

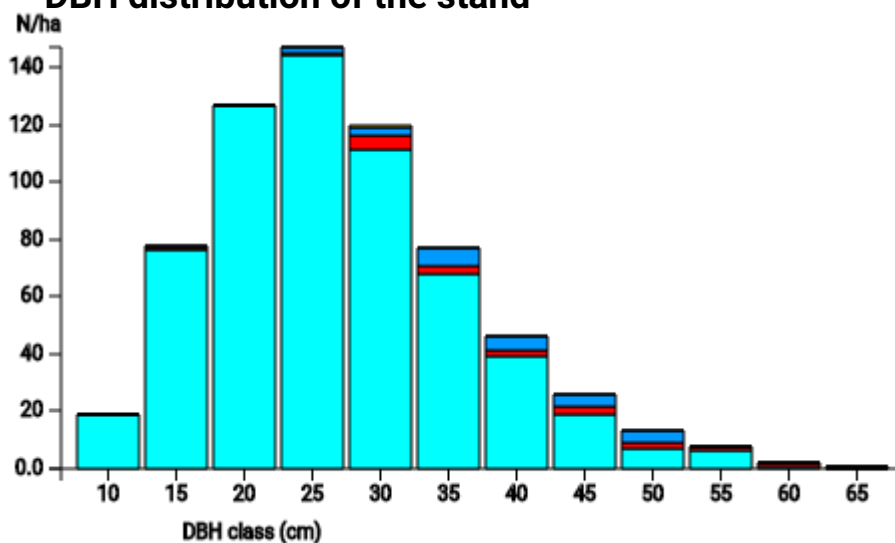
22/04/2021 Camaldoli_prod_gruppoB

Site conditions

Altitude: 1270 m.a.s.l.
 Forest ecological region: Tuscany
 Geology / Bedrock: Sandstone
 Soil type: Brown podzolic soil
 Natural forest community:
 Asperulo-Fagetum
 Mean annual temperature: 8.7 C;
 Mean annual precipitation: 1642
 mm; Ownership: State;
 Establishment: 2020

Tree species distribution by volume (in %)

common beech: 86.8 %
 silver fir: 7.7 %
 sycamore maple: 5.4 %
 goat willow: 0.1 %

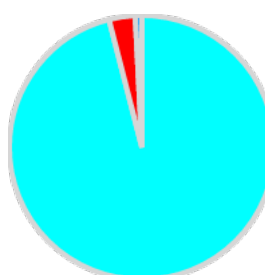
DBH distribution of the stand**Initial stand (details by tree species)**

Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
common beech	617	44.3	484	41247	19808	1283
goat willow	1	0.1	0.8	70	24	3
silver fir	21	3.3	43.1	3060	245	25
sycamore maple	25	3.2	29.9	2409	1664	99
Total	664	50.8	557.9	46786	21741	1410

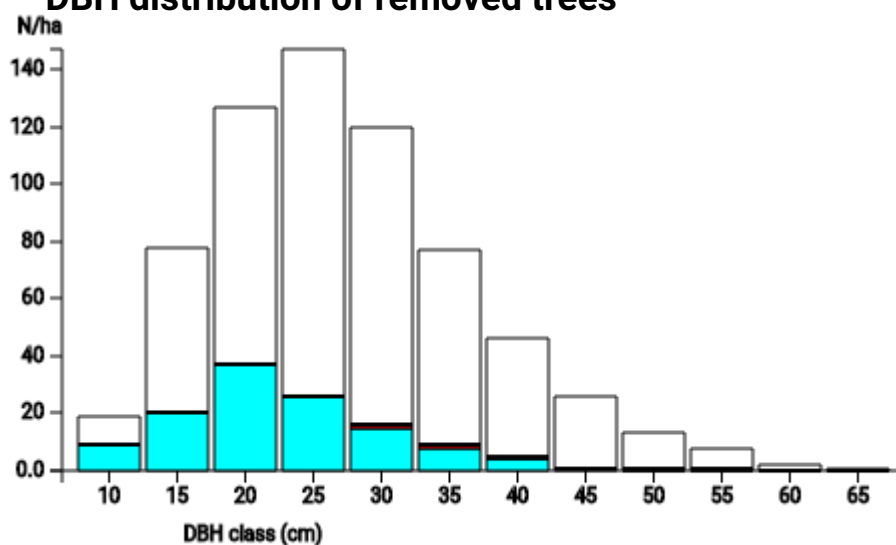
Removed treesVolume: 79.8 m³Basal area: 7.3 m²

Economic value: 6588 €

Habitat value: 3079 pts.

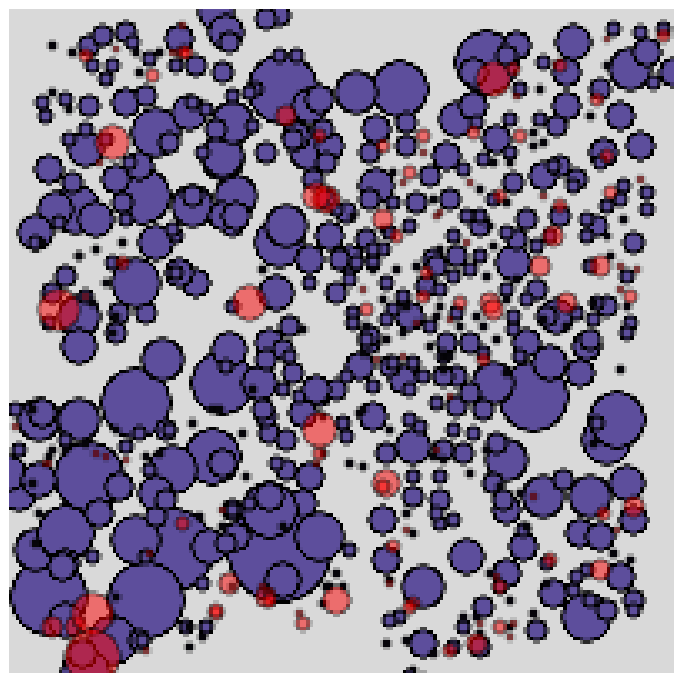
Removed trees (N in %)

- common beech: 96 %
- silver fir: 3.2 %
- sycamore maple: 0.8 %
- goat willow: 0 %

