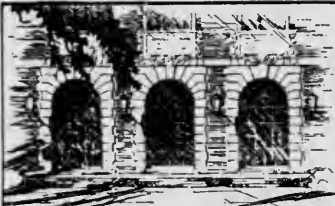


JAN 29 1957



LIBRARY
OF THE
UNIVERSITY
OF ILLINOIS

590.5

FI

v. 37-38

~~LIBRARY~~

BIOLOG

The person charging this material is responsible for its return on or before the **Latest Date** stamped below.

Theft, mutilation and underlining of books are reasons for disciplinary action and may result in dismissal from the University.

UNIVERSITY OF ILLINOIS LIBRARY AT URBANA-CHAMPAIGN

~~AUG 22 1978~~

~~DEC 4 1972~~

~~DEC 11 1972~~

~~DEC 11 1972~~

~~DEC 22 1972~~

MAR 04 1974

Bats from Guerrero, Jalisco and Oaxaca, Mexico

LUIS DE LA TORRE

Associate, Division of Mammals

This paper is based on a small collection of bats made by the author in Guerrero and Oaxaca from July 22 to August 5, 1952, and in Jalisco from December 7 to 11, 1954. The primary objective of this collecting was to obtain additional specimens of *Sturnira* to be used for a systematic review of that genus. In sampling caves and other likely habitats, representatives of fourteen species of bats were collected, including the first series to be taken of *Enchisthenes harti*.

I am indebted to Miss Barbara Lawrence, Museum of Comparative Zoology, and to Dr. E. Raymond Hall, Museum of Natural History, University of Kansas, for the loan of specimens in their care; to Mr. R. W. Hayman, British Museum (Natural History), for comparing specimens of *Chilonycteris* with the types of *C. psilotis*; and to Mr. and Mrs. Loren P. Woods, Chicago Natural History Museum, for their kindness in making possible my visit to the interesting Jalisco region. The patient and enthusiastic help given by my wife, June, in many capacities is also gratefully acknowledged.

LIST OF SPECIES

With the exceptions noted, the specimens from Guerrero and Oaxaca were taken in caves. Those from Ciudad Guzmán, Jalisco, were netted at night in a grove of native, small-fruit *Ficus* trees.

The measurements given are in millimeters and, unless otherwise indicated, apply to the entire series. The average measurement, when given, is followed by the extremes in parentheses.

Balantiopteryx plicata plicata Peters

Balantiopteryx plicata Peters, 1867, Monatsb. Preuss. Akad. Wiss. Berlin, 1867: 476.

Type locality.—Puntarenas, Puntarenas, Costa Rica.

Specimens collected.—Total 32 (2 skins with skulls, 30 in alcohol). GUERRERO: 5 mi. NW. of Acapulco (12 males, 14 females); 12 mi. S. of Mexcala (1 female). OAXACA: Tehuantepec (5 young females).

Measurements.—Forearm of males from Acapulco 41.3 (40.0–43.0), females 42.6 (40.0–46.0); female from Mexcala 41.8.

Chilonycteris rubiginosa mexicana Miller

Chilonycteris mexicana Miller, 1902, Proc. Acad. Nat. Sci. Philadelphia, **54**: 401.

[Chilonycteris] p[arnellii] mexicana, Koopman, 1955, Jour. Mamm., **36**: 112.

Type locality.—San Blas, Nayarít, Mexico.

Specimens collected.—Total 8 (2 skins with skulls, 6 in alcohol). GUERRERO: 5 mi. NW. of Acapulco (7 males, 1 female).

Measurements.—Forearm of males 57.3 (55.7–58.8), female 59.5.

Remarks.—It cannot be established that *parnellii* Gray 1843 has priority over *rubiginosa* Wagner 1843. The issue of the Proceedings of the Zoological Society of London where the name *parnellii* first appears is dated April 11, 1843, as shown by Koopman (Jour. Mamm., 1955, **36**: 111), but the actual date of publication is October of that year (Duncan, Proc. Zool. Soc. London, **1937**: 79). The name *rubiginosa* appears in the Archiv für Naturgeschichte after a paper read in August, but the exact date of publication is not known. In the absence of conclusive evidence, the better known and more widely used name *rubiginosa* should be retained.

Chilonycteris psilotis Dobson

Chilonycteris psilotis Dobson, 1878, Cat. Chirop. Brit. Mus., p. 451. Miller, 1902, Proc. Biol. Soc. Washington, **15**: 249—Isthmus of Tehuantepec, Mexico.

Chilonycteris personata, J. A. Allen (not Wagner), 1911, Bull. Amer. Mus. Nat. Hist., **30**: 263. G. M. Allen, 1935, Jour. Mamm., **16**: 227. Dalquest and Hall, 1949, Jour. Mamm., **30**: 425. Davis and Russell, 1952, Jour. Mamm., **33**: 234; 1954, op. cit., **35**: 67.

Chilonycteris torrei continentis Sanborn, 1938, Occ. Pap. Mus. Zool., Univ. Michigan, no. 373: 1—Laguna de Zotz, Petén, Guatemala (type locality).

Type locality.—Here designated as Tehuantepec, Oaxaca, Mexico.

Specimens collected.—Total 3 (2 skins with skulls, 1 in alcohol). GUERRERO: 5 mi. NW. of Acapulco (3 males).

Measurements.—Forearm 42.5, 43.2, 44.0.

Remarks.—These specimens agree with the type of *C. torrei continentis* Sanborn, and with Guatemala specimens that are identical with the types of *psilotis*. Additional representatives of *psilotis* have been examined from Mexico, Central America, and Venezuela. Inasmuch as it has not been demonstrated that *C. psilotis* and the Brazilian *C. personata* are conspecific, the name *psilotis*, rather than *personata*, should be used for the small, mainland *Chilonycteris*.

Pteronotus davyi fulvus Thomas

Chilonycteris davyi fulvus Thomas, 1892, Ann. Mag. Nat. Hist., (6), 10: 410.

Type locality.—Las Peñas, Jalisco, Mexico.

Specimens collected.—Total 11 (in alcohol). GUERRERO: 5 mi. NW. of Acapulco (9 males, 2 females).

Measurements.—Forearm, males 44.1 (43.2–45.5), females 44.0, 45.0.

Mormoops megalophylla megalophylla Peters

Mormoops megalophylla Peters. 1864, Monatsb. Preuss. Akad. Wiss. Berlin, 1864: 381.

Type locality.—Southern Mexico.

Specimens collected.—Total 27 (in alcohol). GUERRERO: 5 mi. NW. of Acapulco (27 males, no females found).

Measurements.—Forearm 54.9 (53.0–59.0).

Micronycteris megalotis mexicana Miller

Micronycteris megalotis mexicana Miller, 1898, Proc. Acad. Nat. Sci. Philadelphia, 50: 329.

Type locality.—15 mi. S. of Ciudad Guzmán, Platanar, Jalisco, Mexico.

Specimens collected.—1 (in alcohol). JALISCO: 2 mi. N. of Ciudad Guzmán (1 female).

Measurements.—Forearm 36.3.

Glossophaga soricina leachi Gray

Monophyllus leachii Gray, 1844, Voyage of the Sulphur, Zool., 1: 18.

Type locality.—Realejo, Nicaragua.

Specimens collected.—Total 9 (in alcohol). GUERRERO: 5 mi. NW. of Acapulco (6 males, 3 females).

Measurements.—Forearm 36.3 (35.0–37.5).

Remarks.—One specimen was taken in a mouse trap baited with ripe banana.

Leptoncyteris nivalis nivalis Saussure

M[=*Ichnoglossa*] *nivalis* Saussure, 1860, Rev. Mag. Zool., Paris (2), 12: 492.

Leptoncyteris nivalis yerbabuena Martinez and Villa, 1940, An. Inst. Biol. Univ. Nac. México, 11: 313—Yerbabuena, Guerrero, Mexico (type locality).

Type locality.—Near snow line on Mount Orizaba, Veracruz, Mexico.

Specimens collected.—1 (in alcohol). GUERRERO: 12 mi. S. of Mexcala (1 male).

Measurements.—Forearm 54.0.

Remarks.—This specimen, a topotype of *yerbabuena*, is indistinguishable from a topotype of true *nivalis* from Orizaba. In size, it also agrees with specimens from Colima, but is smaller than those from Nuevo León, Texas, and Arizona. A size cline from North to South is indicated.

Artibeus jamaicensis jamaicensis Leach

Artibeus jamaicensis Leach, 1821, Trans. Linn. Soc. London, 13: 75.

Type locality.—Jamaica.

Specimens collected.—Total 5 (in alcohol). JALISCO: 2 mi. N. of Ciudad Guzmán (3 males, 2 females).

Measurements.—Forearm 58.0 (55.5–60.0).

Remarks.—All specimens in the series have the third upper molar.

Artibeus cinereus toltecus Saussure

Stenoderma tolteca Saussure, 1860, Rev. Mag. Zool., Paris, (2), 12: 427.

Type locality.—Mirador, Veracruz, Mexico.

Specimens collected.—Total 8 (in alcohol). JALISCO: 2 mi. N. of Ciudad Guzmán (5 males, 3 females).

Measurements.—Forearm 40.0 (37.0–42.0).

Remarks.—The palate in two individuals appeared abnormally wide, and the arrangement of the upper teeth (pl. 30, fig. 1) differed significantly from the normal condition in *Artibeus cinereus* (pl. 30, figs. 4, 5, 6). Study of the skulls revealed that they were of extreme age, and the labial edge of the maxillary bone had been eroded (pl. 30, fig. 2) leaving a good part of the roots unprotected. It is probable that if this weakened condition develops early in life, the



a



b



c

FIG. 146. *a*, View from the Ciudad Guzmán basin to the southwest. Volcán de Colima in the distance. *b*, View of basin showing scattered fig trees frequented by fruit-eating bats. *c*, Eastern edge of basin showing feeding habitat of *Enchisthenes harti*, *Artibeus j. jamaicensis*, *A. cinereus toltecus*, *Sturnira lilium parvidens*, and *Micronycteris megalotis mexicana*.

lateral mastication movements very likely would alter the alignment of the teeth and cause them to flare out as in this case (pl. 30, fig. 3).

Enchisthenes harti Thomas. Plate 31.

Artibeus harti Thomas, 1892, Ann. Mag. Nat. Hist., (6), 10: 408.

Enchisthenes harti, Sanborn, 1932, Ann. Carnegie Mus., 21: 179—Venezuela (skin and skull); Goodwin, 1940, Amer. Mus. Nov., no. 1075: 2—Honduras (skin and skull); Ecuador (incomplete skulls from owl pellets); Goodwin, 1954, Amer. Mus. Nov., no. 1689: 5—Tamaulipas, Mexico (incomplete skull).

Type locality.—Trinidad, British West Indies.

Specimens collected.—Total 12 (1 skin with skull, 11 in alcohol). JALISCO: 2 mi. N. of Ciudad Guzmán (8 males, 4 females).

Measurements.—Forearm 39.8 (38.2–43.1); greatest length of skull, of a male and two females 20.4, 20.9, 20.9; condylobasal length 18.8, 19.0, 19.0; zygomatic breadth 12.1, 12.2, 12.1; mastoid breadth 10.8, 10.7, 10.6; palatal length 9.0, 9.8, 9.1; postorbital constriction 5.4, 5.6, 5.3; maxillary tooth row 6.8, 7.0, 6.9; greatest width across molars 8.4, 8.6, 8.3; length of mandible 13.1, 13.4, 13.9; lower canine to condyle 12.9, 13.2, 13.5; mandibular tooth row 7.3, 7.5, 7.3.

Remarks.—*E. harti*, previously known from only three complete specimens, was common in the *Ficus* groves (fig. 146, c) near Ciudad Guzmán. This village lies in a basin rimmed by the Sierra Nevada de Colima on the west (fig. 146, b), and by lower, pine covered hills on the east (fig. 146, c).

The feeding habits of *Enchisthenes*, judging from the individuals observed, probably make it a rather easy prey of owls. The fruit eaten in this area is small, about a centimeter in diameter. It is quickly snipped from the tree in flight, and carried to a convenient branch where it is eaten. The forearms are used to handle and turn the fruit as parts of it are consumed, and it is in these movements that the exposed bat probably is seen by its predators.

It is interesting to note that *E. harti* and *Sturnira lilium parvidens*, both tropical species, were taken on one occasion when the temperature was only 36° F.

Desmodus rotundus murinus Wagner

[*Desmodus*] *murinus* Wagner, 1840, Schreber's Saugth., Suppl., 1: 377.

Type locality.—Mexico.

Specimens collected.—Total 2 (in alcohol). GUERRERO: 5 mi. NW. of Acapulco (1 male, 1 female).

Measurements.—Forearm, male 58.2, female 60.6.

Molossus sinaloae Allen

Molossus sinaloae Allen, 1906, Bull. Amer. Mus. Nat. Hist., 22: 236.

Type locality.—Esquinapa, Sinaloa, Mexico.

Specimens collected.—Total 9 females (in alcohol). GUERRERO: 15 mi. NW. of Acapulco.

Measurements.—Forearm 47.9 (46.5–49.8).

Remarks.—These specimens were taken under the dry fronds of a coconut palm.

Miller and Kellogg (1955, U. S. Nat. Mus. Bull. 205: 119) follow G. M. Allen in regarding *sinaloae* a race of *rufus* Geoffroy. *M. sinaloae*, however, is a medium size species and is distinct from the larger *M. rufus* of which *nigricans* Miller is the northern race. *M. r. nigricans* and *M. r. rufus* differ only in average size, while *M. sinaloae* can always be separated from *M. rufus* on absolute characters.



