

Data on weight gain, turnover rates, moult and migration were obtained from many other species. The value of colour-marking is well illustrated by the studies.

Other studies carried out by the CWS have included work on the food resources and feeding ecology of waders on the James Bay coast and on breeding populations near North Point. Studies on the feeding ecology of the Hudsonian Godwit Limosa haemastica were carried out in 1976 at a second camp at Longridge Point about 30 miles (50 km) north of the ringing operation. Current information indicates that the majority of Hudsonian Godwits may fly directly from staging areas on the west coast of James Bay to South America. James Bay is also an important migration area for the North American race of the Knot Calidris canutus rufa. This sub-species appears never to have recovered completely from excessive shooting in the days of market hunting, and pressure on the habitat used during migration by those remaining is increasing. Considerable excitement occurred in August, when a possible sighting was made of two Eskimo Curlews Numerius borealis, a species which has been considered on the verge of extinction, if not actually extinct, since it was practically wiped out mainly through excessive shooting in the late nineteenth and early twentieth centuries.

Work at North Point in 1975 resulted in the first breeding records for James Bay of two species of waders, the Marbled Godwit Limosa fedoa and Wilson's Phalarope Phalaropus tricolor, both of which were found breeding again in 1976.

It is planned to continue the work in 1977, with a third year of the intensive banding operation and further studies of the feeding ecology of waders on the James Bay coast.

REFER OVER PAGE FOR TABLE 1.

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CATCHING BREEDING WADERS ON THEIR NESTS

by Klaas Koopman and Jan Hulscher

In the WSG 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 on arable land too. Densities are relatively high: for Godwit and Lapwing 10-60 (mean about 35), for the Oystercatcher 10-40 (mean 25) pairs/100 ha. When the vegetation is not too tall an experienced observer can locate Oystercatchers, Lapwings and 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 rise directly from the nest. Ruff, Redshank and Snipe 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 breeding waders continuedCatching 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 the WSG 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 x 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 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 tightly above the eggs. When the bird sits down it pushes the thread downwards, this makes the two parts of stick to fold together, whereupon the trap tumbles down capturing the bird. The trap 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.

Measurements according to Bub :

small plovers (Charadrius sp.)	35-40 x 30 x 18 cm
Lapwing and Redshank	45-50 x 35 x 22 cm
Oystercatcher	55-60 x 40-50 x 27 cm
Godwit	50-60 x 40-50 x 27 cm

We used the Oystercatcher-trap only, other species were successfully caught with it too. In our experience a trap of 55 x 40 x 27 cm is too small for Oystercatchers as well as for Godwits. As minimum measurements we recommend 60 x 50 x 27 cm. For easy transport we used a set of four traps, telescoped into each other, the smallest was of the 60 x 50 x 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 WSG 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.

In two seasons we caught the following numbers (one of us (K) tried to catch all wader species, H confined himself to catching Oystercatchers):

	Oystercatcher	Godwit	Lapwing	Redshank	Ruff
Koopman 1975	108	44	9	1	1
1976	40	26	8		
Hulscher 1975	12				
1976	109				

