

2014

AGH

51.

Actually crazy weather the last couple late afternoons. Kinda reminded me of NM monsoons. Huge anvil puffy clouds developing into thunderstorms. We were hit by a mild storm while floating on the 5th and they were all around that evening. On the 6th, it rained overnight sometimes hard but not violent. More like a weather system ~~last~~ this time though.

7 August 2014 - Up at 07:00 to a cloudy and cool morning. Probably got down to ~50°F overnight and wet but not raining in the morning. Low cloud covered the spectacular mountain views to the north (on a clear day can see north through a wide valley between the mountains to high peaks of the Brooks Range in the distance. Our most picturesque side yet, though Walker Lake was also beautiful). Not too windy though. Checked traps after morning tea and came back with a good haul. I asked everyone to collect the traps they had set the first day. I wanted to reset a bunch near the pond to canvas the grassy meadow for different species. As it is, I caught 2 more shrew species and a *Microtus* and we got a couple of the latter total. Sure does seem like wet weather brings out the shrews! Lots of traps helps too... We processed relatively quickly, finishing at ~15:00. Stopped for a Mexican bean burrito lunch in between. Then set traps from 15:30 - 17:30. Two of us heading east from the center north of the pond, and the other two west. Lots more bear sign so we stayed vocal and near to each other. Turns out I wasn't very clear with my description though. Kevin went off looking for Alfredo

after setting his traps as he thought I'd told them to head out together. I should have meant that, but as it was, the mis understanding was unfortunate because it meant one of our crew was out wandering on his own for too long in bear country. Anyway, he got back... A bit pissed at me, but no harm done...

Trapping Results: Site #4: Palu River; 7 August 2014

4AGH2:	2. <u>Sorex hoyi</u> , 7. <u>Sorex cinereus</u>	
	1. <u>Sorex tundrensis</u> , 1. <u>Myodes rutilus</u>	
4AGH 1:	9. <u>Sorex cinereus</u> , 1. <u>Sorex hoyi</u>	
	3. <u>Myodes rutilus</u> , 1. <u>Microtus oeconomus</u>	
4SWL 2:	1. <u>Sorex cinereus</u> , 6. <u>Myodes rutilus</u>	
4SWL 1:	1. <u>Sorex cinereus</u> , 2. <u>Microtus oeconomus</u>	
	2. <u>Myodes rutilus</u>	
4AJS 2:	1. <u>Sorex cinereus</u>	TOTAL = 53 captures
4KRE 1:	6. <u>Myodes rutilus</u>	DIVERSITY = 5 species.
4AJS 1:	9. <u>Myodes rutilus</u>	

Cool all day, maybe up to 60°F but generally lower. Breezy but light. Cloudy but bright. Sprinkles of rain on and off. Then some patches of blue sky in the afternoon accompanied by more cumulus clouds and storms brewing. I went out to fish after setting traps and caught 2 medium grayling south of camp. Not many good fishing holes here though there are fish around. No sheefish yet! Hopefully we'll see some. Schuyler cooked the fish after I cleaned and filleted them, along with some pasta packets. Then I sat to write notes for a while and then started the rain.

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53.

A light sprinkle has turned to downpour while I sit here in the prep tent with drying carcasses hanging overhead and Townes Van Zandt playing on my ipod. Hoping to see some river otter out the window. We heard them last night out croaking by the river and splashing. Rain didn't let up so I ran to my tent at ~22:30.

8 August 2014 - Woke at 07:00 and it was not raining but overcast and breezy. Rained hard through the night. The Pah River is higher (a bit) and steadily rose through the day. We pulled the boats further up in the evening. Must be all the rain draining through the watershed to the south... Had some tea and then checked traps. Most of the snaps had been set off by rain but a few Microtus. The pitfalls had lots of captures although several had popped up with the rising water table over permafrost. Lots of shrews in both tundra and grassy areas and several voles with water in the traps. 2 more species of shrew today!

Trapping Results: Site # 4: Pah River; 8 August 2014

4AGH 2: 11. Sorex cinereus, 1. Sorex tundrensis

1. Sorex hoyi, 1. Myodes rutilus

4AGH 3: 7. Sorex cinereus, 1. Sorex monticolus

3. Microtus oeconomus

4AJS 3: 2. Sorex cinereus

4AJS 2: 2. Sorex cinereus, 1. Sorex tundrensis

1. Sorex monticolus

4AJS 4: 3. Myodes rutilus, 3. Microtus oeconomus

4KRE 2: 1. Myodes rutilus, 1. Microtus oeconomus

4SWL 2: 2. Microtus oeconomus

TOTAL = 41 captures, DIVERSITY = 6 species (+1. Rana sylvatica)

Although the clouds broke and it stayed sunny, partly cloudy for the rest of the day, it was windy all day. Not extreme, but enough to pull stakes out of tents and buffeted us all through prepping. At the morning check-in there was a message with Dispatch from Melanie, something about hazmat issues. I called her office and got Anna on the line who told me our ethanol, shotgun shells, white gas, lighters, and bottle of whiskey could not be delivered with the resupply as hazmat restrictions had tightened considerably for small aircraft. This was bad news. I told her our ethanol was vital to the trip for parasite preparations. We made it through ~1 gal. for the first half preserving all the parasites and we needed it. Anyway, she suggested I call back later in the day when Melanie was back. All very good-natured. I am almost not surprised as the logistics for this trip have been difficult to say the least, but it normally works out... In the ~~evening~~ afternoon I called back and Melanie informed me they were working on it. The ethanol should be fine but the white gas was the real problem. Seems like the plan is that we may have to wait in Kobuk for an extra day or two but hopefully that's the sum of it...

We finished processing and preparing for the next day by 15:00, then free time. I busied around, fixing water filter, charging batteries, sorting gear. Alfredo went to try for fish. Didn't succeed so I tried too but no luck. I eventually got a single gogling. Then Kevin went to try for more pike and I joined him with simply a line spool, a hook and a rodent skin for bait.

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He caught 2 ^{small} medium pike on a spinner and the third one cut the line. I caught a nice sized pike which lunged after the rodent skin as I pulled it through the water. A great feeling to get one like that! So we had 4 fish for dinner which I cleaned out and wrapped in foil with spices and butter and put on coals. We each had one with a side of instant potatoes and all felt full-up for the first time in a while. Ate at ~20:00. Then I wrote notes and others went to bed around 21:00.

Tomorrow we pick up traps, process, pack, and float. Should be plenty of time to get to Kobuk. ~40 miles to go and ~2 full days. Finally calm breeze this evening.

Notes: We have been hearing red squirrels here but could not get one... Also today saw a single raft with 4 people stop at the mouth of the Palu in the distance. First people we've seen in almost 3 weeks, not counting planes overhead...

Capture Trapping Tallies: Site #4: Palu River, 5-9 August 2014

$$90 \text{ snaps} \times 2 \times 2 = 360$$

$$50 \text{ snaps} \times 2 = 100$$

$$30 \text{ snaps} \times 3 = 90$$

$$90 \text{ snaps} \times 2 \times 2 = 360$$

$$50 \text{ snaps} \times 2 = 100$$

$$80 \text{ pits} \times 2 = 160$$

$$80 \text{ pits} \times 2 = 160$$

$$32 \text{ pits} \times 3 = 96$$

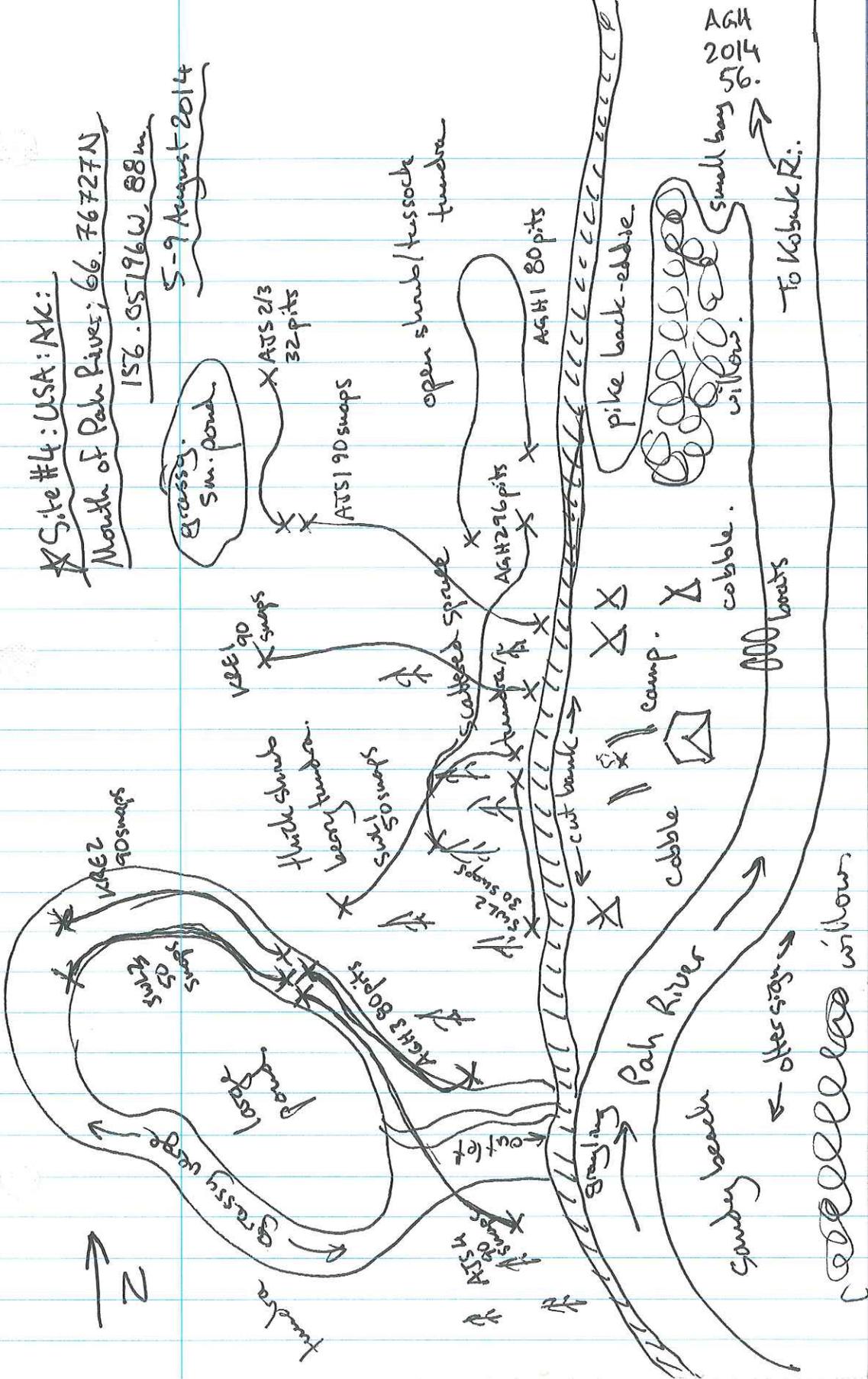
$$96 \text{ pits} \times 3 = 288$$

$$\text{TOTAL} = \underline{\underline{1714}} \text{ trap nights.}$$

Site #4: USA: AK:

Mouth of Pah River; 66.76727N,
156.05196W, 88m

5-9 August 2014



AGH 2014 56.

