

reported several summer records of the American Rough-leg in Lincoln County, Montana, gathered over a nine-year observation period. He also reported seeing two young in flight in Flathead County on August 8, 1922. Lincoln County is adjacent to northern Idaho. Although more conclusive evidence may be desirable, the indications are that the American Rough-leg breeds in western Montana. It is quite likely that it also breeds in northern Idaho.

In the past two years I observed the American Rough-leg to be a winter resident in the south-central portion of Idaho. In this period the following sight records were accumulated from southern Cassia County, Idaho, and northern Boxelder County, Utah: At Standrod on the Utah-Idaho border, 3 on October 30, 1949, and 1 on December 27, 1950; 2 miles south of Elmo, Idaho, 2 on December 4, 1950, 1 on December 26, 1950, and 2 on January 28, 1951; three were found dead along the highway 2 miles east of Strevell (near the Utah-Idaho line) on December 3, 1950; Park Valley, Utah, 8 on January 8, 1950, 1 on December 5, 1950, and 1 on January 30, 1951.

The Ferruginous Rough-leg is considered by Arvey (*loc. cit.*) to be an uncommon migrant. In its range it is confined primarily to western North America and breeds from southern Canada to the southern United States (see Hellmayr and Conover, *op. cit.*: 93). On May 27, 1950, a nest of this species was shown to me by Mr. Robert J. Erwin in Cassia County, Idaho, about 12 miles west of Strevell and 2 miles west of Standrod. The nest was located about 12 feet from the ground in a juniper tree (*Juniperus utahensis*) and contained two downy young and an infertile egg. The sparse juniper stand in which the nest was found is situated between the Raft River Mountains of Utah and the Albion range of Idaho. These two mountain ranges are separated by approximately 10 miles of sage brush (*Artemisia*). Stands of juniper extend from each mountain range down into the sage brush areas, thinning out as they do so. Ranches and farms are located on the choicer foothill areas where hayfields supply the hawks with an abundance of small rodents. Much of southern Idaho has conditions such as these which provide an excellent habitat for this bird. In my field work in Idaho during the past two years I have made numerous other summer observations of the Ferruginous Rough-leg in this type of habitat, which is so abundant in southern Idaho.

From the evidence presented, it would therefore appear that while the American Rough-leg may possibly be a summer resident in northern Idaho, it is certainly a common winter visitant to sections of southern Idaho. The Ferruginous Rough-leg in Idaho is a common summer resident, at least in the southern portion, instead of an uncommon migrant.—RICHARD D. PORTER, *Department of Vertebrate Zoology, University of Utah, Salt Lake City, Utah, March 7, 1951.*

Mourning Doves Raise Triplets.—A study of table 19 in Grinnell, Bryant and Storer's, *Game Birds of California* (1918:594) shows one set of three eggs laid by Mourning Doves (*Zenaidura macroura*) out of sixty-six definite nest records from the state of California. Tyler (*Pac. Coast Avif. No. 9, 1913:36*) states that "after examining hundreds of nests" he can only recall two in which the complement deviated from two in number. A. K. Fisher (*N. Amer. Fauna No. 7, 1893:33*) states that at Lone Pine, Inyo County, a nest was found during the first part of June which contained three young. The paucity of records of Mourning Doves successfully raising three young in a nest seems to make the following account of interest.

For several years a pair of Mourning Doves has nested in a Norfolk Island Pine (*Araucaria excelsa*) in our front yard in Hollywood, California. The tree is about 40 feet high. Cold weather causes the needles to turn brown and subsequently to drop to the ground when the wind blows. Many of these dry brown needles lodge on the foliage near the junction of the limb with the trunk of the tree. This makes a satisfactory platform for the doves' loosely constructed nest. The early nests have been successful. Those later in the summer are usually destroyed by Scrub Jays (*Aphelocoma coerulescens*). The favorite nesting site has been on the side of the tree toward the house and it can easily be observed from an upstairs window.

