

Four of the birds counted were flushed out of the beach morning glory which thickly covers patches which are acres in extent; these birds only flushed when accidentally approached within four feet or less. The remainder of the birds counted were found along the shores of the lagoon and were passed without flushing, at least for any distance. These facts make it most unlikely that any of these ducks were counted more than once, and there may have been ducks in the beach morning glory that were not flushed. Hence, these counts of the ducks of Laysan are undoubtedly less, by an unknown amount, than the actual number of birds on the island.

At the present time the population of the Laysan Duck appears to be on the increase. Fisher (Bull. U. S. Fish Comm., 23 (pt. 3): 769-807, 1903) estimated the total population to be less than 100 birds at the time of his visit in May of 1902. Munro, ('Birds of Hawaii,' Tongg Publ. Co., Honolulu, 1944) gave the following estimates made by various observers:

| Year | Number of Ducks | Observer |
|------|-----------------|----------------|
| 1911 | 6 | Professor Dill |
| 1925 | 20 | Dr. Wetmore |
| 1936 | 11 | Mr. Coultas |

The number observed during the visit of the MV Hugh M. Smith exceeds all previous estimates except that of Fisher. The apparent increase in the duck population, as indicated by these counts, may be due to the comparative infrequency of visits during the last decade and also to the restoration of the vegetative cover following the disappearance of rabbits from the island. The description and photographs of Laysan Island given by Fisher for 1902 would fit the conditions observed at the time of my visit, which was not the case for the other observers listed.

The Laysan Finch, *Telespiza flavissima*, is yet quite abundant. No examples of the Laysan Rail, *Porzanula palmeri*, were seen, however.—VERNON E. BROCK, Board of Agriculture and Forestry, Honolulu 1, T. H.

Rat Snake Overpowers Red-shouldered Hawk, *Buteo lineatus*.—On the morning of December 3, 1950, Mr. J. M. Heiser, my son Stephen, his friend William Green, and I saw a Red-shouldered Hawk lying behind a small bush within the area of the San Jacinto Battlefield near Houston. It was on its back, its feathers ruffled, its wings half-extended and relaxed, its legs limp. The mouth and eyes were open; it was not struggling. Only on second glance did we see that a large snake was wrapped tightly about the hawk's neck. Holding the hawk's legs, I removed the snake. The thick of its body formed one loop about the bird's neck, and its tail region formed another. I had to exert considerable force to release the loops. When the hawk was free, it hung limp in my hand for a few seconds, and then started struggling. I released it, and it flew away, apparently not seriously injured. The snake proved to be a Lindheimer's Rat Snake, *Elaphe obsoleta lindheimeri*. It was just over four feet long and nearly two inches in diameter. We could find no injury on its body, and it was still full of energy. We released it, and after a few threatening gestures in our direction, it crawled away. I have no doubt that, without our intervention, the hawk would have been dead in a few more minutes. Since the Red-shouldered Hawk preys on snakes, and the Lindheimer's Rat Snake sometimes preys on birds, one wonders which animal was the aggressor in this encounter.—GEORGE G. WILLIAMS, *The Rice Institute, Houston, Texas*.

Aerial Feeding of Duck Hawk, *Falco p. anatum*.—During the summers of 1949 and 1950, the writer has had exceptional opportunities to observe the tremendous bat flights which issue from the largest bat cave in the United States, the Ney Cave,

Medina County, Texas (Edwards Plateau). Some 13 trips have been made there, and flights checked carefully. Other observers at Texas bat caves, whether interested in the bats themselves, or the caves which harbor them, have commented on the predation on these mammals by certain birds of prey. Several of them mention the Duck Hawk. However, as far as the writer has been able to find, none refers to the habit of this superb falcon of occasionally feeding on the wing.

While many instances of predation were noted in 1949, such habit was not observed by the writer until 1950. The method of securing prey varies. At times, the falcon will dive headlong into the stream of bats in a spectacular stoop; again it may fly straight through the "living river," and emerge with a bat in the talons. Also, at times, it flies parallel to them, then swerves sideways, makes a "zoom" and reaches outward and forward with the talons, so seizing a bat. One was seen in early August to miss such a strike then, almost instantaneously, reach sideways with the right foot, and seize a bat.

In at least half a dozen instances during 1950, the falcon was seen to begin feeding on the bat at once. Reaching the foot forward and the head downward and back, it devoured the edible portions quickly, releasing the wings which fluttered downward. During this manoeuver the falcon's wings were at right angles to the body, and the bird was soaring. It was exactly the technique of the Swallow-tailed Kite, *Elanoides forficatus*, in aerial feeding.

Predation by such birds at Ney Cave has been recorded by D. G. Constantine "Great Bat Colonies Attract Predators" and K. E. Stager "Falcons Prey on Ney Cave Bats" (National Speleol. Soc., Washington, D. C., Bull. 10: 100, 98, April, 1948). The bat preyed upon is the Mexican Free-tailed Bat, *Tadarida mexicana*. The population of Ney Cave has been estimated at between 20 and 30 million bats. It seems rather obvious that raptorial predation on these animals at this locality is inconsequential, though regular. The writer has never witnessed aerial feeding of the Duck Hawk previously, though he has seen it make many kills.—ALEXANDER SPRUNT, JR., *National Audubon Society, Charleston 50, S. C.*

Food of the Peregrine Falcon, *Falco peregrinus*, in Interior Alaska.—On September 24, 1950, a Peregrine's aerie was discovered on some bluffs overhanging the Tanana River near the old town site of Chena, Alaska. A single, adult falcon, probably a male to judge by its small size, was seen to fly down the river and perch on one of the bluffs. Another trip was made to this site on September 30, and on subsequent days, but the Peregrine was not seen again, and it was assumed that the bird had migrated.

Investigation of the bluffs revealed a number of feeding shelves and scrapes that were well-covered with droppings, pellets, and the remains of prey. This seemed to indicate that a family of Peregrines had occupied the bluffs during the past summer, and in as much as the Indians living along the river are acquainted with a pair of Peregrines that has nested in past years on some bluffs about five miles farther down the river, this seems even more likely.

The remains lying about the bluffs were collected on October 1, and the data from these are presented in the accompanying table. Unfortunately it is not known how many Peregrines occupied the bluffs during the breeding season or how long the material had been accumulating below the aerie. The data do, however, give some interesting information on the relative use of various birds as food by the Peregrine Falcon.