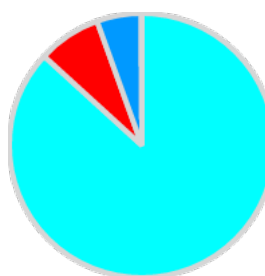


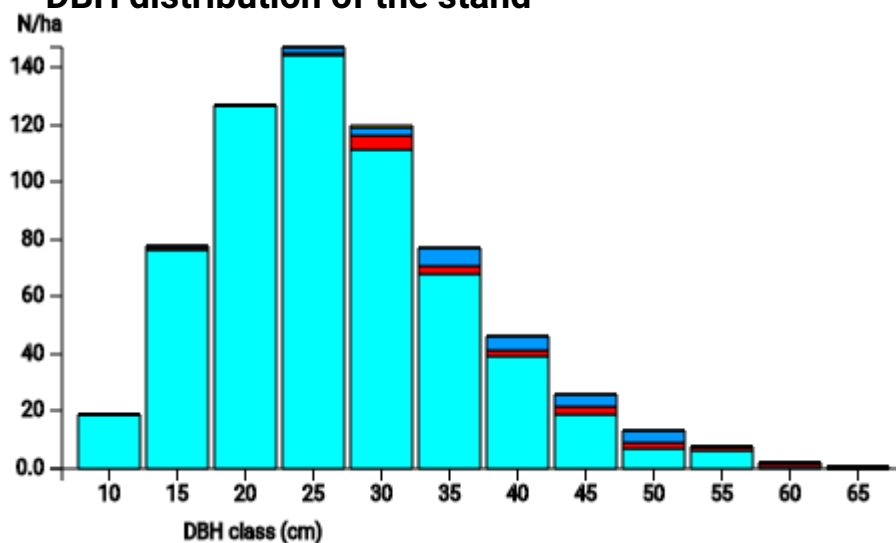
02/03/2021 Gruppo B turno 2

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 %

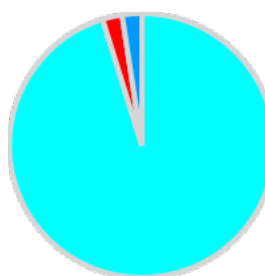
DBH distribution of the stand**Initial stand (details by tree species)**

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 trees

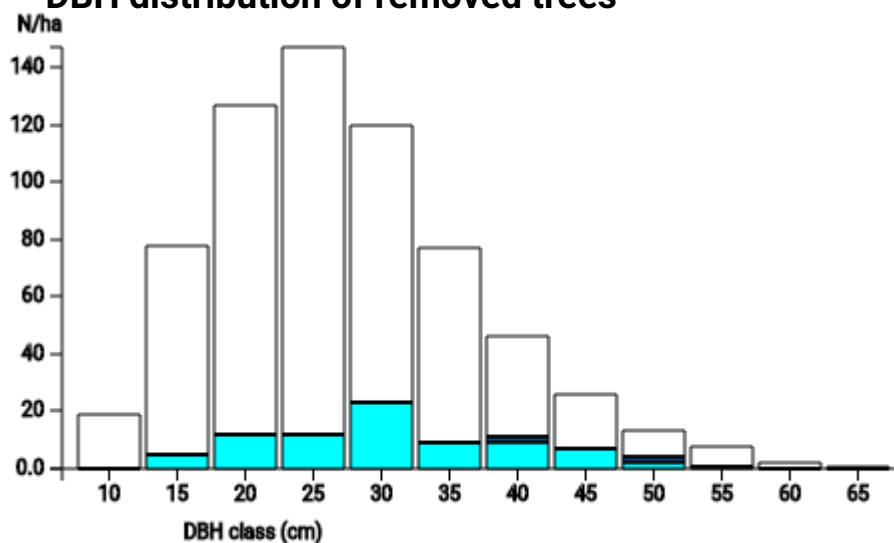
Volume: 91.1 m³
 Basal area: 8 m²
 Economic value: 7657 €
 Habitat value: 3648 pts.

Removed trees (N in %)



- common beech: 95.2 %
- silver fir: 2.4 %
- sycamore maple: 2.4 %
- goat willow: 0 %

