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body molt (lightest on the belly); its bright flanks attracted my attention as being exceptional at that season. As is well known since the days of Stone (*Proc. Acad. Nat. Sci. Phila.*, **48**: 156-157, 1896) and Dwight (*Ann. N. Y. Acad. Sci.*, **13**: 235-240, 1900), our vireos normally have little or no pre-alternate or pre-nuptial molt in the spring. The unusual molt of # 3119 was correlated with badly worn plumage (for April). The exposed flight feathers were all worn (the tail being almost in shreds), except the freshly molted tertials. The rest of the wing was also old, the posterior wing-bar having been almost worn off. Had it *not* molted, this poor vireo would have been half-naked by July or August.—Allan R. Phillips, Instituto de Biología, Universidad Nacional Autónoma de México, Mexico, D. F.

Abnormalities in the Remiges and the Rectrices of the Saw-whet Owl.—Stresemann (Condor, 65: 449-459, 1963) has demonstrated the value of records of abnormalities in the number of primaries as an aid in studies of avian phylogeny. The observations listed below may thus be of interest. In the autumns of 1960 through 1964 we examined carefully 201 Saw-whet Owls (Aegolius acadica) for evidence of molt (Mueller and Berger, in preparation). The owls were taken in mist-nets and were banded and released. Seven individuals showed abnormalities in the flight-feathers, and these are listed below:

514-79662, adult, taken on 30 October 1964. There were only 9 primaries in each wing. We searched to no avail for an empty follicle.

534-14720, adult, netted on 30 October 1964. The innermost (first) primary on the left wing was represented only by a rhachis; the vanes were totally absent.

514-49663, adult, trapped on 31 October 1964; and 524-52498, adult, netted on 29 October 1963. These two birds had only 11 rectrices; in each case there were only five on the left side of the tail. A search for an empty follicle was unsuccessful.

524-52476, immature, taken on 12 November 1962; 514-49649, adult, netted on 22 October 1964; and 514-49655, immature, trapped on 24 October 1964. These three individuals each had 13 rectrices; in each case there were seven on the right side.

We thank the National Science Foundation for financial support during the years 1962 through 1964 (Grant GB-175).—Helmut C. Mueller, Department of Zoology, University of Wisconsin, Madison Wisconsin, (present address: Dept of Zoology, University of North Carolina, Chapel Hill, N. C.), and Daniel D. Berger, Cedar Grove Ornithological Station, Route 1, Cedar Grove, Wisconsin.

Defecation by Bobwhites When Flushed.—When conducting a count of winter birds in Montgomery County, Alabama, on 11 March 1960, I encountered a covey of nine Bobwhites (*Colinus virginianus*) at the edge of a small stockwatering pond. I was approximately six feet from the nearest bird of the closely grouped covey when the birds burst from the ground. The pond and birds had been approached from a direction causing the flushed birds to pass over the water soon after leaving the ground. After flying distances ranging from 8-12 feet and when over the water 4-8 feet from shore, each of the nine birds presumably defecated, as was indicated by nine circles of outward-spreading ripples on the otherwise smooth water surface. While no means was available to recover the feees and thus confirm defecation, other possibilities, such as each bird having dropped food from its mouth or dirt from its feet, appeared most unlikely. The observation was made in mid-forenoon, and the absence of substantial hiding cover where these birds were found suggested that the birds were feeding, or more likely seeking drinking water, rather than loafing.

The fact that each of the nine Bobwhites defecated in this unusual situation where defecation could be observed suggests that defecation might frequently occur when these birds are flushed in situations unfavorable for its observation. On the other hand, it may be that these birds defecated because they were takingoff over water and they would have behaved differently over land. This observation of defecating upon take-off brings to mind the fact that this is a commonly observed habit of herons, and one important reason for this behavior of herons being so well known is the conspicuousness of herons' evacuations.

In studies on behavior of the American Goldfinch (*Spinus tristis*) Ellen L. Coutlee (1963. *Wilson Bull.*, **75**: 356) reported that goldfinches sometimes defecated "just after take off." Defecation was observed by Coutlee to be some-