#### Article XXVII. — MAMMAL NAMES PROPOSED BY OKEN IN HIS 'LEHRBUCH DER ZOOLOGIE.'

# By J. A. Allen.

The second part of Oken's 'Lehrbuch der Zoologie,' published in 1816, includes the Vertebrates, pp. 651-1284 being 'devoted to mammals. While Oken's 'Lehrbuch' has been rarely cited, account has been taken of some of the names first proposed in it, and when found to have priority they have been adopted; a few others guite as well entitled to recognition appear to have been overlooked. Such of the latter as relate to mammals are here considered.

Oken was almost as erratic and irregular in nomenclatorial matters as was Zimmermann in his 'Specimen Zoologiæ Gegraphicæ,' published in 1777,2 but in some respects is less satisfactory, since he failed to cite authorities for the names used, and gave no references to his sources of information. Both diagnosed generic, subgeneric and other groups, as well as species, under either vernacular or systematic names, as seemed to please their fancy, and employed the names given by previous authors as these authors used them, regardless of whether the generic portion of the name conformed or not to the genus to which they assigned the species. Yet they each had a 'system,' — sadly defective, however, when tried by the nomenclatorial usages of to-day. But it is usually not difficult to determine what they meant to indicate.

In the case of Oken, many of the names which he gave were merely substitutes for earlier names. In the case of groups or species not previously named, upon which he bestowed names (fortunately few), their basis is clearly evident. He gave new names to all his higher groups, from classes down to his

 $<sup>^1[</sup>Lorenz]$ Okens | Lehrbuch | der | Zoologie. | — | Mit vierzig Kupfertafeln. | — | Zweite Abtheilung | Fleischthiere. | — | (Preis: 2 Thaler.) | — | Jena, bei August Schmid und Comp. | 1816.

Or: Okens | Lehrbuch | der | Naturgeschichte. | — | Dritter Theil | Zoologie. | Mit vierzig Kupfertafeln. | — | Zweite Abtheilung | Fleischthiere. | . . . [Rest of title page as above.] — 8 vo., 3 ll. (=2 title pages and dedication), and pp. i-xvi., + i-i270, il. and chart of classification.

2 See antea, pp. 13-22.

'Gattungen,' and to a large number of these, but as they are all vernacular and not technical they do not require consideration as an element in nomenclature. His 'Gattungen' are for the most part supergeneric groups, and in many cases conform to modern families rather than to genera. But he subdivided his 'Gattungen' into groups, or sections, that correspond nearly with the modern idea of genera. For these he adopted the names already given to them by previous authors or, with few exceptions, supplied new ones of his own, but left some under merely vernacular names or without names. As an exposition of this phase of the subject I subjoin his classification of the order of Rodents, in the sequence employed in the 'Lehrbuch.' This is not, however, the order in which the groups are given in his 'Nahmen zu Okens Zoologie', II, pp. i-xi; (Mammals, pp. ix-xi, Rodents, pp. ix, x); neither are the names and groups always equivalent in the list of names and in the text.

The text was evidently put together carelessly, as in several instances species of the same group are widely separated (see Arctomys, pp. 837 and 856), and there is apparently here and there some duplication.

## II. ORDNUNG. Lurchsucke-Pfoter.

- 1. Sippschaft. Froschpfoter—Näger.
  - 1. Gattung. Hasen.
- 1. Savia, Cavia.
  - a. Hydrochaerus.

  - b. Coelogenys c. Dasyprocta. d. Cavia.

- 2. Lepus.
  - a. Lagomys. b. Lepus.

#### 2. Gattung. Bilche.

- 1. Jaculus.
  - - a. Dipus.b. Pedetes.
- 2. Murzer.
  - a. Viscaccia.
  - b. Arctomys.
  - c. Bathyergus.
- d. Georychus.
- 3. Krietsche.
  - a. Citellus.
  - b. Cricetus.

- c. Aspalax.
- d. Mus bursarius.
- c. Tamias.
- 4. Schwirrel.
  - a. Sciurus.b. Pteromys.
  - c. Glis.
- 5. Pile.
  - a. Loncheres.
  - b. Mus spinosus.c. Coendu.

## 3. Gattung. Traner.

- 1. Hystrix. 2. Biber.
  - a. Castor.

- b. Hydromys.
- c. Guillino.
- 3. Ondatra.

## 4. Gattung. Mäuse.

- I. Mus.
  - a. Meriones.
  - b. Mus.
    - a. Kleine Mäuse.
    - b. Ratten.
- 2. Zeiste. [=Hypudæus.]
  - a. Zeiste; klein, etc.
  - b. Mus gregarius.
  - c. Glareolus. b. Lemminge.
  - b. Stossmäuse.
  - [=Myospalax.]