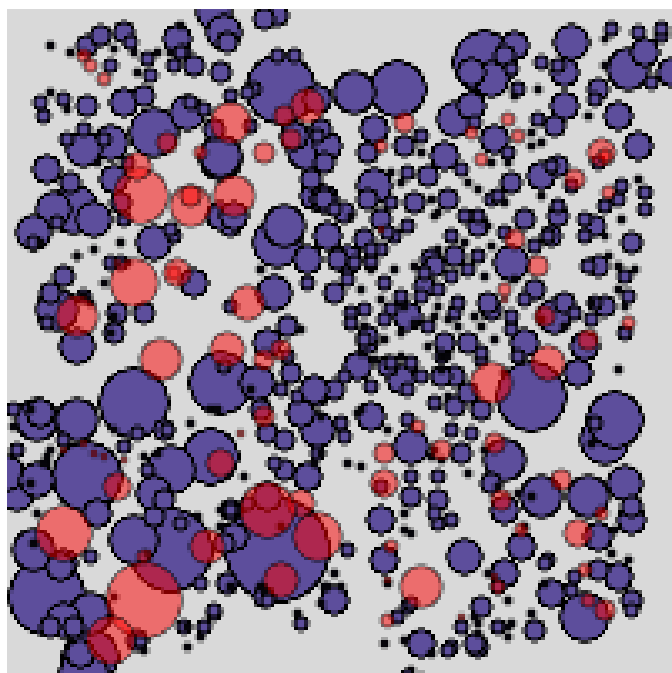
DBH distribution of removed trees



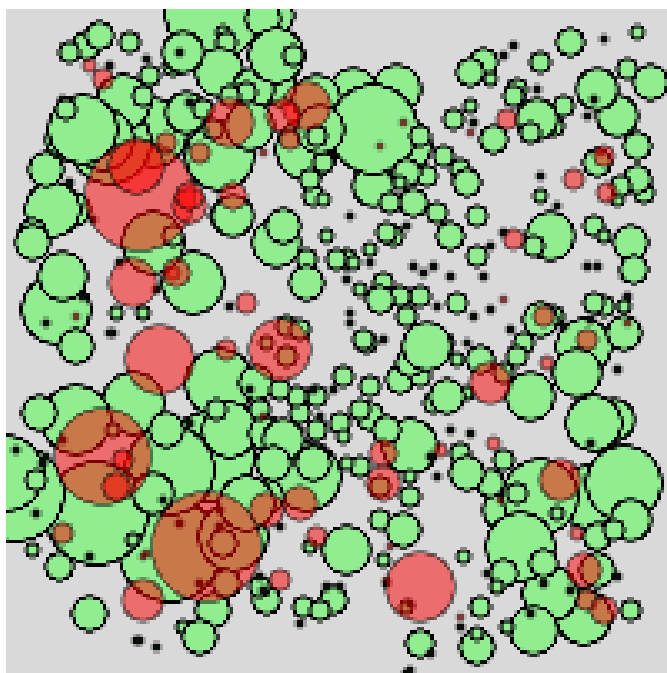
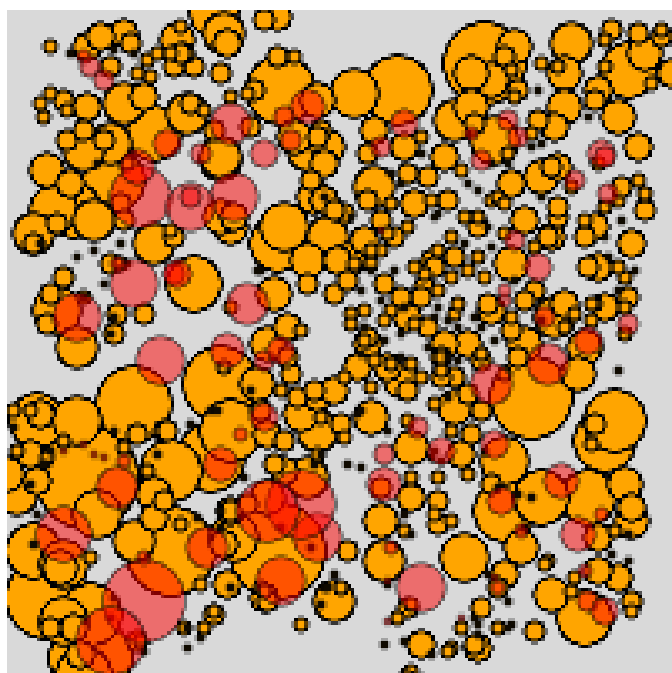
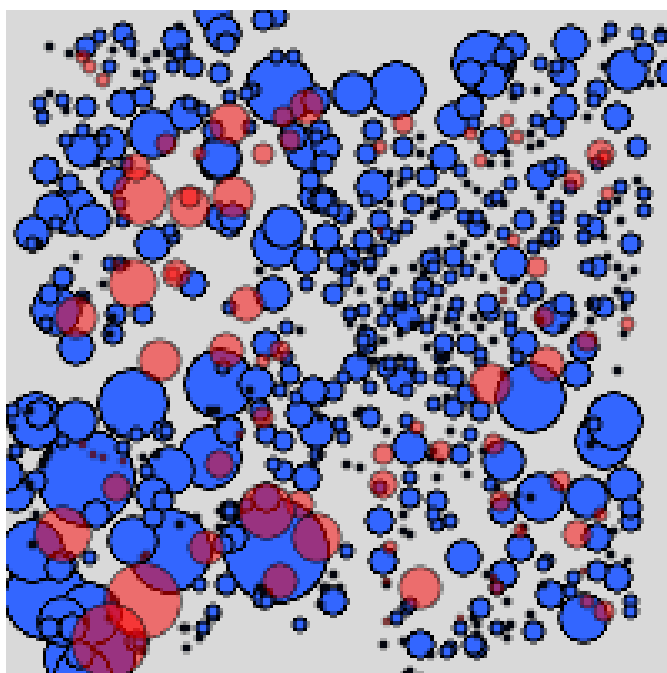
Removed trees (details by tree species)

Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
common beech	80	7.3	83.4	7096	3520	226
goat willow	0	0	0	0	0	0
silver fir	2	0.4	4.8	319	0	0
sycamore maple	2	0.4	2.9	241	128	10
Total	84	8	91.1	7657	3648	236

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.

