

04/03/2021 Gruppo C biodiversità turno3

Site conditions

Altitude: 1270 m.a.s.l.

Forest ecological region: Tuscany

Geology / Bedrock: Sandstone

Soil type: Brown podzolic soil

Natural forest community:

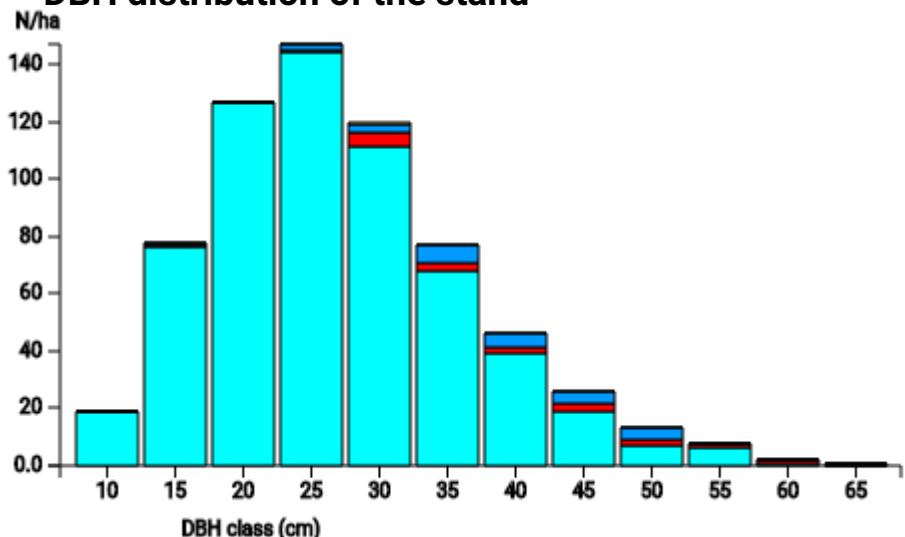
Asperulo-Fagetum

Mean annual temperature: 8.7 C;

Mean annual precipitation: 1642

mm; Ownership: State;

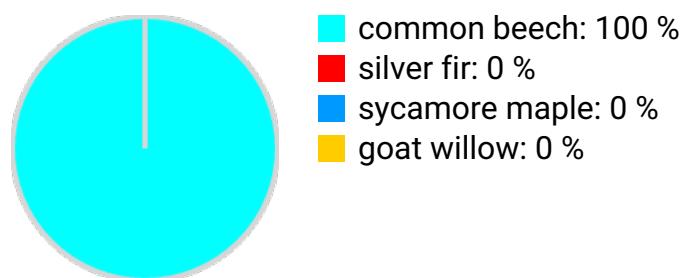
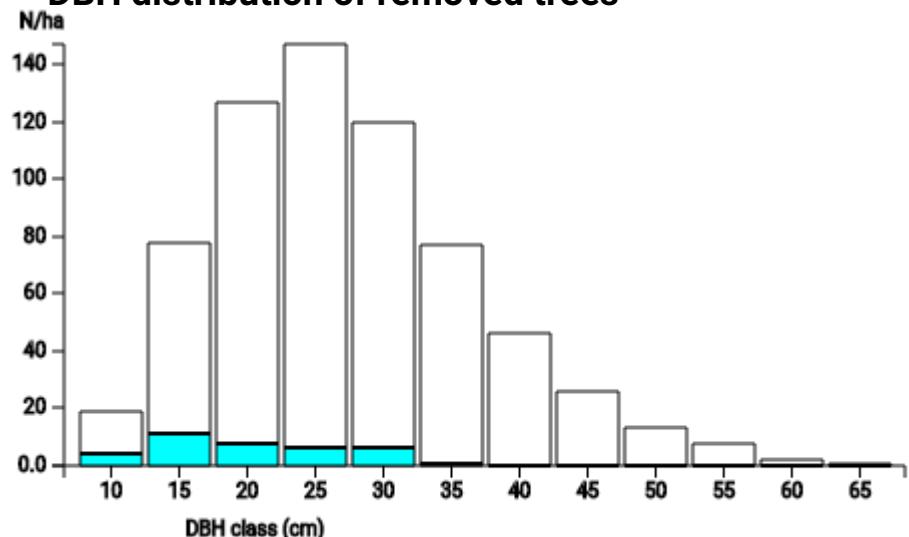
Establishment: 2020

