

Field Journal

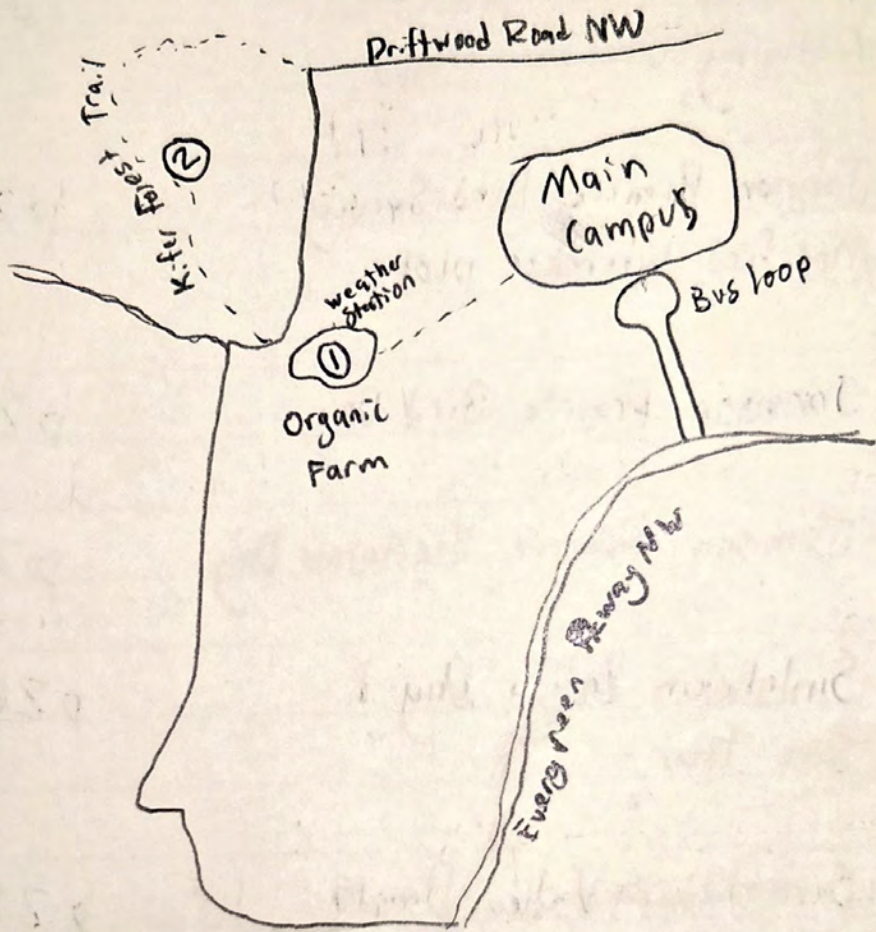
Forestry and Wildlife Methods
Evergreen State College
Spring 2023

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MAP



4/6/23 10:30 - 14:45
Chris Snyder

Snyder 1

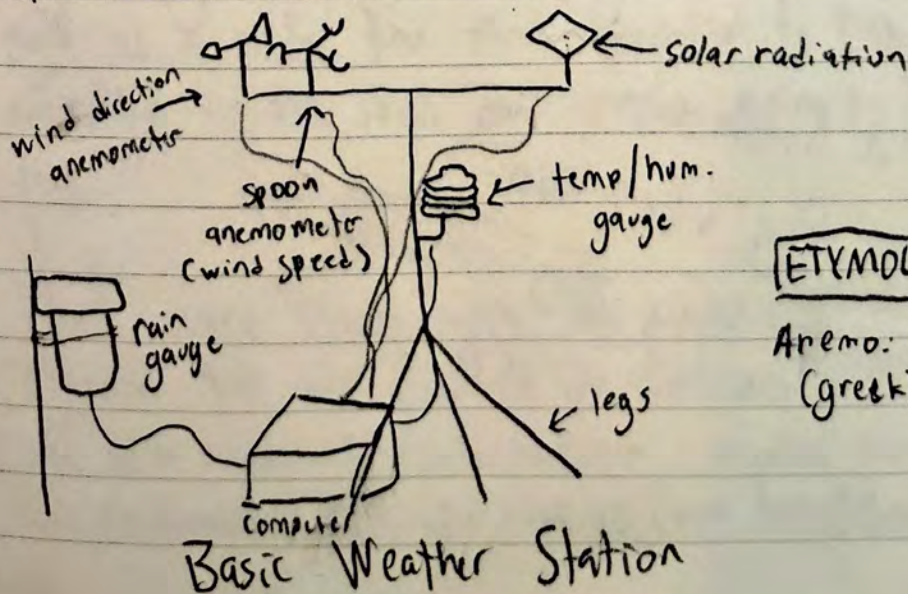
Location: The Evergreen State College

- ① Organic Farm (47.07028, -122.98585)
- ② Kifer Woods ~ (47.0715, -122.9892)

Habitat: Organic Farm: Mature 2nd Growth Mixed Conifer
Kifer Woods: Mature 2nd Growth Bigleaf Maple Dominated

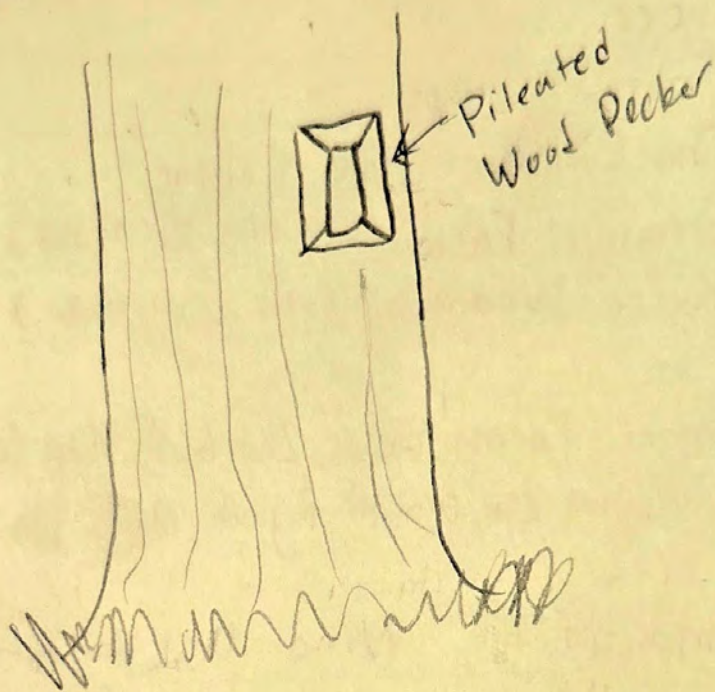
Climate: Temp: 47°F Wind: 0-1 Beaufort
Sky condition: 2-5 changing throughout day

Observations: As a group we disassembled and reassembled a Campbell weather station by the Organic Farm and observed a HOBO weather station. The HOBO is cheaper (~\$800) and connects to the internet but is less durable and accurate than the Campbell (~\$5000).



ETYMOLOGY

Anemo: Wind
(greek)



Dark Eyed Junco

typically ground hunting
for food

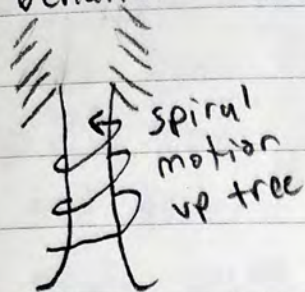
these flash when
they fly which can
make easy ID

4/6/23

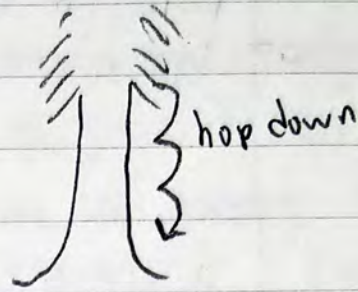
Snyder 2

Observations Cont.

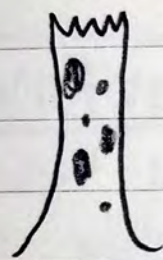
We observed a small creeper wood pecker and discussed its behavior in comparison to a hatch wood pecker.



creeper



hatch



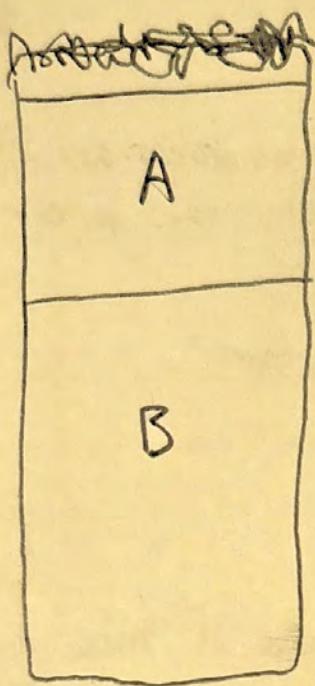
snag

We also discussed the cause of holes in snags (broken tree trunks). They can come from wood peckers or insects or both and form after the tree is dead. Large box shaped holes come from large Pileated Woodpeckers.

We learned that silviculture is the job of forest planning (long term) and we learned that a root fungus specific to Douglas Firs can kill and open space in the canopy which created habitat for various organisms such as a cedar tree that appeared to have been cultivated in the shade and is now going to grow large.

There were issues with the Campbell weather station that will need to be addressed including an off kilter anemometer/solar radiation, toppled canister for the electronics and erratic readings from temp/hum. gauge.

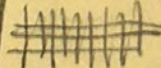
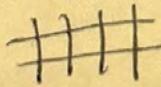
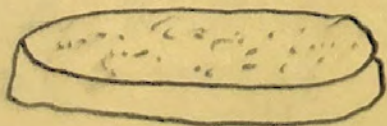
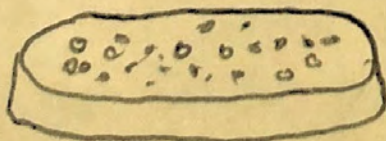
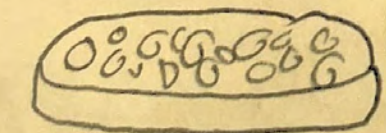
Soil Horizons



O (can be subdivided into O₁ O₂ etc)

A is defined as first soil with no discernable life (mineral soil)

Soil Tumbling



Shaken through different screens to separate by clast size

4/6/23

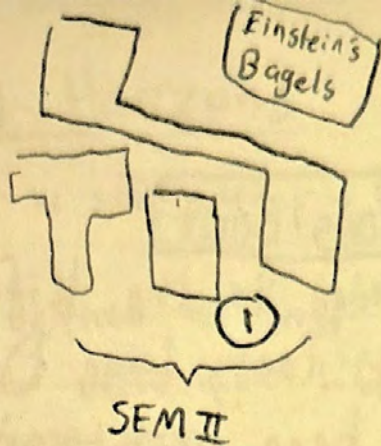
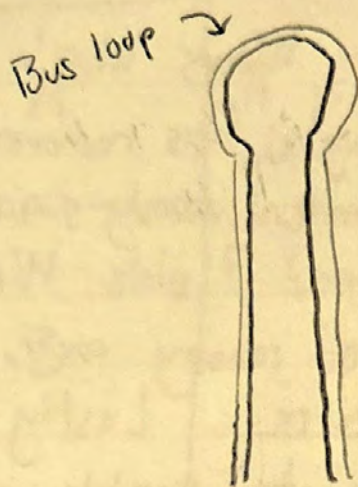
Snyder 3

