

Chinook ~ 950 yrs

Information for Researchers

Transects are 200 m long x 20 m wide
Transect 1 is the focus transect with
rigged trees, although most of the trees
appear to be de-rigged as of 10/06

Created by Anne Fiala
February 2006, updated 10/11/06



Chinook

Site #8 (Van Pelt & Nadkarni 2004)

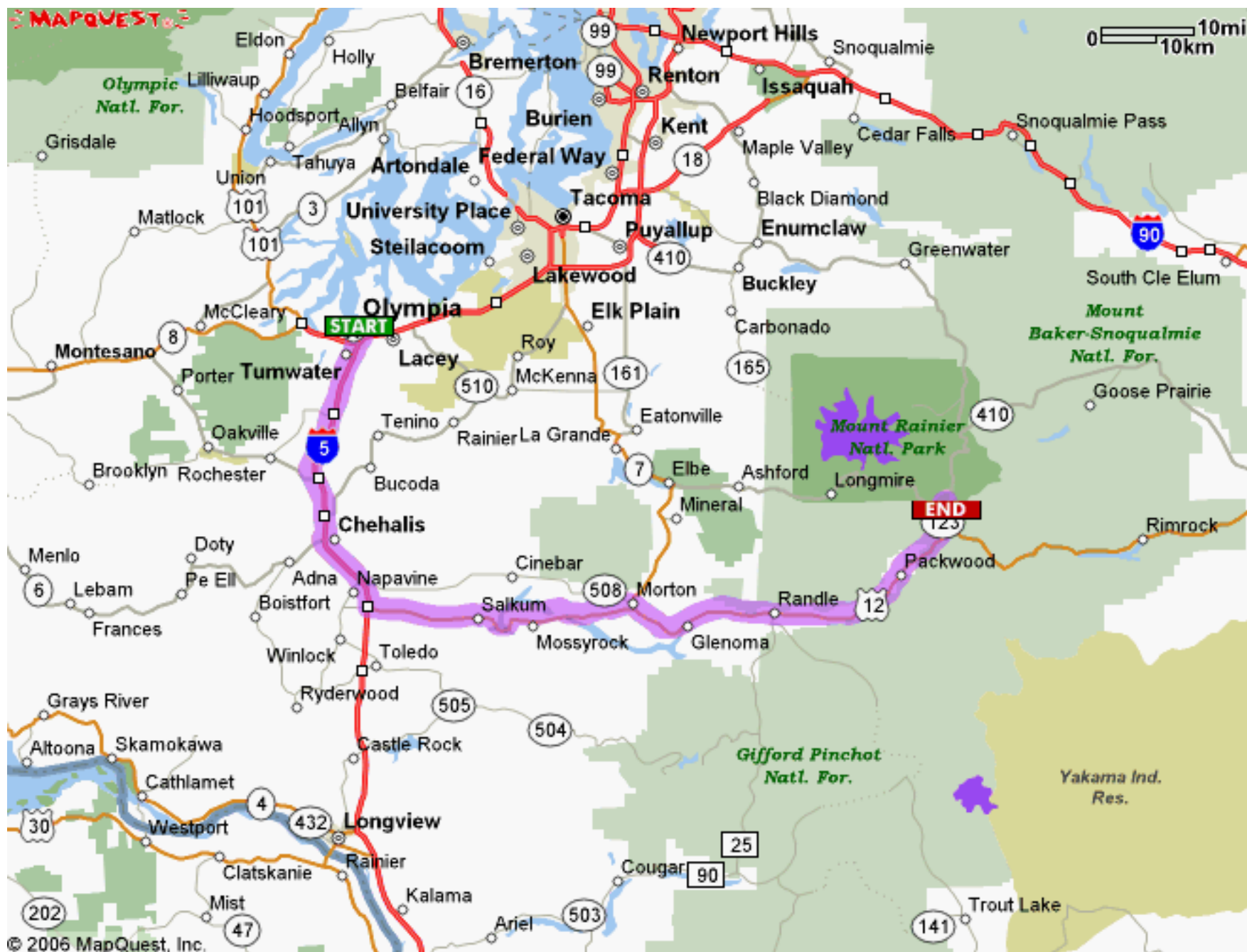


- Permitting for this site is through the National Park Service:
<http://science.nature.nps.gov/research/ac/ResearchIndex>

Driving Directions (~ 2 hours from Oly – you could also go via Puyallup & 410)

Directions	Distance (miles)
Merge onto I-5 S toward PORTLAND.	36.8
Take the US-12 E exit- EXIT 68- toward MORTON / YAKIMA / MT. ST. HELENS	0.2
Turn LEFT onto AVERY RD W / US-12. Continue to follow US-12	72
Turn LEFT onto WA-123 (Note: Portions may be closed seasonally in the winter b/c of snow, so you usually can't access this site in the winter)	3.6 (to the OH campground on your left)
To continue from the campground to the OH site – continue on 123 until just before Mile Marker 8 which is just past the bridge over Laughing Water Creek. There are four pullouts North of Laughing Water Creek on the west-side of the road when heading North on 123. The first is directly adjacent to the bridge. The next pullout that is just up the road from the 1 st is the one where you park to access T1 and T2 (!0.05 miles further up).	~4.5 more miles from the campground
To access T3 and T4 continue up the road passing the 3 rd pullout that is 0.4 miles from the laughing creek bridge, and stop at the 4 th pullout (that is ~0.65 miles North of laughign creek bridge.	0.6 miles further North to T3, T4

Driving Directions



Nearest Hospital - Morton

• Follow 123 South to US-12 and then follow US-12 (Portions may be closed seasonally).	40.9 miles
Turn RIGHT onto 2ND ST / WA-7 / NATIONAL PARK HWY.	0.2 miles
Turn LEFT onto NE ADAMS AVE.	0.2 miles
End at Morton General Hospital 521 Adams Ave, Morton, WA 98356, US	Phone: (360) 496- 5112

Locating Transects

Transect	Directions
T1	Walk up the road from the second pullout that is on the West-side of the road North of LaughingCreek bridge to the Mile Marker 8. The entrance to T1 is ~ 20 m South of MM8. There is a circular aluminum tag with “37” located on the west-side of an ~50 cm dbh Pacific silver fir that is adjacent to the west-side of the road. The tag is situated at breast height, and is not visible from the road. When you locate this tree hike in ~ 80 meters directly west to the start of T1 – you will be going slightly downhill. There is some orange flagging that shows a trail to the start of the transect, and the rebar and PVC are present.
T2	There is a circular aluminum tag with “276” located on the west-side of an ~30 cm dbh Pacific silver fir that is ~ 4 meters in from the west-side of the road. The tag is situated at breast height, and is not visible from the road. (This ABAM is ~2 m directly South of another similar sized ABAM). When you locate this tree hike in ~ 50 meters directly west to the start of T1 – you will be going down a hill to access the transect. There is some orange flagging that shows a trail to the start of the transect, and the rebar and PVC are present.
T3	Directly north of the 4 th pullout North of Laughingwater Creek there is a large hemlock with a circular aluminum tag “269” facing away from the road at breast height. From this tree head at a bearing of 270 degrees approximately 50 m to the start of T3. Note that the end of T3 is ~ 10 meters directly South of Stem 767 that is a part of T4.
T4	From the 4 th pullout North of Laughingwater Creek walk up the road ~ 0.1 miles to a tagged tree. The tree is attached to the backside (away from road) of a TSHE (dbh = 23.5). The tree had a few burls on it and was directly in front of a large-ish hemlock (probably about 60 cm dbh) with a split trunk reiteration that fuses back together. There is an old orange flag on a hemlock branch adjacent to the tree I tagged. From the tag, the transect end is about 30 m in at an azimuth of 241 degrees.

Camping

Ohanapecosh Campground

- **Ohanapecosh Campground**

Location: SE corner of the park, 11 miles north of Packwood off SR 123 ([.jpg map](#)) ([.pdf map](#))

Elevation: 1914 feet

Campsites: 188 individual sites (2 Accessible) & 1 group site (12 to 25 campers).

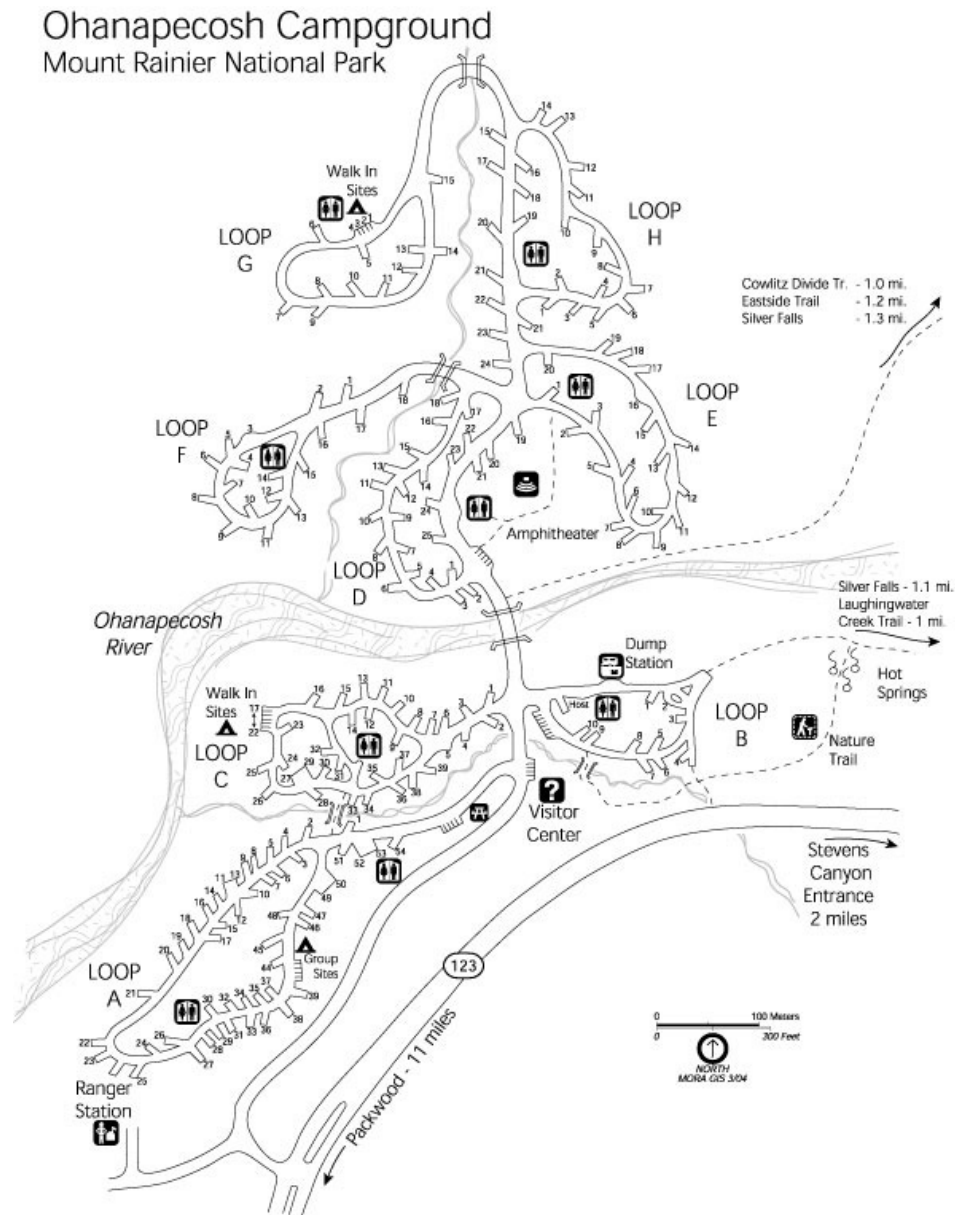
Season: Friday of Memorial Day weekend - Columbus Day

Availability: Regular sites are available on a first-come, first-served basis from Friday of Memorial Day weekend until late June and from Labor Day until Columbus Day. Register at campground. Site-Specific reservations are available and recommended from late June through Labor Day. Group Camping sites are available through reservation from the Friday of Memorial Day weekend until Columbus Day. [Reservation information.](#)

