

04/03/2021 Gruppo A_Turno 3 miozzo

Site conditions

Altitude: 1270 m.a.s.l.

Forest ecological region: Tuscany

Geology / Bedrock: Sandstone

Soil type: Brown podzolic soil

Natural forest community:

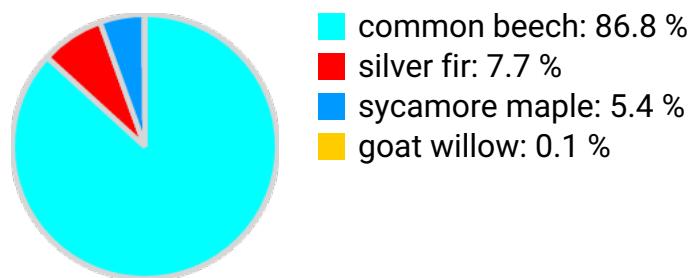
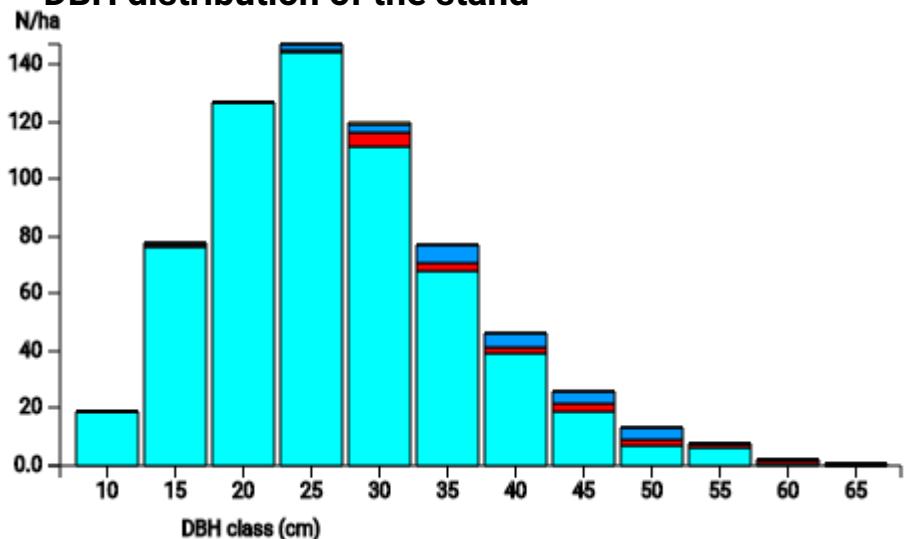
Asperulo-Fagetum

Mean annual temperature: 8.7 C;

Mean annual precipitation: 1642

mm; Ownership: State;

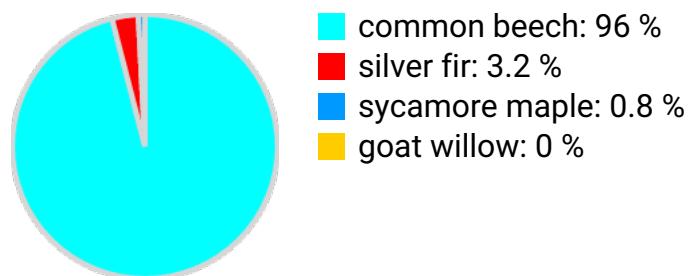
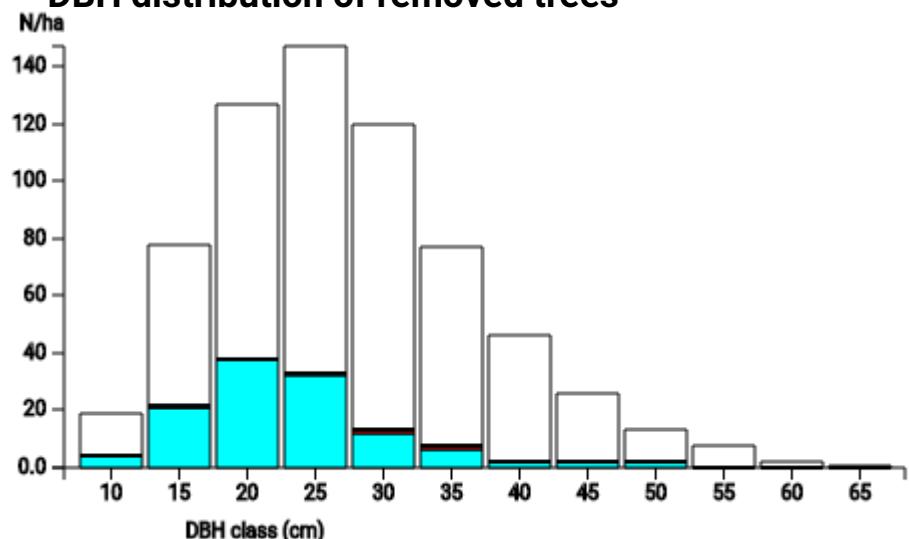
Establishment: 2020

Tree species distribution by volume (in %)**DBH distribution of the stand****Initial stand (details by tree species)**