Small bay willow.

To Kobuk R.

willow

2014

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57.

9 August 2014 - Woke at 07:00 to a partly cloudy and breezy morning. Night time temps. down to ~ 50°F. Collected all our traps. Another decent catch so we sat to process and finished up at ~ 14:30.

Trapping Results: Site #4; Pah River; 9 August 2014

- 4AGH 2: 8. Sorex cinereus, 1. Sorex monticolus
 1. Sorex tundrensis, 1. Sorex ugyunak?? ↩
 (again, this looked like S. ugyunak but was too large. Like others, it was a mature male)
- 4AAT 3: 2. Myodes rutilus, 1. Microtus oeconomus
- 4AJS 2: 3. Sorex cinereus, 4. Microtus oeconomus
- 4AJS 4: 2. Sorex cinereus
 1. Sorex monticolus, 5. Myodes rutilus
 1. Microtus oeconomus
- 4SWL 3: 1. Sorex cinereus, 3. Microtus oeconomus
- 4SWL 2: 4. Myodes rutilus
- 4KREZ: 2. Microtus oeconomus, 4. Myodes rutilus
- TOTAL = 44 captures, DIVERSITY = 6 species + 1 bird.

Capture Tallies: Site #4: Pah River - 5-9 August 2014

63. Sorex cinereus
 4. Sorex hoyi
 4. Sorex tundrensis
 4. Sorex monticolus
 1. Sorex ugyunak
 73. Myodes rutilus
 23. Microtus oeconomus
- TOTAL = 172 captures, DIVERSITY = 7 species

We packed up the rest of camp, finishing and ready to head downriver by ~16:15. I packed all our samples so far into a crate in ready readiness for the supply exchange in Kobuk. We had one crate of stuff and the nitrogen shipper. We floated a little over 15 miles that day down to a sandy bar on river-left to camp. Saw a bunch of black bear tracks on the beach but camped anyway. Not much luck with fishing so far. Had one of our last meals of rice packets with a single two grayling I had caught filleted and chunked, then went to bed. Could hear dogs yipping and barking back in the woods downriver from camp but none came to our location. We later found out that these likely belonged to two white homesteader families that lived near there. Camp for the 9th August 2014 was located at: 66.85456N, 156.44971W.

Incidental Observations - Saw an osprey fishing right next to our camp at Pak River before we left at 66.76727N, 156.05196W. Then another osprey on river-left flying at 66.82854N, 156.16064W. A bald eagle at 66.84870N, 156.26462W. Finally saw our first moose, a young bull on a small island at 66.85335N, 156.29367W. Not a huge rack and good condition. A man (Clive) in Kobuk told us the smaller antlered bulls are fatter this time of year and best for hunting. The larger bulls are still skinny and tough until later in the fall. Saw another osprey at our camp on the 9th Aug. (66.85456N, 156.44971W).

10 Aug 2014 - Another sunny and windy day. We're thankful that the ~~wind~~ wind is downriver for the most part and keeps the bugs away completely but it really makes paddling/steering tougher. These canoes, especially the SOAR just get blown sideways. Not too bad though, and not far to go today, about 20 miles or so. We had packed and set out by ~09:30. I got up early to call Lydia at home, being what I thought was our 4th anniversary... She was very happy to hear from me and in conversation I noticed I got the date wrong and we were actually married on the 7th...!! Not sure why I had it so firmly set in my head. I gather she didn't expect to hear from me at all, so all good... All is well back in the real world, I guess I would prefer to think of it as the world of modern civilization since it's very real out here, more so in so many ways.

We did see our first people today in three weeks apart from spotting a raft with 4 folks in the distance at the mouth of the Pak (~~had the~~ ~~both~~ these rafts appeared to be recreational and we saw a beaver float plane land just down river, likely to pick them up). Anyway today the people were all native fishermen with families. Started seeing fishing camps on the banks more frequently nearer to Kobuk. The family we saw all came out of the tent and waved. We later met them all in Kobuk. In fact our arrival was expected and it seemed everyone was aware of our progress down the last few miles. Some camps were old and broken down, others were well kept and

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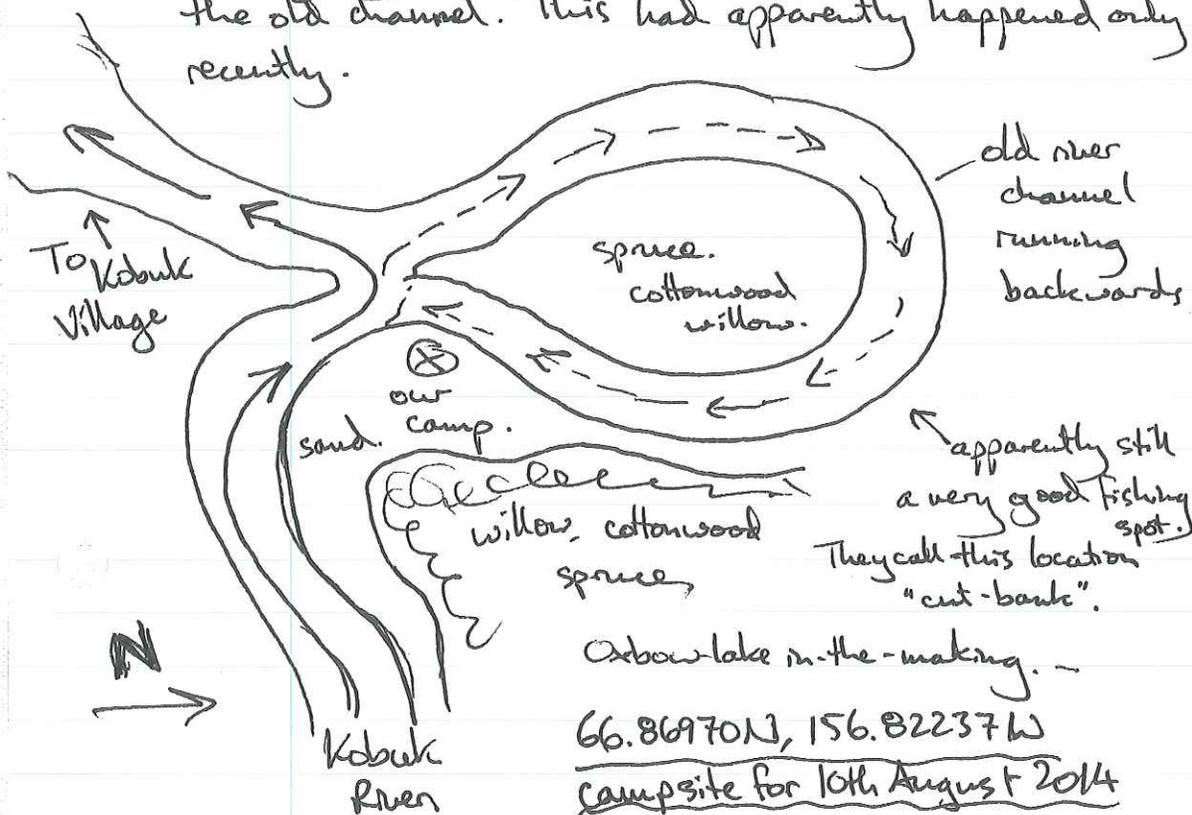
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active. I asked about them in the village and Herby (a 17 yr old who followed us around and helped us find things) told us that people shared the various camps and interchanged. Each family has one or more nets which they set out and check daily, any time of day, and they all fish also using spoons and spinners on 20+lb. line and rods. They then ~~dry~~ fillet and dry them over a smoky fire burning mostly alder but anything really, to keep the flies away. ~~On~~ With warm sunny windy days the full fish racks will be dry enough in 3-4 days to prevent flies laying eggs, then same again until they're dry. The main fish are sheefish and chum salmon right now, both will also take spinners though chum are more picky. A lot of the chum are still in good firm condition although we see dead ones floating or on shore. Also lots of pike, trout (odly varden) and grayling. This is a good fish year. Then carbon starts second week of September, maybe sooner, down by Onion Portage when 10's of thousands make their migrations. They use their 14-30ft flat bottomed skiffs with 30-90 horse outboards to navigate the river. Mostly the men and boys do the fishing although all help to process, ~~hand~~ hang and dry the fish.

After leaving camp that morning we arrived at a major fork in the Kobuk, taking the north route would lead past the former town site of Kalla. Kalla used to be run by folks from Shugnak but many years ago was deserted and building materials stripped leaving only an ephemeral camp. The south

fork was the main channel. I wanted to go north as others have done from previous field notes but the river has changed substantially since the quad maps were made. My GPS unit only crudely follows the topomap river corridor. Sometimes the main channel runs through areas where no river is marked (recent channels) other times parallel to the mapped channel as the river has carved new ground. Many channels have been blocked off. It was difficult to even get into the north channel, so we bypassed Kalla and went south. The two channels would not reconnect until ~~a~~ ^{~5} ~~couple~~ miles upriver from Kobuk. We aimed to camp for the night just before this confluence and found that the final major bend had been broken through by the river with a slight backflow around the old channel. This had apparently happened only recently.



66.86970N, 156.82237W
Campsite for 10th August 2014

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Incidental Observations - Peregrine falcon screaming on river - left necessarily, presumably marking a nest at 66.87293 N, 156.85278 W. The campsite at cut-bank on the 10th had bear tracks (brown) and wolf tracks all over. But no sights of them and we camped anyway.

