

REPORT ON TRIP TAKEN IN AUGUST, SEPTEMBER and
OCTOBER 1923 BY JOHN M. HOLZWORTH IN NORTH-
EASTERN BRITISH COLUMBIA IN THE INTERESTS OF
THE UNITED STATES BIOLOGICAL SURVEY ON THE
SUBJECT OF MOUNTAIN SHEEP AND CARIBOU DISTRIBUTION.

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Briefly stated, the section of country covered on this investigation extended from Mt. Selwyn at the head of the Peace River (junction of Findlay and Parsnip Rivers; latitude 56 degrees, Longitude 123 degrees, 30 minutes) southeast along the eastern slopes of the main Rocky Mountain range to Mt. Sir Alexander (Latitude 54 degrees, Longitude 120 degrees). A map scale 34.8 miles to the inch showing the country traversed is attached to this report.

Briefly stated the main purposes of the trip were to investigate the distribution of any mountain sheep or caribou that might be in this territory, particularly in the northern section thereof and to collect specimens of each for the purpose of learning the particular species they belonged to and particularly, whether there was a relationship between the true Rocky Mountain Bighorn (*Ovis Canadensis*) and the northern black sheep (*Ovis Stoni*). Specimens of neither mountain sheep nor caribou had ever been brought out of this section of the country for scientific or museum study. Neither had there been any authoritative evidence of mountain sheep having been seen in these sections.

The furthest north that mountain sheep (*Ovis Canadensis*) had been seen or collected was at a point about 30 miles north of Mt. Sir Alexander, collected in 1917 by Mr. William Rindfoos.

The furthest south that any specimens of *Ovis Stoni* had been collected was at Jarvis Pass about 90 miles north of Mt. Selwyn, in 1912 by Frederick K. Vreeland. There is authentic evidence, however, that the extreme southern range of the stone sheep extends as far south as the Ottertail River to its mouth where it flows into the Peace River.

Preliminary inquiries disclosed that practically nothing was known of the mountain country between the Peace and Pine Rivers, and that very little was known of the mountain country south from Pine

River to the Wapiti River. A study of all the published maps of the Canadian Departments showed most of the country as unexplored. Such maps as there were showed the main waterways vaguely drawn in and subsequent actual traveling of the country showed them to be mostly erroneously sketched.

One of the most interesting books on this northern country with the title "On the Headwaters of Peace River" by Haworth published by Charles Scribners' Sons, 1921, says of this particular section of the country:

"Very little is known of the immense mountain-mass lying between Pine Pass and Peace River, and there are several interesting biological questions that a thorough investigation of this region might throw light upon. How far north, for example, does the real bighorn (*Ovis canadensis*) extend his range in this region? Are there caribou to be found there, and, if so, of what species are they? Mountain-goats have been seen on Mount Selwyn and also on mountains on the north side of Peace River, but there seems to be no authentic record of mountain-sheep having been killed there. In 1912 Mr. Frederick K. Vreeland's party sought sheep in the Selwyn region without success, but they did not extend their investigations very far south. Later they killed Stone's sheep (*Ovis stonei*) in the region of Laurier Pass, and, according to Vreeland, these sheep had some of the characteristics of the common bighorn. In 1916 William Rindfoos killed specimens of the bighorn on Wapiti River, north of Jarvis Pass, which is a good south of Pine Pass. Between Laurier Pass and the spot where Rindfoos obtained his sheep lies a wide belt of country in which sheep have not yet been found and reported to the scientific world. Biologists are anxious to discover whether this gap can be bridged, to learn whether or not the black sheep (*Ovis stonei*) and the bighorn remain separate and distinct, or whether they intergrade, as in the case of the northern species of sheep. The problem is interesting not only in itself but for its bearing on the greater problem of the evolution of species.

"If there had been time I should very much liked to make a side trip into the Rockies at this point, but such a trip would have been a long and serious undertaking, for by every

account the region is exceedingly rough and the going impeded by much down timber. H. Somers-Somerset's expedition which went through the Pine Pass country in 1893 from Dunvegan were reduced to killing some of their pack-horses for food, and reached Fort McLeod in a state of semi-starvation."

Among the sources of information invariably sought are the various posts of the Hudson Bay Company. Through communication with the factor of the trading post at Hudson Hope on the Peace River at the foot hills of the mountains, I was able to engage two packers and eight pack and saddle horses. I also learned that a small motor boat made periodical trips from Peace River landing 400 miles up the Peace River to Hudson Hope. I was advised that the boat was to leave Peace River landing on August 6th for the 5-day river trip to Hudson Hope.

Leaving New York on July 31, I reached Edmonton on August 4 but found there a message that due to unforeseen happenings the boat would not leave Peace River landing for Hudson Hope until ten days later. Rather than put in a tedious time waiting for such boat I decided to continue on to Prince George, with a view of securing a canoe and possibly a boatman and go by way of Summit Lake, Davie Lake, Crooked River, McLeod Lake and Parsnip River, all of which constitute a continuous and well known canoe water way north from Prince George to the head of the Peace River and then down the Peace River to Hudson Hope. I felt that by so doing, I would not only save time but also pass through some very interesting country. Before leaving Edmonton I arranged for a message to be sent to the Hudson Hope trading post to have the pack horses and outfit meet me at the portage fifteen miles west of Hudson Hope. Arriving at Prince George, B. C., on August 7, I was fortunate in being able to hire a trapper named George Wosly and his canoe for the trip and got away to an early start on August 8, from Summit Lake.

Three days time was consumed in making Findlay Forks, the head of the Peace River. Inasmuch as no particular interest attached to this part of the trip, it is not described at length; particularly as it has been written up in detail in Haworth's "On the Head Waters of the Peace River", and in "New Rivers of the North". Briefly, it affords a very pleasant canoe trip through typical north words river and timber country. The mountains are so far to the east that no

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view of them is obtained until within a few miles of the mouth of the Parsnip River. However, several prospectors and trappers, both whites and Indians, were met from time to time along the Parsnip and Crooked Rivers. None of these had penetrated very far into the mountains to the eastward except that one or two had been through Pine Pass from Fort McLeod and down the Pine River to Fort St. John. None of them had ever seen or heard of mountain sheep in the mountain country south of Peace River with the exception of one lone sheep which an acquaintance of one of the Fort McLeod Indians claimed to have killed a few miles south of Pine Pass. No very authentic confirmation of this could be obtained. Several, however, claimed to have seen mountain sheep a few miles above the mouth of the Ottertail River, and it was said that several had been killed by Indians there several years ago. Diligent questioning and inquiry from these trappers, Indians and inhabitants at Fort McLeod and on Findlay Forks, regarding the skulls or horns of any sheep, failed to disclose any.

Detail progress of the trip is shown in the following daily entries. Also supplemental to this report is the schedule with measurements and photographs of mountain sheep and caribou specimens collected; map to which reference is made; and preliminary reports by letter to the Biological Survey.

Tuesday, August 7. - Arrived at Prince George and made overland trip to Summit Lake (30 miles distant) and there made arrangements with George Wosley, a trapper, for trip with him and canoe north through Davie Lake, Crooked River, McLeod Lake and Parsnip River to Head of Peace River and then down Peace River to Hudson Hope portage where pack outfit would be waiting.

Wednesday, August 8 - Started at 7 a. m. in heavy canoe with overboard motor, through pretty Lake Summit and then down winding Crooked River, transparent and alive with fish - rainbow and Dolly Vardon - great sport catching them. Paddling half the time. Wooded beautiful country and a relief to be through the railroad traveling. Stopped at 12 o'clock for a trout luncheon. Came to Lake Davie - 4 miles long - at 3 p. m. Very beautiful with wooded hills. Saw and watched a black bear on shore. Saw also a few ducks and eagles. Came upon camp of Mr. Perry and Mr. Platzer, twomold prospectors on the way to Liard River. Camped with them. Slight shower during day but cool and pleasant.





Thursday, August 9 - Off at 7 a. m. after breakfast of trout and struck beautiful Lake McLeod - 10 miles long - at one end of which is Fort McLeod, an old established Hudson Bay post. The post building looks like a little New England cottage. Stopped and bought a few things. Several Indians there. Met three or four more on River. Hit Parsnip at 4 p. m. Went through several rough rapids. Mountains beginning to loom up west of Parsnip. Camped at 8 p. m. at pretty place on bank.