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

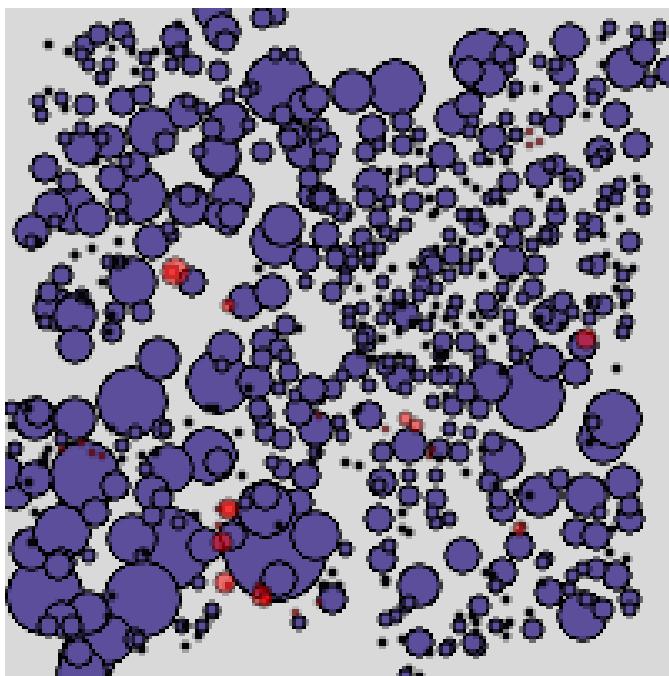
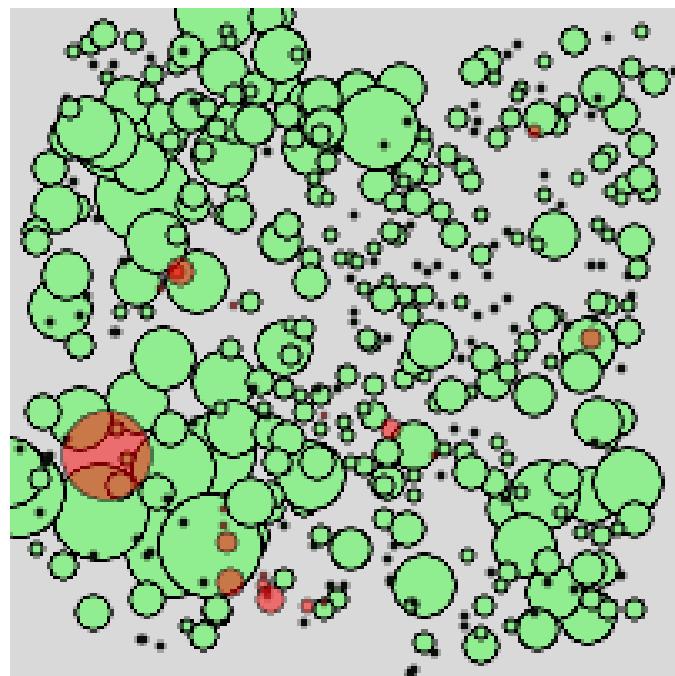
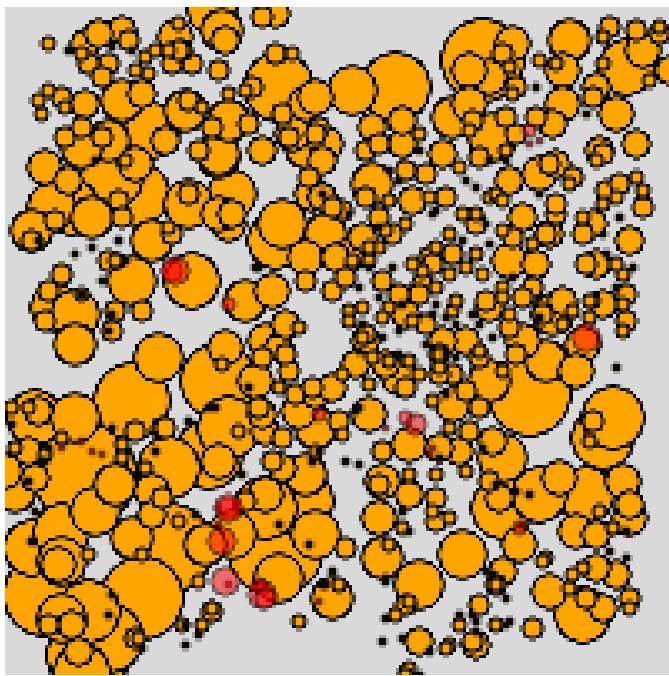
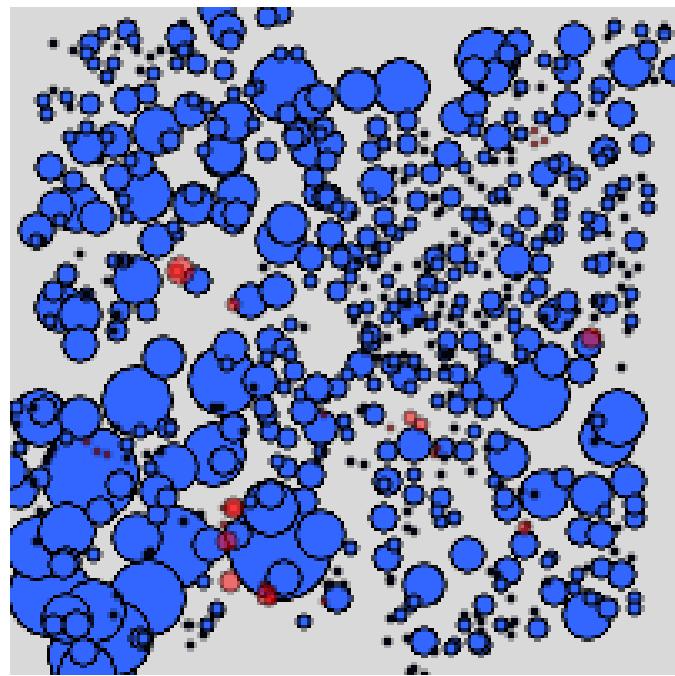
Tree species	N/ha	Basal area (m²)	Volume (m³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
common beech	617	44.3	484	41247	19808	1283
goat willow	1	0.1	0.8	70	24	3
silver fir	21	3.3	43.1	3060	245	25
sycamore maple	25	3.2	29.9	2409	1664	99
Total	664	50.8	557.9	46786	21741	1410

