

Trout Creek ~ 500 yrs

Information for Researchers

Transects 170 m long x 17 m wide

Transect 2 is the focus transect with rigged trees

High clearance vehicle recommended.

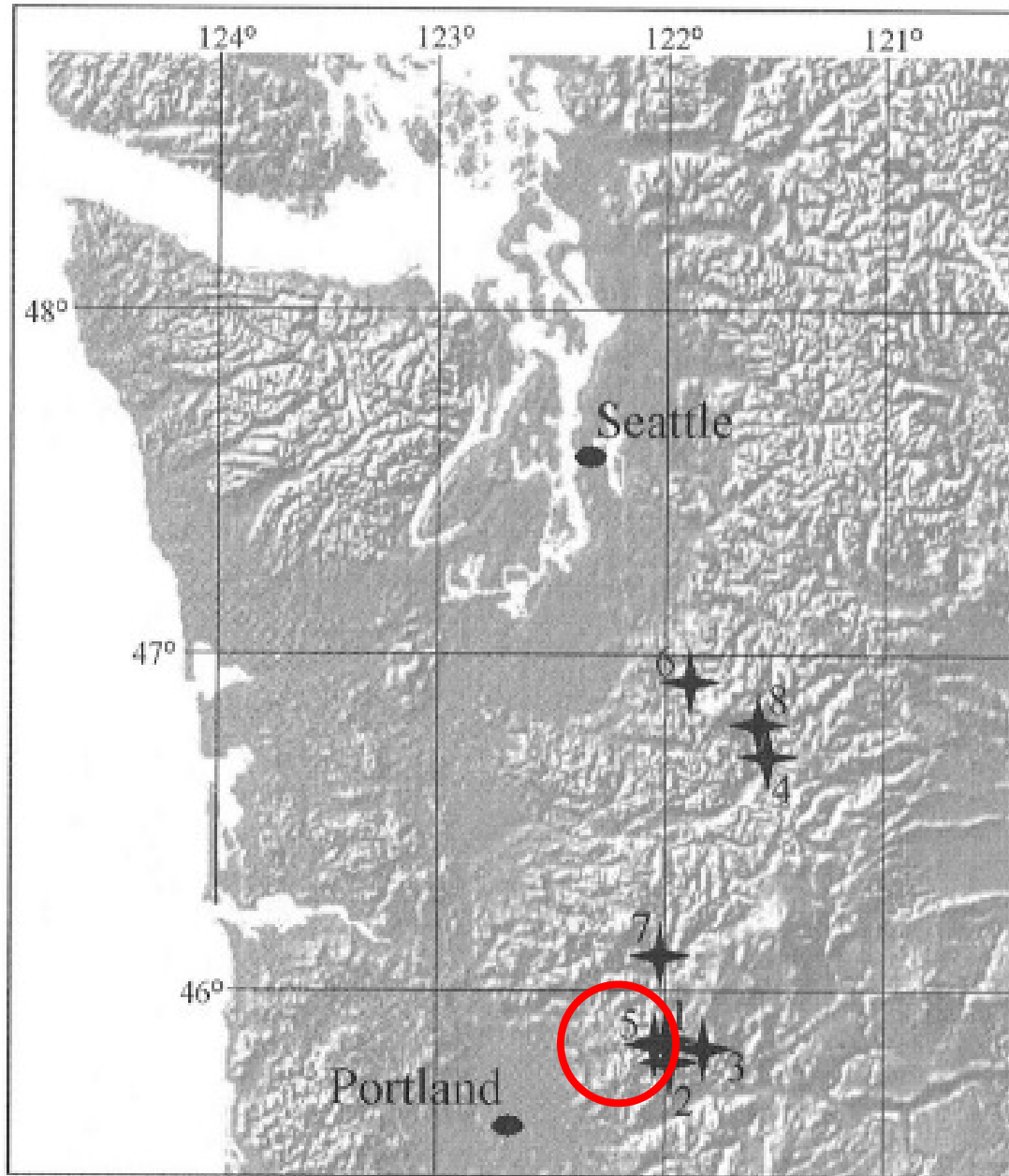
Forest Service combination required for gate lock to access sites. Ask Canopy Lab Members or the Wind River Canopy Crane Staff for the combination.

****Stem 200 is Rigged – but do NOT CLIMB – sounded hollow when taggd and lots of sapsucker holes in it**



Trout Creek

Trout Creek – Site #5 (Van Pelt & Nadkarni 2004)



- For information on permitting for this site contact Sarah Greene at the Forest Service. sgreene@fs.fed.us

Trout Creek General Information

- Lodging – Forest Service bunkhouses, or camping, or motels in Carson, WA.
- Nearest store is in Carson, WA (~ 8 miles south of Stabler on Wind River Road)
- Nearest hospital:
 - **Mount Hood Memorial Hospital**
(<http://www.providence.org/HoodRiver/default.htm>), 811
13th St, Hood River, OR 97031, US Phone: 1-800-955-3911.

Local Lodging

- Lodging for the Wind River sites is available in the Forest Service 'bunk' houses. Cost is 3.76 per person per night.

Contact Annie Hamilton:

annieh@u.washington.edu, 509-427-7028, to make reservations, ask questions about the lodging, etc.

- If the lodging is booked, then there are campgrounds and hotels nearby.

Campgrounds

Panther Creek Campground (USDA FS)

Wind River Ranger District

(<http://www.fs.fed.us/gpnf/recreation/campgrounds/sites/panther-creek.shtml>)

From Highway 14 take Wind River Road north through Carson 6 miles to Forest Road 65. Forest Road 65 4 miles to campground.

Beaver Campground (USDA FS)

Wind River Ranger District

(509) 427-3200

Reservation Phone: 8002802267

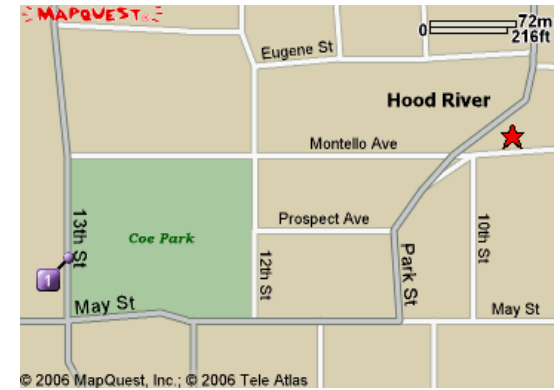


From SR 14, drive N from Carson for 13 mi along the Wind River Hwy.

Features: Shady river setting with large grassy field for day use

Closest Hospital

•Hood River Memorial (OR) Hospital is closest (~ 25 miles). There is another about the same distance on the Washington side in White Salmon Wa but it is not recommended!



Turn LEFT onto WA-14.

17.1 miles

Turn RIGHT onto HOOD RIVER BRIDGE (Portions toll).

1.0 miles

Merge onto I-84 W toward HOOD RIVER / PORTLAND.

0.3 miles

Take EXIT 63 toward HOOD RIVER / CITY CENTER.

0.1 miles

Turn LEFT onto 2ND ST.

0.1 miles

Turn RIGHT onto OAK ST / US-30 / OR-35.

0.6 miles

Turn LEFT onto 13TH ST.

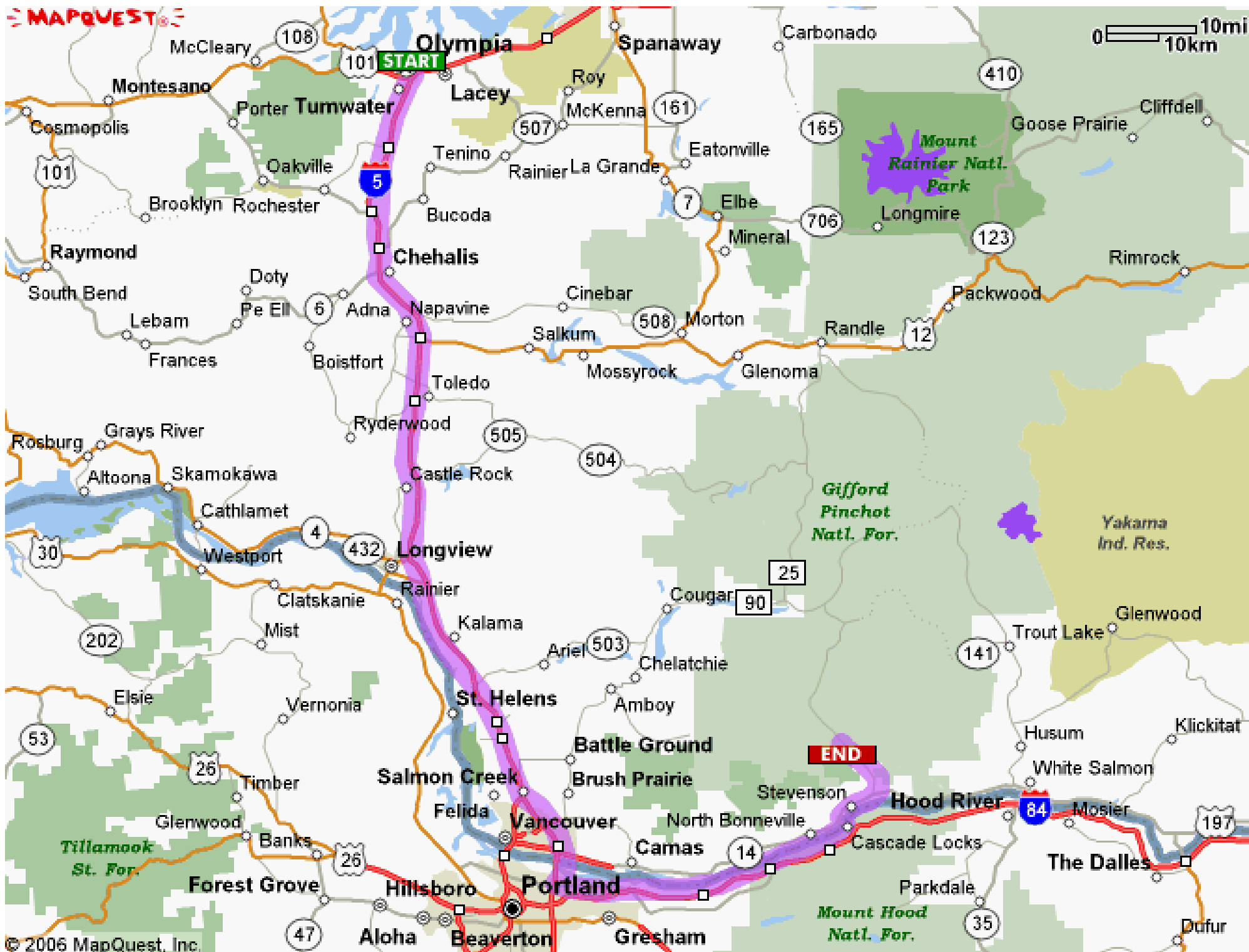
0.2 miles

End at **Hood River Memorial Hospital**

811 13th St, Hood River, OR 97031, US

Driving Directions

From Hwy 101, merge onto I-5 S toward PORTLAND	97 miles
Merge onto I-205 S via EXIT 7 toward WA-14 / SALEM / I-84.	14.7 miles
Merge onto I-84 E / US-30 E via EXIT 22 toward THE DALLES	34.6 miles
Take the US-30 exit- EXIT 44- toward CASCADE LOCKS / STEVENSON	0.3 miles
Stay STRAIGHT to go onto WA-NA-PA ST / US-30.	0.1 miles
Turn LEFT onto BRIDGE OF THE GODS (1.00 toll to cross this bridge)	0.3 miles
Turn RIGHT onto WA-14 / EVERGREEN HWY. Continue to follow WA-14. You will go through Stevenson.	5.9 miles
Turn SLIGHT LEFT onto WIND RIVER RD and continue on the main road (Wind River HWY) to Stabler. You will pass through Carson. The sign to turn onto Wind River Road will mention that you are heading into the Wind River Recreation Area.	8.5 miles
In Stabler turn left onto Hemlock Road. Cross over the Wind River and continue to the Wind River Work Center.	1.2 miles
Turn right just past the Wind River Work Center onto Road #43 (the road that goes to the Wind River Canopy Crane) – continue straight on this road (i.e. do not turn off or follow anymore of the Canopy Crane signs) until you reach a road on the right (north) side of the road - Road # 4303. There is a GATE that you will need to get the combination for from us.	3.2 miles
Turn right onto Road 4303 and follow to the first road on your left – Road #412.	0.35 miles
Turn left onto 412 road and follow to the far end of the clearcut that abuts a patch of old-growth on your left (south) side of the road. There is an old pull-out on the north side of the road that is filling in with young PSME's. Park here to access T3 and T4 which are up an old trail that heads north from the pullout.	0.5 miles
Note: High clearance recommended for the stretch on 43 as there are numerous waterbars, Forest Service combination required to access gated Road 4303.	

