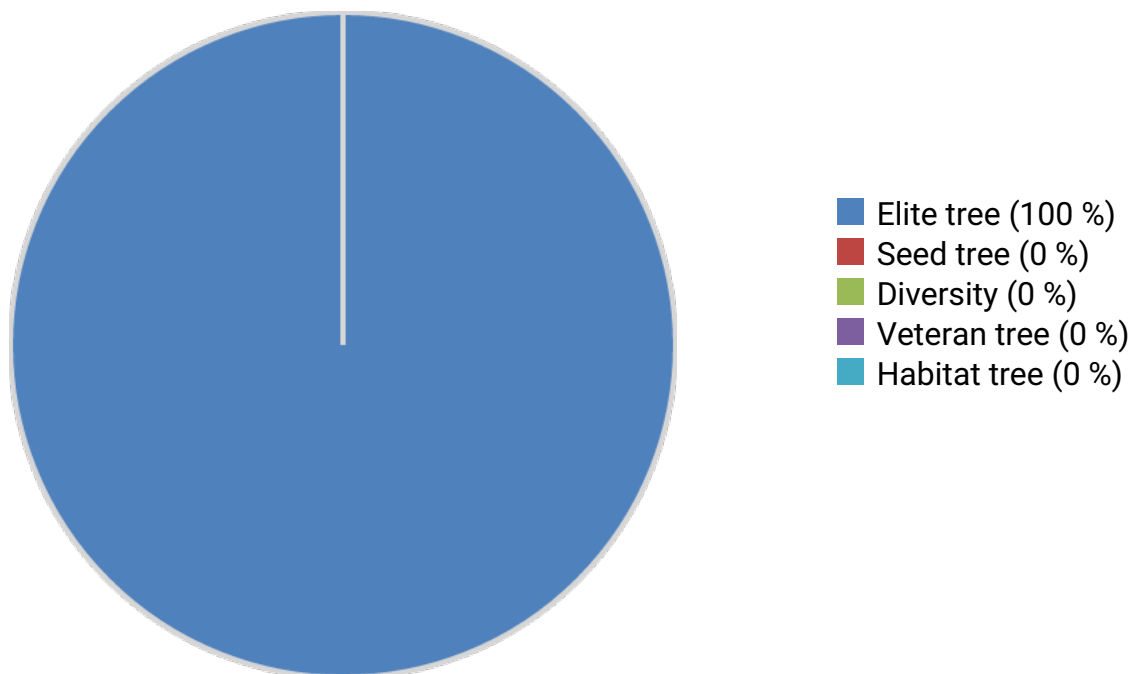
Spatial distribution of habitat trees



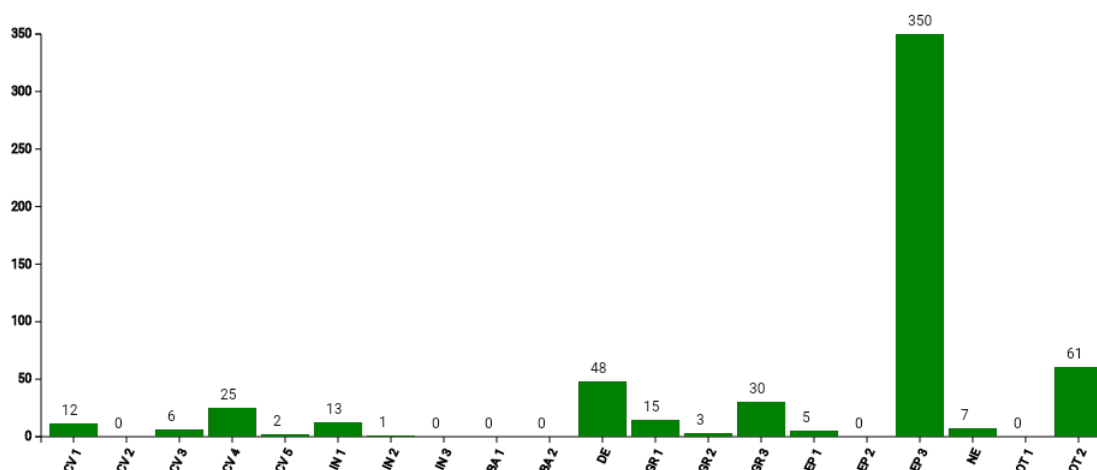
Reasons for removal



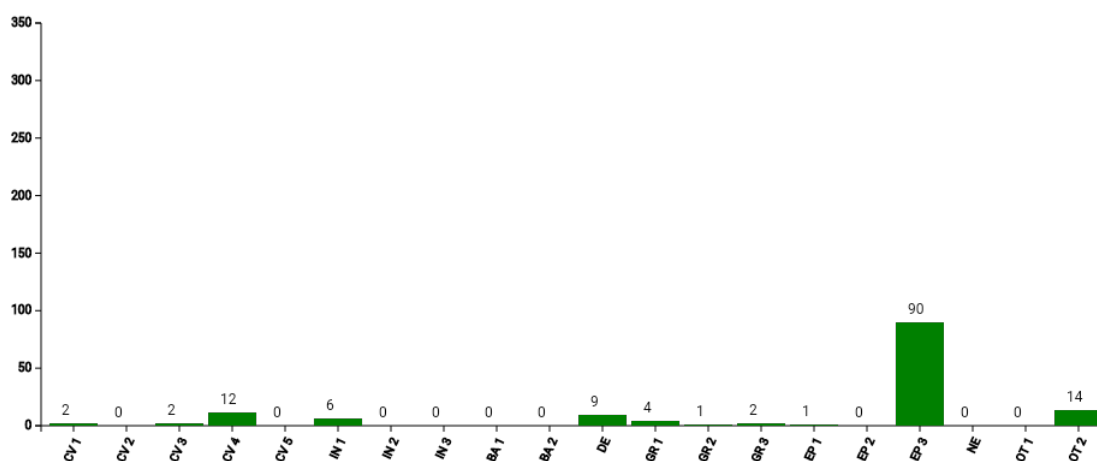
Reasons for retention



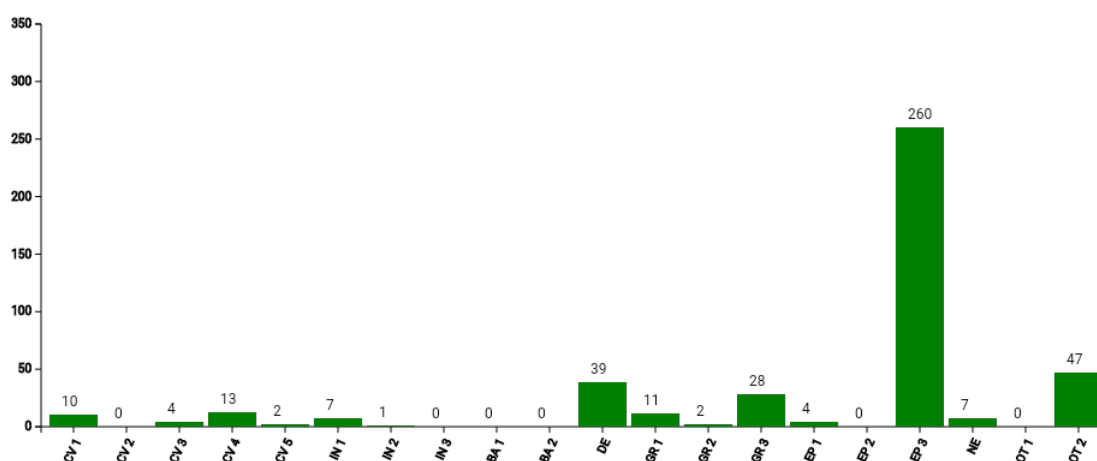
Distribution of tree microhabitats by code (N total)



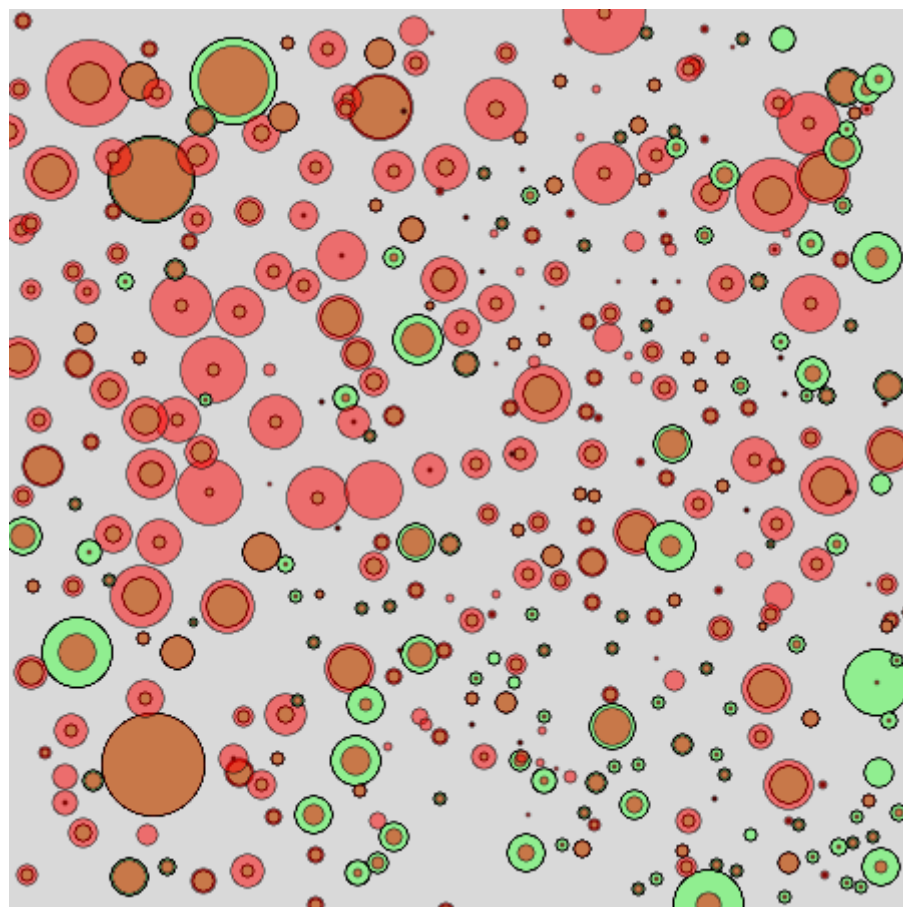
Removed tree microhabitats by code (N removed)



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 (287) Quercus cerris	57	0.26	4.3	330	24	Competitor
Turkey oak (10) Quercus cerris	54	0.23	3.5	269	106	Competitor
Turkey oak (298) Quercus cerris	50	0.2	3.3	252	30	Competitor
Turkey oak (28) Quercus cerris	46.5	0.17	2.7	205	66	Competitor
Turkey oak (86) Quercus cerris	45	0.16	2.4	183	24	Competitor
Turkey oak (327) Quercus cerris	45	0.16	2.7	208	76	Target diameter
Turkey oak (360) Quercus cerris	43	0.15	1.9	149	24	Competitor
Turkey oak (22) Quercus cerris	42	0.14	2.1	163	24	Competitor
Turkey oak (315) Quercus cerris	41	0.13	2	152	24	Competitor
Turkey oak (92) Quercus cerris	41	0.13	1.6	122	60	Competitor
Turkey oak (68) Quercus cerris	40.5	0.13	2.3	178	52	Competitor
Turkey oak (76) Quercus cerris	40	0.13	1.8	134	6	Competitor
Turkey oak (75) Quercus cerris	39.5	0.12	1.7	131	36	Competitor
Turkey oak (161) Quercus cerris	38	0.11	1.4	109	60	Competitor
Turkey oak (345) Quercus cerris	38	0.11	1.3	101	24	Competitor
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	Competitor
Turkey oak (38) Quercus cerris	36	0.1	1.1	81	24	Competitor
Turkey oak (6) Quercus cerris	36	0.1	1.4	111	0	Competitor
Turkey oak (132) Quercus cerris	36	0.1	1.5	111	4	Competitor