Palate, maxilla and rostrum of *Artibeus cinereus toltecus*: 1-3, distorted condition in female of extreme age; 4-6, normal condition in adult female. $\times 4$.



Enchisthenes harti: 1, mandible; 2, ventral surface of skull; 3, dorsal surface of skull. $\times 4$.

Index

Principal discussion and all new names indicated by **bold-faced** type.

- Abo Formation 389
Abraeinae 605, **610**
Abraeus 601
 acicularis 620
 phyllobius 601
 punctiger 624
 vididulus 601
abruptum, *Platysoma* 629
aburri, *Aburria* 21
Aburria aburri 21
acanthognathus, *Lophodolus* 299
Acanthotermes 468, 486, 512
Achalinus spinalis 174
acicularis, *Abraeus* 620
 Bacanius 605, 606, **620**
Aciculitermes 515
acme, *Bulimulus* 325
Acorhinotermes 469, 493, 509
Acritus 602, 605
 biloculatus 612
 caledoniae 605, 607, **612**, 614
 lilliputianus 612
 schmidti 605, 607, 612, **614**
actinopterygians 388
Actitis macularia 154
aculeatus, *Argyropelecus* 275
acuminata, *Erolia* 154
acunhae, *Nesospiza* 147, 152
 horny palate 151
acutirostris, *Calamaria* 199
Adioryx 126
 Holocentrus 92, **109**
Admiral Formation 389
adusta, *Nenia* 305
 tumens, *Nenia* 305
aegyptiaca, *Tadarida* 595
aegyptiacus, *Rousettus* 595
Aeletes 620
 crenatus 605, 606, **610**
 daubani 610
 laevis 610
 longipes 614
 politus 610
aequatorialis, *Penelope* 17
aequinoctialis, *Succinea* 305
Afrosbulitermes 515
agilis, *Mus* 648
Agouti paca 215
Ahamitermes 469, 503, 510
Ailuropoda 44

Aistopoda 531
Akodon aerosus 234
 berlepschii 231
 jelskii 254
 pulcherrimus 227
 pyrrhotis 228
 nigrita 237
akodoni, *Amblyopinus* 228
alatus, *Lampanyctus* 289
alba, *Egretta* 153
 Monopterus 53, **59**
 Muraena 59
alberti, *Craz* 17
albinism, in cracids 19
albiventer, *Calamaria* 199
albopunctata, *Calamaria* 199
alidae, *Calamaria* 200
Allodotermes 473, 513
Allognathotermes 511
alstoni, *Neotomodon* 547
alticolus, *Edrabius* 259
amabilis, *Argyropelecus* 276
amazonicus, *Holochilus* 659, 667
 brasiliensis 667, 669
Ambassis, ecological distribution 81
 gymnocephalus 52, 54, 71
 interrupta 52ff, 71
 ecological distribution 82
 food 71, 84
 nalua 53, 72
 predator of 68
Amblyopininae 211ff
Amblyopinini 221
Amblyopinodes 216, 218, 220, 222, **247**
 claviger 249
 gahani 248
 peruvianus 250
 piceus 248
 similis 251
 trassosi 249
Amblyopinus 212, 214, 216–18, 220, **221**
 akodoni 228
 ancashi 232
 angustus 247
 bequaerti 247
 brandesi 227
 chilomysi 239
 colombiae 231
 emarginatus 239
 fuegensis 216, **237**

- henseli* 212, 247
hershkovitzi 238
huilae 242
jelskii 212, 224
kalinowskii 243
kofordi 231
longus 234
marmosae 247
monticolus 228
montivagans 240
oryzomysi 240
pacae 244
punae 227
sanborni 238
schmidti 231
spinipennis 234
waterhousei 219, 243
amblyurus, *Hemirhamphus* 67
Zenarchopterus 52ff, 67
 food 67, 84
americanus, *Ursus* 25
Amiatermes 467, 469, 472, 473, 477, 480, 483, 485, 488, 491, 493, 501, 503, 510
Amiatermitinae 493, 505, 506, 510, 516, 562
amoenus, *Neomyripistis* 94
Amphibia, *apsidospondylous* 388
 lepospondylous 388
Amphicyodontinae 44
amplus, *Peromyscus difficilis* 547
Ampullariidae 303
Ampullarius (*Ampullarius*) *bridgesii* 304
 insularum 304
 papyraceus 303
 (*Limnopomus*) *crassus* 303
 nubilus 303
Anabantoidea, ecological distribution 83
Anacanthotermes 473, 482, 509
anale, *Scopelarchus* 284
Anapleus 601
Anatidae 153
ancashi, *Amblyopinus* 232
Ancistrotermes 513
andium, *Radiodiscus* 308
andivaga, *Streptaxis* 329
 Systrophia 308
andoicus, *Bulimulus* 324
Angelosaurus 395, 398
angouya, *Mus* 660
 Oryzomys 654
angrandi, *Bulimulus* 315
 kalinowskii, *Nenia* 306
 Nenia 306
 urubambensis, *Nenia* 306
Anguilla borneensis 52ff, 58
 ecological distribution 82
 food 58, 84
 predator of 62
Angularitermes 469, 495, 497, 514
Angulitermes 471, 485, 501, 512
angustus, *Amblyopinus* 247
anguya, *Holochilus* 647
 Mus (*Holochilus*) 648, 660, 666
Anodontostoma chacunda 52, 53, 55
Anomodontia 387, 398
 distribution, geographic 390
 geologic 390
Anoplogaster cornuta 292
Anoplogasteridae 292
Anoplotermes 472, 484, 491, 493, 500, 510
Anthias maculatus 73
apaporiensis, *Caiman sclerops* 340
Apicotermes 473, 485, 511
Apilitermes 511
Apobletes 628
 appendiculata 627
 montrouzieri 605, 607, 627
Apocryptes brachypterus 78
 rictuosus 80
Apoda 531
Apodes, ecological distribution 83
Aporodon 644
appendiculata, *Apobletes* 627
apraeocularis, *Calamaria* 200
arborifera, *Linophryne* 300
Archotermopsis 468, 470, 482, 507, 509
Arctibeus lineatus 409
Arctotherium 25
arenarius, *Miniopterus natalensis* 595
Argas 579ff
 boueti 580, 594, 598
 (*Chiropterargas*) *boueti* 580
 confusus 579, 586, 594, 598
 vespertilionis 586, 596, 598
Argasidae 579
argenteus, *Diretmus* 292
argentimaculata, *Sciaena* 73
argentimaculata, *Lutianus* 54, 55, 73
 food 84, 85
argentinus, *Edrabius* 258
argus, *Chaetodon* 75
 Scatophagus 52, 54, 55, 75
argyromus, *Myripistis* 136
Argyropelecus aculeatus 275
 amabilis 276
 hemigymnus 274
Ariidae, ecological distribution 86
Ariophantidae 308
Arius caelatus 64
 venosus 65
arkansas, *Catapleura* 377
armatus, *Neoniphon* 94
Armitermes 495, 514
Arroyo Formation 389
 fauna 390ff
artensis, *Saprinus* 605, 608, 609
arthuri-muelleri, *Rugitermes* 576
Artibeus cinereus toltecus 698
 harti 700
 jamaicensis jamaicensis 698
 vittatus 405

- ascendens*, *Bulimulus derelictus* 317
ascensionis, *Holocentrus* 93, **100**, 106, 122, 134
Perca 100
Asellia tridens tridens 595
assimilis, *Carcinops* 619
Astronesthes leucopogon 278
Astronesthidae 278
atahualpa, *Epiphragmophora* 327
atavus, *Tretomys* 646
atavus, *Bulimulus* 320
ater, *Lampanyctus* 288
atlantica, *Evermannella atrata* 284
atlanticus, *Diogenichthys* 286
Tetragonurus 298
Atlantisia 158, 159
rogersi 142
Atractaspis 168
Atractus 168
attractus, *Beloholocentrus* 95
atrata atlantica, *Evermannella* 284
atrum, *Cyema* 291
attenuata, *Vinciguerria* 273
auritus christiei, *Plecotus* 595
Reithrodon 646
australasiae, *Saprinus* 609
Australian region, termite fauna of 470, 476, 508ff
Australitermes 469, 477, 503, 515
Autunian fauna 389ff

Bacanius 602, 605
acicularis 605, 606, **620**
fauveli 605, **622**, 624, 625
hamatus 620
punctiger 605, 606, 622, 624, 625
remingtoni 605, 606, 622, 624
sulcisternus 620
Bagrus nemurus 65
Balantiopteryx plicata plicata 695
balbo, *Evermannella* 284
balnearum, *Holochilus* 656, 661, 665
Holochilus brasiliensis 665
Barbodes sealei 62
Barbus elongatus 62
Bartramia longicauda 154
Basidentitermes 512
Bathophilus metallicus 281
Bathylagidae 284
Bathylagus glacialis 284
bathyphila, *Lampadena* 288
bathyphilum, *Gonostoma* 272
bats, ticks of 579ff
Beanea 95
trivittata 95
beani, *Serrivomer* 291
beccari, *Calamaria* 200
Belle Plains Formation 389
Beloholocentrus 95
attractus 95
Belone strongylura 66
benjaminsi, *Calamaria* 200

benoiti, *Hygophum* 285
Benthodesmus simonyi 298
bequaerti, *Amblyopinus* 247
berbicensis, *Holochilus* 661
Holochilus brasiliensis 655, 669
berlepschi, *Crypturellus cinereus* 15
Beryciformes 121
Betta unimaculata 53, 54, **70**
ecological distribution 82, 86
food 70, 84
bibulbosus, *Eustomias* 282
bicolor, *Calamaria* 192, 200
bicornis, *Ceratostethus* 52, 54ff, 68
Linophryne 300
Neostethus 68
bidentatus, *Urotiaianus* 563, 564
bigelowi, *Eustomias* 282
bikolana, *Vaimosa* 79
bikolanus, *Pseudogobius* 52, 54, 79
biloculatus, *Acritus* 612
bitaeniatus, *Thaumastius* 309
bitorques, *Calamaria* 200
blakfordi, *Yarella* 272
boa ferox, *Stomias* 278
boddaerti, *Boleophthalmus* 55, **80**
food 80, 85
Gobius 80
Boleophthalmus boddaerti 55, **80**
food 80, 85
bonapartei, *Nothocercus* 12
Bonapartia pedialota 269
borneensis, *Anguilla* 52ff, **58**
ecological distribution 82
food 58, 84
Calamaria 177ff, **194**, 200
Gastromyzon 64
Neostethus 52, 54ff, **69**
Borneo, North, fishes of 47ff
Borneo Zoological Expedition 47ff
boucardi, *Crypturellus* 16
boueti, *Argas* 580, 594
boyllii levipes, *Peromyscus* 545
brachygnathus, *Rhinolophus clivosus* 595
Brachygobius doriae 52, 77
food 77, 85
brachypterus, *Apocryptes* 78
Holocentrus 109
Gobiopterus 55, 78
brachyrhynchus, *Rhynchichthys* 93
brachyura, *Calamaria* 192, 200
brachyurus, *Doryichthys* 55, 67
Syngnathus 67
brandesi, *Amblyopinus* 227
brasiliensis amazonicus, *Holochilus* 667
balnearum, *Holochilus* 665
berbicensis, *Holochilus* 655, 669
brasiliensis, *Holochilus* 662
guianae, *Holochilus* 668
Hesperomys (Holochilus) 666
Holochilomy 662
Holochilus 645, 648, 653, 654, 657, 658, 660, 661, 666

- incarum*, *Holochilus* 668
leucogaster, *Holochilus* 648, 665
Mus 660, 662, 663, 667
nanus, *Holochilus* 666, 669
vulpinus, *Holochilus* 661
braueri, *Cyclothone* 272
Brazil, shells from 303ff
brevibarbatulus, *Stomias* 279
brevidentatus, *Serrivomer* 291
bridgesii, *Ampullarius* 304
bridwelli, *Spalacotheroides* 690
brookii, *Calamaria* 179
bruegeli, *Calamaria* 185, 187
brunneescens, *Penelope* 17
Bubulcus ibis 153
buccinatus, *Oryzomys* 654, 660
Buchen, Walter 140
buchi, *Calamaria* 195, 200
buckleyi, *Odontophorus gujanensis* 21
Bulbitermes 481, 514
Buliminus aegyptiacus 429, 432
chondriiformis 419
heptodon 429
septemdentatus 422
sexdentatus 436
Bulimulidae 309, 331
Bulimulus acme 325
andoicus 324
angrandi 315
(*Atarax*) *infundibulum* 320
infundibulum umbilicatellus 320
perforatus 320
cereicola 317
culmineus 315
dentritus 319
derelictus 317
elatus 324
extensus 323
(*Geoceras*) *veruculum* 320
(*Geopyrgus*) *turritus* 336
hamiltoni 325
infundibulum 320
umbilicatellus 320
jocosensis 322
(*Lissoacme*) *cereicola* 317
dentritus 319
derelictus ascendens 317
modestus 318
reconditus 320
rudistriatus 318
scutulatus 319
longitudinalis 316
modestus 318
mutabilis 334
nemorensis 316
obeliscus 322
(*Peronaeus*) **acme** 325
andoicus 324
elatus 324
extensus 323
hamiltoni 325
pupiformis 325
pyrgidium 321
proteiformis 335
proteus 335
(*Protoglyptus*) *rirasii* 336
pupiformis 325
pyrgidium 321
reconditus 320
revinctus 316
rirasii 336
rudistriatus 318
(*Scutalus*) *angrandi* 315
culmineus 315
longitudinalis 316
mutabilis 334
nemorensis 316
phaeocheilus 334
proteus 335
revinctus 316
subjussieui 336
tupacii 316
scutulatus 319
(*Spirosulcatus*) *endospira* 336
subjussieui 336
tupacii 316
turritus 336
veruculum 320
Bulimus lamelliferus 434
ovularis 422, 438
sauleyi 416
septemdentatus 422
bullisi, *Holocentrus* 91, 113
bungaroides, *Calamaria* 200
burtoni, *Poliospiza* 149
horny palate 151
Butis butis 52, 75
gymnopomus 52, 55, 76
food 76, 85
butis, *Butis* 52, 75
Cheilodipterus 75
caelatus, *Arius* 64
Tachysurus 55, 64
food 85
caeruleomaculatus, *Chelon* 53, 68
Mugil 68
Caiman sclerops 339
aportensis 340
Calamaria 167ff
acutirostris 199
albiventer 199
albopunctata 199
alidae 200
apraocularis 200
beccari 200
benjaminsii 200
bicolor 192, 200
bitorques 200
borneensis 177ff, 194, 200
brachyura 192, 200
brookii 179
bruegeli 185, 187
buchi 195, 200