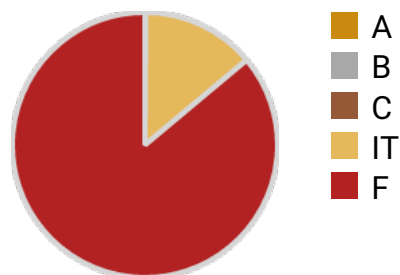
Economic values

Total value of removed trees: 7657 €
 Percentage of total stand value: 16.4 %
 Stand value after harvest: 39130 €

Economic value by tree species [€]

Tree species	Total	Per m ³
common beech	7096	85
silver fir	319	66
sycamore maple	241	85
goat willow	0	0
Total	7657	84

Wood quality distribution (m³ in %)



Quality class	m ³	%
A	0	0
B	0	0
C	0.1	0.1
Industrial Timber	12.6	13.8
Fuelwood	78.5	86.1

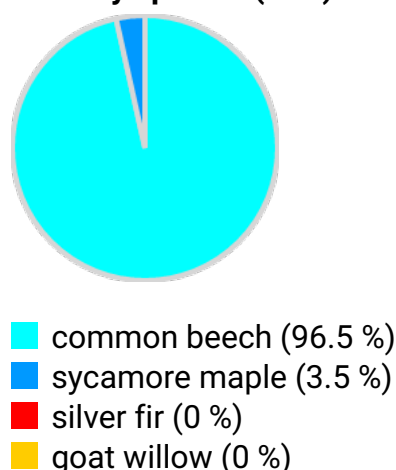
Habitat values

Total habitat value of removed trees: 3648 pts.
 Percentage of total stand value: 16.8 %
 Stand value after harvest: 18093 pts.

Habitat value by tree species [pts.]

Tree species	Total	Per m ³	Microhabitats [N]
common beech	3520	42.2	226
silver fir	0	0	0
sycamore maple	128	44.9	10
goat willow	0	0	0
Total	3648	40	236

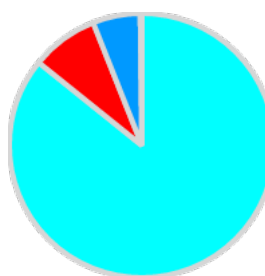
Habitat value (points) of removed trees by species (in %)



Remaining stand

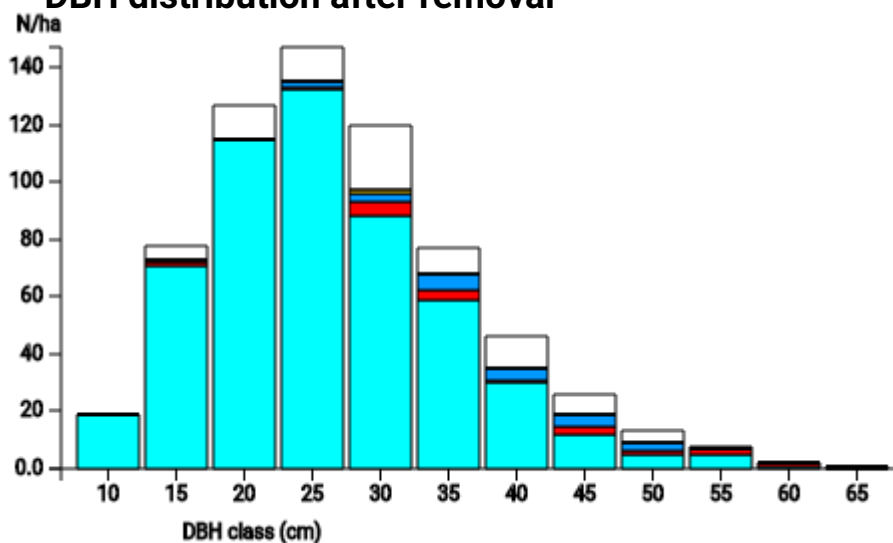
Volume: 466.7 m³
 Basal area: 42.8 m²
 Economic value: 39130 €
 Habitat value: 18093 pts.

Remaining trees by volume (m³ in %)



- common beech: 85.8 %
- silver fir: 8.2 %
- sycamore maple: 5.8 %
- 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	537	36.9	400.6	34151	16288	1057
goat willow	1	0.1	0.8	70	24	3
silver fir	19	2.9	38.3	2741	245	25
sycamore maple	23	2.9	27.1	2167	1536	89
Total	580	42.8	466.7	39130	18093	1174

Retention treesVolume: 49.9 m³

Elite trees: 23

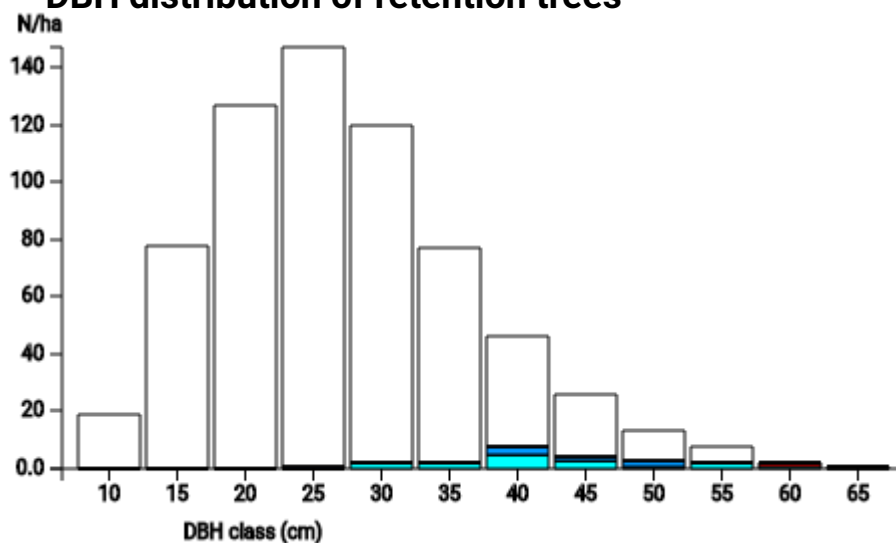
Habitat trees: 2

Economic value: 4046 €

Habitat value: 1921 pts.

