

**Article XVIII.**—NOMENCLATORIAL NOTES ON CERTAIN NORTH AMERICAN MAMMALS.

By J. A. ALLEN.

In revising a manuscript list of the described genera and species, etc., of North American Rodentia, prepared for the use of the Department of Vertebrate Zoölogy, a few points of interest have arisen which form the basis of the present 'Notes.' They relate mainly to certain early names given to various species of Sciuridæ, but include one Vole, and incidentally reference is made to recent proposed changes in the names of the Otter and Fisher.

**Sciurus rubricatus** *Ord.*

*Sciurus rubricatus* ORD, Journ. de Phys. LXXXVII, 1818, 152. Based on the "small gray squirrel" of Lewis & Clark, Hist. Exped. (Paul Allen ed.) 1814, II, 273. Not "small brown squirrel" of Lewis & Clark (*ibid.* p. 274), as claimed by RHOADS, Ord's Zoöl. 1894, 21.

In 1877 (Mon. N. Am. Roden., p. 673) I identified Lewis and Clark's "Small Brown Squirrel" with *Sciurus douglasii* Bachman, the correctness of which identification there is no reason to question. That it is not the "Red-breasted Squirrel, *Sciurus rubricatus* Ord" (*l. c.*), as claimed by Mr. Rhoads (*l. c.*), seems equally certain, the latter having evident reference to Lewis and Clark's "Small Gray Squirrel." This may also belong to the *S. douglasii* group, but if its geographical range, said to be "every part of the Rocky mountains where timber abounds," is to be regarded, it cannot be true *S. douglasii*. This view is supported by three good reasons: (1) There is nothing in Lewis and Clark's description of their "Small Brown Squirrel" to suggest the name *rubricatus*; (2) in the description of their "Small Gray Squirrel" they say it has "a narrow strip of black, commencing behind each shoulder, and entering longitudinally about three inches, between the colours of the sides and belly,"—this being of course the so-

called 'lateral line' of the summer pelage, and evidently is the feature which suggested to Ord the name *rubricatus*; (3) Ord refers, somewhat doubtfully, Lewis and Clark's "Brown Squirrel" to "*Sciurus hudsonius*," thus showing it is almost certainly not what he later called *Sciurus rubricatus*.

Ord, in his list of Squirrels in 'Guthrie's Geography' (1814, p. 292), gives four species as based on Lewis and Clark, mentioning them in practically the same order as they are described in the 'History' of Lewis and Clark's expedition, the last two alone being transposed. In this list Ord's "Columbian Gray Squirrel, *Sciurus* —", is evidently Lewis and Clark's "Large Gray Squirrel"; his "Red-breasted Squirrel, *Sciurus* —," is Lewis and Clark's "Small Gray Squirrel"; his "Rocky mountain Ground Squirrel, *Sciurus* —," is Lewis and Clark's "Ground Squirrel" (quite undeterminable); and his "Brown Squirrel, *Sciurus* —," is Lewis and Clark's "Small Brown Squirrel," concerning which Ord adds in a foot-note: "but we suspect that the Brown Squirrel is no other than the *Sciurus Hudsonius*, No. 48 of Pennant, Arct. Zool., sometimes called the Pine Squirrel, from the circumstance of its being found in Pine Woods"; Lewis and Clark stating that their Small Brown Squirrel "subsists on the seeds of various species of pine, and is always found in the pine country." There is no reference to pines in their account of the "Small Gray Squirrel."

From a letter published in Vol. LXXXVII of the 'Journal de Physique,' in 1818, sent by Mr. Ord to M. de Blainville, editor of the 'Journal,' it appears that Mr. Ord then contemplated publishing an illustrated work on the Zoölogy of the Lewis and Clark Expedition. In this letter occurs a paragraph, here literally transcribed, referring to the Squirrels of Lewis and Clark, of which an English rendering has already been given by Mr. Rhoads (*l. c.*): "Mon ami Leseuer a figuré pour moi la plus grande partie des quadrupèdes rapportés par Lewis, ou du moins ceux dont les peaux étoient dans un parfait état de conservation, comme le *Bagger* [Badger], *Ursus labradoricus* de Linnæus; la Marmotte de la Louisiane, *Arctomys Ludoviciana*; le *Viverra alba*; le *Columbia grey Squirrel*; *sciurus griseus*; le *Red Breasted Squirrel*, *S. rubricatus*; le *Rocky mountain ground Squirrel*, *S. troglodytus*; le

*Great grizzly Bear, Ursus horribilis*; j'ai de ce dernier deux figures d'après deux beaux individus existant dans le Muséum [qui appartient à M. C. W. Peale]."<sup>1</sup>

Here again there is no page reference to the 'History' of the Lewis and Clark Expedition, nor are Lewis and Clark's names of the Squirrels described by them mentioned. His proposed work on the Zoölogy of Lewis and Clark's Expedition was never published, and no further account of these new species of Squirrels ever appeared from Ord's pen.

