

**Waterfowl wintering in the Marshall Islands, southwest Pacific Ocean.**—From 20 to 30 July 1960, I flew to the southwestern Pacific Ocean as a consultant to personnel of the Pacific Missile Range Bio-Science Office.

R. H. Baker (*Univ. of Kansas Publ., Mus. Nat. Hist.*, 3: 15, 1951) describes the Marshall Islands as consisting of 29 atolls and 5 coral islands without lagoons arranged in two chains, the Ralik and Radak, which extend from the northwest to the southeast. He mentions that there are no volcanic rocks exposed in these islands.

All of the islands that I saw in the Marshall group were low, rarely more than seven feet above sea level, originating from coral formations, often in a typical atoll arrangement which included a ring of small islands surrounding a saltwater lagoon several miles across. I observed no freshwater lakes or marshes, so there would be few freshwater aquatic plants to furnish large supplies of typical winter foods for waterfowl.

I was surprised, therefore, to learn that over 200 waterfowl were seen during the winter of 1959–1960 at Kwajalein in the Marshall Islands by W. W. Fennell, M. D., who was stationed there. The waterfowl, which included Gadwalls (*Anas strepera*), Mallards (*Anas platyrhynchos*), Green-winged Teal (*Anas carolinensis*) or Common Teal (*Anas crecca*), Pintails (*Anas acuta*), and Shovelers (*Spatula clypeata*) arrived in September, 1959, and remained until the last of February, 1960. Dr. Fennell (a confirmed waterfowl hunter from South Carolina who knows the species of waterfowl well) and his son shot birds from the wintering flocks and he had a Shoveler in his freezing locker at the time that I was there.

Dr. Fennell considered the Gadwall the most numerous species present that winter. He saw several Pintails and two flocks of Mallards consisting of about 12 birds each, and about 75 teal in one flock.

The beaches and bays abound with sea animals, perhaps furnishing the food supply for these birds, which may have flown southwest from Alaska or south from the Aleutian Islands, passing through the Hawaiian Island chain.

The Gadwalls and Mallards would seem to be the first recorded in Micronesia and the Shoveler the first from the Marshall Islands.

Baker (*op. cit.*) records very few waterfowl from Micronesia: the Australian Gray Duck (*Anas poecilorhyncha pelewensis*) from the Micronesian Islands of Babelthup and Peleliu, but not the Marshall Islands; the Common Teal (*Anas crecca crecca*) from the Mariana Islands, but an uncommon winter visitor to Micronesia; the Green-winged Teal (*Anas [crecca] carolinensis*), once, in the Marshalls in 1901; the Pintail from Pagan, Guam, and the Palau Islands, and in October, 1899, in the Marshalls. Widgeons (*Mareca penelope*) may be occasional winter visitors to Micronesia; Shovelers have been taken in Micronesia but not previously in the Marshall Islands; Canvasbacks (*Aythya valisineria*) were seen in the Marshalls in October, 1899, and May, 1900.

Birds that I observed in the Kwajalein Atoll from 25 to 27 July 1960 included about 12 Reef Herons (*Demigretta sacra*) of the three color phases, white, white and black (mottled), and dark gray; 1 Fairy Tern (*Gygis alba*); 30 Ruddy Turnstones (*Arenaria interpres*) on the runway at Kwajalein and another flock on another island in the atoll; 3 Wandering (?) Tattlers (*Heteroscelus incanum*) on Kwajalein, and 1 on Guegegue Island in the Kwajalein Atoll complex; 2 Sooty Terns (*Sterna fuscata*) or Gray-backed Terns (*Sterna lunata*) along the beach at Kwajalein.

If my identifications of the Wandering Tattlers were correct, then these were earlier migrants than one would expect, according to Baker (*op. cit.*: 147). On the other hand, if these birds were Gray-tailed Tattlers (*Heteroscelus brevipes*), then they were

the first ones to be seen in the eastern part of Micronesia (Baker, *op. cit.*: 145).—CHARLES F. YOCOM, *Division of Natural Resources, Humboldt State College, Arcata, California.*

**Activities of a Mallard (*Anas platyrhynchos*) brood after hatching.**—It is generally assumed that after a Mallard brood leaves the nest it will not return. Relatively little seems to be known about what happens to a brood just after leaving the nest. The following information may therefore be of some value.

While making observations on the behavior of Trumpeter Swans (*Olor buccinator*) at Delta, Manitoba, I observed a Mallard brood just after it first left the nest on 26 July 1963 at 1515 hours. I knew the location of the nest, which was situated on a small artificial island, six feet (2 m) in diameter. The brood left the island at a spot where a brood of nearly full-grown Mallards was feeding. Two of the newly emerged ducklings were attacked, with bill jabs, by two members of the older brood as soon as they came within striking distance. This alarmed the hen. She gave loud, drawn-out quacks, and headed back to the nest. Within five minutes all ducklings and the hen had apparently returned safely to the nest, since no peeping of ducklings could be heard. Continuously until 2200 the hen and brood remained on the island. A check at 1900 disclosed that the hen and her brood were sitting two feet from the nest.

On 27 July, I made observations between 0730 and 1150. At 0855 the hen was leaving the island with her brood. At 0858 they passed the brood of nearly full-grown Mallards (the only other brood on the pond), which was loafing at a distance of less than three feet. The younger brood was not attacked. Again at 0944 the loafing brood was passed at the same distance, but no attack took place. At 0950 the young brood returned to the island and at 1010 they were back on the nest, being brooded by the hen. At 1012 the brood left the island, but returned at 1052 and settled down by 1055. A check at 1105 showed the brood again on the nest. At 1136 the brood was on the pond. On 28 July at 0730, the brood was seen loafing on the island, and on 29 July at 0730 the brood was seen leaving the island. These observations suggest that perhaps again some time was spent on the nest. During the balance of 29 July, the brood was seen either on the pond or on land and no sign of friction with the older brood was observed.

These observations indicate that a newly emerged brood of Mallards is (1) initially attacked but subsequently tolerated by an older, resident brood, and that (2) it may return to its nest at least several times after emergence.—A. DE VOS, *Department of Zoology, Ontario Agricultural College, Federated Colleges, Guelph, Ontario, Canada.*

**Some records from Bermuda affecting the A.O.U. Check-list.**—In an earlier note (*Auk*, 75: 359–360, 1958) I reported a record of the House Martin (*Delichon urbica*), and the breeding of wild Canaries (*Serinus canarius*) on Bermuda. The following additional records, based on specimens and supplementing the A.O.U. Check-list (fifth edit., 1957), have been obtained since 1958. The specimens concerned are now in the collections of the American Museum of Natural History in New York.

Dotterel (*Eudromias morinellus*).—I took a single specimen (B187 in my catalogue), male, testes 4 mm in length, in breeding plumage and just beginning to molt, bearing no subcutaneous fat and slightly emaciated, on Riddell's Bay Golf Course, Warwick Parish, on 16 September 1958. The condition of the bird suggested a long overwater