

on meager evidence. In *Aphelocoma*, the available evidence indicates that first-year birds may wander or disperse over great distances, whereas adults are typically sedentary (Pitelka, MS.).

Obviously, the problem of migration in Blue Jays, and in other species in which plumage differences of the type described above occur, can be approached adequately only if bird banders are aware of the type of information needed and have a knowledge of the morphological bases for distinguishing age groups. I would urge interested students and banders not to attempt aging individuals without first examining a museum series and becoming familiar with seasonal variation due to wear as well as individual variation.—FRANK A. PITEKKA, *Museum of Vertebrate Zoology, Berkeley, California.*

Rumbling noise made by Chimney Swifts in chimney.—In the Auk, 62: 361–370, 1945, there is an interesting article by Horace Groskin, "Chimney Swifts roosting at Ardmore, Pennsylvania." Reference is made to very loud noises which some observers report to have heard as the birds departed from the chimney or hollow tree at dawn. This noise has been likened to the rumbling of distant thunder.

It may be of interest to report my own experiences with the swifts on this point. My childhood up to the age of 19 years was spent on an old New England farm at West Oxford, Massachusetts. This farmhouse was one of the oldest in town and at that time was about 125 years old. An enormous stone chimney occupied the middle of the house, and the portion above the roof made of brick, was about 3–3½ feet square within. The stone chimney itself was constructed from the ground floor of the cellar, and was so spacious as to occupy a large portion of the cellar area, as well as the middle of the ground story above. This enormous stone chimney appears to have been built originally to accommodate a spacious Dutch oven as well as huge fireplaces for all the first-story rooms. Central cross walls of brick divided this chimney into four equal flues, some of which appeared to lead to rooms the fireplaces of which were no longer used.

This large chimney was always frequented by the swifts with their nests each season, and they roosted within it in late summer. This large chimney passed through an open, unfinished attic near a room at one end of the house which was my sleeping room. I could plainly hear the movements of the swifts within the chimney at all times, and I felt a sense of companionship with these fine birds always so close to my bedroom. On rare occasions I have heard them chipper at night as they roosted, but frequently I have heard the rumbling of these birds, and was always puzzled as to how it was made even on nights so dark that it was certain the birds were neither entering nor leaving the chimney.

I am, for this reason, inclined to believe that something may occasionally disturb the birds as they cling to the chimney walls in close arrangement, and that this causes a simultaneous flapping of the wings of many birds so that a reverberation within the chimney is produced. I have frequently heard the rumbling when the birds were all within the chimney, but have never noted any such noise while the birds were merely settling into the chimney at dusk or leaving it at dawn, although conceivably a great mass of frightened, surging birds suddenly leaving a chimney might set up a rumbling sound. This rumbling, I am certain, can be made without this exodus, and sometimes may be the result of a vigorous wing stretching or flapping performance which is taken up simultaneously by a group of birds, perhaps finally to extend to larger numbers in the chimney.—H. A. ALLARD, *Beltsville, Maryland.*