As Lewis and Clark speak of their "Small Gray Squirrel" as "common in every part of the Rocky mountains where timber abounds" (meaning of course the portions they traversed), it seems not to be referable, as already said, to *Sciurus douglasii*; nor does it seem referable to any known species of *Sciurus* from the Rocky Mountain region, as their description says: "the throat, breast, belly, and inner parts of the legs are of the colour of a tanner's ooze," thus implying a ruddy or fulvous color of the under parts. Dr. Coues (Hist. Lewis and Clark's Exped., III, 1893, p. 855) has identified this animal with *Sciurus richardsoni* Bachman, apparently on the ground of locality, but the color of the lower parts, as given by Lewis and Clark, seems to preclude this identification. On the other hand, their account of their "Small Brown Squirrel" shows that this is certainly *Sciurus douglasii*. It is also evident from what they say of these two Squirrels that the animals they had in mind, and attempted to describe (perhaps from memory), were really quite different. The "tanner's ooze" tint of their "Small Gray Squirrel," however, is incongruous with the assigned locality.

While it is evident enough that Ord's "Columbia Gray Squirrel" is Lewis and Clark's "Large Gray Squirrel" of the Columbia River, it is equally evident that Ord's "Red-breasted Squirrel, *Sciurus rubricatus*" is their undeterminable "Small Gray Squirrel" of the Rocky Mountains. It therefore follows that Ord's *Sciurus rubricatus* does not "legitimately antedate Bachman's name [*Sci-*

<sup>1</sup> Sur plusieurs Animaux de l'Amérique septentrionale, et entre autres sur le *Rupicapra americana*, l'*Antilope americana*, le *Cervus major* ou Wapiti, etc. Par Georges Ord. Dans une lettre au Rédacteur du journal.—*Journal de Physique, de Chimie, d'Histoire naturelle, et des Arts*, par M. H.-M. Ducrotay de Blainville, Vol. LXXXVII, pp. 146-154, Aout, 1818. The paragraph above quoted occurs at the top of p. 152. Ord's letter is dated <sup>26</sup> Philadelphie, le 21 juin 1818."

*urus douglasii*] for the Red Squirrel of the West Cascade region of Oregon and Washington," as stated by Mr. Rhoads (*l. c.*).

Another name relating to the *Sciurus douglasii* group, which may be discussed in this connection, is

### ***Sciurus bottæ* Lesson.**

*Sciurus bottæ* LESSON, Cent. Zool. 1830, 221, pl. lxxvi (1831). Text dated "Janvier, 1831."

As stated in my monograph of the North American Sciuridæ (Mon. N. Am. Roden., 1877, pp. 775, 776), *Sciurus bottæ* Lesson, from "California," in many points recalls *Sciurus douglasii* Bachman, agreeing with it very well in size and proportions, and also in having a yellowish belly and a yellowish-fringed tail; it differs, however, in its narrow, somewhat rounded, pointed tail, and in having the hairs of the upper surface of the body ringed about equally with white, brown, yellowish white and red, a coloration that does not fit any member of the subgenus *Tamiasciurus*. The locality, "California," might seem to point to either *Sciurus douglasii californicus* (Allen, 1898) or to *S. d. mollipilosus* (Aud. & Bach.), but the yellow-fringed tail is not pertinent in this connection. While in all probability *Sciurus bottæ* was based on a specimen of the *douglasii* group, the description is inapplicable at so many points, and the type locality is so vague that the name may well be left, as I have heretofore left it, in abeyance.

### ***Sciurus californicus* Lesson.**

*Sciurus (Macroxus) californicus* LESSON, Descrip. de Mamm. et d'Ois. récemment découverts, etc., 1847, 143-145.

