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DESCRIPTIONS

OF

APPARENTLY NEW SPECIES
OF MAMMALS

OF

THE GENERA HETEROMYS AND URSUS
FROM WASHINGTON AND MEXICO

BY

D. G. ELLIOT, F. R. S. E.,

Curator of the Department.



CHICAGO, U. S. A.

June, 1903.

DESCRIPTIONS OF APPARENTLY NEW SPECIES
OF MAMMALS OF THE GENERA HETERO-
MYS AND URSUS FROM MEXICO
AND WASHINGTON.

BY D. G. ELLIOT, F.R.S.E., ETC.

FAM. HETEROMYINÆ.
HETEROMYS.

Heteromys (Liomys)* paralius. Sp. nov.

Type locality. San Carlos, State of Vera Cruz, Mexico.

General character. Similar to *H. texensis*. Size large; tail long, usually white tipped; grayish patch behind ears; ears large. Skull with a greater occipito-nasal length, and the zygomata slightly wider.

Color. Top of head and back behind shoulders blackish brown, mixed with reddish, the base of hairs grayish; back of ears and sides of head and body grayish, with blackish brown hairs intermingled; lateral stripe bright buff, extending from nose to thighs; nose and upper lip, hands, and feet white; under parts yellowish white; a patch of orange-buff on each side of root of tail. Tail above black, beneath whitish, with an all-around white tip.

Measurements. Total length, 255; tail vertebrae, 136; hind foot, 29. Skull: occipito-nasal, length, 33; Hensel, 23; interorbital constriction, 8; zygomatic width, 15; length of nasals, 12; palatal length, 13; length of upper molar series, 4; length of mandible, 13; length of lower molar series, 4.

In general appearance this form resembles *H. texensis*, but is larger, with larger ears, and a noticeable gray patch behind the ears, extending onto the side of neck, and on the majority of the specimens a white tip to the tail of varying extent. In the type the white occupies twenty-eight mm. of the apical length. A dozen specimens were sent to the museum by Mr. N. G. Buxton from San Carlos, State of Vera Cruz, Mexico.

*παράλιος, belonging to the coast.

FAM. URSIDÆ.

URSUS.

Ursus altifrontalis. Sp. nov.

Type locality. Shore of Lake Crescent, Clallam County, Washington.

General character. Skull: forehead, very broad and high, bulging on sides anteriorly, and rounded on top; nasals, long, broad, upper outline concave, the posterior end rising high on forehead, and extending considerably beyond the ends of the maxillæ. Upper outline of skull exceedingly convex, highest at anterior portion of frontals, and descending rapidly, anteriorly and posteriorly; occipital crest prominent; zygomatic arches widely flaring; basioccipital and basisphenoid very broad, the latter rounded anteriorly, not pointed; pterygoid fossa short, broadest anteriorly and rounded; palate of nearly equal breadth from posterior margin of last molar to incisors; muzzle broad and heavy, greatly swollen at base of canines; teeth greatly worn, majority of the molars smooth, their characteristics not perceptible.

Color. Black, nose tan color.

Measurements. Skull: total length, 300; occipito-nasal length, 287; Hensel, 255; zygomatic width, 190; interorbital constriction, 75; across postorbital processes, 106; length of nasals, 80; width anteriorly, 32; palatal length, 138; width of posterior end of last molar, 47; at anterior end of first molar, 45; at posterior edge of canine, 40; breadth of muzzle at outer sides of canines, 68; greatest breadth of basioccipital, 49; of basisphenoid, 30; palatal arch to end of pterygoid, 50; length of crown of last molar, 27; width, 15; from anterior edge of canine to posterior edge of last molar, alveolar border, 100; length of mandible from angle to symphysis on top, 202; height at condyle, 32; at coronoid process, 86; length of lower molar series, alveolar border, 66.

