

HABITS OF THE FLORIDA RED-SHOULDERED HAWK

BY DONALD J. NICHOLSON

The Florida Red-shouldered Hawk is found throughout the entire State, and is a common bird. No other hawk approaches it in numbers, and in certain districts it is exceedingly abundant. It frequents pine forests, prairies, marshes, river-beds, swamps surrounding lakes, extensive cypress swamps, and in fact most any place inland, but I have never seen it on or very near the sea-coast.

I have seen this bird as far south as Cape Sable, and found it nesting on March 6, 1927, about ten miles southwest of Royal Palm Park, Munroe County. The nest was in a small cypress and held two young about two weeks old. The parent was, or seemed to be, a much lighter or paler bird than those found in other parts of Florida, except on Key Largo, where I saw three birds the early part of April, 1927. The Red-shouldered Hawk of this key is now separated, and is said to be a smaller and paler bird than that of the mainland. The birds in Dade and Munroe Counties, however, appeared to me much paler than those found in other parts of Florida. This difference was so pronounced that I noticed it in the field, without the aid of specimens.

Early in December the birds begin their wild courtship "songs", which consists of loud, piercing, shrill calls, or screams, given while circling in the air. With loud cries they either soar or flap their wings rapidly, going in a circle higher and higher. From one to four individuals may be seen in the air at a time over the chosen nesting site. Spirited swoops and long dives through the air are often seen, they calling sharply the while. These cries are given also flying from one place to another. They are most noisy at this period, and keep it up throughout the entire day at intervals.

Early pairs begin building their nests in December, and by January 19 have deposited the complete set of two or three eggs. I have found a single fresh egg as early as January 18, 1927, and have found half a dozen full sets by January 20. It seems that these are laid by very old birds, as each year these same locations have early sets, regardless of cold or mild winters and wet or dry seasons. By February 15, the birds are well under way, but many deposit their eggs in early March, and a few belated nesters wait until April. These, possibly, are young birds of the year before.

More open spots in cypress swamps are chosen for nesting, and if in pine and cypress country a pine close beside the swamp is selected. They do not nest very far from water, and invariably quite

close to the cypress strands. The birds are very numerous on the Kissimmee Prairie, and in fact on most any prairie, nesting in the mixed clumps of palms, oaks and gum trees, which are called "hammocks". Their nests are usually about twenty-five to thirty feet above the ground, but few are placed eighteen or twenty feet, and some fifty to sixty-five feet above the ground. Their favorite nesting tree is the live oak draped heavily with Spanish moss; next is the pine, and third choice is "cabbage" palms; but gums and cypress trees are frequently used. Some of the nests are most artfully hidden among the heavily moss-festooned oaks, and it takes a keen eye to detect them. However, more often they are in plain sight, in the crotch, or out on some horizontal branch. There seems to be no preference.

I do not remember one instance where Spanish moss was not in use, and it comprises in many cases the bulk of the nest. Dead sticks, air-plant leaves, clumps of grass roots, and Spanish moss compose the body of the nest, and it is lined with Spanish moss, a few dead air-plant leaves and stems, bark, green or dead leaves, and down from the parent. Some nests are quite heavily sprinkled with this white down, and a sure sign of occupancy is the tell-tale down clinging to twigs surrounding the nest. The nest cavity is rarely deeply cupped, more often a gradual depression. Some are quite large structures, while others are quite small. In many nests green leaves are used, causing the eggs to become badly stained.

In many cases the nests are constructed long before the eggs are deposited, and I have waited a month after the nest was ready before the bird laid. On the Kissimmee Prairie, where tree cavities are scarce, this hawk often has her new nest stolen by a pair of Florida Barred Owls, and is compelled to build another. I have noted this on four or five occasions. Seldom will this hawk use the nest of the year before, but prefers to re-build each season; however, it does sometimes use the old nest, by merely adding some fresh material, mainly live Spanish moss, air-plant leaves, green leaves, etc. If a set is collected the bird rarely deposits a second set in the same nest, but resorts to another tree in the same clump, or near the original site. They cling tenaciously to the same place each year, no matter how often they may be disturbed. Second sets are deposited within three weeks to four weeks after the first have been destroyed.

