The basis for the absence of Hermit Thrushes from the outer islands is not clear, but it parallels the absence of certain warblers characteristic of spruce forests (Morse, Ecology, 52:216–228, 1971). In that case, however, forest-edge species occur on the smallest islands supporting warblers (Myrtle, Dendroica coronata, and Parula, Parula americana, Warblers); in the case of thrushes the species typical of forest interiors (Swainson's) is the one present. The warblers found on the smallest islands are socially subordinate species. Inadequate data exist upon social interactions of Hermit and Swainson's Thrushes to establish clearly the existence of a hierarchy. I have seen only two encounters between these two species; in both cases Hermit Thrushes supplanted Swainson's Thrushes. Dilger (Auk, 73:313-353, 1956) does not report any interactions between them. However, the habitat relationships of the two species are similar to those of Wood Thrushes and Hermit Thrushes and Wood Thrushes and Veeries, where clear social hierarchies exist (Morse, Wilson Bull., 83:57-65, 1971). These observations suggest that Swainson's Thrush is socially subordinate to the Hermit Thrush. The information thus supports the argument that interspecific social relationships may be a major determinant in deciding what species will occur in any given habitat. This interpretation is consistent with predictions made elsewhere (Morse, Annu. Rev. Ecol. Syst., 2: 177-200, 1971) that socially subordinate species will generally exhibit greater plasticity than social dominants.

These observations were made while conducting research sponsored by the National Science Foundation (GB-6071).-DOUCLASS H. MORSE, Department of Zoology, University of Maryland, College Park, Maryland 20742, 18 November 1971.

Breeding Status of the Purple Gallinule, Brown Creeper, and Swainson's Warbler in Illinois.—In view of the program to revise the American Ornithologists' Union's 1957 Check-list of North American Birds, the following comments on several species in Illinois seem pertinent.

Purple Gallinule (*Porphyrula martinica*).—In 1963 this species nested and raised young at Lake Mermet, Massac County (Waldbauer and Hayes, Auk, 81:227, 1964) the first known instance of breeding Purple Gallinules in Illinois. However, in compliance with the demands of boaters and fishermen, the water plants that made Lake Mermet a suitable nesting locality for gallinules were removed during early spring of 1964. Gallinules reappeared at the lake soon after this occurred (John Schwegman, pers. comm.) but departed without attempting to nest. Purple Gallinules are not known to have nested in Illinois since.

Brown Creeper (*Certhia familiaris*).—The 1957 A.O.U. Check-list does not mention this species as a breeding bird in Illinois, which in the central and southern portions of the state it undoubtedly is. Kendeigh (Audubon Bull., 153:19, 1970) cites various bird watchers who report recent summering creepers from Piatt County southward to the Ohio River-Mississippi River confluence near Cairo; one such report refers to a nest with young.

I collected (W.G.G. No. 2254) a heavily molting juvenile female in a hemlock grove near Cobden, Union County, on 20 August 1968. The bird exhibited a nearly wholly unossified skull and no conspicuous fat deposits. Since the molt of young creepers is completed prior to the fall migration and the migrants do not arrive in Union County before the first week of October, the August juvenile strongly indicated the presence of a local breeding population. Not surprisingly, then, a bird-banding project at Crab Orchard Lake Wildlife Refuge, Williamson County, which is close to Union County, yielded a creeper with a brood patch in 1970 and another in 1971 (Kleen and Bush, Amer. Birds, 25:750-753, 1971), while on 28 May 1971, I observed paired creepers near Pine Hills Field Station, Union County.

Creepers probably colonized southern Illinois long ago, as indicated by Otto Widman's discovery (fide Pickering, Migrant, 8:49–50, 1937) of several nesting specimens in the cypress swamps of southeastern Missouri in 1894 and 1898 (records not heeded in the 1957 AOU Check-list). Our Illinois birds seem adherents of the Missouri pattern, being a handful of birds scattered widely about in the floodplain forest and cypress-tupelo swamps.

However, it should be noted that in the eastern United States, the Brown Creeper appears at present to be expanding its nesting range southward and downslope in mountainous regions (Hall, Redstart, 36:98–103, 1969); hence all or a proportion of our Illinois birds may be participants in this phenomenon.

