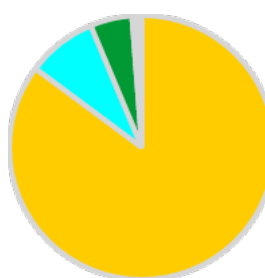


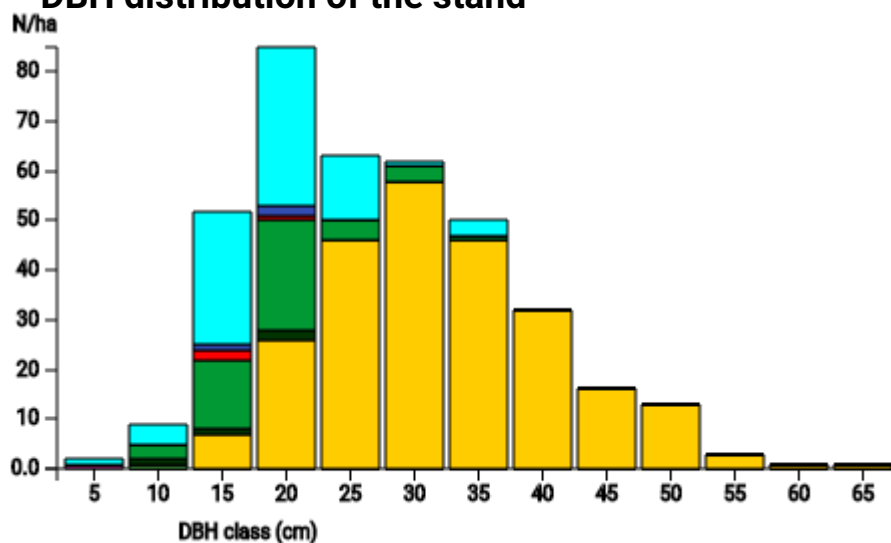
07/05/2021 Sala_bio_gruppo c 07.05

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 %

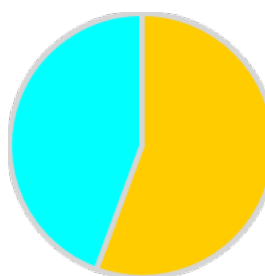
DBH distribution of the stand**Initial stand (details by tree species)**

Tree species	N/ha	Basal area (m²)	Volume (m³)	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

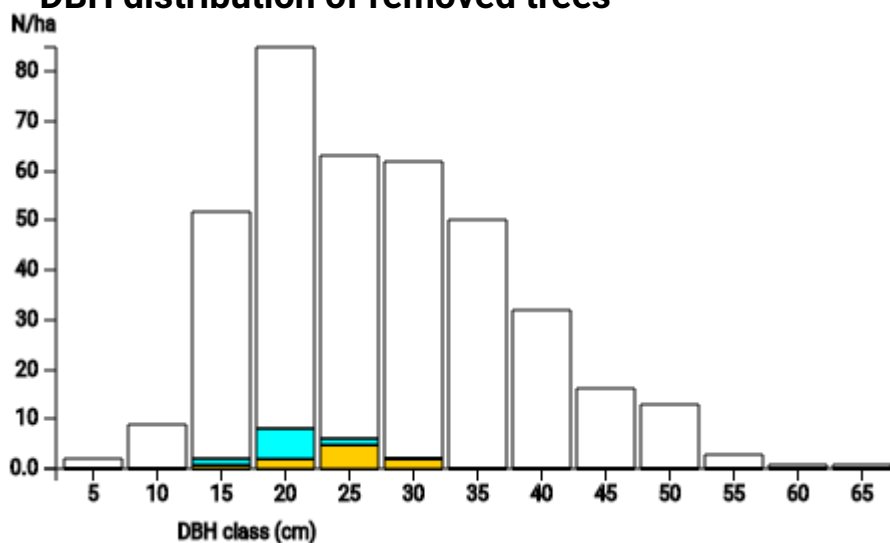
Removed treesVolume: 10.7 m³Basal area: 0.8 m²

Economic value: 815 €

Habitat value: 324 pts.

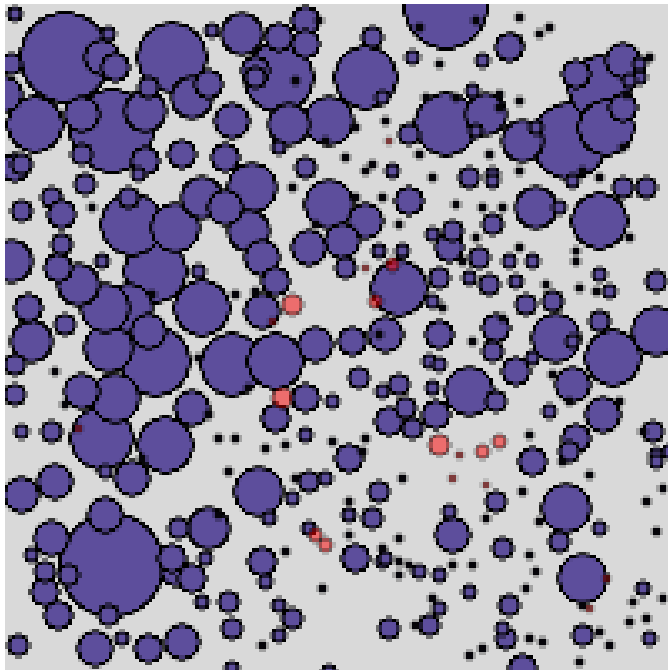
Removed trees (N in %)