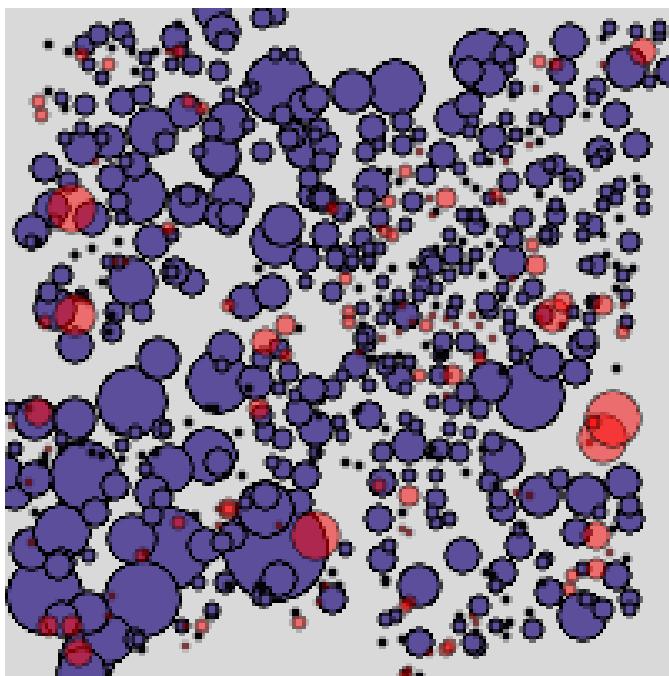
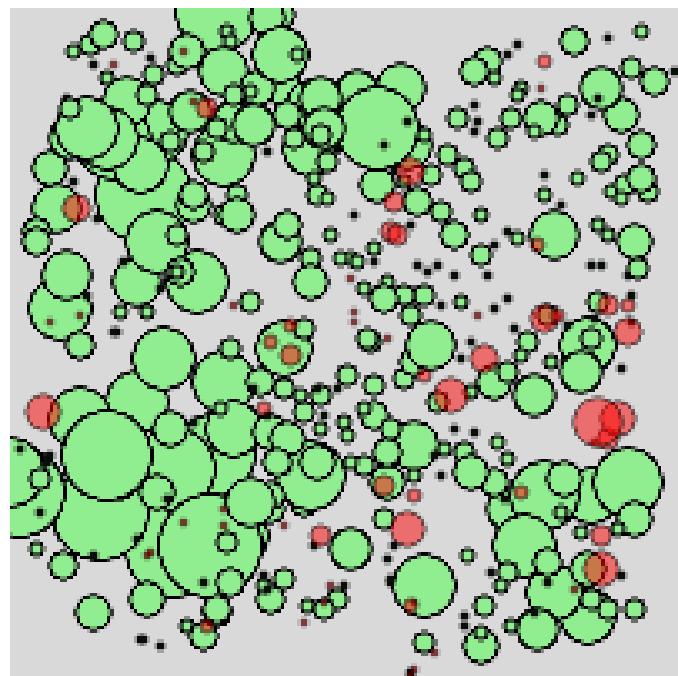
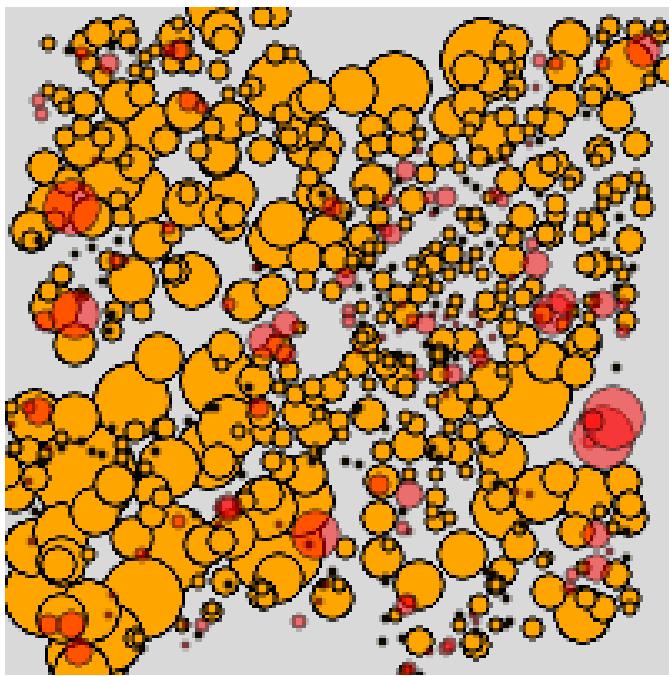
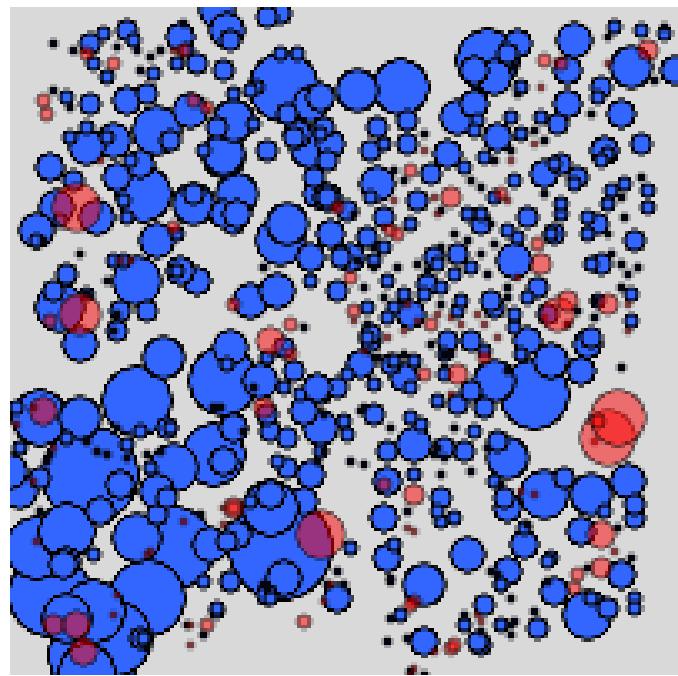
Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
common beech	617	44.3	484	41247	19808	1283
goat willow	1	0.1	0.8	70	24	3
silver fir	21	3.3	43.1	3060	245	25
sycamore maple	25	3.2	29.9	2409	1664	99
Total	664	50.8	557.9	46786	21741	1410

Removed trees

Volume: 75 m³
 Basal area: 7 m²
 Economic value: 6347 €
 Habitat value: 2127 pts.

Removed trees (N in %)**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	119	6.7	70.4	5998	2091	146
goat willow	0	0	0	0	0	0
silver fir	4	0.3	4.3	326	36	4
sycamore maple	1	0	0.3	23	0	0
Total	124	7	75	6347	2127	150

Economic value [EUR]**Habitat value****Basal area [m^2]****Volume [m^3]****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

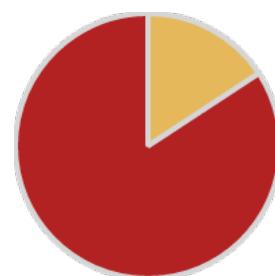
Total value of removed trees: 6347 €

Percentage of total stand value: 13.6 %

Stand value after harvest: 40439 €

Economic value by tree species [€]

Tree species	Total	Per m ³
common beech	5998	85
silver fir	326	77
sycamore maple	23	84
goat willow	0	0
Total	6347	85

Wood quality distribution (m³ in %)

- █ A
- █ B
- █ C
- █ IT
- █ F

Quality class	m ³	%
A	0	0
B	0	0
C	0	0
Industrial Timber	11.8	15.8
Fuelwood	63.1	84.2

Habitat values

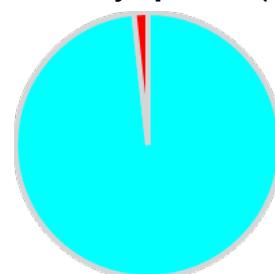
Total habitat value of removed trees: 2127 pts.