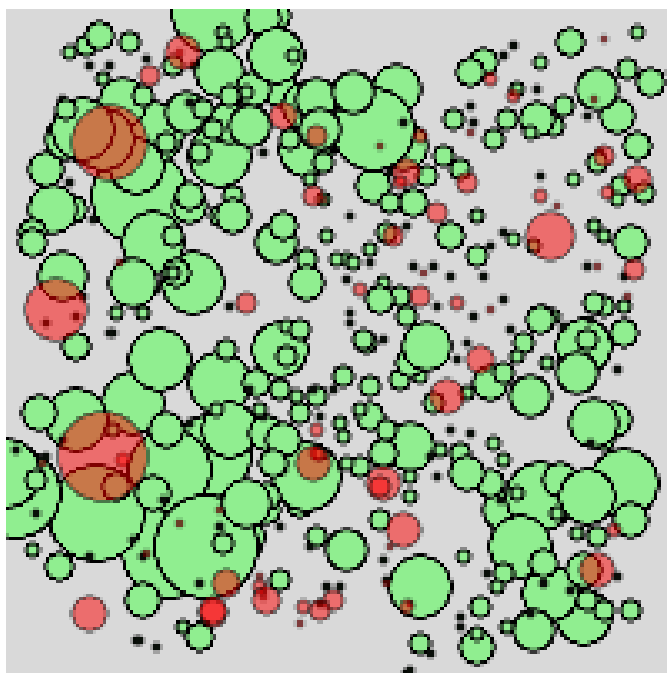
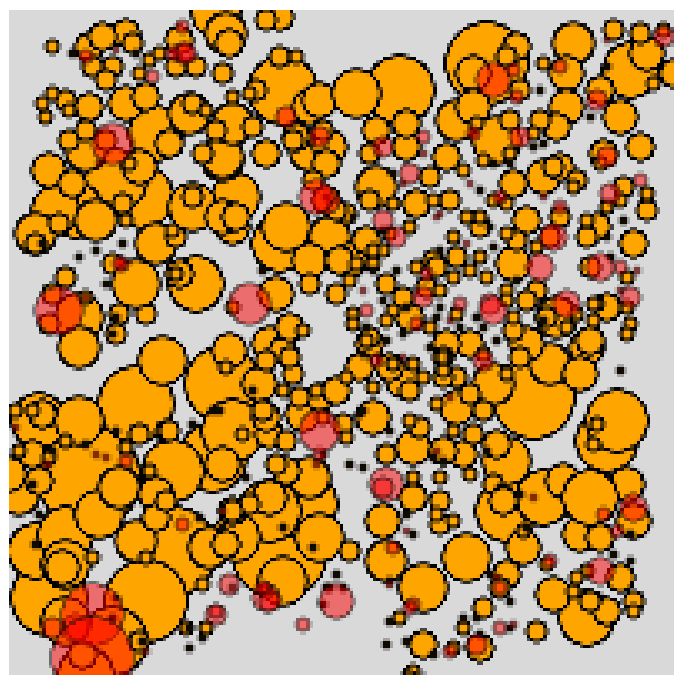
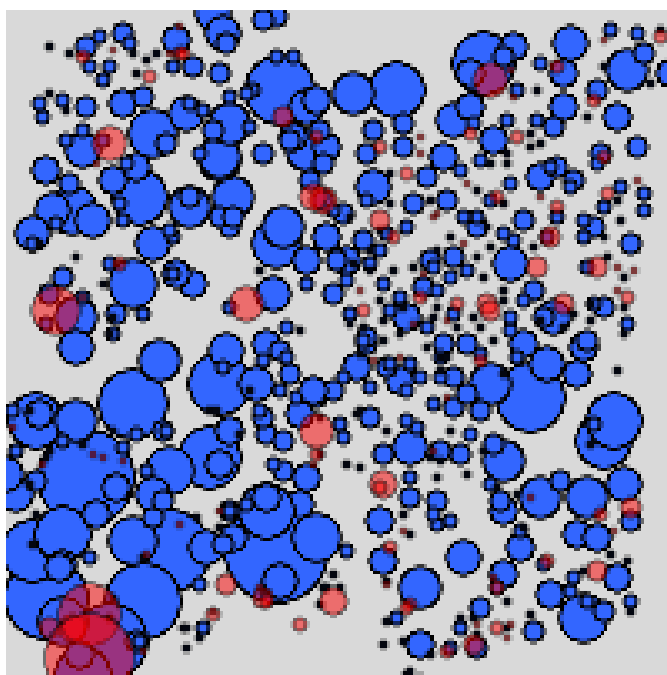
DBH distribution of removed trees**Removed trees (details by tree species)**

Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
common beech	120	6.5	69.2	5913	2939	176
goat willow	0	0	0	0	0	0
silver fir	4	0.7	9.1	555	88	6
sycamore maple	1	0.1	1.4	120	52	3
Total	125	7.3	79.8	6588	3079	185

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

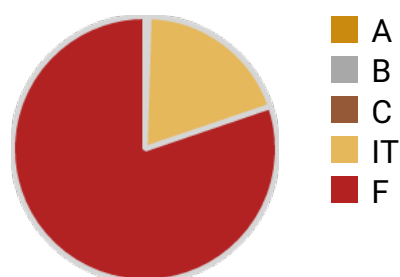
Total value of removed trees: 6588 €

Percentage of total stand value: 14.1 %

Stand value after harvest: 40198 €

Economic value by tree species [€]

Tree species	Total	Per m ³
common beech	5913	85
silver fir	555	61
sycamore maple	120	84
goat willow	0	0
Total	6588	83

**Wood quality distribution
(m³ in %)**

Quality class	m ³	%
A	0	0
B	0	0
C	0.4	0.5
Industrial Timber	15.4	19.3
Fuelwood	64	80.2

Habitat values

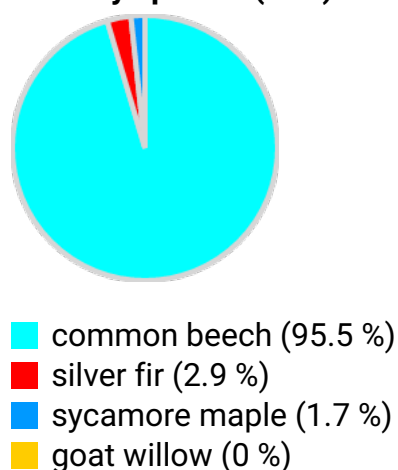
Total habitat value of removed trees: 3079 pts.

