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A Net Pole for the Masses

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Table 2. Summay of Swainson's Hawk Productivity for Successful Nests in Saskatchewan.										
Period	Nests Under Scrutiny	Minimum Nests Failed	Successful 1 yg.	2 yg.	3 yg.	4 yg.	5 yg.	Total Nests	Young Banded	Young/ Nest
1944-1987	1087	259(24%)	271 28%	390 40%	292 30%	32 3%	-	985	2055	2.09
1988-1996	1138	407(36%)	380 52%	265 36%	83 11%	5 1%	-	733	1179	1.61
1997-2004	957	249(26%)	266 38%	279 39%	143 20%	20 3%	1 0%	709	1338	1.89
Total	3182	915(29%)	917 38%	934 38%	518 21%	57 2%	1 0%	2427	4572	1.89
Total Nestlings Banded			917	1868	1554	228	5			

LITERATURE CITED

Houston, C. S. 1974. Mortality in ringing: a personal viewpoint. *Ring* 80:157-161 (reviewed and summarized in *Bird-Banding* 47:76).

Houston, C. S. 1990. Saskatchewan Swainson's Hawks. *Amer. Birds* 44:215-220.

Houston, C. S. 1998. Swainson's hawk productivity and five-young nest. *Blue Jay* 56:151-155.

Houston, C. S. 2002. Swainson's Hawk. Pp. 119-120 *in* Leighton, A. L., J. Hay, C. S. Houston, J. F. Roy, and S. Shadick, Birds of the Saskatoon area, Special Publ. 23, Saskatchewan Natural History Society, Regina, SK.

Houston, C. S. 2005. Swainson's Hawk longevity, colour banding and natal dispersal from Saskatchewan. *Blue Jay* 63: in press.

Houston, C. S. and K. I. Fung. 1999. Saskatchewan's first Swainson's Hawk with satellite radio. *Blue Jay* 57: 69-72.

Newton, I. 1979. Population ecology of raptors. Buteo Books, Vermilion, SD.

Schmutz, J. K., C. S. Houston, and G. L. Holroyd. 1996. Southward migration of Swainson's Hawks: over 10,000 km in 54 days. *Blue Jay* 54:70-76.

Schmutz, J. K., C. S. Houston, and S. J. Barry. 2001. Prey and reproduction in a metapopulation decline among Swainson's Hawks, *Buteo swainsoni. Can. Field-Nat.* 115:257-273.

A Net Pole for the Masses

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ABSTRACT

Methods utilized to deploy mist nets have changed little throughout the history of mist netting. Attempts to make net poles lightweight while maintaining portability have been successful; however, the cost (especially to students) of stackable aluminum poles is often prohibitive. In this paper I describe the construction and the unique attributes of an inexpensive and easy-to-use net pole design using a telescoping paint roller pole.

INTRODUCTION

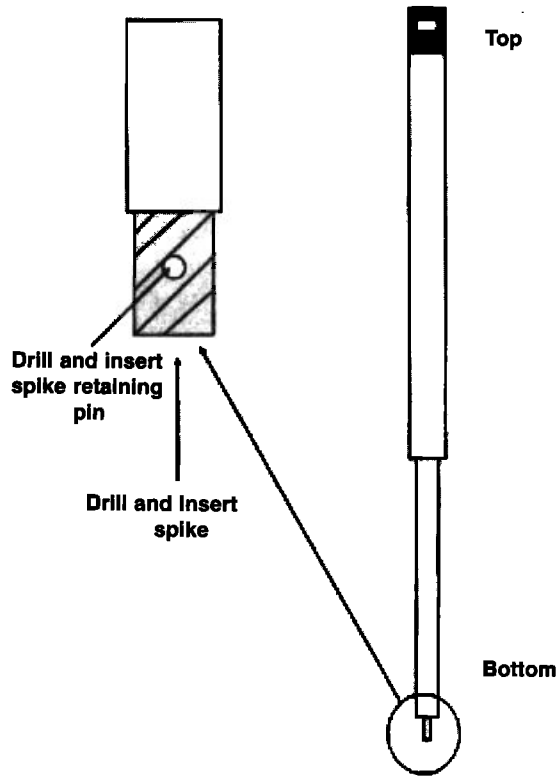
Over the years several methods have been used by ornithologists and others in the deployment of mist nets. Stackable aluminum poles have been preferred due to their lightweight portability. Steel conduit poles have been the cheap and durable method for long-term or permanent netting situations. While many have attempted to make the steel poles smaller and more portable, few have achieved that goal successfully. While a graduate student, I saw that an inexpensive, portable, and lightweight pole was needed. Working in northern Mississippi, I also found that the pole's tip needed to penetrate hard clay soil during the dry summer months. An obvious starting point for this design was a telescoping paint roller

pole. These poles come in various lengths, typically telescoping to twice their length via two or three sections, and lock in place by a screw or cam mechanism. They are constructed of a variety of materials including steel, aluminum, and fiberglass. Each of these materials has positive attributes; however, aluminum seems to be the best option for both price and portability.