Retention trees by volume (m³ in %)

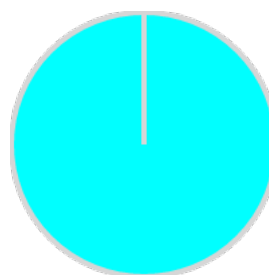
- common beech: 63.9 %
- sycamore maple: 18.2 %
- silver fir: 18 %
- goat willow: 0 %

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	16	2.7	31.9	2708	1353	78
goat willow	0	0	0	0	0	0
silver fir	2	0.7	9	688	40	7
sycamore maple	7	1.1	9.1	650	528	29
Total	25	4.4	49.9	4046	1921	114

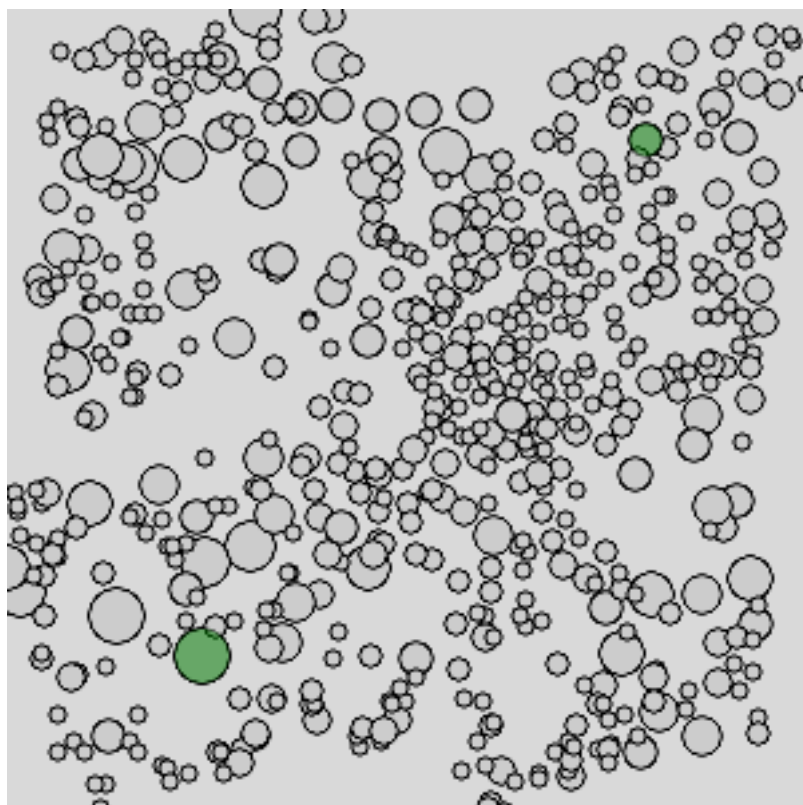
Number of habitat trees	[N]	2
Habitat value	pts.	296
	[% of total]	1.4
Economic value	[€]	393
	[% of total]	0.8
Number of microhabitats	[N]	15
	[% of total]	1.1

Habitat tree distribution by species (N in %)