### I. Generic Names.

The following generic names are open to comment, and are noticed in the order of their occurrence in the 'Lehrbuch,' only those being mentioned which are not synonyms of earlier names, or which preoccupy later names.

Oryx (p. 672). = Monodon Linn., but of even date with OryxBlainville for a genus of Antelopes. As Blainville's name has long been in current use and was published very early in the year 1816, there is no reason to question its tenability. It probably has a slight priority over Oryx Oken.

Viscaccia (p. 835). By restriction Viscaccia Oken equals Viscaccia Schinz, 1825. The authority is simply carried back (See further on this case Allen, Proc. Biol. Soc. to Oken. Wash., XV, 1902, p. —).

Citellus (p. 842). Type Mus citellus Linn., 1766. = Spermophile F. Cuvier, same type. (". . . . je donnerai au groupe dont le Souslik devient le type, le nom de Spermophile." F. Cuvier, Mém. du Mus. d'Hist. Nat., IX, 1822, p. 304). Or: Spermophiles F. Cuvier, in Dents des Mamm., 1825, p. 160, where he again says: "Ce genre est formé du souslic.'

Also = Citillus Lichtenstein, 1830, primarily, and also by Lichtenstein separated the "europäischen Ziesel restriction. (dem polnischen Suslik)" as the type of a group which he took out of Cuvier's genus Spermophilus, leaving the other species to be distributed in either Arctomys or Spermophilus. As the name chosen for the new group is the Linnæan specific name of the suoslik (changed in spelling from citellus to citillus), this species should be construed as the type of the genus Citillus, although he included under it three other species there described as new, only one of which, C. mugosaricus, is strictly congeneric with C. citellus.

As Oken's Citellus was based primarily on the Mus citellus of Linnæus and Pallas (Arctomys citillus Schreb.), as indicated not only by the name but by the forms placed under it, it has the same type as Spermophilus F. Cuvier, over which it has six years' priority (even accepting the name in its original vernacular form). As Spermophilus originally included only the souslik, it is a strict synonym of Citellus Oken. The fact that other authors later referred to it other species, as Lesson in 1827 (Man. de Mamm., pp. 243-245), who appears to have been the first author who employed the Latin form of the name, this does not render the name of the originally monotypic Spermophilus available for any of the forms later referred to it.

In this connection it becomes of interest to see what provision has been made for the numerous species long currently associated with the name *Spermophilus*. The named sections of the group are the following, to which it may be necessary to add others for a few well-marked types apparently as yet unprovided for. Such deficiencies should only be supplied, however, on the basis of a careful revision of the entire group. The names that have been proposed in a generic or subgeneric sense, for the existing forms, in the order of date are:

- Citellus Oken, 1816, type Mus citellus Linn. = Spermophilus F. Cuvier, 1822;=Citillus Lichtenstein, 1830.
- 2. Anisonyx Rafinesque, 1817, type Arctomys columbianus Ord, preoccupied by Anisonyx Latreille, 1809, for a genus of Coleoptera.
- 3. Otospermophilus Brandt, 1844, type Arctomys grammurus Say.
- 4. Collobotis Brandt, 1844, type, Arctomys fulvus Lichtenstein.
- 5. Otocolobus Brandt, 1844, an alternative name for Collobotis.
- 6. Ictidomys Allen, 1877, type, Sciurus tridecemlineatus Mitchell.
- 7. Spermophilopsis Blasius, 1884, type, Citillus leptodactylus Lichtenstein.

- 8. Xerospermophilus Merriam, 1892, type, Spermophilus mohavensis Merriam.
- Ammospermophilus Merriam, 1892, type Spermophilus leucurus Merriam.
- 10. Callospermophilus Merriam, 1897, type, Sciurus lateralis Say.

Grison (p. 1000). Type and only species, Viverra vittata Schreber = Galictis Bell, 1826, same type. Synonyms: Eirara Lund, 1839 (in part); Grisonia Gray, 1843. The name Grison follows, instead of precedes, as is usually the order, the name of the species, but Grison stands as a technical name on p. xi.

**Tayra** (p. 1001). Based, as the name indicates, primarily on the 'Tayra,' or *Mustela barbara* Linn., but includes also the Pekan (*Mustela canadensis* Oken = M. pennanti Erxl.) = Eira H. Smith, 1842. Synonym: Galera Gray, 1843.

Thos (p. 1037). Proposed for, and includes only, the Jackals, the first species being Thos C[anis] ceylonensis Oken (= Canis aureus Linn., part). Synonyms: Lupulus Blainville, 1830; Sacalius H. Smith, 1839, which has the same type; Oxygöus Hodgson, 1841, same type; Dieba Gray, 1869, type, Canis anthus F. Cuvier.