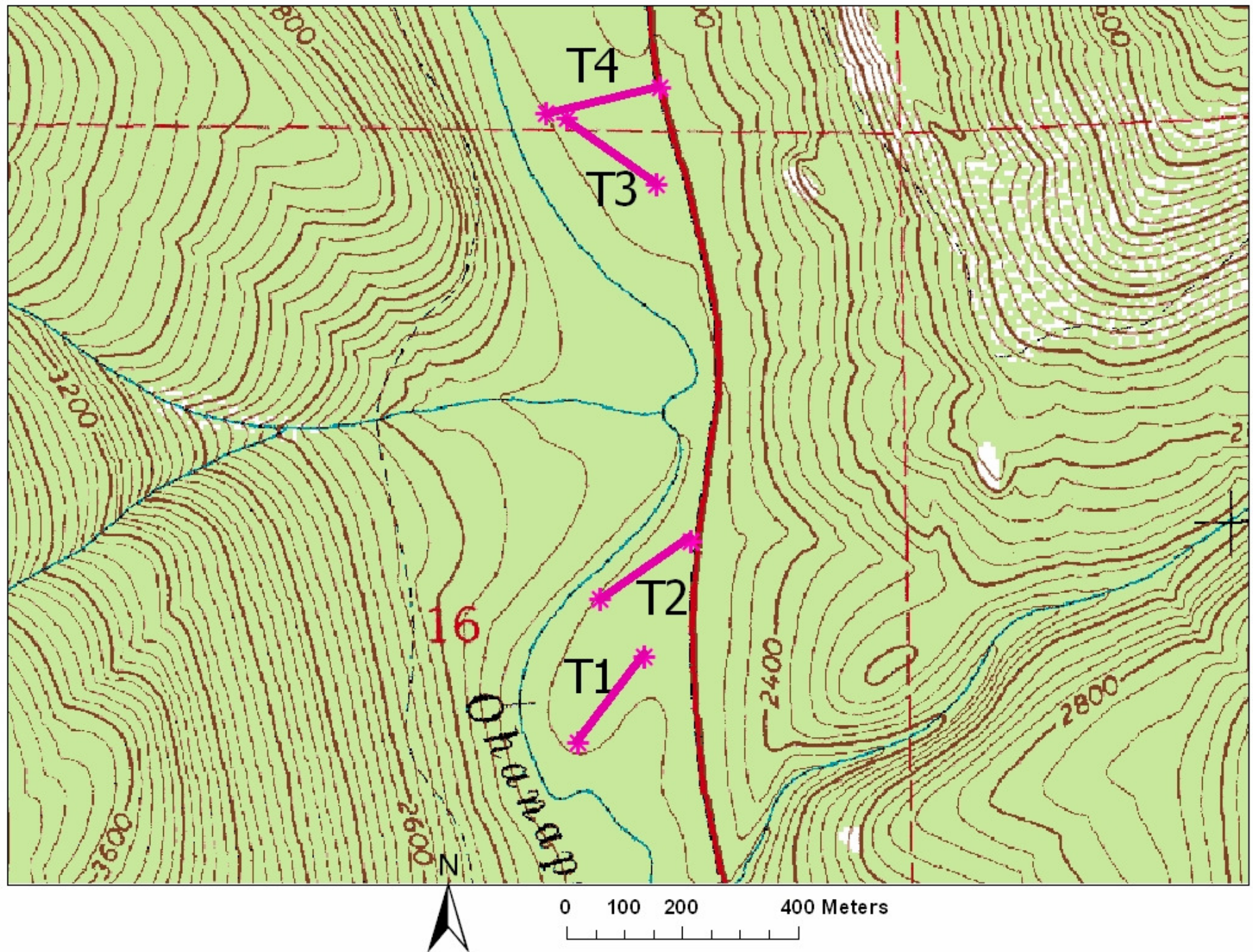
Facilities: Water, flush toilets, trailer dump station, fire grates, tables, refuse and recycling cans, visitor center, amphitheater, hiking trails and fishing. No RV hookups. No showers. Maximum RV length is 32 feet and maximum trailer length is 27 feet.

Fees: Late June - Labor Day: \$15; Remainder of the season: \$12. Group site: \$40. There is a cancellation fee of \$13.65 which also applies to reservation changes.

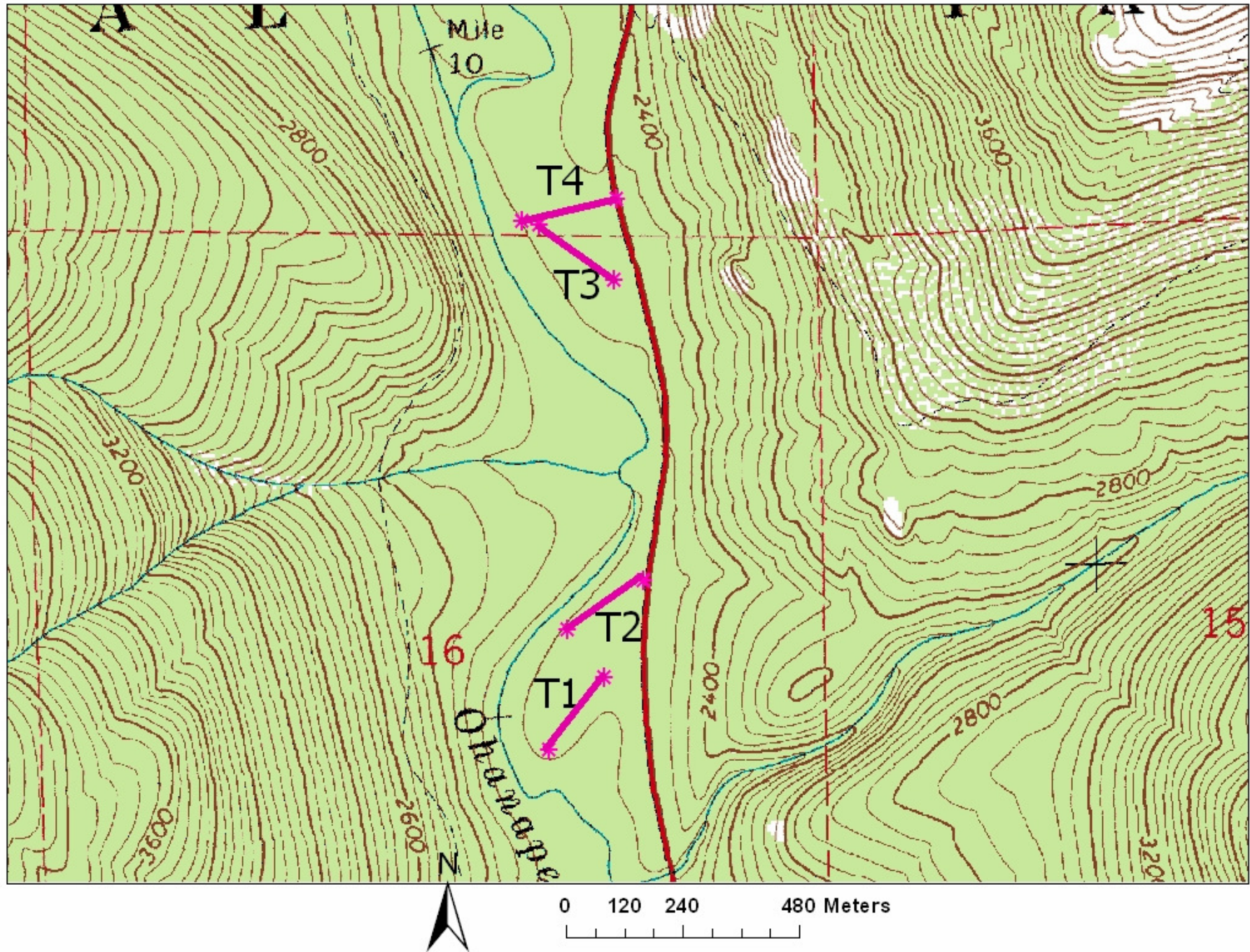
Ohanapecosh Campground



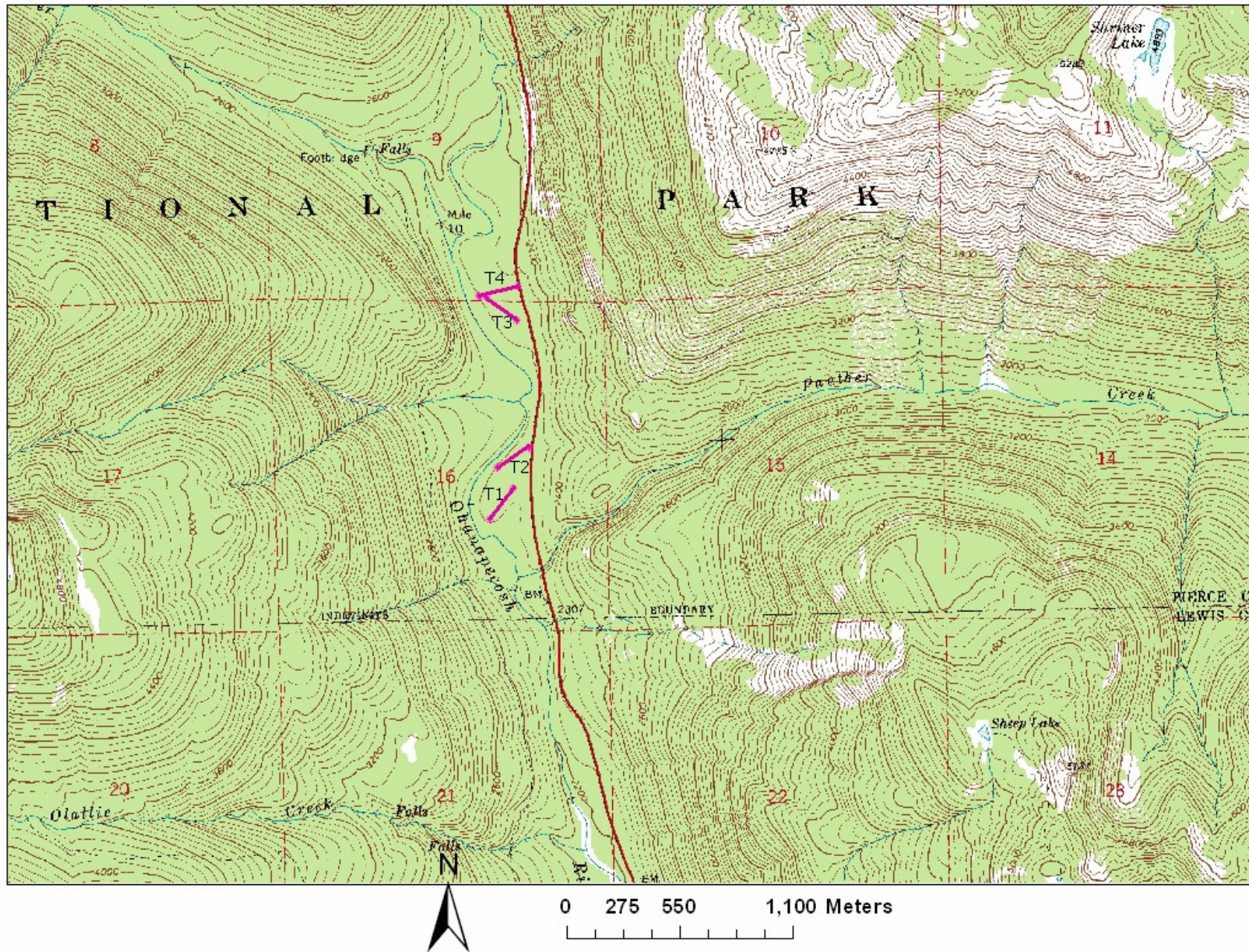
Chinook



Chinook



Chinook



Ohanapecosh site is about 3+ miles south of this site

Overview of all 8 1kcs sites

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*.

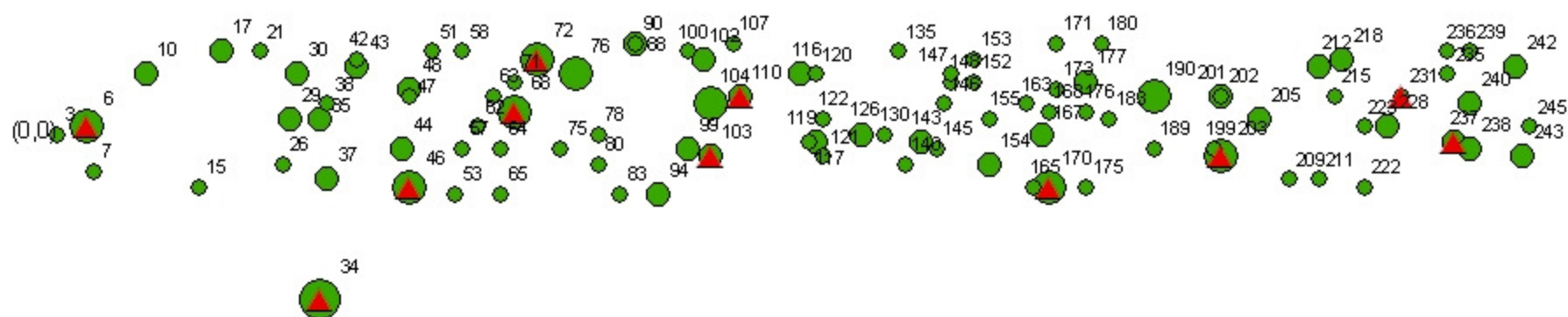
Chinook UTM's — note these could be inaccurate and have not been verified

Stand	Transect	Easting	Northing	Angle	Length (m)
CH	T1	610289	5182594	218	200
		610175	5182446		
CH	T2	610370	5182793	232	200
		610214	5182693		
CH	T3	610311	5183410	307	200
		610157	5183524		
CH	T4	610121	5183533	77	200
		610316	5183578		

Chinook Transect 1

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

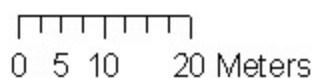
Red triangles represent rigged trees



200 m long x 20 m wide (slightly longer for PSME) **CH_T1_tagged Events**
angle = 218 degrees



