

An inexpensive trap for capturing flightless Canada Geese

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This paper describes a waterfowl trap which is inexpensive to use and easily constructed and transported. It was specifically designed to capture predetermined groups of flightless Canada geese. However, this technique could be applied to other flightless (during summer molt) waterfowl in refuge or urban settings.

During the summer of 1980 at the Pymatuning Laboratory of Ecology, northwestern Pennsylvania, over 350 Canada geese were captured for the purpose of placing numbered collars and leg bands for behavioral observations. One major objective of this research was to capture specific aggregations of geese, such as family units, or non-breeding groups. Other capture techniques such as baited cannon nets as described by Funk and Grieb (1965 and Turner (1956) and corral type used by Robards (1960) and Cooch (1953) were not applicable for the purpose of this study. Cannon-traps were both very expensive and dangerous to the geese. Corrals were too fixed in space and were also time consuming to erect.

The trap was constructed of an 18 m X 18 m hemp net of 5.0 cm mesh. Each corner of the net was attached with an S/hook to a 3 m section of 3.75 cm conduit. Each conduit was guyed at a 45° angle from the square of the net. As the guys were drawn tight the center of the net would rise off the ground to approximately 1 to 2 m. A 30 m rope was tied to the bottom of each conduit to function as a pull rope to drop the net. Each conduit was placed on a square of masonite (.3 m X .3 m) such that it would slide and avoid gouging into the soil. The details are illustrated in Figs. 1 and 2.

Three to 6 people are able to "herd" the flightless geese under the net with very little effort. Two additional people are necessary to pull the ropes that are connected to the conduits which drop the net. After the capture is complete the assistants hold the net down to avoid excess entanglement. The geese are removed individually from under the net, banded and collared, and the necessary data collected. Table I summarizes the use of the drop-net during the summer of 1980. As indicated, the drop-net technique is an extremely economical means of capturing, banding and collaring geese. We required only 78.75 man-hours to handle 352 geese — an average of 13.4 minutes per goose.

Table 1. Summary table of capture data resulting from 15

Number in target group	Number captured	Number escaped	Capture success (%)	Number workers	Man hours
8	8	0	100	6	3
18	18	0	100	7	5.25
13	9	4	69	6	4.5
41	39	2	95	6	7.5
11	11	0	100	6	3
40	40	0	100	8	8
46	42	4	91	8	10
22	17	5	77	6	4.5
41	41	0	100	7	3
11	9	2	82	6	3
7	7	0	100	6	3
27	26	1	96	6	6
49	43	6	88	6	7.5
22	15	7	68	6	4.5
28	27	1	96	6	6
Tot. 384	352	32	92	—	78.75

Note: None injured in any drop net attempt.

It is recommended that no more than 30 geese be captured at any one drop of the net without more manpower than mentioned here (or additional holding facilities). Retaining the geese for more than 30 to 45 minutes may lead to overheating, unnecessary feather damage or injury. This is especially true in the northeastern United States, as the period of flightlessness corresponds to the hottest and most humid time of the year. I have found that morning and early evening captures appear to put less stress on the birds.

The drop-trap is light-weight, portable, and easily re-set for the next capture. Four people are able to reset it in less than 60 seconds.

The drop-net trap will be especially valuable to game-managers and researchers who wish to trap relatively large numbers of geese (or other flightless waterfowl) in areas where cannon-net or corral techniques are inappropriate. This is true in places where small areas of lawn or mowed field present feeding areas which are regularly frequented by the geese. Because the geese can be selectively herded under the net, it has also proved valuable in capturing certain groups or aggregations (families, non-breeding groups) without having to capture large numbers of other, unwanted geese.

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Literature cited

Cooch, G. 1953. Techniques for mass capture of flightless Blue and Lesser Snow Geese. *J. Wildl. Mgmt.* 17(4):460-465.

Funk, H.D. and Grieb, J.R. 1965. Baited cannon-net sampling as an indicator of Canada Goose population's characteristics. *J. Wildl. Mgmt.* 29(2):253-260.

Robards, F.C. 1960. Construction and operation of a portable goose trap. *J. Wildl. Mgmt.* 24(3):329-331.

Turner, L.B. 1956. Improved technique in goose trapping with cannon-type net traps. *J. Wildl. Mgmt.* 20(2):201-203.

