

# ON THE NEW PERISSODACTYLES FROM THE BRIDGER EOCENE.

BY EDWARD D. COPE.

(Read before the American Philosophical Society, Feb. 7, 1873.)

## LIMNOHYUS LÆVIDENS. Cope.

This species is one of the larger forms of the group originally represented by *Palæosyops*, and which has turned out to be so numerous in species. Thanks to the labors of Prof. Marsh, these have been placed on a recognizable footing, and I have been enabled to distinguish not only the species he has described but a few others in the collections obtained by Dr. Hayden's expedition of 1872.

The present species is chiefly represented by a nearly complete cranium with dentition, from Bitter Creek, and a cranium lacking the posterior part of one side and the lower jaw, from Cottonwood Creek. The molars have the general form of those of *L. robustus*, but the second superior premolar has but one outer tubercle. The cingula are much less developed than in that species; those between the inner cones of the molars being entirely absent. These cones are low, and with the rest of the crowns of all the teeth, covered with smooth and shining enamel. The anterior median small tubercle of the first true molar is wanting. The last true molar has but one interior cone.

The canine tooth is powerful and bear-like; the outer incisor is the largest. The premaxillary bones are short, and the side of the face elevated and plane to the convex nasal bones. Zygomatic arch massive.

|   | M.    |
|---|-------|
| Length molar series (No.1) .....        | 0.140 |
| “ true molars .....                     | .085  |
| “ three incisors .....                  | .034  |
| “ crown canine .....                    | .030  |
| “ “ last molar .....                    | .039  |
| Width “ “ “ .....                       | .036  |
| Length cranium to occipital crest ..... | .345  |
| “ true molars (No. 2) .....             | .101  |
| “ last “ “ (oblique) .....              | .039  |
| Width “ “ “ (transverse) .....          | .038  |

The measurements of this species are intermediate between those of *Palæosyops paludosus* and *P. major*, of Leidy; those of the latter agreeing with the *Limnohyus robustus*, Marsh, and perhaps other species.

## PALÆOSYOPS FONTINALIS. Cope.

A small species agreeing with the *P. paludosus* in the two interior cones of the last superior molar. It is represented especially by a considerable part of the cranium of an individual in which the last superior molar is not quite protruded, but with the other molars and last premolar of the permanent dentition in place. The enamel of these teeth is in accordance with the age, delicately rugose, and while the cingulum



is present fore and aft, it is wanting internally and externally. The anterior median tubercle is present on all the true molars, and the bases of the acute inner cones are in contact. The sagittal crest is truncate, and the squamosal portion of the zygoma very stout. The nasal bones are together very convex in transverse section.

|  | M.    |
|--|-------|
| Length of true molar series (2.75 in.) ..... | 0.067 |
| "    last    "    .....                      | .025  |
| Width    "    "    .....                     | .026  |
| Length of penultimate molar.....             | .026  |
| "    "    "    .....                         | .026  |
| Depth squamosal process.....                 | .025  |

Found by the writer on a bluff on Green River, near the mouth of the Big Sandy, Wyoming.

I have just received a paper "On the Gigantic Fossil Mammals of the Order Dinocerata, by Prof. O. C. Marsh," which contains a formidable catalogue of errors which the author appears to suppose I have committed in describing animals of this type. All this is explained by the fact that Prof. Marsh has never seen the genus *Eobasileus* Cope, and erroneously supposes it to resemble *Uintatherium* Leidy (*Dinoceras* Marsh). The descriptions which I have given are correct, as will presently appear, as well as the fact that I have anticipated the Professor in the descriptions of some of the allied species.

*Stated Meeting, February 21st, 1873.*

Present, 14 members.

Vice-President, Prof. CRESSON, in the Chair.

Letters of acknowledgment were received from the N. H. Union at Bonn, Aug. 6th (84, 85, 86); Bureau des Longitudes, Jan. 7th (89, XIV, iii); the Historical Societies of Maine, New Jersey, Maryland and Georgia (89); the Essex Institute, Feb. 14th (89); Lyceum N. H. N., York, Feb. 10th (89).

A letter of envoy was received from the Census Office, Feb. 11th, 1873.

A letter from Mr. A. Van Name, Lib. Yale College, was read, requesting deficiencies to be supplied.

Donations for the Library were received from the R. Prussian and Belgian Academies, Netherland Botanical



Cope, E. D. 1873. "On The New Perissodactyles from the Bridger Eocene." *Proceedings of the American Philosophical Society held at Philadelphia for promoting useful knowledge* 13(81), 35–36.

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