

OBSERVATIONS ON THE MONTANA HORNED OWL

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On March 10, 1941, a pair of Montana Horned Owls (*Bubo virginianus occidentalis*) was found nesting in a large stack of baled hay which was being used as supplemental cattle feed (fig. 19). This hay stack was situated at a winter camp about six miles south of Miles City, Montana. All through the winter a man had occupied the cabin which was about 30 feet from the hay stack. Hay was fed from the stack from the first of January until the middle of April.

The owls were almost undisturbed until about March 20, when removal of hay from the south side of the stack began. At that time a bale was removed near the entrance to the nest and the nesting bird came out of the stack with a great deal of commotion and hissing. The nest was back in the stack so far it could not be seen from the opening from which the bird emerged. On March 25, the actual location of the nest was discovered, but too late, for the bale upon which the nest was resting was inadvertently removed and the nest destroyed. It was about two feet in and about four feet to the right so that the owls had to travel about six feet through the stack to reach the nest. Three eggs fell to the ground when the nest was destroyed.

After losing this first nest, the pair immediately nested again, this time directly on the top of the hay pile where there was no protection at all. Two eggs were laid in this



Fig. 19. Stack of baled hay in which Montana Horned Owls nested. Author is pointing to location of nest of 1942.

nest and after about four weeks one owlet was hatched. The other egg failed to hatch and was kicked out of the nest in a few days by the old owls. The young bird remained on the nest until early June, after which time no regular observations were made. The parent birds and the young one were seen occasionally in this vicinity throughout the summer months, however.

Two owls, presumably the same pair, returned to the hay stack in the spring of 1942. They were nesting when I first returned to the camp on March 16. The nest was

on the south side of the stack, open to the south, but back between two bales so that it was protected on all other sides. Over the top was a ledge of old hay which had been strewn over the stack to protect the baled hay from the weather. Hanging down in front of the nest were several pieces of heavy wire which had been used to keep the loose hay from blowing from the top of the stack. Upon approaching and leaving the nest, the birds had to worm through this wire entanglement.

Two eggs were laid in this nest. They were first seen about March 20. All through the incubation period there was considerable cold and snow which made almost constant protection of the eggs necessary. On one occasion, however, a horse was tied at



Fig. 20. Young owls, one month of age, in nest in hay stack.

the south side of the stack and the nesting bird was flushed. The presence of the horse kept her from returning because each time she would appear the horse would become nervous and the owl would be frightened away. The day was cold and raw, probably 15 to 20 degrees above zero, and the eggs were left exposed to those conditions for 30 to 45 minutes. They apparently suffered no damage, however, for both eggs hatched on or about April 17.

As the incubation period progressed, the parent owls became more and more hostile when disturbed and after the owlets appeared they were ready and willing to fight to protect their young. The nesting site was about 30 feet back from a high bank along the creek. Down in the creek was a small cottonwood tree and crossing the creek near by was a Forest Service telephone line. While one of the pair was on the nest, the other was usually perched in the tree or on a telephone pole. If the nesting bird was flushed from the nest, the other would immediately come to his or her aid. Both would sit near by and hoot and clack their beaks or would fly near the nest, keeping a close watch on all activities. After the young were hatched, the parent birds often would attack intruders.

When the young were one month old, a companion and I set about taking pictures

of them in the nest. One of the old birds flushed from the nest as my friend started up the hay stack and the other bird left the cottonwood tree. This latter bird headed straight for him. As quickly as possible, I thrust a hay fork into the air, deflecting the flight of the bird sufficiently to save my companion from a stout blow on the head. Even so, he could feel the air movement from the large wings as they passed by. We had with us an average-sized cocker spaniel. Every time the dog turned his back, one of the old owls would attack him, nearly knocking him to the ground. Each time, the dog was so surprised that he made no attempt to fight. The owls seemed to throw their weight against him rather than try to tear his hide with their talons.

There was always considerable hooting and clacking of beaks. One bird, presumably the female, made short choppy sounds, *hoo hoo hoo hoo hoo*, while the other would make longer, more extended sounds, *hoooo-- hoooo--*. In addition, one of the birds would fly into the creek bottom, feigning injury, and at the same time make a loud whistling sound. If this bird were approached, it would flutter off, away from the nest, and continue the performance, attempting to lead the intruder from the nesting site. On one such occasion, however, the owl was forced to take to the cottonwood tree when it was viciously attacked by a male Chinese pheasant. The owl made no attempt to fight back but merely flew into the tree.

As stated earlier, the young birds were hatched on or about April 17. They grew rapidly and by May 1 the old bird had to sit out on the edge of the nest to make room for them. Figure 20 shows the birds at one month of age. They were very downy, but the juvenal feathers were beginning to show in the tail and wings. The feathers were still enclosed in sheaths.

The young birds left the nest at five weeks of age, still fuzzy and downy. However, they were able to fly as far as 100 feet when they were six weeks old. Possibly they left the nest at this tender age because of the many disturbances to which they had been subjected. They were last seen at two months of age, the young birds sitting on the platform of the windmill tower and the old owls on telephone poles 100 yards away.

In and around the nest were the remains of many rodents, mostly rabbits. In 1942 no bird remains were found, but in 1941 there was evidence that a few small birds had been killed and eaten. It is not likely that birds made up a large part of the owls' diet.

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