Removed trees

Volume: 17 m³
 Basal area: 1.6 m²
 Economic value: 1443 €
 Habitat value: 802 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	36	1.6	17	1443	802	48
goat willow	0	0	0	0	0	0
silver fir	0	0	0	0	0	0
sycamore maple	0	0	0	0	0	0
Total	36	1.6	17	1443	802	48

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

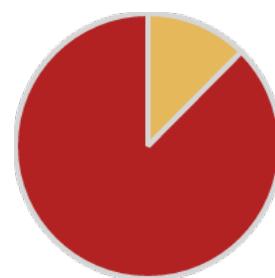
Total value of removed trees: 1443 €

Percentage of total stand value: 3.1 %

Stand value after harvest: 45343 €

Economic value by tree species [€]

Tree species	Total	Per m ³
common beech	1443	85
silver fir	0	0
sycamore maple	0	0
goat willow	0	0
Total	1443	85

Wood quality distribution (m³ in %)

Quality class	m ³	%
A	0	0
B	0	0
C	0	0
Industrial Timber	2.1	12.4
Fuelwood	14.9	87.6

Habitat values

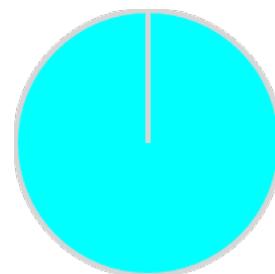
Total habitat value of removed trees: 802 pts.

Percentage of total stand value: 3.7 %

Stand value after harvest: 20939 pts.

Habitat value by tree species [pts.]

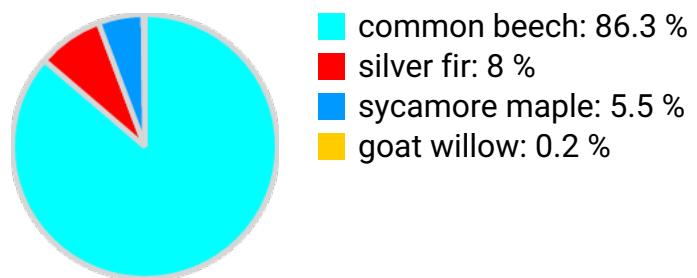
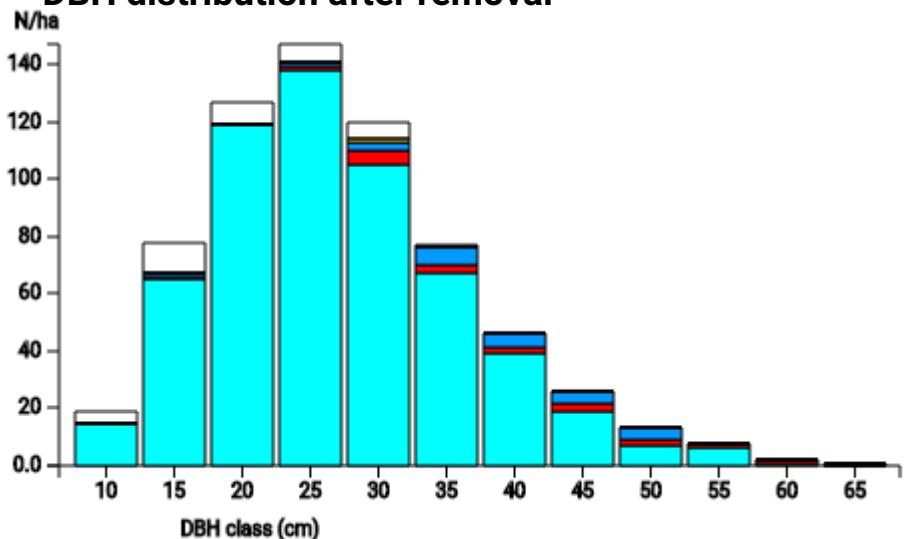
Tree species	Total	Per m ³	Microhabitats [N]
common beech	802	47.3	48
silver fir	0	0	0
sycamore maple	0	0	0
goat willow	0	0	0
Total	802	47.3	48

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

common beech (100 %)
silver fir (0 %)
sycamore maple (0 %)
goat willow (0 %)

