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# THE DECOY TRAP By HAROLD E. BURT and MAURICE L. GILTZ

## Introduction

Our contribution to the Symposium will be limited to decoy traps with which we have had most of our experience. We have been operating such traps in northern and central Ohio since 1963 and between us have banded over 130,000 birds and handled some 10,000 repeats.

The origin of the decoy trap in this country goes back to John Linehan's serendipidy. He used some old fish netting to make an enclosure in a cornfield and after introducing some birds into the enclosure he was concerned about their escaping through holes in the top. The next day he found more birds under the netting than at the outset and then discovered that the newcomers entered to join the others rather than that the captives escaped. This demonstrated the decoy principle which was then implemented by providing "holes" systematically. These took the form of turkey wire with a 2" x 4" mesh on top of a trap. Basically the decoy traps in current use consist of an enclosure of chicken wire or equivalent high enough for the operator to walk inside with an area ("ladder") on top consisting of turkey wire through which the birds can drop with wings folded but through which they cannot fly out with wings extended. Presently they are driven down a tapering runway into a gathering cage.

## Construction

There is no "standard" size for a decoy trap. We have caught substantial numbers of birds in a trap as small as 40' x 20'. However, if there is a large population in the vicinity a larger trap will provide a larger catch. After a certain density is reached (approximately 400 in a 20' x 40' trap), additional birds will not enter the trap. We shall now describe the trap we are currently using with the reservation that other sizes and other materials may be satisfactory. Our present trap is 90' x 40'.

The first step is to plow (or dig) a furrow at least 6" deep around the entire perimeter. This facilitates burying the bottom edge of

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the chicken wire sides to an appreciable depth. In this way birds are prevented from escaping under the wire and rats are discouraged from burrowing their way into the trap.

Next come the steel posts that are to support the wire. Seven posts are installed along the sides of the trap (see ground plan) and at 15-feet intervals a similar array of 7 posts runs lengthwise through the center of the trap. Highway sign posts are quite satisfactory as sections can be bolted together to give any desired length. The posts are installed with 7' above the ground and 1' to 3' below ground depending on how much reliance is to be placed on guy wires. Heavy wire (10 to 14 gauge) is strung along the tops of the posts and secured to each post around the periphery and likewise along the posts in the center of the trap. This heavy wire is to support the chicken wire.

A similar procedure is used to support the ladders of 2" x 4" mesh. It is the usual practice to have the ladder a few feet lower than the edges of the trap. In their efforts to escape the birds tend to fly toward the highest point which in this case is the edge of the trap where escape is impossible. If the ladder is as high as the rest of the trap some of them fly to the ladder, take hold of the wire and manage to flutter in such a way as to escape through a 2" x 4" aperture. The lower ladder minimizes such escape.

Our trap has 2 ladders as shown in the ground plan. Each is supported by 8 fence posts. These can be of lighter weight than those at the periphery and do not need guy wires. They are 4-1/2' high above ground. Our ladders are 30' x 3' but the dimensions may be altered to take advantage of the available width of turkey wire. In a smaller trap one ladder may suffice.

The entire trap, except for the ladders, is now covered with one-inch mesh chicken wire. This wire slopes down from the edges of the trap and from the top center line to the ladder areas and is secured to all the ladder edges. All seams and overlaps must be closed. We use hog nose rings for this purpose but any small metal band similar to those we put on the birds will be satisfactory. This step is very important because birds will find any opening over an inch in diameter and escape. On top of the trap an alternative material is "plastic" netting with one inch mesh. It seems to accumulate less snow and its durability compares favoribly with that of the chicken wire.

The birds are removed from the trap by driving them down a tapering runway into a gathering cage. The side of the trap constitutes one side of the runway. The other is a partition of chicken wire extending

the full height of the trap and supported by posts like those used on the periphery (see ground plan). Its upper edge is fastened with hog nose rings to the chicken wire top of the trap. The runway tapers from 7-1/2' to 2'. At the small end is an exit 2' x 2' and 4-1/2' above the ground closed by a sliding door of masonite which can be operated from inside or outside the trap. Beyond this exit is a bench of appropriate height to hold the gathering cage and possibly an intermediate cage.

The operator enters the door farthest from the exit, drives the birds diagonally across the trap, down the runway and through the exit into the gathering cage. Then he closes the sliding door, goes out the second large door, removes the gathering cages and does the banding. It is advisable to install a baffle or ramp of 1/4" hardware cloth extending from the bottom of the exit to the ground 3' along the runway. This tends to guide the birds up to the exit. Otherwise a "mass" of them may accumulate on the ground just below the exit.

The posts around the periphery should be supported by guy wires. Iron posts of almost any size may be driven diagonally into the ground 6° from the main posts, as indicated, and a wire run from the top of the main post to ground level on the supplementary post. The guy wires are tightened by turnbuckles, or in the interest of economy one may use a double wire and twist it with a stout stick.

Another desirable feature is some perches (dowel rods) hung about 2' from the top of the trap. Preferably there should be some near each end of the trap. They will encourage the birds to fly from end to end and thus be more conspicuous as decoys.