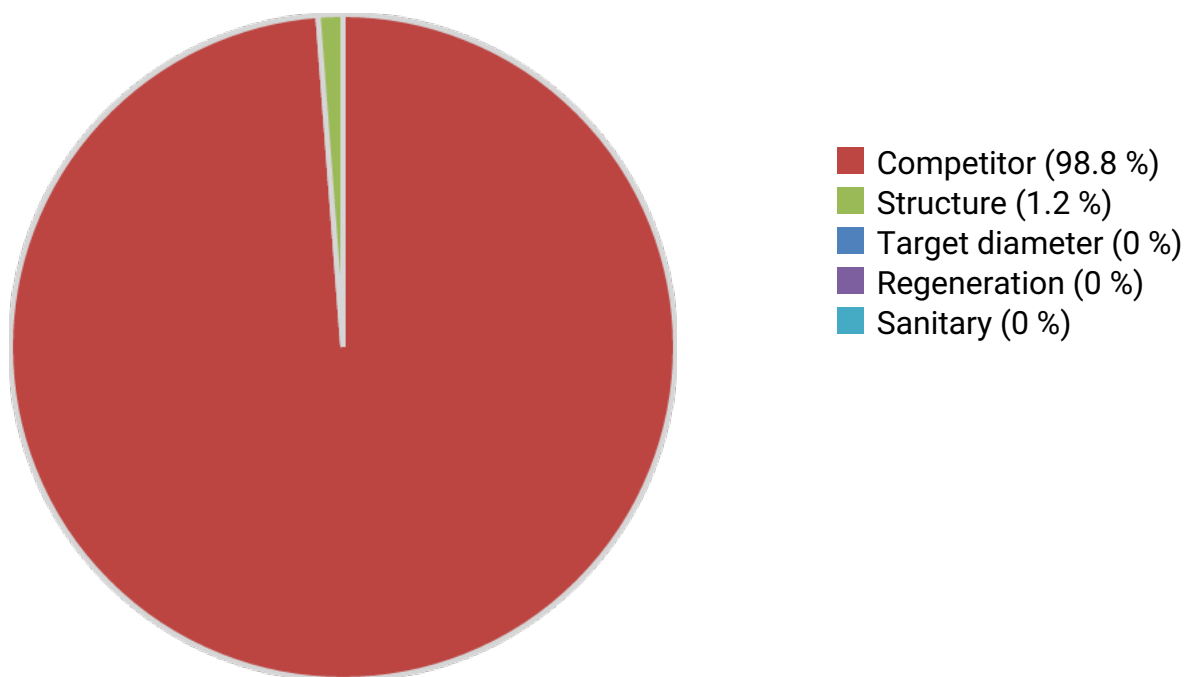


- common beech: 100 %
- silver fir: 0 %
- sycamore maple: 0 %
- goat willow: 0 %

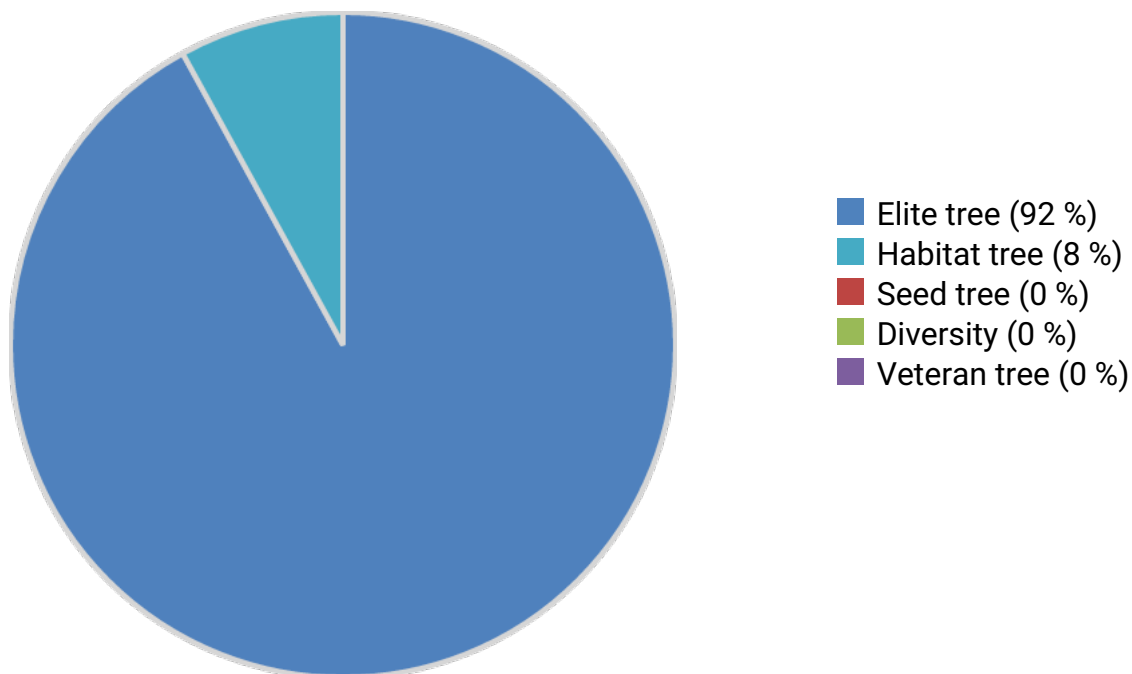
Spatial distribution of habitat trees



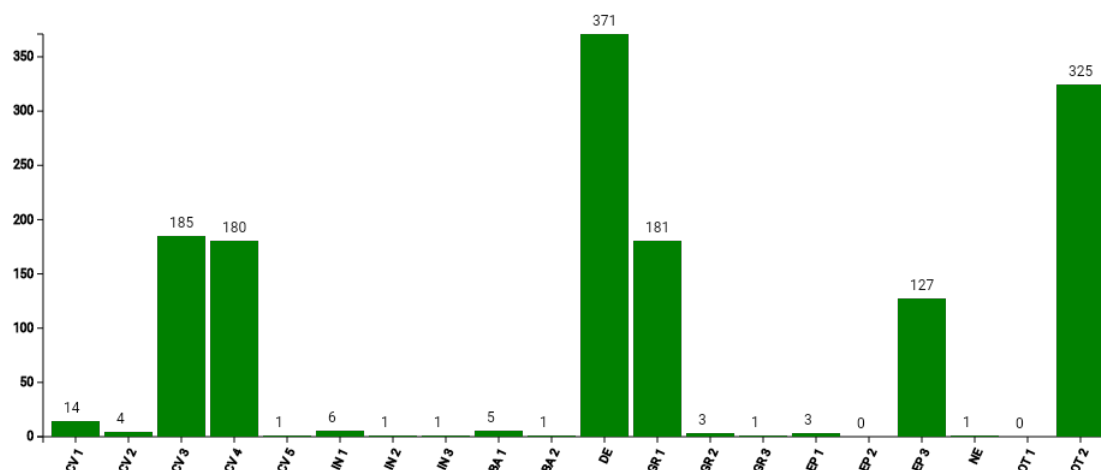
Reasons for removal