- Turkey oak: 55.6 %
- European hop-hornbeam: 44.4 %
- common beech: 0 %
- downy oak: 0 %
- field maple: 0 %
- Italian maple: 0 %
- manna ash: 0 %
- hornbeam: 0 %

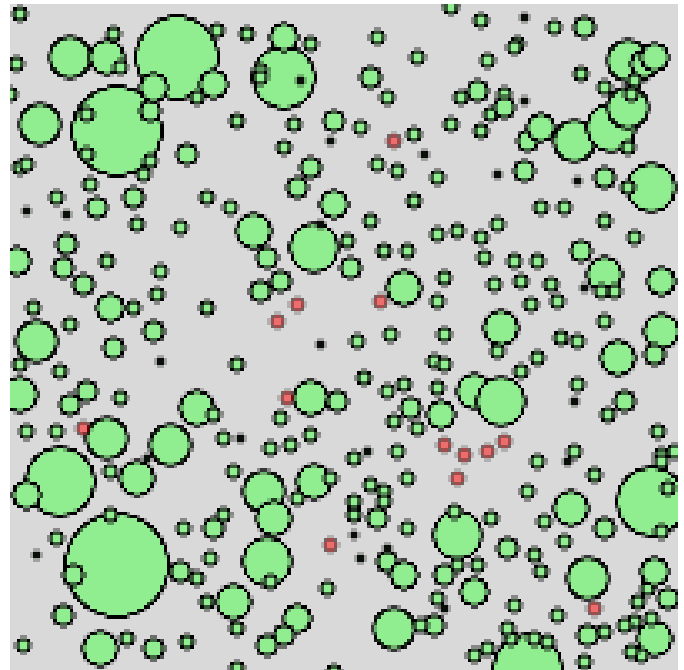
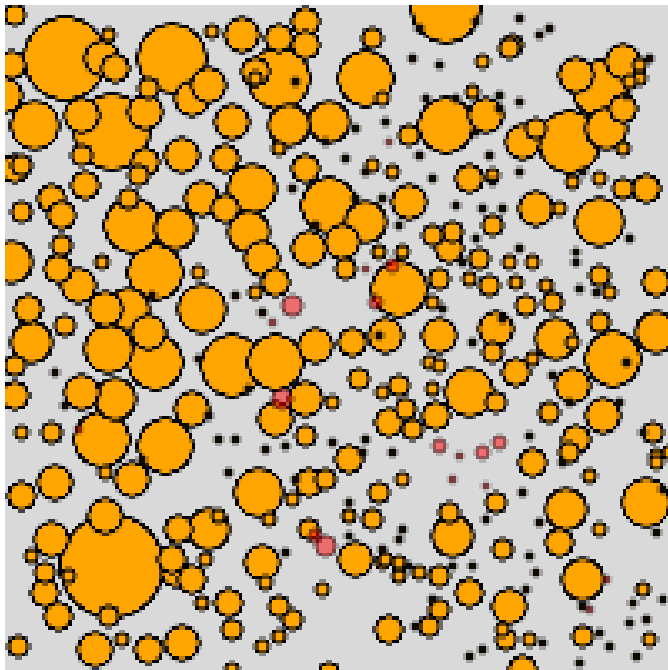
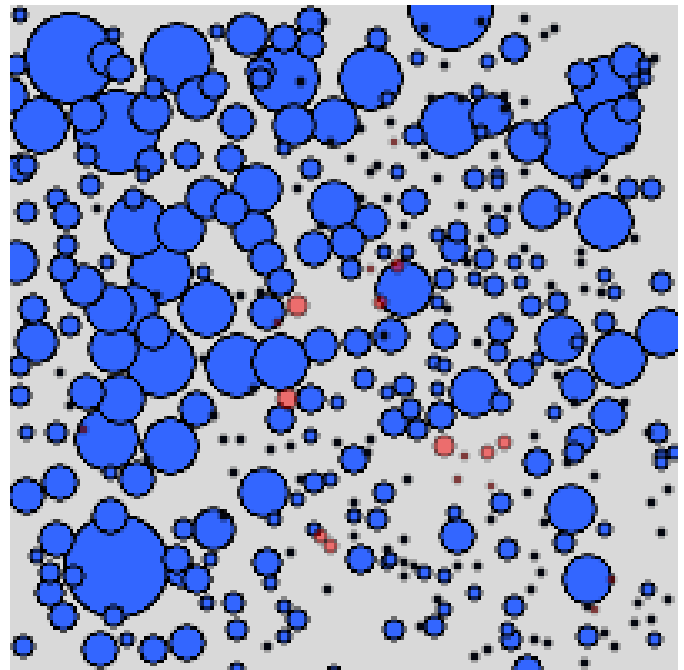
DBH distribution of removed trees**Removed trees (details by tree species)**

Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
European hop-hornbeam	8	0.3	3.2	246	152	8
Italian maple	0	0	0	0	0	0
Turkey oak	10	0.6	7.4	569	172	8
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	18	0.8	10.6	815	324	16

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: 815 €

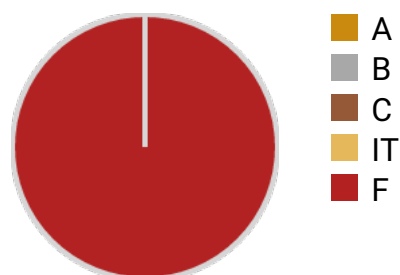
Percentage of total stand value: 2.6 %

Stand value after harvest: 30325 €

Economic value by tree species [€]

Tree species	Total	Per m ³
common beech	0	0
downy oak	0	0
Turkey oak	569	76
field maple	0	0
Italian maple	0	0
manna ash	0	0
hornbeam	0	0
European hop-hornbeam	246	77
Total	815	76

Wood quality distribution (m³ in %)



Quality class	m ³	%
A	0	0
B	0	0
C	0	0
Industrial Timber	0	0
Fuelwood	10.7	100

Habitat values

Total habitat value of removed trees: 324 pts.

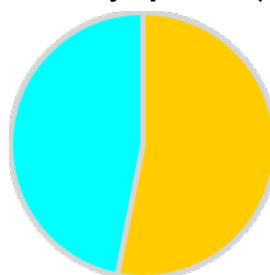
Percentage of total stand value: 3.1 %

Stand value after harvest: 10246 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	172	23.1	8
field maple	0	0	0
Italian maple	0	0	0
manna ash	0	0	0
hornbeam	0	0	0
European hop-hornbeam	152	47.3	8
Total	324	30.4	16

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

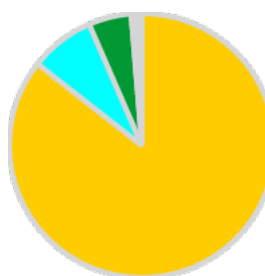


Turkey oak	(53.1 %)
European hop-hornbeam	(46.9 %)
common beech	(0 %)
downy oak	(0 %)
field maple	(0 %)
Italian maple	(0 %)
manna ash	(0 %)
hornbeam	(0 %)

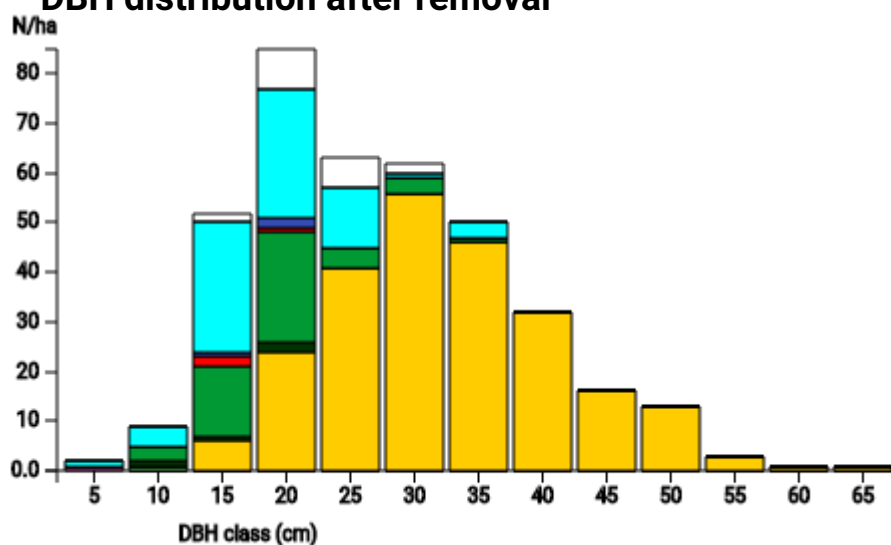
Remaining standVolume: 396.3 m³Basal area: 29 m²

Economic value: 30325 €

Habitat value: 10246 pts.