Swainson's Warbler (Limnothylpis swainsonii).—Of the various accounts of summer occurrences of Swainson's Warbler in Illinois (Ridgway, Bull. Nuttall Ornithol. Club, 4:163, 1878; Howell, Auk, 27:216, 1910; Gross, Auk, 25:225, 1908; Hardy, Wilson Bull., 67:60, 1955; Brewer, Audubon Bull., 106:9–11, 1958), none provides unequivocal evidence of breeding. An adult female that I obtained accidently in a tree-shaded canebrake along Cave Creek in the Shawnee National Forest near Pomona, Jackson County, on 8 August 1966, is such evidence, the bird exhibiting a brood patch; and more recently even nests have been found and young observed (see below).

The Cave Creek birds exist at the northern limits of the range of their own species and of the cane (*Arundinaria*) with which the distribution and nesting of Swainson's Warbler appear closely correlated, except in the Appalachian Mountains (see Meanley, Natural History of Swainson's Warbler. N. Amer. Fauna 69, 1971, for a fine discussion of this and related data).

John William Hardy (op. cit.) who with Richard Brewer first detected singing males at Cave Creek in 1951 and revisited the site often during the early fifties, described the canebrake as "extensive," a statement no longer accurate because of reduction of some cane stands and elimination of others. When Hardy introduced me to the area in 1966, the canebrake was more or less as he remembered it, though a logging operation threatened the forest canopy along the creek. The logging largely has ceased; but during the past five years almost all large canes have been cut down by men collecting cheap fishing poles and beanstalk supports. Today the two largest stands of cane include fewer than 300 sq meters of ground each and contain almost no canes greater than 1.5 cm in diameter at the base or 2.5 meters in height. One dense cane thicket through which Hardy and I forced our way with some difficulty consists now of only scattered thin-stemmed plants. Fortunately, an agreement to rescue this canebrake from further dismemberment has been worked out between the property owner (U. S. Forest Service) and the Department of Zoology at Southern Illinois University.

The Swainson's Warbler population at Cave Creek varies in size from a single pair in some years (see Hardy, op. cit.; Brewer, op. cit.) to two or at most three pairs. They arrive in early May and I have seen bob-tailed fledglings in late June and large fledglings still being fed by adults in early August. In 1971 I found two nests; each was located in cane; one, abandoned prior to egg deposition, has been added (along with the skin of the female warbler mentioned earlier) to the collections of the Museum of Zoology at Southern Illinois University. This nest agrees in its measurements and construction with several of those described by Meanley, and is very similar in appearance to the photographed example shown in Meanley's figure 25.

The closest avian associates of Swainson's Warbler at Cave Creek include not only

all the species listed as associates by Meanley but also the Indigo Bunting (*Passerina cyanea*), a few of which nest in cane at Cave Creek and hence perhaps compete with Swainson's Warbler for nesting sites.

As Meanley does not mention the response of Swainson's Warbler to its taped voice, I think it may be useful to know that, at times at least, both males and females are strongly attracted by the recorded notes of the characteristic male song. For example, during May, 1971, Charles T. Clark, playing the Pennsylvania-taped [= Maryland.--Ed.] song from the Peterson Field Guide Record Series, repeatedly succeeded in drawing a pair of these warblers into clear view at Cave Creek.

I thank the Pine Hills Field Station and the Department of Zoology of Southern Illinois University for financial support in 1971.—WILLIAM G. GEORGE, Department of Zoology, Southern Illinois University, Carbondale, Illinois 62901, 15 November 1971.

LIFE MEMBER



Lovett B. Williams, Jr. of Gainesville, Florida has recently become a Life Member of the Wilson Society. Mr. Williams, who is a wildlife biologist for the Florida Game and Freshwater Fish Commission, is a graduate of Florida State University and holds a Master's degree from Auburn University. His work with the Commission has involved mostly the study of the biology and management of the wild Turkey, but he has also been concerned with studies on the Sandhill Crane and the Brown Pelican. He has published a number of technical papers on the Turkey as well as several general ornithological papers, and some popular conservation articles. Mr. Williams is currently President of the Southeastern Section of the Wildlife Society, as well as being a member of the AOU, the AAAS, the Ecological Society of America, and several other conservation organizations. He is married and has one child.