1 centimeter equals 8.813844 meters

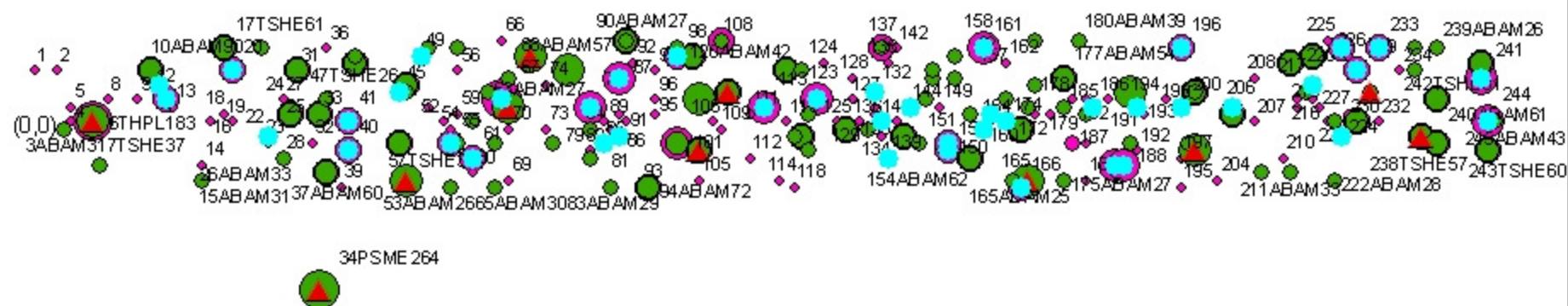
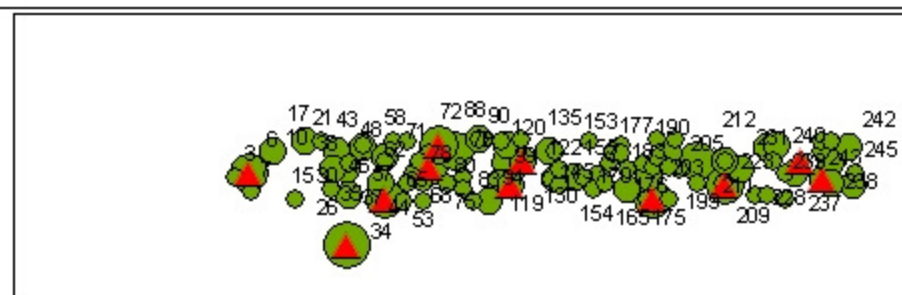


DBH

- 25 - 51
- 52 - 99
- 100 - 183
- 184 - 264

▲ CH_T1_tagged Events selection

Chinook Transect 1 (all trees)
 Live tagged trees ≥ 25 cm dbh in green
 Dead trees highlighted in blue
 Red triangles represent rigged trees



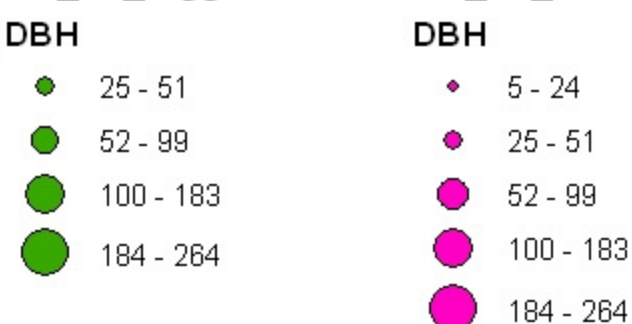
200 m long x 20 m wide (slightly longer for PSME)
 angle = 218 degrees



1 centimeter equals 8.813843 meters

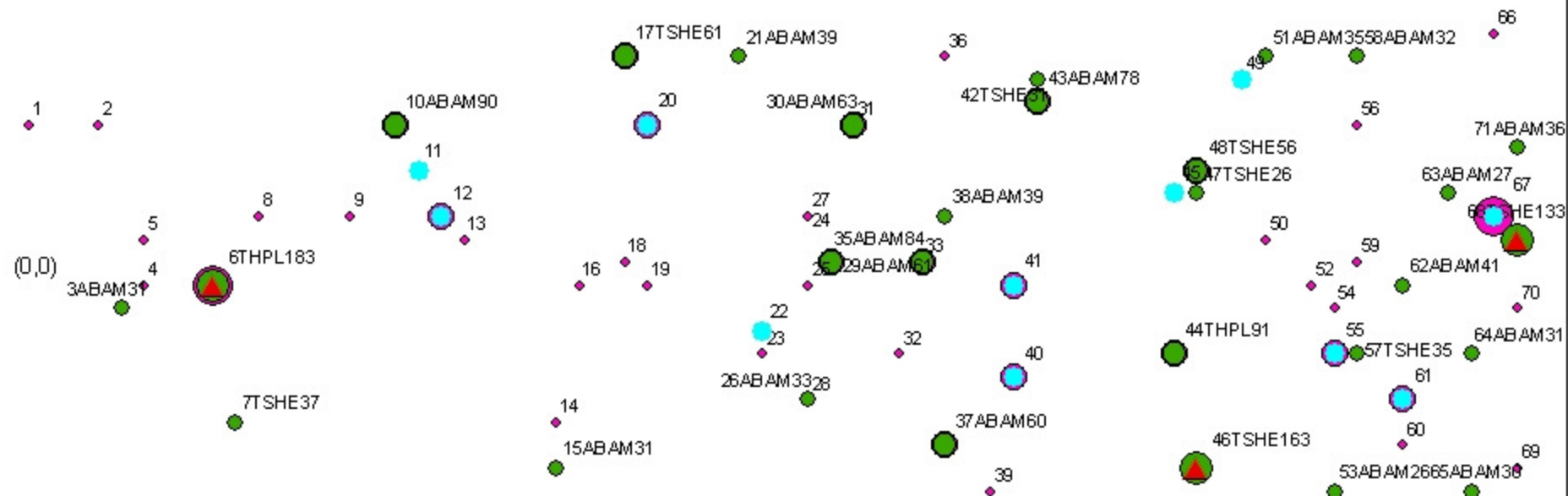
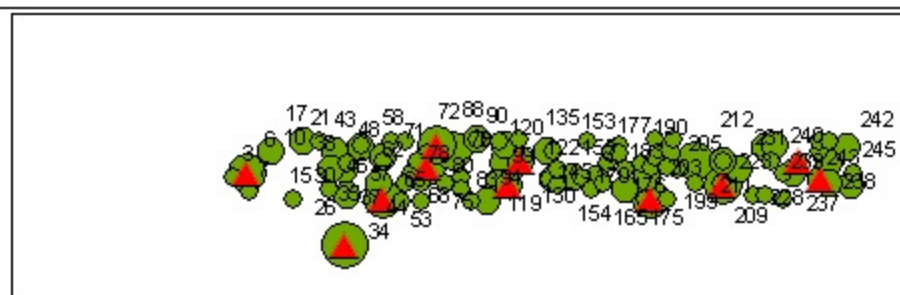


CH_T1_tagged Events CH_T1_all Events



▲ CH_T1_tagged Events

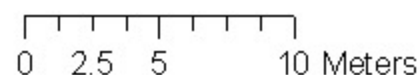
Chinook Transect 1 (all trees)
 Live tagged trees ≥ 25 cm dbh in green
 Dead trees highlighted in blue
 Red triangles represent rigged trees



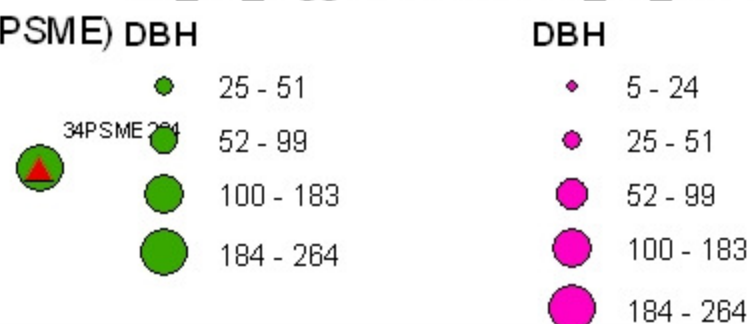
200 m long x 20 m wide (slightly longer for PSME) DBH
 angle = 218 degrees



1 centimeter equals 2.788755 meters

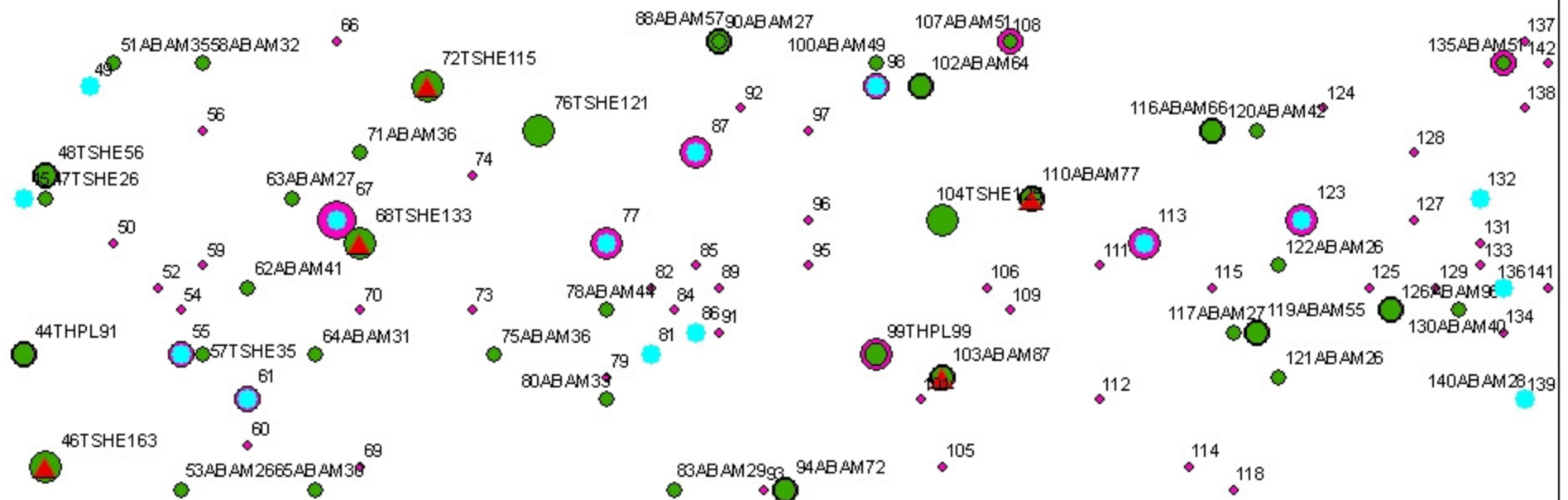
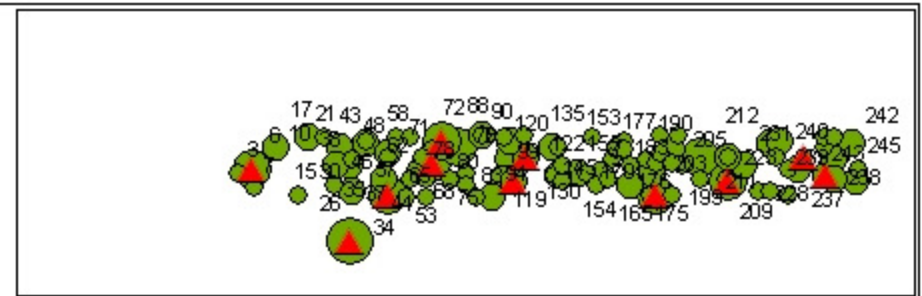


CH_T1_tagged Events CH_T1_all Events







▲ CH_T1_tagged Events

Red triangles represent rigged trees



1 centimeter equals 2.788755 meters

CH_T1_tagged Events CH_T1_all Events

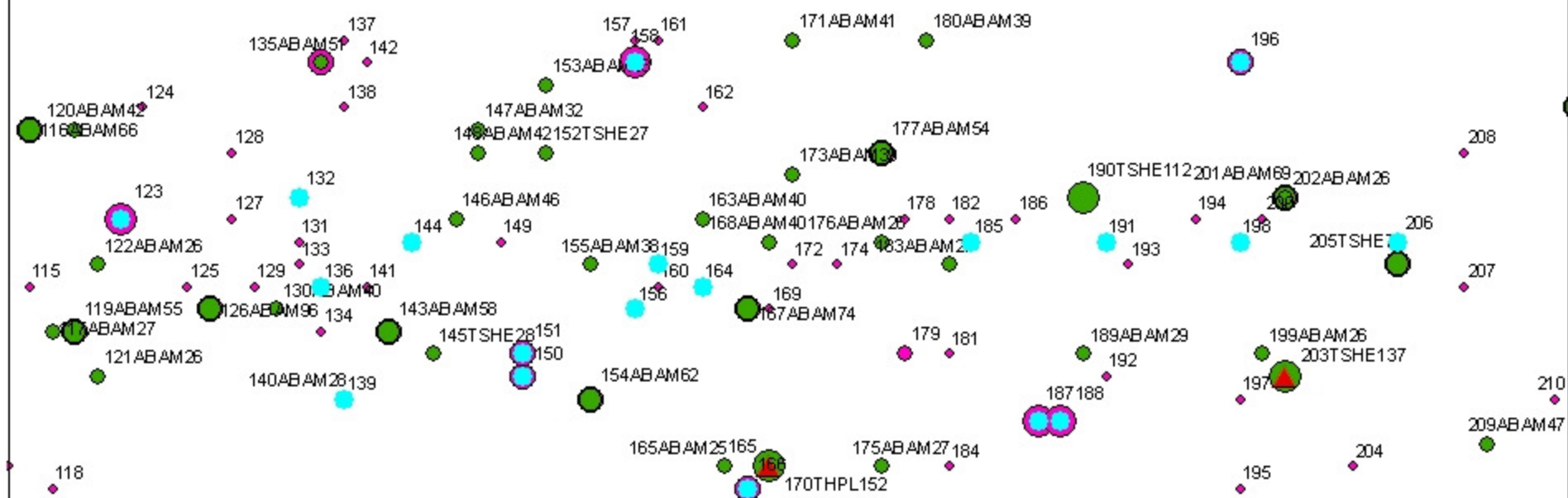
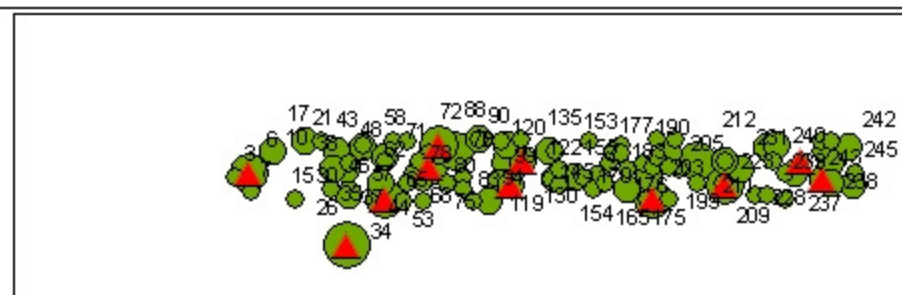
 25 - 51
 52 - 99
 100 - 183
 184 - 264

