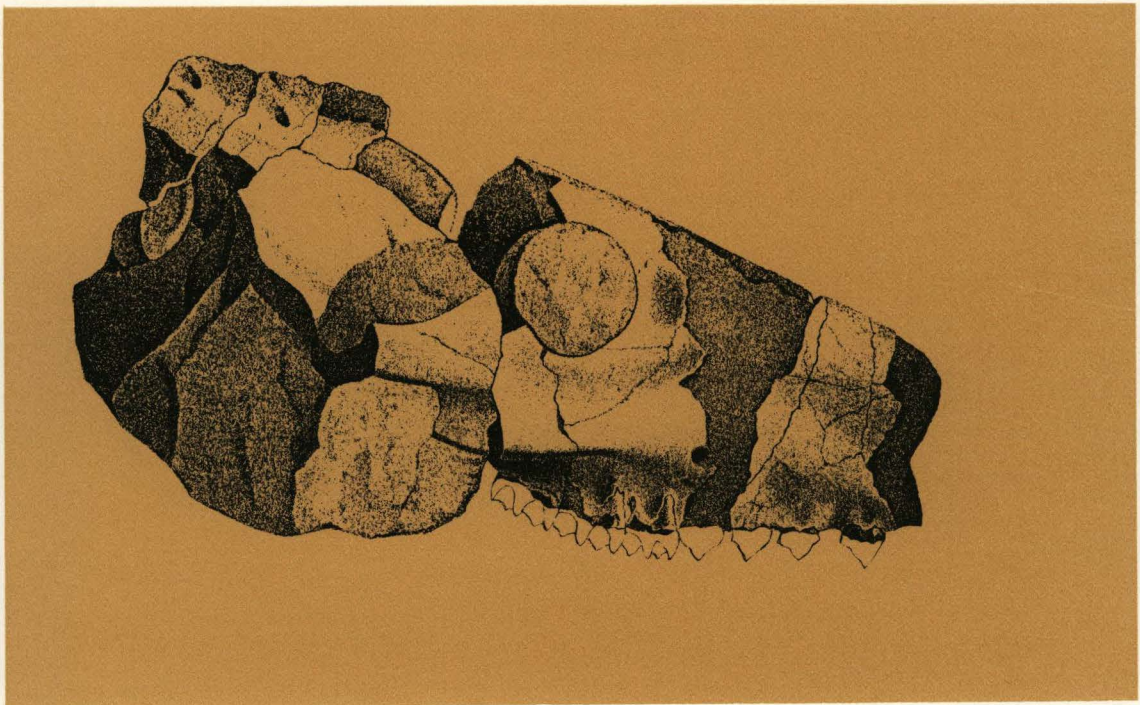


# TYPE SPECIMENS AT THE UNIVERSITY OF OREGON: FOSSIL VERTEBRATES AND PLANTS

by

ERIC PAUL GUSTAFSON and JOYCE EATON



Bulletin No. 24

*Museum of Natural History*

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Cover—*Oreodon superbis* Leidy, as shown in Plate 1, Figure 1, of Joseph Leidy, *Contributions to the Extinct Vertebrate Fauna of the Western Territories*, 1873 (see Literature Cited).

Volume editor—Don E. Dumond

## PUBLICATIONS

Museum of Natural History, University of Oregon  
Eugene, Oregon

<i>Special Publication</i>	<i>Price</i>
Guide to the Plants of the Willowa Mountains of Northeastern Oregon, by Georgia Mason; 411 pages, illustrated. First printing December 1975; second printing March 1980	\$7.95
 <i>Bulletins</i>	
No. 1 Cenozoic Stratigraphy of the Owyhee Region, Southeastern Oregon, by L.R. Kittleman and others; 45 pages, 9 plates, 11 figures, December 1965	\$1.50
No. 2 Notes on Some Upper Miocene Shrews from Oregon, by J. H. Hutchison; 23 pages, 17 figures, March 1966	\$1.25
No. 3 A New Archaic Cetacean from the Oligocene of Northwest Oregon, by Douglas Emlong; 51 pages, 15 figures, October 1966	\$1.50
No. 4 The Archaeology of a Late Prehistoric Village in Northwestern California, by Frank C. Leonhardy; 41 pages, 17 figures, March 1967	\$1.00
No. 5 <i>Peromyscus</i> of the Late Tertiary in Oregon, by J. Arnold Shotwell; 35 pages, 11 figures, June 1967	\$1.25
No. 6 Ethnomalacology and Paleoecology of the Round Butte Archaeological Sites, Deschutes River Basin, Oregon, by Ernest J. Roscoe; 20 pages, 4 figures, July 1967	\$ .75
No. 7 Its Own Story: The Museum of Natural History; 20 pages	no charge
No. 8 Geologic Map of the Owyhee Region, Malheur County, Oregon, by L. R. Kittleman and others; scale, 1:125,000 (1/2 inch equals 1 mile), September 1967	\$2.00
No. 9 Late Tertiary Geomyoid Rodents of Oregon, by J. Arnold Shotwell; 51 pages, 28 figures, November 1967	\$1.25
No. 10 Refinements in Computerized Item Seriation, by W.B. Craytor and LeRoy Johnson, Jr.; 22 pages, 6 figures, March 1968	\$ .75

[Continued inside back cover.]



