

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