

the hawk with prey, or making a kill, on about two or three days out of each week. Its prey was in every case a coot. It was seen one day stooping at the head of a domestic (Chinese) goose, but it did not actually strike the bird.—RICHARD M. BOND, *Oakland, California, December 3, 1935.*

Records of Two Species New to Arizona.—In the course of making a more detailed examination of certain species in the Thayer collection than was possible when it was first presented to the Museum of Comparative Zoology by the late Colonel John E. Thayer in the autumn of 1931, I find two Arizona records that seem to be worthy of note.

Dryobates nuttallii. An adult female in rather worn plumage was collected by G. F. Breninger at Phoenix. On the original label the month has been blotted and it is not certain whether "Jan." or June is intended, but from the worn condition of the plumage I judge it to be a summer bird. If this assumption is correct then the date of collection is June 24, 1901.

Tyrannus melancholicus occidentalis. A female taken by H. H. Kimball at Fort Lowell, May 12, 1905. This specimen is very obviously not a Couch Kingbird, *T. m. couchii*, but agrees in smaller size and in other details with a series of the race *occidentalis* from western Mexico (Sinaloa to Guerrero.)—JAMES L. PETERS, *Museum of Comparative Zoology, Cambridge, Massachusetts, June 1, 1936.*

Tribulations of Thorn-dwellers.—To explore a Cactus Wren's nest in a cholla bush seldom fails to engender speculation on the ways and means by which the birds safely build and use the structure. Such meditation associated with the prick of cactus spines does not lead to any simple answer. Surprisingly little is known about the foot-work of thorn-frequenting species that might be vital to their successful negotiation of these hazards. A part of the problem is the frequency with which animals become entangled in thorns. Is the hazard one easily surmounted or does it require constant vigilance and special dexterity? Any harmful agency such as thorns will rarely be seen in operation, for, barring mass destruction, loss to a species of bird can not ordinarily be sustained at a high rate.

During a month's field work in the Arizona desert I felt especially fortunate in four times seeing interference with the routine activity of animals by thorns or spines. A certain unworthy satisfaction also was felt that I was not the only animal being caught by these prominent features of the xerophytic flora.

One morning, the 13th of May, 1936, on Rillito Creek at Fort Lowell, Arizona, I stopped close to the nest of a Verdin (*Auriparus flaviceps*) situated in a mesquite bush. Although I neither touched the nest nor shook the tree, an adult bird, surprised at my presence, attempted to leave the nest. At the entrance it became entangled in the canopy of thorny twigs. One wing was hooked in the tangle, some of the primaries protruding outward. The bird fluttered, but made no progress in freeing itself. I moved toward it and slowly reached out, touching its wing. At that moment a final effort freed it from the twigs, but its position for some time had been extremely hazardous. Was the bird so much hurried in its departure that it failed in some detail of its customary action?

The next day, along the Rillito, a nest of a Palmer Thrasher (*Toxostoma curvirostre palmeri*) was found in a large cholla. The three young were mature enough to take notice of my approach fifteen feet away and to start moving out of the nest. Under no special coercion, they tried to run along the cholla limbs. Most young passerines at this age, though awkward, would have progressed satisfactorily through the twigs of a bush. The thrashers had evident trouble with the thorns. Many times their feet were caught, throwing their bodies forward onto the thorns. There must be some particular way of placing the feet to avoid the spines. One of the young continued on until it became badly entangled with a burr on the side of the body that would seem certain to have resulted fatally. These thrashers were in serious danger at a critical period. They had much to learn, or else they needed to develop much further in neuromotor control to escape the peril of the cholla.

Two weeks later near Picacho, Pinal County, my field companion, Mr. William L. Engels, brought in a mummified juvenal Cactus Wren (*Heleodytes brunneicapillus*) that he found impaled on thorns at the entrance of a nest. The bird was entire, not partly eaten, and it was of just the age at which young wrens first venture out of the nest. Apparently it had failed to solve the cholla problem. E. C. Jaeger in his "Denizens of the Desert" (p. 73) mentions one similar accident.

In the vicinity of Picacho were many round-tailed ground squirrels (*Citellus tereticaudus*) that frequently foraged among cholla burrs on the ground. Near camp one morning I saw, at a distance of fifty feet, a tumbling mass of cactus burrs and animal. I approached quickly and found one of these small squirrels attempting to run with three large cholla joints stuck to its body. The burrs repeatedly upset the squirrel, painfully rolling it over and setting the spines deeper. Finally it reached its burrow, ten feet away, but the burrs stuck in the entrance and the animal lay there squeaking. After I pried at the burrs with a stick, the squirrel made another effort and pulled all the cactus joints down a couple of feet to a turn in the hole. There it lay helpless. It is unlikely that it could

have extricated itself from such an entanglement.—ALDEN H. MILLER, *Museum of Vertebrate Zoology, Berkeley, California, July 7, 1936.*

Notes on Some Nests Found in Eastern Riverside County, California.—In company with Mr. W. J. Sheffler and Mr. Robert Hannum of Los Angeles, California, a trip was made to the vicinity of Blythe, Riverside County, California, in the spring of 1936. The object of the trip was the collecting of eggs of the Harris Hawk (*Parabuteo unicinctus harrisi*) and Treganza Blue Heron (*Ardea herodias treganzai*).

