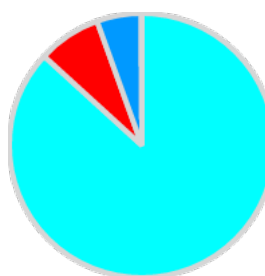


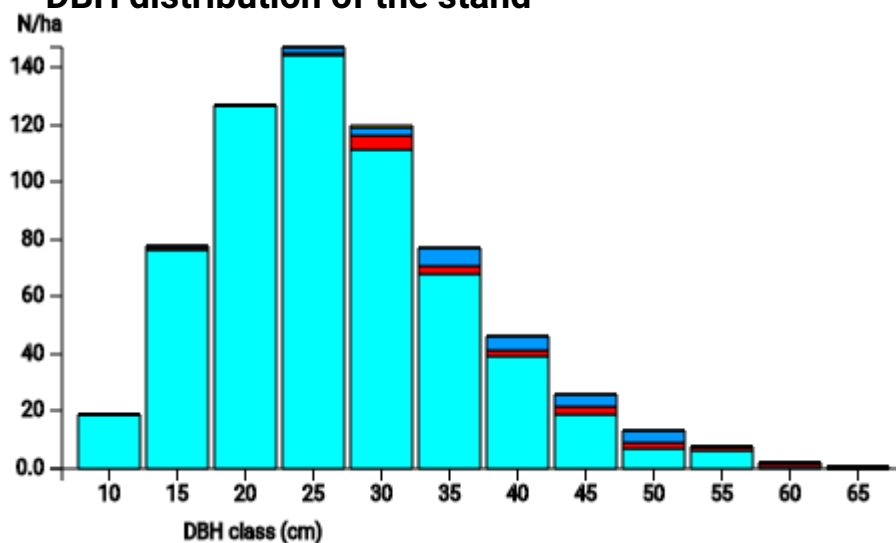
04/03/2021 Gruppo B turno 3

**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 %

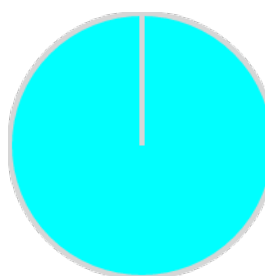
**DBH distribution of the stand****Initial stand (details by tree species)**

Tree species	N/ha	Basal area (m <sup>2</sup> )	Volume (m <sup>3</sup> )	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: 31.5 m<sup>3</sup>Basal area: 3 m<sup>2</sup>

Economic value: 2682 €

Habitat value: 1141 pts.