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## INTRODUCTION

A published list of type specimens such as this serves several purposes. First and foremost it is intended to allow quick access to the type holdings of a museum and to the basic information that is present in the museum files. Secondly, it allows some evaluation of the scientific value of a given collection. This latter can be particularly significant in the case of a collection such as that at the University of Oregon, which is of considerable size (13th in the United States in terms of total catalogued specimens of fossil vertebrates as of 1977, according to Langston et al., 1978) but is off the beaten paths which in Vertebrate Paleontology lead back and forth between California and the northeastern states. We hope that this publication will also serve as a bibliographic introduction to the widespread literature on fossil vertebrates from Oregon. It certainly will *not* serve as a complete guide to fossil vertebrate type specimens from the State of Oregon; these are widespread in other collections and only a small fraction of the taxonomic work on the various fossil faunas had been done here.

The large collection of fossil plant materials at the University of Oregon, mostly leaf impressions, is poorly documented in the literature. Thus, there is relatively little to report in the way of type specimens.

Much of the bibliographic work involved in this publication was done by Joyce Eaton in early 1978 while helping to reexamine and improve the curation of the UO type collections. The organization and editing of this list are entirely the responsibility of the senior author.

## HISTORY OF THE COLLECTIONS

At the date of this publication, the specimens herein listed are housed in the University of Oregon Museum of Natural History building, but are a separate administrative responsibility under the title of Condon Museum of Geology in the Department of

Geology. The history of these collections has some complications. Originally the "University of Oregon's collection" was, in fact, the private collection of Dr. Thomas Condon, one of the first members of the faculty of the University when it was organized in 1876. He had begun his collecting activities in the 1840's, but his collection of vertebrate fossils was begun while he was a minister at The Dalles, Oregon, in the 1860's. When Dr. Condon died in 1907 his large collection remained with the University, and when purchased in 1909 from his heirs, it became the Condon Museum of Geology. In 1936 the Condon Collection (with some additions) was added to the newly organized University of Oregon Museum of Natural History. The bulk of the present collection was added in the years 1946-1971 when Dr. J. Arnold Shotwell was Curator of the collections and (for some of those years) Director of the museum. In September of 1977 the old Condon Museum collection and other specimens related to geology and paleontology were placed in the care of the Department of Geology as part of a general reorganization of the museums.

## CONTENT OF THIS CATALOG

Only those specimens listed in the original publications as types, holotypes, cotypes, or paratypes, are listed here. The Condon Museum collections contain between 800 and 1000 hypotypes (described, figured, or listed specimens) which could not be included.

Entries to the list follow this pattern: The specific name is listed in boldface type as originally published, followed by the most recent revision (if any) in italics. Then follows the type status, the specimen number and description, the locality number and description as originally given, the stratigraphic position, the age (as originally given and as revised), the collector, and any comments that seem necessary or desirable for understanding the history of the specimen.



## VERTEBRATES

## Phylum CHORDATA

## Subphylum VERTEBRATA

## Class OSTEICHTHYES

## Order SILURIFORMES

## Family Ictaluridae

**\*Ictalurus peregrinus** Lundberg, 1975*Type status*—Holotype*Specimen*—F-28035, left pectoral spine 28.3 mm in length.*Locality*—UO 2337, Sec. 11 (14 in original pub.), T21S, R37E, WM, Black Butte local fauna.*Stratigraphic position*—upper member of Juntura Formation, Malheur County, Oregon.*Age*—Clarendonian, Lower Pliocene (Upper Miocene).*Collector*—Shotwell.

## Order SALMONIFORMES

## Family Salmonidae

**\*Smilodonichthys rastrosus** Cavender and Miller, 1972*Type status*—Holotype*Specimen*—F-26799, skull with jaws and anterior gill arches.*Locality*—UO 2250, gravel quarry just southwest of Gateway, Madras Quadrangle, Jefferson County, Oregon.*Stratigraphic position*—Madras Formation (also called Deschutes Fm. in some publications), from a sand lens within the "torrential gravels" in the lower part of the quarry.*Collector*—Iames and McKain, 1964.**\*Smilodonichthys rastrosus** Cavender and Miller, 1972*Type status*—Paratype*Specimen*—F-3335, associated bones from a single individual, including crushed neurocranium, left and right mandibles and premaxillae, about 40 vertebrae, etc.*Locality*—UO 2250, same as holotype.*Stratigraphic position*—same as holotype.*Collector*—J. A. Shotwell, 1950.

## Class AMPHIBIA

## Order CAUDATA

## Family Salamandridae

**\*Paleotaricha oligocenica** van Frank, 1955*Type status*—Holotype*Specimen*—F-5405, complete skeleton on slab.*Locality*—UO 2715, Plant-bearing tuffs (locality of "Willamette Flora") 3 miles southeast of Eugene, ¼ mile north of Goshen, Lane County, Oregon.*Stratigraphic position*—Tuffaceous shales and sandstones apparently overlying the Fisher and Eugene Formations.*Age*—Upper Oligocene.*Collector*—George Moorhead, 1951.*Comments*—The exposed surface of this specimen has been completely covered with transparent plastic to allow preparation of the underside of the skull.

