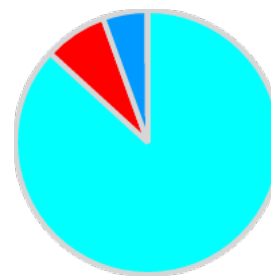


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Site conditions

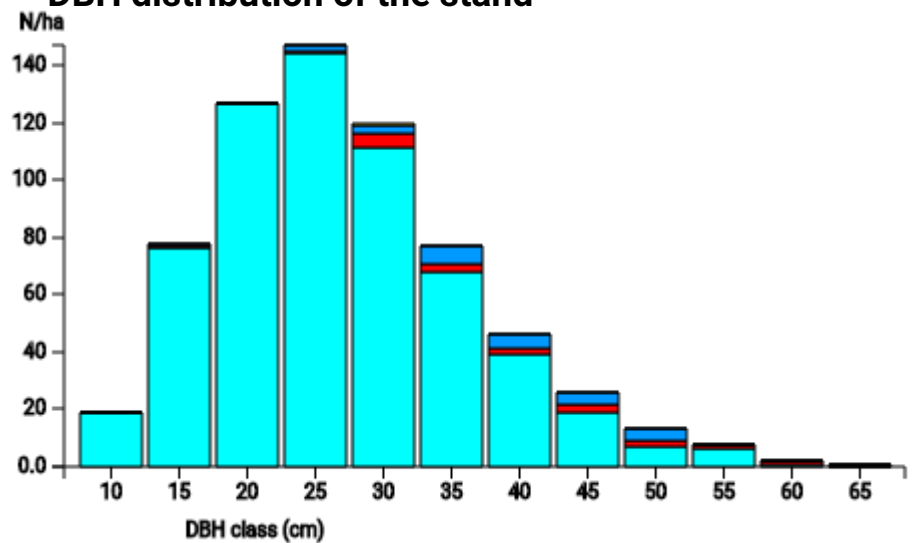
Altitude: 1270 m.a.s.l.
 Forest ecological region: Tuscany
 Geology / Bedrock: Sandstone
 Soil type: Brown podzolic soil
 Natural forest community:
 Asperulo-Fagetum
 Mean annual temperature: 8.7 C;
 Mean annual precipitation: 1642 mm;
 Ownership: State;
 Establishment: 2020

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

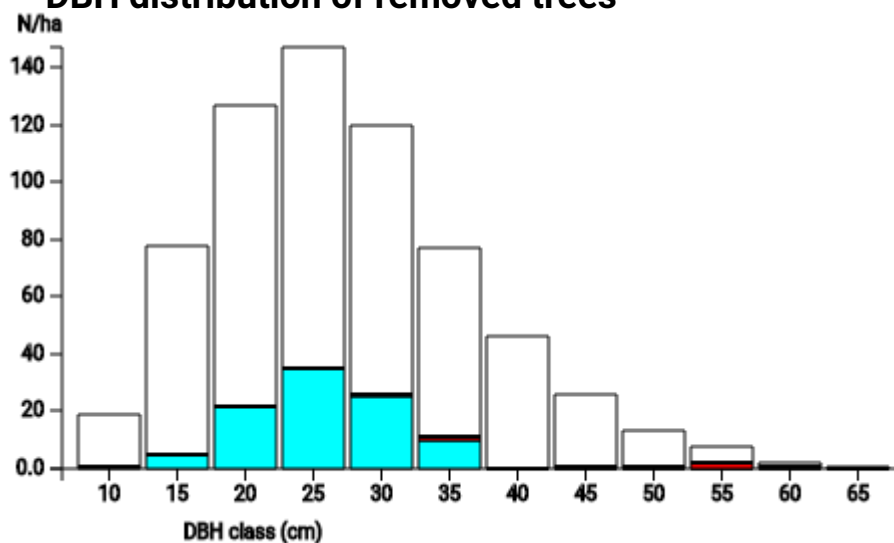
Volume: 87.2 m³
 Basal area: 7.7 m²
 Economic value: 7220 €
 Habitat value: 1079 pts.

Removed trees (N in %)



- common beech: 93.3 %
- silver fir: 6.7 %
- sycamore maple: 0 %
- goat willow: 0 %