Observations Cont

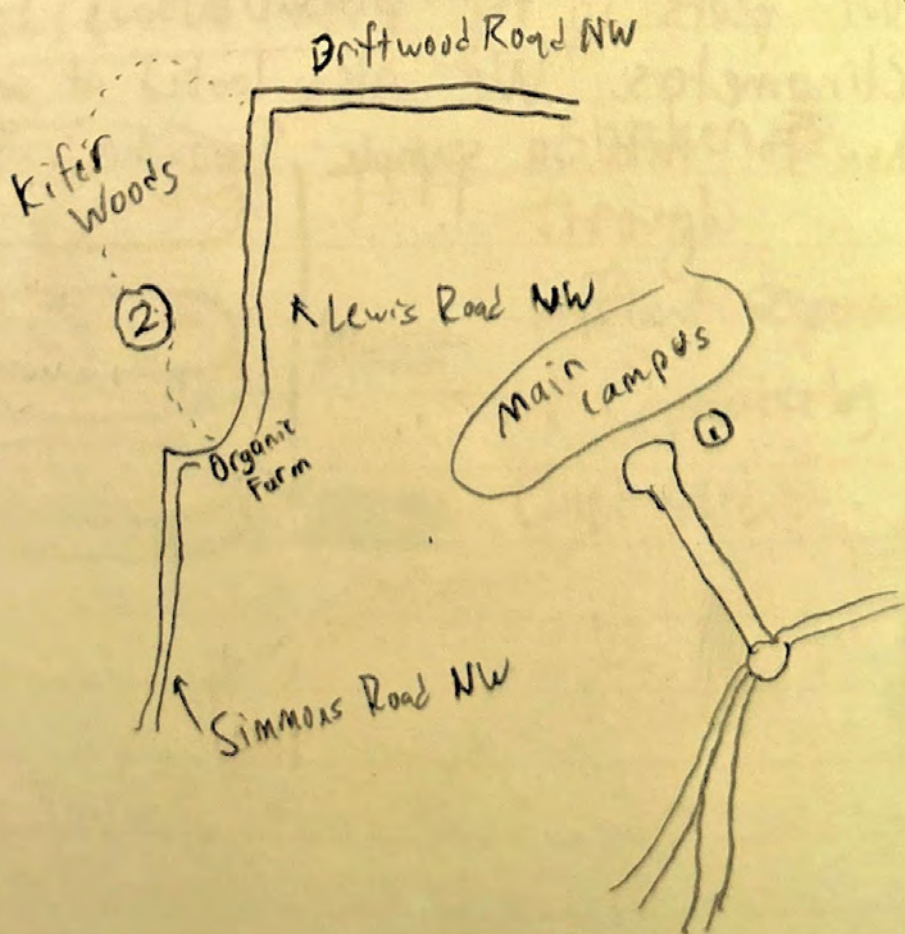
We proceeded to the Kifer Woods which was last cut (only large Douglas Firs removed) in 1967(?). It has been monitored continuously since 1977. We (group 2) have been assigned 7 plots. We saw plot 4.2 and took a picture of canopy cover, then measured the grade with a clinometer. Lastly we visited soil pits and took cores to tumble at the lab.

Narrative: As a class we learned about weather stations by servicing one and visited our plots in the Kifer Woods to practice using clinometers. We also looked at soil pits and saw how to take a sample. Throughout the day we

MAP 1



MAP 2



4/11/23

Chris Snyder

Snyder 4

Location: The Evergreen State College

- ① Behind and around Seminar II Building (47.07243, -122.9756)
- ② Kifer Woods plot 5-2 (47.0715, -122.9882)

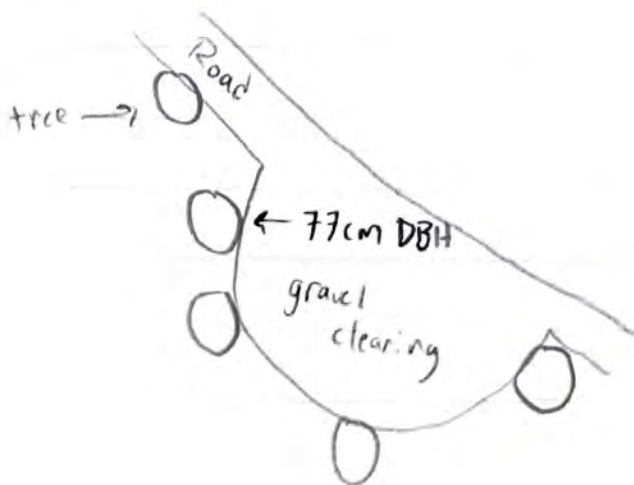
Habitat: Mature 2nd growth mixed conifer/deciduous in both locations

- ① Also on college campus, development adjacent and within developed area.
- ② Bigleaf ~~Maple~~ dominated

Climate: Temp^o 48-51°F Wind: 0-1 Beaufort

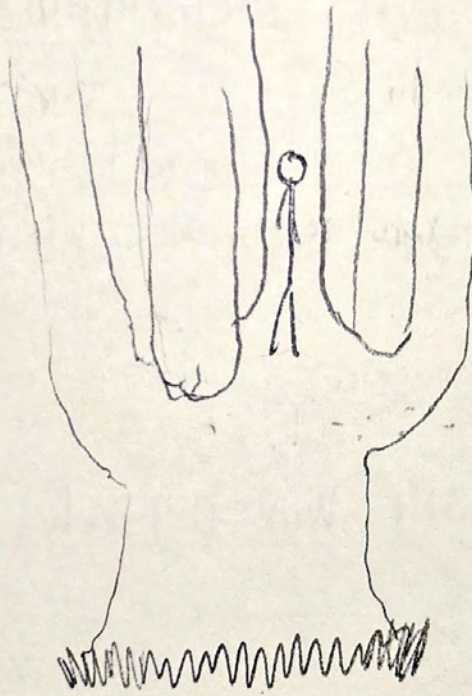
Sky: 1

Observations: ① We measured the Diameter at Breast Height of a Douglas Fir behind Seminar II. We took a short gravel road across from Einstein's Bagels to a gravel clearing and measured the first tree on our left.





Red Cedar
Needle
Scales



Multi trunk
Bigleaf Maple

4/11/23

Snyder 5

Observations Cont.

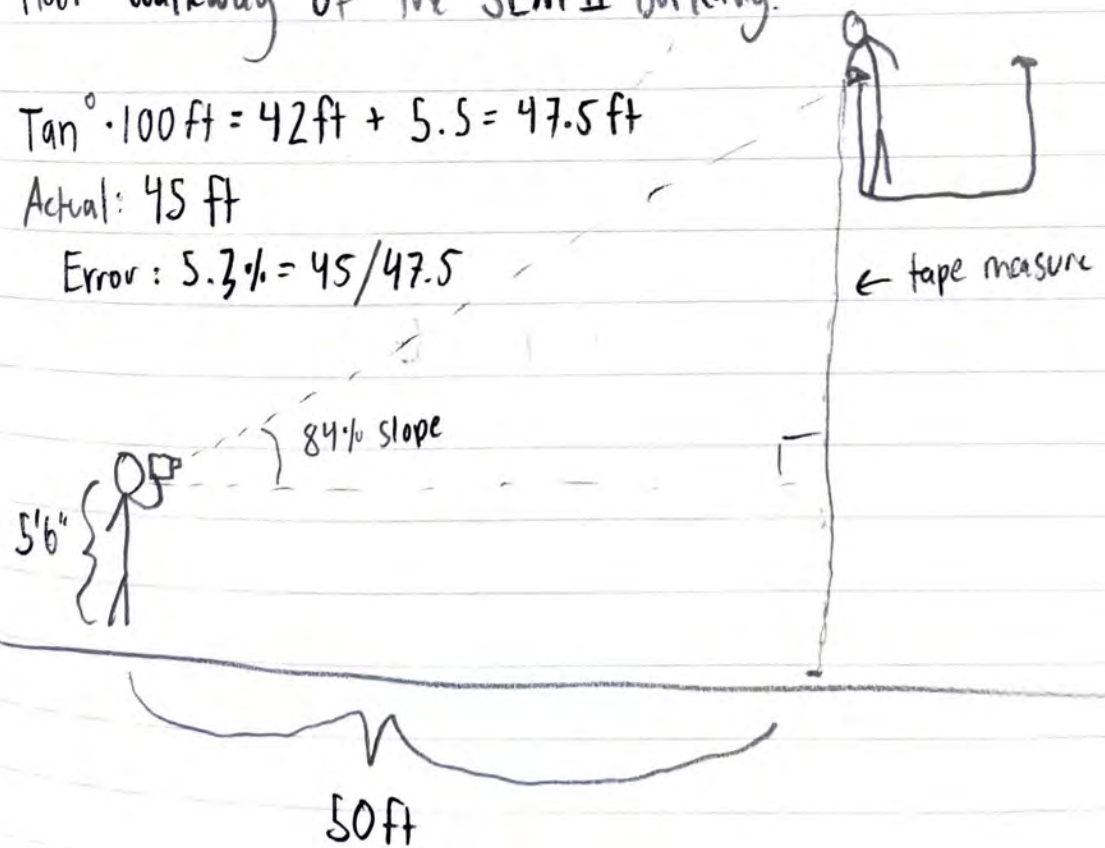
We learned that trees under 2" DBH do not need to be measured. Observed "butterfly" scales on red cedar needles. We found a Bigleaf Maple that branched into many trunks that had to be climbed to get DBH of each trunk. This was only partially measured for practice.

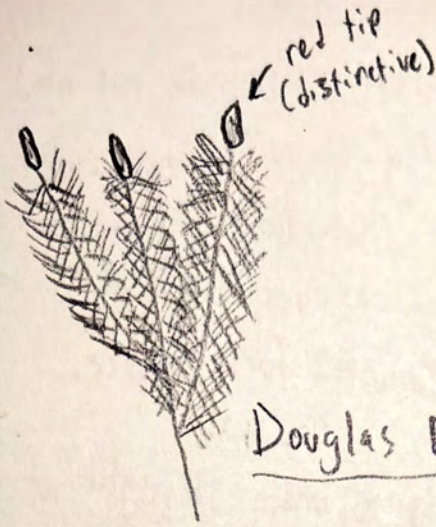
We then used a clinometer to estimate the height of the 4th floor walkway of the SEM II Building.

$$\tan^\circ \cdot 100 \text{ ft} = 42 \text{ ft} + 5.5 = 47.5 \text{ ft}$$

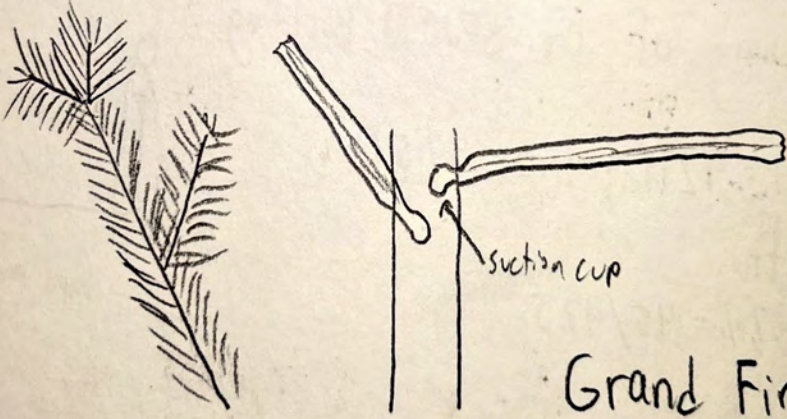
Actual: 45 ft

$$\text{Error: } 5.3\% = 45 / 47.5$$





Douglas Fir



Grand Fir



Western Hemlock

Observations Cont.

