Egg measurements for three endangered species.—From 1967 through 1969, external dimensions of the eggs of three endangered species of birds were measured. Included were 33 eggs of the Whooping Crane (*Grus americana*), 158 eggs of the Aleutian Canada Goose (*Branta canadensis leucopareia*), and 809 eggs of the Masked Bobwhite Quail (*Colinus virginiana ridgwayi*). In the literature, there are only scattered reports of small samples of Masked Bobwhite Quail and Whooping Crane eggs and, to the best of our knowledge, no measurements of Aleutian Canada Goose eggs have been reported. The information presented herein is intended to augment knowledge of these three threatened forms of North American wildlife. We wish to thank members of the staff of the Endangered Wildlife Research Program for assistance in gathering the data.

Twenty-four of the Whooping Crane eggs were taken from nests on the breeding grounds at Wood Buffalo National Park, Northwest Territories, Canada. These eggs were collected for a program designed to establish a captive breeding flock at Patuxent with which to produce stock that will bolster the existing wild population or establish other self-perpetuating units. Six of the eggs were collected in 1967; eight in 1968; and 10 in 1969. The remaining nine eggs were laid by a bird in the San Antonio Zoo in Texas. This female had been born in the wild and was captured after being injured during migration. She was mated to another captive Whooping Crane at the zoo.

In Table 1, measurements of Whooping Crane eggs taken from the wild are listed separately from those of eggs laid by the San Antonio female. Our average measurements were similar to those reported in previous studies. Allen (Natl. Audubon Soc., Res. Rept. 3: 180, 1952) reports average dimensions of 99.6 × 63.3 mm for 62 eggs, and Reed (North American bird eggs, New York, Dover Publications, Inc., 1965, p. 99) finds averages of 95.3 × 63.5 mm for an unspecified number of eggs. Bent (U. S. Natl. Mus., Bull. 135, 1926, p. 225) states, "The measurements of 38 eggs average 98.4 by 62.4 mm; the eggs showing the four extremes measure 107.5 by 63.5, 98.0 by 67.5, and 87.5 by 50.2 mm."

Eggs of the Aleutian Canada Goose (a small form characterized by a white "collar"

TABLE 1
EGG MEASUREMENTS FOR THREE ENDANGERED SPECIES

Species	No.	Mean ± SE	Deviation	Range
Length in mm				
Whooping Crane				
Wild	24	101.3 ± 0.97	4.65	92.5–110.9
Captive-reared	9	94.2 ± 0.79	2.37	92.2– 96.9
Masked Bobwhite Quail				
Wild stock	390	30.2 ± 0.06	1.28	27.1– 40.1
Captive-bred	419	27.7 ± 0.08	1.61	21.0– 33.8
Aleutian Canada Goose	158	77.4 ± 0.22	2.80	71.4– 83.9
Width in mm				
Whooping Crane				
Wild	24	62.9 ± 0.31	1.53	60.6– 66.2
Captive-reared	9	60.8 ± 0.65	1.95	58.4– 65.2
Masked Bobwhite Quail				
Wild stock	390	23.8 ± 0.04	0.74	20.7– 25.7
Captive-bred	419	21.6 ± 0.05	1.01	17.2– 24.5
Aleutian Canada Goose	158	54.3 ± 0.12	1.49	50.5– 58.0

at the base of the neck and by other less obvious characteristics) were obtained from captive stock of the Endangered Wildlife Research Program at the Patuxent Wildlife Research Center. This flock included about a dozen birds captured as goslings on Buldir Island in the Aleutian chain during 1963, and their descendants. The eggs of Aleutian Canada Geese measured in this study were only slightly larger than those of cackling Canada Geese (*B. c. minima*) reported on by Bent (ibid., p. 233) and Reed (ibid., p. 86). Eggs of our Aleutian Canada Geese were also similar to those of the cackling geese in color.

Of the Masked Bobwhite eggs 390 were laid by wild-caught birds, and 419 were laid by birds several generations removed from the wild. The eggs laid by the wild-caught birds are listed separately from those laid by the captive-bred ones because of difference in size and in the source of the stock. Bent (U. S. Natl. Mus., Bull. 162, 1932, p. 38) wrote that a single egg in the U. S. National Museum measured 32.5 × 25.0 mm, and that an egg recorded by Major Bendire measured 31 × 24 mm; seven other eggs averaged 29.6 × 23.4 mm, the largest measuring 30.5 × 23.6 mm and the smallest, 28.3 × 23.1 mm. Reed (op. cit., p. 136) reports an average of 30.5 × 24.1 mm for eggs of Masked Bobwhite Quail.

Our eggs from the wild stock of Masked Bobwhite averaged 30.2 by 23.7 mm, which is close to the average of Bent's and Reed's records, but eggs of the captive stock were noticeably smaller (27.6 by 21.6 mm). Perhaps the few birds from which this captive stock originated were genetically producers of small eggs.—James D. Stephenson and Glen Smart, *Patuxent Wildlife Research Center, Laurel, Maryland 20810.* Accepted 26 Apr. 71.

Breeding of the White-plumed Antbird (*Pithys albifrons*).—The nest and eggs of the White-plumed Antbird do not seem to be recorded. On 1 January 1962, while studying ant-following birds at Nappi Creek (a settlement of Macusi Indians at 200 m elevation, about 3° 17′ N, 59° 39′ W, on the flats and lower slopes of the northern base of the Kanaku Mountains), Guyana, I flushed a White-plumed Antbird off a nest with two speckled eggs. The cup-shaped nest (Figure 1) was sunk in a mat of dead leaves in the spiny crown of a small palm about 30 cm above the ground, in rather open mora (*Mora excelsa*) forest and on the edge of a small opening near Nappi Creek. Unfortunately building a blind of heliconia leaves to photograph the birds made them desert the nest. One or both parents warily circled the area during the few hours I watched, occasionally giving faint "see-see-see" and "tsee" notes, but did not go to the nest. The next day the eggs were cold and wet from rain.

The nest is somewhat unusual for an antbird. Many antbirds suspend their nests from forks of small twigs (Skutch, Life histories of Central American birds, 3, Pacific Coast Avifauna, No. 35, 1969, p. 293), although the Chestnut-backed Antbird (*Myrmeciza exsul*) builds bulky nests set on low vegetation or debris (Skutch, op. cit., p. 238). Nests that are not suspended from small forks are hard to find, and other antbird species may build nests like those of Chestnut-backed and White-plumed Antbirds. Some antbirds, such as Bicolored Antbirds (*Gymnopithys bicolor*), nest in cavities or behind the sheathing base of a large palm frond (Willis, Univ. California Publ. Zool., 79: 82, 1967).

The nest and several nearly-independent young out of the nest in late December and early January represent dry-season nesting at Nappi. Juveniles in the American Museum of Natural History were taken in August in Guyana and in October to April in Venezuela. This suggests nesting in both wet and dry seasons, possibly