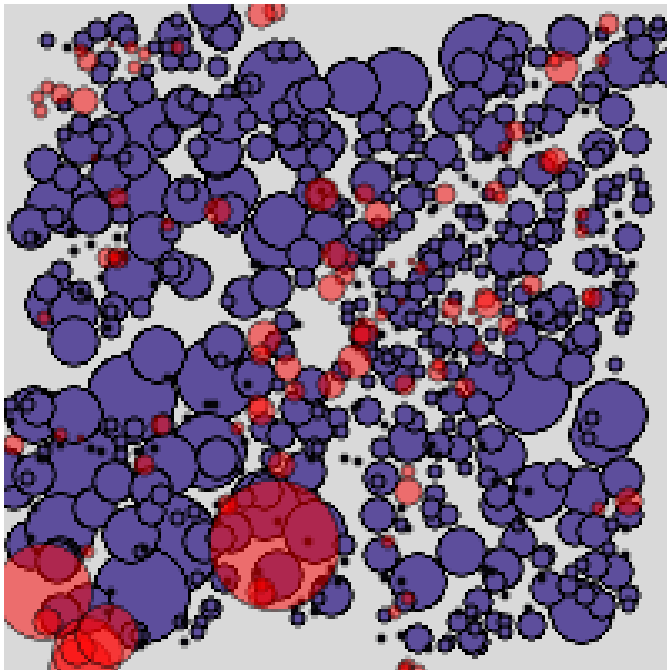
DBH distribution of removed trees



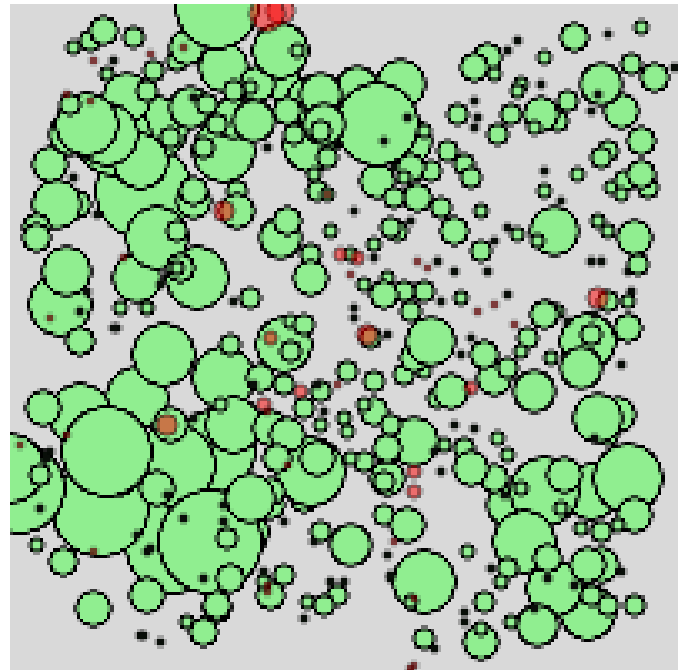
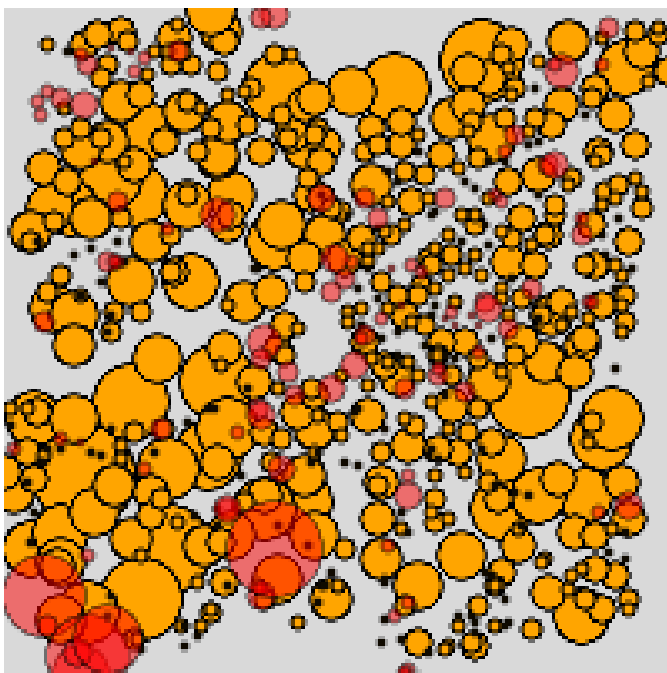
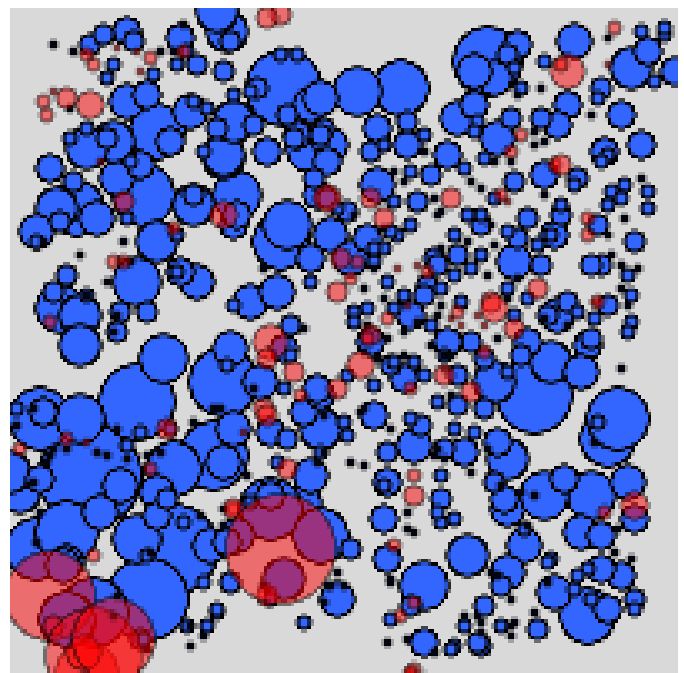
Removed trees (details by tree species)

Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
common beech	98	6.2	66.3	5677	1057	105
goat willow	0	0	0	0	0	0
silver fir	7	1.4	20.9	1543	22	5
sycamore maple	0	0	0	0	0	0
Total	105	7.7	87.2	7220	1079	110

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.

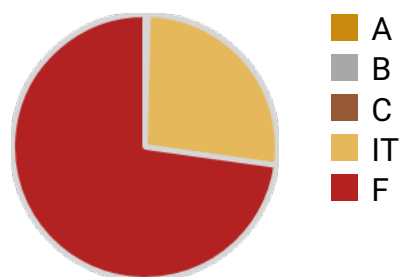
Economic values

Total value of removed trees: 7220 €
 Percentage of total stand value: 15.4 %
 Stand value after harvest: 39567 €

Economic value by tree species [€]

Tree species	Total	Per m ³
common beech	5677	86
silver fir	1543	74
sycamore maple	0	0
goat willow	0	0
Total	7220	83

Wood quality distribution (m³ in %)



Quality class	m ³	%
A	0	0
B	0	0
C	0.3	0.4
Industrial Timber	23.4	26.9
Fuelwood	63.5	72.8

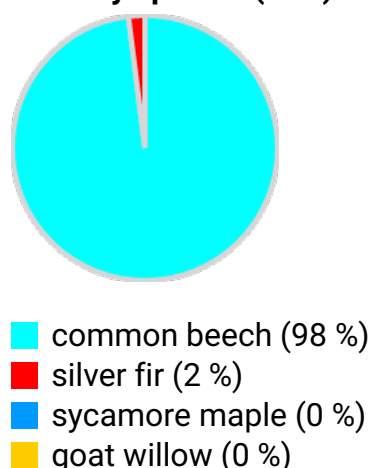
Habitat values

Total habitat value of removed trees: 1079 pts.
 Percentage of total stand value: 5 %
 Stand value after harvest: 20662 pts.