Snyder 6

time: 14:00 location (2)

Learned to identify Douglas Fir, Grand Fir, Western Hemlock
Grand Fir is much like Douglas Fir but has smoother, less furrowed bark and more low branches. It's said that the needles look like they suction cup onto the stem. The also splay of flat rather than the more pipe cleaner splay of Douglas Fir needles. Hemlock have shorter needles of heterogeneous length, also more flat splay. Also less furrowed bark. From below, the canopy of Hemlock is feathery and not geometric like Grand Fir.

At plot 5-2 we measured 3 trees

K816: 26.5 cm DBH / 92'5" Height / Alder

K809: 25.5 cm DBH / 61'7" Height / Alder

K1083: 70 cm DBH / 137" Height / Douglas Fir

Typically when doing height for a site you only need one representative height per canopy layer. Snags are measured if they are 4.5 ft tall (DBH).

Narrative:

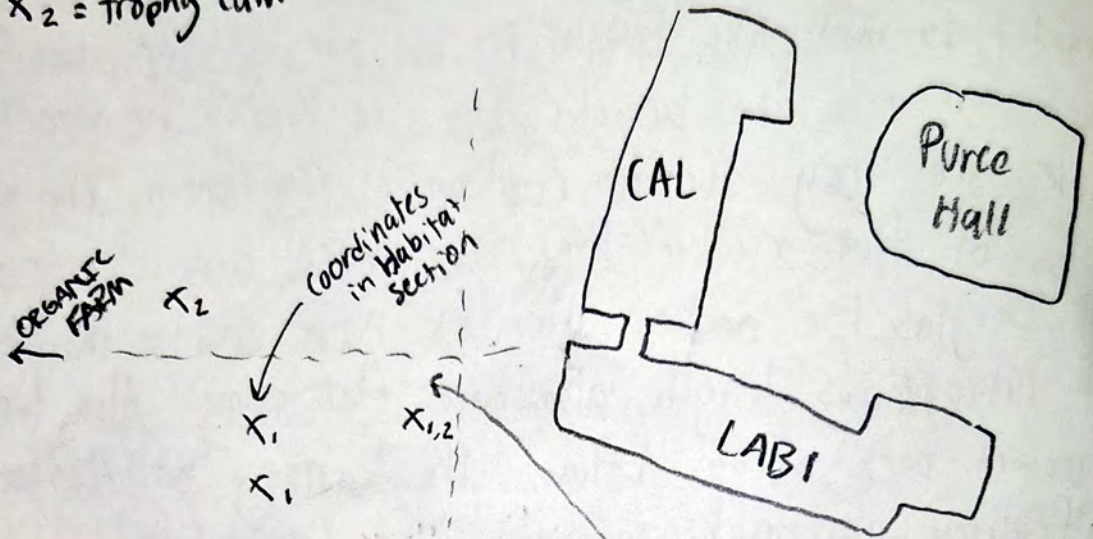
We learned to measure tree height and DBH, then practiced this with trees behind SEM II and at Kifer Plot 5-2. We also learned to ID 4 trees: Douglas Fir, Grand Fir, Western Hemlock and Red Cedar.

X = equipment placed here

x_1 = audiomoth

x_2 = trophy cam

MAP



Shell Pile

4/12/23

Chris Snyder

Snyder 7

Habitat Mature 2nd growth Douglas Fir dominated
salal undergrowth (49.67151, -122.97963)

Climate Temp: 49°F - 51°F Wind: 0 Beaufort
Sky condition: 0-1

Observations 11:00 Mounted 3 audiomoths
and 2 trophy cams in the forest behind the CAL.
Left the equipment in place for 45 minutes and then
collected them. I saw a small pile of mussel shells
when I left the trail.

Narrative In groups we learned to set up remote
audio recording and cameras that capture objects moving.

Melospiza Melodia
Song Sparrow

Speckly stripes of
dark brown



white breast

Troglodytes Pacificus
Pacific Wren



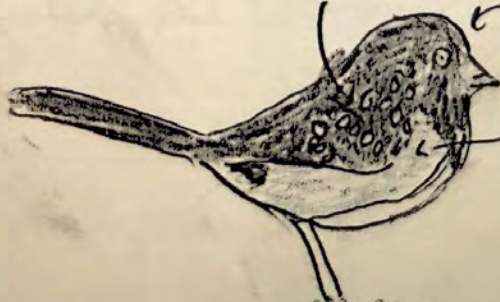
Speckling

stripes of dark

white spots

red eyes

brown-red chest



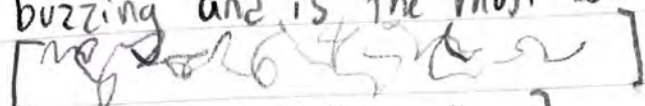
Spotted Towhee
Pipilo Maculatus

Common Birds of the PNW

Snyder 8

Song Sparrow longer song that typically ends with a trill and includes a buzz

Pacific Wren long complicated song does not include buzzing and is the most common bird in PNW forests



[|| || || || || || ||]
chk chk chk chk chk chk

[||| | || | | || | |]
like turning a clicky knob

Robin [~ ~ ~ ~] can be deep or mousey
[~ ~ ~ ~] [^ ^ ^ ^ ^]

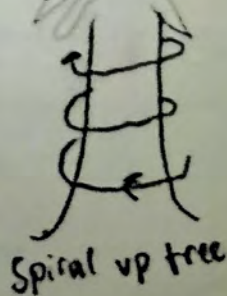
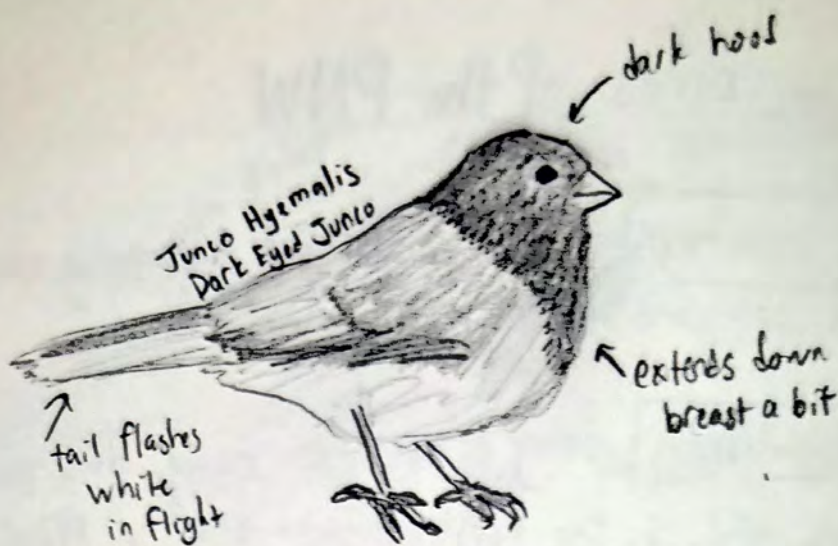
[chr eer eer eer whr] (jungle esq)

[^ ^ ^ ^ ^] (jungle like but lower)

[^ ^ ^ ^] short blips
mouse like
[^ ^ ^]
alarm chirp

Spotted Towhee [777] chw chw chw
beedddddd

lots of lazer gun sounds and the complaining about lack of coffee



Common Birds of the PNW

Snyder 9

Dark Eyed Junco

[hum hum] laser gun cricket
sound
[11111] chirp chirp chirp

Black

Black Cap Chickadee

[- - -] [- -]

chicka chick beh
^ ^ ^

chicka dec dec dec dec

Chestnut Backed Chickadee

Squeak toy and rodent esq

Brown Creeper

[- - - -]

many regional variations on this pattern but usually starting high, rifting lower, and ending high

Sitta Canadensis
Red Breasted Nuthatch

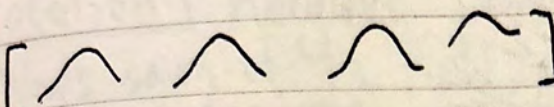


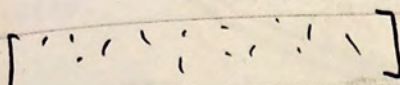
cinnamon
color

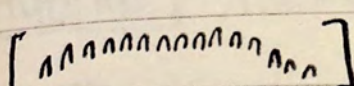
Common Birds of the PNW

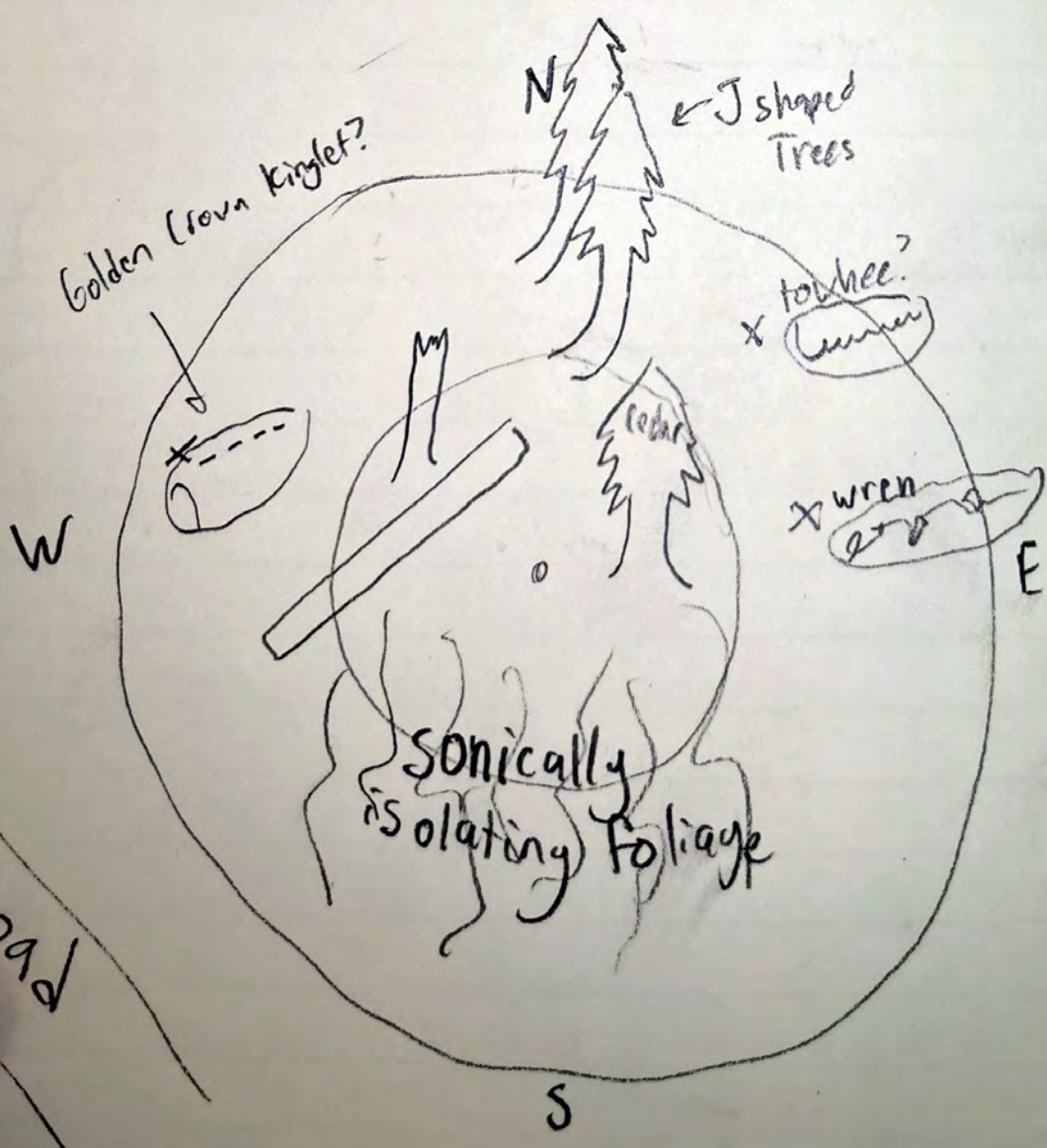
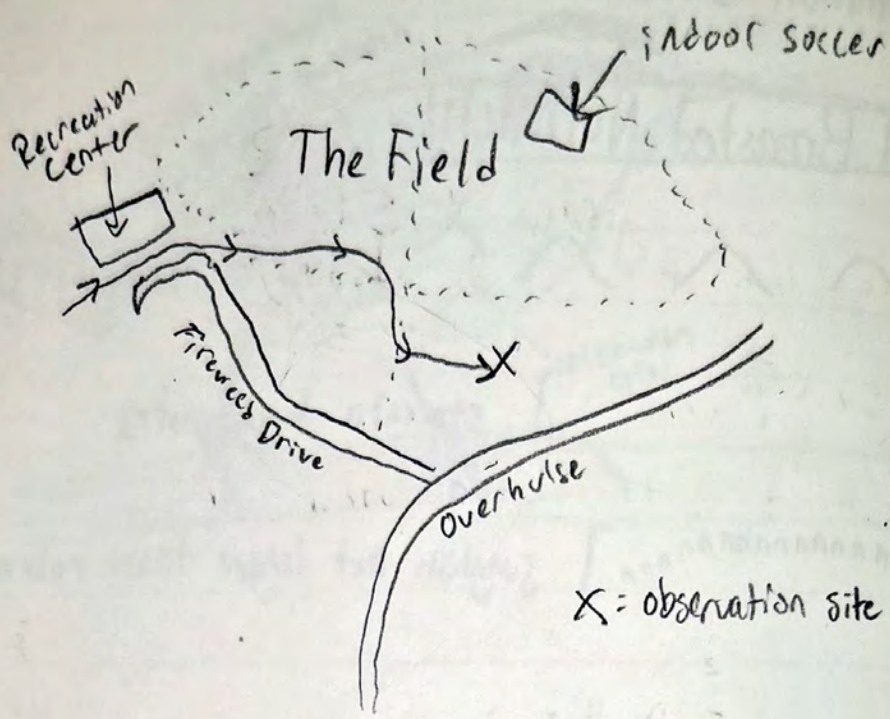
Snyder 10

