## THE NESTING OF THE SHORT-TAILED HAWK.

BY HERBERT W. BRANDT.

## Plate IX.

The Short-tailed Hawk (Buteola brachyura) occurs in Florida, Mexico and southward throughout most of the tropical regions of South America. It is apparently a very rare bird wherever found, confining itself to the forests and big wooded swamps, and, therefore, very little concerning it has been written. Because of the inaccessible nature of its nesting grounds the authentic eggs of this Hawk are, in collections, perhaps the rarest of any of the Raptores nesting within the United States.

One of the most interesting things about this bird is the melanistic, or black, phase; in fact, this bird is known among the natives of Florida as the "little black hawk." Most of the North American Buteos have a melanistic phase (e. g., Buteo borealis, Buteo swainsoni), although the wholly black plumage is comparatively rare, whereas, in Buteola brachyura it seems to be the prevalent form. Indeed for a long time, it was thought that the dark phase of the present bird was a distinct species. When the Short-tailed Hawk was first taken in Florida by W. S. Crawford at Oyster (=Estero) Bay, Lee County, January 28, 1881, and recorded by Mr. Robert Ridgway in the 'Bulletin of the Nuttall Ornithological Club' for October of that year (Vol. VI, pp. 207-214), the question whether or not the black phase (Buteo "fuliginosus") was specifically identical with the light phase (B. brachyurus) was not definitely settled. In March, 1889, near Tarpon Springs, Florida, Mr. W. E. D. Scott found a pair of these Hawks just starting to build a nest. The location was on the edge of a hammock, up forty feet in a gum tree. The female was in the light phase and the male in the dark phase. Both birds were collected by Mr. Scott before the nest was completed, which settled the problem of the phases of this species ('The Auk', Vol. VI, 1881, pp. 243-245). Mr. Scott in the same paper recorded the capture of five more specimens from Florida—one in the light phase taken in company with one in the black phase at Chatham Bay, November 12, 1888, and three in the black phase taken as follows: Miami, October 11, 1883 (3); Chatham Bay, February 2, 1889 (3); source of Caloosahatchie River (no date or sex mark).

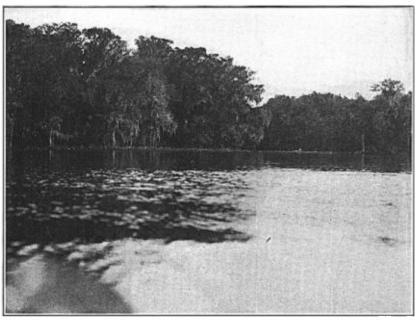
It has been suggested, also, that the phases represented different sexes, but our investigation indicates that this is not the case. I have counted the specimens of this Hawk in the United States National Museum collection and find them to be divided as follows: White phase, 1 male, 2 females; black phase, 5 females, 5 unsexed. In the Museum of Comparative Zoology, however, there are 4 white females and 4 black males. In Florida we saw but five individuals, four of these in the dark phase. Among the specimens I have seen there does not appear to be any intergradation between the phases, so prevalent among the other Buteos. Furthermore, from the data available, above and elsewhere, it seems that the black phase is somewhat more numerous than the light phase, which makes this species unique among the dichromatic North American Hawks.

The first complete nesting record of the Short-tailed Hawk was reported by Mr. C. J. Pennock in 'The Auk' for 1890 (Vol. XII, pp. 56). He found, on April 3, 1889, a nest at St. Mark's, Florida, in a pine tree. A month later his boatman took one egg from the nest. Its dull white showed blue when held against a strong light. It was marked on the larger end with reddish brown in small spots and blotches over about one-fourth of the surface, with a few fine spots extending to the middle of the small end. These were, however, so small that they could hardly be seen unless closely examined. Mr. Pennock gave no description of the nest except that he took it for an old Heron's nest to which fresh twigs of green cypress had been added. All the information that Bendire had concerning this Hawk he obtained from the articles by Scott and Pennock, before mentioned. Bendire in his 'Life History of North American Birds,' (I, 1892, pl. VIII, fig. 7) figured the egg taken by Pennock, which is now in the collection of the Academy of Natural Sciences of Philadelphia. There seems to have been no information published concerning the life history of this species since the early 90's.

