

**Further observations on foster-feeding by Purple Martins.**—In an earlier paper (1959. *Wilson Bull.*, 71:96) I reported a single instance of foster-feeding by Purple Martins (*Progne subis*). Since then similar types of behavior have been observed repeatedly during studies associated with the homing ability of this species. The following observations were made at a colony of about 80 pairs located near Indian River (Cheboygan County), Michigan. Between 9 and 17 July 1962, 31 Purple Martins (15 females, 4 sub-adult males, and 12 juveniles) were removed from the colony for use in homing trials and almost continuous watch was maintained at the colony by me or an assistant. During the absence of one member of a pair, and occasionally even after its return, I noticed unmarked martins serving as “helpers” at 10 different nests. In some instances a “helper” was observed to make several trips to a particular nest. Details regarding these examples of foster-feeding are presented in Table 1.

TABLE 1  
DETAILS REGARDING FOSTER-FEEDING ACTIVITIES AT 10 PURPLE MARTIN NESTS

Nest No.	Sex of experimental birds removed	Sex of unmarked helper(s) observed	Comments
10	female	female	“helper” peered into other compartments on same level of house prior to feeding young of #10. One observation.
11	female	female	fed young as did adult male (mate?). One observation.
12	female	female and adult male	#12 mated to subadult male. Unmarked female fed young occasionally for at least 4 days. Adult male fed once.
14	female	female	one observation
15	female	female	helper fed young occasionally on 2 days.
16	female	female	helper fed young on 2 days.
17	female	female	helper aided with feeding for 2 days.
18	female	female	one observation
21	female	female	helper fed several times during 2 days prior to return of female #21 and also several times thereafter.
40	immature male	im. male and adult male	Two males aided female (mate) in feeding young. Each fed at least once.

The significance of this behavior cannot be determined at this time. Speculation regarding the selective value of this arrangement in a colonial species is possible but as yet premature. Since all foster-feeding observations for Purple Martins have been associated

with colonies used in homing trials, there is need for a careful comparative study of marked individuals in an "undisturbed" population and one where particular individuals can be removed for varying lengths of time. It is possible that foster-feeding normally occurs if a member of a pair is killed during the feeding stage of the nesting cycle. This behavior was only observed when the colony was near full capacity, i.e., most of the available nest compartments were full.

A factor which may have stimulated particular instances of foster-feeding during the later stages of the nesting cycle is that fully feathered young occasionally changed nest compartments along the same tier. In these instances, the adults may find their own compartment void of young and, as a result, move to another nest and feed those young. On one occasion, I observed a color-marked martin (No. 22) feeding young in a compartment on the opposite side of the house. I did not know whether or not her young had left the compartment.—WILLIAM E. SOUTHERN, *Department of Biological Sciences, Northern Illinois University, DeKalb, Illinois 60115, 14 June 1967.*

**Yellow-green Vireo collected in Texas.**—The A.O.U. Check-list of North American Birds (1957) includes *Vireo flavoviridis*, a Middle American bird, only on the basis of two accidental occurrences: at Riverside, California, 29 September 1887, and Godbout, Quebec, 13 May 1883. Yet from the lower Rio Grande Valley of Texas there are enough sight identifications for the Yellow-green Vireo to be considered locally a rare or irregular summer resident; even nesting has been reported (Davis, 1945. *Auk*, 62:146, 1966. "Birds of the Rio Grande Delta"; Peterson, 1960. "A field guide to the birds of Texas"; Wolfe, 1956. "Checklist of the birds of Texas"). So far as we are aware, no indisputable specimen record from Texas has been published hitherto, and Col. L. R. Wolfe has kindly advised us (in litt.) that he knows of none. L. Wolf (1961. *Auk*, 78:258) reported a specimen, without locality data, taken 9 May 1938, believed probably from Matagorda County, Texas, on the basis of the sedentary habits of the collector. On 10 May 1966 Richardson collected a Yellow-green Vireo at Ingleside, San Patricio County, Texas. The bird, taken from a mist-net, was a female (ovary  $6 \times 2$  mm); weight 16.51 g. In all features—wing length (78 mm flat), primary formula (ninth shorter than sixth), strongly yellow under tail-coverts and flanks, and facial markings rather indistinct (as compared with those of *V. olivaceus*)—the specimen seems typical of *V. flavoviridis*. The population of eastern Mexico (with which the specimen agrees) is considered the same form found in Central America, nominate *flavoviridis*, a highly migratory bird "wintering" in South America. B. L. Monroe, Jr. (1959. *Auk*, 76:95) has reported a specimen secured and another observed on 4 and 11 May 1958 at Pensacola, Florida. It is of interest that all specimen records north of Mexico, with one exception, relate to birds taken in May. Some authors regard the Middle American *V. flavoviridis* complex as conspecific with *V. olivaceus*, the Red-eyed Vireo (Zimmer, 1945. *Amer. Mus. Novit.*, no. 1127:1-3). Indubitably they are very closely allied, as are also the West Indian *V. attiloquus* and the South American *V. chivi* complexes, each of which includes several subspecies. It is a matter of opinion whether these complexes are best merged into one wide-ranging polytypic species or considered allopatric representative species of a super-species (see Hamilton, 1962. *Condor*, 64:40-68; Eisenmann, 1962. *Condor*, 64:506-507). We are indebted to C. T. Collins for calling attention to certain literature.—EUGENE EISENMANN, *American Museum of Natural History, New York, New York 10024*; JAMES I. RICHARDSON, *Department of Zoology*, AND GEORGE I. CHILD, *Institute of Ecology, University of Georgia, Athens, Georgia 30601, 21 April 1967.*