

# **The Project Gutenberg eBook of Mammals taken Along the Alaska Highway, by Rollin H. Baker**

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**Title:** Mammals taken Along the Alaska Highway

**Author:** Rollin H. Baker

**Release Date:** October 19, 2010 [EBook #33915]

**Language:** English

**Credits:** Produced by Chris Curnow, Tom Cosmas, Joseph Cooper and the Online Distributed Proofreading Team at <http://www.pgdp.net>

\*\*\* START OF THE PROJECT GUTENBERG EBOOK MAMMALS TAKEN ALONG THE ALASKA HIGHWAY \*\*\*

## **Transcriber's Notes**

The text presented is essentially that in the original printed document with the exception of some minor punctuation changes and the typographical corrections detailed below.

### **Typographical Corrections**

Page 103 (Dawson Red-backed Mouse) : Territoy => [Territory](#)  
Page 104 (Muskrat) : Mann. => [Mamm.](#)  
Page 114 (Red Fox) : procupine => [porcupine](#)

## **Mammals Taken Along the Alaska Highway**

[Pg 87]

**BY**

**ROLLIN H. BAKER**

**University of Kansas Publications  
Museum of Natural History**

**Volume 5, No. 9, pp. 87-117, 1 figure in text  
November 28, 1951**

**University of Kansas**

**LAWRENCE  
1951**

UNIVERSITY OF KANSAS PUBLICATIONS, MUSEUM OF NATURAL HISTORY

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Editors: E. Raymond Hall, Chairman, A. Byron Leonard,  
Edward H. Taylor, Robert W. Wilson

Volume 5, No. 9, pp. 87-117, 1 figure in text  
November 28, 1951

UNIVERSITY OF KANSAS  
Lawrence, Kansas

PRINTED BY  
FERD VOILAND, JR., STATE PRINTER  
TOPEKA, KANSAS

1951



23-7607

**Mammals Taken Along the Alaska Highway**

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**ROLLIN H. BAKER**

**INTRODUCTION**

Mammals from along the Alaska Highway were obtained for the University of Kansas Museum of Natural History in the summers of 1947 and 1948 by Mr. J. R. Alcorn, field representative of the Museum. He and his family visited Alberta, British Columbia, the Yukon Territory and Alaska in an automobile and trailer from June 9, 1947, to September 6, 1947, and again from June 8, 1948, to August 24, 1948. In 1947, considerable time was spent by Alcorn in Alaska; trips were made on the Steese Highway to Circle and on the Glenn Highway to Anchorage. In 1948, most of the collecting was done in British Columbia and in the Yukon Territory but a side trip was taken to Haines, Alaska. The collecting stations are shown in [figure 1](#). Alcorn's 1,252 specimens include several large series from areas where few or no mammals had been taken previously. Time spent at each collecting station was of short duration (usually less than three days) and although 56 species and subspecies of mammals are represented in the collections, it is recognized that not all of the kinds of mammals at any one locality were taken.

For the loan of comparative mammalian material, grateful acknowledgment is made to officials of the following institutions: California Academy of Sciences; Biological Surveys collection of the U. S. National Museum; Provincial Museum, Victoria, B. C.; National Museum of Canada. The promptness of officials of the game commissions of the provinces and territories concerned, in providing permits for collecting also is acknowledged. A part of the funds for field work was made available by a grant from the Kansas University Endowment Association. Elevations above sea level are given in feet. Capitalized color terms refer to those in Ridgway, Color Standards and Color Nomenclature, Washington, D. C., 1912.

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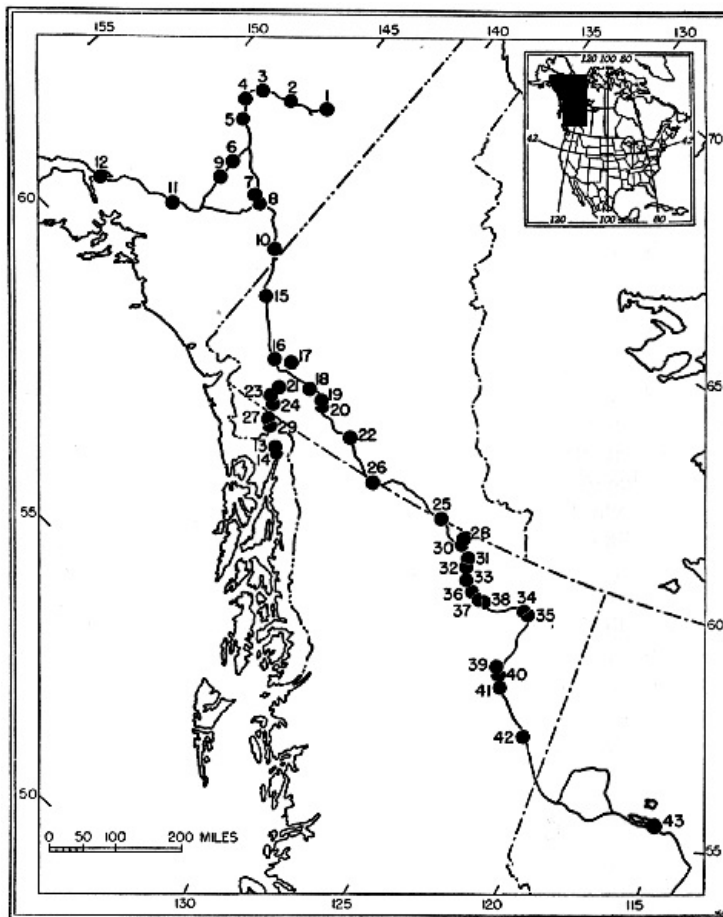


FIG. 1. Map showing localities where J. R. Alcorn collected mammals in Alaska, Yukon Territory, British Columbia, and Alberta, in 1947 and 1948.

COLLECTING LOCALITIES SHOWN IN FIGURE 1.

ALASKA

- |  |  |
|--|--|
| 1. Circle.   | 8. Tok Junction.   |
| 2. Twelve Mile Summit, Steese Highway.                       | 9. Fish Creek, 5 mi. N and 1 mi. E Paxson.               |
| 3. Chatanika River, 14 mi. E and 25 mi. N Fairbanks.         | 10. East side Deadman Lake, 15 mi. SE Northway.          |
| 4. 1 mi. SW Fairbanks.                                       | 11. Glenn Highway, 6 mi. WSW Snowshoe Lake.              |
| 5. North side Salcha River, 25 mi. S and 20 mi. E Fairbanks. | 12. 1 mi. NE Anchorage.                                  |
| 6. Richardson Highway, 32 mi. S and 4 mi. W Big Delta.       | 13. East side Chilkat River, 9 mi. W and 4 mi. N Haines. |
| 7. Yerrick Creek, 21 mi. W and 4 mi. N Tok Junction.         | 14. 1 mi. S Haines.                                      |

YUKON TERRITORY

To avoid undue crowding, or overlapping, of symbols, two or more collecting localities, in some instances, are represented by a single symbol (solid circle) in [figure 1](#).

- |  |       |   |
|--|-------|---|
| 15. Junction Grafe and Edith Creeks.           | 21. { | Marshall Creek, 3 mi. N Dezadeash River.                |
| 16. 6 mi. SW Kluane.                           |       | Champagne, North side Dezadeash Lake.                   |
| 17. East side Aishihik River, 17 mi. N Canyon. | 22. { | SW end Dezadeash Lake.                                  |
|  |       | 5 mi. W Teslin River, 16 mi. S and 53 mi. E Whitehorse. |
|  |       | 2 mi. W Teslin River, 16 mi. S and 56 mi. E Whitehorse. |
|  |       | West side Teslin River, 16 mi. S and                    |

18. 25 mi. NW Whitehorse.  
2 mi. NNW Whitehorse.
19. { McIntyre Creek, 3 mi. NW Whitehorse.  
1 mi. NE Whitehorse.  
½ mi. W Whitehorse.
20. West side Lewes River, 2 mi. S Whitehorse.
- 58 mi. E Whitehorse.  
East side Teslin River, 16 mi. S and 59 mi. E Whitehorse.
23. { Unahini River, 5 mi. N and 1 mi. E Dalton Post.  
Unahini River, 3 mi. N and 1 mi. E Dalton Post.
24. { 1½ mi. E Tatshenshini River, 1½ mi. S and 3 mi. E Dalton Post.

#### BRITISH COLUMBIA

25. 1 mi. NW junction of Irons Creek and Liard River.
26. Screw Creek, 10 mi. S and 50 mi. E Teslin.
27. { 15 mi. NW Kellsall Lake.  
Stonehouse Creek, 5½ mi. W junction Stonehouse Creek and Kellsall River.
28. 14 mi. N Fort Halkett, West side Smith River.
29. West side Mt. Glave, 14 mi. S and 2 mi. E Kellsall Lake.
30. North side Liard River, Fort Halkett.  
Hot Springs, 3 mi. WNW junction Trout River and Liard River.
31. { North side Liard River, ½ mi. W junction Trout River and Liard River.  
¼ mi. S junction Trout River and Liard River.
32. 12 mi. S junction Trout River and Liard River.
33. { NE end Muncho Lake.  
SE end Muncho Lake.
34. 10 mi. W Fort Nelson.
35. North side Muskwa River, 4 mi. W Fort Nelson.
36. South side Toad River, 10 mi. S and 21 mi. E Muncho Lake.
37. Summit Pass, 10 mi. S and 70 mi. W Fort Nelson.
38. North Fork Tetsa River, 4 mi. ENE Summit Pass.
39. East side Minaker River, 1 mi. W Trutch.
40. Buckinghorse River, 94 mi. S Fort Nelson.
41. Beatton River, 115 mi. S Fort Nelson.
42. 5 mi. W and 3 mi. N Fort St. John.

#### ALBERTA

43. Assineau River, 10 mi. E and 1 mi. N Kinuso.

## ACCOUNTS OF SPECIES

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### **Sorex cinereus cinereus Kerr** **Cinereous Shrew**

*Sorex arcticus cinereus* Kerr, Animal Kingdom, p. 206, 1792. (Type from Fort Severn, Ontario, Canada.)

