

While on a field trip with Bob Walker on Feb 26th 1933 along Beaver Creek about eight and one half miles south west of Ogden we found four large elm trees all growing in a group very closely together right on the east bank of the creek.

In a large hole in one of the trees about 24 ft from the ground we saw the head of a Great Horned Owl peering down at us.

It seemed to be such an ideal place for a nest that we managed to climb up and investigate and found that she was brooding two eggs. She left the nest however as soon as we attempted to climb the tree and did not return while we were there as a gang of crows made life miserable for her off in the woods across the creek.

Beaver Creek is not a large stream and the timber along its course has been largely removed and the belt remaining is quite narrow.

These large elms were all over two feet in diameter and were among the largest to be found in that vicinity.

There was no nest in the cavity but the two white eggs were deposited on the floor of the cavity which was composed of decayed wood and was just about level with the opening. We found the cavity to be quite large and gave plenty of room for this our largest Iowa owl as well as plenty of room for her large husky youngsters which she later reared there. The opening faced west and was directly over the waters of the creek which at times was several feet deep. I have observed many nests of these big birds but this one was the best one ever studied from the point of protection, isolation and location. The large elm trees were so close together that we came down again and nailed strips across from one to the other making a ladder and thus making it easily accessible at all times. She did not disturb us while building this ladder and we did not

disturb her nest in any way. We made only three trips to the nest that year and on the third trip on March 6th we found that the nest was abandoned and we saw nothing of the old birds.

We naturally were very much disappointed for we wanted to study this pair of nesting birds when we had such a fine opportunity and also since very little work has been done with these big fierce owls.

Since **Most** bird students give them a wide berth on account of their ferocity in attacking intruders.

We decided to start early in 1934 to see if they would return to their same nesting site. On Feb 6th we found three eggs in the same spot so we were well pleased and decided to be very careful and not disturb them more than necessary.

We made a total of eleven trips to the nest that year during which time there was plenty of snow and on Feb 27th it was 16 below zero. One can imagine how close the brooding bird must sit and how well protected the eggs must be to withstand weather like that.

They did and all three were hatched and we continued to visit the nest and kept careful check on all food found. On Mar 15th when the young were from a week to ten days old we found the nest empty and found no traces of violence so came to the conclusion that someone must have destroyed them so the second year was not a success.

The year 1935 proved to be a better year when they returned again and deposited two eggs both of which hatched and both young matured.

The year 1936 was the only year in the seven years we have studied this nest that they did not return. We thought perhaps they had been killed but they were back again in 1937. Only two eggs were deposited and one proved infertile. The other one hatched on Mar 13 and the young owl left the nest when he was about 40 days old.

We made 23 trips to the nest in 1937 and the nest was under observation for a total of 56 days.

The year 1938 started off well for we found them back again and two eggs were in the cavity on Feb 22nd. ~~The first egg hatched on Dec 17th.~~ When we visited the nest on Mar 17th we found both eggs had hatched and the newly hatched young were dead in the nest from no cause that we were able to determine. The old birds were not seen so again we thought that they may have been shot and thought that our studies of this nest were ended.

This was not true for they were back again in 1939 which proved to be the most successful year of the seven years of study.

Our first visit to the nest was on Jan 29th when we found the crows busy mobbing the old birds. No eggs were laid yet but when we returned on Feb 4th we found her brooding one egg and on Feb 7th she was brooding two eggs. The third egg was deposited shortly after and all three were hatched and all the young grew to maturity.

We wanted to get the exact date of the hatch and from our previous experience we estimated that they should hatch about Mar 12th to 15th. We visited the nest on Mar 12th and found the creek far out of its bank and the nesting tree that formerly stood on the bank of a peaceful creek was now in the middle of a raging river nearly 200 yards wide. It was impossible to reach the tree until a week later when on Mar 19th we found all three hatched and seemed to be about a week old. We made a total of 21 trips to the nest this year and checked all food found very carefully and also removed and destroyed it so that it could not be counted a second time.

One very interesting observation was that both in 1934 and 1939 we found food in the nest from 11 days to a month before the hatch. In every case it was a mouse and this would indicate that the male was bringing food to the brooding female so that she could sit close to keep the eggs from freezing.

The record of food found is a most interesting one and was really our principal objective. The most complete records were for the years 1934, 1937 and 1939. The other years which were unsuccessful and the nest abandoned gave us very little for our records in the line of food. The list is as follows:-

Meadow Vole or Buffalo Mouse	13	
Whitefooted Mouse	7	
Barn Mouse	1	
Rats	21	
Muskrat	1	
Cottontail Rabbit	23	
Gray Squirrel	1	
Civet	1	Total rodents, 68
Robin	2	
Meadowlark	2	
Flicker	2	
Grackle	2	
Redwing Blackbird	3	
Pigeon	2	
Pheasant	9	
Canvasback Duck	1	
Ringneck Duck	1	
Piedbilled Grebe	1	
Domestic Chicken	1	Total birds 26

Not until nearly the close of the seventh year did we find any traces of any chickens and there are two farm yards within a half mile of the nest. Instead we found 21 mice and 21 rats.