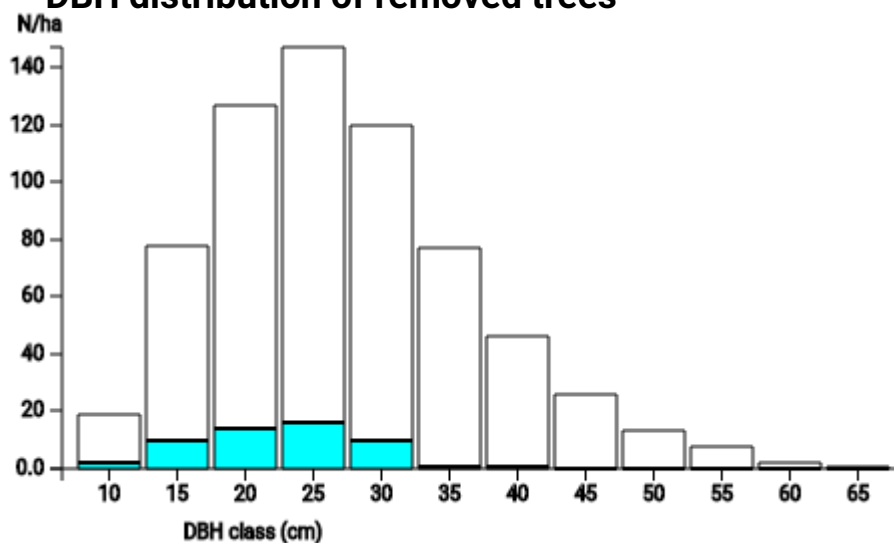
**Removed trees (N in %)**

common beech: 100 %

silver fir: 0 %

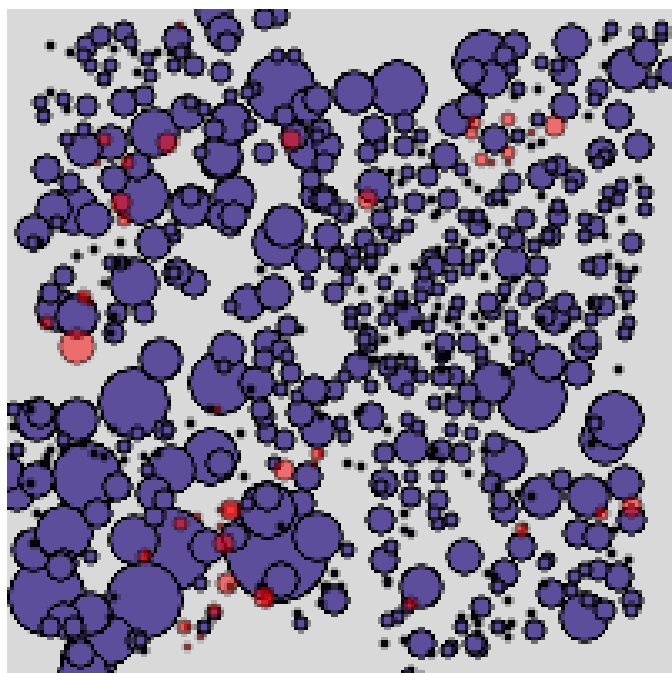
sycamore maple: 0 %

goat willow: 0 %

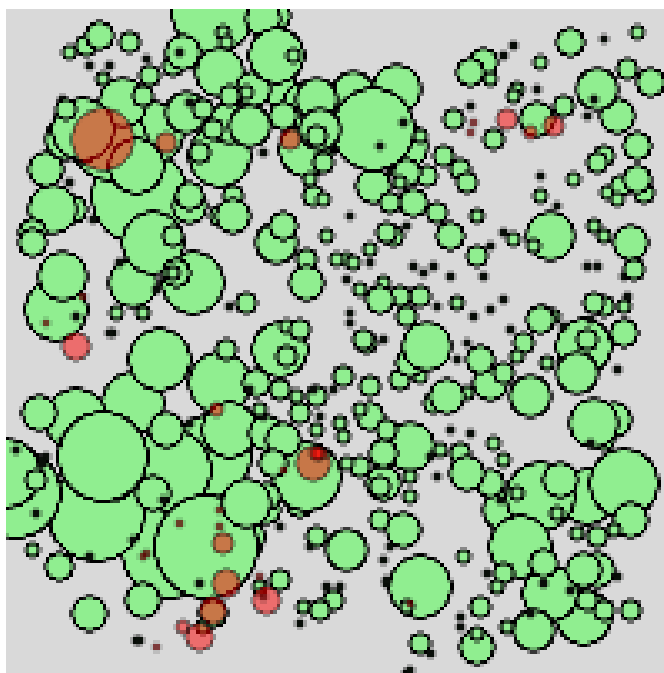
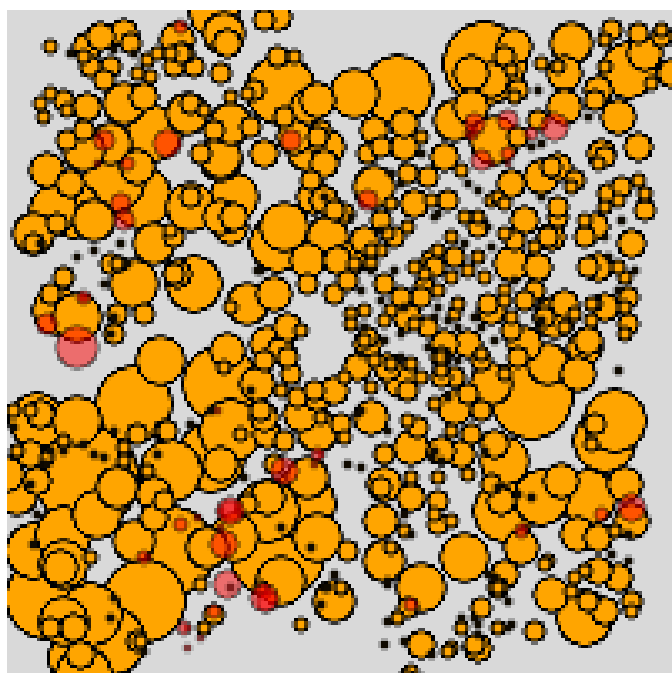
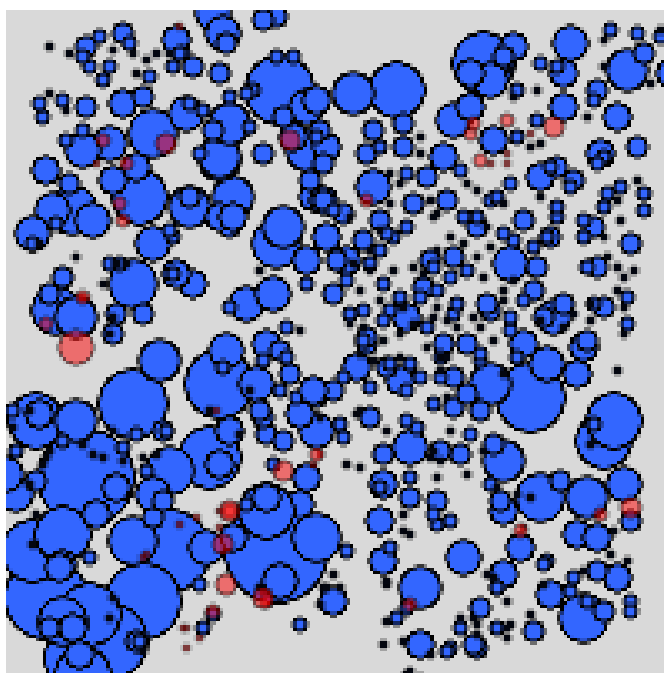
**DBH distribution of removed trees****Removed trees (details by tree species)**

Tree species	N/ha	Basal area (m <sup>2</sup> )	Volume (m <sup>3</sup> )	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
common beech	54	3	31.5	2682	1141	87
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	54	3	31.5	2682	1141	87

Economic value [EUR]



Habitat value

Basal area [m<sup>2</sup>]Volume [m<sup>3</sup>]**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.