The Florida Red-shouldered Hawk lays from one to three, very rarely four, eggs. I have seen possibly close to 150 nests, and two eggs or young is the rule, but three are laid quite often. I should say the ratio is five to one in favor of the smaller number. Quite

often only one egg is laid. William Leon Dawson found the first set of four eggs I ever saw in March, 1928, while with me. In 1929, Messrs. J. C. Howell and Wray H. Nicholson took a set of four eggs. Both sets were found on the Kissimmee Prairie and the only large sets known to me. Some years they seem to run heavily to sets of three eggs, but one year (1910) I took seventeen sets, of which two were single eggs, and one set was of three eggs.

As nearly as I can ascertain, it takes a little over four weeks for the eggs to hatch, judging from a set I took three weeks after finding a single fresh egg. It appeared from the stage of incubation that these eggs would have taken eight or ten days more to fully develop. The young are alert little fellows, clothed in snowy white down, with blue-black bills, and give weak imitations of the adult calls at quite an early age.

After the bird has deposited her full set she is always found on the nest, and rarely slips off until the tree is smartly rapped, or loud shouts are given, or sticks thrown up at the nest. She is often a close sitter and even this does not seem to bother her. I have thrown sticks and had them strike the nest only to have her flit up, and again settle upon the eggs. Often after rapping you are forced to ascend, and then sometimes she leaves the nest softly as an owl, but more often emits wild piercing screams. I once went up to a nest on a windy day and touched the bird's tail once and still she remained. The second time she dashed off like a bullet.

The birds are very bold and fearless in the defense of their nests, either while the eggs are fresh, or with young. One day I visited five nests, and the first bird carried away my cap in her talons and struck me such a severe blow that it gave me a bad headache, and left a scratch on my forehead. At two more nests I was attacked and struck upon the head. Many other times this has happened. This bird coming swiftly as an arrow directly for your head, screaming wildly, gives a timid soul the shivers, and unless you wildly wave your arms and shout, most likely she will give you a stiff blow that will put fear into you, and respect for their bravery. Actions of different birds vary when flushed from a nest; some will slip off quietly and not make any outcry, but the common practice is to begin calling and circling above, making dashes at the collector. Generally the male joins in. Others are content to alight in a tree within a few yards and try to frighten you with their shrill cries.

Two pairs rarely use the same hammock on the prairies, but I have found on one or two occasions two nests within few hundred

yards, where clumps were scarce. Nesting places are scarce on the prairies, and Florida Barred Owls, Florida Crows, and Audubon's Caracaras are often found nesting together in hammocks of an acre in area. Sometimes a Florida Red-tailed Hawk will nest near a Red-shoulder.

While in Collier County, May 1 to 5, 1928, I found several nests upon that late date with small young. The eggs of this hawk are quite handsome, but many are very plainly colored, with brown markings (sparse) on a ground of white. Frequently immaculate eggs are seen. Many have only a few minute dots. Generally, the marking is bold, with spots and splashes of reddish, brown, blackish, chestnut and lavender. Some are almost entirely marked faintly with lilac or lavender, and no other colors. Eggs of a set most usually match in size, but in a series the size of the eggs varies considerably. Some eggs are equal ended, ovate. Most eggs are blunt-pointed, while others are almost round. The patterns of marking are quite varied; some are heavily marked at the large end with other markings scattered over the entire egg. Others are equally marked all over, while still others are heavily marked at the center, more so than at the large end.

I have never seen these hawks chasing birds, and they make no attempt to catch small birds, which often annoy them in flight, but dodge and try to avoid them. Their food consists mainly of frogs and mammals; also many snakes are caught, and occasionally a bird. I have rarely observed feathers of birds in their nests. It can be safely classed as a beneficial bird. However, farmers in certain sections have suffered the loss of many small "biddies", and these hawks are killed whenever an opportunity is offered.

The method of hunting food by this hawk is perching alertly on posts, dead trees, or stubs, out in the open, watching patiently by the hour for its prey, be it some luckless mouse, snake, or frog. It is more frequently seen along the banks of streams, ditches, marshes, lakes, etc., watching for frogs, which is a favorite food. Crickets and grasshoppers are also eaten.

I counted ten of these birds within a few miles, posted on the top of telephone poles along the ditch, as I passed in my automobile, near Everglade, Florida, in April, 1928. Many did not offer to fly as I passed within twenty feet of them. However, the birds are as a rule rather shy, and do not permit close approach, except during the nesting season while near a nest.

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