

BIRDS WHICH NEST IN CAVITIES AND BURROWS.

BY MORRIS GIBBS.

Of the birds of Michigan which nest in excavations in wood or earth, there are probably nearly fifty species. In this division of nesters I have met with twenty-eight species nearly all of which habitually occupy a cavity during the duties of nesting.

The woodpeckers are pre-eminent as excavators in solid wood, and undoubtedly all of the nine species found in Michigan follow this custom, and with the aid of friends I have recorded seven kinds of these carpenters which bore or peck out their homes.

Then there are the nuthatches, which are capable of digging in soft decayed wood, but who quite as often select a site formerly occupied by a stronger-billed bird. The white-breasted nuthatch, which is the commoner of the two and much more social in its relations with man, often chooses an artificial cavity in the cornice of a building. The opening may be small, while the interior is very capacious, and to fill this large space and have snug quarters, the industrious birds often carry in nearly a peck of rubbish. The house wren also not infrequently fills cavities with twigs, grass and other litter, and then, strange to say, often leaves the premises for other quarters. The oddities of this little snuff-colored bird in the arrangement of its household affairs are very amusing and will furnish entertainment for any student. Why it is that all wrens with which I am acquainted seem desirous of amassing real estate in the shape of a collection of nests is more than I can conjecture, but it is a habit with which all are possessed. I have known a pair of house wrens to engage in the act of building in four different situations at one time. The winter wren, that ecstatic singer of the deep wild wood, rears its young in the hollow of some old log or stump.

Our vivacious acquaintance, the black-capped chickadee, digs out a shallow burrow in the decayed side of an old stump in early May. Not rarely, after working for a day or more, the pair encounter a layer of hard wood in the old weather-worn stump, and have to cease their efforts and look for a more suitable spot, for the little conical beak of this titmouse has not sufficient strength to penetrate hard substances. When the cavity is complete the bottom is lined with soft materials, nearly always dry moss and the hair of some of our small mammals, generally rabbit fur. On this delicate bed seven or eight white eggs, dotted with pink, are laid. I do not know of a more tempting discovery than the finding of one of these little nests. The circular entrance, which is generally from two to three feet from the ground, is not much more than one inch and a quarter in diameter. The excavation is usually about six inches deep and is widened out to accommodate the prospective family. Nearly one-half of the space is filled with the fluffy material of the nest. The chickadee occasionally adopts other quarters than those excavated by itself, and has been known to come into the city and build in an outhouse, after the manner of the more social wren. This is one more instance of the adaptation of birds' ways to a half civilized standard; or we may say that it is in conformity to the certain changes of evolution; demanded, as we can plainly understand, as in the case with the swallows and swifts.

Our common bluebird is another well-known example of the inhabitants of cavities. It never digs out these retreats, and seems to accept almost any kind of quarters, either in a clearing or in a bird house in the village.

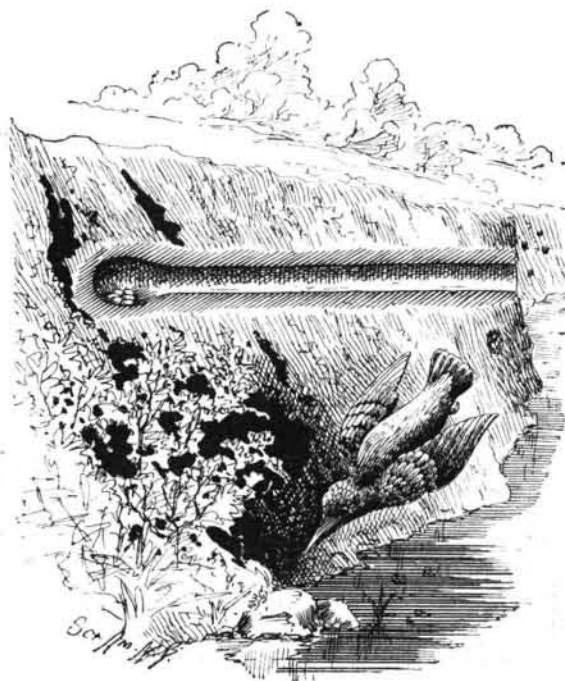
One species of swallow builds regularly in cavities, of course accepting those provided for it, generally preferring those holes in dead trees about water, over which it largely secures its food, but occasionally taking possession of a bird house. It is a graceful, pleasing bird, with a glossy blue back and white under parts, and is known to the boys as the tree swallow.