## Class AVES

## Order GALLIFORMES

## Family Phasianidae

**\*Lophortyx shotwelli** Brodkorb, 1958*Type status*—Holotype*Specimen*—F-3611, proximal portion of left humerus.*Locality*—UO 2222, East bank of McKay Reservoir, Pendleton Quadrangle, Umatilla County, Oregon.*Stratigraphic position*—Tuffaceous sandstone filling a channel cut into upper flows of the Yakima Basalt.*Age*—Pliocene, Hemphillian (probably very late Hemphillian).*Collector*—J. A. Shotwell and Genevieve Shotwell, 1950.

## Order CHARADRIFORMES

## Family Scolopacidae

**\*Bartramia umatilla** Brodkorb, 1958*Type status*—Holotype*Specimen*—F-3727, right carpometacarpus.*Locality*—UO 2222, east bank of McKay Reservoir, Pendleton Quadrangle, Umatilla County, Oregon.*Stratigraphic position*—Tuffaceous sandstone in channel cut into Yakima Basalt.*Age*—Pliocene, Hemphillian (probably very late Hemphillian).*Collector*—J. A. Shotwell and Genevieve Shotwell, 1950.

## Order PELECANIFORMES

## Family Phalacrocoracidae

**\*Phalacrocorax leptopus** Brodkorb, 1961*Type status*—Holotype



*Specimen*—F-7994, proximal half of left tarso-metatarsus.

*Locality*—UO 2360, Malheur County, Oregon.

*Stratigraphic position*—Upper member of Juntura Formation.

*Age*—Lower Pliocene, Clarendonian (Upper Miocene).

*Collector*—Shotwell and Russell, 1955.

#### Order ARDEIFORMES

##### Family Palaelodidae

#### \**Megapaloelodus opsignus* Brodkorb, 1961

*Type status*—Holotype

*Specimen*—F-5459, proximal end of left tarso-metatarsus.

*Locality*—UO 2334, SW $\frac{1}{4}$ , Sec. 7, T21S, R38E, WM., Malheur County, Oregon.

*Stratigraphic position*—Upper member of Juntura Formation.

*Age*—Lower Pliocene, Clarendonian (Upper Miocene).

*Collector*—Shotwell and Alvey, 1954.

#### Order ANSERIFORMES

##### Family Anatidae

#### \**Eremochen russelli* Brodkorb, 1961

*Type status*—Holotype

*Specimen*—F-5414 and F-5424, proximal part of humerus.

*Locality*—UO 2335, SW $\frac{1}{4}$ , Sec. 7, T21S, R38E, WM, Malheur County, Oregon.

*Stratigraphic position*—Upper member of Juntura Formation.

*Age*—Lower Pliocene, Clarendonian (Upper Miocene).

*Collector*—Shotwell and Alvey, 1954.

#### \**Eremochen russelli* Brodkorb, 1961

*Type status*—Paratype

*Specimen*—F-5872, coracoid.

*Locality*—UO 2338, W Sec. 11, T21S, R37E, WM, Malheur County, Oregon.

*Stratigraphic position*—Juntura Formation, upper member, 50 feet below pumice band.

*Age*—Lower Pliocene, Clarendonian (Upper Miocene).

*Collector*—Shotwell and Alvey, 1954.

#### \**Querquedula pullulans* Brodkorb, 1961

*Type status*—Holotype

*Specimen*—F-6289, proximal part of left carpo-metacarpus.

*Locality*—UO 2337, Sec. 11, T21S, R37E, Malheur County, Oregon.

*Stratigraphic position*—Upper member of Juntura Formation.

*Age*—Lower Pliocene, Clarendonian (Upper Miocene).

*Collector*—Shotwell, 1954.

#### \**Ocyplonessa shotwelli* Brodkorb, 1961

*Type Status*—Holotype

*Specimen*—F-11291 and F-10485, distal part of left tarsometatarsus.

*Locality*—UO 2337, Sec. 11, T21S R37E, WM, Malheur County, Oregon.

*Stratigraphic position*—Upper member of Juntura Formation.

*Age*—Lower Pliocene, Clarendonian (Upper Miocene).

*Collector*—Shotwell, 1954.

#### Order RALLIFORMES

##### Family Rallidae

#### \**Fulica intelix* Brodkorb, 1961

*Type status*—Holotype

*Specimen*—F-5758, distal portion of left tibiotarsus.

*Locality*—UO 2341, Malheur County, Oregon.

*Stratigraphic position*—Upper member of Juntura Formation, immediately below the pumice band.

*Age*—Lower Pliocene, Clarendonian (Upper Miocene).

*Collector*—Shotwell and Alvey, 1954.

#### Class MAMMALIA

##### Order INSECTIVORA

##### Family Soricidae

#### \**Alluvisorex arcadentes* Hutchison, 1966

*Type status*—Holotype

*Specimen*—F-22307, left dentary with I<sub>3</sub>-M<sub>2</sub>.

*Locality*—UO 2465, west side of Quartz Basin, center of Sec. 33, T24S, R43E, WM, Malheur County, Oregon.

*Stratigraphic position*—Deer Butte Formation.

*Age*—Miocene, Barstovian.

*Collector*—Shotwell, 1960.

#### \**Trimylus mawbyi* Repenning, 1967

*Type status*—Holotype

*Specimen*—F-10486, right mandible with I, P<sub>1</sub>, P<sub>4</sub>, M<sub>1-3</sub>.

