

Mechanism of feather replacement in a hummingbird.—Watson (1963, Auk 80: 486) pointed out that during natural molt in several species of birds the loss of the old feather occurs only after the feather follicle has been activated and the new feather is growing. Until the sheath of the newly emerged feather opens the old feather is presumably lost by scraping against another object. When the sheath of the new feather opens the old feather probably falls off as the sheath splits at the tip. At the time of his report, Watson noted evidence of this molt mechanism in only eight orders of birds, including Passeriformes. Subsequently, I added a further record for the passerines (Wolf 1967, Auk 84: 128). Although this method of molt probably is common among many bird species, the general lack of records makes it seem worthwhile to report instances for new groups of birds. Here I report the first record of this molt mechanism in the Apodiformes, extending the records to a ninth order.

A captive male Rivoli's Hummingbird (*Eugenes fulgens*) that I caught in Costa Rica in July 1970 was in heavy molt about the base of the bill on the throat and forehead on 28 April 1971. As in many hummingbirds (Wagner 1955, Auk 72: 286) most of these feathers began molting nearly simultaneously resulting in a large tract covered with pinfeathers in about the same stage of growth. In this same male, new feathers on the throat and forehead had grown nearly full length with the old feather still capping the new sheath (see Fig. 1B of Watson's article for a similar occurrence in *Alectoris chukar*).—LARRY L. WOLF, *Department of Biology, Syracuse University, Syracuse, New York 13210*. Accepted 13 Dec. 73.

Redhead breeding in the state of Jalisco, Mexico.—The Redhead (*Aythya americana*) has hitherto been recorded only as a winter visitor in Mexico, found in greatest numbers along the northeastern coast (Tamaulipas) and in smaller numbers along the western coast (particularly Sinaloa and Nayarit). The species is relatively uncommon in the interior (Leopold 1959, *Wildlife of Mexico*, Berkeley, Univ. California Press, pp. 186–188). The Redhead is not common south of the transverse volcanic cordillera of central Mexico, although a few winter to Guatemala (1957, Check-list of North American birds, fifth ed., Baltimore, Amer. Ornithol. Union, p. 81; Weller 1964, *J. Wildl. Mgmt.* 28: 64). The most southerly breeding location previously reported is on the California-Arizona line in the vicinity of Yuma (Weller *ibid.*). During studies of the Mexican Duck (*Anas diazi*) in central Mexico in the summer of 1973, I discovered a breeding population of Redheads on Laguna de Zapotlan (19° 45' N, 103° 30' W), approximately 100 miles due south of Guadalajara, Jalisco. These records constitute, by about 1000 miles, the most southerly known nesting for the Redhead and add a new breeding species for Mexico.

I first visited the lake on 26 April, returned eight times in the latter half of May, nine times in June, twice in mid-July, and three times in August. On 12 visits I used a boat and 3-horsepower motor to explore the lake. Other visits involved only brief inspections of one or two small stretches of shoreline. Excepting four dates in May and one in June, I saw Redheads on all visits to the lake.

In April and May I encountered Redheads as scattered pairs or small groups, and during this period the species did not seem particularly numerous on the lake. On 12 June I saw a flock of at least 100 individuals, as well as numerous scattered pairs. From mid-June until I left the region in late August, Redheads were common and conspicuous on the lake. Perhaps 200 individuals stayed there through the summer. I saw active courtship on various dates in June and July, and pairs were still common in early August.

I observed five Redhead broods. On 24 June I saw a female with two downy young, whose size and coloration indicated an age of between 1 and 2 weeks (see Weller 1957, *Wilson Bull.* 69: 5). On 2 August I found three separate females, each with one downy young that I estimated to be between 2 and 4 weeks old. On 27 August I found a female with two young that appeared to be between 5 and 6 weeks old. I discovered no nests and collected no specimens, but took photographs of adults and young whose identity as Redheads Clarence Cottam and others have confirmed.

I did not see Redheads at any other location I visited in Jalisco and adjacent states from May through August, nor am I aware of any other summer records for the species in central Mexico.

Laguna de Zapotlan is a natural lake adjacent to Ciudad Guzman, Jalisco, and lies in an agricultural valley at about 5000 feet elevation. The region is surrounded by mountain ridges, the highest peak being Nevado de Colima, a 14,000 foot volcano to the southwest. The Pacific coast of the state of Colima is 100 airline miles to the southwest. The lakebed is roughly oval in shape and comprises 4300 acres. The central 60% of the lake is open water, although it is choked with thick growths of submerged pondweed (*Potamogeton*) and waterweed (*Najas*); the margins are composed of dense stands of cattail (*Typha*) and bulrush or tule (*Scirpus*). The emergent vegetation-open water edge is often irregular, providing ideal water-cover interspersions for nesting waterbirds. The lake is shallow and grades to a depth of 5 feet at the center. The amount of lakebed that is submerged fluctuates with the seasons, shrinking to its smallest extent at the end of the dry season in mid-June, and it can vary widely from year to year depending upon the rainfall. In some years the lake is completely dry. Local people told me this last occurred 10-15 years ago. Cattle graze into the tule stands, occasionally out to a depth of 2 or 3 feet. These tules also support a local industry; the native population continually harvests them to weave into mats and similar items.

In addition to Redhead broods, I also saw on this lake two broods of Ruddy Ducks (*Oxyura jamaicensis*), several of Common Gallinules (*Gallinula chloropus*), and many of American Coots (*Fulica americana*). I strongly suspect that Mexican Ducks and Cinnamon Teal (*Anas cyanoptera*), both seen repeatedly from April through August, may nest about the lake margins.

My research in Mexico is being supported by the Welder Wildlife Foundation and the Bureau of Sport Fisheries and Wildlife. I gratefully acknowledge Kenard Baer, B.S.F.W., Albuquerque, New Mexico, and William Ziener, Ajjic, Jalisco, for introducing me to the study area. I am indebted to Karl Lueder, Chapala, Jalisco, and Ignacio Enriquez V., Ciudad Guzman, Jalisco, for assistance during my stay in the region. I thank R. A. Ryder for comments on the manuscript.—SARTOR O. WILLIAMS III, *Department of Fishery and Wildlife Biology, Colorado State University, Fort Collins, Colorado 80521*. Accepted 27 Dec. 73.

Arctic Tern in Arizona.—In the bird collection of the University of Arizona are two immature Arctic Terns (*Sterna paradisaea*) taken at a now dry irrigation water storage pond near the intersection of Ina Road and U.S. Interstate 10 just northwest of Tucson in Pima County, Arizona. One of the birds, a male, was collected by W. Bulmer on 4 September 1965 (UA 6375), and the other, a female, was collected by D. L. Burckhalter on 4 October 1968 (UA 9549).

The two specimens were identified by Roxie C. Laybourne of the Fish and Wildlife Service. In writing us of her determinations that the birds are Arctic Terns, she