Tried to fish at our campsite but not a bite. Apparently it's a great spot for sheefish and chum too but nothing. They finally started biting around 10pm. We arrived early, by ~ 16:30 in hot sun and breezy so set up then fished and hung out, bathed. Saw fishermen boating back and forth. Cooked our last meal except for oats and instant potatoes. Had canned chicken, tuna, shrimp with coconut milk, peanut sauce and chopped carrots in a kind of curry soup over mashed taters and roasted garlic in foil. A great mix actually. Bed by 20:00.

11 August 2014 - Up at 07:30 and packed to leave by 09:00. Only a couple miles to go till Kobuk. I called ahead and got a hold of Chris who works at the airport as the checkin agent and camp agent. He also works as maintenance at the school and manages the boat dock. A white guy (last name McKay) from Kotzebue with a native wife and three kids. Nice guy and helpful. He said to get in touch when we got to town. Then floated down to the village and pulled in by the fishing boats on the gravel ramp. I stayed with the boats while others went to explore. Chris arrived on a Honda ATV

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with trailer and took our exchange cargo and Alfredo's bags up to the air strip and left them there on a pile. No one bothered the stuff and we checked on it every $\frac{1}{2}$ hr or so. The others had found 2 stores, one either end of the village. Both well stocked. The one near the boat ramp was run by a village girl and the other on the west side of town by a Russian who had been here for years then went back to Russia but returned after a few years with his brother. There were lots of essentials plus lots of snacks, fish hooks etc., cigarettes in the Russian store with ammo, guns and motor oil. We bought some snacks and I got 2 spoon lures for sheefish. We asked at both for white gas. None in town but the lady from the village council (all ladies who work there in the offices above the red post office next to the school) let me use her cell phone to call the Shugnak general store and they had gallons of white gas. So I called Tara to let her know we didn't need an extra flight for this and then bought a gallon of regular gasoline (east end of town but paid for in the council office over the P.O.) which could fuel our stoves in a pinch and we'll hopefully get white gas down river.

Several
Everyone here is really nice and helpful. ~~At~~ stopped by the boats to speak for a while. The boys in particular wanted to hang out, show us how to fish for salmon and sheefish and play basketball. Kevin and Alfredo played 2 on 2 at the small court behind the school. I took pictures. The school is new and large. Biggest building in town. Lots of laptops, other

Supplies, skis etc. supplied by the state. New outbuildings being built behind. A huge water purifying building and tank next door covered in solar panels to power it. All houses on stilts to protect against spring ice-melt. Ice jams just down river back up the Kobuk and flood the whole village every couple years. Some litter around but not a dump. Old cars and snowmachines but everyone uses ATVs to drive around. About 150-200 people total. We are the first "tourist" folks to come through town this year although more will follow with hunting and fishing trips and guided trips, plus rafters. Lots of dogs but mostly tethered. There's a book exchange near the council offices that we've used to get more reading materials. Lots of fish racks near shore and ~~sticking~~ huts. Lots of good conversation ^{with} ~~about~~ the locals ^{about} interesting places, history of the area, and gossip about other people in town. Tales of seeing 4 beluga whales near Amder this year for the first time. One old man used to live much further up river at Norutak Lake with a few other families but most remote holdings have moved into town. I asked about the Amder Road plans. Everyone I spoke to about this said that everyone here was against the road although not at first, but now they worry about what effects it will have on the village. Dust out to the north and lots of tracks, problems with hunting and caribou in particular since they migrate through just east of here. Lots of stickers around saying ~~say~~ "NO ONE ON ONE". Not sure the details of this voting proposition but either gas oil or mineral development. However, some acknowledged that it would bring jobs for their kids.

Asht

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65.

We got Alfredo away on the Bering Air flight to Kotzebue at 16:30 and received all our resupply except one box of food and our ethanol. Major problems still with hazmat paperwork for the latter. I wish I'd have known before. Anyway I spoke to Tara and now the remainder will be sent to Kotzebue tomorrow morning and with luck via a charter flight to Kobuk on the morning or afternoon of the 13th. A long wait for us which would have been more frustrating if we weren't so elated by the friendly reception and our food resupply, and snacks from the stores. So we loaded what we had onto boats and floated just down-river of the boat ramp to set up camp for a couple nights.

We reorganized and packed all our gear, then spent time fishing. Still could not bring in a big fish so we cooked up some sausage and hamburger helper. There were fresh apples and butter cookies in our supplies. A special treat from Melanie which is great! Went to bed at ~23:00.

12 August 2014 - Woke at 07:45. Had some tea (coffee is still not arrived, in the final food box to come) and made some calls. Confirmed it will be at least tomorrow so we did some fishing. One of the boys caught a huge sheefish and gave it to us (I think they each catch a couple big fish a day on average) and I took some pictures then filleted it as they do leaving both flanks of meat attached at the tail. It turned out well. We grilled half for lunch with salt + pepper. Delicious on its own. The best tasting fish I've had down here!

2014.

66.

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The fish was probably 15 lbs. easily. We'll have the other half for dinner. I wrote my notes for a few hours. It took a while because three kids came and hung out at our camp and quizzed us non-stop. Kevin and Schuyler went into town a couple times. I stayed here to watch camp. Had a few visitors on and off. Tough to get things done here... but very interesting. I learned much more than I can easily write down.

I used meat rub and tobasco for the dinner fish and fried it. Great stuff. We shaved Kevin's head that night. Something to do... Cheap razors in the Russian's shop for \$0.35 each. We fished that night with Herbie and his big brother Guy. Kevin caught 2 female chum salmon, still firm so we gutted them and packed in bags. Bed at ~ midnight.

13 August 2014 - Woke at 07:00 and I called Tara to check on the status of our second resupply. It was in transit to Kotzebue from Fairbanks and scheduled to be transferred to Golden Eagle Air for Kobuk that day. I called Golden Eagle next and inquired and they said it would be delivered by noon. Good news! So we packed up our camp and Kevin stayed to organize gear while the two of us went up to the airstrip. The cessna 206 arrived and Jared jumped out and gave us our two boxes. He had his toddler son with him. Nice guy. Good friends with Eric Seih of Arctic Backcountry. Both small companies work out of the same hangar at Kotz. He jumped in and took off and Herbie showed up with an ATV to take our boxes to the beach. We

headed back and said our farewells then packed the boats and headed down river. 11 miles to Shungnak. The day was breezy in the morning but sunny and calmed by afternoon. There is a major fork in the river a few miles before Shungnak and we needed to take the right (north) fork to reach the village. Interestingly this is a much smaller channel than the other option, shallow and slow. I imagine that this channel will eventually close off and that will likely be problematic for the village though they are located near the far confluence at the other end so can motor down and then up river via the main channel.

Anyway, arrived at Shungnak at ~16:15. The river has slowed down considerably and travel is slow. Shungnak is built up on a high bank out of site of the river so never gets flooded, but it makes for a more disconnected dynamic compared with Kobuk. I left the others to unpack lunch stuff and headed up from the boat dock to a steep staircase (wooden) on the up river end of the beach and climbed up into town, past the post office on the left to a large general store, blue building on the main street. This is a much larger village and streets are wide, still dirt, but more developed. Big school with playground. The store has a bit of everything. They had Coleman fuel white gas for \$25/gal. so I bought one and headed back to the beach. I sent the other two up to take a look and buy some snacks while I watched the boats and kids swimming in the river. We continued down river at ~17:00 and travelled another

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68.

12 miles to a campsite on a beach on river right near another confluence of channels, down beach from a small cabin, at: 66.87624N, 157.30164W, just down river from the ~~west~~ mouth of Cosmos Creek. When we arrived we made a fire, set up camp and cooked salmon steaks for dinner. I also filleted the other salmon and cross-hatched it with a knife and we smoked it over a small fire with green wood. I salt and peppered it first. Worked pretty well. I have continued to dry it on the boat over the last few days and it's very tasty for snacking. We arrived at ~20:30 and didn't get to sleep until ~midnight.

Incidental observations: Bald eagle on river left at 66.89468N, 156.99332W. We saw a lone wolf on a sand bar on river left at 66.91747N, 156.97234. (Oh, saw an osprey at Kobuk at 66.90730N, 156.88585W). Saw a male northern harrier flying over river left at 66.89685N, 157.00279W.

14 August 2014: - woke after a sleep in at 08:30 and packed and headed down river by 09:50. A breezy day that turned to windy later on. This was a hard travel day for us, largely because of the wind. Physically exhausting. These long canoes are blown sideways by even slight wind making some stretches very difficult. The river has become much more sluggish and really big. We float now at rest in current at only ~2mph, but could maintain ~4mph while rowing/paddling, even into wind but the effort made us all tired. Sunny too.

We took breaks in all the down wind sections of river and the wind would push us along at ~ 3.5 mph. Stopped for lunch after 12 miles at $66.92067N, 157.42325W$ at the mouth of Shungnak River. Taking ~ 3 hours for each 10 mile stint going at it hard. We carried onwards to complete 30 miles that day, arriving at our campsite worn out at 20:30. We had a quick meal of pasta and headed for our tents by 22:00. Camp at: $67.00984N, 157.62112W$.

↙ This obs. for the 15th Aug.

Incidental Observations: - Saw two birds that I thought were ospreys flying over the river at $67.08458N, 157.66895W$.
Saw a black bear on river left at $66.97514N, 157.54633W$ and another on river right about a mile upriver from here.
Bald eagle on river right at $66.97097N, 157.57817W$.

15 August 2014 - Our camp the previous evening was at mile 150 since the portage below Walker Lake and our predicted half-point for the whole trip. A big milestone. Then yesterday we travelled to mile 180. Kevin had a try on the oars in my boat and couldn't get the hang of it so after rowing in circles for a $\frac{1}{2}$ hr. and missing the first fork we reached, I swapped back out. I'm glad I didn't choose to go with all our boats...

Anyway, woke at 08:00 and packed and headed down river by 09:20. The day was blissfully calm and overcast so cool. No fighting wind but no sitting and floating either since we would only move at 1.5-2 mph. unless paddling. Went ~ 11 miles till lunch. Stopped just as a shower started at $67.05418N, 157.76732W$. Then carried onward. We wanted to push through to our camp

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70:

but it turned out to be longer than predicted and started to get windy right at the end. We passed Onion Portage where the caribou cross but no sign of any. Also passed the previous BCP trapping site at $67.10580\text{N}, 158.26970\text{W}$. The Park Service told me it was on a native allotment so we had to move our site further down. Ended up travelling 41 miles to our site and again dead beat. Arrived, unpacked food and personal gear then ate some dinner of mac and cheese and went to sleep. Arrived at 22:30. Bed at ~ midnight. (Saw another osprey at $\star \text{I.O.} \rightarrow 67.11031\text{N}, 158.20052\text{W}$) (and a female northern harrier around camp at $67.12732\text{N}, 158.33067\text{W}$).