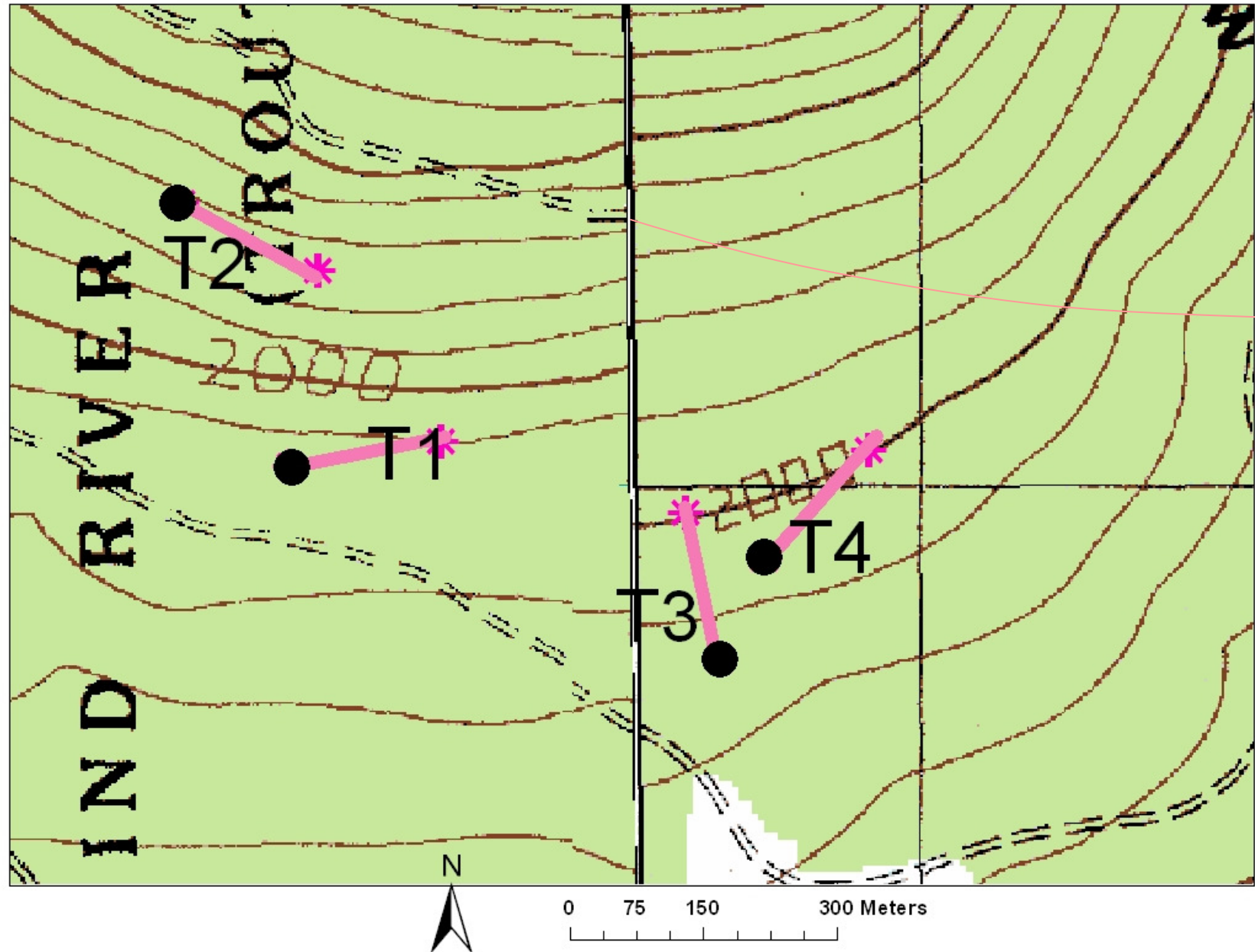


Transect Locations

T1	T1 is located north of the road, and is accessed by parking near the west end of the boundary of the old-growth patch on the south-side of the road (or just walk up from where you parked the car for T3 & T4). There is a silver rectangular tag on a ~ 30 cm dbh ABAM that is adjacent to the road. Travel ~ 100 m due North from this tree to the start of T1.
T2	<p>This is the focus transect with rigged trees. This is the only transect that is accessed from road 413, rather than 412. Drive back out to road 4303 and turn left and continue up to your next road on the left (~0.5 miles), which is road 413 and turn left. Follow this road ~ 0.9 miles to the entrance to T2 on the south side of the road. There is a silver rectangular tag on a ~ 25 cm dbh ABAM that has a basal scar on it. From this tree travel ~ 130 m at a bearing of 225 degrees to the start of T2.</p> <p>(?Alternatively – by staying on the south road, from the west side of T1 travel ~ 220 m North to the east side of T2.)</p>
T3	This transect is located north of the road, at the west-end of the clearcut that is on the south-side of the road. There is an overgrown pullout on the north side of the road with an old path that should lead you north to T3 (&T4). There is a silver rectangular tag on a big PSME that is adjacent to the road. From this tree travel ~ 120 m directly North to the start of T3.
T4	This transect is located north of the road, at the west-end of the clearcut that is on the south-side of the road. There is an overgrown pullout on the north side of the road with an old path that should lead you north to T3 (&T4). There is a silver rectangular tag on a big PSME that is adjacent to the road. From this tree travel ~120 m directly North to the start of T3. From the start of T3 now travel ~ 135 m at a bearing of 18 degrees to the start of T4.
	Note: Paths to all transects should be flagged red, Transects are 170m long x 17 m wide. Transect 2 is the rigged transect. Combination needed to access these roads. High clearance vehicle recommended.

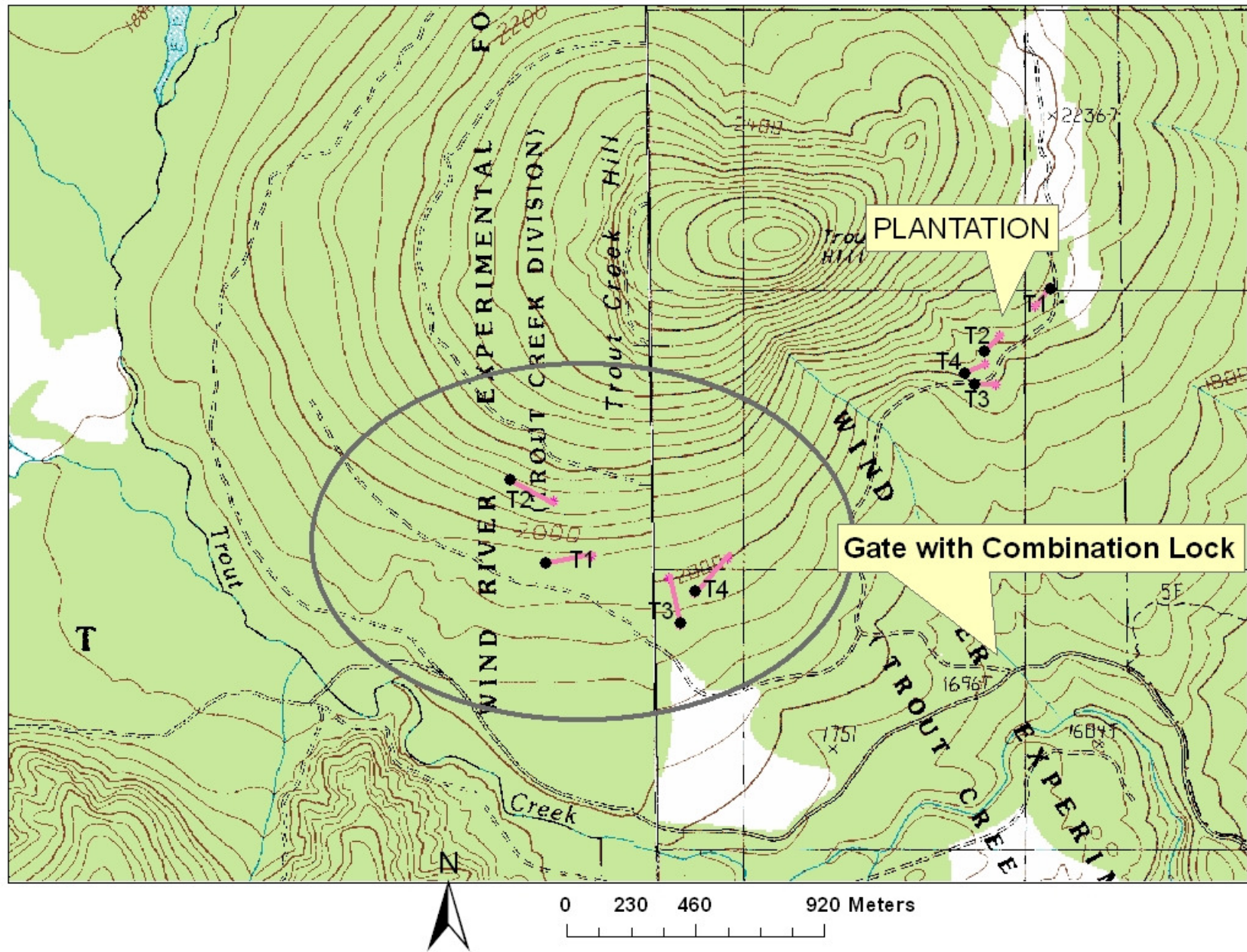
Trout Creek

– Black dot indicates start of transect
Note roads on maps aren't accurate – the upper road and the road on the east join up

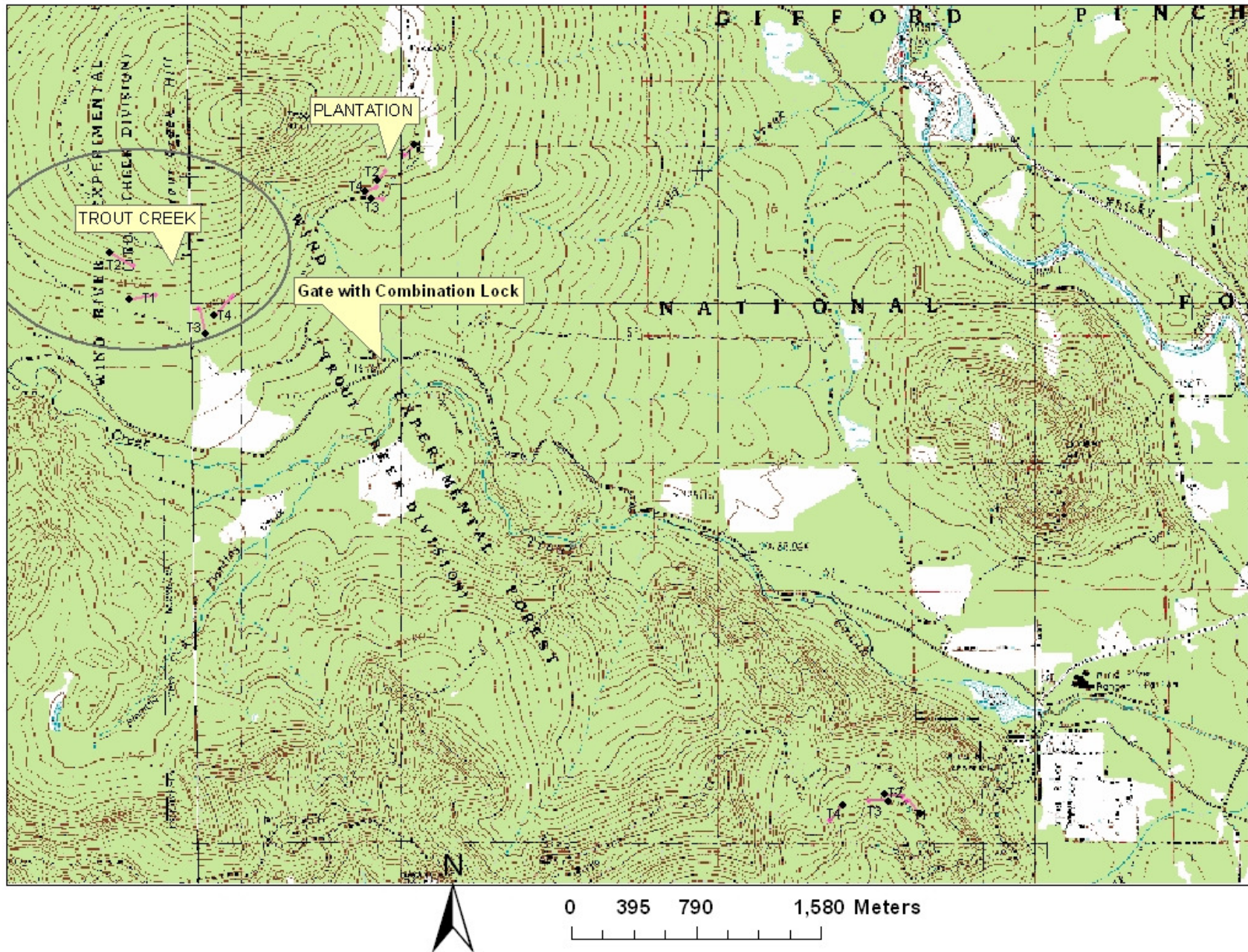


Trout Creek

— Note roads on maps aren't accurate — the upper road and the road on the east join up