*Sorex cinereus cinereus* Jackson, Jour. Mamm., 6:56, February 9, 1925.

*Specimens examined.*—Total 56, as follows: *Alaska*: Chatanika River, 700 ft., 14 mi. E and 25 mi. N Fairbanks, 3; N side Salcha River, 600 ft., 25 mi. S and 20 mi. E Fairbanks, 10; Yerrick Creek, 21 mi. W and 4 mi. N Tok Junction, 2; E side Deadman Lake, 1800 ft., 15 mi. SE Northway, 1. *Yukon Territory*: 6 mi. SW Kluane, 2550 ft., 1; McIntyre Creek, 2250 ft., 3 mi. NW Whitehorse, 2; W side Lewes River, 2150 ft., 2 mi. S Whitehorse, 2; SW end Dezadeash Lake, 4; 1½ mi. S and 3 mi. E Dalton Post, 2500 ft., 10. *British Columbia*: Stonehouse Creek, 5½ mi. W jct. Stonehouse Creek and Kellsall River, 9; Hot Springs, 3 mi. WNW jct. Trout River and Liard River, 6; ¼ mi. S jct. Trout River and Liard River, 4; 5 mi. W and 3 mi. N Fort St. John, 1. *Alberta*: Assineau River, 1920 ft., 10 mi. E and 1 mi. N Kinuso, 1.

*Remarks.*—Shrews from extreme northwestern British Columbia (Stonehouse Creek) average slightly larger than typical *S. c. cinereus*, especially in length of tail. These animals show definite evidence of intergradation with the larger subspecies, *S. c. streatori*, but are referable to *S. c. cinereus*. The pallor of some shrews from east-central Alaska (Chatanika River and Salcha River) suggests intergradation with the pale *S. c. hollisteri*.

Alcorn found the cinereous shrew at most of his trapping stations. It was captured in mouse

traps baited with "chewed" rolled oats; one was taken in a trap baited with a grasshopper. Rand (1944:35) and Alcorn each found this shrew to be one of the commoner mammals along the Alaska Highway, but Alcorn did not find it to be so abundant as some of the rodents in areas in which he trapped. The cinereous shrew was taken principally in moist woodlands, grassy areas, and adjacent to water. One female taken on July 18 was lactating.

### **Sorex cinereus streator Merriam** **Cinereous Shrew**

*Sorex personatus streator* Merriam, N. Amer. Fauna, 10:62, December 31, 1895. (Type from Yakutat, Alaska.)

*Sorex cinereus streator* Jackson, Jour. Mamm., 6:56, February 9, 1925.

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*Specimens examined.*—Total 19, as follows: *Alaska*: E side Chilkat River, 100 ft., 9 mi. W and 4 mi. N Haines, 10; 1 mi. S Haines, 5 ft., 9.

*Remarks.*—Average and extreme external measurements of the nine adult specimens from 1 mile south of Haines are as follows: Total length, 103 (98-105); tail, 45 (43-46); and condylobasal length, 16.2 (16.0-16.4). Corresponding measurements of an adult specimen (No. 1676, UKMNH) from Sitka, Alaska, are 108, 47, and 16.5. Measurements of ten adult specimens from the Chilkat River, 9 miles west and 4 miles north of Haines, are 100 (91-106), 44 (40-50), 16.0 (15.5-16.5). The slightly smaller average size of the latter specimens indicates a trend toward the smaller *S. c. cinereus*, which occurs farther inland. Skulls of some of the specimens from the Chilkat River have a more slender rostrum than those of the specimens from 1 mile south of Haines, and more nearly resemble *S. c. cinereus* in this respect. Evidently, as indicated by Jackson (1928:54), *S. c. streator* occupies only an extremely narrow strip of mainland in the vicinity of Haines.

### **Sorex cinereus hollisteri Jackson** **Cinereous Shrew**

*Sorex cinereus hollisteri* Jackson, Jour. Mamm., 6:55, February 9, 1925. (Type from St. Michael, Alaska.)

*Specimens examined.*—Two from *Alaska*: 1 mi. NE Anchorage, 100 ft.

*Remarks.*—Both specimens of this pale subspecies were trapped, along with six *Clethrionomys* and one *Mus*, in a grassy area bordered on one side by the road and on the other by a spruce forest. No. 21069, ♂?, taken on August 21, is in molt, with one patch of new fur on the rump and another along the midline of the nape and shoulders.

### **Sorex obscurus obscurus Merriam** **Dusky Shrew**

*Sorex obscurus* Merriam, N. Amer. Fauna, 10:72, December 31, 1895. (Type from near Timber Creek, altitude 8200 ft., Salmon River Mountains, now Lemhi Mountains, 10 miles west of Junction, Lemhi County, Idaho.)

*Specimens examined.*—Total 12, as follows: *Yukon Territory*: McIntyre Creek, 2250 ft., 3 mi. NW Whitehorse, 1; SW end Dezadeash Lake, 2; 1½ mi. S and 3 mi. E Dalton Post, 2500 ft., 1. *British Columbia*: Stonehouse Creek, 5½ mi. W jct. Stonehouse Creek and Kelsall River, 4; W side Mt. Glave, 4000 ft., 14 mi. S and 2 mi. E Kelsall Lake, 1; Hot Springs, 3 mi. WNW jct. Trout River and Liard River, 1. *Alberta*: Assineau River, 1920 ft., 10 mi. E and 1 mi. N Kinuso, 2.

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*Remarks.*—Some of the shrews taken in extreme southwestern Yukon Territory (1½ miles south and 3 miles east of Dalton Post) and in extreme northwestern British Columbia (Stonehouse Creek and Mt. Glave) show evidence of intergradation with the coastal subspecies, *S. o. alascensis*, in length of hind foot. These individuals have a long hind foot (14 and 15); the hind feet of specimens from the other localities listed measure 13 and 14.

Alcorn, like Rand (1944:35), found the dusky shrew to be less common than the cinereous shrew; both were taken in the same trap lines. The dusky shrew was taken at a higher altitude (4000 feet, on Mt. Glave) than the cinereous shrew.

### **Sorex obscurus shumaginensis Merriam** **Dusky Shrew**

*Sorex alascensis shumaginensis* Merriam, Proc. Washington Acad. Sci., 2:18, March 14, 1900. (Type from Popof Island, Shumagin Islands, Alaska.)

*Sorex obscurus shumaginensis* J. A. Allen, Bull. Amer. Mus. Nat. Hist, 16:228, July 12, 1902.

*Specimens examined*.—Total 3, as follows: *Alaska*: 1 mi. NE Anchorage, 100 ft., 1; Glenn Highway, 6 mi. WSW Snowshoe Lake, 2.

*Remarks*.—These three shrews, in comparison with those referred to *S. o. obscurus*, are paler, and the one complete skull has a slightly higher braincase. All of the specimens were obtained in grassy areas adjacent to the roadway.

### ***Sorex obscurus alascensis* Merriam Dusky Shrew**

*Sorex obscurus alascensis* Merriam, N. Amer. Fauna, 10:76, December 31, 1895. (Type from Yakutat, Alaska.)

*Specimens examined*.—Total 22, as follows: *Alaska*: E side Chilkat River, 100 ft., 9 mi. W and 4 mi. N Haines, 12; 1 mi. S Haines, 5 ft., 10.

### ***Sorex palustris navigator* (Baird) Water Shrew**

*Neosorex navigator* Baird, Report Pacific R. R. Survey, 8, pt. 1, Mammals, p. 11, 1857. (Type from near head of Yakima River, Cascade Mountains, Washington.)

*Sorex (Neosorex) palustris navigator* Merriam, N. Amer. Fauna, 10:92, December 31, 1895.

*Specimens examined*.—Total 20, as follows: *Alaska*: E side Chilkat River, 100 ft., 9 mi. W and 4 mi. N Haines, 2. *Yukon Territory*: McIntyre Creek, 2250 ft., 3 mi. NW Whitehorse, 11; SW end Dezadeash Lake, 2; 1½ mi. S and 3 mi. E Dalton Post, 2500 ft., 3. *British Columbia*: Stonehouse Creek, 5½ mi. W jct. Stonehouse Creek and Kelsall River, 2.

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*Remarks*.—Those males with worn teeth seem to have a slightly longer and deeper rostrum with a larger, more inflated cranium than specimens of *S. p. navigator* from Washington, but in other ways resemble typical *S. p. navigator*. An adult male, with slightly worn teeth, from Dezadeash Lake has sagittal and lambdoidal crests. All of the water shrews were taken in July and early August and at the edge of water in traps baited with rolled oats. None of the females had embryos.

### ***Myotis lucifugus lucifugus* (LeConte) Little Brown Bat**

*Vespertilio lucifugus* LeConte, McMurtrie's Cuvier, Animal Kingdom, vol. 1, appendix, p. 431, 1831. (Type from Georgia; probably the LeConte plantation, near Riceboro, Liberty County.)

*Myotis lucifugus* Miller, N. Amer. Fauna, 13:59, October 16, 1897.

*Specimens examined*.—Thirty-eight from *British Columbia*: NE end Muncho Lake.

*Remarks*.—The 38 bats were from a colony of approximately 75 individuals, found on the south side of a house. The paper was loose and had buckled in numerous places allowing room for the bats to ensconce themselves between the paper and outside wall.

### ***Myotis lucifugus alascensis* Miller Little Brown Bat**

*Myotis lucifugus alascensis* Miller, N. Amer. Fauna, 13:63, October 16, 1897. (Type from Sitka, Alaska.)

*Specimens examined*.—One from *British Columbia*: Screw Creek, 10 mi. S and 50 mi. E Teslin.

*Remarks*.—The specimen is considerably darker both above and below than either of two specimens of *M. l. alascensis* from Red Bluff Bay, Alaska. Alcorn searched ten frame buildings in an abandoned camp on the east side of Screw Creek, for bats and found only the one bat. It was above some droppings. No droppings were found in other buildings.

### ***Ochotona collaris* (Nelson) Collared Pika**

*Lagomys collaris* Nelson, Proc. Biol. Soc. Washington, 8:117, December 21, 1893. (Type from near head of Tanana River, about 200 miles south of Fort Yukon, Alaska.)