Percentage of total stand value: 9.8 %

Stand value after harvest: 19614 pts.

Habitat value by tree species [pts.]

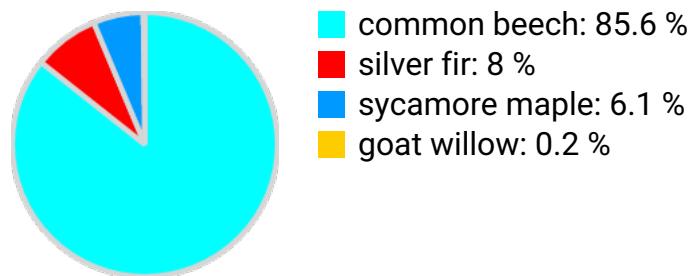
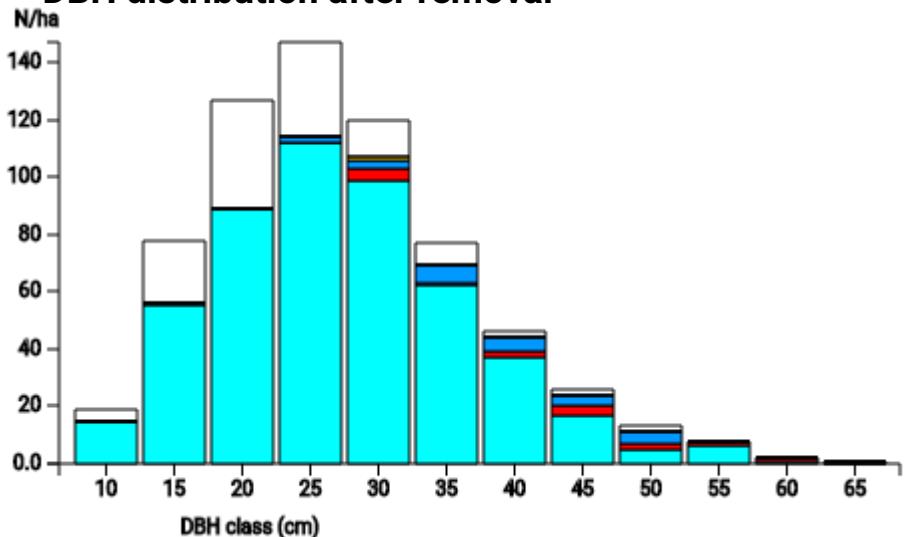
Tree species	Total	Per m ³	Microhabitats [N]
common beech	2091	29.7	146
silver fir	36	8.4	4
sycamore maple	0	0	0
goat willow	0	0	0
Total	2127	28.4	150

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

- █ common beech (98.3 %)
- █ silver fir (1.7 %)
- █ sycamore maple (0 %)
- █ goat willow (0 %)

Remaining stand

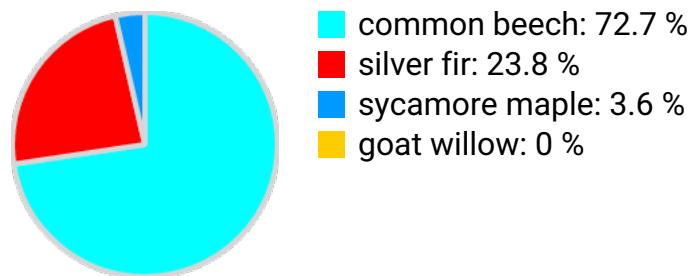
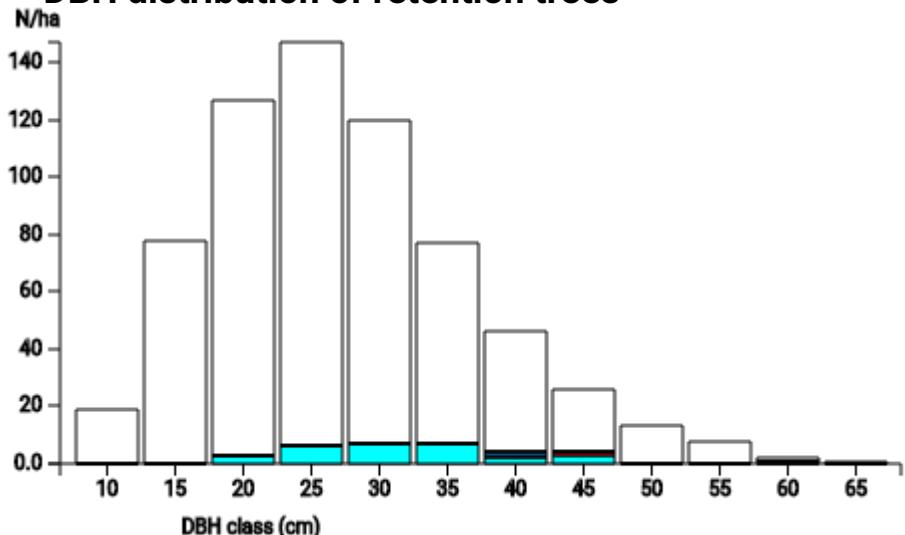
Volume: 483.2 m³
 Basal area: 44.1 m²
 Economic value: 40439 €
 Habitat value: 19614 pts.

Remaining trees by volume (m³ in %)**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	498	37.6	413.6	35249	17717	1137
goat willow	1	0.1	0.8	70	24	3
silver fir	17	2.9	38.8	2734	209	21
sycamore maple	24	3.2	29.7	2386	1664	99
Total	540	43.8	482.9	40439	19614	1260

Retention trees

Volume: 39.9 m³
 Elite trees: 32
 Habitat trees: 0
 Economic value: 3317 €
 Habitat value: 1266 pts.