Lesson's *Sciurus (Macroxus) californicus*, described in 1847, is undoubtedly referable to the *Spermophilus beecheyi* of Richardson (*cf.* Baird, Mam. N. Am., 1857, p. 282; Allen, Mon. N. Am. Roden., 1877, pp. 827, 832). Its interest in the present connection lies in the fact that Lesson's *Sciurus californicus* renders the later use of the name *californicus* by myself for a subspecies of *Sciurus (Sciurus hudsonius californicus* Allen, 1890) untenable.

As it becomes necessary to supply a new name for the latter, it may be called **Sciurus douglasii albolimbatus**, in allusion to its conspicuously white-fringed tail, as compared with other members of the group.

### **Sciurus griseus** Ord.

*Sciurus griseus* ORD, Journ. de Phys. LXXXVII, 1818, 152. Based on the "large gray squirrel" of Lewis & Clark, Hist. Exped. 1814, 273. Cf. RHOADS, Am. Nat. June, 1894, 525; *ibid.* Ord's Zoöl. 1894, App. 21.

As stated above (p. 451), I agree with Mr. Rhoads (*l. c.*) that *Sciurus griseus* Ord is beyond doubt the proper name for the much later *Sciurus fossor* Peale, so that this group will stand as follows:

1. *Sciurus griseus* Ord, Journ. de Phys. LXXXVII, 1818, 152 (*cf.* Rhoads, *l. c.*)=*Sciurus fossor* Peale, 1848.
2. *Sciurus griseus nigripes* Bryant (*cf.* Rhoads, *l. c.*)=*S. fossor nigripes* Bryant.
3. *Sciurus griseus anthonyi* (Mearns)=*S. fossor anthonyi* Mearns.

### **Sciurus albipes et varius** Wagner.

*Sciurus albipes* WAGNER, Abh. der Math. Phys. Klasse der K. Bayer. Akad. d. Wissensch. II, 1837, 501. Mountains of State of Oaxaca, Mexico. Not *Sciurus albipes* KERR, 1792, from Ceylon.  
*Sciurus varius* WAGNER, Schreber's Säugt. Suppl. III, 1843, 168, pl. ccxiii. (*Sciurus albipes* on the plate.) New name for *Sciurus albipes* WAGNER, 1837, preoccupied. Not *Sciurus varius* PALLAS, 1831 (or 1811)=*Sciurus vulgaris* LINN., or *S. vulgaris varius* (PALLAS).

As shown by the citations given above, *Sciurus albipes* Wagner, 1837, is untenable, being preoccupied. It was replaced by Wagner himself in 1843 by *Sciurus varius*, but unfortunately this name is also preoccupied by *Sciurus varius* Pallas (Zool. Rosso-Asiaticus, I, 1831, p. 183)=*Sciurus vulgaris* Linn. There being apparently no later available synonym for *Sciurus albipes* Wagner, the species may be again renamed **Sciurus wagneri**, in honor of its original describer, Johann Andreas Wagner, the eminent author of the 'Supplement' to Schreber's 'Säugethiere.' The species, with its subspecies recently described by Mr. Nelson (Proc. Biol. Soc. Washington, XII, pp. 150-152, June 3, 1898), may stand as follows:

1. *Sciurus wagneri* Allen=*S. albipes* Wagner, preoccupied.
2. *Sciurus wagneri quercinus* (Nelson)=*S. albipes quercinus* Nelson.

3. *Sciurus wagneri nemoralis* (Nelson)=*S. albipes nemoralis* Nelson.
4. *Sciurus wagneri colimensis* (Nelson)=*S. albipes colimensis* Nelson.
5. *Sciurus wagneri effugius* (Nelson)=*S. albipes effugius* Nelson.
6. *Sciurus wagneri cervicalis* (Allen)=*S. albipes cervicalis* (Allen) Nelson MS.

### **Mus empetra** Pallas.

*Mus empetra* PALLAS, Nov. Sp. Glires, 1778, 74.

