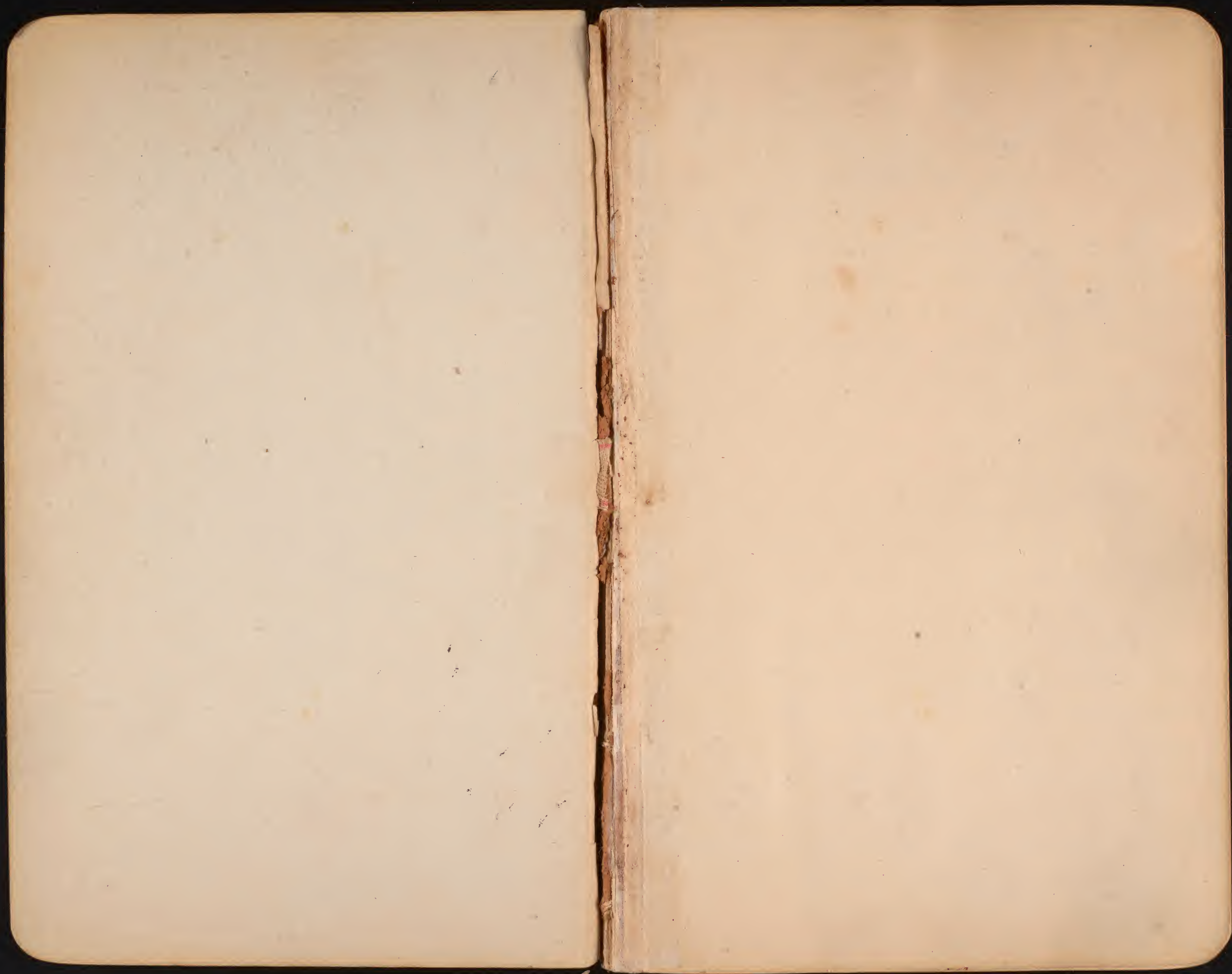


Alberta

Athabasca





April 30. 1901

Left Edmonton about 6 P.M. and drove about 5 miles on the road toward Athabasca Landing and camped just before dark beside the road near a shallow pond. The country is flat and mostly covered with a scattering growth of willows with here and there a grove of Poplars and in one or two places we saw spruces growing in swamps.

May 1: Left camp early and came about 20 miles through a pretty flat country with many marshy places. Sparsely wooded. Roads very bad. Saw a good many birds elsewhere noted.

Toward night we passed through some country more heavily wooded with Pine, Poplar and some spruce in the swamps and camped near the Sturgeon River.

May 2 Crossed the ~~river~~ ^{trunk} Sturgeon River and came about 20 miles ~~to the Vermilion River~~ ^{passing deep glets.} where we camped. The country fair-

red through mainly rolling and
with very little wood mainly
poplar with a little spruce and
Lamarack in the swamps.

May 3. Came about 23 miles
through a fairly well wooded
country grown up mainly with
Pines with some spruce in
the swamps

May 4. Came nearly 20 miles through
a high rolling country rather
sparsely wooded. mainly with poplar
we crossed several small creeks
and camped on a high ridge
about 14 miles south of the
Landing.

May 5 Traveled through a high
rather barren ^{rolling} country which
has evidently been swept by
fire and never grown up
again, and reached Athabasca
Landing about 5 o'clock.

Made arrangements to start as
early in the morning as possible
Found a good canoe in readi-
ness.

May 6 Athabasca Landing to
28 miles below

We left Athabasca Landing about
one o'clock and went ashore about
dark at a point on the left bank
said to be about 28 miles below
the Landing. The first few miles of
banks are rather barren the forest
having been burnt off and never
made a stand again. a few pines
remaining but very small poplars
constituting the bulk of the growth
especially on the right bank.

Banks immediately at the river
rather low but back from the
stream rising to ridges several
^{300 to 400.} hundred feet high.

Farther down the character of the banks
remains the same but the forests
are heavier mainly of poplar (both
species) spruce and a good deal
of birch with an undergrowth
of willows, alders, cornel etc.
Large tracts have been swept
by fire and the forest killed.

May 7. 28 m. below A. Landing. to 10.

miles above Pelican Rapids
were routed out by the guide
about 3. am. and travelled until
dark when we had come
about 80 miles. mainly through
a rather heavily forested region
the character of the banks
remaining the same as those
passed the first day and
the same kind of forest
covering them. We saw
several flocks of "gray war-
blers" (ancey) and a flock of
cranes besides several other
species elsewhere noted.
We passed during the after-
noon 2 slight rapids a few
miles apart.

We went ashore on the right
bank at a point where there
was a steep beach closely
paved with small boulders.

May 8. The weather remaining
stormy we remained in camp.
all day. During the afternoon the
rain several times changed to
sleet hail or snow and
we passed a rather uncom-
fortable day.

May 9. 10 miles above Pelican River
to mouth of House River
Though the weather showed no
signs of clearing the entire party
left camp about 9.30 am.
putting some of our heavier
baggage on the scow which
we have accompanied thus
for we left them in our
canoe for greater comfort
about 11 am. we passed the
mouth of the Pelican River
where 15 or 20 pelicans were
started from the shore near
the mouth of the river, also
a number of gulls.
About noon we stopped at a
small stream and had dinner
and just as we were about

to leave again were overtaken
by the large boat. The crew
reported seeing a large black
bear at the Pelican Rapids, a
short distance below the Pelican
River. We continued on down
the stream and camped just
before dark on the right bank
a few hundred yards below
the mouth of House River
May 10. House River to Grand Rapids

The large boat passed our
camp about 6.30 and we shortly
afterward started down after
them on taking them about a
mile above the Island at
the Grand Rapids and in a
few minutes landed at the
upper end of the Island.

We transported our baggage
to the lower end over the tram
way which the N.B. Co. have
built and use constantly and
camped at the lower end.
The large boat not expecting
to leave until tomorrow

The River at this point cuts down
through the sandstone (The Grand
Rapids sandstone) leaving high
banks (nearly perpendicular) on either
side about 200 feet of the sand-
stone being exposed topped by
about a hundred feet of
shales and a layer of the
"Pelican" sandstone. The
Island is about $\frac{1}{4}$ ~~or $\frac{3}{4}$~~ of
a mile long and about 150
yards in width and has been
well wooded with spruce fir
Birch, Poplar etc. The current
on each side of the island
is very swift and the bed
of the river is filled with
the nodules of sandstone
which have been left when
the softer parts of the sand-
stone has been worn away
a song sparrow was seen near
the buildings at the upper end
of the Island and one or two ducks
(Mergansers?) in the river. I took a few
pictures of the shores on each side.

May 11.

We left the foot of the Grand Rapids about 7:30 P.M. and travelled until nearly dark. The sandstone cliffs border the valley on both sides for most of the way and the country is mainly heavily wooded though mostly swept by fire. About 15 miles below G.R. a gas well emerges on the left bank at the mouth of a small stream, ^(the little Buffalo River) a large quantity of the gas emerging ~~beneath the surface~~ from the bed of the stream. The bubbles showing that it reaches nearly half way across the river though mostly near the shore. About 10 miles below here we passed the Burnt or Bruce rapids following near the left bank in the canoe where the river is better for small boats. We camped on the left bank a short distance below here.

May 12 It being Sunday the whole party remained in camp. Very little of interest was seen. One or two hermit thrushes were heard singing near camp and Eutamias seen on the shore in a pile of drift-wood. a putoarius (creognani) seen.

May 13. We pushed off from camp quite early and floated off down stream. Soon after starting we saw a bear on a bluff near the river and landing climbed after him but after climbing two steep slopes we had only the satisfaction of seeing him disappearing over the third and out of shot. We had some lunch at the head of the Boiler Rapid and after running it and proceeding a short distance we stopped at an Indian encampment. They had several heads of moose, mostly in poor condition. One had a portion of

the face white.

during the afternoon we successively ran the Middle Long, Crooked & Stony rapids and camped near the head of the Little Cascade Rapid.

Banks of River of Sandstone Shales, and Limestone the latter first appearing at the Crooked Rapid.

May 14. Left the camp early and ran the Little & Big Cascades which fall over horizontal beds of Limestone. Waited some time for the large boats to pass over the Big Cascades and after proceeding a few miles we ran the Moberly Rapid the last on the river and shortly afterwards arrived at H. Murray at the junction of the Athabasca & the Clearwater. After waiting here a short time we went

on I took a few pictures of the high shale cliffs above McMurray. After leaving the "Forks" the ~~shore~~ ^{banks} on the east side of the River consist of high cliffs of shale surrounding the limestone but after passing a few miles the ~~valley~~ valley becomes less deep though the immediate banks remain much the same. We camped at dark about 15 miles below the "Forks".

