

A Simple, Effective Net for Capturing Cavity Roosting Birds

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INTRODUCTION

Present traps and nets require elaborate construction and special conditions of use or are inefficient, allowing some birds to escape. We describe here a simple, inexpensive net which we have used with efficiency to capture Red-cockaded (*Picoides borealis*) and Red-bellied (*Melanerpes carolinus*) Woodpeckers at Fort Polk, Vernon Parish, Louisiana. Jackson also used the net to capture Red-headed Woodpeckers (*M. erythrocephalus*), Northern Flickers (*Colaptes auratus*), Eastern Bluebirds (*Sialia sialis*), and Tufted Titmice (*Parus bicolor*) at Noxubee National Wildlife Refuge, Noxubee County, Mississippi, and West Indian Woodpeckers (*M. superciliaris*) on Abaco, Bahamas. We have also used it to capture southern flying squirrels (*Glaucomys volans*).

METHOD AND RESULTS

Components needed to construct this net include: (1) the aluminum frame of a fisherman's landing net from which the net has been removed; (2) a 25-cm (10-in) diameter embroidery hoop; (3) a large, clear plastic bag; and (4) duct tape. "Flat" dimensions of bags we have used have usually been about 0.6 m x 1.0 m (2 ft x 3 ft), although bags of slightly larger or smaller dimensions can be used.

Construction of the net involves the following: (1) Slightly stretch the aluminum net frame so that the outer ring of the embroidery hoop can be fitted inside of it. (2) Tape the outer ring of the embroidery hoop in place there with small pieces of duct tape at the top and sides. The adjusting screw of the embroidery hoop should be placed nearest the net frame handle for ease of adjustment. (3) The inner frame of the embroidery hoop is then inserted into the clear plastic bag and held 10-20 cm (4-8 in) from the opening as the hoop and bag are fitted into the outer ring of the embroidery hoop. (4) The final step is to fold the 10-20 cm top of the bag inward and use 2-3 small strips of duct tape to form the loose plastic of the bag top into an inward pointing funnel. An opening of 8-10 cm (3-4 in) should be left to allow easy movement of the bird into the bag.

The net, thus constructed, is held over the roost hole to capture the bird as it leaves. Our experience with birds and flying squirrels is that once in the bag the animal almost never attempts to exit through the entrance funnel, although the funnel both guides the animal in and presents a baffle to keep it from escaping. Our impression is that the clear plastic fools both birds and flying squirrels into thinking that escape is straight ahead.

Clarity of the bag is important and success at getting an animal to enter the bag decreases when a more opaque plastic bag is used. It is useful to have extra bags at hand, since bag opacity increases with use as a result of scratches and body fluids, and occasionally an animal will tear a small hole in one.

The net can be taped or tied to the top of an extendable pruning pole, a section of TV antenna pole, or the extendable fiberglass pole (called a "hot stick") used by utility companies. We have found the latter to be ideal, since poles of more than 10 m (30 ft) extensibility are available. These can be extended or lowered from a vertical position, whereas others require the extended pole to be raised to vertical from a horizontal position--a difficult maneuver in wooded or brushy areas.

DISCUSSION

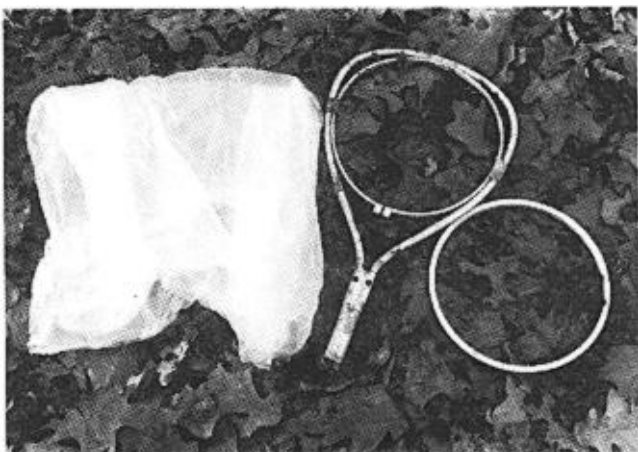
We have had greatest success in capturing woodpeckers at dawn as they leave the roost or in the evening just after they have entered the roost and while it is still light. After dark, the birds are more reluctant to leave the cavity, but focusing a high intensity spotlight on the bag after it is in place over the cavity entrance seems to help. Individuals that remain in the cavity after the net has been placed over the entrance may be enticed to fly into the net by pounding sharply or scraping on the net pole or on the tree trunk. Another enticement is a tape recording of the distress call of the species sought. Such a recording can usually be made during the banding of a captured individual. Use of

calls is facilitated by recording them on a continuous loop tape, such as used for telephone answering machines. In the case of Red-cockaded Woodpeckers, we have also used recordings of the species' "greeting" call with success.

Wildlife staff at Ft. Stewart, Georgia (Anonymous 1982) developed a "RCW ferret" to coax Red-cockaded Woodpeckers from their roost cavities. This consists of a section of plastic tubing taped in front of a net opening with a right-angle bend such that the tubing can be inserted into the cavity as the net is placed over the entrance. A line is threaded through the tubing and a weight tied to the end in front of the net. Once the net is in place, the weight is lowered, presumably frightening the woodpecker into leaving the cavity. We have usually found this addition unnecessary and difficult to work with on high cavities. In addition, some woodpeckers excavate cavity entrances that are a "tight fit" for the bird and insertion of the tube into the cavity entrance might prevent a bird from leaving. The RCW ferret should not be used during the breeding season because of the potential for breaking eggs or harming nestlings--nor, for that matter, should birds be captured at a potentially active nest at night.

Only one bird has escaped capture once it entered our net, this being the result of an enlarged funnel opening. Three birds out of approximately 200 captures have eluded capture by exiting between the net frame and tree. This happened when birds roosted in trees whose diameter at cavity height was less than the diameter of the net opening; this could be resolved by using a smaller net frame.

Figure 1. A Net components before assembly.



We found this net easier to construct and use than that described by Jackson (1977) because (1) its construction does not require use of a mist net, (2) the slick plastic bag does not snag on bark and limbs as easily as mist net material, and (3) this net does not have mechanical parts. Birds seem less reluctant to enter this net than they do to enter the wire trap described by Jackson et al. (1979). This net is simpler to construct and at least as efficient for capturing flying squirrels as the net designed by Sonenshine et al. (1973). Their net included a draw-string to close the opening and we have found that unnecessary for either birds or flying squirrels.

ACKNOWLEDGMENTS

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Figure 1. B. Assembled net ready for use.