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PLATE IX.





1. Nest and Eggs of the Short-tailed Hawk.
2. Edge of Istokpoga Lake Cypress Swamp, Florida, Where the Nest Was Found.

In March, 1923, I went to Florida in company with Mr. A. H. Howell of the United States Biological Survey, the objective of the trip being to study the nesting habits of the Short-tailed Hawk. We were fortunate in getting considerable information concerning this bird from Mr. Donald Nicholson of Orlando, Florida, who had spent a collecting season on Lake Istokpoga. Mr. Nicholson found three nests of the Short-tailed Hawk in the vast swamps about this lake, in 1910, two of which contained young, the third two eggs at the point of hatching, so that he was able to save only one of them.

Lake Istokpoga is the second largest lake in Florida, lying northwest of Lake Okeechobee in the central part of the state. It is roughly twelve to fifteen miles across and is entirely surrounded by a large cypress growth. To the south, reaching nearly to Lake Okeechobee, is a very dense impenetrable swamp, said to be one of the worst in Florida, and one through which very few white men have gone. It is in this swamp and in the big cypress bordering the lake that we found the Short-tailed Hawk.

During the latter half of March, 1923, we spent considerable time watching these birds, and on the 29th of that month, Mr. Howell found a nest in the dense swamp, three hundred yards from the lake. The male bird would sit by the hour in a big cypress tree near the mouth of Istokpoga Creek, evidently using this tree as a lookout perch. Mr. Howell patiently watched this bird on a number of occasions, and finally, about five o'clock, on the evening of the 29th the Hawk left his perch, circled upward a couple of times and dived into the swamp about one hundred yards from the lookout tree. A careful search of the swamp, in the direction taken by the bird, resulted in locating a nest in the top of a tall, slender magnolia, and on rapping the tree the female flushed from the nest.

The following day, March 30, I took a set of two nearly fresh eggs from this nest, which was in a swamp magnolia up fifty-eight feet from the ground. The tree was one foot in diameter at the base and very heavily overgrown with poison ivy, making the ascent rather difficult. It stood in a dense jungle of small trees and undergrowth, with water and mud knee deep. As we approached the tree the male, a bird in the black phase, flew up and

circled above, uttering a few cackling notes, somewhat like the Red-shouldered Hawk. This was heard but once. struck the tree the female, a beautiful bird in the light phase, immediately flew off the nest. As I climbed the tree they both uttered a single high pitched squeal, not unlike the alarm note of the Broad-winged Hawk, but a little bit harsher. They continued to utter this note during all the time that I was on the tree, which was at least an hour. They looked like two entirely different species of birds as they sat near or circled overhead. The female was noticeably the larger and nearly pure white below, while the male was as iridescently black as a crow in the morning sunlight. They were very unsuspecting and gentle in appearance, being most dove-like in their attitude, and having none of the ferocious features that are characteristic of the Buteos. Scott, however, speaks of them as being extremely wary and difficult to approach.

The nest was two feet in diameter and nearly a foot in height and was very large for the size of the bird. It was an entirely new nest. In a nearby tree was another nest, similar to this one, which may have been used by the pair in a previous season. The occupied nest was placed in the topmost part of the tree in a three-pronged fork among the heavy vines, and just eight feet below the highest leaf. The tree was only two inches in diameter at the nest, which was built entirely of cypress twigs, freshly broken off, with a small amount of moss and lichens remaining on them. It was lined with finer sticks of the cypress tree, dry magnolia leaves, and a few sprays of green cypress.