*Locality*—5 miles southwest of south end of Guano Lake, and about 25 miles southwest of Beatty Butte, Lake County, Oregon.

*Stratigraphic position*—not known.

*Age*—Miocene, Barstovian.

*Collector*—F. B. Van Houten, about 1966.



\***Paradomnina relictus** Hutchison, 1966*Type status*—Holotype*Specimen*—F-24279, left mandible with P<sub>3</sub>-M<sub>3</sub>.*Locality*—UO 2495, Skull Springs, SE corner Sec. 10, T23S, R40E, WM, Malheur County, Oregon.*Stratigraphic position*—Butte Creek Volcanic Sandstone.*Age*—Miocene, Barstovian.*Collector*—Shotwell, 1961.\***Ingentisorex tumididens** Hutchison, 1966*Type status*—Holotype*Specimen*—F-21960, left mandible with P<sub>1</sub>-M<sub>2</sub>.*Locality*—UO 2465, west side of Quartz Basin, center of Sec. 33, T24S, R43E, WM, Malheur County, Oregon.*Stratigraphic position*—Deer Butte Formation.*Age*—Miocene, Barstovian.*Collector*—Shotwell, 1960.\***Mystipterus (Mystipterus) pacificus** Hutchison 1968*Type status*—Holotype*Specimen*—UO F-22438, incomplete left dentary with P<sub>4</sub>-M<sub>3</sub>, roots of P<sub>3</sub> and posterior half of P<sub>2</sub>.*Locality*—UO 2465, Quartz Basin, west side, center of Sec. 33, T24S, R43E, WM, Malheur County, Oregon.*Stratigraphic position*—Deer Butte Formation.*Age*—Miocene (Barstovian).*Collector*—Shotwell, 1960.\***Scalopoides ripafodiator** Hutchison 1968*Type status*—Holotype*Specimen*—F-22488, right mandible with I<sub>2</sub> and P<sub>1</sub>-M<sub>3</sub>.*Locality*—UO 2465, Quartz Basin, west side, center of Sec. 33, T24S, R43E, Malheur County Oregon.*Stratigraphic position*—Deer Butte Formation.*Age*—Miocene (Barstovian).*Collector*—Shotwell, 1960.\***Scapanus (Xeroscapheus) proceridens**

Hutchison 1968

*Type status*—Holotype*Specimen*—UO F-22503, right mandible with I<sub>2</sub>, P<sub>1</sub>, M<sub>1-2</sub>.*Locality*—UO 2323, Krebs Ranch II; NW¼ Sec. 31, T3N, R22E, WM, Arlington Quad., Gilliam County, Oregon.*Stratigraphic position*—Dalles or Ellensburg Formation, above Elephant Mountain basalt flow.*Age*—Pliocene (Hemphillian; possibly late Miocene).*Collector*—Shotwell, 1954.\***Scapanoscapter simplicidens** Hutchison 1968*Type status*—Holotype*Specimen*—UO F-24286, left mandible with P<sub>1</sub>, partial M<sub>1</sub>, M<sub>2-3</sub>.*Locality*—UO 2495, Red Basin, Skull Springs fauna, SE corner Section 10, T23S, R40E, Malheur County, Oregon.*Stratigraphic position*—Butte Creek Volcanic Sandstone.*Age*—Miocene (Barstovian).*Collector*—Shotwell, 1961.\***Achlyoscapter longirostris** Hutchison, 1968*Type status*—Holotype*Specimen*—UO F-22412, left mandible with I<sub>3</sub>-M<sub>1</sub>.*Locality*—UO 2465, Quartz Basin, west side, center of Sec. 33, T24S, R43E, WM, Malheur County, Oregon.*Stratigraphic position*—Deer Butte Formation.*Age*—Miocene (Barstovian).*Collector*—Shotwell, 1960.\***?Neurotrichus columbianus** Hutchison 1968*Type status*—Holotype*Specimen*—UO F-24816, nearly complete right mandible.*Locality*—UO 2222, McKay Reservoir, east bank, Pendleton Quad., Umatilla County, Oregon.*Stratigraphic position*—Tuffaceous sandstone in channel cut into upper Yakima Basalt.*Age*—Pliocene (Hemphillian).*Collector*—Shotwell, 1949.\***Hydroscapheus americanus** Shotwell, 1956*Type status*—Holotype*Specimen*—F-4101, humerus.*Locality*—UO 2222, McKay Reservoir, Pendleton Quad., Umatilla County, Oregon.*Stratigraphic position*—Tuffaceous sandstones in channel cut into upper Yakima Basalt.*Age*—Pliocene (Hemphillian).*Collector*—Shotwell, 1949.\***Hydroscapheus americanus** Shotwell, 1956*Type status*—Paratypes*Specimen*—F-3206, clavicle; F-2698 femur; F-2456 and F-3792, tibia-fibulae.*Locality*—UO 2222, same as holotype.*Age*—Pliocene (Hemphillian).*Collector*—Shotwell, 1949.

