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A MIOCENE DOG FROM MARYLAND

By Charles T. Berry

No canid remains hitherto have been reported from the Miocene of Maryland, and very few from other Tertiary deposits of the Atlantic Coastal Plain. The material herein described consists of two associated lower molars found in the cliff near Plumpoint, Md., on the west side of Chesapeake Bay.

I have consulted with Dr. C. L. Gazin, and he has been good enough to verify the generic allocation and to allow me to examine pertinent specimens in the United States National Museum.

Genus TOMARCTUS Cope

TOMARCTUS MARYLANDICA, new species

Figure 68

Type.—M_1 and M_2 from the left mandible, U.S.N.M. no. 15561, collected by Charles T. Berry, August 26, 1937, from zone 10 of the Calvert formation, 1½ miles south of Plumpoint wharf, Calvert County, Md.

Description.—M_1 is incomplete, lacking the paraconid and anterior root. The heel of the tooth is broad and flat, with a rounded posterior margin. The entoconid is slightly higher than the hypoconid, and the connecting ridge is straight. The protoconid, the most outstanding feature of the tooth, is about twice as high as the metaconid. Halfway up the outer posterior side of the protoconid there is a very small tubercle. An obscure ridge runs from the hypoconid toward the metaconid, which is observed only in the heel portion of the tooth. The anteroposterior diameter (incomplete) of M_1 is 12 mm. The greatest height at the anterior end of the preserved portion is 10.5 mm. The greatest transverse diameter of the heel is 6.5 mm.

In M_2 the protoconid and metaconid are equal in size while the paraconid is reduced. The heel, which has a rounded posterior margin, is occupied by the equally developed entoconid and hypoconid, which are connected by a straight ridge. A very obscure ridge runs across the heel portion of the tooth from the hypoconid toward the metaconid. This ridge is less pronounced in M_2 than in M_1. A small, poorly developed tubercle is present on the posteroexternal side of the protoconid. Also, a crescent-shaped rim anterior to the paraconid and protoconid is present only on the outer portion of the tooth. The anteroposterior diameter of M_2 is 9 mm. The greatest transverse diameter of the heel is 5 mm. The greatest height of the tooth, including root, is 13 mm.

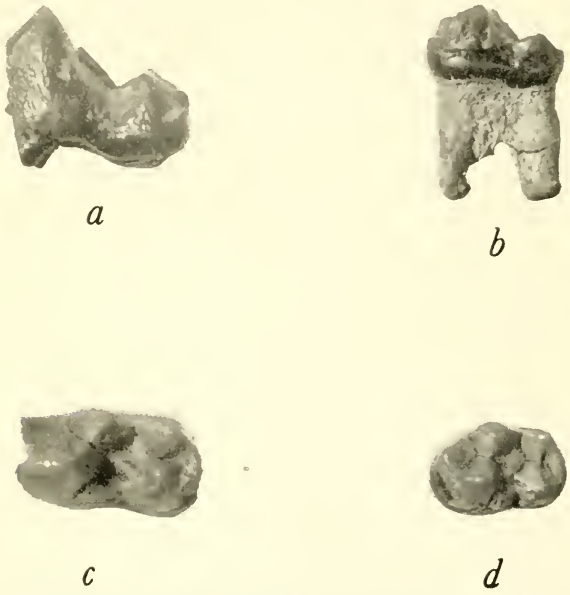

FIGURE 68.—*Tomarctus marylandica*, new species, left lower molars, type specimen (U. S. N. M. no. 15561): *a*, M_1, lateral view; *b*, M_2, lateral view; *c*, M_1, occlusal view; *d*, M_2, occlusal view. × 2. Calvert Miocene, Maryland.

The two molars show very little wear, indicating that the animal was in the prime of life. The enamel on both is in perfect condition except for small cracks. In M_1 the dentine can be seen at the anterior end.

Comparison.—The two molars of *Tomarctus marylandica* are closely comparable to those in *Tephrocyon kelloggi* described by Merriam[1] in 1911. The type of *T. kelloggi* was collected from the Virgin Valley beds (middle Miocene) in Humboldt County, Nev., and consists of "a lower jaw with dentition." The present find and

[1] Merriam, J. C., Univ. California Publ. Bull. Dept. Geol., vol. 6, pp. 235–238, figs. 5, 6, pl. 32, 1911.

that of Merriam compare favorably in all the outstanding features with but few exceptions. The protoconid of *T. kelloggi* appears in the illustration to be more rounded than in the present specimen. This may be due to difference in wear. A small tubercle near the base of the metaconid is mentioned in the description of M_1 of *T. kelloggi*. This tubercle is absent in the present specimen, but a slight unevenness of the enamel in this region, if developed, might have been termed a tubercle.

Remarks.—I adopt the current usage of the generic name *Tomarctus*, assuming that *Tephrocyon* is a synonym. The Maryland form corresponds more closely to members of this group, which in the West are known from the middle Miocene, than it does to the lower Miocene species of *Cynodesmus*.

From the scant material at hand it is impossible to draw any conclusions as to the characters or habits of *Tomarctus marylandica*. It is possible, however, to enumerate its associates from the other fossil vertebrates found in the Calvert Miocene. The known vertebrate fauna includes Pisces, Chelonia, Crocodilia, Aves, Sirenia, Cetacea, Carnivora, Proboscidea, and Artiodactyla.

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