

A LIVE-TRAP FOR BIRDS*

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There is a need for a simple and efficient trap to capture alive the wide range of birds which can be attracted to food, water, a decoy, or other lure. The trap (Fig. 1) described here was designed to catch the swamp-harrier, *Circus approximans* (Peale), but with suitable baits and methods of release it can be adapted to take a wide range of sizes and types of birds which land on the ground. It has the following essential requirements of such a trap:

(i) It can be automatic, released by the bird, and an appropriate bait, perch, or other release mechanism can make it selective for species of similar weight or habit, as in the case of the swamp-harrier which pulls the bait. By passing the bridle bar over the main spike the trap can be fixed so that it will not spring during a period of free-feeding or while the bait is being set.

(ii) It can be released by an operator from a distance.

(iii) The "Selfset" trigger mechanism (which is an all-metal mousetrap with that trade name) is easy to set correctly. Although the trip mechanism is sensitive there can be great tension on the release bar; this enables the tension and check cords to be strained in opposite directions so that the net frame cannot be moved from the upright position.

(iv) It can be made to any size, and a trap with a 4 by 3 ft frame, with all components, weighs 9 lb. It is not bulky, and only a light hammer (or stone) and a knife are needed to set it. This operation takes about 15 min, and the trap can be reset in 1 min. It is cheap.

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The component parts of one trap are:

- 1 net frame, $\frac{1}{4}$ in. mild steel rod, with semicircular (or rectangular) frame welded to \square -shaped base.
- 1 main spike, $\frac{5}{8}$ in. mild steel rod, with $\frac{3}{4}$ in. nut on end (for hammering), and 3 by 2 in. metal base plate welded on side.
- 4 holding spikes, $\frac{1}{2}$ in. mild steel rod, 12 in. long with $\frac{1}{2}$ in. open eye.
- 2 extension springs, 4 in. long, extending to 9 in. with 3 lb load.
- 1 net, $\frac{1}{2}$ in. (or larger) mesh, cone-shaped; nylon is preferable.
- 1 net peg, c. 6 in. of 10 or 12 gauge wire.
- 1 "Selfset" mousetrap, mounted on base plate.
- 1 bridle bar, rectangular strip of metal to fit under release bar of mousetrap.
- 50 yd rot-proof fishing-line, for trap and distant release.

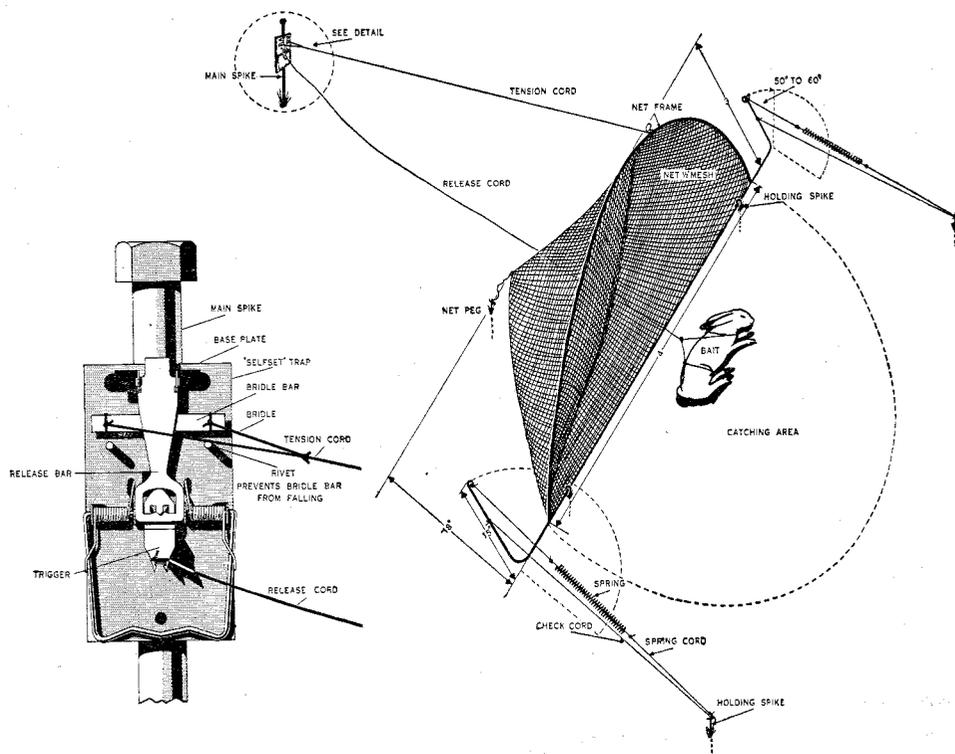


Fig. 1.—Live-trap in set position with detail of release mechanism.

To set the trap:

- (i) Lay the frame on flat ground and anchor with two holding spikes.
- (ii) Drive the other two holding spikes into the ground so that there is slight tension on the springs when their cords are tied.
- (iii) Drive the main spike into the ground 3 or 4 ft behind the trap and leaning slightly towards it.

(iv) Lift the frame almost vertical, place the bridle bar under the release bar, set the trigger, and tie the tension cord so that it pulls on the net frame.

(v) Tie the bait (or perch, treadle, etc.) to the release cord, which is left just slack. The forward pull on the release cord, away from the main spike, by which the trigger is tripped, is provided by a bird which attempts to drag away the prey, or by the weight of birds on a perch alongside the bait. The perch can be propped up so that any desired weight is necessary to depress it.

(vi) Tie the wind-check cord so that it pulls against the tension cord but leaves some tension on the springs.

(vii) Prevent the net from flapping or from blowing inside-out by attaching the apex to the net peg which is pressed so lightly into the ground that it is pulled out when the trap is sprung.

During January 12 to February 12, 1957, four of these traps were tested at Woodbury, Tas., the aim being to catch swamp-harriers for banding. Each trap was baited with a rabbit carcass and remained at the same site; it was visited twice daily. The four traps were in operation for 18, 12, 10, and 5 days respectively, and 6 trap-days were lost before check cords were fitted, which leaves 39 effective trap-days. Fourteen swamp-harriers were caught, two were recaptured, and only one false release occurred. No other species of birds were caught.

Since this paper was written, the author has seen a description of a similar bow-net used by Tordoff (1954)* to catch raptors, using live sparrows and mice as decoys, and with a trigger-release mechanism above the decoy platform.

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* TORDOFF, H. B. (1954).—An automatic live-trap for raptorial birds. *J. Wildl. Mgmt.* 18: 281-4.