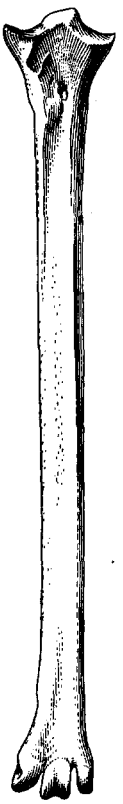
single roofed, indicating that the specimen was an immature. The skull and wing are now in the collection at Humboldt State College.

This record is additional support for the assumption made by Cogswell (Condor, 54, 1952:117) that the northward movements of wandering vagrants of this species in the fall may be fairly commonplace, at least along the Pacific coast.—ROLF E. MALL, *Humboldt State College, Arcata, California, November 29, 1955.*

A Fossil Magpie from the Pleistocene of Texas.—A nearly complete left tarsometatarsus of a magpie is included among fossil vertebrate material from the panhandle of Texas under study by Dr. Donald E. Savage. We are indebted to Dr. Savage for opportunity to report on this specimen. The bone (Univ. Calif. Mus. Paleo. no. 43386) comes from Palo Duro Falls (locality no. V–5318, Univ. Calif. Mus. Paleo.), Randall County, Texas; more precisely this is 9 miles east and 3½ miles north of Canyon along the graded road leading from the old "Harding Ranch" house out over the south wall of Palo Duro Canyon. The bone was associated with mollusks, turtle and fish fragments, and a few small mammal bones in a stream channel sand that is part of a larger alluvial channel in the Caliche (limey) caprock of the Texas panhandle plains. On the basis of combined, although meager, paleontologic and geologic evidence, Dr. Savage states that the age of the vertebrate remains here is probably post-Blancan or, in other words, early Pleistocene. It is definitely not older than Blancan and it is possibly, although less likely, as late as mid-Pleistocene.



The fossil tarsometatarsus shows its identity with the genus *Pica* among the Corvidae most clearly by the configuration of the shaft (see fig.) which is almost parallel-sided throughout its length, involving a distinct narrowing just distal to the scar of the M. tibialis anticus, and by the less rounded outline of the medial cotyla in contrast with other corvids of similar dimension. New World corvids which bear near resemblance in size of the tarsometatarsus to *Pica* are *Calocitta, Psilorhinus,* and *Cyanocorax. Calocitta* and *Psilorhinus* are shorter and relatively stouter, with the proximal end of the shaft stouter than the distal end. *Cyanocorax* is the same length as *P. pica* but shows more taper in the shaft and a distinctly more rounded medial cotyla.

The two Recent forms of North American magpies, *P. pica hudsonica* and *P. nuttallii,* show overlap in all measurements of the tarsometatarsi (see table). Even though *P. p. hudsonica* and *P. nuttallii* exhibit a similar size range in total length of the tarsometatarsus, *P. nuttallii* is still a relatively smaller bird and this difference is reflected in a reduction of the massiveness of the cotylar and trochlear ends. Statistical significance can be demonstrated (see table of *t,* Simpson and Roe, Quantitative Zoology, 1939:206) in the differences between the means of the measurements of *P. nuttallii* for trochlear width ($P<.01$), cotylar width ($P<.05$), and anteroposterior length of medial cotyla ($P<.01$) and those of the fossil. The fossil falls within or barely exceeds the upper size limits of *P. p. hudsonica* and *P. p. japonica,* whereas it greatly exceeds the extremes of *P. nuttallii* in the three measurements. It is therefore identified as *Pica pica.*

In North America, fossil magpies (*P. nuttallii*) heretofore were known only from the late Pleistocene of California (A. H. Miller, Univ. Calif. Publ. Bull. Dept. Geol. Sci., 1929, 19:7; Wetmore, Smithsonian Misc. Coll., 131, 1956:92). The genus *Pica* has generally been considered to be of Old World origin and to have reached the North American continent "relatively recently," presumably via a Bering land bridge (Amadon, Amer. Mus. Novit. No. 1251, 1944:12). The magpie from Palo Duro Falls therefore places the time of arrival of the genus *Pica* in North America earlier than had previously been supposed.