## Order RODENTIA

\***Sewelleladon predontia** Shotwell 1958*Type status*—Holotype



- Specimen*—F-4734, left mandible with P<sub>4</sub>—M<sub>3</sub>.  
*Locality*—UO 2275, along Haystack Creek, 3 miles NE of Spray, Wheeler County, Oregon.  
*Stratigraphic position*—John Day Formation (lower part of upper member), from a slump block.  
*Age*—Miocene (Arikarean).  
*Collector*—Shotwell et al. 1946.
- \***Citellus (Otospermophilus) wilsoni** Shotwell, 1956  
*Type status*—Paratype  
*Specimen*—F-3596, crushed skull and lower jaws, fore and hind feet, radii and ulna, distal tibia.  
*Locality*—UO 2222, McKay Reservoir, east bank, Pendleton Quad., Umatilla, Oregon.  
*Stratigraphic position*—Tuffaceous sandstone in channel cut into Yakima Basalt.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell, 1949.
- \***Marmota oregonensis** Shotwell, 1956  
*Type status*—Holotype  
*Specimen*—F-3625, left M<sub>1</sub>.  
*Locality*—UO 2222, McKay Reservoir, east bank, Pendleton Quad., Umatilla, County, Oregon.  
*Stratigraphic position*—Tuffaceous sandstone in channel cut into Yakima Basalt.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell, 1949.
- \***Marmota oregonensis** Shotwell, 1956  
*Type status*—Paratype  
*Specimen*—F-3626, right M<sub>1</sub>.  
*Locality*—UO 2222, McKay Reservoir, east bank, Pendleton Quad., Umatilla County, Oregon.  
*Stratigraphic position*—Same as holotype.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell, 1949.
- \***Citellus (Citellus) mckayensis** Shotwell, 1956  
*Type status*—Holotype  
*Specimen*—F-3627, left mandible fragment with M<sub>1-3</sub>.  
*Locality*—UO 2222, McKay Reservoir, east bank, Pendleton Quad., Umatilla County, Oregon.  
*Stratigraphic position*—Tuffaceous sandstone in channel cut into Yakima Basalt.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell, 1949.
- \***Citellus (Otospermophilus) wilsoni** Shotwell, 1956  
*Type status*—Holotype  
*Specimen*—F-4097, right lower jaw with P<sub>4</sub>—M<sub>3</sub>.  
*Locality*—McKay Reservoir, east bank, Pendleton Quad., Umatilla County, Oregon.
- Stratigraphic position*—Tuffaceous sandstone in channel cut into Yakima Basalt.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell, 1949.
- \***Protosciurus condoni** Black, 1963  
*Type status*—Holotype  
*Specimen*—F-5171.  
*Locality*—Exact locality not recorded.  
*Stratigraphic position*—John Day Formation.  
*Age*—Late Oligocene or, more probably, early Miocene.  
*Collector*—Thomas Condon, 1870.
- \***Citellus junturensis** Shotwell, 1963  
*Type status*—Holotype  
*Specimen*—F-5871, right lower jaw with P<sub>4</sub>—M<sub>3</sub>.  
*Locality*—UO 2338, Malheur County, Oregon.  
*Stratigraphic position*—Juntura Formation, Upper Member, 50 ft. below pumice band.  
*Age*—Clarendonian, early Pliocene (late Miocene)  
*Collector*—Shotwell and Alvey, 1954.
- \***Protosciurus rachelae** Black 1963  
*Type status*—Hypotype  
*Specimen*—F-5039.  
*Locality*—Turtle Cove, exact horizon not recorded.  
*Stratigraphic position*—John Day Formation.  
*Age*—Probably early Miocene.  
*Collector*—Thomas Condon (?), 1869.
- \***Leptodontomys oregonensis** Shotwell, 1956  
*Type status*—Holotype  
*Specimen*—F-3633, right lower jaw with incisor and P<sub>4</sub>.  
*Locality*—UO 2222, McKay Reservoir, east bank, Pendleton Quad. Umatilla County, Oregon.  
*Stratigraphic position*—Tuffaceous sandstone in channel cut into Yakima Basalt.  
*Age*—Pliocene (Hemphillian).  
*Collector*—J. A. Shotwell, 1956.
- \***Adjidaumo quartzii** Shotwell 1967  
*Type status*—Holotype  
*Specimen*—UO 22689, partial right mandible with P<sub>4</sub>—M<sub>2</sub>.  
*Locality*—UO 2465, Quartz Basin, west side. Center of Sec. 33, T24S, R43E, WM, Malheur County, Oregon.  
*Stratigraphic position*—Deer Butte Formation.  
*Age*—Miocene (Barstovian).  
*Collector*—J. A. Shotwell, 1967.
- \***Pseudotharidomys pagei** Shotwell 1967  
*Type status*—Holotype



*Specimen*—UO 22715, mandible with P<sub>4</sub>, M<sub>2-3</sub>.  
*Locality*—UO 2465, Quartz Basin, west side; center of Sec. 33, T24S, R43E, WM, Malheur County, Oregon.

*Stratigraphic position*—Deer Butte Formation.  
*Age*—Miocene (Barstovian).  
*Collector*—J. A. Shotwell, 1967.

\***Parapliosacomys oregonensis** Shotwell, 1967

*Type status*—Holotype  
*Specimen*—UO 3631.  
*Locality*—UO 2222, McKay Reservoir, east bank; Pendleton Quad., Umatilla County, Oregon.  
*Stratigraphic position*—Channel cut into upper Yakima Basalt.  
*Age*—Pliocene (Hemphillian)  
*Collector*—J. A. Shotwell, 1949.