Friday, August 10.- Off at 7 a. m. and mountains begin to loom up on both sides. Saw several flocks of geese and ran down one young one which could not fly and tied him to canoe. Scenery very fine. Arrived at Findlay Forks at 2 p. m.; stopped at Hudson Bay post and bought a few things. The Parsnip and Findlay join and make the wide Peace River. Mountains high on both sides. Two hours portaging and lining down canoe through bad rapids - hard work and during it the goose tore loose and jumped into the rapids - so went one fine goose dinner. Mt. Selwyn a most imposing cone-shaped peak loomed up on right. Took photos of Mt. Selwyn. Beautiful snow-capped and glaciated peaks on both sides. Camped at Clearwater Creek. Good camp. Decided to hunt up Clearwater Creek.

Saturday, August 11 - Up early - breakfast and off at 7 a. m. with small pack of grub. Up along creek on old trapper trail for four or five miles, then working up mountain through timber - quite rough. Old caribou and moose sign and occasional bear sign. Peace River visible for several miles. By 11 a. m. up to 5000 feet and fine view of peaks beginning - Mt. Selwyn to the westward. Up at 6000 feet and rugged mountains with small glaciers in all directions with beautiful grassy meadow basins under the peaks but careful examination with field glasses showed no trails. Went along westerly range from Clearwater for several miles but no sign of anything on the meadows. A few ptarmigan. Very thirsty and finally melted ice for tea and broiled some bacon. Peaks, grassy basins and meadows on other side of creek and canyon made me decide to go down and camp on creek for night. Steep descent, taking two hours. Shot one grouse, forded creek in heavy rain and made camp under tree. Had good fire, fried chicken, tea and bread and fairly comfortable night's sleep about four hours.





Sunday, August 12 - Up early and breakfast. Clear. Early start up steep wooded and brushy slope - fresh grizzly sign. Raspberries and huckleberries in abundance. In three hours climb rose from 3000 to 6500 ft. and was soon in the grassy basins seen the day before but no sign or trails except of bear. Over a peak and looked down into the prettiest basin with three little lakes and glaciers. Descended 1000 ft. to it and shot another grouse and cooked it at edge of lake. Wondering why such an ideal place had no game sign - went through a little pass and started descending 70 degrees to creek bottom. A succession of beautiful falls and rapids. Very hard, dangerous climb - took photos. Reached timber at 4 p. m. Very rough, windfall - waded the creek for a while and then took to other side. This creek is a tributary to fork of Clearwater Creek and heads in south of Mt. Selwyn. Continued up the creek until 8 p. m. and camped for the night.

Monday, August 13 - Continued on up the south easterly side of Selwyn and reached elevation of 6300 ft. but no sign of game or game trails except occasional old bear sign. Examined surrounding mountains with field glasses. Started down and reached river by 3 p. m. After quick lunch, continued down river, passing thru one rapids requiring lining down of canoe. Reached portage at 8 p. m. and found Garbitt and Louis (half-breed) waiting with pack outfit which looked in good shape.

Tuesday, August 14 - Up at 4 a. m. and took outfit over in canoe and swam horses at 6.30 a. m. Good pictures. Goodbye to Geo. Woosley, who was a fine boatman and companion for past five days. Packed and off south at 7 a. m. along Gathay Creek. Bad muskeg at one or two places. Had to take off packs several times. Through woodland over old trapper trail all day. Camped at 5 p. m. 3000 ft. elevation. After supper an hour used to look for bear sign but no bear. A little tired - the reaction from Monday. Bed at 8 p. m. (Only the thought of the eiderdown robe and cup of hot tea kept me going - resolved to live a sensible, civilized life and stay at home hereafter instead of hitting the hills - but then I remembered many such resolutions in the past while on hunting trips and realized I would not keep this one) Shot two chickens.

Wednesday, August 15 - Up at 4.30 and off at 7 a. m. along north fork of Gathay, south-westward. Muskeg & horse mired -

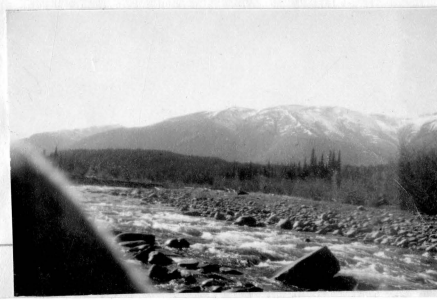
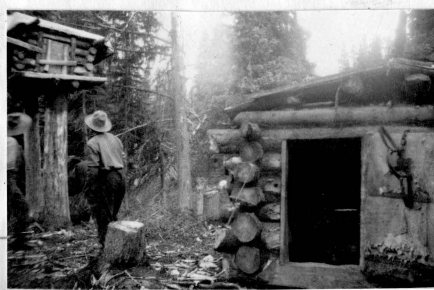




cutting trail at 3 p. m. Came to lake $3/4 \times 1/3$ mile n. e. and s. w. which enters into north fork Gathay. 3500 ft. elevation. Copley map does not show north fork of Gathay as outlet. Very rough going along steep rock slide side of lake (west side) trail, cutting, etc. $1/4$ mile from lake came on stream running westward and followed it; trappers' trail along it. (It does not head in the lake as Copley map shows) Rough going where little creeks run into it. Elevation 3000 ft. - camped at 6 p. m. on creek (three hours from lake) Moose sign - light rain. Not good feed and horses tried to go back during the night,

Thursday, August 16 - Up at 4 a. m. and away at 6.15 (real early starting) 7.15 came to Carbon River - elevation 2700 ft. - 400 yds. Further on came to a fork - a large branch coming in from s. e. at 45 degree angle (not the smaller creek we came down) Not on Copley map. Continued up the Carbon River. Bare peaks to westward but timbered high. Carbon River turned sharp south westward. At 9 a. m. came to large branch from west. At 2 p. m. (elevation 3000 ft.) came to 60 degree fork - both equal volume water (rapid at fork) Continued westward - bad muskeg - cutting trail. At 4 p. m. crossed creek from West and headed due south. Camped at 5 p. m. - elevation 3400 ft. Flat top bare mountain due west from camp on edge of river. After horses unpacked, went up steep hill west through timber. Looked at bare peaks to east and south. No sign of game. Few bear signs. Small bridal veil falls just above camp (creek coming into Carbon) Poor horse feed. (Copley map does not show creeks and branches of Carbon as we found it. A long, hard days going from 6.15 to 5 p. m. Nice camp on bank of Carbon.

Friday, August 17 - Up at 4 and off at 6 a. m. South up over steep hill and through woods - then going for one hour, then crossing Carbon and came to old trapper cabin with bear trap in it. Then turned westward and went up wooded mountain side, very rough going - getting finally near top. 5000 ft. elevation - saw five bare peaks and meadows. Snow to south and west. Camped in small meadow with little lakes. 4700 ft. at 3 p. m. Saw bear tracks - also fresh caribou and moose. Killed two chickens and cooked them for lunch. Glad to be again high up and near good-looking game country. Harry and Louie went out to cut and look over trail down mountain side. Clear, cool day. Seem to be about at head of Carbon Creek and also near head of Clearwater from N. west.





Saturday, August 18 - Up at 4 a. m. and off at 6 a. m. Breakfast of boiled Whistlers. Slow ascent along wooded ridge to 5000 ft. then down to nice open basin in which a branch of the Carbon headed. Made camp at 7.30 and at 9 a. m. started up over hill to south. Foggy. On top at 5200 ft. and saw five 6000 ft. ranges to south, southeast and southwest, and Mount Selwyn to the northwest. Low hanging clouds in valleys. Took photos. Built fire under spruce tree and waited two hours for rain to stop. Covered a great many basins to s. e., south and west and examined opposite range closely with glasses. Saw fresh caribou sign of a few stray caribou. Several ptarmigan. Shot several. A three hour walk and climb through thick fog to camp at 8 p. m. Surprising how little sign of game or game trails in what should be fine game country. One or two bear sign only. Mountains not quite as high and rocky enough for sheep or goats.

Sunday, August 19 - Up at 5 a. m. but a heavy fog covering everything. Spent morning mending, washing and re-arranging packing, etc. In afternoon went out south down creek and swung up over and around summit but saw nothing as fog was too thick.

Monday, August 20 - Up at 4 a. m. and off at 6 a. m. Clear fine day. Traveled due south, down creek one hour and then winding trail in south-easterly direction. Looked again at long range to south-east but saw nothing. Fresh moose tracks. Shot two chickens. Followed up Gold Creek and camped at pretty little 1/2 mile lake 4700' and just west of Mount Bickford. At 1 p. m., three of us started out and up mountains to east. At 2 p. m. parted, I going up and around Mt. Bickford. Beautiful sea of five 6000 foot peaks, basins and little lakes in all directions. On top of Mt. Bickford - 6400 ft - very windy and chilly but an inspiring view. Old signs of caribou. Watched basins and started back at 7.30. Reached camp at 8 p. m.