\star Site #5: USA: AK: 1.2 mi. N Onion Portage Kobuk Valley National Park; 1.2 mi. N. Onion Portage; $67.12732\text{N}, 158.33067\text{W}$, 15 m. 15-19 August 2014
16 August 2014 - Woke at 08:30 after a good sleep and set about unpacking and organizing. Then went to have a look around before setting all our traps in the afternoon. The camp is on a huge open sandy beach on river left at the end of a large peninsula of land surrounded by a 180° bend in the river. The peninsula is very sandy, possibly all sand underneath the habitat. We are not far from the big sand dunes here. (Some very cool old dunes cut back on the river bank yesterday further up stream calving chunks of sand actively). Anyway, the camp transitions into a broad zone of willows and cottonwood then back into more boreal vegetation including alder and common juniper and then into conifer including white spruce and fir trees (Abies).

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Some low boggy pond areas and some moss and berries but overall not great looking habitat, at least for shrews. The other side of the river however looked very different and really good, consisting of open tussock tundra and shrub tundra.

After lunch Kevin went to set 2 lines of 50/65 traps behind camp and some for Schuyler, both trying to hit all the different habitat types. I took all the pitfalls across river. I had to paddle up river to the point of the beach and then cross to the outlet of a small pond where there was an eddy to pull out in. I set from 14:00-17:30. Unfortunately, I sheared the bolt on the auger so with a broken tool, we are now using clammung shovels to dig pits for the rest of the trip. I quit when it broke for the day, tired out anyway with ~~132~~¹³² pits in the ground. I also caught 3 pike in that eddy on the far bank, one was very large 2-3 ft long. I filleted them and set them up to smoke and dry. That evening at camp. Also went to make a few casts near camp that night and caught my first ever salmon, a huge male chum. Good condition, so its now drying too! A fairly easy day but much needed after our travel days. This day was partly cloudy, some breeze in the morning and intermittent showers through the day. In fact our weather for the last 3 days has been the same. Warm during the day to ~65°F and cool at night to ~40-45°F. A beautiful area in general with mountains to north, west and south. My tundra site across river has a row of wooden cross planks, 2 placed every 100 yards or so heading north from the

river. Maybe marks the border of a native allotment? The pits were set at 67.12661N, 158.31241W (general locality).

We had a huge pot of coconut Thai noodles for dinner and were in bed by 22:00.

17 August 2014: - Woke at 07:00 to find fresh wolf prints right along the beach behind our tents. Too bad we all missed it! Wet morning due to rain overnight but not too bad. Had coffee then went to check traps. I went across the river to my pits. Took about an hour to check. I was back by 09:00 with a good catch of shrews. Lots of Myodes near camp. A pretty busy day and felt good to be back on track for the science and processing. We processed till ~16:00 then I went across river to set another 64 pits with the shovel until 18:30. Schuyler went out and came back with a red squirrel from the spruce behind camp. He was looking for ptarmigan but didn't find the covey he scared up that morning. Also found a moose atlas bone and Kevin found a snowshoe hare foot (dried).

* I.O.: - ((found a river otter skull at Kobuk Village)).

Trapping Results: site # 5: Onion Portage; 17 August 2014

SAGH 1: 12. Sorex cinereus, 3. Sorex tundrensis

SAGH 2: 6. Sorex cinereus, 1. Lemmus trimucronatus

SSWL 1: 4. Myodes rutilus

SSWL 2: 9. Myodes rutilus

+ 1. Alces alces

SKRE 1: 8. Myodes rutilus

+ 1. Lepus americanus

SKRE 2: 3. Myodes rutilus

+ 1. Lontra canadensis (Kobuk Village)

TOTAL: 46 captures, DIVERSITY = 4 species + 1 bird
+ 3 salvage species.

That evening we had a simple mac + cheese dinner but with chocolate pudding for dessert. Then built a big fire and discussed our trip and all the travel and our final weeks to come. Went to bed at ~ midnight.

18 August 2014 - woke at 07:00 and coffee and went to check traps. Not much rain overnight but a huge catch of shrews today ~ 20+% success on the pits. Wow. A long day of processing with some hard rain showers that set off most of the snap traps so they went to reset the snaps after processing at 19:00. We weren't done with everything until about 20:30. Then had dinner of mexican burritos beans and rice and then I sat to write notes. Heard native boats going by every once and a while, out looking for caribou. Heard several shots in the distance both up and down river, but we've still not seen any sign of caribou. They should be migrating through in the coming couple of weeks.

Tapping Results: site #5: Onion Portage: 18 August 2014.

SAGH 2: 15. Sorex cinereus, 2. Sorex tundrensis

SAGH 1: 18. Sorex cinereus, 9. Sorex tundrensis.

1. Myodes rutilus, 1. Lemmus trimucronatus

SKRE 2: 1. Sorex cinereus, 3. Myodes rutilus

SSWL 2: 5. Myodes rutilus

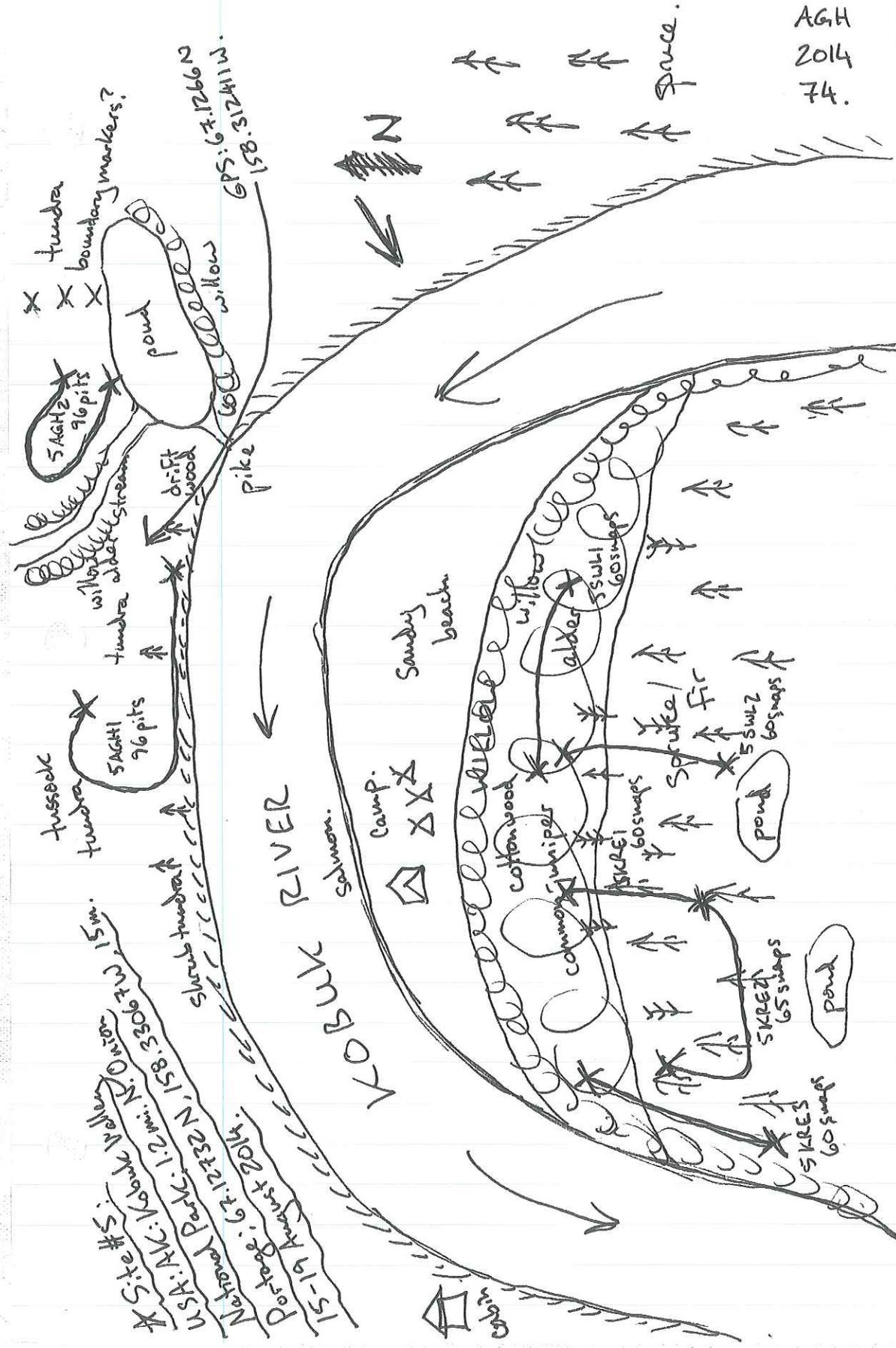
SSWL 1: 5. Myodes rutilus

SSWL(SG): 2. Tamiasciurus hudsonicus

SKRE 1: 1. Sorex cinereus, 4. Myodes rutilus

TOTAL = 67 captures, DIVERSITY = 5 species.

AGH
2014
74.



19 August 2014 - Woke at 07:00 to a still morning, cool at ~40°F with a little fog. Breezy in the night. Coffee then went to pick traps. A decent catch too. Processed till ~14:30 then packed up camp. A west wind for the first time today, though gentle, made me anxious about heading down river. It may be we're nearing the coast and into a different prevailing zone...

Trapping Results: Site #5: Onion Portage; 19 August 2014

SAGH 1: 11. Sorex cinereus, 1. Sorex tundrensis

SAGH 2: 13. Sorex cinereus

SAGH 1: 1. Microtus oeconomus, 1. Myodes rutilus.

SKRE 1: 3. Sorex cinereus, 6. Myodes rutilus

SSWL 2: 1. Sorex cinereus, 4. Myodes rutilus

SSWL 1: 2. Myodes rutilus

TOTAL = 43 captures, DIVERSITY = 4 species.

Trapping Tallies: Site #5: Onion Portage; 15-19 August 2014

AGH 132 pits × 3 = 396

AGH 60 pits × 2 = 120

SWL 120 snaps × 3 = 360

KRE 125 snaps × 3 = 375

TOTAL = 1251 trap nights.

