

exit from the oviduct into the cloaca was open. Since this bird could never have laid an egg, the oviduct likely opened by hormonal means.

The lumen appeared normal, and no tumor or polyp was present. The exit from the lumen was tied off with thread at its junction with the cloaca and inflated with air by means of a pipette. It was apparent that the isthmus was blocked, because no air passed into the magnum. The magnum was grossly foreshortened and a further constriction was present at its anterior end. This constriction was also blocked and prevented the passage of air. When the magnum was punctured for the injection of air, a quantity of pink viscous (albumen?) material flowed out. Anterior to the upper blockage the oviduct was narrow, 27.7 mm long, enshrouded in mesenteric tissue and terminated in a point. The funnel-shaped infundibulum was missing. The failure to lay in this goose was clearly a result of a deformed and blocked oviduct.

It is of interest that the ovary which appeared to be normal contained six atretic follicles, but no indication of ovulated follicles. These atretic follicles were graded in size indicating that at maturity each in turn began to resorb. If the endocrine system as a whole had been functioning properly we would expect that ovulation would have taken place, but into the body cavity, since the infundibulum was missing.

Cole and Hutt (Poult. Sci. 32:481-492, 1953) described a condition in 26 of 324 fowl in which the cause of non-laying was an incomplete oviduct. They stated that in most of these the infundibular portion of the oviduct persisted, while a section of the albumen secreting region degenerated. They did not specifically discuss the state of the ovaries in these birds and nowhere described the presence of atretic follicles. In their discussion of non-layers with normal oviducts they noted there was often liquid yolk in the body cavity indicating that the bird had ovulated but the yolk had not been picked up by the infundibulum.

Failure to ovulate suggests a deficiency of LH, and atresia is controlled by the secretion of progesterone (Van Tienhoven, *Endocrinology of Reproduction in Birds*, pp. 1088-1169, in *Sex and Internal Secretions*, W. C. Young, ed., Williams and Wilkins, Baltimore, Maryland, 1961). It seems likely that the massive deformity of the oviduct of the Giant Canada Goose F13 probably occurred during early ontogeny. We speculate that the deformity and the absence of the infundibulum may have prevented adequate secretion of LH, hence the absence of ovulated follicles. However, adequate secretion of sex hormones occurred to allow copulation, pair-bonding, nest-building, incubation, brooding behavior, and presumably five seasonal proliferations and regressions of the oviduct. The development of the magnum and the presence of gelatinous material suggests that this zone of the oviduct, although reduced in size, was still able to respond to the synergistic effects of estrogen and progesterone. This is Ontario Ministry of Natural Resources, Wildlife Research Contribution No. 82-05.—HARRY G. LUMSDEN, *Ontario Ministry of Natural Resources, Wildlife Research Section, P.O. Box 50, Maple, Ontario L0J 1E0, Canada*; AND VERNON G. THOMAS, *Dept. Zoology, Coll. Biological Science, Univ. Guelph, Guelph, Ontario N1G 2W1, Canada. Accepted 15 Sept. 1982.*

Wilson Bull., 95(2), 1983, pp. 313-314

Black-capped Chickadee performs "hiss-display" while in wire-mesh trap.—On 15 July 1981, I re-trapped a color-banded female Black-capped Chickadee (*Parus atrica-pillus*) that had visited feeders in my yard in Logan, Cache Co., Utah, intermittently between her initial capture on 13 December 1980 and 21 April 1981. The bird was not re-trapped during that interval. I carried her into the house (a distance of 11 m) in the wire mesh trap 17 × 17 × 16 cm. As I placed the trap on the table the chickadee, which crouched on the

floor of the cage facing away from me, extended her wings quickly, thumping the floor of the trap while simultaneously making a hiss-like vocal sound that I transliterated as *haaah*. A single repetition of the display followed immediately.

The "hiss-display" (Gompertz, Vogelwelt 88:165–169, 1967) usually is elicited when an incubating titmouse (*Parus* sp.) is disturbed in the nest cavity. Components include rising on the tarsi, thrusting the head forward while expelling air, opening the wings rapidly to strike the walls of the cavity, and spreading the tail. Several postures of a sequence in the Great Tit (*P. major*) are illustrated in Gompertz (1967) and the sound spectrogram in Fig. 2 of her paper demonstrates that the wing-strike immediately precedes the hiss. This display has been reported in *P. atricapillus* by Burleigh (Auk 47:48–65, 1930) and Odum (Auk 58:518–535, 1941).

Löhrl (J. Ornith. 105:153–181, 1964) noted that this "threat combination" was fully elicited only in a cavity, but that males performed it in nest defense and titmice in roost holes at night also hissed when the observer scratched the trunk outside the opening. Löhrl also observed the display regardless of season in injured titmice that were startled at the opening of the carton in which they were enclosed.

The confinement in a small space that afforded no escape route, and the proximity of my hands on the sides of the trap evidently elicited a response normally given only when titmice occupying unlighted cavities are disturbed.—KEITH L. DIXON, Dept. Biology and the Ecology Center, Utah State Univ., Logan, Utah 84322. Accepted 8 July 1982.

Wilson Bull., 95(2), 1983, pp. 314–315

First sight record of Orange-breasted Falcon for Belize.—The Orange-breasted Falcon (*Falco deiroleucus*) is a local and rare resident within the Central American portion of its range (Eisenmann, The Species of Middle American Birds, Trans. Linnaean Soc., New York, New York, 1955; Blake, Manual of Neotropical Birds, Vol. 1, Univ. Chicago Press, Chicago, Illinois, 1977). Russell (A Distributional Survey of the Birds of British Honduras, A.O.U. Monogr. No. 1, 1964) makes no mention of the species in his account of the birds of Belize and there are apparently no subsequent literature references to it.

On 20 July 1981, Carl Swafford, Chuck Arellano, and I saw an Orange-breasted Falcon in the western part of Cayo District, Belize (16°49'N, 88°59'W) between 500 and 600 m elev. The bird was perched in the top of a partially defoliated palm (probably *Orbigyna cohune*) in a small clearing 9 km south of the crossing by the road from Augustine to Millionario of the Río Guacamayo, a tributary of the Belize River draining the western slope of the Mountain Pine Ridge and Mayan Mountains.

The bird was not disturbed by our approach on foot and we obtained an excellent view in full sunlight through 7× binoculars from distances less than 25 m. We noted the white throat contrasting with a rufous-orange breast, a rufous-orange, partial neck collar and lower belly, black and buffy-barred lower breast and upper belly, and blackish back, wings and upper head. Direct comparison with the similar, though smaller, Bat Falcon (*Falco ruficularis*) was made possible by the presence of an individual of that species which made several aerial passes at the Orange-breasted Falcon while uttering a shrill, kestrel-like *kree*. The Orange-breasted Falcon made no response other than lowering its head slightly and was still on the same perch 2 h later when we retraced our route. At that time it held in its talons a small bird which we were unable to identify.

This section of Belize is remote and sparsely inhabited, the few residents having been relocated as a result of the dispute with Guatemala. Annual rainfall of 2000–4000 mm supports a tall wet forest which Russell (1964) referred to as Tropical Moist Forest Life Zone