Turkey oak (55) Quercus cerris	36	0.1	1.5	113	40	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Quercus cerris						
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	Competitor
Turkey oak (67) Quercus cerris	35.5	0.1	1.4	106	24	Competitor
Turkey oak (11) Quercus cerris	35	0.1	1.5	116	18	Competitor
Turkey oak (195) Quercus cerris	35	0.1	1.4	109	0	Competitor
Italian maple (313) Acer opalus	35	0.1	1.3	101	64	Competitor
Turkey oak (226) Quercus cerris	34.5	0.09	1.2	94	24	Competitor
Turkey oak (146) Quercus cerris	33.5	0.09	0.9	72	48	Competitor
Turkey oak (362) Quercus cerris	33.5	0.09	1.1	87	40	Competitor
Turkey oak (357) Quercus cerris	33.5	0.09	1.1	86	24	Competitor
Turkey oak (293) Quercus cerris	33.5	0.09	1.2	89	24	Competitor
Turkey oak (134) Quercus cerris	33	0.09	1.2	94	0	Competitor
Turkey oak (19) Quercus cerris	33	0.09	1.2	93	50	Competitor
Turkey oak (41) Quercus cerris	32.5	0.08	1.2	89	12	Competitor
Turkey oak (187) Quercus cerris	32.5	0.08	1	80	24	Competitor
Turkey oak (29) Quercus cerris	32	0.08	1	79	24	Competitor
European hop-hornbeam (373) Ostrya carpinifolia	32	0.08	0.9	66	58	Competitor
Turkey oak (124) Quercus cerris	31.5	0.08	0.9	65	0	Competitor
Turkey oak (189) Quercus cerris	31.5	0.08	1.1	81	36	Competitor
Turkey oak (285) Quercus cerris	31	0.08	1.2	89	24	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Turkey oak (126) Quercus cerris	30.5	0.07	0.8	60	24	Competitor
Turkey oak (30) Quercus cerris	30	0.07	0.9	69	24	Competitor
Turkey oak (369) Quercus cerris	29.5	0.07	1	79	24	Competitor
Italian maple (330) Acer opalus	29.5	0.07	1	73	24	Competitor