[*Ochotona*] *collaris* Trouessart, Catal. Mamm. viv. foss., p. 648, 1897.

*Specimens examined.*—Total 14, as follows: *British Columbia*: Stonehouse Creek, 5½ mi. W jct. Stonehouse Creek and Kelsall River, 1; W side Mt. Glave, 4000 ft., 14 mi. S and 2 mi. E Kelsall Lake, 13.

*Remarks.*—In comparing specimens obtained by Alcorn with published descriptions of *O. collaris* in Howell (1924:35), it appeared that measurable geographic variation might be present in this monotypic species. Accordingly, comparisons were made with materials in the Biological Surveys collection of the U. S. National Museum, the Provincial Museum, Victoria, B. C., and the National Museum of Canada. A comparison of specimens of similar ages showed that no subspecific separation is justified although animals from the Yukon Territory, British Columbia, and Northwest Territories, as compared with available material from Alaska, tend to be grayer in color and longer in total length with a slightly larger skull and greater alveolar length of molariform tooth-row in both upper and lower jaws.

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Specimens used for comparison were from the following localities: *Alaska*: Mts. near Eagle (USBS), 15; 200 mi. S Fort Yukon (USBS), 2; Upper Little Delta River, Glacier Creek, Mt. Hayes region (USBS), 1; Glacier Creek, Mt. Hayes region (USBS), 3; Little Delta River, Slate Creek, Red Mt. Camp, Mt. Hayes region (USBS), 1; Muldron Glacier, Mt. McKinley (USBS), 2; Mt. McKinley (USBS), 3; Summit of Chugach Mts., on Richardson Highway, N of Valdez (USBS), 1; Chitina River Glacier (Nat. Mus. Canada), 3. *Yukon Territory*: McMillan Pass, Canol Road, mile 282 (Nat. Mus. Canada), 2; Rose River, Canol Road, mile 95 (Nat. Mus. Canada), 8; Tepee Lake (Nat. Mus. Canada), 1; Conrad (Nat. Mus. Canada), 1; near Teslin Lake (Nat. Mus. Canada), 1. *Northwest Territories*: headwaters of Caracajou River, Canol Road, mile 111E (Nat. Mus. Canada), 1. *British Columbia*: White Mt., Moose Arm, Tagish Lake, Atlin (Prov. Mus., Victoria, B.C.), 2.

### ***Lepus americanus macfarlani* Merriam Varying Hare**

*Lepus americanus macfarlani* Merriam, Proc. Washington Acad. Sci., 2:30, March 14, 1900. (Type from Fort Anderson, near mouth of Anderson River, Mackenzie, Canada.)

*Specimens examined.*—Total 3, as follows: *Yukon Territory*: W side Lewes River, 2150 ft., 2 mi. S Whitehorse, 1; 5 mi. W Teslin River, 2400 ft., 16 mi. S and 53 mi. E Whitehorse, 1. *British Columbia*: 14 mi. N Fort Halkett, W side Smith River, 1.

*Remarks.*—Alcorn reports seeing few hares on his two trips to Alaska. Near the Miniker River, a geologist told him that the numbers of these animals had steadily declined since 1943. One of three seen in a spruce forest on July 8, 1947, near Whitehorse was taken by Alcorn. A young one was captured in a rat trap in a building near the Teslin River on July 5 of the same year.

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### ***Tamiasciurus hudsonicus columbiensis* A. H. Howell Red Squirrel**

*Tamiasciurus hudsonicus columbiensis* A. H. Howell, Proc. Biol. Soc. Washington, 49:135, August 22, 1936. (Type from Raspberry Creek, about 30 mi. SE of Telegraph Creek, northern British Columbia.)

*Specimens examined.*—Total 18, as follows: *Yukon Territory*: McIntyre Creek, 2250 ft., 3 mi. NW Whitehorse, 1; W side Lewes River, 2150 ft., 2 mi. SW Whitehorse, 1; 2 mi. W Teslin River, 2400 ft., 16 mi. E Whitehorse, 1. *British Columbia*: 1 mi. NW jct. Irons Creek and Liard River, 1; ¼ mi. S jct. Trout River and Liard River, 3; S side Toad River, 10 mi. S and 21 mi. E Muncho Lake, 3; Summit Pass, 4200 ft., 10 mi. S and 70 mi. W Fort Nelson, 8.

*Remarks.*—Rand (1944:42) experienced difficulty in assigning subspecific names to red squirrels taken along the Alaska Highway in northern British Columbia. Some variability as found by Rand is noted in adults taken by Alcorn in this area. All of the specimens assigned to *T. h. columbiensis* have a darker tail and more tawny feet than *T. h. preblei*. The average of skulls of adults is smaller than the skull of an adult of *T. h. preblei* from Yerrick Creek, Alaska.

Alcorn obtained most of the squirrels in rat traps and steel traps, using "chewed" rolled oats as well as bits of fish and mouse bodies as bait.

### ***Tamiasciurus hudsonicus petulans* (Osgood) Red Squirrel**

*Sciurus hudsonicus petulans* Osgood, N. Amer. Fauna, 19:27, October 6, 1900. (Type from Glacier, White Pass, Alaska.)

[*Tamiasciurus*]. *hudsonicus petulans* A. H. Howell, Proc. Biol. Soc. Washington, 49:136, August 22, 1936.

*Specimens examined.*—Total 7, as follows: *Alaska*: 1 mi. S Haines, 5 ft., 2. *Yukon Territory*: SW end Dezadeash Lake, 1; 1½ mi. E Tatshenshini River, 1½ mi. S and 3 mi. E Dalton Post, 4.

*Remarks.*—Specimens from extreme southwestern Yukon Territory appear to be referable to

this subspecies. The one adult female (skull only, with body measurements) from the southwestern end of Dezadeash Lake has a shorter skull than does any adult female of *T. h. columbiensis*. No skins of adults are in the series, but the skins of three subadults have darker upper parts, a darker tail and less olivaceous sides than *T. h. columbiensis*.

### **Tamiasciurus hudsonicus preblei A. H. Howell** **Red Squirrel**

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*Tamiasciurus hudsonicus preblei* A. H. Howell, Proc. Biol. Soc. Washington, 49:133, August 22, 1936. (Type from Fort Simpson, Mackenzie District, Northwestern Territories.)

*Specimens examined*.—Total 3, as follows: *Alaska*: Chatanika River, 700 ft., 14 mi. E and 25 mi. N Fairbanks, 1; N side Salcha River, 600 ft., 25 mi. S and 20 mi. E Fairbanks, 1; Yerrick Creek, 21 mi. W and 4 mi. N Tok Junction, 1.

*Remarks*.—In comparison with specimens of *T. h. hudsonicus* from Iskwasum Lake, District of the Pas, Manitoba, the squirrel from Yerrick Creek, an adult female, is larger and paler on the upper parts and tail.

The squirrel taken at Yerrick Creek was captured in a rat trap; Alcorn found these animals to be "fairly common" in that area. He obtained no evidence that the natives use them for food.

### **Marmota monax ochracea Swarth** **Woodchuck**

*Marmota ochracea* Swarth, Univ. California Publ. Zoöl., 7:203, February 18, 1911. (Type from Forty-mile Creek, Alaska.)

*Marmota monax ochracea* A. H. Howell, N. Amer. Fauna, 37:34, April 7, 1915.

*Specimens examined*.—Total 3, as follows: *British Columbia*: Hot Springs, 3 mi. WNW jct. Trout River and Liard River, 1; ¼ mi. S jct. Trout River and Liard River, 2.

### **Citellus parryii plesius (Osgood)** **Parry Ground Squirrel**

*Spermophilus empetra plesius* Osgood, N. Amer. Fauna, 19:29, October 6, 1900. (Type from Bennett City, head of Lake Bennett, British Columbia.)

*Citellus parryii plesius* A. H. Howell, N. Amer. Fauna, 56:97, May 18, 1938.

*Specimens examined*.—Total 42, as follows: *Alaska*: Richardson Highway, 2000 ft., 32 mi. S and 4 mi. W Big Delta, 5. *Yukon Territory*: 6 mi. SW Kluane, 2550 ft., 1; McIntyre Creek, 2250 ft., 3 mi. NW Whitehorse, 1; 2 mi. NNW Whitehorse, 2100 ft., 1; 1 mi. NE Whitehorse, 1; ½ mi. W Whitehorse, 2150 ft., 1; SW end Dezadeash Lake, 1; 2 mi. W Teslin River, 2400 ft., 16 mi. S and 56 mi. E Whitehorse, 7; 1½ mi. E Tatshenshini River, 1½ mi. S and 3 mi. E Dalton Post, 3. *British Columbia*: Stonehouse Creek, 5½ mi. W jct. Stonehouse Creek and Kelsall River, 14; W side Mt. Glave, 4000 ft., 14 mi. S and 2 mi. E Kelsall Lake, 7.

*Remarks*.—The specimens vary much in color; most color variation is the result of wear and fading. In pallor of coloration the specimens taken on August 16 along the Richardson Highway, 32 miles south and 4 miles west of Big Delta, Alaska, show some resemblance to *C. p. ablusus*, which occurs to the westward, although in other diagnostic characters these specimens are typically *C. p. plesius*.

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Specimens in early stages of molt were taken on July 3, 4, and 14; another specimen in an advanced stage of molt was obtained on July 10. One melanistic individual was taken one mile northeast of Whitehorse on July 11.

Alcorn found these ground squirrels locally abundant, especially in the vicinity of Whitehorse in Yukon Territory. A large population was observed along the highway west of the Teslin River; animals were seen for several miles along the road, principally in open coniferous forests where there was little or no underbrush. Alcorn caught several animals near the city dump at Whitehorse. Along the Richardson Highway he observed these ground squirrels almost continuously for approximately ten miles. He comments that the animals appeared to be more numerous in the man-cleared areas along the highway than in "unmolested areas farther back from the highway." Specimens were taken with collecting gun and in rat traps baited with "chewed" rolled oats.

### **Eutamias minimus borealis (J. A. Allen)** **Least Chipmunk**

*Tamias asiaticus borealis* J. A. Allen, Monogr. N. Amer. Rodentia, p. 793, August, 1877. (Type from



*Eutamias minimus borealis* A. H. Howell, Jour. Mamm., 3:183, August 4, 1922.