Capture Tallies; Site #5: Onion Portage; 15-19 August 2014

81. Sorex cinereus

1. Alces alces

15. Sorex tundrensis

1. Lepus americanus

1. Lemmus trimucronatus

1. Lontra canadensis

55. Myodes rutilus

TOTAL = 158 captures

2. Tamiasciurus hudsonicus

DIVERSITY = 9 species
(other from Kolavik Village)

1. Microtus oeconomus

2014

AGH

76.

We headed downriver at 16:20 and made 15 miles or so as planned. Pretty heavy going into wind but at least it wasn't too strong or side-on.. Just constant rowing. River now very sluggish and huge. Dropped down to ~10m elevation. Pretty river though, surrounded by mountains, especially to the north. Steady progress got us to our camp for the night on river right across from the mouth of Ahnewetut Creek on a large sandbar that was previously a right river channel (or between two, but now only left). Brown bear tracks fresh and everywhere along shore. Wolves too, at 67.17058N, 158.78082W.

Incidental Observations: - Saw a peregrine and northern harrier, both at 67.16695N, 158.39186W. Saw a presumed brown bear in the distance on river-right at 67.18336N, 158.70012W. Sandhill cranes everywhere, still in breeding pairs or several at a time. Lots of geese, lots of belted kingfishers, ravens, and gulls in increasing numbers. Lots of loons too, perhaps most common of all, both common and red throated.

We reached camp by 21:00 and checked in with Dispatch then made a quick meal. Lots of midges here but we managed some fishing without success before bed at 23:30. Great sunset. We're now trying again to supplement our food supply with fish, or to try and catch and dry. My pike from the previous site are drying nicely and salmon too. We're not short on food, but we're getting through it, better to be safe.

2014

AGH

77.

20 August 2014 - Not too far left to travel today. Up at 07:30 and in the water before our check-in at 09:00. A foggy cold morning but still air and the sun was breaking through when we hit the water. A pleasant float of ~8 mi. to our next site. We reached the coordinates but no beach apart from a tiny sand bar so we headed around the left bend to a larger shallow beach and parked at the mouth of Kavet Creek, hopefully outside of the native allotment. We could see a cabin down river on the right.

★ Site #6: USA; AK: Kobuk Valley National Park; Mouth of Kavet Creek; 67.12996°N, 159.03632W; 20-23 August 2014

Arrived at ~noon and unpacked camp then set up tents to dry out after the morning fog. Had some lunch and then set up traps all afternoon. The site starts on a beach that would be underwater without too much rise in river flow. Kavet creek meanders out on the downriver end of the beach and is lined by thick willow and alder. Behind camp is a zone of thick alder and willow with some small cottonwood, about 100m wide, tough to get through and hard to see where you're going. Wolf tracks everywhere on the beach and moose poop in the brush. Some trails that look more like wolf runs through the thick willow/alder. Feels strange and cool to be following wolf trails! No bear sign yet. Eventually behind the deciduous the ground rises to spruce forest growing on medium sized tussuck and birch shrub tundra. Then back further are a few good sized ponds filling very old river channels, maybe $\frac{1}{4}$ - $\frac{1}{2}$ mile back. Up river

on the same side, behind a small grove of cottonwood, already losing their leaves, I discovered a broad area of grassland, tall tussocks, fairly dry, surrounding a large wetlands area, islands of alder and willow interspersed. Across river is a ~ 50m hill rising steeply with a healthy mixed forest.

Schuyler set up 60 traps across river in the mixed forest and another 60 traps on river left west of the mouth of Kavet in thick willow/alder. He heard something large in there at first, either moose or bear that did not show, so moved away a bit to be safe. Kevin set up a line of 60 snaps along the east bank of Kavet in thick willow then another 60 snaps running east through the transition between willow/alder to spruce. Plus 28 pit falls also in this area with a clam shovel. I walked south from camp to the edge of a pond and set a line of 80 pits in alder to start and moving northward into the spruce/tundra zone. Hard setting compared with the auger but nice sets. Took ~ 3 hrs for my first line from 14:00-17:00. After our 18:00 callin, I went out to set as many more as possible before 20:00. Schuyler had caught his first salmon (a male) earlier in the afternoon ~~out~~ of the bank from camp and we were going to grill it. Anyway, too tired to get all my pits. ~~big~~ I discovered the grassland in to the southeast of camp and set up 48 more pits here. We had grilled salmon steaks with mashed potatoes for dinner over a fire. A chilly evening ~~&~~ with more west wind and we were in bed by 22:30.

(IO: - saw an osprey over camp flying, pretty sure...)

2014

79.

AGH

21 August 2014 - Woke at 07:00 to a cold and foggy morning, slight west breeze. Maybe high 30's °F. Hot coffee then trap checking. Took a while, partly navigating lines at a thick site and partly due to the large catch. A surprising density of both shrews and voles and our busiest day yet. I also had something filling in a few pitfalls near the pond at the start of my first line with dirt. Not sure, perhaps a fox or squirrel? After making up extra tubes for tissues we started prepping at 09:30 and didn't finish until ~19:30, then preparations for the next day. Good feeling though, lots of skin sample preps too, and nearing over 1000 specimen mark.

Trapping Results: Site #6: Mouth of Kavet Cr., 21 August 2014

6AGH 2: 18. Sorex cinereus, 2. Sorex tundrensis

1. Sorex hoyi

6AGH 1: 20. Sorex cinereus, 2. Sorex tundrensis

6KRE pits: 4. Sorex cinereus, 1. Sorex tundrensis

6KRE 1: 5. Myodes rutilus

6KRE 2: 7. Myodes rutilus

6SWL 1: 1. Sorex cinereus, 15. Myodes rutilus

6SWL 2: 1. Microtus oeconomus, 5. Myodes rutilus

TOTAL = 82 captures, DIVERSITY = 5 species

(+ 2. Rana sylvatica I collected from my second line)

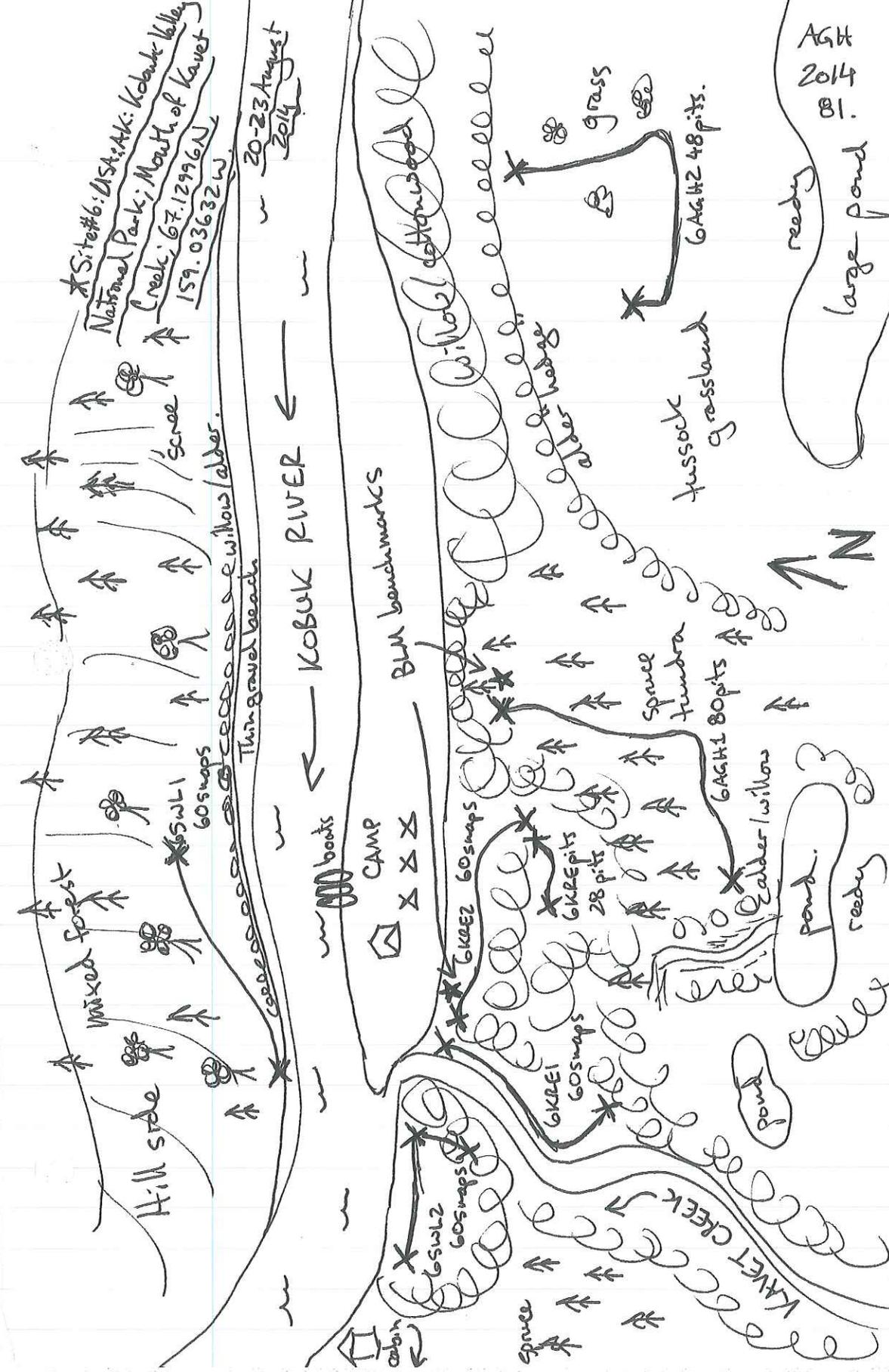
Also lots of good parasite samples from the shrews. Most are riddled with different worms. Again I caught mature S. cinereus that appear strongly birdowned. Need to look into this... S. cinereus also beginning to molt to a much thicker winter pelage, darker. After prepping, another dinner of grilled salmon with rice packets and bed by 23:00.

AGH.

22 August 2014:- Rain in showers during the day yesterday but none overnight. Up at 07:00 to another cold foggy morning but no wind till later in the day, and only light. Probably only ~35-40°F in the morning but the sun was soon out. Warmer than yesterday with no breeze, up to ~60°F, partly cloudy. Another good catch. We will probably move down river tomorrow to give us some extra time to deal with potential wind, considering we already have a good sample here. Prepped from 09:30-14:30 and finished everything by ~15:30 then I sat to write notes. Schuyler fixed a pin-hole in the bottom of his boat and then took my SOAR rig out to practice rowing and to do some fishing. Kevin caught a couple pike, one large for drying. While we were prepping we saw a brown bear on our beach up river, wandering down shoreline towards us. Seemed not to notice us. Probably nearsighted and wind was blowing our scent inland. We fired a shot to try out our non-lethal rounds (fired into the air). The bear heard the shot and ran off. Then saw another brown bear later down river on our left past the cabin. Both were distant and not a problem. Saw one boat pull into the cabin yesterday and a couple hours later headed past us up river with a dead caribou on top.