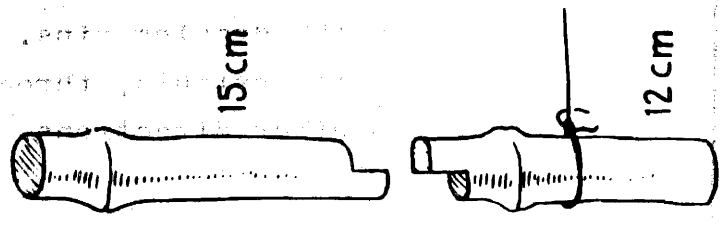
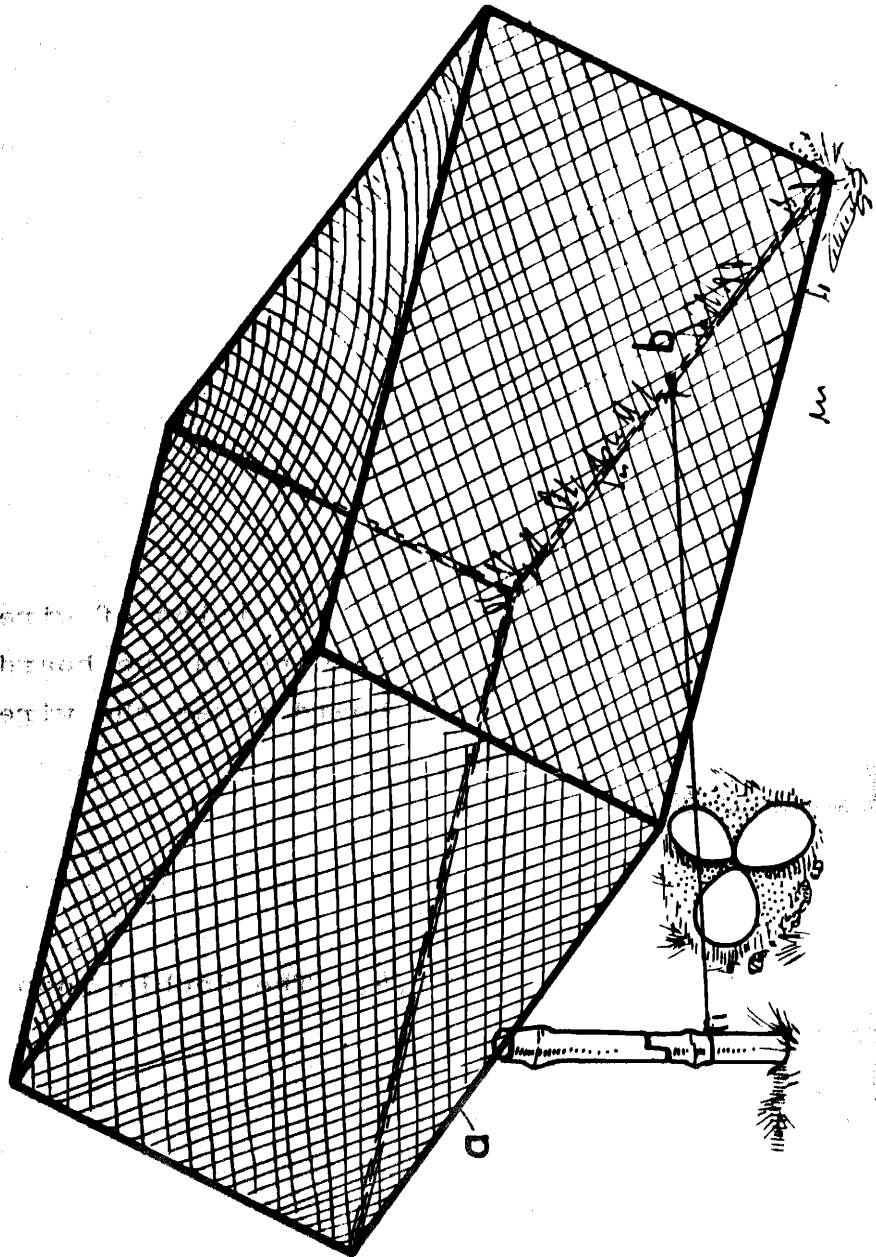


Figure 1 for "Catching breeding waders on their nests" by K.Koopman & J.Hulscher

FOR THE METHOD OF MAKING WADERS

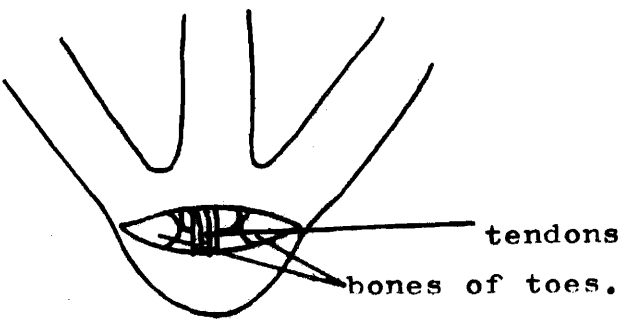


Fig. 1. When the foot pad is slit the tendons will show between the bones of the toes.

