

**Descriptions of four artificially hatched, neonatal large-waders.**—On July 5, 1958, O. L. Austin, Jr. and I took 4 clutches of eggs of 4 species of large-waders from a rookery near Gainesville, Florida. The eggs were put immediately into an incubator maintained at standard conditions of 37.8 degrees C., 64 per cent humidity, forced draft. The clutches were already partly incubated at the time of collection; hatchability was 100 per cent. One neonate of each species was contributed to the Florida State Museum.

These new descriptions supplement descriptions made previously of 3 other neonatal herons, *Butorides virescens*, *Botaurus lentiginosus*, and *N. nycticorax* (Wetherbee, Artificial incubation of wild birds' eggs and developmental condition of neonates, ms. University Microfilms, 1959).

Cattle Egret, *Bubulcus ibis*. A complete clutch had 4 eggs averaging 46.5 mm. x 34.47 mm. The eggs appeared larger and lighter in color than those of the following 3 species. Between the hatching of the first and last egg  $79 \pm 6$  hr. elapsed. The weight of the chicks averaged 21.69 g. (20.35 g. to 22.48 g.). The eggs opened relatively near the small end compared to those of passerines. The chicks of the herons had white down that was conspicuously longer and stiffer on the head. Skin was blue-gray, lighter on apteria and conspicuously blue over the eyes, legs were flesh-color, nails white, bill and lores yellow-green with small orange fleck between the nares on the culmen and with a gray spot in front of the orange. The gular sac was also light orange, the tomium was blue-gray, the inside margins of both mandibles were gray as was also the tip of the tongue; the rest of the mouth was light pink.

The eyes were open and had irides of light yellow. The auditory meatus was conspicuous. The skin hung loosely above the heel. The chick, upon hatching sat up feebly and squawked while the head was raised shakily; the toes made grasping motions and the wings made swimming strokes.

Snowy Egret, *Leucophoyx thula*. A complete clutch of 4 eggs averaged 43.8 mm. x 31.6 mm. The eggs were the smallest of the species described here and the next to lightest in color. Between the hatching of the first and second egg  $16 \pm 6$  hr. elapsed and between the second and third,  $20 \pm 3$  hr. elapsed. The neonates averaged 16.66 g. (15.45 g. to 17.70 g.). The down was similar to that of *Bubulcus ibis*. The skin and the black-tipped bill were cinnamon. The toes were lighter buffy brown than the legs (which had a knicker-like edemetic appearance), nails were light gray, feet relatively small. The mouth lining was dull flesh color.

Louisiana Heron, *Hydranassa tricolor*. The eggs from a complete clutch of 3 very light turquoise eggs averaged 42.90 mm. x 32.63 mm. Between the hatching of the first and last egg  $60 \pm 11$  hr. elapsed. The neonates averaged 17.11 g. (16.00 g. to 18.27 g.). The scanty down was light tawny on the head, dark gray on the back and wings and white on the femoral tract and underparts. The skin was grayish flesh-color and the bill the same except gray at the tip and along the tomium; toenails were white, mouth yellowish pink.

White Ibis, *Eudocimus albus*. The eggs from a complete clutch of 3 eggs averaged 54.53 mm. x 39.63 mm. The chicks averaged 32.32 g. (31.20 g. to 34.20 g.). The natal plumage (5 mm. to 10 mm. in length) was blackish anteriorly and gray posteriorly. The dark down of the crown and cheeks presented a striking contrast to the bare orange facial region. The skin, mouth and bill were light pinkish orange except for the anterior thirds of both mandibles which were black. The toenails were light gray. Although the bill did not show the decurved feature of the adult it is interesting to note that the tip of the tongue was decurved. In general the newly hatched ibis chicks were more helpless than those of the herons (which had good muscular control) and had a cormorant-like appearance. They uttered successive short rasping calls.—David Kenneth Wetherbee, U. S. Fish & Wildlife Service, Massachusetts Cooperative Wildlife Research Unit, University of Massachusetts, Amherst, Massachusetts.

**Tree Sparrow Recovery.**—A Tree Sparrow (*Spizella arborea*) was banded at Arcadia Wildlife Sanctuary of the Massachusetts Audubon Society in Northampton and Easthampton, on February 13, 1958, with band 53-94075. It repeated on February 15, and March 8. Essentially one month later, on April 7, 1958, this bird was trapped and released by Mr. Victor R. Perkins, assisted by Miss Virginia Perkins, at Maple Valley, Bethel, Vermont. According to the records, this Tree Sparrow took about a month to travel the approximately 110 miles from the Arcadia station (coordinates 4217-7238) to Bethel, Vermont. The time of