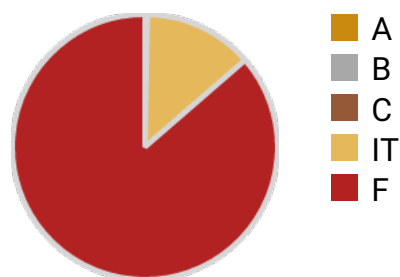
**Economic values**

Total value of removed trees: 2682 €  
 Percentage of total stand value: 5.7 %  
 Stand value after harvest: 44104 €

**Economic value by tree species [€]**

Tree species	Total	Per m <sup>3</sup>
common beech	2682	85
silver fir	0	0
sycamore maple	0	0
goat willow	0	0
Total	2682	85

**Wood quality distribution (m<sup>3</sup> in %)**



Quality class	m <sup>3</sup>	%
A	0	0
B	0	0
C	0.1	0.3
Industrial Timber	4.2	13.3
Fuelwood	27.2	86.4

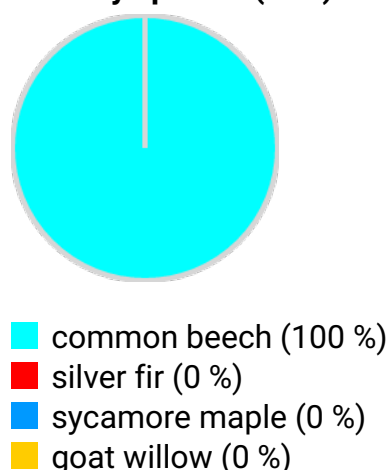
**Habitat values**

Total habitat value of removed trees: 1141 pts.  
 Percentage of total stand value: 5.2 %  
 Stand value after harvest: 20600 pts.

**Habitat value by tree species [pts.]**

Tree species	Total	Per m <sup>3</sup>	Microhabitats [N]
common beech	1141	36.2	87
silver fir	0	0	0
sycamore maple	0	0	0
goat willow	0	0	0
Total	1141	36.2	87

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



### Remaining stand

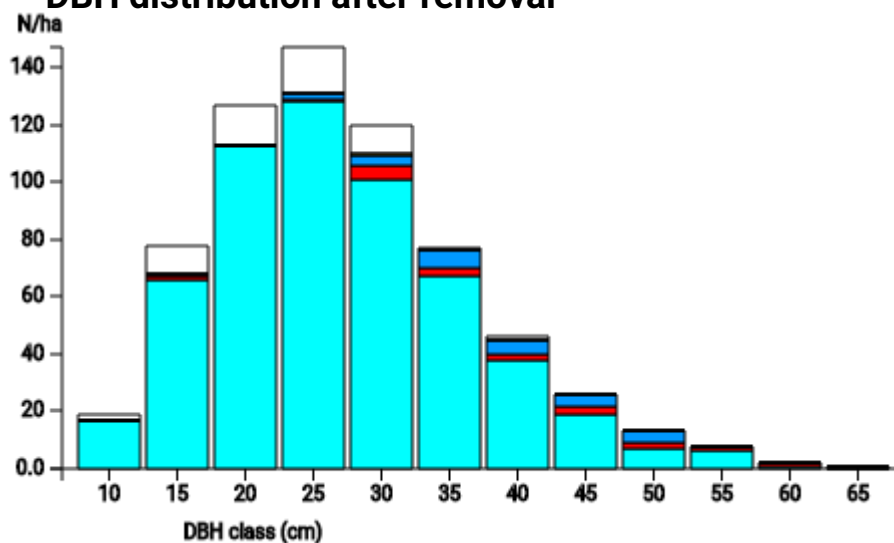
Volume: 526.3 m<sup>3</sup>  
 Basal area: 47.9 m<sup>2</sup>  
 Economic value: 44104 €  
 Habitat value: 20600 pts.

### Remaining trees by volume (m<sup>3</sup> in %)



- common beech: 86 %
- silver fir: 8.2 %
- sycamore maple: 5.7 %
- goat willow: 0.2 %

### DBH distribution after removal



### Remaining stand (details by tree species)

Tree species	N/ha	Basal area (m <sup>2</sup> )	Volume (m <sup>3</sup> )	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
common beech	563	41.3	452.5	38565	18667	1196
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
<b>Total</b>	<b>610</b>	<b>47.9</b>	<b>526.4</b>	<b>44104</b>	<b>20600</b>	<b>1323</b>

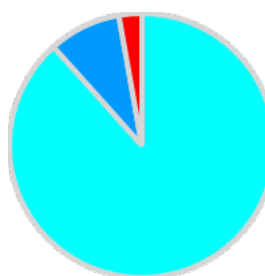
**Retention trees**Volume: 48.8 m<sup>3</sup>