- bungaroides* 200
ceramensis 200
 check list 199ff
collaris 201
crassa 192, 201
curta 191, 201
 dentition 173ff
döderleini 201
doerianense 199, 201
egregia 201
electa 201
elegans 190, 192, 201
everetti 192, 201
 food 174
gervaisi 169, 176, 178, 180, 201
 iridescens 182
gimletti 196, 199, 201
göringi 202
grabowskyi 178, 189, 202
gracilis 202
gracillima 196, 199, 202
grayi 183, 185, 188
griswoldi 178, 183, 202
hollandi 202
hosei 202
indragirica 202
javanica 202
 javanica 202
 lineata 196, 202
jeudi 202
joloensis 203
klossi 203
lateralis 203
lautensis 178, 191, 203
leucocephala 169, 176, 178, 193, 203
leucogaster 169, 176, 179, 203
 dentition 172ff
linnaei 171, 195, 203
lowi 178, 196, 199, 203
lumbricoidea 178, 183, 189, 203
 griswoldi 183, 202
lumholtzi 203
margaritophora 191, 192, 203
 gastropicta 204
 margaritophora 203
mearnsi 204
mecheli 204
melanota 204
mindorensis 204
mjobergi 204
muelleri 192, 204
nuchalis 204
occipitalis 204
ornata 204
pavimentata 193, 204
 formosana 205
 pavimentata 204
pendleburyi 178, 191, 192, 205
pfefferi 205
polillensis 205
prakkei 190, 192, 205
quinquetaeniata 205
raveni 205
rebutischi 205
schlegeli 205
schmidti 174, 178, 197, 205
semiannulata 205
septentrionalis 169, 178, 194, 206
simalurensis 189, 190, 192, 206
smithi 206
sondaica 206
 specializations of 168ff
stahlknechti 192, 206
suluensis 178, 190, 192, 206
sumatrana 191, 192, 206
tropica 168, 192, 206
ulmeri 206
uniformis 206
ventralis 196, 206
vermiformis 176, 178, 183, 185, 207
 grayi 188, 207
 vermiformis 187, 207
virgulata 180, 207
zamboangensis 207
calcarifer, *Holocentrus* 72
 Lates 53, 72
 food 84
Calcaritermes 472, 490, 492, 498, 508
caledoniae, *Acritus* 605, 607, 612, 614
caledoniae, *Sternaulax* 605, 607, 626
calosoma, *Macrostomias* 279
canaliculatus, *Drymaeus* 314
canalifrons, *Prorhinotermes* 488
canellinus, *Holochilus* 647, 661, 666
Canis familiaris, weights of jaw muscles 42
capensis, *Eptesicus* 595
Capritermes 469, 477, 478, 480, 486, 488, 501, 503, 512
Captorhina 387
Captorhinikos 391
Captorhinoides 391
Captorhinomorpha 386, 399
 distribution, geographic 390
 geologic 390
 Permian evolution 391
Captorhinus 391
caquetae, *Ortalis* 19
Caranx ignobilis 53, 55, 72
 food 73, 84
carapace, of *Caretta* 374ff
 of *Lepidochelys* 374ff
 of *Procolpochelys* 349
 Carbondale Formation 523
carce, *Ichthyocampus* 54, 55, 67
 Syngnathus 67
Carcinops assimilis 619
 minuta 618
 palans 618
 pumilio 605, 608, 616, 619
 quattuordecimstriata 616
 rubripes 618, 619
 tibialis 617
 trogloodytes 605, 608, 618

- Carcinus pumilio* 616
Caretta 347, 365
 carapace 374ff
 caretta 360
 plastron 357, 377
 scales, head 376
 vertebrae 360
Caretini 345ff, 365
 plastron 377
Carollia perspicillata 238, 239
Casea 392
 halselli 396
 nicholsi 396
Caseidae 387, 392, 399
Caseoides 395, 398
Catapleura arkansas 377
caucae, *Crypturellus soui* 15
 Ortalis 19
Caulolepis longidens 292
 subulidens 293
caurinus, *Reithrodon* 646
cavifrons, *Constrictotermes* 474
Cavitermes 469, 494, 512
Centrobranchus nigro-ocellatum 286
Cephalaspis 449
 novaesotiae 454
Cephalofarer 95
Cephalotermes 469, 484, 493, 495, 510
ceramensis, *Calamaria* 200
Ceratiidae 299
Ceratostethus bicornis 52, 54ff, 68
Ceratotermes 511
cereicola, *Bulimulus* 317
Ceylonitermellus 469, 515
Ceylonitermes 481, 497, 514
chacarius, *Holochilus* 655, 656, 663, 665
chacunda, *Anodontostoma* 52, 53, 55
 Clupanodon 55
Chaerephon major 595
Chaetodon argus 75
Chamaepetes goudotii goudotii 21
Chanda naluia 72
chapalmalense, *Proreithrodon* 646
chatareus, *Coius* 75
 Toxotes 52, 54, 55, 75
 food 75, 85
Chauliodontidae 277
Chauliodus danae 277
 sloanei 277
chavesi, *Lampadena* 288
Chelon caeruleomaculatus 53, 68
 sp. 54, 68
Chelone grandaeva 345
 longiceps 345
Chelonia 366
 girundica 366, 378
 grandaeva 345
 winneri 364, 377
 mydas 360, 378
 neurals 353
 simondai 366, 378
 vertebrae 360
Cheloniidae, limbs 364, 378
 phylogeny 363ff
 scales, head 376
Cheloniinae, classification 365
Chelonini 366
 plastron 377
Chiasmodon niger pluriradiatus 297
Chiasmodontidae 297
Chiasognathe 499
Chilomys sp. 240, 242
chilomysi, *Amblyopinus* 239
Chilonycteris davyi fulvus 697
 parnelli 696
 personata 696
 psilotis 696
 rubiginosa mexicana 696
 torrei continentis 696
chionea, *Helicina* 305
Chiropterargas 579, 580
Chirotomias pliopterus 281
chocoensis, *Ortalis* 20
chondriiformis, *Buliminus* 419
 Jamnia 419
 Pupa 419
Chondrula broti 441
 florieni 432, 441
 ghilanensis 441
 ledereri 441
 libanica 423
 limbodentata 441
 louisi 441
 Massei 419
 nichoni 432
 septemdentata 422
 tricuspidata 441
 triticea 441
Chondrulus heptodon 429
Chondrus l'hotellieri 440
 ovularis 438
 septemdentatus 422, 440
Chondrusa saulcyi impressa 441
 septemdentatus 441
Choza Formation 389
 fauna 390ff
 christiei, *Plecotus auritus* 595
 chrysogaster, *Holochilus* 661
 chryosoma, *Cyprinogobius* 52, 77
 Lophogobius 77
Cichlherminia 145
cinereiceps, *Ortalis* 20
cinereus, *Crypturellus* 15
 toltecus, *Artibeus* 698
Clarias teysmanni 52, 54, 65
 ecological distribution 82
 food 65, 84
claromphalos, *Epiphragmophora* 327
Clausiliidae 305
clausomphalos, *Epiphragmophora* 327
 inferior, *Epiphragmophora* 327
claviger, *Amblyopinodes* 249
Clear Fork Group 388ff, 397
 fauna of 390

- Climatius* 458, 459
clivusus brachygnathus, Rhinolophus 595
Clupanodon chacunda 55
 Clyde Formation 389
Coarctotermes 473, 481, 486, 487, 489, 501, 514
cocco, Gonichthys 286
Coilia coomansi 54, 57
Coilus chatareus 75
collaris, Calamaria 201
colombiae, Amblyopinus 231
colombiae, Cryptomorpha 572
 Colombian Zoological Expedition (1948-52) 214, 221
 map of collecting stations 11
 colonization of Tristan da Cunha 159
Coluber 169
columbiana, Ortalis 19
columbianus, Crypturellus boucardi 16
comeri, Porphyriornis 142
commersoni, Stolephorus 52, 56
 food 56, 84
 competition, among termites 474
confusus, Argas 579, 586, 594
connexum, Platysona 605, 607, 628, 629
 Conover, Boardman 9
Constrictotermes 469, 481, 496, 497, 514
 cavifrons 474
 cyphergaster 474
contiguum, Platysona 629
Convexitermes 497, 515
coomansi, Coilia 54, 57
Coptotermes 468, 469, 472, 478, 483, 484, 488, 493, 509
 Coptotermitinae 516
cor, Megaderma 580, 595
cora, Neopetraeus 335
 unicolor, Neopetraeus 335
Corica, predator of 80
 soborna 52, 54, 57
Cornicapritermes 495, 512
Corniger 96, 122
Cornitermes 473, 495, 514
cornuta, Anoplogaster 292
cornutus, Hoplostethus 292
coruscus, Holocentrus 92, 100, 112
Cotylorhynchus 392, 397ff
 hancocki 396
 romeri 396
Cotylosauria 386
couesi, Cryptopsaras 299
crassa, Calamaria 192, 201
crassus, Ampullarius 303
Craz alberti 17
 globulosa 16
 rubra rubra 17
crenatus, Aeletes 605, 606, 610
Crenetermes 511
Crepulitermes 494, 512
cretaceus, Neopetraeus 335
 Cricetidae 218
Crithagra 147
Crithagroides 147, 148
 crossopterygians 388
Cryptommatius jansonii 260
Cryptomorpha colombiae 572
Cryptopsaras couesi 299
Cryptotermes 472, 478, 487, 490, 492, 508
 dudleyi 492
 havilandi 487
Crypturellus boucardi columbianus 16
 cinereus berlepschi 15
 souei cauae 15
 undulatus yapura 16
Ctenogobius sp. 55, 77
Ctenomys 215, 216, 220
 fulvus 259
 magellanicus dicki 237
 opimus nigriceps 228, 252, 258
 peruanus 254, 259
Cubitermes 485, 511
culmineus, Bulimulus 315
cumanensis, Pipile 21
cuniculoides, Reithodon 646
Cuniculus taczanowskii 215, 244
cuprarius, Lampanyctus 288
curia, Calamaria 191, 201
Curvitermes 468, 495, 514
cyaneocupreus, Saprinus 610
cyaneus, Hister 608
 Saprinus 605, 608
Cyclohone braueri 272
 microdon 272
 pallida 272
Cyema atrum 291
 Cyemidae 291
Cylindrotermes 469, 493, 510
cyphergaster, Constrictotermes 474
Cyprinogobius chrysonoma 52, 77
cystops, Rhinopoma hardwickei 595

dalmati, Strepsylla 541
danae, Chauliodus 277
Dangila, spilurus 63
darwini, Holochilus 647, 661, 663, 664
darwiniensis, Mastotermes 468
daubani, Aeletes 610
davisae, Strepsylla 546
 davyi fulvus, Chilonycteris 697
 Pteronotus 697
 Dendrophilinae 601, 605, 616
Dendrophilus minutus 618
 quatuordecimstriata 616
Dentispicotermes 494, 512
 dentition, of *Calamaria* 173ff
 of sigmodont rodents 644ff
 of symmetrodont 690
dentritis, Bulimulus 319
derelictus ascendens, Bulimulus 317
 Derichthyidae 290
Derichthys serpentina 290
 Dermochelyidae 365
Dermogenys, ecological distribution 81, 86

