Pileated Woodpecker Capture Using a Mist Net and Taped Call

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ABSTRACT

We used a mist net and taped call to capture Pileated Woodpeckers in central Missouri during the spring of 1997. Our success rate was 75% (6 of 8 attempts) with no injury to the birds. This method of capturing Pileated Woodpeckers has not been reported previously in the literature, and proved to be more cost and time efficient than all other capture methods attempted.

INTRODUCTION

Researchers have employed a variety of trapping techniques to capture adult Pileated Woodpeckers *(Dryocopus pileatus)* near their nest and roost cavities. Adult Pileated Woodpeckers have been captured in mist nets near their food source and also near nest cavities (Rumsey 1968). Bull and Pedersen (1978) described the use of a net trap that captures the woodpecker as it attempts to exit the cavity and a board trap that keeps the bird inside the cavity for hand removal. In addition, Bull and Cooper (1996) successfully trapped Pileated Woodpeckers using bark and lichen traps and suspended mist nets in front of nest cavities. Mannan (1984) trapped five adult Pileated Woodpeckers by holding a dip net fitted with mist net mesh over cavity entrances and by hanging mist nets near cavities. Renken and Wiggers (1989) captured 13 Pileated Woodpeckers using a dip net on an extendable pole and a net trap. Woodpeckers were also captured by Jackson and Parris (1991) using the dip net technique, but a plastic bag was attached to the net frame instead of netting. In our trapping attempts we discovered that cavities higher than 6 m created difficulty in controlling a net pole and the accurate placement of a net over the cavity. In addition, the net trap technique required the proficient use of tree climbing equipment and proved extremely labor intensive.

METHODS

Using mist nets and taped calls we captured six Pileated Woodpeckers (5 male, 1 female) in Boone and Calloway counties in central Missouri during April-May 1997. Mist nets (2.6m x 12m, with 61 mm mesh) were placed in upland forest stands primarily composed of trees with average dbh 25 cm consisting of white oak *(Quercus alba)*, red oak *(Q. rubra)*, black oak *(Q. velutina)*, black walnut *(Juglans nigra)*, and hickories (*Carya* spp.). If forested areas were too dense for trapping, nets were placed in an adjacent open field, parallel to and 10-20 m from the woodland edge. The mist net was anchored with extendable poles with the bottom of the net raised approximately 1.5 m above ground level. We broadcasted Pileated Woodpecker calls and drums every few seconds from a stereo cassette player (Lenox Sound, model CT-731) placed behind or beneath the center of the net while we concealed ourselves at least 30 m from the net. The volume was adjusted to the loudest level to maximize the broadcasting range. Within 10-60 minutes, a Pileated Woodpecker responded to the taped calls by flying around the area until it became entangled in the mist net. Prior to becoming entangled in the net, the Pileated Woodpeckers swooped toward the source of the call, in some instances perched nearby for brief periods, and

eventually closed the distance to the call until they were captured. Once the woodpeckers responded to the call and began flying around the area of the net they were all captured in less than ten minutes.

RESULTS

This method resulted in the capture of Pileated Woodpeckers in six of eight attempts (75% capture rate) during a four-day trapping period. During the two unsuccessful trapping attempts, birds were not heard or seen responding to the taped call. Two birds were captured in different forest interior net settings, and four in different field placements adjacent to forested areas. No captured birds were injured during trapping.

DISCUSSION

Compared to capturing woodpeckers at their cavities, the mist net technique proved safer for field workers, less stressful to captured woodpeckers, and was more cost-and-time efficient. Caution should always be exercised utilizing taped calls, especially during breeding season so as not to disrupt nesting activities.

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