DBH

- 5 - 24
- 25 - 51
- 52 - 99
- 100 - 183
- 184 - 264

▲ CH_T1_tagged Events

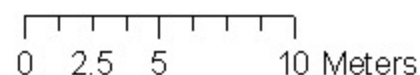
Chinook Transect 1 (all trees)
 Live tagged trees ≥ 25 cm dbh in green
 Dead trees highlighted in blue
 Red triangles represent rigged trees



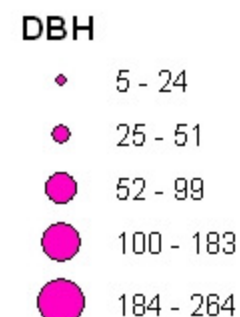
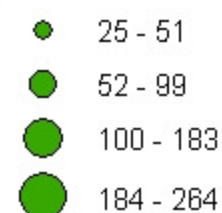
200 m long x 20 m wide (slightly longer for PSME)
 angle = 218 degrees



1 centimeter equals 2.788755 meters

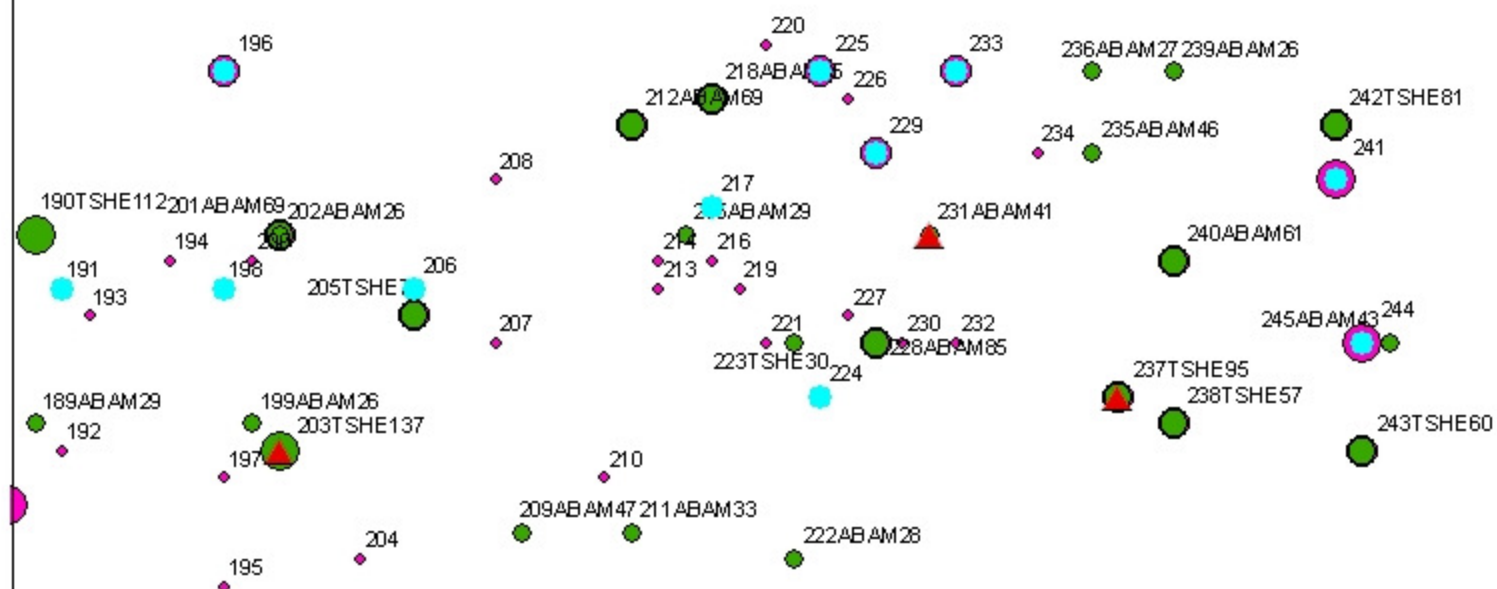
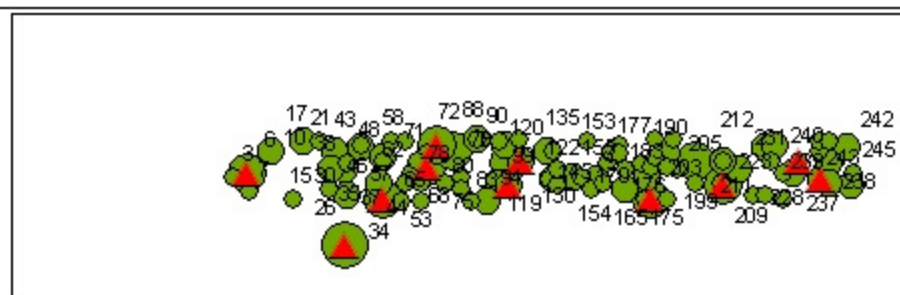


CH_T1_tagged Events CH_T1_all Events



CH_T1_tagged Events

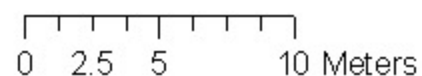
Chinook Transect 1 (all trees)
 Live tagged trees $\geq 25\text{cm}$ dbh in green
 Dead trees highlighted in blue
 Red triangles represent rigged trees



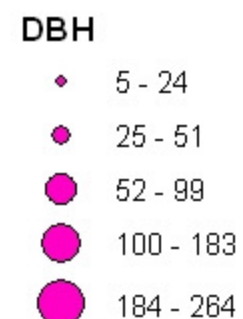
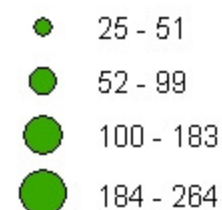
200 m long x 20 m wide (slightly longer for PSME) DBH
 angle = 218 degrees



1 centimeter equals 2.788755 meters

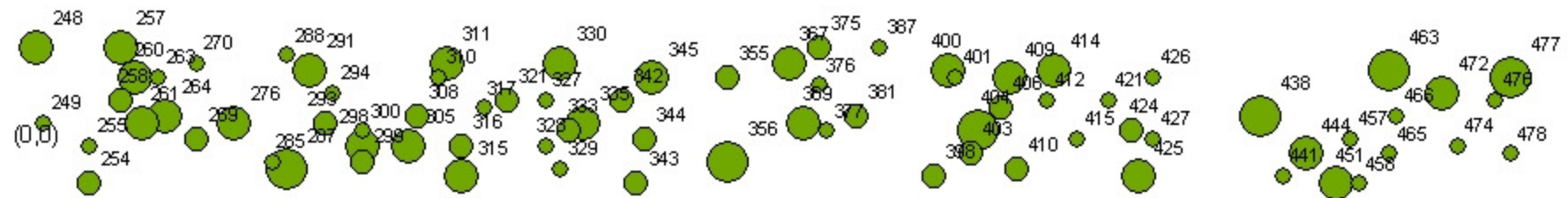


CH_T1_tagged Events CH_T1_all Events



▲ CH_T1_tagged Events

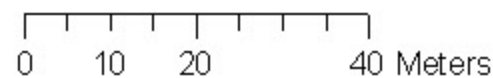
Chinook Transect 2

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

200 m long x 20 m wide (slightly different for PSME)
 E610370 N5182793 angle = 232 degrees



1 centimeter equals 8.769774 meters



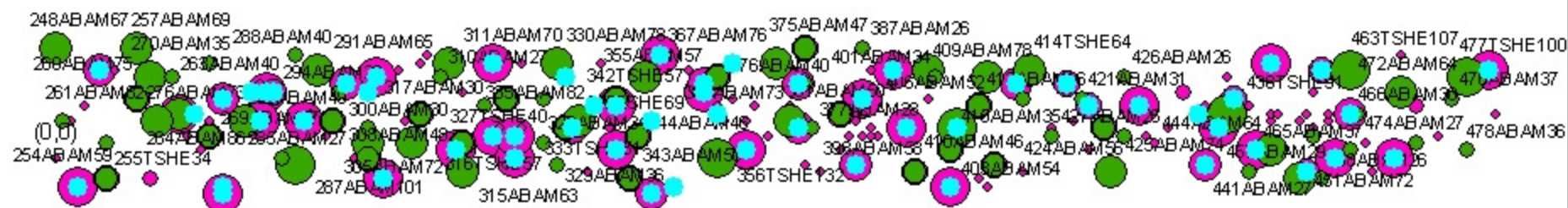
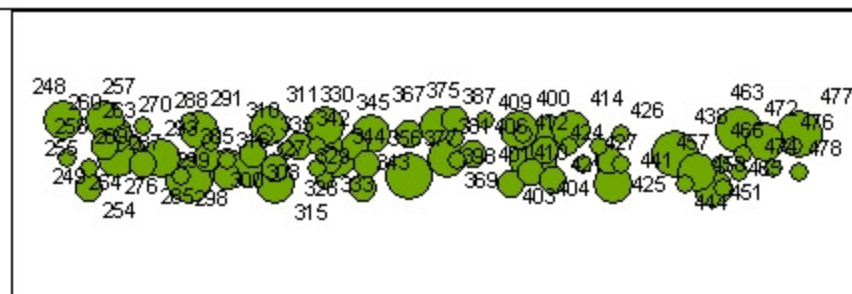
Legend

CH_T2_tagged Events

DBH

- 26 - 40
- 41 - 60
- 61 - 86
- 87 - 132

Chinook Transect 2 (all trees)
 Live tagged trees $\geq 25\text{cm}$ dbh in green
 Dead trees highlighted in blue



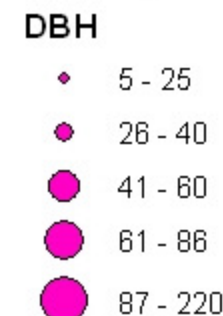
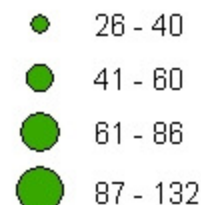
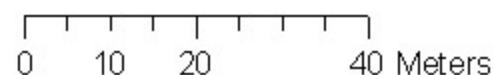
Legend

CH_T2_tagged Events CH_T2_all Events

200 m long x 20 m wide (slightly different for PSME) DBH
 angle = 232 degrees

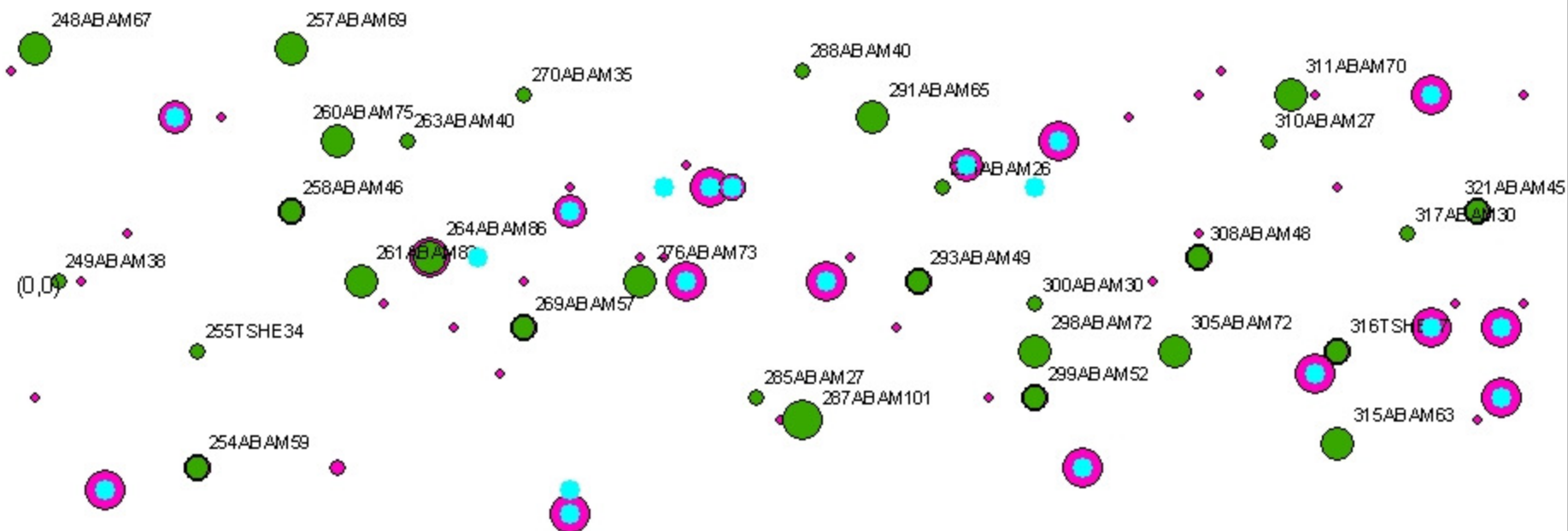
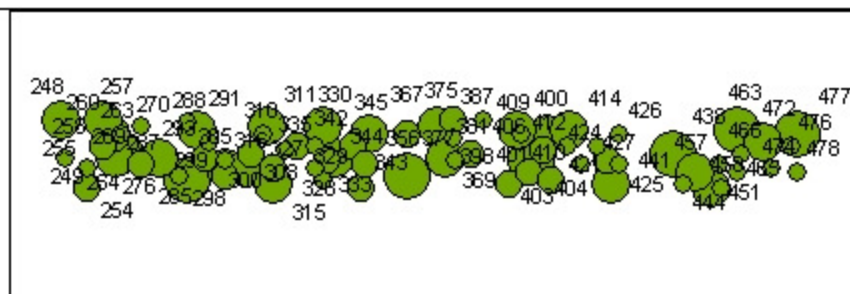


