

bird in turn seemed to be dominant over all the other hens except Number 1 and displayed the same types of aggressive behavior as did Number 1.

The hen with the longest beard was the last Turkey to leave the area after the morning feeding. The Turkeys left the area in a follow-the-leader style with the Number 2 hen about half way back in the line. The Number 1 hen stayed until the rest of the Turkeys were almost 40 yards away, and then she ran to them and took a place at the end of the line until they disappeared into the brush about 75 yards away.—SAMUEL L. BEASOM, *Department of Wildlife Ecology, University of Wisconsin, Madison, Wisconsin 53706, 27 September 1967.*

**The Whooping Crane from the lower Pleistocene of Arizona.**—While studying the avian fossils in the Frick Collection, American Museum of Natural History, I discovered the proximal end of a left tarsometatarsus (A.M.N.H., F:A.M. No. 8410) of a Whooping Crane (*Grus americana*). The fossil was collected in 1939 by Mr. Ted Galusha from lower Pleistocene deposits in Arizona; the locality data are as follows: Dry Mountain locality, San Simon Valley, 20 miles east of Safford, Graham Co., Arizona.

The Whooping Crane has not been recorded from fossil deposits in southwestern United States including Arizona (Brodkorb, *Bull. Florida State Mus.*, 11:153, 1967), the nearest locality previously reported being the Rancho La Brea tar pits of southern California (Howard, *Condor*, 32:84, 1930). The fossil tarsometatarsus further documents the once wide distribution of this species.

*Measurements.*—Transverse breadth (external to internal) across cotylae 28.0 mm.

I am grateful to Dr. Malcolm C. McKenna for allowing me to report on this specimen; to Dr. Richard Tedford for his help with stratigraphy; and to the authorities of the Division of Birds, United States National Museum, and the Department of Ornithology, American Museum of Natural History, for allowing me the use of their collections.—JOEL CRACRAFT, *Department of Biological Sciences, Columbia University, New York, New York 10027, 13 October 1967.*

**Bar-tailed Godwit from Alaska recovered in New Zealand.**—Mr. Frank H. Rowson of Kati Kati, Bay of Plenty (North Island), New Zealand, found the skeleton of a banded Bar-tailed Godwit (*Limosa lapponica*) at the mouth of the Tawanga-Harkoin River on 28 October 1967. The bird had been banded by DeLong on St. George Island, Pribilof Islands, Alaska, 31 May 1966. The distance between St. George and the Bay of Plenty, following the Great Circle Route, is 5,288 nautical miles. This is the first recovery of a Bar-tailed Godwit banded in North America and one of the longest over-water movements on record for any species of bird.

The Bar-tailed Godwit had been previously recorded only as a casual visitant to the Pribilof Islands (Kenyon and Phillips, *Auk*, 82:624-635, 1965). The species was not recognized by island residents when it began arriving in sizeable numbers on 29 May 1966. By 30 May there were an estimated 300 godwits on St. George. On 31 May the birds were feeding persistently and a rocket net (Thompson and DeLong, 1967. *Bird-Banding*, 38:214-218) was set. It was camouflaged with moss and lichens torn from the earth in front of the net. After an hour's futile attempt to herd the birds toward the net, two birds discovered the disturbed area and began feeding actively. The rest soon followed, and when the net (70 ft × 35 ft) was launched, 113 birds were trapped and only seven escaped. Size No. 5 bands were used; these were large and had to be overlapped and crimped. This species is normally banded with size No. 3 (male) and

No. 4 (female) bands, but these were not available. Before the supply of No. 5 bands was exhausted, 100 godwits were banded, leg-streamered, color-marked with orange paint, and then released.

That evening flocks of godwits with marked birds among them were observed flying over the bogs west of St. George Village. By the next day all but a few had left. The New Zealand recovery is the only one to date.—(*Paper No. 40—Pacific Ocean Biological Survey Program.*) ROBERT L. DELONG, *Pacific Ocean Biological Survey Program, Smithsonian Institution, Washington, D.C.* AND MAX C. THOMPSON, *Southwestern College, Winfield, Kansas, 26 April 1968.*

**“Ploughing” for fish by the Greater Yellowlegs.**—A feeding method employed by the Greater Yellowlegs (*Totanus melanoleucus*), but not by the Lesser Yellowlegs (*Totanus flavipes*), is “ploughing” the water in pursuit of fish. Rowan (*Brit. Birds*, 23:2-17, 1929) described it thus: “The species never probes and is frequently to be seen running through the water and skimming the surface with its bill . . . the bill being pushed along steadily forwards.” (p. 15). According to Witherby (*Handbook of British birds*, vol. 4:336, 1940) similar behavior is exhibited by the Greenshank (*Totanus nebularia*), and Lacey (*Brit. Birds*, 37:217, 1944) said further of the Greenshank, that “On five occasions . . . its whole head and body were under water, so that all that was seen was its tail moving along, sometimes at considerable speed.”

I first observed and photographed ploughing behavior by the Greater Yellowlegs in 1964 at the Cheyenne Bottoms of central Kansas. There, at 6:00 AM on 5 September, two birds were walking in a shallow, turbid channel bordered by extensive sedge flats. Repeatedly they ran forward, cutting the water with the lower mandible for periods of one to seven seconds. The birds were attracted to surface ripples produced by concentrations of fish; they ran toward and ploughed through these ripples when they appeared. The birds changed direction at times while ploughing, but the usual movement was a straight forward rush. I saw no food being taken. Lesser Yellowlegs feeding nearby kept closer to the sedges and walked about, making repeated single stabs at the water's surface.

On 6 September a lone bird fed near the middle of a roadside ditch containing muddy water between one and two inches deep. A number of times the bird ran forward with its bill open, the lower jaw submerged and the upper jaw above water (Fig. 1A). It also fed by drawing the opened bill to one side and back again through the water. On the next day a bird was feeding in the same spot, running after fish whose presence was revealed by surface ripples. This bird ploughed briefly several times, but eventually caught a fish by simply picking it up. The fish was about as long as the bird's bill and quite flat-bodied. After about seven attempts, the bird finally swallowed it with a single flick of the head.

I again observed Greater Yellowlegs ploughing in clear, shallow water at the southern end of Assateague Island, Virginia, on 29 September 1966. The site was a channel with exposed mud bars supporting some short sedge and other herbaceous plants. Two Greater Yellowlegs were accompanied by about twenty Lesser Yellowlegs. The latter walked on the mud bars and in the water, pecking or briefly probing. By contrast, the Greater Yellowlegs kept largely to the water and walked or ran, at times abruptly changing direction. Although I was unable to see fish or surface disturbance during much of their feeding, the birds sometimes ran 10 or 15 feet in a straight line to a spot where they made a stab or a short ploughing motion in the water. At times the