May 15. We left camp about 5 am. and caught up with the Scow which had drifted nearly all night at Red River where there is a H.B. Post about 8.30. Just before reaching here we saw many nests of cliff swallows beneath the overhanging cliffs on the east shore but the birds had evidently not arrived. We saw several species of ducks. ^(Bristle) Gray geese and small geese.

Probably B. c. ^{hutchinsoni} ~~hutchinsoni~~ ~~hutchinsoni~~ and several other birds elsewhere noted. Heard several water thrushes along the shore.

Shores of shale, limestone and Tar sands

Remained at Red River until about 11. am cooking bread etc and then started down the river. The banks are rather low and heavily wooded with spruce, birch poplars mainly balsamifera which reaches a large size and an undergrowth of Cornus various willows and alders. Ruffed grouse were very abundant along the river passed today several ~~times~~ could be heard drumming at most any time.

The snow will drift all night so we will float along with her.

May 16 Poplar point to 20 miles of Lake Athabasca

We drifted all night and early in the morning passed Poplar point and shortly afterward went ashore and had breakfast. We floated down the River all day and all hands went ashore and camped, about dark

May 17 To Lake Athabasca

Floated down the river and reached the marshes at the mouth about 4 P.M. shot a few birds here. were unable to cross the bar on account of wind. Went to bed about 10.30 as the guide said we would not start until two in the morning in all probability. He roused us up at 11. however and we started and soon reached the Lake. We encountered much floating ice but managed by hard work to get through it

and reached Ft Chippewyan
May 18 at about 3.30. After
some breakfast we went along
the shore a short distance and
went to bed for a short sleep.
Got up about the middle of
the forenoon and having
gathered a few provisions at
the store we went up the
shore about a mile (east)
and made a camp in a
favorable place for work
and set out some traps.

May 19. We made a fairly good
catch of Evotomys & Peromyscus
and set out another line
of traps. Also set some
snare for rabbits which
are abundant judging by signs.
Saw a pair of mallards
about a lake near, which
were evidently nesting. Red
squirrels are very common.

Ft Chippewyan.

May 20. Took a good series
of Evotomys and a few
Microtus & Peromyscus in
new traps. Shot a Lepus
on the rocky hill near camp
and a muskrat in a small
piece of marsh. Rained all day.
In the afternoon we made up
our specimens, and collected
a few plants. There are very
few small birds here.
Our camp is pitched on the
shore of ~~the lake~~ which at
this point and for some
distance either way is
high and rocky and fairly
well wooded. with spruce
birch. Aspen poplar willow
Banksian Pine. a good deal
of Junipers grows on the
rocky hills and also in the
woods and a great deal of
mountain cranberry & a ground
cedar () the latter main-
ly on the ledges.

May 21. Took Sorex Eutamias &
Peromyscus in our traps and
shot a Lepus & several Red
squirrels. I attracted the
rabbit by squeaking. Also
took Junco Parus hudsonicus
Canachites, Spizella & Dendroica
coronata. Reset some traps.

In the afternoon we made
up our specimens which
occupied all our time
until dark.

Noticed a few trees of Papulus
balsamifera in a swamp near
which are the only ones seen
in the vicinity. Also Tamarack

May 22. Took a fair lot of mice, etc
including Sorex Microtus Eutamias
& Peromyscus and shot some
squirrels. It commenced to rain
about 10.30 am and rained hard
the rest of the day, almost turning
to snow. very cold and disagreeable
My brother shot a F. gray checked
Thrush in the spruce woods near
Camp. We put in the afternoon on specimens

May 23. Took a fair catch of
mammals, and a number of
birds including Troglodytes philadelphicus
About 3. PM after assisting
to make up most of the specimens
I made a trip in the canoe
to the mouth of the Athabasca
~~and~~ to get some water birds
and see if it would be a
good place to camp & do
some work. After shooting
a few birds we camped, did
not set any traps as the
place had been so recently
flooded that there seemed
to be no small mammals.
but may be able to get some
desirable birds. Left my brother
in camp to attend to traps and
prepare specimens.

Noted a flock of Black bellied
Plover on the marsh but was
unable to secure any.

During the night I heard a
great horned owl several
times.

May 24 Got up at 4.30 and
after breakfast started to
hunt over the marsh after
birds and hunted until
about 9.30 when we left
for camp. secured several
species not elsewhere seen
including Yellow-headed black
bird & Scofield's sparrow.

The only song of the latter
which I heard was a simple
twitter uttered on the wing
Two, a pair, were taken
List of birds seen noted else-

where. Saw a great many
white warblers (leucis) but
was unable to secure any
Heard many bitterns & saw
two. and many snipe ^(Gallinago) were
heard and one shot.

Got back to camp in time
for dinner and after dinner
we prepared our specimens
Heard Humming Thrushes & Blue-
backs near camp at sunset
also Nighthawk

May 25 Fort Chippewyan to 12 miles N.E.

Took up our traps and broke camp.
leaving about 9.30 We proceeded
along the north shore of the Lake
about 12 miles and camped in
a thick grove of spruces near
Point ~~Barre~~ ^{La Brie}. The country beyond is
said to be entirely bare rock.

with no camping places available
for a long distance. The shore
passed consists of a succession of
bare rocky hills 50 to 150 feet high
in some cases with precipitous
~~sides~~ ^{fronts} with wooded ravines between.

Took some snapshots of the shore
near where we stopped. There were
ice fields of considerable extent
on which were feeding Fringilla
baurii ^{a good many} and arenaria mornella
~~maculata~~

about 15 or 20 of the latter were
observed and 3 shot. Their stom-
achs were filled with remains of
beetles and other insects, mostly
beetles. Took several of the Fringilla
and made up two. We camped
in a depression between two hills

thickly wooded with white spruce
with some birch aspen & Balsam
poplar. with an undergrowth of
Alnus incana cornus (red over)
wild rose etc. The rocks are
covered with lichens some of
a brick red color. Vaccinium
ground cedar, Juniperus etc
with Banksian pines mostly of
small size. a little beyond
us is Big Island with two
or 3 small islands near it to
the north. Beyond it as far
as the eye can reach is
an apparently unbroken ex-
panse of ice.

Back from the shore are num-
erous muskegs with small
streams draining them. which reach
the Lake by underground channels
in most cases.

Saw many surf Scoters always
in pairs and a few white-
winged scoters and many Herring
gulls. Shot a rabbit and a
spruce grouse while setting traps

May 26. Got a few specimens
in our traps and made them
up. My brother shot a Lomocana
Larager in a poplar near the
Tent Saw a grouse down
several times. He stood erect
and had his wings only half
open. the motion being from
the shoulders. Took some photo-
graphs of the Lake, rocks, etc.
May 27. Up early. Got a

fair catch of mammals in-
cluding Skunk, Microsorex, Evot
omys Putorius. Shot a rabbit
and some spruce and ruffed
grouse and a number of
small birds. Set some more
steel traps. Saw a track of
a bear on the shore half
a mile east of camp.

Work in the afternoon on spec-
imens and finished up every
thing. The location seems to
be off the path of migration
and few small birds are seen
A very fine day.

May 28 Got very few mammals
in our traps. Shot a muskrat
in muskeg near camp, also
two Canada grouse Bay breasted
warblers and some squirrels.
Rained some toward evening.
Trains leaving such fast. When
we came here (May 25) they had
barely started.

May 29. Made only a poor catch of
mammals. Took 3 rabbits in traps but
they were so bruised and bloody as
to be unfit for skins so only the
skulls were saved. Shot a number
of birds including Cantopus borealis
Empidonax minimus Seiurus aurocapillus
Bonasa, Dendroica castanea Hermit & Olive
taeata Thrushes & Geothlypis phaeola the
latter one of a pair which probably
had a nest on a cliff near the
Lake shore. Reset a good many traps.
Observed signs of bears on the rocky
hills ^{north} east of camp. Crops of Bonasa &
Canachites examined. The ~~latter~~ ^{former} contained
young leaves of the Aspen Papular. That
of the spruce grouse was filled with hairs
of Arctostaphylos uva-ursa.

May 30 We had planned to break
camp and to make another
camp somewhere near the
outlet of the Lake to the
west of Chipewyan but the
day proved so stormy we
thought it inadvisable to
move. We took very little
in our traps and the
heavy rain made hunting
impossible, so we were
able to accomplish but
little beyond drying and
preparing our specimens
for packing.

May 31. Took up our traps
and left camp about 8 a.m.
The Lake proved to be rather
rough but we reached Chipewyan
safely about noon.

On our way two "waves"
Chen. were seen to alight on
a high cliff ~~near~~ the shore.
We stopped the canoe and
while my brother and one
of the canoeemen kept the

June 2. Took a good catch
of mammals. Peromyscus
Ernstomys & Sorex. The Ernst-
omys measure larger than
those taken near Chipewyan.
We put in the forenoon looking
after our traps and shooting
birds and secured several,
including Tyrannus tyrannus
Louisiana Tanager, Canada
Nuthatches, a pair of Hudsonian
Chickadees, White winged cross-
bill, Tennessee Warbler etc.
Found the nest of the Hudsonian
Chickadee and will try to
secure it entire in the morn-

ing.
In the afternoon we skinned
up all our specimens nearly 40
and set out more traps in-
cluding some steel traps.
Took a pair of yellowbellied Wood
peckers the first seen since
leaving the heavily timbered valley
of the Athabasca.

June 3. Took about 25 mammals
Ernstomys, Peromyscus Sorex &
Sciurus and shot a few birds
Tyrannus, Dendroica virens, Empidonax
flaviventris etc. The ~~egg~~ nest
of Parus contained 4 young
and two eggs on the point of
hatching, and as we had shot
the ^{old} birds we preserved the
young in formalin. A strong
cold wind from the north
blew all day and made col-
lecting very difficult.

June 4. Took a fair catch of
Sorex, Peromyscus & Ernstomys
and shot a few birds. Wind
very high and cold and collect-
ing difficult. Spent an hour or
two in the marsh and took Agelaius
Sciurus norboracensis. Found
a nest of swamp sparrow contain-
ing 5 eggs. It was in a tussock
of grass over the water. Reset
many of our traps. My brother
shot another Black throated green warbler
but was unable to find it.

June 5 Took up our traps and
after preparing the more desirable
game mammals we broke camp
and crossing the small Lake
where we were we proceeded
down the Rocher River
We had dinner on the left
bank of the river. Beyond the
fringe of willows and poplars
which occupied the immediate
bank was a large marsh
where I shot a gareulus
& Agelaius and observed
several other species.