1 centimeter equals 8.769774 meters



Chinook Transect 2 (all trees)

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



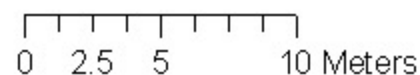
Legend

CH_T2_tagged Events CH_T2_all Events

200 m long x 20 m wide (slightly different for PSME)
angle = 232 degrees



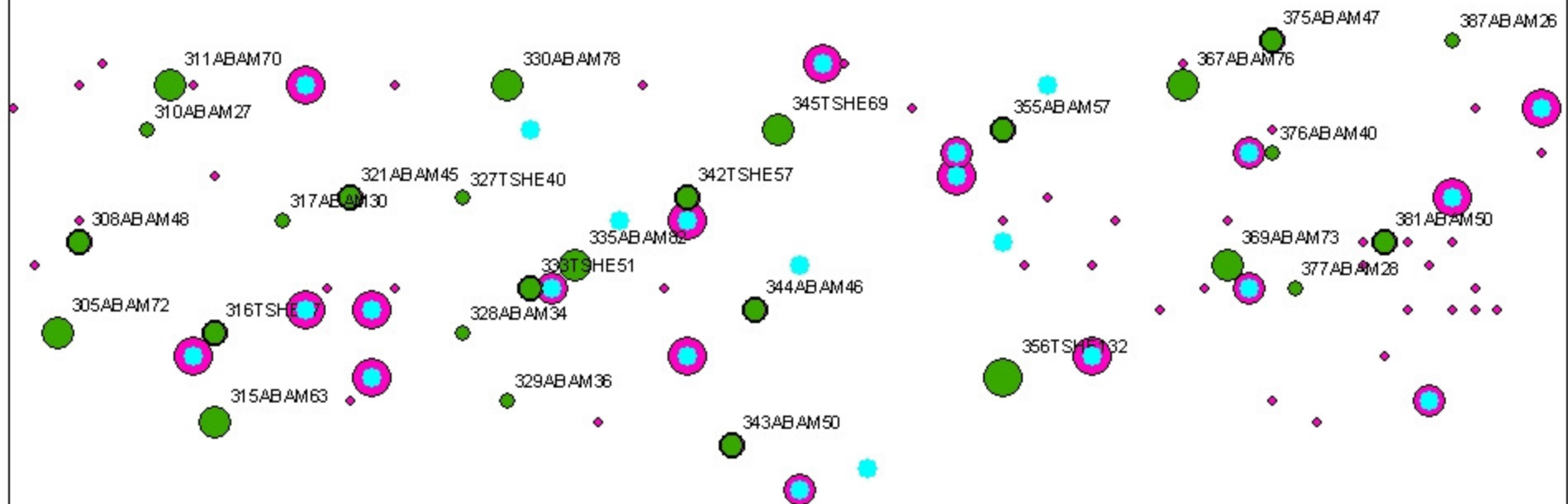
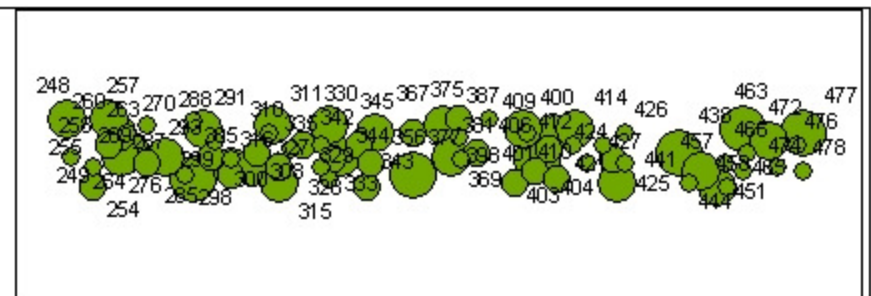
1 centimeter equals 2.774811 meters



DBH
● 26 - 40
● 41 - 60
● 61 - 86
● 87 - 132

DBH
◆ 5 - 25
◆ 26 - 40
◆ 41 - 60
◆ 61 - 86
◆ 87 - 220

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



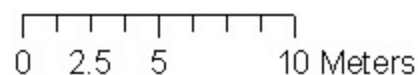
Legend

CH_T2_tagged Events CH_T2_all Events

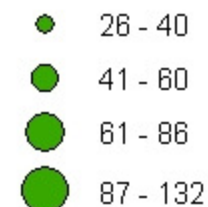
200 m long x 20 m wide (slightly different for PSME)
angle = 232 degrees



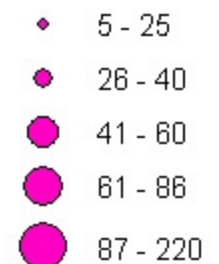
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DBH

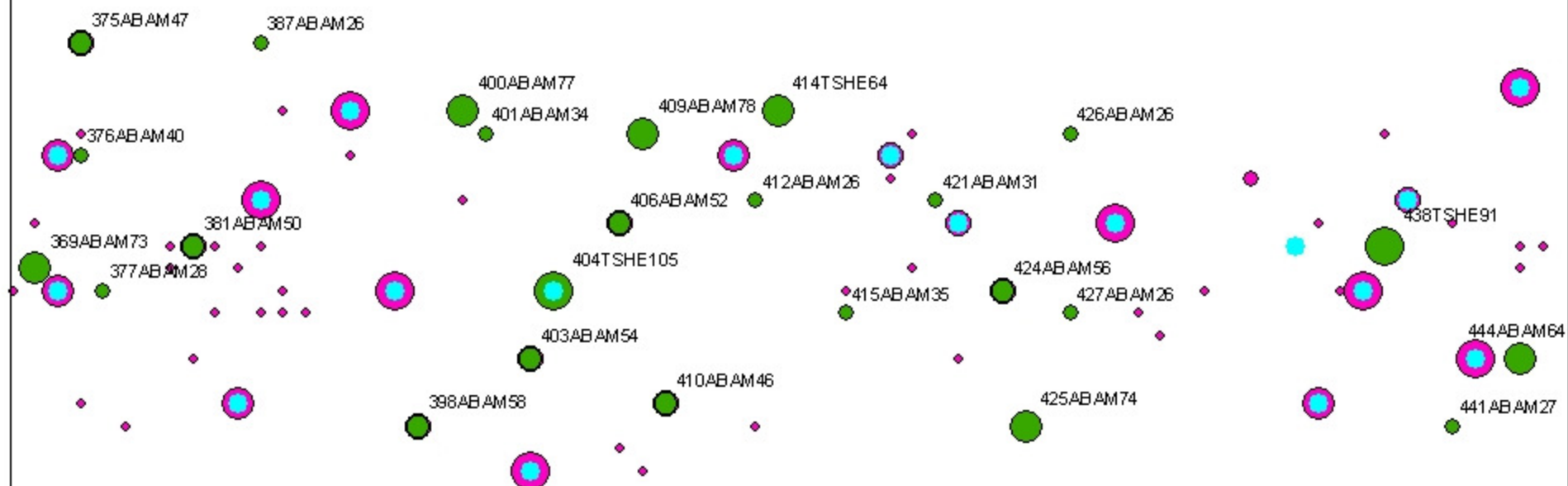
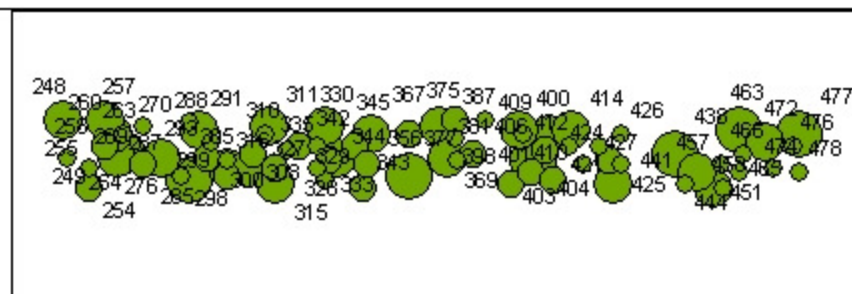


DBH



Chinook Transect 2 (all trees)

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



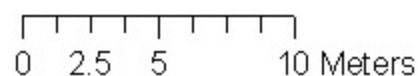
Legend

CH_T2_tagged Events CH_T2_all Events

200 m long x 20 m wide (slightly different for PSME)
angle = 232 degrees



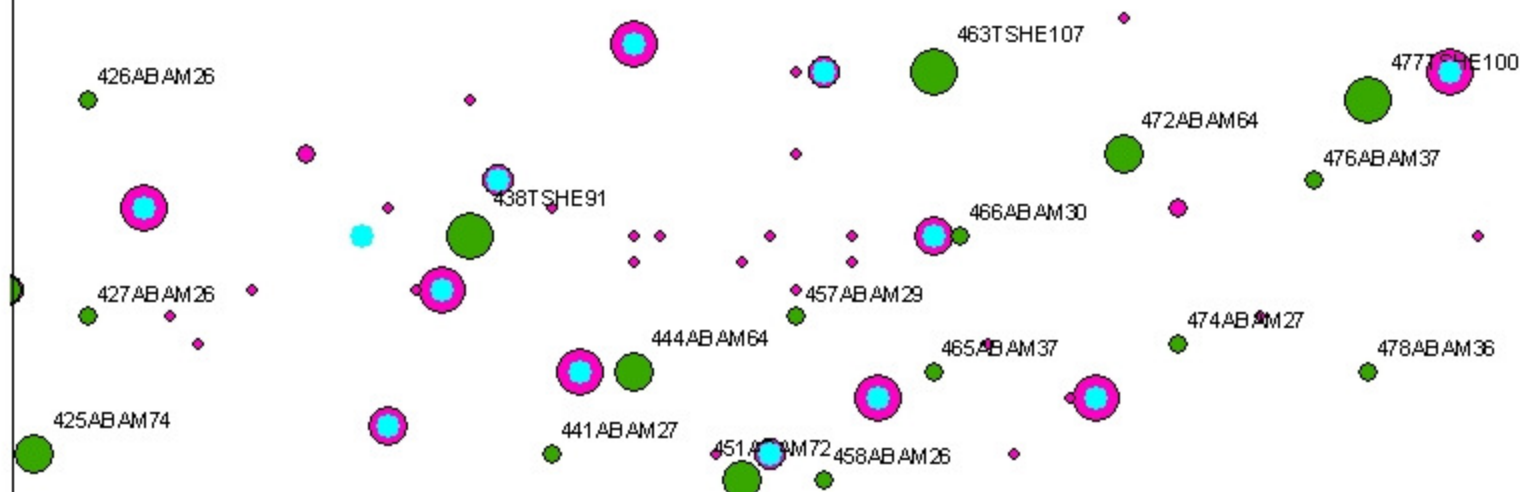
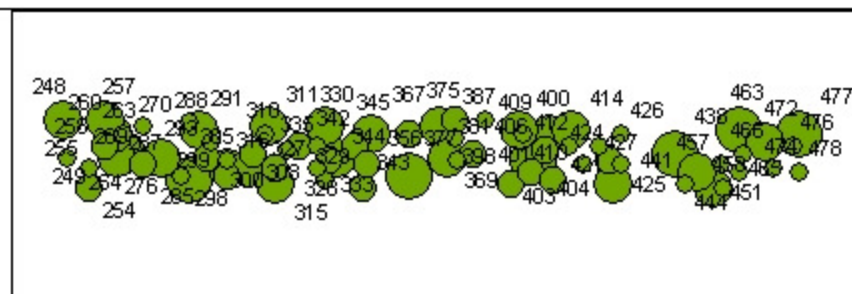
1 centimeter equals 2.774811 meters



DBH
● 26 - 40
● 41 - 60
● 61 - 86
● 87 - 132

DBH
● 5 - 25
● 26 - 40
● 41 - 60
● 61 - 86
● 87 - 220

Chinook Transect 2 (all trees)
 Live tagged trees $\geq 25\text{cm}$ dbh in green
 Dead trees highlighted in blue