Remaining stand

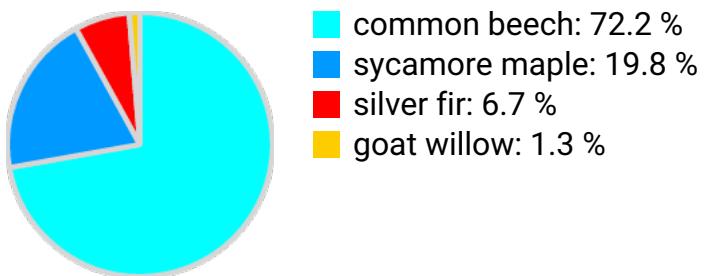
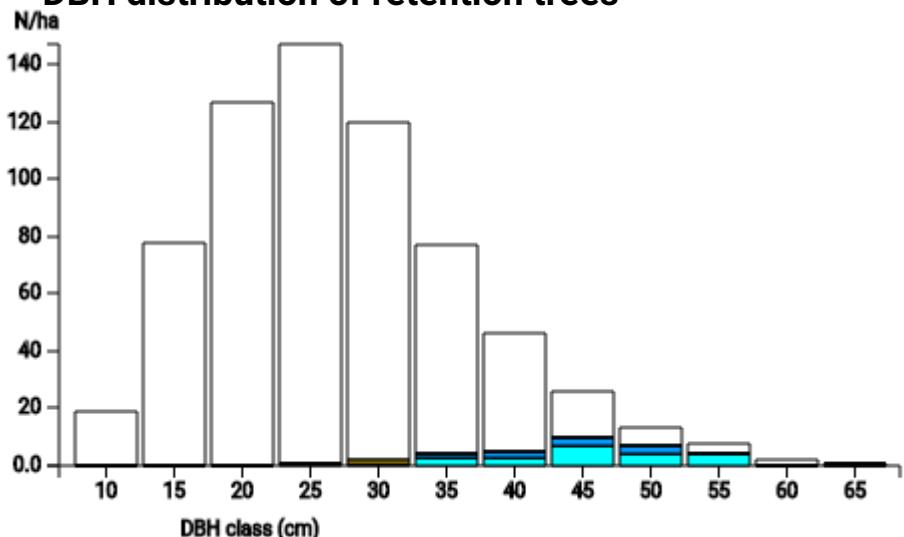
Volume: 540.9 m³
 Basal area: 49.2 m²
 Economic value: 45343 €
 Habitat value: 20939 pts.

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	581	42.6	467	39804	19006	1235
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	628	49.2	540.9	45343	20939	1362

Retention trees

Volume: 64.1 m³
 Elite trees: 0
 Habitat trees: 30
 Economic value: 5324 €
 Habitat value: 2878 pts.

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

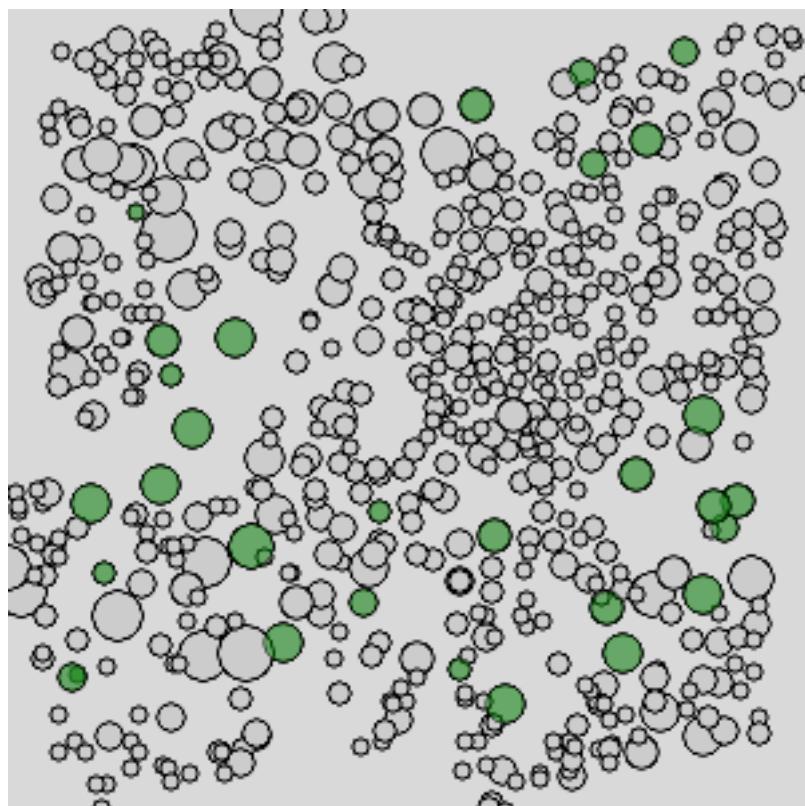
Tree species	N/ha	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
common beech	23	4	46.2	3903	2246	144
goat willow	1	0.1	0.8	70	24	3
silver fir	1	0.3	4.3	277	34	6
sycamore maple	9	1.5	12.7	1074	574	39
Total	34	6	64.1	5324	2878	192

Number of habitat trees	[N]	30
Habitat value	pts.	2638
	[% of total]	12.1
Economic value	[€]	4641
	[% of total]	9.9
Number of microhabitats	[N]	175
	[% of total]	12.4