The specimen above described was killed on the shores of Lake Crescent, near the road connecting that body of water with Lake Sutherland. The skull was figured in my paper on the mammals of the Olympic Mountains, and mention was made in the text of the exceedingly high forehead, and the possibility of the example representing a distinct form. On comparing this skull with those of black bears from other parts of the United States, and with those of cinnamon bears, from Copper Mines, New Mexico, types of Baird's *U. cinnamomeus*, and from the Sierra Madre, State of Chihuahua,

Mexico, the peculiarities mentioned in the description were more conspicuous and distinctive, and separated this animal as worthy of a different specific rank. While the skull is much shorter in total length than those of the great cinnamon bears of New and Old Mexico, it is nevertheless considerably broader across the postorbital processes, and the forehead much higher and more prominent, and differs from them also in other ways, while the superior outline and general configuration of the skull is quite different from that of any American black bear that I have seen.

The only name heretofore given to the bears of the northwest portion of the United States, exclusive of Alaska and the islands off British Columbia, is *Ursus amblyceps*, proposed by Baird, U. S. and Mex. Bound. Surv., 1859, p. 20, Mamm., for a cinnamon bear from Oregon. He had only a skin, and no skull, and was unable to give any characters by which his supposed species could be recognized. Whether the Oregon cinnamon bear is a distinct species from other cinnamon bears, or is identical with the black bears of that and neighboring states, I know not, but this name *amblyceps*, as it describes nothing, and represents no tangible characters of any kind, is a *nomen nudum*, and consequently without standing scientific or otherwise, and until authenticated skulls of the cinnamon bears of Oregon and Washington are obtained it will be impossible to give any decision as to their specific standing, no matter how many robes may be in evidence. The *Ursus carlotta*, Osgood, N. Am. Faun., No. 21, 1901, p. 30, from Queen Charlotte Islands, in having a slender rostrum and *cranium less arched* than is exhibited in skulls of *U. americanus*, is evidently distinct from the present species with its exceedingly high forehead.

Ursus machetes.* Sp. nov.

Type locality. Casa Grande, Sierra Madre, State of Chihuahua, Mexico.

General character. Color, cinnamon; skull long, frontals broad, raised above level of face; nasals very broad, posterior ends on a line with ends of maxillæ; superior outline convex, highest just behind postorbital processes, and declining gradually anteriorly, sharply posteriorly; occipital crest prominent, extending forward to coronal suture; zygomatic arches very wide; basioccipital and basisphenoid wide; pterygoid fossa equal in width throughout its length; broad and rounded anteriorly; mandible heavy, deep beneath last molar; coronoid process very broad, and rounded on top without hook over

*μᾶχητης, a fighter.

posterior margin; upper and lower molars much worn, the larger one quite smooth, so that their characteristics are absent.

Color. Cinnamon.