*Specimens examined*.—Total 10, as follows: *British Columbia*: N side Muskwa River, 1200 ft., 4 mi. W Fort Nelson, 1; E side Minaker River, 1 mi. W Trutch, 5; Beaton River, 115 mi. S Fort Nelson, 1; 5 mi. W. and 3 mi. N Fort St. John, 1. *Alberta*: Assineau River, 1920 ft., 10 mi. E and 1 mi. N Kinuso, 2.

*Remarks*.—Specimens with worn pelage are conspicuously paler and grayer than those in fresh pelage. Chipmunks in early stages of molt with fresh pelage extending posteriorly to the middle of the dorsal part of the back were taken on June 19, 20, and 22; others in fresh pelage above, except for the hind quarters, were taken on June 15 and on September 2.

Alcorn found this species nowhere abundant; for example, in 187 museum special traps set near Charlie Lake, 5 miles west and 3 miles north of Fort St. John, in British Columbia, he took only one chipmunk.

### **Eutamias minimus caniceps Osgood** **Least Chipmunk**

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*Eutamias caniceps* Osgood, N. Amer. Fauna, 19:28, October 6, 1900. (Type from Lake Lebarge, Yukon Territory.)

*Eutamias minimus caniceps* A. H. Howell, Jour. Mamm., 3:184, August 4, 1922.

*Specimens examined*.—Total 36, as follows: *Yukon Territory*: 6 mi. SW Kluane, 2550 ft., 2; McIntyre Creek, 2250 ft., 3 mi. NW Whitehorse, 3; 2 mi. NNW Whitehorse, 2100 ft., 1; W side Lewes River, 2150 ft., 2 mi. S Whitehorse, 1; SW end Dezadeash Lake, 10; 5 mi. W Teslin River, 2400 ft., 16 mi. S and 53 mi. E Whitehorse, 1; W side Teslin River, 16 mi. S and 58 mi. E Whitehorse, 2; 1½ mi. S and 3 mi. E Dalton Post, 2500 ft., 5. *British Columbia*: 1 mi. NW jct. Irons Creek and Liard River, 2; S side Toad River, 10 mi. S and 21 mi. E Muncho Lake, 6; Summit Pass, 4200 ft., 10 mi. S and 70 mi. W Fort Nelson, 3.

*Remarks*.—Some of the specimens taken between Summit Pass and Toad River show evidence of intergradation between the paler and grayer *E. m. caniceps* and the brighter and browner *E. m. borealis*. Rand (1944:41) also found evidence of intergradation between these two subspecies in this area.

Along the highway, Alcorn found this species to be somewhat more abundant in the Yukon Territory than in British Columbia. He often found the animals occupying abandoned road camps; seemingly they were more numerous in these areas than in undisturbed natural habitat.

### **Glaucomys sabrinus zaphaeus (Osgood)** **Flying Squirrel**

*Sciuropterus alpinus zaphaeus* Osgood, Proc. Biol. Soc. Washington, 18:133, April 18, 1905. (Type from Helm Bay, Cleveland Peninsula, southeastern Alaska.)

*Glaucomys sabrinus zaphaeus* A. H. Howell, N. Amer. Fauna, 44:43, June 13, 1918.

*Specimens examined*.—One from *Yukon Territory*: 1½ mi. S and 3 mi. E Dalton Post, 2500 ft.

*Remarks*.—Although comparative material is not available at this writing, descriptions in the literature indicate that this single adult female belongs to the coastal form, *G. s. zaphaeus*. In both color and in cranial and external measurements, this specimen appears to agree closely with descriptions given by Howell (1918:43) and by Cowan (1937:78 and 82), although its measurements are also in the range of those given for *G. s. alpinus* by Cowan (*loc. cit.*). It may be pointed out that Swarth (1936:402) regarded a specimen from 15 miles south of Atlin, British Columbia, as *G. s. alpinus*.

Measurements of Alcorn's specimen are as follows: total length, 331; tail, 143; hind foot, 42; ear from notch, 23; greatest length of skull, 41.7; zygomatic breadth, 25.7; mastoid breadth, 21.7; length of nasals, 12.2; length maxillary tooth-row, 8.2; interorbital constriction, 8.2; and postorbital constriction, 9.0.

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### **Castor canadensis sagittatus Benson** **Beaver**

*Castor canadensis sagittatus* Benson, Jour. Mamm., 14:320, November 13, 1933. (Type from Indianpoint Creek, 3200 ft., 16 mi. NE Barkerville, British Columbia.)

*Specimens examined*.—Two from *British Columbia*: Fort Halkett, N side Liard River.

*Remarks*.—Two beaver skulls obtained by Alcorn from trapper Johnny Pie appear to be of this subspecies. Anderson (1947:133) records this subspecies from the Liard River, in the area from which these specimens were taken. The trapper told Alcorn that he shot these two beavers in the winter of 1947-48 and hung the skulls in a tree.

## **Peromyscus maniculatus algidus Osgood** **White-footed Mouse**

*Peromyscus maniculatus algidus* Osgood, N. Amer. Fauna, No. 28:56, April 17, 1909. (Type from head of Lake Bennett, site of old Bennett City, British Columbia.)

*Specimens examined.*—Total 93, as follows: *Alaska*: E side Chilkat River, 100 ft., 9 mi. W and 4 mi. N Haines, 20; 1 mi. W Haines, 5 ft., 7. *Yukon Territory*: 6 mi. SW Kluane, 2550 ft., 10; McIntyre Creek, 2250 ft., 3 mi. NW Whitehorse, 6; 2 mi. NNW Whitehorse, 2100 ft., 2; W side Lewes River, 2150 ft., 2 mi. S Whitehorse, 16; SW end Dezadeash Lake, 9; 1½ mi. S and 3 mi. E Dalton Post, 15. *British Columbia*: Stonehouse Creek, 5½ mi. W jct. Stonehouse Creek and Kelsall River, 8.

*Remarks.*—Specimens from the localities listed above are in the geographic range of *P. m. algidus* as outlined by Anderson (1947: 136). Specimens from the vicinity of Haines, Alaska, are slightly darker indicating intergradation with *P. m. hylaeus*; Osgood (1909a: 54 and 56) also noted that intergradation between *P. m. algidus* and *P. m. hylaeus* occurs in this area.

## **Peromyscus maniculatus borealis Mearns** **White-footed Mouse**

*Peromyscus maniculatus borealis* Mearns, Proc. Biol. Soc. Washington, 24:102, May 15, 1911. Substitute name for *P. m. arcticus* Mearns. (Type from Fort Simpson, Mackenzie, Canada.)

*Specimens examined.*—Total 214, as follows: *Yukon Territory*: 2 mi. W Teslin River, 2400 ft., 16 mi. S and 56 mi. E Whitehorse, 8; W side Teslin River, 2300 ft., 16 mi. S and 58 mi. E Whitehorse, 24; E side Teslin River, 2300 ft., 16 mi. S and 59 mi. E Whitehorse, 7. *British Columbia*: 1 mi. NW jct. Irons Creek and Liard River, 10; Hot Springs, 3 mi. WNW jct. Trout River and Liard River, 6; N side Liard River, ½ mi. W jct. Trout River and Liard River, 13; ¼ mi. S jct. Trout River and Liard River, 20; SE end Muncho Lake, 5; S side Toad River, 10 mi. S and 21 mi. E Muncho Lake, 45; N side Muskwa River, 1200 ft., 4 mi. W Fort Nelson, 9; North Fork Tetsa River, 3900 ft., 4 mi. ENE Summit Pass, 13; Summit Pass, 4200 ft., 10 mi. S and 70 mi. W Fort Nelson, 17; E side Minaker River, 1 mi. W Trutch, 18; Beaton River, 115 mi. S Fort Nelson, 2; 5 mi. W and 3 mi. N Fort St. John, 7. *Alberta*: Assineau River, 1920 ft., 10 mi. E and 1 mi. N Kinuso, 10.

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*Remarks.*—Specimens from 2 miles west of Teslin River resemble *P. m. borealis* more than *P. m. algidus* both in size of skull and in color, although I find it difficult to distinguish the specimens by color.

Alcorn, like Rand (1945:43), found the mouse in almost every habitat along the Alaska Highway. On the east side of the Minaker River, one mile west of Trutch, Alcorn took 26 *Peromyscus* and four *Microtus* in 70 museum special traps baited with chewed rolled oats, set in a grassy area where there were birches and clumps of willows. *Peromyscus* was usually abundant in old construction camps along the highway; on July 27 in 50 traps set under abandoned buildings at Summit Pass, Alcorn took 21 *Peromyscus*. Apparently, as Swarth (1936:402) notes, the white-footed mouse makes itself at home in such buildings, and local populations probably increase as a result of the artificial environment that provides favorable conditions for existence.

## **Neotoma cinerea drummondii (Richardson)** **Bushy-tailed Wood Rat**

*Myoxus drummondii* Richardson, Zool. Jour., 3:517, 1828. (Type probably from near Jasper House, Alberta, Canada.)

*Neotoma cinerea drummondii* Merriam, Proc. Biol. Soc. Washington, 7:25, April 13, 1892.

*Specimens examined.*—Total 4, as follows: *British Columbia*: Summit Pass, 4500 ft., 10 mi. S and 70 mi. W of Fort Nelson, 1; 5 mi. W and 3 mi. N Fort St. John, 3.

*Remarks.*—Wood rats were obtained at only two locations, Alcorn's field notes indicating that the animals were rare and spotty in distribution. Rand (1944:44) comments that the rats were "scarce north of the Lower Liard Crossing."

At both localities where specimens were taken, Alcorn noted first their characteristic droppings. At Summit Pass, droppings were found in a rock slide at the upper limit of timber line; one rat was taken. At the trapping station five miles west and three miles north of Fort St. John, droppings were found in and under an old abandoned building; four young (two prepared) and one adult were obtained.

## **Synaptomys borealis dalli Merriam** **Northern Bog Lemming**

*Synaptomys (Mictomys) dalli* Merriam, Proc. Biol. Soc. Washington, 10:62, March 19, 1896. (Type from Nulato, Alaska.)

