FROM FIELD AND STUDY

Mountain Chickadees Feeding Young Williamson Sapsuckers.—On June 28, 1946, while collecting in the Sweetwater Mountains, Mono County, California, an unusual life-history observation was made. In Sweetwater Canyon at 8000 feet, I heard the constant buzzing of young birds in the distance. As I approached a large white-barked pine (*Pinus albicaulis*) two Mountain Chickadees (*Parus gambeli*) left the vicinity of a hole in the trunk. As I stood marveling at the fact that young chickadees could be heard at approximately 100 yards, a female Williamson Sapsucker (*Sphyrapicus thyroideus*) came to the tree and proceeded to feed young birds through an opening 90° around the trunk and slightly below the hole I had been watching. It thus appeared that there were two families in close proximity. But then the male sapsucker arrived and fed young, not through the hole the female had just left but through the one the chickadees had been near. Observations were becoming more confusing by the minute. Watching the tree for the next half hour, I noted that every three to five minutes either two chickadees, or a male or a female sapsucker arrived to feed young sapsuckers.

The adults and young used both openings indiscriminately. The chickadees came simultaneously, but the sapsuckers alternated in time of arrival. The chickadees' instinct to feed was being sorely tried by the violent reactions of the adopted brood. When one inserted its head in an opening, a charge by the inmates was too much to face, and the chickadee would fly to a branch nearby and then return immediately. This was usually repeated two or three times before the food was delivered.

When taken, the chickadees were carrying insect larvae one-half inch long, and the male sapsucker was providing the usual diet of ants.

Upon returning the following day to chop out the nest, I took the female sapsucker, and it, too, was carrying ants. At the first blow of the ax, two young sapsuckers popped out and flew down canyon. One was a male but the sex of the other could not be determined. The three remaining birds proved to be two females and one male.

Exposure of the interior showed how this family mixup could have occurred. An outer shell of the tree one and one-half inches thick was alive, but the center was rotten and the thin partition between the two cavities had broken away. Cavity 1 (see fig. 16) was bare, since any debris deposited here would be pushed down by the scrambling young. At the bottom of cavity 2 there was one sapsucker egg. This egg, stained brown, had a small hole in one side and was filled with dead ants. A mass of shredded bark and dead ants filled the cavity two-thirds full. Chickadees usually obtain fur for an inner lining, but this was not present. From the evidence, one might assume that the sapsuckers nested first in cavity 2, laying six eggs. Some time after five of the eggs hatched, the chickadees probably began to deposit an outer lining of shredded bark in cavity 1. The increasing activity of the young sapsuckers may have





caused the partition to fall out, and the unusual adoption resulted.—WARD C. RUSSELL, Museum of Vertebrate Zoology, Berkeley, California, January 16, 1947.

Red-tailed Hawk Feeding on Coot.—While patrolling near El Padre Island, lower Millerton Lake, Fresno County, California, at 12 noon on November 20, 1946, my attention was attracted by a medium-sized, long-tailed hawk (possibly a female Cooper Hawk, *Accipiter cooperii*) which was diving from elevations of approximately 100 feet at a larger bird which was on the ground. Four such dives were seen before the bird retreated at my approach. Each time the hawk dived, the grounded bird would flutter as though attempting to fly.

As I drew close to shore, I saw that the bird on the ground was a large Red-tailed Hawk (*Buteo jamaicensis*). Its seeming reluctance to fly caused me to believe that it was injured, but as my boat touched shore, the hawk took off, carrying a large object approximately 20 feet before dropping it and flying to a stump some 200 feet distant, where it landed. It remained on this stump some 30 seconds before flying away.