

A RECORD OF *DEMOCRICETODON* (ORDER RODENTIA)  
FROM THE LATE TERTIARY OF  
NORTHEASTERN COLORADO

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ABSTRACT. — *Democricetodon* (D.) sp. is reported from latest Miocene or earliest Pliocene deposits in Weld County, Colorado.

A damaged rodent jaw and several teeth similar to the teeth of old world cricetids were found in Weld County, Colorado, in deposits judged to be of latest Miocene or earliest Pliocene Age. This material was recovered from a thin and restricted layer of well-weathered volcanic ash. All physical evidence suggests that the deposit represents an accumulation in a pond or a slow, sluggish stream. These specimens were collected in the vicinity of Pawnee Buttes in Weld County, Colorado. Exact locality and stratigraphic data are on file in the University of Colorado Museum at Boulder—the repository for the specimens.

Details pertaining to the material collected, catalogue numbers, and dimensions are recorded in TABLE 1. Parts of at least four individuals are present. Specimens numbered 27391 (RM<sub>1</sub>) and 27392 (RM<sub>2</sub>) are well worn teeth that could represent parts of one individual. Teeth numbered 27393 and 27396 are illustrated in FIGURE 1.

These teeth have been assigned to the genus *Democricetodon*, subgenus

*Democricetodon* Fahlbusch (1964) because of their close resemblance to specimens assigned to this group and because, in most respects, the features of these teeth agree with the diagnostic criteria set forth by Fahlbusch. A useful criterion, but not one regarded to be of taxonomic worth, is the fact that Dr. Fahlbusch examined these specimens on two occasions and agrees to their assignment to the subgenus *Democricetodon*. The possibility that the teeth could belong to some cricetid with a North American history was reviewed and rejected.

The jaw has the incisor broken off deep to the alveolus, has lost all the molars, and lacks the posterior border and the upper part of the ascending ramus. I think the jaw belongs with the teeth because it has a cricetid-like conformation, is of the size to accommodate the teeth



FIGURE 1. — Occlusal view of LM<sub>2</sub> (Univ. Colorado Mus. No. 27393) and RM<sub>2-3</sub> (Univ. Colorado Mus. No. 27396) of *Democricetodon* (D.) sp. from Weld County, Colorado.

TABLE 1.—Dimensions (in mm) of Specimens of *Democricetodon* (*D.*) sp. from Weld County, Colorado.

Univ. Colorado Mus. Number		Antero- posterior length	Transverse width
27391.....	RM <sub>1</sub>	1.67	1.13
27392.....	RM <sub>2</sub>	1.37	1.22
27393.....	LM <sub>2</sub>	1.39	1.13
27394.....	LM <sub>2</sub>	1.42	1.14
27395.....	RM <sub>3</sub>	1.39	1.03
27396.....	RM <sup>2</sup>	1.37	1.35
	RM <sup>3</sup>	0.93	1.03
27397.....	Right jaw		
	Incisor width at point 2.0 mm deep to the alveolus.....		0.8
	Incisor depth at point 2.0 mm deep to the alveolus.....		1.8+
	Alveolar length of molar tooth row.....		4.5
	Length of diastema, alveolus to alveolus.....		3.0
	Greatest depth of jaw from septum between roots of first molar to ventral border.....		3.9

found in the deposit, and does not differ from the fragments of jaw bone associated with specimens numbered 27392 and 27395. A feature of the jaw that merits comment is the presence of an incisor capsule that is small, but well-formed, and prominent enough to be separated from the ramus by a groove. The masseteric fossa has the ventral border marked by a ridge that, anteriorly, curves upward and fades out as a trace below the anterior root of the first molar. The sharp anterior border of the ramus extends to a point even with the anterior root of the second molar. The mental foramen is high on the side of the jaw, being slightly antero-external

to the alveolar border. A comparison of this jaw with the figure of a jaw of *Democricetodon* (*D.*) *minor gracilis*, seen in Fahlbusch's paper (Taf. 2, figs. 5a and 5b), shows that the Colorado specimen has a shallower masseteric fossa.

The incisor is flat on the medial side and slightly convex on the lateral side.

LITERATURE CITED

FAHLBUSCH, V. 1964. Die Cricetiden (Mamm.) der Oberen Süsswasser — Molasse Bayerns. Bayerische Akademie der Wissenschaften Mathematisch-Naturwissenschaftliche Klasse Abhandlungen, Neue Folge, Heft 118, pp. 1-136, pls. 1-7.

*Manuscript received March 15, 1966.*