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*Specimens examined.*—Total 6, as follows: *Alaska*: E side Deadman Lake, 1800 ft., 15 mi. SE Northway, 1. *Yukon Territory*: McIntyre Creek, 2250 ft., 3 mi. NW Whitehorse, 5.

*Remarks.*—The northern bog lemming is evidently not generally distributed along the Alaska Highway but may be locally numerous in cover of grass and sedge especially in marsh and bog habitat. Five specimens were obtained in a grassy area 30 feet wide by 60 feet long which was approximately 50 feet from McIntyre Creek in the Yukon Territory. In 22 mouse traps set the first night in this locality, three *Synaptomys*, six *Microtus* and one *Sorex* were taken. One additional *Synaptomys* was taken on each of the following two nights in the same area. At Deadman Lake, Alaska, one *Synaptomys* was taken in heavy sedge bordering a small pond.

### **Clethrionomys rutilus dawsoni (Merriam) Dawson Red-backed Mouse**

*Evotomys dawsoni* Merriam, Amer. Nat., 22:650, July, 1888. (Type from Finlayson River, a northern source of the Liard River, lat. 61° 30' N, long. 129° 30' W, Yukon, Canada.)

*Clethrionomys rutilus dawsoni* Rausch, Jour. Washington Acad. Sci., 40:135, April 21, 1950.

*Specimens examined.*—Total 126, as follows: *Alaska*: Chatanika River, 700 ft., 14 mi. E and 25 mi. N Fairbanks, 17; 1 mi. SW Fairbanks, 440 ft., 1; N side Salcha River, 600 ft., 25 mi. S and 20 mi. E Fairbanks, 15; 25 mi. S and 20 mi. E Fairbanks, 3; Yerrick Creek, 21 mi. W and 4 mi. N Tok Junction, 32; Tok Junction, 1600 ft., 1; E side Deadman Lake, 1800 ft., 15 mi. SE Northway, 9; 1 mi. NE Anchorage, 100 ft., 9; Glenn Highway, 6 mi. WSW Snowshoe Lake, 1; E side Chilkat River, 100 ft., 9 mi. W and 4 mi. N Haines, 2; 1 mi. S Haines, 5 ft., 2. *Yukon Territory*: Jct. Grafe Creek and Edith Creek, 2; 6 mi. SW Kluane, 2250 ft., 4; 2 mi. NNW Whitehorse, 2100 ft., 2; W side Lewes River, 2150 ft., 2 mi. S Whitehorse, 6; SW end Desadeash Lake, 15. *British Columbia*: Stonehouse Creek, 5½ mi. W jct. Stonehouse Creek and Kelsall River, 1; S side Toad River, 10 mi. S and 21 mi. E Muncho Lake, 2; Summit Pass, 4500 ft., 10 mi. S and 70 mi. W Fort Nelson, 2.

*Remarks.*—Specimens from one mile northeast of Anchorage show little tendency toward *C. r. orca* from the Prince William Sound area (see Orr, 1945:73). One specimen from this locality is slightly darker than the others.

Red-backed mice were numerous in most localities where Alcorn trapped. A number of specimens were taken adjacent to and within abandoned road camps, where second growth vegetation was rank. As in the case of *C. gapperi*, he found *C. rutilus* in varied habitats.

### **Clethrionomys gapperi athabascaae (Preble) Red-backed Mouse**

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*Evotomys gapperi athabascaae* Preble, N. Amer. Fauna, 27:178, October 26, 1908. (Type from Fort Smith, Slave Lake, Mackenzie District, Northwest Territories, Canada.)

*Clethrionomys gapperi athabascaae* Harper, Jour. Mamm., 13:28, February 9, 1932.

*Specimens examined.*—Total 14, as follows: *British Columbia*: N side Muska River, 1200 ft., 4 mi. W Fort Nelson, 1; E side Minaker River, 1 mi. W Trutch, 3; 5 mi. W and 3 mi. N Fort St. John, 4. *Alberta*: Assineau River, 1920 ft., 10 mi. E and 1 mi. N Kinuso, 6.

*Remarks.*—These red-backed mice were taken in various habitats: grassy areas in aspen and poplar forest, heavy spruce forest with no undergrowth excepting lichens and moss, thick underbrush in river flood plain, and at the site of an old sawmill. The northwestern distribution of this species along the Alaska Highway as found by Alcorn is approximately the same as that found by Rand (1944:44).

### **Ondatra zibethicus spatulatus (Osgood) Muskrat**

*Fiber spatulatus* Osgood, N. Amer. Fauna, 19:36, October 6, 1900. (Type from Lake Marsh, Yukon, Canada.)

*Ondatra zibethica spatulata* Miller, N. Amer. Land [Mamm.](#) 1911, p. 231, December 31, 1912.

*Specimens examined.*—Total 2, as follows: *Alaska*: N side Salcha River, 600 ft., 25 mi. S and 20 mi. E Fairbanks, 1; E side Deadman Lake, 1800 ft., 15 mi. NE Northway, 1.

*Remarks.*—One muskrat was shot in an old beaver pond on the north side of the Salcha River. A skull from a carcass, that had been left by a trapper the previous winter, was obtained at Deadman Lake.

### **Phenacomys intermedius mackenzii Preble**

## Lemming Mouse

*Phenacomys mackenzii* Preble, Proc. Biol. Soc. Washington, 15:182, August 6, 1902. (Type from Fort Smith, Slave River, Mackenzie, Canada.)

*Phenacomys intermedius mackenzii* Crowe, Bull. Amer. Mus. Nat. Hist., 80:403, February 4, 1943.

*Specimen examined.*—One from *Yukon Territory*: SE end Dezadeash Lake.

*Remarks.*—A subadult taken only a few miles from the Alaskan border in Yukon Territory constitutes an extension of the known range of this species to the northwest. The mouse is evidently rare or irregular in its distribution since Alcorn did considerable trapping in the area from which only one was taken.

## Microtus pennsylvanicus Pennsylvania Meadow Mouse

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The Pennsylvania meadow mouse is an abundant mammal along the Alaska Highway. Alcorn obtained specimens at most of his trapping stations, frequently in company with *Microtus oeconomus* at the more northern localities. A preferred habitat was grassy areas and willow clumps along streams or at the edges of lakes. The best catches were made along well-used runways, especially where there were piles of cut grass. These runways were used also by *Clethrionomys* and other small animals. Specimens of *M. pennsylvanicus* were frequently taken in the daytime; one was taken on June 29 as it was swimming at the edge of a small lake near the junction of the Liard River and Irons Creek in British Columbia.

Lacking sufficient comparative material in the past, most workers have considered that *M. pennsylvanicus* ranges without appreciable geographic variation throughout most of northwestern Canada and Alaska, where it has been referred to the subspecies, *M. p. drummondii*. Dale (1940), in studying collections made in British Columbia and southeastern Alaska, found evidence of geographic variation and recognized two new subspecies; thus he not only pointed out geographically variable characters but reduced the size of the range ascribed to *M. p. drummondii*. A later work by Rand (1943) considered the northwestern populations of *M. pennsylvanicus* as being too variable to show distinctive groupings. The large collection made by Alcorn offers evidence that other separable subspecies with constant characters are present. Study of this material indicates the presence of two unnamed subspecies, which are named and described as follows:

### Microtus pennsylvanicus alcorni new subspecies

*Type.*—Female, adult, skin with skull, No. 21552, Univ. Kansas, Mus. Nat. Hist., 6 mi. SW Kluane, 2550 feet elevation, Yukon Territory, Canada; 24 August 1947; obtained by J. R. Alcorn; original No. 5240.

*Range.*—Extreme southwestern Yukon Territory and adjacent parts of Alaska as far south as Haines, as far north as Northway, and as far west along the Alaskan coast as Anchorage and Tyonek.

*Diagnosis.*—Size large (see [measurements](#)); color of upper parts near (*I*) Brussels Brown; skull noticeably ridged; zygomatic arches heavy, rounded and relatively short; rostrum heavy; auditory bullae not greatly expanded; maxillary teeth relatively heavy and low-crowned.

*Comparisons.*—From *M. p. drummondii* (specimens from vicinity of Whitehorse, Y. T., Trutch, B. C., and Kinuso, Alberta), *M. p. alcorni* differs as follows: Averaging larger in all measurements taken except lengths of tail and hind foot, which are the same; color of upper parts slightly paler and more gray and less brown; underparts paler; zygomatic arches heavier, rounder and shorter; skull proportionately more massive, except the auditory bullae which are less inflated; maxillary teeth heavier and lower-crowned.

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From *M. p. rubidus* (specimens from Atlin, B. C.), *M. p. alcorni* differs as follows: Averaging larger in all cranial measurements taken except length of the maxillary tooth-row which is the same; color of upperparts more gray and less brown; underparts darker; skull longer with longer nasals and heavier zygomatic arches; skull of adult more heavily ridged.

From *M. p. admiraltiae* (specimens from Admiralty Island), *M. p. alcorni* differs as follows: Averaging larger in all measurements taken; color of upper parts more gray and less brown, underparts darker.

*Remarks.*—*Microtus p. alcorni* is a well-defined subspecies differing markedly from adjacent subspecies by a larger and heavier skull and broader, more rounded and heavier zygomatic arches. Characters examined in the specimens available are constant. Specimens from Haines are slightly darker than those from Kluane. An adult (No. 21534, UKMNH) from Northway has slightly more inflated auditory bullae than those from Kluane. An adult from Tyonek (No. 986, UKMNH) has richer brown upper parts. Measurements of this specimen resemble closely those of animals from Kluane, although the rostrum is noticeably heavier.

Several adults were available from many of the localities of occurrence of *M. p. alcorni*. At the locality 9 miles west and 4 miles north of Haines, there were four which were considered to be old adults. These four had larger measurements than others considered to be fully adult. In addition, the skulls were larger and more rugged. There were occasionally old adults in other

series. For the sake of uniformity, I have not considered these aforementioned old adults in the comparative studies of younger adults. This subspecies is named in honor of J(oseph). R(aymond). Alcorn, the collector.

