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A CAGE TRAP USEFUL IN THE CONTROL OF WHITE-NECKED RAVENS

Ey Shaler E. Aldous, Junior Biologist, Section of Food Habits
Division of Wildlife Research

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INTRODUCTION

This leaflet, describing a cage trap that has been found useful in capturing white-necked ravens, has been prepared in response to numerous requests for aid in the local control of these birds in western Texas and southern New Mexico and Arizona. Traps of the type described have been used also in the capture of crcws, the results having been particularly effective in areas where sncwfall tends to curtail the winter food supply of these birds.

THE WHITE-NECKED RAVEN

Range

The white-necked raven (<u>Corvus cryptoleucus</u>) is found in Texas west of longitude 99° and in the southern parts of New Mexico and Arizona. At the present time it does not occur in numbers great enough to be of economic importance north of latitude 34° in Texas and the adjoining eastern edge of New Mexico. The bird is most common in areas where mesquite is plentiful and of sufficient size to serve as roosting sites. Roosts of this nature may harbor from a few hundred to many thousand birds late in fall and in the winter and early spring months.

Identification

The white-necked raven may be distinguished from the western crow (Corvus brachyrhynchos hesperis), a species with which it comes in contact along the eastern and northern borders of the raven's range in Texas, by its slightly larger size, its longer and more heavily set beak, its less resonant and distinctly guttural voice, and in flight by its greater tendency to soar. The term "white-necked" refers to the concealed white bases of the feathers of the neck and breast, which distinguish it on close examination, but in general the plumage appears entirely black.

Economic Relations

It is the gregarious habits of the white-necked raven that make it capable of inflicting damage to unharvested crops in fall. The aggregate loss to grain sorghums, because of the large acreage involved, far exceeds that to any other crop. Locally, however, fields of melons, corn, and peanuts may be seriously damaged.

On the other hand, the white-necked raven has many good qualities. In fact, in some extensive agricultural areas its good work overbalances its damage, this being particularly true where alfalfa and cotton are the principal crops. In February more than one-third of the raven's diet consists of cutworms, and during the nesting season (May, June, and July) about 80 percent of the food of the adults and nearly all that of the young consists of insects.

In areas where heavy concentrations of these birds occur and the interests of agriculture are at stake, local control of some nature is essential.

THE TRAP

The most selective and safe means of reducing the numbers of the white-necked raven is to use a large cage trap of the type known as the Australian crow trap. The frame of this trap is constructed of 1 by 4-inch lumber throughout, and is covered with 2-inch poultry netting (fig. 1, \underline{A}). The ladderlike opening at the bottom of the V-shaped top serves as an entrance for the birds and, except at the extreme ends, is the only part of the trap not covered by netting.

Construction

The trap here illustrated is 10 feet square, thus permitting the use of 5-foot poultry netting with a minimum of splicing and waste. The four corner uprights are 6 feet high, and the base of the V-shaped opening is $4\frac{1}{2}$ feet from the ground. The ladder (fig. 1, \underline{B}), built across the middle of the trap, is nailed to the two end cross pieces; it is 18 inches wide, and the slats, made either of lath or 1 by 2-inch lumber, are spaced 9 inches apart. A 1 by 4-inch strip 20 inches long is nailed to the top of the ladder and the supporting cross piece of the frame, so as to strengthen the structure at each end.

To prevent the caged birds from escaping, if they should climb the wall of the trap at these points, pieces of poultry wire cover the space between the ladder's end brace and the first slat. A brace of 1 by 4-inch lumber 18 inches long is placed in the middle of the ladder, vertically, taking the place of one of the slats. Pieces of stiff wire 8 inches long, hung from the center of each slat, will aid in preventing the birds from escaping through the openings (fig. $1,\underline{A}$). One or two roosts, or perches, extending the length of the trap will assist in keeping the captive birds quiet.

Two strips of the 5-foot netting, each 11 feet long, attached to the inner side of the ladder and stretched over the side and stapled to the bottom board of the frame, will cover half the top and all of one side. A piece of stovepipe wire may be used to lace the two pieces together. Two strips of the netting, each 10 feet long, will cover all but a small section in the upper corners of the two ends. These small openings and the ends of the ladder can be covered with the extra netting allowed in the specified material. Poultry staples should be used to attach the wire to the frame. It is best to place a staple about every 4 inches, to avoid any possibility of the birds forcing the wire loose from the frame.

Material required

The following material will be needed for the construction of the trap, and either old or new lumber and poultry wire will be satisfactory:

5 pieces, 1 by 4 inches, 12 feet long.

13 pieces, 1 by 4 inches, 10 feet long.

l piece, l by 4 inches, 6 feet long.