Nearly all authorities mention the fact that they are fond of skunks and their nests usually have that familiar odor. Here again it was not until the close of the seventh year that we found our first Civet.

The food in about half the instances was headless although some authorities state that it is almost always headless. Very few pellets were found and none were analyzed. The food checked and recorded was that which remained uneaten.

While the young were real small and for the first two weeks they were fed only mice of various kinds but as they grew larger we found no mice but instead, cottontail rabbits.

The one lone chicken found at the close of the seventh year was so completely cleaned that nothing but the bones and feet remained. That the young after they were a month old consumed great quantities of food was quite evident for the older they grew the less food we found.

In the seven years study of this nest only six young birds grew to maturity and left the nest and all of them were banded with the regulation government leg bands. Two matured in 1935, one in 1937 and three in 1939

According to this ratio I hardly think we need to worry about any alarming increase of these predators.

The nearest we can drive to the nest in a car is nearly a half mile and from there we follow a fence row directly down to the nest. Along this fence grow is a tangle of willows, grape vines, weeds and plum thickets which former ideal cover for sparrows and in 1939 it was the home of a covey of about 20 Bob Whites. We would very frequently flush these birds as we walked along the fence row and they would scatter down toward the owl nest just a few rods away.

The most interesting observation this year was the fact that we found absolutely no trace of any Bob Whites in the nest nor did we have any reason to believe that any had been taken by the owls. This should prove conclusively that our Bob Whites are perfectly safe from the most vicious predators if they have the proper cover.

Another interesting observation was that no small birds were found. One year a pair of bluebirds nested in a woodpecker hole in a neighboring tree and seemed to be unmolested.

That they obtained water birds was easy to understand because the nest was right on the bank of the creek. However another interesting observation was that the only three water birds were Canvasback, Ringneck and Grebe all of which are divers. Why were they selected and how were they captured? They may have been crippled birds. The old birds have the reputation of being very savage and most bird students will not go near a nest. We had no trouble for six years and were beginning to think the pair we had were really civilized owls until the day we were banding them in 1939.

Bob was up in the tree lowering them to me in a sack and I was banding them. The old bird came swooping down through the timber and like a bolt of lightning struck him on the side of the head and sent his cap flying in the air and tearing several holes in his ear and the side of his head causing the blood to run freely.

The next time we came down we were equipped with steel helmets and heavy leather helmet so we better protected. However she struck Bob again and although his steel helmet warded the blow until it fairly resounded in the woods and one of her claws gave him another scratch on his cheek below the helmet.

During the entire seven years of study of this one nest we made 68 trips travelling a total of 1156 miles by auto and about 53 miles on foot. During this time the nest was under observation for a total of 219 days. A number of photographs were taken during the various years and during the years 1937, 1938 and 1939 a complete series of colored motion pictures were taken showing both action as well as color of this most interesting predator who is feared by everyone and who is usually killed on sight. Fortunately our pair still lives.

The size of the nest cavity by actual measurements is 16 in. high from top to bottom, it is 9 in. across the center and is 22 in. deep across the bottom from front to back. Since the tree slopes somewhat at this point it is only 14 in. across the top from front to back. The opening is just 24 ft from the ground. Another significant fact was that we never saw more than one of the old birds at one time during the entire 1939 season.

These birds are considered the most relentless killers and are not protected by law as are the other owls. Most authorities condemn them in the strongest terms and their conclusions many times are those reached by someone who may have found food in their nest which they thought we should have had instead of the owl family.

During our seven year study we had ample opportunity to kill both old birds but we never harmed them in any way although we felt like it after her vicious attack in 1939

Instead we are still continuing our studies for after all, that is the only way to secure reliable information. To get it yourself and directly from the birds.

While they only took one chicken in seven years and during that same period they took two pigeons, two wild ducks and nine pheasants.

During that same period however we found 21 mice, 21 rats, 1 muskrat, 23 cottontail rabbits, 1 gray squirrel and 1 civet.

You may judge for yourselves whether the balance is in their favor or whether it is against them.

I have always maintained that we should make our bird study practical and there is no better way than to make close and extensive studies of the nesting, the food habits and the habits and actions of the birds.

One can not come to definite conclusions on one or two casual observations but our studies should extend over a period of years and then arrive at an average. For instance we learned that the period of incubation ranges from 29 to 36 days. The female broods the eggs continually from the time the first egg is laid hence the young hatch in the same way so they two and three days difference in their age. This can always be noted by the group photographs of the young. We also learned that the age when the young leave the nest varies from 34 to 47 days. We still have much to learn of these big fellows and hope to continue our studies providing some "human predator" does not interfere with our perfect set up.

With apologies to Mr Kipling I wish to close my remarks by saying "If" you can climb to dizzy heights in the tallest trees, "If" you can be strapped to another tree in mid air while taking pictures, "If" you are willing to go out on regular bird trips when the temperature is below zero, "If" you can wade snow and slush when other folks are sitting by a warm fire, "If" you can hear the coarse "Whoo Whoo" of old Bubo and see the glare in her eyes without having chills run up your back, "If" you can be struck by this thunderbolt of the air and still come back for more, "If" you can do all this and like it -then you will be a real bird student and what's more, - you'll be a man, my son.