HOW TO ERECT NETS EASIER AND FASTER

Sam de Beer
P O Box 70036, Mieder Park 2527

Introduction

When I started ringing with William Scott it often happened that I had problems in erecting the nets because I was alone, had to carry the equipment over long distances and difficult terrain and it was often still dark. I also found that I sometimes spent more time erecting and taking nets down than I spent catching and ringing birds. However, I was lucky enough to get opportunities to ring with several experienced ringers and decided to take a close look at each one's equipment and to make an evaluation of the strong and the weak points of their systems. From that information I designed my own system, which is a culmination of all the strong points of several other ringers' systems.

Equipment

Poles

The poles are made out of aluminium pipe with an outside diameter of 21,7 mm and an inside diameter of 19 mm. The pipe's sides are approximately 2 mm thick. These aluminium pipes can be bought at hardware shops, department stores or at the factory. A contact name is Wispeco, makers of aluminium doors and window frames, or S A Aluminium in Johannesburg or at Kedla D I Y Quality Products in 34 Gemsbok Street, Koedoespoort, Pretoria. They send the pipes by rail and the pipes can be ordered by telephone at 012 333 0005. The pipes are supplied in 5 m lengths and are then cut into four 1,25 m lengths. To make the poles fit on top of each other, a thicker-sided pipe of smaller diameter is inserted at one end and riveted to the pole. The pipe's outside diameter is 19 mm and the inside diameter is 12 mm. This pipe is cut into approximately 150 mm lengths and 75 mm of it is pushed into the one end of the pole. Holes are then drilled through both pipes and it is riveted or screwed into position. If the fit is not very tight, two rivets on opposite sides may be needed. The head of the rivet should be flattened with a hammer to prevent the net from getting hooked on it in windy weather (Figure 1).

Rivets or self-tapping screws are used because welding or brazing alters the characteristics of the aluminium and it looses its strength. A thicker pipe is used for the link because it affords greater strength and the 75 mm overlap also ensures greater strength and a more stable set-up. Buy anodised poles if possible, because they are not as abrasive to the net's loops as normal aluminium poles, nor do they blacken one's hands. A diameter of approximately 22 mm is the thinnest you should go before you start loosing strength and stability to weight and money. As many as these poles as needed can be stacked on each other, up to a height of 8 m. Guy ropes should be used if you go higher than three poles or when a heavy net is used. I could detect no variation in catch rates when the poles were painted either in camouflage, green or black. Try to make all poles exactly the same so that any pole can be used anywhere.

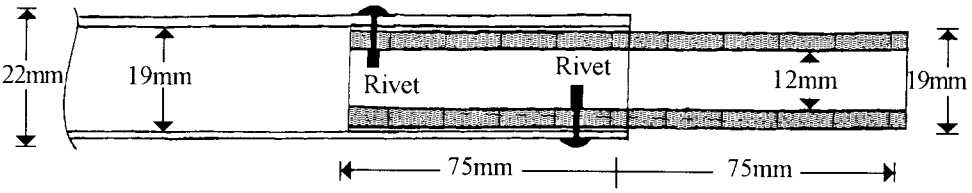


Figure 1. The top end of the poles with the thicker connecting pipe held in position with pop rivets or self-tapping screws.

Pegs

Instead of using guy ropes to keep the poles upright and the net tight, I use a peg, which I hammer into the ground at a slight angle away from the direction of the net. The pole is then put over the peg and the net is opened (Figure 2).

The peg is made out of 12,7 mm ripplebar and is 400 mm long. The one end is sharpened either on a grinder or by forging it, while the other end is given a slightly rounded head to prevent it from flaring when hammered. You can also make the sharpening process much easier by cutting the pegs diagonally at the one end and perpendicular at the other end (Figure 3).

I also put a 25 mm length of 12,5 mm diameter hose over the top end of the peg. This makes the pole fit tighter over the peg and protects the pole's inside from damage by the flared head of the peg (Figure 2).