Reembarking we paddled and
sailed down the river until
nearly night when we put
ashore on the right bank
in a grove of heavy spruces
From this point a path leads
sometimes on to a marsh
which connects with the river
by a creek several miles below
thereby cutting across a bend.
This point where we camped
is only a short distance

above the mouth of the Peace
River. The upper part of the
river passed through today
is narrow and winding and
fringed mainly with willows
and alders with swampy shores.
Here and there occur outcrops
of granite where a few spruces
and pines occur. The river
passed through in the afternoon
is wider and generally fringed
with Poplars with and undergrowth
of willows & other shrubs.
Here and there are stretches
of the White spruce which at
the place where we camped
was very tall and reached
a diameter of two feet in
some instances.
I set out a line of traps and
shot a ruddy duck (Aythya
collaris) at a small pond in the
forest. My brother being sick
was unable to set traps and
retired early, but I hunted
until stopped by darkness.

June 6. Got up early and
took up my traps securing
a fair catch of common species
skate a few birds.

Shortly after breakfast we
reembarked and after proceeding
a short distance passed the
mouth of the Peace River
which comes in on the left
and uniting with the Rack
which is small in comparison
makes a broad rather Rapid
River. We proceeded on down
the character of the banks
remaining much the same but
slightly lower than where we
camped. Stopped shortly after
noon and after dinner
went to work skinning specimens
of which I had quite a lot
on hand. My brother was un-
able to assist me and I
put in the afternoon and
after supper as long as
I could see without finish-
ing them all. A Pleasant day,

June 7. Finished up all my specimens
and between 10 and 11 o'clock start-
ed on down the river. After
going a few miles we put ashore
for dinner at a ^{deserted} trapper's cabin
on the left bank. On the roof
I found skulls of Lynx, Mustela
americana, Vulpes, Lutrola, Lutra
and a wolf. The latter was
unsuitable for a specimen but
I collected the others.

A short distance below the left
bank of the river became higher
and as the place seemed a
favorable one for collecting
I concluded to camp for a
few days more. We accordingly
put ashore at the mouth
of a creek which formed one
of the outlets of a lake about
a mile distant. I put out a good
line of traps, while setting them
I pushed over a large poplar
stub in which I noticed a large
woodpecker's hole and found it
to contain 3 young Richardson's

Owls nearly ready to leave the nest. I set two steel traps on poles at the spot in hopes of catching the old ones.

Shot a warbling vireo in the swamp near camp.

While I was examining the young owls a ^{small} bat flew up from the debris of the stub and flew away through the woods. I was unable to secure it or to see where it took refuge.

June 5. On going to my traps in the morning I found the Red Owl in one and in the other a fine small Goshawk. In my small traps I took Sorex, Microtus, Eutamias & Peromyscus. The owl caught had a Microtus in her claws. In the hole occupied by the owls was a mass of hair and bones of Microtus, Peromyscus & Eutamias an inch and a half thick. The stomachs of the young owls were filled with the remains

of Peromyscus, Microtus & Eutamias. The stomach of the old one was empty.

Shot a fine male Rosebreasted Grosbeak near camp where he was singing.

Found a nest of the Pintail on an island near camp. It was at the edge of a thicket and was composed wholly of the down from the breast of the parent, arranged between pieces of driftwood. Found also a nest of spotted Scaup containing 3 eggs, one normal one about half size and one about as big as a normal worm egg.

Took Peromyscus, Eutamias and ~~heard~~ song of Ovenbird about was unable to find the bird. Saw several tracks of moose near camp, none very fresh. However and found a nest of Empidonax containing 4 eggs.

June 9 Took Eutamias Peromyscus
and Eutamias in my traps
The latter were taken in the
swamp near camp. Shot another
in a fallen grove of Poplars
Heard Ovenbird again but
caught only a passing glimpse
of the bird which was very shy
Took night a grouse, whose
drumming grounds we had invaded
came back after dark and
drummed within a few feet
of our beds.

We drummed several times
and remained some time
clucking loudly as if angry
at our intrusion.

June 10. Took some Richardson's Eutamias,
Eutamias, Microtus and shot several
birds including Zamelodia, Setophaga
of which I took nests & eggs. Sciurus
amoenus. Bonasa Empidonax
(with nest & eggs) Helminthophila peregrina
Accipiter velox. Sayornis phoebe
Carpodacus Arreosorus, Dryobates
pubescens & Vireo gilvus

The Flycatcher's nest was in an
alder about 15 feet up in heavy
woods and the eggs were slightly
incubated. The nest of the
Zamelodia was in a clump
of willows in a swamp about
12 feet up and in the same
clump about 6 feet below it
was the Setophaga's nest with
5 eggs. We also found a nest
of Junco with 4 fresh eggs.

June 11 Took up our traps taking
Eutamias, Microtus Eutamias and
an adult ♀ Peromyscus. Prepared
our specimens and after dinner
broke camp and proceeded down
the river.

The left bank of the River for about
4 miles is high bank of clay &
gravel and wooded with poplar
& spruce.

After going about 5 miles we
stopped at a trappers shanty on
the right bank where the river
turns abruptly to the left and
found some skulls on the roof

A few miles below Lee we passed high banks again. One very high ~~point~~ one on the right bank being the highest ground seen for some time.

Below here several outcrops of rock occurred and one or two large rocky islands were passed, dividing the river in two.

About a mile below here we put ashore at a rocky point on the left bank and made camp. Found a marsh with a pond in it a short distance back and set out a large line of traps. Signs of *Microtus* abundant. Saw many birds elsewhere recorded.

Some Banksian pine seen among the ~~hills~~ on the higher parts of the Banks and *Betula glandulosa* observed at camp. First seen on trip.

June 12. Took a large catch of *Citellus*, *Microtus*, *Peromyscus* & one *Microtus* and shot several birds *Richardson's Owl*, *Ammodramus caudescens*, *Grice's*, *Sora*, *Rail*, *Ridings* etc.

Put in the afternoon on specimens and in the evening reset traps. Found a nest of Wilson's Snipe with 4 eggs.

June 13. Took up our traps taking a fair catch of mammals and after dinner having prepared all our specimens we broke camp and proceeded down the River. Found some skulls of marten at a trappers shanty about 10 miles below our camp. We passed a number of large islands some of them high and rocky and got to Smith Landing before sunset having come about 25 miles. Procured some supplies and set out a line of traps.

June 14 Took a few Microtus and Peromyscus. but decided to cross the river to get away from the annoyance incident to near proximity to a Post. So we made a camp on the opposite side from the landing a little higher up the river at a point where there was a clearing and which afforded a variety of ground for trapping. We set out a lot of traps finding signs of Microtus plentiful and before night took a number of specimens.

June 15 Took over 20 mammals, Microtus, Eutamias & Peromyscus evidently two species. Also took a number of desirable birds including a pigeon hawk. As we had a large lot of specimens we were kept busy all the afternoon preparing them. The locality where we are encamping consists mainly of small rocky hills scantily wooded with

poplar, a little pine etc. Between the ledges which constitute the hills are swampy areas some ^{well} wooded and some with only a scattering growth of Tamarack spruce etc growing in thick mass of sphagnum. A large portion of the country has been forested and has come up with young poplars mainly tremuloides juvella. Took a Synaptomys among other specimens in our traps and two Sorex. Shot Empidonax flaviventris & humilis.

Reset a good many of my traps in swampy woods near camp in hopes of getting more Synaptomys & Sorex.

Saw a flock of Canada Geese which contained one or two very small ones probably hutchinsii. Saw several species of ducks elsewhere record ed Found a Junco nest with young nearly ready to fly.

June 17. Took only a small catch of mammals including Sorex & Microtus and shot two Sciurus and took a number of birds. Partially packed all our dry specimens to leave at Smith Landing until we come out. Has made arrangements to start tomorrow across the Portage to Fort Smith.

June 18. Took Sorex & Microtus and took up our traps and crossed to Smith Landing. Left there about 10.30 for Ft Smith. 16 miles over a cart road. I walked in order to make observations and take photos during the first 6 or 7 miles a number of swamps are passed. Then the road passes over a sandy rolling country wooded with Pines. The last few miles is over a nearly level country wooded with poplar ^{a little} and Birch. A marsh with a series

of lakes in it is passed just before reaching Fort Smith extending two or three miles parallel to the road on the left.

We reached Fort Smith situated on a high sandy bluff near the river at the lower ^{about 6.30} mouth of the Smith Rapids. Between the high bank and the river the ground is quite steep and is wooded mainly with spruce and tamarack. As we had to mend our canoe before using it we did not find a camping place but slept at the bank of the river near the D. B. Co's warehouse. We set some traps here as mice seemed to be abundant. Many birds, elsewhere recorded were observed on the road over. Pelicans are said to be abundant on the river in the rapids.

June 19 Made camp on the south bank of the river not far from the foot in a cleared and burnt space in the spruce forest. We took about 20 Peromyscus in wire traps which we made up. In the afternoon we put out our traps my brother trapping near camp while I climbed the bank and went across to the marsh a half mile or so. I found some large runways and holes which I supposed to be Microtus xanthognathus and set out some traps. After they had remained awhile I went the rounds and took out an adult female xanthognathus. She contained 11 embryos. The holes and runway were in small papirus and willows on rather dry ground on the edge of the

marsh. They burrow quite extensively forming trenches which connect the holes in some instances and also make broad and plain runways much larger, naturally than the ordinary species of Microtus. I set all the traps that the size of the colony warranted and as they did not seem to be very active left them to be visited in the morning when I hope to take more and to find other favorable places for trapping. Found Quercalus to be common in the marsh. also Agelaius. Shot some birds including Mimus, Hylodreptes a pallasi, Quercalus. Heard Sora rails in the marsh and saw Lesser Yellowlegs & Solitary Sandpiper.

June 20. Visited a nest found yesterday
by my brother and found it to
be of the Tennessee Warbler.
It contained 5 fresh eggs. The
bird was seen on the nest at
a distance of a few feet and
identified beyond question. I
shot her as she left the
nest and hit here as we
found blood on the leaves
but a long and careful
search failed to discover her.
The nest was situated on the
ground beneath the leaning
base of a clump of willows
in spruce woods near the
edge of a cleared area.
It was collected with as much
of its surroundings as was
practicable and the eggs care-
fully blown and packed away.
We watched some time with hopes
of getting the male bird but
though we caught a glimpse
of him once or twice we
failed to secure him.

Took about 20 mammals
including Sorex, Eutamias,
Peromyscus, Sciurus, Microtus,
drummondii and saxatilis
saxatilis and Zapus which I
shot in the grass. We set
more traps for saxatilis
and on visiting them before
dark took out two more
and two of the ordinary kind.
A number of birds were shot
and made up.

