Article III.—NOTES ON MAMMALS FROM NEW BRUNS-WICK, WITH DESCRIPTION OF A NEW SPECIES OF EVOTOMYS.

By J. A. Allen.

The present paper is based on a collection of about 175 specimens, representing 21 species. The collection is one of the results of an expedition sent out by the Museum to New Brunswick, primarily for the purpose of securing proper accessories for a 'Moose Group,' now in process of preparation, the other results of the enterprise being incidental to the main purpose. The expedition was in charge of Mr. John Rowley, Jr., Chief of the Department of Taxidermy, who was accompanied by his brother, Mr. Charles P. Rowley, as a volunteer assistant. Mr. E. T. Adney also accompanied the party, rendering material aid and contributing to the success of the expedition.

About six weeks were spent in the field (Sept. 15 to Nov. 1, 1893), in the Tobique River region of New Brunswick. The area traversed extended from Andover, on the St. Johns River, to the Fork of the Tobique River, and thence to Trousers Lake, a distance of about seventy-five miles.

The district is strictly Canadian, as shown by both the mammals and the birds obtained, among the latter being such forms as Parus hudsonicus, Perisoreus canadensis, Loxia leucoptera, Picoides arcticus, Dendragopus canadensis, and Bonasa umbellus togatus, of most of which good series were collected. The forest is wholly second-growth, the original growth having been long since removed by lumbermen.

While the number of species of mammals actually taken on the expedition is only 21, Mr. John Rowley, to whom I am indebted for all of the field notes given in the following list, has kindly furnished me with interesting information respecting a number of other species, which it has been thought best to place on record

¹ This lake is said to have received its name from its resemblance in outline to a pair of trousers.

in the present connection. His notes are distinguished by being inclosed in marks of quotation, and followed by the initial "R."

- I. Cariacus virginianus (Bodd.). VIRGINIA DEER.—"Not common in the region of Trousers Lake, but found chiefly lower down the river, near clearings."—R.
- 2. Alces machlis (Linn.). Moose.—A fine old bull was killed by Mr. Rowley, for the Museum 'Moose Group,' at Gulquac Lake. A skeleton of another old male was also obtained, for which the Museum is indebted to the Hon. John Costigan of Ottawa.
- "Moose were of frequent occurrence in the Trousers Lake region, having considerably increased during the last ten years, in consequence of legal protection."—R.
- 3. Rangifer tarandus caribou (Kerr). WOODLAND CARIBOU.—"Common everywhere, being found as far down the St. Johns River as Woodstock."—R.
- 4. Vespertilio gryphus F. Cuvier. Brown Bat.—One specimen, Trousers Lake, Sept. 28. Others were seen.

I follow Dr. Harrison Allen (Mon. N. Am. Bats, 1893 (March, 1894), p. 75) in discarding the name *Vespertilio subulatus* Say, so long in use for this species, as indeterminable, and in any case inapplicable to the present species.

- 5. Blarina talpoides (Gapper). SHORT-TAILED SHREW.—One specimen, Andover, Oct. 28.
- 6. Sorex forsteri Rich. Forster's Shrew.—A series of 11 specimens is provisionally referred to this species, with the original description of which they seem sufficiently to agree. The average of the measurements taken from the fresh specimens by the collector is as follows: Total length, 99.5 mm. (3.92 in.); head and body, 70 mm. (2.75 in.); tail, 45 mm. (1.77 in.); hind foot, 12.5 mm. (.50 in.).

On the proper name aud relations of this species, of Miller, Proc. Boston Soc. Nat. Hist., XXVI, p. 185, March, 1894

- "Apparently common everywhere, in all sorts of situations."—R.
- 7. Scalops aquaticus (Linn.). Common Mole.—"A mole, probably of this species, was evidently common about the settlements. No specimens were taken, but from the descriptions obtained of it, it was not the Star-nosed Mole (Condylura cristata)."—R.
 - 8. Lepus americanus Erxl. Varying Hare.—This species is represented by 5 specimens taken Oct. 27 and 30, by 9 specimens taken Nov. 14-18, and by 15 specimens taken at various dates from Nov. 24 to Dec. 14, all at or near Andover. All, except the five first mentioned, were taken by Mr. A. Lockwood, after the return of the expedition. The 29 specimens form a series fully illustrating the autumnal change from the brown summer pelage to the white coat of winter. As this series, combined with other material in the Museum Collection, forms the subject of a special paper on the seasonal change of color in this species, to be published later in this volume, it is only necessary to note in the present connection that the specimens in which the character of the summer coat is still well shown present a wide range of variation in coloration—from pale-yellowish brown to deep-reddish brown, more or less strongly varied with black in different individuals.