Elite trees: 5

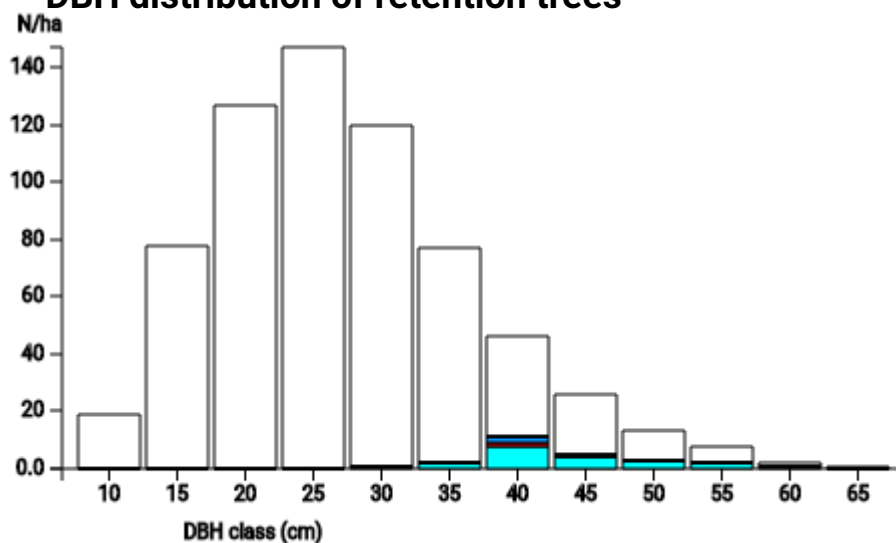
Habitat trees: 16

Economic value: 4141 €

Habitat value: 3086 pts.

**Retention trees by volume (m<sup>3</sup> in %)**

- common beech: 88.4 %
- sycamore maple: 8.8 %
- silver fir: 2.8 %
- goat willow: 0 %

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

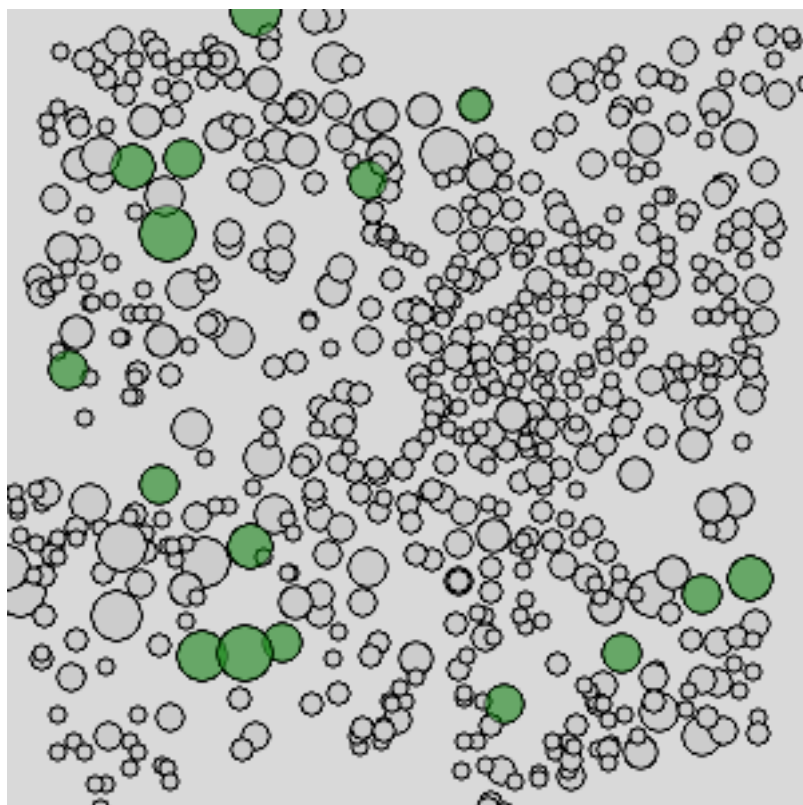
Tree species	N/ha	Basal area (m <sup>2</sup> )	Volume (m <sup>3</sup> )	Economic value (€)	Habitat value (pts.)	Microhabitats (N)
common beech	21	3.6	43.2	3657	2750	161
goat willow	0	0	0	0	0	0
silver fir	1	0.1	1.4	122	0	0
sycamore maple	3	0.5	4.3	362	336	15
<b>Total</b>	<b>25</b>	<b>4.2</b>	<b>48.8</b>	<b>4141</b>	<b>3086</b>	<b>176</b>

Number of habitat trees	[N]	16
Habitat value	pts.	2548
	[% of total]	11.7
Economic value	[€]	2882
	[% of total]	6.2
Number of microhabitats	[N]	139
	[% of total]	9.9