Remaining trees by volume (m³ in %)

Turkey oak: 85.5 %
European hop-hornbeam: 7.9 %
Italian maple: 5.2 %
manna ash: 0.6 %
field maple: 0.3 %
hornbeam: 0.3 %
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	73	2.7	31.4	2401	1517	93
Italian maple	47	1.8	20.8	1588	917	65
Turkey oak	239	24.2	339	25931	7635	393
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	371	29	396.4	30325	10246	562

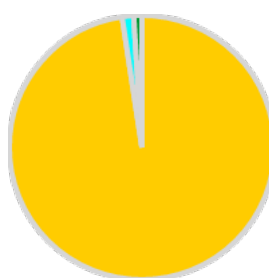
Retention treesVolume: 94.1 m³

Elite trees: 31

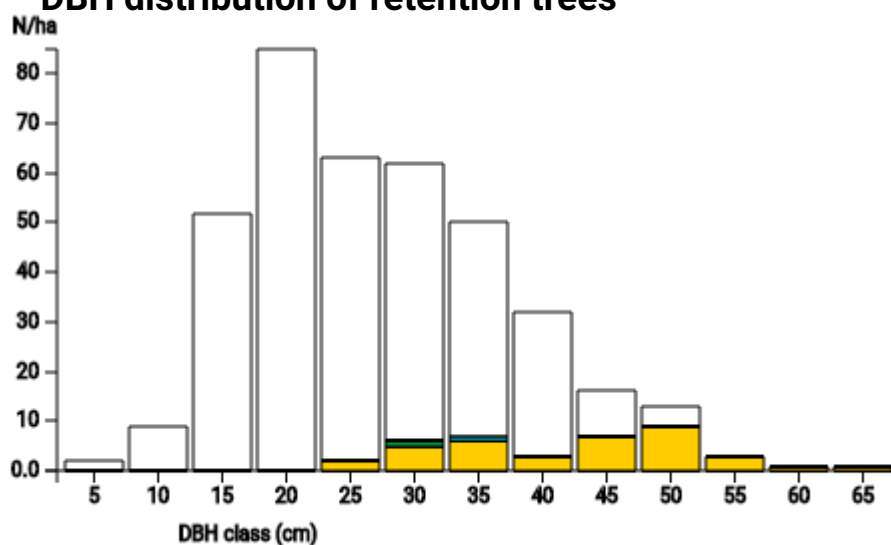
Habitat trees: 1

Economic value: 7200 €

Habitat value: 1830 pts.

Retention trees by volume (m³ in %)

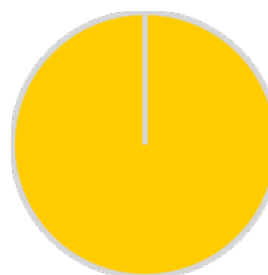
Turkey oak:	97.7 %
European hop-hornbeam:	1.4 %
Italian maple:	1 %
common beech:	0 %
downy oak:	0 %
field maple:	0 %
manna ash:	0 %
hornbeam:	0 %

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	1	0.1	1.3	99	12	1
Italian maple	1	0.1	0.9	71	27	2
Turkey oak	37	6.1	91.9	7031	1791	108
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	39	6.3	94.1	7200	1830	111

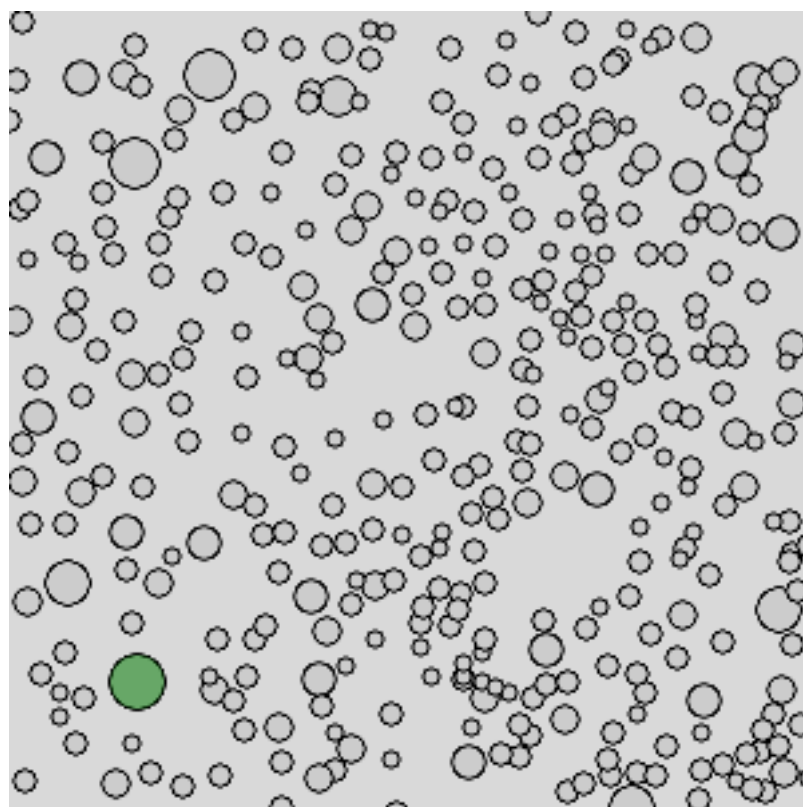
Number of habitat trees	[N]	1
Habitat value	pts.	174
	[% of total]	1.6
Economic value	[€]	409
	[% of total]	1.3
Number of microhabitats	[N]	13
	[% of total]	2.2