Turkey oak (44) Quercus cerris	29	0.07	0.9	73	32	Competitor
Turkey oak (37) Quercus cerris	29	0.07	0.9	65	24	Competitor
Turkey oak (206) Quercus cerris	28.5	0.06	0.9	70	24	Competitor
Turkey oak (123) Quercus cerris	28	0.06	0.7	57	60	Competitor
Italian maple (166) Acer opalus	28	0.06	0.8	60	24	Competitor
Turkey oak (114) Quercus cerris	28	0.06	0.9	66	19	Competitor
Turkey oak (184) Quercus cerris	28	0.06	0.8	64	24	Competitor
European hop-hornbeam (302) Ostrya carpinifolia	27.5	0.06	0.8	59	30	Competitor
Turkey oak (2) Quercus cerris	27.5	0.06	0.8	64	24	Competitor
Turkey oak (371) Quercus cerris	27	0.06	0.7	56	24	Competitor
Turkey oak (143) Quercus cerris	27	0.06	0.6	48	24	Competitor
Turkey oak (129) Quercus cerris	27	0.06	0.7	52	24	Competitor
Turkey oak (154) Quercus cerris	27	0.06	0.6	49	36	Competitor
European hop-hornbeam (336) Ostrya carpinifolia	26.5	0.06	0.6	47	14	Competitor
Turkey oak (381) Quercus cerris	26	0.05	0.7	55	0	Competitor
Turkey oak (295) Quercus cerris	26	0.05	0.7	52	24	Competitor
Turkey oak (135)	26	0.05	0.7	53	14	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Quercus cerris						
Turkey oak (379) Quercus cerris	25.5	0.05	0.6	45	24	Competitor
European hop-hornbeam (229) Ostrya carpinifolia	25.5	0.05	0.7	55	24	Competitor
European hop-hornbeam (310) Ostrya carpinifolia	25.5	0.05	0.6	50	7	Competitor
Turkey oak (107) Quercus cerris	25	0.05	0.6	47	24	Competitor
Turkey oak (219) Quercus cerris	24.5	0.05	0.5	41	24	Competitor
Turkey oak (173) Quercus cerris	24	0.05	0.6	44	24	Competitor
Turkey oak (260) Quercus cerris	24	0.05	0.5	41	44	Competitor