Percentage of total stand value: 14.2 %

Stand value after harvest: 18662 pts.

Habitat value by tree species [pts.]

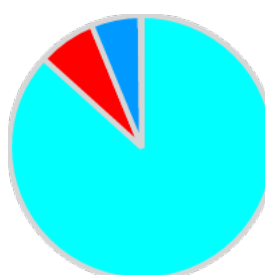
Tree species	Total	Per m ³	Microhabitats [N]
common beech	2939	42.5	176
silver fir	88	9.6	6
sycamore maple	52	36.5	3
goat willow	0	0	0
Total	3079	38.6	185

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

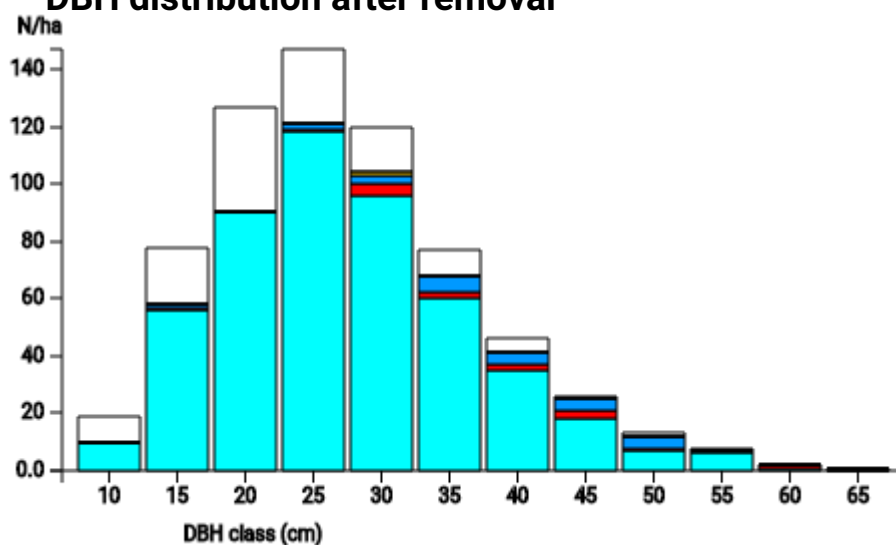
Remaining standVolume: 478 m³Basal area: 43.5 m²

Economic value: 40198 €

Habitat value: 18662 pts.

Remaining trees by volume (m³ in %)

- common beech: 86.8 %
- silver fir: 7.1 %
- sycamore maple: 6 %
- goat willow: 0.2 %

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)
common beech	497	37.7	414.8	35334	16869	1107
goat willow	1	0.1	0.8	70	24	3
silver fir	17	2.6	34	2505	157	19
sycamore maple	24	3.1	28.5	2289	1612	96
Total	539	43.5	478.1	40198	18662	1225

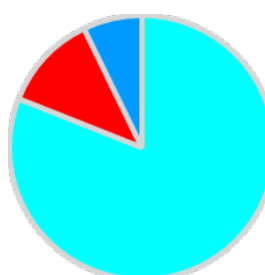
Retention treesVolume: 56.2 m³

Elite trees: 30

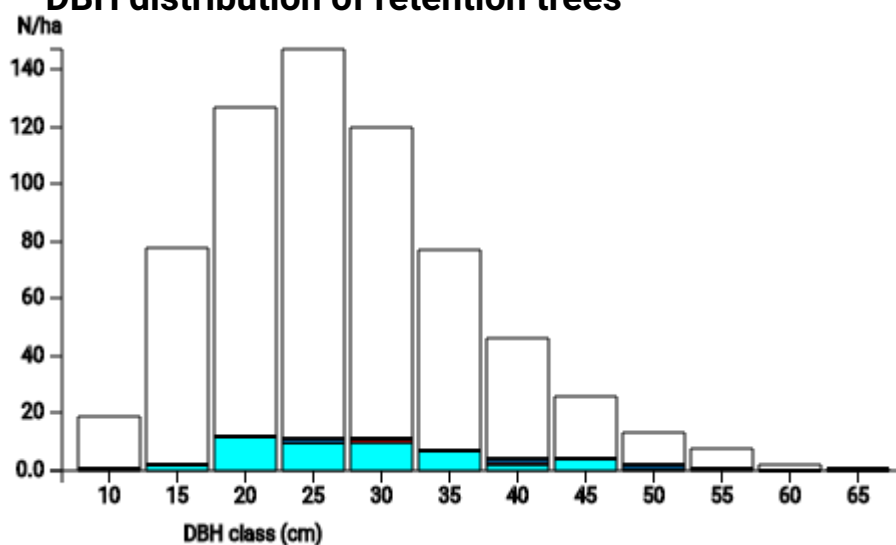
Habitat trees: 14

Economic value: 4619 €

Habitat value: 2042 pts.

Retention trees by volume (m³ in %)

common beech: 81.1 %
 silver fir: 11.8 %
 sycamore maple: 7.2 %
 goat willow: 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)
common beech	50	4.1	45.6	3871	1877	134
goat willow	0	0	0	0	0	0
silver fir	3	0.6	6.6	410	34	6
sycamore maple	3	0.4	4	338	131	12
Total	56	5.1	56.2	4619	2042	152

