standard deviation in egg weight (5.31 and 0.53 g, respectively). Multiplying the slopes in %/g by the standard deviation gives a normalized percentage decrease of −0.93% for the chicken and −0.89% for the Starling. The relative size of the yolk appears to be about equally conservative with respect to variation in egg weight in both species. In absolute terms the decrease is much greater in the Starling because the proportion of yolk in the egg is only slightly more than one-third of that in the chicken (Ricklefs 1974).

Variation in egg weight within Starling populations is not great, and most of the variation is expressed between clutches. Within clutches, egg size is relatively uniform. Other species with greater variation in egg size, particularly many seabirds with marked differences in egg size within clutches (Parsons 1970) might be expected to show less conservatism of yolk size with respect to egg size, hence a greater influence of egg size on the subsequent development of the young. Studies of individual variation within populations may yield considerable insight into the evolutionary significance of patterns in egg-size variation between species.

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Second record of the Mississippi Kite in Guatemala.—A Mississippi Kite (*Ictinia mississippiensis*) I banded as a nestling (U.S. F&WS band no. 535-26824) on 3 August 1971 in a colony of nine nests northwest of Knowles, Beaver County, Oklahoma, was shot near Escuintla, Department of Escuintla, south-central Guatemala on 29 October 1971; it recovered from its wounds and was presented to the Aurora Zoo of Guatemala City. Although Mississippi Kites were long thought to winter only as far south as Guatemala, their presence there has been documented by only one undated specimen collected (1861 or earlier) by Salvin near Coban, Vera Paz, central Guatemala (Blake 1949, Eisenmann 1963, Land 1970). Only a handful of additional records report this kite's migratory and wintering presence elsewhere in Central and South America (Eisenmann 1963).

The Plumbeous Kite (*I. plumbea*), which some have considered conspecific with *I. mississippiensis* (Sutton 1944), is known in Guatemala as a fairly common migrant and uncommon resident in the Caribbean lowlands and Petén of the north and northeast, but it has been recorded only once in the Pacific lowlands (Land 1970). Thus, the immature kite reported here represents the second record for *Ictinia* from the Pacific slope.

Because both species of *Ictinia* migrate in large flocks, the occurrence of the immature *I. mississippiensis* suggests that this species may occur more often in the Pacific lowlands of Guatemala. In support of this Wetmore (1965: 179–180) recounted three sightings in the Panamanian Pacific lowlands of large flocks of *Ictinia* that he believed to be *mississippiensis*, and E. Eisenmann (pers. comm.) has seen what appeared to be *mississippiensis* over forested and open areas of the same region.

The recent increase of Mississippi Kites in North America seems related partially to the effects of agriculture that benefit large insects the kites feed on while nesting (Parker and Ogden MS). The ecological similarity of the two *Ictinia* kites, especially concerning diet and foraging habits (Wetmore 1965, Brown and Amadon 1968), suggests that nesting *I. plumbea* might also respond positively to the extensive agricultural activity in the Pacific lowlands of Middle America or elsewhere.

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Some blood characteristics of White-crowned Sparrows during molt.—The number of erythrocytes in birds varies in some species with the sex and age of the bird as well as with the season (Sturkie 1965, Avian Physiology, Ithaca, New York, Cornell Univ. Press, pp. 1–5). In the White-crowned Sparrow (*Zonotrichia leucophrys gambelii*), an intracontinental migrant of Pacific North America, the packed erythrocyte volume (hematocrit) decreases significantly during both the prenuptial (Mar, Apr) and postnuptial (Jun, Jul, Aug) molts (Fig. 1, Table 1). In fact a weak negative correlation exists between hematocrit and the intensity of molt in this species ($r = -0.6$; $P < 0.001$) (deGraw 1972, unpublished Ph.D. dissertation, Pullman, Washington State Univ.). Molt involves extensive vascularization in the growing quills. The decrease in hematocrit might be attributed simply to increased plasma volume without a fully compensatory increase in total erythrocyte volume, as rates of water consumption increase substantially during molt (Chilgren 1975, unpublished Ph.D. dissertation, Pullman, Washington State Univ.). There is no rationale for a decrease in the total number of erythrocytes during the molt. To test this hypothesis, erythrocyte numbers were tabulated in 30 captive White-crowned Sparrows during their postnuptial molt.

Birds of undetermined sex and at various stages of postnuptial molt were maintained outdoors or indoors at 15°C (LD = 16:8) and sampled at the end of their real or subjective day. The blood sampling technique for small birds was reported by Kern et al. (1972, Gen. Comp. Endocrinol. 18: 43). Duplicate counts were made from each blood sample and the average value recorded. When two counts differed by more than 50 cells per grid, another duplicate count was made. The stages of postnuptial molt at which samples were taken and the respective mean values for erythrocyte numbers are reported in Table 2. Prior to the molt the means were comparable to those reported for other species (Sturkie op. cit.) and perhaps in the lower range. Erythrocyte numbers appeared to increase throughout molt, although the increase was not significant. At stage 5 (after molt) erythrocyte numbers increased significantly compared with stage 0, suggesting that erythrocyte numbers as well as plasma volume must increase during molt, as an invariant or decreasing plasma volume would have resulted in small to large increases in hematocrit, respectively, unlike that found in feral and captive birds. No information exists as to the presence of blood-borne hemopoietic factors that might be responsible for erythrocyte proliferation during the molt in passerines.

Because the hematocrit decreases in White-crowned Sparrows by about 14% at the peak of postnuptial molt (deGraw op. cit., see Table 1), the estimated increase of total blood volume is thus 14%, assuming no changes in the erythrocyte population (number or volume per cell), but the erythrocyte count increase of about 53% between stages 0 and 3 of postnuptial molt (Table 2), indicates that the increase in total blood volume must be greater than 14%. Assuming no changes in volume per cell or in plasma volume, the hematocrit resulting from a 53% increase in cell count at the peak of postnuptial molt in captives not distributed into molt classes (hematocrit = 38%; see Fig. 1) should be $[(0.53)(0.38) + 0.38]100 = 58\%$.