Tuesday, August 21 - Up at 4 a. m. and off at 6 a. m. along lake south and soon started down mountain side to Pine River. Continuous cutting of trees, etc. all the way down steep mountain side, covered with timber and small growth. Very rough going. Reached Pine River just east of Le Moray Creek at 3 p. m. Continued down on good trail, camped at 5 p. m. Tried fishing but no success.





Wednesday, August 22. Up early and off at 6.20 a. m. continuing down river. Saw fresh deer and bear sign on bars. Shot five grouse. At noon, boiled tea and took swim in river. Water very cold. Passed grave of Bickford, who froze to death near Mt. Bickford, for whom it was named. One way to have a mountain named after one. It looked like a lonesome grave. A stick with a rusty wash basin hanging on it, marked it. Camped at 5 p. m. on bank of river.

Thursday, August 23 - Up at 4 again - our regular program. 5.30 started packing and at 5.51 off (21 minutes for 6 pack horses, some packing). Continued down Pine River Valley, wooded hills on mountain sides. Camped at 3 p. m.

Friday, August 24 - Started at 6 a. m. and reached Middle Fork, Pine River at 12 a. m. A fine 600 acre bar at the junction occupied by Frances, a trapper, who was away up Middle Pine, - hunting - according to notice on door. Had fine garden and got bushel of potatoes also onions, carrots. Started up Middle Fork and camped at 4 p. m. Short hunt up river until 6 p. m. Shot willow grouse.

Saturday, August 25 - Up and away at 6:30, the valley of the Middle Fork being about 1/2 mile wide, wooded, with batches of meadows. At 11 a. m. came to 15 mile flats at Martin Creek. Here found Frank camp; also Joe Coyon, Indian, Beaver, wife and five or six small children. All skinning and smoking several moose and black bear. A pretty smelly and dirty place. Took movies and still pictures. Waited until 3 p. m. when Frank came in with a black bear which we had heard him shoot at 2 p. m. An interesting character 65 years old and in that section for 15 years. Asked him and Joe about sheep but both claimed there was none this side of the Peace or above the Wapiti Rivers. Joe, a jolly old Beaver, was born in this section. He is Jones' father. Forded river at 4 p. m. to right side of river and continued up, camped at nice meadow at 6.30 p. m.

Sunday, August 26 - Up at 4 a. m. but awake since 2 a. m. by pack rat chewing at my bed cover but could not catch him. Away at 6 a. m. Lunch 9-11. Forded Burnt River at 11.30 and





continued on up right side of Middle Fork but well back from it near hills on right, Forded Middle Fork at 3 p. m. over to left side and up hill. Ford was down stream about 100 yards. Two cabins just inside the timber. Camped just up on hill, it starting to rain. Early supper and walked up over hill. Returned at 7. Weather has cleared up and there is a beautiful sunset - sky purple and pink. We are now about 25 miles above mouth of N. Ford, Pine and four miles above mouth of Burnt River. S. E. from here a range about 10 miles distant shows up. Four degrees above here (2500) would make it about 6000' elev. Louie says the main river continues south a few miles and then eastward. About five miles above us a creek runs eastward (on left of M. Fork going Up) and we are going up it tomorrow into the range above referred to and which is known as Moose Mts. The maps are apparently quite off or vague in this section. Have traveled since leaving Prince George about 330 miles by canoe and 180 by saddle not to mention about 80 miles by foot, hunting.

Monday, August 27 - Up at 4.30 and off at 6.30 traveling on bench overlooking river valley on right south, until 9.30 when we camped at bank of creek coming in from a valley to south east at the head of which valley appear the mountains. The river continues south from this point for quite some distance. Went up towards mountains, looking for a way up by horses and chopping trail. I went fishing in river and after fishing quite a while they commenced to bite and I landed fourteen, some of them 2 feet long, Dolly Vardon trout. It was great sport. Lots of black bear tracks and returning to camp I got my rifle and went up river several miles but did not catch sight of any bear. They probably scented the outfit and lit out as the tracks were fresh. Returned to camp at 7 p. m. River and country very pretty in light of dusk. At 9 p. m. Louie and Harry came in and said it would be hard going up the mountains. Elevation at this camp 2600 feet.

Tuesday, August 28 - Up at 4 a. m. and no sight of horses. Cloudy all day, but clearing. Horses found and off at 6.30 up and southeast, cutting trail; then on to steep back ridge, a steady steep climb, driving horses ahead. Soon mountain peaks appeared in all directions. By 2 p. m. up to 5200 feet - almost on top. Saw Bull Moose at 1/2 mile and in a few minutes a bull caribou on a ridge about 1 mile east. Made a quick camp (5200') and Louie





and I circled around about 3 miles, located and killed a caribou - a fair-sized bull - 20 points - horns in velvet - skinned him completely and quite a butchering job and at 4 o'clock started back, I packing the head and skin and Louie about 50 pounds of meat. Rough going and through muskeg and realized that packing out whole specimens for the U. S. Biological Survey was no snap. Measurements, Length 74"; height 46"; Length of tail 5 1/2". Got back to camp at 5.30. Supper. At dusk saw two moose away down in a timbered flat about 1/2 mile. A strong wind and chilly at this mile high camp. Rolled up in blankets and overhead millions of bright stars which seemed so close that one could reach out and get one.

Wednesday - August 29 - Awakened at 3 a. m. by pattering of rain on my face, which continued for one hour. Then cleared brightly. Off at 6.30 to camp a little higher where horse feed would be better. A great joy to be in fine new game country. Camped at 8 a. m. on little flat, good water, wood and feed. 5800'. After making camp started at 9 a. m. to westward about three miles west; got to top of mountain, 6900' and took bearings on R. mountain L to north and Moose Lake No. 45 degrees E., also head of fork of Bull Moose Creek. Also several peaks (with snow spots) to south. Also took photos (2 panorama) Also photo of R. Mt. L. Back to camp at 7 p. m. Lots of caribou sign but they stay in the timber lower down. Saw one bull caribou towards R. M. on way back. Rain and wind storm and cold in evening.

Thursday, August 30 - Up at 5 a. m. after breakfast, spent two hours working on the two hides. At 10 a. m. Garbitt and Louis started over towards Bull Moose Creek south to see if we could get horses through; on way back Louie went to get some of the caribou meat killed two days ago and found it was all eaten up by grizzly. I went back in same direction as day before but saw nothing. On way back killed two ptarmigan. Very windy, chilly and cloudy. Wind apparently keeps game under cover. Finished cleaning out skulls, fleshing hides.

Friday, August 31 - Up at 4.30 and went back to old camp where Louie said he saw either a moose or bear. Saw nothing. Back to camp and started about half hour before horses packed south-ward.





Saw nothing and pack train caught up and went up steep mountain side and went about two miles further south when we camped in a pretty basin. Rain and strong wind continues. On the way and bear the top, I saw one of the rarest of sights and a lost opportunity waiting for back train to catch up. About 100 yards away and near a rock ledge I saw several ptarmigan fly up and then a jet black animal with a white tipped tail. I thought at first that it was Tiger, our dog, and that he had grown a tail. I quickly put the field glasses on it and then I realized that it was a beautiful big silver fox. A \$500 prize; before I had a chance to shoot, it was gone in the rocks. Garbitt and Louie said that they had seen but one or two in their twenty years on the mountains. After camping at 11, I went a short distance from camp and suddenly saw a bull caribou about half mile away. The wind was right and I was soon within 300 yards of him, then another bull appeared. The first one dropped at the first shot. The other, apparently wounded at the second shot, ran and on the third shot dropped at about 500 yards. Butcher work again and with the help of Louie and Garbitt had the two skinned and dressed at 2.30 and back in camp at 3 p. m. The first was shot through the heart; the second through the neck and through the body about one foot back of the shoulder. Both big-bodied and good-sized. Horns - 20 and 28 points; size 54-87-5 and 51-79-4 $\frac{1}{2}$. My back ached after the skinning and packing back to camp of head and hide of one, but a big feed of tenderloin steak broiled to a turn and tea made one new again. One of the bulls had horns cleaned; the other part of velvet off. Tiger is busy caching part of the carcass. The wind is now about 60 miles an hour and we stay in camp, the kettle boiling a big stew. Plenty of meat and grease to take place of goat grease.

Saturday, Sept. 1. Up at 5 and off for a hunt at 6 a. m. going southward about three miles when we could overlook a little lake about 100 yards long which is apparently the head of Bull Moose Creek on one of its forks. On a grassy meadow on next range saw a caribou enter timber. Swung around to east and down on a grassy meadow with patches of spruce and little lakes. Saw a bull caribou about one mile away. He was slowly making for the timber. Made a run for it and as I got about 200 yards away from him, he ran. A hurried off hand shot hit him in the neck - he dropped. 19 points - good size.