So much for the interior of the trap. The gathering cage is of 1/4" or 1/2" hardware cloth 24" x 18" x 12". It has a sliding door of masonite which is removable. This door has an aperture 12" x 7" which is covered by two pieces of rubber inner tube stapled to the masonite in such a way as to make a slit through which the operator can reach. The hole closes when he withdraws his hand holding a bird.

It is not advisable to put the gathering cage next to the 2' x 2' exit. Some birds will enter the gathering cage, "bounce" off the far wall, go back through the exit and pass the operator in the runway in spite of all the commotion he makes. An intermediate cage about 2' in each dimension may be placed next to the exit. The side toward the exit is open but controlled by the sliding exit door. The other side of the intermediate cage has a vertically sliding door which may be set partly open and leading into the gathering cage. In this way the birds have more space beyond the exit and are not so apt to bounce back. We have sometimes used 2 intermediate cages in sequence to further minimize es-

cape back into the trap. The materials for a trap like ours will cost from \$200 to \$250. A substantial amount of hard labor is likewise involved.

#### Maintenance

The trap is baited with cracked corn in the area below the ladders. If this area is bare dirt the corn is more visible. Pieces of stale bread also serve as good bait, especially with Starlings. Pans of water are provided and in hot weather is is well to shade these pans. From 10 to 20 birds are always left in the trap as decoys. The grass in the trap and the work area should be mowed periodically.

Occasional inspection for "leaks" should be made. In our experience Starlings are most adept at finding small holes in the wire. If such a leak is suspected it is our practice to count the Starlings left in the trap at night and if the number is substantially reduced next day, we can be certain there is a leak.

### Conclusions

If one is anxious to band large numbers of birds and has access to a heavily populated area, the decoy trap is to be recommended. However we are disposed to inquire why he is so anxious. Our philosophy of banding has changed with the accumulation of experience (and years). At one time banding large numbers seemed to us a mark of distinction or a status symbol; now it is merely a way to reduce sampling error in our data. Moreover the numerical needs vary with the problem. For example if we are concerned with species differences in the geographical distribution of recoveries and only some 1% of the birds banded are recovered, then it is necessary to band thousands in order to get an adequate sample of recoveries. On the other hand if we are experimenting with the birds as we have access to them, for example measuring "complacency" of each individual in our sample, then a few hundred birds will suffice.

It is our conviction that a bander should not build himself a decoy trap, band all comers and hope for an important problem to emerge. He should, on the contrary, have some problems or hypotheses formulated in advance and then tailor his banding program (and equipment) to those problems.

(See next page for photographs) we are publishing figure one because it is the only suitable photo available of the overall design although the picture lacks considerably in contrast. Ed.)



Figure 1. Overall view of the decoy trap.

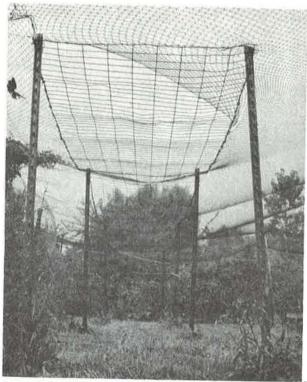


Figure 2. Ladder through which birds enter decoy trap.

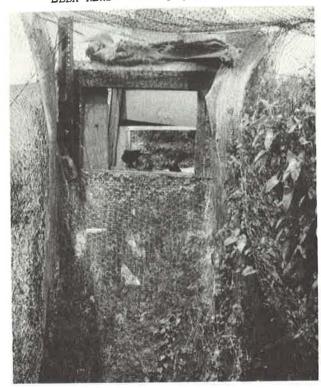


Figure 3. Ramp feeding from ground up to exit which prevents birds from bunching on ground.

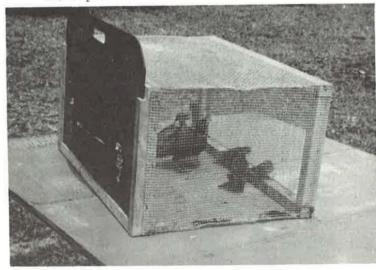


Figure 4. Gathering cage with slot in door through which the operator may reach to obtain birds.

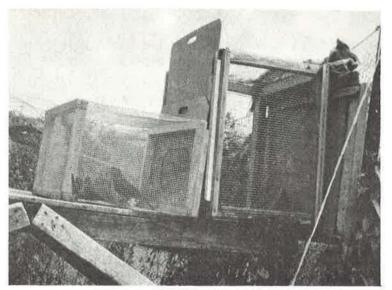


Figure 5. Gathering and intermediate cages from the decoy trap in position next to the exit.

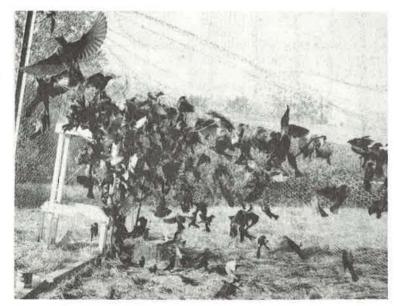


Figure 6. Typical concentration of birds in the runway.