*Measurements.*—Average and extreme measurements of six adults of both sexes of *M. p. alcorni* from the type locality are as follows: Total length, 162 (149-172); length of tail, 43 (39-45); condylobasal length, 26.3 (25.6-26.3); basal length, 25.2 (24.2-25.9); length of nasals, 7.3 (6.9-7.5); zygomatic breadth, 15.3 (14.9-15.6); breadth across auditory bullae, 12.8 (12.4-13.2); alveolar length of upper molariform tooth-row, 6.4 (6.1-6.7). Seven adults of both sexes from 9 miles west and 4 miles north of Haines have the following measurements: 158 (148-165); 45 (41-50); 26.1 (25.5-26.8); 24.8 (24.4-25.7); 7.3 (7.0-7.6); 14.9 (14.3-15.1); 12.2 (11.8-13.0); 6.2 (5.9-6.3).

*Specimens examined.*—Total 65, distributed by localities of capture as follows and deposited in the University of Kansas Museum of Natural History: *Alaska*: E side Deadman Lake, 1800 ft., 15 mi. SE Northway, 7; 1 mi. NE Anchorage, 100 ft., 1; Tyonek, Cook's Inlet, 1; E side Chilkat River, 100 ft., 9 mi. W and 4 mi. N Haines, 37. *Yukon Territory*: 6 mi. SW Kluane, 2250 ft., 14; SW end Dezadeash Lake, 2; 1½ mi. S and 3 mi. E Dalton Post, 2500 ft., 3. Specimens reported by Osgood (1904:35) have not been seen by me but may be of this subspecies, and are tentatively referred to it. These are from the following localities in Alaska: Lake Clark near Keejik, near the mouth of the Chulitna River, and Kakhtul River near the junction with the Malchatna.

## **Microtus pennsylvanicus tananaensis new subspecies**

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*Type.*—Female, adult, skin with skull, No. 21509, Univ. Kansas, Mus. Nat. Hist., Yerrick Creek, 21 mi. W and 4 mi. N Tok Junction, Alaska; 20 July 1947; obtained by J. R. Alcorn; original No. 5023.

*Range.*—East-central Alaska as far south as Tok Junction, as far west as Mt. McKinley, as far north as Fairbanks and as far east as Eagle.

*Diagnosis.*—Size medium (see [measurements](#)); color of upper parts dark, near (*n*) Prout's Brown, with some individual variation; skull with zygomatic arches moderately heavy and wide; nasals relatively long; auditory bullae inflated.

*Comparisons.*—From *M. p. alcorni* (see [description](#)), *M. p. tananaensis* differs as follows: Smaller in all measurements taken except alveolar length of upper molariform tooth-row which is the same; color of upper parts darker, more richly brown and less gray; underparts darker; zygomatic arches less massive and narrower; auditory bullae larger and more inflated.

From *M. p. drummondii* (see [comparisons](#) under *M. p. alcorni*), *M. p. tananaensis* differs as follows: Larger in all cranial measurements taken except nasal length which is the same; color everywhere slightly darker; wider across zygomatic arches; zygoma thicker; nasals, relative to length of skull, shorter; auditory bullae larger and more inflated.

*Remarks.*—For the most part the material available of this subspecies consisted of subadults; however, comparison of adults with those of adjacent subspecies indicates that this subspecies can be distinguished by color of the upper parts, cranial measurements, and size of the zygomatic arches and the auditory bullae. Specimens from 14 miles east and 25 miles north of Fairbanks are especially dark. One subadult (No. 21467, UKMNH) has blackish hair on the feet and a blackish unicolored tail. No. 241696, USBS, an old adult female, from Ketchumstock, is larger.

The specimens referred to this subspecies, vary some in color, but vary less in cranial characters. Additional adults are needed from western Alaska to determine how far this subspecies extends down the valley of the Yukon River. Bailey (1900:24) lists one specimen from Nulato, as *drummondii*; I have not seen it but on geographic grounds tentatively assign it to *M. p. tananaensis*.

*Measurements.*—Measurements of the type specimen are as follows: Total length, 160; length of tail, 40; condylobasal length, 26.0; basal length, 24.9; length of nasals, 6.7; zygomatic breadth, 14.5; breadth across auditory bullae, 12.5; alveolar length of upper molariform tooth-row, 6.2. Two specimens from Eagle (Nos. 128295 and 128320, USBS) have the following measurements respectively: 161, 154; 37.5, 36; 25.3, 25.4; 23.8, 23.9; 6.5, 6.8; 14.5, 14.6; 11.9, 12.3; 6.1, 6.1.

*Specimens examined.*—Total 34, distributed by localities of capture as follows and unless otherwise stated in the University of Kansas Museum of Natural History: *Alaska*: Near Buster Creek, Chatanika River, 1 (USBS); Chatanika River, 700 ft., 14 mi. E and 25 mi. N Fairbanks, 4; Fairbanks, 2 (USBS); head of Glacier Creek, Mt. McKinley, 1 (USBS); Moose Creek, Mt. McKinley, 2 (USBS); head of Toklat River, 1 (USBS); Eagle, 4 (USBS); Yerrick Creek, 21 mi. W and 4 mi. N Tok Junction, 13; Ketchumstock, 2 (USBS); 9 mi. from mouth of Robertson River, 1 (USBS); Tanana, 3 (USBS); Tanana Crossing, 1 (USBS). Osgood (1909b:24) records specimens which may be of this subspecies from the following localities in Alaska: Charlie Creek, Circle, 20 miles above Circle, 40 miles above Circle, Nation Creek, and Seventy Mile Creek. Osgood (1900:36) also records specimens from near Fort Yukon. None of these has been seen by me; they are only tentatively assigned to this subspecies.

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## **Microtus pennsylvanicus drummondii (Audubon and Bachman)**

*Arvicola drummondii* Audubon and Bachman, *Quadr. North Amer.*, 3:166, 1854. (Type, by subsequent designation, from vicinity of Jasper House, Alberta.)

*Microtus pennsylvanicus drummondii* Hollister, *Canadian Alp. Jour.*, Special Number, p. 23, February 17, 1913.

*Specimens examined*.—Total 93, as follows: *Yukon Territory*: McIntyre Creek, 2250 ft., 3 mi. NW Whitehorse, 26; W side Lewes River, 2150 ft., 2 mi. S Whitehorse, 4; 5 mi. W Teslin River, 2400 ft., 16 mi. S and 53 mi. E Whitehorse, 7; E side Teslin River, 2300 ft., 16 mi. S and 59 mi. E Whitehorse, 1. *British Columbia*: 1 mi. NW jct. Irons Creek and Liard River, 8; Hot Springs, 3 mi. WNW jct. Trout River and Liard River, 3; N side Liard River, ½ mi. W jct. Liard River and Trout River, 1; ¼ mi. S jct. Trout River and Liard River, 13; S side Toad River, 10 mi. S and 21 mi. E Muncho Lake, 2; Summit Pass, 4200 ft., 10 mi. S and 70 mi. W Fort Nelson, 2; E side Minaker River, 1 mi. W Trutch, 19; Beatton River, 115 mi. S Fort Nelson, 1; 5 mi. W and 3 mi. N Fort St. John, 2. *Alberta*: Assineau River, 1920 ft., 10 mi. E and 1 mi. N Kinuso, 4.

*Remarks*.—Adults among the specimens listed above vary but little; one female from Assineau River in Alberta is notably more reddish than others taken elsewhere.

Average and extreme measurements of nine adults of both sexes of *M. p. drummondii* from E side Minaker River, 1 mi. W Trutch, British Columbia, are as follows: Total length, 157 (148-165); length of tail, 42 (37-46); condylobasal length, 25.1 (24.7-26.0); basal length, 24.2 (23.4-25.0); length of nasals, 6.8 (6.4-7.2); zygomatic breadth, 14.4 (13.9-14.7); breadth across auditory bullae, 12.4 (12.0-12.7); alveolar length of upper molariform tooth-row, 6.1 (6.0-6.2); Nine adults of both sexes from McIntyre Creek, 2250 ft., 3 miles northwest of Whitehorse, Yukon Territory, have the following measurements: 153 (147-168); 40 (33-47); 24.9 (24.2-25.5); 24.0 (23.6-24.6); 6.6 (6.2-7.2); 14.4 (13.9-15.1); 12.1 (11.7-12.5); 6.1 (6.0-6.2).

### ***Microtus cf. cantator* Anderson Yukon Singing Mouse**

*Microtus cantator* Anderson, Nat. Mus. Canada, Bull. No. 102, Biol. Ser. No. 31:161, [for 1946], January 24, 1947. (Type "taken in tundra-slide above timber-line on mountain top near Tepee Lake on north slope of St. Elias Range," Yukon Territory, Canada.)

*Specimen examined*.—One from *Alaska*: Fish Creek, 3400 ft., 5 mi. N and 1 mi. E Paxson.

*Remarks*.—The single adult male, obtained by Alcorn, has been compared by Dr. Henry W. Setzer with specimens of *Microtus muriei* Nelson, *M. miurus miurus* Osgood, and *M. m. oreas* Osgood in the United States National Museum. He reports that the specimen is related most closely to *M. miurus* but exhibits characters by which it is, at least, subspecifically distinct from these two forms of this species. Three specimens of *M. andersoni* Rand and one of *M. cantator* Anderson, borrowed from the National Museum of Canada are less mature than the specimen in question. Even so, the male from Fish Creek is less gray than *M. andersoni* and as seen from measurements of the type, an adult male (Rand, 1945:42), is larger with longer tail and has a shorter and narrower skull and is judged to be taxonomically separable. *M. cantator* was named from two specimens; both the paratype (seen by me) and seemingly the type are too young to show clearly subspecific characters. Alcorn's specimen is tentatively referred to *M. cantator* until some adult topotypes can be obtained. Measurements of the male, No. 21539, from Fish Creek, are: Total length, 152; length of tail, 30; hind foot, 22; condylobasal length, 28.0; basal length, 26.6; length of nasals, 7.1; zygomatic breadth, 13.8; breadth across auditory bullae, 11.5; least interorbital breadth, 3.3; alveolar length of upper molariform tooth-row, 6.2.

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Alcorn took this specimen in an area above timberline where a low growth of willow was the dominant vegetation. Traps were set where he had seen a mouse go into a small burrow. The next morning, August 18, 1947, he found this specimen and two *Microtus oeconomus macfarlani* in his traps.