European hop-hornbeam (200) Ostrya carpinifolia	24	0.05	0.7	51	24	Competitor
European hop-hornbeam (340) Ostrya carpinifolia	23.5	0.04	0.5	38	24	Competitor
Italian maple (333) Acer opalus	23.5	0.04	0.6	42	8	Competitor
Italian maple (316) Acer opalus	23	0.04	0.6	45	24	Competitor
Turkey oak (102) Quercus cerris	23	0.04	0.5	38	24	Competitor
Italian maple (263) Acer opalus	23	0.04	0.4	31	4	Competitor
European hop-hornbeam (344) Ostrya carpinifolia	22.5	0.04	0.4	33	0	Competitor
European hop-hornbeam (48) Ostrya carpinifolia	22	0.04	0.5	35	38	Competitor
European hop-hornbeam (321) Ostrya carpinifolia	22	0.04	0.4	34	28	Competitor
Italian maple (286) Acer opalus	22	0.04	0.5	35	4	Competitor
European hop-hornbeam (322) Ostrya carpinifolia	22	0.04	0.5	38	6	Competitor
European hop-hornbeam (246) Ostrya carpinifolia	21.5	0.04	0.5	35	24	Competitor
European hop-hornbeam (35) Ostrya carpinifolia	21.5	0.04	0.5	41	6	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
European hop-hornbeam (211) Ostrya carpinifolia	21	0.04	0.3	26	24	Competitor
European hop-hornbeam (272) Ostrya carpinifolia	21	0.04	0.4	30	24	Competitor
Turkey oak (277) Quercus cerris	21	0.04	0.3	21	24	Competitor
European hop-hornbeam (308) Ostrya carpinifolia	21	0.04	0.4	33	48	Competitor
European hop-hornbeam (231) Ostrya carpinifolia	20.5	0.03	0.3	26	4	Competitor
European hop-hornbeam (314) Ostrya carpinifolia	20.5	0.03	0.3	26	38	Competitor
Italian maple (377) Acer opalus	20	0.03	0.3	25	7	Competitor
European hop-hornbeam (300) Ostrya carpinifolia	20	0.03	0.3	26	0	Competitor