Trapping Results: Site #6: Mouth of Kavet Cr; 22 August 2014

6AGH 1:	14. <u>Sorex cinereus</u> , 3. <u>Sorex tundrensis</u>	TOTAL = 47 captures DIVERSITY = 3 species
6AGH 2:	6. <u>Sorex cinereus</u>	
6KRE pits:	3. <u>Sorex cinereus</u>	
6KRE 2:	1. <u>Sorex cinereus</u> , 1. <u>Sorex tundrensis</u> , 2. <u>Myodes rutilus</u>	
6SWH 1:	3. <u>Sorex cinereus</u> , 6. <u>Myodes rutilus</u>	
6SWH 2:	3. <u>Sorex cinereus</u> , 5. <u>Myodes rutilus</u>	



AGH
2014
81.

2014

AGH

82.

23 August 2014 - Woke at 07:00 to a cold morning ~ 35°F.
 Collected all traps and processed until 13:00 then packed
 up camp and headed downriver by 15:30. Saw another
 osprey flying over camp with a fish in talons.

Trapping Results: Site #6: Kavet Creek; 23 August 2014

6AGH1: 9. Sorex cinereus, 1. Sorex tundrensis, 1. Sorex hoyi

6AGH2: 3. Sorex cinereus

6SWL1: 4. Sorex cinereus, 3. Myodes rutilus.

6SWL2: 2. Myodes rutilus, 1. Microtus oeconomus

6KRE2: 1. Sorex cinereus, 1. Sorex tundrensis, 2. Myodes rutilus

TOTAL = 28 captures, DIVERSITY = 5 species.

Capture Tally: Site #6: Kavet Creek; 20-23 August 2014

90. Sorex cinereus

11. Sorex tundrensis

2. Sorex hoyi

52. Myodes rutilus

2. Microtus oeconomus

TOTAL = 157 captures

DIVERSITY = 5 species

Trapping Tallies: Site #6: Kavet Creek; 20-23 August 2014

60. snaps x 3 nights = 180

60. snaps x 3 nights = 180

120 snaps x 3 nights = 360

28 pits x 3 nights = 84

80 pits x 3 nights = 240

48 pits x 3 nights = 144

TOTAL = 1188 trap nights

Higher densities as the trip progresses. We also picked up

an extra day so are well ahead of schedule with only ~150 specimens to collect before we reach 1000 for the trip. We headed down river in mostly calm conditions and mostly sunny. Cool day though. Made good time. The river down here is mostly a single channel and picks up good current rounding bends. Sifting speed often at 3mph and rowing at ~5mph. Made 15 miles by ~20:15 and stopped for the night at 67.15803N, 159.44724W. on the right on a pebble bar just down river from a large sand bar and ^{the} mouth of Salmon River. There were certainly a lot of salmon here. Many more dead now on the beaches and decomposing. Pretty bad smell around. Lots of activity in the river too with jumping all over. Not sure why but perhaps due to skin irritation since they are all moldy, or perhaps part of their maturing process. Either way, the salmon are no longer going for food and we haven't caught a fish in a while. We are also getting short on food supplies so good we're ahead of schedule... Dinner of our final mac+cheese with tuna and bed by 22:30.

24 August 2014 - Woke at 07:30 to a cold and foggy morning, but still air. Made coffee then waited for the sun to break through and dry out our tents a bit. Then packed and headed down river by ~09:30. Made 15 miles quickly on a calm sunny day with good current. A real pleasure to be on the water today! Warm by lunch at ~13:30, about 65°F, and we stopped on river left at 67.09683N, 159.73459W and heated water for ramen noodles, tea, and pilot bread.

2014

AGH.

84.

Incidental Observations :- Saw a peregrine falcon and then two northern harriers flying in the vicinity of 67.1501 N, 159.4993 W. Saw two brown bears on river right on banks in quick succession around 67.1136 N, 159.6476 W. One watched us for a while then wandered off. The second saw us and ran. A couple bald eagles along this stretch too.

Not far left to our site. Closer than I thought. We headed on for another ~⁶ miles and found a good sandy beach on river left about 2.7 mi. SW of the mouth of Katarichuk River, about a mile past the previous sampling site from ~2003.

★ Site #7: USA: AK: Kobuk Valley National Park; 2.7 mi. SW, ^{mouth of} Katarichuk River; 67.07072 N, 159.79510 W, 11 m.
24-28 August 2014.

We arrived at ~15:30 and unpacked the boats then set up our tents to dry and organized camp and kitchen and prep tent. The camp is our best yet in terms of large size. The place is a level football pitch size area consisting of an elevated flood channel with a moderately steep bank down to the river. The camp is actually on an island with an old back channel running behind, still with water but not running. Lots of grass here too, so a broad open sandy area with sparse willow shrubs then behind a broad grassland phasing into young willow and then thick old willow and alder, eventually leading to a very narrow strip of

mature white spruce, but no mossy understory, just thinner alder and willow. On the beach, again lots of dead and putrifying salmon. Saw one fish washed up here with a highly pronounced hump-back. A smaller salmon. Need to figure out what this was: Red? Also lots of bear tracks, mostly brown bear all over, young and old, plus wolf prints abundant, some moose, and one set of river otter prints on the ^{down-river} south end of the backchannel.

I asked us each to get up 30 traps on the island around camp this evening so we had stuff to work on in the morning, with the idea we'd set the rest the next day. Keon set 30 behind the kitchen from grassland into willow. Schuyler set 30 snags along the verge of grassland and willow and I set 32 pitfalls through the narrow strip of spruce. Difficult setting in there with lots of roots and lack of good mossy tundra habitat. Finished setting by ~18:30 then pasta for dinner and bed by 22:30. Tried fishing again but no luck...

25 August 2014 - Wake at 07:00. Getting tougher to wake up towards the end of this trip and everyone is thinking about the finish at this point, but all still in good spirits and working hard. Another cold morning - 35°F and fog. We have had very consistent weather the past couple weeks. Checked our traps and had a surprisingly high catch for so few traps. Processed specimens until ~13:00 and then had some lunch. A nice sunny day by afternoon with very few clouds and

calm; maybe reached $\sim 70^{\circ}\text{F}$. In the afternoon we get more traps. I had scouted the place a bit the day before so suggested people go ~~at~~ and set traps on the main river bank to the south beyond the back-channel. The river bank begins with a thick and broad band of willow and alder that is a real pain to battle through. This gives way to a spruce zone running parallel to the river but only about 100m wide. Not much moss but lots of downed logs from old stumps and grassy. Looked moderately good for shrews. Past the spruce is a very old river channel (flood channel) filled in with grasses now and surrounded by a band of willow. Beyond this is another spruce zone followed by another old main river channel, still with water but as ponds now. Throughout these areas ~~is~~ ^{are} signs of rodents. I heard them as soon as I broke through the first thick river bank willow. I suspected they might be Microtus xanthognathus since they are colonial so all the abundance of high-pitched "cheeps" as warning calls would make sense. Turns out I was right! This is an excellent example of a colony, something I've never seen before. There appears to be no habitat preference as they are in spruce, willow, or open grassland. And the extent is massive. They are everywhere with runways, holes and freshly dug mounds of soil each morning. Surprisingly difficult to catch though. The filled in many of my pitfalls with soil and were seen running across snap traps a few times without taking the bait. At least we caught a couple. Red squirrels in all the areas of spruce too. Kevin set up 90 snaps on the island in willow zone behind camp.

2014.

AGH.

87.

Schuyler set 90 snaps in two lines of 50 in the willow along the river bank and 40 in the willow leading into the spruce. I set 64 pitfalls beginning in the first spruce zone and out through the grassland. Then another 32 pits through the second spruce zone. The following day Schuyler and Kevin pulled their first 30 snaps and set them out in the grassland to try and get these ~~yellow~~ taiga voles, and I set a further 32 pits in the second spruce zone. After setting our initial traps this day, they checked snaps around camp and had several voles to prep so we sat and finished up into the evening. Then a big pot of tortilla soup for dinner and bed by 23:00. I was again beat after setting my pits and had a bath late afternoon. The water is colder these days! All the plants are turning shades of yellow, orange and red. Fall colours.

Trapping Results: 25 August 2014; Site #7; Kallaridunk.

7AGH 1: 2. Sorex cinereus, 1. Sorex tundrens 3

7KRE 1: 10. Myodes rutilus

7SWL 1: 10. Myodes rutilus

TOTAL = 23 captures DIVERSITY = 3 species.

26 August 2014 - Woke at 07:00, coffee, then checked our traps. Not a huge catch but still good. Lots of traps filled or set off by voles. The night was not as cold - maybe down to -40°F and calm, mostly clear. Morning of fog though. Partly cloudy during the day and windy out of the west most of the day. We processed until ~16:00 then set our other traps.

2014

AGH.

88.

Trapping Results: Site # 7: Kollarichuk River; 26 August 2014

7SWL3: 1. Sorex cinereus, 8. Myodes rutilus.

7SWL2: 1. Sorex cinereus, 1. Sorex tundrensis, 1. Myodes rutilus

7AGH3: 3. Sorex cinereus

7AGH2: 14. ~~14~~ Sorex cinereus, 1. Sorex monticolus (?)

7AGH1: 2. Sorex cinereus, 1. Sorex tundrensis

7SWL1: 1. Myodes rutilus, 1. Microtus xanthognathus

7KRE1: 3. Myodes rutilus.

7KRE2: 7. Myodes rutilus

7KRE3: 2. Myodes rutilus

TOTAL = 47 captures, DIVERSITY = 5 species

Some of these captures were from afternoon as we checked traps after setting our final lines of the trip! Then back to camp and processing then dinner of pasta and pilot bread. Bed by 22:30 but during the night we were all awakened by a huge splash. I suspect it was a bear jumping after fish. Later on it sounded like something large splashed out on the far shore. ~~to~~ I looked out of the tent and noticed a dark sky full of stars and northern lights so everyone got up at least briefly to watch this, around 02:45. Then bed again. Good to see both stars and northern lights for the first and perhaps only time this trip...