Microtines of the subgenus *Stenocranius* from continental areas of Alaska and Northwestern Canada are represented in collections by a few specimens from widely separated localities. Lacking material from intermediate localities, describers have given specific recognition to several of these isolated populations. Future collecting will be necessary to disclose whether the North American mice of this subgenus belong to one or to more than one species and may disclose whether or not there has been more than one invasion of the North American continent by members of this Asiatic group.

### ***Microtus longicaudus vellerosus* J. A. Allen Long-tailed Meadow Mouse**

*Microtus vellerosus* J. A. Allen, Bull. Amer. Mus. Nat. Hist., 12:7, March 4, 1899. (Type from upper Liard River, British Columbia, Canada.)

*Microtus longicaudus vellerosus* Anderson and Rand, Canadian Field-Nat., 58:20, April 1, 1944.

*Specimens examined*.—Total 127, as follows: *Alaska*: N side Salcha River, 600 ft., 25 mi. S and 20 mi. E Fairbanks, 1. *Yukon Territory*: 6 mi. SW Kluane, 2550 ft., 2; McIntyre Creek, 2250 ft., 3 mi. NW Whitehorse, 10; ½ mi. W Whitehorse, 1; SW end Dezadeash Lake, 18; 1½ mi. S and 3 mi. E Dalton Post, 2500 ft., 24. *British Columbia*: Stonehouse Creek, 5½ mi. W jct. Stonehouse Creek and Kellsall River, 20; Hot Springs, 3 mi. WNW jct. Trout River and Liard River, 4; ¼ mi. S jct. Trout River and Liard River, 15; S side Toad River, 10 mi. S and 21 mi. E Muncho Lake, 27; SE end Muncho Lake, 4; Summit Pass, 4500 ft., 10 mi. S and 70 mi. W Fort Nelson, 1.

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*Remarks.*—Specimens from 1½ miles south and 3 miles east of Dalton Post and from Dezadeash Lake in Yukon Territory and from Stonehouse Creek in British Columbia are referred to *M. l. vellerosus* although in color of upper parts they show close relationship with *M. l. littoralis*. These specimens are less gray and more brown than specimens more typical of *M. l. vellerosus* from the Liard River area.

Alcorn found the long-tailed meadow mouse in widely separated areas. Most specimens were obtained in grassy situations near water or on moist ground. The single male from Summit Pass in British Columbia was taken above timberline.

### ***Microtus longicaudus littoralis* Swarth Long-tailed Meadow Mouse**

*Microtus mordax littoralis* Swarth, Proc. Biol. Soc. Washington, 46:209, October 26, 1933. (Type from Shakan, Prince of Wales Island, Alaska.)

*Microtus longicaudus littoralis* Goldman, Jour. Mamm., 19:491, November 14, 1938.

*Specimens examined.*—Total 29, as follows: *Alaska*: E side Chilkat River, 100 ft., 9 mi. W and 4 mi. N Haines, 9; 1 mi. S Haines, 5 ft., 20.

*Remarks.*—In comparison with the series of *M. l. vellerosus* from the Liard River area, the long-tailed meadow mice from near Haines are more reddish brown, have a longer tail, and have a smaller skull with smaller auditory bullae. This subspecies is restricted to the coastal area, and as noted under the account of *M. l. vellerosus*, intergradation between these two forms occurs a relatively short distance inland.

### ***Microtus oeconomus macfarlani* Merriam Tundra Mouse**

*Microtus macfarlani* Merriam, Proc. Washington Acad. Sci., 2:24, March 14, 1900. (Type from Fort Anderson, Anderson River, Mackenzie district, Northwest Territories, Canada.)

*Microtus oec[onomus] macfarlani* Zimmerman, Archiv f. Naturgesch., 11:187, September 12, 1942.

*Specimens examined.*—Total 70, as follows: *Alaska*: Circle, 664 ft., 1; Chatanika River, 700 ft., 14 mi. E and 25 mi. N Fairbanks, 13; Twelve Mile Summit, 3225 ft., Steese Highway, 6; 1 mi. SW Fairbanks, 440 ft., 3; N side Salcha River, 600 ft., 25 mi. S and 20 mi. E Fairbanks, 28; Yerrick Creek, 21 mi. W and 4 mi. N Tok Junction, 9; Fish Creek, 3400 ft., 5 mi. N and 1 mi. E Paxson, 3; Glenn Highway, 6 mi. WSW Snowshoe Lake, 1. *Yukon Territory*: Jct. Grafe and Edith Creeks, 1; 6 mi. SW Kluane, 2550 ft., 2; SW end Dezadeash Lake, 1. *British Columbia*: Stonehouse Creek, 5½ mi. W jct. Stonehouse Creek and Kelsall River, 2. [Pg 111]

*Remarks.*—Alcorn found the tundra mouse in many of the localities at which he trapped in east-central Alaska. Specimens were taken above timberline, along roads, in grassy areas which had been cleared of timber, and in low vegetation bordering streams. On August 17 at Fish Creek, 5 miles north and 1 mile east of Paxson, Alaska, Alcorn obtained one of these mice in a tree in the daytime. Immature specimens taken at Stonehouse Creek are, to my knowledge, the first records for this species in British Columbia.

### ***Mus musculus* Linnaeus House Mouse**

[*Mus*] *musculus* Linnaeus, Syst. Nat., ed. 10, 1:62, 1758. (Type from Upsala, Sweden.)

*Specimens examined.*—Total 6, as follows: *Alaska*: 1 mi. NE Anchorage, 100 ft., 2. *Yukon Territory*: McIntyre Creek, 2259 ft., 3 mi. NW Whitehorse, 2; 2 mi. NNW Whitehorse, 2100 ft., 1. *Alberta*: Assineau River, 1920 ft., 10 mi. E and 1 mi. N Kinuso, 1.

*Remarks.*—Alcorn took house mice in and near areas inhabited by man. One mouse was taken near Whitehorse on July 10 under a building which had not been occupied for one year. Another was taken at the Whitehorse city dump. Near Kinuso, one specimen was obtained at the site of an old sawmill.

### ***Zapus hudsonius hudsonius* (Zimmermann) Meadow Jumping Mouse**

*Dipus hudsonius* Zimmermann, Geogr. Gesch., 2:358, 1780. (Type from Hudson Bay, Canada.)

*Zapus hudsonius* Coues, Bull. U. S. Geol. and Geogr. Surv. Terr., ser. 2, 1:253, January 8, 1876.

*Specimens examined.*—Total 8, as follows: *British Columbia*: 1 mi. NW jct. Irons Creek and Liard River, 3; Hot Springs, 3 mi. WNW jct. Trout River and Liard River, 1; E side Minaker River, 1 mi. W Trutch, 1; 5 mi. W and 3 mi. N Fort St. John, 1. *Alberta*: Assineau River, 1920 ft., 10 mi. E and 1 mi. N Kinuso, 1.

*Remarks.*—The jumping mice listed above have been compared with specimens of *Z. h. hudsonius* from Ontario and Michigan. The zone of contact between *Z. h. hudsonius* and *Z. h. alascensis* is still unknown; Alcorn obtained no specimens between Irons Creek and Whitehorse. To my knowledge there are no records from this extensive area.

Alcorn took *Zapus* in grassy areas at the edge of water, in an old gravel pit, and at the site of an old sawmill. Animals were taken as early as June 30 and as late as September 2.

### **Zapus hudsonius alascensis Merriam** **Meadow Jumping Mouse**

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*Zapus hudsonius alascensis* Merriam, Proc. Biol. Soc. Washington, 11:223, July 15, 1897. (Type from Yakutat Bay, Alaska.)

*Specimens examined.*—Total 18, as follows: *Alaska*: 1 mi. SW Fairbanks, 440 ft., 1; E side Chilkat River, 100 ft., 9 mi. W and 4 mi. N Haines, 8. *Yukon Territory*: McIntyre Creek, 2250 ft., 3 mi. NW Whitehorse, 4; SW end Dezadeash Lake, 1. *British Columbia*: Stonehouse Creek, 5½ mi. W jct. Stonehouse Creek and Kelsall River, 4.

*Remarks.*—Specimens taken by Alcorn were compared with representatives of both *Z. princeps* (Wyoming, Idaho, Oregon) and *Z. hudsonius* (Ontario, Michigan, Kansas, Wyoming). All have been referred to *Z. hudsonius* although one female from Stonehouse Creek shows some tendency toward *Z. princeps* in external measurements, length of upper molariform tooth-row, and length of incisive foramina.

### **Erethizon dorsatum myops Merriam** **Porcupine**

*Erethizon epixanthus myops* Merriam, Proc. Washington Acad. Sci., 2:27, March 14, 1900. (Type from Portage Bay, Alaska Peninsula, Alaska.)

*Erethizon dorsatum myops* Anderson and Rand, Canadian Jour. Res., 21:293, September 24, 1943.

*Specimens examined.*—Total 2, as follows: *Alaska*: Yerrick Creek, 21 mi. W and 4 mi. N Tok Junction, 1. *Yukon Territory*: 2 mi. W Teslin River, 2400 ft., 16 mi. S and 56 mi. E Whitehorse, 1.

*Remarks.*—Alcorn found little evidence of porcupines along the highway. The female from the Teslin River was found under a building. The female from Yerrick Creek was in dense underbrush in a spruce forest and weighed 20 pounds.

### **Canis latrans incolatus Hall** **Coyote**

*Canis latrans incolatus* Hall, Univ. California Publ. Zool., 40:369, November 5, 1934. (Type from Isaacs Lake, 3000 ft., Bowron Lake region, British Columbia, Canada.)

*Specimens examined.*—Total 2, as follows: *Yukon Territory*: 25 mi. NW Whitehorse, 1. *British Columbia*: Buckinghorse River, 94 mi. S Fort Nelson, 1.

### **Canis lupus pambasileus Elliot** **Wolf**

*Canis pambasileus* Elliot, Proc. Biol. Soc. Washington, 18:79, February 21, 1905. (Type from Susitna River, region of Mount McKinley, Alaska.)