About one hour skinning him. Then lunch on tenderloin and tea. About 1 p. m. Garbitt and Louie went different directions. Back at 3 p. m. Louie and Garbitt having seen a moose. Back up over the mountains and when near top saw a caribou, down below when within one mile of camp and saw two more, and climbed up to them but they were too small to shoot. Looked at old carcasses but not touched by bears. Camp at 5 p. m. and showers all day and really chilly on mountain tops. No sign of any one ever having hunted or camped in this country. A great treat to be in a new fresh country.

Sunday, September 2 - Awakened by rain at 3 a. m. which continued all morning. Spent time in camp cleaning skulls, salting hides, mending shoes, etc. At 10 a. m. we all started out in different directions - Garbitt and Louie to see if bear had been at carcasses and me to caribou killed yesterday. When part way up mountain, the clouds came down and for two hours I sat under a rock covered by clouds, rain, hail - very chilly. At 12 it cleared and I went to top. Caribou carcass undisturbed. Then crossed over to next range to south east and hunted it very carefully but saw nothing except ptarmigan. Started back to camp at 6 p. m. The scenery was beautiful - the sky lights blue in west, deep blue in east - clouds of all colors and tints and the atmosphere that steel gray color that only Ed. Deming can get in paint. The peaks stood out and it is inspiring on the top looking over it all. Back to camp at 7.30, a little after dark, and a pot of caribou ribs was waiting. Garbitt and Louie saw nothing but two small caribou.

Monday, September 3 - Up at 5 a. m. Very chilly. Decided to move on southward this a. m. Up over top 6800 ft. blowing a gale and very cold - down a steep wooded mountain side and up to next mountain. Camped at 11.30 near top. Garbitt and Louie going on south to see if we could get horses through. In camp all afternoon - 3 hours - cleaning out skulls of caribou, etc., labeling them and fleshing hides. Also doing a little washing. Showers all afternoon. Elevation 5600'.

Tuesday, September 4 - Up at daylight - 5 a. m. Days getting shorter and off towards Wolverine Creek at 6.30. Wind gone down. Traveled until 4 p. m. from top of summit to creek bottom several times, sometimes dropping 12-1500' reminding one of Service's "mighty mouthed hollow all filled with hush to the brim". At 2 p. m. crossed





creek running north and south, probably running into Perry or Wolverine Creek. At 4 p. m. took gun and went up on top. From there the rocky peaks which form the continental divide could be seen only four or five miles to west and southwest. Caribou sign but none of sheep or goat. At 6000'. A storm coming on and built a small shelter under a protecting rock and was very comfortable. For two hours watched for caribou below and at the changing moods of the mountain peaks, the clouds and the storm. To the north and just over the dimly seen mountains, it was blue and sunlight - above dark clouds. A little to the west of north, the sun is shining brightly on the mountain sides and to the east and west the cold rocky peaks are wrapped in white and gray clouds and above blue sky shows in spots and winds are playing times all around. The spell of the mountains.

Wednesday - September 5 - Up at 5 and off at 7 a. m. Very chilly during night and a drizzling rain in the morning. The weather has been very unsettled for several days. Louie says it is three days travel from forks of the North Fork of the Pine to the head of the upper branch, so the North Fork must head far down towards the headwaters of the Wolverine and Wapiti. Camped at a little lake, head of a creek at 8 a. m. and Garbitt and Louie took axes, grub and packed Tiger, prepared to be gone over night, looking out a way through as we are and have been traveling for several days along the peaks, no trail and apparently no one ever here before. At 8.30, I started out to hunt, taking loin of caribou, piece of bacon and chocolate. While climbing mountain to south, I saw two caribou with huge heads about one mile across the valley. I started across, and was about half way when two small caribou came out of timber towards me. I hoped and expected they would get my wind and go back and not scare the two big ones. They got my wind but did not turn back and started running towards the two big ones, who instantly became alarmed and started to run. My chances were ruined - three or four shots sight sights at 500 yards fell six feet short. They were beauties. I hurried down the valley, hoping to get nearer but they took to the mountain and soon were on a trail along the summit and made a beautiful picture silhouetted against the sky with their high horns. I followed them and on the way saw a cow, calf and yearling. I came back and had no way to approach them but down a 600 ft. cliff in plain view. It stormed meanwhile and I almost froze but I made the





best approach I ever made. It was interesting to watch them. I got down to within 300 yards and picked the big one with which the calf was staying. The second shot knocked her down and the little calf went over and licked her. I went down to her and found her breathing - also that it was a young bull - I was sorry. I had hold of the horns and was about ^{to} my knife in his throat when he jumped up and almost knocked me over. I missed an opportunity for a fine picture as he stood for a moment. I was glad to let him dash off apparently all right. My shot apparently only grazed and stunned him, as there was no blood. I continued up the valley and soon a large cow with good horns and size came running along but got my wind and saw me as I hurried closer for a shot. She was getting away and I shot at an estimated range of 400 yards and luckily knocked her down on the first shot. She got up and I had to run a half mile before I got another shot and killed her. Then continued up valley, stopped to cook some meat at 3 p. m. At 5, I got to top of ridge to west and one mile across the canyon saw in dim light apparently six or seven sheep high up on a grassy meadow just under the cliffs and snow. My heart was in my mouth at the thought that sheep were found at last. But the light got better and I seemed to see the white manes and chests of caribou but not certain. It was getting dark so I went back to camp, arriving at 7.30 after dark. Tired but supper of mush and caribou refreshed me and I shall start early in the morning to see the "sheep". Saw fresh grizzly digging one-half mile from camp and expected to find it raided but not so. It has cleared and they sky is full of stars.

Thursday, September 6 - Awakened at 4 a. m. by the clucking of ptarmigan along side camp and though dazed got up, built fire, had big breakfast of caribou, bacon, mush and tea and packing the eiderdown robe and some meat and tea in the pack started south at 5.30. Visited the cow caribou killed yesterday but no bear had been there. Ascended high ridge and continued south along it and swung west where I could overlook the valley where I had seen the band of caribou last night. Near by and at the foot of the cliffs were two caribou, one apparently larger, lying down. As I was lying down near the game trail, four small caribou trotted by only fifteen yards away. They were scared by my scent. Looking to the left basins eight small caribou are feeding and apparently working up the trail on which I am now sitting. Hope they come by for a photo. As I sit here the view is tremendous. To the south and southwest, a mass of beautiful peaks and valleys, sky as clear as





crystal except great white clouds just above horizon, floating fast. For sheer joy, pleasure and contentment, I know of nothing like this, a hundred miles or two from any civilization and no human being within miles, and those only Garbitt and Louie who are God knows where; two days now and no one to talk to except myself. The eight caribou have disappeared, probably approaching me on the trail. They, however, disappeared in the timber, lower down. Ascending high peak and looking down in basin on right see twombull caribou and six cows feeding. Watch them from time to time. At 11 a. m. reached top - 7000 feet - fine view of peaks to the west and southwest. A little south of west is a beautiful snow-covered peak about 1000 feet higher - 10 minutes distant - about five miles. Saw two caribou on opposite mountains but no sign of sheep. Examined peaks and meadows often and carefully. Chilly and wrap myself in robe. No sight of Vreeland Glacier to south. The snow mountain above referred to is at the head of the Wolverine. Both the Wolverine and north fork of Pine head together at a large lake, according to Tom McCook, a Macleod Indian and Louie.. ~~Saw with glasses.~~ Three p. m. Vreeland's Glacier just sighted S. 20 degrees East (by true bearings) - dome-shaped - running southeast and northwest. Two separate and sharp cliffs appear on this side. 20 degrees further east appear a pyramid snow peak. Between the Glacier and this peak appears several high snow covered peaks. Glacier one degree above Ice Mt. Elevation at this point - 6500 feet. Wish Fred was here to look at his Glacier from this side. Just below me is a little creek and I shall celebrate with some tea and caribou chops, the first thing I have eaten since six this morning except a piece of chocolate. Back at camp at 5:30. Garbitt and Louie just in before me. They cut trail to the Wolverine. Camped last night apparently on mouth of Perry Creek. According to Frank Treadwell (who told Guillan) Mt. Hunter is just between the forks of the North Fork of the Pine River. After sunset, clouds in east turned to beautiful blood red color.