Habitat value by tree species [pts.]

Tree species	Total	Per m ³	Microhabitats [N]
common beech	1057	15.9	105
silver fir	22	1.1	5
sycamore maple	0	0	0
goat willow	0	0	0
Total	1079	12.4	110

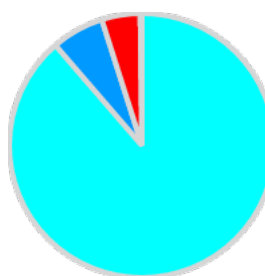
Habitat value (points) of removed trees by species (in %)



Remaining stand

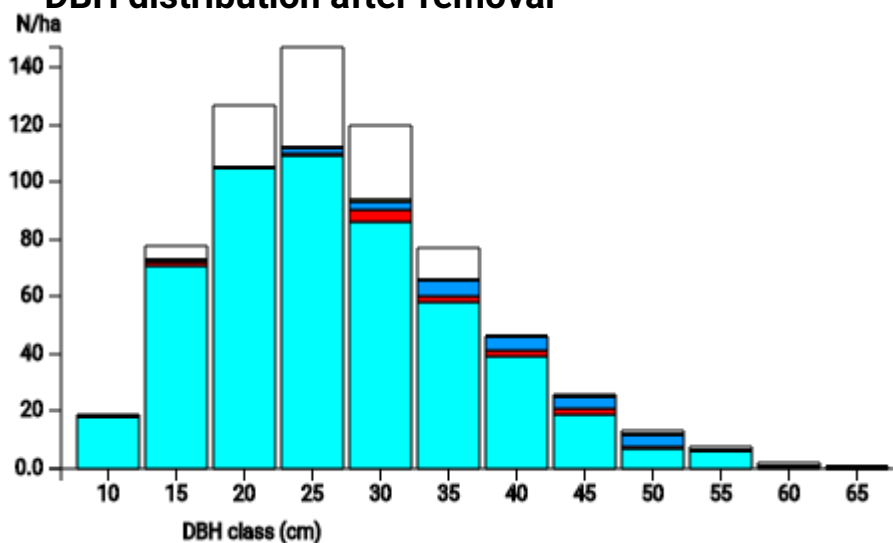
Volume: 471 m³
 Basal area: 43.5 m²
 Economic value: 39567 €
 Habitat value: 20662 pts.

Remaining trees by volume (m³ in %)



- common beech: 88.7 %
- sycamore maple: 6.4 %
- silver fir: 4.7 %
- 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	519	38	417.7	35571	18751	1178
goat willow	1	0.1	0.8	70	24	3
silver fir	14	1.8	22.2	1517	223	20
sycamore maple	25	3.2	29.9	2409	1664	99
Total	559	43.1	470.7	39567	20662	1300

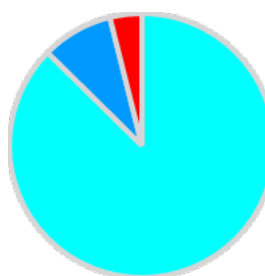
Retention treesVolume: 61.7 m³

Elite trees: 13

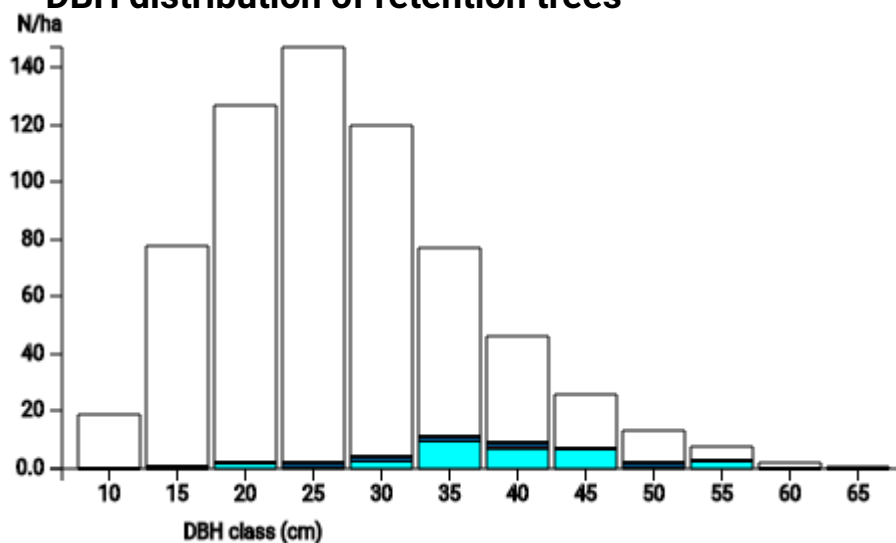
Habitat trees: 19

Economic value: 5182 €

Habitat value: 2575 pts.