The species referred by Oken to Thos are: (1) Thos C. ceylonensis; (2) Th. C. mesomelas; (3) Thos C. barbarus (= Canis anthus F. Cuvier, 1824); (4) Thos vulgaris (= Canis aureus Linn).

Vulpes (p. 1033); Lupus (p. 1039). These names are used in combination with specific names and correspond to superspecific divisions of his *Canis*, but are not employed in a manner that entitles them to recognition in nomenclature. Brisson and Oken are strictly comparable in their use of these names, which are not tenable from either of these authors.

Panthera (p. 1052); Tigris (p. 1054); Leo (p. 1070). Oken divides his genus Felis into four primary sections, to which he formally applies only vernacular names, as follows. 1. Luchse [Lynx]; 2. Pardel, Lunzen [Panthera]; 3. Tiger [Tigris]; 4. Lowen [Leo]; but under each, in enumerating the species, he employs with considerable consistency their Latin equivalents, namely (respectively), Lynx, Panthera, Tigris, and Leo. The

species indicated by Linnæus and Pallas by these names are obviously to be taken as the types of these groups.

Lynx = Lynx Kerr, 1792, and of such recent authors as have made use of the name.

Panthera includes all of the spotted cats, both large and small, which he subdivided into minor groups on the character of the markings, etc., he placing Felis pardus Linn. (=F. panthera Pallas) as "Art. 7. P[anthera] vulgaris." This should obviously be considered as the type of Panthera, of which Gray's Leopardus, as used by him in 1843 (List Mamm. Brit. Mus., 1843, pp. 40-44), is practically equivalent.

Tigris and Leo respectively antedate Tigris and Leo of Gray, 1867, but are more comprehensive groups.

### II. Specific Names.

Oken also gave many new specific names, he purposely renaming many species already named, and giving names to many others he considered new. These names in some instances antedate others given later to the same species; in other cases Oken's names preoccupy names given later as new by other authors. In most cases his names are identifiable but fortunately in very few instances disturb current names. The following ten, relating to American species, are all that will be given special mention here. A few others appear to be available for Old World species.

**Lepus chilensis** (sub **Viscaccia**), p. 836. The first name available for the Argentine Viscacha, having one year's priority over *Dipus maximus* Desmarest (1817, ex Blainville, MS.), as already shown in another connection. (*Cf.* Proc. Biol. Soc. Wash., XV, 1902, p. —.)

Hystrix paraguayensis (sub Coendu), p. 870. Based on 'Le Couiy' of Azara, for which it is the earliest name, antedating by six years *Spiggurus spinosus* F. Cuvier, 1822. The species should therefore stand as *Coendou paraguayensis* (Oken).

Lynx brasiliensis (sub Felis), p. 1050. Not satisfactorily identifiable. Attributed to Paraguay. Not Felis brasiliensis

Schinz, 1821, and probably not Felis brasiliensis F. Cuvier, 1828.

P[anthera] paraguayensis (sub Felis), p. 1052. Includes (1) the 'Ocelot,' which he describes at length, and (2) the 'Chibi-guazu,' the latter after Azara. If the Ocelot can be excluded on the ground of its having been previously named, only Azara's 'Chibigouazou' would be left as the basis of Oken's paraguayensis, which antedates Felis mitis F. Cuvier (1820), Felis wiedi Schinz (1821 = Felis macroura Weid, 1826), and other names later applied to practically the same animal.

P[anthera] mexicana (sub Felis), p. 1054. In part, and so far as it has any substantial basis, this is the same as Felis mexicana Desmarest, 1816 (ex. Buffon, Hist. Nat., Suppl., III, 227, pl. xxxiv), and hence the two names are of even date. Also = Felis novæ hispaniæ Schinz, 1825. It is of course, as Buffon believed, the Serval.

Leo niger (sub Felis), p. 1070. The black phase of the 'Jagouarondi'=Felis jaguarundi Fischer, 1814.

L[eo] griseus (sub Felis), p. 1070. The 'Jagouarondi' of Azara; hence = Felis jaguarundi Fischer, 1814. Not Leopardus griseus Gray, 1842 = Felis griseus Gray, 1867.

L[eo] brunneus (sub Felis), p. 1070. The 'Pajero' or Pampas Cat = Felis pajeros Desmarest of same date. The last name having probably slight priority in date of publication, and also having obtained currency while the other has not, is to be preferred.

Did[elphys] paraguayensis, p. 1147. As already shown (antea, pp. 251, 267), this name is based on Azara's 'Micouré premier,' and hence supplants D. azaræ Temminck, 1825.

Did[elphys] mes-americana, p. 1152. As already shown (antea, p. 251) this is the earliest name for the large opossums of northern Mexico.