12 pieces, 1 by 2 inches, 20 inches long; or 6 laths, 4 feet long.

70 linear feet of 2-inch-mesh poultry wire, 5 feet wide.

l pound of poultry-wire staples.

1½ pounds of 8-penny box nails.

l pair of 3-inch butt hinges, with screws.

1 3-inch hasp, with screws.

1 roll of stovepipe wire.

The 12-foot lumber is for the 4 corner uprights (6 feet long), the 4 pieces forming the V of the top (about 5 feet 6 inches each), the upright to which the door is hinged (4 feet 6 inches long), the diagonal door brace (about 5 feet long), and the top of the door (2 feet long). The 10-foot lumber is for the 8 strips for the sides of the frame (upper and lower), the 2 sides of the ladder, the two roosts or perches, the bottom of the door (2 feet long), and the 2 sides of the door (3 feet 10 inches). The 6-foot strip is for the two pieces (fig. 1, B, a, a') nailed to the ends of the top of the ladder (20 inches long), and the brace (fig. 1, B, b) in the center (18 inches long). The 1 by 2-inch pieces, or the laths, are for the slats of the ladder (20 inches long).

The tools necessary are a hammer, a saw, a pair of pliers, screw driver, tin snips, and a shovel, The shovel is for removing any irregularities on the ground, so that the bottom of the trap will touch at all points.

Operation and Efficiency

The choice of location of the trap is essential to its proper functioning. Any natural congregating place of the birds, where they come to feed each day, is a good site. Such places may be found around slaughter houses, hog or cattle feed lots, dump grounds (especially garbage disposal places), barnyards, and at watering places if these are scarce.

The trap is baited by placing slaughter-house offal, rabbit carcasses, or other meat in the cage directly beneath the ladder. Some success has been obtained with milo maize heads, watermelons, and even garbage as bait, but such materials are not as attractive to the birds as is meat. After the first baiting, the trap should not be approached for at least 24 hours.

Once the birds begin to enter the trap, it should be visited daily and all birds should be removed except 5 or 6 freshly caught ones, which are to be left in the trap as decoys. As soon as the bait loses its fresh appearance, it should be replaced with fresh material.

The birds may be killed quickly and humanely, by grasping the legs, wings, and tail tightly in the hand and striking the head sharply against a post or rock. The dead ravens should always be taken some distance from the trap, so they will not act as a deterrent, and the trap and the surrounding area should be kept free of feathers and other litter.

Trapping is most effective during the colder months, after the crops have been harvested and food is scarce. In some years successful results may be obtained as early as October and as late as March.

The efficiency of this trap has been demonstrated on various occasions. One that was operated for 12 days in November caught 512 white-necked ravens. Four traps operated at one place from September 1934 through the following spring caught 10,000 of these birds. The success of this trap depends largely on its proper placement and on the care the operator exercises in keeping it freshly baited and in removing excess birds at regular intervals. When the trap is not being operated, all bait should be removed and the door tied open, so that birds entering it may escape and not be trapped only to die of starvation.

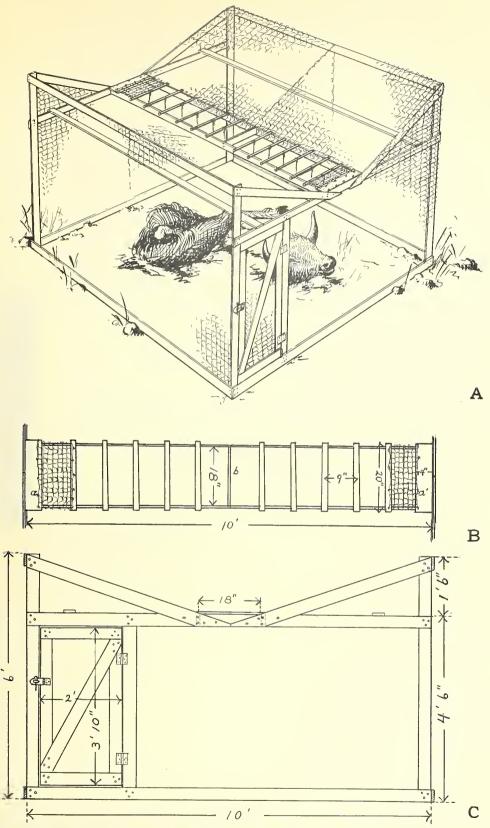


FIGURE 1.—Cage trap for capturing white-necked ravens: A, View when baited;
B, plan of "ladder" opening; C, end elevation. The trap is adapted also for capturing crows, but when the trap is used for crows the ladder slats should be 6 instead of 9 inches apart.