27 August 2014 :- Woke at 07:00 and checked traps. Had a good catch which put us over our 1000 specimen mark confirming a successful trip. So with this in mind we are looking to leave towards Kiana tomorrow after one more trapping night. We

2014

89.

AGH.

not only short on food but also running out of prepping supplies so its time to head home. I think everything was estimated just about perfectly for this trip, things have for the most part worked out very well. I made some calls to the expeditor in Kotz to see about being picked up on the 31st if we could get out a day early. No problem. Then called ~~the~~ Bering Air and Arctic Backcountry Flying Service. Both said it might be possible to fly out early but we should call Sunday morning early. So, we'll play it by ear...

Trapping Results: Site # 7: Kollanuk River; 27 August 2014

FAGH1: 2. Sorex cinereus

FAGH2: 4. Sorex cinereus

FAGH3: 3. Sorex cinereus

FAGH4: 6. Sorex cinereus, 2. Sorex tundrensis

7SWL2: 3. Sorex cinereus, 3. Myodes rutilus

7KRE2: 1. Sorex cinereus, 4. Myodes rutilus

7KRE3: 6. Myodes rutilus

7KRE4: 3. Myodes rutilus.

7SWL56: 1. Tamiasciurus hudsonicus

7SWL4: 1. Microtus xanthognathus, 3. Myodes rutilus

7SWL3: 6. Myodes rutilus

TOTAL = 48 captures, DIVERSITY = 5 species + 1 bird (song sparrow)

Schuyler shot a red squirrel in the morning out in the second spruce zone near my line (FAGH3). We processed until ~ 16:30. The morning was overcast and cool - 45°F with no breeze, but dark. Turned into a

2014

AGH

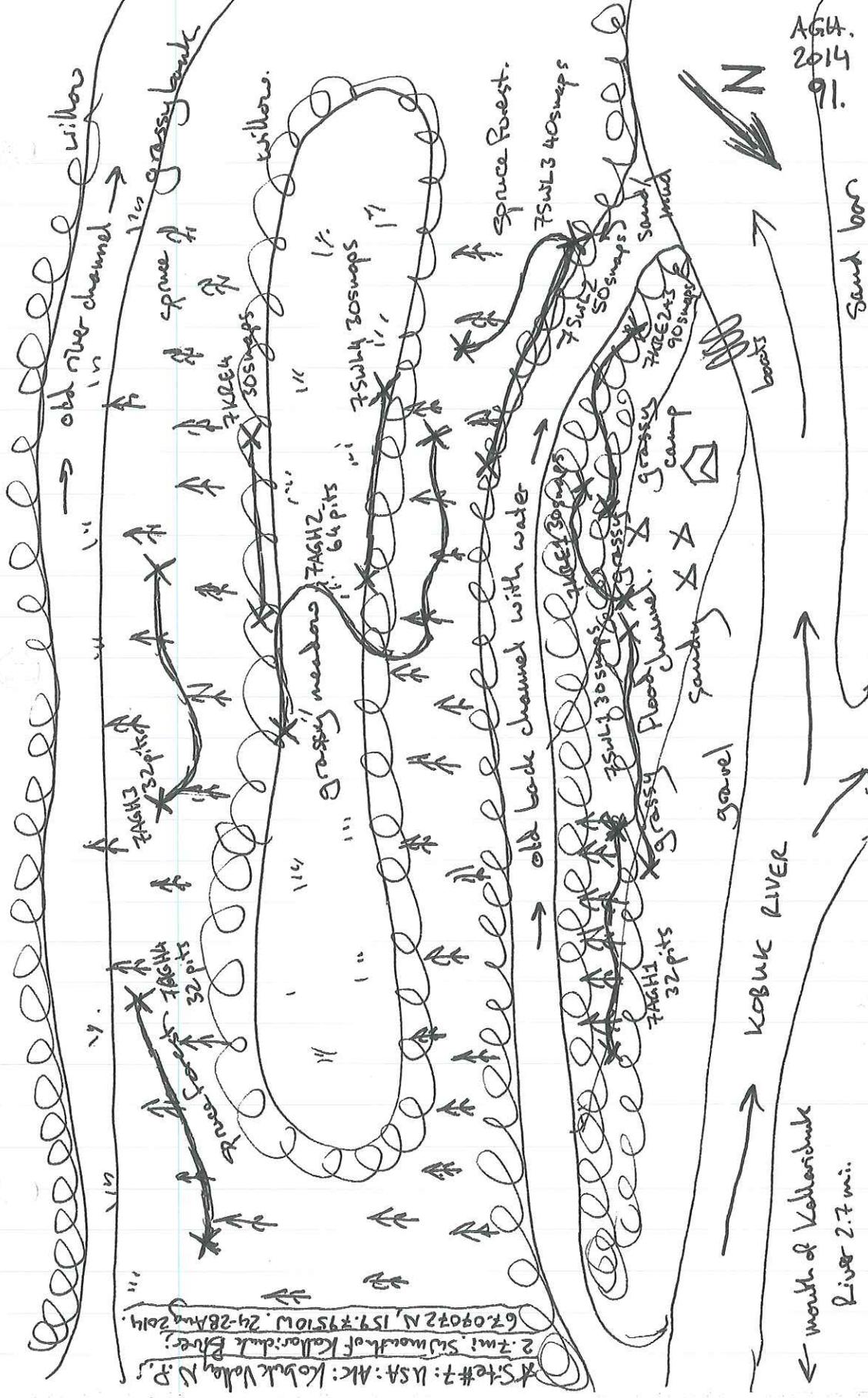
90.

few showers in the afternoon and then back to partly cloudy and breezy by evening. We're hoping for good weather for our final span of river and take-out. I sat to write up notes in the evening and the others organized gear and burned all our trash and cooked another pot of soup for dinner. (Saw another osprey fly up over yesterday near camp and 3 or 4 ospreys flying overhead out by my furthest trap line by the second spruce zone (TAGH3). Probably a newly fledged family)

I.O. ↗

28 August 2014 - Woke at 07:00 to a cold morning close to freezing, breezy and overcast. Not a good sign. - Out to collect traps in full waterproofs and got another big catch. It had rained a lot overnight, up to $\frac{1}{2}$ inch and pitfalls were successful, snaps too since rain wasn't too violent. ~50 captures to process so we set about it, getting breezier all day. A couple guys from Kiwana out hunting moose stopped by to see what we were up to. Everybody knows about us down here it seems. Word spreads fast along the river! They reported seeing a lot of bears but no moose. No black bear either, which are better for eating; don't taste as much like fish. - They gave us some dried whitefish to eat and caribou jerky, lamenting the late caribou migration this year. They heard the caribou were still up by Red Dog at this time. Also spoke of all the dead fish (salmon mostly). I guess the chum are particularly large this year and very abundant. (When we reached Kotzebue we found out this massive die-off was highly unusual,

AGH. 2014 91.



*Site# 7: USA: AK: Kobuk Valley N.P.
 2.7mi. SW mouth of Kallaribuk River.
 67.04072 N, 159.79510 W, 24-28 Aug 2014.

old river channel
 willow
 grassy bank
 spruce forest
 willow

grassy meadows
 willows
 7AGH2 32 pits
 7AGH4 30 swamps
 7AGH1 32 pits
 7AGH2 64 pits
 7AGH4 30 swamps
 7AGH1 32 pits

old back channel with water
 spruce forest
 7SUL3 40 swamps
 7SUL4 30 swamps
 7SUL5 30 swamps
 7SUL6 30 swamps
 7SUL7 30 swamps
 7SUL8 30 swamps
 7SUL9 30 swamps
 7SUL10 30 swamps
 7SUL11 30 swamps
 7SUL12 30 swamps
 7SUL13 30 swamps
 7SUL14 30 swamps
 7SUL15 30 swamps
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 7SUL35 30 swamps
 7SUL36 30 swamps
 7SUL37 30 swamps
 7SUL38 30 swamps
 7SUL39 30 swamps
 7SUL40 30 swamps

camp
 grassy
 flood channel
 sandy
 gravel
 sand bar

Kobuk River
 mouth of Kallaribuk River 2.7 mi.

AGH.

including lots of females still with eggs. They think its due to algal blooms in the warmer than usual river).

Anyway the two guys left and we finished processing and packed camp up before further rain. We headed down river, done now with trapping, into a head wind though not that bad, yet, setting off at ~15:30.

★ Site #7: Kallarschuk River; Trapping Results; 28 August 2014

- 7AGH4: 1. Sorex tundrensis, 6. Sorex cinereus
 7AGH3: 4. Sorex cinereus
 7AGH2: 8. Sorex cinereus, 1. Sorex tundrensis
 7KRE3: 1. Sorex cinereus
 7KRE2: 2. Sorex cinereus, 3. Myodes rutilus
 7KRE4: 1. Microtus xanthognathus, 4. Myodes rutilus
 1. Synaptomys borealis
 7SWL2: 4. Sorex cinereus, 1. Synaptomys borealis
 3. Myodes rutilus
 7SWL4: 1. Microtus xanthognathus, 2. Myodes rutilus
 7SWL3: 2. Myodes rutilus
 TOTAL = 45 captures, DIVERSITY = 5 species
 (+ 1. Rana sylvatica)

Tallies
 Capture Results: Site #7: Kallarschuk River; 24-28 August 2014

67. Sorex cinereus
 1. Sorex monticolus (check ID)
 7. Sorex tundrensis
 81. Myodes rutilus
 4. Microtus xanthognathus
 1. Tamiasciurus hudsonicus
 2. Synaptomys borealis

TOTAL = 163
 captures
 DIVERSITY =
7 species

AGH

Trapping Tallies: Site # 7: Kallanichuk River; 24-28 August 2014

32 pits x 3 nights = 96

96 pits x 3 nights = 288

32 pits x 2 nights = 64

60 snaps x 2 nights = 120

60 snaps x 2 nights = 120

90 snaps x 3 nights = 270

90 snaps x 3 nights = 270

TOTAL = 1228 trap nights

It was tough paddling this last section. Unrelenting wind until evening time when it normally died down (after ~7pm). We made a very slow ~~to~~ miles this day (I.O. - saw a brown bear on river right at: 67.02183N, 159.85602W). Camped on river left at 66.99880N, 159.91075W. We arrived at ~18:00 at a reedy bank with very active bear sign everywhere, so floated a bit upriver (helped by wind) to get to a more open sand bar. The wind died by 19:30 but we were tired and set up - so stayed the night. Awoke at ~02:30 to a wailing bear near camp. Got up but it was gone. Saw more northern lights.