Trout Creek — Note roads on maps aren't accurate — they don't end as shown, but continue instead



Trout Creek

Rain Bucket location

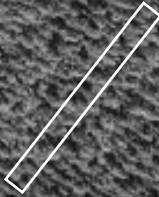
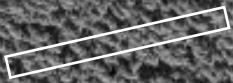
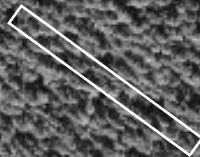


Table 1. Summary of site characteristics. The Carbon River stand is on an alluvial flat, and the Cedar Flats stand is on swampy ground, thus reducing a need for summer precipitation at both sites. Precipitation data does not include condensation from fog, which can add 10–30% at all of these sites.

Site	Elevation (m)	Age	Slope (% aspect)	Plant association*	Precipitation (cm)			Temp (°C) (annual Ave.)
					Ann.	July–Sep.	Snowfall	
PL Plantation	624	50	0–15% SE	<i>TSHE/BENE</i>	253	12	233	0–17.5 (8.0)
MC Martha Creek	582	100	5–20% S	<i>TSHE/BENE/GASH</i>	253	12	233	0.6–17.8 (8.5)
PC Panther Creek	732	157	0–15% W	<i>TSHE/BENE/GASH</i>	264	13	254	0–17.5 (7.8)
OH Ohanepecosh	622	~280	0–10% SW	<i>TSHE/ACTR</i>	197	14	385	2.2–14.2 (7.9)
TC Trout Creek	613	~500	0–10% S	<i>TSHE/VAAL/GASH</i>	253	12	233	0–17.5 (8.0)
CR Carbon River	607	~500	0%	<i>TSHE/POMU/OXOR</i>	346	18	137	3.1–11.8 (7.5)
CF Cedar Flats	411	~650	0%	<i>TSHE/TITR</i>	317	20	77	5.0–14.4 (9.7)
CH Chinook	841	~950	0%	<i>ABAM/VAAL</i>	210	17	462	–0.6 –13.8 (6.6)

* Based on Topik et al. 1986 and Franklin et al. 1988. *TSHE*, *Tsuga heterophylla*; *BENE*, *Berberis nervosa*; *GASH*, *Gaultheria shallon*; *ACTR*, *Achlys triphylla*; *VAAL*, *Vaccinium alaskaense*; *POMU*, *Polystichum munitum*; *OXOR*, *Oxalis oregana*; *TITR*, *Tiarella trifoliata*.

Trout Creek UTM's

May be inaccurate – unknown datum

	Stand	Transect	Easting	Northing	Angle	Length
TC	T1		577186	5075229	81	170
			577354	5075256		
TC	T2		577063	5075524	116	170
			577216	5075449		
TC	T3		577669	5075011	347	170
			577630	5075176		
TC	T4		577718	5075124	44	170
			577836	5075246		

Trout Creek Transect 1

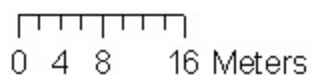
Live tagged trees $\geq 25\text{cm}$ dbh in green



170 m long x 17 m wide
angle = 81 degrees



1 centimeter equals 7.227352 meters

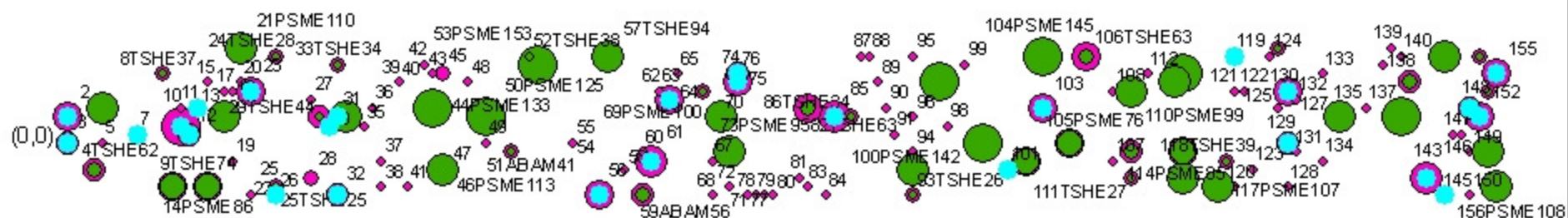
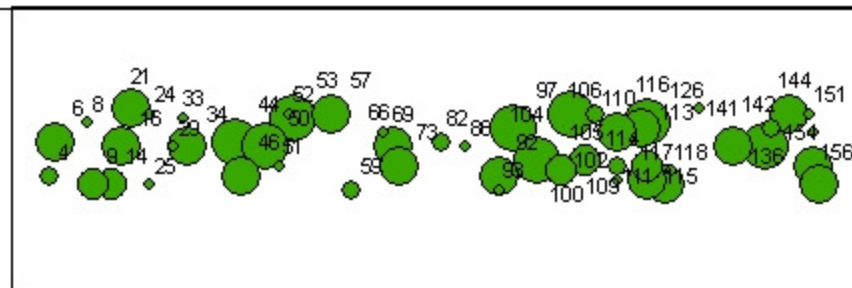


TC_T1_tagged Events

DBH

- 25 - 45
- 46 - 76
- 77 - 114
- 115 - 167

Trout Creek Transect 1 (all trees)
 Live tagged trees $\geq 25\text{cm}$ dbh in green
 Dead trees highlighted in blue



170 m long x 17 m wide
 angle = 81 degrees

1 centimeter equals 7.217079 meters



0 4.5 9 18 Meters

TC_T1_tagged Events TC_T1_all Events

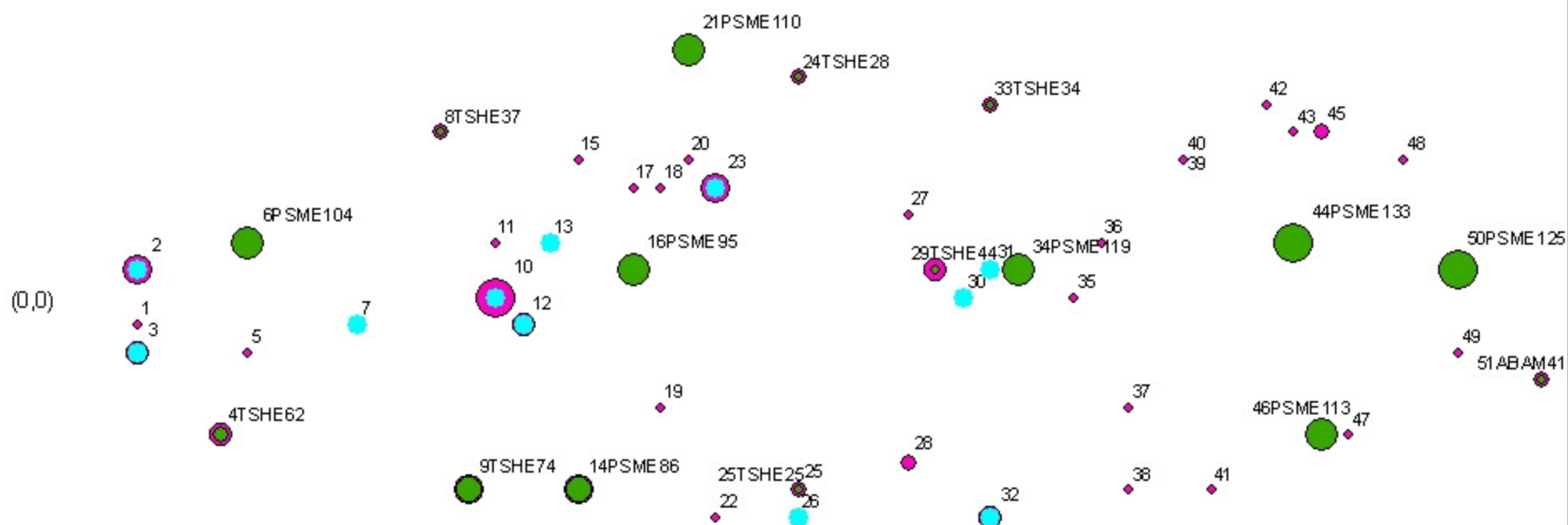
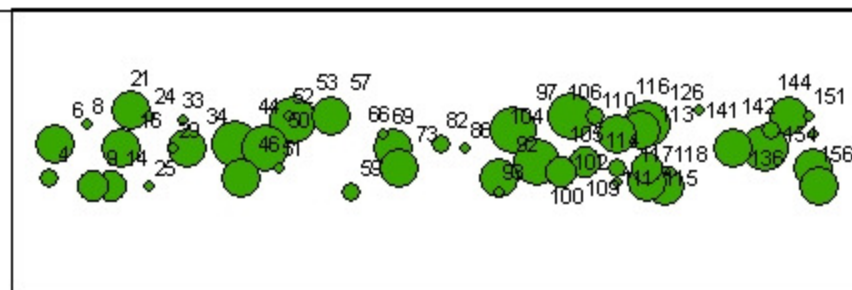
DBH

- 25 - 44
- 45 - 63
- 64 - 86
- 87 - 119
- 120 - 167

DBH

- 5 - 24
- 25 - 44
- 45 - 63
- 64 - 86
- 87 - 119
- 120 - 167

Trout Creek Transect 1 (all trees)
 Live tagged trees $\geq 25\text{cm}$ dbh in green
 Dead trees highlighted in blue