June 21. Took over 20 mammals
including M. saxatilis and drummondii,
Phenacomys (3) Sorex (microsorex),
S. richardsoni, Eutamias and a
fine male specimen of Putorius
riparius. This was taken in
a climax trap set in a runway
for Microtus. A few blackbirds
were taken. Found nest of olive
back thrush (3 eggs) and 3 nests of
Robins (with eggs) second brood.
Shot Bartramia in bushy field
near Post.

June 22. Took 26 mammals including 4. M. xanthognathus Zapus Eutamias etc. Did not shoot any birds worth mentioning as we are so near out of stuffing that we have difficulty in properly preparing them. Found nest of yellow warbler with young nearly ready to fly.

Found a nest of Empidonax ^{minimus} probably ~~parvulus~~ built almost entirely of white feathers of Parnassian. I left it to complete the set but on visiting it later found the eggs gone.

June 23. Took about 16 specimens in our traps mainly Microtus and made them up together with some taken out of traps last night. Came across a family of chickadees and collected three. Also took a fox sparrow the first seen ^{on the trip} ~~since leaving~~ my brother recognized the song as the same heard while coming across the portage June 18.

June 24 Took only a few mammals and no M. xanthognathus so must have trapped the colony dry. Made further efforts to find another place to trap them tramping all the forenoon and part of the afternoon but without success, so reset traps for other things.

Shot an Upland Plover in the Barrens back of Fort Smith also a vesper sparrow and a pair of W.B. Swallows and a sharp tail grouse. Heard one or two other vesper sparrows but was unable to collect them.

The ~~stomach~~ gullet of the Upland Plover contained grasshoppers

June 25. Took only a fair catch of mammals but reset most of our traps. Found a few runways of M. xanthognathus and set a few traps catching one before leaving them. Saw a ♀ Sharp tail grouse with young a few days old. Found nests of Blue back & Chipping sparrow

June 26. Took one M. xanthognathus
4 Phenacomys and a number
of Eutamias of both phases and
Microtus. Reset a long line of
traps in line of woods bordering
marshy pond where we have
taken Phenacomys. Observed
Mallard with young about a
week old.

Took Picoides am. Tinnunculus Warbler
young spruce grouse. & yellow warbler
The steamer Grahame supposed to
reach Smith Landing about June 16.
has not yet come and the rest
of our supplies expected on
her not coming has made us
short of stuffing. Our cotton being
about gone we have been obliged
for about a week to stuff our
specimens with moss which we
obtain from squirrels nests
We are also getting short of
traps and our air shells are
about exhausted - so the arrival
of the boat is anxiously looked
for

June 27. Took a large catch of
Mammals including Sorex
Microtus - Eutamias Phenacomys
comys etc. My brother found
another nest of the Tinnunculus
Warbler containing 5 fresh
eggs. We tried to shoot
the ♀ but she was lost
and was not seen again
so we took the nest for
fear something would
happen to it

June 28. A good catch of
mammals. Received our
mail and chest with
supplies of traps Cotton etc.
If nothing happens to prevent
will start down the river
tomorrow. Had a talk with
Mr. Rae in charge of ^{Ft. Simpson} ~~Ft. Rae~~
and he tells me that I can
easily go there ^{to Ft. Rae} and work
and be picked up by the
steamer on her return
from the Harrier River
Wrote letters in the evening

June 29. Took up all our traps,
Taking among other things
Phocaenopus & Lepus. After preparing
these and packing up a box of
specimens. we procured some
supplies and started down the
River about 3.30 We soon passed
Bell's Rock on the left. a square
cliff evidently of sandstone.
The river occupies a broad
valley ~~and~~ ^{which} is bordered by high
banks of clay for most of the
distance passed today. and the
immediate bank is usually a
cut bank of clay and shows
patches of the tan sands in several
places. The sands are very
similar to those on the upper
part of the river.

We tramped until about 8 o'clock
and put ashore on the right
bank.

A drizzly rain has kept up nearly
all day and during the latter
part of the afternoon we had
several moderately heavy showers.

15 miles below Fort Smith

June 30. Left camp rather late as the morn-
ing was rainy and proceeded on
down the river. The right bank ~~was~~
a cut bank of clay for nearly
all the way. A few miles below
camp we passed a nest of
the Duck Hawk. It was beneath
a small spruce at the top
of a high cut bank and contain-
ed two young which were
taken. We were unable to get
either of the old birds.

This was about 25 miles below
Fort Smith. We took a raven and
Arctic tern, Kingfisher & Cape May
Warbler a Bohemian Waxwing
was seen where I shot the Cape
May. about 50 miles below Fort
Smith. Several times we heard the
song of the golden crowned thrush
Seiurus ~~auriceps~~ ^{auriceps}. We camped. A large
flock of Male widgeons were seen
in the afternoon.

We camped on the right bank
of the river about 10 miles below
the Grand Detour.

July 1. Proceeded on down the river
shot a Bonapartes gull, cliff swallow
and a medium sized gull not identical
with the other birds. A pair
of great horned owls were
seen on the river bank accom-
panied by ^{nearly} 4 full grown young
two of which were secured.

The old birds disappeared before
we got within range and we saw
no more of them.

The stomachs of the young duck
hawks ~~we~~ taken contained the
remains of birds; the Louisiana
tanager being the only species
identifiable. Feathers of this species
were also seen about the nest.

We passed a nest of the Redtail
Hawk containing young, and
many colonies of bank swallows
a number of nests of the cliff-
swallows were seen at one of
these colonies. The two species
apparently nest together in perfect
harmony.

We camped just before sunset on
the left bank and set some traps.

July 2. 100 miles below Fort Smith

Took up our traps taking 3-
sures. Several ~~nests~~ of Bohemian
warblers were seen near the camp
but I was unable to obtain one.
They flew about flycatching exact-
ly like Cedar warblers. We remain-
ed in camp until after dinner as we

had some birds and mammals to
skin and having finished up every-
thing we again started down the
river. We proceeded on at a good
rate until about 7:30 and camped
on the right bank a short distance
below two large islands presumably
near Point Emery as near as we
could judge from the map.

Many birds were seen which are
elsewhere recorded. Near our
camp were seen several Snipe
performing their evolutions.

July 3. Proceeded on down the river
Saw a goshawk which had cap-
tured a rabbit and was feed-
ing on him. During the afternoon
we saw many mallards &
Widgeons. Shot two muskrats
~~two~~ About noon we saw a Canada

goose accompanied by young
about as large as Seal and
later another with somewhat larger
young.

Toward evening we came to
a narrow channel leaving
the main river on the left.
Finding a strong current
setting down it we followed it
recognizing it as the one of
which we had been told.
We paddled down it a
couple of miles and camped
on the left bank. At some
log cabins where a steamer
had been built and launched
I found a few skulls of
minks & weasels at a cabin
a short distance back in the
woods. Noted Yellowbellied Wood
pecker at camp.

After getting ready to retire
heard a partridge Bonasa
drumming the forest heard
for a long time.

July 4 Left our camp quite early and
soon reached the mouth of the
channel and arrived at Fort
Resolution about 11 am. Had
an interview with the officer in
charge Mr Gardet in regard
to my intention to go to Ft Rae
in my canoe and he thought
it feasible and will endeavor
or to get a reliable guide to
go with me. We camped near
the Fort so as to be in touch with
the place. Set out some traps.
It is my intention to leave here
as soon as the "Wrigley" arrives
leaving my brother to work
here until my return.
July 5. He took a fair catch
only including Peromyscus,
Eutamias & Phenacomys. Made
them up and set more traps
also did some packing and
dividing of supplies preparatory
to my departure. Observed one
or two barn swallows the first
seen on the trip.

July 6. Took Peromyscus Cortcamp.

& Sorex and a bird or two.

made up our specimens. Reset traps and explored the country adjacent to the Fort to find favorable places for trapping.

July 7 Sunday. Took only Zapus & Peromyscus Set the remainder of our

traps in no good places as we

could find but could not find

very good places for trapping.

Rainy and foggy all day. Expected to see the "Wragley" but she did not appear. but will probably tomorrow.

July 8. The Steamer "Wragley" arrived

early in the morning and we

got our chest containing the

remainder of our stock of traps

and other supplies which were

left at Edmonton to be

forwarded. Engaged a guide

to take us to Fort Rae. Put

in most of the day packing

and getting ready for my trip.

Got my brother nicely installed

in a log house which he will occupy during my absence. He will get his meals at the home of Mr. Gaudet, the officer in charge of the Post. We took a few specimens in our traps and made them up. My brother found a nest of the orange-crowned Warbler (Helmuthoppila celata) containing four eggs. We collected them but being nearly ready to hatch I could only save them by extracting the young ones through a very large hole and soon then broke one of them. I considered them worth saving however.

Prospects seem good for an early start in the morning.

July 9 Tuesday. Left Resolution about

7.30 and went out between the

mainland and Mission Island.

Then crossing a small bay we entered

one of the narrow Channels

at the mouth of Staron River. up

which we paddled for 2 or 3 miles

until we reached one of the main channels of Slave River, the largest one. We went up this for about a mile and crossing it we took a channel on the opposite side and paddling down it soon reached the Lake.

We went along the shore for several miles and reached Stone Island. The first of a series which serve as stepping stones ~~by~~ to cross the Lake in canoes. It was now blowing quite hard and the guide did not consider it prudent to attempt to cross the Lake to the next Island some 18 or 20 miles so we remained here hoping that when the sun went down we could safely cross but at sunset the weather looked so threatening that he decided not to try so we encamped.

Stone Island is an irregular rock about 150 yards by 50 yards

smoothly polished by glacial action and without trees.

Several good sized patches of Rosa, Ribes, Amelanchier and several species of grasses, Urtica and other plants. White crowned Sparrows & Chipping Sparrows live on the Island in small numbers. Just before reaching the Island I saw several Caspian Terns the first observed.

July 30 Left ~~the~~ ^{Stone} Island, about 7.30 with a fair light wind and sailed about half way across the traverse about 18 miles and paddled the remainder of the way. Had dinner on a rocky Island at the end of the traverse. Then continued on until nearly sunset. Found a nest of Herring gull on a small rock island containing one egg. We passed an island where many were nesting but did not stop to investigate. We stopped for supper at a good sized

Island covered with scrubby
spruces and arctic plants
the whole appearance of the
ground resembling the edge
of the Barren Grounds. Collected
a number of plants. on the
Island were several ponds
in each of which was a
pair or two of Redthroated
Loons each pair with two
young but a few days old.
Their nests were in grass
at the waters edge and the
young left and followed
the ♀ bird in every case
The ♀ would not leave them
even if the pond was only a
few feet across. A great
many Arctic Terns were
nesting about somewhere
but I did not discover
the site. Shot a pair of
Parasitic Jaegers which
undoubtedly had a nest
near probably on the upper
part of the island they were

of the melanistic phase. Another
pair was seen at an
island passed today
Saw also Alicis Thrush & W.C.
sparrow on the island also
several pairs of Spotted Sand-
pipers and a Sooty Rail.
July 11. Thursday. W.