Friday, September 7 - Up at and off at 8 and climbed out to east and eastward through valley to two little lakes; then sharp descent through timber to Wolverine River, which was reached at two p. m. Elevation 3200 feet. Could see where it headed about 12 miles to the south in snow-covered mountains. We struck it where it turned south to its head. Continued east, fording back and forth and along moose trails for about four miles, camping at 3 p. m. Day clear and warm. We struck the Wolverine where a creek came in from the north, probably Perry Creek. Wolverine is about 50' wide, shallow and full of boulders - valley about 1/4 to 1/2 mile wide - mountain and valley burned from point two miles below where we reached it eastward. Lots of moose sign - saw five caribou today.



Saturday, September 8 - Clear, bright day and up at 4.30 and off at 6.30. After about four miles of burned timber going struck a good trapper trail and continued, camping at 3.30 in little prairie. Just above passed through MH ranch. Showers in the afternoon. Passed through several moose licks. Went out to look for moose - 5-7 p. m. but saw none.

Sunday, September 9 - Up at 4.30 and off at 6.30. Should reach Flat Creek today. Would give a dollar a word to hear J. and B. talk. No talk in camp for several days except occasional word of Cree. At 9 o'clock struck and crossed Bullmoose Creek, flowing into the Wolverine from the north. Passed through large bunch of beef cattle on flat owned by Roy Armour now up on Nelson River. Nobody at home. Camped for lunch at 9.30 where the Wolverine flows into the East fork of the Pine (also this fork is known as the Murray River) Flat Creek flows into the East fork from the East nearby. Elevation 2500 feet. Found that a trapper, V. Peck had a cabin a mile down the East Fork and going there found Mrs. Peck and three bright boys, the oldest six years. Mr. Peck went out two weeks ago for operation for hermeroids. Mrs. Peck was doing the buying, digging potatoes, caring for stock, shooting meat and fishing when required. A very bright cheerful woman and a wonder under the circumstances. Runs her own trap line in the winter. She has been here seven years and her husband three or four years before her. - came on with nothing but a rifle and a bag of flour. Her husband tried to get through Flat Creek and East Fork to Wapiti last winter. When snow went and left miles of fallen and down timber, he had to leave all his outfit behind and he travelled by dogs and not horses. On full inquiry and investigation, showed that it would be impossible to get through this way. Considered and finally decided to go to Pouce Coupe - three days travel north east. Tried to ford the river at 2.30 and found it too deep - horses soon having to swim and current swift. Snow on mountain causes river to rise. Decided to camp and built raft to get over and portage outfit, which we did.

Monday, September 10 - Rain during night but clearing. Up at 4.30 and had trouble in getting horses to swim across, etc. Off on trail at 7.30, traveling north and ll to east Fork about five miles east of it, rough going through muskeg and horses behaving badly. Through wooded hills, water holes, passing over small, creeks. Made camp at 4.30 - only place for horse feed.





Spent hour going over hides and drying them. A clear night and a cold one. Woke about 2 a. m. from the cold - found my eiderdown robe was not infallible. At 4 a. m. got up to build fire and found pail of water by my head had frozen solid, my bed cover frost covered and the ground frozen.

Tuesday - September 11 - Off at 6.30 through rolling country, covered with spruce, poplar and willows in a north and northeasterly direction. At 9.30 reached Muskeg Lake about half mile long surrounded by muskeg. Continued on along east side of lake and camped for lunch on creek which apparently flows into Salt Creek. At Muskeg Lake, saw cabin and large log barn used for cattle several years ago. All of them died from exposure and starvation and their carcasses could be seen all around. Continued along creek in north and northeasterly direction, camping at 4.30. A lot of muskeg during the day. Day clear and warm. Elevation 2900 feet. A couple of miles before camping, passed through big moose lick and after supper went there and stayed until dark. No moose seen but very fascinating, enjoying the colorful sky, the mingled hoot of owls, occasional call of moose far away and whistle of duck and geese passing overhead. Saw several small groups of mallard and black ducks during week. Coyotes kept howling during night, which was very cold and my nose slightly frost bitten.

Wednesday - September 12 - Up at 4 a. m. and had breakfast before daylight. The big camp fire is a treat on mornings like this. At 5.30 I was back in the moose lick but apparently Lady Luck is not with me. Good to watch the color changes in the sky as the dawn and sunrise came. Lay awake larger part of the night Thursday, thinking how I was going to fare in arranging to continue to Wapiti and East Fork head. The uncertainty was the disturbing element. The unexpected always happens on big game hunts which are not of the cut and dried dude variety. Continued through rolling country, wooded with poplar and willows - lots of grouse - followed a creek west and northwest most of the day - Sunset Creek probably, though neither of the men seem to know the country. We are simply following a north and northwest trail. Camped at 4.30 pretty tired after long day.



Thursday, September 13 - Up at 4.15; not so cold as yesterday - Off at 6.30 east towards Pouce Coupe, through rolling country, here and fine looking oat and wheat country - also cattle. Stopped at Dawson Creek a few minutes. Passed many prairie chickens. Reached Pouce Coupe at 4.30 - a 18 mile ride in $4\frac{1}{4}$ hours, most of the time on lope and gallop. Pouce Coupe just a small settlement - 89 miles from R. R. Sent wires east, wrote letters, made inquiries about outfit to W. R. Met W. D. Burke who had Chevrolet car and arranged to have him take me 35 miles to Branard's Ranch on Swan Lake. Outfit got in at 7. Camped and had light supper with them. Bade Garbitt goodbye and packed all ~~my~~ baggage in car and started at 7.30 dark over rough road. A clear, starry night. Northern lights on left - very pretty - two or three small forest fires in the distance, coyotes like ghosts; rabbits, owls along the road side, enjoyable ride, ducks whistling. Reached Branard's at 10.30 and got bed.

Friday, September 14 - Up at 5. Beautiful sunrise and lake - lots of ducks - typical ranch and Mrs. Branard is a typical bright, aggressive farmer-rancher wife. Packed heads and skins for shipment from ranch - also other packages to J. M. and W. and H. Reduced outfit to about 40 pounds. No man or horse outfit available and at 8 a. m. started for Hythe 18 miles south and reached it at 9.30. There I found a ranchman named Kelly. A fine treat to meet good, square-looking Irishman. Kelly agreed to round up five horses. B. Burke, he and I went to Beaver Lodge - 14 miles and then 7 miles further to Red Willow to see Bert Chapman who was threshing and had trapped up the Wapiti. Chapman would not leave so returned to Beaver Lodge and Hythe, gathering pack outfit and preparing to start tomorrow a. m. A very windy but clear day. The howling wind made me lonesome. B. charged 20¢ per mile for 140 miles - \$28.00. Hundreds of prairie chickens and ducks. Got back at 2 p. m. and helped Kelly get a pack outfit together, repairing pack saddles, making cinches, etc. At 5 p. m. went out for two hours with Cub, the dog, along Beaver Lodge River and hunted for ducks. Cub was a wonderful duck retriever and more interested than I in locating and shooting ducks. When I missed he looked at me in a quizzical way - and I was more ashamed to miss before him than any human. But we got seven, all of which Cub swam or dove for. It was the most enjoyable day I ever had.





Saturday, September 15 - Up at 5.30 and for two hours in the morning hunted with Cub and took movies of his retrieving. Back and did several odd jobs - sharpening axes, making sheaths, etc. until 12. Helped get the horses in - a fine lot of big strong intelligent horses, three L., two mares and 1 filly colt. Packed and off at 1.30 - making Beaver Lodge at 5.30 - fourteen miles. A most enjoyable ride through rolling cattle and wheat country. A shower and rainbow - completed buying grub and outfit at Gondin's store. Cub along and hugs my side.

Sunday, September 16 - Up at 5.30 and one grand glorious morning, awakened by Cub and I got up and we walked west through the main street, whistling and awakening the tired inhabitants (population about 50). Went to the top of the ridge and met the dawning sun as it topped the horizon and sang a Te Deum to it. The sky every color of gold and yellow and blue ^{and} to the west, the main range of the Rockies, 50 miles away, standing high and proud in the steel gray haze that only the western sky can have. Mt. Kitchi (Sir Alexander) 11000' standing out with snow top and in the valley the fog hung looking like a large lake and overhead went a flock of Canadian geese to complete the picture. Back to town and roused out Kelly and breakfast and packing and away at 8.30, traveling through rolling country. Lunch at bridge over Red Willow river at 2 - left road and on trail. 5.30 struck Wapiti Brown's hot home - killed three chickens.

Monday, September 17 - Up at 5 and after searching out trails, started south west and at 8.30 came to W. E., a deep gorge. Spruce and willow hill sides. Cut trail all morning, I going ahead. Traveled until 12 along top of ridge and crossed river at 12. Lunch. Continued all afternoon on south side of river. On top some fine willow and spruce. No water till six p. m. Poor feed. Rain during night.

