## HOME LIFE OF THE AMERICAN BITTERN

## BY HENRY MOUSLEY

T is now just twelve years since I found my last nest of the Bittern (Botaurus lentiginosus), and I certainly had little hopes of finding one in the area (a suburb of Montreal) that I have been working over and writing about for the past five or six years. However, on May 18, 1938 I flushed a female from the side of a small willow bush which was surrounded by water. Naturally, I kept a sharp look out in the immediate vicinity and a week later (May 25) had the satisfaction of flushing the female off her first egg. The nest was situated in the center of a small cattail bed on a raised mound about eight inches above the water and at this date was certainly somewhat exposed as the cattails had barely begun to send up their new shoots. Three more eggs were laid on successive days; then came a break of a day, the fifth and last egg being deposited on May 30. As already mentioned, the female flushed from her first egg when I was close to the nest, flying away with a croak and discharge of excrement. She was not on the nest, or perhaps I should say I did not see her on it, when I visited the site on May 26, 27 and 28. She flushed off her 4 eggs on the twenty-ninth, but was again not seen on May 30, the date of the laying of the fifth and last egg. From this date to June 17, I only found her at home once, on the third, when she again allowed a close approach before flying off with the usual croak and discharge of excrement. I always found the eggs warm, however, the bird no doubt having just slipped off them and hidden in the surrounding cattails on hearing my approach. I never searched for her as this would have meant trampling down the surrounding herbage with the eventual giving away of the site, no doubt. At no time during the study did I see the male bird. This no doubt was owing to the fact that I was unable to visit the site in the early morning or towards evening, the times when the pumping of the male usually takes

The duration of the incubation period of the American Bittern has never been quite clear to me, as in our text books it is said to be about 28 days or, again, not less than a month, but no mention is made as to when this period starts—whether from the laying of the first or last egg. In the present case, it would seem that incubation began on the laying of the first egg and continued more or less until the deposition of the last one, in which case the period was twenty-four days. On June 18 four eggs hatched with the fifth still remaining in the nest. This hatched out five days later on June 23. There was some little difference in the size of the first four young, one especially, seeming a little larger and more active than the others. Curiously enough I find Miss E. L. Turner's account of her experiences with the European Bittern (Botaurus stellaris) coincides more or less with mine, for Mr.

B. B. Riviere ("A History of the Birds of Norfolk" 1930: 135) says: "The period of incubation, from the laying of the first egg to the hatching of the first chick, appears to be twenty-five days (E. L. Turner). The eggs hatch on consecutive days and there is always a great difference in size between the oldest and youngest nestling, from which it may be inferred that incubation begins on the laying of the first egg." As if to still further substantiate this period, it will be noticed that the fifth and last egg in my case was deposited on May 30, and the chick appeared on June 23, again a period of just 24 days, as against Miss Turner's 25 days.

No pictures were taken of the young on the day they hatched, but on June 20 they were photographed when 3 days old, the pictures showing the 4 young with the one egg still unhatched. I did not visit them again until three days later (June 23), the day on which the fifth egg hatched, the pictures showing all 5 chicks in characteristic attitudes. Both on this, and previous visits, a constant hissing or buzzing noise was kept up, with snapping of the mandibles and various thrusts of the bill whenever I approached them. I again took pictures two days later (June 25), when 4 of the young were 8 days old, the youngest only 3 days old. It was a matter of great difficulty to obtain pictures of them at all, as just previous to my visit a heavy thunder shower had pretty well drenched them so that they presented a very forlorn appearance and were in no mood to be photographed. However, I set up the camera and had just managed to take one or two pictures showing the birds in an aggressive stage with mouths wide open and looking quite fierce when down came the rain again to add still further to my troubles. The youngest bird to my mind looked as though the time of its demise (the usual fate of the youngest) was not very far distant. This surmise was well founded, I think, for on again visiting the nest 3 days later (June 28), only 4 young could be found, these being 11 days old. Three of them immediately left the nest on my near approach and hid in the surrounding cattails. Fortunately, one for some reason or other preferred to remain in the nest and I was able to obtain some pictures showing it in characteristic attitudes. Time and again I managed to locate the other three in the surrounding herbage, but the instant I placed them in the nest they were out of it again before I could obtain any pictures. However, when my patience was nearly at an end, I did manage to get a picture showing the three of them in the nest together. The fifth young one either formed a meal for its stronger relatives, or was drowned, or perhaps eaten or carried away by its parent when cleaning up the nest. Speaking of sanitary arrangements at the nest, I have read some very disparaging accounts of this species in which the nest was in a dreadful state of filth, uneaten and smelling food lying about in all directions. This I am glad to say was not so in the present case, the nest on every one of my visits containing not a vestige of



Fig. 1. General view of nesting site of American Bittern.



Fig. 2. Nest and eggs of American Bittern

uneaten food, the parent having cleaned up everything before leaving on a further hunting expedition. The empty egg shells, I may also remark, were removed from the nest upon the hatching of each chick, but apparently were not carried away to any great distance, as I found most of them on searching about in the immediate precincts of the nest. My last visit took place on July 2 when all the young had left the nest and could not be found anywhere in the neighborhood. They probably had left it a day or so earlier, making their stay in the home a period of about 14 days. The nest consisted of a platform 13 x 16 inches, composed of dry cattail leaves on top of a mound some 8 inches above the water level. At first it was somewhat exposed, but as the herbage commenced to grow it became more hidden and later made quite a pretty picture with its canopy of cattails overhanging it.

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