

26/02/2021 Gruppo D

Site conditions

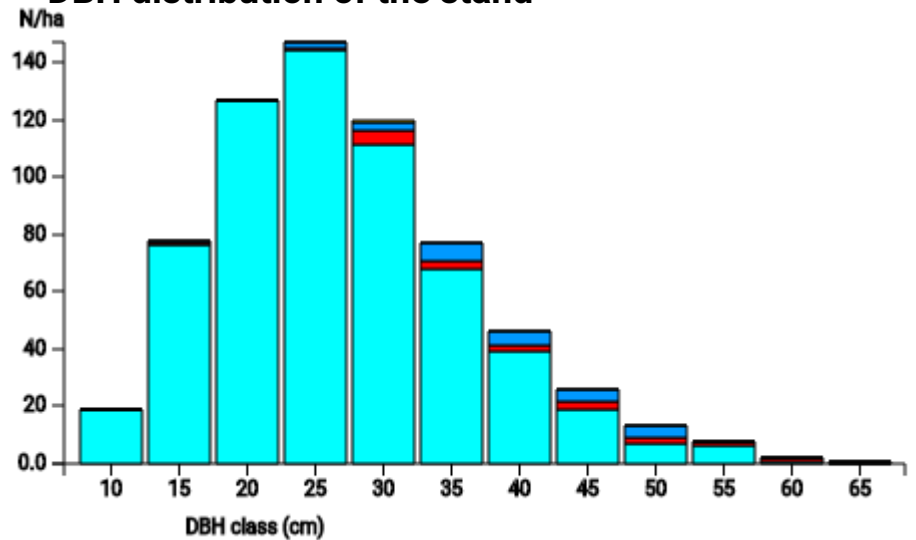
Altitude: 1270 m.a.s.l.
 Forest ecological region: Tuscany
 Geology / Bedrock: Sandstone
 Soil type: Brown podzolic soil
 Natural forest community:
 Asperulo-Fagetum
 Mean annual temperature: 8.7 C;
 Mean annual precipitation: 1642 mm;
 Ownership: State;
 Establishment: 2020

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

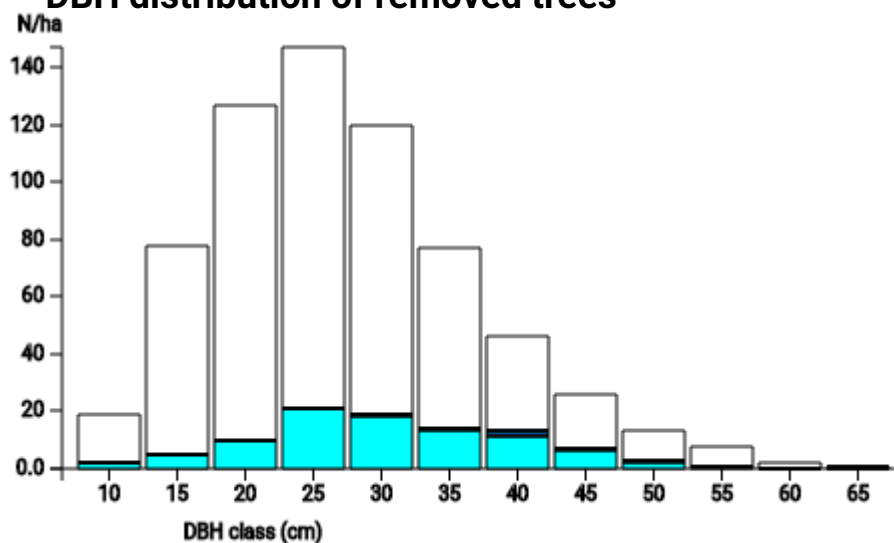
Volume: 108.6 m³
 Basal area: 9.3 m²
 Economic value: 8936 €
 Habitat value: 3537 pts.

Removed trees (N in %)



- common beech: 92.7 %
- silver fir: 6.3 %
- sycamore maple: 1 %
- goat willow: 0 %