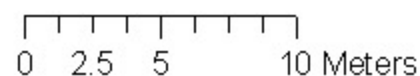
Legend

CH_T2_tagged Events CH_T2_all Events

200 m long x 20 m wide (slightly different for PSME)
 angle = 232 degrees



1 centimeter equals 2.774811 meters

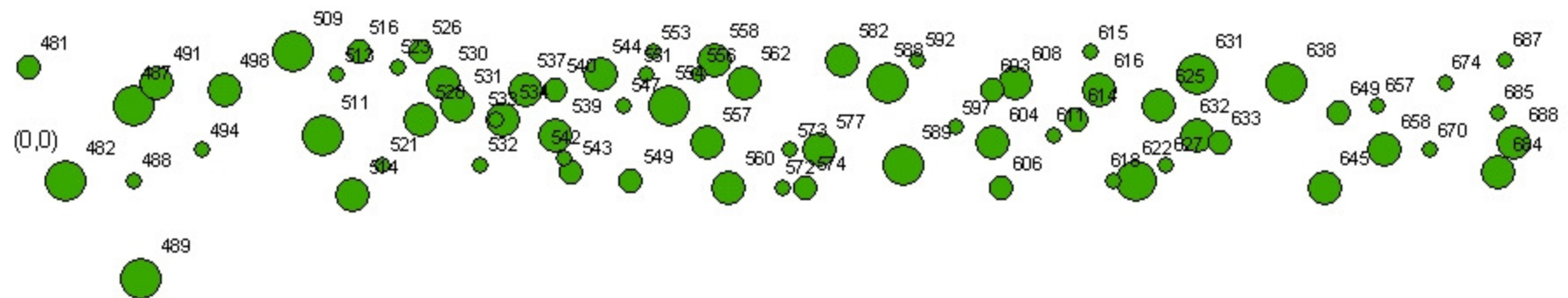


DBH	DBH
26 - 40	5 - 25
41 - 60	26 - 40
61 - 86	41 - 60
87 - 132	61 - 86
	87 - 220

E610157 N5183524

Chinook Transect 3

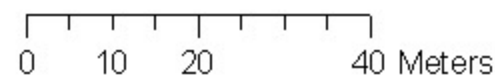
Live tagged trees ≥ 25 cm dbh in green



200 m long x 20 m wide (slightly different for PSME)
angle = 307 degrees
E610311 N5183410



1 centimeter equals 8.769774 meters



Legend

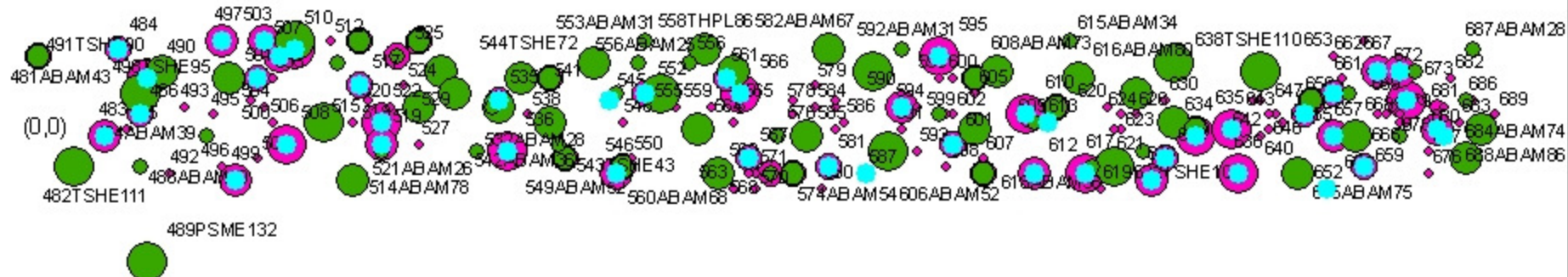
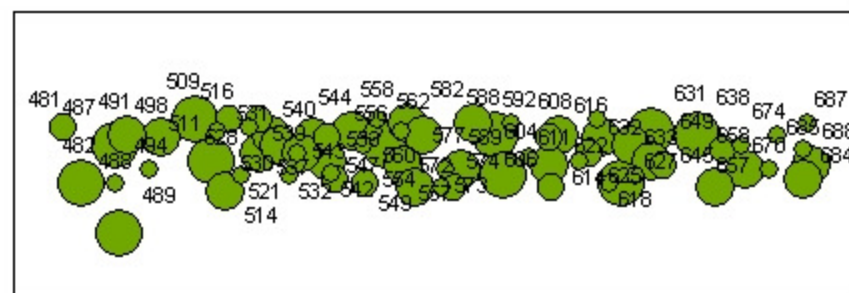
CH_T3_tagged Events

DBH

- 25 - 41
- 42 - 60
- 61 - 95
- 96 - 144

Chinook Transect 3 (all trees)

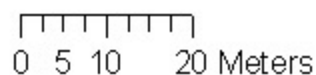
Live tagged trees $\geq 25\text{cm}$ dbh in green
Dead trees highlighted in blue



200 m long x 20 m wide (slightly different for PSME)
angle = 307 degrees



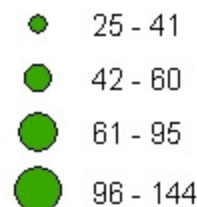
1 centimeter equals 8.769774 meters



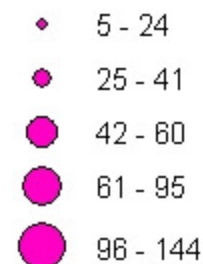
Legend

CH_T3_tagged Events CH_T3_all Events

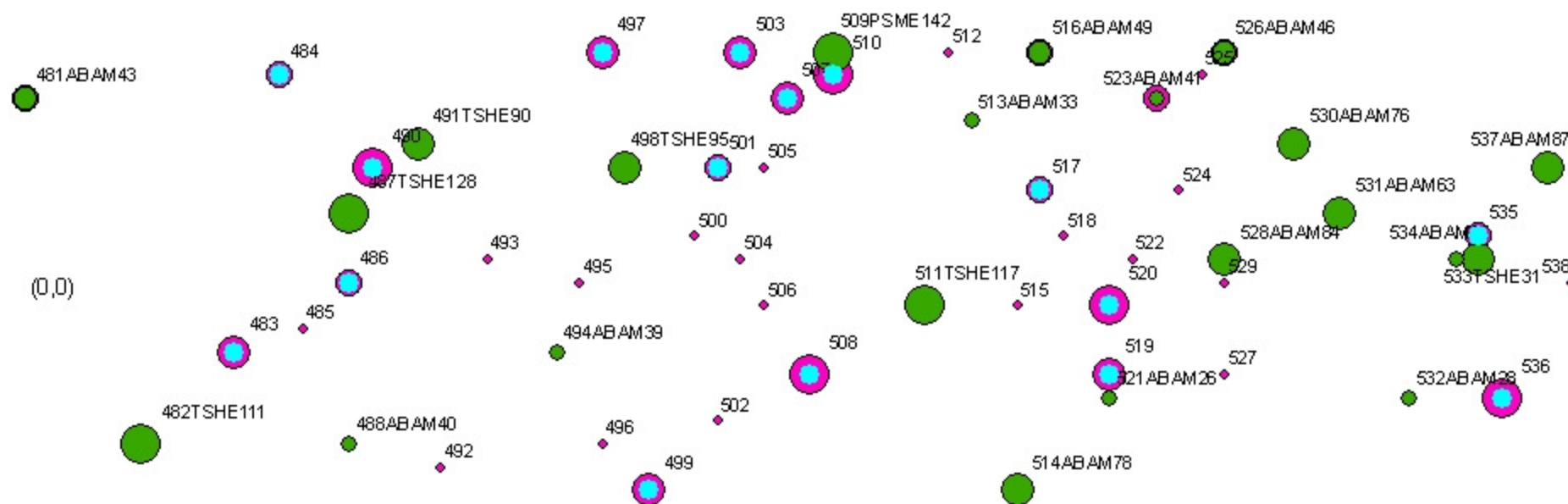
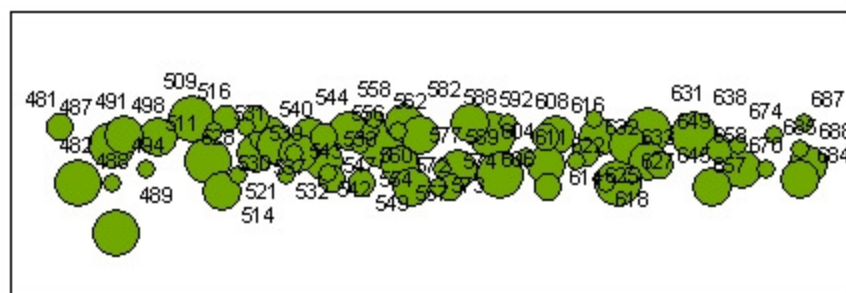
DBH



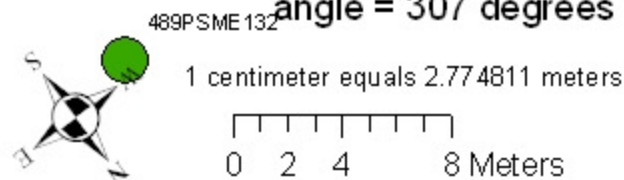
DBH



Chinook Transect 3 (all trees)
 Live tagged trees ≥ 25 cm dbh in green
 Dead trees highlighted in blue



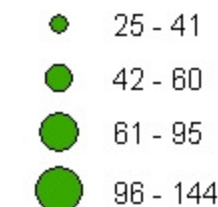
200 m long x 20 m wide (slightly different for PSME)
 angle = 307 degrees



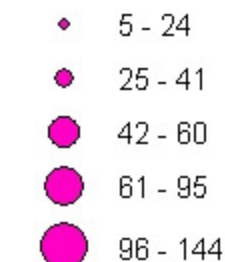
Legend

CH_T3_tagged Events CH_T3_all Events

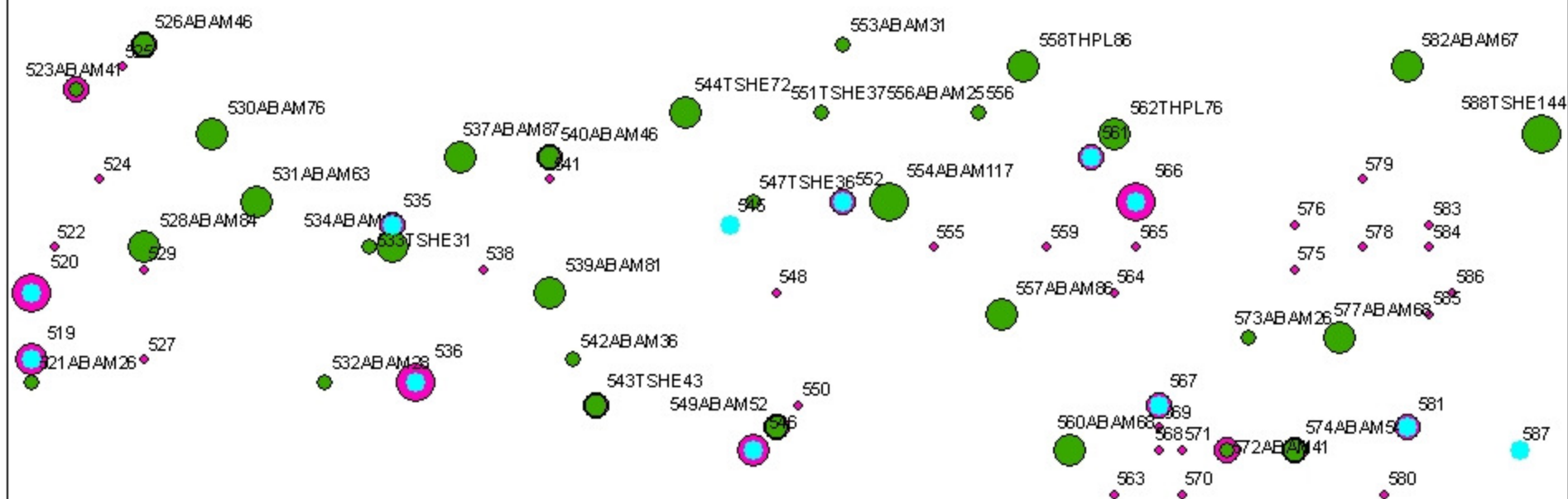
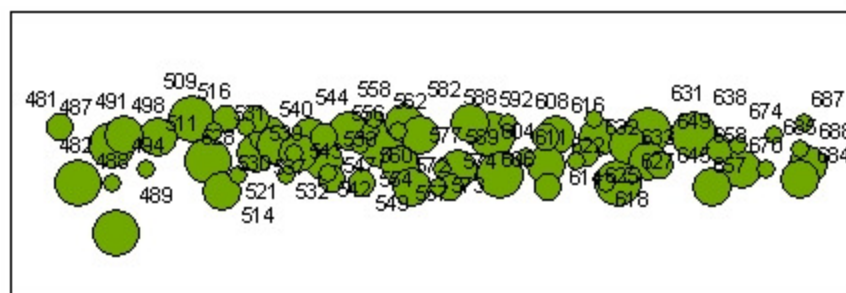
DBH



DBH



Chinook Transect 3 (all trees)
 Live tagged trees $\geq 25\text{cm}$ dbh in green
 Dead trees highlighted in blue



