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EXPERIENCES WITH A HELIGOLAND TRAP

By MRS. ROBERT LEACH

I first learned of Heligoland traps through two articles written by J. Woodford and D. J. T. Hussell, published in the July 1961 issue of *Bird-Banding*. Very detailed descriptions of construction and methods of operation were given, along with diagrams and pictures. Soon after, in August of 1961, my family and I began to build a trap along these lines. (These diagrams, taken from the Woodford and Hussell articles, are reprinted for those readers not familiar with the general design of a Heligoland trap. I am indebted to the authors for permission to use the diagrams.) I was influenced in this decision because of having missed one of the best warbler migrations in many springs, due to rain and high winds. Our property is located on a hill and if there is any wind at all, we are apt to get it. Therefore, there are many days, even in good weather, when nets are not usable.

The authors of the aforementioned article stress the importance of site selection and the desirability of observing, for many months, the movements of birds in your locality—and in this I heartily concur. A trap of this size and weight cannot be moved without great effort.

One suggestion as to location was given as the end of an isolated line of bushes, preferably containing no high trees. They also recommend a natural hollow, out of the wind—an isolated clump of evergreens—a narrow valley, and many other possibilities. However, I felt that I had little choice except for a long line of planting, running along our east boundry—because of the impossibility of frequent checking of a spot too far from the house, and also the difficulty of transporting building materials down a hill into woods, which was my other choice. Pastured horses on a large part of our land have made trapping impractical, except in certain areas.

This line of planting, running north and south, is isolated to the east by a corn field and to the west by grassy plots and a winding road. It is approximately 250 feet from its inception in a pasture to the trap location, and continues on to the south for about 400 feet. Thus, the trap is placed in the midst of a line of planting of about 650 feet in length. In composition, the planting begins at its north end with a line of seven mulberry trees and from there includes several flowering crabs, a few soft maple and birch trees. Then the height drops down to a double row of these bushes: First, Siberian Pea Tree; second, Ginnalla Maple, ending with Honey-suckle just at the entrance, and Lilacs within the trap itself.

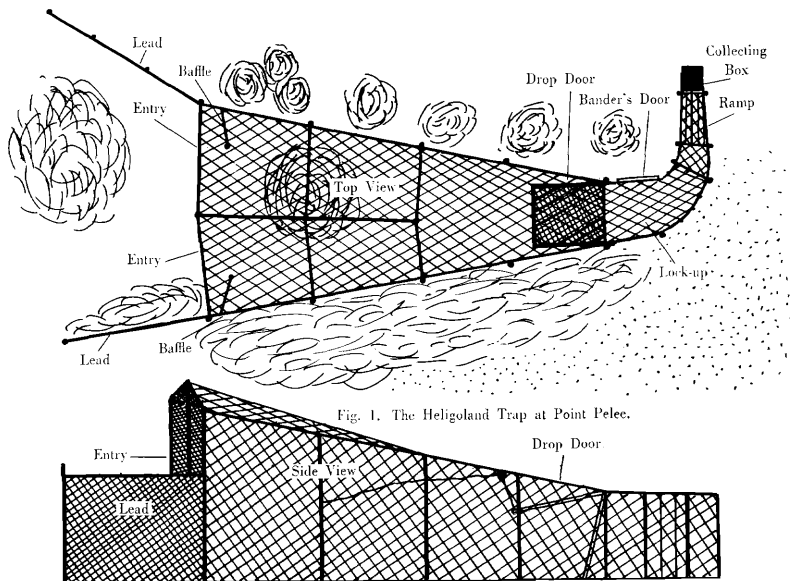


Fig. 1. The Heligoland Trap at Point Pelee.

As is stated in the article, "no two Heligoland traps are exactly alike." However, we did follow, as nearly as possible, the measurements given for the trap in use at Pt. Pelee, Ontario. The basic pattern is a wire enclosure, widely open at one end, tapering and angling to a narrow end, and closed by a collecting box. The back of the box is window glass and appears to the birds to be a way of escape. They fly against the glass and drop into the box.

The framework is of 2 by 4's and covered with $\frac{1}{2}$ in. hardware cloth. As with the Pt. Pelee trap, our trap has wing-walls which angle to each side of the entry and serve as lead-ins. The wings are 12 feet wide and 15 feet high. The opening is about 25 feet from wing to wing and the height of the main body of the trap is also 15 feet. This height clears by several feet the honeysuckle bushes which are directly at the entrance—an important factor—as otherwise birds would tend to fly over.