A careful reëxamination of the case of *Mus empetra* Pallas *vs.* *Arctomys parryi* Richardson, has confirmed me in the view I took in 1877 (Mon. N. Am. Roden., 1877, pp. 839, 842, 843), namely, that the two species are one and the same. Pallas's description, based on a specimen in the Leyden Museum, is not wholly satisfactory, but agrees well with Parry's Marmot, so far as it goes,—as regards size, form, and color, except that the chestnut brown on the front of the head is not mentioned. Schreber's Plate CCX, based on a drawing received by him from Pallas, shows the chestnut color on the head, somewhat exaggerated, it is true, but fails to show the grayish-white mottling called for by the text. But Pallas identifies with his *M. empetra* Forster's Quebec Marmot, which is unquestionably the *Arctomys parryi* of Richardson, as Richardson himself states (Faun. Bor.-Am., I, p. 147). Pennant's Quebec Marmot, also cited by Pallas under *Mus empetra*, is, of course, a wholly different animal, but it does not enter into Pallas's diagnosis of *Mus empetra*.

As shown by Dr. Merriam (N. Am. Fauna, No. 5, July, 1891, pp. 39-42), Richardson's *Arctomys* (*Spermophilus*) *parryi*,  $\beta$  *erythrogluteia* is *Spermophilus columbianus* (Ord). Richardson's *Arctomys parryi* and its varieties should henceforth stand as follows :

1. *Spermophilus empetra* (Pallas)=*Arctomys parryi* Richardson. Type locality, banks of the Mackenzie River.
2. *Spermophilus empetra columbianus* (Ord)=*Arctomys parryi* var.  $\beta$  *erythrogluteia* Richardson. Type locality, sources of Elk River, Rocky Mountains, lat. 57°.
3. *Spermophilus empetra phaognathus* (Richardson)=*Arctomys parryi* var.  $\gamma$  *phaognatha* Richardson. Type locality, Hudson Bay, precise district unknown. I have seen specimens I refer to this form from Depot Island, Hudson Bay.
4. *Spermophilus empetra kodiacensis* (Allen)=*S. parryi* var. *kodiacensis* Allen (1874).

**Arctomys lewisii** *Aud. & Bach.*

*Arctomys lewisii* AUD. & BACH. Quad. N. Am. III, 1853, 32, pl. cvii.

In 1857 Professor Baird (Mam. N. Am., p. 347) discussed the relationship of *Arctomys lewisii* Aud. & Bach., reaching the conclusion that, from the characters given, it could not be an *Arctomys* but might be a *Cynomys*, concluding his remarks as follows: "For the above reasons I am inclined to consider the *Arctomys lewisii* rather as a *Cynomys*, and quite probably the same with the burrowing squirrel of Lewis and Clark, called *Arctomys columbianus*, by Ord, and *Anisonyx brachyura*, by Rafinesque."

In 1877 I referred *Arctomys lewisii* not only to *Cynomys*, but placed it as a synonym of my *Cynomys columbianus* (Ord), accepting *Arctomys columbianus* Ord as the earliest name for *Cynomys gunnisoni* Baird. Since that date Dr. Merriam (North Am. Fauna, No. 5, July, 1891, pp. 39-42) has conclusively shown that the "Burrowing Squirrel" of Lewis and Clark, the basis of Ord's *Arctomys columbianus*, was not a *Cynomys* but a Spermophile, the *Arctomys* (*Spermophilus*) *parryi*, var.  $\beta$  *erythrogluteus* of Richardson.

Granting that the *Arctomys lewisii* is a *Cynomys*, of which there seems no reasonable doubt, its distinctive feature among the species of *Cynomys* is its half white tail, described by Audubon and Bachman as "tail, from the root for half its length, reddish-brown, the other half to the tip soiled white." This agrees strikingly with the tail of Dr. Merriam's *Cynomys leucurus* (N. Am. Fauna, No. 4, Oct., 1890, p. 33), which he describes as "Tail, basal half concolor with upper and lower surfaces of body respectively; terminal half whitish all round without trace of dark bar."

*Arctomys lewisii* was described from a specimen in the collection of the Zoölogical Society of London, unfortunately from an unknown locality, labeled "*Arctomys brachyura?* Harlan" (= *Anisonyx brachiura* Raf.). The supposed locality was given as "Oregon" (= Oregon of fifty years ago). The specimen, according to Audubon and Bachman, was sent to the Zoölogical Society by "the British fur-traders, who are in the habit of annually carrying their peltry down the Columbia river to the Pacific." The type locality of *Cynomys leucurus* is Fort Bridger, Wyoming,

the species ranging, however, considerably to the westward. There seems therefore good reason for supposing that in all probability the *Arctomys lewisii* (= *Cynomys lewisii*) and *Cynomys leucurus* are one and the same animal, there being as yet only one white-tailed *Cynomys* known.