- pusillus* 52, 54ff, 66
 ecological distribution 82
Desmatodon 391
 Desmochelyidae 365
Desmodus murinus 700
rotundus murinus 700
 Diadecta 387
Diadectes 387, 391
 Diadectidae 387, 399
 Diadectomorpha 386
 distribution, geographic 390
 geologic 390
 Permian evolution 391
diaphana, *Sternoptyx* 277
Diaphus dofleini 286
fulgens 287
gemellari 287
metopoclampus 287
Diasparactus 391
Diatermes 507
diazii, *Romerolagus* 548
Didelphis albiventris 215, 243, 244
aurita 247
marsupialis 215
paraguayensis 243
difficilis amplus, *Peromyscus* 547
diluta, *Epiphragmophora* 327
Dimacrodon 393, 395, 398, 400
Dimetrodon 387, 393, 397
gigashomogenes 392, 397
dinema, *Photonectes* 282
Dinocyon 44
Diogenichthys atlanticus 286
 Dipnoi 388
 Diretmidae 292
Diretmus argenteus 292
disjuncta, *Margrethia* 270
 distribution, ecological, of fishes 81ff
 geographic, fossil reptiles 389ff
 vertical, of fishes 269ff
Diversitermes 496, 514
döderleini, *Calamaria* 201
doerianense, *Calamaria* 199, 201
dofleini, *Diaphus* 286
Dolichorhinotermes 469, 493, 509
Dolichosoma 531, 532
 Dolichosomatidae 531
doriae, *Brachyogobius* 52, 77
 food 77, 85
Gobius 77
dorsalis, *Vampyrops* 407
Doryichthys brachyurus 55, 67
Drepanotermes 469, 473, 503, 510
Drymaeus canaliculatus 314
eucosmetus 331
interruptus 333
pamplonensis 314
poecilus 332, 333
ponsonbyi 332
schmidti 314
serotinus 313, 332
zilchi 333
dudleyi, *Cryptotermes* 492
 Dunkard Formation 389
dunnei, *Nesospiza wilkinsi* 152
Duplidentitermes 511
dussumieri, *Mugil* 53, 68
ebriosus, *Neotomys* 646
vulturinus, *Neotomys* 646
Echiosstoma tanneri 281
 ectoparasitism, in beetles 211
 Edaphosauria 387
 distribution, geographic 390
 geologic 390
Edaphosauria 387
 Edaphosauridae 387, 399
 evolution in Permian 392
Edaphosaurus 392
Edrabiis 216, 218, 220, 254
alticolus 259
argentinus 258
pearsoni 219, 258
peruanus 259
philippianus 212, 215, 254, 255
weiseri 255
Edriolychnus schmidti 299
egregia, *Calamaria* 201
Egretta alba 153
thula 152
Elaphe 169
elatus, *Bulimulus* 324
electa, *Calamaria* 201
Electrotermes 507
 Electrotermitinae 507
elegans, *Calamaria* 190, 192, 201
Ptyssophorus 646
 Eleotridae, ecological distribution 81-82
Eleotris fusca 52, 76
 predator of 78
gymnopomus 76
melanosoma 52, 54, 76
 food 76, 85
porocephala 76
urophthalmus 77
Eleutheronema tetradactylum 55
 food 85
elongatum, *Gonostoma* 270
elongatus, *Barbus* 62
emarginatus, *Amblyopinus* 239
Emberiza 150
tahapisi, horny palate 151
 Emberizinae 149
Enchisthenes harti 700
 Endodontidae 308
endospira, *Bulimulus* 336
Engraulis tri 56
enode, *Platysoma* 629
Enoploclytia walkeri schmidti 445
ensifer, *Holocentrus* 92
Eotermes 507
Epierus krujanensis 617
rubripes 618
Epinephalus nebulosus 55, 72

- food 85
Epiphragmophora atahualpa 327
claromphalos 327
clausomphalos 327
diluta 327
 (*Epiphragmophora*) *atahualpa* 327
claromphalos 327
diluta 327
olssoni 336
patasensis 327
huanucensis 328
olssoni 336
patasensis 327
 (*Pilsbryna*) *clausomphalos* 327
inferior 327
puntana 328
Eptesicus capensis 595
pusillus 595
lenuipinnis 595
equula, *Leiognathus* 74
equulus, *Leiognathus* 52ff, 74
 food 74, 85
Scomber 74
eremita, *Nesocichla* 145
Eremotermes 472, 480, 483, 510
Eretmochelys 366
imbricata 376
 vertebrae 360
Erolia acuminata 154
erythrocephala, *Ornithoctona* 21
erythrogaster, *Hirundo rustica* 155
 Ethiopian region, termite fauna of 484,
 508ff
Euchilotermes 511
Euclastes melii 363, 365, 377
eucosmetus, *Drymaeus* 331
Eucryptotermes 469, 492, 508
Euhamitermes 495, 510
Eurylisters 628
 Eurypharyngidae 289
Eurypharynx pelecánoides 289
Eurytermes 468, 493, 510
Euscaiotermes 513
Eustomias bibulbosus 282
bigelowi 282
obscurus 282
schmidti 282
Eutermellus 469, 487, 502, 515
Euxina moesta 433
Evenchelys macrurus 55, 58
 food 85
everetti, *Calamaria* 192, 201
Nematabramis 53ff, 60
 ecological distribution 82
 food 60, 84, 88
Evermannella atrata atlantica 284
balbo 284
indica melanoderma 285
 Evermannellidae 284
 evolution of cricetine dentition 643
 of parasitic staphylinids 216
 of rodents 217
 of sigmodont dentition 643
extensus, *Bulimulus* 323
familiaris, *Canis* 42
Farancia 169
Faremusca 95
fasciola, *Idiacanthus* 283
Fastigitermes 512
fautini, *Strepsylla* 546
fauxeli, *Bacanius* 605, 622, 624, 625
ferox, *Stomias boa* 278
Firmitermes 511
 fishes, Bermuda deep sea 265ff
 complementary fresh-water 81
 of North Borneo 47ff
 ecological distribution 81ff
 food of 84, 87ff
 vertical distribution 269ff
flammeo, *Holocentrus* 92, 99
flavicans, *Oryzomys* 657
flaviventris, *Serinus* 139, 155
 Flower Pot Formation 386
 fauna of 393ff, 398
fluviatilis, *Tetraodon* 54, 55, 80
Tetrodon 80
 food, of *Calamaria* 174
 of fishes 87ff
Foramitermes 506, 515, 516
forestieri, *Paromalus* 619
Platylomalus 605, 608, 619
Forficulitermes 511
 Formation, geologic, Abo 389
 Admiral 389
 Arroyo 389ff
 Belle Plains 389
 Choza 389ff
 Clyde 389
 Dunkard 389
 Flower Pot 389
 Hennessey 392
 Moran 389
 Putnam 389
 San Angelo 389
 Vale 389ff
formosana, *Calamaria pavimentata* 205
frantzii, *Ortalis* 20
Fringillaria tahapisi 150
 Fringillinae 149
frontosum, *Platysoma* 631
 Fruticicolidae 327, 336
fuegensis, *Amblyopinus* 216, 237
fulgens, *Diaphus* 287
fumosus, *Vampyrops* 405
fur, *Termes* 474
Furculitermes 511
fusca, *Eleotris* 52, 76
 predator of 78
Poecilila 76
fuscipennis, *Nothocercus* 13
 Gadidae 291
gahani, *Amblyopinodes* 248

- Galea musteloides* 254
Galenomys garleppi 254
Gallinula 143
 chloropus 143
garrula, *Ortalis* 20
Gastrocopta (Gastrocopta) wolfii 305
Gastromyzon borneensis 64
gastropicta, *Calamaria margaritophora* 204
gemellari, *Diaphus* 287
Gempylidae 298
Genuotermes 494, 512
Geoceras, *Bulimulus* 320
Geocichla 144
Geomyidae 218
Geopyrgus, *Bulimulus* 336
Geospiza 148
Gerres poeii 53, 74
 food 74, 85
gervasi, *Calamaria* 169, 176, 178, 180, 201
Gibbotermes 488
gigashomogenes, *Dimetrodon* 392, 397
gimletti, *Calamaria* 196, 199, 201
girundica, *Chelonia* 366, 378
giurus, *Glossogobius* 52, 55, 78
 food 78, 85
 Gobius 78
glacialis, *Bathylagus* 284
Glarichelys knorri 364, 377
Globitermes 469, 510
globulosa, *Craz* 16
Glossogobius giurus 52, 55, 78
 food 78, 85
 predator of 68
Glossophaga soricina leachi 697
Glossotermes 479, 492, 509
Glyptotermes 468, 469, 473, 476-478, 484, 492, 498, 507, 508
Gnathamitermes 469, 472, 473, 491, 510
Gobiidae, ecological distribution 81ff
Gobiopterus brachypterus 55, 78
Gobius boddaerti 80
 doriae 77
 giurus 78
 schlosseri 79
 tentacularis 78
Gomphodus 459
Gonichthys coco 286
Gonionenia, *Nenia* 308
Gonistomus subhybridus 314
Gonostoma bathyphilum 272
 elongatum 270
Gonostomatidae 269
gordoni, *Nesocichla* 146
Gorgonopsia 387, 397
göringi, *Calamaria* 202
goudotii, *Chamaepetes* 21
Gough Island 142ff
goughensis, *Nesospiza* 148
 Rowettia 142
 horny palate 151
grabowskyi, *Calamaria* 178, 189, 202
gracilis, *Calamaria* 202
gracillima, *Calamaria* 196, 199, 202
Grallatotermes 477, 478, 481, 486, 487, 501, 503, 514
grandaeva, *Chelone* 345
 Chelonia 345
 Procolpochelys 345ff
grandis robustior, *Urotraiinus* 564
 Syntermes 564
 Urotraiinus 564
Granopupa rhodia 429
gratus, *Peromyscus truei* 548
grayi, *Calamaria* 183, 185, 188, 207
 vermiformis 188, 207
Green Sand 345
griswoldi, *Calamaria* 178, 183, 202
 lumbricoidea 183, 202
guatemalensis, *Peromyscus* 544, 548
guernei, *Photostomius* 283
guianae, *Holochilus* 647, 659, 668
guttata, *Ortalis* 19
guttatus, *Tinamus* 12
gwinneri, *Chelonia* 364, 377
gymnocephalus, *Ambassis* 52, 54, 71
 Lutjanus 71
gymnopomus, *Butis* 52, 55, 76
 food 76, 85
 Eleotris 76
Habrocerinae 211
Habroconus (Pseudoguppya) semenlini 308
haedinus, *Taphozous perforatus* 580
Halacritus 611
halselli, *Casea* 396
hamatus, *Bacanius* 620
hamiltoni, *Bulimulus* 325
 Thrissa 56
 Thrissocles 53, 56, 58
 food 56, 84
Hampala macrolepidota 52, 53, 62
 ecological distribution 82
 food 62, 84
hancocki, *Cotylorhynchus* 396
Haptodus 392
hardwickei cystops, *Rhinopoma* 595
Harpag 95
 rosea 95
harti, *Artibeus* 700
 Enchisthenes 700
hasta, *Lutjanus* 73
 Neoniphon 94
 Pomadasy 53, 55, 73
 food 73, 85
hastatus, *Holocentrus* 92, 111
havilandi, *Cryptotermes* 487
Havilanditermes 481, 514
Helicinidae 304
Helicina (Helicina) chionea 305
 peruviana 304
helleri, *Vampyrops* 411

- Hemicyon* 44
hemigymnus, *Argyropelecus* 274
Hemirhamphus amblyurus 67
hemprichi, *Otonycteris* 595
 Hennessey Formation 392
henseli, *Amblyopinus* 212, 247
 Hershkovitz, Philip 9, 214
hershkovitzi, *Amblyopinus* 238
hershkovitzi, *Tinamus osgoodi* 10
Hesperomys 644
 (*Holochilus*) *brasiliensis* 666
 physodes 666
 vulpinus 663
 physodes 666
 russatus 666
 squamipes 666
 vulpinus 657, 664
Heteromys 218
 anomalus 238
Heterotermes 468, 472, 473, 477-479,
 483, 484, 490, 493, **499**, 509
 Heterotermitinae 516
hirtipes, *Petalasoma* 626
Hirtitermes 481, 514
Hirundo rustica erythrogaster 155
hispidus, *Sigmodon* 647
Hister, *cyaneus* 608
 nanus 617
 troglydites 618
 Histeridae 601ff
 Histerinae 605, **626**
Hodotermes 473, 484, 502, 509
 Hodotermitidae 472, 479, 482, 484, 499,
 505-507, 509
 Hodotermitinae 516
Hodotermopsis 470, 482, 509
hollandi, *Calamaria* 202
 Holocentridae 91ff, 121ff
 auditory bulla 123
 opisthotic bone 125
 swim bladder 122
 Holocentrinae 122
Holocentrum longipinne 100
 perlatum 104, 107
 osculum 104
 productum 100
 riparum 109
 rostratum 99
Holocentrus 91ff, 121, 122
 (*Adioryx*) 92, **109**
 bullisi 92
 coruscus 92, 100
 hastatus 92
 lacteoguttatus 92
 microstomus 92
 punctatissimus 92
 suborbitalis 92, 100
 tiere 92
 vepillarius 92, 100
 xantherythrus 92
 ascensionis 93, 97, **100**, 106, 122ff, 134
 Atlantic species 91ff
 brachypterus 109
 bullisi 91, 97, **113**
 calcarifer 72
 coruscus 97, 100, 112
 (*Flammeo*) 92
 laevis 92, 100
 marianus 92
 opercularis 92, 100
 sammara 92, 100
 scythrops 92, 100
 hastatus 111
 leo 92
 marianus 92, 96, **99**
 maxilla 92
 meeki 95, 104, 109
 osculus 91
 punctatissimus 95
 puncticulatus 112
 rufus 91, 97, 102, **104**, 122
 sammara 94
 sanctipauli 91, 100
 (*Sargocentron*) 92
 ensifer 92
 leo 92
 prasin 92
 tieroides 92
 spinosissimus 92
 sicciferum 95, 109
 spinifer 92
 suborbitalis 92, 126, 132
 tahiticum 95
 tortugae 112
 vepillarius 96, 97, **109**
Holocheilus 648
Holochilomy brasiliensis 662
Holochilus 639ff, 647, 648, 653
 amazonicus 659, 667
 anguya 647
 balnearum 656, 661, 665
 berbicensis 661
 brasiliensis 645, 647, 648, 653, 654,
 657, **658**, 660, 661, 662, 666
 amazonicus 667, 669
 balnearum 665
 berbicensis 655, **669**
 brasiliensis 662
 guianae 668
 incarcum 668
 leucogaster 648, **665**
 nanus **666**, 669
 venezuelae 670
 vulpinus 661, **662**
 canellinus 647, 661, 666
 chacarius 655, 656, 663, 664, 665
 chrysogaster 661, 662
 darwini 647, 661, 663, 664
 guianae 647, 659, 668
 incarcum 659, 668
 leucogaster 647, 661, 666
 magnus 640, 644, 648, 653, 654, **657**
 multannus 647, 661, 663, 664
 nanus 647, 659, 666, 668