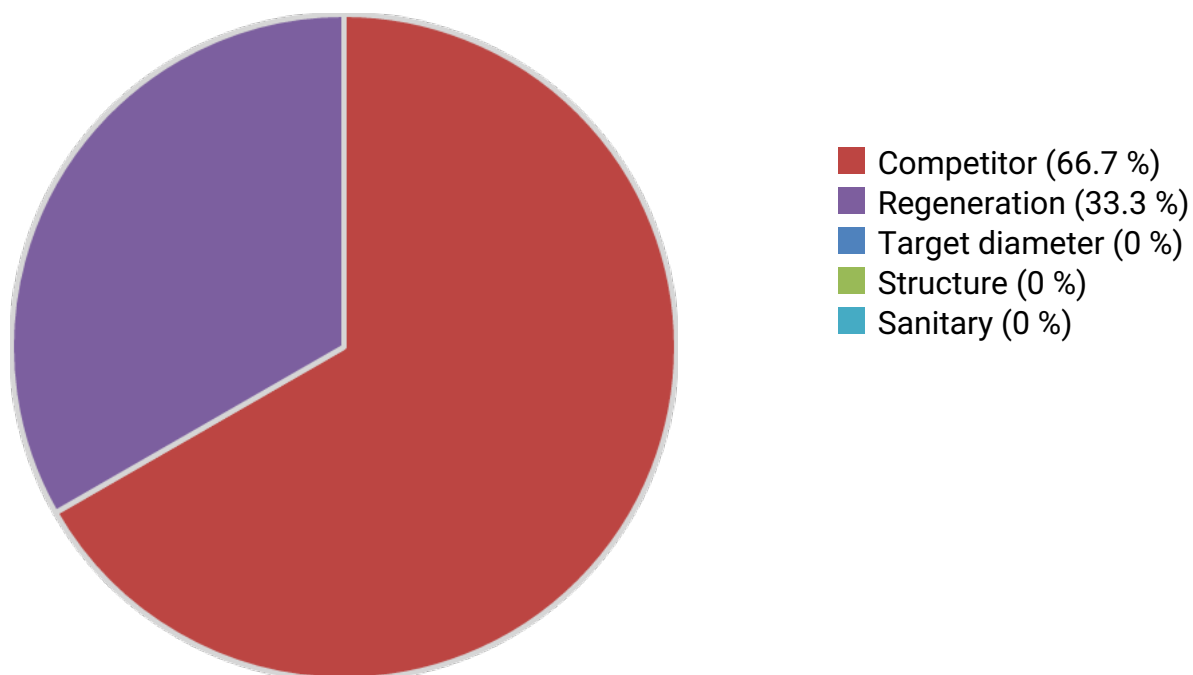
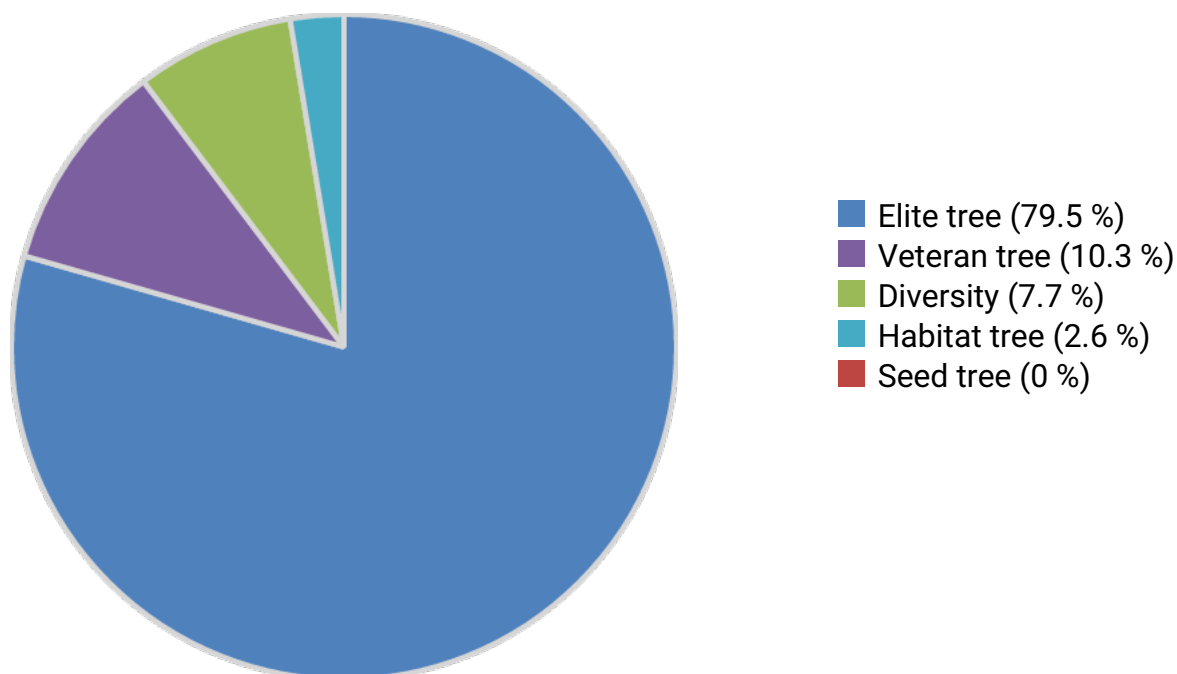
Habitat tree distribution by species (N in %)