The trap is composed of four sections, gradually growing narrower and angling to the west. Each section, built independent of the one adjacent, is approximately 8 feet wide, narrowing in the last section, to the width of the gathering box. Since the trap was built in late summer, we faced it to the north for the fall migration, believing that after this first season we would turn the trap to the south and make such changes and adjustments as might be necessary. For this reason, also, we did not sink the uprights into the ground, as recommended. Instead, to strengthen the trap, we attached guy wires out from the opening section and this has withstood winds of over 50 miles an hour.

We had professional help with the framework and catching box; then, when it came time for the wire to be attached and laced, the entire family joined in and by using scaffolding we were able to reach the highest spots. The new wood seemed so bright to me that I used black paint from a spray can, making a splotchy pattern to help camouflage it before the weathering process took care of that problem. I would like to point out, too, that it is especially helpful to lace the wire to the wing sections before raising.

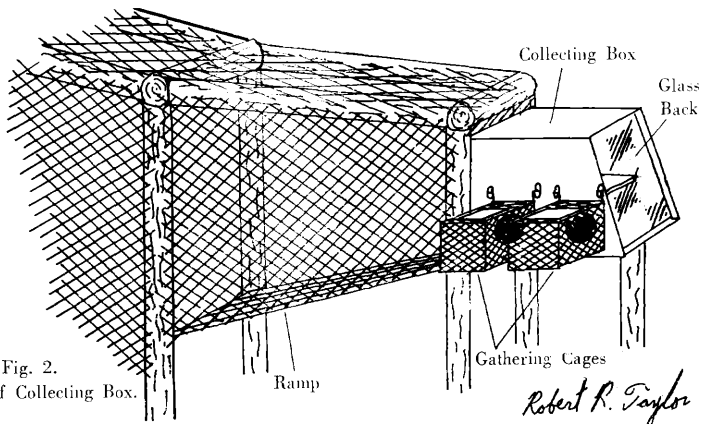


Fig. 2.
Details of Collecting Box.

The box is placed about waist high, $3\frac{1}{2}$ feet above the ground, with a ramp leading up to it. It is 19 inches square and 2 feet high. I followed Woodford and Hussell's plan carefully and at first had a drop floor made of light metal, balanced to return to its position after the bird had dropped below. However, I found the balance very difficult to maintain properly so as to drop for all sized birds with which I had to deal. The heavier birds, such as Blue Jays and Doves, tended to throw the mechanism off. I discussed this problem with Carl Johnson, a Rochester, Minnesota, bander and he offered the suggestion that I eliminate the treadle and simply have a 3-inch wide opening running the length of the glass back. This I did and since then have had a minimum of escapes, once a bird had dropped.

Also, at first I had a drop door which could be lowered from the outside of the trap to cover the entrance to the catching box and prevent any possible escapes. This, likewise, proved impractical in operation and has since been removed. We never did install a door which dropped to close the last section, as shown in the diagrams I was following.

As completed, the last section sloped slightly downward to the box, contrary to advice in the *Bird-Banding* article. It was quickly noted that the birds trapped did not want to fly downward towards the box, and consequently driving them in, proved a tedious, arm-waving process. This last problem was remedied by rebuilding the last section to slope upward to a slightly raised box. And, at the same time, the angle of this last section was increased to insure that the way back to the entrance could not be seen by birds which had been driven this far.

The trap is baited with mixed feed in a raised feeder and water drips into a small container during the warm months. During migration, when certain ground-feeding species are present in number, feed is sprinkled on the ground.

With observation, as time went on, I felt that there was too little planting within the trap area. The walls were too obvious and there were too few places for birds to perch within the confines of the structure. So, I have wired dead trees and branches to the sides and added brush piles. The only additions in planting I have made are two Manchurian Crabs, in hopes of luring Bohemian Waxwings in winter.

The first bird was caught in the Heligoland on September 23, 1961, and since I ceased all banding activities for the year at the end of October, any meaningful records begin with the full year of 1962.

I should say here, that although we found it necessary to leave the Heligoland in its north-facing position, we do feel that the trap is almost as effective in spring, since such birds as have gathered in the 250 feet of planting to the north are easily driven back to the south.