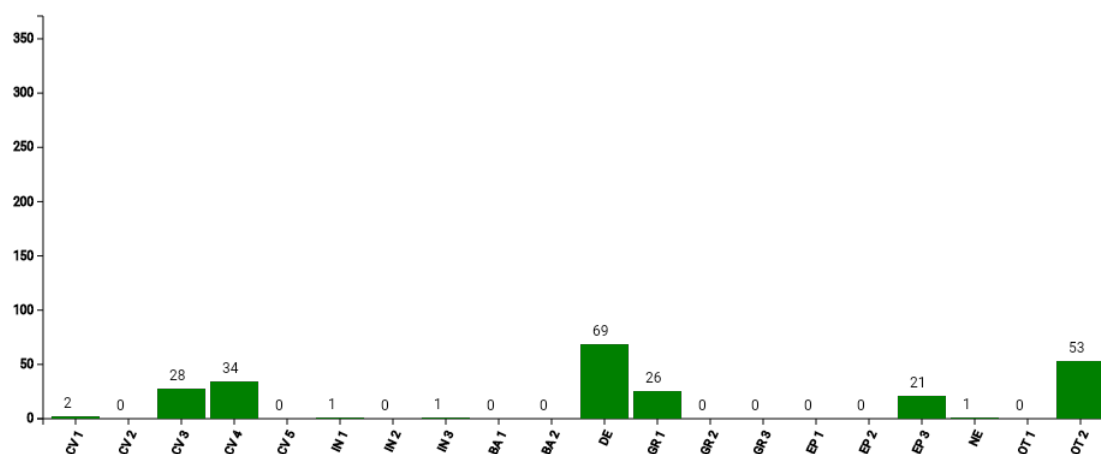
Reasons for retention



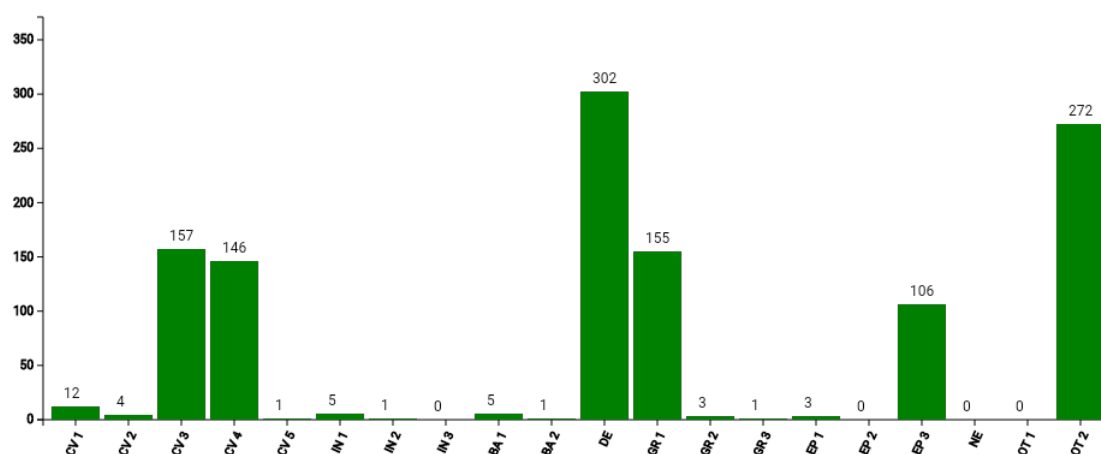
Distribution of tree microhabitats by code (N total)



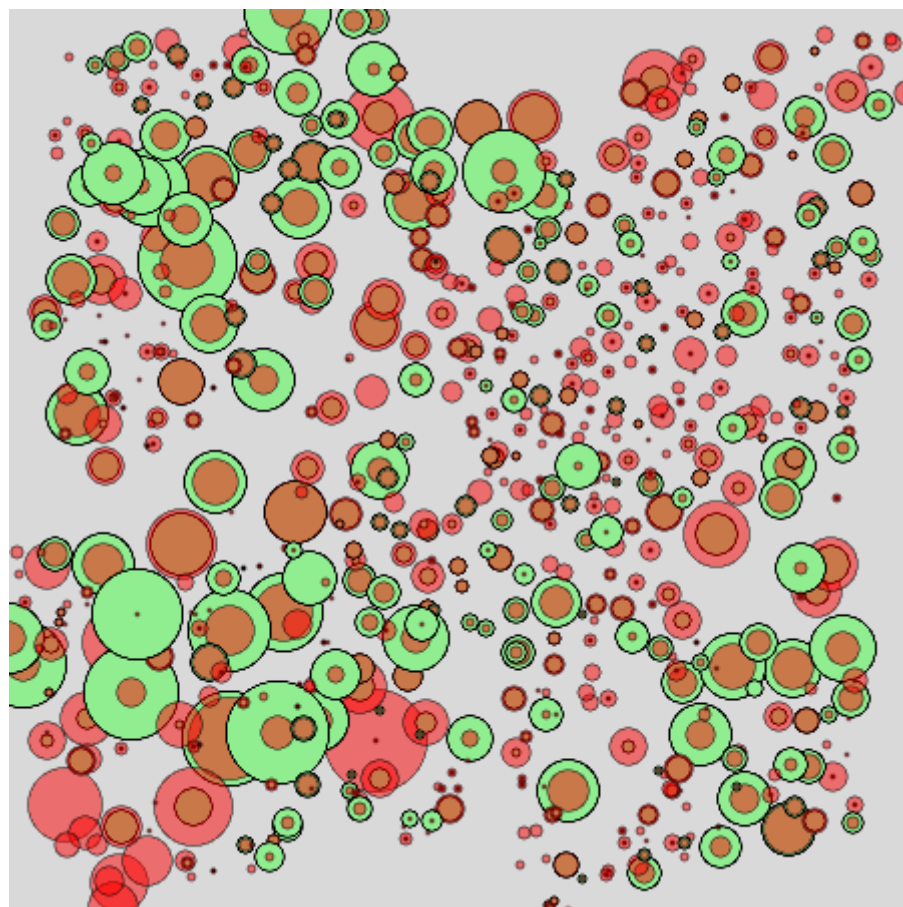
Removed tree microhabitats by code (N removed)