Retention trees by volume (m³ in %)**DBH distribution of retention trees****Retained trees (details by tree species)**

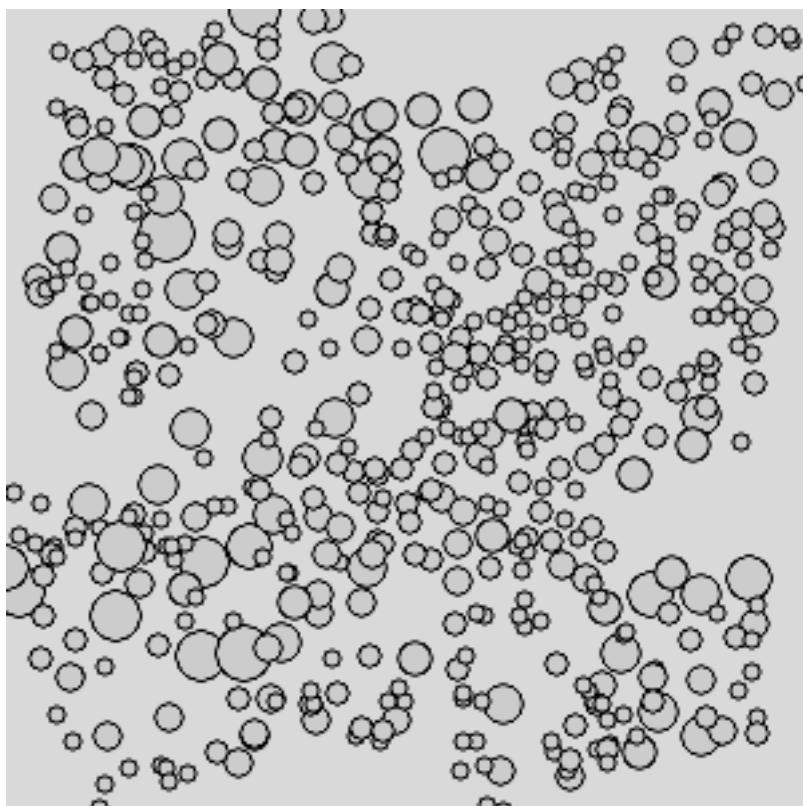
Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
common beech	28	2.6	29	2484	1205	67
goat willow	0	0	0	0	0	0
silver fir	3	0.7	9.5	713	9	2
sycamore maple	1	0.1	1.4	120	52	3
Total	32	3.4	39.9	3317	1266	72

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

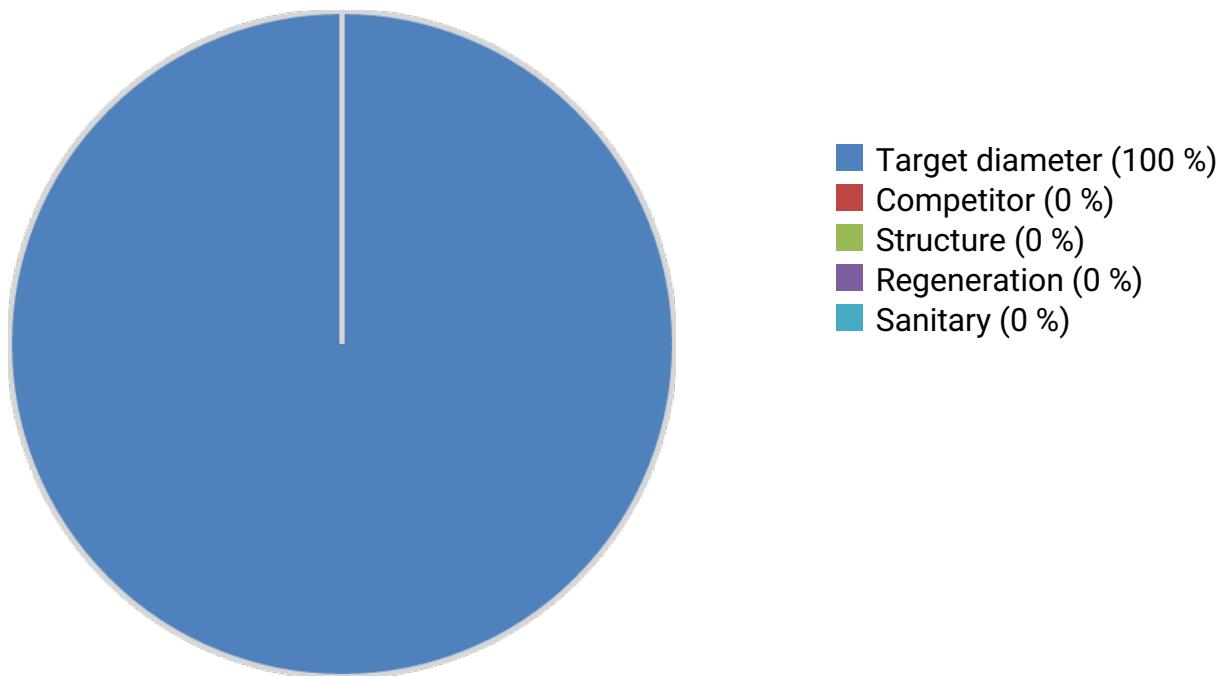
Habitat tree distribution by species (N in %)

- common beech: NaN %
- silver fir: NaN %
- sycamore maple: NaN %
- goat willow: NaN %