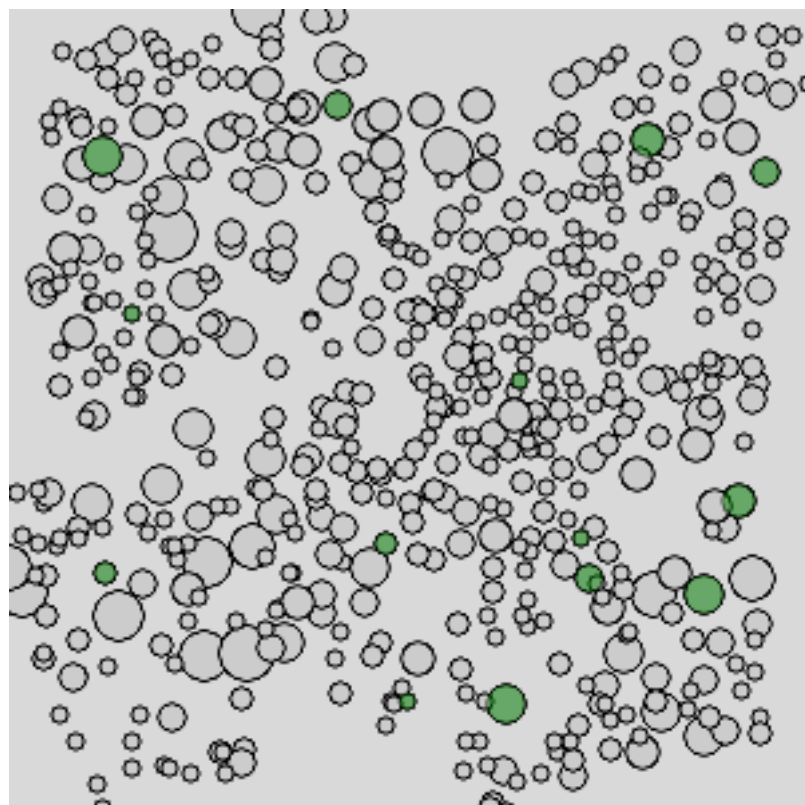
Number of habitat trees	[N]	14
Habitat value	pts.	848
	[% of total]	3.9
Economic value	[€]	1581
	[% of total]	3.4
Number of microhabitats	[N]	59
	[% of total]	4.2

Habitat tree distribution by species (N in %)

