

[. . .]

Incidentally O-rings are often lost because the grooves in which they lie are not deep enough. On the new projectiles we make these deeper than many people currently use so the O-ring requires little filing to make it fit the barrel. Old projectiles are often too difficult to manage for us to offer to deepen grooves – you could use a file!

[. . .]

Reference

Green, G.H. 1978. Troubles with projectiles. *Wader Study Group Bull.* 24: 20–22.

Catching waders with a “wilsternet”

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Since 1974 we have been trying to catch full grown waders (mainly Oystercatchers *Haematopus ostralegus*) inland in Friesland, a province in the north of the Netherlands. Results with mist nets near roosts at night were moderate to poor. In 1975 and 1976 we had good results catching waders on their nests (Koopman & Hulscher 1976). Attempts to catch Oystercatchers at roosts with a large clapnet (4 × 15 m) gave poor results (once a catch of 25 birds). In 1976 we had the opportunity to buy a “wilsternet” – a net especially designed for catching “Wilsters” (Golden Plovers *Pluvialis apricaria*). Golden Plover catching has been practised in the north of the Netherlands since the 17th century (Eenshuistra 1973). Since this type of net is not very well known outside Friesland and because our results using it are fairly promising, we think it worthwhile to describe the net and how it works. According to Eenshuistra (1973) a good description with sketches of a comparable type of net is given by Payne-Gallwey (1882).

Equipment

One net with poles at both ends, 1 cable, 1 tension line, 1 pullcord, 4 pegs, 3 security sticks, 10 small wire pegs, 2 seesaws for live* decoy birds (not always essential), 25–35 stuffed decoys, 1 hide, 1 shovel.

Net

We advise nylon net with a thread thickness 210 denier/12 ply. Thinner thread injures the birds. Mesh size: 6 × 6 cm to 3.2 × 3.2 cm depending on the quarry. The net measures 25 m in length and is 3.5 m high. At the bottom edge there is a strong string with a loop every two meters. Pegs through the loops fasten the net to the ground. The upper-most meshes are reinforced with nylon thread of thicker diameter and a steel wire (diameter 3 mm) is laced through them (Figure 2).

Poles

At either end of the net there are round, wooden arms (poles) 3.2 m long. Front arm diameter is 6 cm, rear arm may be thinner. Both have hinges revolving in wooden bases (oak or beechwood) (Figure 3).

Cable

Total length 50 m consisting of 35 m of steel wire (diameter 3 mm) with 9 m of polypropylene rope (diameter 8 mm) at one end and 4 m at the other. A cable wholly of steel wire also operates very well.

Tension line

A propylene rope of 6.5 m (diameter 8 mm), or steel wire.

Pullcord

A steel wire cable (diameter 3 mm), length 40 to 70 m provided with one or two wooden sticks at the end as handgrips.

Pegs

Round, wooden, 90 cm long, diameter 6 to 8 cm (nos. 1 to 3 in Figure 1).

Security sticks

See Figure 4. Wooden, pointed, round, 20 cm long with a notch at the upper end. A little round stick, 12 cm long; diameter 1 cm can be squeezed into the notch; this gadget keeps the cable pressed to the ground, before action.

Wire pegs

‘r’-shaped, iron, to fasten bottom edge of the net to the ground.

*The use of live decoy birds is prohibited by law in the UK and some other countries: if in doubt consult your national ringing authority. – The Editors



Seesaw

See Figure 5. A metal rod (such as used for re-enforcing concrete), 60 cm long, diameter 8 mm, pivoting upon a wooden base. One end of the rod is shaped into a large eye, diameter 10 cm, which is stuffed with foam rubber containing two holes in the centre. A lure-bird can be fastened on this by pushing its feet through the holes in a bent position and tying both heels together underneath the foam rubber. A rope fastened to the seesaw runs to the ringer's hide. When the rope is pulled the bird on the seesaw is lifted, whereupon it flutters its wings, thus attracting the attention of birds flying nearby.

Decoys

Roughly stuffed waders with legs replaced by one wooden stick that can be stuck into the ground.

Hide

A piece of cloth, 2 × 1.8 m, held vertical with three poles.