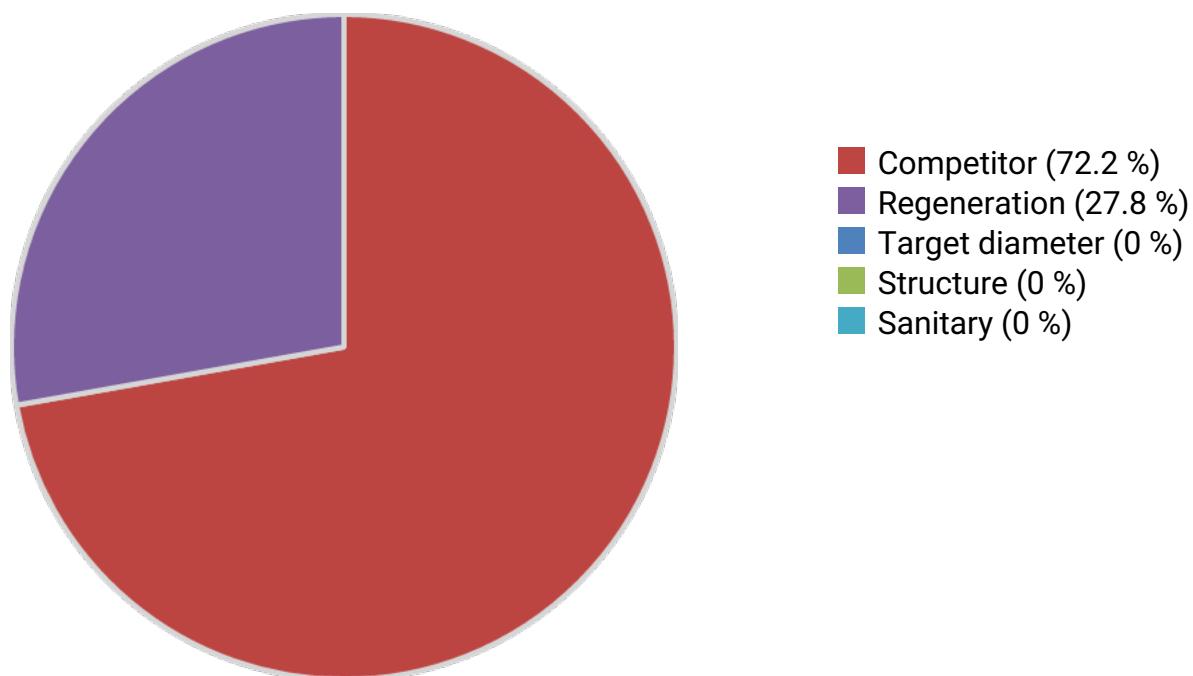
Habitat tree distribution by species (N in %)