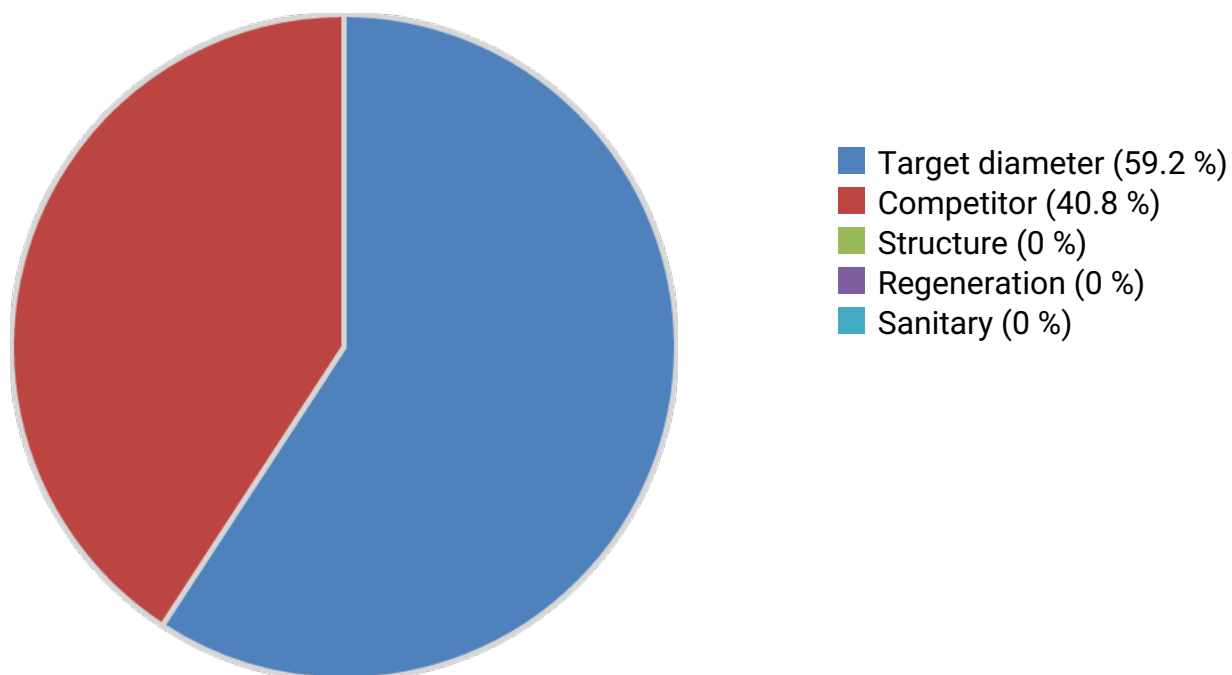


common beech: 92.9 %
silver fir: 7.1 %
sycamore maple: 0 %
goat willow: 0 %

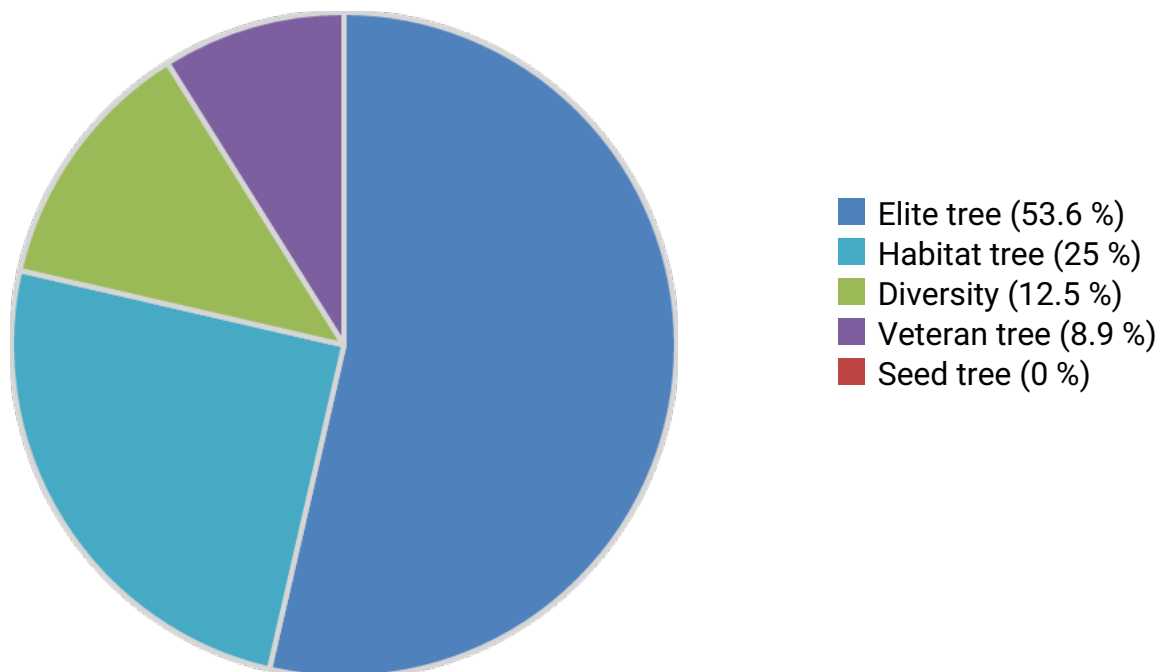
Spatial distribution of habitat trees



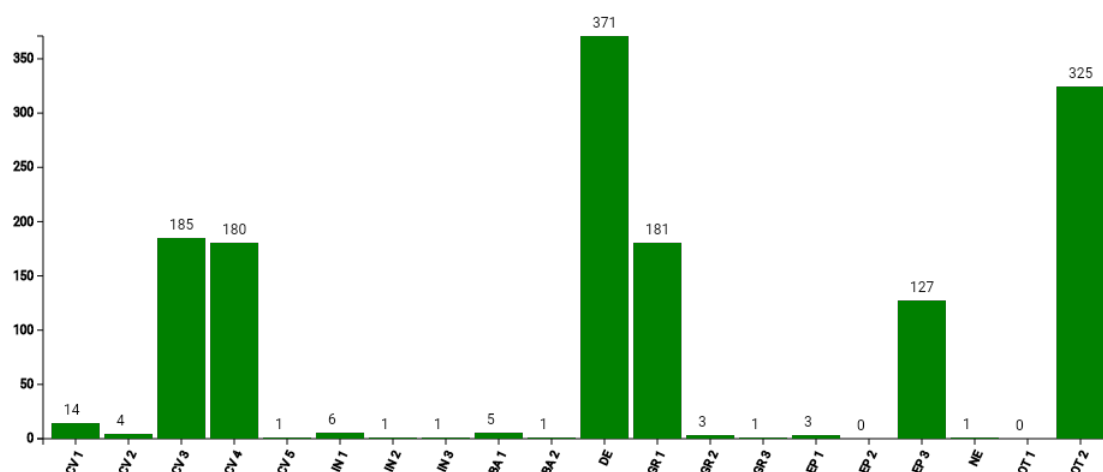
Reasons for removal



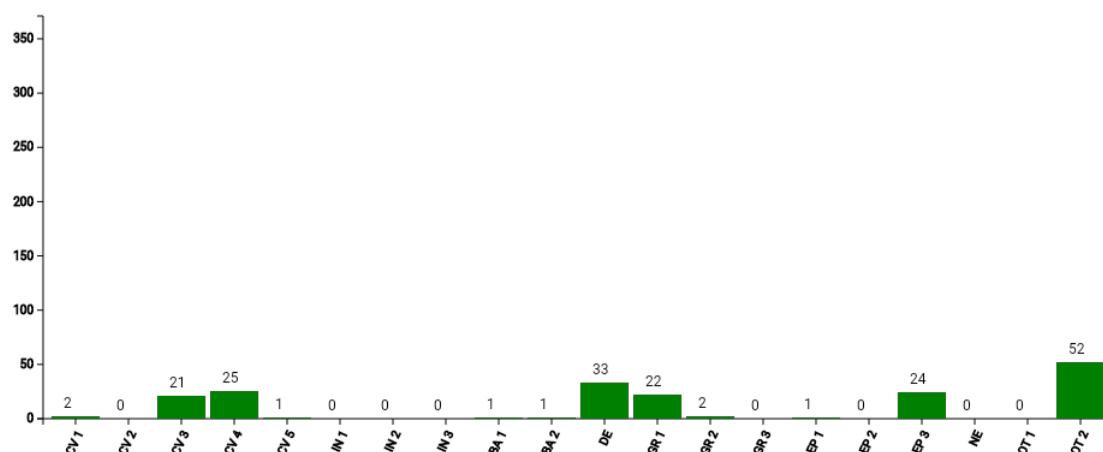
Reasons for retention



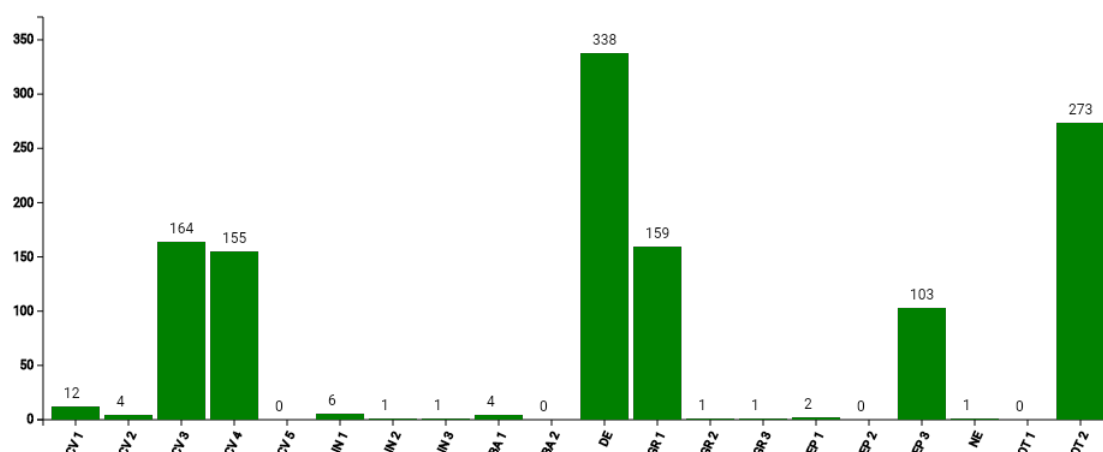
Distribution of tree microhabitats by code (N total)