Red Breasted Nuthatch

[] low and nasally single notes

[] staccato high notes

[] junglish but longer than robin



4/13/23

Chris Snyder

Snyder 11

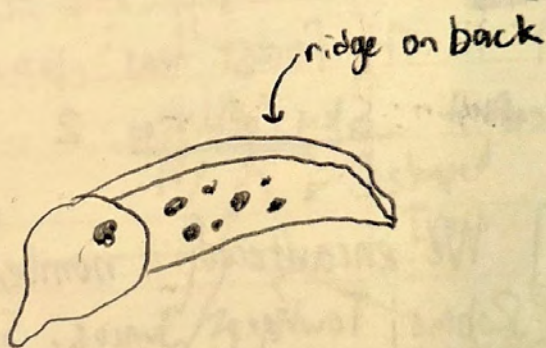
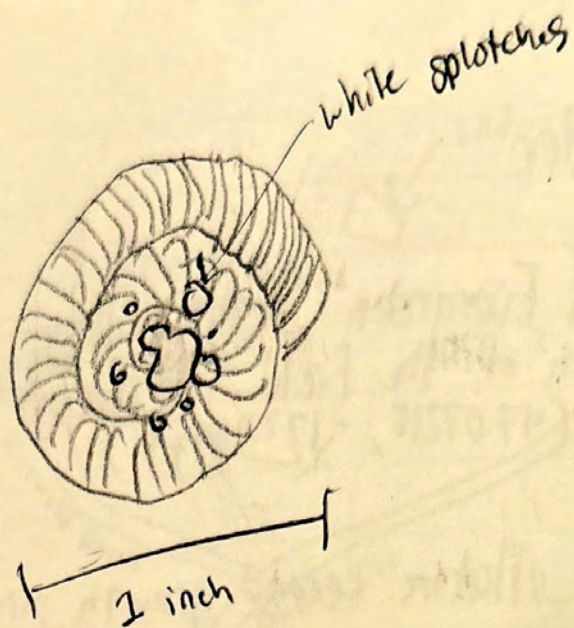
Location: Evergreen State College
Woods south of the field, frisbee golf course in these woods. (47.07218, -122.96973)

Habitat: Mature second growth mixed conifer

Climate: Temp: weather report said 47° - 50°F throughout the day but in the forest was closer to 43° - 45°F
Wind: 0-1 Beaufort Sky Condition: 2

Observations: We encountered a number of common PNW birds (Robins, Towhees, Juncos, Sparrows, Chickadees, crows, Starlings) on the way to the observation site. I was able to hear 3 distinct birds during my point count although I'm certain there were more. I drew visualizations of their calls for later analysis.

Narrative: We spent time talking about common birds before doing our first point count.



4/13/23

Chris Snyder

Snyder 12

Location Evergreen State College Kifer Forest
Entrance at (47.07012, -122.98694) for map refer previous entries.

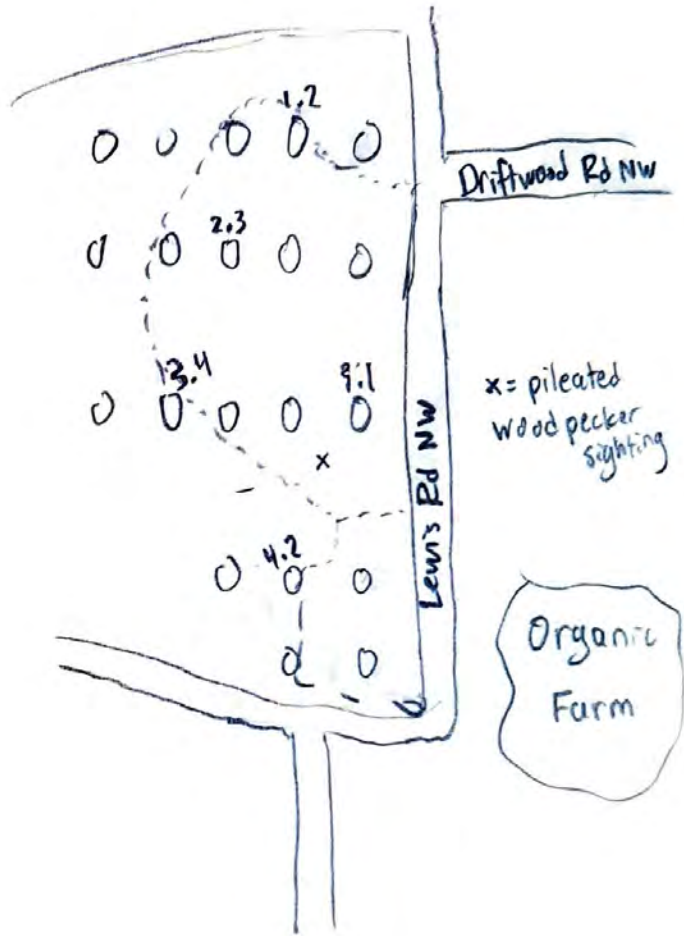
Habitat Mature 2nd Growth forest Mixed Conifer
Bigleaf Maple Dominated due to highgrade cut
in the 1970s.

Climate 45° F, Wind D-1 B, Sky 2. Brief
rain before my arrival at the site.

Observations I observed pacific Waterleaf, Oregon Grape,
liquorish fern, sword fern, and some small green plants that
I was unable to identify at plot 4.2. We found the
grade at plot 3.1 to be negligible. I observed
4 snails, one of which was an inch in diameter
and 3 of which were less than 1 cm. These were
on the underside of a wet peice of bark. I also
saw a small slug that was either a leopard slug or
banana slug.

Narrative I arrived late to the site where my teammates
had already catalogued the species in the undergrowth at 4.2.
We then looked for herps and mammals on our way to 3.1
and were only able to get the slope of 3.1 before
rain came in.

MAP



4/18/23 Tax Day :
Chris Snyder

Snyder 13

Location Kifer Woods, plots: 4.2, 3.4, 3.1, 2.3, 1.2
plot 3.1 coordinates: (47.07356, -122.98767) time 9:30

Habitat Mature 2nd growth Maple Dominated

Climate 40°F Wind 0-23 Sky 5-7

rain became sleet at times with occasional temporary
halt of precip

Observations At plot 4.2 our 5 min point count only
yielded the positive ID of one Purple Finch. There was
some other unidentified bird song, individual chirps.

On the way to site 3.1 Caleb pointed out a Pileated
Woodpecker feeding at a snag (location marked on map).

We played calls to it but got no response. Too hungry?

At plot 3.1 we heard a Pacific Wren, Song Sparrow, and
Chestnut Backed Chickadee during our 5 min point count.

Afterwards, using binoculars we observed a small bird with
yellow on its head (Golden Kinglet?) in some Bigleaf
Maples outside our plot. At plot 3.4 the wind increased

and snow became sleet (11:30). We placed camera 4
by a squirrel midden in an attempt to capture feeding.

We heard a Eiminon Backed Chickadee, Junco, and Pacific Wren
during our point count but decided to stop the point counts
due to weather. We also placed an audio moth here.