Retention trees by volume (m³ in %)

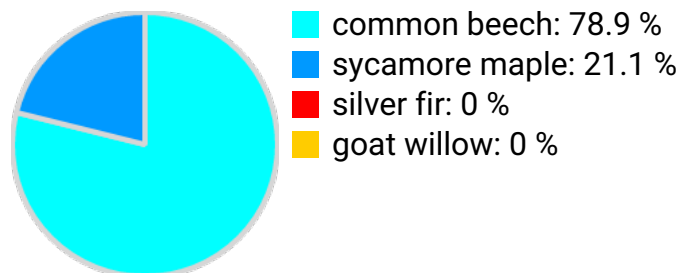
- common beech: 87.4 %
- sycamore maple: 8.7 %
- silver fir: 3.9 %
- goat willow: 0 %

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

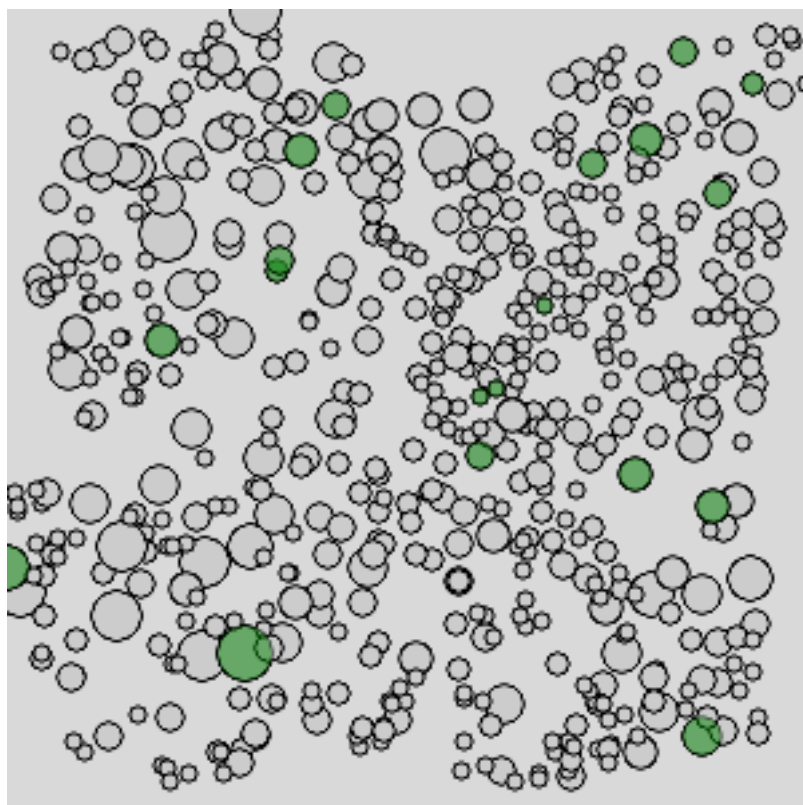
Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
common beech	34	4.7	53.9	4585	2354	146
goat willow	0	0	0	0	0	0
silver fir	2	0.2	2.4	138	6	2
sycamore maple	5	0.6	5.4	458	215	12
Total	41	5.5	61.7	5182	2575	160

Number of habitat trees	[N]	19
Habitat value	pts.	1434
	[% of total]	6.6
Economic value	[€]	2263
	[% of total]	4.8
Number of microhabitats	[N]	85
	[% of total]	6

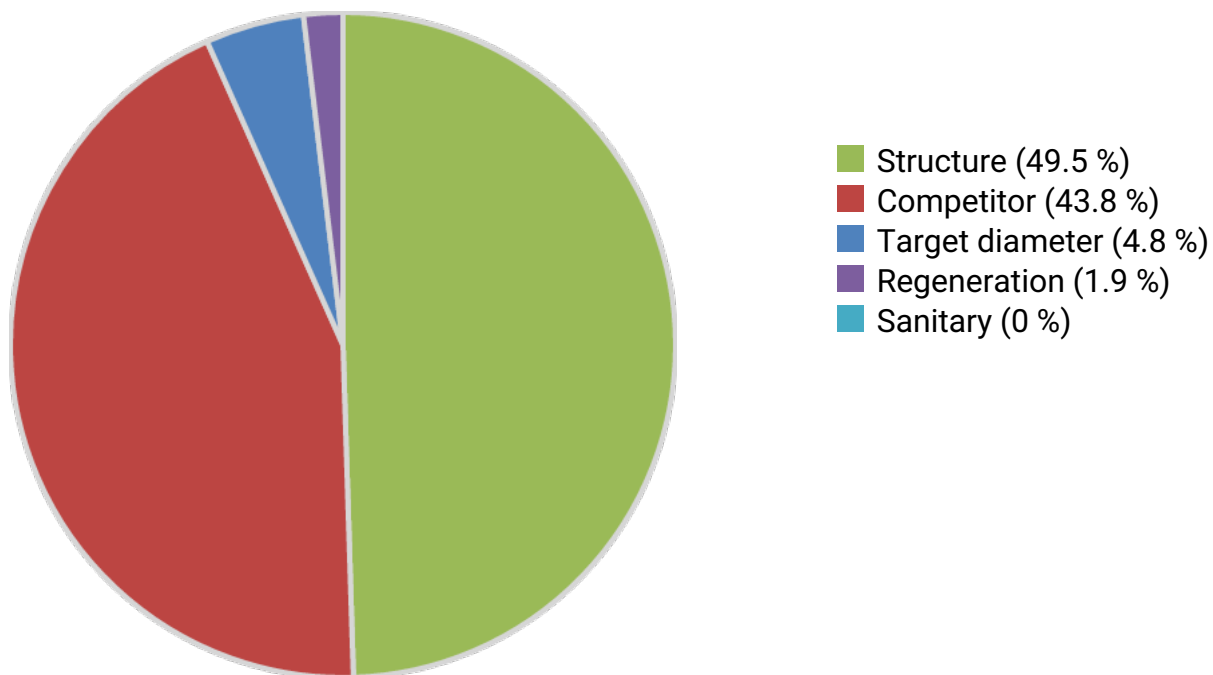
Habitat tree distribution by species (N in %)