Of significance is the fact that this early Pleistocene magpie represents the holarctic species *P. pica* rather than *P. nuttallii* whose range is at present restricted to California west of the Sierra Nevada. It is even possible that *P. nuttallii* could have been derived from *P. pica* at some time earlier

Measurements of Tarsometatarsi of Recent and Fossil Magpies

Species	No.	Total length		Trochlear width		Cotylar width		Anteroposterior length of medial cotyla	
		Mean and extremes	SD	Mean and extremes	SD	Mean and extremes	SD	Mean and extremes	SD
P. nuttallii	10	48.3		4.6		6.4		3.9	
		(45.5–50.2)	1.51	(4.2–4.8)	0.20	(6.1–6.7)	0.22	(3.6–4.2)	0.17
P. p. hudsonica	10	46.5		4.6		6.2		4.5	
		(44.5–48.0)	1.44	(4.4–5.2)	0.24	(5.7–6.9)	0.33	(3.9–4.6)	0.20
P. p. japonica	1	50.9		5.3		7.0		4.7	
Palo Duro Falls specimen	1	50.3		5.4		7.0		4.8	

than the Pleistocene. *Nuttallii* probably became isolated in western California as a derivative of *P. pica* of the Great Basin or northern plains and this could have occurred at the time of elevation of the Sierra Nevada in the Pliocene (A. H. Miller, Univ. Calif. Publ. Zool., 50, 1951:610).—ALDEN H. MILLER and ROBERT I. BOWMAN, *Museum of Vertebrate Zoology, Berkeley, California, August 20, 1955.*

Interspecific Relations between Goshawks and Ravens.—On October 6 and 7, 1955, in the Copper River region of south-central Alaska, four encounters between Goshawks (*Accipiter gentilis*) and Ravens (*Corvus corax*) were witnessed. During the late morning of October 6 at Mile 158 on the Richardson Highway, a Raven and an immature Goshawk were seen circling in close proximity 40 feet overhead. Intermittently, one of the birds would dip slightly toward the other, which would then exhibit a mild avoidance reaction and return the action. Overt aggressiveness or active chasing were not witnessed on the part of either bird and there was no vocalization. Approximately five minutes elapsed before the birds parted, soaring from view over the trees. Later the same morning at Mile 151 a Raven flew low over the highway with an adult Goshawk following a few feet behind and to the side. Neither bird was flying rapidly, but both veered sharply and returned over the timber when the observers came into view below.

On October 7, two additional encounters were seen, the first during the early morning at Mile 141 on the Richardson Highway. On this occasion the birds appeared quite suddenly, flying rapidly 15 feet over the trees with an adult Goshawk in definite pursuit of the Raven. After a chase of approximately 50 yards, the hawk closed the short gap and the Raven turned, beating its wings, and uttered a series of loud guttural notes. The Goshawk turned sharply, and both birds flew from view in opposite directions. During the early afternoon at Mile 119 on the same highway, an adult Goshawk flew low over the road followed closely by a Raven. Both birds promptly disappeared among the trees.

These two large diurnal birds, one a raptor and the other at least partly so, are widespread and abundant in this region. Opportunities for contact between the two species would seem numerous and it is reasonable to assume that in some instances competitive situations might arise in relation to food. However, with one exception, the incidents witnessed were not of an aggressive nature.—FRANCIS S. L. WILLIAMSON and ROBERT RAUSCH, *Arctic Health Research Center, United States Public Health Service, Anchorage, Alaska, November 23, 1955.*

White-winged Scoter in Texas.—The winter range of the White-winged Scoter (*Melanitta fusca*) is principally along the seacoasts, southward regularly along the Atlantic coast of North America to South Carolina and on the Pacific coast to Baja California. Bent (U. S. Nat. Mus. Bull. 130, 1925:142) mentions casual records from Colorado and Louisiana. On November 5, 1955, Mr. James Cullum of Wichita Falls, Texas, shot two birds of this species on Lake Kickapoo, Archer County, that seem to constitute the first record for the state of Texas. One specimen, an immature male, was presented to the Biology Department of Midwestern University and there preserved. It is noteworthy that the birds were taken in arid north-central Texas, where numerous artificial lakes now form wintering grounds for waterfowl. This is an area where there was little or no standing water in the past. —WALTER W. DALQUEST, *Midwestern University, Wichita Falls, Texas, November 15, 1955.*