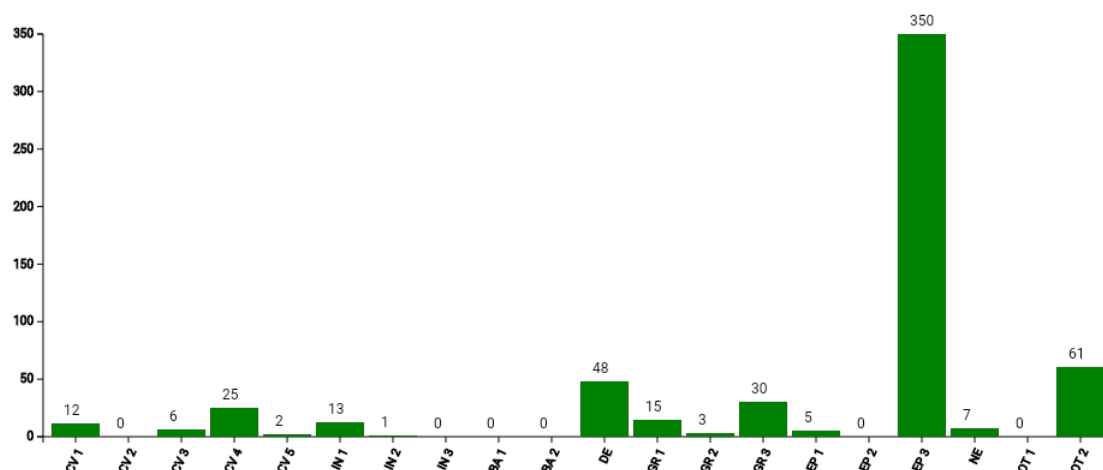
■ Turkey oak:	100 %
■ common beech:	0 %
■ downy oak:	0 %
■ field maple:	0 %
■ Italian maple:	0 %
■ manna ash:	0 %
■ hornbeam:	0 %
■ European hop-hornbeam:	0 %