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
common beech (459) Fagus sylvatica	57.7	0.26	3.6	306	82	Competitor
silver fir (480) Abies alba	53.2	0.22	3.5	197	0	Competitor
sycamore maple (358) Acer pseudoplatanus	53	0.22	1.4	120	68	Competitor
common beech (279) Fagus sylvatica	50.5	0.2	2.5	216	221	Competitor
common beech (389) Fagus sylvatica	50.2	0.2	2.5	210	66	Competitor
common beech (476) Fagus sylvatica	48.9	0.19	2.5	209	49	Competitor
common beech (629) Fagus sylvatica	46.8	0.17	2	166	136	Competitor
common beech (407) Fagus sylvatica	46.7	0.17	2.1	173	136	Competitor
common beech (357) Fagus sylvatica	46.2	0.17	2.2	189	44	Competitor
common beech (299) Fagus sylvatica	46.2	0.17	2.1	180	105	Competitor
common beech (242) Fagus sylvatica	45.5	0.16	2	172	51	Competitor
common beech (391) Fagus sylvatica	45.2	0.16	1.7	144	44	Competitor
common beech (261) Fagus sylvatica	44.4	0.16	1.8	152	74	Competitor
common beech (329) Fagus sylvatica	44.3	0.15	1.8	152	15	Competitor
common beech (536) Fagus sylvatica	43	0.15	1.7	139	32	Competitor
common beech (566) Fagus sylvatica	42.6	0.14	1.8	154	78	Competitor
common beech (424) Fagus sylvatica	42.3	0.14	1.6	134	231	Competitor
sycamore maple (455) Acer pseudoplatanus	42.3	0.14	1.4	121	60	Competitor
common beech (258) Fagus sylvatica	41.7	0.14	1.6	136	46	Competitor
common beech (235) Fagus sylvatica	41.1	0.13	1.8	152	96	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (529) Fagus sylvatica	40.5	0.13	1.4	117	33	Competitor
silver fir (412) Abies alba	40.4	0.13	1.4	122	0	Competitor
common beech (207) Fagus sylvatica	40.1	0.13	1.5	128	104	Competitor
common beech (385) Fagus sylvatica	39.7	0.12	1.5	126	45	Competitor
common beech (640) Fagus sylvatica	39.6	0.12	1.2	100	71	Competitor
common beech (280) Fagus sylvatica	38.5	0.12	1.3	113	120	Competitor
common beech (530) Fagus sylvatica	37.2	0.11	1.1	92	83	Competitor
common beech (565) Fagus sylvatica	35.8	0.1	1.1	95	27	Competitor
common beech (364) Fagus sylvatica	35.5	0.1	1.1	93	128	Competitor
common beech (574) Fagus sylvatica	35	0.1	1.1	90	8	Competitor
common beech (526) Fagus sylvatica	35	0.1	1.1	94	50	Competitor
common beech (275) Fagus sylvatica	35	0.1	1.2	101	62	Competitor
common beech (149) Fagus sylvatica	34.8	0.1	1	85	21	Competitor
common beech (379) Fagus sylvatica	34.8	0.1	0.9	79	20	Competitor
common beech (272) Fagus sylvatica	34.7	0.1	1.1	92	42	Competitor
common beech (23) Fagus sylvatica	34.2	0.09	1.1	98	12	Competitor
common beech (612) Fagus sylvatica	34	0.09	1	84	34	Competitor
common beech (519) Fagus sylvatica	33.6	0.09	0.9	77	42	Competitor
common beech (226) Fagus sylvatica	33.6	0.09	1.1	93	18	Competitor
common beech (58) Fagus sylvatica	33.6	0.09	1	89	0	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (216) Fagus sylvatica	33	0.09	0.9	80	48	Competitor
common beech (535) Fagus sylvatica	33	0.09	0.9	80	44	Competitor
common beech (40) Fagus sylvatica	32.8	0.08	1	83	36	Competitor
common beech (641) Fagus sylvatica	32.5	0.08	0.8	70	59	Competitor
common beech (262) Fagus sylvatica	31.6	0.08	0.8	72	55	Competitor
common beech (256) Fagus sylvatica	31.2	0.08	0.7	63	44	Competitor
common beech (289) Fagus sylvatica	31	0.08	0.7	63	22	Competitor
common beech (70) Fagus sylvatica	31	0.08	0.8	71	38	Competitor
common beech (383) Fagus sylvatica	30.8	0.08	0.8	69	6	Competitor
common beech (217) Fagus sylvatica	30.7	0.07	0.9	73	67	Competitor
common beech (621) Fagus sylvatica	30.5	0.07	0.8	66	3	Competitor
common beech (527) Fagus sylvatica	30.2	0.07	0.7	60	47	Competitor
common beech (82) Fagus sylvatica	30.2	0.07	0.8	65	0	Competitor
common beech (152) Fagus sylvatica	30.2	0.07	0.8	65	9	Competitor
common beech (24) Fagus sylvatica	30	0.07	0.7	64	48	Competitor
common beech (283) Fagus sylvatica	29.4	0.07	0.7	57	36	Competitor
common beech (83) Fagus sylvatica	29.2	0.07	0.8	67	39	Competitor
common beech (26) Fagus sylvatica	29.1	0.07	0.7	57	36	Competitor
common beech (502) Fagus sylvatica	28.5	0.06	0.6	53	20	Structure
common beech (276) Fagus sylvatica	28.5	0.06	0.7	59	32	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (102) Fagus sylvatica	28.5	0.06	0.6	52	6	Competitor
common beech (103) Fagus sylvatica	28	0.06	0.6	52	12	Competitor
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	Competitor
common beech (528) Fagus sylvatica	26.9	0.06	0.5	44	72	Competitor
common beech (560) Fagus sylvatica	25.7	0.05	0.6	47	0	Competitor
common beech (76) Fagus sylvatica	25.6	0.05	0.5	45	0	Competitor
common beech (75) Fagus sylvatica	24.3	0.05	0.5	39	12	Competitor
common beech (387) Fagus sylvatica	24	0.05	0.4	37	0	Competitor
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	Competitor
common beech (458) Fagus sylvatica	23.8	0.04	0.5	43	12	Competitor
common beech (637) Fagus sylvatica	23.7	0.04	0.5	46	15	Competitor
common beech (523) Fagus sylvatica	23.6	0.04	0.6	50	0	Competitor
common beech (168) Fagus sylvatica	22.7	0.04	0.4	36	6	Competitor
common beech (658) Fagus sylvatica	22.7	0.04	0.5	43	0	Competitor
common beech (452) Fagus sylvatica	21.6	0.04	0.4	30	0	Competitor
common beech (604) Fagus sylvatica	21.1	0.04	0.4	31	12	Competitor
common beech (655) Fagus sylvatica	20.2	0.03	0.3	29	8	Competitor
common beech (453) Fagus sylvatica	19.4	0.03	0.3	29	0	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (582) Fagus sylvatica	19	0.03	0.3	26	0	Competitor
common beech (454) Fagus sylvatica	16.8	0.02	0.2	20	202	Competitor
common beech (470) Fagus sylvatica	16.2	0.02	0.2	18	0	Competitor
common beech (457) Fagus sylvatica	15.9	0.02	0.2	20	12	Competitor

