

Catching breeding waders on their nests

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In *Bulletins* 16, 17 and 18 methods for finding nests of waders and catching breeding birds are described. In 1975 and 1976 we caught several waders in Friesland in the north of the Netherlands, and perhaps it is worthwhile reporting on our methods and experiences.

Locating nests

In our study area most wader species breed in pastures, Oystercatchers and Lapwings *Vanellus vanellus* on arable land too. Densities are relatively high: for Black-tailed Godwit *Limosa limosa* and Lapwing 10–60 (mean about 35), for the Oystercatcher *Haematopus ostralgus* 10–40 (mean 25) pairs/100 ha. When the vegetation is not too tall an experienced observer can locate Oystercatchers, Lapwings and Black-tailed Godwits whilst they are sitting on the nest. If the vegetation is rather tall the observer must scan the field first and take in the positions of all the birds present, then he must enter the field and take in those birds that rise but were not seen before. These birds come from the nest. A bird that has already been incubating several days, will either walk over a short distance before it rises, or will rise directly from the nest. Ruff *Philomachus pugnax*, Redshank *Tringa totanus* and Snipe *Gallinago gallinago* always rise directly from their nest. Birds coming from the nest can be recognised by their particular flight: a low flight over a short distance. The non-breeding bird of an Oystercatcher pair is often on guard, for instance standing on a fence pole or polderdike. The partner usually breeds in its immediate neighbourhood in the tall grass. If one enters the field the incubating bird is bound to rise.

Catching the birds on their nests

Birds were caught on their nest with a self operating trap described by Bub (1974). We would like to add a description of this trap (Figure 1) to those described in *Bulletins* 16, 17 and 18.

The rectangular frame is made of concrete reinforcing steel (diameter 6–8 mm), roof and side walls of garden or fishing net (mesh width 15 × 15 mm). The shortest side (a) of the trap is supported by a stick composed of two parts of unequal length, the upper part about 15 cm and the lower about 12 cm respectively. We used bamboo sticks (diameter 20–25 mm). A piece of thin black sewing-thread running from the lower part of the stick to side (b) of the trap, is stretched rightly above the eggs. When the bird sits down it pushes the thread downwards. This makes the two parts of stick fold together, whereupon the trap tumbles down capturing the bird. The gap must be placed in such a position that the eggs are near side (a) of the trap in its dropped position. The trap should be approached from this side. The bird tries to escape at the other side where it does not harm the eggs.

Trap measurements according to Bub (1974):

Small plovers (<i>Charadrius</i> sp.)	35–40 × 30 × 18 cm
Lapwing and Redshank	45–50 × 35 × 22 cm
Oystercatcher	55–60 × 40–50 × 27 cm
Black-tailed Godwit	50–60 × 40–50 × 27 cm

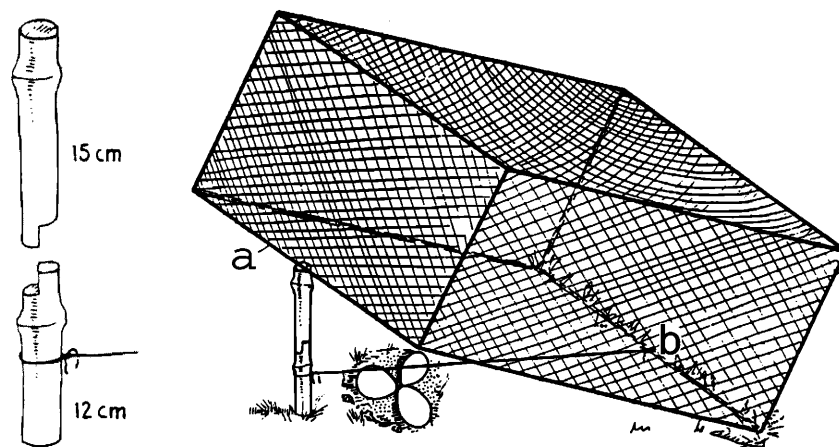


Figure 1. Trap for catching breeding waders on their nests.