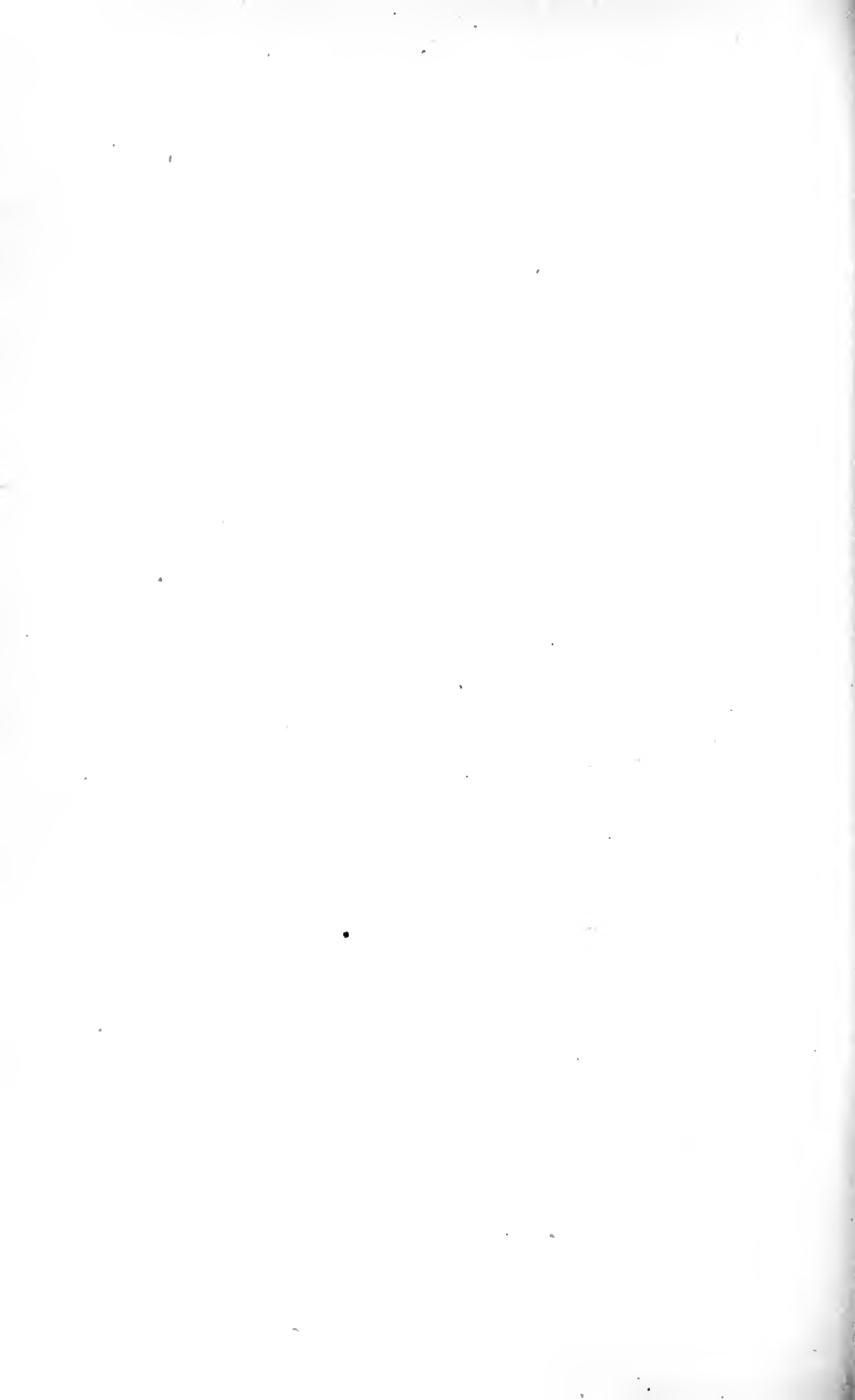
Measurements. Skull: total length, 315; occipito-nasal length, 282; Hensel, 267; zygomatic width, 196; interorbital width, 75; across postorbital processes, 103; mastoid width, 132; posterior width of basioccipital, 39; length of pterygoid fossa, 49; palatal length, 145; length of nasals, 75; anterior width of nasals, 30; width at mid-length of nasals, 26; anterior edge of canine to posterior edge of last molar, alveolar border, 99; length of last molar, crown, 24; width, 19; width of palate at anterior edge of last molar, 53; between canines at posterior edge, 46; breadth of muzzle at outer side of canines, 66; length of mandible, angle to symphysis on top, 212; height at condyle, 36; at coronoid process from angle, 89; breadth of coronoid process above condyle, 62; length of condyle, 65; length of lower molar series, alveolar border, 58.