Tuesday, September 18 - Up at 5 - raining, coyotes barking - early breakfast. Heavy rain which continued all morning. Shot two grouse for lunch at 12. Where we hit Nose Creek, large flat. Two miles beyond ran into Indian encampment and met Pierre Shetler - about 12 tepees and fifty or sixty Indians having tea dance and drying moose meat. Weather cleared a little and spent afternoon visiting with Indians and taking pictures. Met old Solomo and son Pete with whom I hunted last Fall. The older Indians seemed very jolly and trustworthy as Indians go. They live a happy, no worry life. A little flour



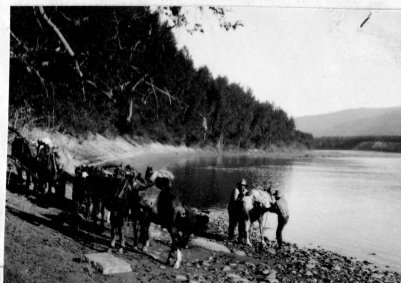


and the country provides the rest. Moose or deer hides or meat for clothing and food. Visited in one tepee - very spacious and comfortable, during evening.

Wednesday, September 19 - Rain, hail and snow all night and up at 6 a. m. Bad day - snow. A fine breakfast of moose meat, fried potatoes, moose and bannock and apple sauce. As the day went on the snow storm increased and Kelly, who is a fine, real Irishman, Cub, who sleeps and eats with us and I sat under the lean-to, a roaring fire in front. The snow swirling and covering the hills and country in front of us to the west, the country we are headed for. Toward noon, we went a quarter of a mile over to Pierr'e tepee and spent several hours basking in front of the fire, telling stories and taking in the life of a primeval Indian family ranging from two to twenty years old, the girls and squaw tending fire, cooking, mending mocassins and now and then passing around the tea kettle. A carefree, comfortable, healthy life with no worry about meeting the rent, coal or butcher bill. All seem happy and contented. Back to camp through the snow - cut several trees for wood - rebuilt our fire and put on the kettle for a muligan, which will be finer than anything that the Biltmore could produce and an appetite to meet it, keener than ever happened east of the Mississippi.

Thursday, September 20 - A cold night and about two feet of snow and still snowing when we awoke at 6 a. m. Visits back and forth, to and from Indians and Indian boys cutting wood all day to keep the big fire going. Warm, comfortable and well fed on moose meat. A little chickadee adopts us and feeds in and around the tent and even perches on us. Indian boys running around shooting birds and rabbits with bow and arrow and we have to protect our little chickadee. Cub sleeps, eats and drinks with us - shares our bannock and moose. Kelly, the most genial and good-natured man I have ever hit the trail with. The little chickadee is pruning its wings and looking for an evening bed or perch as night comes in. We buy a tepee for \$5. from an Indian. Elevation 2800'. A flock of geese went over but too high for a shot.

Friday - September 21 - A cold night. Up at 6 a. m., still cloudy and flurry of snow but decided to go on west and south west. The little bird back for breakfast. Off at 8.30. Pierre shows us the trail covered by two to three feet of snow. Snowing





Friday, September 28 - Up at 6 a. m. and off at 7 with small pack of grub sufficient for three or four days, and started for the range to the northwest and head of Fish and Red Deer Creeks. Saw bull and cow moose shortly after leaving and shortly after another large bull moose on banks of Creek. Climbed steadily up ridge and along top of range towards the northwest, combing carefully the country but see only four ewes and two caribou far away. Not very much fresh game sign. Bad day - very windy and cold. Camped at 6 p. m., high up in range.

Saturday, September 29 - Up at 5.30 and off at 7, continuing in northwest and down into head of Fish Creek and up to range to the west, a hard, long climb. Saw a number of old sheep sign. Continued on and at 7 p. m. camped in the snow-covered draws in small clump of spruce. A good fire soon going and tea-pot boiling and puffing at old pipe waiting for tea-water melted from snow. A good supper of moose meat, tea and bannock. The scalding tea tastes good. A beautiful moon just coming up with the white mountain peaks coming in view. Thousands of peaks in view as we come along and a wonderful sunset. A cow and calf caribou near our camp and unafraid. This is hunting at its best and a reminder of the days in the rugged mountains of Idaho. Very chilly and catching snatches of sleep between trips out around in search of fire wood - sometimes digging it out of the snow. Have no blankets in pack and just enough supplies to carry one through. Fifty-five days on trail today since starting and from 1000 to 1200 miles through mountains and over peaks. After midnight it gets very much colder and the hours drag slowly.

September 30 - A mountain sunrise at 6 at 7000 feet elevation and off at 7 after tea and moose meat breakfast. At 9 o'clock found band of 7 caribou and shot one large bull and sent Pierre back to camp with hide and head and continued on crossing over to the next range, following sheep tracks. A long, hard climb and hungry. Finally, in the middle of the afternoon, saw three rams and after a three hour approach through slide rock, finally got within range and shot two good-sized rams - skinned both and cached one and started with head and skin of the other one back towards camp. I soon became very tired and at 8 p. m. made camp in small bunch of spruce. The pack load very heavy and hardly had enough strength to get a little wood together and build fire but a couple of pails of boiling tea and fresh meat was refreshing.





resumed and the trees and bushes covered with it. The chilliest, iceiest, snowiest, wettist day I ever had and covered with snow, ice and ice water running down neck and legs. Stopped and built fire at 2 p. m. and moose for lunch. Things look brighter. Continued several miles and saw one medium-sized bull at 400 yds. Hundreds of rabbits. Passed around Nose Mt. Camped at 6 p. m. on Nose Creek. Good camp spot. Weather cleared. As I looked over Nose Mt., I noticed just the tip of a red glacier like dome in east. Looking closer it seemed to grow. It was the moon coming up like a giant balloon. The craters showing plainly to the naked eye. A real comfort tonight, with blazing fire inside and dinner of broiled moose steak, turnips, rice pudding, corn bread and tea - fit for the gods and the earlier part of the day forgotten.

Saturday, September 22 - Up at 6 a. m. to a clear, cold morning and off at 7.30, gradually going higher, south and southwest along Nose Creek four miles and then southwest towards sheep. Cold and wet from snow and at 12 stopped to build fire to thaw out. Bad muskeg at spots. Moose tracks, also. Saw high snow peaks and two lakes (one Nose Lake) one mile by 1/2 mile. down below at elevation 5000' - dropped down to 4300'. Lakes very pretty, camped high on bank of one under large pine tree. No poles for tepee. A beautiful camp - lake at foot and high snow peaks around reflected in waters. To the southeast can be seen large round mountain north of Porcupine on which mountain I killed caribou last year.

Sunday, September 23 - A good night's sleep and up at 5.30. Seven miles to the high peaks ahead. Off at 8 a. m. and up and down hills. Through spruce and poplar south and southwest. Hit Sheep Creek at 11 a. m. at foot of mountain, nice flat, camped and hunted mountain to southwest from 1 to 6 p. m. Moose and grizzly bear sign. Elevation 4900'.

Monday, September 24 - Up early, cloudy and off up creek to mountain range to south. A hard stiff climb, fallen timber. Up to 6500' through deep snow. Below saw bear half mile below on mountain side. Went back down and before I got there he got to timber but finally found him and killed him at 100 yds. Fine fur and grease. Long climb back up through the snow. Shot bird and had it for lunch. On up to top. Rain and wind. 7800' but only old sheep sign. Kelly went for more bear meat and I had long time finding camp after dark. Rain and wet. Big feed of bear meat, good and hot.





Tuesday - September 25 - Up at 4 a. m. - built fire, fine clear day. Off with pack at 7.30 - up creek and box canyon for three miles saw two sheep, then started up through timber and 3 feet snow to range to the south. Steep and deep snow and cold. Half way up saw fresh sign two sheep and little while later I picked them up through glass half way up opposite mountain - $\frac{3}{4}$ mile away lying in rocks. Only way to approach up to top and around rim - two hours making steep climb and around. Felt numb. Saw fresh sign. Came down on two rams - 300 yards below. Too hurried a shot and a flesh wound in stomach. Slid down steep snow 75' within 25 feet of sheep. Ram wounded, blood all over. Then a chase down to bottom of creek, through fallen timber and up mountain to the west - 6500'. Followed until 6 o'clock and then around cliffs and found there. Camp away below and reached there at 7.30. An unholy hard day but beautiful snow ranges and Mount Alexander from the top - 20 miles - 11000'. Back to camp and Kelly had wild blueberries, cranberries - Listen to this for supper - broiled young bear tenderloin (tender as chicken) hot flour and corn bread bannock with butter and wild huckleberry sauce, figs, prunes, apples and wild cranberries, Hudson Bay tea and then a pipe of Hudson Bay imp. mixture.