The wind blew hard all
day and we had to remain
on the Island. Made up some
birds and pressed some
plants. Found several nests
of the Arctic Tern on the rocks
on the east end of the Island.
Some were apparently fresh but
in most cases young a few
days old occupied the nest or
were found hiding near it
The nests were merely a few
blades of grass arranged
in a circle in a small
hollow. Saw a number of Redpolls
and took one also a Rusty
blackbird. Saw a Parasitic
Jaeger in the normal plumage

all those seen previously being
pelagic.

The wind shows no sign of abating
and I fear we shall have
to remain here all night.

Friday July 12,

During the night the wind
increased in violence and this
morning was blowing almost
a gale with indications of rain
so we could not leave.

Toward noon it commenced
to rain and all the afternoon.
It rained and blew a gale.
Tonight there is some indica-
tion of clearing and the wind
has gone down considerably.

I collected a few birds and
made them up together with
some shot last evening.

The ~~crop~~ crop of a Greater Scaup
Duck was filled with small
shells some of which I saved
in formalin.

Saturday July 13. Wind still strong
with much rain so we had to
remain on the Island. Toward
noon we paddled to a small
rocky island (on the lee side of
the one on which we are encamp-
ed) on which were nesting about
100 pairs of Herring and ~~Ring-~~
~~bill~~ Gull. The latter returned
among the former. I collected
specimens of both species. Most
of the nests contained young
from chicks just hatched to
the size of a teal. Many of
the larger ones left the island
and swam out on our approach
but the greater number scrambled
into crevices of beneath tufts
of grass and remained motion-
less. The rock was nearly circu-
lar and about 50 yards across
rough and uneven and
and with tufts of grass
growing in its crevices. The
old birds hovered over
us and kept up a deafen-

ing clamor. A few eggs mainly of the smaller species were left unhatched but mostly pipped. A young one a few days old lying in a nest with an egg of the smaller species and thus identifiable was taken and a larger one evidently of the same species. I made up the birds collected in the afternoon.

This evening the wind has somewhat abated but heavy fogs prevent our leaving as the island toward which our course lies is invisible even in clear weather from this place. We have hopes of being able to get away during the night.

Sunday July 14.

The wind continued strong all night so we had to remain where we were and today it still continued to blow. but about noon cleared off. I took some photos of various parts of the

Island. Toward night it became perfectly clear and the wind almost ceased. And after supper we started from the island about 7 o'clock. We crossed the traverse to the next island where the men "boiled the kettle" and we had a light supper again. leaving there about 11 P.M. We next crossed another traverse to the mainland on the north shore of the Lake, landing on a long point about 1 o'clock and went to bed. On the way I shot two Parasitic Jaegers.

Monday July 15.

Up about 8 and while the men were preparing breakfast - I explored the vicinity. Found a nest of the Pigeon Hawk with young nearly ready to fly and took two. also shot a red squirrel. After proceeding a short distance on our way we passed a bold rocky island on whose cliffs were nesting a small colony of Barn Swallows. I took a fine nest with 5 eggs

and shot one of the birds.
They were very wild and difficult to shoot.

We made good progress and camped at night just south of the mouth of "Yellowknife Bay" into which the Yellowknife River empties. Shot a muskrat on an island where we stopped a few minutes. Saw many Pacific Loons during the day and several species of ducks elsewhere recorded.

Tuesday July 16.

Awoke to find a fair wind blowing and making the men. In made ready to start and we were soon under way. We soon reached and crossed the mouth of Yellowknife Bay and then sailed the rest of the day between Islands of which there are thousands following the east coast of the Northern Arm. As we progressed the opposite shore became visible and

at the point opposite where we camped was quite high for several miles. We stopped at night at "Trout Rock" said to be 40 miles south of Fort Rae. The shores and islands of the Northern Arm are of solid rock in places holding a little soil which supports a scanty growth of spruce, birch and herbaceous plants, and much moss. The Islands are so numerous and the shores so indented with bays that it is difficult to tell where the main shore is.

At Trout Rock where we camped there are some swampy patches with grass and bushes, the stopping places being selected on this account as I wished to do some trapping. This is the first place passed since crossing the Lake which offers any inducement

ment to trap for small mammals. Here I found signs of Microtus and perhaps other species and set out as many traps as I could before dark.

Today on an island ^{20 m south of this place} I saw Tree Sparrows old ones accompanied by young just from the nest. I also saw some here I shot a Pigeon Hawk and sharp tailed grouse & Tree Sparrows

Found a nest of a small sparrow with eggs. As I could neither secure the bird or identify her I left it until morning. Saw a great many Pacific Loons, W. winged Gulls, Surf Scoters, Red B. Mergansers and a few mallards one with young.

Wednesday July 17 Took a good catch of Microtus "drummondii" and xanthognathus, Eutamias, Peromyscus, Neotoma & Sorex richardsoni. Made them up and what specimens I had

already on hand which occupied me until supper time. Took the nest of sparrow found yesterday I caught the old bird in a trap set at the nest. It proved to be Lincoln's Sparrow. Took a nest of young Pigeon Hawks as I had already killed the parents before finding the nest. The young birds would have flown in perhaps a week. Set additional traps and revisited those already set securing several more specimens.

Thursday July 18 Took up my traps securing a good catch of Microtus xan and "drummondii" Sorex richardsoni, & Microsorex and after preparing them and finishing up things we had dinner and left Trout Rock with a fair wind. We sailed all the afternoon until with a few miles of Fort Rae when the wind went down and we finished our journey with the paddles. We pitched camp in the grassy

flat in front of the Fort
and I set out some traps
for Peromyscus about the
buildings.

I was cordially received by the
officer in charge Mr Frank Heron
and was shown the furs in the
Company's warehouse. There were
Oribos from the Barren Grounds
Arctic foxes which were last
winter taken in the vicinity of the
Post Red Foxes. Wolverines from
the Barren grounds. Muskrats.
Beaver. Marten. Otter. Wolver

Friday July 19 Took a number of
Peromyscus and made them
up together with some other spec-
imens I had on hand. Caught a young
Lepus in my hands on the Hill back of
the post. Set out a good number
of traps in thick grass & bushes.

Saturday July 20. Took a good catch
of Peromyscus, Microtus & one
Synaptomys. Explored further the
"mountain" back of the Post ~~which~~
and set a few still traps along

the limestone cliffs on its south face.
and more small traps
Took a few birds and saw many
others.

July 21. Took Sorex, Eutamias & a large
series of Microtus & Peromyscus
and took some pictures of the country
back of the Fort

July 22. Took a few Eutamias & Microtus
and a large lot of Peromyscus.
Took some photos of skins of Wolverines
to show the pattern of coloration and
the variation. In the late afternoon
took the canoe and explored the
marshes along the main shore east
of the Post to find some muskrots
but was unable to find any or
any signs of them. Saw a ♀ green-
wing Teal with quarter grown young
& in number. Shot a young gull
of a medium size species before
taken. (Larus brachyrhynchus). In the
evening I reset many of my
traps in thick grass and
bushes in the vicinity of the
Post.

July 23. Took a fair catch of Castomys
Microtus & Peromyscus and one Synap-
tomys and shot a number of birds
obtained a rabbit (half grown) from a
boy. Reset some traps. A squirrel or two
heard in the spruce woods at the farther
end of the hill. but I could not get
a sight of one they seem to be very
shy being doubtless hunted for food
by the Dogribs who are generally on
the ^{verge} ~~edge~~ of starvation.

A single Bohemian Waxwing was seen in
the willows on the hillside near the
Post but I was unable to obtain it.

July 24 Took a good catch of Sorex
Castomys, Peromyscus, Microtus, & Synaptomys

Reset a line of traps about the edge
of a small slough. Did not see any
birds of especial note. Killed some
semipalmated Sandpipers from a small
flock seen on the beach just before dark.

Noted the following shrubs & trees. White Spruce
Banksian Pmi., Balsam Poplar, Cause brook.

B. glandulosa, Myrica gale, Lepargyrea
Carrandria, Vaccin. v. idaea, Arctostaphylos
Rubus chamaemorus, Salix (several species)

Tamarack, Alnus incanus, Rhododendron
lapponicum etc.

July 25 Took a large catch of Microtus &
Sorex, Castomys, Microtus, Peromyscus
and obtained a rabbit of a boy.
Mr. Heron tells me that he has seen
a Buffalo skull on a "prairie"
on the trail between this place &
Fort Providence.

July 26. Took Sorex richardsoni and
a number of personatus, also Microtus &
Castomys & Peromyscus and shot
a few birds.

July 27 Took a few Microtus and shot
a number of birds including
Scurus vancouverensis, Dendroica coronata
& elmiphila peregrina, Sayornis phoebe
etc. obtained an adult ♀ Lepus
from an Indian Boy. obtained
also a skull of a mink and
Fox.

July 28 Took only a few mammals
and no birds. Pressed a few
plants mainly willows. The steamer
Wrigley being expected hourly
I cannot keep much work on hand.

July 29 Took a few mammals and a number of birds and made them up. The Wrigley arrived about 4 P.M.

so took up all my traps and made ready to leave as she will probably start at light in the morning.

July 30. We left Fort Rae about 3 A.M. and proceeded toward down the arm toward Fort Resolution. We passed out into the Lake during the afternoon and reached Hardisty Island late in the afternoon. Here we were obliged to lay to for the night as the wind was high and it was not safe to pass the cross the wide expanse to Resolution.

July 31. Left Hardisty Island early in the morning and got to Fort Resolution about 9 A.M. I found my brother had made a very good collection of mammals. We made ready

to leave when the business of the company showed permit. About noon the wind increased to such an extent that the Captain announced his intention of seeking a more favorable place in the lee of an island near to side past the storm, so I ~~embarked on~~ went on board. The wind increased in fury until about dark when it went down somewhat.

August 1. Everything being steady the Wrigley left Fort Resolution late in the afternoon and rounding the Islands entered the mouth of the Slave River, and began to ascend it. About 9 o'clock we stopped for wood and the crew were engaged a good part of the night in loading it. As soon as enough wood was obtained we were

work started on.

August 2. We left the "wood up" place about 4 A.M. and steamed steadily up the river all day. During the early part of the day the banks passed were low but later clay banks began to appear. We passed point "Emmyent" about 3 P.M.