Among the warblers there is but one species that nests in holes. This is the prothonotary or lawyer warbler, and is commonly called the golden swamp warbler. It builds its nest almost invariably at the edge of water or over it. It is a handsome, lively bird, and its nest of moss usually contains five or six eggs. The great crested flycatcher is the only one of the family in Michigan which selects an excavation for its nest. The situation chosen varies greatly; hollow limbs, telegraph poles, fence rails and holes in stubs are the usual selections. The five or six eggs are laid in a nest composed of rubbish, and in which there is nearly always found a cast-off snakeskin. Sometimes there are two of these skins, and I have found portions of three. This is the only species of bird which presents this peculiarity in Michigan, and naturalists have tried vainly to account for the habit.

Among the birds of prey there are several known which lay their eggs in holes. The common sparrow hawk lays its five or six blotched eggs in a cavity in a tall dead stub, while the screech and barred owls select somewhat similar situations. The great horned owl often builds its nest in a huge cavity in the trunk of a large forest tree, but the nest is about as often built in exposed situations in the crotches of the tree, after the manner of the hawk.

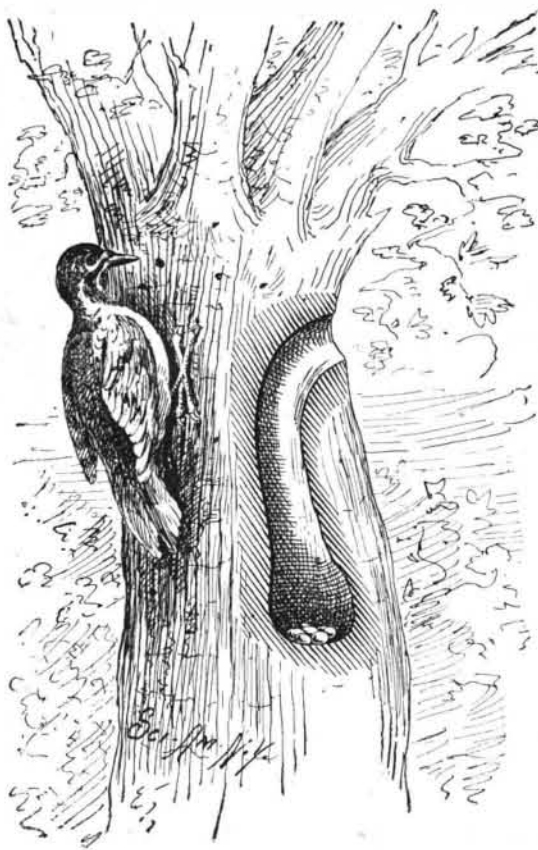
I have only met with one duck's nest, that of the mallard, placed otherwise than on the ground. This set of eleven eggs was laid in a deep cavity at the top of a large stub which stood in the water. The wood duck always builds its nest in the cavities of trees near the water.

Two kinds of swallows burrow in banks in the nesting season. The common bank swallow or sand martin is very abundant in sections, and I have seen as many as two hundred burrows in one bank on the



BANK WITH KINGFISHER'S NEST.

Kalamazoo River. These holes are generally about the length of one's arm, rarely longer, and at the end of a nearly straight burrow the flimsy nest of dead grass is found holding the five, six, or seven crystal-white eggs. As a rule the burrow has to be dug away in order to reach the nest, as the entrance is not of a size to admit the hand and arm. Another species, more often found breeding by isolated pairs, and much rarer, is a near relative, the rough-winged swallow, whose burrows are deeper and are further distinguished by having a round entrance hole, whereas the opening of the common bank swallow's burrow is elliptical in shape. The belted kingfisher is another burrower, and sometimes digs his tunnels over six feet in length. Generally they are between four and five feet deep, and wind about slightly. At the end of this tunnel is an enlargement sufficient to accommodate six to eight glo-



SECTION OF TRUNK SHOWING NEST OF A WOODPECKER.

bular white eggs and the sitting bird. The eggs are deposited on the bare, cold sand, usually in early May.