- physodes* 647, 666
russatus 647, 661
sciureus 647, 659, 661, 662, 666, 667, 669
 berbicensis 669
squamipes 647
venezuelae 661, 669, 670
vulpinus 647, 657, 661, 663
Hololepta urvillei 630
Holotrachys 95, 122
 lima 95
Homalotermes 469, 512
Hoplognathotermes 468, 485, 511
Hoplostethus cornutus 292
Hoplotermes 469, 493, 510
hosei, *Calamaria* 202
Hospitalitermes 477, 478, 481, 503, 514
huancucensis, *Epiphragmophora* 328
huilae, *Amblyopinus* 242
Hyalorhynchus natalensis 284
hygomi, *Hygophum* 286
Hygophum benoisti 285
 hygomi 286
 macrochir 286
 reinhardti 285
hylocetes, *Peromyscus* 548
hyperythrus, *Odonophorus* 22
hypopiuis, *Rhynchortyx cinctus* 22
Hypotermes 513
hypodonty 644
Hypsolenus 626
Hystricomorpha 217
Hystrichopsyllidae 541

ibis, *Bubulcus* 153
Ichthyocampus carce 54, 55, 67
Ichthyococcus ovatus 273
Idiacanthidae 283
Idiacanthus fasciola 283
Idister 626
 mendax 626
 morphon 626
ignobilis, *Caranx* 53, 55, 72
 food 73, 84
 Scomber 72
Ilisha kampeni 52ff, 57
 food 57, 84
imbricata, *Eretmochelys* 379
Incania, *Nenia* 307
incarum, *Holochilus* 659, 668
 brasiliensis 668
 Strophocheilus 331
incipiens, *Proreithron* 646
indica melanoderma, *Evermannella* 285
Indomalayan region, termite fauna of 479, 508ff
indragirica, *Calamaria* 202
inferior, *Epiphragmophora clausomphalos* 327
infundibulum, *Bulimulus* 320
infuscus, *Vampyrops* 405
ingolfianus, *Nessorhamphus* 291

inquilinus, *Termes* 474
insularum, *Ampullarius* 304
interrupta, *Ambassis* 52ff, 71
 food 71, 84
interruptus, *Drymaeus* 333
iostoma, *Porphyrobae* 331
iridescens, *Calamaria gervaisi* 182
Isospondyli, ecological distribution 81ff
Ixodoidea 579

jacobus, *Myripristis* 93
jacuáçu, *Penelope* 18
jaculator, *Toxotes* 74
jaculatrix, *Sciaena* 74
 Toxotes 54, 74
 food 74, 85
jamaicensis, *Artibeus* 698
Jaminia chondriformis 419
 ghilanensis 436
 heptodon 423, 429ff
 lamellifera 434ff
 libanica 429, 432ff, 435
 ovularis 423, 438ff
 saulcyi 416
 septemdentata 421, 422ff, 433
 sexdentata 436ff
 sulcidens 438ff
 tridens 440
jansoni, *Myotyphlus* 219, 259, 260
javanica, *Calamaria* 202
 lineata, *Calamaria* 196, 202
jello, *Sphyaena* 54, 68
 food 68, 84
jelskii, *Amblyopinus* 212, 224
 Thaumastus 309
jeudi, *Calamaria* 202
jocosensis, *Bulimulus* 322
joloensis, *Calamaria* 203
jouteli, *Kalotermes* 576
Jugositermes 511
julius, *Nothocercus* 12

kalinowskii, *Amblyopinus* 243
 Nenia angrandi 306
Kalotermes 467, 468, 472, 473, 478, 483, 488, 490, 491, 492, 502, 507, 508
 jouteli 576
Kalotermitidae 476, 479, 484, 491, 505-508, 516
 introductions 474
 termitophiles 563, 575
Kalotermitinae 507
kampeni, *Ilisha* 52ff, 57
 food 57, 84
 Pellona 57
Karlschmidtia 327
 lentiformis 328
klossi, *Calamaria* 203
knorri, *Glarichelys* 364, 377
koefoedi, *Searsia* 269
kofordi, *Amblyopinus* 231

- kretamensis*, *Tetraodon* 52, 55, 81
 food 81
krujanensis, *Epiurus* 617
kuhli, *Pipistrellus* 595
Kutaflammeo 95
- labecula*, *Peromyscus maniculatus* 548
Labidosaurikos 391
Labidosaurus 391
Labiotermes 495, 514
Labritermes 510
Lacessititermes 481, 514
lacteoguttatus, *Holocentrus* 92
laetus, *Saprinus* 609
laeve, *Platysoma* 628
laevis, *Aeletes* 610
Holocentrus 92, 100
lamellifera, *Jamini* 434ff
Lampadena bathyphila 288
chavesi 288
minima 288
Lampanyctus alatus 289
ater 288
cuprarius 288
photothorax 289
pusillus 289
supralateralis 289
taaningi 289
- lankesteri*, *Neostethus* 53, 69
lateralis, *Calamaria* 203
Lates calcifer 53, 72
 food 84
Latisubulitermes 515
lautensis, *Calamaria* 178, 191, 203
leachi, *Glossophaga soricina* 697
Monophyllus 697
leathensis, *Pteraspis* 452
Leiognathus equula 74
equulus 52ff, 74
 food 74, 85
- lentiformis**, *Karlschmidia* 328
Lepidochelys 349, 354, 365
carapace 374ff
neurals 349
olivacea 376
plastron 377
scales, head 376
vertebrae 360
Lepidotermes 511
Lepospondyli 531
Leptocephalus pseudolatissimus 290
roulei 290
splendens 290
Leptonycteris nivalis nivalis 698
Leuciscus sumatranus 60
leucocephala, *Calamaria* 169, 176, 178, 193, 203
leucogaster, *Calamaria* 169, 176, 179, 203
dentition 172ff
Holochilus 647, 661, 666
Holochilus brasiliensis 648, 665
Mus (Holochilus) 648, 660, 666
- Leucopitermes* 477, 478, 489, 502, 514
leucopogon, *Astronesthes* 278
leucops, *Subulitermes* 502
leucopus, *Rhizophoberyx* 94
levipes, *Peromyscus boylii* 545
libanica, *Jamini* 432ff
lilium parvidens, *Sturnira* 700
lilliputianus, *Acritus* 612
lima, *Holotrachys* 95
limbs, of Cheloniidae 364, 378
Limnopomus, *Ampullarius* 303
linearis, *Phlegethontia* 531
lineata, *Calamaria javanica* 196, 202
lineatus, *Vampyrops* 408, 409
linnaei, *Calamaria* 171, 195, 203
Linophryne arborifera 300
bicornis 300
Lissoacme, *Bulimulus* 317ff
lobatus, *Rhinolophus* 595
 London Clay 345
longibarbatu, *Macrostomias* 279
longicauda, *Bartramia* 154
longicaudatus, *Oryzomys* 648
longiceps, *Chelone* 345
longidens, *Caulolepis* 292
Longipeditermes 469, 481, 514
longipes, *Aeletes* 614
longipinne, *Holocentrum* 100
longitudinalis, *Bulimulus* 316
longus, *Amblyopinus* 234
Lophodolus acanthognathus 299
Lophogobius chryosoma 77
lowi, *Calamaria* 178, 196, 199, 203
Loxops 148
lumbricoidea, *Calamaria* 178, 183, 189, 203
griswoldi, *Calamaria* 183, 202
lunholtzi, *Calamaria* 203
lutescens, *Mus* 648
Lutianus argentimaculatus 54, 55, 73
 food 84, 85
Lutjanus gymnocephalus 71
hasta 73
 Lysorophidae 531
- Macraster elegans* 447
macrochir, *Hygophum* 286
macrolepidota, *Hampala* 52, 53, 62
 ecological distribution 82
 food 62, 84
macrolychnus, *Neonesthes* 278
macropus, *Ophthalmopelton* 284
Macrosternus montrouzieri 627
Macrostomias calosoma 279
longibarbatu 279
Macrosbulitermes 503, 515
Macrotermes 473, 484, 486, 507, 513
 Macrotermitinae 486, 505, 506, 513, 516
macrurus, *Evenchelys* 55, 58
 food 85
Muraena 58
macularia, *Actitis* 154

- maculatus*, *Anthias* 73
Pomadasy 53, 73
 food 73, 85
magnus, *Holochilus* 640, 644, 648, 653, 654, 657
major, *Chaerephon* 595
Opheodrys 174
Tinamus 9
 Malacosteidae 283
Malagasitermes 469, 489, 501, 514
 Malagasy region, termite fauna of 487ff, 502, 508ff
Manchurodon 692
maniculatus labecula, *Peromyscus* 548
margaritophora, *Calamaria* 191, 192, 203
gastroptica 204
marginalis, *Rhinotermes* 493
Margrethia disjuncta 270
obtusirostra 270
marianus, *Holocentrus* 92, 96
marmoratus, *Odontophorus gujanensis* 21
marmosae, *Amblyopinus* 247
martinica, *Porphyra* 153
Mastotermes 476, 490, 498, 507, 508
darwiniensis 468
 Mastotermitidae 479, 490, 491, 505-508, 516
maxilla, *Holocentrus* 92
maximus vestitus, *Strophocheilus* 309
mazonensis, *Phlegethontia* 523
mearnsi, *Calamaria* 204
mecheli, *Calamaria* 204
meeki, *Holocentrus* 95, 104, 109
Megaderma cor 580, 595
Megagnathotermes 468, 485, 511
Megalobulimus, *Strophocheilus* 309
megalophylla, *Mormoops* 697
megalotis mexicana, *Micronycteris* 697
Megamblyopinus 212, 215, 216, 218, 222, 251
germaini 254
mniszehi 216, 219, 251
mehelyi, *Rhinolophus* 595
Melamphaes anthrax 297
microps 296
mizolepis 297
opisthopterus 296
robustus 297
 Melamphaidae 296
 Melanocetidae 299
Melanocetus murrayi 299
Melanodera 144, 147-149
melanodera 149
 horny palate 151
melanoderma, *Evermannella indica* 285
Melanonus unipennis 291
melanosoma, *Eleotris* 52, 54, 76
 food 76, 85
Ophicephalus 54, 71
 ecological distribution 82
 food 71, 84
 Melanostomiidae 281
Melanosuchus niger 339
melanota, *Calamaria* 204
melasoma, *Ophicephalus* 71
melii, *Euclastes* 363, 365, 377
Melursus ursinus 25
mendax, *Idister* 626
Metachirus opossum 247
metallicus, *Bathophilus* 281
Merostichis 656
metopoclampus, *Diaphus* 287
mexicana, *Chilonycteris rubiginosa* 696
Micronycteris megalotis 697
 Mexico, bats from 695ff
Microborus, *Strophocheilus* 330
microcephalus, *Neonesthes* 278
Microcerotermes 467, 469, 472, 473, 478, 480, 483, 485, 488, 493, 507, 510
microdon, *Cyclothone* 272
Microrhodotermes 471, 473, 477, 482, 484, 502, 509
Micronycteris megalotis mexicana 697
microphthalma, *Sytermorpha* 572
microphyllum, *Rhinopoma* 595
microps, *Melamphaes* 296
 Microsauria 531
microstomus, *Holocentrus* 92
Microtermes 473, 486, 489, 501, 513
 Milleretidae 392
milloti, *Eutermes* 501
Mimeutermes 487, 489, 502, 514
mina, *Strepsylla* 546
mindorensis, *Calamaria* 204
minima, *Lampadena* 288
Miniopterus natalensis arenarius 595
minuta, *Carcinops* 618
minutus, *Dendrophilus* 618
 Miocene Marl 345
Miotermes 507
mira, *Ortalis* 20
Mirocapritermes 512
mizolepis, *Melamphaes* 297
mjobergi, *Calamaria* 204
mniszehi, **Megamblyopinus** 216, 219, 251
modestus, *Bulimulus* 318
Zonibyx 154
molesti, *Urotirainus* 564
molestus, *Sytermes* 562, 564, 571
 Molgophidae 531
Molossus rufus nigricans 701
rufus rufus 701
sinaloae 701
Monopterus alba 53, 59
montagnii, *Penelope* 18
monticolus, *Amblyopinus* 228
montivagans, *Amblyopinus* 240
montrouzieri, *Apobletes* 605, 607, 627
Macrosternus 627
Platysoma 605, 607, 629
 Moran Formation 389
Mormoops megalophylla megalophylla 697