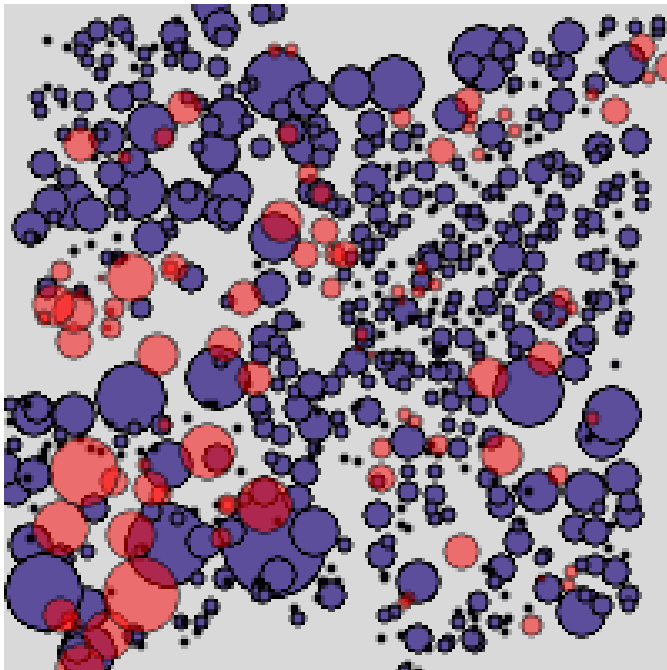
DBH distribution of removed trees



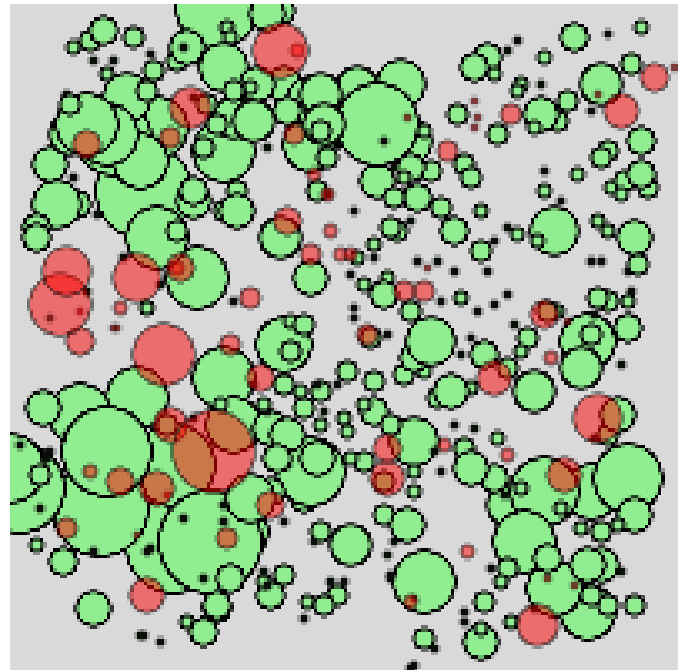
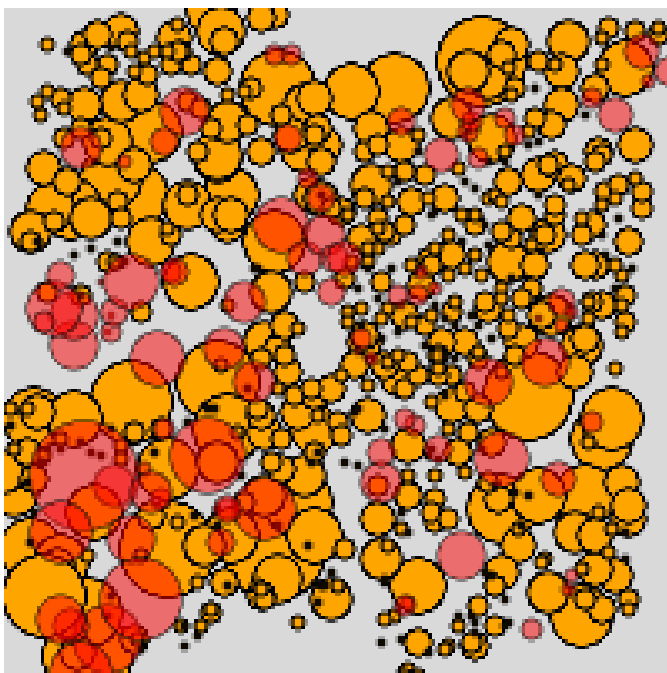
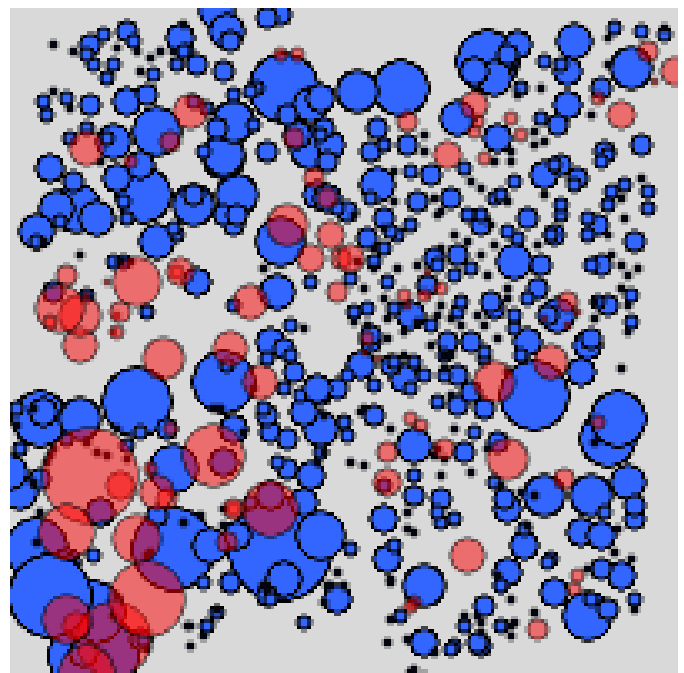
Removed trees (details by tree species)

Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
common beech	89	8.1	92.3	7859	3423	242
goat willow	0	0	0	0	0	0
silver fir	6	1.1	14.9	956	54	9
sycamore maple	1	0.1	1.4	121	60	5
Total	96	9.3	108.6	8936	3537	256

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.