Spatial distribution of habitat trees

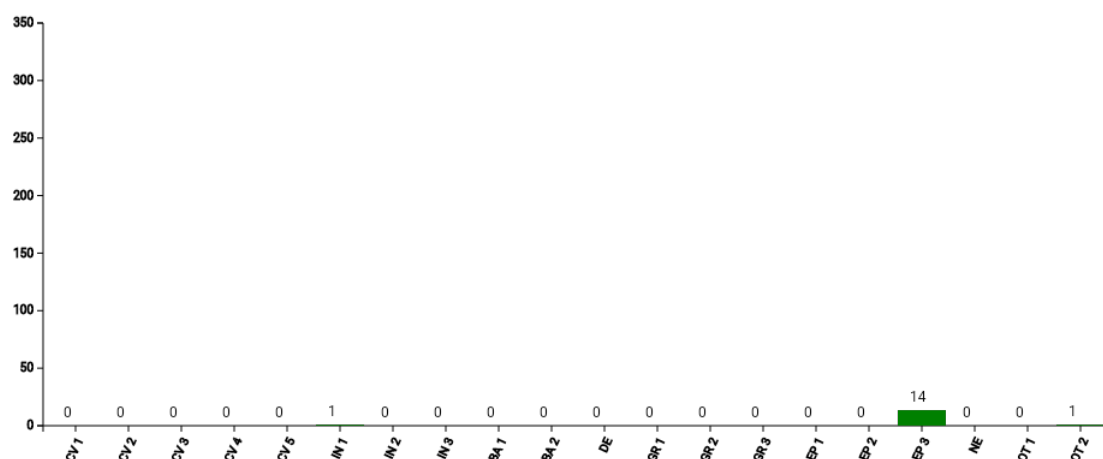


Reasons for removal**Reasons for retention**

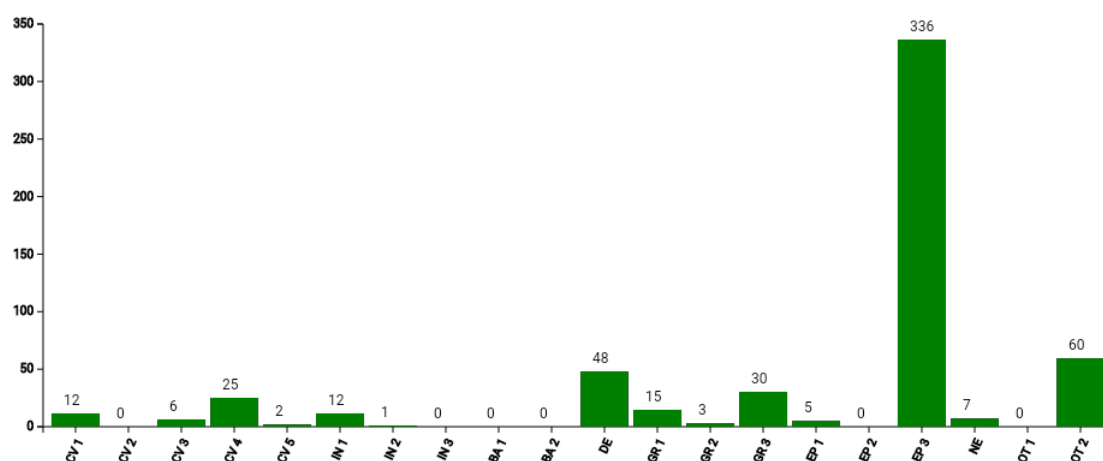
Distribution of tree microhabitats by code (N total)



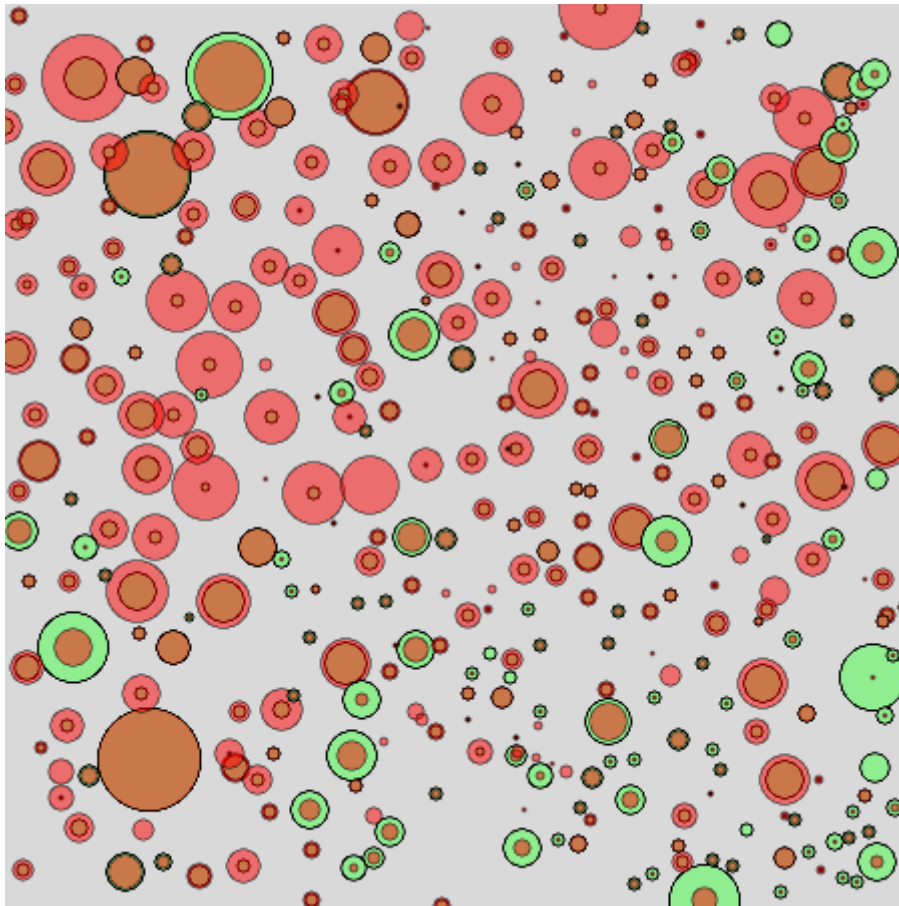
Removed tree microhabitats by code (N removed)