Spatial distribution of habitat trees

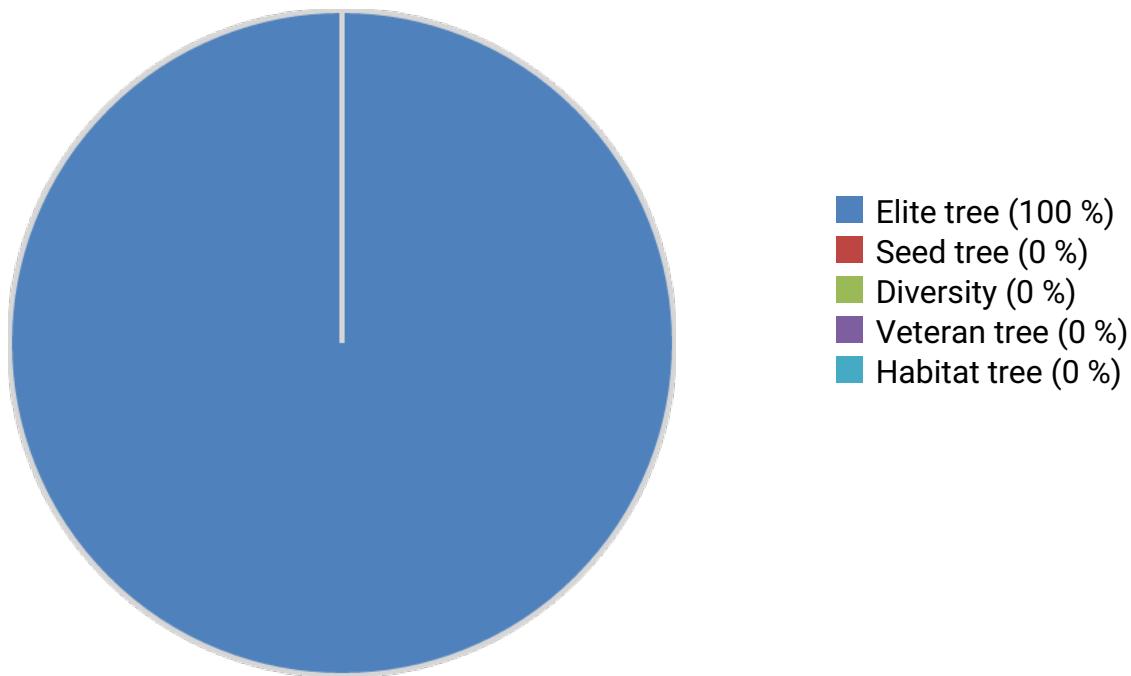


Reasons for removal

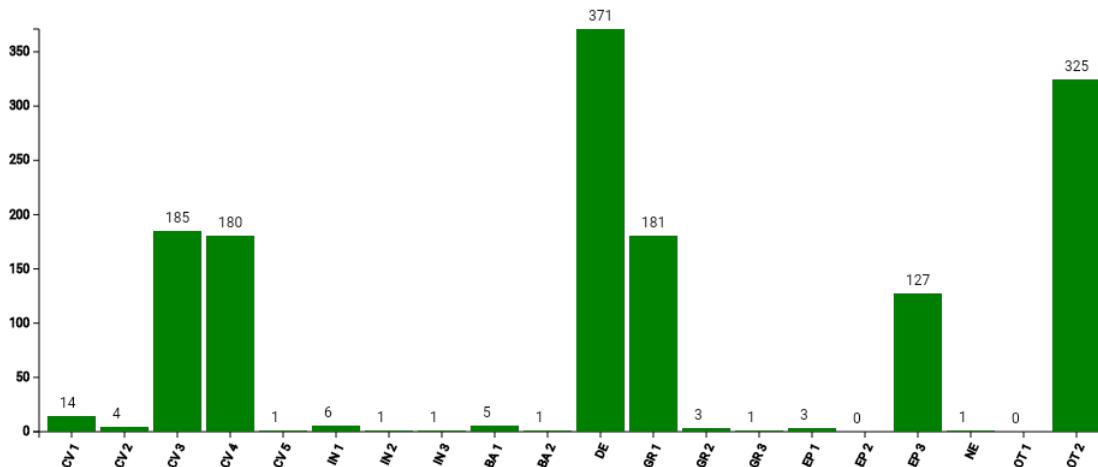
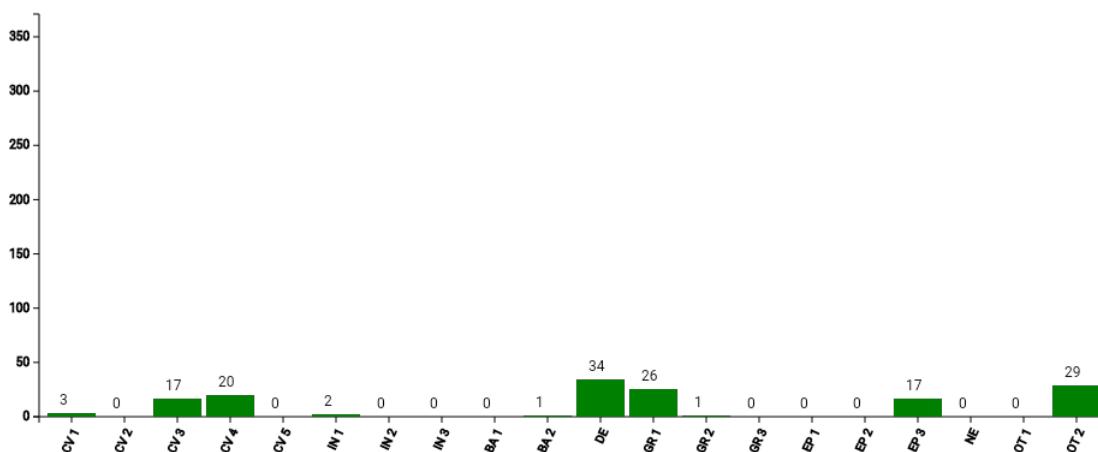
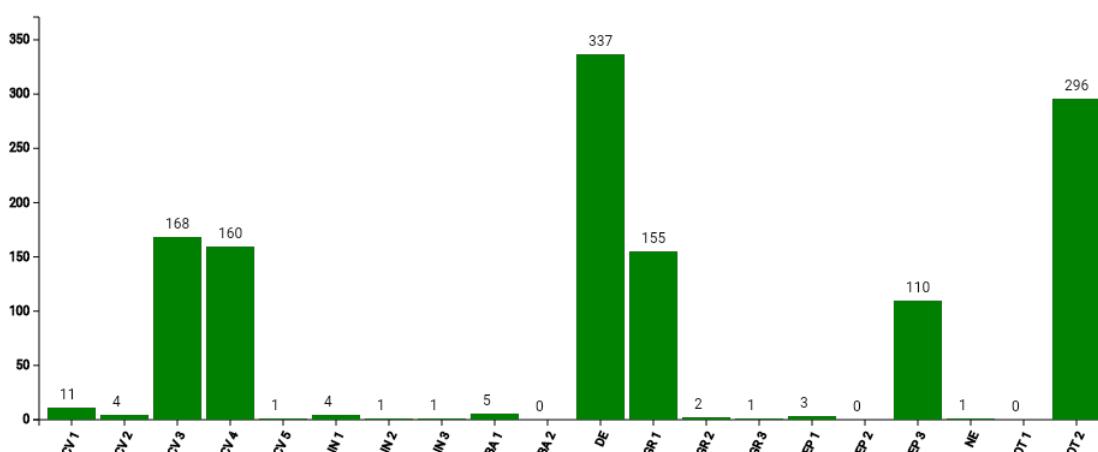


■ Target diameter (100 %)
■ Competitor (0 %)
■ Structure (0 %)
■ Regeneration (0 %)
■ Sanitary (0 %)