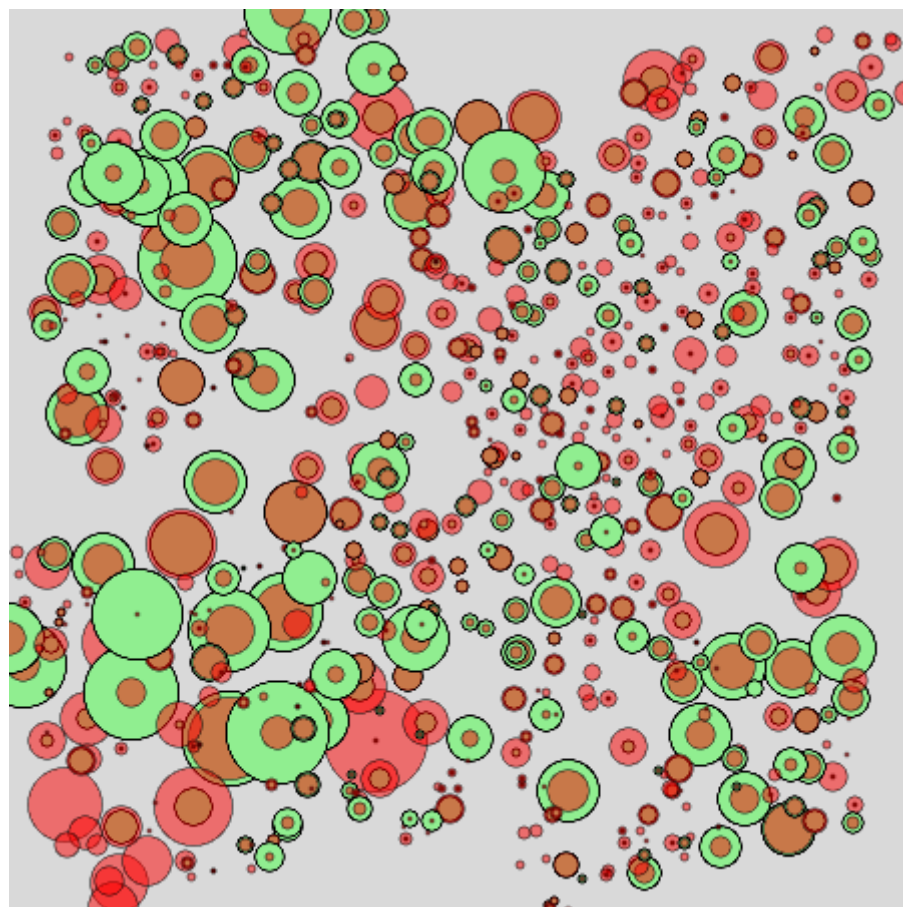
Removed tree microhabitats by code (N removed)



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
silver fir (481) Abies alba	59.6	0.28	4	226	4	Competitor
silver fir (479) Abies alba	51.3	0.21	2.8	163	76	Competitor
common beech (342) Fagus sylvatica	46.5	0.17	2.1	178	142	Target diameter
common beech (350) Fagus sylvatica	43.8	0.15	1.6	135	36	Competitor
common beech (290) Fagus sylvatica	42.6	0.14	1.6	139	176	Target diameter
common beech (258) Fagus sylvatica	41.7	0.14	1.6	136	46	Competitor
sycamore maple (371) Acer pseudoplatanus	40.6	0.13	1.4	120	52	Target diameter
common beech (106) Fagus sylvatica	40.5	0.13	1.5	127	30	Target diameter
common beech (640) Fagus sylvatica	39.6	0.12	1.2	100	71	Competitor
common beech (213) Fagus sylvatica	37.8	0.11	1.2	102	48	Target diameter
common beech (211) Fagus sylvatica	36.8	0.11	1.2	103	12	Competitor
silver fir (482) Abies alba	36.6	0.11	1.3	76	4	Competitor
common beech (525) Fagus sylvatica	36.4	0.1	1.1	96	72	Competitor
common beech (505) Fagus sylvatica	36.2	0.1	1.1	92	6	Competitor
common beech (54) Fagus sylvatica	36	0.1	1.1	93	102	Target diameter
common beech (31) Fagus sylvatica	35.5	0.1	1	84	12	Target diameter
common beech (95) Fagus sylvatica	35.4	0.1	1.1	95	12	Target diameter
common beech (38) Fagus sylvatica	34.2	0.09	1	84	0	Target diameter
common beech (58) Fagus sylvatica	33.6	0.09	1	89	0	Target diameter
common beech (396) Fagus sylvatica	33.5	0.09	0.9	77	12	Competitor
common beech (419)	33.1	0.09	1	89	54	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Fagus sylvatica						
common beech (639) Fagus sylvatica	31.6	0.08	0.6	54	44	Competitor
common beech (601) Fagus sylvatica	31.5	0.08	0.9	81	3	Competitor
common beech (155) Fagus sylvatica	31.5	0.08	0.9	77	3	Target diameter
common beech (249) Fagus sylvatica	31	0.08	0.8	65	84	Target diameter
silver fir (498) Abies alba	31	0.08	1	91	4	Competitor
common beech (147) Fagus sylvatica	31	0.08	0.7	58	60	Target diameter
common beech (217) Fagus sylvatica	30.7	0.07	0.9	73	67	Target diameter
common beech (140) Fagus sylvatica	30.5	0.07	0.8	68	39	Target diameter
common beech (175) Fagus sylvatica	30.3	0.07	0.8	65	43	Target diameter
common beech (82) Fagus sylvatica	30.2	0.07	0.8	65	0	Target diameter
common beech (152) Fagus sylvatica	30.2	0.07	0.8	65	9	Target diameter
common beech (24) Fagus sylvatica	30	0.07	0.7	64	48	Target diameter
common beech (569) Fagus sylvatica	29.7	0.07	0.8	66	54	Competitor
common beech (96) Fagus sylvatica	29.5	0.07	0.9	74	0	Target diameter
common beech (157) Fagus sylvatica	29.5	0.07	0.7	57	44	Target diameter
common beech (26) Fagus sylvatica	29.1	0.07	0.7	57	36	Target diameter
common beech (421) Fagus sylvatica	29.1	0.07	0.7	59	61	Competitor
common beech (2) Fagus sylvatica	29	0.07	0.7	60	4	Target diameter
common beech (395) Fagus sylvatica	28.9	0.07	0.7	57	60	Target diameter
common beech (42) Fagus sylvatica	28.8	0.07	0.7	61	8	Target diameter