- morphon*, *Idister* 626
Mucrotermes 511
muelleri, *Calamaria* 192, 204
Mugil caeruleomaculatus 68
 dussumieri 53, 68
Mullerister 620
multannus, *Holochilus* 647, 661, 663
 664
Muraena alba 59
 macrurus 58
murinus, *Desmodus* 700
 Desmodus rotundus 700
Muroidea 218
murrayi, *Melanocetus* 299
Mus agilis 648
 angouya 660, 662
 brasiliensis 660, 662-664
 (*Holochilus*) *angouya* 648, 660, 666
 (*Holochilus*) *leucogaster* 648, 660
 lutescens 648
 physodes 660, 665
 simpsoni 648
 vulpinus 660, 662
mutabilis, *Bulimulus* 334
Myctophidae 285
mydas, *Chelonia* 360
Myomorpha 217
Myotyphlus 211, 215, 217, 218, 259
 jansoni 219, 259, 260
Myripristinae 122
 auditory bulla 124
 opisthotic bone 125
 swim bladder 123
Myripristis 96
 argyromus 136
 jacobus 93, 121
 occidentalis 93, 121
Mystus nemurus 53ff, 65
 ecological distribution 82, 86
 food 66, 84

nalua, *Ambassis* 53, 72
 Chanda 72
nanus, *Hister* 617
 Holochilus 647, 659, 666, 668
 brasiliensis 666
Nasutitermes 468, 469, 472, 473, 477,
 478, 480, 481, 483, 486, 489, 495,
 496, 514
Nasutitermitinae 486, 487, 495, 505,
 514, 516, 562
nasutus, *Nesiarchus* 298
natalensis, *arenarius*, *Miniopterus* 595
 Hyalorhynchus 284
 Rhynchohyalus 284
Natrix 169
 nuchalis 174
Nearctic region, termite fauna of 489,
 508ff
nebulosus, *Epinephelus* 55, 72
 food 85

Serranus 72
Nectomys 654, 670
 squamipes 249, 653
Nectridia 531
Nematabramis everetti 53ff, 60
 ecological distribution 82
 food 60, 84, 88
 predator of 62
Nemichthyidae 291
Nemichthys scolopaceus 291
nemorensis, *Bulimulus* 316
nemurus, *Bagrus* 65
 Mystus 53ff, 65
 ecological distribution 82, 86
 food 66, 84
Nenia angrandi kalinowskii 306
 urubambensis 306
 (*Gonionenia*) *weyrauchi* 308
 (*Incania*) *warszewiczi* 307
 (*Neniactra*) *adusta* 305
 tumens 305
Neniactra, *Nenia* 305
Neobacanius 620
Neocapritermes 469, 495, 512
Neomyrpristis 94
 amaenus 94
Neonesthes macrolychnus 278
microcephalus 278
Neoniphon 94
 armatus 94
 hasta 94
Neopetraeus cora unicolor 335
 cretaceus 335
 platycheilus 311
 rhodolarynx 311
Neopsyllinae 541
Neostethus bicornis 68
 borneensis 52, 54ff, 69
 lankesteri 53, 69
Neotermes 467, 468, 470, 472, 478, 483,
 490, 492, 493, 507, 508, 576
Neotomodon 644
 alstoni 547
Neotomys 639, 640, 644, 645, 646
 ebriosus ebriosus 646
 vulturinus 646
Neotropical region, termite fauna of
 491, 508ff
Nesiarchus nasutus 298
nesiotis, *Porphyriornis* 143
Nesocichla 144ff
 eremita eremita 145
 gordoni 146
 procax 146
Nesospiza 157, 158
 acunhae 147
 acunhae 152
 horny palate 151
 questi 152
 goughensis 148
 wilkinsi 147
 dunnei 152

- wilkinsi* 150
 Nessorhamphidae 291
Nessorhamphus ingolfianus 291
 New Caledonia, Histeridae of 601ff
nicholsi, *Casea* 396
niger, *Melanosuchus* 339
 pluriradiatus, *Chiasmodon* 297
nigricans, *Molossus rufus* 701
nigro-ocellatum, *Centrobranchus* 286
nimbraria, *Vinciguerrria* 273
Nitiditermes 511
nitiduloides, *Saprinus* 610
nivalis, *Ischnoglossa* 698
 Leptonyciteris 698
Noditermes 511
norvegicus, *Rattus* 648
Nothocercus bonapartei bonapartei 12
 fuscipennis 13
 julius 12
 venezuelensis 14
Notolychnus valdiviae 288
novascotiae, *Cephalaspis* 454
novae-scoliae, *Pteraspis* 452
nubilus, *Ampullarius* 303
nuchalis, *Calamaria* 204
 Natrix 174
nudiventris, *Taphozous* 595
Nyciteris thebaica 595

obeliscus, *Bulimulus* 322
obscura, *Penelope* 18
obscurus, *Eustomias* 282
obtusirostra, *Margrethia* 270
Obtusitermes 497, 514
Occasitermes 503, 514
occidentalis, *Myripristis* 93
occipitalis, *Calamaria* 204
Oculitermes 503, 515
Odontophorus erythrops parambae 21
 gujanensis buckleyi 21
 marmoratus 21
 hyperythrus 22
Odontotermes 469, 472, 473, 513
olivacea, *Lepidochelys* 376
olivascens, *Sicalis* 149
 horny palate 151
olivensis, *Reithrodon* 646
olssoni, *Epiphragmophora* 336
onca, *Panthera* 42
Onchus 458, 459
 murchisoni 449
 Oneirodidae 299
opercularis, *Holocentrus* 92, 100
Opheodrys major 174
 Ophiacodonta 387
 distribution, geographic 390
 geologic 390
Ophicephalus melanosoma 54, 71
 ecological distribution 82
 food 71, 84
 melasoma 71
Ophiderpeton 531, 532

 Ophiderpetonidae 531
Ophiocara porocephala 52, 76
Ophiocephalus melanosoma 71
Ophiotermes 494, 511
Ophthalmopelton macropus 284
opisthopterus, *Melamphaes* 296
Oriensubulitermes 515
ornata, *Calamaria* 204
ornatus, *Tremarctos* 25ff
 jaw mechanics 40
 mandibular articulation 38
 muscles 32
 salivary glands 31
 skull 26
 tongue and oral vestibule 29
 vessels and nerves 31
Ornithoctona erythrocephala 21
Ortalix garrula choacoensis 20
 garrula 20
 mira 20
 guttata cauae 19
 columbiana 19
 guttata 19
Orthognathotermes 469, 494, 512
Orthotermes 485, 512
Oryzomys 644
 albicularis 214, 242
 angouya 654
 buccinatus 654, 660
 flavicans 657
 keaysi 239
 longicaudatus 654
 sp. 251
oryzomys, *Amblyopinus* 240
osculus, *Holocentrus* 91, 104
osgoodi, *Tinamus* 10
 Ostariophysi 127
 ecological distribution 82ff
Osteochilus spilurus 53, 63
 ecological distribution 82
Ostichthyes 96
Ostichthys 122
 trachypoma 123
Otonyciteris hemprichi hemprichi 595
ovatus, *Ichthyococcus* 273
ovularis, *Jaminia* 438ff
Oxyeleotris urophthalmus 52, 77
 food 77, 85
Oxymycteris judex 249
 rufus 249
Oxyurichthys tentacularis 55, 78

pacae, *Amblyopinus* 244
Pachyotus 595
pacificum, *Platysoma* 605, 607, 629
pacificum, *Platylister* 629
 Palaearctic region, termite fauna of 481,
 508ff
Palaeastacus walkeri 445
palans, *Carcinops* 618
pallida, *Cyclothone* 272
pamplonensis, *Drymaeus* 314

- Panthera onca*, weights of jaw muscles 42
 Pantotheria 689
Papio maimon 44
 Papuan region, termite fauna of 477ff,
 503, 508ff
papyraceus, *Ampullarius* 303
Paracapritermes 469, 477, 503, 512
Paracornitermes 468, 473, 487, 495, 502,
 514
 parallelism 385ff
Paramastus 429
parambae, *Odontophorus erythroptus* 21
 Paramyidae 217
Paraneoterme 473, 490, 508
Parapocryptes rictuosus 55, 80
 food 80, 85
 Parareptilia 387
Parastylotermes 507
Parasubulitermes 515
 Pareiasauridae 387, 392, 397ff
parnelli, *Chilonycteris* 696
Paromalus forestieri 619
pumilio 616
quattuordecimstriata 617
trogodytes 618
Parophiocephalus unimaculata 70
Parotermes 490, 507
Parrhinotermes 478, 500, 509
parvidens, *Sturnira lilium* 700
Parvitermes 497, 514
patagonicus, *Phrygilus* 149
 horny palate 151
patasensis, *Epiphragmophora* 327
pavimentata, *Calamaria* 193, 204
formosana 205
pavimentata 204
 Pearson, Oliver P. 215, 252, 254
pearsoni, *Edrabius* 219, 258
pedialota, *Bonapartia* 269
pelamidis, *Rhynchichthys* 93
pelecanoides, *Eurypharynx* 289
Pellona kampeni 57
 Pelycosauria 387, 400
 distribution, geographic 390
 geologic 390
pendleburyi, *Calamaria* 178, 191, 192,
 205
Pene 429
Penelope montagnii 18
purpurascens aequatorialis 17
jacuáçu 18
 Pennsylvanian, Late 387
 fauna 390
Perca ascensionis 100
rufa 104, 107
 Percesoces, ecological distribution 81-83
 Percoidea, ecological distribution 81-83
perforatus, *Bulimulus* 320
Taphozous 580, 595
Pericapritermes 469, 486, 495, 501, 511
Periophthalmus schlosseri 79
schlosseri 55, 79
variabilis 55, 79
perlatum, *Holocentrum* 104, 107
 Permian fauna 385ff
Peromyscus 644
boyllii levipes 545
difficilis amplus 547
quatemalensis 231, 544, 548
hylocetes 548
maniculatus labecula 548
truei gratus 548
Peronaeus, *Bulimulus* 321
perroudi, *Platysoma* 629
personata, *Chilonycteris* 696
perspicax, *Penelope* 17
 Peru, shells from 304ff
peruanus, *Edrabius* 259
 Peruvian Zoological Expedition (1953)
 221, 304ff
 (1954) 330ff
peruviana, *Helicina* 304
Succinea 305
peruvianus, *Amblyopinodes* 250
peruvianus, *Radiodiscus* 308
Petalasoma hirtipes 626
pfefferi, *Calamaria* 205
phaeocheilus, *Bulimulus* 334
philippianus, *Edrabius* 212, 215, 254,
 255
Phlegethontia 523ff
linearis 531
mazonensis 523ff
serpens 531
 Phlegethontidae 524, 531
Photonectes dinema 282
Photostomias guernei 283
photothorax, *Lampanyctus* 289
Phrygilus patagonicus 149
 horny palate 151
Phyllostoma lineatum 403, 409
Phyllotis 644
boliviensis 254
darwini 234
sublimus 234
 phylogeny of Cheloniidae 363ff
physodes, *Hesperomys* 666
Holochilus 647, 666
Mus 660, 665
Reithrodon 646
piceus, *Amblyopinodes* 248
Pilotermes 511
Pilsbryna, *Epiphragmophora* 327
Pimelodus sagor 64
Pipile cumanensis cumanensis 21
Pipistrellus kuhli kuhli 595
Plaestius 626
Planicapritermes 495, 512
 plastron, of Cheloniidae 377
 of *Procolpochelys* 357
platycheilus, *Neopetraeus* 311
Platylister pacificus 629
urvillei 630
Platylomalus forestieri 605, 608, 619

