

6. May 2014

31. May Today I looked at developing tubers(?) of ground cones (*Boschniakia*) across the parking lot under Sitka alders. These were 0.4-1.5 cm in diameter, right now, only loosely associated with all dead ground cones. I sampled (tasted) the largest of these.

It was a little astringent like steeped black tea with a pleasant nutty aftertaste. The texture was a bit mealy, & am curious as to how these look as they develop.

I would like to find some *Anostraca* from the Refuge, so I checked some vernal pools today. At 60.46202°N 51.88018°W ± 7m x 3m I collected some arthropods and a pea clam (2014, MCB107).

9. May 2014

I walked down to Headquarters Lake with one of our *Elodea* rakes to try sampling some aquatic plants. All I pulled up green was some water moss (*Fontinalis?*). I picked up what I think is a small,

4
floating Insecta. All of the
Potamogeton was old rotten
material from last year.
I am afraid that next
week may be too early for
sampling the perennials.

5
12. May, 2014 | 1247 - onto camp.

We are at Stony Lake this
morning for our pre-treatment
aquatic vegetation survey.

John, Jan, and I will be in
the News Craft; Todd, Loty,
and Loty have the Magnum.

We finished surveying the lake
and were on Daniel's Lake
by about 14:00. Our boat
surveyed half the lake.

The other crew had gone
back to headquarters after
Stony Lake due to
mechanical trouble.

It was 19:00 when we got
back to Headquarters.

6 (13. May. 2014)

John, Jim Mullet and I met at 07.00 and headed out to Daniel Lake.

On the water moving at 08:28. We were home before 12:00. I drove the boat around to the public dock.

(14. May. 2014)

This afternoon I am looking at interpillars infesting buds of Devils club (Oglopnan laxoides). At 60.46376°N 151.07401°W ± 5m I pulled off bracts of a bud. There was a interpillar in this bud, which

7
I photographed (5351 - 5355).
^{brance}

I collected this larva (2014MUB108).

☒: I checked 13 buds before

finding another larva, which quickly dropped off on a silk strand. I had been placing a net under each bud because of this behavior. I collected this one (2014MUB109)

☒: (4) buds with no larvae and then a small one (2014MUB110)

I pooled the larvae 2014MUB109-110.

Hoping to rear these. Of the two buds in the photograph of 2014MUB110, it was the upper bud that the tiny larvae came from.

•• (2. absences)

- On the lower bud in the photograph of 2014MLB110, there was a larger larva, which I photographed and pecked to save one.

• (1 absence) I found a larger larva in a more mature bud.
(2014MLB111)

(19. May. 2014)

In the same vicinity where I had been collecting on 14. May I found another larva on Deutz shrub. This was at the base of the leaf surface, the buds now having opened and the leaves spreading. I collected this larva (2013MLB112)

and photographed it (frames 5412-5426). Strangely, I saw no evidence of damage on the leaves. I soon did find damage in repeated patterns, which I photographed. I also collected several more larvae to rear. (2014MLB113)

(22. May. 2014)

Today I am taking Nicholas Crane and Jefferson Uta out looking for the Trichalypus larvae.

We serviced the malaise trap at
 $60.45794^{\circ}\text{N } 151.08310^{\circ}\text{W} \pm 10\text{m} \times 2\text{m}$.
 (2014 MCB114). There were no insects.

(2. June 2014)

L ○○
 XL ○
 M ○

} PFDs to grad.

(23. June 2014)

On a walk to Nordic Lake
 I ran across a beautiful
 shenny mark, which I photographed
 (frames 5951 - 5954) and
 collected (2014 MCB115). This
 was at $60.45251^{\circ}\text{N } 151.08069^{\circ}\text{W} \pm 4\text{m}$.

(26. June 2014)

I collected several
Tricholophus alternatus juveniles,
 which I kept alive in the
 lab (2014 MCB116).

post Ave

post Mini

Mini & Jane to Cloud
Ave. down hill, post driving
2 big brown posts, mown grass
Shedder parked, Jane.

5 July 2014!

Today I am out with
Wayne and Diane Mathis
and Dominique Collet. We
first stopped at Egumen Lake
pull-out to sample flies. We
first collected in an open wetland
at $60.52927^{\circ}\text{N } 150.44200^{\circ}\text{W} \pm 100\text{m}$
(waypoint 001).

We next sampled at the
East Fork Moose River at the
outlet of Egumen Lake
($60.52769^{\circ}\text{N } 150.43910^{\circ}\text{W} \pm 50\text{m}$)
(waypoint 002).