Mr. Rowley informs me that this Hare is locally common in the region visited, being confined mainly to the cedar swamps.

- 9. Erethizon dorsatus (Linn.). CANADA PORCUPINE.— Two specimens, Fork of Tobique, Sept. 20.
- 10. Zapus insignis Miller. Northern Jumping Mouse.—Three specimens, Tobique River, Sept. 21 and Oct. 9.
- "Not an uncommon species in the long grass of the clearings, but they seemed to avoid the traps."—R.
- II. Mus decumanus Pallas. Brown RAT.—One specimen, Andover, Oct. 29.

- 12. Mus musculus Linn. House Mouse.—Andover. Several specimens, caught in the fields.
- 13. Sitomys americanus canadensis Miller. Canadian White-footed Mouse.—A series of 24 specimens is typically referable to S. a. canadensis, now for the first time represented in the Museum Collection. Nearly all are in the plumbeous coat, one only being fully adult. This form, as pointed out by Mr. Miller (l. c.), differs notably from the common White-footed Mouse of southern New England and further south.

"Very common about piles of logs in lumber camps, but also found generally distributed."—R.

- 14. Arvicola riparius Ord. MEADOW MOUSE.—Represented by 29 specimens, of which the greater part are immature; two of the adults are very strongly reddish brown.
- "All of the specimens taken at Trousers Lake were trapped in the evergreen forests; at the Forks of the Tobique they were found only in the cleared land."—R.
- 15. Arvicola chrotorrhinus Miller.² RUFOUS-NOSED MEADOW MOUSE.—One specimen, ♀ ad., Trousers Lake, N. B., Oct. 7, 1893.

This specimen has been identified as above by Mr. Miller, who has compared it with the types of his A. chrotorrhinus from the White Mountains of New Hampshire, the only other locality from which it is thus far known. Mr. Miller's specimens were taken near the summit of Mt. Washington, N. H., July 12-15, 1893, hence nearly three months before the one above recorded.

"This specimen was taken in a small opening in the spruce woods. Two others were taken, but were so badly mutilated by the traps that they were not saved."—R.

16. Evotomys gapperi (Vig.). RED-BACKED MOUSE.— Represented by a series of 40 specimens, of which about one-half are adult and the rest in various stages of immaturity. One has a conspicuous patch of white on the back, due to albinism.

¹ Proc. Biol. Soc. Washington, VIII, 1893, p. 55. ² Proc. Boston Soc. Nat. Hist., XXVI, p. 190, March 24, 1894.

"This is the common Mouse of the region, being found abundantly everywhere, but perhaps rather more numerously in the spruce woods than in the clearings."—R.

17. Evotomys fuscodorsalis, sp. nov.

Smaller than *E. gapperi*, and very differently colored, but similar in proportions. Middle of dorsal region, from crown to base of tail, dusky brown, forming a broad blackish dorsal area; sides light, rather ashy, mouse-gray; below light whitish gray, the hairs dark plumbeous for their basal two-thirds, apically whitish gray. Ears prominent, clothed with short brown hair. Fore feet light gray; hind feet dusky gray. Tail bicolored, above dusky brown, blackish at the extreme tip; lower surface light whitish ashy.

The two specimens measure as follows: 1 δ , total length, 129 mm. (5.06 in.); head and body, 89 mm. (3.50 in.); tail, 40 mm. (1.56 in.); hind foot, 16.5 mm. (.65 in.); ear from crown, 7.6 mm. (.30 in.); \circ , total length, 127 mm. (5.00 in.); head and body, 90 mm. (3.56 in.); tail, 37 mm. (1.44 in.); hind foot, 18 mm. (.70 in.); ear from crown, 7.6 mm. (.30 in.).

Skull, & ad.—Total length (front border of nasals to occip. cond.), 23.4 mm. (.92 in.); basal length (inner base of incisors to occip. cond.), 20.5 mm. (.81 in.); greatest zygomatic breadth, 12.7 mm. (.50 in.); greatest width of brain-case, 11.7 mm. (.46 in.); least interorbital breadth, 4 mm. (.16 in.); length of nasals, 9.4 mm. (.37 in.); length of anterior palatine foramen, 4.3 mm. (.17 in.); length of crown surface of upper molar series, 8.1 mm. (.22 in.); length of lower jaw (point of incisors to post. edge of cond.), 10.7 mm. (.42 in.); height at coronoid process, 4.3 mm. (.17 in.).