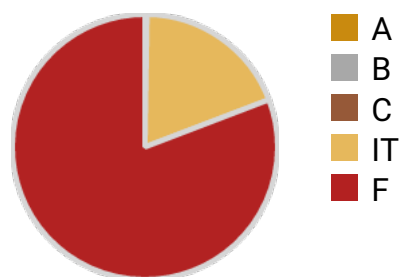
Economic values

Total value of removed trees: 8936 €
 Percentage of total stand value: 19.1 %
 Stand value after harvest: 37850 €

Economic value by tree species [€]

Tree species	Total	Per m ³
common beech	7859	85
silver fir	956	64
sycamore maple	121	85
goat willow	0	0
Total	8936	82

Wood quality distribution (m³ in %)



Quality class	m ³	%
A	0	0
B	0	0
C	0.3	0.2
Industrial Timber	20.3	19
Fuelwood	86.4	80.8

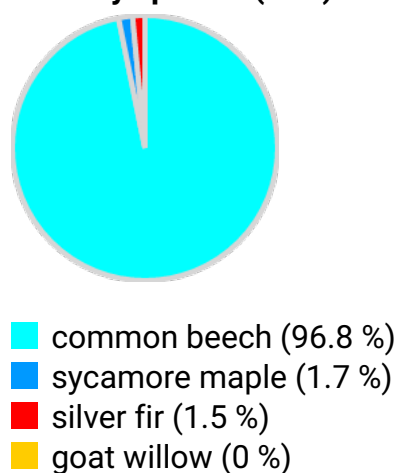
Habitat values

Total habitat value of removed trees: 3537 pts.
 Percentage of total stand value: 16.3 %
 Stand value after harvest: 18204 pts.

Habitat value by tree species [pts.]

Tree species	Total	Per m ³	Microhabitats [N]
common beech	3423	37.1	242
silver fir	54	3.6	9
sycamore maple	60	42.1	5
goat willow	0	0	0
Total	3537	32.6	256

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



Remaining stand

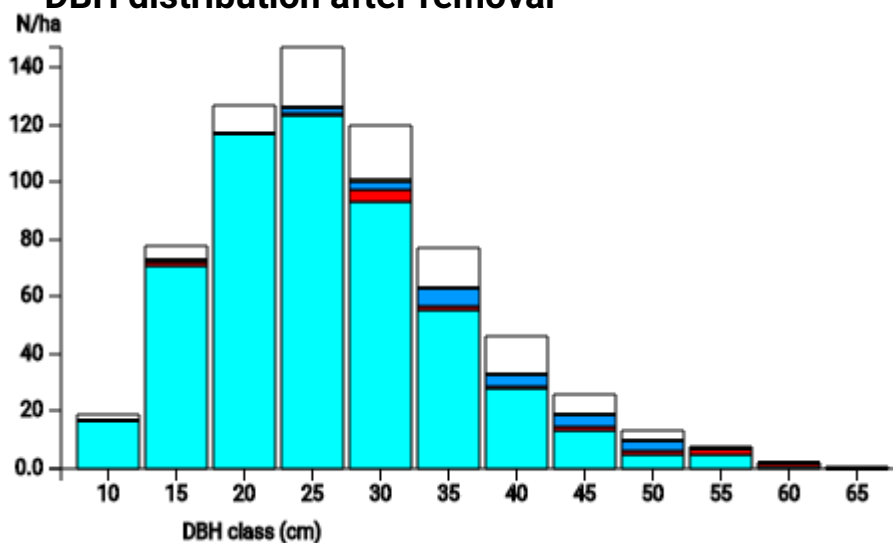
Volume: 449.2 m³
 Basal area: 41.5 m²
 Economic value: 37850 €
 Habitat value: 18204 pts.

Remaining trees by volume (m³ in %)



- common beech: 87.2 %
- silver fir: 6.3 %
- sycamore maple: 6.3 %
- 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	528	36.2	391.7	33389	16385	1041
goat willow	1	0.1	0.8	70	24	3
silver fir	15	2.2	28.2	2105	191	16
sycamore maple	24	3.1	28.5	2287	1604	94
Total	568	41.5	449.3	37850	18204	1154

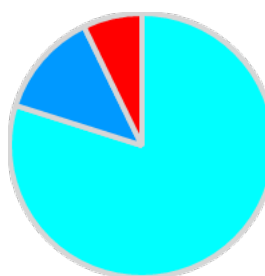
Retention treesVolume: 55.1 m³

Elite trees: 24

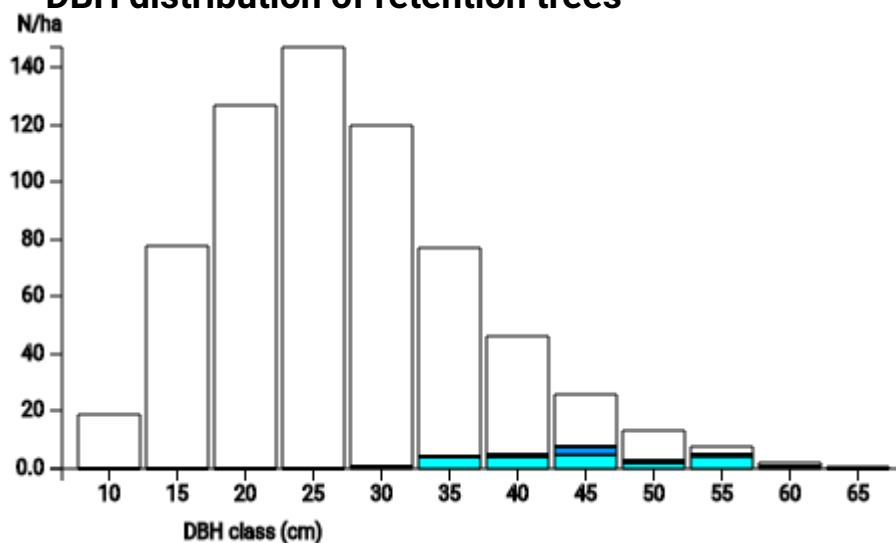
Habitat trees: 3

Economic value: 4568 €

Habitat value: 2678 pts.