Took a number of photos of characteristic spots on each side of the river, and soon afterwards the River Sounders

August 3. We rounded the Grand Detour about 9 A.M. and arrived at Fort Smith about 1 P.M. We put out some traps to secure a few specimens as we cannot cross the forage to Smith Landing until Monday.

August 4 Took only a small catch of Cortomys Eutamias & Peromyscus. Did some packing of specimens & baggage prepar-

atory to crossing to Smith Landing. Saw a ^{young} Pelican swimming down the river near the boat.

Aug 5. We took up our traps securing a few mammals and left Fort Smith about 9 A.M. to cross to Smith Landing. Saw 3 mallards in a small pond halfway across. We arrived at Smith Landing at 3 P.M. and took up our residence on the S.S. Kahane by which we will travel to Fort McMurray. Found the boxes of specimens which we had left in charge of Mr. Caisell Ok. and took them in charge as the boat will not leave before tomorrow evening in any case. We put out a good line of traps

Aug 6. Took several Cortomys, Peromyscus & Eutamias and made them up. The steamer left Smith Landing later in the afternoon and after proceeding a short distance stopped to wood up and at dark tied up at

a point about 7 miles above
Chipewyan
Aug 7. The steamer started at
daylight and proceeded all
day without interruption, arriv-
ing at Chipewyan late in
the evening.

Aug 8. We remained at
Ft Chipewyan until short-
ly after noon, and crossing
the lake entered the Athabasca
over one of the outlets of the
Athabasca up which we
proceeded until it be-
came dark. The boat
then tied up at the
Old Fort. 50 miles from
Chipewyan and 38 from
the mouth of the river.
Took a number of photos.
Aug 9. The steamer proceeded up
the Athabasca all day passing
the Birch Mountains about
noon, and tied up at
night about 5 miles below
Little Red River.

August 10. Proceeded up
the river after taking on
wood and stopping about
half an hour at the Fort
at Little Red River. Took
a number of photos of
Limestone & Far Sand Banks.
We got to Fort McMurray
about 7.30 where we got
some mail.

August 11. Remained at Ft McMurray
all day and prepared for
our journey up the Athabasca.

August 12. Left McMurray about
4 P.M. on the H. B. Co's Scows.
Our canoe having been broken
by the paddle wheel of the
steamer, and being unable to
obtain another suitable to our
needs we were obliged to
give up attempting to ascend
the Athabasca in a canoe
as had been my plan. We
proceeded about 5 or 6 miles
and encamped on the right
bank of the river in heavy

Spruce and birch woods.

Above McMurray we passed a high bank on the left. ^{Dwornian} limestone at the bottom surmounted by about 150 feet of Tar Sands.

We set out a good line of traps in the spruce woods although the indications were not very favorable.

August 13 We took nothing in our traps. Left about 7 and proceeded on up the river to the Mountain rapid where the scows crossed to the left bank of the river after ascending this rapid we had dinner. A very large area on the right bank at this point has been burned over within a year or two. The left bank is well wooded all along.

We encamped at night at the foot of the ~~limestone~~ Cascade Rapid on a flat limestone formation.

August 14. As the men were obliged to carry all the freight past the Big Cascade Rapid which would consume about half the day. I took my gun and set off to try to secure some game or specimens. I climbed the steep ridge bank of clay to the top of the ridge and travelled along parallel to the river for some distance. Observed a number of species of birds and shot a Philadelphia Vireo.

In a damp place near the top of the ridge I found a colony of Microtus xanthognathus but as we must soon start I was unable to trap for them.

We proceeded and camped at night at the foot of the Crooked Rapid. And set out some traps.

Aug 15. Ascended Crooked Rapid I walked along the shore for some distance and took a

Founga and caught a Microtus
xanthognathus in my hands. He
was among the rocks at the foot
of a limestone bluff.

We camped near the Middle
Rapid and set out some
traps for mice & weasels. Saw
two bears.

August 16 Took no mice but
caught two weasels.
Ascended the middle & Lower
Rapids. Collected some skulls
at some cabins above the
latter Rapid. High banks of
the Grand Rapids Sandstone
occur.

Camped at night just before
a heavy storm broke upon
us.

August 17. Proceeded on and
about 4 o'clock reached the
Brule Rapid which we ascended.
The day was cold and windy.
Shot a sparrow hawk. We camp-
ed at night a short distance
above the Brule Rapid.
and set out some traps

Aug. 18 We took no specimens
in our traps and remained
in camp all day, it being Sunday.
One of the crew shot a mouse
a few miles away. We
labeled ~~some~~ the skulls which
we had collected.

Aug. 19 Started about 7. am. and
about noon passed Little Buffalo
River at the mouth of which a
great quantity of gas escapes.
We camped at night about 8
miles below Grand Rapids.
The Grand Rapids Sandstone
is exposed almost all the
way between the Brule Rapid
and Grand Rapids.

August 20. Reached Grand Rapids
about the middle of the afternoon
where all the load except the
passengers baggage ~~was~~ ^{has to be} portaged
and the boats hauled up.
The stuff was mostly carried
up and two of the boats
hauled up by dark. We camp-
ed at the foot of the rapids.

and set some traps along
the shore.

August 21. We took some Peromyscus
in our traps. and removed
to the upper ~~part~~ end of the
rapids. Made arrangements
to get a canoe for the
passage up the river and
got supplies for the trip.

August 22. Got away about 7 o'clock
and proceeded up the river
ahead of the scows. We had
a little difficulty at first
but made a good days
journey. We reached House
River about 11 am and at
night encamped above ~~the~~
Jolly fall Rapid. having come
over 20 miles. We set out
some traps and skinned
some specimens which we
had on hand by candle light
Rocks mainly of clay. but
some exposures of sandstone
August 23 Proceeded on and made a
good days journey and camped

at night just below the Pelican
Rapid.

August 24. We started about 8 o'clock
and ascended the Pelican
Rapid. and about 3 miles above
passed the mouth of the Pelican
River. Reached the gas spring
about noon. The Hbles has a
small store here and a portage
is made from this Point to
the Pelican River. The Govt
has driven a well here ~~to~~
to a depth of several hundred
feet and a quantity of gas
constantly escapes from the
pipe this has been lighted and
burns continually. Its roaring can
be heard about a half a
mile. We travelled about
8 or 9 miles above here and
camped in some mixed woods
and set out some traps
August 25. Sunday. We had not
thought of travelling today but
about noon concluded to start
We made good progress during

the afternoon. The men who were tracking picked up a Microtus xanthognathus. Putorius & Semiopterus dead. We camped at night below Iron Point & fixed up our specimens.

August 26. Made good progress.

We released one of the men who had a swollen foot, on the line. Started an old bear with a half grown cub. from the bushes near the bank but before we could get ashore with the gun they escaped. We camped at night just above Duncan's ^(Big Mt. Break) creek said to be 72 miles below the Landing.

August 27 We started before six o'clock and passed swift current Rapid just before dinner. Passed ~~Bottom~~ ^{Duto} River about 6 and camped on the left Bank a couple of miles below La Biche River, having come about 27 miles.

August 28. Left camp about 7:30 and soon passed the mouth of La Biche River said to be 45 miles below the Landing. Had dinner near the big stone and camped within about 15 miles below the Landing.

August 29. Started about 7:30 and proceeded on to 6 mile Island. The country on the left Bank for nearly all the distance traveled today has been burned over within a few years. Reached Athabasca Landing about 3 o'clock. and pitched camp as we will have to wait here until the scows arrive. Set out a good line of traps. Though indications are rather poor.

August 30. Took nothing in our traps. In the forenoon hunted back on the road about 5 miles and shot a few birds ^{& a Eutamias} and set some traps. In the afternoon we fixed up our specimens.

August 31. Took nothing in our traps but 1 *orex* (*personatus*). Observed many birds. The brigade of scows arrived about 3 o'clock and we got our baggage and boxed. Obtained provisions for the trip to Edmonton and made arrangements to leave in the morning. Took up our traps and packed up for our trip.

Sept. 1. We left Athabasca Landing about 10 am. on a freight wagon which also carried our baggage & boxes of specimens. The road ascends the hills bordering the valley of the Athabasca and proceeds for several miles over a sort of plateau sparsely wooded and comparatively level. A long narrow lake is passed on the right hand side and we descended a steep hill and had dinner about 2 o'clock beside a small stream at its base ^{about 10 miles from Athabasca}. We then proceeded on and ~~crossed~~ passed through an extensive tract of Banksian Pine

with an undergrowth of *vaccinium* etc. and crossed the (Loknow) River about a mile beyond here we camped for the night ^{at Sandy Creek} near the house of a settler named Whitely about 70 miles from Athabasca Landing.

September 2.

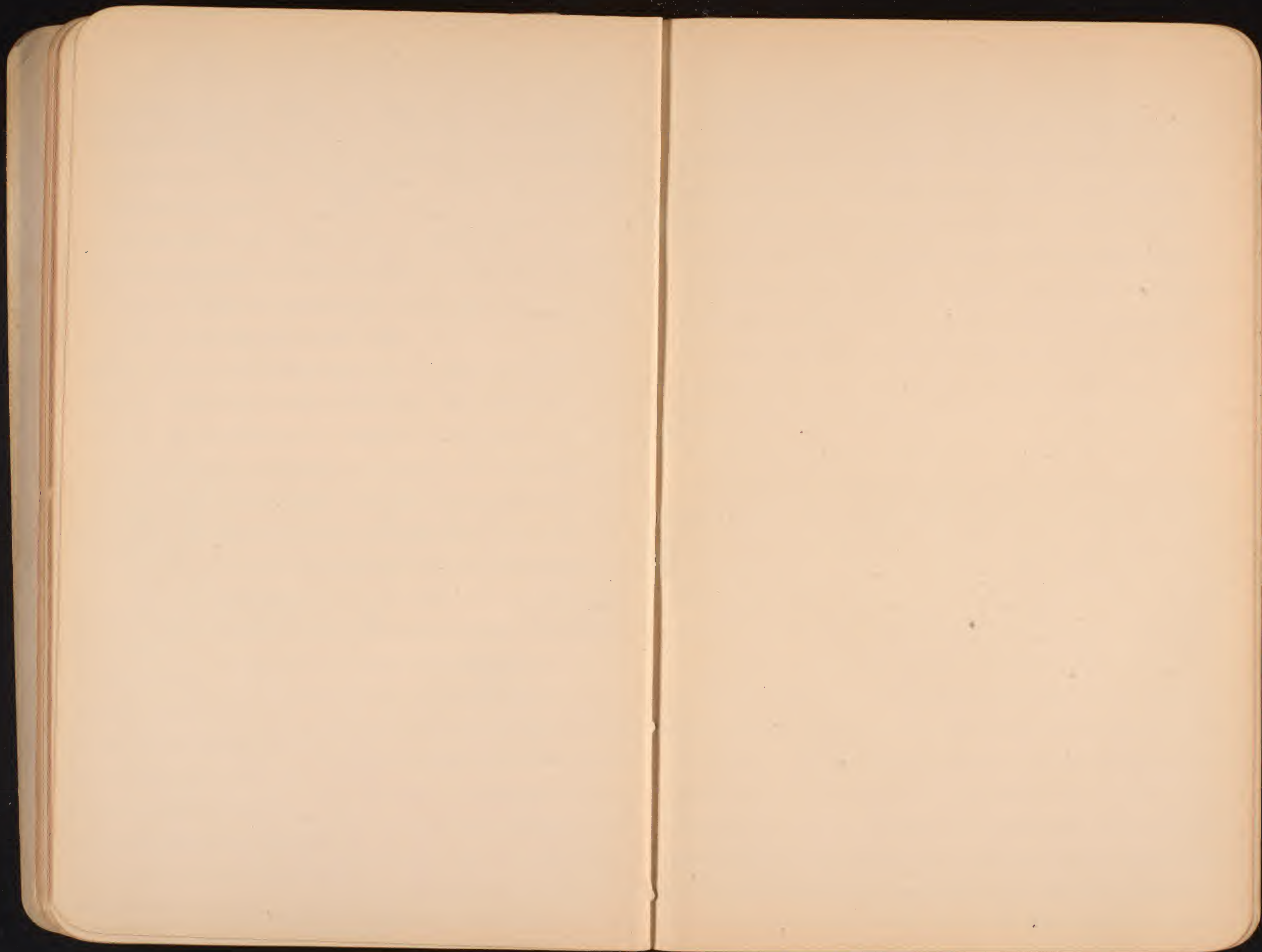
Left about 7 o'clock and had dinner at Stony Creek. Reached Egger's place about half way to Edmonton late in the afternoon and camped a few miles beyond about 7 miles north of Vermilion Creek. Country similar to that passed through yesterday but some prairie passed. Took a number of photos.