*Canis lupus pambasileus* Goldman, Jour. Mamm., 18:45, February 14, 1937.

*Specimens examined.*—Total 3, as follows: *Yukon Territory*: E side Aishihik River, 17 mi. N Canyon, 1; SW end Dezadeash Lake, 1; Marshall Creek, 3 mi. N Dezadeash River, 1.

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*Remarks.*—Alcorn reported wolf sign at many of his camps along the highway. Skulls were obtained from trappers.

### **Canis lupus occidentalis Richardson** **Wolf**

*Canis lupus occidentalis* Richardson, Fauna Boreali-Americana, 1:60, 1829. (Type not designated, restricted to Fort Simpson, Mackenzie, Canada, by Miller, Smithsonian. Misc. Coll., 59 (no. 15):4, June 8, 1912.)

*Specimens examined.*—Two from *British Columbia*: Buckinghorse River, 94 mi. S Fort Nelson.



## **Canis lupus columbianus Goldman** **Wolf**

*Canis lupus columbianus* Goldman, Proc. Biol. Soc. Washington, 54:110, September 30, 1941. (Type from Wistaria, north side of Ootsa Lake, Coast District, British Columbia, Canada.)

*Specimens examined.*—One from *British Columbia*: Screw Creek, 10 mi. S and 50 mi. E Teslin.

## **Vulpes fulva abietorum Merriam** **Red Fox**

*Vulpes alascensis abietorum* Merriam, Proc. Washington Acad. Sci., 2:669, December 28, 1900. (Type from Stuart Lake, British Columbia, Canada.)

*Vulpes fulva abietorum* Bailey, Nature Mag., 28:317, November 1936.

*Specimens examined.*—Total 11, as follows: *Yukon Territory*: 6 mi. SW Kluane, 2559 ft., 1; Marshall Creek, 3 mi. N Dezadeash River, 6; Champagne, N side Dezadeash River, 3; 1½ mi. E Tatshenshini River, 1½ mi. S and 3 mi. E Dalton Post, 1.

*Remarks.*—Specimens obtained are skulls only, mostly taken in the winter months by trappers. One fox was found dead with [porcupine](#) quills stuck in and around its mouth.

## **Ursus americanus cinnamomum Audubon and Bachman** **Black Bear**

*Ursus americanus var. cinnamomum* Audubon and Bachman, Quadr. North Amer., 3; 125, 1854. (Type from Northern Rocky Mountains.)

*Specimens examined.*—Total 3, as follows: *British Columbia*: 10 mi. W Fort Nelson, 1; Buckinghamhorse River, 94 mi. S Fort Nelson, 2.

*Remarks.*—One large, unsexed skull from Buckinghamhorse River with part of the rostrum gone has the frontal shield strongly dished. A young adult female taken 10 miles west of Fort Nelson on August 23, 1948, has the following external measurements: Total length, 1345; tail, 65; hind foot, 256; ear from notch, 135.

## **Ursus species** **Grizzly**

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*Specimens examined.*—Total 5, as follows: *Yukon Territory*: E side Aishihik River, 17 mi. N Canyon, 1; Unahini River, 5 mi. N and 1 mi. E Dalton Post, 1; Unahini River, 3 mi. N and 1 mi. E Dalton Post, 2. *British Columbia*: Buckinghamhorse River, 94 mi. S Fort Nelson, 1.

*Remarks.*—Of three specimens obtained at the Unahini River, two males resemble each other closely, while the third, an old adult represented by an unsexed skull with broken cranium, is markedly different, the skull being noticeably shorter with shorter rostrum and lower jaw and other distinctive features. It closely resembles the skull of an adult male taken at the Aishihik River. Furthermore, the first two animals show close relationships with an unsexed skull which Alcorn obtained at the Buckinghamhorse River in British Columbia.

Two males taken at the Unahini River in the Yukon Territory have the following external measurements: Total length, 1933, 1812; tail, 150, 96; hind foot, 262, 260; ear from notch, 129, 131. Other specimens, skulls only, obtained from native hunters, are partly broken. Alcorn writes that the local hunters always shoot a grizzly in the head to be certain that it is dead.

## **Mustela erminea arctica (Merriam)** **Ermine**

*Putorius arcticus* Merriam, N. Amer. Fauna, 11:15, June 30, 1896. (Type from Point Barrow, Alaska.)

*Mustela erminea arctica* Ognev, The mammals of U. S. S. R. and adjacent countries, 3:31, 1935.

*Specimens examined.*—Four from *Alaska*: N side Salcha River, 600 ft., 25 mi. S and 20 mi. E Fairbanks.

*Remarks.*—One ermine was caught in a rat trap; the others were taken within 50 yards of the trapped animal by attracting them with squeaking calls to within shooting range. One of the weasels approached to within ten feet of Alcorn, while he was making the mentioned call.

## **Mustela erminea richardsonii Bonaparte**

### **Ermine**

*Mustela richardsonii* Bonaparte, Charlesworth's Mag. Nat. Hist., 2:38, January, 1838. (Type from Fort Franklin, at western end of Great Bear Lake, Mackenzie district, Northwest Territories, Canada.)

*Mustela erminea richardsonii* Hall, Jour. Mamm., 26:180, July 19, 1945.

*Specimens examined.*—One from *Yukon Territory*: McIntyre Creek, 2250 ft., 3 mi. NW Whitehorse.

## **Mustela erminea alascensis (Merriam)**

### **Ermine**

*Putorius richardsonii alascensis* Merriam, N. Amer. Fauna, 11:12, June 30, 1896. (Type from Juneau, Alaska.)

*Mustela erminea alascensis* Hall, Jour. Mamm., 26:180, July 19, 1945.

*Specimens examined.*—One from *Alaska*: E side Chilkat River, 100 ft., 9 mi. W and 4 mi. N Haines.

## **Mustela vison energumenos (Bangs)**

### **Mink**

*Putorius vison energumenos* Bangs, Proc. Boston Soc. Nat. Hist., 27:5, March, 1896. (Type from Sumas, British Columbia, Canada.)

*Mustela vison energumenos* Miller, North Amer. Land Mamm. 1911, p. 101, December 31, 1912.

*Specimen examined.*—One (broken and unsexed skull) from *Yukon Territory*: Champagne, N side Dezadeash River.

*Remarks.*—While studying moose at Medicine Lake, near Circle Hot Springs, Alaska, on August 9, 1947, Alcorn observed some mink concerning which he records the following: "After waiting about an hour a large mink was seen traveling northward on land at the edge of the lake. It continued and went out of sight. I waited about two minutes and then started a series of loud squeaks. To our surprise we soon saw what we judged was the same mink. In company with this mink were five others.... These mink were much interested in the squeaking noise and some came within 10 feet of me. They stayed on land most of the time but some of them made short swims a few feet out into the lake. One had a white chin, another had a white spot on its chest. This group may have been an adult female with her young."

## **Martes pennanti columbiana Goldman**

### **Fisher**

*Martes pennanti columbiana* Goldman, Proc. Biol. Soc. Washington, 48:176, November 15, 1935. (Type from Stuart Lake, near headwaters of Fraser River, British Columbia, Canada.)

*Specimens examined.*—Total 2, as follows: *British Columbia*: 14 mi. N Fort Halkett, W side Smith River, 1; N side Liard River, Fort Halkett, 1.

## **Martes americana actuosa (Osgood)**

### **Marten**

*Mustela americana actuosa* Osgood, N. Amer. Fauna, 19:43, October 6, 1900. (Type from Fort Yukon, Alaska.)

*Martes americana actuosa* Miller, N. Amer. Land Mamm. 1911, p. 93, December 31, 1912.

*Specimen examined.*—One from *British Columbia*: N side Liard River Fort Halkett, 1.

## **Lynx canadensis canadensis Kerr**

### **Canada Lynx**

*Lynx canadensis* Kerr, Anim. Kingd., vol. 1, systematic catalogue inserted between pages 32 and 33 (description, p. 157), 1792. (Type from Eastern Canada.)

*Specimens examined.*—Total 4, as follows: *Yukon Territory*: Marshall Creek, 3 mi. N Dezadeash River, 1. *British Columbia*: 14 mi. N Fort Halkett, W side Smith River, 2; Buckingham River, 94 mi. S Fort Nelson, 1.

## **Alces americana gigas Miller**

## Moose

*Alces gigas* Miller, Proc. Biol. Soc. Washington, 13:57, May 29, 1899. (Type from North side Tustumena Lake, Kenai Peninsula, Alaska.)

*Alces americanus gigas* Osgood, N. Amer. Fauna, 24:29, November 23, 1904.

*Specimens examined*.—One from *British Columbia*: 15 mi. NW Kelsall Lake.

## **Oreamnos americanus columbiae Hollister** **Mountain Goat**

*Oreamnos montanus columbianus* J. A. Allen, Bull. Amer. Mus. Nat. Hist., 20:20, February 10, 1904. Not *Capra columbiana* Desmilins, 1823.

*Oreamnos americanus columbiae* Hollister, Proc. Biol. Soc. Washington, 25:186, December 24, 1912. (Type from Shesley Mountains, northern British Columbia, Canada.)

*Specimens examined*.—Two from *British Columbia*: 12 mi. S jct. Liard River and Trout River.

*Remarks*.—Two skulls of male goats were obtained from a trapper, Johnny Pie, who shot them on July 4, 1948. Field notes indicate that both mountain goats and mountain sheep are frequently taken by natives in the Liard River area.

## **Ovis dalli stonei Allen** **Northern Mountain Sheep**

*Ovis stonei* Allen, Bull. Amer. Mus. Nat. Hist., 9:111, April 8, 1897. (Type from headwaters of the Stikine River, British Columbia, Canada.)

*Ovis dalli stonei* Allen, Bull. Amer. Mus. Nat. Hist., 31:28, March 4, 1912.

*Specimen examined*.—One from *British Columbia*: Summit Pass, 4200 ft., 10 mi. S and 70 mi. W Fort Nelson.

*Remarks*.—The specimen has the following external measurements: Total length, 1474; tail, 84; length of hind foot, 400; ear from notch, 91. The individual is a male, seven years old, as judged by the rings of growth on the horns. The skull is accompanied by a skin now tanned for study purposes.

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