This year in the middle of April it seemed to us that the nest was quite full of doves but we thought nothing of it until three young doves walked out on a limb and flew to the ground under the dining room window where they had a protected area with a border of ferns. We watched them through the window from a distance of about three feet being fed by the parents, one parent feeding all three in order at a feeding. After each feeding the three would snuggle up together as they sat on the ground. Oftentimes before the adult arrived to feed them they would walk around the small area picking at the dirt. When they were frightened, they would fly up to one of the lower limbs

of the pine tree where they waited to be fed. After being fed they sat on the limb close together. They followed this pattern of activity of flying down to the ground and then back to the tree for several days. As they gained strength, they flew around the house and perched on the limbs of an avocado tree. Here the adult fed them and often both adults would sit on the bare limb with the three young. On May 2 the young were fully fledged and flying around with the adults.—C. V. DUFF, *Hollywood, California, April 10, 1951.*

Fishing Efficiency of the Black Skimmer.—In the past fifteen years the writer has from time to time taken detailed notes on the fishing activities of several species of birds in the delta region of the Rio Grande in Cameron County, Texas. Some of the data concerning the Black Skimmer (*Rynchops nigra*) were examined recently and found to contain material that might be of general interest. Consequently, the following notes are offered in the hope that they may be of use to others making more specialized studies.

The Black Skimmer obtains its food by "skimming." The bill is held open at an angle of about 40°. Most of the mandible is immersed in the water as the bird flies along at almost exactly 18 miles per hour. The wings almost touch the water on the down stroke and the spray thrown up by the "plowing" mandible may spread over an area greater than that of the bird itself. While skimming in shallow water, mud ripples or other obstacles are frequently hit with such force that the head of the bird is jerked back rather abruptly. A less decided jerk is observed when the mandible strikes a fish. When this occurs, the bill is snapped shut and the catch is instantly raised out of the water. Very tiny minnows may be swallowed at once but the bird flies for some time with most "fingerlings." When fish of five or six inches are caught, the bird carries them (frequently pursued momentarily by other skimmers) to the shore and manipulates them on the ground until they can be properly oriented for swallowing.

The efficiency of the skimming was found to vary greatly. Birds were observed to visit a given spot repeatedly in the course of an hour although no fish were caught on any visit. When negative results were obtained after seven to ten minutes skimming, the birds usually departed; however, others might replace them at the poor location almost immediately. On the other hand, when good fishing was discovered at a place, the birds would skim for much longer periods and usually fished in the area until they had caught all the food they wanted. However, after catching one or two fish, birds sometimes left places where, at the time, there was a good school of fingerlings. No reason for such action was apparent. At times a new arrival at a good location would leave before making a catch or discovering the quality of the place. It was not discovered whether or not the same birds frequented the same places daily, but from comparative numbers present on different days it was thought quite likely that a pattern was followed by the birds and that places which proved to be good one day were visited again and again even though fish were absent most of the time. Apparently most of the places visited on any one day are unproductive.

Study areas were selected where the Skimmers worked parallel to the line of travel which could be followed by the observer. Data were recorded by an assistant while I watched with binoculars.

The maximum efficiency was observed on July 11, 1937, at the north cayo of Laguna Atascosa, 16 miles northeast of Harlingen. A small inlet which had been dry for some weeks had just been flooded to a depth of several inches by slowly rising water. The inlet was so small that the observer could keep the whole study area in the field of view at one time, and the birds could be watched so closely that it is believed that there was no chance of missing even the smallest catch. Here one fish was caught for each 6½ minutes of skimming time.

The maximum observed results for some other species were as follows: a White Pelican caught three fish in one minute; a Reddish Egret caught fifteen small minnows in three minutes, while a Least Tern fishing at the same place at the same time required four minutes to catch one fish, although several other fruitless dives were made.

While the foregoing notes were based on somewhat scattered observations, they did extend over a period of years and it is thought that the results should indicate roughly the relative efficiency of the species. If that be true, it follows that the Black Skimmer is much less efficient at fishing than wading and swimming birds such as the Reddish Egret and White Pelican and that it compares more favorably with diving birds such as the Least Tern.—L. IRBY DAVIS, *Harlingen, Texas, January 29, 1951.*