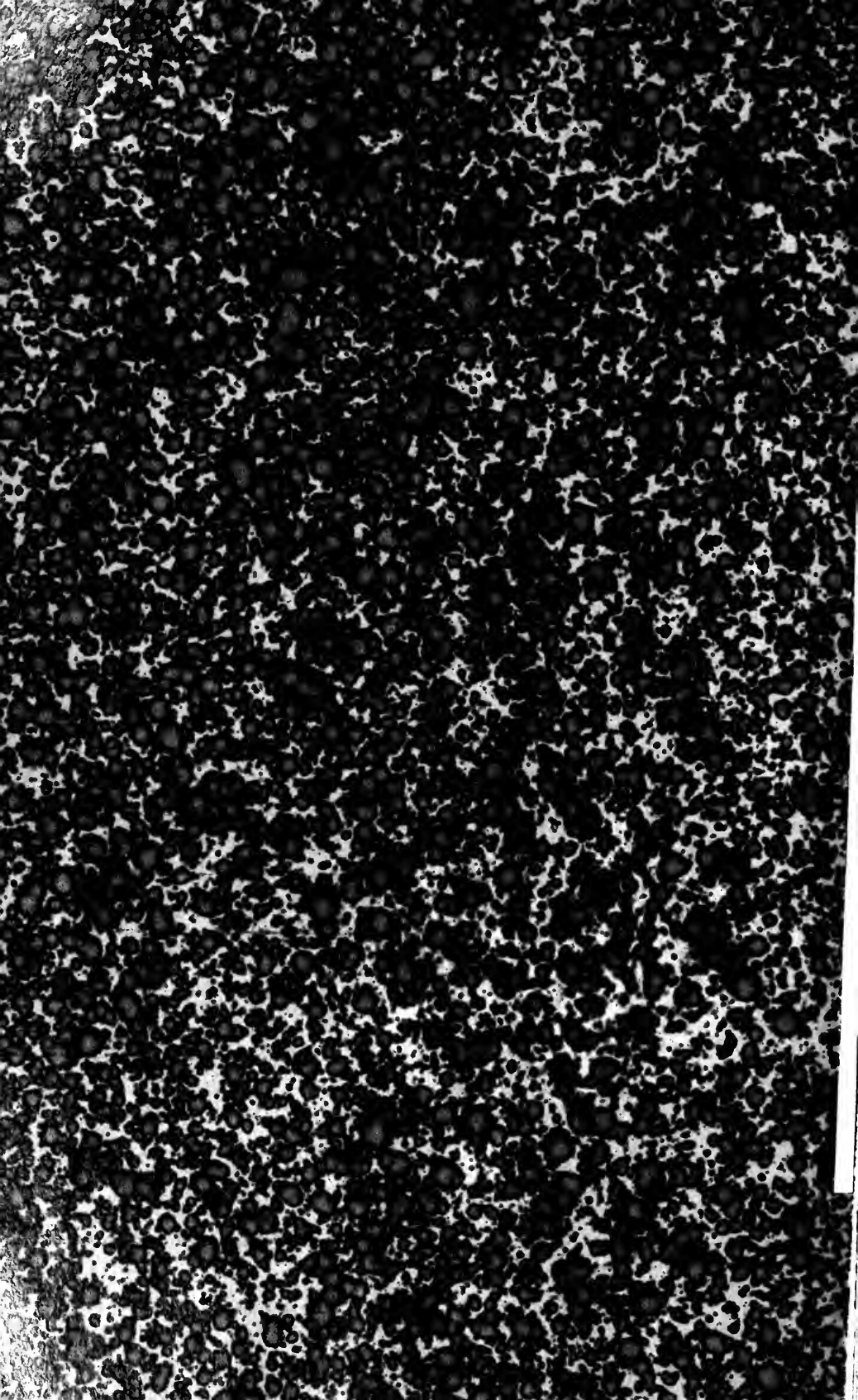
Baird in Rep. U. S. and Mex. Bound. Surv., Mamm., 1859, p. 29, pl. 19, describes a brown bear from Copper Mines, New Mexico, as *U. cinnamomeus*. Through the kindness of my friend Mr. G. S. Miller, Jr., of the National Museum, I have the three skulls of Baird's specimens, Nos. 991, 992, and 994, before me. They are smaller, narrower, and generally lighter than the skulls of the Mexican bear, with the superior outline like that of the skull of the eastern black bear. The nasals are much narrower and less rounded at the posterior ends; the width across postorbital processes much less, 94.74, to 103 in *U. machetes*; the greatest zygomatic width is only 177.80, to 196, and the width between orbits 64.17, to 77 in the new species; while the width of the palate at the posterior margin of last molars is 48 to 55. It will be seen by these measurements that the Mexican animal has a considerably wider skull with broader nasals. The superior outline is also more convex, and the forehead more prominent. The pterygoid fossa is shaped very differently, being much broader for its entire length, and nearly as wide at its anterior termination as between the tips of the pterygoids. The mandible is very heavy, and the coronoid process is very wide at its base, with a gradual inclination of its anterior outline backward to the rounded tip, with the posterior outline slightly curved at top, and then nearly straight to the condyle, without any hook, very different from the same process in *U. cinnamomeus* with its tip rounded for its entire width, and prominent posterior hook. The molar series are shorter, 50.5, to 68.58 of the New Mexican species, and still shorter than that of *U. americanus*.