- saucius* 619
umbilicatus 619
victoriae 619
Platypsyllus castoris 248
Platysoma 627
 abruptum 629
 connexum 605, 607, 628, 629
 contiguum 629
 enode 629
 frontosum 631
 laeve 628
 montrouzieri 605, 607, 629
 pacificum 605, 607, 629
 perroudi 629
 (*Platylister*) *montrouzieri* 629
 urvillei 630
 (*Platysoma*) *connexum* 628
 montrouzieri 629
 pacificum 629
 urvillei 630
 querulum 628
 oronense 631
 urvillei 605, 608, 630
 vanum 631
plebius, *Polydactylus* 55, 70
 food 85
Plectotus auritus christiei 595
Plectognathi, ecological distribution 83
Plectrypops 96, 122
Plesiochelyidae 369
plicata, *Balantiopteryx* 695
pliopterus, *Chirostomias* 281
Pliotermes 507
pluriradiatus, *Chiasmodon niger* 297
Poecilia fusca 76
poecilopus, *Rhamphoberyx* 93
poecilus, *Drymaeus* 332
poeti, *Gerres* 53, 74
 food 74, 85
polillensis, *Calamaria* 205
Poliospiza 147
 burtoni 149
 horny palate 151
politus, *Aeletes* 610
Polydactylus plebius 55, 70
 food 85
Polynemus tetradactylum 69
Polyporaceae 561
Pomadasyus hasta 53, 55, 73
 food 73, 85
 maculatus 53, 73
 food 74, 85
Pomiatus olivieri 433
ponsonbyi, *Drymaeus* 332
popelairianus, *Strophocheilus* 309
popcephala, *Eleotris* 76
 Ophiocara 52, 76
Porotermes 468, 470, 471, 476, 484, 491,
 492, 498, 502, 509
Porotermitinae 516
porphyreus, *Thaumastus* 309
Porphyrio 143
Porphyriornis nesiotis comeri 142, 143
 nesiotis 143
Porphyrobaphe iostoma 331
Porphyryla 143
 martinica 153
Postsubulitermes 515
Potamopyrgus subgradatus 304
poweriae, *Vinciguerria* 273
prakkei, *Calamaria* 190, 192, 205
prasin, *Holocentrus* 92
Proboscitermes 512
Procapratermes 511
procar, *Nesocichla* 146
Procolophonidae 387, 392, 400
Procolpochelys grandaeva 345ff
 carapace 349
 phylogeny 363ff
 plastron 357
 vertebrae 360
Procornitermes 472, 473, 495, 514
Procryptotermes 472, 473, 478, 490, 492,
 498, 508
Procubitermes 511
productum, *Holocentrum* 100
productus, *Termitopteryx* 572, 575
Proelectrotermes 507
Profastigitermes 511
Prohamitermes 493, 510
Prokalotermes 507
Promirotermes 469, 485, 486, 494, 512
Proreithrodon 646
 chapalmalense 646
 incipiens 646
Prorhinotermes 471, 477, 478, 479, 488,
 489, 493, 500, 509
 canalifrons 488
proteiformis, *Bulimulus* 335
Protermes 513
Proterothyrus 391
proteus, *Bulimulus* 335
Protocapratermes 503, 511
Protoglyptus, *Bulimulus* 336
Protohamitermes 468, 480, 510
Protostegidae 365
proximus, *Saprinus* 610
Psammosteus cf. *anglicus* 449
Psammotermes 473, 479, 483, 484, 499,
 509
 voeltzkowi 488
Psammotermittinae 516
Pseudacanthotermes 486, 513
Pseudocapratermes 512
Pseudogobius bikolanus 52, 54, 79
 sp. A 55, 79
 sp. B 52, 79
Pseudoguppya, *Habroconus* 308
pseudolatiissimus, *Leptocephalus* 290
Pseudomicrotermes 510
psilotis, *Chilonycteris* 696
Psittirostra 148
Psophocichla 144
Pteraspis cf. *crouchi* 449

- leathensis* 452
novae-scotiae 452
vogti 452
whitei 450
Pteronotus davyi fulvus 697
Pteryx 562
Ptiliidae 561ff
 habitat 561
 termitophilous adaptations 563
Ptinella 562
Ptyssophorus 646
 elegans 646
 rotundatus 646
Pugnitermes 511
pumilio, *Carcinops* 605, 608, 616, 619
 Carcinus 616
 Paromalus 616
punae, *Amblyopinus* 227
punctatissimus, *Holocentrus* 92, 95
punctulatus, *Holocentrus* 112
punctiger, *Abraeus* 624
 Bacanius 605, 606, 622, 624, 625
puntana, *Epiphragmophora* 328
Puntius sealeri 52ff, 62
 ecological distribution 82
 food 62, 84
 predator of 62
Pupa chondriformis 419
 michoni 432
 septemdentata 422
pupiformis, *Bulimulus* 325
Puppigerus 345
purpurascens, *Penelope* 17
pusillus, *Dermogenys* 52, 54ff, 66
 Eptesicus 595
 Lampanyctus 289
Putnam Formation 389
Pycnopteryx 562, 563, 567
 schmidti 562, 567, 570
 sp., 572
pyrgidium, *Bulimulus* 321

Quasitermes 469, 488, 512
quattuordecimstriata, *Carcinops* 616
 Dendrophilus 616
 Paromalus 617
Quechua, *Thaumastus* 331
Quediini 211
querulum, *Platysoma* 628
questi, *Nesospiza acunhae* 152
quinquetaeniata, *Calamaria* 205

radiation, adaptive 388, 399
Radiconus, *Radiodiscus* 308
Radiodiscus (*Radioconus*) *andium* 308
 (*Radiodiscus*) *peruvianus* 308
Rasbora sumatrana 52ff, 60
 ecological distribution 82
 food 60, 84, 88
ratada 655ff
rats, marsh 639ff
Rattus norvegicus 648

raveni, *Calamaria* 205
rebertschki, *Calamaria* 205
recifinus, *Vampyrops* 413
reconditus, *Bulimulus* 320
reinhardti, *Hygophum* 285
Reithrodon 639, 640, 644, 646
 auritus 646
 caurinus 646
 cuniculoides 646
 olivensis 646
 physodes 646
 typicus 646
remingtoni, *Bacanius* 605, 606, 622, 624
reptiles of Permian 385ff
 geographic distribution 389
Reticulitermes 470, 471, 483, 489, 490, 507, 509
revinctus, *Bulimulus* 316
Rhamphoberyx 93
 leucopus 94
 poecilopus 93
Rhinoberyx 93
 chryseus 93
Rhinolophus clivus *brachygnathus* 595
 lobatus 595
 mehelyi 595
Rhinopoma hardwickei cystops 595
 microphyllum 595
Rhinotermes 469, 493, 509
 marginalis 493
Rhinotermitidae 476, 479, 505-507, 509
 introductions 474
Rhinotermitinae 516
rhodolarynx, *Neopetraeus* 311
Rhynchichthys 93
 brachyrhynchus 93
 pelamidis 93
Rhynchohyalus natalensis 284
Rhynchortyx cinctus hypopiis 22
Rhynchotermes 468, 495, 514
rictuosus, *Apocryptes* 80
 Parapocryptes 55, 80
 food 80, 85
ridley turtles 345
riparum, *Holocentrum* 109
rivasi, *Bulimulus* 336
robustior, *Urotiaianus grandis* 564
robustus, *Melamphaes* 297
rodents, ericetine 639
 dentition 643ff
 sigmodont 639ff, 646
 dentition 643
 skull 640
rogersi, *Atlantisia* 142
romeri, *Cotylorhynchus* 396
Romeria 391
Romerolagus diazi 548
rosea, *Harpag* 95
rostratum, *Holocentrum* 99
Rostrotermes 511
Rothia 393, 398

- Rotunditermes* 496, 514
rotundus murinus, *Desmodus* 700
roulei, *Leptocephalus* 290
Rousettus aegyptiacus aegyptiacus 595
Rowettia 144, 147-150, 158
 goughensis 142
 horny palate 151
rubiginosa, *Chilonycteris* 696
 mexicana, *Chilonycteris* 696
rubra, *Crax* 17
 Sciaena 104
rubripes, *Carcinops* 618, 619
 Epiurus 618
rudistriatus, *Bulimulus* 318
rufa, *Perca* 104, 107
ruficeps, *Tinamus major* 10
rufus, *Holocentrus* 91, 102, **104**, 122ff
 Molossus 701
Rugitermes 477, 478, 491, 492, **498**, 508
 arthuri-muelleri 576
ruppelli, *Tadarida teniotis* 595
russatus, *Hesperomys* 666
 Holochilus 647, 661

sagor, *Pimelodus* 64
 Tachysurus 55, 64
 food 85
sammara, *Holocentrus* 92, 94, 100
 San Angelo Formation 385
 fauna of 393ff, 398
sanborni, *Amblyopinus* 238
sanctipauli, *Holocentrus* 91, 100
 Sapriniinae 605, **608**
Saprinus artensis 605, 608, **609**
 australasiae 609
 cyaneocupreus 610
 cyaneus 605, **608**
 laetus 609
 nitiduloides 610
 proximus 610
 speciosus 609
 subnitidus 605, 608, **610**
 tasmanicus 609
Sargocentron, *Holocentrus* 92
saturatus, *Tinamus major* 9
saucius, *Platyomalus* 619
sauleyi, *Bulimus* 416
 Jamiania 416
 scales, head, in Cheloniidae 376
Scatophagus argus 52, 54, 55, 75
Schedorhinotermes 469, 478, 479, 484,
 493, **500**, 509
schlegeli, *Calamaria* 205
schlosseri, *Gobius* 79
 Periophthalmus 79
 schlosseri 55, 79
schmidti, *Acritus* 605, 607, 612, **614**
 Calamaria 174, 178, 197, 205
 Drymaeus 314
 Enoploclytia walkeri 445
 Pycnopteryx 562, 567, **570**
 Strepsylla 544

 Thaumastus 309
schmidti, *Edriolychnus* 299
 Eustomias 282
scholviensis, *Thaumastus* 309
Sciaena argentimaculata 73
 jaculatrix 74
 rubra 104
sciureus berbicensis, *Holochilus* 669
 Holochilus 647, 659, 661, 666, 667, 669
 Sciuromorpha 217
sclerops apaporiensis, *Caiman* 340
 Caiman 339
scolodonta, *Streptaxis* 329
scolopaceus, *Nemichthys* 291
Scomber equulus 74
 ignobilis 72
 Scopelarchidae 284
Scopelarchus anale 284
Scutalus, *Bulimulus* 315ff, 334
scutulatus, *Bulimulus* 319
scythrops, *Holocentrus* 92, 100
sealei, *Barbodes* 62
 Puntius 52ff, 62
 ecological distribution 82
 food 62, 84
Searsia koefoedi 269
 Searsidae 269
 semenlini, *Habroconus* 308
 semiannulata, *Calamaria* 205
 septedentata, *Jamiania* 421, 422ff
 septentrionalis, *Calamaria* 169, 178,
 194, 206
Serinus 147
 flaviventris 139, 155
 sulphuratus 149
 horny palate 151
 serotinus, *Drymaeus* 313, 332
 serpens, *Phlegethontia* 531
 serpentina, *Derichthys* 290
 Serranus nebulosus 72
Serritermes 515
 Serritermitinae 497, 505, 506, 515, 516
Serrivomer beani 291
 brevidentatus 291
 Serrivomeridae 291
sexdentata, *Jamiania* 436ff
 sharks, xenacanth 388
Sicalis olivascens 149
 horny palate 151
sicciferum, *Holocentrus* 95, 109
Sigmodon 639, 640, 644, 645, 647, 648,
 652, 653
 hispidus 647
 vulpinus 657
Sigmomys 647
Silvestritermes 515
simalurensis, *Calamaria* 189, 190, 192,
 206
similis, *Amblyopinodes* 251
simonyi, *Benthodesmus* 298
simpsoni, *Mus* 648
sinaloae, *Molossus* 700

- Siphonaptera 541
sismondai, *Chelonia* 366, 378
sloanei, *Chauliodus* 277
smithi, *Calamaria* 206
snyderi, *Syntermes* 562, 570, 572
soborna, *Corica* 52, 54, 57
 Solenichthyes, ecological distribution 83
sondaica, *Calamaria* 206
soricina leachi, *Glossophaga* 697
soronense, *Platysoma* 631
soui, *Crypturellus* 15
 Spalacotheriidae 689
Spalacotherium 690, 692
Spalacotheroides 690, 692
 bridwelli 690
 dentition 690ff
 specialization, in *Calamaria* 168
 speciosus, *Saprinus* 609
Speculitermes 480, 493, 500, 510, 567
 termitophiles of 562
Sphaerotermes 513
Sphenacodon 392
Sphenacodontia 387
 distribution, geographic 390
 geologic 390
Sphyraena jello 54, 68
 food 68, 84
Spicotermes 494, 511
spilurus, *Dangila* 63
 Osteochilus 53, 63
 ecological distribution 82
 spinalis, *Achalinus* 174
 spinifer, *Holocentrus* 92
 spinipennis, *Amblyopinus* 234
Spinitermes 485, 494, 511
spinosissimus, *Holocentrus* 92
Spinus 147
 spinus 149
 horny palate 151
Spirosulcatus, *Bulimulus* 336
splendens, *Leptocephalus* 290
squamipes, *Hesperomys* 666
 Holochilus 647
 Nectomys 653
stahlknechti, *Calamaria* 192, 206
 Staphylininae 211, 221
 Stegocephali 531
 Stephanian fauna 389ff
Steppesaurus 393, 397ff
Sternaulex 605, 626
 caledoniae 605, 607, 626
 zealandica 626
 Sternoptychidae 274
 vertical distribution 275
Sternoptyx diaphana 277
Stolephorus commersoni 52, 56
 food 56, 84
 tri 54, 56
 food 84
Stolotermes 468, 470, 471, 476, 484, 498, 502, 509
 Stolotermitinae 516
 Stomias boa ferox 278
 brevibarbatus 279
 Stomiatidae 278
 Strepsylla 541ff
 dalmati 541
 davisae 546
 fautini 546
 mina 541
 schmidti 544
 taluna 546
 villai 546
 Streptaxidae 329
 Streptaxis (Scolodonta) andivaga 329
 strongylura, *Belone* 66
 strongylurus, *Tylosorus* 53, 66
 food 84
 Strophocheilidae 309, 330
 Strophocheilus incarum 331
 maximus vestitus 309
 (*Microborus*) **tenuis** 330
 popelairianus 309
 tenuis 330
 Sturnira lilium parvidens 700
 styani, *Trirhinopholis* 174
 Stylotermes 509
 Stylotermitinae 516
 subgradatus, *Potamopyrgus* 304
 subhybridus, *Goniostomus* 314
 subjussieui, *Bulimulus* 336
 subnitidus, *Saprinus* 605, 608, **610**
 suborbitalis, *Holocentrus* 92, 100, 126, 132
 subulidens, *Caulolepis* 293
 Subulitermes 469, 481, 487, 489, 496, 497, 502, 515
 leucops 502
 undecimus 502
 Succinea aequinoctialis 305
 peruviana 305
 Succineidae 305
 sulcidens, *Jaminia* 438ff
 sulcisternus, *Bacanius* 620
 sulphuratus, *Serinus* 149
 horny palate 151
 suluensis, *Calamaria* 178; **190**, 192, 206
 sumatrana, *Calamaria* 191, 192, 206
 Rasbora 52ff, **60**
 ecological distribution 82
 food 60, 84, 88
 sumatranus, *Leuciscus* 60
 supralateralis, *Lampanyctus* 289
 Symmetrodonta 689
 Sympholis 168
 Synacanthotermes 468, 473, 513
 Synapsida 387
 Synbranchoidea, ecological distribution 83
 Synentognathi, ecological distribution 83
 Syngnathus brachyurus 67
 carce 67