170 m long x 17 m wide
 angle = 81 degrees

1 centimeter equals 2.283529 meters



0 1.5 3 6 Meters

TC_T1_tagged Events TC_T1_all Events

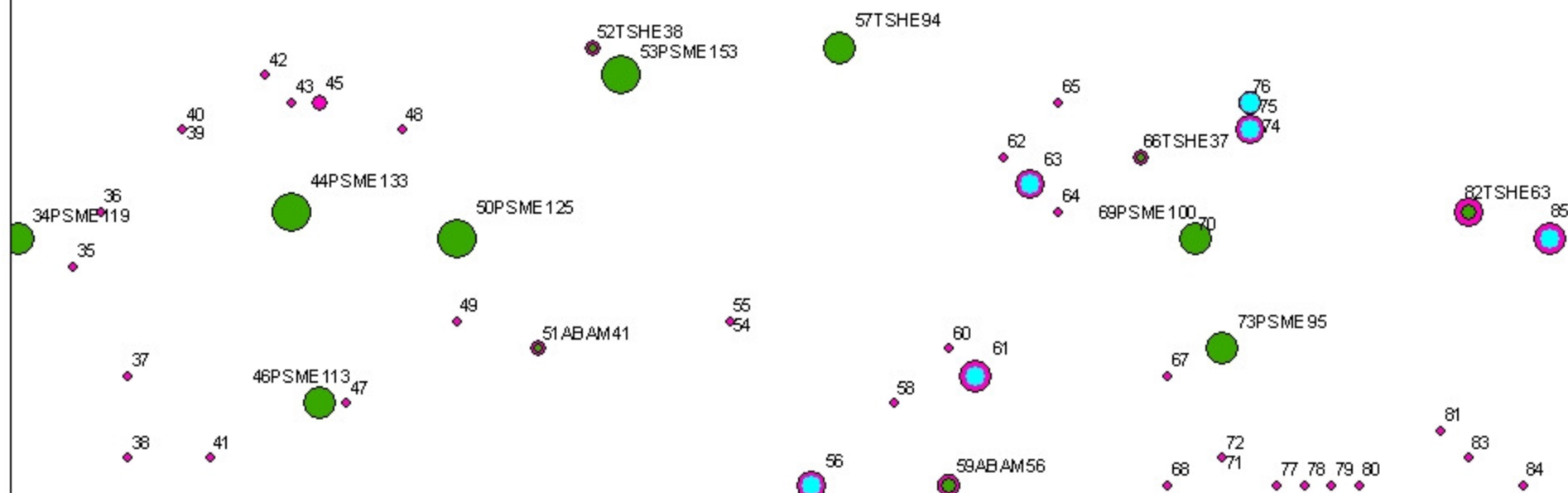
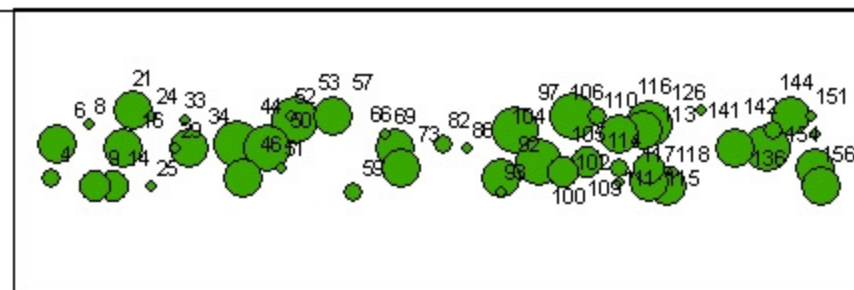
DBH

- 25 - 44
- 45 - 63
- 64 - 86
- 87 - 119
- 120 - 167

DBH

- 5 - 24
- 25 - 44
- 45 - 63
- 64 - 86
- 87 - 119
- 120 - 167

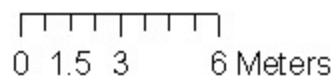
Trout Creek Transect 1 (all trees)
 Live tagged trees $\geq 25\text{cm}$ dbh in green
 Dead trees highlighted in blue



170 m long x 17 m wide
 angle = 81 degrees



1 centimeter equals 2.283529 meters



TC_T1_tagged Events TC_T1_all Events

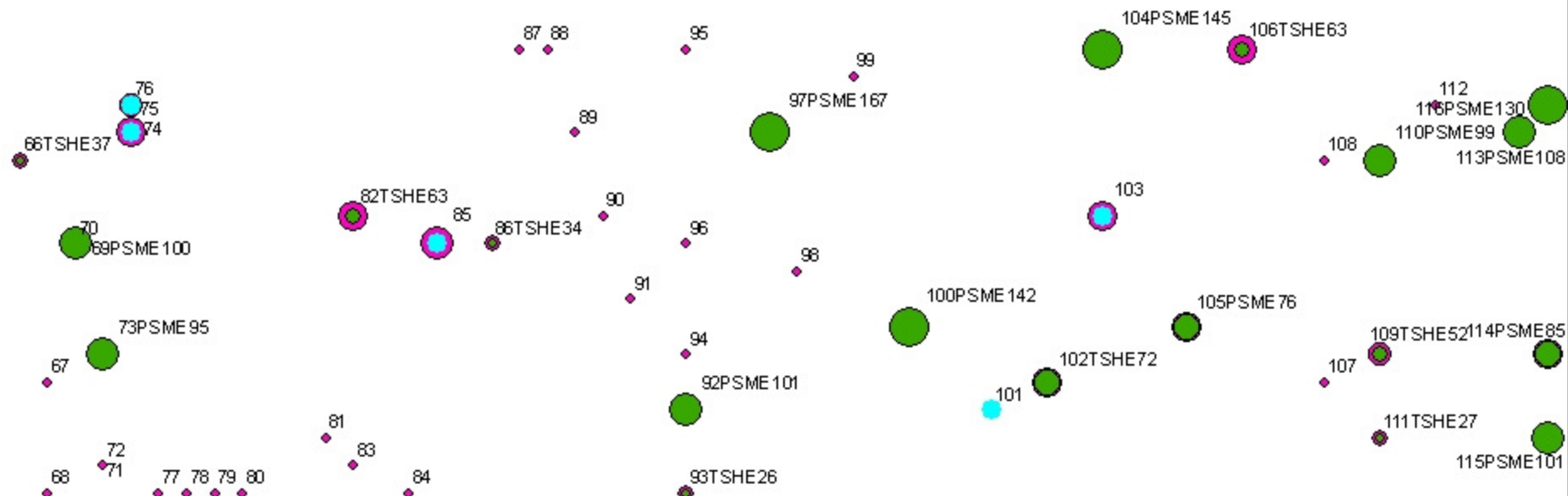
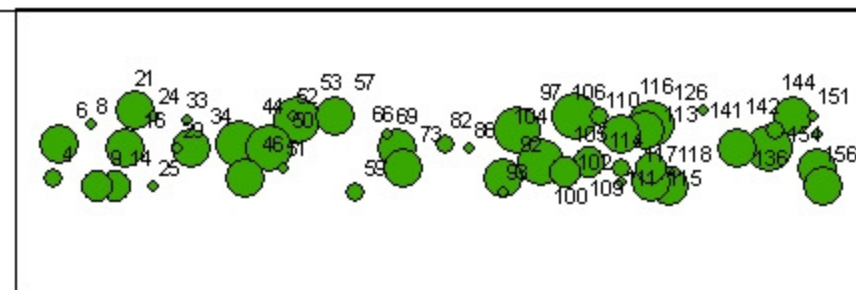
DBH

- 25 - 44
- 45 - 63
- 64 - 86
- 87 - 119
- 120 - 167

DBH

- 5 - 24
- 25 - 44
- 45 - 63
- 64 - 86
- 87 - 119
- 120 - 167

Trout Creek Transect 1 (all trees)
 Live tagged trees $\geq 25\text{cm}$ dbh in green
 Dead trees highlighted in blue



170 m long x 17 m wide
 angle = 81 degrees



1 centimeter equals 2.283529 meters

0 1.5 3 6 Meters

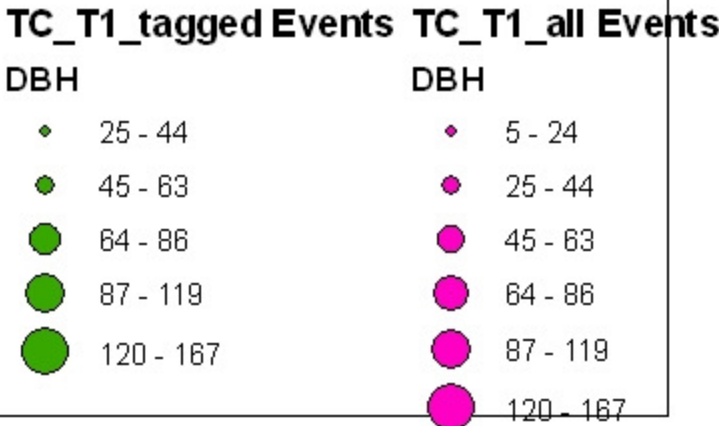
TC_T1_tagged Events TC_T1_all Events

DBH

- 25 - 44
- 45 - 63
- 64 - 86
- 87 - 119
- 120 - 167

DBH

- 5 - 24
- 25 - 44
- 45 - 63
- 64 - 86
- 87 - 119
- 120 - 167



Trout Creek Transect 2

Live tagged trees $\geq 25\text{cm}$ dbh in green

Red triangles highlight rigged trees



170 m long x 17 m wide
angle = 116 degrees



1 centimeter equals 7.447698 meters



Legend

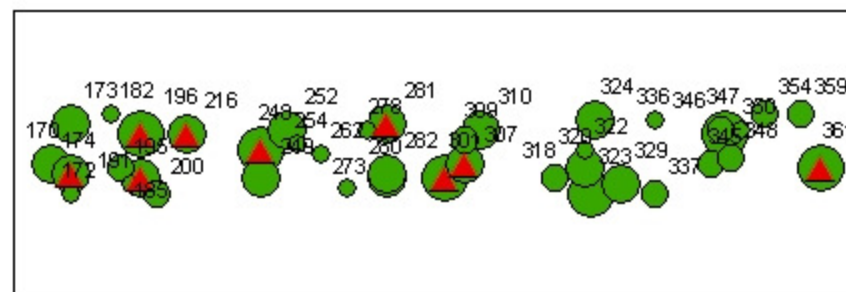
TC_T2_tagged Events

DBH

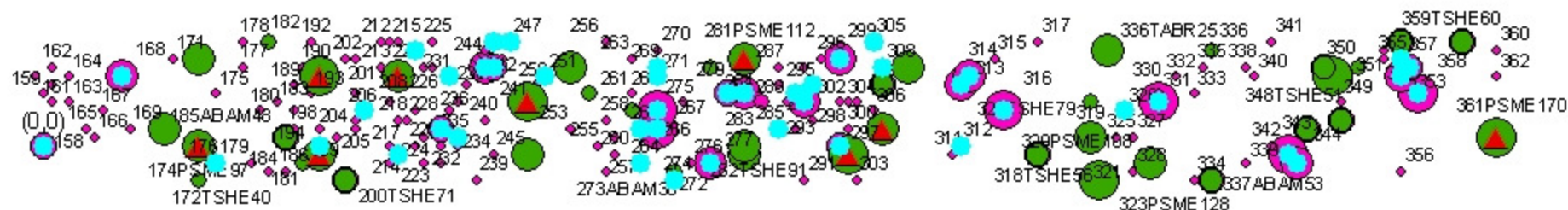
- 25 - 40
- 41 - 74
- 75 - 119
- 120 - 170

▲ TC_T2_tagged Events selection

Trout Creek Transect 2 (all trees)
 Live tagged trees ≥ 25 cm dbh in green
 Dead trees highlighted in blue
 Red triangles mark the rigged trees



