

brood departure, and there were no desertions. The air temperature during the 15 day period that the hatching checks were made averaged 48.2°F and ranged from a minimum of 26° to a maximum of 70°. No precipitation fell during the hatching period and we believe the study had no measurable effect on nesting success, hatching, or gosling mortality.

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**Spring migration of Swainson's Hawk and Turkey Vulture through Veracruz, Mexico.**—At 15:40 hours, 22 March 1970, on Highway 180, 9 km west of Cardel, Veracruz we observed a massive migration of Swainson's Hawks (*Buteo swainsoni*) and Turkey Vultures (*Cathartes aura*) heading generally north-northwest. The hawks, apparently all in typical adult plumage, were in loosely formed flocks of 75 to 200 birds flying approximately 50 to 300 m above the ground. In 30 minutes we conservatively estimated that 1,600 hawks passed overhead.

An approximately equal number of Turkey Vultures were migrating at the same time; they tended to segregate into homogeneous flocks traveling at lower altitudes and wheeling and turning more than did the Swainson's Hawks. At 16:10 we continued south toward Veracruz and observed flocks of migrating birds along the coastal plain to 28 km south of Tamarindo. The weather was warm and overcast.

On 23 March, another overcast day, we encountered along the same route hundreds of migrating birds 14 km south of Tamarindo. Again the Swainson's Hawks tended to be higher than the vultures, although the vultures outnumbered the hawks. As soon as we started up the mountains west of Tamarindo into heavy clouds, we no longer saw migrating flocks.

On 26 March which was mainly overcast with a few short breaks of sunlight and a strong wind off the Gulf of Mexico, we encountered migrating birds on Highway 180 12 km north of Vega de Alatorre at about noon. From there to Tecolutla we observed thousands of vultures. Often they were just above the tops of the palms and other trees bordering the Gulf, but we saw none over the water itself. Hawks were few, although about 27 were over Puente Nautla at 12:13. The stratification of species was still evident. Our northernmost observation was 32 km south of Poza Rica at 15:00.

The spectacular migration of both species through Central America has been noted by many authors. In Veracruz Swainson's Hawk migrations have been reported by Loetscher (*Auk*, 72:14-54, 1955) near Las Vigas and Jalapa. Sutton and Pettingill (*Auk*, 59:1-34, 1942) witnessed migrating Swainson's Hawks near Gomez Farias, Tamaulipas, in April. Turkey Vulture spring migration in Veracruz was reported by Wetmore (*Proc. U. S. Natl. Mus.*, 93:215-340, 1943) and Bussjaeger et al. (*Condor*, 69:425-426, 1967). Heretofore the extensive occurrence of both species migrating together this far north has not been reported. Monroe (*Ornithol. Monogr.* No. 7:1-458, 1968) reported the two species together in Honduras. Dickey and van Rossem (*Field Mus. Nat. Hist., Zool. Ser.* No. 23:1-609, 1938) noted migrating flocks of Turkey Vultures and Swainson's Hawks in El Salvador in the fall. They stated that hawks and

vultures were "migrating as an integral part of the flight," but they did not indicate whether the species were stratified by altitude.

Swainson's Hawk normally migrates at great heights (Monroe, *ibid.*; Skutch, *Northwest Sci.*, 19:80-89, 1945), however, on overcast days they are forced to fly much lower (Skutch, *ibid.*). The overcast weather coupled with the jutting mountains could have funneled the hawks we observed toward the coastline. This idea is supported by Loetscher's observations of migrating Swainson's Hawks in the vicinity of Jalapa and Las Vigas on 5 April 1939. The weather at that time (4 and 5 April 1939) was mostly fair and clear in the mountains (Loetscher, *pers. comm.*) and on the coastal plain at Tejeria, west of the city of Veracruz (U. S. Weather Bureau records).

On 23 March 1970 the coastal plain was overcast; at Jalapa (elevation 1,400 m) we were in the midst of the clouds, and at Las Vigas (2,450 m) we were above the clouds. Since we observed migrating birds only on the coastal plain, this observation apparently was an example of local weather conditions and topographic features affecting the migration of these birds.—JAMES R. PURDUE, CHARLES C. CARPENTER, DALE L. MARCELLINI, *University of Oklahoma, Norman, Oklahoma*, AND ROBERT F. CLARKE, *Kansas State Teachers College, Emporia, Kansas*, 16 June 1971.

**An unusual nest of the Sandhill Crane.**—On 7 May 1969 while conducting research on Sandhill Cranes (*Grus canadensis tabida*) at Malheur National Wildlife Refuge, Harney County, Oregon I discovered an unusual crane nest. The nest consisted of two mounds of vegetation with an egg on each mound. One had the appearance of a normal nest, while the other consisted of a small accumulation of broad-fruited bur-reed (*Sparganium eurycarpum*). The second mound was situated 73 centimeters south of the normal structure.

The larger mound had the following measurements: basal diameter 110 × 138 cm; crown diameter 69 × 50 cm; bowl diameter 22 × 25 cm; bowl depth 2.9 cm and nest height above water 11.9 cm. The nest was in 17.8 cm of water and the egg which measured 102.8 × 61.1 mm, was being incubated. The small mound had no definable crown or bowl. It was 3.5 cm above water level in 10.5 cm of water. The egg measured 99.6 × 60.9 mm and had not been incubated.

When I disturbed the incubating bird it showed little interest in the nests; however, a crane was observed incubating on 8 May. Re-examination of the nest in early June revealed both eggs had been destroyed by a raccoon (*Procyon lotor*).

Of 394 Sandhill Crane nests I have inspected on Malheur NWR, this is the first nest observed where the eggs were not deposited on a single mound. I have seen several sites where two mounds had been constructed, but only one was ever utilized.—CARROLL D. LITTLEFIELD, *Department of Biological Sciences, University of Arizona, Tucson, Arizona* 85721, 16 August 1971.

**Variability of tail molt in the Burrowing Owl.**—Mayr and Mayr (*Auk*, 71: 172-178, 1954) described simultaneous tail molt in one museum specimen of the Burrowing Owl (*Speotyto cunicularia hypugaea*) as well as in other small owls. However, Thomsen (*Condor*, 73:177-192, 1971) in her study of a population of *S. c. hypugaea* in California found simultaneous tail molt to be "not apparent." Coulombe (*Condor*, 73:162-176, 1971) did not study tail molt. This note documents the occurrence of simultaneous or nearly simultaneous tail molt in a captive Burrowing Owl (*S. c. floridana*) and in a natural population of this subspecies.