Fixing the equipment (refer to Figure 1)

First of all determine the direction of the wind. Then check to see if the spot chosen is large enough to operate the net properly. Stretch the cable to its full length at right angles to the wind direction with its rear end fastened to peg no. 2 and its front end to peg no. 1. Peg no. 2 is driven firmly into the ground. Peg no. 1 is loosely fixed because it must be re-sited later. Next the two net arms (poles) are laid down on the ground pointing upwind, perpendicularly to the cable, the rear pole 9 m from peg no. 2, the front arm 34 m (from peg no. 2).

Dig a shallow groove 20 cm wide along the whole length of the outer side of the two arms (poles), 15–20 cm deep at the hinged end, decreasing in depth to zero at the top of the arm. The wooden bases of the arms are then pushed into the ground about 10 cm in front of the cable.

Peg no. 1 is now moved and re-sited 45 cm towards peg no. 2 and driven firmly into the ground. The cable is then stretched over the top ends of the arms. Fasten one end of the tension line to the top of the front arm and the other end to peg no. 3. The line lies about 10 cm from the arm (Figure 1). The pullcord is fastened to the tension line opposite the base of the first pole and stretched in line with pegs no. 1 and no. 2 to peg no. 4 in the shelter. The bottom edge of the net is pinned to the ground with small wire pegs in the line with pegs no. 1 and no. 2.

The three security sticks are placed in the middle and near the ends of the upper edge of the net, pressing the cable to the ground before action takes place (see Figure 4). The decoys and seesaws are placed upwind of the net. Now all is ready for the catch.

Birds are caught in flights as they fly in to land in an upwind direction next to the decoys. The pullcord has to be operated exactly at the moment the birds pass the bottom line of the net. The arms rise, carrying the net. The birds fly into the net and are carried to the ground and held by it as it swings down pulled by the tension line.

A wilsternet can be installed and operated by a single person. A short summary of our experiences in catching different wader species is given below.

Oystercatcher *Haematopus ostralegus*

[...] A live bird on the seesaw can be helpful but is not necessary. One or two decoys placed downwind of the net effectively reduce the flying height and direct the course of birds arriving and intending to land. Sometimes, however, the birds land just beyond the range of the net. Our highest daily catch total was 88 birds in 2½ hours. Our highest total in one stroke was 29 birds.

Usually one or two birds were caught in a stroke.

Lapwing *Vanellus vanellus*

This alert species with erratic flight is difficult to catch.

Golden Plover *Pluvialis apricaria*

The "wilsternet" is specially designed to catch this species. It is practically a prerequisite to train with an experienced plover fowler in order to become a clever fowler oneself. We have some contact addresses. Two seesaws with two live birds are essential, as well as a special plover whistle in order to lure flocks to the net. See Eenshuistra (1973) for details.

Curlew *Numenius arquata*

We have no experience in catching this species ourselves. A live bird on the seesaw is necessary. Curlew are shy and a long pullcord of 70 m is required.

Whimbrel *Numenius phaeopus*

We once caught 18 birds in a stroke. It took four people one hour to disentangle the severely enmeshed birds (meshes 6 × 6 cm). Usually Whimbrels arrive at the roost late in the evening. They descend along a very steep angle, making it difficult to catch them.

Godwit *Limosa* spp.

Black-tailed Godwits *L. limosa* usually roost in shallow water, they descend steeply and are therefore difficult to catch. Bar-tailed Godwits *L. lapponica* react very well to Golden Plover decoys (Eenshuistra 1973).

Tringa spp.

We caught nine Redshanks *T. totanus* on the breeding grounds. They were attracted to the net by Oystercatcher and Golden Plover decoys. Greenshank *T. nebularia* and Spotted Redshank *T. erythropus* were caught regularly by traditional fowlers (Eenshuistra 1973).

Dunlin *Calidris alpina*

We have not caught Dunlins although they react very well to Golden Plover decoys. A net with meshes at least as small as 3.5 × 3.5 cm is required.