Retention trees by volume (m³ in %)

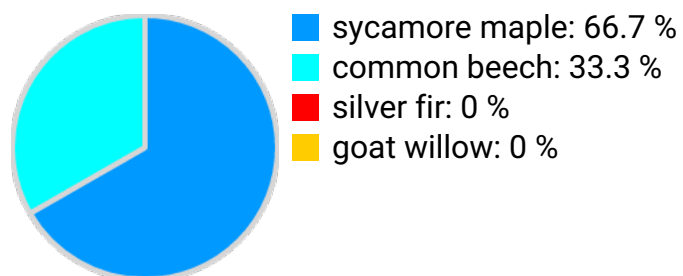
- common beech: 79.9 %
- sycamore maple: 12.9 %
- silver fir: 7.2 %
- goat willow: 0 %

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

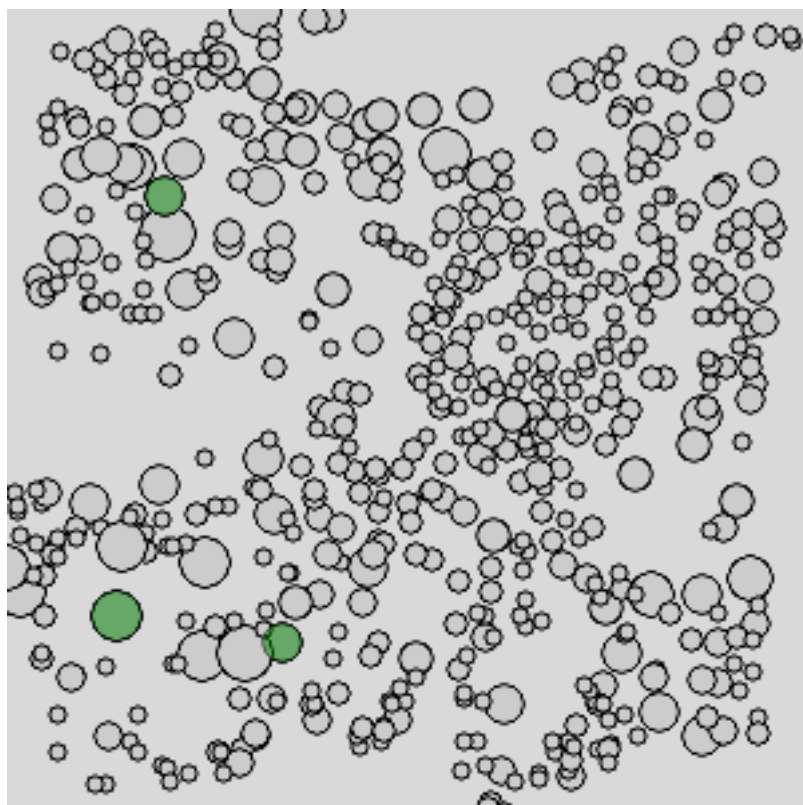
Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
common beech	21	3.6	44	3737	2144	117
goat willow	0	0	0	0	0	0
silver fir	1	0.3	4	226	4	1
sycamore maple	5	0.9	7.1	605	530	27
Total	27	4.8	55.1	4568	2678	145

Number of habitat trees	[N]	3
Habitat value	pts.	464
	[% of total]	2.1
Economic value	[€]	352
	[% of total]	0.8
Number of microhabitats	[N]	21
	[% of total]	1.5

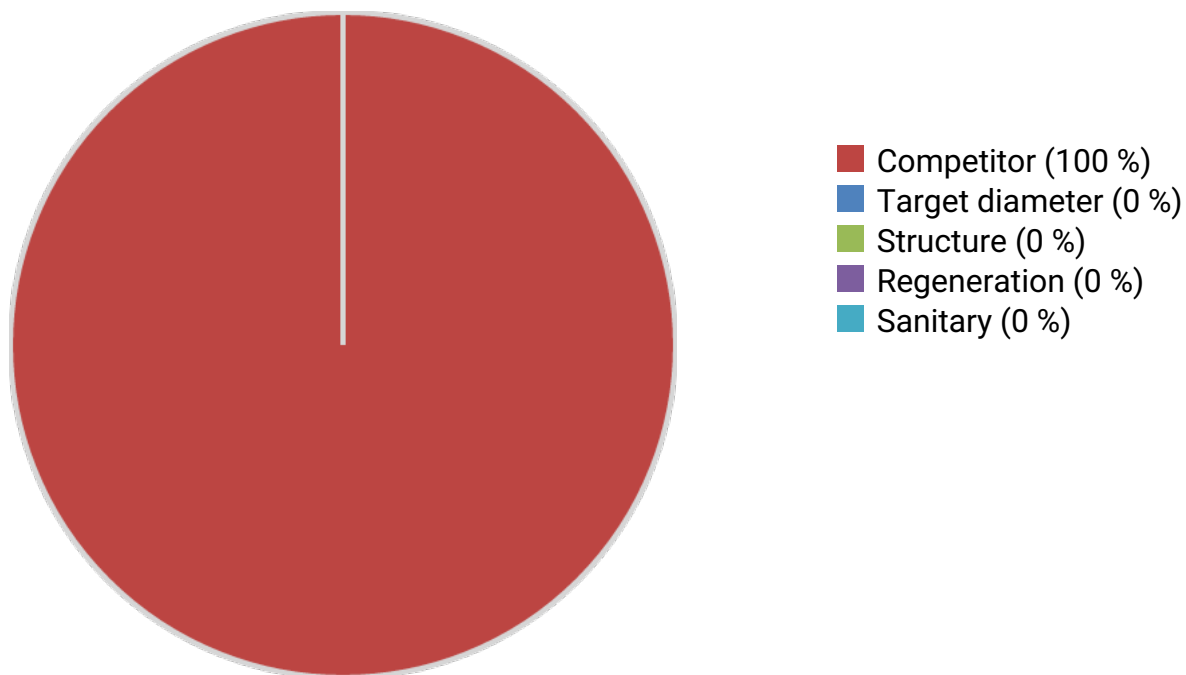
Habitat tree distribution by species (N in %)



