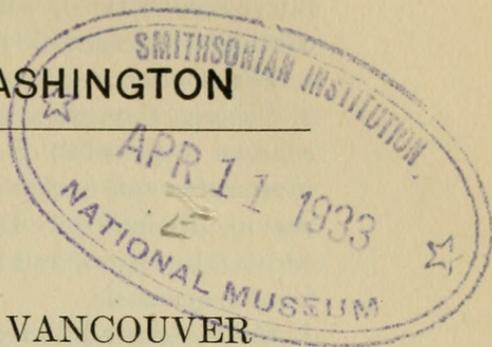


PROCEEDINGS
OF THE
BIOLOGICAL SOCIETY OF WASHINGTON



A NEW MOUNTAIN LION FROM VANCOUVER
ISLAND.

BY E. W. NELSON AND E. A. GOLDMAN.

Felix [sic] *oregonensis* was described by Rafinesque (Atlantic Journ., vol. 1, no. 2, p. 62, June 20, 1832), no definite locality being given, but indirect reference was made to "the western wilds of the Oregon mountains, or east or west of them." There seems to be no doubt that the describer referred to a mountain lion ranging in the region near the northwest coast of the United States, as pointed out by Stone (Science, n. s., vol. 9, p. 35, Jan. 6, 1899).

In connection with listing the recognizable subspecies of *Felis concolor* we made the following statement (Journ. Mamm., vol. 10, no. 4, p. 346, Nov. 11, 1929): "Our studies indicate that a widely distributed form to which Rafinesque's name is applicable occupies the coastal region from Vancouver Island, British Columbia, to southern Oregon, * * *." The accession of new material and subsequent study has convinced us that Vancouver Island should be excluded from the range of *Felis concolor oregonensis* as thus outlined. For greater precision it seems logical to restrict the name to the animal inhabiting the "Oregon Mountains," which may be interpreted as the Cascade Range of Oregon and Washington, states that in Rafinesque's time had not been segregated. Specimens from Mount Rainier National Park may be regarded as typical.

Vancouver Island is occupied by a distinctive form described as follows:

***Felis concolor vancouverensis*, subsp. nov.**

VANCOUVER ISLAND MOUNTAIN LION.

Type.—From Campbell Lake, Vancouver Island, British Columbia. No. 211519, ♂ adult, skull only, U. S. National Museum (Biological

Survey collection), collected by W. R. Kent, September 13, 1915. X catalogue number 15040.

Distribution.—Known only from Vancouver Island.

General characters.—A very large dark form, closely allied to *Felis concolor oregonensis* of the adjacent mainland, but upper parts apparently more rufescent, and cranial characters, especially the more elevated frontal region, distinctive. Darker colored than *F. c. hippolestes*, of the Rocky Mountain region, and differing more widely in cranial details from it than from *oregonensis*.

Color.—An adult from Vancouver Island (No. 194247). Top of head, neck, and median dorsal area to base of tail near cinnamon rufous, moderately mixed with black on posterior part of back and rump; sides of body and outer surfaces of limbs cinnamon buffy, paling gradually to pinkish buff on feet; upper lips near sides of nose, lower part of cheeks, and chin nearly pure white; under side of neck suffused with pale pinkish buff; chest, inner surfaces of limbs and median line of abdomen dull white; upper surface of muzzle dark brownish; areas at base of vibrissae on sides of muzzle deep black; light supraorbital markings distinct; ears blackish externally without distinct median spots, whitish internally and narrowly edged with gray; hairs around pads on soles of feet blackish; tail above about like posterior part of back, becoming pinkish buffy below (tip missing).

Skull.—Size about as in *F. c. oregonensis* but frontals more arched anteriorly (more flattened in *oregonensis*), bulging prominently upward, or "humped," in front of postorbital processes; fronto-nasal pit (at posterior ends of nasals) deeper; nasals usually more convex in upper outline between anterior points of frontals, as viewed from side, owing to posterior depression in fronto-nasal pit, with a deeper median trough as viewed from rear; lambdoid crest usually less sinuate in outline, the lateral margins shelving more broadly and evenly outward from braincase; interpterygoid fossa narrow as in some specimens of *oregonensis* (*oregonensis* appears to be more variable in this character); lower border of mandible usually straighter (usually more curved downward near middle in *oregonensis*); dentition about the same. Similar in size to *F. c. hippolestes* also, but in more arched frontal region and expanded lambdoid crest contrasting still more strongly than with *oregonensis*; interpterygoid fossa narrower; space between canine and anterior large upper premolar (in front of and behind vestigial premolar) much reduced; but general dentition about the same.

Measurements (no external measurements available).—*Skull* (type): Greatest length, 215 mm.; zygomatic breadth, 146.4; interorbital constriction, 44.2; distance between ends of postorbital processes, 79.4; least width between outer walls of interpterygoid fossa, 27.8; alveolar length of upper canine-premolar series, 62.8; crown length of upper carnassial, 24.4.

Remarks.—While the mountain lion of Vancouver Island is closely related to that of the mainland comparable material now available shows that the differences pointed out are well marked, and in most individuals quite uniform and constant. In the steeply arched frontal region and depth of the fronto-nasal pit it presents an extreme in development in the

group. The unusual median indentation of the fronto-nasal region, the convexity of the posterior part of the nasals, and the highly arched frontal region give that part of the skull a distinctly more sinuous upper outline than in *F. c. oregonensis*. In *oregonensis* the skulls are more variable, the frontal region is rather arched, the fronto-nasal pit rather deep and the lambdoid crest rather widespreading in some specimens, but a distinctly nearer approach in cranial characters to the paler form, *F. c. hippolestes*, of the Rocky Mountain region, is exhibited. *F. c. vancouverensis* is the only insular form known.

Specimens examined.—Total number, 15, all from Vancouver Island, as follows: Buttle Lake, 1 (skull only); Campbell Lake (type locality), 3 (skulls only); Campbell River Valley, 1 (skull only); Nanoose Bay, 2¹; Parksville, 1¹; Quatsino, 1 (skull only); Quinsome Valley, 1 (skull only); within 20 miles of Victoria, 4 (skulls only); without definite locality, 1 (skin only).

¹Specimens in Museum of Vertebrate Zoölogy.



1932. "A new Mountain Lion from Vancouver Island." *Proceedings of the Biological Society of Washington* 45, 105–108.

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