Cedar Waxwings that often completely strip the tree of fruit in a matter of hours. In late February 1981, we noticed that almost none of the fruit had been used. One afternoon several days later, we saw an aerial clash near the fruit tree between a mockingbird and Cedar Waxwing. The mockingbird pursued and forced the Cedar Waxwing to the ground in a small planter where it pinned the waxwing and repeatedly struck the other bird with its bill, killing it. When we went to retrieve the dead bird, we found another Cedar Waxwing lying dead nearby. Both birds had several similar wounds on their backs. None of the wounds showed any evidence of skin puncture but each was marked by subcutaneous bleeding. In January 1982, we found another dead Cedar Waxwing with a shallow puncture wound on its dorsum lying within 15 m of the cherry-laurel tree. We cannot with certainty attribute the demise of the latter two waxwings to mockingbird aggression, since we were not witness to either of their deaths. However, the similarities of the wounds and the proximity of the dead birds to the fruit tree lead us to strongly suspect it.

We are indebted to R. G. Hooper, Paul Hamel, Frank R. Moore, and R. N. Conner for review of this note.—L. D. HEDRICK, *U.S. Forest Service, 1765 Highland Ave., Montgomery, Alabama 36107;* AND A. D. WOODY, *U.S. Forest Service (Retired), 3430 Woodhill Rd., Montgomery, Alabama 36109.* *Accepted 25 June 1982.*

Wilson Bull., 95(1), 1983, p. 158

American Coot apparently suffocates while attempting to swallow lizard.—On 14 February 1981, along the shoreline of San Pablo Reservoir (approximately 30 km northeast of San Francisco, Contra Costa Co., California) at 13:00 I discovered a dead American Coot (*Fulica americana*) lying face down in shallow water in a small inlet. A dead western fence lizard (*Sceloporus occidentalis*), 16.5 cm in length, had one-third of its body lodged head first in the coot's gullet. The plumage of the coot was still normally waterproof, its eyes were open and glossy, and rigor mortis was not complete. An autopsy was performed on the coot and the cause of death appeared to be suffocation (with verification from Howard Brooks-Korn, D.V.M.). The lizard was blocking the glottis, cutting off air to the lungs. The raised scales of the lizard may have prevented the coot from regurgitating the lizard. It appears the lizard did not try to bite or hold onto the inside of the coot's mouth. The coot's physical appearance seemed normal and no indication of starvation was noted. Opening of the gizzard (the esophagus was empty) revealed fragments of grass and sand. A search of literature yielded only one pertinent paper (Jones, Food Habits of the American Coot with Notes on Distribution, Wildl. Resear. Bull. No. 2, Bur. Biological Survey, U.S. Dept. Interior, 1940) which mentions salamanders and other amphibia in the diet. No previous mention of predation on lizards was found, but fish are taken (Jones 1940).

Acknowledgments.—For assistance with this manuscript, I am grateful to Dr. Brooks-Korn, Dr. F. A. Pitelka, Dr. J. D. Rising, Dave Garcelon and Pam Nave.—GARY F. MCCURDY, *119 Las Vegas Rd., Orinda, California 94563.* *Accepted 10 Apr. 1982.*

Wilson Bull., 95(1), 1983, pp. 158–160

Head-scratching method of Galapagos finches unaffected by variation in cranial morphology.—The head and bill of Darwin's finches (Geospizinae) have undergone rapid and extensive morphological change (Grant, Am. Sci. 69:653–663, 1981). Thus, the Geospi-

TABLE 1
HEAD-SCRATCHING IN THE GEOSPIZINAE

Species	Overwing head-scratches	Island
Small Ground Finch (*Geospiza fuliginosa*)	1 (1)[a]	Rabida
	2 (1)	Santa Fe
	2 (2)	Santa Cruz
Medium Ground Finch (*G. fortis*)	1 (1)	Isabella
	3 (1)	Santiago
	4 (3)	Santa Cruz
	1 (1)	Santa Maria
Cactus Finch (*G. scandens*)	1 (1)	Santa Cruz
Vegetarian Finch (*Platyspiza crassirostris*)	2 (1)	Santa Cruz
Small Tree Finch (*Camarhynchus parvulus*)	3 (2)	Santa Cruz
Large Tree Finch (*C. psittacula*)	2 (1)	Santa Cruz
Warbler Finch (*Certhidea olivacea*)	1 (1)	Santa Cruz

[a] The number of observations is followed (in parentheses) by the minimum number of individuals observed.

zinae are an ideal group within which to study potential morphological correlates of avian head-scratching methods. Birds head-scratch by raising the foot dorsal to the lowered wing (overwing or indirect) or by passing the foot ventral to the folded wing (underwing or direct). The method employed is usually common to all individuals of a species (Simmons, Ibis 103A: 37–49, 1961), although some intraspecific variation exists (Dunham, Auk 80:375, 1963; Burtt and Hailman, Ibis 120:153–170, 1978; Burtt, Ibis 122:541, 1980). Most intraspecific variation (e.g., the ontogenetic shift from underwing to overwing head-scratching) and most taxonomic variation (e.g., most non-passerines use the underwing method of head-scratching) suggest that overwing head-scratching is the derived method. Nonetheless, anomalous data persist (e.g., Burtt 1980) and the evolutionary significance of avian head-scratching methods remains unresolved. Hence, I observed head-scratching among Darwin's finches, a subfamily whose evolutionary relationships and morphology have been particularly well studied.