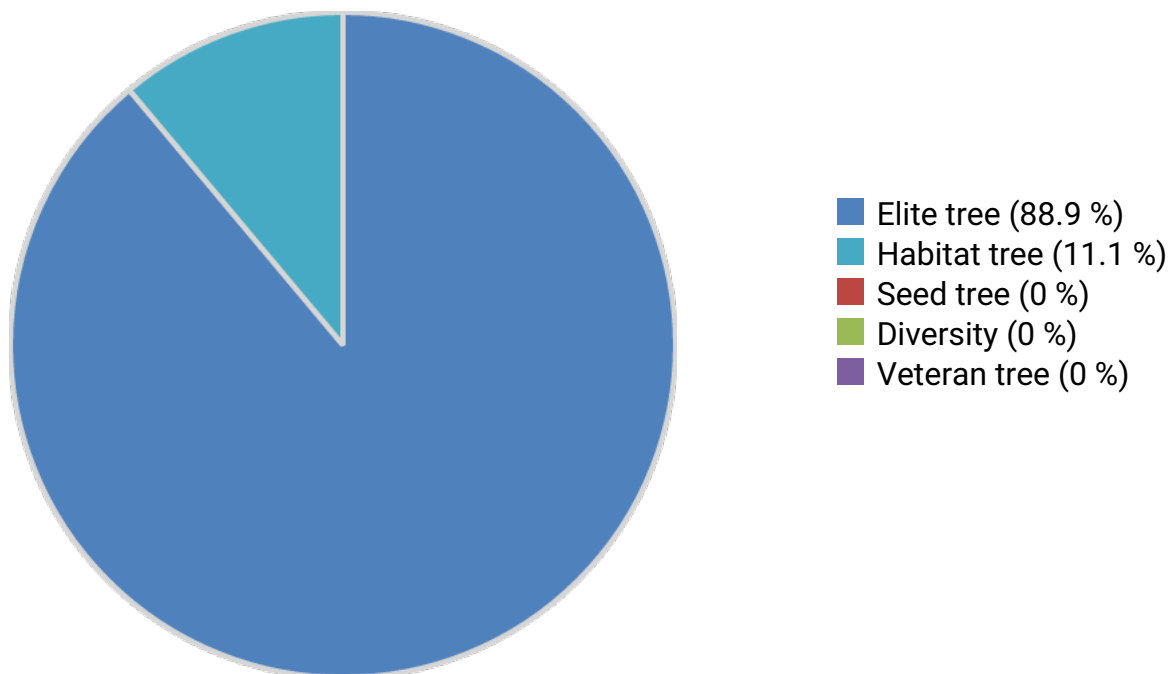
Spatial distribution of habitat trees



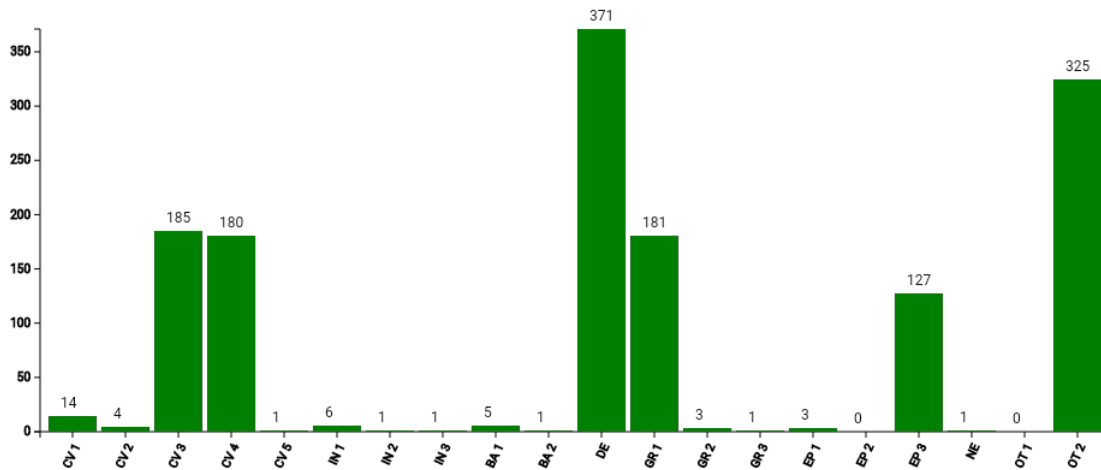
Reasons for removal



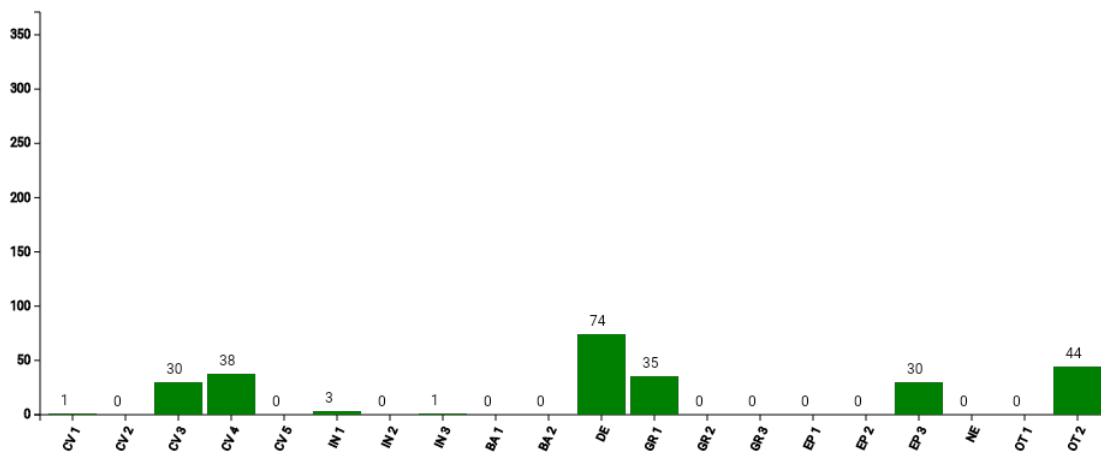
Reasons for retention