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 (126) <i>Quercus cerris</i>	30.5	0.07	0.8	60	24	Competitor
Turkey oak (73) <i>Quercus cerris</i>	30	0.07	1.1	85	28	Competitor
Turkey oak (91) <i>Quercus cerris</i>	29	0.07	1	74	24	Competitor
Turkey oak (206) <i>Quercus cerris</i>	28.5	0.06	0.9	70	24	Regeneration
Turkey oak (204) <i>Quercus cerris</i>	28	0.06	0.8	58	24	Regeneration
Turkey oak (383) <i>Quercus cerris</i>	27.5	0.06	0.8	60	24	Competitor
Turkey oak (125) <i>Quercus cerris</i>	26	0.05	0.7	53	0	Competitor
European hop-hornbeam (192) <i>Ostrya carpinifolia</i>	25	0.05	0.6	44	24	Regeneration
Turkey oak (365) <i>Quercus cerris</i>	24.5	0.05	0.6	46	0	Competitor
Turkey oak (102) <i>Quercus cerris</i>	23	0.04	0.5	38	24	Competitor
European hop-hornbeam (205) <i>Ostrya carpinifolia</i>	22.5	0.04	0.5	37	24	Regeneration
European hop-hornbeam (321) <i>Ostrya carpinifolia</i>	22	0.04	0.4	34	28	Competitor
European hop-hornbeam (209) <i>Ostrya carpinifolia</i>	22	0.04	0.4	29	24	Regeneration
European hop-hornbeam (246) <i>Ostrya carpinifolia</i>	21.5	0.04	0.5	35	24	Competitor
European hop-hornbeam (231) <i>Ostrya carpinifolia</i>	20.5	0.03	0.3	26	4	Competitor
European hop-hornbeam (72) <i>Ostrya carpinifolia</i>	20	0.03	0.4	27	24	Competitor
Turkey oak (363) <i>Quercus cerris</i>	18.5	0.03	0.3	25	0	Competitor
European hop-hornbeam (210) <i>Ostrya carpinifolia</i>	16	0.02	0.2	15	0	Regeneration

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	Habitat tree
Turkey oak (16) Quercus cerris	60	0.28	4.6	351	72	Elite tree
Turkey oak (26) Quercus cerris	57.5	0.26	4.3	329	148	Elite tree
Turkey oak (287) Quercus cerris	57	0.26	4.3	330	24	Elite tree
Turkey oak (13) Quercus cerris	56.5	0.25	3.7	281	144	Elite tree
Turkey oak (10) Quercus cerris	54	0.23	3.5	269	106	Elite tree
Turkey oak (326) Quercus cerris	53	0.22	3.9	299	66	Elite tree
Turkey oak (101) Quercus cerris	51	0.2	3.3	253	66	Elite tree
Turkey oak (384) Quercus cerris	51	0.2	3	229	60	Elite tree
Turkey oak (49) Quercus cerris	51	0.2	2.4	183	42	Elite tree
Turkey oak (306) Quercus cerris	50	0.2	3.2	246	24	Elite tree
Turkey oak (77) Quercus cerris	50	0.2	3	232	0	Veteran tree
Turkey oak (100) Quercus cerris	50	0.2	2.9	219	69	Elite tree
Turkey oak (298) Quercus cerris	50	0.2	3.3	252	30	Elite tree
Turkey oak (176) Quercus cerris	49	0.19	3	232	60	Elite tree
Turkey oak (52) Quercus cerris	49	0.19	3.2	244	24	Diversity
Turkey oak (115) Quercus cerris	48	0.18	2.7	205	70	Elite tree
Turkey oak (183) Quercus cerris	46	0.17	2.3	179	60	Elite tree
Turkey oak (86) Quercus cerris	45	0.16	2.4	183	24	Elite tree
Turkey oak (232) Quercus cerris	45	0.16	2.5	192	64	Elite tree
Turkey oak (327) Quercus cerris	45	0.16	2.7	208	76	Elite tree

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Quercus cerris						
Turkey oak (51) Quercus cerris	44	0.15	2.5	191	24	Elite tree
Turkey oak (360) Quercus cerris	43	0.15	1.9	149	24	Elite tree
Turkey oak (150) Quercus cerris	40	0.13	1.8	139	60	Elite tree
Turkey oak (116) Quercus cerris	39	0.12	1.9	146	18	Diversity
Turkey oak (161) Quercus cerris	38	0.11	1.4	109	60	Elite tree
Turkey oak (159) Quercus cerris	38	0.11	1.5	117	27	Veteran tree
European hop-hornbeam (257) Ostrya carpinifolia	38	0.11	1.3	99	12	Elite tree
Turkey oak (191) Quercus cerris	37.5	0.11	1.6	123	45	Elite tree
Turkey oak (33) Quercus cerris	36	0.1	1.6	122	4	Veteran tree
Turkey oak (367) Quercus cerris	36	0.1	1.5	113	0	Veteran tree
Turkey oak (337) Quercus cerris	34	0.09	1.1	87	0	Diversity
Turkey oak (19) Quercus cerris	33	0.09	1.2	93	50	Elite tree
Turkey oak (218) Quercus cerris	33	0.09	1.1	86	0	Elite tree
Turkey oak (124) Quercus cerris	31.5	0.08	0.9	65	0	Elite tree
Turkey oak (274) Quercus cerris	30	0.07	0.7	55	16	Elite tree
Italian maple (318) Acer opalus	30	0.07	0.9	71	27	Elite tree
Turkey oak (339) Quercus cerris	28	0.06	0.8	60	24	Elite tree
Turkey oak (154) Quercus cerris	27	0.06	0.6	49	36	Elite tree