METHODS

The following design components may be purchased and assembled for under $20 per pole. Construction requires a hand drill, drill bits, and a hacksaw or other metal-cutting device. Net poles may be constructed from aluminum (steel or fiberglass if preferred) telescoping paint roller poles (Mr. Longarm™ or similar brand). They can be purchased in several lengths; however, the 8 ft and 12 ft (2.4 m and 3.7 m; extended length) models seem to work best for most mist net purposes. To easily insert these poles into hard soil, a spike or point must be inserted into the pole's lower end. Spikes can be constructed from a large nail (8 in [80 d] - 10 in [100 d] spike) or by grinding a section of 3/8 in (9.5 mm) round steel bar to a point. The nails head must first be cut off. The functional end of the pole (where the roller screws onto the pole) is drilled to allow for insertion of the spike (see Fig. 1). The builder should be sure to match the drill bit and spike diameter as closely as possible or even drill the hole slightly smaller. Plastic tends to melt when drilled and the resulting hole may be larger than intended. Once the pole is prepared, insert the spike leaving only 4 - 7 in (10 - 18 cm) of the spike extending from the end of the pole. The spike is now anchored to the pole to prevent it from sliding up into the shaft or from falling out. This can be accomplished by drilling an appropriate size hole through the plastic section of the pole surrounding the spike and the spike itself. A retaining pin is placed into this hole to prevent the spike from falling out; a small bent nail, screw, or cotter pin all work equally well in this capacity. The top of the pole may also be drilled and pinned in a similar fashion to prevent the top cap from pushing out (this is an optional step that may not be necessary in all models). For further assistance see Fig. 1.

Fig. 1. Telescoping net pole design.



Once construction is completed the poles can be painted to improve their camouflage. With certain species this has proven very helpful. Guy ropes may be attached in several locations; however, the simplest way is to tie the rope or line into the hole in the top cap of the pole (see Fig. 1). This secure attachment point prevents the rope from getting in the way when the pole is lowered to remove birds.

DISCUSSION

The pole design described above has been utilized in studies from Mississippi and Arkansas to Churchill, Manitoba, and has proven to be a reliable option for the economically minded researcher. This design is not, however, without issues. From experience, I prefer a pole with a telescoping mechanism that utilizes a screw action to lock the pole as opposed to the cam lock type used in many poles. The cam action can wear and requires some modification and cleaning to function again; also, the cam action may freeze in cold temperatures preventing it from locking. More expensive poles may use other telescoping mechanisms that eliminate this problem; however, price may become an issue.

Lightweight, compact, low cost, and ease of use are all positive aspects of this pole design; however, one of the most useful characteristic is the telescoping mechanism. With fixed length poles and even stackable poles, the researcher pulls the net down to reach birds trapped in the top trammels of the net. Often this results in undue stress that eventually tears or damages the net in some way. Past answers to this problem have included attaching ropes to the top shelf or carrying a long pole with a hook to pull the net down. Once finished the net had to be returned to its functioning position using a long pole or stick. This is not the easiest way to handle a net. With the telescoping action, the pole can be lowered along with the net to reach the upper shelf. The pole then can be raised again carrying the net back to its original height.

ACKNOWLEDGMENTS

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News, Notes, Comments

PORTABLE STAND FOR HANGING BIRD BAGS

INTRODUCTION

When banding birds, care needs to be given that they are being handled promptly and efficiently. Often, at portable banding stations birds are hung in nearby trees or shrubs while waiting to be processed. This necessitates the bander to get up, go retrieve the next bag, and then return to their table for processing. Time spent retrieving the next bag is wasted time. We developed a bird bag holding stand which speeds the processing time, allowing a bander to spend time on the bird itself.

The following describes a portable stand for hanging bird bags close to the banders while processing. Although originally developed to hang bags with hummingbirds, we have used the portable stand extensively for landbird banding operations as well without problems. One caution about using the stand for landbirds: bagged larger birds, such as towhees, thrashers, woodpeckers, and orioles, should be hung close to the center pole to avoid a balancing problem.

MATERIALS AND METHODS

The stand (see Fig. 1) is made of 3/4" schedule 40 PVC. All small parts are glued so the finished stand consists of three separate pieces, which are assembled easily at the start of a banding session. At the end of the banding session, the stand is disassembled into three separate pieces, which are then bound together with a bungee cord for transport and storage. The center pole can be cut to any reasonable height for use. Our center poles are 30", which works well with our table heights.

Materials needed are:

1 - 10 ft 3/4"schedule 40 PVC cut into the following pieces:

1 - 32" to 36" (your preference)

4 - 12" *and* 4 - 6"

In addition, you need the following items:

4 - 3/4" Tees *and* 4 - 3/4" Caps

1 small can clear PVC cement

16 - 3/4" rubberized cup hooks

Either a PVC cutter or hack saw is needed for cutting the PVC. To start the installation of cuphooks, a drill with a slightly smaller drill bit than the dimension of the cuphook screws makes the installation easier. Assemble all the PVC pieces and glue them before drilling the cuphook holes, as glue sets very fast.

After pieces are cut, glue two 12" pieces to top of one T, creating a straight line. Set aside to dry. Glue the remaining two 12" pieces to top of a second T, again creating a straight line. Set aside to dry. Glue one cap to each 6" piece. Glue two 6" pieces to