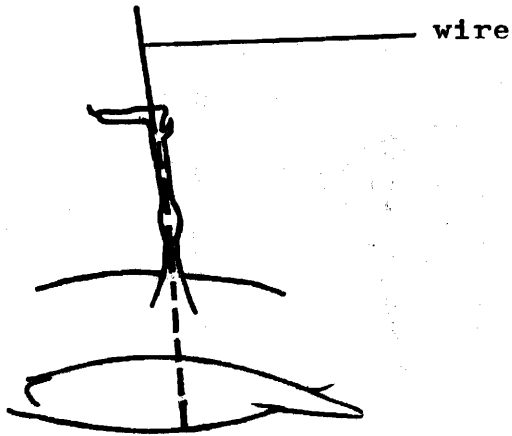


Fig. 2. Position of wire when fully inserted into leg.

N.B. This must be on the inside of the leg.

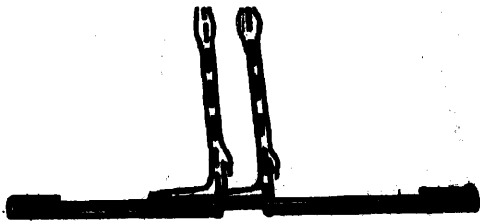


Fig. 3. Position of wires when bird is standing on the board. The bend of the board makes the wires more rigid.

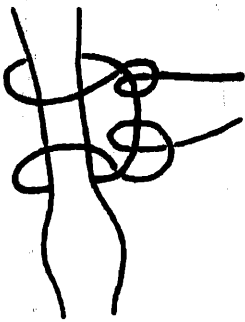


Fig. 4. The double loop knot.

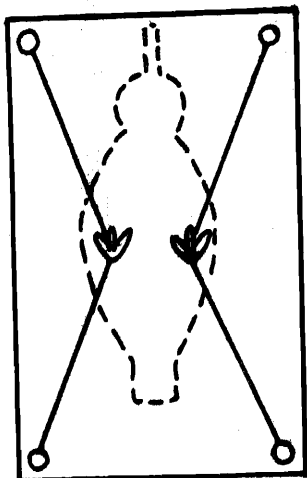


Fig. 5. Points of tying the leg strill to the drawing pins. If the bird is still unstable, threads can be added in other directions.

FIGURES FOR "A METHOD OF MAKING WADER DECOYS" by I.P. Bainbridge

The relatively high densities of Godwit and Oystercatcher enabled us to keep an eye on three to four traps at a time. If a trap clapps the bird mostly continues to incubate. We therefore waited till all traps and 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 on the mean 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.

About 2-4% of the Oystercatcher-pairs from which one or two 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.

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 Redslank 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. Ziemsen Verlag: Wittenberg, Lutherstadt.
- K. Koopman, Nieuweweg 50, Rotsterhaule (Fr.), Netherlands.
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A METHOD OF MAKING WADER DECOYS

by I.P. Bainbridge

Over the past few years the use of stuffed or preserved decoy waders for wader catching, particularly cannon netting, has become commonplace with certain groups. I have received several enquiries on the methods of making wader decoys. The simplest method is to use concentrated formalin solution to preserve the birds intact. This then is another use for the odd wader casualty or birds found freshly dead.

Before the method though, a warning about the 40% formalin solution used; it is a strong irritant and will sting in cuts and cause severe distress if it gets into an eye. It will also harden fingertips. It is thus necessary to have a supply of fresh running water at hand, in case of any accidents. I also wear safety goggles. Formalin also has a noxious vapour and will choke, so take care!

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