Occasionally we observe oddities in the selection of a nesting site, as in the rare case of a robin building in a cavity in a stump. It is not unusual for bronzed grackles to nest in hollows in stubs, in newly cleared quarters, showing that a species that generally builds nests on limbs of trees can take advantage of opportunities for protection when afforded.

The eaves and barn swallows and purple martins and also the swifts accept the protection afforded by man by nesting under the eaves and within barns and sheds, and bird houses, cornices, and chimneys.

All owls, woodpeckers and the burrowing swallows and kingfishers lay white eggs, but the rule is not unvaried regarding white eggs with those species which breed in excavations, for the sparrow hawk, nuthatches, house wren, and brown creeper all lay well spotted eggs.

Hunting the Polecat.

BY THOMAS HOLMES.

From the 15th of November till the 1st of March a good many of the dwellers in the rural districts of Connecticut, and especially in the Connecticut River Valley, find profitable employment in trapping polecats.

The occupation is not a pleasant one for a person whose sense of smell is toned up to the point of fastidiousness, but it pays far better than farming or any other vocation that offers itself to the back-country dweller.

The trapper, about the middle of November, sets stone traps and baits them with pieces of fresh meat. A chicken's wing, the "hind quarter" of a musk rat, or a piece of fresh rabbit is considered a fetching bait. The trap is a heavy flat stone, supported by notched sticks that are held in place by a spindle, upon the end of which the bait is placed. In attempting to take the meat from the spindle the trap is tripped and the stone falls on the animal.

The most favorable localities for setting these traps are under the walls around pasture lots and near ledges and old cellars or chimney stacks. Steel traps are sometimes used. They are placed in burrows; but it is necessary to carefully conceal them, or the animal will dig around the trap and escape.

When deep snow covers the ground, the skunk remains in its burrow and the trappers are obliged to wait until the ground is bare again before hunting the animal.

When the polecat is stirring, his favorite stamping ground is easily found, for the soil will be turned up as if by pigs. The animal roots in the ground for worms and roots of grass and certain shrubs. He is also fond of eggs and chickens, and he makes bad work for the farmer when he manages to get into his chicken house. He seems to hold the flesh of the fowl in a lower estimation than its blood. When a skunk finds himself in a well filled chicken house he proceeds to kill the fowls, and as he does so he drinks their blood, sometimes so gorging himself as to be unable to get away, and he falls into the hands of the person whose property he has destroyed.

In the fall skunk hunting is quite a popular sport among the men and boys of the back-country. The hunt usually takes place on the "young o' the moon." The participants clothe themselves in raiment for which they care but little, and, armed with a stout club or pole, from eight to twelve feet long, they take to the field about nine o'clock in the evening.

The polecat has an uncanny preference for cemeteries, and, if moving at all, he will be found burrowing around a graveyard oftener than anywhere else. If there is a cemetery within a reasonable distance, the hunter makes it his objective point.

When the game is sighted, the hunter, moving as stealthily as possible, advances upon it, and if he manages to get within striking distance of it without having been noticed, he stamps on the ground. The animal, on hearing the sound, immediately faces the enemy. There is a quick blow of the club, carefully aimed, and the polecat's days are ended. It sometimes happens that the aim of the hunter is faulty and the animal is not seriously hurt. Then it is that the man takes to his heels and beats an inglorious retreat.

From the fatty substance taken from the animal the country people try an oil, which they believe possesses wonderful medicinal properties, and it is freely used by them in severe cases of croup, inflammation of the lungs, and rheumatic affections.

The true value of the animal lies in its pelt, which finds a ready market. The pelts are graded in three classifications, viz.: Stripe, half stripe, and black. In the majority of skunk pelts there is a white stripe running from the head to the tail. These are classed as striped skins. When the white stripe extends only half way along the back it is a "half stripe" skin. A black pelt has but very little white in it, and it brings a much higher price than either of the other classifications.

Within the past few years skunk skins have made a wonderful increase in value. Formerly the hides went slowly at ten cents apiece; but the demand has grown for them, and a stripe and half stripe pelt now brings the trapper from eighty cents to one dollar and a black skin goes at one dollar and a half.

The skins are used extensively in the manufacture of fur garments. The monkey skin capes and muffs that were so popular a year ago were largely made of black skunk skins. Large numbers of them are annually exported to Europe, where they are manufactured into capes and other articles of wearing apparel.