The political weight behind oil was amply demonstrated recently by the decision by the Secretary of State for Scotland to over-rule the recommendations arising from the Public Enquiry into the proposed oil refinery at Nigg.

The Highland Kinging Group, already actively involved with seabirds, raptors and passerines, is keen to extend its operations to include studies on the waders in the Firths and will shortly have its own cannon net. Using a cannon net from The Wash, two successful catches were made in March this year, totalling 130 waders, including about 60 Redshank and 30 Oystercatchers, and a survey was made of the Firths for suitable cannon netting sites. There are many excellent sites for netting and the potential is enormous, once the vagaries of the local tides and feeding habits of the numerous peregrine falcons have been evaluated! The possibilities for catching Redshank and Bar-tailed Godwit, normally difficult species, appear to be very good.

The Moray Firth is on the same latitude as southern Norway and parts of the Baltic Sea, and is the most northerly important wintering area for waders in Europe. As such, studies could yield an interesting insight into the ecology of waders in a northerly wintering area which could be compared with areas further south. For example, what is the influence of shorter days and lower temperatures on wader feeding habits and mid winter fat accumulation? Why are there relatively fewer small wader species, e.g. Dunlin, on these estuaries? The Firths could be important staging posts for migrants either of Icelandic and Greenlandic origin or from Scandinavian and Russia. Similarly little is known of the relationship of the wintering populations to those further south or to local breeding populations. For example, many local breeding Oystercatchers are known to winter on the west coast of Britain, but do any winter in the Firths or are all the Oystercatchers wintering there of Norwegian origin?

Thus the ringing of waders by the Highland Ringing Group will have both strong scientific and conservation interest. The conservation interest will be of the most immediate importance as it has already proved difficult to present hard facts to planning committees considering the siting of oil developments. Information on local movements of waders within the Firths is urgently required to back up the conservation lobby, already well represented in the area. The Nature Conservancy Council has published its Moray Firth Prospectus and has carried out studies on the invertebrate and <u>Zostera</u> (eel-grass) distribution. Ringing studies will complement this and the Birds of Estuaries Enquiry and will provide some very interesting information in an area where little is at present known of the waders.

It is hoped that ringers from established wader groups, particularly those with cannon netting licences, may like to visit the Moray Firth to help with cannon netting. If so, they are asked to contact the secretary. David McAllister at 3 Springfield, Morangie Road, Tain, Easter Ross.

W.J.A. Dick and Roy Dennis

WAX LINING FOR RINGS PLACED ON NEWLY-HATCHED CHICKS

(this article is reprinted from the IWRB Woodcock Research Group Newsletter 2, Oct. 1976)

The BTO Ringing Committee are reluctant to permit general use of this on Woodcock pulli before trials have shown it to be harmless for the bird. Because of the difficulties in ringing Woodcock pulli and re-capturing them at regular intervals under natural conditions, we asked R & J Jackson to test the method during their work on <u>Vanellus vanellus</u>. They very kindly did so, and sent the following report:

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1) Conclusions: Due to adverse dry conditions prevailing throughout the breeding season, the results of the experiment are inconclusive, although in our opinion treatment of rings with florists wax does not appear to have any adverse effect on the development of the pullus or leg growth.

2) Method: Green florists wax (a soft wax) was applied in an even coating inside 'D' rings placed on the legs of a sample number of Lapwing pulli, during the period 2-10 May 1976, in order to reduce the internal diameter of the ring and thus minimise ring loss (N.B. We have never encountered ring loss using 'D' rings on pullus Lapwing previously, but the species was being used as test). As far as possible the wax was applied evenly to an overall'depth'of 1 mm. The average measurement of a day-old Lapwing pullus tarsus at its broadest part (from 30 measured) was found to be 2.2. mm x 3.1 mm, therefore the effect of reducing the internal diameter of the 'D' ring was that the ring barely moved up and down the tarsus, but was nevertheless free to allow development.

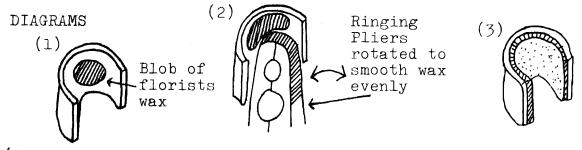
3) Results: 14 one day-old pulli were ringed using the method, one from each of 10 broods of 4 or 3 and one complete brood of 4. Normally one would have expected to re-capture most of these individuals at least twice during the 30-35 days following ringing, up to the free-flight stage. However, due to the dry adverse conditions an extraordinary number of pulli failed to survive (this had nothing to do with the experiment as those ringed in the normal manner fared no better). By 10 days from hatching the average tarsus had developed to 2.4 mm x 4.2 mm and from two individuals recaptured at this age the wax had pushed up and over the edges of the ring, the legs had developed normally and there appeared to be no adverse effects. Only one of the 'waxed ring' individuals was recovered subsequently, 23 days after hatching, and there was no trace whatsoever of wax on the ring and the tarsus had developed normally.

4) Opinion: We would prefer to see a further season's work under more normal weather conditions before expressing a firm opinion, as the re-capture data are too few, but from what we have seen so far we would not consider that adverse effects result from application of the wax, and it would appear to be an ideal preventative against ring loss.

5) Hint on application: We found that if a small blob of wax was placed internally in the half-open ring, and then smoothed over the whole internal surface evently with the outer edge of ringing pliers (see diagram), followed by ring application in the normal way, a more easy application resulted. Prior preparation was not favoured. The process took little time in the field.

Editor's Note: The best opportunity to ring a complete brood of Woodcock is at the nest, especially if a low meshed screen has been placed round the nest before hatching (c. 2 m away) while the sitting bird is off. 'E' rings may possibly be lost from newly-hatched pulli - and every one matters.

Monica Vizoso Shorten



Wax lining evenly spread to depth of 1 mm

(This technique may enable many more pulli to be ringed but in Britain special permission is needed from the Ringing Office at the BTO. Workers abroad should consult with their ringing authorities before experimenting with it . Eds.)