\***Perognathus sargenti** Shotwell, 1956

*Type status*—Holotype  
*Specimen*—F-3637, left mandible with P<sub>4</sub>—M<sub>3</sub>.  
*Locality*—UO 2222, McKay Reservoir, east bank; Pendleton Quad., Umatilla County, Oregon.  
*Stratigraphic position*—Tuffaceous sandstone in channel cut into Yakima Basalt.  
*Age*—Pliocene (Hemphillian).  
*Collector*—J. A. Shotwell, 1949.

\***Dipoides smithi** Shotwell, 1955

*Type status*—Holotype  
*Specimen*—F-4072, left mandible with P<sub>4</sub>—M<sub>2</sub> and incisor.  
*Locality*—UO 2222, McKay Reservoir, east bank; Pendleton Quad., Umatilla County, Oregon.  
*Stratigraphic position*—Tuffaceous sandstone in channel cut into upper Yakima Basalt.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell, 1959.

\***Dipoides smithi** Shotwell, 1955

*Type status*—Paratypes  
*Specimen*—F-2820, palate with P<sub>4</sub>—M<sub>2</sub> of both sides; F-2821, lower jaw.  
*Locality*—UO 2222, McKay Reservoir, east bank; Pendleton Quad., Umatilla County, Oregon.  
*Stratigraphic position*—Same as holotype.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell, 1949.

\***Eucastor malheurensis** Shotwell, 1963

*Type status*—Holotype  
*Specimen*—F-6683, right lower jaw with P<sub>4</sub>—M<sub>2</sub>.  
*Locality*—UO 2352, Juniper Creek Canyon, west side, Malheur County, Oregon.  
*Stratigraphic position*—Juntura Formation, Upper Member.

*Age*—Clarendonian, early Pliocene (late Miocene).

*Collector*—Shotwell.

\***Castor accessor** Hay, 1927 (Shotwell, 1970).

*Type status*—Plesio-type  
*Specimen*—UO 16338.  
*Locality*—UO 2404, unconsolidated, crossbedded sand lens; Grand View Fauna; Jackass Butte Quad., Idaho.  
*Stratigraphic position*—Glenns Ferry Formation.  
*Age*—late Pliocene.  
*Collector*—Shotwell, 1958.  
*Comments*—Shotwell (1970) considered Hay's type specimen of *Castor accessor* to be inadequate to characterize the species, and yet he did not want to create a new name for his specimens, which he considered to be conspecific with the *C. accessor* of Hay. He therefore states: "I thus consider the new material as representing *Castor accessor* Hay and use it as a supplementary type in order that this beaver may be characterized."

\***Hystricops browni** Shotwell, 1963

*Type status*—Holotype  
*Specimen*—F-15696, associated partial dentition, with P<sup>4</sup>—M<sup>1</sup> on each side.  
*Locality*—UO 2239, T21S, R35E; on highway 54 east of Burns, Harney County, Oregon.  
*Stratigraphic position*—Drewsey Formation.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Eriksson, 1952.

\***Procastoroides idahoensis** Shotwell, 1970

*Type status*—Holotype  
*Specimen*—UO 16267, lower left jaw with P<sub>4</sub>—M<sub>2</sub>.  
*Locality*—UO 2404, Jackass Butte Quad., Idaho.  
*Stratigraphic position*—Glenns Ferry Formation, in unconsolidated, cross-bedded sand lens; Grand View Fauna.  
*Age*—Blancan, late Pliocene.  
*Collector*—Shotwell, 1958.

\***Monosaulax typicus** Shotwell, 1968

*Type status*—Holotype  
*Specimen*—UO 21677.  
*Locality*—UO 2495, Skull Springs fauna, Red Basin; SE corner Sec. 10, T23S, R40E, WM, Malheur County, Oregon.  
*Stratigraphic position*—Butte Creek Volcanic Sandstone.  
*Age*—Miocene (Barstovian).  
*Collector*—Shotwell, 1961.

\***Dipoides vallicula** Shotwell, 1970

*Type status*—Holotype



*Specimen*—UO 26695, left mandible with P<sub>4</sub>—M<sub>3</sub>.  
*Locality*—UO 2516, Little Valley, screening site #6406; Mitchell Butte Quad., Malheur County, Oregon.  
*Stratigraphic position*—Chalk Butte Formation.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell and Russell, 1958.

\***Prosimys mimus** Shotwell, 1956

*Promimomys mimus* (Shotwell 1956) Repenning, 1968.

*Type status*—Holotype  
*Specimen*—F-3667, right mandible with incisor and M<sub>1-2</sub>.  
*Locality*—UO 2222, McKay Reservoir, east bank; Pendleton Quad., Umatilla County, Oregon.  
*Stratigraphic position*—Tuffaceous sandstone in channel cut into Yakima Basalt.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell, 1949.

\***Peromyscus pagei** Shotwell, 1967

*Type Status*—Holotype  
*Specimen*—UO 22623, left mandible with M<sub>1-3</sub>.  
*Locality*—UO 2465, Quartz Basin, west side; center of Sec. 33, T24S, R42E, WM, Malheur County, Oregon.  
*Stratigraphic position*—Deer Butte Formation.  
*Age*—Miocene (Barstovian).  
*Collector*—Shotwell, 1960.