4/18/23

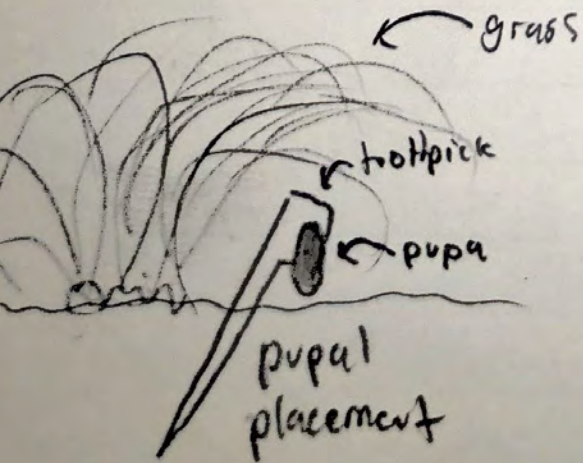
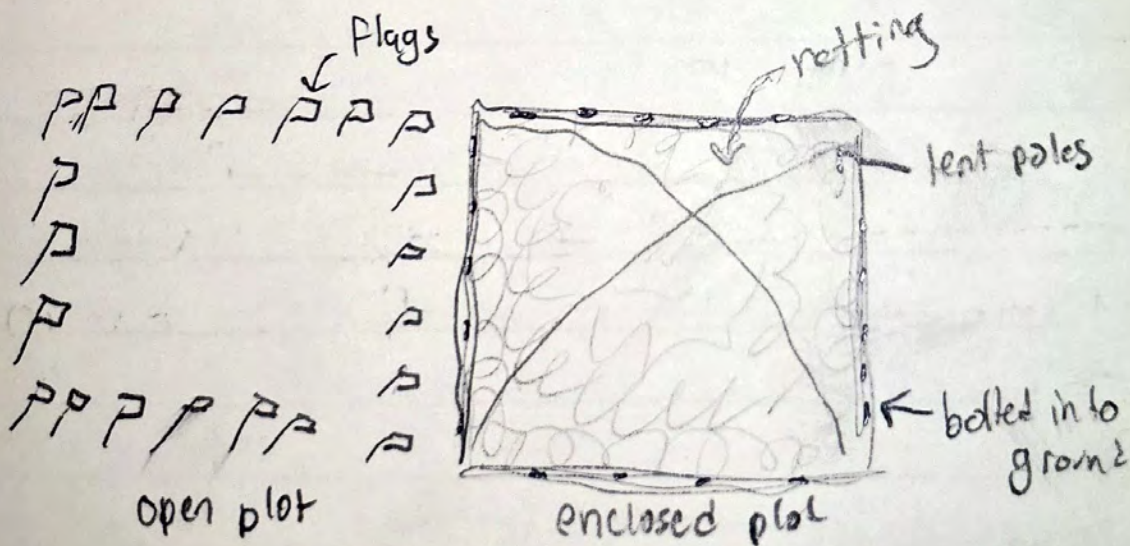
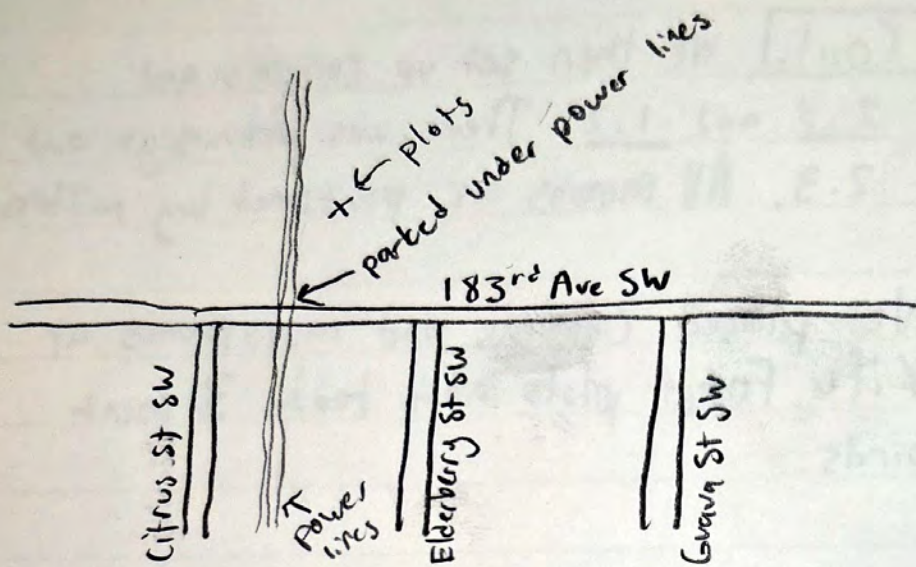
Chris Snyder

Snyder 14

Observations Cont. We then set up cameras and audio mths at 2.3 and 1.2. There was deer sign and 2 middens at 2.3. All cameras are positioned by middens.

Narrative We placed cameras and microphones at 3 of our Kifer Forest plots and took 3 point counts of birds.

MAP



3 sets of these two plots

4/21/23

Snyder 15

Chris Snyder

Location Scatter Creek Wildlife Area (South Tract)
Coordinates (46.82386, -123.01485)

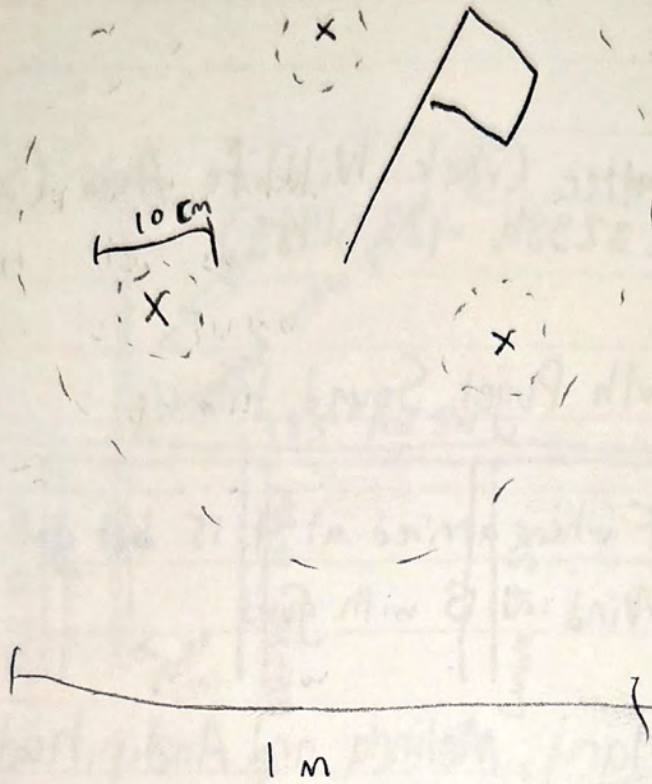
Habitat South Puget Sound Prairie

Climate 45°F when arrived at 9:15 but got warmer
sky: Cloudy Wind: 13 with gusts

Observations Mary, Melinda and Andy had set up a release study in which pupa were glued on tooth picks and stuck in the ground under grasses and near their host plant (plantain). There were two plots right next to each other with one enclosed by netting to protect from predation and one unenclosed. There were 3 replicates of these.

These plots had been placed a week(?) earlier and upon inspection today most of the plots had apparently very low survival rate, including 2 of the enclosed plots. True survival rate could not be determined because some toothpicks were well hidden and a complete search may have disturbed the plots. The plot with the highest survival was an enclosed plot that was notably more open and mossy.

X: pupal placement



Pupae ID	Plot ID	Initials	Pupa ^{♀/♂} o/v	Plot o/v	
001-24	P43	MLV	50:50	70:30	10

Sample of data sheet ↗

4/21/22
Chris Snyder

Snyder 14

Observations Cont The unenclosed sister plot to the plot with highest survival had piles of pupa tucked under grasses. Current hypothesis is field mice are storing them for later consumption. The plan is to use cameras to monitor predation starting tomorrow.

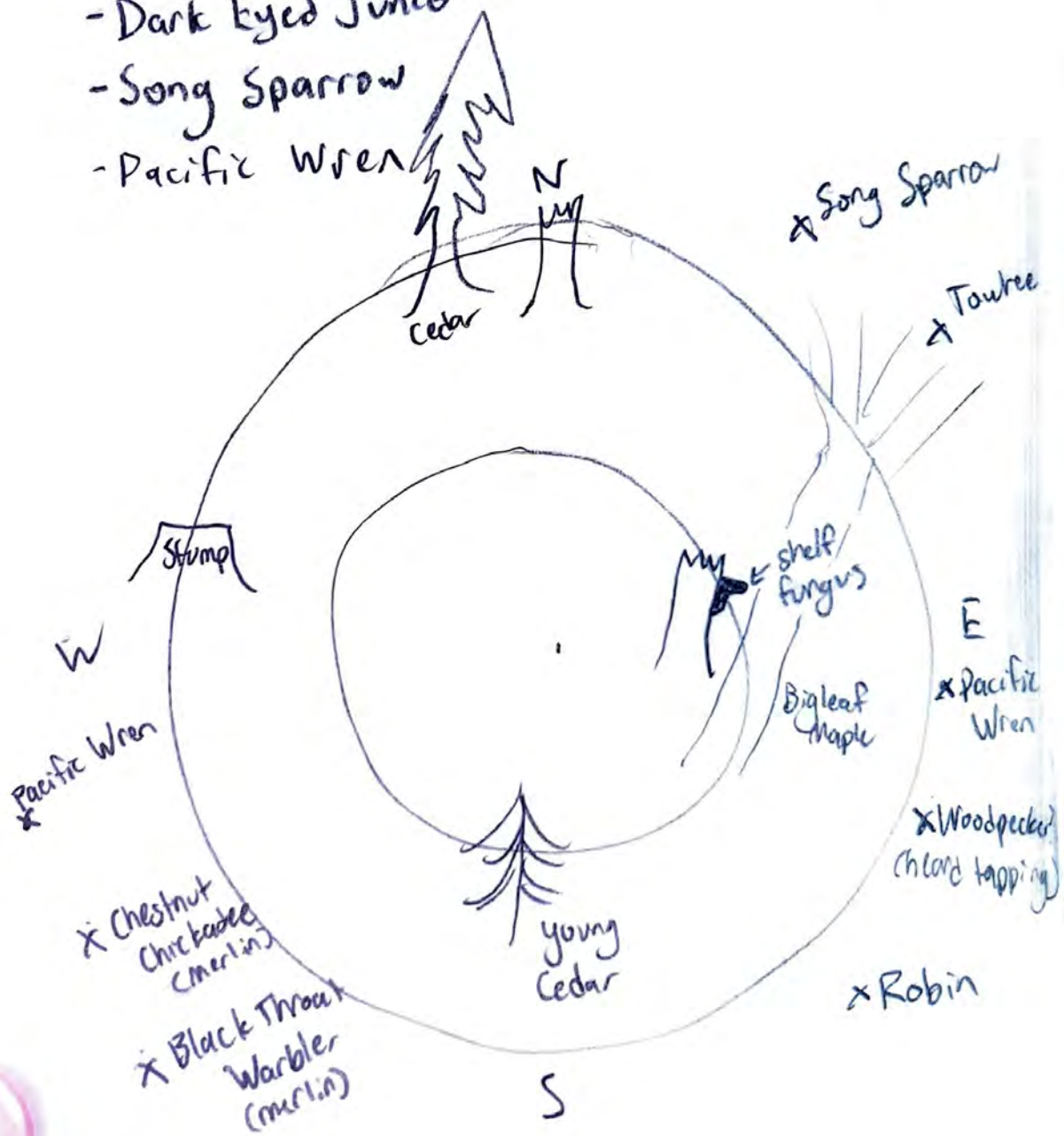
In light of the apparent poor pupal survival, a new study design was conjured by Mary. 1m plots marked by flags with 3 pupae per plot. These plots were located next to plantain. Pupae would be placed the same way as before and the following info would be recorded: Plot number, plot openness ($x/10$), 10cm circle around pupa openness ($x/10$), pupa genetics number, initials of researcher placing pupa, avg. vegetation over or under 10 cm. Melinda and I set up 29 plots while Mary and Andy did the same.

Narrative I arrived at the DNR building in Olympia at 8:30 and was out at Scatter Creek until 16:00. Usually larva are released but weather and host plant conditions were insufficient this year.

Plot 4-2

30 sec Merlin recording:

- Spotted Towhee
- Dark Eyed Junco
- Song Sparrow
- Pacific Wren



4/25/23
Chris Snyder

Snyder 17

Location Kifer Forest at Evergreen State College

plots 4-2 (47.071696, -122.988065)

3-1 (47.073311, -122.987362)

3-4 (47.073161, -122.989737)

2-3 (47.074854, -122.989128)

Habitat Mature 2nd growth Bigleaf Maple dominant

Climate 47°F at 10:00 up to 60-65°F by 14:00

Sky: Partly Cloudy Wind: 0 B

Observations At plot 4-2: (only took NESW canopy pictures. Then for our playback bird survey we played 5 minutes of Pacific Wren calls after an initial 5 minutes of silence. I also recorded 30 seconds in Merlin Bird ID on my phone before the survey. I found it harder to hear birds while the playback was going and resolved to stand farther away at future plots. I ran Merlin sound ID during the survey to cross reference what I heard and could ID. Merlin detected some species I did not and I marked those to indicate Merlin as the source. Merlin marks lower confidence IDs and I didn't use any low confidence IDs.