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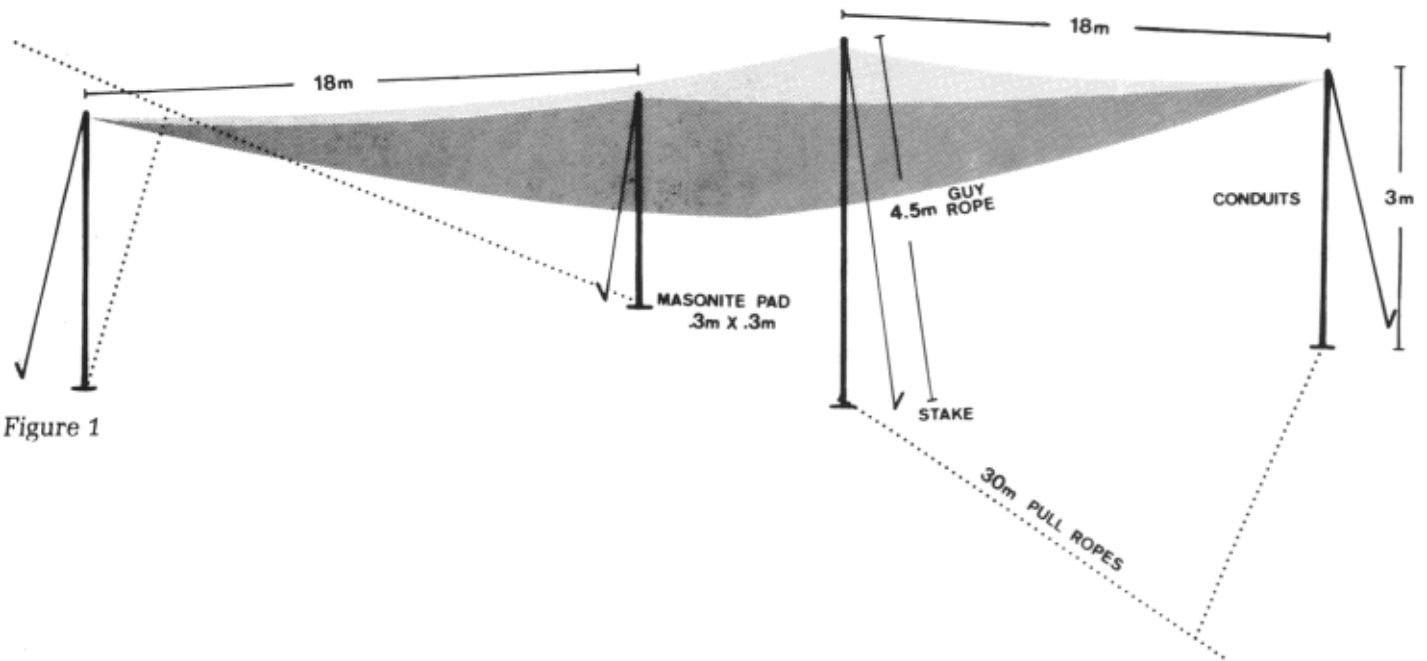


Figure 1

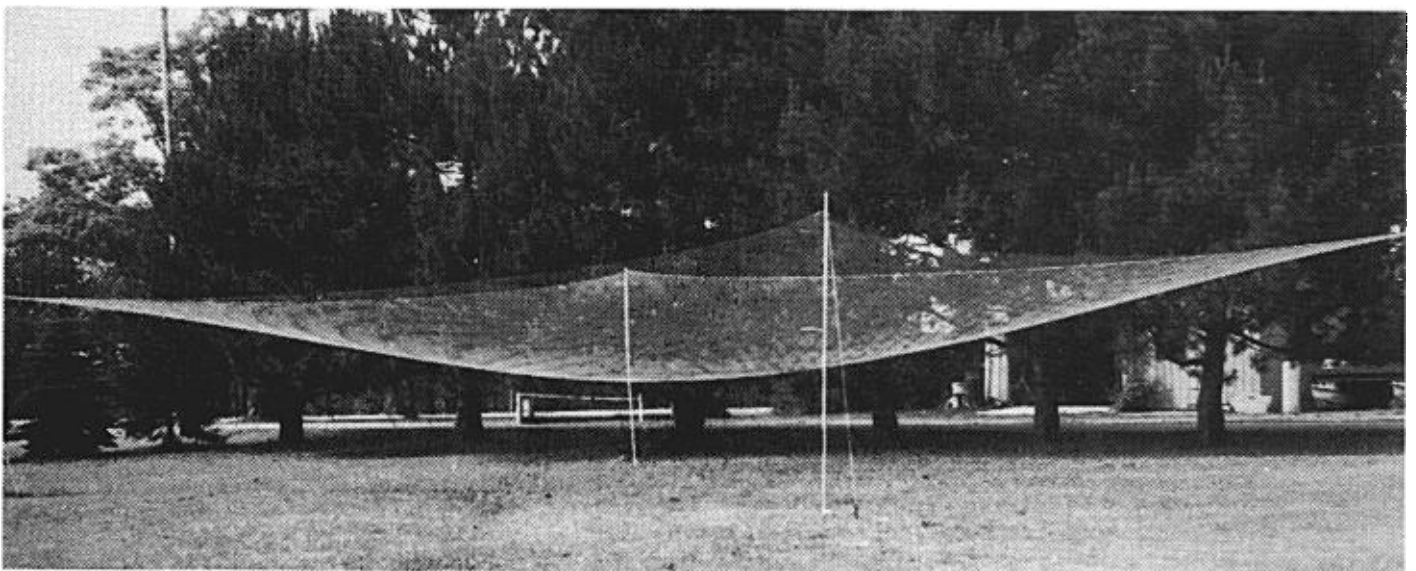


Figure 2