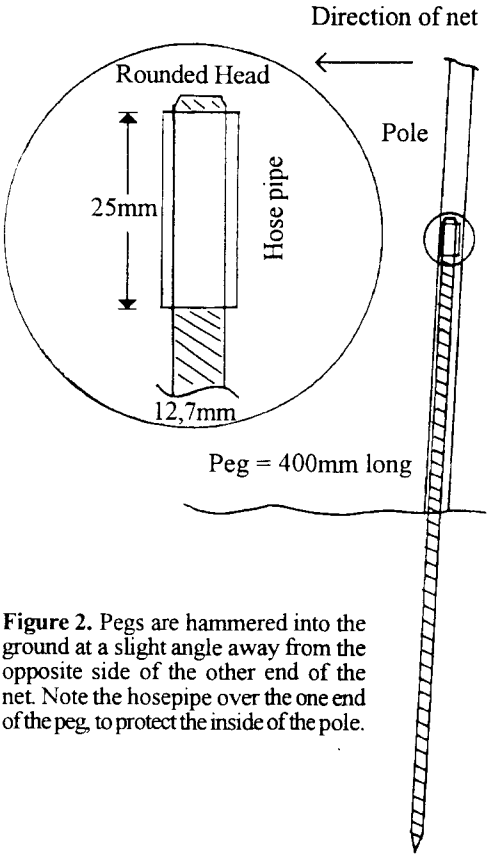


Figure 2. Pegs are hammered into the ground at a slight angle away from the opposite side of the other end of the net. Note the hosepipe over the one end of the peg, to protect the inside of the pole.

Guy ropes

Although this system tends to anchor itself, guy ropes are sometimes needed when using heavy nets, high nets or when nets are used in strong winds. In line with my principle of keeping everything as simple as possible, I use a 56 m length of nylon rope which is approximately 2 mm thick, with no loops, aluminium or plastic tensioners, hooks, washers or non-slip guy rope fittings. All these things tend to tangle and then time is spent in unravelling the mess. I use a simple clove hitch knot which can be slipped over the top of the pole, or between two poles. This knot is easy to make, easy to loosen, does not slip and can be used anywhere. The knot can also be made at any position in the rope. It is tied as follows: make a loop in the rope with the rope from the left underneath the rope from the right (Figure 4); make a similar loop and move the second loop underneath the first. Now it can be slipped over the top of the pole, or between two poles.

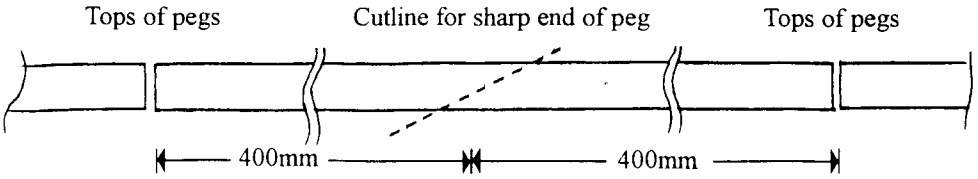


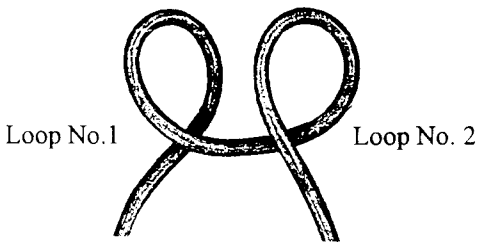
Figure 3. Cut the ripplebar diagonally across at the one end to ease the sharpening process.

The same knot is used on the other side to anchor the pole to a peg, rock, tree, branch or whatever is available. If the knot is to be made around an object like a branch or tree trunk, take the end of the rope around the object. Bring it around a second time and push the end underneath the first overlap (see Figure 5). It is advisable to tie a clove hitch as in Figure 4 and then pull it apart to see how it unravels. To tie the clove hitch around an object, you just have to do the unravelling process in reverse.

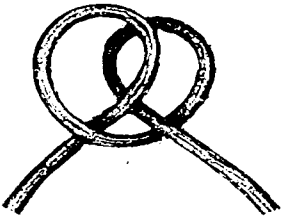
The rope can be bought at hardware stores and the rope used to tie and thread shadecloth works very well. To store the rope, keep on doubling it until it is approximately 30 cm long and then knot it.