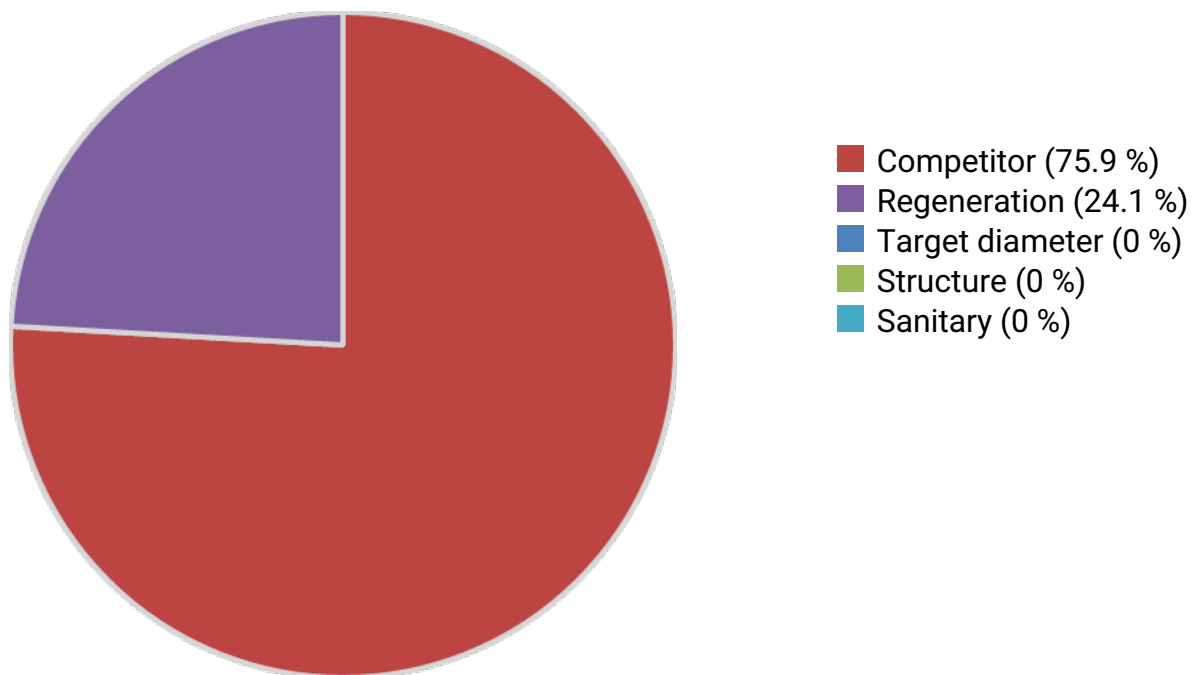
### Habitat tree distribution by species (N in %)



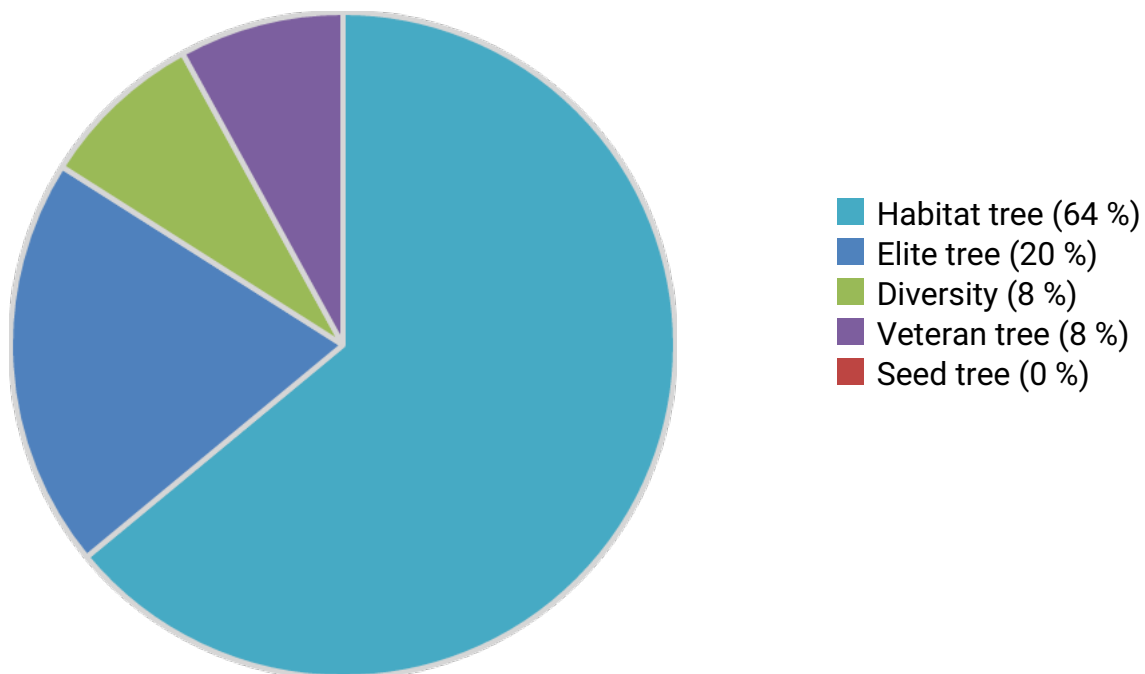
### Spatial distribution of habitat trees