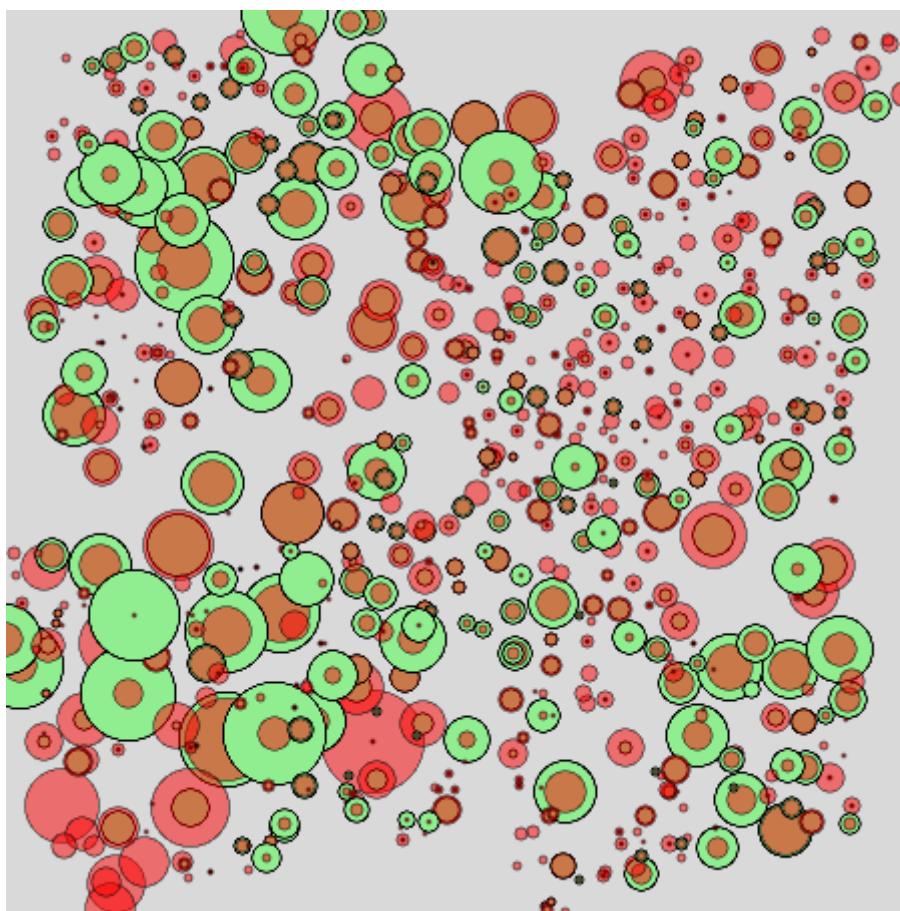
Reasons for retention



■ Elite tree (100 %)
■ Seed tree (0 %)
■ Diversity (0 %)
■ Veteran tree (0 %)
■ Habitat tree (0 %)

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
common beech (514) <i>Fagus sylvatica</i>	50.2	0.2	2.4	205	51	Target diameter
common beech (515) <i>Fagus sylvatica</i>	50.1	0.2	2.5	215	84	Target diameter
common beech (320) <i>Fagus sylvatica</i>	49.7	0.19	2.2	190	66	Target diameter
common beech (357) <i>Fagus sylvatica</i>	46.2	0.17	2.2	189	44	Target diameter
common beech (329) <i>Fagus sylvatica</i>	44.3	0.15	1.8	152	15	Target diameter
common beech (534) <i>Fagus sylvatica</i>	42.2	0.14	1.5	130	38	Target diameter
common beech (384) <i>Fagus sylvatica</i>	39.5	0.12	1.3	113	28	Target diameter
common beech (18) <i>Fagus sylvatica</i>	38.2	0.12	1.1	96	6	Target diameter
silver fir (482) <i>Abies alba</i>	36.6	0.11	1.3	76	4	Target diameter
common beech (525) <i>Fagus sylvatica</i>	36.4	0.1	1.1	96	72	Target diameter
common beech (524) <i>Fagus sylvatica</i>	36.3	0.1	1.2	100	53	Target diameter
silver fir (499) <i>Abies alba</i>	36.1	0.1	1.3	112	4	Target diameter
common beech (450) <i>Fagus sylvatica</i>	36.1	0.1	1.2	106	72	Target diameter
common beech (624) <i>Fagus sylvatica</i>	35	0.1	1	80	36	Target diameter
common beech (517) <i>Fagus sylvatica</i>	34.8	0.1	1	82	42	Target diameter
common beech (344) <i>Fagus sylvatica</i>	34.6	0.09	0.8	69	38	Target diameter
common beech (414) <i>Fagus sylvatica</i>	34.2	0.09	0.8	73	0	Target diameter
common beech (38) <i>Fagus sylvatica</i>	34.2	0.09	1	84	0	Target diameter
common beech (58) <i>Fagus sylvatica</i>	33.6	0.09	1	89	0	Target diameter
common beech (124) <i>Fagus sylvatica</i>	32.2	0.08	0.8	73	3	Target diameter

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (639) <i>Fagus sylvatica</i>	31.6	0.08	0.6	54	44	Target diameter
common beech (346) <i>Fagus sylvatica</i>	31.5	0.08	0.7	60	48	Target diameter
common beech (284) <i>Fagus sylvatica</i>	31	0.08	0.7	62	12	Target diameter
silver fir (498) <i>Abies alba</i>	31	0.08	1	91	4	Target diameter
common beech (147) <i>Fagus sylvatica</i>	31	0.08	0.7	58	60	Target diameter
common beech (380) <i>Fagus sylvatica</i>	30.8	0.08	0.8	71	36	Target diameter
common beech (591) <i>Fagus sylvatica</i>	30.2	0.07	0.8	72	0	Target diameter
common beech (569) <i>Fagus sylvatica</i>	29.7	0.07	0.8	66	54	Target diameter
common beech (157) <i>Fagus sylvatica</i>	29.5	0.07	0.7	57	44	Target diameter
common beech (208) <i>Fagus sylvatica</i>	29.4	0.07	0.7	62	3	Target diameter
common beech (415) <i>Fagus sylvatica</i>	29.3	0.07	0.6	54	0	Target diameter
common beech (247) <i>Fagus sylvatica</i>	29.3	0.07	0.7	63	12	Target diameter
common beech (343) <i>Fagus sylvatica</i>	28.7	0.07	0.6	53	20	Target diameter
common beech (250) <i>Fagus sylvatica</i>	28.7	0.07	0.6	52	9	Target diameter
common beech (635) <i>Fagus sylvatica</i>	28.6	0.06	0.8	67	26	Target diameter
common beech (138) <i>Fagus sylvatica</i>	28.5	0.06	0.7	57	0	Target diameter
common beech (193) <i>Fagus sylvatica</i>	28.5	0.06	0.7	57	12	Target diameter
common beech (520) <i>Fagus sylvatica</i>	28.5	0.06	0.6	46	110	Target diameter
common beech (616) <i>Fagus sylvatica</i>	28.4	0.06	0.6	46	36	Target diameter
common beech (156) <i>Fagus sylvatica</i>	28.1	0.06	0.6	53	42	Target diameter