European hop-hornbeam (289) Ostrya carpinifolia	19.5	0.03	0.4	30	10	Competitor
Turkey oak (255) Quercus cerris	19.5	0.03	0.3	20	6	Competitor
European hop-hornbeam (288) Ostrya carpinifolia	19.5	0.03	0.4	31	24	Competitor
Italian maple (296) Acer opalus	19	0.03	0.3	26	0	Competitor
Turkey oak (238) Quercus cerris	19	0.03	0.2	18	24	Competitor
Turkey oak (363) Quercus cerris	18.5	0.03	0.3	25	0	Competitor
European hop-hornbeam (319) Ostrya carpinifolia	18	0.03	0.3	25	4	Competitor
Turkey oak (312) Quercus cerris	18	0.03	0.2	19	28	Competitor
Turkey oak (253) Quercus cerris	18	0.03	0.2	17	0	Competitor
Italian maple (174) Acer opalus	17.5	0.02	0.2	19	4	Competitor
European hop-hornbeam (196) Ostrya carpinifolia	17	0.02	0.3	20	0	Competitor
European hop-hornbeam (269) Ostrya carpinifolia	17	0.02	0.2	14	24	Competitor
European hop-hornbeam (217)	17	0.02	0.3	19	24	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Ostrya carpinifolia						
European hop-hornbeam (230) Ostrya carpinifolia	16	0.02	0.3	19	24	Competitor
European hop-hornbeam (270) Ostrya carpinifolia	15	0.02	0.1	10	24	Competitor
European hop-hornbeam (222) Ostrya carpinifolia	13	0.01	0.1	7	24	Competitor

Retention trees

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Turkey oak (80) Quercus cerris	51.5	0.21	3.5	266	16	Elite tree
Turkey oak (101) Quercus cerris	51	0.2	3.3	253	66	Elite tree
Turkey oak (317) Quercus cerris	51	0.2	3.2	249	24	Elite tree
Turkey oak (306) Quercus cerris	50	0.2	3.2	246	24	Elite tree
Turkey oak (52) Quercus cerris	49	0.19	3.2	244	24	Elite tree
Turkey oak (47) Quercus cerris	48.5	0.19	2.5	189	4	Elite tree