Legend

CH_T3_tagged Events CH_T3_all Events

DBH

- 25 - 41
- 42 - 60
- 61 - 95
- 96 - 144

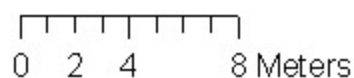
DBH

- 5 - 24
- 25 - 41
- 42 - 60
- 61 - 95
- 96 - 144

200 m long x 20 m wide (slightly different for PSME)
 angle = 307 degrees

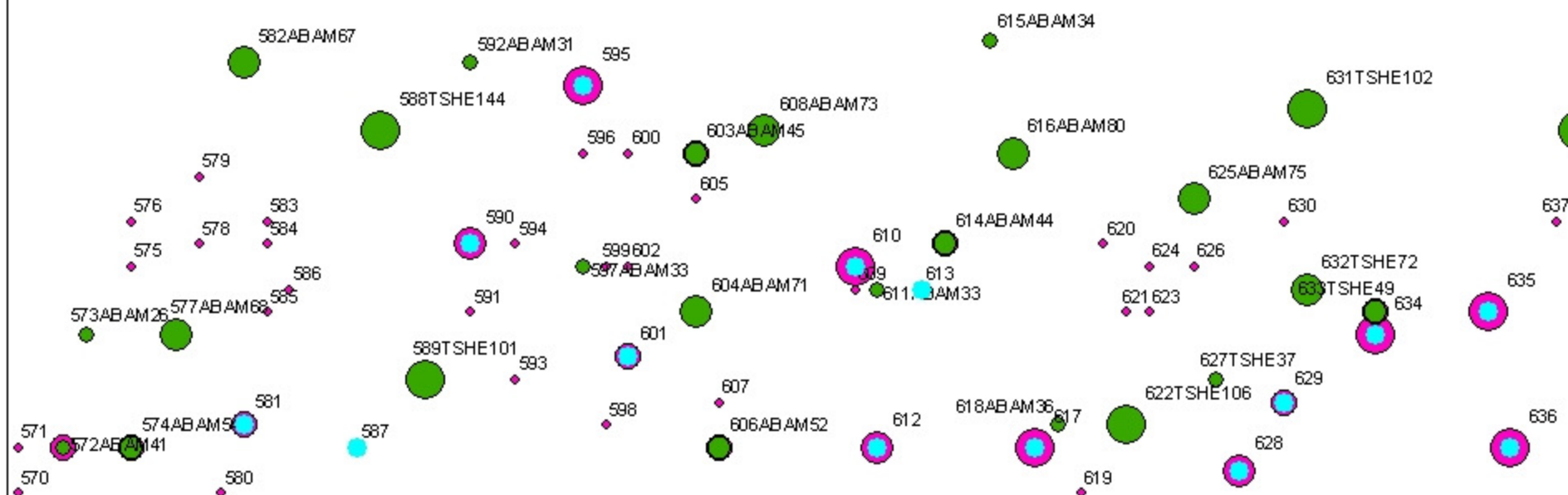
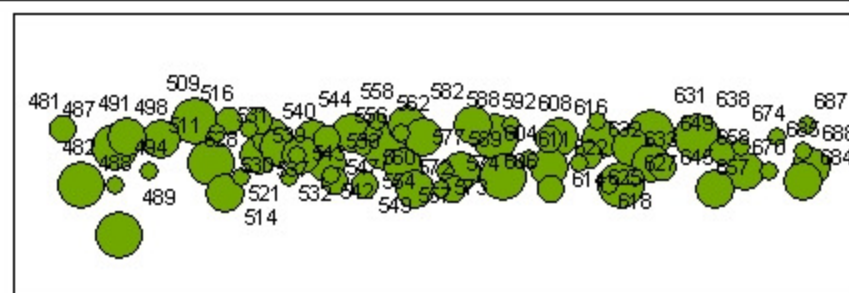


1 centimeter equals 2.774811 meters



Chinook Transect 3 (all trees)

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



Legend

CH_T3_tagged Events CH_T3_all Events

DBH

- 25 - 41
- 42 - 60
- 61 - 95
- 96 - 144

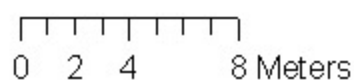
DBH

- 5 - 24
- 25 - 41
- 42 - 60
- 61 - 95
- 96 - 144

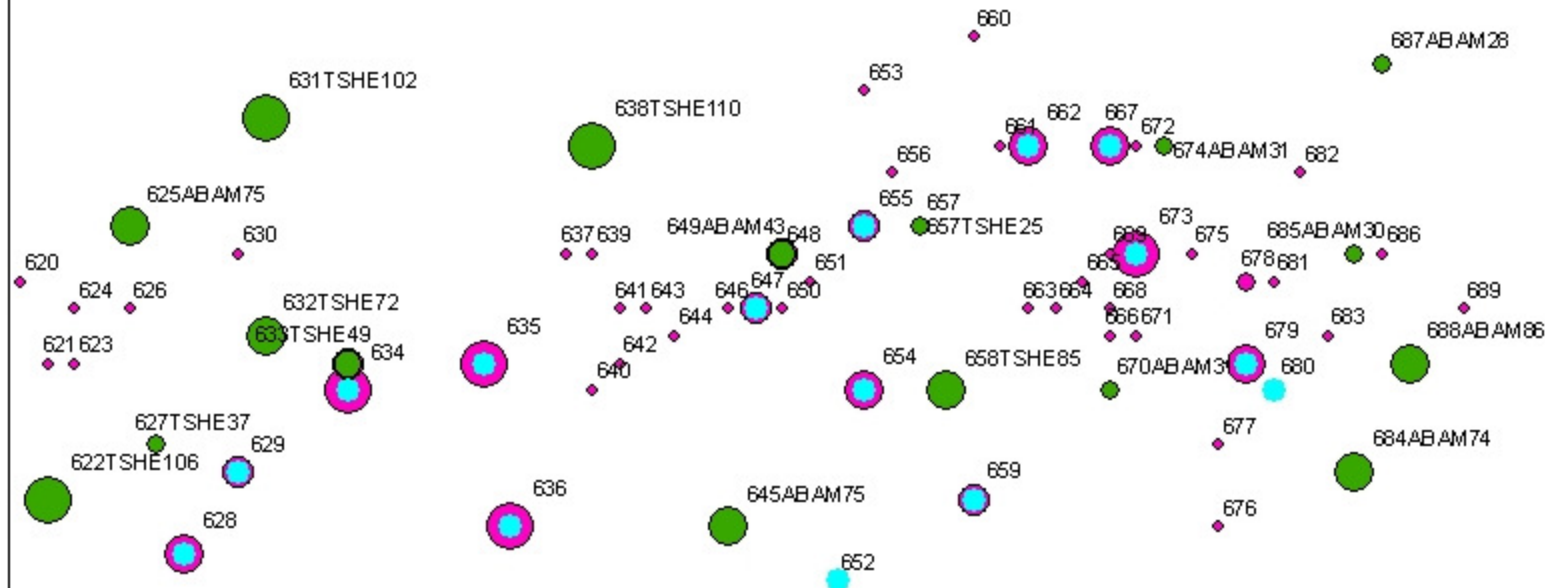
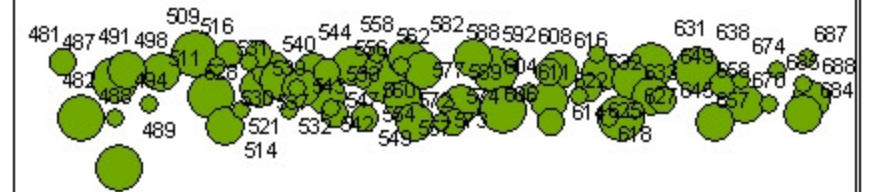
200 m long x 20 m wide (slightly different for PSME)
angle = 307 degrees



1 centimeter equals 2.774811 meters



Live tagged trees ≥ 25 cm dbh in green
Dead trees highlighted in blue



CH_T3_taggedEvents CH_T3_all Events

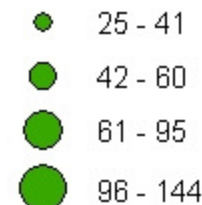
200 m long x 20 m wide (slightly different for PSME)
angle = 307 degrees



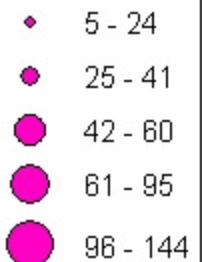
1 centimeter equals 2.774811 meters



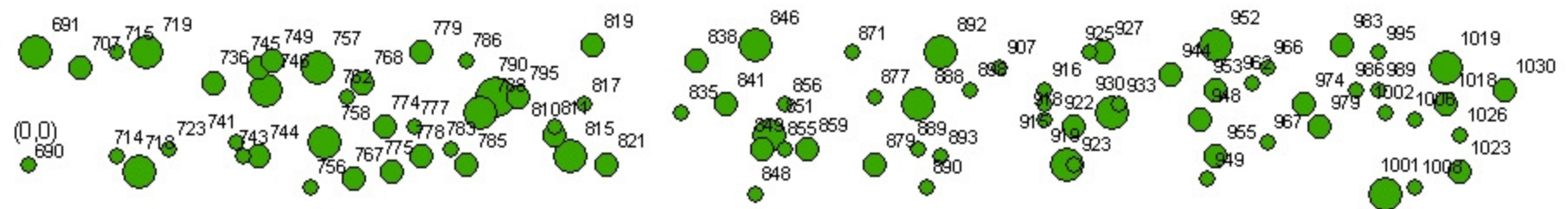
DBH



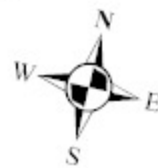
DBH



Chinook Transect 4

Live tagged trees ≥ 25 cm dbh in green

200 m long x 20 m wide (slightly different for PSME)
 E610121 N5183533 angle = 77 degrees



1 centimeter equals 8.813844 meters

0 4 8 16 Meters

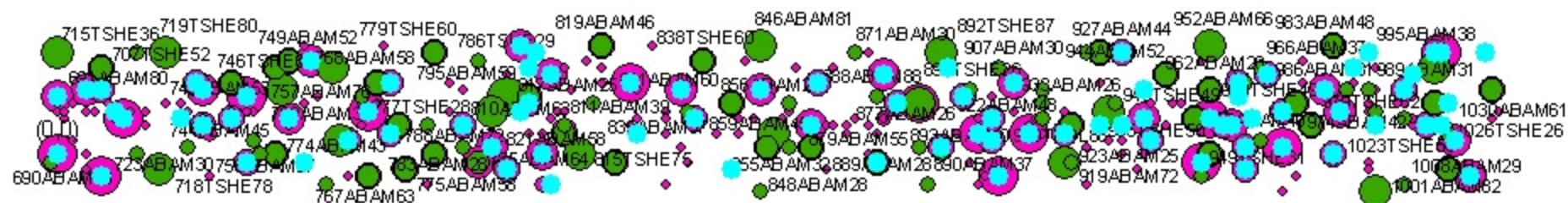
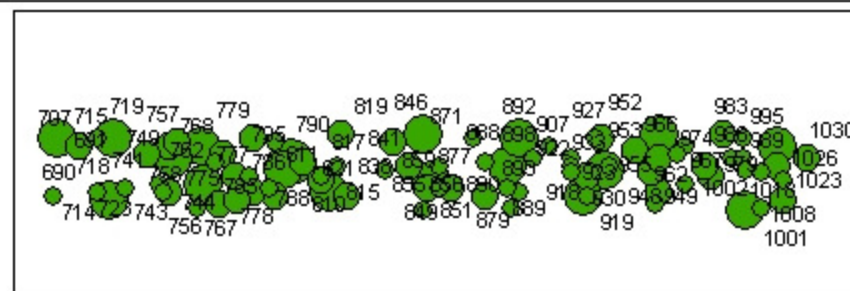
Legend

CH_T4_tagged Events

DBH

- 25 - 41
- 42 - 64
- 65 - 88
- 89 - 170

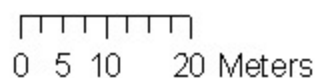
Chinook Transect 4 (all trees)
 Live tagged trees $\geq 25\text{cm}$ dbh in green
 Dead trees highlighted in blue



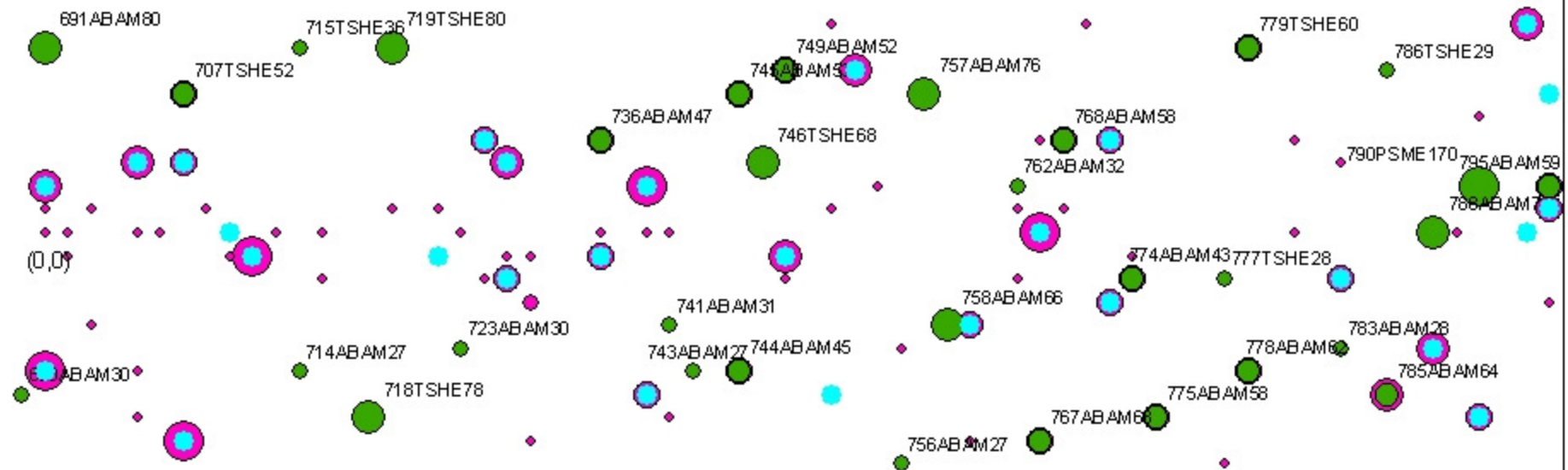
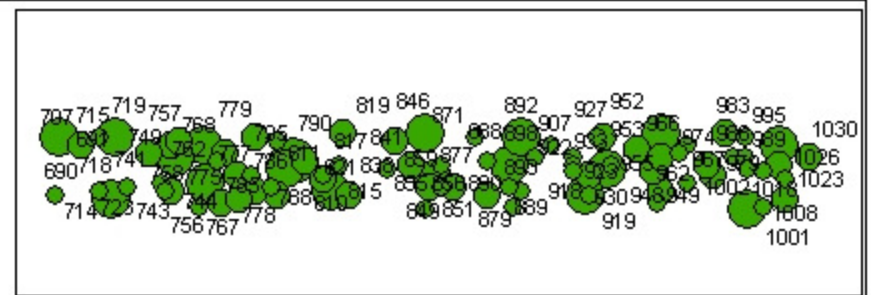
200 m long x 20 m wide (slightly different for PSME)
 angle = 77 degrees