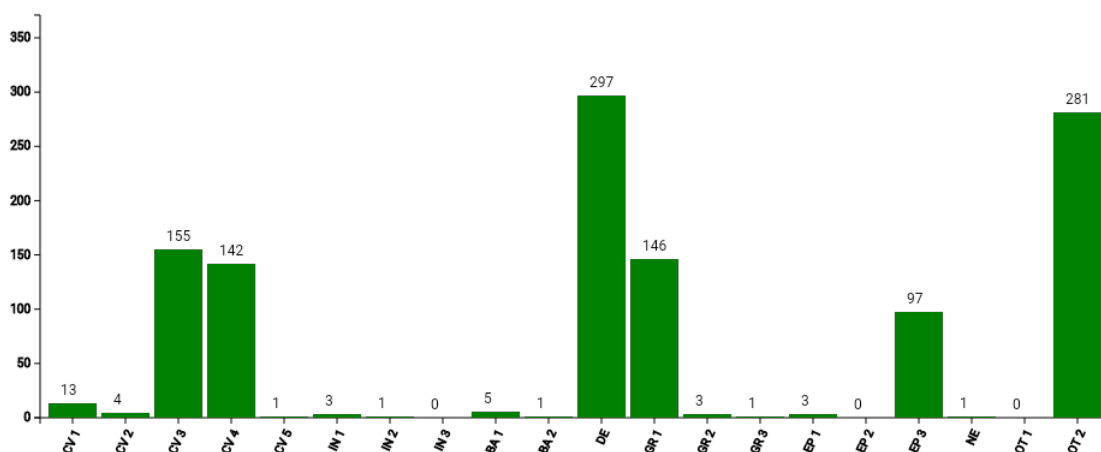
Distribution of tree microhabitats by code (N total)



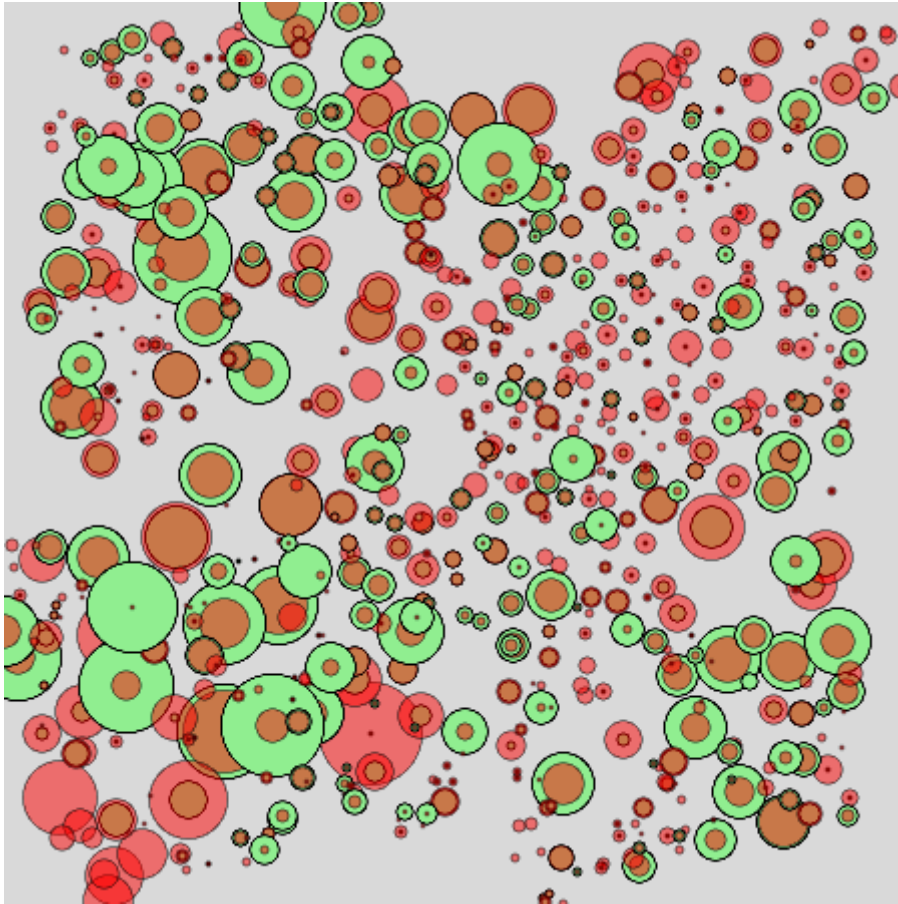
Removed tree microhabitats by code (N removed)