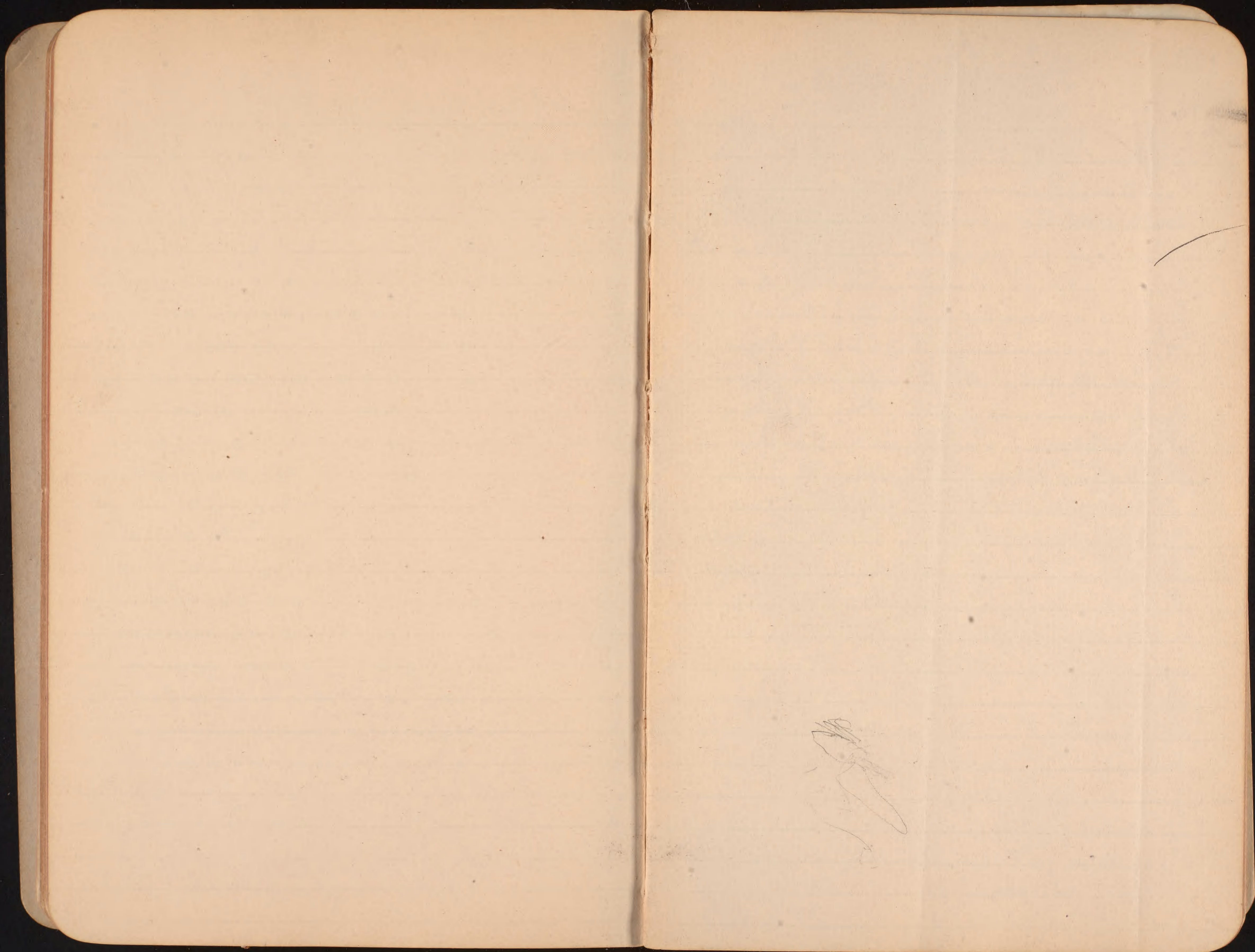
Sept. 3. Started early and soon passed Vermilion Creek and passed through some rather open country. Passed Lily Lake ~~about noon~~ early in the afternoon. and the Sturgeon River. Camped at night at Sandy Cameron's farm. 16 miles from Edmonton. Much rain in afternoon.

September 4 - Heavy rains
with thunder and lightning raged
nearly all night. We left about
8 o'clock. and proceeded on
through a farming country to
Edmonton where we arrived about
4 P.M. set up camp near
the ~~the~~ Fort ~~to~~

Sept 5 Packed up everything
so as to be ready to leave
at any time and shipped
a large chest and 2 cases
of specimens to Washington by
the Dominion Exp Co. and
took another chest of specimens
as baggage.

Registered at the Alberta Hotel





| | | |
|----|------|-------------------------|
| 1 | ♀ | Sorex |
| 2 | ♂ | Fiber |
| 3 | ♂ | Microtus |
| 4 | ♂ | " |
| 5 | ♂ | " |
| 6 | ♂ | " |
| 7 | ♀ ad | " |
| 8 | ♀ im | Microtus pennsylvanicus |
| 9 | ♀ im | " |
| 10 | ♂ | Sorex |
| 11 | ♂ | Sorex |
| 12 | ♂ | Sorex |
| 13 | ♀ | Sorex richardsoni |
| 14 | ♀ | " |
| 15 | ♀ | " |
| 16 | ♂ im | Microtus pennsylvanicus |
| 17 | ♂ im | " |
| 18 | ♀ im | " |
| 19 | ♂ im | Microtus |
| 20 | ♀ ad | " |
| 21 | ♀ | " |
| 22 | ♀ | " |
| 23 | ♀ | " |
| 24 | ♂ ad | Sorex richardsoni |
| 25 | ♂ ad | Sorex (Microtus) |

East side of
mouth of Northern
Lake

Fort Shaw Lake

Front Rock
Northern Arm.

| | | | |
|---------|-----|-----|------|
| July 15 | 340 | 137 | 50 |
| " | 550 | 240 | 75 |
| " 17 | 174 | 46 | 20 |
| " | 130 | 39 | 18 |
| " | 130 | 37 | 18 |
| " | 137 | 38 | 19 |
| " | 157 | 42 | 20 |
| " | 136 | 35 | 22 |
| " | 139 | 36 | 21 |
| " | 134 | 32 | 18 |
| " | 130 | 24 | 18 |
| " | 152 | 63 | 20 |
| " | 114 | 42 | 18 |
| " | 112 | 40 | 18 |
| " | 120 | 41 | 18 |
| " | 140 | 36 | 21 |
| " | 145 | 37 | 22 |
| " | 140 | 36 | 22 |
| " | 126 | 35 | 18 |
| " | 166 | 40 | 19 |
| " | 144 | 36 | 17 |
| " | 145 | 34 | 18 |
| " | 110 | 21 | 17 |
| " 18 | 120 | 40 | 18 |
| " | 93 | 33 | 14.5 |

40 m South of Rae

| | | | |
|----|------|-------------------------------|--------------------------|
| 26 | ♂ ad | <i>Microtus xanthognathus</i> | Great Slave Lake to Aron |
| 27 | ♂ im | " | " |
| 28 | ♀ ad | " | " |
| 29 | ♀ ad | " | " |
| 30 | ♂ im | " | " |
| 31 | ♀ im | " | " |
| 32 | ♀ im | " | " |
| 33 | ♀ im | " | " |
| 34 | ♂ im | <i>Microtus "dumosus"</i> | " |
| 35 | ♂ im | " | " |
| 36 | ♂ im | " | " |
| 37 | ♂ im | " | " |
| 38 | ♂ im | " | " |
| 39 | ♀ ad | " | " |
| 40 | ♂ | <i>Peromyscus</i> | 71 Rae |
| 41 | ♂ | " | " |
| 42 | ♂ | " | " |
| 43 | ♂ | " | " |
| 44 | ♂ | " | " |
| 45 | ♂ | " | " |
| 46 | ♀ | " | " |
| 47 | ♀ | " | " |
| 48 | ♀ | " | " |
| 49 | ♀ | " | " |
| 50 | ♀ | " | " |

| | | | | |
|---------|-----|----|----|-----------------------|
| July 18 | 204 | 46 | 24 | 40 miles south of Rae |
| | 136 | 35 | 21 | |
| | 205 | 48 | 23 | Femur only |
| | 195 | 48 | 20 | |
| | 138 | 34 | 21 | |
| | 138 | 35 | 21 | |
| | 110 | 29 | 19 | |
| | 115 | 31 | 19 | |
| | - | - | - | Infantile |
| | - | - | - | " |
| | - | - | - | " |
| | - | - | - | " |
| | - | - | - | Skull only |
| | 170 | 48 | 20 | |
| July 19 | - | - | - | Skull only |
| | 153 | 62 | 20 | |
| | 152 | 63 | 20 | |
| | 135 | 54 | 20 | |
| | 130 | 57 | 20 | |
| | 120 | 48 | 20 | |
| | 172 | 74 | 21 | |
| | 152 | 63 | 20 | |
| | 145 | 62 | 20 | |
| | 146 | 61 | 20 | |
| | 135 | 60 | 19 | |

| | | |
|----|-------|-----------------------|
| 51 | ♂ | Peromyscus |
| 52 | ♂ | " |
| 53 | ♂ | " |
| 54 | ♀ | " |
| 55 | ♀ juv | Lepus |
| 56 | ♂ | Microtus |
| 57 | ♂ | " |
| 58 | ♂ | " |
| 59 | ♂ | " |
| 60 | ♀ | " |
| 61 | ♀ | " |
| 62 | ♀ | " |
| 63 | ♀ | " |
| 64 | ♀ | Synaptomys (Microtus) |
| 65 | ♂ | Peromyscus |
| 66 | ♂ | " |
| 67 | ♂ | " |
| 68 | ♂ | " |
| 69 | ♂ | " |
| 70 | ♂ | " |
| 71 | ♀ | " |
| 72 | ♀ | " |
| 73 | ♀ | " |
| 74 | ♀ | " |
| 75 | ♀ | " |