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (10) Fagus sylvatica	28.7	0.07	0.7	60	9	Target diameter
common beech (250) Fagus sylvatica	28.7	0.07	0.6	52	9	Target diameter
common beech (635) Fagus sylvatica	28.6	0.06	0.8	67	26	Competitor
common beech (52) Fagus sylvatica	28.5	0.06	0.7	57	8	Target diameter
common beech (351) Fagus sylvatica	28.2	0.06	0.7	59	36	Target diameter
common beech (269) Fagus sylvatica	28	0.06	0.6	52	39	Target diameter
common beech (579) Fagus sylvatica	28	0.06	0.7	61	6	Competitor
common beech (103) Fagus sylvatica	28	0.06	0.6	52	12	Target diameter
common beech (581) Fagus sylvatica	28	0.06	0.8	66	0	Competitor
common beech (288) Fagus sylvatica	27.9	0.06	0.6	49	0	Target diameter
common beech (296) Fagus sylvatica	27.4	0.06	0.7	62	14	Target diameter
common beech (91) Fagus sylvatica	27	0.06	0.6	55	0	Target diameter
common beech (120) Fagus sylvatica	27	0.06	0.6	54	36	Target diameter
common beech (544) Fagus sylvatica	26.9	0.06	0.7	61	0	Competitor
common beech (64) Fagus sylvatica	26.6	0.06	0.6	54	6	Target diameter
common beech (195) Fagus sylvatica	26.6	0.06	0.6	52	6	Target diameter
common beech (252) Fagus sylvatica	26.2	0.05	0.5	40	0	Target diameter
common beech (422) Fagus sylvatica	25.5	0.05	0.5	44	65	Target diameter
common beech (631) Fagus sylvatica	24.9	0.05	0.6	49	6	Competitor
common beech (634) Fagus sylvatica	24.8	0.05	0.6	50	14	Competitor
common beech (394)	24.7	0.05	0.6	48	12	Target diameter

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Fagus sylvatica						
common beech (126) Fagus sylvatica	24.5	0.05	0.5	43	36	Target diameter
common beech (88) Fagus sylvatica	24.5	0.05	0.5	43	0	Target diameter
common beech (5) Fagus sylvatica	24.5	0.05	0.5	40	63	Target diameter
common beech (142) Fagus sylvatica	24.5	0.05	0.5	43	8	Target diameter
common beech (198) Fagus sylvatica	24.2	0.05	0.4	38	0	Target diameter
common beech (437) Fagus sylvatica	24.1	0.05	0.5	44	18	Competitor
common beech (13) Fagus sylvatica	24	0.05	0.4	35	3	Target diameter
common beech (445) Fagus sylvatica	23.9	0.05	0.5	40	36	Competitor
common beech (297) Fagus sylvatica	23.9	0.05	0.5	38	0	Target diameter
common beech (161) Fagus sylvatica	23.8	0.04	0.5	39	6	Target diameter
common beech (637) Fagus sylvatica	23.7	0.04	0.5	46	15	Competitor
common beech (84) Fagus sylvatica	23.6	0.04	0.4	37	36	Competitor
common beech (523) Fagus sylvatica	23.6	0.04	0.6	50	0	Competitor
common beech (513) Fagus sylvatica	23.4	0.04	0.5	38	36	Competitor
common beech (397) Fagus sylvatica	23.3	0.04	0.4	32	36	Target diameter
common beech (253) Fagus sylvatica	23.3	0.04	0.4	35	6	Target diameter
common beech (398) Fagus sylvatica	23.3	0.04	0.5	39	12	Competitor
common beech (627) Fagus sylvatica	23.2	0.04	0.4	36	72	Competitor
common beech (45) Fagus sylvatica	23.2	0.04	0.4	35	16	Target diameter
common beech (186) Fagus sylvatica	23	0.04	0.4	36	6	Target diameter

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (492) Fagus sylvatica	22.5	0.04	0.3	28	0	Competitor
common beech (310) Fagus sylvatica	22.4	0.04	0.4	31	0	Target diameter
common beech (111) Fagus sylvatica	22.3	0.04	0.3	28	51	Target diameter
common beech (9) Fagus sylvatica	22	0.04	0.3	29	52	Target diameter
common beech (127) Fagus sylvatica	21.8	0.04	0.4	33	0	Target diameter
common beech (285) Fagus sylvatica	21.5	0.04	0.3	29	0	Target diameter
common beech (113) Fagus sylvatica	21.3	0.04	0.4	31	0	Target diameter
common beech (130) Fagus sylvatica	21.3	0.04	0.3	30	42	Target diameter
common beech (462) Fagus sylvatica	21	0.04	0.3	29	0	Competitor
common beech (474) Fagus sylvatica	21	0.04	0.4	31	18	Competitor
common beech (118) Fagus sylvatica	21	0.04	0.4	32	0	Target diameter
common beech (11) Fagus sylvatica	20.5	0.03	0.3	26	0	Target diameter
common beech (656) Fagus sylvatica	20.3	0.03	0.3	29	8	Competitor
common beech (413) Fagus sylvatica	20.3	0.03	0.3	23	12	Competitor
common beech (194) Fagus sylvatica	19.6	0.03	0.3	23	24	Target diameter
common beech (324) Fagus sylvatica	19.5	0.03	0.3	27	6	Competitor
common beech (360) Fagus sylvatica	19.5	0.03	0.3	23	72	Target diameter
common beech (453) Fagus sylvatica	19.4	0.03	0.3	29	0	Competitor
common beech (61) Fagus sylvatica	19.3	0.03	0.3	24	33	Target diameter
common beech (582) Fagus sylvatica	19	0.03	0.3	26	0	Competitor
common beech (552)	19	0.03	0.3	24	0	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Fagus sylvatica						
common beech (557) Fagus sylvatica	19	0.03	0.3	26	3	Competitor
common beech (131) Fagus sylvatica	18.8	0.03	0.3	23	0	Target diameter
common beech (611) Fagus sylvatica	18.7	0.03	0.3	24	0	Competitor
common beech (146) Fagus sylvatica	18.5	0.03	0.2	19	24	Target diameter
common beech (592) Fagus sylvatica	17.2	0.02	0.2	21	72	Competitor
common beech (475) Fagus sylvatica	17	0.02	0.2	16	3	Competitor
common beech (454) Fagus sylvatica	16.8	0.02	0.2	20	202	Competitor
common beech (420) Fagus sylvatica	16.3	0.02	0.2	15	0	Target diameter
common beech (599) Fagus sylvatica	16	0.02	0.2	21	0	Competitor
common beech (457) Fagus sylvatica	15.9	0.02	0.2	20	12	Competitor
common beech (393) Fagus sylvatica	15.8	0.02	0.2	16	0	Target diameter
common beech (373) Fagus sylvatica	15.5	0.02	0.2	13	0	Target diameter
common beech (555) Fagus sylvatica	15.4	0.02	0.5	40	0	Competitor
common beech (392) Fagus sylvatica	14.5	0.02	0.2	13	36	Target diameter
common beech (399) Fagus sylvatica	14.4	0.02	0.1	11	16	Target diameter
common beech (354) Fagus sylvatica	14.4	0.02	0.1	13	0	Competitor
common beech (626) Fagus sylvatica	13.5	0.01	0.1	9	0	Competitor
common beech (372) [REPLACE_DEAD]Fagus sylvatica	13.4	0.01	0.1	8	46	Target diameter
common beech (493) Fagus sylvatica	13.1	0.01	0.1	8	0	Competitor
common beech (464) Fagus sylvatica	12.1	0.01	0.1	8	0	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (447) Fagus sylvatica	12	0.01	0.1	6	0	Target diameter
common beech (306) Fagus sylvatica	10.8	0.01	0.1	5	0	Target diameter