### Reasons for removal

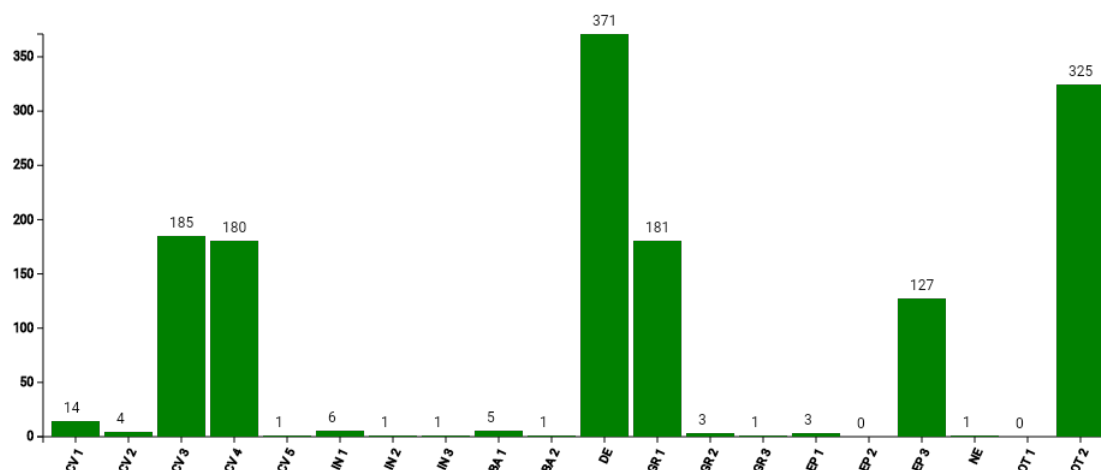


### Reasons for retention

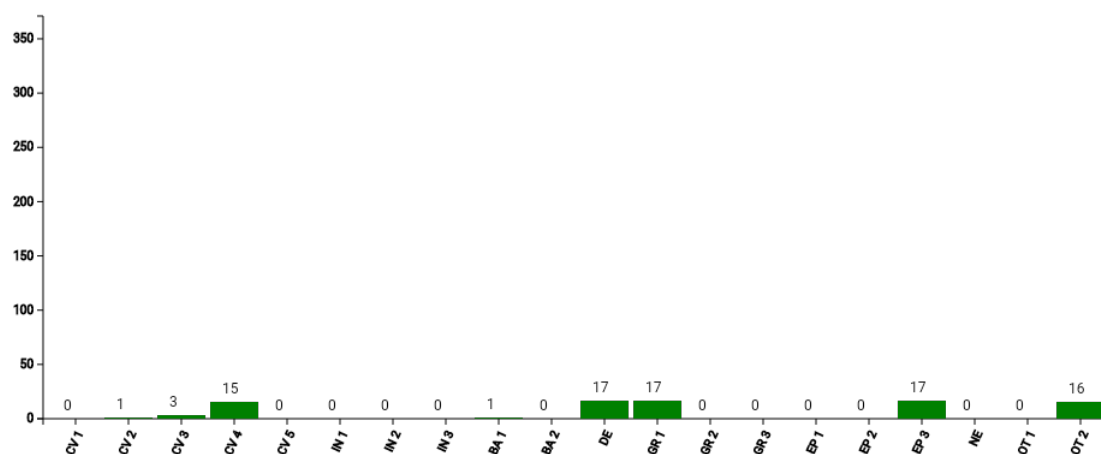




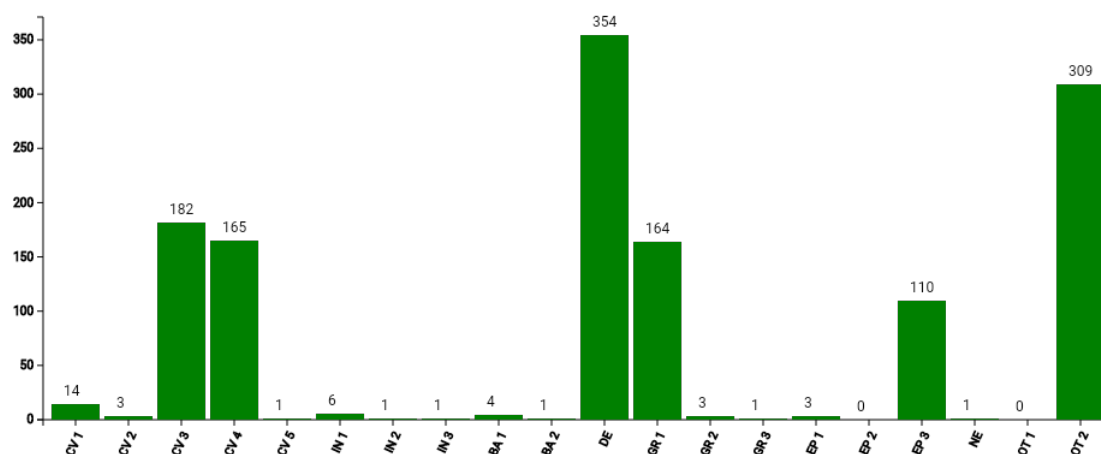
### Distribution of tree microhabitats by code (N total)