Wednesday, September 26 - Up at 6.30 clear and off at 7. Steady climb 3800 to 7800'. Towards top a bitter cold wind - 70 miles, blowing snow and ice like bullets. Went length of this range all day, feet and hands almost frozen, wind almost blows one off mountain peaks and plowing through two to four feet of snow. Made tea in a snow drift. Lots of sheep sign. On way back to peaks very tired. Good view and pictures of Mt. Alexander. Saw cow and calf moose. Good fire and grub in tepee and all forgotten.

Thursday, September 27th - Up at 5 and off at 7.30, moving camp up creek about 10 miles and making camp at 12. Fine scenery and a paradise. Lunch and off up mountains. Soon saw five sheep (ewes) but they had our scent and ran off. Followed and three hours after located them and shot one at 300 yards and one at 400 yards - the latter a pippin - Started down mountain at dark, arriving at 8.30 p. m. A glorious sunset of gold with jagged peaks of white silhouetted against it.



October 1.- Up at 7 a. m. Stiff and still pretty tired. Continued on with sheep head and skin across a fork of the Wapiti, which was reached at noon, where I camped and cooked luncheon. Continued on over range to the Southeast and camped late at night at the head of Fish Creek. Very tired.

October 2.- Up at daylight and after quick breakfast of tea and sheep meat continued over range between Fish Creek and Sheep Creek. Reached Sheep Creek at noon and had tea and then continued down Sheep Creek reaching camp at 6 p. m.

October 3.- Up at 5.30 and broke camp to start back. One horse had become lost and one had such a sore back that it was unfit for use. Packed on saddle horse. At noon caught some graylings and they were a great relief from the moose and sheep meat diet. Cub, the dog, caught a porcupine and got an awful dose of quills in nose and mouth. Hard time holding him, pulling quills. Continued on toward Nose Creek, saw lots of moose, deer and occasional bear sign; also otters and beaver. Camped at 4 p. m.

October 4-5- Traveled both these days steadily with good clear weather, reaching old camp on Nose Creek late the afternoon of October 5th.

October 6 - Off at 8 a. m. - good, fine travelling, passing through foothills, finally seeing last view of mountains. All the foliage has turned red and yellow. The country wooded with spruce, Jack-pine and poplar. At 5 p. m. crossed Wapiti River and at 6.30 reached the cabin of a rancher named Barrett, who was away but we found a supply of potatoes and carrots and this was a great relief after a solid meat diet for some time.

October 7 - Up at 6 - a bright, clear day and after all day travelling struck the road between Beaver Lodge and Grande Prairie and arrived at Beaver Lodge late in the evening.



To Mr. E. W. Nelson
U. S. Reel. Survey
Dept of Agri.
Wash. D. C.

October 17, 1923.

Dr. E. W. Nelson,
Chief of Bureau of Biological Survey,
United States Department of Agriculture,
Washington, D. C.

Dear Dr. Nelson:-

You have no doubt received my telegram sent to you from Montreal on Sunday, telling you briefly the result of my trip as far as it concerns sheep and caribou. Inasmuch as I am planning to be in Washington within the next two or three weeks and will, no doubt, have the pleasure of seeing you at which time I can report personally, and also as I intend to make a very complete report to you in writing, I will not attempt to do more in this letter than to briefly outline the route which I took and the locations where game was secured.

When I arrived at Edmonton, I learned that the Hudson Bay Company's Boat, which I had been advised was to leave Peace River on August 6th had been delayed and would not leave until several days after. I thereupon decided to save as much of this time as possible by going to Prince George and there taking a canoe from Summit Lake north by way of Davie Lake, McLeod Lake, Fort McLeod, Parsnip River to the head of the Peace River and then east along the Peace River to within fifteen miles of Hudson Hope, at which point I had requested, by telegraph, that the packhorses be sent. I made the trip from Prince George to Findlay Forks at the head of the Peace River in three days.

I then went down the Peace River to the mouth of Point Creek and Clearwater Creek, which creeks are just east of Mt. Selwyn and hunted there several days, going south and southwest around Mt. Selwyn about twenty miles. There was an absolute lack of any sign of sheep and only a few old signs of probably three or four caribou and moose. I did not stay there long or endeavor to hunt back further at this time at this point as I was afraid that the man who had the pack-horses down the river might not wait. After another day on the Peace River I reached a point about fifteen miles west of Hudson Hope

where the Portage begins and there found the horses. It was at this point that I sent you the brief note of August 13th.

From there I went south and west, striking Carbon Creek, which you will, no doubt, notice on your map, at a point about twenty-five miles above its mouth and from this point hunted east and west and working south to Mt. Bickford and Mt. Garbitt, which I believe are also shown on your map, which I saw when I was in Washington. I then struck the Pine River and went down the Pine River to the Middle Pine and then up the Middle Pine and its forks to within a few miles of the Continental Divide. It was along this river and the mountains adjacent that I killed the first caribou. From the head of the Middle Pine I went southeast and parallel to the Divide and within probably seven or eight miles of it, following the high summits to the head of Bull Moose Creek, Perry Creek and Wolverine River, which are tributaries and form the headwaters of the Murray, or otherwise known as the East Pine River. I endeavored to continue from the head of the Wolverine south along the main divide but at the point where he tried to find passage for the horses we were unable to get through, due to the excessive ruggedness of the mountains and of the down timber lower down.

I then decided to go down the Wolverine to the mouth of Flat Creek, about forty miles from the head of the Wolverine and, if possible, go up Flat Creek and in this way cross over to the mountains which we could see to the southeast from the head of the Wolverine. I found this country impassable on account of down timber, which one could possibly cut through but which would have taken several weeks to do and at the end of which time we would probably have been snowed in, that is, if I took any time to do much hunting afterwards. The only thing left to do was to go back northeast to Pouce Coupe and then around east and south through the foothills and circle around by way of the Wapiti River to its head and in this way get into the country above referred to.

At a point about sixty miles southeast of Pouce Coupe on the Beaver Lodge River, I secured another outfit of five horses and from there struck for the Wapiti River and up the Wapiti River hunting at Sheep Creek, Fish Creek and other unnamed creeks, which flow into the Wapiti River from the west and southwest. During this time, it had snowed very heavily for several days and the traveling was rather difficult. Sheep, which are no doubt Bighorn or Canadensis, were located on Fish Creek and Sheep Creek about forty miles northwest of Mt. Sir Alexander and also on a creek which flowed north into the East Pine.

From observations taken with a pocket sextant for latitude and also from observations taken with a clinometer on Mt. Sir Alexander, I computed the distance to be between fifty and sixty miles northwest of Mt. Sir Alexander. I returned by way of the Wapiti River and Beaver Lodge to Grand Prairie, arriving there on October 9th.

Four complete specimens of caribou and three complete specimens of mountain sheep are now in transit by express, having been sent from Edmonton by Wolf & Hine, taxidermists, and who have examined the specimens to see that they were in fit condition to express. Two of the caribou and two of the sheep I was unable to pack out but the hides were well salted and together with the heads securely cached. I believe I will be able to make arrangements to have a trapper bring out the two caribou this winter and the two sheep I will be able to get myself next Fall as I expect to go out there again. In addition to caribou and sheep, I secured goat, moose, bear and deer.

As I stated in my telegram, I feel reasonably certain that there are no sheep between Peace River and Pine River or between Pine River and Wolverine Creek. In view of the fact that the country just described embraces a huge area, which would take far more time than I had to comb it over completely, I feel loathe to make too absolute a statement as to the absence of sheep. However, I covered a great amount of country and the country was of such character that I could examine a great amount of it through field glasses, and I feel that if there were any sheep, except occasional stray sheep, that I would have found some evidence of them.

My explanation for the absence of sheep in these sections is briefly as follows:

The mountain ranges, with the exception of a few peaks, run below 6500 feet. There are very fine basins and meadows above the timber-line but, in general, there is an absence of the rocky, jagged peaks and rimrock which forms shelter and acts as windshields for feeding spots for sheep in winter. This, together with the fact that, from various inquiries and observations, I learned that the snows are very, very deep in the winter in these sections and the natural feeding ground for sheep would be entirely covered and probably frozen over. Also there are a great number of wolves and eagles in that country, which might be an element in affecting the sheep. My photographs, which have turned out uniformly good, will show quite clearly the character of this country.