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (246) <i>Fagus sylvatica</i>	28	0.06	0.7	56	39	Target diameter
common beech (65) <i>Fagus sylvatica</i>	28	0.06	0.7	62	38	Target diameter
common beech (288) <i>Fagus sylvatica</i>	27.9	0.06	0.6	49	0	Target diameter
common beech (503) <i>Fagus sylvatica</i>	27.6	0.06	0.5	43	64	Target diameter
common beech (539) <i>Fagus sylvatica</i>	27.2	0.06	0.7	59	12	Target diameter
common beech (337) <i>Fagus sylvatica</i>	27.1	0.06	0.6	51	0	Target diameter
common beech (91) <i>Fagus sylvatica</i>	27	0.06	0.6	55	0	Target diameter
silver fir (438) <i>Abies alba</i>	26.9	0.06	0.6	47	24	Target diameter
common beech (336) <i>Fagus sylvatica</i>	26.7	0.06	0.5	45	6	Target diameter
common beech (64) <i>Fagus sylvatica</i>	26.6	0.06	0.6	54	6	Target diameter
common beech (259) <i>Fagus sylvatica</i>	25.8	0.05	0.6	53	18	Target diameter
common beech (202) <i>Fagus sylvatica</i>	25.6	0.05	0.6	48	18	Target diameter
common beech (154) <i>Fagus sylvatica</i>	25.2	0.05	0.5	42	48	Target diameter
common beech (501) <i>Fagus sylvatica</i>	25.2	0.05	0.5	39	32	Target diameter
common beech (273) <i>Fagus sylvatica</i>	25.2	0.05	0.6	49	6	Target diameter
common beech (521) <i>Fagus sylvatica</i>	25.1	0.05	0.5	40	12	Target diameter
common beech (661) <i>Fagus sylvatica</i>	25.1	0.05	0.5	41	21	Target diameter
common beech (630) <i>Fagus sylvatica</i>	25.1	0.05	0.6	49	6	Target diameter
common beech (59) <i>Fagus sylvatica</i>	25	0.05	0.5	45	36	Target diameter
common beech (203) <i>Fagus sylvatica</i>	25	0.05	0.5	42	14	Target diameter

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (631) <i>Fagus sylvatica</i>	24.9	0.05	0.6	49	6	Target diameter
common beech (634) <i>Fagus sylvatica</i>	24.8	0.05	0.6	50	14	Target diameter
common beech (394) <i>Fagus sylvatica</i>	24.7	0.05	0.6	48	12	Target diameter
common beech (538) <i>Fagus sylvatica</i>	24.2	0.05	0.5	46	0	Target diameter
common beech (437) <i>Fagus sylvatica</i>	24.1	0.05	0.5	44	18	Target diameter
common beech (297) <i>Fagus sylvatica</i>	23.9	0.05	0.5	38	0	Target diameter
common beech (161) <i>Fagus sylvatica</i>	23.8	0.04	0.5	39	6	Target diameter
common beech (471) <i>Fagus sylvatica</i>	23.8	0.04	0.5	40	0	Target diameter
common beech (458) <i>Fagus sylvatica</i>	23.8	0.04	0.5	43	12	Target diameter
common beech (78) <i>Fagus sylvatica</i>	23.7	0.04	0.4	37	0	Target diameter
common beech (663) <i>Fagus sylvatica</i>	23.6	0.04	0.5	43	18	Target diameter
common beech (129) <i>Fagus sylvatica</i>	23.5	0.04	0.5	40	0	Target diameter
common beech (253) <i>Fagus sylvatica</i>	23.3	0.04	0.4	35	6	Target diameter
common beech (44) <i>Fagus sylvatica</i>	23.2	0.04	0.4	38	0	Target diameter
common beech (627) <i>Fagus sylvatica</i>	23.2	0.04	0.4	36	72	Target diameter
common beech (139) <i>Fagus sylvatica</i>	22.8	0.04	0.4	38	0	Target diameter
common beech (512) <i>Fagus sylvatica</i>	22.7	0.04	0.5	40	0	Target diameter
common beech (168) <i>Fagus sylvatica</i>	22.7	0.04	0.4	36	6	Target diameter
common beech (487) <i>Fagus sylvatica</i>	22.6	0.04	0.5	38	0	Target diameter
common beech (374) <i>Fagus sylvatica</i>	22.6	0.04	0.4	33	12	Target diameter

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (550) <i>Fagus sylvatica</i>	22.6	0.04	0.4	36	0	Target diameter
common beech (492) <i>Fagus sylvatica</i>	22.5	0.04	0.3	28	0	Target diameter
common beech (310) <i>Fagus sylvatica</i>	22.4	0.04	0.4	31	0	Target diameter
common beech (598) <i>Fagus sylvatica</i>	22	0.04	0.4	35	0	Target diameter
common beech (127) <i>Fagus sylvatica</i>	21.8	0.04	0.4	33	0	Target diameter
common beech (440) <i>Fagus sylvatica</i>	21.7	0.04	0.4	32	0	Target diameter
common beech (164) <i>Fagus sylvatica</i>	21.2	0.04	0.3	29	0	Target diameter
common beech (159) <i>Fagus sylvatica</i>	21.2	0.04	0.3	28	3	Target diameter
common beech (56) <i>Fagus sylvatica</i>	21	0.04	0.3	28	64	Target diameter
common beech (118) <i>Fagus sylvatica</i>	21	0.04	0.4	32	0	Target diameter
common beech (562) <i>Fagus sylvatica</i>	20.8	0.03	0.3	27	36	Target diameter
common beech (197) <i>Fagus sylvatica</i>	20.8	0.03	0.3	30	15	Target diameter
common beech (205) <i>Fagus sylvatica</i>	20.5	0.03	0.3	28	0	Target diameter
common beech (298) <i>Fagus sylvatica</i>	20.4	0.03	0.3	29	0	Target diameter
common beech (69) <i>Fagus sylvatica</i>	20.3	0.03	0.3	28	6	Target diameter
common beech (491) <i>Fagus sylvatica</i>	20.3	0.03	0.3	26	0	Target diameter
common beech (413) <i>Fagus sylvatica</i>	20.3	0.03	0.3	23	12	Target diameter
common beech (66) <i>Fagus sylvatica</i>	20	0.03	0.3	29	9	Target diameter
common beech (370) <i>Fagus sylvatica</i>	19.8	0.03	0.3	28	12	Target diameter
common beech (115) <i>Fagus sylvatica</i>	19.5	0.03	0.3	25	14	Target diameter