****Stem 200 is Rigged – but do NOT CLIMB – sounded hollow when tagged and lots of sapsucker holes in it**



170 m long x 17 m wide
 angle = 116 degrees

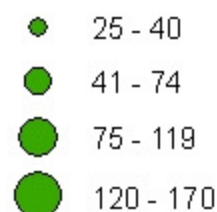


1 centimeter equals 7.447698 meters

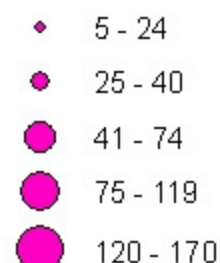


TC_T2_tagged Events TC_T2_all Events

DBH

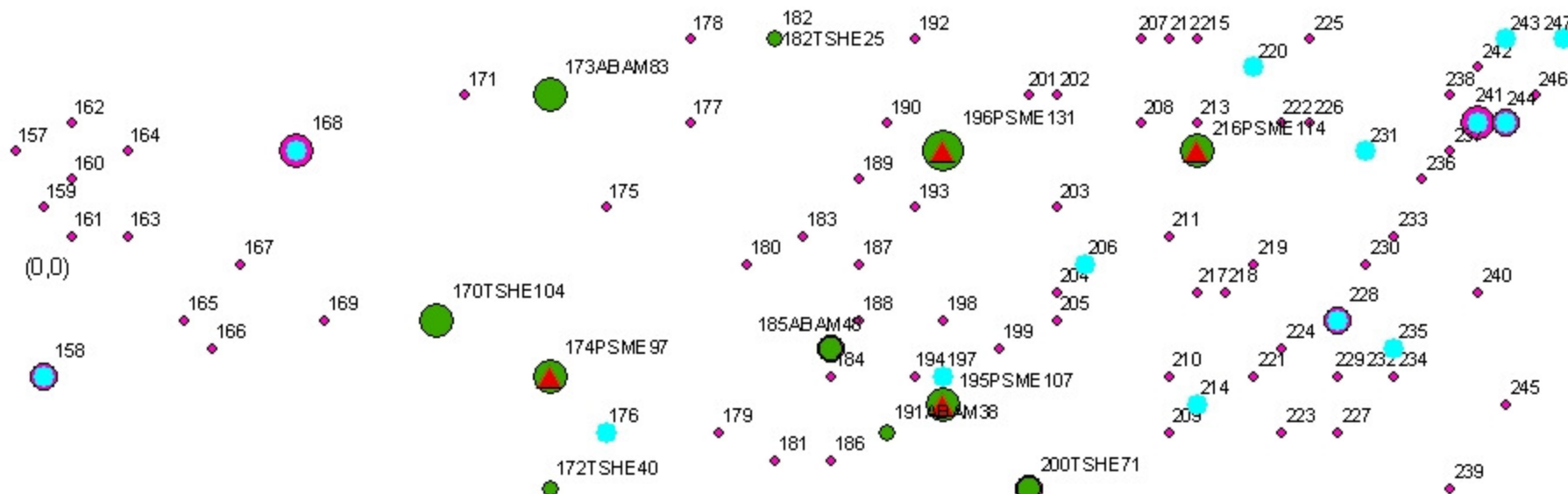
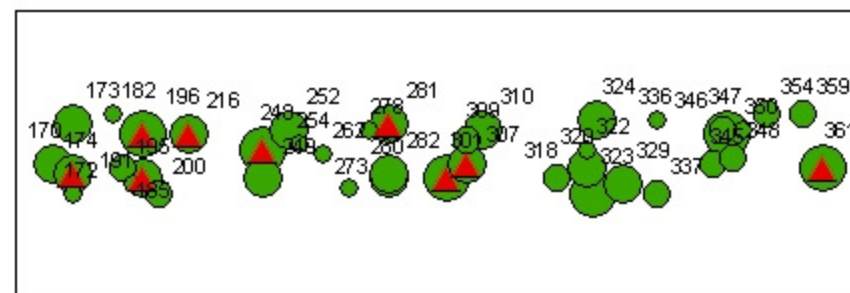


DBH

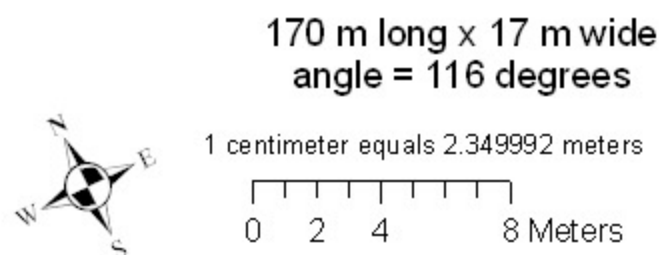


▲ TC T2 tagged Events s

Trout Creek Transect 2 (all trees)
 Live tagged trees ≥ 25 cm dbh in green
 Dead trees highlighted in blue
 Red triangles mark the rigged trees

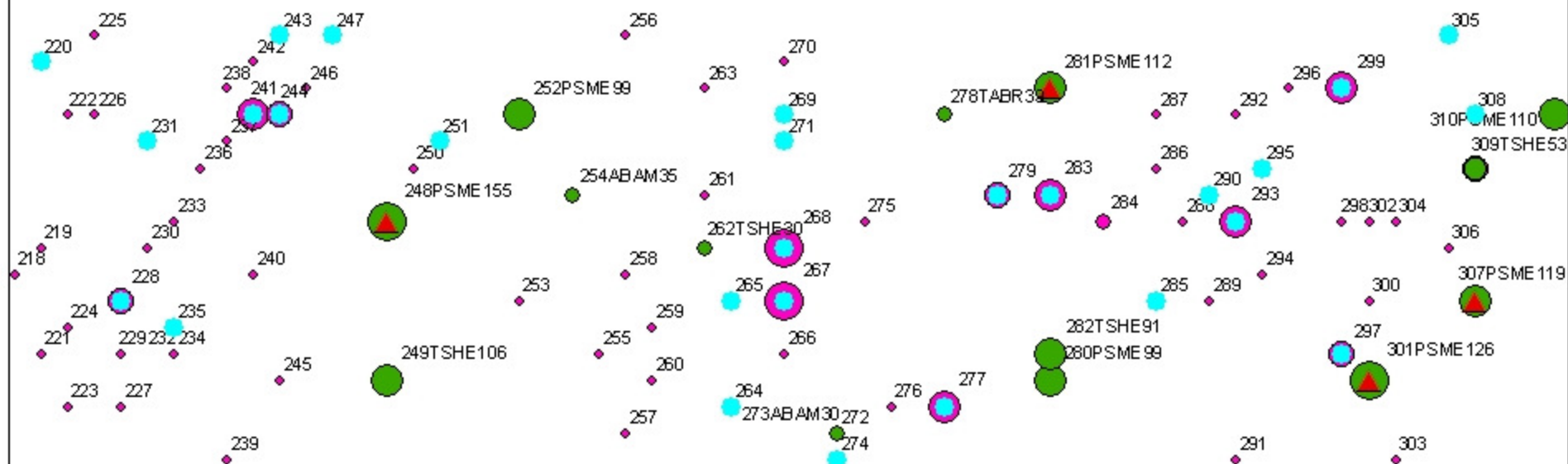
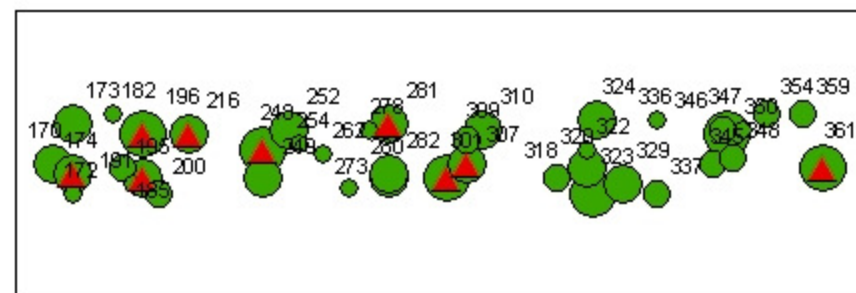


****Stem 200 is Rigged – but do NOT CLIMB – sounded hollow
 when tagged and lots of sapsucker holes in it**



TC_T2_tagged Events	TC_T2_all Events
DBH	DBH
● 25 - 40	● 5 - 24
● 41 - 74	● 25 - 40
● 75 - 119	● 41 - 74
● 120 - 170	● 75 - 119
	● 120 - 170
	▲ TC T2 tagged Events s

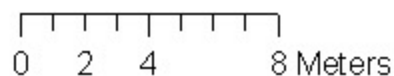
Trout Creek Transect 2 (all trees)
 Live tagged trees $\geq 25\text{cm}$ dbh in green
 Dead trees highlighted in blue
 Red triangles mark the rigged trees



170 m long x 17 m wide
 angle = 116 degrees

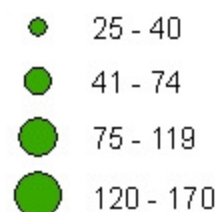


1 centimeter equals 2.349992 meters

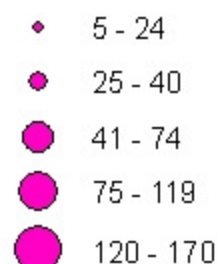


TC_T2_tagged Events TC_T2_all Events

DBH

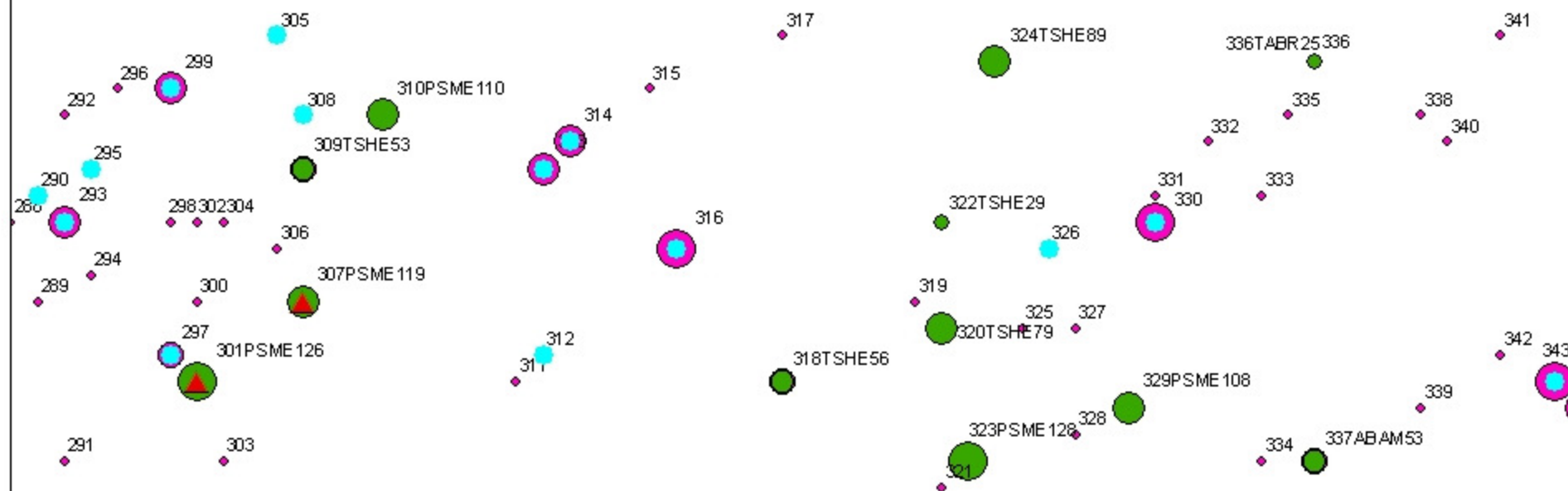
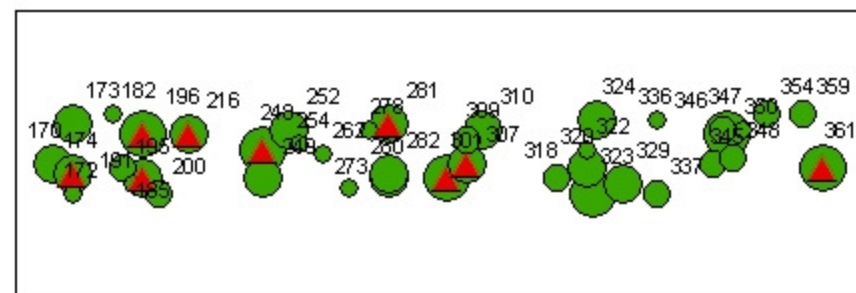


DBH



TC T2 tagged Events s

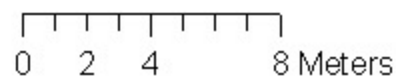
Trout Creek Transect 2 (all trees)
 Live tagged trees ≥ 25 cm dbh in green
 Dead trees highlighted in blue
 Red triangles mark the rigged trees



