

Cranberry Prairie's Ancient Elk—One That Got Away?

James L. Murphy
Ohio State University Libraries

By

David Dyer
Ohio Historical Society

The nearly complete skeleton of a mature (ca. 8-10 years old) male elk was excavated near Cranberry Prairie, Mercer County, Ohio, on May 4, 1982. At first thought to represent a late Pleistocene occurrence, the skeleton is now believed to represent an individual that had been wounded by an Archaic Indian and later died in the lake that stood at this site some 9000 years ago.

The skeleton was discovered by Ron Schwieterman, in November, 1981, while excavating for plastic drainage pipe on the Ron Stucke farm, near Vandebush Run, southwest of the town of Cranberry Prairie. Schwieterman contacted Mrs. Joyce Alig, Director of the Mercer County Historical Society, in Celina, and she in turn contacted the junior author. The following spring, the Cy Schwieterman Excavating Co. kindly donated a backhoe and a workman to help locate the elk skeleton, which was found approximately three feet below the surface, at the contact between an overlying zone of brown to black peat and an underlying gray marl. Except for disturbance by the original pipe-laying, the skeleton was essentially undisturbed and virtually complete.

Abundant plant remains in both layers included tamarack, birch, and cattail leaves. Subsequently identified in screened samples of the marl were seeds from water-lily (*Nelumbo*) and pondweed (*Potamogeton*), as well as numerous *Chara* oogonia. Even more abundant in both the peat and the marl were fresh-water gastropods, including several species considered to be extinct and characteristic of the late Pleistocene and immediate post-Pleistocene. Among these are *Ammicula leightoni*, *A. gelida*, *Gyraulus altissimus*, and *Helisoma anceps striata*, along with forms that are still living, such as *Helisoma campanulata* and *Valvata tricarinata*. *Ammicula* is particularly characteristic of small lake deposits. It and the *striata* variety of *Helisoma anceps* are extinct forms found in abundance in late Pleistocene marls in Ohio (LaRocque, 1968) and, along with the presence of tamarack, which is no longer native to Mercer County, led us to believe that the elk deposit was late Pleistocene in age. The Cranberry Prairie deposit is clearly the remnant of a promorainic lake formed along the margin of the St. Johns Moraine, dated at ca. 14,000 B.P. (Dreimanis and Goldthwait, 1973). A radiocarbon date received from Dicarb Laboratories, however, gives a 9370 ± 70 years B.P. date, determined from bone from the elk skeleton.

There are several unusual osteologi-

cal features about this particular elk specimen. The dentition (Fig. 2) displays an unusual wear pattern, in which the lower first molars show extremely heavy wear in comparison to the rest of the mandibular teeth. Reported as being of rare occurrence in living elk populations (Shaw, 1981), this condition has not been described previously from fossil or subfossil deer or elk. It probably is more common than has been reported and is due to a combination of physiological factors: the relatively greater age and greater initial height of the first molar, resulting in greater initial wear to produce conformance with the upper tooth row; once the balance of wear is upset, the less worn upper fourth premolar and upper first molar gouge more and more deeply into the less resistant, enamelless lower first molar (Linsdale and Tomich, 1953). Also unusual is the fact that the posterior edge of the blade of the scapula remained unossified, even though we are dealing with a fully mature individual.

Of particular interest is the presence of a small hole punched through the left scapula (Fig. 3, 4). This was noted in the course of excavating the elk skeleton, and considerable care was taken in an unsuccessful attempt to find the missing piece of bone. The hole, measuring 2.0 x 1.2 cm, showed no signs of healing. In a detailed study of animal skeletons from the Danish Mesolithic, Noe-Nygaard (1974) has demonstrated that trauma virtually identical to that of the Cranberry Prairie specimen was commonly a result of Mesolithic hunting (Fig. 5). Coupled with the radiocarbon date of 7420 B.C., this strongly suggests that the Cranberry Prairie elk was wounded by an early Archaic Indian, wandered into the proglacial lake occupying the present site of Cranberry Prairie, became mired in the mud, and died. Goslin (1961) describes a similar occurrence from a bog near Bellefontaine, Logan Co., Ohio, in which a projectile point remained lodged in the elk skeleton, but that find was not radiocarbon-dated and the antler tip point is culturally non-diagnostic.

Evidence of early Archaic man in the inhospitable "Black Swamp" area of northwestern Ohio is not common, essentially limited to stray point finds. Some workers (Pratt, n.d.) believe that the Black Swamp region at this time "represented an upland forest area which became inhospitable only after rising lake levels inundated the bulk of the present western lake basin." Regardless, it seems evident that a clear, shallow lake was present at Cranberry

Prairie as late as ca. 7000 B.C. and that elk were being hunted in the vicinity by early Archaic man.

References

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Fig. 1 (Murphy—Dyer) The Cranberry Prairie site. Joyce Alig stands on the previous excavation for drainage pipe. Jim Murphy and Dale Walker to her left. St. John's Moraine and the village of Cranberry Prairie in the background.