### *Glis canadensis* Erxleben.

*Glis canadensis* ERXLEBEN, Syst. Anim. 1777, 363. Based primarily on the Quebec Marmot of Pennant (Syn. Quad. 1771, 270, No. 199) = *Arctomys monax melanopus* Kuhl.

Both the Quebec Marmot of Pennant and the *Glis canadensis* of Erxleben were referred by Baird (Mam. N. Am., 1877, pp. 339, 340) without question to *Arctomys monax* (Linn.). Under *Glis canadensis* Erxleben gives two references, first, to the Quebec Marmot of Pennant; secondly, to the Quebec Marmot of Forster (Phil. Trans., LXII, p. 378), an entirely different species (= *Spermophilus parryi phæognathus*), which he considered to be probably the young of Pennant's Quebec Marmot. But his diagnosis is almost a literal translation into Latin of Pennant's description of the Quebec Marmot, his incidental allusions, *passim*, to Forster's animal, in no way vitiating his diagnosis. Pennant's Quebec Marmot is, beyond reasonable doubt, the northern form of *Arctomys monax* (Linn.), which later was named by Kuhl *Arctomys monax melanopus*, under which designation it has been lately recognized by Rhoads (Proc. Acad. Nat. Sci. Phila., 1897, p. 30), Miller (Proc. Bost. Soc. Nat. Hist., XXVIII, 1897, p. 26), and Bangs (Am. Nat., July, 1898, p. 496). It should, however, evidently stand as

*Arctomys monax canadensis* (Erxleben) = *Arctomys monax melanopus* Kuhl.

### *Arctomys pruinosus* Gmelin.

*Arctomys pruinosus* GMELIN, Syst. Nat. 1788, 144. Based on the Hoary Marmot of Pennant, Hist. Quad. II, 1781, 398.  
*Arctomys caligatus* ESCHSCHOLTZ, Zool. Atlas, Zweites Heft, 1829, I, pl. vi. "Nördlichsten Theile der Westküste Amerika's, häufig an der Bristolbai."

Gmelin's *Arctomys pruinosus* was based solely on the Hoary Marmot of Pennant; Pennant's very good description was taken from a specimen in the Leverian Museum; the habitat is given



as "the northern parts of North America." *Arctomys pruinosus* Gmelin was the currently accepted name for the Hoary Marmot until 1888, when Mr. J. B. Tyrrell, in his 'Catalogue of the Mammalia of Canada, exclusive of the Cetacea' (Proc. Canadian Inst., 3d Ser., VI, 1887-88, p. 88), adopted for it the name *Arctomys caligatus* Eschscholtz, stating that "Pennant's description on which Gmelin's name *pruinosus* was founded. . . . agrees so well with a specimen of *A. monax* from Hudson's Bay, the original locality, now in the Geological and Natural History Museum, that I have very little hesitation in placing Gmelin's species as a synonym of *A. monax*." In 1877 I had not only a specimen from the Hudson Bay region, but *several*, and others from as far north and west as the Athabasca country; so that this point was considered in the light of much pertinent material. Besides, it is not known that the type locality of *A. pruinosus* is "Hudson's Bay." Richardson, who identified Pennant's 'Hoary Marmot' with the 'Whistler' of Harmon, which is the true Hoary Marmot, states (Fauna Bor.-Am., I, p. 150) that Pennant's specimen (at that time lost) was "said to have been brought from Hudson's Bay," but Pennant does not so state.

Eschscholtz himself noticed the close resemblance of *A. pruinosus* to his *A. caligatus*; and Wagner says, under *A. caligatus* (Suppl. Schreber's Säugt., III, p. 260), that the resemblance of *A. caligatus* to *A. pruinosus* is striking, and that it seemed to him very doubtful whether *A. caligatus* was a distinct species. In view of this statement it seems strange that he should have placed *A. pruinosus* among the synonyms of *A. monax*, even under the separate subdivision " $\beta$  *Totus pruinosus*," although thus indicating that he considered it something different from *A. monax* proper. Eschscholtz's *A. caligatus* was based on specimens from the coast of Alaska, apparently Bristol Bay, where, he states, it is abundant.

Some writers have given both *A. pruinosus* and *A. caligatus* the rank of distinct species, but most recent authors agree in referring, more or less confidently, *A. caligatus* to *A. pruinosus*. The case would not now be taken up were it not that there seems to be a tendency in some quarters to follow Mr. Tyrrell's dictum, which seems to me quite unwarranted.