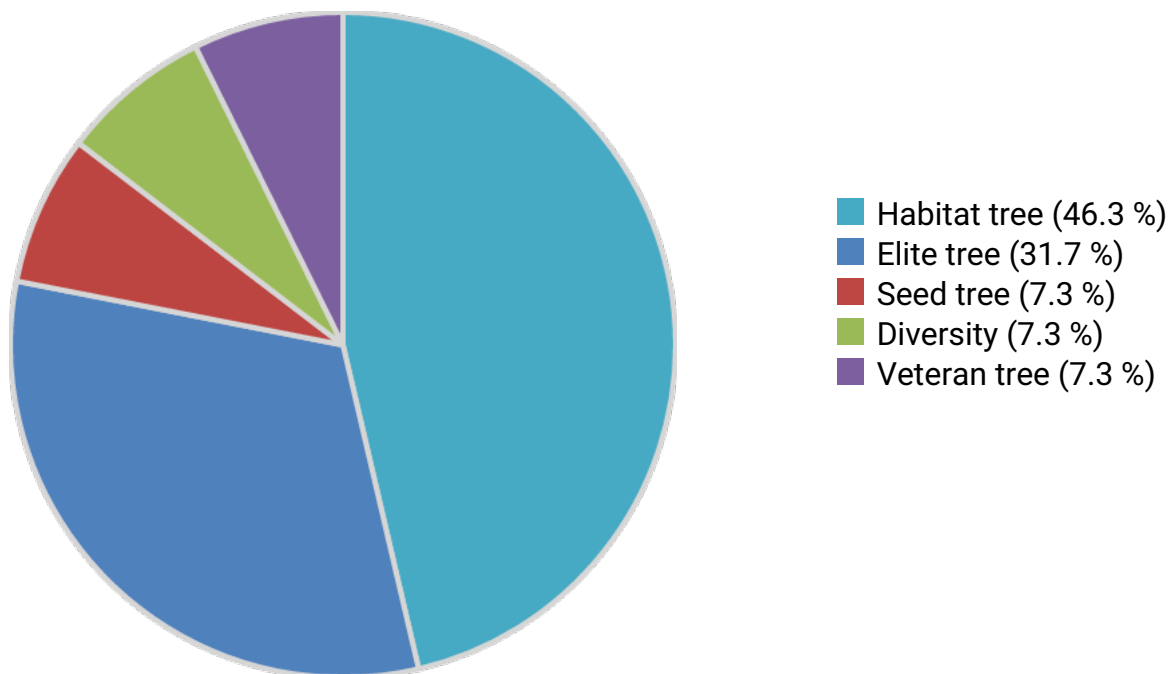
Spatial distribution of habitat trees



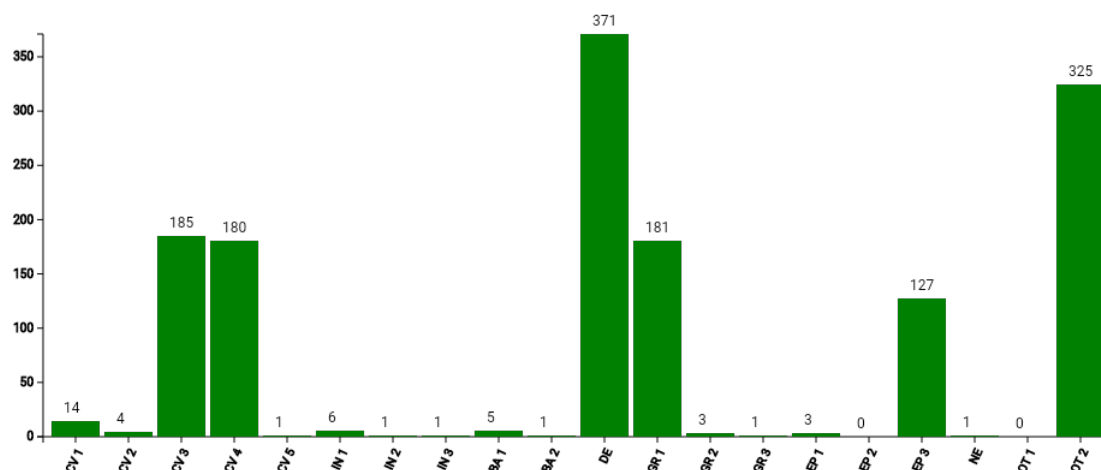
Reasons for removal



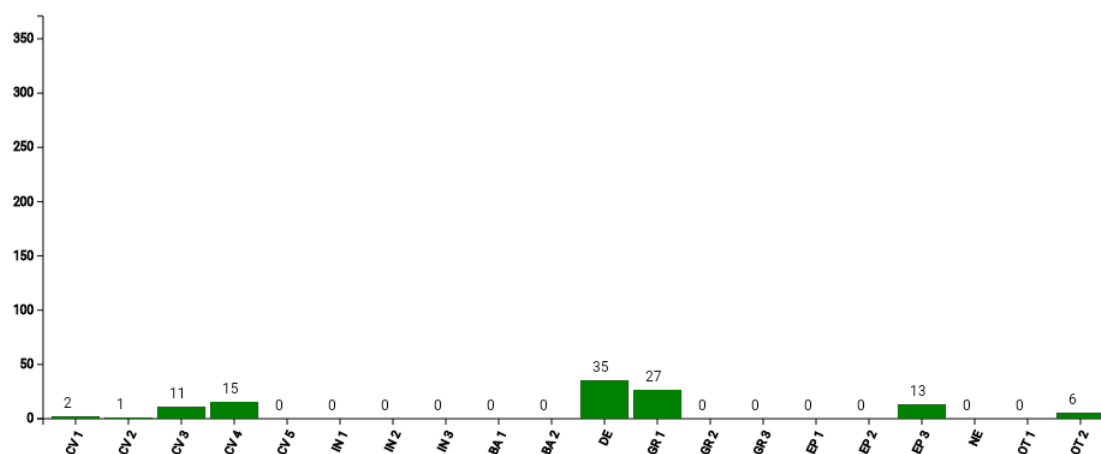
Reasons for retention