\***Peromyscus valensis** Shotwell, 1967

*Type status*—Holotype  
*Specimen*—UO 26920, mandible with incisor and M<sub>1-2</sub>.  
*Locality*—UO 2516, Little Valley, screening site #6406, Mitchell Butte Quad., Malheur County, Oregon.  
*Stratigraphic position*—Chalk Butte Formation.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell and Russell, 1958.

Order LAGOMORPHA

\***Ochotona spanglei** Shotwell, 1956

*Type status*—Holotype  
*Specimen*—F-4083, left lower jaw with P<sub>3</sub>—M<sub>3</sub>.  
*Locality*—UO 2222, McKay Reservoir, east bank; Pendleton Quad., Umatilla County, Oregon.  
*Stratigraphic position*—Tuffaceous sandstone in channel cut into Yakima Basalt.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell, 1949.

\***Hypolagus oregonensis** Shotwell, 1956

*Type status*—Holotype

*Specimen*—F-4094, left lower jaw with P<sub>3</sub>—M<sub>3</sub>.  
*Locality*—UO 2222, McKay Reservoir, east bank; Pendleton Quad., Umatilla County, Oregon.  
*Stratigraphic position*—Tuffaceous sandstone in channel cut into Yakima Basalt.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell, 1949.

\***Hypolagus oregonensis** Shotwell, 1956

*Type status*—Paratypes  
*Specimen*—F-4099, right maxilla fragment with P<sub>2</sub>; F-2702, F-2907, F-4037, F-4036, F-2906, F-3064, F-2908, F-2063, F-3663, all lower jaws.  
*Locality*—UO 2222, McKay Reservoir, east bank; Pendleton Quad., Umatilla County, Oregon.  
*Stratigraphic position*—same as holotype.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell, 1949.

Order CARNIVORA

\***Canis condoni** Shotwell, 1956

*Type status*—Holotype  
*Specimen*—F-3241, lower jaw with M<sub>2</sub>.  
*Locality*—UO 2222, McKay Reservoir, Pendleton Quad., Umatilla County, Oregon.  
*Stratigraphic position*—Tuffaceous sandstone in channel cut into Yakima Basalt.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell, 1949.

\***Canis rurestris** Condon, 1896

*Tomarctus rurestris* (Condon, 1896) Downs, 1956  
*Type Status*—Holotype  
*Specimen*—UO 23077, skull and associated mandible.  
*Locality*—Cottonwood Creek, John Day Valley, Grant County, Oregon.  
*Stratigraphic position*—Mascall Formation, type locality.  
*Age*—Miocene (Hemingfordian, or possibly early Barstovian).  
*Collector*—Thomas Condon, about 1870.

\***Sthenictus junturensis** Shotwell, 1963

*Type Status*—Holotype  
*Specimen*—F-6694, left lower jaw with P<sub>2</sub>—M<sub>1</sub>.  
*Locality*—UO 2344, Malheur County, Oregon.  
*Stratigraphic position*—Juntura Formation, Upper Member.  
*Age*—Early Pliocene (Clarendonian).  
*Collector*—Shotwell and Alvey.

\***Martes (Plionictis) oregonensis** Shotwell, 1970

*Type Status*—Holotype



*Specimen*—F-26744, right mandible with P<sub>2</sub>—M<sub>2</sub>.  
*Locality*—UO 2516, Little Valley, 6406 screening site; Mitchell Butte Quad., Malheur County, Oregon.  
*Stratigraphic position*—Chalk Butte Formation.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell and Russell, 1958.

\***Felis longignathus** Shotwell, 1956

*Type status*—Holotype  
*Specimen*—F-2628, left lower jaw with C, P<sub>3-4</sub>, M<sub>1</sub>.  
*Locality*—UO 2222, McKay Reservoir, Pendleton Quad., Umatilla County, Oregon.  
*Stratigraphic position*—Tuffaceous sandstone in channel in Yakima Basalt.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell, 1949.

\***Desmatophoca oregonensis** Condon, 1906

*Type status*—Holotype  
*Specimen*—F-00735.  
*Locality*—UO 1153, Nye Beach, just west of Newport, Oregon.  
*Stratigraphic position*—Astoria Formation.  
*Age*—Middle Miocene.  
*Collector*—Thomas Condon, before 1906.

Order PROBOSCIDEA

\***Mammut (Pliomastodon) furlongi** Shotwell, 1963

*Type Status*—Holotype  
*Specimen*—F-10291, mandible with M<sub>1-3</sub> of both sides.  
*Locality*—UO 2448, Quarry 3, Malheur County, Oregon.  
*Stratigraphic position*—Juntura Formation, Upper Member.  
*Age*—Early Pliocene (Clarendonian).  
*Collector*—Shotwell, 1956.

Order CETACEA

\***Cophocetus oregonensis** Packard, 1934

*Type status*—Holotype  
*Specimen*—F-00305, skull, parts of both forelimbs, vertebrae, innominates, and a few ribs.  
*Locality*—UO 1151, Newport, SE $\frac{1}{4}$ , Sec. 7, T11S, R11W, WM, Lincoln County, Oregon.  
*Stratigraphic position*—Astoria Formation.  
*Age*—Middle Miocene.  
*Collector*—Earl L. Packard, 1920.

