First Vermilion Flycatcher specimen from Missouri.—Six sight reports exist for the Vermilion Flycatcher (*Pyrocephalus rubinus*) in Missouri. A. E. Shirling (The Bluebird, Audubon Soc. Missouri, 12: 60) reported the first (a male) at a lake at Pleasant Hill, Cass County, on 27 October 1945. On 11 November 1952 Arthur Bennett found an immature male at a lake at the August A. Busch Wildlife Area near St. Louis, St. Charles County. The bird stayed 12 days and was seen by some 30 individuals (op. cit., 20: no. 2). On 13 March 1955 Harold and Margaret Hedges and Oscar Hawksley saw a male on the Gasconade River near Hartville, Wright County (pers. comm.). Clara M. Moody reported a Vermilion Flycatcher during September 1958 at Portageville, New Madrid County (op. cit., 25: no. 8). On 5 May 1958, Tatum saw one at Forest Hill Cemetery, Jackson County (pers. comm.).

On 30 September 1967 at the August A. Busch Wildlife Area, Mr. and Mrs. Schaeffer discovered one male (red on head and underparts) and three females (no red) perched in dead trees over a lake. The females stayed only a few days, but the male remained until 13 November when it was found dead. Over 50 (including the authors) had opportunity to view these birds. The dead bird was preserved as a study skin (partially ossified skull, juvenal plumage, little fat) and represents the first specimen for Missouri. Wesley Lanyon and Eugene Eisenmann, American Museum of Natural History, determined the subspecies to be *P. r. mexicanus*. The wing measured 83 (chord) and the tail 61.5 mm. Apparently the Vermilion Flycatcher is a casual stray to Missouri during migration. It is of interest to note that to the west in Kansas, Johnston (Directory to the bird-life of Kansas, Lawrence, Mus. Nat. Hist., Univ. Kansas, 1960) mentions no records for this species, but Sutton (Oklahoma birds, Norman, Univ. Oklahoma Press, 1967, p. 350) mentions several recent Oklahoma breeding records.—David A. Easterla, *Department of Biology, Northwest Missouri State College, Maryville, Missouri 64468*, and Richard A. Anderson, *1147 Grenshaw Drive, St. Louis, Missouri 63137.*

Notes on the Long-billed Curlew.—At one time the Long-billed Curlew (*Numenius americanus*) occurred in large numbers over most of the prairie regions of the United States and southern Canada. By the early 1900s the species had already declined markedly. Today it is rarely encountered east of the Mississippi River and occurs mainly in scattered populations in the western United States and Canada. Published information on its distribution and ecology is sparse; almost all its known biology is based on works written at the turn of the century, most of them purely observational and rather subjective in nature.

This bird is rare over most of its former range, but some still breed in western South Dakota. On 25 June 1967 Raymond Daugherty and I noted between 25 and 30 Long-billed Curlews in northern Butte and western Harding Counties, one group of 9 or 10 individuals, another of 11 or 12 birds, and a number of singles and pairs. As these were casual sightings made while driving through these counties, the breeding populations in that region are apparently large enough to offer good possibilities for future study of the species' biology.

At present most of the land in Butte and Harding Counties is used as pasture for cattle and sheep. All the curlews seen on 25 June 1967 were either in pasturelands with cattle or in unoccupied fields. This suggests, as Sugden (Condor, 35: 3, 1933) points out, that sheep limit curlew nesting whereas cattle do not.

We collected two Long-billed Curlews in western Harding County 25 June 1967 for the University of South Dakota research and teaching collection. When the first

bird was shot it fell to the ground crippled and called loudly; 10 or 11 other Long-billed Curlews immediately flew in and began circling us crying constantly. We obtained the second bird from this "mobbing" flock (cf. Bent, U. S. Natl. Mus., Bull. 146: 105, 1929). Both birds' stomachs were empty, but in the esophagus of one curlew just a few millimeters from its stomach was an altricial nestling that measured 51 mm T.L., apparently a fringillid and probably a Lark Bunting (*Calamospiza melanocorys*), many of which were nesting in the vicinity. In one of the few sources of information on Long-billed Curlew food habits, Wickersham (Auk, 19: 353, 1902) mentions many types of invertebrates as commonly consumed, but toads are the only vertebrates he lists.

When Long-billed Curlews first return to their upland breeding habitats, their diets may be rather different than reported in the literature. The species usually begins nesting in May and June. Snowdrifts were present on the prairies of Harding County as late as 7 June 1967. I saw no insects there in early June and relatively few 25 June, but I heard many chorus frogs (*Pseudacris triserata*) and saw many ground nesting fringillids. Like its congener, the Common Curlew (*N. arquata*) (cf. Hibbert-Ware and Ruttledge, Brit. Birds, 38: 22, 1944), the Long-billed Curlew is doubtless an opportunist consumer of a wide variety of animal foods. Its diet in upland habitats could be expected to include small frogs, nestling birds, and possibly small mammals.—RICHARD L. TIMKEN, *Department of Zoology, University of South Dakota, Vermillion, South Dakota 57069. Present address: Department of Biology, Minot State College, Minot, North Dakota 58701.*

Giant Cowbird solicits preening from man.—Harrison (Auk, 80: 373, 1963) describes an interspecific preening invitation display of the Giant Cowbird, *Psomocolax oryzivorus*, similar to displays given by several other species of cowbirds described by Selander (Auk, 81: 394, 1964) and Selander and La Rue (Auk, 78: 473, 1961). In these displays the cowbird solicits preening of the nape by another bird, usually a potential host species and never another cowbird. This behavior has also been reported in the field for the Giant Cowbird by Chapman (Bull. Amer. Mus. Nat. Hist., 58: 123, 1928); in two instances a female cowbird bowed the head and presented the erected nape feathers to a host oropendola (*Zarhynchus wagleri*) at the nest.

A captive, solitary male Giant Cowbird in an aviary at the Fort Worth Zoo, Fort Worth, Texas, performs the same behavior towards humans. I first saw the bird 26 November 1867. As people walked past the cage the bird watched them from his perch, but when anyone stopped in front of the cage the bird flew down to the floor of the cage, erected and ruffed out the nape feathers, bowed the head forward, tucked the bill back nearly to the breast, and sidled as close as possible to the visitor. As the bird appeared to be soliciting preening of its nape I poked a finger through the wire screen and tried to scratch the bird's head. The cowbird maintained his bow, bent farther forward, and erected the nape feathers at nearly right angles from the body as I rubbed his head (Figure 1). A finger withdrawn and inserted a few feet to the side brought the cowbird shuffling to it in the bowed posture; a finger inserted through the screen 5 feet above the bird induced the cowbird to climb up to it and bow. Pencils made the bird retreat but fingers attracted it. In one preening session I scratched the bird for more than a minute while it remained in an apparent state of euphoria, and the bird solicited more preening when I stopped. I visited it again 13 April 1968 and noted the same behavior; on this day I watched the cowbird solicit nine times to other people in one hour, but no one responded.

The keeper of birds informed me that the cowbird had been in the zoo for about 3