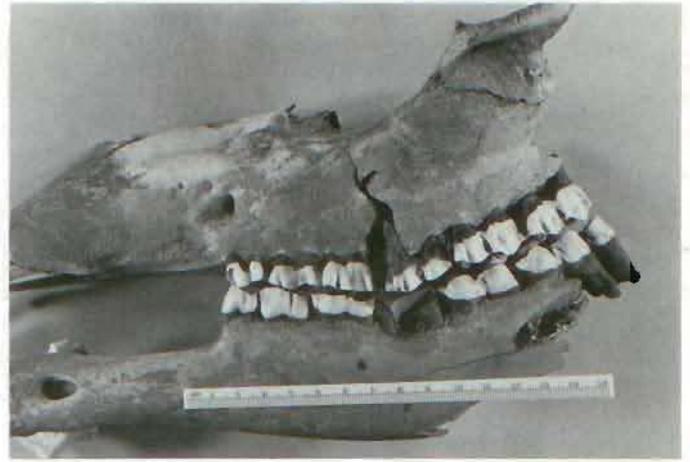


Fig. 2 (Murphy—Dyer) Upper and lower left dentition of the Cranberry Prairie elk showing pronounced wear of the lower first molar.

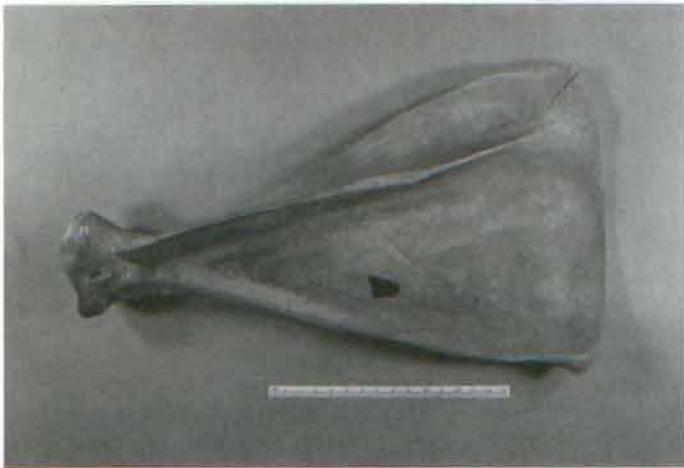


Fig. 3 (Murphy—Dyer) Left Scapula showing hole punched through the blade.

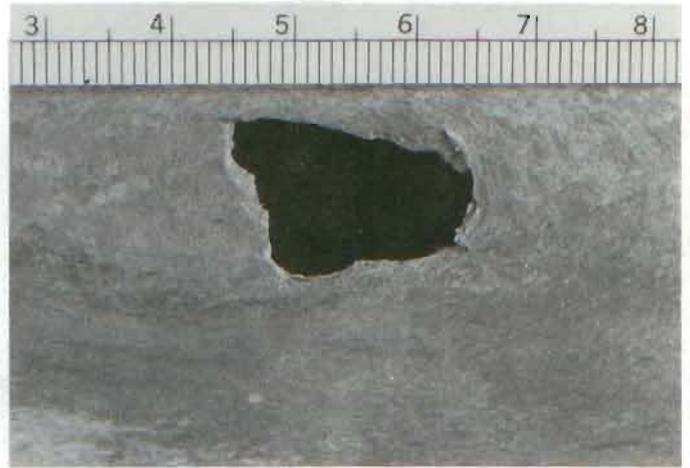
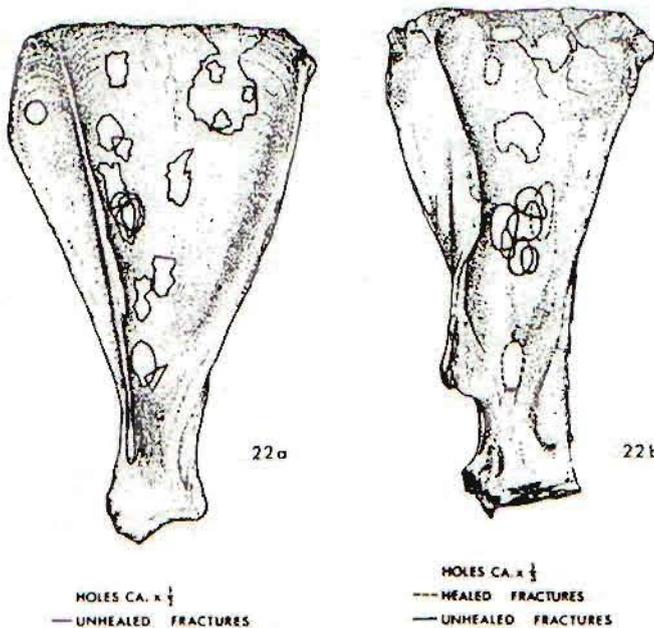


Fig. 4 (Murphy—Dyer) Close-up of the left scapula showing unhealed nature of the hole.



(Fig. 22) a. Positions and sizes of all the fractures considered by Rust (1943) to be shot-holes, superimposed onto a standard blade. Note the scattered distribution of the fractures, all of which are unhealed (drawing by Bente Surlyk). b. Positions and sizes of all fractures found on the Mesolithic scapulae superimposed onto a standard blade. Note the concentration of the unhealed fractures. (Drawing by Bente Surlyk).

Fig. 5 (Murphy—Dyer) Distribution of healed and unhealed fractures on Mesolithic scapulae (from Noe-Nygaard—1974).