

GENERAL NOTES

More Returns from the Guanica Forest, Puerto Rico.—A recent paper (Faaborg and Winters, *Bird-Banding* 50:216–223, 1979) summarized the results of seven winters of banding in the seasonally dry Guanica forest of southwestern Puerto Rico. Further netting was done in this area in January 1980. Due to hurricane David in the fall of 1979, the area was lush and green, although resident bird populations were rather low. Only one of the 16-net lines was operated for a 3-day period, but a number of interesting recaptures of residents and winter residents were recorded.

Perhaps due to the relatively low population levels, only 9 recaptures occurred among the 69 resident birds caught. These included 3 Red-legged Thrushes (*Mimochichla plumbea*), 2 Pearly-eyed Thrashers (*Margarops fuscatus*), 2 Bananaquits (*Coereba flaveola*), 1 Puerto Rican Vireo (*Vireo latimeri*), and 1 Adelaide's Warbler (*Dendroica adelaidae*). All had been banded in January 1978 except for 2 of the Red-legged Thrushes. One of these had been banded in January 1975 and the other in June 1973 (6 years and 6 months earlier). These exceed the known longevity record for this species.

Of the 19 winter resident warblers captured, 5 had been banded in previous years. Two of the 8 Black-and-white Warblers (*Mniotilta varia*) and 2 of the 3 Ovenbirds (*Seiurus aurocapillus*) captured were banded in this location in 1978. A Prothonotary Warbler (*Protonotaria citrea*) banded originally in 1976 and recaptured in 1978 was captured again just one net away from its original banding site. This individual was the first ever recorded returning to a winter area and this new observation suggests that it is strongly attached to this location. No recaptures were recorded among the 4 American Redstarts (*Setophaga ruticilla*), 2 Prairie Warblers (*Dendroica discolor*), and 1 Parula Warbler (*Parula americana*) netted, although many individuals of these species have been banded here in previous years.

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The Ingestion of Grit by Nestling Barn Swallows.—The ingestion of grit by various bird species is well documented, particularly for granivorous and herbivorous species. Grit particles aid in the digestion of organic nutrients (Fritz 1937, Meinertzhagen 1954, Scott et al. 1962) and provide a source of essential soluble minerals (Hill 1971). Accounts of grit ingestion among wholly insectivorous species are sporadic. Jenkinson and Mengel (1970) discussed grit ingestion within the Caprimulgidae, suggesting that grit aids in the mechanical digestion of chitinous exoskeletons of beetles (Coleoptera) which form a large part of their diet. Hirundinids, like caprimulgids, are wholly insectivorous and feed on similar orders of insects (Beal 1918, Bent 1942). Barlow and Klaas (1963:439) mention swallows picking up bits of gravel from road surfaces, presumably for grit. Brown (1976) recorded Purple Martins (*Progne subis*) picking up grit material and suggested a similar function.

The purpose of this paper is to document and discuss grit selection among Barn Swallows (*Hirundo rustica*) nesting in central Washington. Dead nestling Barn Swallows were removed from nests after periods of inclement weather during 1976–77 in the vicinity of Ellensburg, Washington. These were aged (Barrentine 1978), preserved in 10% formalin, and later analyzed for stomach content by separating grit material from insect remains. Grit particles were air-dried and then separated on the basis of color (light, dark, transparent), size (selectively sieving using U.S. Standard Sieve Series, W. S. Tyler Co.,