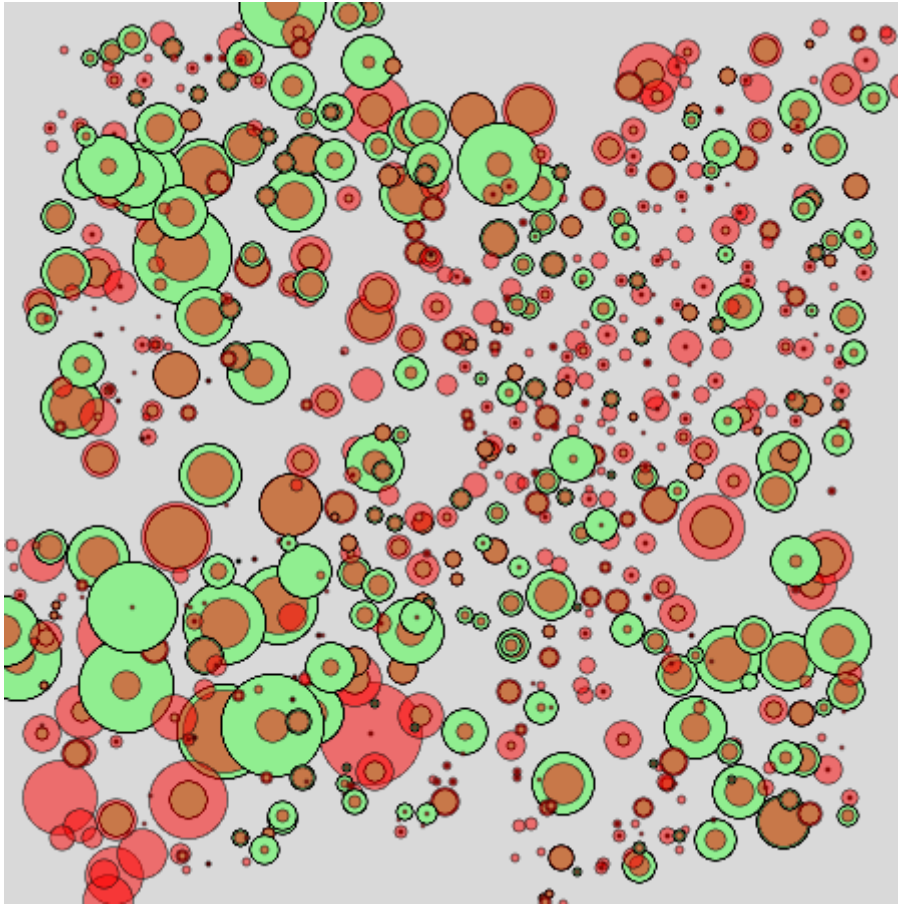
### Removed tree microhabitats by code (N removed)



### 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 <sup>2</sup> )	Volume (m <sup>3</sup> )	Economic value (€)	Habitat value (pts.)	Reason
common beech (327) Fagus sylvatica	42.6	0.14	1.7	146	66	Competitor
common beech (505) Fagus sylvatica	36.2	0.1	1.1	92	6	Competitor
common beech (418) Fagus sylvatica	34.9	0.1	1.1	90	52	Competitor
common beech (272) Fagus sylvatica	34.7	0.1	1.1	92	42	Competitor
common beech (49) Fagus sylvatica	34.5	0.09	1.1	95	42	Competitor
common beech (414) Fagus sylvatica	34.2	0.09	0.8	73	0	Competitor
common beech (396) Fagus sylvatica	33.5	0.09	0.9	77	12	Regeneration
common beech (367) Fagus sylvatica	33.3	0.09	1	85	9	Competitor
common beech (419) Fagus sylvatica	33.1	0.09	1	89	54	Regeneration
common beech (216) Fagus sylvatica	33	0.09	0.9	80	48	Competitor
common beech (169) Fagus sylvatica	31.3	0.08	0.8	70	0	Competitor
common beech (291) Fagus sylvatica	30.8	0.08	0.8	67	132	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 (293) Fagus sylvatica	29	0.07	0.8	69	0	Competitor
common beech (395) Fagus sylvatica	28.9	0.07	0.7	57	60	Regeneration
common beech (343) Fagus sylvatica	28.7	0.07	0.6	53	20	Competitor
common beech (104) Fagus sylvatica	28.5	0.06	0.7	60	12	Competitor
common beech (294) Fagus sylvatica	28.5	0.06	0.7	57	0	Competitor
common beech (102) Fagus sylvatica	28.5	0.06	0.6	52	6	Competitor