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 (469) Abies alba	65.5	0.34	4.3	277	34	Competitor
common beech (459) Fagus sylvatica	57.7	0.26	3.6	306	82	Competitor
common beech (411) Fagus sylvatica	54.5	0.23	2.8	232	180	Competitor
silver fir (480) Abies alba	53.2	0.22	3.5	197	0	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
silver fir (500) Abies alba	48.3	0.18	2.6	204	4	Competitor
common beech (407) Fagus sylvatica	46.7	0.17	2.1	173	136	Competitor
common beech (342) Fagus sylvatica	46.5	0.17	2.1	178	142	Competitor
common beech (564) Fagus sylvatica	46.5	0.17	1.8	155	36	Competitor
common beech (299) Fagus sylvatica	46.2	0.17	2.1	180	105	Competitor
common beech (225) Fagus sylvatica	45.6	0.16	2	168	65	Competitor
common beech (329) Fagus sylvatica	44.3	0.15	1.8	152	15	Competitor
common beech (596) Fagus sylvatica	44	0.15	1.7	143	30	Competitor
silver fir (483) Abies alba	44	0.15	2.2	127	0	Competitor
common beech (456) Fagus sylvatica	43.4	0.15	2.1	180	22	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 (255) Fagus sylvatica	42.6	0.14	1.6	135	90	Competitor
common beech (327) Fagus sylvatica	42.6	0.14	1.7	146	66	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
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 (210) Fagus sylvatica	41.3	0.13	1.4	122	29	Competitor
common beech (311) Fagus sylvatica	40.7	0.13	1.6	135	54	Competitor
common beech (382) Fagus sylvatica	40	0.13	1.5	130	64	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 (435) Fagus sylvatica	39.5	0.12	1.6	131	84	Competitor
common beech (18) Fagus sylvatica	38.2	0.12	1.1	96	6	Competitor
common beech (22) Fagus sylvatica	38.2	0.12	1.2	105	83	Competitor
common beech (224) Fagus sylvatica	38	0.11	1.2	108	42	Competitor
common beech (192) Fagus sylvatica	37.8	0.11	1.3	114	36	Competitor
common beech (105) Fagus sylvatica	37.5	0.11	1.2	102	22	Competitor
common beech (530) Fagus sylvatica	37.2	0.11	1.1	92	83	Competitor
common beech (125) Fagus sylvatica	36.7	0.11	1.2	102	42	Competitor
silver fir (482) Abies alba	36.6	0.11	1.3	76	4	Competitor
common beech (3) Fagus sylvatica	35.5	0.1	1.2	102	10	Competitor
common beech (209) Fagus sylvatica	35.2	0.1	1	90	36	Competitor
common beech (275) Fagus sylvatica	35	0.1	1.2	101	62	Competitor
common beech (418) Fagus sylvatica	34.9	0.1	1.1	90	52	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (149) Fagus sylvatica	34.8	0.1	1	85	21	Competitor
common beech (272) Fagus sylvatica	34.7	0.1	1.1	92	42	Competitor
common beech (414) Fagus sylvatica	34.2	0.09	0.8	73	0	Competitor
common beech (38) Fagus sylvatica	34.2	0.09	1	84	0	Competitor
common beech (612) Fagus sylvatica	34	0.09	1	84	34	Competitor
common beech (178) Fagus sylvatica	33.8	0.09	1	89	26	Competitor
common beech (216) Fagus sylvatica	33	0.09	0.9	80	48	Competitor
common beech (330) Fagus sylvatica	32.8	0.08	0.9	73	105	Competitor
common beech (304) Fagus sylvatica	32.6	0.08	0.9	79	27	Competitor
common beech (201) Fagus sylvatica	32.5	0.08	1	83	3	Competitor
common beech (641) Fagus sylvatica	32.5	0.08	0.8	70	59	Competitor
common beech (214) Fagus sylvatica	31	0.08	0.9	75	36	Competitor
silver fir (436) Abies alba	30.9	0.08	0.9	75	12	Competitor
common beech (621) Fagus sylvatica	30.5	0.07	0.8	66	3	Competitor
common beech (140) Fagus sylvatica	30.5	0.07	0.8	68	39	Competitor
common beech (554) Fagus sylvatica	30.2	0.07	0.9	77	97	Competitor
common beech (428) Fagus sylvatica	30.2	0.07	0.8	65	76	Competitor
common beech (82) Fagus sylvatica	30.2	0.07	0.8	65	0	Competitor
common beech (165) Fagus sylvatica	29.6	0.07	0.8	65	42	Competitor
common beech (301) Fagus sylvatica	29.4	0.07	0.8	71	12	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (219) Fagus sylvatica	29.3	0.07	0.6	55	116	Competitor
common beech (415) Fagus sylvatica	29.3	0.07	0.6	54	0	Competitor
common beech (83) Fagus sylvatica	29.2	0.07	0.8	67	39	Competitor
common beech (42) Fagus sylvatica	28.8	0.07	0.7	61	8	Competitor
common beech (343) Fagus sylvatica	28.7	0.07	0.6	53	20	Competitor
common beech (635) Fagus sylvatica	28.6	0.06	0.8	67	26	Competitor
common beech (104) Fagus sylvatica	28.5	0.06	0.7	60	12	Competitor
common beech (276) Fagus sylvatica	28.5	0.06	0.7	59	32	Competitor
common beech (102) Fagus sylvatica	28.5	0.06	0.6	52	6	Competitor
common beech (520) Fagus sylvatica	28.5	0.06	0.6	46	110	Competitor
common beech (204) Fagus sylvatica	28.4	0.06	0.7	59	39	Competitor
common beech (206) Fagus sylvatica	28.1	0.06	0.7	62	36	Competitor
common beech (103) Fagus sylvatica	28	0.06	0.6	52	12	Competitor
common beech (620) Fagus sylvatica	27.9	0.06	0.7	61	0	Competitor
common beech (539) Fagus sylvatica	27.2	0.06	0.7	59	12	Competitor
common beech (135) Fagus sylvatica	27	0.06	0.7	58	0	Competitor
common beech (434) Fagus sylvatica	26.9	0.06	0.7	58	6	Competitor
common beech (17) Fagus sylvatica	26.5	0.06	0.5	44	64	Competitor
common beech (281) Fagus sylvatica	26.2	0.05	0.6	54	0	Competitor
common beech (634) Fagus sylvatica	24.8	0.05	0.6	50	14	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (142) Fagus sylvatica	24.5	0.05	0.5	43	8	Competitor
common beech (198) Fagus sylvatica	24.2	0.05	0.4	38	0	Competitor
common beech (538) Fagus sylvatica	24.2	0.05	0.5	46	0	Competitor
common beech (37) Fagus sylvatica	23.7	0.04	0.5	41	0	Competitor
common beech (533) Fagus sylvatica	23.4	0.04	0.5	39	20	Competitor
common beech (303) Fagus sylvatica	21.4	0.04	0.4	33	0	Competitor
common beech (159) Fagus sylvatica	21.2	0.04	0.3	28	3	Competitor
common beech (56) Fagus sylvatica	21	0.04	0.3	28	64	Competitor
common beech (205) Fagus sylvatica	20.5	0.03	0.3	28	0	Competitor
common beech (305) Fagus sylvatica	19.7	0.03	0.3	24	0	Competitor
common beech (324) Fagus sylvatica	19.5	0.03	0.3	27	6	Competitor
common beech (302) Fagus sylvatica	17.5	0.02	0.3	21	12	Competitor
common beech (542) Fagus sylvatica	15.7	0.02	0.2	18	21	Competitor
common beech (326) Fagus sylvatica	15	0.02	0.2	15	6	Competitor
common beech (328) Fagus sylvatica	13	0.01	0.1	8	0	Competitor
common beech (306) Fagus sylvatica	10.8	0.01	0.1	5	0	Competitor