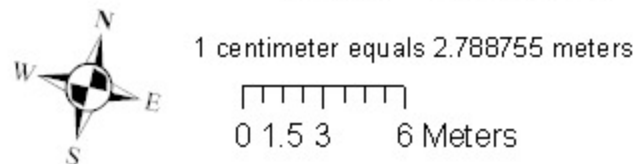
1 centimeter equals 8.813843 meters



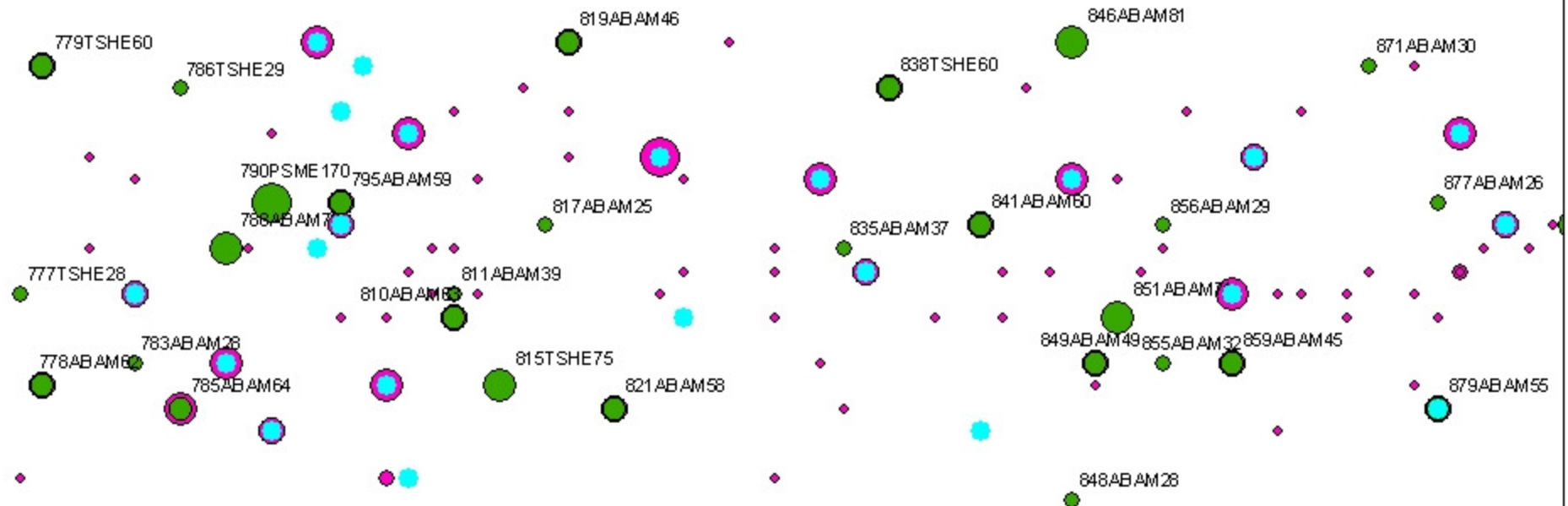
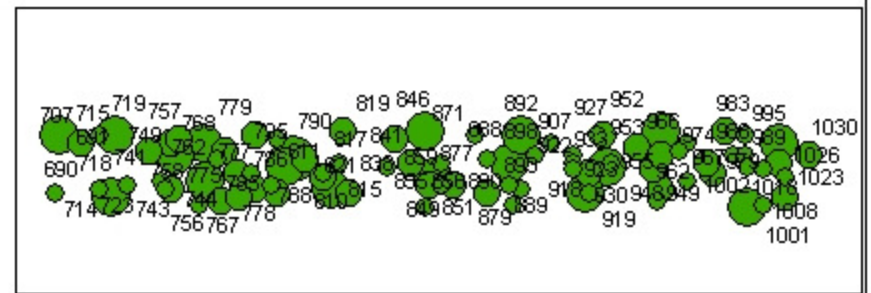
Live tagged trees $\geq 25\text{cm}$ dbh in green
Dead trees highlighted in blue



200 m long x 20 m wide (slightly different for PSME)
angle = 77 degrees



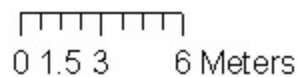
Live tagged trees $\geq 25\text{cm}$ dbh in green
Dead trees highlighted in blue



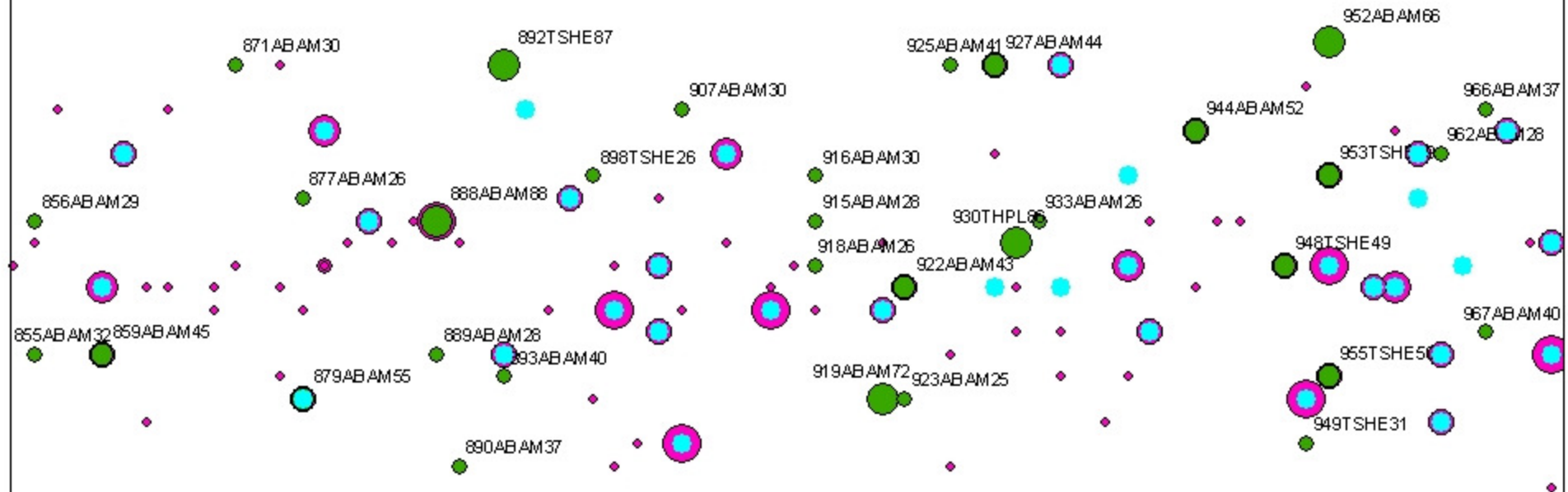
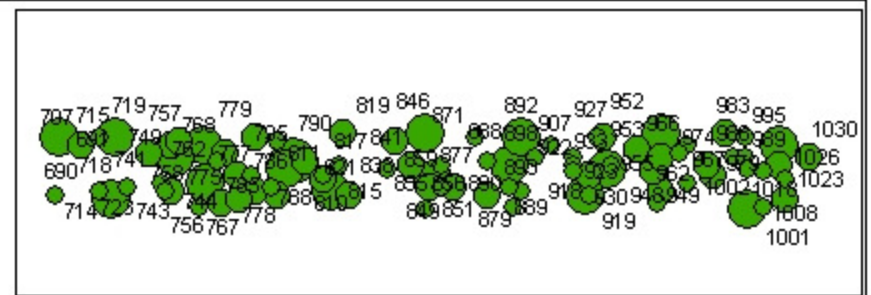
200 m long x 20 m wide (slightly different for PSME)
angle = 77 degrees



1 centimeter equals 2.788755 meters



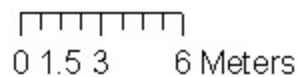
Live tagged trees ≥ 25 cm dbh in green
Dead trees highlighted in blue



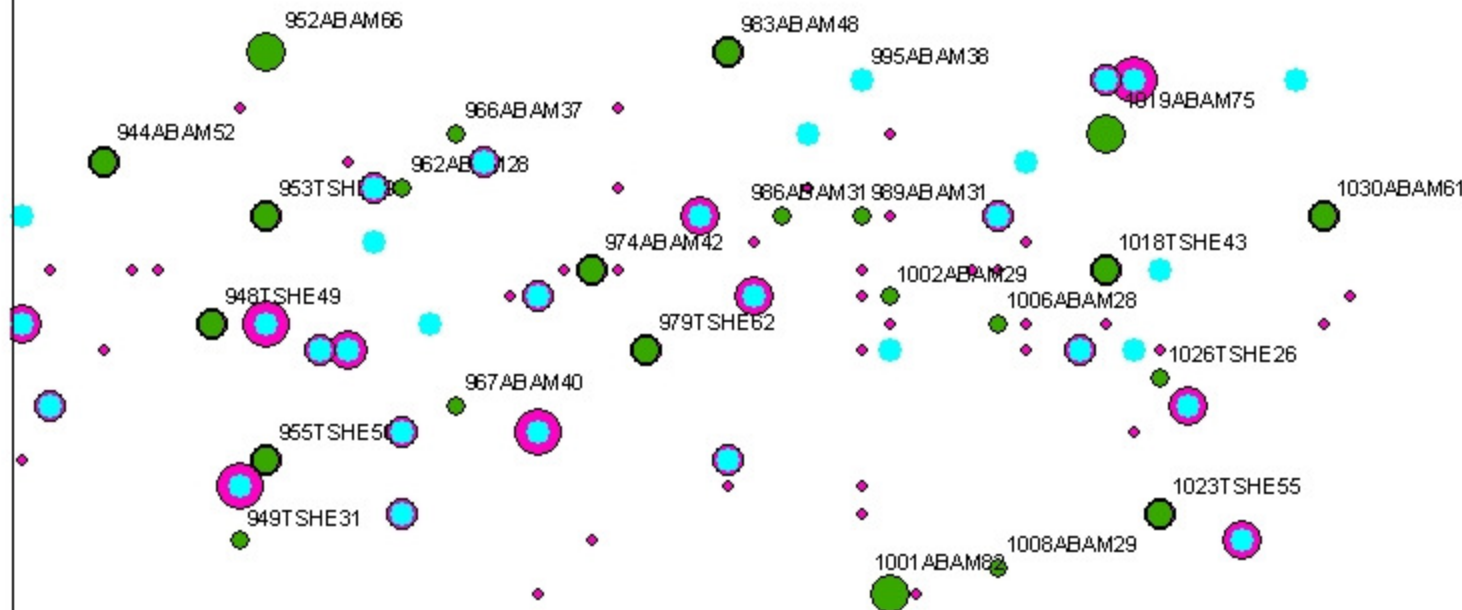
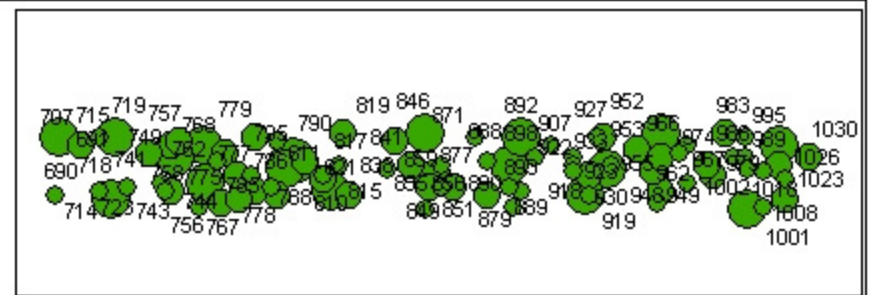
200 m long x 20 m wide (slightly different for PSME)
angle = 77 degrees



1 centimeter equals 2.788755 meters



Live tagged trees ≥ 25 cm dbh in green
Dead trees highlighted in blue



200 m long x 20 m wide (slightly different for PSME)
angle = 77 degrees



1 centimeter equals 2.788755 meters