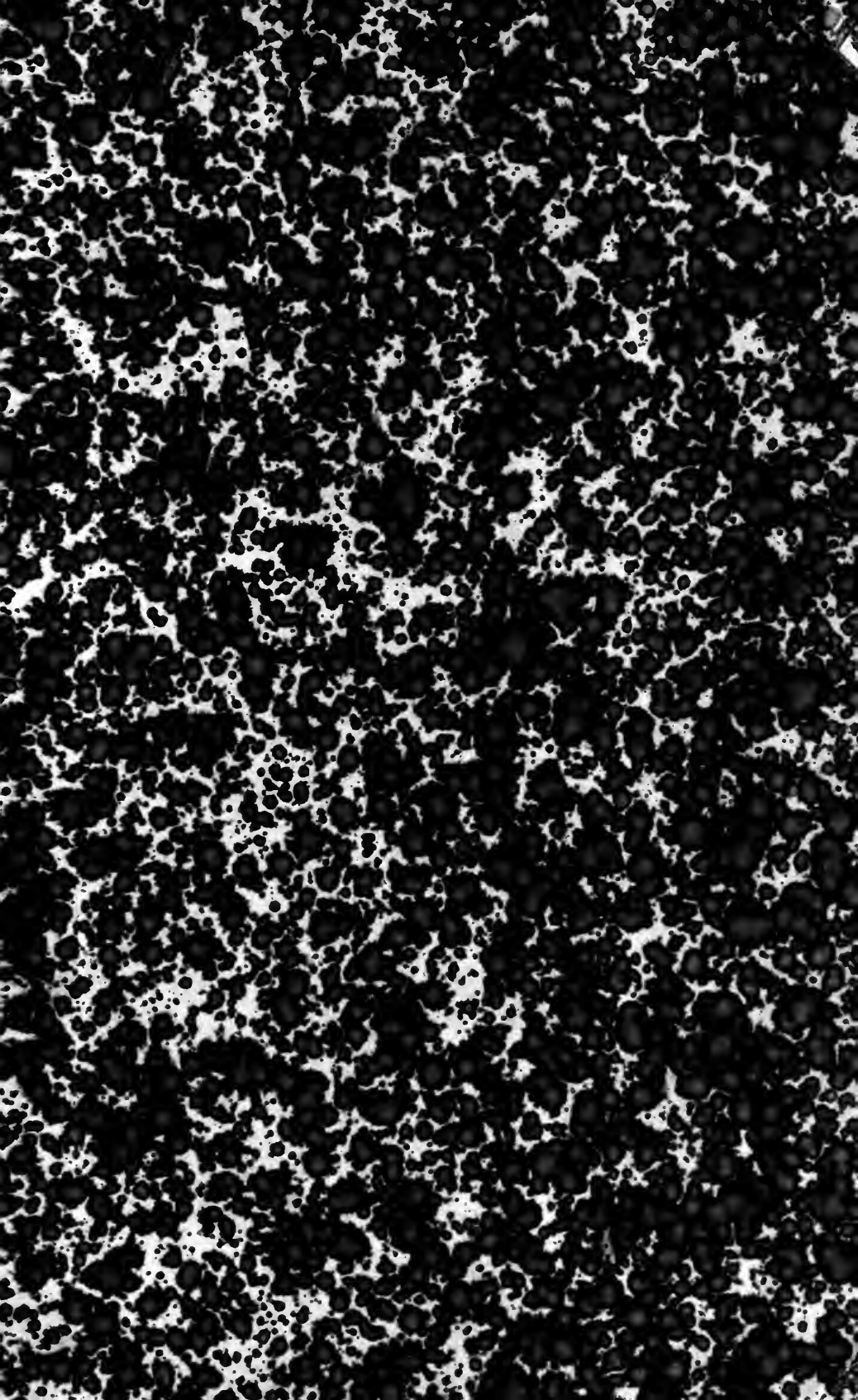
Two skulls of *U. machetes* are in the collection of this institution,

and the skins of the animals are in the possession of Dr. L. C. Sanford, New Haven, Conn., who shot the type specimen.

I am told that in the district in which these bears were taken there are no black ones, the young being cinnamon like the parents.







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