The two eggs are bluish white, somewhat lighter than those of the Cooper's Hawk. One is plain, while the other has a few reddish spots about the larger end. The sizes of the eggs are  $57.5 \times 40.9$  mm. and  $49.2 \times 40.3$  mm. The egg taken by Pennock measured  $55. \times 41$  mm.; while the only two eggs in the United States National Museum collection, both singles taken by Dr. W. L. Ralph at San Mateo, Florida, measure as follows: April 4, 1893, one egg,  $48.5 \times 41.7$  mm.; May 12, 1899, one egg,  $54. \times 41.6$  mm. The last two eggs are entirely unmarked. The data of one of these sets of eggs is as follows: "April 4, 1893, one fresh egg taken at San Mateo, Florida. Nest in a very dense cypress swamp about half a mile from Dunns Creek and about same distance from pine

woods. It is in the top of an immense cypress tree, about twenty feet from the trunk at the end of the largest limb, 95 feet from the ground (measured). Male killed was dark phase—female light. Nest composed of small sticks and Spanish moss thinly lined with leaf-covered cypress twigs; it was flat without much of a hollow and placed in front of and connected with a former one."

The sole recently published note on the nesting of the species that I can find was written by H. Kirke Swann in the 'Bulletin of the British Ornithologists' Club,' (Vol. XLII, Feb. 25, 1922, pp. 80) which reads: "Buteola brachyurus. Set of two eggs taken in Dade County, Florida, on March 27, 1910. The nest was in a large cypress in seven feet of swamp water, and the eggs were taken for three years in succession, when the tree was blown down in a storm and the birds left. This South American species is very rare in Florida and not many eggs exist in collections."

Unpublished data on two nests of this interesting species found by Donald J. Nicholson of Orlando, Florida, are as follows: "April 12, 1910, Istokpoga Lake, Florida. Nest on extreme outermost branches of a large cypress limb overhanging Istokpoga Creek; thirty feet above water; two eggs heavily incubated. Nest of sticks and moss, lined with green oak and gum leaves and a plentiful supply of green cypress boughs. April 12, 1910, Istokpoga Lake (south of creek). Nest in a tall slender cypress among the uppermost branches of the top, about fifty feet up. Composed of cypress twigs and moss, lined with leaves and moss. Contained two young birds about a week old in white down. Only one parent seen, was of an entire sooty black cast and had a white beak and light yellow claws. While in the tree it screamed the entire time, sometimes circling in the air or sitting in a nearby tree. Heard screaming at night in moonlight."

The Short-tailed Hawk is a very expert flier and sails by the hour, high in the air above the swamps, without a beat of its wings. It is often seen in company with the Swallow-tailed Kite or with either of the Vultures. During nest building the male accompanies the female, which carries sticks to the nest, while he hangs stationary, with motionless wings, fifty feet over the tree. This is the same trait that is shown by the White-tailed Hawk in Texas.

From what has been said, it is evident that this very rare species is a bird of interesting habits and well deserving of further careful study.

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## THE STATUS OF THE BLACK GYRFALCON AS A LONG ISLAND BIRD.

BY E. P. BICKNELL.

THE Black Gyrfalcon has for so long a period held an unquestioned place among the rarer birds attributed to Long Island that it is an unhappy matter it should at length come to be put under the ban. Nevertheless the interests of authentic history require that there should now be told a long unpermitted excommunicating tale. This goes far back and traces certain devious happenings that unintendedly issued in a mistaken record.

Probably not many of us of those pioneer days, as they now seem to be, may intimately recall the indefatigable John Wallace and his taxidermist shop, of musty memory, in upper William street, New York. Thither as a youth I used often to go, hesitant of troubling this always busy man, yet how impelled by expectation! Almost always there would be news of unusual local birds, for many were the specimens that came to that work-shop, and it even might befall, on good days, that I should be allowed to take into my hands some rarity not yet dispossessed of the fresh beauty of its natural form and plumage. Thus I came to know the bluff proprietor and, as it appeared, to be in some degree the recipient of his confidence. So it was that in the course of time I was permitted to hear the somewhat secret story of this falcon and how nearly it had missed its place in ornithological history.

It had been brought in to be mounted by two men who kept a saloon in Harlem, as the then suburban part of the city was known, and who often went out gunning into the adjoining county of It was from one of these expeditions that the men had returned with their bird. The undisclosing eye of the taxi-