170 m long x 17 m wide
 angle = 116 degrees



1 centimeter equals 2.349992 meters



TC_T2_tagged Events **TC_T2_all Events**

DBH

- 25 - 40
- 41 - 74
- 75 - 119
- 120 - 170

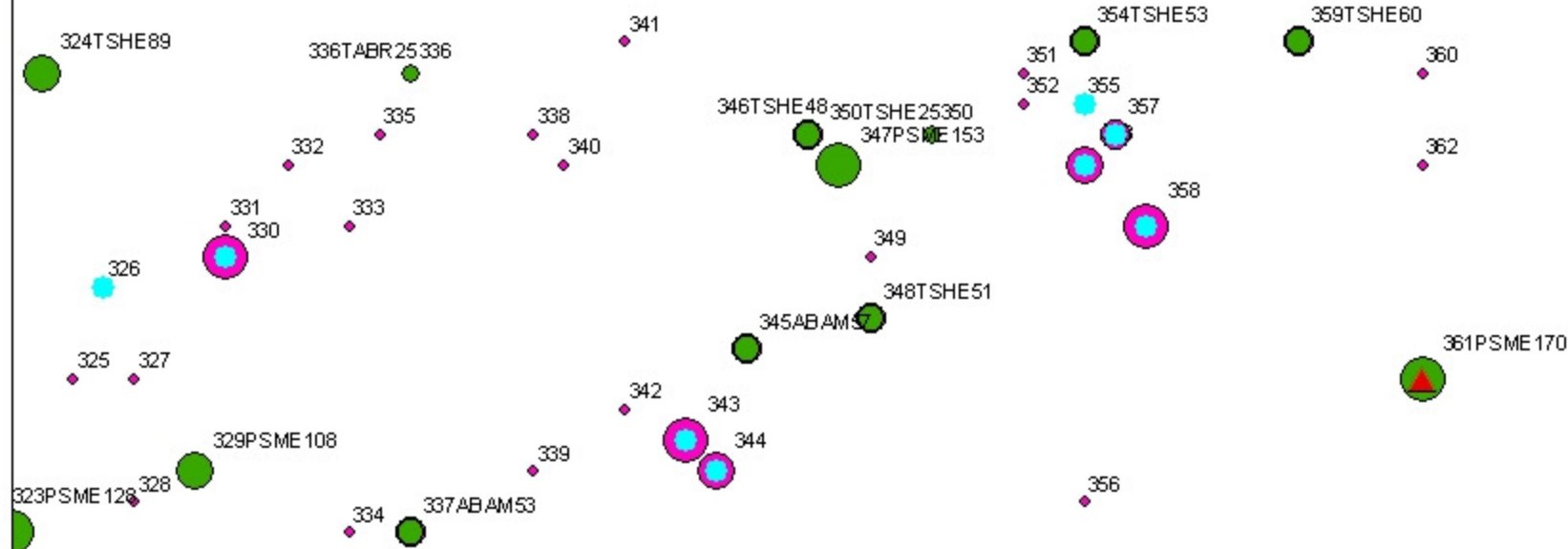
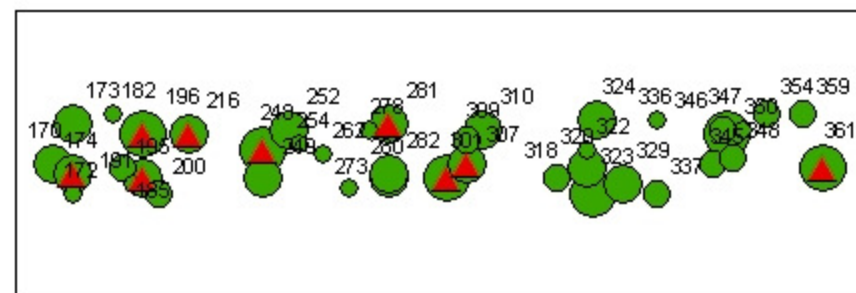
DBH

- ◆ 5 - 24
- ◆ 25 - 40
- ◆ 41 - 74
- ◆ 75 - 119
- ◆ 120 - 170



TC T2 tagged Events s

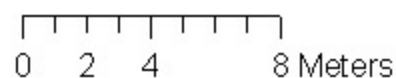
Trout Creek Transect 2 (all trees)
 Live tagged trees $\geq 25\text{cm}$ dbh in green
 Dead trees highlighted in blue
 Red triangles mark the rigged trees



170 m long x 17 m wide
 angle = 116 degrees



1 centimeter equals 2.349992 meters



TC_T2_tagged Events TC_T2_all Events

DBH

- 25 - 40
- 41 - 74
- 75 - 119
- 120 - 170

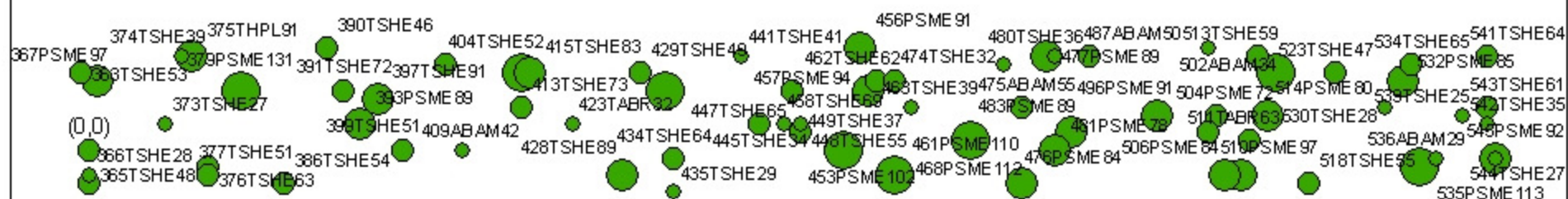
DBH

- 5 - 24
- 25 - 40
- 41 - 74
- 75 - 119
- 120 - 170



TC T2 tagged Events s

Live tagged trees ≥ 25 cm dbh in green



170 m long x 17 m wide
angle = 347 degrees

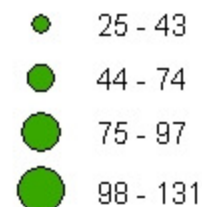
1 centimeter equals 7.359559 meters



Legend

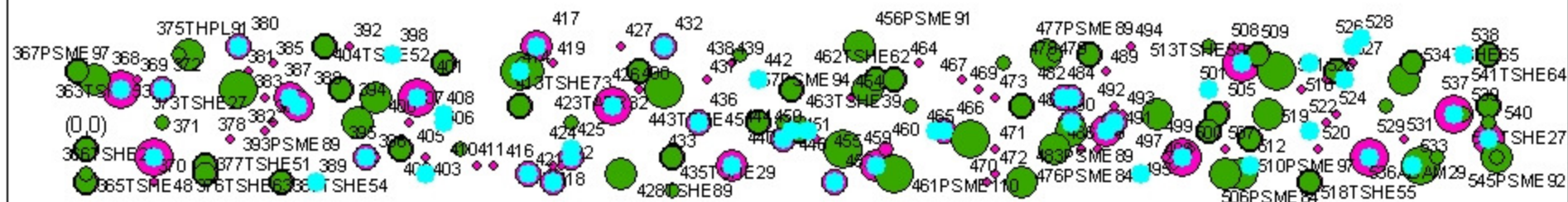
TC_T3_tagged Events

DBH



Trout Creek Transect 3 (all trees)

Live tagged trees $\geq 25\text{cm}$ dbh in green
Dead trees highlighted in blue



Legend

TC_T3_tagged Events TC_T3_all Events

DBH

- 25 - 43
- 44 - 74
- 75 - 97
- 98 - 131

DBH

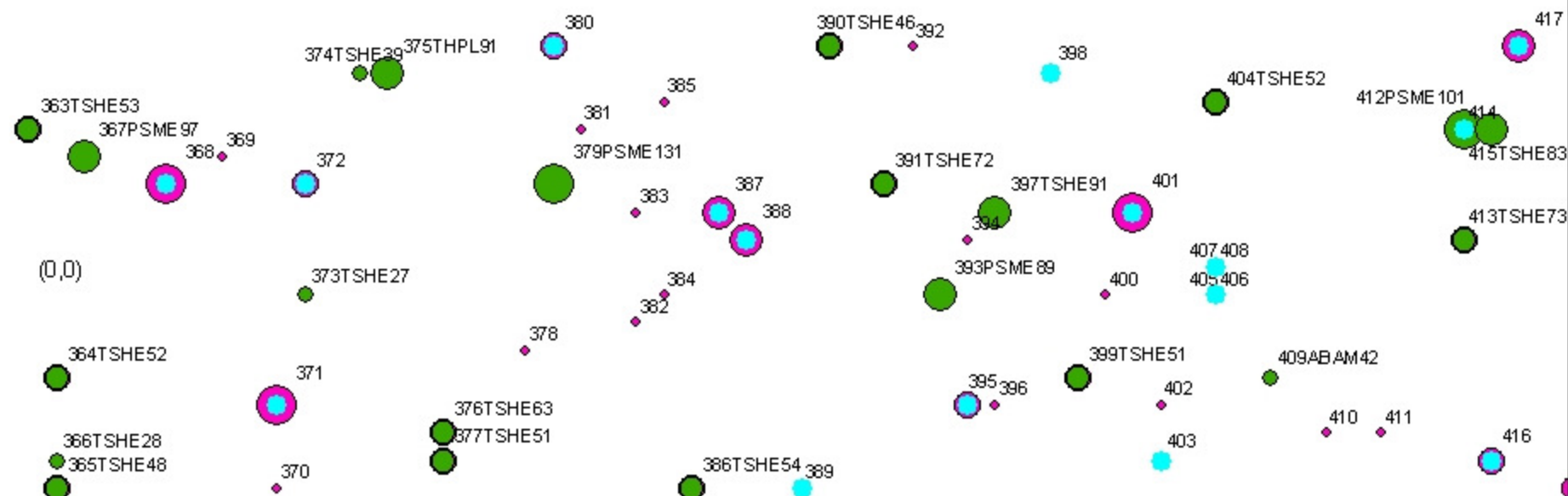
- ◆ 4 - 24
- ◆ 25 - 43
- ◆ 44 - 74
- ◆ 75 - 97
- ◆ 98 - 140

170 m long x 17 m wide
angle = 347 degrees

1 centimeter equals 7.349099 meters



Live tagged trees $\geq 25\text{cm}$ dbh in green
Dead trees highlighted in blue



(0,0)

170 m long x 17 m wide
angle = 347 degrees

1 centimeter equals 2.325301 meters







A horizontal number line with tick marks at 0, 2, 4, and 8. The text "8 Meters" is placed at the end of the line.

Legend

TC_T3_tagged Events	TC_T3_all Events
1	1
2	2
3	3
4	4
5	5
6	6
7	7
8	8
9	9
10	10
11	11
12	12
13	13
14	14
15	15
16	16
17	17
18	18
19	19
20	20
21	21
22	22
23	23
24	24
25	25
26	26
27	27
28	28
29	29
30	30
31	31
32	32
33	33
34	34
35	35
36	36
37	37
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78	78
79	79
80	80
81	81
82	82
83	83
84	84
85	85
86	86
87	87
88	88
89	89
90	90
91	91
92	92
93	93
94	94
95	95
96	96
97	97
98	98
99	99
100	100

DBH

 25 - 43
 44 - 74
 75 - 97
 98 - 131

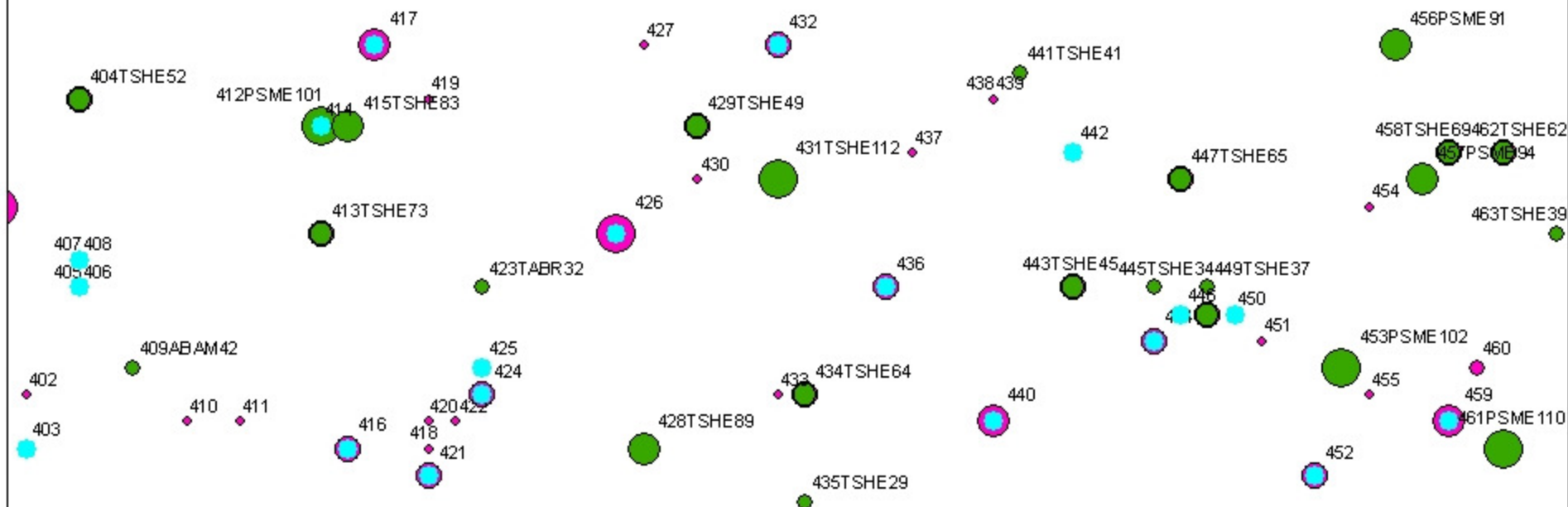
DBH

◆ 4 - 24
 ● 25 - 43
 ● 44 - 74
 ● 75 - 97
 ● 98 - 140

Trout Creek Transect 3 (all trees)