On April 21, 1935, a similar trip had been made and, after much difficult "slushing" through tule thickets and flooded mesquites, a nesting colony of Treganza Blue Herons was located, but all nests on that date contained young birds. A set of two hawk eggs, incubation advanced, was taken on this date, but it was not certain in our minds that the eggs were those of a Harris Hawk.

On March 21 and 22, 1936, we returned to the vicinity and found that the dead cottonwoods in which the herons had nested in 1935 were blown down. However, after a further search, a colony of about twenty-five pairs of breeding birds was found. In the short time at our disposal, we investigated about half of the occupied nests and found two nests with five well-incubated eggs, four nests with four eggs each (two sets fresh and the other two sets half incubated), and several nests containing three eggs each. The sets of three eggs taken were well incubated, proving that they were full complements. The nests were all placed in dead flooded mesquites, about ten to fifteen feet above the surface of the water, which in many places was well over our heads in depth.

While we were approaching the heron rookery, a hawk was seen to leave a nest placed in the same sort of situation as the heron nests in the dead mesquites. Upon investigating the nest, a set of seven eggs, ready to hatch, was found. We were able to observe the hawk closely and positively identify it as a Harris Hawk. This set of seven eggs appears to represent the laying of two females, for three eggs are easily picked out from the remaining four in size and shape, although all seven eggs were equally well incubated. This set of eggs is now in the collection of Mr. Sheffler. On the same day, March 22, another nest of Harris Hawk was found, containing two eggs slightly incubated, which eggs are now in my collection. These two sets and the set of two taken last year which now may be positively identified establish the Harris Hawk as a regular breeding bird in California.

Regarding the nesting of the Treganza Blue Heron in California, Mr. Sidney Peyton informs me that some years ago he found three nests placed in the tules of Salton Sea, Imperial County, all containing young birds. He attributed these nests to this race, but no specimens were taken for positive identification. A nesting female taken by Mr. Hannum at the colony which we visited has proved to be *Ardea herodias treganzai*. There is some difference in size of the heron eggs, the smallest egg measuring 62×46 mm., and the largest measuring 66×52 mm. The Harris Hawk eggs are indistinguishable in size from those which I have taken in Lower California, Mexico.

An unusual nest of a Plumbeous Gnatcatcher (*Poliophtila melanura melanura*) was found on March 21 in a mesquite near Coachella, Riverside County. The bird had used the base, feather lining and outer thorny twigs of a Verdin's nest; she had shaped it a bit to suit her fancy, but had failed miserably to uphold the standard of construction of gnatcatcher nests in general. There apparently had been no attempt made by the gnatcatcher to build her own nest, as the eggs were laid in a lining of Gambel Quail feathers, typically a Verdin trait.—J. STUART ROWLEY, *Alhambra, California, July 11, 1936.*

A Pacific Golden Plover Reaches California.—Whenever Allan Brooks visits the California Museum of Vertebrate Zoology, as he last did early this year, he never fails to find something in our collection that has escaped the notice of bird students resident here. This time it was a previously misidentified skin of Pacific Golden Plover (*Pluvialis dominica fulva*)—California-taken at that! And when once pointed out, there is no doubt about the identification.

The bird had, of course, been concealed in a series of Americans. It is no. 43999, Mus. Vert. Zool.; collected by Donald D. McLean on Bay Farm Island, Alameda County, California, January 15, 1922. It is naturally in winter plumage, and it is a close match for a specimen of *fulva* (no. 12519) taken by Miss A. M. Alexander on Molokai, Hawaiian Islands, February 12, 1910. These two *fulva* contrast with California-taken *Pluvialis dominica dominica* most conspicuously, as pointed out to me by Major Brooks, by the coloration of the lower surface; in *fulva* there is a well defined dull brownish chest area set off rather sharply against the extensively clear white abdominal area, whereas in *dominica* the lower surface is mottled grayish brown from the lower throat clear back to the lower tail coverts. In *fulva*, too, there is more extensive pervasion of clear apricot yellow throughout the dorsal surface; also this color extends dilutely over the sides of the head, and even tinges the pectoral area. There are dimensional differences, also. In *fulva* the wing is shorter, the bill longer, than in *dominica*. No. 43999, the California-taken male, gives the following measurements: Wing 166 millimeters, tail 65, culmen 24.4, tarsus 45.0, middle toe without claw 22.9. These measurements have