Spatial distribution of habitat trees

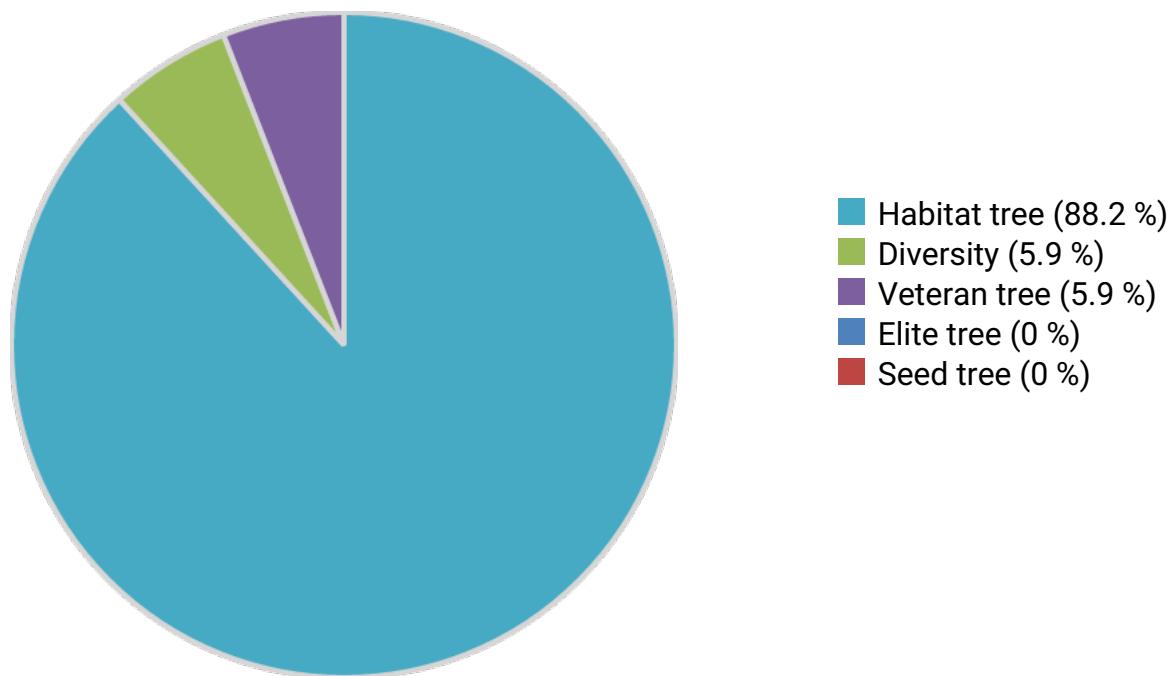


Reasons for removal

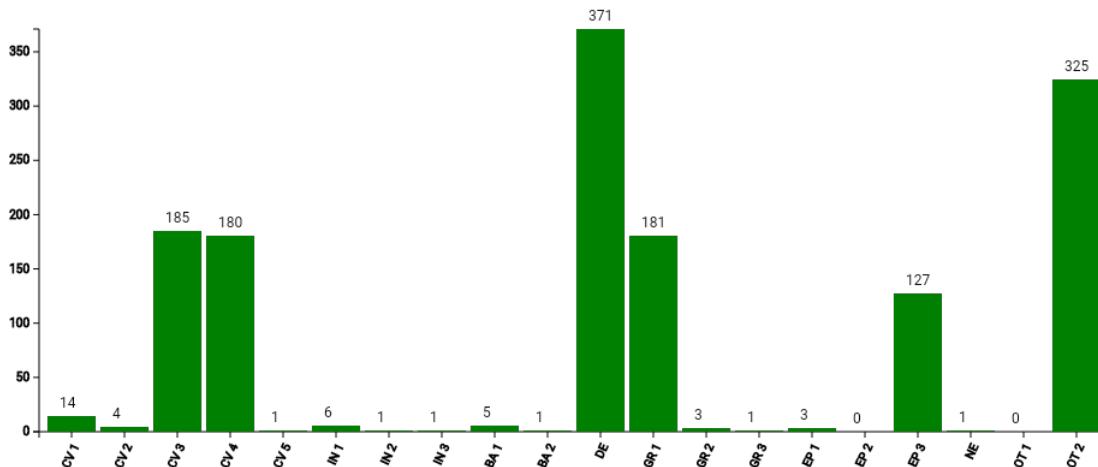
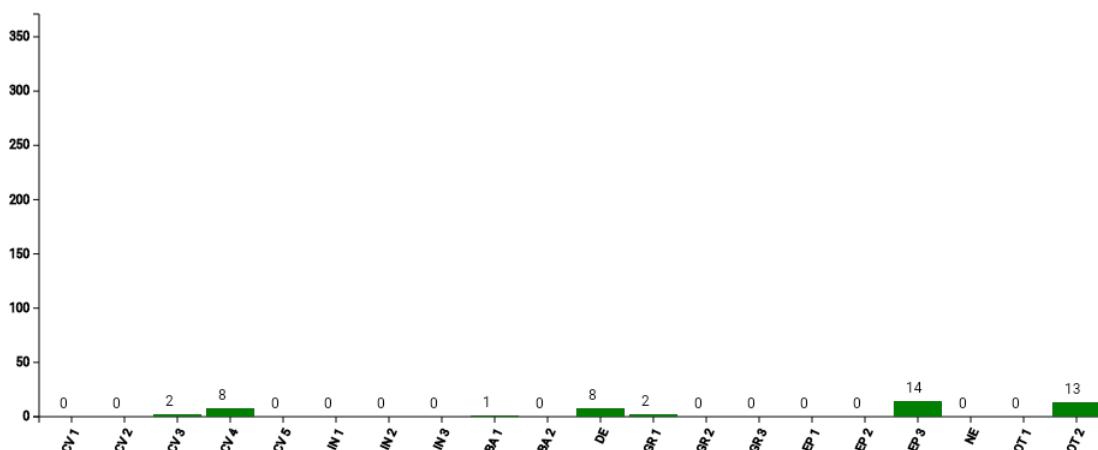
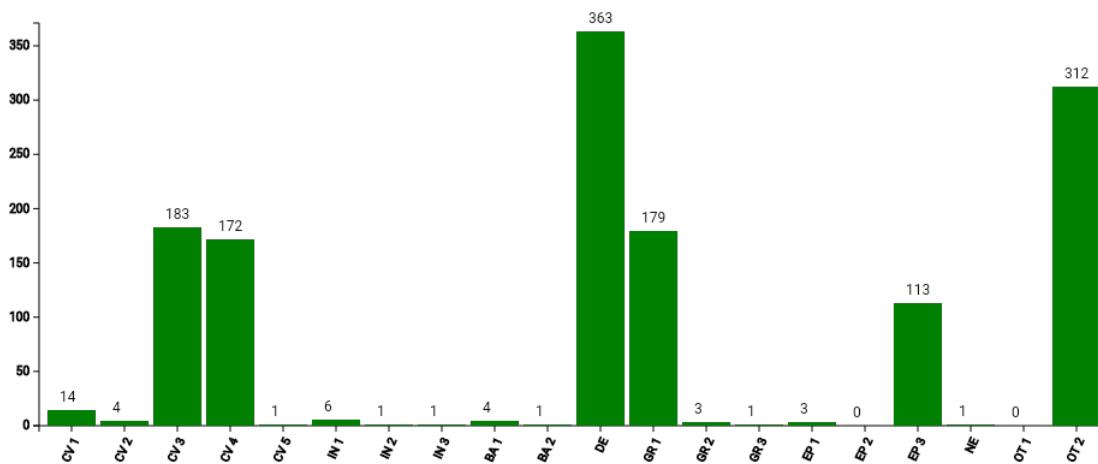


Competitor (72.2 %)
Regeneration (27.8 %)
Target diameter (0 %)
Structure (0 %)
Sanitary (0 %)