Live tagged trees $\geq 25\text{cm}$ dbh in green
Dead trees highlighted in blue

375THPL91 404TSHE52 429TSHE49 462TSHE62 487ABAM50 513TSHE59 541TSHE64
415TSHE74 457PSME94 483PSME89 521TSHE47 543PSME92
399TSHE51 434TSHE64 438TSHE69 466PSME84 483TSHE73
373TSHE74 409ABAM42 446TSHE55 487PSME94 514PSME80 541TSHE27
386TSHE54 428TSHE89 435TSHE29 518TSHE55



170 m long x 17 m wide
angle = 347 degrees

1 centimeter equals 2.325301 meters

0 2 4 8 Meters



Legend

TC_T3_tagged Events TC_T3_all Events

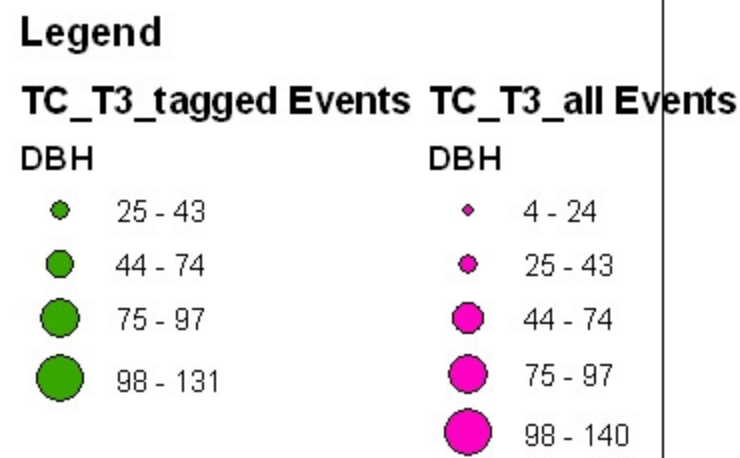
DBH

- 25 - 43
- 44 - 74
- 75 - 97
- 98 - 131

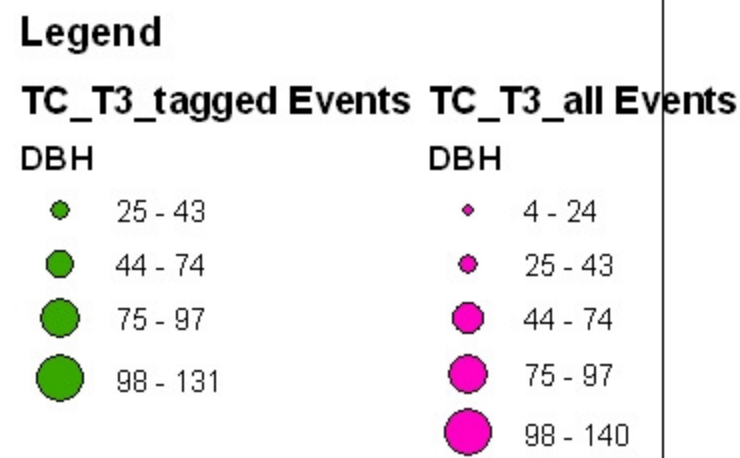
DBH

- 4 - 24
- 25 - 43
- 44 - 74
- 75 - 97
- 98 - 140

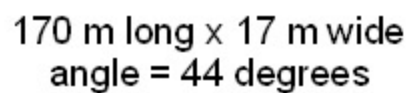
375THPL91 404TSHE52 429TSHE49 462TSHE62 487ABAM50 513TSHE59 541TSHE64
 415TSHE56 457PSME34 483PSME89 507TSHE65 523TSHE47 545PSME92
 399TSHE51 434L2HE64 468TSHE66 496PSME84 511PSME80 533TSHE61
 373TSHE27 402ABAM42 446TSHE55 461PSME76 514PSME80 541TSHE27
 386TSHE54 442TSHE89 435TSHE29 461PSME76 518TSHE55







375THPL91 404TSHE52 429TSHE49 462TSHE62 487ABAM50 513TSHE59 541TSHE64
 415TSHE56 457PSME34 483PSME89 507TSHE65 523TSHE47 545PSME92
 399TSHE51 434L2HE64 468TSHE66 496PSME84 511TSHE63 533TSHE61
 373TSHE27 402ABAM42 446TSHE55 461PSME76 514PSME80 531TSHE60 541TSHE27
 386TSHE54 442TSHE89 435TSHE29 461PSME76 518TSHE55



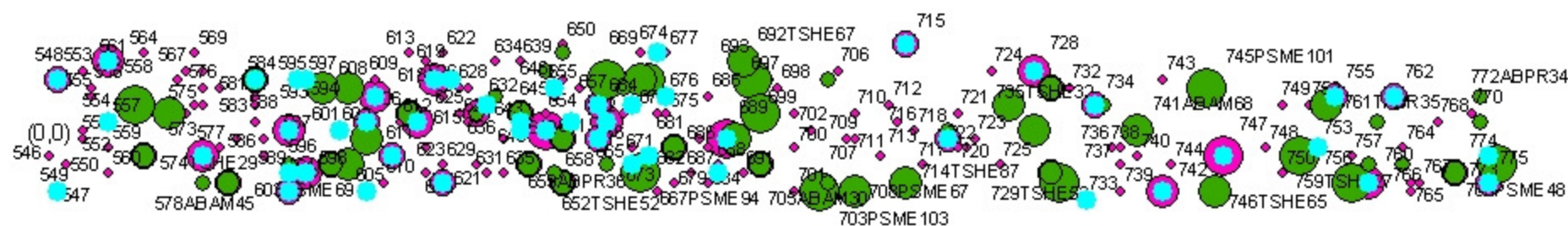
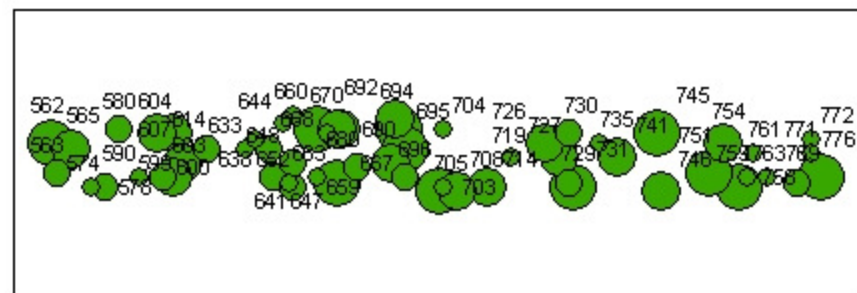
Live tagged trees ≥ 25 cm dbh in green



DBH

-  27 - 39
 40 - 59
 60 - 87
 88 - 122

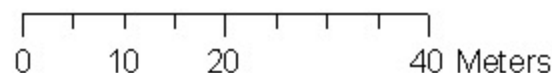
Trout Creek Transect 4 (all trees)
 Live tagged trees $\geq 25\text{cm}$ dbh in green
 Dead trees highlighted in blue



170 m long x 17 m wide
 angle = 44 degrees

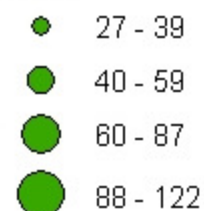


1 centimeter equals 7.447698 meters

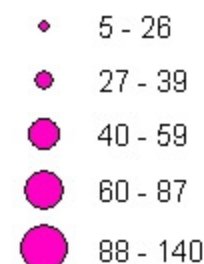


TC_T4_tagged Events TC_T4_all Events

DBH

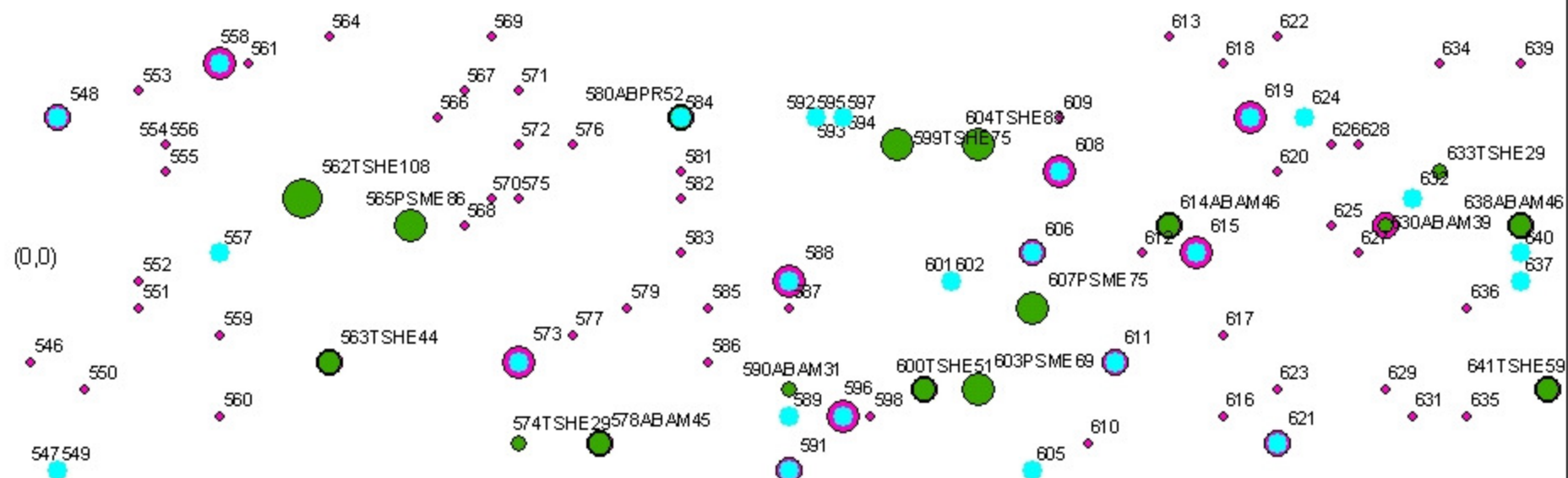
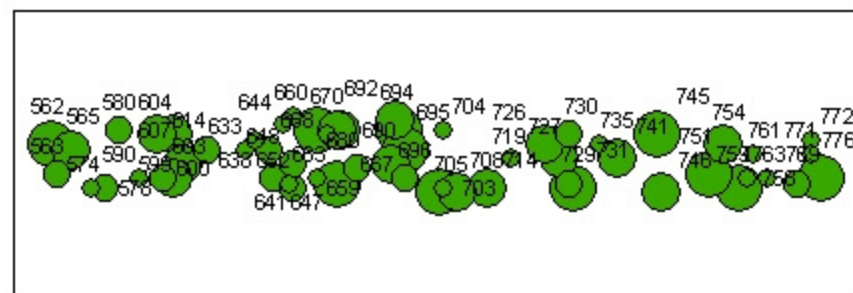


DBH



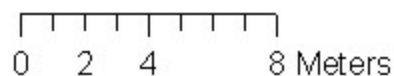
Trout Creek Transect 4 (all trees)

Live tagged trees $\geq 25\text{cm}$ dbh in green
Dead trees highlighted in blue



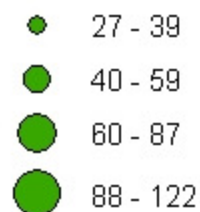
170 m long x 17 m wide
angle = 44 degrees