In case the form from the Alaskan coast should prove to be separable from that found in the Liard River district, the name *pruinus* might appropriately be restricted to the latter and *caligatus* retained for the former; the British Columbia animal has already a name, in case it proves separable, in the *Arctomys okanaganus* King (Narr. Back's Journ., II, 1836, p. 236).

### **Hypudæus ochrogaster** Wagner.

*Hypudæus ochrogaster* WAGNER, Suppl. Schreber's Säugt. III, 1843, 592.

In 1877 Prof. Baird said of this species (Mam. N. Am., p. 551): "I have never seen nor heard of any authentic American *Arvicola* of an ochery yellow beneath." In the same work he describes the color beneath of his *Arvicola* (*Pedomys*) *austerus* as "pale pure cinnamon, brighter than above," which he describes as "pale cinnamon rufous, variegated with black." Nine of his series of 12 specimens, however, were 'alcoholics.'

Coues described the upper parts in this species as "an intimate 'grizzle' of black, brown, yellowish-brown, and grayish-brown." The belly, he continues, in an average case, "shows a background of plumbeous, strongly washed over with a dirty cinnamon, or muddy rust color" which, "in the lightest-colored specimens" is "so bright as to approach a fawn-color or tawny brown."

Wagner describes his *Hypudæus ochrogaster* as being markedly smaller than *H. riparius* (= *Microtus pennsylvanicus*), but states that the chief difference from this species lies in the light ochery-yellowish of the underparts ("licht ockergelblichen Unterleib"), by which it is easily distinguished from *riparius*. He describes the upper parts as yellowish brown mixed with black. His Latin diagnosis is: "H. supra fuscus, subtus pallide bruno-ochraceus, gutture cinereo, auriculis tectis, cauda dense pilosa, supra fusca, infra abrupte et sordide ochracea." This is slightly amplified in the description in German which follows, the essential parts of which are quoted above. But he adds: "Der Schwanz ist oben dunkelbraun, unten licht ockergelblich, was von der obern Farbe scharf abschneidet." The description as a whole so admirably fits strongly colored examples of *Microtus austerus* that it seems surprising that the fact has not been previously

pointed out. Unfortunately there is no definite type locality; Wagner's two specimens were received from a dealer, "unter dem Namen *Hypudæus riparius* und *novoboracensis*," and were said to have come from America.

If this identification of Wagner's *Hypudæus ochrogaster* is accepted, the appropriate name *ochrogaster* will take precedence by ten years over *austerus*, for the animal now commonly known as *Microtus (Pedomys) austerus* (Le Conte), which should doubtless stand as *Microtus (Pedomys) ochrogaster* (Wagner).

### ***Mustela lutra canadensis* Schreber.**

*Mustela lutra* Linn, *canadensis* SCHREBER, Säugt. III, 1778, pl. cxxvii.

Plate issued in 1776.

*Die americanischen Fischotter* SCHREBER, *ibid.* 1778, 458, in text.

*Mustela lutra canadensis* SCHREBER, *ibid.* 588.

*Mustela hudsonica* DESMAREST (ex Lacépède, MS.), Nouv. Dict. d'Hist. Nat. XIII, 1803, 384.

The name currently adopted for the common Otter of North America throughout the present century has been *Lutra canadensis*, but the authority for the same has been carried back from Sabine, 1823 (Baird, 1857), to Turton, 1806 (Coues, 1877), to Kerr (1792), and finally to Schreber, 1778 (Rhoads, 1894). The latter is the correct authority for the name *canadensis*, as shown by Rhoads in 1894 (Ord's Zoöl., App., p. 12). It is therefore strange and surprising to find that in 1898 (Trans. Am. Phil. Soc., N. S., XIX, pp. 424-426) he abandons the name *canadensis* Schreber for the untenable *hudsonica* Desmarest (ex Lacépède, MS.), apparently to overturn the equally long accepted name *pennanti* Erxleben for the Fisher. Were it not for his intelligent discussion of the case in 1894, one would be justified in inferring, from his latest exposition of the matter, that he was quite unacquainted with Schreber's work, and dependent on second-hand references. He says: "*Mustela lutra canadensis* Schreber is a plate name, published (*fide* Sherborn) in 1776, and is the earliest applied to this Otter. It would stand . . . were it not unquestionably applied and intended by Schreber merely as a geographic name without reference to its specific relations to '*Mustela lutra* Linn.' For this reason alone it should be discarded. Furthermore, the name

*Mustela canadensis* was used by Schreber on a previous plate in the same volume (Pl. No. 126) in the specific sense for the fisher."