Tree	DBH (cm)	Basal area (m <sup>2</sup> )	Volume (m <sup>3</sup> )	Economic value (€)	Habitat value (pts.)	Reason
common beech (351) Fagus sylvatica	28.2	0.06	0.7	59	36	Competitor
common beech (325) Fagus sylvatica	28.2	0.06	0.7	58	15	Competitor
common beech (103) Fagus sylvatica	28	0.06	0.6	52	12	Competitor
common beech (281) Fagus sylvatica	26.2	0.05	0.6	54	0	Competitor
common beech (252) Fagus sylvatica	26.2	0.05	0.5	40	0	Competitor
common beech (560) Fagus sylvatica	25.7	0.05	0.6	47	0	Competitor
common beech (422) Fagus sylvatica	25.5	0.05	0.5	44	65	Regeneration
common beech (81) Fagus sylvatica	25.2	0.05	0.5	44	6	Competitor
common beech (634) Fagus sylvatica	24.8	0.05	0.6	50	14	Competitor
common beech (441) Fagus sylvatica	24.2	0.05	0.5	43	33	Regeneration
common beech (437) Fagus sylvatica	24.1	0.05	0.5	44	18	Competitor
common beech (458) Fagus sylvatica	23.8	0.04	0.5	43	12	Competitor
common beech (523) Fagus sylvatica	23.6	0.04	0.6	50	0	Competitor
common beech (68) Fagus sylvatica	23.3	0.04	0.4	35	36	Competitor
common beech (398) Fagus sylvatica	23.3	0.04	0.5	39	12	Regeneration
common beech (352) Fagus sylvatica	22.4	0.04	0.4	36	24	Competitor
common beech (310) Fagus sylvatica	22.4	0.04	0.4	31	0	Competitor
common beech (439) Fagus sylvatica	22	0.04	0.4	35	68	Regeneration
common beech (425) Fagus sylvatica	22	0.04	0.4	35	0	Competitor
common beech (440) Fagus sylvatica	21.7	0.04	0.4	32	0	Regeneration

Tree	DBH (cm)	Basal area (m <sup>2</sup> )	Volume (m <sup>3</sup> )	Economic value (€)	Habitat value (pts.)	Reason
common beech (90) Fagus sylvatica	21	0.04	0.3	26	0	Competitor
common beech (413) Fagus sylvatica	20.3	0.03	0.3	23	12	Competitor
common beech (324) Fagus sylvatica	19.5	0.03	0.3	27	6	Competitor
common beech (360) Fagus sylvatica	19.5	0.03	0.3	23	72	Competitor
common beech (80) Fagus sylvatica	19.4	0.03	0.3	24	0	Competitor
common beech (442) Fagus sylvatica	19.2	0.03	0.3	24	3	Regeneration
common beech (404) Fagus sylvatica	19.2	0.03	0.3	25	36	Regeneration
common beech (416) Fagus sylvatica	18.8	0.03	0.3	23	12	Competitor
common beech (561) Fagus sylvatica	17.2	0.02	0.2	21	3	Competitor
common beech (420) Fagus sylvatica	16.3	0.02	0.2	15	0	Regeneration
common beech (457) Fagus sylvatica	15.9	0.02	0.2	20	12	Competitor
common beech (326) Fagus sylvatica	15	0.02	0.2	15	6	Competitor
common beech (461) Fagus sylvatica	14.7	0.02	0.1	10	12	Regeneration
common beech (399) Fagus sylvatica	14.4	0.02	0.1	11	16	Regeneration

## Retention trees

Tree	DBH (cm)	Basal area (m <sup>2</sup> )	Volume (m <sup>3</sup> )	Economic value (€)	Habitat value (pts.)	Reason
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 (430) Fagus sylvatica	57.1	0.26	3.2	272	134	Habitat tree
common beech (411) Fagus sylvatica	54.5	0.23	2.8	232	180	Habitat tree
common beech (150) Fagus sylvatica	53	0.22	2.4	207	104	Habitat tree
common beech (279) Fagus sylvatica	50.5	0.2	2.5	216	221	Habitat tree
common beech (522) Fagus sylvatica	48.2	0.18	1.9	159	129	Habitat tree
common beech (271) Fagus sylvatica	48.2	0.18	2.2	190	142	Habitat tree
common beech (629) Fagus sylvatica	46.8	0.17	2	166	136	Habitat tree
common beech (342) Fagus sylvatica	46.5	0.17	2.1	178	142	Habitat tree
sycamore maple (417) Acer pseudoplatanus	46	0.17	1.4	120	136	Habitat tree
common beech (231) Fagus sylvatica	44.5	0.16	1.6	138	192	Habitat tree
common beech (329) Fagus sylvatica	44.3	0.15	1.8	152	15	Veteran 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	Veteran tree
common beech (536) Fagus sylvatica	43	0.15	1.7	139	32	Diversity
common beech (215) Fagus sylvatica	42.9	0.15	2	167	125	Habitat tree
common beech (290) Fagus sylvatica	42.6	0.14	1.6	139	176	Habitat tree
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

Tree	DBH (cm)	Basal area (m <sup>2</sup> )	Volume (m <sup>3</sup> )	Economic value (€)	Habitat value (pts.)	Reason
sycamore maple (359) Acer pseudoplatanus	41	0.13	1.4	120	148	Elite tree
silver fir (412) Abies alba	40.4	0.13	1.4	122	0	Diversity
common beech (504) Fagus sylvatica	38.7	0.12	1.5	125	151	Habitat tree
common beech (559) Fagus sylvatica	37.4	0.11	1.3	112	137	Habitat tree
common beech (67) Fagus sylvatica	30.6	0.07	0.8	67	84	Elite tree