We used the Oystercatcher-trap only. Other species were successfully caught with it too. In our experience a trap of $55 \times 40 \times 27$ cm is too small for Oystercatchers as well as for Black-tailed Godwits. As minimum measurements we recommend $60 \times 50 \times 27$ cm. For easy transport we used a set of four traps, telescoped into each other. The smallest was of the $60 \times 50 \times 27$ cm size, the other increased in length and breadth with 2–3 cm each time.

According to Bub the heart shaped cage trap mentioned in *Bulletin 17* is particularly useful for gulls, terns and Oystercatchers. He advises against this trap for catching smaller waders (*Charadrius*). He also considers use of the elastic powered clapnet inadvisable, because eggs are sometimes damaged and the nest is often deserted.

Table 1 shows the numbers we caught in two seasons (one of us (KK) tried to catch all wader species, JH confined himself to catching Oystercatchers).

The relatively high densities of Black-tailed Godwit and Oystercatcher enabled us to keep an eye on three to four traps at a time. If a trap claps, the bird mostly continue to incubate. We therefore waited till all traps had dropped. Oystercatchers are easy to catch. Catching times of five minutes or less frequently occurred. For 79 birds the mean catching time was 24 minutes. In many cases the second bird of a pair was caught shortly after the first. In 30 cases this was an average of 41 minutes after resetting the trap for the second time. Sometimes the first bird was caught again. In these cases it proved better to try again on another day, at another time. In our experience the two birds of a pair of Oystercatchers keep to a fairly constant time pattern in incubation day after day (this probably applies to other species too). If the bird had not returned to the nest after an hour we removed the trap. The permissible length of this period depends on the weather. We had the impression (no figures) that it was more difficult to catch Oystercatchers in the same area during the second year than during the first.

Table 1. Numbers of birds caught in two seasons.

	Oyster-catcher	Black-tailed Godwit	Lapwing	Redshank	Ruff
Koopman					
1975	108	44	9	1	1
1976	40	26	8	–	–
Hulscher					
1975	12	–	–	–	–
1976	109	–	–	–	–

About 2–4% of Oystercatcher pairs from which one or both birds were caught abandoned the nest. In three cases one of the eggs was broken. Therefore, it is advisable to use dummy eggs when possible.

Black-tailed Godwits can be caught easily too. The shortest catching time was two minutes but there were great differences between individuals. Relatively more birds than with the Oystercatcher did not return to the trap at all. Two birds of a pair can be caught with a delay of two days or more. A few individuals caught in 1975 were also caught in 1976.

Lapwings are difficult to catch. The minimum catching time was 10 minutes. Many birds did not return to the trap at all.

The sole Redshank that was caught abandoned the nest although it had already been incubating for a long time. Also one Reeve was caught, brooding small pulli; she returned to the trap within a minute.

References

- Bub, H. 1974. *Vogelfang und Vogelberingung zur Brutzeit*. pp. 31–38. A. Ziemse Verlag, Wittenberg, Lutherstadt.

Alternative wader catching

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Introduction

Most full-grown waders are caught using cannon-nets or multi-shelf mist nets. Both are specialised techniques, best suited to group efforts where there are large numbers of waders. In 1974 the Oxford Expedition to Varangerfjord (a large fjord in north east Norway; see *Bulletin 13*) had to find alternatives; the expertise and equipment for cannon-netting were not available, and multi-shelf mist nets are not effective in the arctic twilight. So, walk-in traps, single-shelf mist

nets and clap-nets were used; over 3,000 captures were made by four people in a month, and, on one occasion 286 birds were caught in twelve hours; there must be many sites elsewhere where these techniques could be used to advantage. Our experiences show that they certainly are not outdated, but are simply suited to different circumstances to the two major catching methods. We hope to convey some of the experience gained from intensive use of the three methods described, and enable wader ringers to catch more birds more safely.