Retention trees

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
silver fir (469) Abies alba	65.5	0.34	4.3	277	34	Habitat tree
common beech (218) Fagus sylvatica	55	0.24	3.2	271	76	Habitat tree
sycamore maple (575) Acer pseudoplatanus	52	0.21	1.4	120	88	Elite tree
common beech (515) Fagus sylvatica	50.1	0.2	2.5	215	84	Habitat tree
common beech (522) Fagus sylvatica	48.2	0.18	1.9	159	129	Habitat tree
common beech (629) Fagus sylvatica	46.8	0.17	2	166	136	Habitat tree
common beech (299) Fagus sylvatica	46.2	0.17	2.1	180	105	Veteran tree
common beech (391) Fagus sylvatica	45.2	0.16	1.7	144	44	Elite tree
common beech (329) Fagus sylvatica	44.3	0.15	1.8	152	15	Veteran tree
silver fir (483) Abies alba	44	0.15	2.2	127	0	Elite tree
sycamore maple (654) Acer pseudoplatanus	41.6	0.14	1.3	110	22	Elite tree
common beech (529) Fagus sylvatica	40.5	0.13	1.4	117	33	Elite tree
common beech (47) Fagus sylvatica	38.7	0.12	1.4	119	0	Elite tree
common beech (192) Fagus sylvatica	37.8	0.11	1.3	114	36	Elite tree
common beech (251) Fagus sylvatica	37	0.11	1.2	107	0	Elite tree
common beech (148) Fagus sylvatica	36.8	0.11	1.1	90	108	Elite tree
common beech (4) Fagus sylvatica	36.5	0.11	1.1	96	59	Habitat tree
common beech (633) Fagus sylvatica	35.8	0.1	1.2	98	52	Diversity
common beech (364) Fagus sylvatica	35.5	0.1	1.1	93	128	Elite tree
silver fir (489) [REPLACE_DEAD]Abies alba	34.6	0.09	0.1	6	0	Diversity
common beech (122)	33	0.09	0.9	76	6	Veteran tree

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Fagus sylvatica						
common beech (40) Fagus sylvatica	32.8	0.08	1	83	36	Veteran tree
common beech (330) Fagus sylvatica	32.8	0.08	0.9	73	105	Diversity
common beech (179) Fagus sylvatica	32.1	0.08	0.9	73	6	Elite tree
common beech (57) Fagus sylvatica	32	0.08	0.9	73	6	Elite tree
common beech (53) Fagus sylvatica	31.5	0.08	0.8	69	6	Elite tree
common beech (586) Fagus sylvatica	31.4	0.08	0.9	74	24	Elite tree
common beech (572) Fagus sylvatica	30.7	0.07	0.8	70	60	Habitat tree
common beech (312) Fagus sylvatica	30.7	0.07	0.7	63	142	Habitat tree
common beech (67) Fagus sylvatica	30.6	0.07	0.8	67	84	Habitat tree
common beech (16) Fagus sylvatica	28.9	0.07	0.6	54	47	Elite tree
common beech (307) Fagus sylvatica	28.8	0.07	0.7	60	6	Habitat tree
sycamore maple (347) Acer pseudoplatanus	28.5	0.06	1.3	108	21	Diversity
common beech (520) Fagus sylvatica	28.5	0.06	0.6	46	110	Diversity
common beech (156) Fagus sylvatica	28.1	0.06	0.6	53	42	Elite tree
common beech (606) Fagus sylvatica	28.1	0.06	0.7	60	0	Elite tree
common beech (119) Fagus sylvatica	28	0.06	0.7	58	0	Elite tree
common beech (490) Fagus sylvatica	27.2	0.06	0.6	54	9	Elite tree
common beech (446) Fagus sylvatica	26.9	0.06	0.6	53	0	Elite tree
common beech (259) Fagus sylvatica	25.8	0.05	0.6	53	18	Elite tree
common beech (263) Fagus sylvatica	25	0.05	0.5	39	6	Elite tree

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (12) Fagus sylvatica	24.8	0.05	0.5	44	11	Elite tree
common beech (608) Fagus sylvatica	24.6	0.05	0.5	43	9	Elite tree
common beech (423) Fagus sylvatica	24.5	0.05	0.6	48	18	Elite tree
common beech (349) Fagus sylvatica	24.4	0.05	0.5	39	8	Elite tree
common beech (268) Fagus sylvatica	23.8	0.04	0.4	35	0	Elite tree
common beech (345) Fagus sylvatica	23.5	0.04	0.3	29	40	Veteran tree
common beech (355) [REPLACE_DEAD]Fagus sylvatica	23.2	0.04	0.4	31	8	Habitat tree
common beech (139) Fagus sylvatica	22.8	0.04	0.4	38	0	Habitat tree
common beech (352) Fagus sylvatica	22.4	0.04	0.4	36	24	Habitat tree
common beech (425) Fagus sylvatica	22	0.04	0.4	35	0	Elite tree
common beech (571) Fagus sylvatica	21	0.04	0.4	32	6	Habitat tree
common beech (356) Fagus sylvatica	20.1	0.03	0.3	25	6	Elite tree
common beech (556) Fagus sylvatica	17.9	0.03	0.5	40	26	Elite tree
common beech (238) Fagus sylvatica	16.2	0.02	0.1	11	3	Diversity
common beech (577) Fagus sylvatica	13.5	0.01	0.1	10	0	Diversity