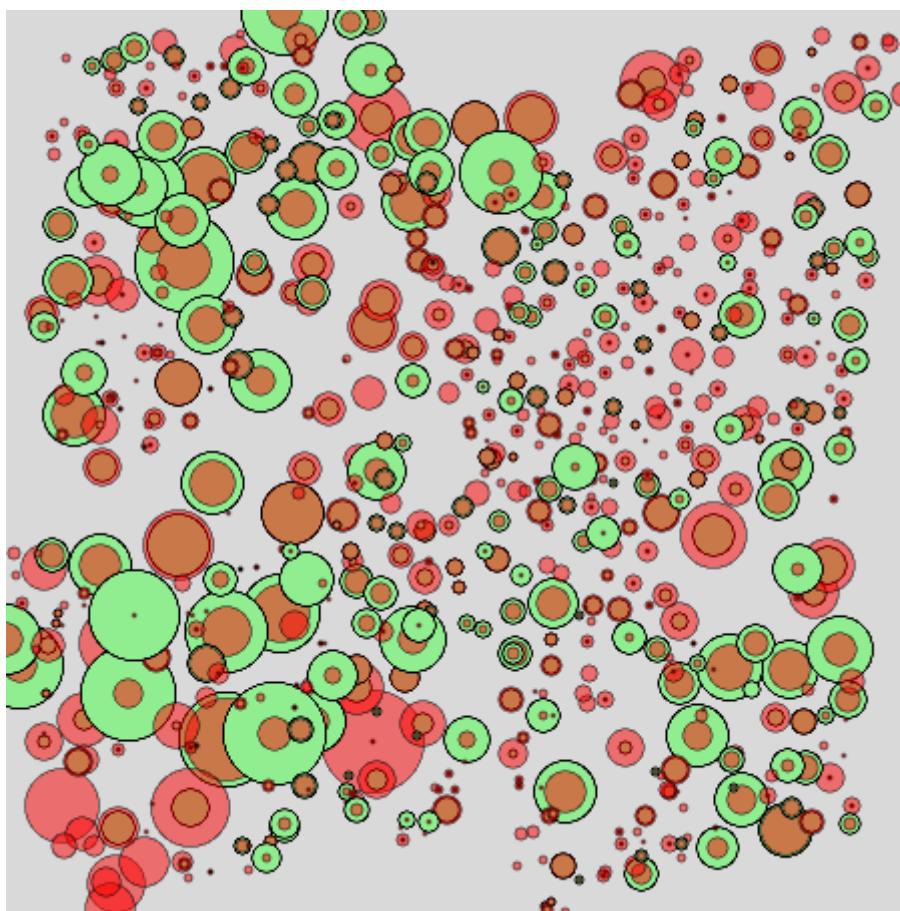
Reasons for retention



Habitat tree (88.2 %)
Diversity (5.9 %)
Veteran tree (5.9 %)
Elite tree (0 %)
Seed 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 (275) <i>Fagus sylvatica</i>	35	0.1	1.2	101	62	Competitor
common beech (418) <i>Fagus sylvatica</i>	34.9	0.1	1.1	90	52	Competitor
common beech (414) <i>Fagus sylvatica</i>	34.2	0.09	0.8	73	0	Competitor
common beech (519) <i>Fagus sylvatica</i>	33.6	0.09	0.9	77	42	Competitor
common beech (396) <i>Fagus sylvatica</i>	33.5	0.09	0.9	77	12	Regeneration
common beech (419) <i>Fagus sylvatica</i>	33.1	0.09	1	89	54	Regeneration
common beech (621) <i>Fagus sylvatica</i>	30.5	0.07	0.8	66	3	Competitor
common beech (415) <i>Fagus sylvatica</i>	29.3	0.07	0.6	54	0	Competitor
common beech (395) <i>Fagus sylvatica</i>	28.9	0.07	0.7	57	60	Regeneration
common beech (276) <i>Fagus sylvatica</i>	28.5	0.06	0.7	59	32	Competitor
common beech (620) <i>Fagus sylvatica</i>	27.9	0.06	0.7	61	0	Competitor
common beech (259) <i>Fagus sylvatica</i>	25.8	0.05	0.6	53	18	Competitor
common beech (560) <i>Fagus sylvatica</i>	25.7	0.05	0.6	47	0	Competitor
common beech (349) <i>Fagus sylvatica</i>	24.4	0.05	0.5	39	8	Competitor
common beech (397) <i>Fagus sylvatica</i>	23.3	0.04	0.4	32	36	Regeneration
common beech (68) <i>Fagus sylvatica</i>	23.3	0.04	0.4	35	36	Competitor
common beech (398) <i>Fagus sylvatica</i>	23.3	0.04	0.5	39	12	Regeneration
common beech (374) <i>Fagus sylvatica</i>	22.6	0.04	0.4	33	12	Regeneration
common beech (452) <i>Fagus sylvatica</i>	21.6	0.04	0.4	30	0	Competitor
common beech (69) <i>Fagus sylvatica</i>	20.3	0.03	0.3	28	6	Competitor