Observations made during a week's visit to the Galapagos Islands in early December 1980 were often with the unaided eye, although 8 × 32 binoculars were used whenever necessary. Because several species vary morphologically from island to island (Lack, Darwin's Finches, Cambridge Univ. Press, Cambridge, England, 1947), I have grouped the data for each species by island.

Among the Geospizinae observations of seven species in four genera showed that all adults head-scratched over the wing (Table 1). There was no variation among genera, among species, among individuals on the same or different islands or habitats (e.g., the Small Ground Finch [*Geospiza fuliginosa*], Medium Ground Finch [*G. fortis*]), or among successive head-scratches of the same individual; six of the 16 finches I observed head-scratched more than once.

The basic problem is why some birds head-scratch over the wing and others head-scratch under the wing. The alternatives are that head-scratching method is evolutionarily conservative, a phylogenetic legacy that parallels taxonomy, or that head-scratching method is evolutionarily labile, in which case it varies with ecology, other behavior, or anatomy. My data indicate that among the Geospizinae, head-scratching method is evolutionarily conservative. Galapagos finches head-scratch over the wing as do other fringillids (Andrew, Br. J.

Anim. Behav. 4:85–91, 1956; Simmons 1961; Wickler, Z. Tierpsychol. 18:320–342, 1961). Morphological differentiation of the head and bill, which has led to ecological and behavioral divergence among the Geospizinae (Abbott et al., Condor 77:332–335, 1975, and Ecol. Monogr. 47:151–184, 1977; Grant, Anim. Behav. 29:785–793, 1981), has had no effect on head-scratching method.

I thank A. J. Gatz, Jr., T. C. Grubb, Jr., and G. M. Fails for their comments on earlier drafts. Preparation of the manuscript was supported by an Ohio State University Postdoctoral Fellowship and NSF grant DEB 721014.—EDWARD H. BURTT, JR., *Dept. Zoology, The Ohio State Univ., Columbus, Ohio 43210.* (Present address: *Dept. Zoology, Ohio Wesleyan Univ., Delaware, Ohio 43015.*) *Accepted 20 Apr. 1982.*

Wilson Bull., 95(1), 1983, p. 160

Hermit Thrush nesting on a rock face.—While conducting population studies of birds near Walker Lake, Regional Municipality of Muskoka, in central Ontario (45°21′N, 79°06′W), we observed an unusual nesting of a Hermit Thrush (*Catharus guttatus*) on a small rock face in a mature eastern hemlock (*Tsuga canadensis*) forest. The local terrain sloped steeply to the lakeshore, with many small rock faces and large boulders.

On 8 June 1977, an adult Hermit Thrush was flushed from the rock face by the senior author. This vertical rock face was approximately 2.25 m high, and faced west. Upon examination, an empty, weathered nest was located on an open ledge. An adult Hermit Thrush was observed on 14 June 1977 on another nest with four eggs located less than 1 m from the first nest, in a rectangular-shaped cavity situated 1.5 m up the near-vertical rock face. The cavity was 30 cm wide, 12 cm high, and extended 21 cm back into the rock. The active nest was directly adjacent to another more weathered but otherwise similar nest and together both nests filled the width and depth of the cavity. All three nests were comprised of bark, twigs and moss, and lined with pine needles, typical of *C. guttatus* (Harrison, A Field Guide to Birds' Nests, Houghton Mifflin Co., Boston, Massachusetts, 1975). The cup of the nest in use was 8 cm in diameter, and was entirely protected from above by the rock. Only a portion of the outer edge of the nest was exposed, and grass was growing along this edge. There was a space of approximately 6 cm between the top of the nest and the overlying rock. This particular nesting attempt was unsuccessful.

During August 1978 the nest-site was again examined. The previously weathered nest within the cavity had been refurbished, indicating possible reuse by Hermit Thrushes during the 1978 nesting season.

Hermit Thrushes typically nest in sheltered locations on the ground and occasionally in trees (Godfrey, Natl. Mus. Can. Bull. No. 203, 1966; Harrison 1975). The average height of tree nests is 0.6–1.2 m (Harrison 1975). Bent (U.S. Natl. Mus. Bull. 196, 1949) reported one instance of a Hermit Thrush nesting on an exposed rock shelf, but stated that the nest is generally built in a "natural depression of a knoll or hummock, forming a kind of protective canopy over the nest [Bent 1949:145]." The thrushes involved in our observed nesting attempts were apparently responding to the shelter offered by the crevice in the rock face.

The location of all three nests within a horizontal distance of 1 m, and the reuse of at least one nest, suggest that this may be a fairly typical nesting practice, or that the same thrush(es) may have returned to the same territory and the same nest-site for possibly 3–4 breeding seasons (pre-1977, 1977, 1978). Although banding returns would be required to verify this, our observations suggest that individuals of *C. guttatus* may reuse nests.—EDWARD R. ARMSTRONG, *Ministry of Natural Resources, P.O. Box 730, Cochrane, Ontario P0L 1C0, Canada,* AND DAVID L. EULER, *Ministry of Natural Resources, Wildlife Branch, Whitney Block, Queen's Park, Toronto, Ontario M7A 1W3, Canada.* *Accepted 23 Aug. 1982.*