

takes place in August (Thayer, Auk, 23:223-225, 1906) and extends to October (Bergtold, Auk, 23:425-428, 1906). As yet, there are no records of the species on the Colima volcanos at that time of year.

In January 1973 we ascended the volcanos along the east slope of the Volcán de Fuego, along a road joining the valley town of Atenquique and the saddle between the two volcanic peaks. Several roads leave the saddle, and we found a newly constructed one that proceeded northward along the west side of the massif, gradually ascending the Volcán de Nieve. Workers with a bulldozer were extending the road at 3,200 m elevation. Along the entire 40 km of the road, the forest—including some magnificent stands of fir (*Abies religiosa*)—was almost entirely intact. However, a lumbering facility was in operation on the saddle, with its output of slats, shingles, and parts of wooden crates neatly stacked for drying. Because of this lumbering and the active paper mill at Atenquique, the future may be bleak for the forests on the volcanos and the parrots that depend upon them. At this time, there is still an abundance of undisturbed pine forest. Much occurs on steep and relatively unstable slopes, a fact that may retard its destruction by man. In addition, we noted several areas on the volcanos where numerous small pines have been planted, indicating that at least parts of the forests being lumbered may eventually be replaced.

We express our thanks to R. W. Dickerman and R. B. Payne for supplying information on *Rhynchopsitta* specimens, and to D. Amadon for permitting us to examine collections at the American Museum of Natural History (AMNH).—GARY D. SCHNELL, *Department of Zoology and Stovall Museum, University of Oklahoma, Norman, Oklahoma 73069*, JOHN S. WESKE, *National Fish and Wildlife Laboratory, Bureau of Sport Fisheries and Wildlife, National Museum of Natural History, Washington, D.C. 20560*, and JENNA J. HELLACK, *Department of Zoology and Stovall Museum, University of Oklahoma, Norman, Oklahoma 73060*. Accepted 3 June 1974.

**Red squirrel attacks a Pileated Woodpecker.**—On 26 March 1974 we observed a red squirrel (*Tamiasciurus hudsonicus*) attack a Pileated Woodpecker (*Dryocopus pileatus*) in our yard near Ithaca, New York. The woodpecker was perched near the base of a large white pine (*Pinus strobus*), when a red squirrel came down the trunk of the tree to go to a bird-feeder about 10 ft away. When the descending squirrel noticed the woodpecker, it made several aggressive feints towards the bird. The woodpecker threw its head backward, raised its crest, and slightly lifted and spread its wings in a threat display (Kilham, Condor, 61:377-387, 1959). The squirrel retreated and then ran down the side of the trunk opposite the woodpecker. It went to the bird-feeder and ate seeds on the ground for several minutes. Suddenly it ran back up the tree, and then came down the trunk toward the Pileated Woodpecker, again making aggressive feints. This time the woodpecker jumped off the trunk onto the ground and gave its threat display as before. The squirrel then leaped onto the woodpecker's breast, and the two struggled briefly and silently before the bird broke away and flew high into another tree. The squirrel ran up the pine and chattered, apparently unharmed.

We can suggest no reasons for this aggression, although the proximity of the food in the unnatural setting of a feeding station may create conflict where abnormal densities and aggregations of species occur. The squirrel could easily descend the large tree without encountering the woodpecker, and neither species was near its nest. A literature search revealed no reports of similar encounters; however, Klugh (J. Mammal., 8:1-32, 1927) observed that red squirrels will chase birds from their food caches, although he

saw no attacks. Perhaps other birds tend to fly away, rather than remain in place as did the Pileated Woodpecker. Bent (U.S. Nat. Mus. Bull., 174:13-115) and Hoyt (Ecology, 38:246-256, 1957) report that Pileated Woodpeckers will feed on fruit and nuts on or near the ground, but they mention no conflicts over food. Other reported cases of interspecific aggression involving Pileated Woodpeckers have occurred when the birds were defending their nests against predators or nest-hole competitors (Bent, *ibid*; Hoyt, *ibid*; Kilham, *ibid*; Nolan, Wilson Bull., 71:381-382, 1959).

We would like to thank Peter Feinsinger and Lawrence Kilham for reviewing this note.—B. J. RATHCKE, *Department of Entomology, Cornell University, Ithaca, New York 14850* and R. W. POOLE, *Biometrics Unit, Cornell University, Ithaca, New York 14850*. (*Present address of BJR: Section of Population Biology and Genetics, Brown University, Providence, Rhode Island 02912.*) Accepted 3 June 1974.

**Eastern Kingbird in Paraguay.**—No specific record seems to exist of the occurrence of the Eastern Kingbird (*Tyrannus tyrannus*) in Paraguay. Hence, a specimen (DMNH 30,959) taken there on 26 October 1972 is of interest. The bird, an unsexed adult (skull ossified), was taken in the Department of Boquerón, at Teniente Ochoa (21° 42' S, 61° 02' W), at km 557 on the Trans-Chaco Highway. The senior author was the collector and the preparator Juan Guggiari. The presence of this kingbird in northwestern Paraguay is to be expected, as the species is known to range southward to southern Bolivia and northwestern Argentina (Tucumán) (de Schaunsee, *The species of birds of South America and their distribution*. Livingston Publishing Co., Narbeth, Pa. 1966).—GREGORY SCHMITT, *P.O. Box 97, Kirtland, New Mexico 87417* and JOHN P. HUBBARD, *2097 Camino Lado, Santa Fe, New Mexico 87501*. Accepted 17 May 1974.

**Behavioral interactions and the dispersal of the family in Black-capped Chickadees.**—Most studies of the family life of young birds after they leave the nest have been descriptive, with little quantitative behavioral data. My objectives were to study how parent and young Black-capped Chickadees (*Parus atricapillus*) interact and to gain insight into the causes of dispersal. Special attention was focused on aggressive behavior.

The study took place at The University of Wisconsin-Milwaukee Field Station, Saukville, Wisconsin, from 2 June to 14 August 1972. Every adult bird had its own color band combination. Forty-four nestlings were banded using the same color band combination for all young in a family. Six families were studied.

Becoming independent and finally dispersing from the family group is a gradual process, which begins a week or so after the young leave the nest. As the young began to find food on their own, they begged less frequently from their parents (Fig. 1); also, parents at about 8-10 days after fledging began ignoring the begging of young birds that were following them.

As measures of aggression I use the Bill-up Display (Smith, *Publ. Nuttall Ornithol. Club*, No. 11, 1972)—a common threat display, Supplanting Call (Dixon, Stefanski and Folks, *Auk*, 87:322-328, 1970)—a vocalization commonly associated with attacks, and lunges at or chases of one bird by another. These aggressive acts were counted and averaged over five min periods, based on approximately 10 hr of observation for each two-day period (Fig. 2). Very little aggression was noted among family members in the first ten days after fledging, with the exception of some chasing. Aggression between members of the family increased in the latter half of the fledging period. The young became more aggressive toward each other. The parents, particularly the male, became