

REMAINS OF A GRAY WOLF (*CANIS LUPUS*) FROM NORTHWESTERN OKLAHOMA

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Information concerning the gray wolf (*Canis lupus*) in Oklahoma is scarce since native populations probably became extinct shortly after the turn of this century (1). On 26 November 1979, members of the Central Oklahoma Grotto of the National Speleological Society discovered the right ramus of the mandible of a gray wolf protruding from soft mud about 1,000 feet inside the Virgin Entrance Section of the Selman Cave System, 7 mi. SW Freedom, Woodward Co., Oklahoma. This is apparently the first record of the gray wolf from northwestern Oklahoma and the third locality for the state.

According to Young and Goldman (1, p. 445) and Hall and Kelson (2), specimens of *C. lupus* have been collected in Oklahoma at Afton in Ottawa County, and from Beaver Creek and the Wichita Mountains in Comanche County. Young and Goldman (1, p. 48) related accounts of gray wolves being observed along the Canadian River of Oklahoma in 1845 and being very common throughout the Indian Territory.

The Selman Cave System is a gypsum cave of the Blaine Formation and was mapped and described by the Central Oklahoma Grotto in 1968. The main passage of the cave where the ramus was found is a large solution passage which has been greatly modified by both breakdown and vadose water. This cave system is deep with the bottoms of the caves lying near the water table. Several portions of the cave are 1000 feet beneath the surface. Cave entrances in the bottoms of the dry valleys are essentially vertical with drops of up to 20 feet and some as much as 67 feet. None of the cave entrances are on the crests of the hills which the caves underlie.

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The ramus is quite complete and matches Alaskan specimens of *C. l. pambasileus* in the collection of recent mammals at the University of Oklahoma, Stovall Museum of Science and History, so closely in dentition and in detail of the mandible, that it is clearly *C. lupus*. Mandibular measurements of our specimen are: lower carnassial, crown length, 30.2 mm; height of coronoid process, 75.3 mm; length of mandible, 176.9 mm. This corresponds closely to 30.4 mm, 75.7 mm, and 175.7 mm, respectively, for an adult male *C. l. nubilus* from the Wichita Mountains of Oklahoma (1, p. 493).

Dr. Walter W. Dalquest of Midwestern University also examined the ramus and reported that it is clearly that of *C. lupus*. The nature of the ramus suggested to him that the original matrix was a silt and might have been the soft mud where the ramus was found. The bone was partially replaced and not fibrous. Dr. Dalquest suggested that the ramus was at least several hundred years and not more than 10,000 years old.

This find clearly reminds us that caves are among the best potential "historical vaults" provided by nature.

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REFERENCES

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2. E. R. HALL and K. R. KELSON, *The Mammals of North America*, Ronald Press, New York, 2 Vols., 1959.