I am looking forward with much pleasure to seeing both you and Mr. Sheldon and going over the trip in detail.

Sincerely yours,

John A. Hargrave

Data on Caribou and Mountain Sheep specimens sent to
U. S. Biological Survey, Washington, D. C. from Pine
River Section, Eastern British Columbia.

1923 - JOHN M. HOLZWORTH.

CARIBOU #1

Date collected - August 28, 1923.

Locality: West fork of Middle Pine River
(Approximate position indicated by
figure #1 on map attached)
Photograph attached marked #1

Measurements:

Length, nose to base of tail 74"
Height at shoulders 46"
Length of tail 5 $\frac{1}{2}$ "
Sex Male
Points 17

CARIBOU #3

Date collected - August 31, 1923.

Locality: Middle Pine River (approximate position
indicated by figure #3)
Photograph attached marked #3.

Measurements:

Length, nose to base of tail 87"
Height at shoulders 54"
Length of tail 5"
Sex Male
Points 28"

CARIBOU #2

Date collected - August 31, 1923.

Locality: Same as #3
Photograph attached marked #2

Measurements:

Length, nose to base of tail 79"
Height at shoulders 21"
Length of tail 4 $\frac{1}{2}$ "
Sex Male
Points 20

CARIBOU #4.

Date collected - Sept. 1, 1923.

Locality: Head of Bullmoose Creek (Approximate
position indicated by figure #4)
Photograph attached marked #4.

Measurements:

Length, nose to base of tail 77"
Height at shoulders 47"
Length of tail 5"
Sex Male
Points 19

MOUNTAIN SHEEP #5

Dated Collected - Sept. 27, 1923.

Locality: Sheep Creek (Approximate position
indicated by figure #5)

Measurements:

Length, nose to base of tail 54"
Height at shoulders 35"
Sex. Female

MOUNTAIN SHEEP #6

Date collected - Sept. 27, 1923.

Locality: Sheep Creek (Approximate position
same as #5)
Photograph attached marked #6

Measurements:

Length, nose to base of tail 52"
Height at shoulders 34"
Sex Female

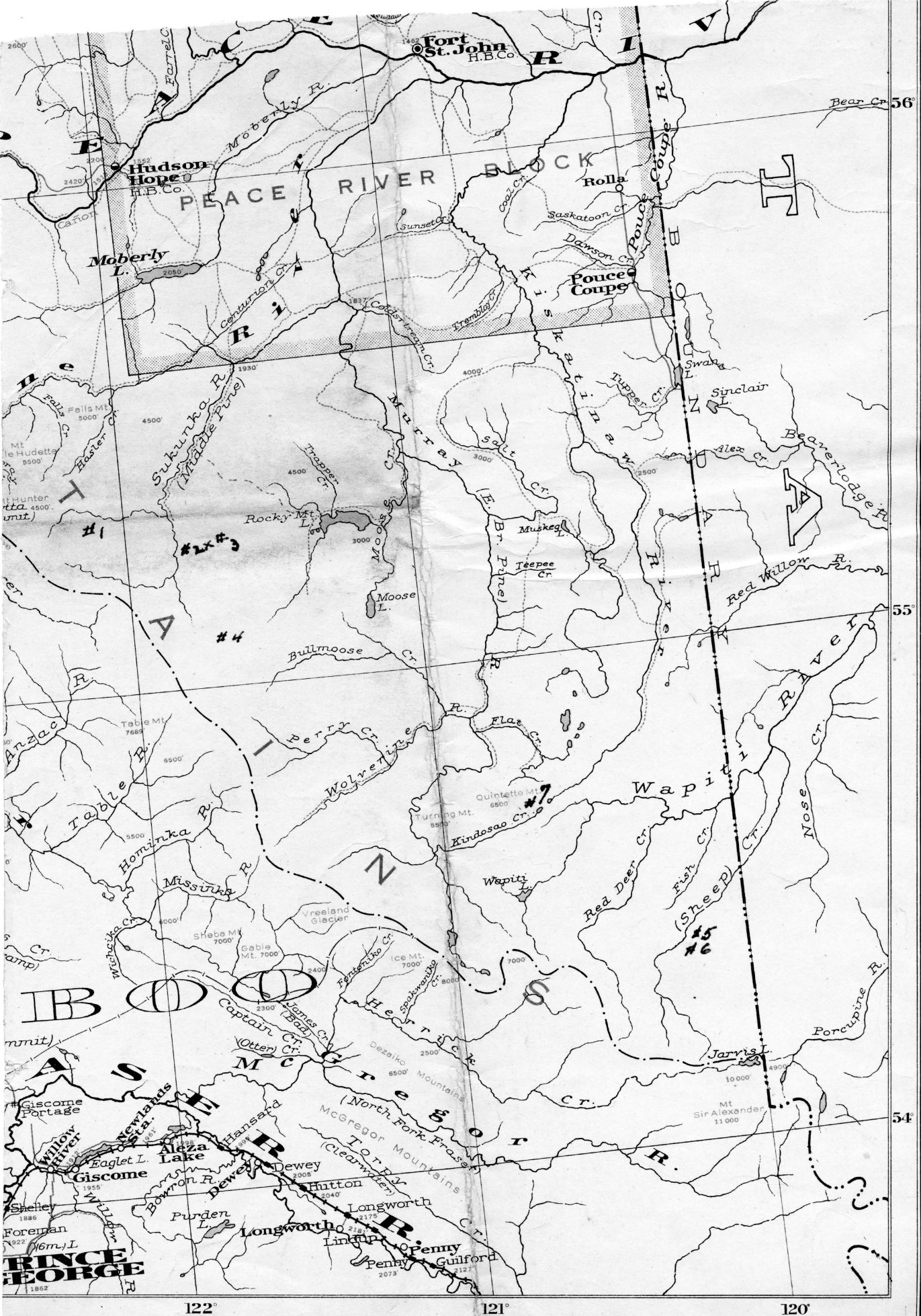
MOUNTAIN SHEEP #7

Date collected - Sept. 30, 1923.

Locality: Between Wapiti River and East Pine
River (approximate position indicated
by figure #7)
Photograph marked #7

Measurements:

Length, nose to base of tail 63"
Height at shoulders $39\frac{1}{4}$ "
Sex Male



Localities of specimens taken by John Mc Holm, 1923

Wool Sheep # 6



Caribou #4







Carson #1



mt sheep #1



Mix Sheep #5-



Data on Caribou and Mountain Sheep specimens sent to U. S.
Biological Survey, Washington, D. C. from Pine River Section,
Eastern British Columbia. 1923- JOHN M. HOLZWORTH

CARIBOU # 1

23469X

Date collected - August 28, 1923.
Locality : West fork of Middle Pine River
(Approximate position indicated by
figure #1 on map attached)
Photograph attached marked #1
Measurements:

Length, nose to base of tail 74"
Height at shoulders 46"
Length of tail 5 $\frac{1}{2}$ "
Sex Male
Points 17 (?)

CARIBOU # 3

23471X

Date collected - August 31, 1923
Locality: Middle Pine River (approximate position
indicated by figure #3)
Photograph attached marked #3.
Measurements:

Length, nose to base of tail 87"
Height at shoulders 54"
Length of tail 5"
Sex Male
Points 28"

CARIBOU #2

23470X

Date collected - August 31, 1923
Locality: Same as # 3.
Photograph attached marked #2
Measurements:

Length, nose to base of tail 79"
Height at shoulders 21"
Length of tail 4 $\frac{1}{2}$ "
Sex Male
Points 20

CARIBOU #4

23472X

Date collected - Sept. 1, 1923
Locality: Head of Bullmoose Creek (Approximate
position indicated by figure #4)
Photograph attached marked #4
Measurements:

Length, nose to base of tail 77"
Height at shoulders 47"
Length of tail 5"
Sex Male
Points 19

MOUNTAIN SHEEP
#5

23473X

Date collected - Sept. 27, 1923
Locality: Sheep Creek (Approximate position
indicated by figure #5)
Measurements:

Length, nost to base of tail 54"
Height at shoulders 35"
Sex Female

MOUNTAIN SHEEP
#6

23474X

Date collected - Sept. 27, 1923
Locality: Sheep Creek (approximate position
same as #5)
Photograph attached marked #6
Measurements:

Length, nose to base of tail 52"
Height at shoulders 34"
Sex Female

MOUNTAIN SHEEP
#7

23475X

Dated collected - Sept. 30, 1923
Locality: Between Wapati River and East
Pine River (approximate position
indicated by figure #7)
Photograph marked #7
Measurements:

Length, nose to base of tail 63"
Height at shoulders 39 $\frac{1}{4}$ "
Sex Male