Retention trees

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (443) Fagus sylvatica	60.7	0.29	3.8	326	212	Elite tree
silver fir (481) Abies alba	59.6	0.28	4	226	4	Elite tree
common beech (546) Fagus sylvatica	58	0.26	3.1	264	96	Elite tree
common beech (430) Fagus sylvatica	57.1	0.26	3.2	272	134	Elite tree
common beech (406) Fagus sylvatica	55.7	0.24	3	251	135	Elite tree
common beech (218) Fagus sylvatica	55	0.24	3.2	271	76	Elite tree
common beech (426) Fagus sylvatica	50.1	0.2	2.3	196	183	Elite tree
common beech (515) Fagus sylvatica	50.1	0.2	2.5	215	84	Elite tree
sycamore maple (292) Acer pseudoplatanus	50	0.2	1.4	121	0	Elite tree
common beech (236) Fagus sylvatica	49.3	0.19	2.3	196	93	Elite tree
common beech (271) Fagus sylvatica	48.2	0.18	2.2	190	142	Elite tree
sycamore maple (260) Acer pseudoplatanus	47.6	0.18	1.4	122	134	Elite tree
common beech (545) Fagus sylvatica	47.6	0.18	2.1	176	150	Elite tree
common beech (21) Fagus sylvatica	47.5	0.18	1.9	159	49	Elite tree
common beech (629) Fagus sylvatica	46.8	0.17	2	166	136	Elite tree
sycamore maple (468) Acer pseudoplatanus	46.1	0.17	1.4	120	208	Habitat tree
sycamore maple (417) Acer pseudoplatanus	46	0.17	1.4	120	136	Habitat tree
sycamore maple (89) Acer pseudoplatanus	44	0.15	1.4	122	52	Elite tree
common beech (215) Fagus sylvatica	42.9	0.15	2	167	125	Elite tree
common beech (534) Fagus sylvatica	42.2	0.14	1.5	130	38	Elite tree

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (109) Fagus sylvatica	40.8	0.13	1.5	132	42	Elite tree
common beech (541) Fagus sylvatica	40.2	0.13	1.4	117	118	Elite tree
common beech (280) Fagus sylvatica	38.5	0.12	1.3	113	120	Habitat tree
common beech (622) Fagus sylvatica	37.7	0.11	1.5	125	113	Elite tree
common beech (199) Fagus sylvatica	36.4	0.1	1	89	48	Elite tree
common beech (160) Fagus sylvatica	35.6	0.1	1.2	99	44	Elite tree
common beech (141) Fagus sylvatica	32.9	0.09	1	82	6	Elite tree