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	Elite tree
silver fir (390) Abies alba	63.2	0.31	4.7	411	6	Elite tree
common beech (443) Fagus sylvatica	60.7	0.29	3.8	326	212	Habitat tree
common beech (546) Fagus sylvatica	58	0.26	3.1	264	96	Elite tree
common beech (218) Fagus sylvatica	55	0.24	3.2	271	76	Elite tree
common beech (150) Fagus sylvatica	53	0.22	2.4	207	104	Elite tree
sycamore maple (403) Acer pseudoplatanus	52.2	0.21	1.4	0	120	Elite tree
sycamore maple (292) Acer pseudoplatanus	50	0.2	1.4	121	0	Elite tree
common beech (540) Fagus sylvatica	49.8	0.2	2.3	198	118	Elite tree
common beech (522) Fagus sylvatica	48.2	0.18	1.9	159	129	Elite tree
sycamore maple (260) Acer pseudoplatanus	47.6	0.18	1.4	122	134	Elite tree
common beech (342) Fagus sylvatica	46.5	0.17	2.1	178	142	Elite tree
sycamore maple (89) Acer pseudoplatanus	44	0.15	1.4	122	52	Elite tree
common beech (596) Fagus sylvatica	44	0.15	1.7	143	30	Elite tree
common beech (243) Fagus sylvatica	43.7	0.15	1.9	159	26	Elite tree
common beech (244) Fagus sylvatica	43	0.15	1.8	154	142	Elite tree
common beech (534) Fagus sylvatica	42.2	0.14	1.5	130	38	Elite tree
sycamore maple (654) Acer pseudoplatanus	41.6	0.14	1.3	110	22	Elite tree
sycamore maple (359) Acer pseudoplatanus	41	0.13	1.4	120	148	Elite tree
common beech (71) Fagus sylvatica	40.5	0.13	1.5	128	6	Elite tree

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (384) Fagus sylvatica	39.5	0.12	1.3	113	28	Elite tree
common beech (622) Fagus sylvatica	37.7	0.11	1.5	125	113	Elite tree
common beech (367) Fagus sylvatica	33.3	0.09	1	85	9	Elite tree
common beech (67) Fagus sylvatica	30.6	0.07	0.8	67	84	Habitat tree
sycamore maple (25) Acer pseudoplatanus	27.9	0.06	0.6	55	52	Elite tree