Our third site (003) was also near
the outlet of Egumen Lake on gravel
shore at $60.52700^{\circ}\text{N } 150.43910^{\circ}\text{W} \pm$

50m. I collected a moth here.

(2014 MCB117)

We next drove out Mystery

Creek Road to the lake

at 60.54795°N 150.27170°W ± 10m

(waypoint 4)

Here I collected some psyllids
in the what looks like a

Potamogeton or Polygonum.

Some were emergent / floating
in water, others were attached
on shore. (2014ALB118)

This is an interesting level
basin lake with a large grass
mat and many cobbles

Equisetum scirpoides and

Polartilla ageda here

We next traveled to Mystery

Creek at 60.65819°N 150.65819°W

± 50m, (waypoint 005).

[17. July, 2014]

At the floatplane dock I
found little reddish sawfly
larvae feeding on seeds of
Carex palustris. These
were reddish larvae that
perfectly matched the color
of their host. I collected
some to try to rear
(2014ALB119). The larvae ate
holes through the host to gain

access, then into the seeds.

(21. July, 2014)

Pete and I were at the parking lot on Skyline at 0923.

At 10:44 we were approaching the saddle in the area near *Salix scaberrima* where there had been significant defoliation over the last couple of years. This was at

60.52337°N $150.17671^{\circ}\text{W} \pm 17\text{m}$.
(waypoint 006) (frames (251 - 6265))

At 60.52785°N $150.17810^{\circ}\text{W}$
(waypoint 007) there was near complete death of aspen.

Calamagrostis has come in thickly here. (frames (289 - 272))
There is no visible damage this year from defoliation.

It is a most year for hemlocks, too!

At 60.52967°N 150.1726°W
I collected and photographed on *Arnicca* (2014 MCB/20)
(frames 6284).

At the saddle at 60.53019°N $150.17154^{\circ}\text{W}$ I collected a *Pteris* using the aerial net.
(2014 MCB/21)

Pete collected another *Pteris* at 60.53253°N $150.17656^{\circ}\text{W}$

(waypoint 010) (frames 6310-6312)
(2014MLB122)

At 60.53254°N 150.17693°W

(waypoint 011) I collected

Parnassius (2014MLB123)

(photo: 6313-6316)

At 60.53401°N 150.17851°W

± 100m Bri and I collected
several Leptobrama from
among the rock outcrops.

At the top I collected

Tachinid fly (2014MLB124)

There were lots of large flies
and wasps including

Urocerus hilltopping larva.

At 60.52905°N 150.17073°W

(wp. 014) there was complete
dieback ^{dead} of Salix scouberian
and Alnus viridis, many
individuals.

A. scouberian with dbh
diameters of 8-11cm about
20-30cm above the ground
were dead (no regrowth, even
from the bases). This indicates
to me that the defoliation
was the major killer, not
the fungal pathogens of
Alnus. There is no obvious
fungal damage on S.
scouberian. (frames

(6340 - 6346 here). In this
 found alders were completely
 killed. Some shrubby
 birch (*Betula x occidentalis?*)
 was also completely dead.
 Above us on the slope and
 to the SE are live
 alders. Mountain ash
 appears to be much less
 affected.

For georeferencing photos,
 my camera time is 8 minutes
 faster than OLS time.

(30 July 2014) At Headquarters Lake
 at 60.46176°N 151.07538°W ± 4m
 I collected a caterpillar and
 cocoon from rolled leaves
 of *Myrica gale*
 (2015 McBURS)

(13 August 2014)

Now I am testing
 methods I hope to employ
 on Skryline tomorrow.
 I chose a point in
 alder from Dog Earth
 (60.464252°N 151.073428°W).
 I navigated to this site.
 6.8 ft. is too small of a

radius, capturing no alders despite being in an alder patch. I used 5.14 m & photographed from S to N. This 5.64 m radius captured 9 Abrus viridis ramets. About half of the plot is in alders. The single 30 cm x 30 cm herbaceous aboveground productivity plot yielded no grasses, only Gymnocarpus. I think multiple biomass samples per plot are necessary due to high ~~within~~ within-plot heterogeneity.

(14. August, 2014)

Mark Laker and I hiked up Skyline to start sampling in about 2 1/2 hours. We started at site SK018, arriving just before noon.

(26. August, 2014)

On a walk in Headquarters Lake wetland S of the lake I came across an orchid (Malaxis?) I saw only one, so I did not pick it. Waypoint: (027) 60.45826°N 151.07587°W ± 2.7 m (GPS averaged). (frames 672 - 673)
I saw a couple more individuals in the vicinity.