Turkey oak (115) Quercus cerris	48	0.18	2.7	205	70	Elite tree
Turkey oak (70) Quercus cerris	48	0.18	2.7	210	24	Elite tree
Turkey oak (351) Quercus cerris	47	0.17	2.9	224	24	Elite tree
Turkey oak (232) Quercus cerris	45	0.16	2.5	192	64	Elite tree
Turkey oak (54) Quercus cerris	44	0.15	2.1	160	46	Elite tree
Turkey oak (212) Quercus cerris	44	0.15	2.5	189	60	Elite tree
Turkey oak (167) Quercus cerris	43.5	0.15	2.4	181	24	Elite tree
Turkey oak (69) Quercus cerris	43	0.15	2.4	184	24	Elite tree
Turkey oak (179) Quercus cerris	41.5	0.14	1.7	131	24	Elite tree
Turkey oak (25) Quercus cerris	41.5	0.14	2.1	157	36	Elite tree
Turkey oak (18) Quercus cerris	41	0.13	1.7	132	28	Elite tree
Turkey oak (361) Quercus cerris	40	0.13	1.9	147	24	Elite tree
Turkey oak (4) Quercus cerris	38.5	0.12	2	155	24	Elite tree
Turkey oak (191) Quercus cerris	37.5	0.11	1.6	123	45	Elite tree
Turkey oak (131)	37	0.11	1.5	116	40	Elite tree

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Quercus cerris						
Turkey oak (169) Quercus cerris	35	0.1	1.6	122	24	Elite tree
Turkey oak (40) Quercus cerris	35	0.1	1.5	114	24	Elite tree
Italian maple (36) Acer opalus	34.5	0.09	1.2	93	40	Elite tree
Turkey oak (136) Quercus cerris	34	0.09	1.3	103	4	Elite tree
Turkey oak (294) Quercus cerris	33	0.09	1.3	101	24	Elite tree
Turkey oak (197) Quercus cerris	32	0.08	1.2	90	24	Elite tree
Turkey oak (223) Quercus cerris	32	0.08	1	79	24	Elite tree
Turkey oak (380) Quercus cerris	31	0.08	1.2	92	24	Elite tree
Turkey oak (145) Quercus cerris	30	0.07	0.9	66	0	Elite tree
Turkey oak (339) Quercus cerris	28	0.06	0.8	60	24	Elite tree