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
common beech (413) <i>Fagus sylvatica</i>	20.3	0.03	0.3	23	12	Competitor
common beech (453) <i>Fagus sylvatica</i>	19.4	0.03	0.3	29	0	Competitor
common beech (610) <i>Fagus sylvatica</i>	19.2	0.03	0.2	20	14	Competitor
common beech (642) <i>Fagus sylvatica</i>	19.1	0.03	0.3	23	50	Competitor
common beech (63) <i>Fagus sylvatica</i>	19	0.03	0.3	22	0	Competitor
common beech (416) <i>Fagus sylvatica</i>	18.8	0.03	0.3	23	12	Competitor
common beech (611) <i>Fagus sylvatica</i>	18.7	0.03	0.3	24	0	Competitor
common beech (561) <i>Fagus sylvatica</i>	17.2	0.02	0.2	21	3	Competitor
common beech (454) <i>Fagus sylvatica</i>	16.8	0.02	0.2	20	202	Competitor
common beech (420) <i>Fagus sylvatica</i>	16.3	0.02	0.2	15	0	Regeneration
common beech (470) <i>Fagus sylvatica</i>	16.2	0.02	0.2	18	0	Competitor
common beech (393) <i>Fagus sylvatica</i>	15.8	0.02	0.2	16	0	Regeneration
common beech (392) <i>Fagus sylvatica</i>	14.5	0.02	0.2	13	36	Regeneration
common beech (408) <i>Fagus sylvatica</i>	14.5	0.02	0.2	14	0	Competitor
common beech (277) <i>Fagus sylvatica</i>	14.5	0.02	0.1	13	12	Competitor
common beech (399) <i>Fagus sylvatica</i>	14.4	0.02	0.1	11	16	Regeneration

Retention trees

Tree	DBH (cm)	Basal area (m²)	Volume (m³)	Economic value (€)	Habitat value (pts.)	Reason
silver fir (469) <i>Abies alba</i>	65.5	0.34	4.3	277	34	Habitat tree
common beech (107) <i>Fagus sylvatica</i>	59	0.27	2.9	251	63	Habitat tree
common beech (546) <i>Fagus sylvatica</i>	58	0.26	3.1	264	96	Habitat tree
common beech (430) <i>Fagus sylvatica</i>	57.1	0.26	3.2	272	134	Habitat tree
common beech (406) <i>Fagus sylvatica</i>	55.7	0.24	3	251	135	Diversity
common beech (411) <i>Fagus sylvatica</i>	54.5	0.23	2.8	232	180	Habitat tree
sycamore maple (358) <i>Acer pseudoplatanus</i>	53	0.22	1.4	120	68	Habitat tree
common beech (150) <i>Fagus sylvatica</i>	53	0.22	2.4	207	104	Habitat tree
sycamore maple (575) <i>Acer pseudoplatanus</i>	52	0.21	1.4	120	88	Habitat tree
common beech (514) <i>Fagus sylvatica</i>	50.2	0.2	2.4	205	51	Habitat tree
common beech (515) <i>Fagus sylvatica</i>	50.1	0.2	2.5	215	84	Habitat tree
sycamore maple (292) <i>Acer pseudoplatanus</i>	50	0.2	1.4	121	0	Habitat tree
common beech (522) <i>Fagus sylvatica</i>	48.2	0.18	1.9	159	129	Habitat tree
sycamore maple (260) <i>Acer pseudoplatanus</i>	47.6	0.18	1.4	122	134	Habitat tree
common beech (21) <i>Fagus sylvatica</i>	47.5	0.18	1.9	159	49	Veteran tree
common beech (449) <i>Fagus sylvatica</i>	46.9	0.17	2	172	138	Habitat tree
common beech (629) <i>Fagus sylvatica</i>	46.8	0.17	2	166	136	Habitat tree
common beech (407) <i>Fagus sylvatica</i>	46.7	0.17	2.1	173	136	Habitat tree
sycamore maple (477) <i>Acer pseudoplatanus</i>	46.2	0.17	1.4	120	16	Habitat tree
common beech (299) <i>Fagus sylvatica</i>	46.2	0.17	2.1	180	105	Habitat tree

Tree	DBH (cm)	Basal area (m ²)	Volume (m ³)	Economic value (€)	Habitat value (pts.)	Reason
sycamore maple (417) <i>Acer pseudoplatanus</i>	46	0.17	1.4	120	136	Habitat tree
common beech (391) <i>Fagus sylvatica</i>	45.2	0.16	1.7	144	44	Veteran tree
sycamore maple (89) <i>Acer pseudoplatanus</i>	44	0.15	1.4	122	52	Habitat tree
common beech (350) <i>Fagus sylvatica</i>	43.8	0.15	1.6	135	36	Habitat tree
common beech (309) <i>Fagus sylvatica</i>	42.1	0.14	1.5	129	12	Diversity
sycamore maple (654) <i>Acer pseudoplatanus</i>	41.6	0.14	1.3	110	22	Habitat tree
common beech (46) <i>Fagus sylvatica</i>	41.4	0.14	1.5	126	54	Habitat tree
common beech (532) <i>Fagus sylvatica</i>	39.6	0.12	1.3	112	116	Habitat tree
common beech (622) <i>Fagus sylvatica</i>	37.7	0.11	1.5	125	113	Habitat tree
common beech (559) <i>Fagus sylvatica</i>	37.4	0.11	1.3	112	137	Habitat tree
sycamore maple (478) <i>Acer pseudoplatanus</i>	37.3	0.11	1.4	120	58	Habitat tree
goat willow (300) <i>Salix caprea</i>	32	0.08	0.8	70	24	Habitat tree
common beech (67) <i>Fagus sylvatica</i>	30.6	0.07	0.8	67	84	Habitat tree
common beech (520) <i>Fagus sylvatica</i>	28.5	0.06	0.6	46	110	Habitat tree