Type, No. $\frac{6458}{5278}$, & ad., Trousers Lake, N. B., Oct. 17, 1893; C. P. and J. Rowley.

This species is based on two specimens, male and female, taken at Trousers Lake, Oct. 17. Although full grown, neither is apparently very old.

In coloration this species strongly resembles the species of *Phenacomys*, to which genus it was presumed to be referable until an examination was made of the skull and dentition, which show that it is clearly referable to *Evotomys*. It therefore does not require comparison with any other species of the genus. The pattern of coloration is the same as in *E. gapperi*, the red color of the back in that species being replaced with blackish brown in *E*.

¹ Measurements, except of ear, from the fresh specimens, by the collector.

- 18. Fiber zibethicus (Linn.). MUSKRAT.—Trousers Lake and vicinity of Andover, Sept. 28-Oct. 27. A series of 10 specimens.
 - "Abundant in all suitable localities."-R.
- 19. Tamias striatus lysteri (Rich.). NORTHERN CHIPMUNK.—One specimen, Trousers Lake, Oct. 15.
- "Common lower down the river, and probably also on the hardwood ridges about Trousers Lake. This, however, was the only one seen, probably owing to the lateness of the season."—R.
- 20. Sciurus hudsonius Pallas. RED SQUIRREL.—Represented by a series of 14 specimens, taken at various localities, Sept. 23 to Oct. 17. All are in rather thin pelage, molting from the summer to the winter coat. The black lateral line is more or less distinct in all.
- "Common everywhere, sometimes probably a hundred being seen in a single day."—R.
- 21. Sciuropterus volucella sabrinus (Shaw). Flying Squirrel.—" More or less common."—R.
- **22.** Arctomys monax *Gmel.*—" Not uncommon about the settlements."—R.
- 23. Castor canadensis Kuhl. BEAVER.—A fine specimen, now in the mounted collection of the Museum, was taken Oct. 20 on the Tobique River.
- "Now becoming scarce. Saw but one fresh beaver dam, but remains of old ones were frequently met with."—R.
- **24.** Ursus americanus *Pallas*. BLACK BEAR.— "More plentiful near the settlements than in the forests. We were much annoyed by bears destroying our sable traps."—R.

- 25. Procyon lotor (Linn.). RACCOON.—"Quite common. Thirty were taken by Mr. John Costigan of Ottawa, who was trapping here, during the six weeks of our stay in the region."—R.
- 26. Lutra hudsonica (Lacép.). Otter.—" Not uncommon. Many are caught for their fur by trappers."—R.
- 27 Mephitis mephitica (Shaw). SKUNK.—"Found at Andover and Riley Brook, but apparently not common."— R.
- **28.** Lutreola vison (*Schreber*). MINK.—The collection contains three specimens taken at Trousers Lake.
 - " Not uncommon."—R.
- 29. Putorius erminea (Linn.). Ermine; Weasel.—Two specimens, in summer pelage, taken at Trousers Lake, Sept. 30 and Oct. 15.
- 30. Mustela pennanti Erxl. BLACK CAT; FISHER.—"Not uncommon. One of the animals forming the chief dependence of the trappers in their pursuit of furs."—R.
- 31. Mustela americana Turton. MARTEN; AMERICAN SABLE.—Two specimens, Trousers Lake, Oct. 7 and 10. Both are very richly colored, the breast patch being deep orange ochre.
- "This is one of the most abundant of the fur-bearing species."—R.
- 32. Vulpes fulvus (Desm.). RED FOX; SILVER FOX.—"Common about the clearings. The 'Silver' or 'Cross' Fox is frequently taken, but the common form is of course much the more abundant."—R.
- Mr. Rowley informs me that the Gray Wolf (Canis lupus griseo-albus) has been, so far as he could learn from extended inquiries, quite extinct in this region for many years. Even one of the oldest Indian trappers he met had never seen one.

33. Lynx canadensis *Raf*. Canada Lynx.—"Reputed to be not uncommon."—R.

"The Panther (Felis concolor) is said to occur, but no satisfactory evidence of its present existence in the region was obtained."—R.