- Synhamitermes* 510
Syntermes 468, 473, 495, 514
 grandis 564
 molestus 562, 564, 571
 snyderi 562, 570
 termitophiles of 561
Syntermorpha microphthalma 572
Systrophia (Systrophiella) andivaga 308
Systrophiella, Systrophia 308
 Systrophiidae 308
- taaningi, Lampanyctus* 289
Tachysurus caelatus 55, 64
 food 85
 sagor 55, 64
 food 85
 renosus 55, 65
 food 84
Tadarida aegyptiaca aegyptiaca 595
 teniotis ruppelli 595
tahapisi, Emberiza, horny palate 151
tahilicum, Holocentrus 95
taluna, Strepsylla 546, 547
tanneri, Echiosloma 281
Taphozous nudiventris 595
 perforatus 580
 haedinus 580, 595
 perforatus 595
Tapinocephalia 387, 393, 397
Tappenosaurus 395, 397
Tarditermes 515
tasmanicus, Saprinus 609
teniotis ruppelli, Tadarida 595
tentacularis, Gobius 78
 Oxyrichthys 55, 78
tenuipinnis, Eptesicus 595
Tenuirostritermes 472, 481, 491, 496,
 497, 514
tenuis, Strophocheilus 330
Termes 468, 469, 473, 477, 478, 480,
 485, 488, 494, 507, 512
 fur 474
 inquilinus 474
 termites, zoogeography 465ff
 Termitidae 479, 505–507, 510–512
 Termitinae 485, 487, 494, 505, 506, 511,
 512, 516
Termitogeton 509
 Termitogetoninae 516
 termitophiles, of Kalotermitidae 563
 of *Speculitermes* 562
 of *Syntermes* 561, 562
Termitopteryx 563, 572
 productus 572, 575
 sp. 576
 Termopsinae 482, 516
Termopsis 482, 507
tetradactylum, Eleutheronema 55, 69
 food 85
 Polynemus 69
 Tetragonuridae 298
Tetragonurus atlanticus 298
Tetraodon, ecological distribution 81, 86
 fluviatilis 54, 55, 80
 ecological distribution 82
 food 80, 85
 kretamensis 52, 55, 81
 ecological distribution 82
 food 81, 85
Tetrodon fluviatilis 80
teysmanni, Clarias 52, 54, 65
 ecological distribution 82
 food 65, 84
Thaptomys nigrata 249
Thaumastus bitaeniatus 309
 conspicuous 331
 jelskii 309
 porphyreus 309
 (*Quechua*) *conspicuous* 331
 schmidti 309
thebaica, Nycteris 595
 Thecophora 368
 Therapsida 387, 392, 400
 distribution, geographic 390
 geologic 390
 origin 388
 Theria 689
 Theriodonta 387, 397
 distribution, geographic 390
 geologic 390
 origin 388
 Therocephalia 387, 397
Thomasomys 232, 644
 aureus nicefori 232
 laniger 239
Thoracotermes 511
Thrissa hamiltoni 56
Thrissocles hamiltoni 53, 56, 58
 food 56, 84
Thrysidium 532
thula, Egretta 152
Thyreoxenus 478
tibetanus, Ursus 26ff
tibialis, Carcinops 617
 ticks 579ff
tiere, Holocentrus 92
Tinamus guttatus 12
 major saturatus 9
 osgoodi hershkovitzi 10
Tinodon 692
 Titanosuchia 387, 393, 397
 origin 388
tolteca, Stenoderma 698
toltecus, Artibeus cinereus 698
torrei continentis, Chilonycteris 696
tortugae, Holocentrus 112
 Toxochelyidae 365
 plastron 377
 Toxotes
 chatareus 52, 54, 55, 75
 food 75, 85
 jaculator 74
 jaculatrix 54, 74
 food 74, 85

- Traquairaspis* 449
travassosi, *Amblyopinodes* 249
Tremarctos ornatus 25ff
 jaw mechanics 40
 mandibular articulation 38
 muscles 32
 salivary glands 31
 skull 26
 tongue and oral vestibule 29
 vessels and nerves 31
Tremarctotherium 25
Tretomys atavus 646
tri, *Engraulis* 56
 Stolephorus 54, 56
 food 57
 Tribalinae 601
Tribalus 601
 Trichiuridae 298
 Trichopterygidae 561
Trichotermes 511
tridens, *Asellia* 595
Trinervitermes 473, 481, 486, 501, 514
 Trinity Sand Formation 689
tripunctulatus, *Valenciennellus* 274
Trirhinopholis styani 174
 Tristan da Cunha, land birds of 139ff
tritvatata, *Beanea* 95
trogodytes, *Carcinops* 605, 608, 618
 Hister 618
 Paromalus 618
tropica, *Calamaria* 168, 192, 206
truei gratus, *Peromyscus* 548
Tuberculitermes 494, 511
tumens, *Nenia* (*Neniactra*) *adusta*
 305
Tumulitermes 469, 477, 503, 514
tupacii, *Bulimulus* 316
Turdus 144
turrilus, *Bulimulus* 336
 turtles, caretine 345ff
 loggerhead 345
 ridley 345
Tylosurus strongylurus 53, 66
 food 84
Typhlogeophis 168
typicus, *Reithrodon* 646

ulmeri, *Calamaria* 206
Ulmeriella 482, 490, 499, 507
umbilicatellus, *Bulimulus infundibulum*
 320
umbilicatus, *Platylomalus* 619
umbratus, *Vampyrops* 408
undecimus, *Subulitermes* 502
undulatus, *Crypturellus* 16
Unguitermes 511
unicolor, *Neopetraeus cora* 335
uniformis, *Calamaria* 206
unimaculata, *Betta* 53, 54, 70
 ecological distribution 82, 86
 food 70, 84
 Parophiocephalus 70

unipennis, *Melanonon* 291
Uralotermes 507
 Uralotermitidae 506, 507
 Urodela 531
urophthalmus, *Eleotris* 77
 Oxyeleotris 52, 77
 food 77, 85
Urotraiinus 561–563, 564, 567
 bidentatus 563, 564
 grandis 564
 robustior 564
 molesti 564
ursinus, *Melursus* 25
Ursus americanus 25
 tibetanus 26ff
urubambensis, *Nenia angrandi* 306
urvillei, *Hololepta* 630
 Platylister 630
 Platysoma 605, 608, 630

Vaimosa bikolana 79
valdiviaae, *Notolychnus* 288
 Vale Formation 389
 fauna 390ff
Valenciennellus tripunctulatus 274
Vampyrops 403
 dorsalis 407
 fumosus 405
 helleri 411
 infuscus 405
 lineatus 408, 409, 411
 recifinus 413
 umbratus 408
 vittatus 405
 zarhinus 411
vanum, *Platysoma* 631
variabilis, *Periophthalmus* 55, 79
Velocitermes 469, 496, 514
venezuelae, *Holochilus* 661, 669, 670
 brasiliensis 670
venezuelensis, *Nothocercus* 14
venosus, *Arius* 65
 Tachysurus 55, 65
 food 84
ventralis, *Calamaria* 196, 206
vermiformis, *Calamaria* 176, 178, 183,
 185, 207
 vermiformis 187, 207
 grayi, *Calamaria* 207
Verrucositermes 515
 vertebrae, of *Caretta caretta* 360
 of *Chelonia mydas* 360
 of *Eretmochelys* 360
 of *Lepidochelys* 360
 of *Procolpochelys* 360
 Vertiginidae 305
veruculum, *Bulimulus* 320
vespertilionis, *Argas* 586, 596, 598
vestitus, *Strophocheilus maximus* 309
vexillarius, *Holocentrus* 92, 96, 100, 109
victoriae, *Platylomalus* 619
villai, *Strepsylla* 546

- Vinciguerria attenuata* 273
 nimbraria 273
 poweriae 273
virgulata, *Calamaria* 180, 207
vittatus, *Vampyrops* 405
voeltzkowi, *Psammotermes* 488
vogti, *Pteraspis* 452
vulpinus, *Hesperomys* 657, 664
 Holochilus 647, 657, 661, 663
 Holochilus brasiliensis 661, 662
 Mus 660
 Sigmodon 657, 668

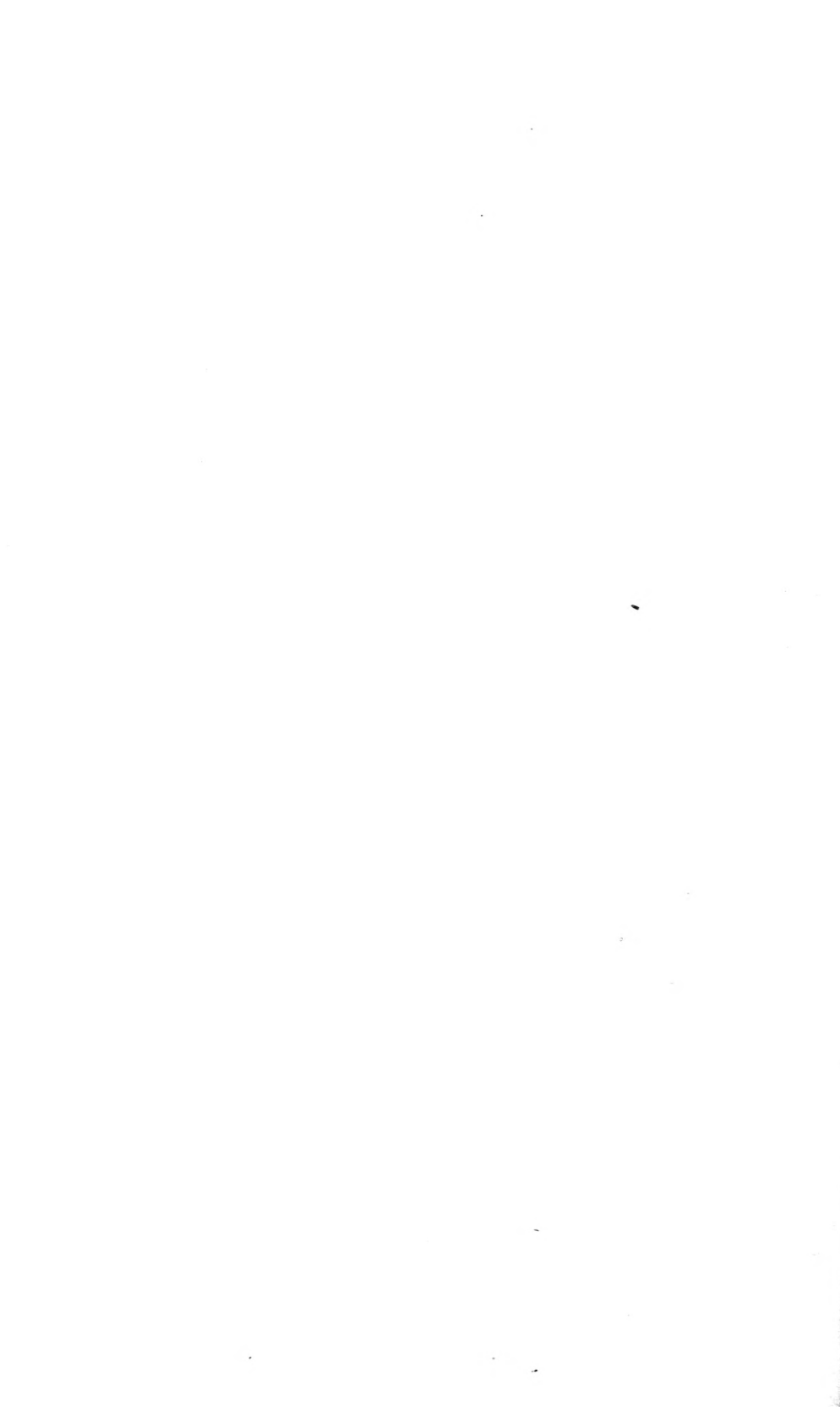
warszewiczi, *Nenia* 307
waterhousei, *Amblyopinus* 219, 243
weiseri, *Edrabius* 255
weyrauchi, *Nenia* 308
whitei, *Pteraspis* 450
Wichita Group 389
 fauna 390

wilkinsi, *Nesospiza* 147, 150
Winteriidae 284

xantherythrus, *Holocentrus* 92

yapura, *Crypturellus undulatus* 16
Yarella blakfordi 272

zamboangensis, *Calamaria* 207
zealandica, *Sternaulax* 626
Zenarchopterus amblyurus 52ff, 67
 food 67, 84
zilchi, *Drymaeus* 333
Zonibyx modestus 154
zoogeography, of New Caledonia His-
 teridae 605ff
 of termites 465ff
Zootermopsis 489, 490, 507, 509
Zoothera 144











UNIVERSITY OF ILLINOIS-URBANA

590 5F1 C001
FIELDIANA, ZOOLOGY&CHGO
37-38 1955-56



3 0112 009379683