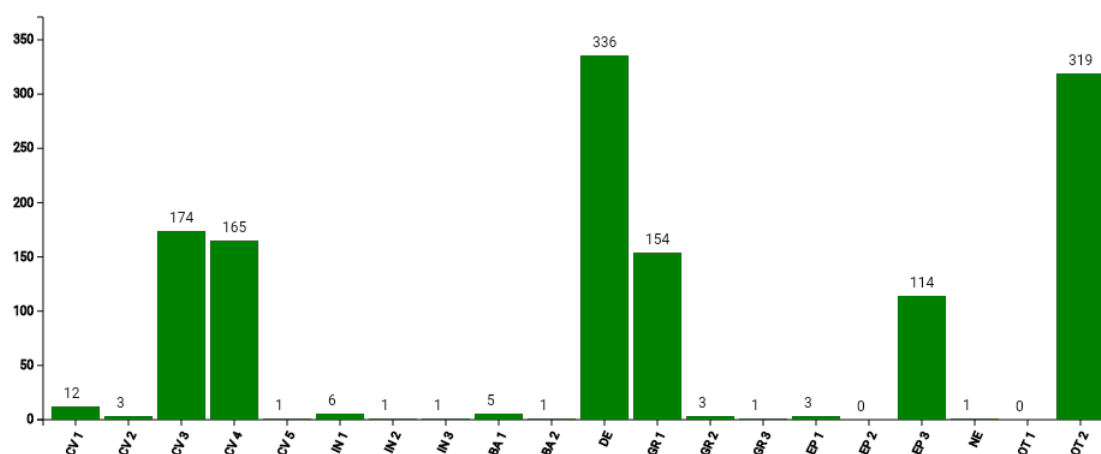
Distribution of tree microhabitats by code (N total)



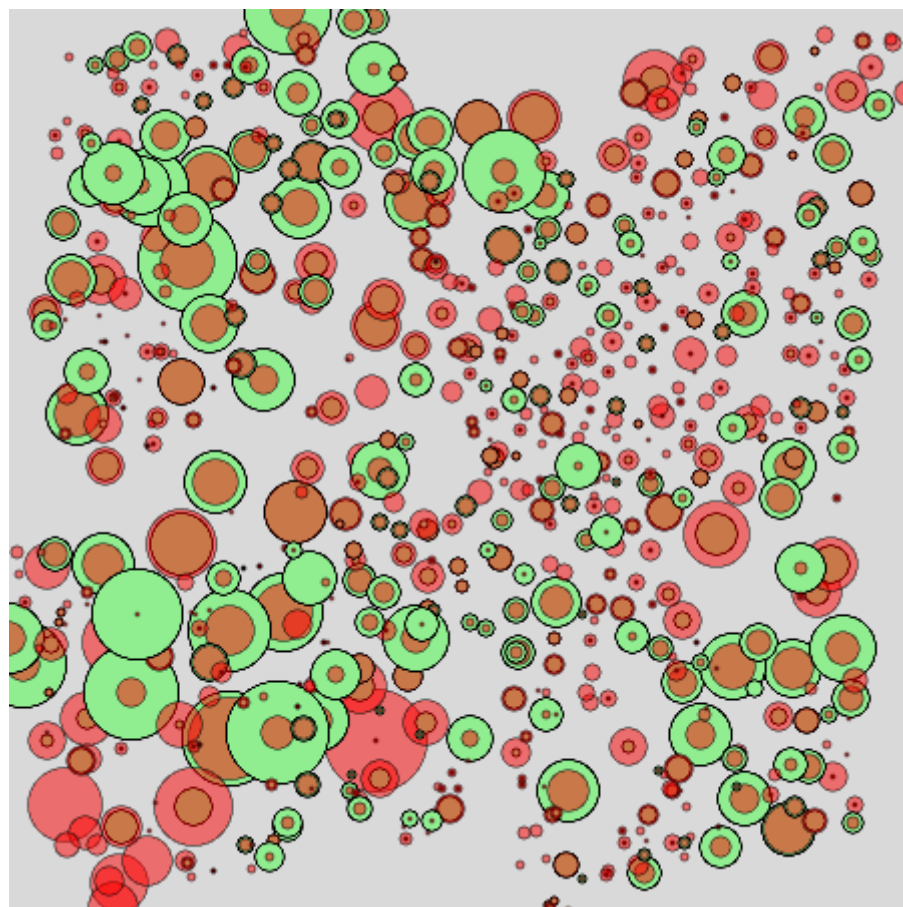
Removed tree microhabitats by code (N removed)