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (80) <i>Fagus sylvatica</i>	19.4	0.03	0.3	24	0	Target diameter
common beech (442) <i>Fagus sylvatica</i>	19.2	0.03	0.3	24	3	Target diameter
common beech (117) <i>Fagus sylvatica</i>	19.2	0.03	0.3	26	0	Target diameter
common beech (552) <i>Fagus sylvatica</i>	19	0.03	0.3	24	0	Target diameter
common beech (628) <i>Fagus sylvatica</i>	19	0.03	0.3	24	0	Target diameter
common beech (131) <i>Fagus sylvatica</i>	18.8	0.03	0.3	23	0	Target diameter
common beech (416) <i>Fagus sylvatica</i>	18.8	0.03	0.3	23	12	Target diameter
sycamore maple (485) <i>Acer pseudoplatanus</i>	18.7	0.03	0.3	23	0	Target diameter
common beech (116) <i>Fagus sylvatica</i>	18.3	0.03	0.3	23	0	Target diameter
common beech (466) <i>Fagus sylvatica</i>	17.6	0.02	0.3	24	3	Target diameter
common beech (375) <i>Fagus sylvatica</i>	17.6	0.02	0.2	16	14	Target diameter
common beech (592) <i>Fagus sylvatica</i>	17.2	0.02	0.2	21	72	Target diameter
common beech (72) <i>Fagus sylvatica</i>	17	0.02	0.2	19	0	Target diameter
common beech (465) <i>Fagus sylvatica</i>	16.9	0.02	0.3	21	0	Target diameter
common beech (632) <i>Fagus sylvatica</i>	16.4	0.02	0.2	21	15	Target diameter
common beech (238) <i>Fagus sylvatica</i>	16.2	0.02	0.1	11	3	Target diameter
common beech (599) <i>Fagus sylvatica</i>	16	0.02	0.2	21	0	Target diameter
common beech (457) <i>Fagus sylvatica</i>	15.9	0.02	0.2	20	12	Target diameter
common beech (563) <i>Fagus sylvatica</i>	15.8	0.02	0.2	13	6	Target diameter
common beech (326) <i>Fagus sylvatica</i>	15	0.02	0.2	15	6	Target diameter

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (354) <i>Fagus sylvatica</i>	14.4	0.02	0.1	13	0	Target diameter
common beech (493) <i>Fagus sylvatica</i>	13.1	0.01	0.1	8	0	Target diameter
common beech (328) <i>Fagus sylvatica</i>	13	0.01	0.1	8	0	Target diameter
common beech (464) <i>Fagus sylvatica</i>	12.1	0.01	0.1	8	0	Target diameter

Retention trees

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
silver fir (390) <i>Abies alba</i>	63.2	0.31	4.7	411	6	Elite tree
silver fir (472) <i>Abies alba</i>	49.1	0.19	2.6	176	3	Elite tree
common beech (545) <i>Fagus sylvatica</i>	47.6	0.18	2.1	176	150	Elite tree
common beech (629) <i>Fagus sylvatica</i>	46.8	0.17	2	166	136	Elite tree
common beech (342) <i>Fagus sylvatica</i>	46.5	0.17	2.1	178	142	Elite tree
silver fir (483) <i>Abies alba</i>	44	0.15	2.2	127	0	Elite tree
common beech (255) <i>Fagus sylvatica</i>	42.6	0.14	1.6	135	90	Elite tree
common beech (311) <i>Fagus sylvatica</i>	40.7	0.13	1.6	135	54	Elite tree
sycamore maple (371) <i>Acer pseudoplatanus</i>	40.6	0.13	1.4	120	52	Elite tree
common beech (640) <i>Fagus sylvatica</i>	39.6	0.12	1.2	100	71	Elite tree
common beech (47) <i>Fagus sylvatica</i>	38.7	0.12	1.4	119	0	Elite tree
common beech (224) <i>Fagus sylvatica</i>	38	0.11	1.2	108	42	Elite tree
common beech (251) <i>Fagus sylvatica</i>	37	0.11	1.2	107	0	Elite tree
common beech (160) <i>Fagus sylvatica</i>	35.6	0.1	1.2	99	44	Elite tree
common beech (364) <i>Fagus sylvatica</i>	35.5	0.1	1.1	93	128	Elite tree
common beech (3) <i>Fagus sylvatica</i>	35.5	0.1	1.2	102	10	Elite tree
common beech (379) <i>Fagus sylvatica</i>	34.8	0.1	0.9	79	20	Elite tree
common beech (79) <i>Fagus sylvatica</i>	33.7	0.09	0.8	71	0	Elite tree
common beech (535) <i>Fagus sylvatica</i>	33	0.09	0.9	80	44	Elite tree
common beech (201) <i>Fagus sylvatica</i>	32.5	0.08	1	83	3	Elite tree

Tree	DBH (cm)	Basal area (m²)	Volume (m³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (57) <i>Fagus sylvatica</i>	32	0.08	0.9	73	6	Elite tree
common beech (155) <i>Fagus sylvatica</i>	31.5	0.08	0.9	77	3	Elite tree
common beech (128) <i>Fagus sylvatica</i>	31.3	0.08	0.9	78	42	Elite tree
common beech (615) <i>Fagus sylvatica</i>	29.7	0.07	0.8	69	6	Elite tree
common beech (307) <i>Fagus sylvatica</i>	28.8	0.07	0.7	60	6	Elite tree
common beech (502) <i>Fagus sylvatica</i>	28.5	0.06	0.6	53	20	Elite tree
common beech (648) <i>Fagus sylvatica</i>	27.7	0.06	0.7	58	48	Elite tree
common beech (528) <i>Fagus sylvatica</i>	26.9	0.06	0.5	44	72	Elite tree
common beech (335) <i>Fagus sylvatica</i>	25.6	0.05	0.5	40	0	Elite tree
common beech (439) <i>Fagus sylvatica</i>	22	0.04	0.4	35	68	Elite tree
common beech (425) <i>Fagus sylvatica</i>	22	0.04	0.4	35	0	Elite tree
common beech (285) <i>Fagus sylvatica</i>	21.5	0.04	0.3	29	0	Elite tree