4/25/23

Snyder 18

Chris Snyder

Observations Cont

At plot 3-1: We arrived at ~11:00 and had a discussion with profs Dylan and Alison about classifying canopy layers. For the sake of wildlife surveys it is important to consider whether a potential canopy layer sufficiently provides the habitat that it should in order to be considered. Foresters tend to think in terms of succession and how canopy layers reveal or impact what flora can grow. For our playback survey we chose spotted Towhee calls, but the rest of the methods remained the same. Towards the end of the 5 minutes, 3 or more Towhees flew up to Jack (doing playback) and there was a lot of loud Towhee calling. It was at this point we realized we needed to fill out the rest of the habitat surveys from last week which we did before returning to 4-2 to complete it there.

We took lunch around ~12:30 and split into teams to cover the remaining 4 plots. Jack and Cody took 1-2 and 1-5 while Aaron, Caleb, and I took 3-4 and 2-3. At plot 3-4: We repeated playback survey and habitat survey. We also checked our wooden cover board for herps but found none. I took the NESW canopy pictures.

4/25/23

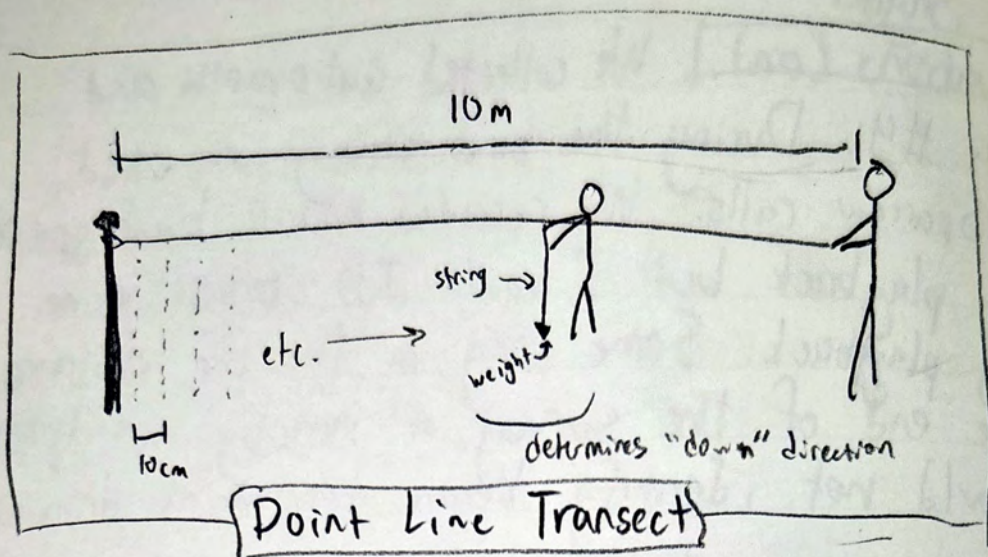
Snyder

Chris Snyder

Observations Cont We collected audiomoth and camera #4. During the bird survey we used Song Sparrow calls. We recorded many bird species before playback but I could ID almost none during playback. Some sang in the far distance. At the end of the survey a nearby woodpecker I could not identify began territorial drumming.

At plot 2-3: We arrived at 14:37 and noticed the temperature was much higher than morning. We collected audiomoth 10 and camera 6 before repeating the playback survey and habitat survey. We used Pacific Wren calls and appeared to attract the calls of 3 Wrens. No herps.

Narrative Our task today was to collect our audiomoths and cameras, then conduct playback bird surveys using 3 different species' calls (1 pr site, 6 sites, 2 replicates per species), and finally complete our habitat surveys and check our cover boards for herps.



$$\text{Species density} = \frac{\text{Species count}}{\# \text{ of segments}} \cdot 100$$

4/27/23

Chris Snyder

Snyder 20

Location | Kifer Forest; plots 4-2, 3-1, 3-4
refer prev entries for coordinates and map

Habitat | Mature 2nd growth Bigleaf Maple Dominated

Climate | 65°F sunny, no wind.

Observations | Met at 9:00, out in field around 10:00.
First visited plot 4-2. We accomplished N, E, S, W
transects (point line) 10 meters with 10cm increments.

Some species observed:

Sword Fern

Spring Beauty

Bedstraw

Lady Fern (very young, ruled out Bracken by observing nearby
older specimens)

Small flower Nemophila

Maple Seedling

We took cores from 2 Douglas Firs with an average
determined age of 64 years

At plot 3-1 we observed a few species we did not
see at 4-2 including Pacific Waterleaf, Sweet Cicely,
grass, and enchanter's nightshade.

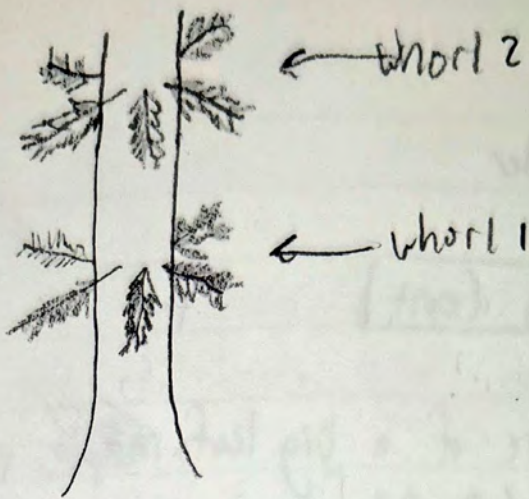
4/27/23
Chris Snyder

Snyder 21

Observations Cont

Our tree core of a big leaf maple indicated a stand age of $\sim 60-65$ years. We accomplished N, E, S, W vegetation transects here and at plot 3-4. At 3-4 we observed native blackberry in some abundance. At this point I took off on my own to position two trophy cams and 1 audio moth. I now have cams at 3-1, 3-4, and 2-3 which is where I placed the audio moth (it failed to record last time).

Narrative As a group we learned to do point line transects and I placed 2 cameras and 1 audio moth.



5/4/23

Chris Snyder

Snyder 22

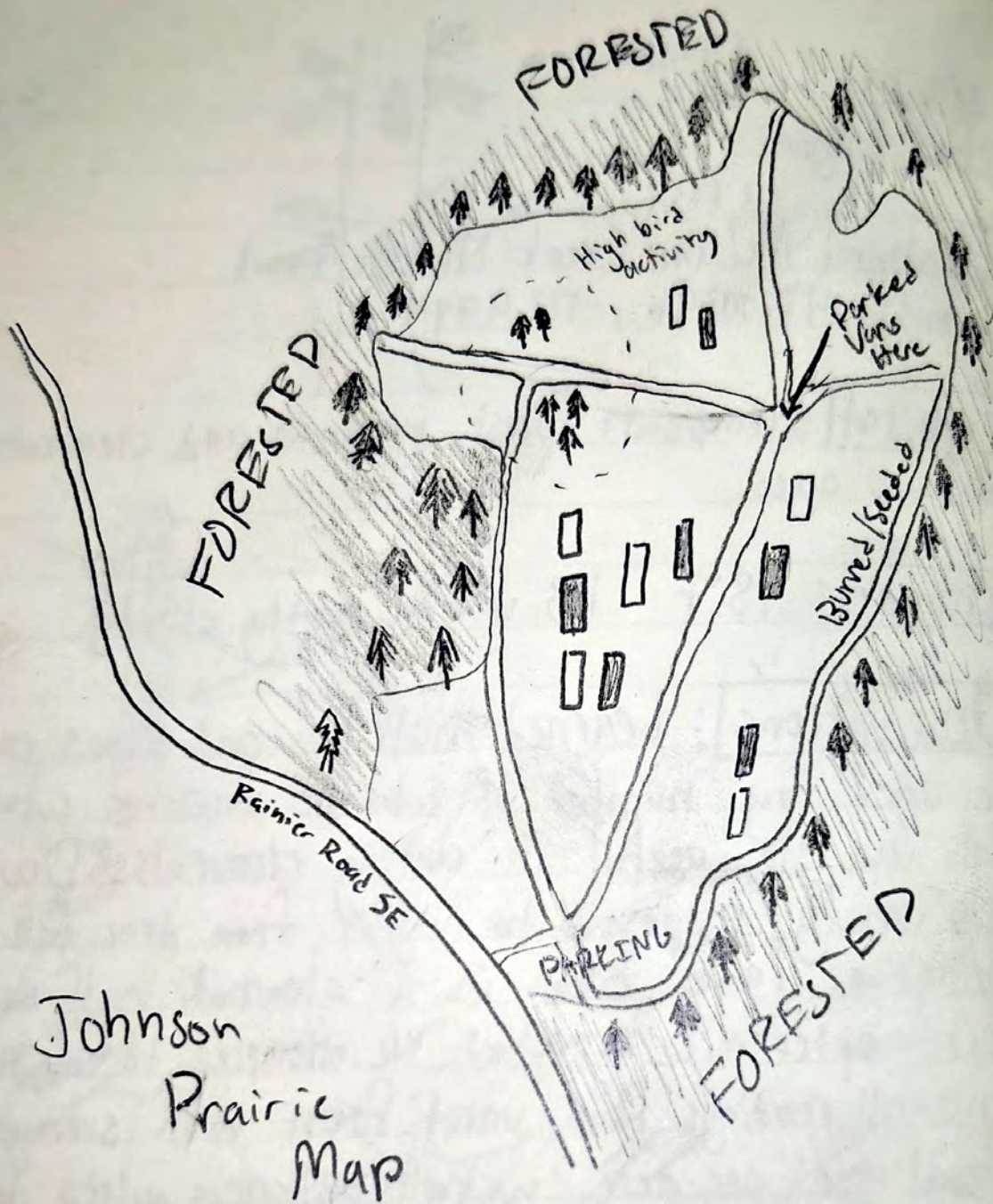
Location: McLane Creek Nature Trail

Coords: 47.00396, -122.99746

Habitat: Temperate forest, riparian and clearcuts of various ages.

Climate: 48°F 113 wind partly cloudy

Observations: Learned that firs and pines can be aged by number of whorled branches when young. This can be useful in dating clearcuts. Douglas firs newly exposed to light from tree fall or being a leave tree in a clearcut will develop new epicormic branches. We attempted to compare cross-sectional readings from uncut forest with surveyed basal area per acre with 20th acre plots but data was too variable to be meaningful. Understory species varied greatly from forest to clearcut with more disturbance loving plants like dandelion in clearcut. After taking lunch we mapped territories of red wing blackbirds at the beaver pond. There appear to be at least 3 territories.