Ruff *Philomachus pugnax*

An easy species to catch. It reacts very well on Golden Plover decoys, but a bird on a seesaw is necessary, though use of a glove to catch the first bird proved effective. Meshes are



Figure 1

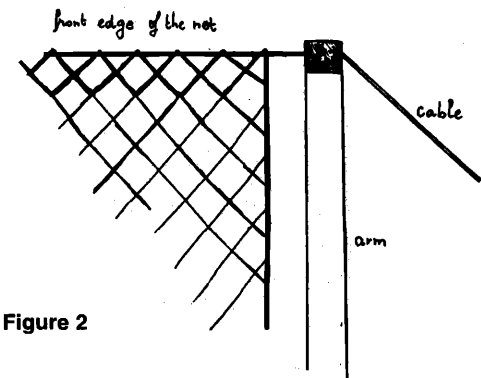
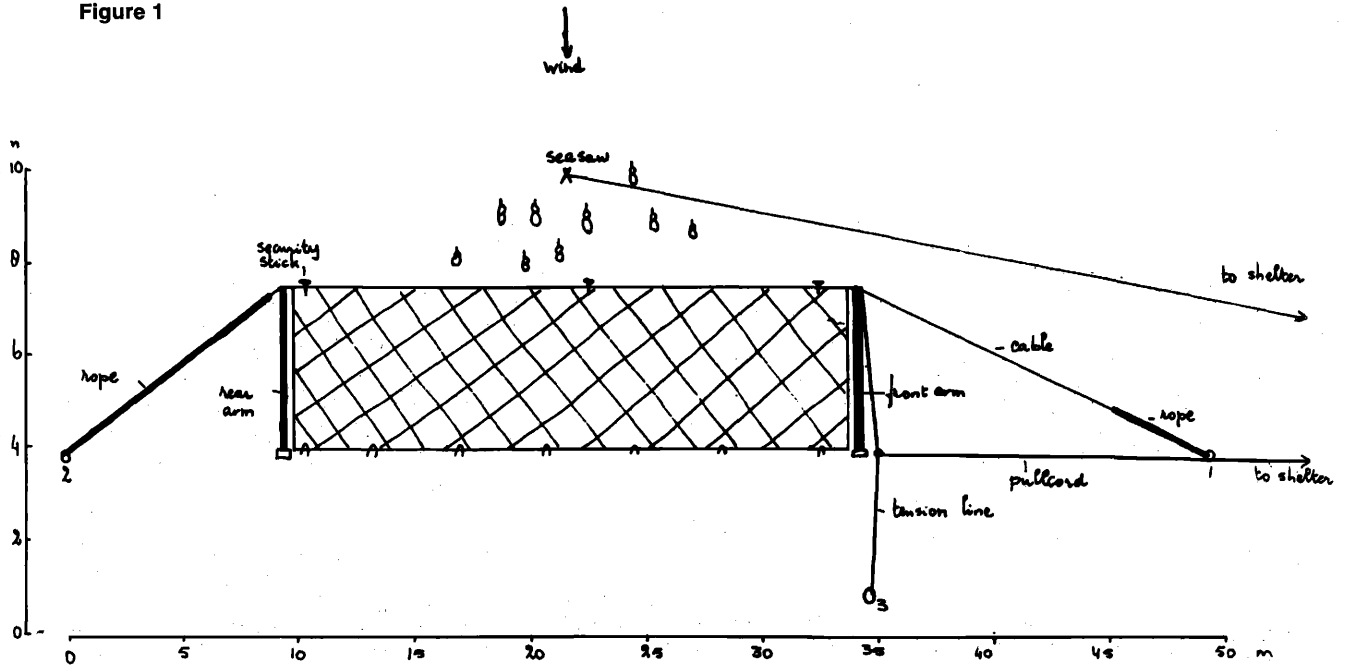