Madras Fort Rd

| | | | |
|---------|-----|----|----|
| July 19 | 155 | 63 | 20 |
| " | 154 | 65 | 20 |
| " | 156 | 63 | 20 |
| " | - | - | - |
| " | 172 | 19 | 56 |
| 20 | 168 | 46 | 20 |
| " | 172 | 46 | 19 |
| " | 154 | 41 | 19 |
| " | 141 | 36 | 19 |
| " | 154 | 42 | 20 |
| " | 146 | 46 | 19 |
| " | 148 | 41 | 18 |
| " | 157 | 42 | 19 |
| " | 136 | 27 | 17 |
| " | 160 | 65 | 19 |
| " | 155 | 70 | 20 |
| " | 150 | 67 | 20 |
| " | 153 | 68 | 20 |
| " | 140 | 58 | 20 |
| " | 153 | 66 | 21 |
| " | 155 | 74 | 21 |
| " | 163 | 70 | 19 |
| " | 156 | 67 | 20 |
| " | 148 | 58 | 20 |
| " | 155 | 65 | 20 |

Informal

2nd embryonic

| | | |
|-----|---|------------|
| 76 | ♂ | Sorex |
| 77 | ♂ | Eutamias |
| 78 | ♀ | " |
| 79 | ♂ | Microtus |
| 80 | ♀ | " |
| 81 | ♀ | " |
| 82 | ♀ | " |
| 83 | ♀ | " |
| 84 | ♀ | " |
| 85 | ♀ | " |
| 86 | ♀ | " |
| 87 | ♂ | Peromyscus |
| 88 | ♂ | " |
| 89 | ♂ | " |
| 90 | ♂ | " |
| 91 | ♂ | " |
| 92 | ♂ | " |
| 93 | ♀ | " |
| 94 | ♀ | " |
| 95 | ♀ | " |
| 96 | ♀ | " |
| 97 | ♀ | " |
| 98 | ♀ | " |
| 99 | ♀ | " |
| 100 | ♀ | " |

Measurements Fish Pond

July 21

| | | |
|-----|----|------|
| 100 | 55 | 11.5 |
| 144 | 33 | 20 |
| 113 | 29 | 17 |
| 166 | 42 | 18 |
| 140 | 43 | 19 |
| 180 | 48 | 19 |
| 178 | 50 | 20 |
| 166 | 43 | 19 |
| 155 | 39 | 19 |
| 132 | 37 | 19 |
| 130 | 36 | 19 |
| 170 | 78 | 21 |
| 110 | 63 | 21 |
| 165 | 70 | 19 |
| 153 | 63 | 20 |
| 145 | 62 | 20 |
| 157 | 69 | 20 |
| 170 | 74 | 21 |
| 148 | 58 | 20 |
| 165 | 73 | 20 |
| 160 | 62 | 20 |
| 162 | 73 | 20 |
| 158 | 68 | 20 |
| 160 | 66 | 20 |
| 180 | 77 | 21 |

Tail slightly shortened

Tail slightly shortened

| | | | | |
|-----|---|------------------|------|------|
| 126 | ♂ | Synaptomyza | Foot | Male |
| 127 | ♂ | Eurostomyza | | |
| 128 | ♀ | " | | |
| 129 | ♀ | " | | |
| 131 | ♂ | Microtus dom- | | |
| 131 | ♂ | " | | |
| 132 | ♂ | " | | |
| 133 | ♀ | " | | |
| 134 | ♀ | " | | |
| 135 | ♀ | " | | |
| 136 | ♀ | " | | |
| 137 | ♀ | " | | |
| 138 | ♀ | " | | |
| 139 | ♀ | " | | |
| 140 | ♀ | " | | |
| 141 | ♂ | Peromyscus | | |
| 142 | ♀ | " | | |
| 143 | ♀ | " | | |
| 144 | ♀ | " | | |
| 145 | ♀ | " | | |
| 146 | ♂ | Lepus | | |
| 147 | ♂ | Sorex personatus | | |
| 148 | ♀ | " personatus | | |
| 149 | - | " macrourus | | |
| 150 | ♂ | " personatus | | |

| | | | |
|---------|-----|----|------|
| July 23 | 120 | 22 | 17 |
| | 120 | 20 | 18 |
| | 142 | 34 | 18 |
| | 125 | 30 | 18 |
| | 142 | 42 | 18 |
| | 130 | 37 | 19 |
| | 115 | 35 | 18 |
| | 175 | 50 | 19 |
| | 173 | 25 | 20 |
| | 160 | 42 | 20 |
| | 161 | 42 | 20 |
| | 188 | 42 | 19 |
| | 148 | 45 | 19 |
| | 140 | 39 | 18 |
| | 108 | 30 | 17 |
| | 162 | 71 | 20 |
| | 160 | 68 | 20 |
| | 175 | 77 | 19 |
| | 165 | 71 | 19 |
| | 161 | 67 | 20 |
| | 370 | 36 | 104 |
| 24 | 98 | 37 | 12 |
| | 96 | 38 | 11.5 |
| | | | |
| | 95 | 34 | 11.5 |

Skull only
Caught in Halls. Stone house

| | | |
|-----|---|-------------------------|
| 176 | ♀ | <i>Sorex personatus</i> |
| 177 | ♀ | " |
| 178 | ♂ | <i>Eutamias</i> |
| 179 | ♀ | " |
| 180 | ♀ | " |
| 181 | ♀ | <i>Synaptomys</i> |
| 182 | ♂ | <i>Microtus</i> |
| 183 | ♂ | " |
| 184 | ♂ | " |
| 185 | ♂ | " |
| 186 | ♂ | " |
| 187 | ♂ | " |
| 188 | ♀ | " |
| 189 | ♀ | " |
| 190 | ♂ | " |
| 191 | ♀ | " |
| 192 | ♀ | " |
| 193 | ♀ | " |
| 194 | ♀ | " |
| 195 | ♀ | " |
| 196 | ♀ | " |
| 197 | ♀ | " |
| 198 | ♂ | " |
| 199 | ♀ | " |
| 200 | ♀ | <i>Lepus</i> |

Foot Race

| | | | |
|---------|-----|----|-----|
| July 25 | 105 | 40 | |
| " | 93 | 36 | 11 |
| " | 120 | 32 | 20 |
| " | 132 | 33 | 19 |
| " | 130 | 32 | 19 |
| " | 127 | 24 | 18 |
| " | 170 | 47 | 19 |
| " | 146 | 39 | 18 |
| " | 128 | 36 | 18 |
| " | 136 | 38 | 19 |
| " | 130 | 37 | 19 |
| " | 133 | 35 | 20 |
| " | 174 | 47 | 20 |
| " | 163 | 46 | 20 |
| " | 126 | 36 | 18 |
| " | 130 | 38 | 18 |
| " | 130 | 37 | 19 |
| " | 132 | 38 | 19 |
| " | 138 | 39 | 19 |
| " | 122 | 39 | 18 |
| " | 120 | 35 | 18 |
| " | 125 | 38 | 18 |
| " | 150 | 67 | 21 |
| " | 156 | 68 | 20 |
| " | 380 | 32 | 108 |

Skull only

Embryos

Informal

Informal

| | | |
|-----|---|--------------------------|
| 201 | ♀ | <i>Sorex richardsoni</i> |
| 202 | ♂ | <i>Sorex personatus</i> |
| 203 | ♂ | " |
| 204 | ♂ | " |
| 205 | ♀ | " |
| 206 | ♀ | " |
| 207 | ♀ | " |
| 208 | ♀ | " |
| 209 | ♀ | " |
| 210 | ♀ | " |
| 211 | ♀ | " |
| 212 | ♀ | " |
| 213 | ♀ | <i>Microtus</i> |
| 214 | ♀ | " |
| 215 | ♀ | " |
| 216 | ♂ | <i>Eutamias</i> |
| 217 | ♀ | " |
| 218 | ♂ | <i>Peromyscus</i> |
| 219 | ♂ | " |
| 220 | ♀ | " |
| 221 | ♂ | <i>Microtus</i> |
| 222 | ♂ | " |
| 223 | ♂ | " |
| 224 | ♂ | " |
| 225 | ♀ | " |

Fort Rae

| | | | |
|---------|-----|----|------|
| July 26 | 110 | 42 | 13 |
| " | 98 | 38 | 12 |
| " | 96 | 36 | 11 |
| " | - | - | - |
| " | 97 | 35 | 12 |
| " | 93 | 35 | 11.5 |
| " | 92 | 36 | 12 |
| " | 95 | 37 | 12 |
| " | 100 | 37 | 12 |
| " | 95 | 37 | 12 |
| " | 98 | 39 | 12 |
| " | - | - | - |
| " | 148 | 43 | 19 |
| " | 135 | 40 | 18 |
| " | - | - | - |
| " | 127 | 30 | 19 |
| " | 135 | 33 | 18 |
| " | 160 | 67 | 21 |
| " | 168 | 71 | 21 |
| " | 170 | 69 | 20 |
| July 27 | 172 | 46 | 20 |
| " | 132 | 37 | 19 |
| " | 145 | 38 | 19 |
| " | 100 | 25 | 16 |
| " | 135 | 39 | 19 |

Skull only

Skull only

Skull only

226
227
228
229
230
231
232
233
234
235
236
237
238
239
240
241
242
243
244
245
246
247
248
249
250
251

6
7
8

1

12 15 -