Johnson
Prairie
Map

- unburned control plot
- burned plot

5/9/23
Chris Snyder

Snyder 23

Location: Johnson Prairie
Coords: 46.91696, -122.73762

Habitat: South Sound Prairie

Climate: Upper 60s to mid 70s F°
occasional wind gusting
partly cloudy

Observations: Arrived around 11:00 and recieved site tour from Gina and Adam, past Evergreen students who work on the sites still. These plots in burned and unburned areas aim to test effectiveness of current controlled burning regimes as management strategies for bio diversity. After this we split into groups and practiced distance sampling on systematic line transects for birds and % cover approximation for quadrats in a whitacre plot. New plant species observed include Camas, Jazz Hands, Fescue (family of bunch grasses), and desert parsley which comes in 2 varieties differentiated by leaf type not flower. We also learned that some Balsam roots may grow to be over 100 years old.



yellow

Passerculus sandwichensis
Savannah Sparrow

White
Breast

5/10/23

Chris Snyder

Snyder 24

Location Johnson Prairie

Coords: see prev entry

Habitat South Sand Prairie

Climate 72°F 1-2B wind clear sky

Observations Arrived at 10:00 and began observing birds. "Quick three beers" - olive sided fly catcher. Many savannah sparrows and white crown sparrows. Purple Martins make sounds like croaking. Swallows chatter and many flew close to us as we walked. We used heads/tails randomization to do ~250m transects (4x) with 2x in area recently cut encroaching woods and 2x open grass. We observed more birds where there were downed logs and stumps. This is consistent with my observations at Scatter Creek. We observed a swallows nest in the crack of a downed burnt tree and one western bluebird.



Gallium



trifolium



Chickweed

5/11/23

Chris Snyder

Snyder 25

Location Johnson Prairie, JBLM

Coordinates: see p. 23

Habitat South Puget Sound Prairie

Climate 70-76°F Wind 1-2B Sky: Clear

Observations Spent the day doing % cover on the rest of the unburned plots and started the burned plots. Species density and maybe richness was significantly lower in the burn plots and moss took up a very large proportion. I observed native chickweed, a small variety of gallium, trifolium, and a species affectionately called baby grass.

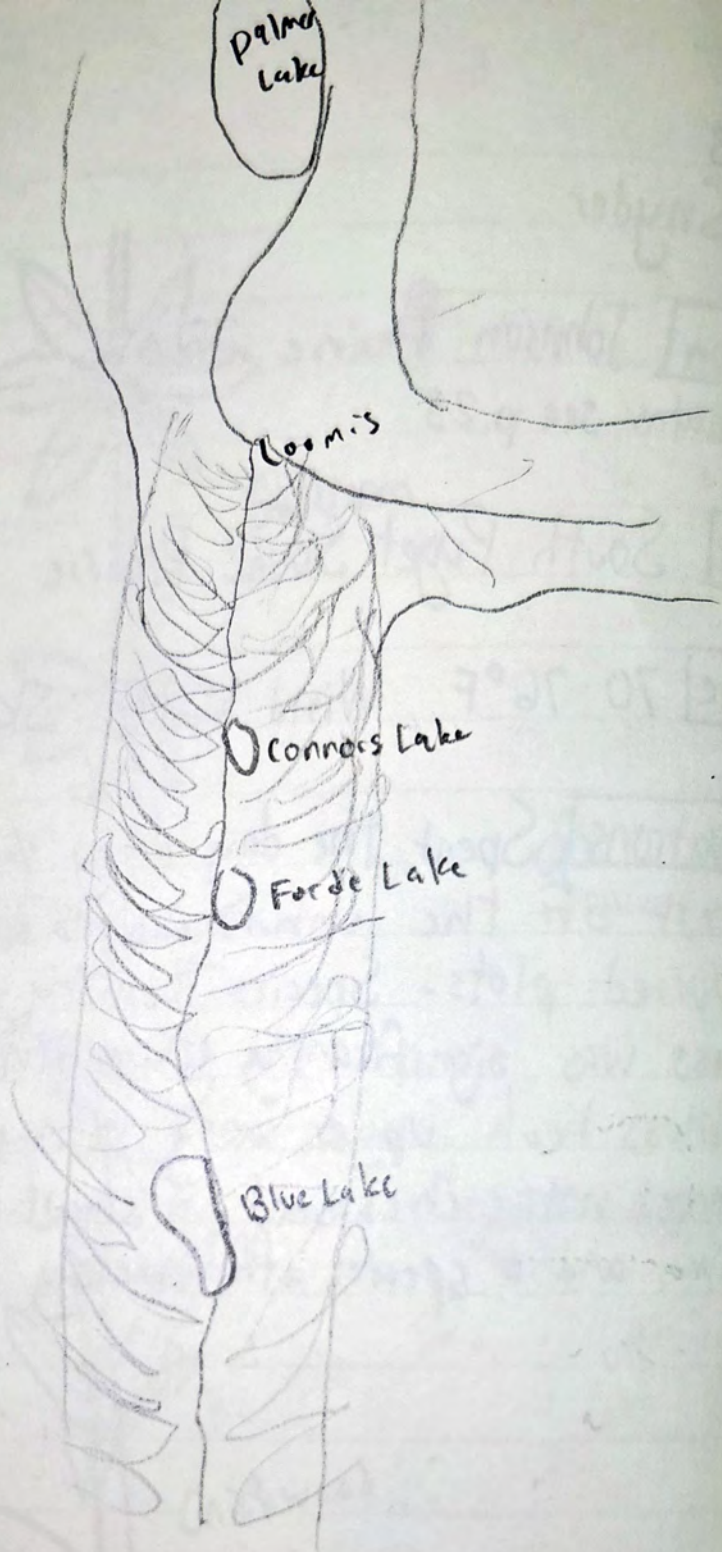
Palmer
Lake

Loomis

Connors Lake

Forde Lake

Blue Lake



5/22/23

Chris Snyder

Snyder 26

Location Sinlahekin Wildlife Area

Campsite: Connors Lake

coords: 48.75158, -119.66239

Habitat Dry Forest Ponderosa Pine Dominated mixed conifer Douglas fir dom at higher elevations on valley walls. Base level ~1500ft

Climate high of ~65°F partly/mostly cloudy with thunderstorms at 13:00

Observations Lots of red winged black birds competing for territory at Connors Lake, some males aggressive when we walk too close. Many bird species here. I saw yellow warbler, common yellowthroat, and magpie. A number of old Ponderosa Pines on east wall of the valley. Ponderosa age can be approximated with bark color which changes from gray to orange/red as young bark sloughs off. Bark plates get bigger and smoother (?). Diameter is a poor judge of age. Aspen leaves quake because the flat stem is perpendicular to the flat leaf. May shake off herbivorous insects. Some insects lay eggs on leaf and roll leaf like a burrito around larvae.



Practice Butterfly
Drawings

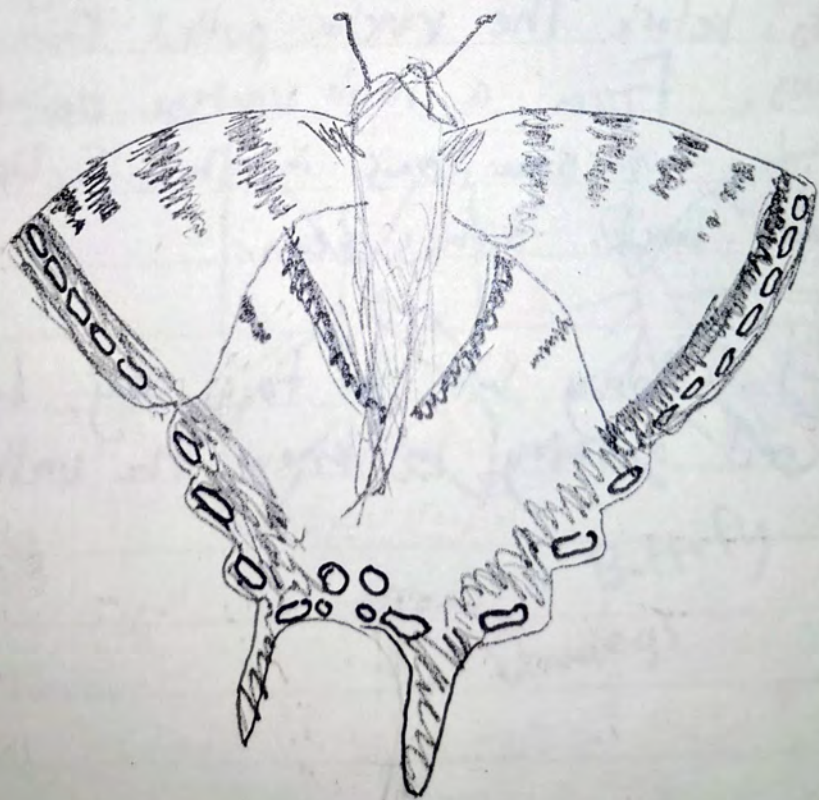
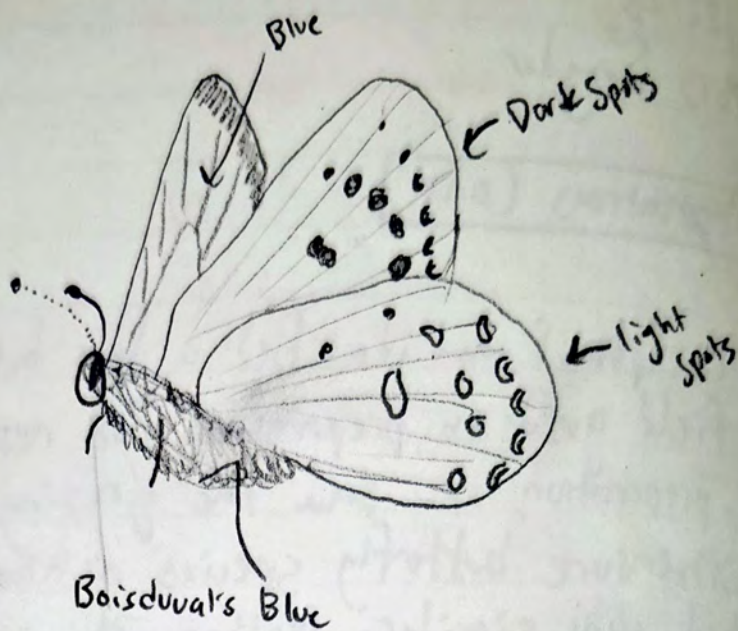
5/22/23
Chris Snyder

Snyder 27

Observations Cont.

We captured and identified a few butterfly flies with a field guide in preparation for research. Also in preparation we saw the grazing sites we intend to measure butterfly species richness at. They looked very similar. Nathan, the manager of this area told us these 3 grazing enclosures are on rotation and this year the cows only grazed for two weeks before the rancher pulled them for fear of wolves. From a high vantage point later in the day we saw cows in these fields. Maybe they came back. 3 cows seen.

Narrative Today was a fair day, learning tid bits and getting to know the valley.