So it was for other reasons, after the busy months of the spring migration were past, that I began to suspect that we had made a very large and costly mistake. It was soon plain that a bander, driving alone towards the trap, would find his yield roughly half that of a drive by two or more persons. Some herding can be ac-

complished by a back-and-forth route, but once begun, it is important that the drive continue steadily, even though escaping birds can be observed in all directions. The other conclusion that soon came to light was that one bander, working alone during the height of a good migration, where ground traps are working as beautifully as they did for me that April, has all he can possibly handle to process totals of 50 to 150 birds a day; the hours devoted to banding often being only a very few. The time consumed to make a long drive on the "H", (as I began to refer to it in my notes), sometimes to discover that the birds had moved out of the area, simply couldn't be spared. And, this year also, contrary to 1961, the warblers were not plentiful. So, this was another disappointment.

Occasionally, birds will be self-caught and I will have the happy surprise of finding a bird or two waiting for me. My five black-billed and yellow-billed Cuckoos were found in this manner. However, this is very rare. I have kept no records of the birds caught in this way, but would estimate that there have been no more than 25.

To sum up 1962: Of my total 3,090 birds banded in 169 days, 434 were trapped in the "H". Of a total of 83 species banded, 49 were caught in the big trap, some of these being duplicates of those species caught in ground traps and nets. So this first full year of its use, I felt that it had not been worth the investment, at least for my situation.

In 1963, I banded even fewer days—127—my total being 2,268 of 52 species. By this second year, I had become accustomed to including a few drives on the Heligoland on most banding days, especially when Juncos were present in number. But, in October, when their migration was at its peak, I began to concentrate on use of the big trap as I had never done before. At the same time my husband began to join me during the weekends in driving on the trap and whenever possible we enlisted the aid of our two daughters. I believe the figures for this month show what can be done with such a trap, even in a "family" situation.

I banded on 19 of the 31 days of the month. My total was 1,207 birds in this time, of which 619 were caught in the "H". 563 of the 619 were of "0" band size, predominately Juncos. There were 17 other species represented in the 619.

My conclusions are:

(1): The planting, especially as it nears the entrance, is quite important. For example, during the time the honeysuckle is in fruit, I am able to catch large numbers of Robins, Catbirds, and Orioles which would not be attracted to corn, millet, etc.

(2): Even though the trap is in a location naturally attractive to birds, even when the concentration of birds is high, the yield from the trap is dependent upon the number of people available to drive. When my husband and children joined me, we caught up to 40 or more at one time. Alone, with what appeared to be about the same number of birds in the area, my best yield would be 20 or less. In my opinion, the cost of building a trap of this size is not justified unless there are two or more banders involved.

The following are the 53 species caught in the "H" from September 1961, to the end of 1963. Only 6 new species were added in 1963.

Red-Winged Blackbird	Clay-Colored Sparrow
Yellow-Headed Blackbird	Field "
Indigo Bunting	Fox "
Cardinal	Harris' "
Catbird	Lincoln's "
Brown-Headed Cowbird	Song "
Brown Creeper	Swamp "
Black-Billed Cuckoo	Tree "
Yellow-Billed Cuckoo	Vesper "
Mourning Dove	White-Crowned "
Purple Finch	White-Throated "
Yellow-Shafted Flicker	Brown Thrasher
Least Flycatcher	Warbling Vireo
Trail's Flycatcher	Red-Eyed Vireo
American Goldfinch	Black and White Warbler
Common Grackle	Myrtle "
Rose-Breasted Grosbeak	Nashville "
Blue Jay	Orange-Crowned "
Slate-Colored Junco	Western Palm "
Slate-Colored x Oregon Junco	Tennessee "
Eastern Kingbird	Yellow "
Golden-Crowned Kinglet	Yellowthroat
Ruby-Crowned Kinglet	Cedar Waxwing
White-Breasted Nuthatch	House Wren
Baltimore Oriole	
Eastern Phoebe	
Common Redpoll	
Robin	
Chipping Sparrow	

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REGROUPING OF FAMILY MEMBERS OF THE WHITE-FRONTED GOOSE (*Anser albifrons*) AFTER INDIVIDUAL RELEASE

By HARVEY MILLER¹ AND ALEX DZUBIN²

INTRODUCTION

The purpose of this paper is to document the reformation of white-fronted goose families after they had been released singly during banding procedures. That a strong bond exists between members of a goose family and that this cohesion is important in flock formation of Canada geese (*B. canadensis*) and other species of *Branta*, *Chen* and *Anser* is a well known phenomenon (Elder and Elder, 1949; Lorenz, 1959).

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