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 (390) Abies alba	63.2	0.31	4.7	411	6	Target diameter
silver fir (481) Abies alba	59.6	0.28	4	226	4	Target diameter
silver fir (497) Abies alba	57.6	0.26	3.8	302	0	Target diameter
silver fir (480) Abies alba	53.2	0.22	3.5	197	0	Target diameter
silver fir (500) Abies alba	48.3	0.18	2.6	204	4	Target diameter
common beech (384) Fagus sylvatica	39.5	0.12	1.3	113	28	Structure
common beech (47) Fagus sylvatica	38.7	0.12	1.4	119	0	Competitor
common beech (257) Fagus sylvatica	37.2	0.11	1.1	97	39	Competitor
common beech (315) Fagus sylvatica	36.9	0.11	1.1	93	10	Structure
common beech (211) Fagus sylvatica	36.8	0.11	1.2	103	12	Competitor
common beech (505) Fagus sylvatica	36.2	0.1	1.1	92	6	Competitor
silver fir (499) Abies alba	36.1	0.1	1.3	112	4	Structure
common beech (647) Fagus sylvatica	35.6	0.1	1.2	105	0	Competitor
common beech (95) Fagus sylvatica	35.4	0.1	1.1	95	12	Structure
common beech (209) Fagus sylvatica	35.2	0.1	1	90	36	Competitor
common beech (624) Fagus sylvatica	35	0.1	1	80	36	Structure
common beech (379) Fagus sylvatica	34.8	0.1	0.9	79	20	Competitor
common beech (414) Fagus sylvatica	34.2	0.09	0.8	73	0	Competitor
common beech (649) Fagus sylvatica	34	0.09	1	88	17	Structure
common beech (51) Fagus sylvatica	33.6	0.09	0.9	81	0	Structure
common beech (396)	33.5	0.09	0.9	77	12	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Fagus sylvatica						
common beech (220) Fagus sylvatica	33.5	0.09	0.9	75	68	Regeneration
common beech (367) Fagus sylvatica	33.3	0.09	1	85	9	Competitor
common beech (363) Fagus sylvatica	33	0.09	1	85	3	Competitor
common beech (200) Fagus sylvatica	32.9	0.09	1	89	6	Structure
common beech (221) Fagus sylvatica	32.7	0.08	0.9	76	70	Regeneration
common beech (201) Fagus sylvatica	32.5	0.08	1	83	3	Competitor
common beech (124) Fagus sylvatica	32.2	0.08	0.8	73	3	Structure
common beech (57) Fagus sylvatica	32	0.08	0.9	73	6	Competitor
common beech (155) Fagus sylvatica	31.5	0.08	0.9	77	3	Structure
common beech (586) Fagus sylvatica	31.4	0.08	0.9	74	24	Competitor
common beech (169) Fagus sylvatica	31.3	0.08	0.8	70	0	Structure
common beech (289) Fagus sylvatica	31	0.08	0.7	63	22	Competitor
common beech (316) Fagus sylvatica	31	0.08	0.8	66	18	Competitor
silver fir (498) Abies alba	31	0.08	1	91	4	Structure
common beech (549) Fagus sylvatica	30.8	0.08	0.8	67	21	Competitor
common beech (383) Fagus sylvatica	30.8	0.08	0.8	69	6	Competitor
common beech (380) Fagus sylvatica	30.8	0.08	0.8	71	36	Competitor
common beech (429) Fagus sylvatica	30.7	0.07	0.9	73	40	Competitor
common beech (50) Fagus sylvatica	30.5	0.07	0.8	66	6	Structure
common beech (82) Fagus sylvatica	30.2	0.07	0.8	65	0	Structure

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (619) Fagus sylvatica	30.1	0.07	0.6	54	6	Competitor
common beech (615) Fagus sylvatica	29.7	0.07	0.8	69	6	Competitor
common beech (35) Fagus sylvatica	29.6	0.07	0.6	54	6	Competitor
common beech (96) Fagus sylvatica	29.5	0.07	0.9	74	0	Structure
common beech (415) Fagus sylvatica	29.3	0.07	0.6	54	0	Competitor
common beech (293) Fagus sylvatica	29	0.07	0.8	69	0	Competitor
common beech (20) Fagus sylvatica	29	0.07	0.7	63	0	Structure
common beech (307) Fagus sylvatica	28.8	0.07	0.7	60	6	Structure
common beech (362) Fagus sylvatica	28.7	0.07	0.7	56	36	Competitor
common beech (343) Fagus sylvatica	28.7	0.07	0.6	53	20	Competitor
common beech (250) Fagus sylvatica	28.7	0.07	0.6	52	9	Competitor
common beech (193) Fagus sylvatica	28.5	0.06	0.7	57	12	Competitor
common beech (204) Fagus sylvatica	28.4	0.06	0.7	59	39	Structure
common beech (32) Fagus sylvatica	28.4	0.06	0.7	63	47	Structure
common beech (119) Fagus sylvatica	28	0.06	0.7	58	0	Structure
common beech (288) Fagus sylvatica	27.9	0.06	0.6	49	0	Structure
common beech (623) Fagus sylvatica	27.7	0.06	0.6	54	29	Competitor
common beech (296) Fagus sylvatica	27.4	0.06	0.7	62	14	Structure
common beech (451) Fagus sylvatica	27.4	0.06	0.6	50	21	Competitor
common beech (490) Fagus sylvatica	27.2	0.06	0.6	54	9	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Fagus sylvatica						
common beech (91) Fagus sylvatica	27	0.06	0.6	55	0	Structure
common beech (568) Fagus sylvatica	27	0.06	0.6	54	6	Competitor
common beech (434) Fagus sylvatica	26.9	0.06	0.7	58	6	Competitor
common beech (336) Fagus sylvatica	26.7	0.06	0.5	45	6	Structure
common beech (64) Fagus sylvatica	26.6	0.06	0.6	54	6	Competitor
common beech (267) Fagus sylvatica	26.3	0.05	0.5	42	12	Structure
common beech (36) Fagus sylvatica	26.1	0.05	0.6	48	0	Competitor
common beech (189) Fagus sylvatica	26	0.05	0.5	46	6	Structure
common beech (335) Fagus sylvatica	25.6	0.05	0.5	40	0	Structure
common beech (657) Fagus sylvatica	25.4	0.05	0.5	47	0	Structure
common beech (664) Fagus sylvatica	25.4	0.05	0.5	41	15	Structure
common beech (81) Fagus sylvatica	25.2	0.05	0.5	44	6	Structure
common beech (273) Fagus sylvatica	25.2	0.05	0.6	49	6	Competitor
common beech (661) Fagus sylvatica	25.1	0.05	0.5	41	21	Competitor
common beech (163) Fagus sylvatica	25	0.05	0.5	41	0	Competitor
common beech (634) Fagus sylvatica	24.8	0.05	0.6	50	14	Competitor
common beech (467) Fagus sylvatica	24.7	0.05	0.6	53	12	Structure
common beech (33) Fagus sylvatica	24.7	0.05	0.5	40	0	Structure
common beech (142) Fagus sylvatica	24.5	0.05	0.5	43	8	Structure
common beech (387) Fagus sylvatica	24	0.05	0.4	37	0	Structure