Method

To erect a net with this system is as easy as pie. Take the number of poles you need, two pegs, a hammer (not heavier than one kilo) and a net. Put half the poles, say two, and a peg down at the place where you want your net to end. Now you count a big step for every meter of the net's length towards the point where you want your net to begin. Hammer the peg halfway into the ground, at a slight angle away from the opposite peg. Put the hammer in your pocket or belt, since you are going to need it when you are at the other side, and then there is no way that you can get it if you are alone. Put one of the poles over the peg. Take the net out of the bag and throw the bag down at the base of the pole. Sort the loops of the net and put it over the pole, allowing the bottom loop to drop roughly 40 cm below the top of the pole. Now you walk towards the other pole, releasing the net as you walk. When the whole net is played out, keep it tight, sort out the loops and keep it over your finger. Bend down and pick up a pole. Put the net over the top of the pole, again allowing the bottom loop to drop roughly 40 cm below the top of the pole. By looking at the bottom string of the net you can see whether there are any turns in the net and you can then take them out by just unwinding the pole with the net over it. This operation can also be done after the net is opened. Bend down again to pick



A. Move Loop No.2 underneath Loop No.1.



B. Then place the two loops over the pole.

Figure 4. To tie a simple clove hitch knot, two similar loops are made, the second is placed underneath the first (A) and the string is pulled tight (B).

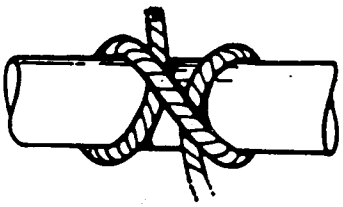


Figure 5. To tie a clove hitch knot around an object, the end of the rope is taken around the object twice and the end is then pushed underneath the coils.

up the peg. Pull the net as tight as you want it. Make a mark on the ground with the bottom of the pole, insert the sharp end of the peg if the ground allows it and hammer it into the ground, again at a slight angle away from the opposite peg. Now you see why the hammer had to be with you all the way. If the ground is too hard or rocky for the peg to stand by itself, you've got to kneel down with your back towards the opposite pole, hook the pole over your shoulder and behind your foot to keep the net tight and the pole upright. You will then have your hands free to hammer the peg into the ground. Slip the bottom of the pole over the peg and start to open the net. Lift the pole with the net on it and slip the other pole over the peg. Put the pole with the net on it on the bottom pole and pull the rest of the net down until it is opened up. Now you walk back to the other side, pick up the spare pole, lift the pole with the net and repeat the opening up procedure. Other nets can easily be linked to this system by just integrating the loops of the two nets and opening the second net to the position where you have placed the poles and peg. The middle pegs are then not hammered in at an angle, but straight in.

Conclusion

This system is durable, light, quick and easy to use and once you are used to it, it will take you less than three minutes to erect a net, as I have proved at the Bonamanzi Workshop.

ANNOUNCEMENT

2ND NATIONAL RINGING WORKSHOP

Sandveld Nature Reserve, Free State

Autumn 1996

The results of ringing carried out at Sandveld Nature Reserve indicate the best time of the year to hold the Ringing Workshop to be March or April. As the Southern African Ornithological Society will be holding its AGM during March or April 1996, no dates have yet been finalised for the Workshop, but it will be during this period as well. This implies at least a 16 month break between the First and the Second Ringing Workshops. As soon as dates have been finalised, these will be announced.

Anyone interested in attending the Ringing Workshop should contact Rick Nuttall at the National Museum, P O Box 266, Bloemfontein 9300, as soon as possible to be placed on the mailing list. Please indicate whether you would like to do ringing, and if so, please give details of your permit number. All ideas and suggestions for the Ringing Workshop are most welcome. There will be accommodation for 44 people in chalets (rooms with two, four or six beds). Pleasant camping facilities are also available.

All interested ringers are referred to Sam de Beer's comprehensive report on the First National Ringing Workshop in *Safring News* Volume 23(2) pp.88-90. Please take special note of the ideas generated regarding presentations (posters and talks), and demonstration of techniques. There is ample time available before the next Workshop to put posters together about your ringing projects.

A second notice will be published as soon as more information is available.