1 centimeter equals 2.353149 meters

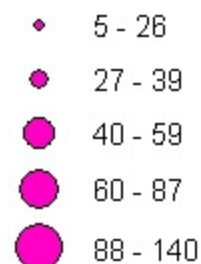


TC_T4_tagged Events TC_T4_all Events

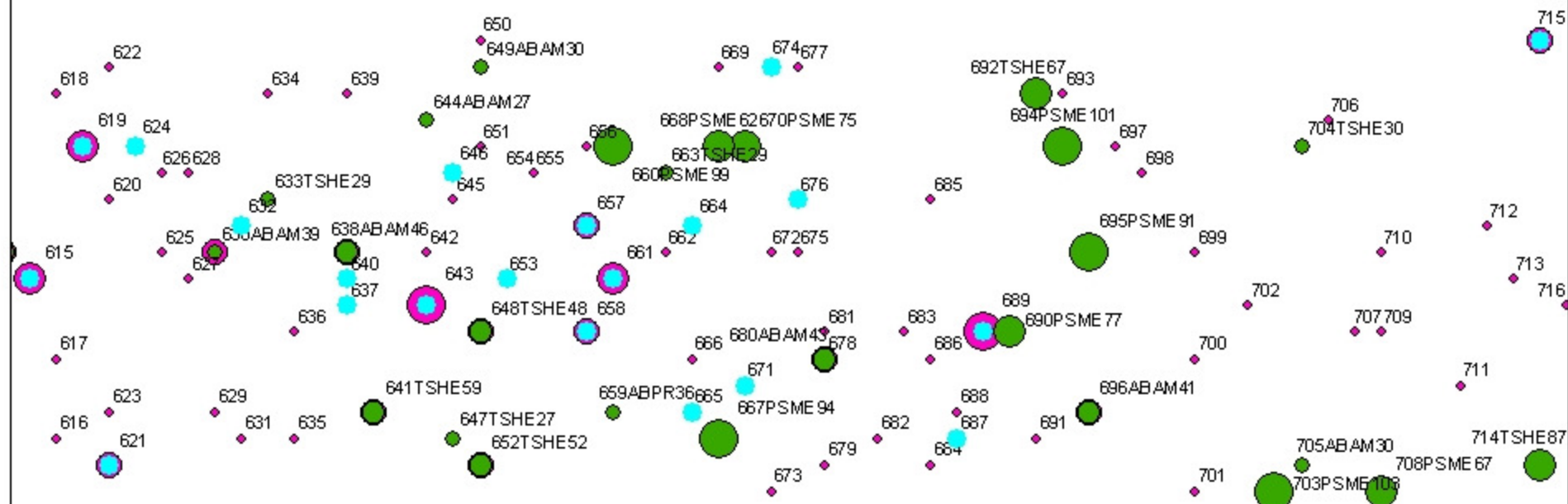
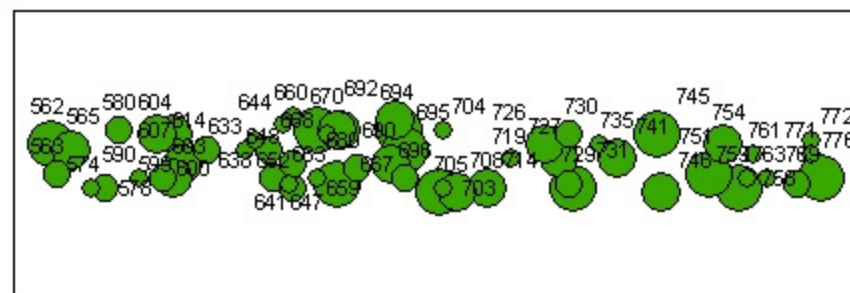
DBH



DBH

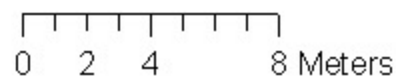


Live tagged trees $\geq 25\text{cm}$ dbh in green
Dead trees highlighted in blue



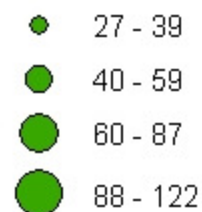
170 m long x 17 m wide
angle = 44 degrees

1 centimeter equals 2.353149 meters

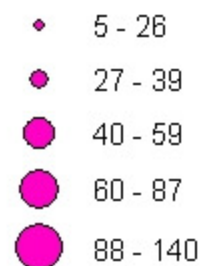


TC_T4_tagged Events TC_T4_all Events

DBH

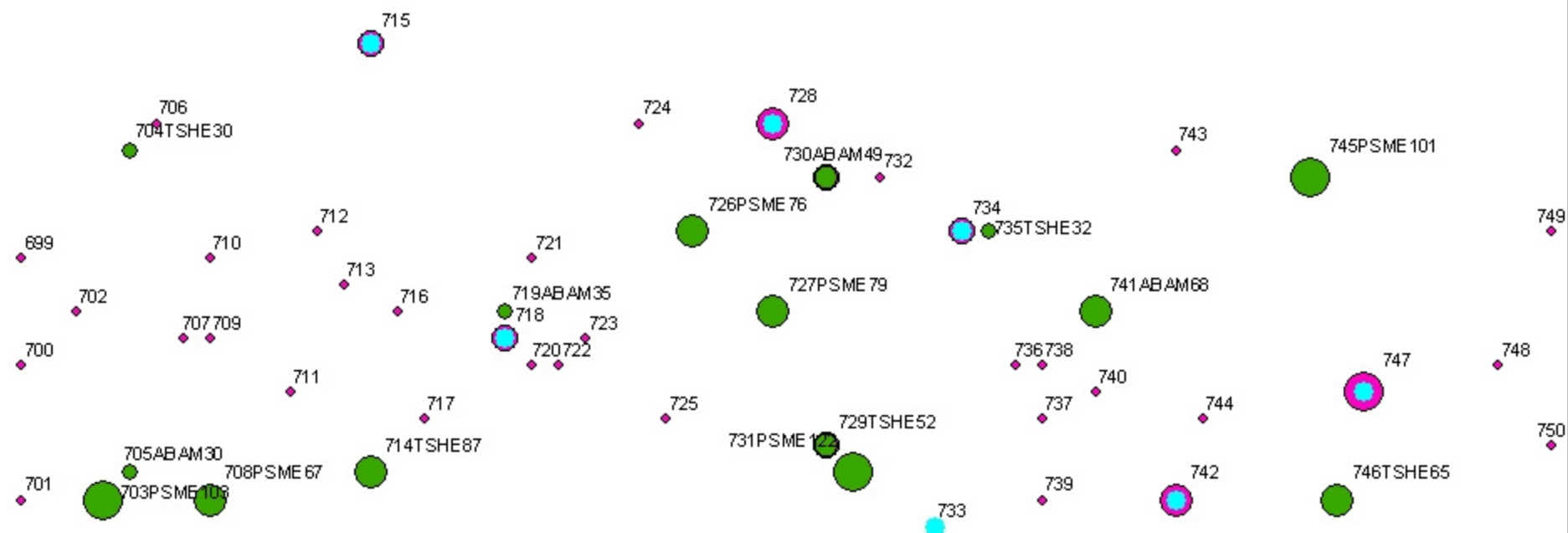
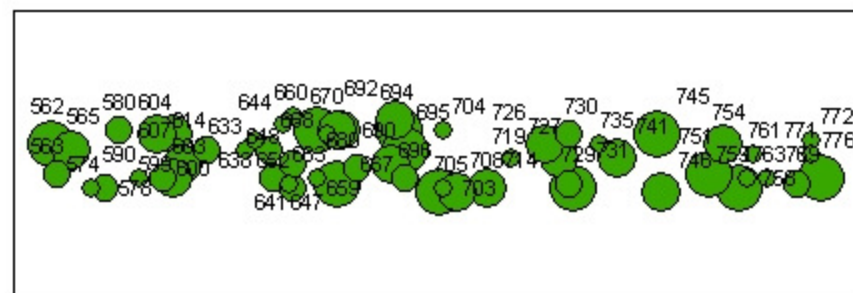


DBH



Trout Creek Transect 4 (all trees)

Live tagged trees $\geq 25\text{cm}$ dbh in green
Dead trees highlighted in blue



170 m long x 17 m wide
angle = 44 degrees

1 centimeter equals 2.353149 meters



0 2 4 8 Meters

TC_T4_tagged Events TC_T4_all Events

DBH

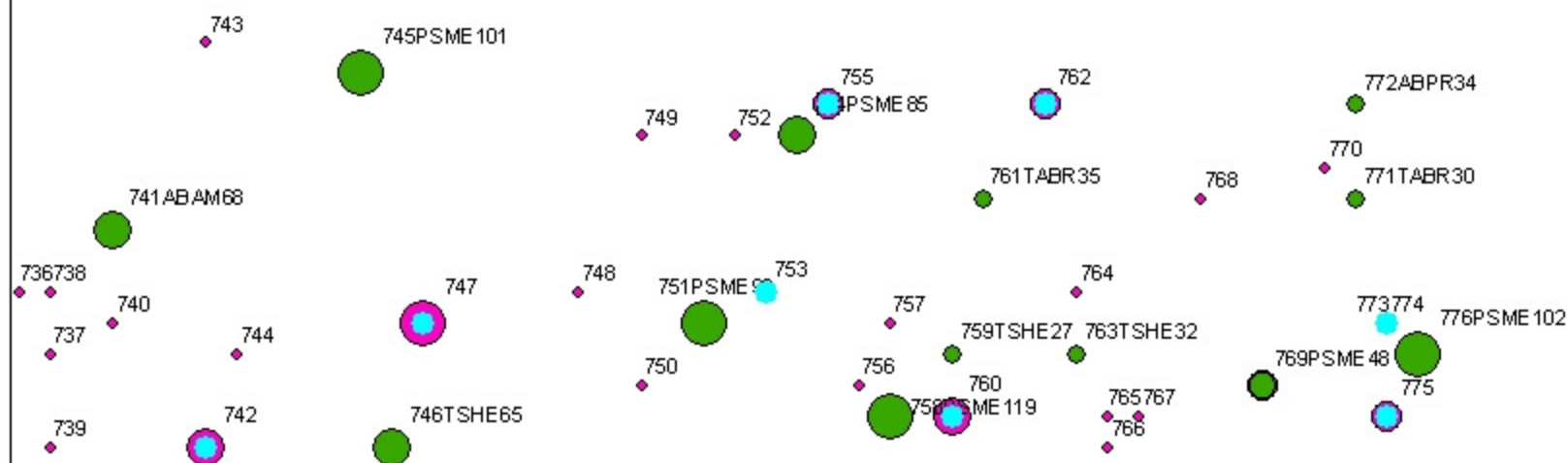
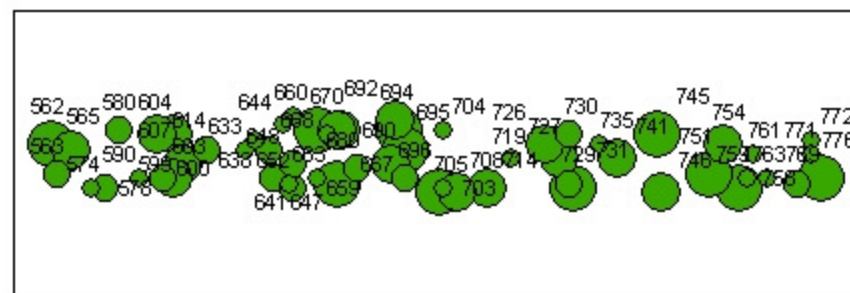
- 27 - 39
- 40 - 59
- 60 - 87
- 88 - 122

DBH

- 5 - 26
- 27 - 39
- 40 - 59
- 60 - 87
- 88 - 140

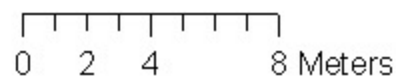
Trout Creek Transect 4 (all trees)

Live tagged trees $\geq 25\text{cm}$ dbh in green
Dead trees highlighted in blue



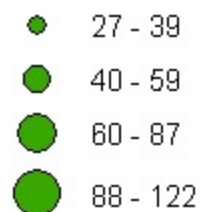
170 m long x 17 m wide
angle = 44 degrees

1 centimeter equals 2.353149 meters



TC_T4_tagged Events TC_T4_all Events

DBH



DBH