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (297) Fagus sylvatica	23.9	0.05	0.5	38	0	Structure
common beech (143) Fagus sylvatica	23.8	0.04	0.3	27	9	Structure
common beech (268) Fagus sylvatica	23.8	0.04	0.4	35	0	Structure
common beech (637) Fagus sylvatica	23.7	0.04	0.5	46	15	Competitor
common beech (78) Fagus sylvatica	23.7	0.04	0.4	37	0	Structure
common beech (523) Fagus sylvatica	23.6	0.04	0.6	50	0	Competitor
common beech (663) Fagus sylvatica	23.6	0.04	0.5	43	18	Structure
common beech (191) Fagus sylvatica	23.3	0.04	0.5	41	30	Competitor
common beech (398) Fagus sylvatica	23.3	0.04	0.5	39	12	Competitor
common beech (44) Fagus sylvatica	23.2	0.04	0.4	38	0	Competitor
common beech (266) Fagus sylvatica	23	0.04	0.4	37	0	Structure
common beech (662) Fagus sylvatica	22.7	0.04	0.5	38	0	Structure
common beech (310) Fagus sylvatica	22.4	0.04	0.4	31	0	Structure
common beech (452) Fagus sylvatica	21.6	0.04	0.4	30	0	Competitor
common beech (285) Fagus sylvatica	21.5	0.04	0.3	29	0	Structure
common beech (159) Fagus sylvatica	21.2	0.04	0.3	28	3	Structure
common beech (118) Fagus sylvatica	21	0.04	0.4	32	0	Structure
common beech (158) Fagus sylvatica	19.6	0.03	0.3	26	0	Structure
common beech (115) Fagus sylvatica	19.5	0.03	0.3	25	14	Structure
common beech (117) Fagus sylvatica	19.2	0.03	0.3	26	0	Structure
common beech (116)	18.3	0.03	0.3	23	0	Structure

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Fagus sylvatica						
common beech (465) Fagus sylvatica	16.9	0.02	0.3	21	0	Structure
common beech (464) Fagus sylvatica	12.1	0.01	0.1	8	0	Structure

Retention trees

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (107) Fagus sylvatica	59	0.27	2.9	251	63	Veteran tree
common beech (546) Fagus sylvatica	58	0.26	3.1	264	96	Habitat tree
common beech (218) Fagus sylvatica	55	0.24	3.2	271	76	Habitat tree
common beech (150) Fagus sylvatica	53	0.22	2.4	207	104	Elite tree
sycamore maple (292) Acer pseudoplatanus	50	0.2	1.4	121	0	Seed tree
common beech (540) Fagus sylvatica	49.8	0.2	2.3	198	118	Habitat tree
common beech (320) Fagus sylvatica	49.7	0.19	2.2	190	66	Seed tree
common beech (21) Fagus sylvatica	47.5	0.18	1.9	159	49	Habitat tree
common beech (449) Fagus sylvatica	46.9	0.17	2	172	138	Elite tree
common beech (342) Fagus sylvatica	46.5	0.17	2.1	178	142	Elite tree
common beech (172) Fagus sylvatica	46.5	0.17	2	176	98	Elite tree
common beech (299) Fagus sylvatica	46.2	0.17	2.1	180	105	Habitat tree
sycamore maple (89) Acer pseudoplatanus	44	0.15	1.4	122	52	Habitat tree
silver fir (483) Abies alba	44	0.15	2.2	127	0	Veteran tree
common beech (456) Fagus sylvatica	43.4	0.15	2.1	180	22	Diversity
common beech (424) Fagus sylvatica	42.3	0.14	1.6	134	231	Habitat tree
common beech (170) Fagus sylvatica	41.8	0.14	1.5	129	81	Elite tree
common beech (46) Fagus sylvatica	41.4	0.14	1.5	126	54	Habitat tree
common beech (71) Fagus sylvatica	40.5	0.13	1.5	128	6	Elite tree
common beech (495) Fagus sylvatica	40.3	0.13	1.6	136	156	Habitat tree
common beech (382)	40	0.13	1.5	130	64	Elite tree

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
Fagus sylvatica						
common beech (435) Fagus sylvatica	39.5	0.12	1.6	131	84	Veteran tree
common beech (548) Fagus sylvatica	39	0.12	1.2	107	39	Diversity
common beech (62) Fagus sylvatica	39	0.12	1.3	112	15	Diversity
sycamore maple (240) Acer pseudoplatanus	38.6	0.12	1.1	91	18	Habitat tree
common beech (192) Fagus sylvatica	37.8	0.11	1.3	114	36	Elite tree
common beech (618) Fagus sylvatica	37.6	0.11	1.2	101	50	Habitat tree
common beech (378) Fagus sylvatica	36.8	0.11	1.1	94	75	Elite tree
common beech (125) Fagus sylvatica	36.7	0.11	1.2	102	42	Elite tree
common beech (241) Fagus sylvatica	36.5	0.11	1.1	98	78	Habitat tree
common beech (264) Fagus sylvatica	36.3	0.1	1.1	92	0	Elite tree
common beech (145) Fagus sylvatica	35.8	0.1	1	82	60	Elite tree
common beech (38) Fagus sylvatica	34.2	0.09	1	84	0	Elite tree
common beech (122) Fagus sylvatica	33	0.09	0.9	76	6	Habitat tree
common beech (67) Fagus sylvatica	30.6	0.07	0.8	67	84	Habitat tree
sycamore maple (227) Acer pseudoplatanus	30.4	0.07	0.8	68	93	Habitat tree
common beech (520) Fagus sylvatica	28.5	0.06	0.6	46	110	Habitat tree
sycamore maple (25) Acer pseudoplatanus	27.9	0.06	0.6	55	52	Habitat tree
common beech (161) Fagus sylvatica	23.8	0.04	0.5	39	6	Habitat tree
common beech (164) Fagus sylvatica	21.2	0.04	0.3	29	0	Habitat tree
silver fir (212) Abies alba	18.3	0.03	0.1	11	6	Seed tree