Figure 2

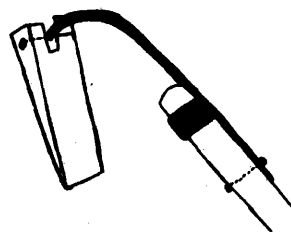


Figure 3

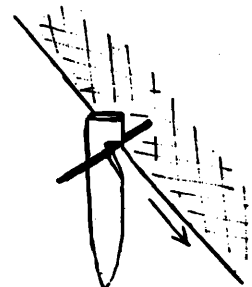
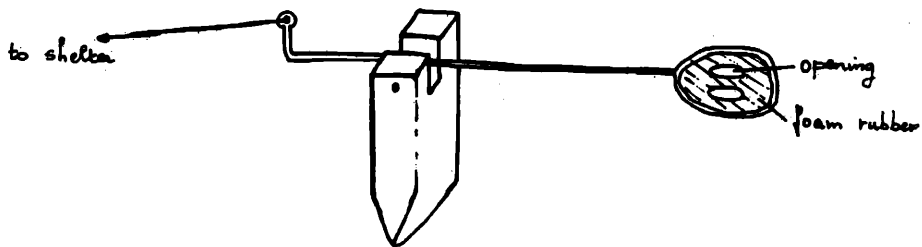


Figure 4

Figure 5



5 × 5 cm at the most. Larger meshes permit some birds to escape. We caught Ruffs during spring migration at day roosts (pools where they drank and bathed).

From March–August 1977 we caught 1,023 waders of seven different species in 33 days:

Oystercatcher	880
Lapwing	2
Little Ringed Plover	1
Whimbrel	24
Redshank	9
Black-tailed Godwit	5
Ruff	102

We also caught Oystercatchers successfully with the wilster-net at coastal high water roosts. In our opinion it must also be possible to catch other wader species at high water roosts.

References

- Eenshuistra, O. 1973. *Goudplevier en Wilstervangst*. Fryske Akademy, Leeuwarden.
- Koopman, K. & Hulscher, J.B. 1976. Catching breeding waders on their nests. *Wader Study Group Bull.* 19: 17–19
- Payne-Gallwey, Sir R. 1882. *The fowler in Ireland*. London.

A simple rapid method of moving a set cannon net with minimal disruption

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Citation: Clark, N.A. 1980. A simple rapid method of moving a set cannon net with minimal disruption. *Wader Study Group Bull.* 28: 32.

In response to the cannon-netter's nightmare of unpredictable tides a new method of setting or re-setting a cannon net was sought. This has now been developed to the point at which a two-cannon net can be set or re-set by five experienced people in less than five minutes.

The method involves the use of a "stretcher" made of hessian or polyester sacks, 13 metres long and ½ metre wide. Three 5½-metre-long bamboo mist-net poles are threaded through channels on each side, and these poles must overlap to make the entire structure rigid.

The net, which is 13 metres long, is set in the usual way, *on top of the stretcher*. If it becomes necessary to move the net, the cannons and projectiles are lifted and placed on top of the net on the stretcher with the electrics still connected (N.B. see 1, below). The pegs connected to the jump ropes are also placed on the net, as are spade, mallet, decoys, etc. The five people are spaced out at regular intervals along the stretcher to move the net.

There are several very important points to be remembered:

1. As loaded cannons are being moved with cables attached, the firing box must be **disconnected** before the team starts the move. It is **not** sufficient only to switch off.
2. Each person must be allotted a particular job before starting the operation, so that it can be carried out as quickly and quietly as possible.
3. When cannons and pegs are lifted off the net, care should be taken to ensure that the net is not twisted.

4. New cannon holes must be dug and the cannon weighted down properly so they are not displaced when fired.
5. All normal safety precautions must be taken when positioned cannon, and all members of the team must be behind the net when circuit-testing.
6. The stretcher poles in front of the net must be below the trajectory of the net, otherwise the net will not extend properly.

We have found this method extremely successful. It has proved very useful for catching on sites which are exposed on the falling tide; birds seem to have no hesitation in landing with the decoys, in front of the very obvious stretcher, perhaps as they have learned that cannon nets can be set below high tide!

This method may also prove useful for catching species such as Sanderling *Calidris alba* and Turnstone *Arenaria interpres* on sites where it is possible to make several catches over the high-tide period.

If any further information is required, I shall be happy to provide it.

Reference

- Lessells, C.M., McMeeking, J.M. & Minton, C.D.T. [Undated]. *Cannon-netting code of practice*. BTO, Tring, Herts.

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