Oregon
Swallowtail

5/23/23

Chris Snyder

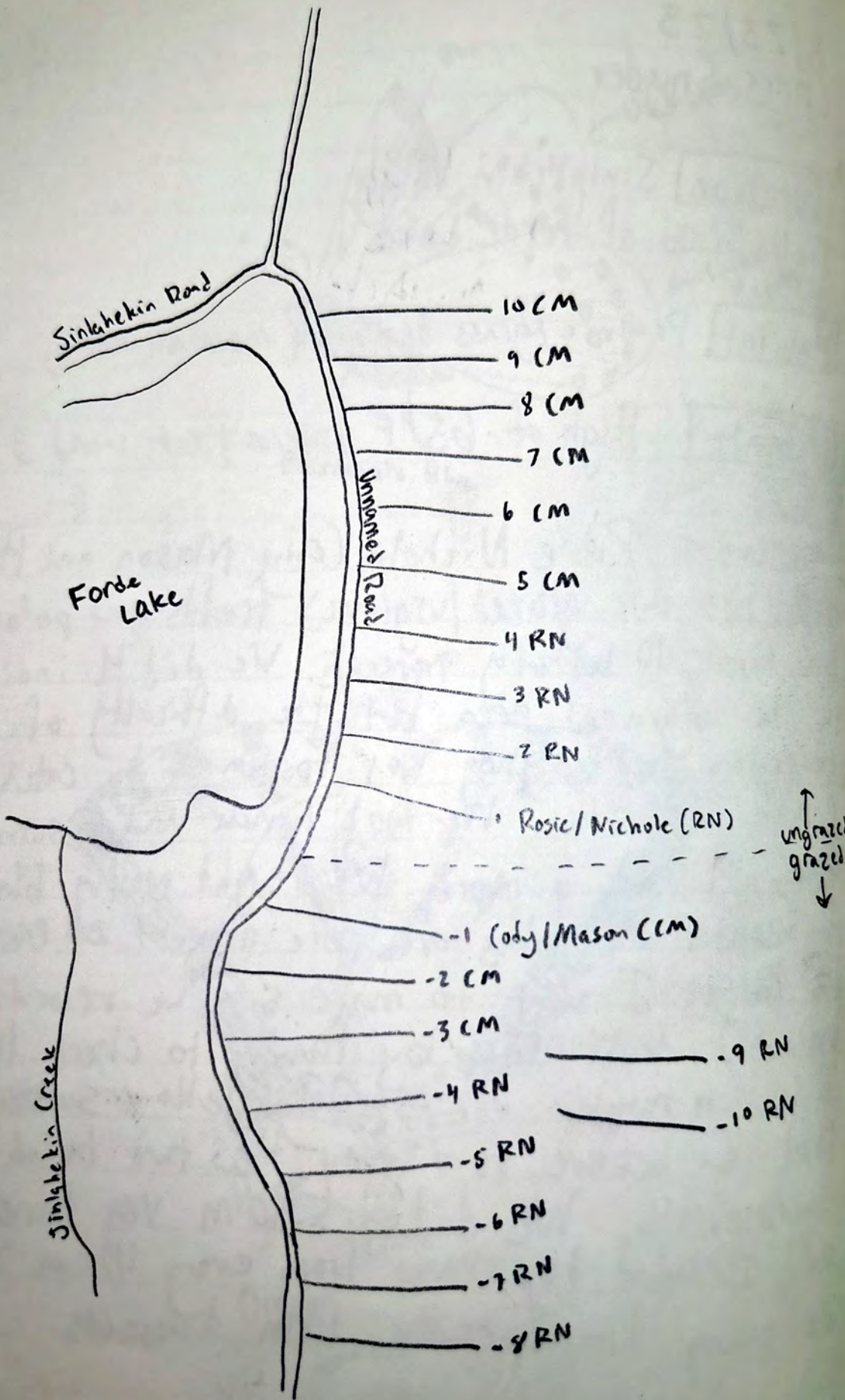
Snyder 28

Location Sinlahekin Valley
Fields east of Forde Lake

Habitat Prairie/grass dominated mountain valley

Climate High of 65°F intermittent wind 3B

Crew of Rosie Nichole Cody Mason and Haley drove to our grazed/ungrazed fields and performed our first 10 butterfly transects. We did 4 individually in the ungrazed area but the difficulty of recording and catching was too much to catch enough butterflies. We took lunch and resurveyed those 4 and 6 more. We caught mostly blues. I wonder if blues are more abundant or easier to catch. I want to make sure we record uncaught butterflies by family to check this. I saw a number of especially yellow swallowtails that I believe now may be two tailed tiger swallowtails. We did a 30m veg transect and decided to change from every 10cm to every 1m for the 100m transects.



5/24/23

Snyder 29

Chris Snyder

Location Sinlahekin Valley

Fields east of Forde Lake

(coords of gate between grazed (south) and ungrazed (north))

Habitat Grassland, mountain valley floor

Climate High of 71°F, thunderstorms in afternoon

approx 15:00 - 17:00 winds of S B prior to storm

Drove to Forde Lake from Connors lake ~ 10:00.

I spent most of my day laying out transects on Gaia and placing flags while Nichole, Rosie, Cody, and Mason performed the remaining transects (5 on grazed and 5 on ungrazed). At lunch, Mason switched to doing vegetation work with Haley (different project) and I took on the first vegetation transect with Cody. We got through transect 10 and half of 9 before a thunderstorm began. Much of our dominant vegetation was a tall grass we couldn't identify that seemed to indicate a wetter environment than the vegetation of the ungrazed plot. After the storm passed it was decided that on Thursday our crew would work on a riparian butterfly survey that would

Snyder 30

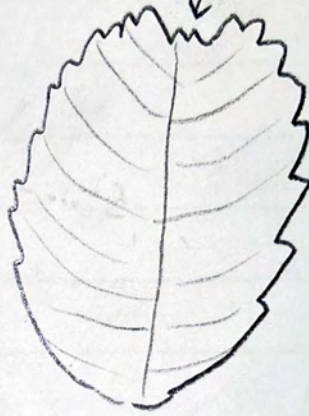
be used to track butterfly populations' reaction to a prescribed burn that is to be performed this summer. Dylan helped Nichole and I with species identification in our ungrazed area. We finished transect 9 and proceeded with transect 8 before returning to camp.

Alfalfa

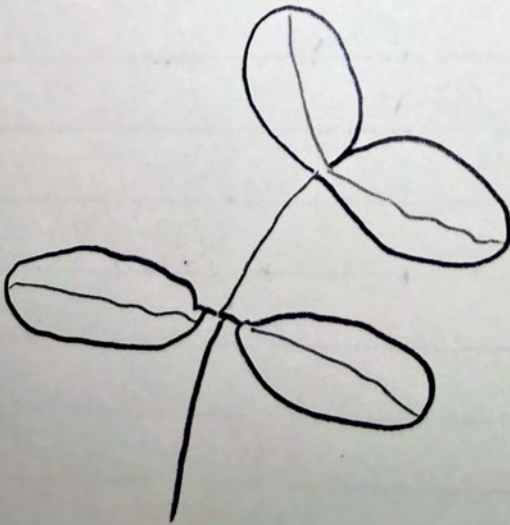
← Three leaves



← recessed teeth



Service berry



opposite round leaves

Snowberry

5/25/23
Chris Snyder

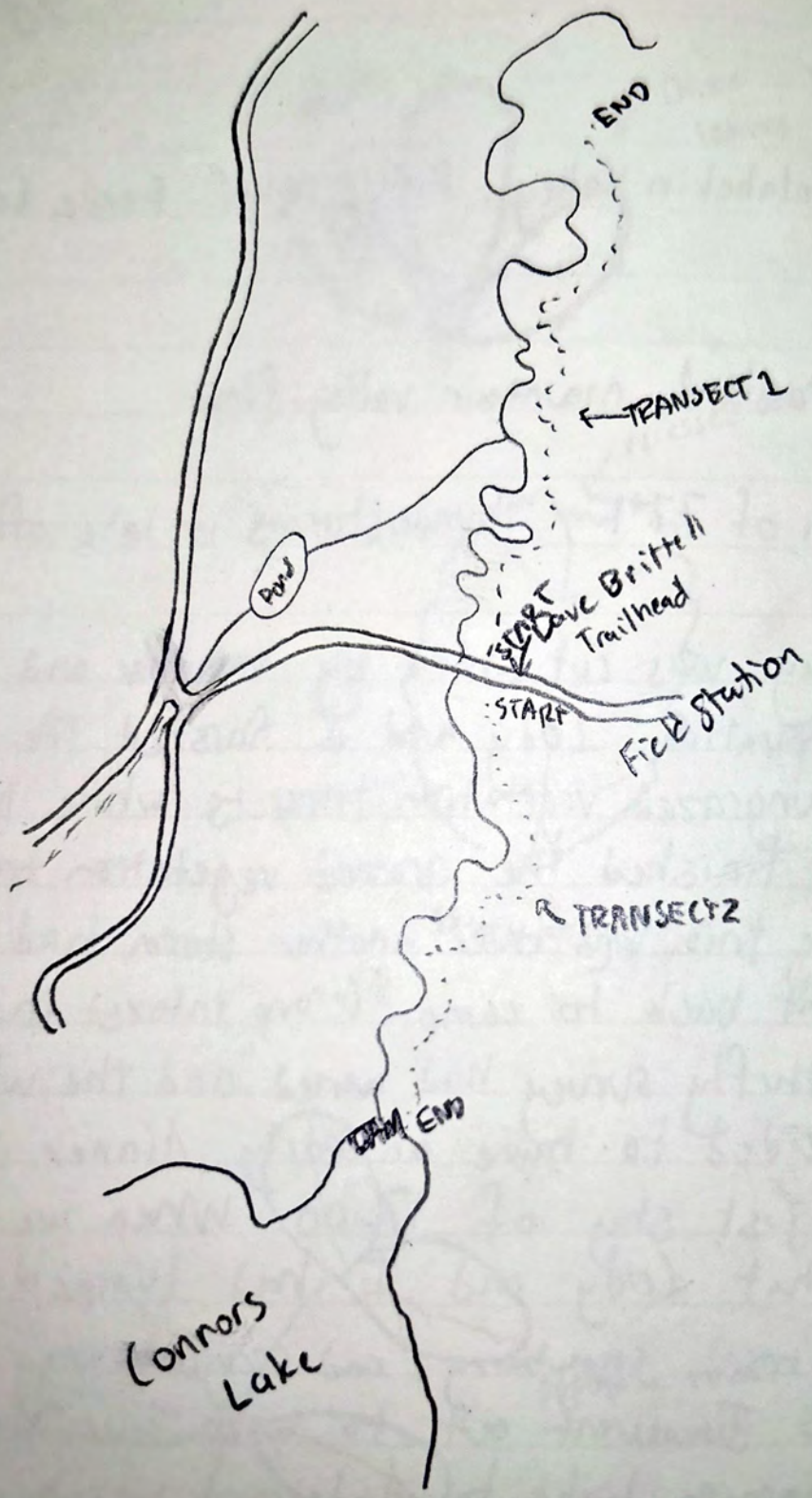
Snyder 31

Location Sinlaken Valley, Fields east of Forde Lake

Habitat Grassland, mountain valley floor

Climate High of 77°F, thunderstorms in late afternoon

The workday was cut short by weather and group motivation. Cody and I finished the 5 remaining ungrazed vegetation transects while Nichole and Rosie finished the grazed vegetation transects. By the time this was over another storm had begun and we went back to camp. Group interest in the riparian butterfly survey had waned and the whole program decided to have an early dinner in Tokusket just shy of 17:00. When we returned I found that Cody and I had lumped alfalfa with wild rose, snowberry, and service berry. To remedy this I went out to walk our transects in the remaining light to determine which species were present, since they made up such a small percent. This work was completed the following day.



5/26/23

Snyder 32

Chris Snyder

Location Sinlahekin Valley, Fields East of Forde Lake as well as East side of Sinlahekin River by Field Station near Dave Brittell Memorial Trailhead.

Habitat Grassland/Riparian

Climate High of 74°F Wind 2B Clear Sky

I decided to perform the riparian butterfly survey on my own. I started at the Dave Brittell memorial trailhead and walked S paces from the edge of the riparian foliage to where a road crossed in front of me (0.6 miles approx) I recorded species I observed along with whether I was able to catch them or not. Those I could not catch to identify I usually could determine family. Realizing I was seeing most species in the non riparian grasses I made a small loop in the riparian foliage where it was walkable to see if the species I identified were different in large respects. They did not. My first transect had gone north along the river, my second went south toward Connors Lake. After this I finished my vegetation triage.