

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 rachis; 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 stock-watering 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 feces 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 taking-off 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-

times associated with fear-producing situations, such as aggressive encounters or when the birds were being held in the hand, as every bander has experienced with various species of birds. Considering my close approach to the Bobwhite covey, it seems reasonable to assume that these birds were in a fear-producing situation.—Paul A. Stewart, U. S. Department of Agriculture, Agricultural Research Service, Entomology Research Division, Oxford, North Carolina.

Pigeon Guillemot Banding Returns.—In July 1965, I banded two mated pairs of Pigeon Guillemots (*Cepphus columba*) on South Farallon Island, about 30 miles west of San Francisco, California. Each bird was color-ringed on one leg and banded with an aluminum government band on the opposite leg. Both pairs were feeding young at the time they were banded. The birds were trapped at the entrances to the rocky crevices in which they were nesting; the trapping method is described elsewhere (Tenaza, *Bird-Banding*, 37: 207-208 July 1966). When I revisited South Farallon from 18 to 25 June 1966, I found that each of the banded birds was paired with its mate of the previous year, and that each pair was occupying the exact crevice it had utilized for nesting in 1965. Both pairs were again feeding young. Field work was sponsored by a NSF Institutional Grant administered by San Francisco State College to Professor Robert I. Bowman.—Richard R. Tenaza, Department of Biology, San Francisco State College, San Francisco, California 94132.

Observations on a Robin nest: nest translocation and nestling mortality.—This paper reports the successful translocation of a partially constructed nest of a Robin (*Turdus migratorius*), and the subsequent mortality of the nestlings of this nest. On 25 April 1964, a pair of Robins were observed constructing a nest atop a wooden post which abutted the east-facing, exterior brick wall of my house in Champaign, Illinois. The top of the post was 16.0 dm above ground level. In the afternoon of the following day, 26 April, the post was removed, and the nest, which was in the stage of being lined with mud, was moved by me from the post to the nearest window ledge. The new position of the nest was 10.7 dm to the right and 1.5 dm below the original nest site (Fig. 1). In spite of my continued presence in the vicinity of the nest, the female Robin resumed her activities of "mudding" the nest at the new site within 15 min after I had moved the nest. By 30 April 1964, the construction of the nest had been completed, as evidenced by the presence of a lining of grass in the nest bowl.

Neither the male nor female Robin was observed in the vicinity of the nest on 1 May. On 2 May, the female arrived at the nest shortly before 1200 hr (CST) and had laid her first egg by 1300 hr, after which she departed for the remainder of the day. The second egg was laid between 1200 and 1300 hr on 3 May, after which she sporadically attended the nest until nightfall. The female arrived at the nest shortly before 0900 hr on 4 May and had deposited the third egg by 0930 hr; she attended the nest irregularly throughout the day but was not observed on the nest after the onset of darkness (nest checked at 2200 and 2400 hr). The fourth, and final, egg was laid between 1000 and 1230 hr on 5 May, after which nest attendance was irregular during the remaining daylight hours; the female remained on the nest throughout the night.

By 1400 hr, 16 May, 3 of the 4 eggs had hatched; the remaining egg (presumably the last egg laid) hatched between 1600 and 1830 hr on 16 May. Thus, all eggs had hatched within a maximum period of $11\frac{1}{2}$ days from the time of the laying of the last egg.

The last-hatched nestling died on 18 May. Two other nestlings died on 19 May. The last surviving nestling was in poor physical condition on 19 May, but was brooded by the female through the night. However, this nestling died between 0800 and 0900 hr on 20 May and was removed from the nest by the female prior to 1100 hr.

Two points stemming from these observations seem worthy of comment. The translocation of nests (with eggs or young) of many species of birds has been accomplished many times for photographic, experimental, or conservation purposes. Among Robins, nests with eggs (S. H. Cross, Mrs. *Passenger Pigeon*, 11: 60, 1949) and with young (F. H. Herrick. *The Home Life of Wild Birds*. G. P. Putnam's Sons, Publisher. N. Y., 1901) have been successfully moved to new sites by man. The successful translocation of the nest reported in this note demonstrates that