

**An unusual habitat for Purple Martins.**—The Purple Martin, *Progne subis*, is probably most commonly thought of, at least in eastern North America, as a species nesting in cavities provided by man. But, like other species that have come to be largely dependent on man for living accommodations, martins originally must have utilized something other than an urban habitat. Sprunt (*in Bent, U. S. Natl. Mus., Bull.* 179: 490, 1942) states that: "Before the advent of the white man the martin used natural cavities of trees and cliffs for nesting sites." Roberts (*Birds of Minnesota*, vol. 2, Minneapolis, Univ. Minnesota Press, 1932; see p. 55) reported a large colony breeding under boulders on islands in a lake in Minnesota. In the western United States, it is well known that martins nest almost exclusively in natural cavities and make little use of the few units provided by man. Except in much of the eastern United States and Canada, Purple Martins have probably seldom encountered "subsidized housing." In Baja California, for example, Grinnell (*Univ. California Publs. Zoöl.*, 32: 188, 1928) reported martins nest "in either giant cactuses, palms, or coniferous trees, according to availability." Whatever the nest site, however, martins are associated in our minds with a good supply of insect food, frequently with open water, and in non-urban habitats usually with wooded situations if not with forest.

It was thus with considerable surprise that on 28 June 1964 we encountered a colony of about 50 Purple Martins (*P. s. hesperia*) on Cayo Island, Baja California (Figure 1). This islet, off the southwest end of San José Island in the Gulf of California, is a guano-covered rock approximately 1,500 feet long and 300 feet wide. The scanty vegetation is mostly cactus less than three feet high. It is a nesting place for Western Gulls, *Larus occidentalis*, and Craveri Murrelets, *Endomychura craveri*, and a home for fish-eating bats, *Pizonyx vivesi*. Brown Boobies, *Sula leucogaster*, and Magnificent Frigatebirds, *Fregata magnificens*, roost on the rock in the non-nesting season.



Figure 1. Male Purple Martin on guano-covered Cayo Island, Baja California. Photograph by R. T. Orr.

The martins flew in small groups and pairs, the latter often alighting together. Many flew in to and out from crevices under the ledges and boulders on the steep sides of the island. Five birds were collected. The three males had testes measuring  $14 \times 8$ ,  $15 \times 8$ , and  $15 \times 9$  mm, and all had cloacal protuberances. The ovary of one female measured  $10 \times 5$  mm, with ova up to 1.5 mm in diameter. Neither female had a brood patch. None of the birds was more than slightly fat.

On 29 and 30 June 1964, Orr saw a group of 30 to 40 martins on Los Islotes (Figure 2), a group of rocks at the north end of Isla Partida (Espiritu Santo), some 20 miles south of Cayo, where he was observing a colony of California sea lions, *Zalophus californianus*. The behavior of these birds was very similar to that noted on Cayo Island. The crevices into which they went were high up in chimney-like columns of rock.

Lamb (*Condor*, 29: 157, 1927) reported that martins first arrive at Cape San Lucas, on the southern tip of Baja California, in June, and that he found large young in the nest in mid-September in La Paz. The dates of the insular occurrences reported here fit well enough into this schedule to suggest that the martins on Cayo and Los Islotes may be nesting colonies. The reproductive condition of the birds examined and the behavior of the flocks further suggest that breeding was in the very early stages. Observations in July or August will be necessary to determine with certainty the status of the Purple Martins on these islands.

Two features of the environment make one wonder if the martins could nest successfully here. First is the seemingly limited food supply. Insects were not particularly abundant at the time of our visit, nor on the occasion of a visit 17 April 1962. The stomachs examined were nearly empty; the small amount of insect material found in them appeared to be remains of small black beetles. It is extremely difficult, however, to determine the extent of the insect population on such short visits, and we did



Figure 2. Los Islotes, in the Gulf of California, Baja California. Photograph by R. T. Orr.

not sample the insect fauna. Perhaps more important is the lack of fresh water nearby, assuming that the martins actually need fresh water. There is no open water on the larger islands near these colonies, and even on the peninsular mainland, several miles distant, water holes are rare. R. F. Johnston (pers. comm.) has noted Purple Martins nesting on the coast of Sonora in the absence of open fresh water.

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**The gender of the fringillid genus *Pinicola*.**—Some time past, the opinion was expressed by the writer (W. E. Godfrey, *Natl. Mus. Canada, Bull.* 172: 107, 1961) that the generic name of the Pine Grosbeak, *Pinicola* Vieillot, should be treated as feminine in gender, but at the time the reasons for this were not given in detail.

Shortly afterwards, several interested persons wrote to me expressing opposite views, and at least one recent publication (W. E. C. Todd, *Birds of the Labrador Peninsula and adjacent areas*, University of Toronto Press, Toronto, 1963; see p. 649) also adopted the view that *Pinicola* is masculine. The A.O.U. *Check-list of North American birds* (5th edit., 1957) is not consistent in its treatment of the gender of *Pinicola*, using feminine endings for several adjectival subspecific names, but a masculine ending for another, *eschatosus* Oberholser. Actually, the principle involved far transcends the present case, because similar Latin compound nouns ending in *cola* are widely used in zoology, and the treatment of them all as of masculine gender would entail much confusing (and in the writer's opinion, unwarranted) emendation.

There exists among zoologists, and botanists too, a widely-held opinion that some inflexible rule decrees that *all* Latin compound nouns ending in *cola* must be treated as of masculine gender. Evidently the trouble here is a matter of mistaking the exception for the rule. *Agricola* (farmer) is an exception, cited by every elementary Latin grammar, to the usually feminine gender of first declension nouns. It does not necessarily follow, however, that *all* other similar nouns must be masculine. Similar nouns, with classical usage to establish their gender, are evidently not very numerous, but all Latin dictionaries consulted by the writer give *monticola* as of common gender; *Harper's Latin dictionary* gives *paludicola* as of common gender also. Clearly, then, such nouns may be of variable gender.

Article 30a(i) (2) of the *International code of zoological nomenclature* (London, Intern. Comm. Zool. Nomencl., 1961) states, "A noun of variable gender, masculine or feminine, is to be treated as masculine, unless its author states, when he first publishes the name, that it is feminine, or so treats it in combination with an adjectival specific name."

In the case of *Pinicola* we must consult Vieillot, its original author, for an indication of its gender. Vieillot (*Hist. nat. oiseaux Amér. Sept.*, vol. 1, 1807 [1808], p. iv) named the single species concerned *Pinicola rubra*, thus establishing the feminine gender of *Pinicola*. The subspecies name *eschatosus* Oberholser should therefore be emended to *eschatosa* to conform with the feminine gender of its genus, *Pinicola*.—W. EARL GODFREY, *National Museum of Canada, Ottawa, Ontario*.