Here are two radical errors which defeat Mr. Rhoad's whole contention. First, the name *canadensis* was not used by Schreber "merely as a geographic name without reference to its specific relations to '*Mustela lutra* Linn.,'" but just in the same sense as on other plates in his work he employs such varietal names as *Felis catus ferus* (Pl. cviiA and cviiAA), *Felis catus domesticus* and *Felis catus angorensis* (Pl. cviiB), *Ursus arctus fuscus* (Pl. cxxxix), *Ursus arctus niger* (Pl. cxl), etc., both on the plates and in the lists of plates at the end of each part. Secondly, the plate name *Mustela canadensis* for the Fisher does not occur "on a *previous* plate (Pl. No. 126)," but on a *subsequent* plate (No. cxxxiv)! Therefore the name *Mustela canadensis* Schreber, Pl. cxxxiv, becomes, contrary to Mr. Rhoads's contention, untenable for the Fisher, being preceded in the same work by a *Mustela lutra canadensis* on Pl. cxxviiB. Furthermore, Schreber gives (*l. c.*, p. 458) a very good description of the distinctive external characters of the "americanischen Fischotter," as compared with the European species, adding at the close "S. Tab. cxxviiB." Hence the group of North American Otters should evidently stand as follows:

1. CANADIAN OTTER. *Lutra canadensis* Schreber=*Mustela lutra canadensis* Schreber, Säugt., pl. cxxviiB, 1776.
2. CAROLINIAN OTTER. *Lutra canadensis lataxina* (F. Cuvier)=*Lutra lataxina* F. Cuvier, Dict. des Sci. Nat. XXVII, 1823, 242.
3. FLORIDA OTTER. *Lutra canadensis vaga* (Bangs)=*Lutra hudsonica vaga* Bangs, Proc. Boston Soc. Nat. Hist. XXVIII, 1898, 224.
4. PACIFIC OTTER. *Lutra canadensis pacifica* (Rhoads)=*Lutra hudsonica pacifica* Rhoads, Trans. Am. Phil. Soc. N. S. XIX, 1898, 429.
5. SONORA OTTER. *Lutra canadensis sonora* (Rhoads)=*Lutra hudsonica sonora* Rhoads, Trans. Am. Phil. Soc. N. S. XIX, 1898, 431.
6. NEWFOUNDLAND OTTER. *Lutra degener* Bangs, Proc. Biol. Soc. Washington, XII, 1898, 35.

### ***Mustela pennanti* Erxleben.**

*Mustela pennanti* ERXLEBEN, Syst. Anim. 1777, 470. Based solely on the "Fisher Weesel" of Pennant, Syn. Quad. 1771, 223, No. 157.

As stated above, Mr. Rhoads, in his recent paper entitled 'Contributions to a Revision of the North American Beavers, Otters

and Fishers' (Trans. Am. Phil. Soc., XIX, 1898, pp. 417-439, Pl. xxi-xxv), rejects the name *Mustela pennanti* Erxl. (1777) for the Fisher for the plate name *Mustela canadensis* Schreber, distributed in 1776, about two years in advance of the text to which the plate belongs. But, as already shown (p. 460), this name appears on Schreber's Plate cxxxiv, and is preceded in the same work by a *Mustela lutris canadensis* on Pl. cxxvib, given to the North American Otter, which, on the ground that plate names are available, preoccupied the name *Mustela canadensis* as applied by Schreber to the Fisher.

We therefore agree entirely on this question with Mr. Rhoads's conclusion published in 1894 (Ord's Zoöl., p. 12), where he says: "The '*Mustela canadensis*' of Schreber (1778) [1776] is the same animal as '*M. pennantii*' of Erxleben (1777). Erxleben's *M. canadensis* is the Mink, *Lutreola vison*. Owing to its page sequence in the Säugthiere, the name '*canadensis*' is applicable to only one member of the genus *Mustela* as Schreber defines it, and that (if recognized as a tenable form) is the trinomial '*M. Lutra canadensis*.' The other, in such an event, is a synonym [=homonym]." The name of the Fisher should, therefore, still be ***Mustela pennanti* ERXLEBEN.**