29 August 2014 - Woke at 07:00 to a frosty morning already windy. Grouchy. Packed and headed out but wind got worse. We made 3 miles before being blown to shore with large dangerous white-capped waves and constant wind. Set up our tents to wait it out. Bitter cold with wind chill. Stayed in tents from noon till 3pm then packed and headed onwards with reduced wind but

AGH.

Kobuk River Small Mammal Sampling 2014; Capture Summaries: 7 sites; 21 July - 1 September 2014

425. Sorex cinereus
 12. Sorex ugyunak (?) - check IDs on all
 41. Sorex tundrensis
 23. Sorex hoyi
 6. Sorex mordax
 474. Myodes rutilus
 30. Microtus oeconomus
 15. Microtus xanthognathus
 2. Synaptomys borealis
 4. Lemmus trimucronatus
 7. Tamiasciurus hudsonicus
 1. Alces alces
 1. Lontra canadensis
 1. Lepus americanus
 ~8. (Rana sylvestris)

TOTAL = 1042 captures (+~8) DIVERSITY = 14 species

Kobuk River Small Mammal Sampling 2014; Trapping Summaries; 7 sites; 21 July - 1 September 2014

- Site #1: 562 pits, 910 snaps = 1472 t.n.
 Site #2: 612 pits, 906 snaps = 1518 t.n.
 (+4 shotguns) Site #3: 624 pits, 818 snaps = 1408 t.n.
 Site #4: 704 pits, 1010 snaps = 1714 t.n.
 Site #5: 516 pits, 735 snaps = 1251 t.n.
 Site #6: 468 pits, 720 snaps = 1188 t.n.
 Site #7: 448 pits, 780 snaps = 1228 t.n.
 TOTALS = 3934 pits, 5871 snaps = 9779 t.n.
 TRAP SUCCESS = 1042 captures / 9779 trap nights = 10.7%

2014.

95.

AGH.

not great. Made another 5 miles and were again stopped by wind, exhausted at ~20:00. Set up our tents again to wait it out. By 22:00 it was finally calm so we packed and boated on until we could no longer see, taking the northern (smaller) river channel towards Kotzebue around the last large island. Made another ~4 miles and camped at ~midnight on river right at 66.96900N, 160.34259W.

30 August 2014 - Woke after another cold night to a frosty morning at 07:00 packed and headed onward with relative calm but cold conditions. Only 3 miles to Kiana and arrived at ~08:45. Boating over, after ~302 miles from Walker Lake (portage to the south) to Kiana! Schuyler and Kevin went to scout town. There's a general store right on the beach front and another up the top of the hill straight up the main road. The latter is also Lee's Sea Air which became our major contact here. I unpacked my boat. When they returned we all unpacked boats and washed the rubber, then sorted gear and organized. Showery today so not great for drying stuff or getting sand out... We folded up boats then I went up to Lee's Sea Air and spoke with his wife (Aoney?? - something like that ... very nice and helpful) then to Lee on the phone. He suggest we just stay camped on the beach for the night. ~~Had called~~ ~~both~~. I bought some snacks and mac and cheese for dinner then returned to the beach. Also did a walking tour of town for photos. Pretty big place. Then we set up tents, napped, had dinner, then bed.

31 August 2014 - Woke at ~08:00. Noone slept very well. Cold and noisy with late boats coming in, shouting, dogs barking. Looking forward to leaving today! I called Bering Air and Arctic Backcountry to see if there was space to get us all out. Bering was a "go", AB was a "maybe", beat the airport by 1 pm. So we waited till noon, being a Sunday everything was shut till then, then went up to Lee's, met one of the pilots, Robert who helped ~~use~~ us out. There are apparently a couple guys in town who will haul gear from river to airstrip for ~20-50 \$ but none available. Lee's Sea Air therefore lent me their flatbed Chevy 250 to use for \$50. I drove it down to the beach, we loaded everything and dumped it ~~on~~ ^{near} the air strip.

When I dropped the truck back off, I met Lee and some of his pilots, all preparing for various flights. He called Eric Sich with Arctic Backcountry. Eric didn't want to leave me hanging so asked Lee to get me and freight to Kotz. A friendly back scratch type thing so I went with Robert in a red piper cheerokee. He fit all our gear apart from 2 pieces which Lee said he'd deliver tomorrow to Kotz. I had also given away one of our tables and preptent and tarps. I was surprised it all fit but no problem and a nice flight of ~35 mins to Kotz. I paid at Golden Eagle Air (\$495). Interesting how these small local airlines work.

Called Valerie with NPS who dropped off a full size van for me to use and told me where to go. I loaded all the gear and drove just down the road to the BLM bunkhouse kitty-corner to the NPS office block. First,

AGH.

I showered and changed, then went to drive around town. Sunday so not much open. Also Labor Day tomorrow so even less open than. We have fingers crossed we can buy some beer tomorrow from the state package store. ... I then went to pick up the other two from Beringer. They arrived at 17:00. We returned to the bunkhouse, after showers I put on a load of clothes to wash, then we went to get a few items to make a huge pasta with ground beef for dinner. A nice bunkhouse, very comfy, lots of amenities, full kitchen and some leftover food supplies. We were sharing with Stan, a heli-pilot working for BLM and Brian who works for Bear Smart non-profit out of Durango, CO., up here working with Marcie Johnson at NPS doing public outreach in local villages around Navajo and Hopi regions. I met Marcie who helped with our hazmat frasco sending the ethanol out to Kobuk. I am very grateful for all these NPS folks making the logistics of this trip work!

We played some cards (rummy) till late, then bed at ~01:00. Rain and wind all night and most of the next day.

1 September 2014 - Woke at 08:00 and coffee and pancakes for breakfast. Then sorting gear. Personal stuff cleaned and dried, then kitchen gear, bear cans, electronics and paperwork. I sat to write notes. This afternoon we will head to Golden Eagle to pick up our final 2 items, then drive to the NPS hangar at the airport to get the scales for weighing gear, then over.

AGH

to the FWS warehouse to the north of the Bering Air hangar (2 streets over from 3rd where the bunkhouse is) where our other gear is that came out with Alfredo. We'll sort everything then probably settle in for more cards this evening... We should fly out tomorrow by ~10:30 am to arrive in Anchorage around noon.

Contacts

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Jim Lawler - 907-455-0624

- Bettles - Dale Lynn Gardner - 907-692-6100

- Denali Dispatch - 907-683-9555 (412-1158)

- Kotzebue - Valerie Atkinson - 907 442 8302

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- Permits - Linda Hasselbach 509-996-8031

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Kobuk Villages - Kobuk Ramp Agent Chris 907 948 5180

- Krana Ramp Agent - Lee's Sea Air 907 475 2101

Air Liquide (liquid N₂) - Fairbanks - 907-452-4781

Bering Air - 907-442-3943 (Kotz.)

Wright Air - 907-474-0502 (Fairbanks)

Brooks Range Aviation - Jay & Judy ^{Jasperson} 907-692-5444

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Golden Eagle Outfitters - Jared 907-388-5968 (Kotz.)

Kobuk River Small Mammal Sampling 2014: AGH traps
Trapline Co-ordinates; All sites.

Site #1: AGH1 start: 67'3'55.80N, 154'17'2.07W
 67'3'55.27N, 154'17'7.45W
 AGH1 finish: ~~154'17'2.07N, 154'17'~~
 AGH2 start: 67'3'53.37N, 154'17'4.36W
 AGH2 finish: 67'3'54.48N, 154'16'59.11W
 AGH3 start: 67'3'43.43N, 154'17'3.25W
~~AGH3 middle:~~
 AGH3 end: 67'3'45.59N, 154'17'2.32W
 AGH4 start: 67'3'54.08N, 154'17'4.75W
 AGH4 finish: 67'3'55.49N, 154'17'1.75W

Site #2: AGH1A start: 66'57'29.98N, 154'25'43.48W
 AGH1A finish: 66'57'29.30N, 154'25'43.66W
 AGH1B start: 66'57'26.50N, 154'25'38.74W
 AGH1B finish: 66'57'27.37N, 154'25'37.44W
 AGH2 start: 66'57'28.63N, 154'25'56.93W
 AGH2 finish: 66'57'25.54N, 154'25'56.64W
 AGH3 start: 66'57'25.87N, 154'25'56.59W
 AGH3 finish: 66'57'27.32N, 154'25'57.97W

Site #3: AGH1 start: 66'48'53.93N, 154'58'27.40W
 AGH1 finish: 66'48'54.40N, 154'58'18.35W
 AGH2 start: 66'48'52.50N, 154'58'31.96W
 AGH2 finish: 66'48'52.53N, 154'58'22.91W

Site #4: AGH1 start: 66'46'3.73, 156'3'14.16W
 AGH1 finish: 66'46'0.90N, 156'3'15.67W

Site#4 (Cont.): AGH2 start: 66'46'1.90N, 156'3'11.25W
 AGH2 Finish: 66'45'58.12N, 156'3'13.90W
 AGH3 start: 66'45'57.38N, 156'3'33.84W
 AGH3 finish: 66'45'55.75N, 156'3'28.47W

Site#5: AGH1 start: 67'7'35.57N, 158'18'45.02W
 AGH1 finish: 67'7'40.57N, 158'18'35.24W
 AGH2 start: 67'7'32.91N, 158'18'41.08W
 AGH2 finish: 67'7'31.62N, 158'18'31.95W

Site#6: AGH1 start: 67'7'44.58N, 159'1'52.35W
 AGH1 finish: 67'7'46.74N, 159'1'53.41W
 AGH2 start: 67'7'53.15N, 159'1'45.46W
 AGH2 finish: 67'7'52.05N, 159'1'43.09W

Site#7: AGH1 start: 67'4'19.05N, 159'47'24.01W
 AGH1 finish: 67'4'20.56N, 159'47'23.40W
 AGH2 start: 67'4'3.14N, 159'47'25.95W
 AGH2 finish: 67'4'2.61N, 159'47'20.21W
 AGH3 start: 67'4'1.04N, 159'47'11.93W
 AGH3 finish: 67'4'2.67N, 159'47'12.77W
 AGH4 start: 67'4'5.47N, 159'47'14.08W
 AGH4 finish: 67'4'4.69N, 159'47'12.02W

Contacts (Cont.)

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