surface flow at Pittsburgh from south to southwest. At intermediate levels though, the low center may be slightly farther west and more V shaped so that winds will be more northerly or northwesterly. At much higher levels low pressure may not be apparent at all and winds at those levels could well be from the west.

"The duration of a particular pattern is chiefly a matter of a rate of movement of the pressure systems and may last for a few hours at the least to a day or more. It might well be that migrating birds, consciously or unconsciously, seek out the optimum level for their direction of flight."

Although only two occasions are reported above when a particularly striking set of circumstances was obvious, it seems likely that many more would be observed if they were carefully watched for.—F. W. PRESTON, *Preston Laboratories, Butler, Pennsylvania, August 13, 1954.*

An avifauna from the Pleistocene of central Kansas.—The avifauna described here is the result of ten years of intermittent collecting of vertebrate remains from a Pleistocene deposit in the NE¼ sec. 14, T.18S., R.3 W. (Kentuck locality of Hibbard, 1952. *Univ. Kansas Paleont. Contr., Vert., Art.* 2:6), McPherson County, Kansas, by members of the Kansas Geological Survey, Museum of Natural History, and Department of Anatomy, University of Kansas. I wish to acknowledge the critical advice of Dr. H. B. Tordoff, University of Kansas, and the use of comparative material in the University of Kansas Museum of Natural History and the National Museum, Washington.

The specimens, all in the University of Kansas Museum of Natural History, represent the following species:

FAMILY ANATIDAE

Anas carolinensis Gmelin, Green-winged Teal. Nos. 9908 and 9909, distal ends of right humerus.

Lophodytes cucullatus (Linnaeus), Hooded Merganser. No. 9910, proximal end of left carpometacarpus. No. 9911, shaft and distal end of left carpometacarpus.

FAMILY SCOLOPACIDAE

Bartramia longicauda (Bechstein), Upland Plover. No. 9912, left coracoid.

Numenius borealis (Forster), Eskimo Curlew. No. 7428, humeral end of right coracoid.

FAMILY ICTERIDAE

Euphagus cyanocephalus (Wagler), Brewer Blackbird. No. 7354, humeral end of left coracoid. This specimen and no. 7428, listed above, were reported (as unidentified birds) by Hibbard (*loc. cit.*).

To my knowledge, this is the first record of *Numenius borealis* as a fossil. The remaining four species are known from late Pleistocene deposits, to wit: *Anas carolinensis,* Florida (Wetmore, 1931. *Smithsonian Misc. Coll.,* 85:21), Oregon (Howard, 1946. *Carnegie Inst. Wash. Publ.,* 551:191), California (Howard, 1949. *Condor,* 51:21 — a tentative identification), and Nevada (Howard, 1952. *Bull. So. Calif. Acad. Sci.,* 51:54); *Lophodytes cucullatus,* Florida (Wetmore, 1931. *op. cit.*:23) and Oklahoma (Lunk, 1952. *Condor,* 54:317); *Bartramia longicauda,* Kansas (Downs, 1954. *Condor,* 56:211); and *Euphagus cyanocephalus,* Oregon (Howard, 1946. *op. cit.*:192). Fragments, closely resembling parts of *Anas carolinensis,* have been reported from the lower Pliocene of Texas (Compton, 1934. *Condor,* 36:41) and lower Pliocene of Nevada (Miller, in Merriam, 1916. *Univ. Calif. Publ., Bull. Dept. Geol. Sci.,* 9:173). Judging by the result of Wetmore's (1944. *Univ. Kansas Sci. Bull.,* 30:92–94) study of *Anas bunkeri* from the Blancan of Kansas, it

is probable that these specimens from the Pliocene of Texas and Nevada would prove to be different from the existing species if more material were available for study.

The age of this avifauna is probably late middle Pleistocene or early upper Pleistocene. Hibbard (1952. *op. cit.*:11) regarded the stream deposit from which the Kentuck assemblage was collected to be younger than beds containing the Borchers faunule of Meade County, Kansas. Some of the mammals in the assemblage suggest an age roughly near that of the Cragin Quarry faunule and other fossils from the Kingsdown, or lower Sanborn, formation. The bird bones listed here provide no evidence of having been associated with the fossils of pre-Borchers age that Hibbard thinks were redeposited with the younger post-Borchers fossils to make the Kentuck assemblage. In any event, without better faunules for correlation it is enough to say that the deposits containing this avifauna are probably late Yarmouthian or Illinoian in age.

This collection is of interest because there is nothing in it to show that there have been any great and profound changes in the avifauna of the High Plains since the end of the middle Pleistocene. The five species have been inhabitants or migrants in the High Plains within historic times. The similarity of all seven of the fragments to the corresponding parts of Recent species increases the probability, in my opinion, that the species had attained, or were near, their present form by mid-Pleistocene time. With a collection as small as this one such a view would not exclude the presence of now extinct species or the possibility that slight morphological differences existed.—EDWIN C. GALBREATH, *Department of Anatomy, University of Kansas, Lawrence, Kansas, August 6, 1954.*

An early seasonal record of the Swallow-tailed Kite in Florida.— A Swallow-tailed Kite (*Elanoides forficatus*) was seen by the writer on February 6, 1954, flying over Payne's Prairie four miles south of Gainesville, Alachua County, Florida. The bird was sighted about 8:00 a.m. and was watched through 7 × 50 glasses for about 40 minutes as it circled overhead. The bird then flew southeast. According to the weather station at the University of Florida, at Gainesville, the temperature was 47° F. at 8:30 a.m. The weather was clear following a heavy frost and there was a slight wind from the northwest.

The species is a rare summer resident in this area, and as far as can be ascertained, this is the earliest record of its occurrence in Florida. Howell (1932. "Florida Bird Life," p. 164) gives the earliest record as February 28, 1920, at St. Marks, or the "last week in February, 1876" at Panasoffkee Lake.—THOMAS W. HICKS, *University of Florida, Gainesville, Florida, August 10, 1954.*

Red Phalarope in Ohio.— On May 1, 1953, while flying through a rapidly moving storm system near Columbus, Ohio, our crew noticed clouds of dust blowing along at 8,000 feet above sea level. Later we learned that the system had caused dust storms in the Great Plains and tornadoes in Macon, Georgia, and other places as it moved eastward.

An hour before sunset on the next day, I found a Red Phalarope (*Phalaropus fulicarius*) swimming on a small pond in the Game Preserve in Area C, Wright-Patterson Air Force Base, Dayton, Ohio. The bird was busily snapping up black "flies" which were numerous within three inches of the surface of the water. The bird must have been starving, for it paid little attention to my family and nearby fishermen as it darted after the insects. It came within 25 feet of me as I watched with 8 × 30 binoculars. The yellow, dark-tipped