Order PERISSODACTYLA

\***Colodon (?) hancocki** Radinsky, 1963

*Type Status*—Holotype  
*Specimen*—UO 20377, partial skull.

*Locality*—UO 2473, Clarno Mammal Quarry, Wheeler County, Oregon.

*Age*—Early Oligocene (early Chadronian).  
*Collector*—Shotwell (?) 1960.

\***Hipparion condoni** Merriam, 1915

*Type status*—Holotype  
*Specimen*—#672 Condon Collection.  
*Locality*—Stone quarry at Ellensburg, Washington.  
*Stratigraphic position*—Ellensburg Formation.  
*Age*—Miocene.  
*Collector*—Sent to Condon by W. R. Abrams before 1902.

Order ARTIODACTYLA

\***Prosthennops brachirostris** Shotwell, 1956

*Type Status*—Holotype  
*Specimen*—F-2767, palate with canines and all cheek teeth.  
*Locality*—UO 2222, McKay Reservoir, Pendleton Quad., Umatilla County, Oregon.  
*Stratigraphic position*—Tuffaceous sandstone in channel cut into Yakima Basalt.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell, 1949.

\***Prosthennops brachirostris** Shotwell, 1956

*Type status*—Paratype  
*Specimen*—F-3585, lower jaw with canines, P<sub>4</sub>—M<sub>3</sub>.  
*Locality*—UO 2222, McKay Reservoir, east bank, Pendleton Quad., Umatilla County, Oregon.  
*Stratigraphic position*—Tuffaceous sandstone in channel cut into Yakima Basalt.  
*Age*—Pliocene (Hemphillian).  
*Collector*—Shotwell, 1949.

\***Dicotyles pristinus** Leidy, 1873

*Perchoerus pristinus* (Leidy, 1873) Cope and Matthew, 1915  
*Type status*—Holotype  
*Specimen*—F-5049, skull.  
*Locality*—UO NFJD, North Fork of John Day River, eastern Oregon.  
*Stratigraphic position*—John Day Formation.  
*Age*—Miocene.  
*Collector*—Thomas Condon.

\***Palaeochoerus subaequans** Cope, 1879

*Perchoerus subaequans* (Cope, 1879) Cope and Matthew, 1915  
*Type status*—Holotype  
*Specimen*—F-669.



*Locality*—UO NFJD, North Fork of John Day River, eastern Oregon.

*Stratigraphic position*—John Day Formation.

*Age*—Miocene (Late Arikareean).

*Collector*—Thomas Condon.

\***Chaenohyus decedens** Cope, 1879

*Perchoerus decedens* (Cope, 1879) Cope and Matthew, 1915.

*Type status*—Holotype

*Specimen*—F-669.

*Locality*—UO NFJD, North Fork of John Day River, eastern Oregon.

*Stratigraphic position*—John Day Formation.

*Age*—Miocene (Late Arikareean).

*Collector*—Thomas Condon.

\***Oreodon superbis** Leidy, 1870

*Promerycochoerus superbis* (Leidy, 1870) Douglass, 1901

*Type status*—Holotype

*Specimen*—F-5146, F-5147, F-5148, F-5342, F-5361, mutilated skull (Condon yellow numbers

718, 721, 722, 723, 726, and 727).

*Locality*—Bridge Creek, John Day Basin, Oregon.

*Stratigraphic position*—John Day Formation.

*Age*—Miocene (Late Arikareean).

*Collector*—Thomas Condon, about 1869.

*Comments*—For many years this specimen was thought to be lost (see Schultz and Falkenbach, 1949: 107-108). It was reidentified by direct comparison with Leidy's illustration of 1873. Comparison was difficult because the specimen is in several pieces, and the illustrator had drawn the snout from the opposite side of the specimen. Leidy's illustration is reproduced on the cover of this Bulletin.

\***Oreodon superbis** Leidy, 1870

*Promerycochoerus superbis* (Leidy, 1870) Douglass, 1901

*Type status*—Cotype

*Specimen*—F-684.

*Locality*—Turtle Cove, John Day Basin, Oregon.

*Stratigraphic position*—John Day Formation.

*Age*—Miocene (Late Arikareean).

*Collector*—Thomas Condon.

## PLANTS

Family Awacardiaceae

\***Rhus varians** Lakhanpal, 1958

*Type status*—Syntype

*Specimen*—F-4290, 5 leaflets around stem.

*Locality*—UO 2715, Willamette Flora, ¼ mile north of Goshen, Lane County, Oregon.

*Stratigraphic position*—? Eugene Formation (tuffaceous shales and sandstone, which may overlie Eugene Fm., Fisher Fm., or both).

*Age*—Oligocene.

*Collector*—Chaney.

\***Rhus varians** Lakhanpal, 1958

*Type status*—Syntype

*Specimen*—F-4291, single leaflet on slab.

*Locality*—UO 2715, Willamette Flora (as above).

*Stratigraphic position*—? Eugene Formation (see above).

*Age*—Oligocene.

*Collector*—Chaney.

\***Rhus varians** Lakhanpal, 1958

*Type status*—Paratype

*Specimen*—F-4202.

*Locality*—UO 2715, Willamette Flora (as above).

*Stratigraphic position*—? Eugene Formation (see above).

*Age*—Oligocene.

*Collector*—Chaney.



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