Acknowledgements

We are indebted to Dr. Eckhart Kuyken and to Peter Meininger for their comments on the first draft of this paper. The research of the second author is supported by a grant from I.W.O.N.L. (Institut ter Aamoediging van Wetenschappelijk Onderzoek in Nijverheid en Landbouw), Brussels.

References

Evans, P.R. 1979. Shorebird research on the Tees estuary, N.E.England. Wader Study Group Bulletin 27: 21-22 Meire, P. 1980. Inleidend onderzoek naar de voedseloecologie van enkele steltlopers (Aves-Charadriiformes) op de Slikken van Vianen (Oosterschelde). Thesis, University of Gent Saeijs, H.L.F. and H.J.M.Baptist. 1977a. Waterfowl in the changing delta of the southwest Netherlands (Dutch with English summary). Limosa 50: 98-113 Saeijs,H.L.F. and H.J.M.Baptist. 1977b. Wetland criteria and birds in a changing delta. <u>Biol. Conserv.</u> 11: 251-266 Saeijs,H.L.F. and H.J.M.Baptist. 1978. Waders in the Dutch Delta area (Dutch with English summary). <u>Limosa</u> 51: 52-63 Saeijs, H.L.F. and H.J.M.Baptist. 1980. Coastal engineering and European wintering wetland birds. Biol. Conserv. 17: 63-83 Wolff,W.J. 1967. Bird counts in the "Delta area" in the southwestern part of the Netherlands. (Dutch with English summary.) Limosa 40: 216-225 Wolff,W.J. 1969. Distribution of non-breeding waders in an estuarine area in relation to the distribution of their food organisms. Ardea 57: 1-28

Wolff,W.J. 1973a. Results of five years of wader counts on the island of Schouwen (Dutch with English summary). Limosa 46: 21-41

Wolff,W.J. 1973b. The estuary as a habitat. Leiden, Brill, 242 pp.

Zwarts, L. 1974. Ecological studies on the birds of a Dutch brackish tidal area (Dutch with English summary). Amsterdam, Jaap Kaal, 212 pp.

H.J.M. Baptist, Public Works Department, Delta Project Department, section Environmental Research, PO Box 439, 4330 AK Middelburg, The Netherlands. P.M.Meire, Rijksuniversiteit Gent, Laboratory of Animal Ecology, Zoogeography and Nature Conservation, Ledeganckstraat 35,

B 9000 Gent, Belgium.

IDENTIFYING COLOUR-RINGED OYSTERCATCHERS HAEMATOPUS OSTRAI FGUS by Bruno Ens

Oystercatchers on the shore, getting banded by the score, Oh how happy they would be, were there no ecology.

(modified from Norton-Griffiths, unpublished PhD thesis, University of Oxford)

.

Correctly identifying a colour banded Oystercatcher has become a major challenge to the twentieth century ornithologists

Ringing combinations must belong to the most boring of subjects to read about, so I expect that only a few of hardline waderologists will reach the end of my article. Presumably they also contributed the bulk of the oystercatcher-sightings of which, according to Mike Pienkowski, only 10% can be tracked back to the original ringing scheme. Having observed oystercachers from three different ringing schemes I am convinced that these inaccurate observations can no longer be blamed on the carelessness of observers, but are mainly due to the great number of extant ringing programmes and methods. The combination of all these schemes has necessitated the use of very complex types of colour-bands and has led to what the well-intentioned outsider might seem like a conspiracy to prevent him from making correct identifications. Although few of these studies are primarily concerned with migratory movements, it would seem that observations from outside the ringing area could be very helpful in elucidating the amount of interchange between populations and the types of individuals involved.

The trickiest device developed so far in the ring race was invented by Chris Mead and developed by John Goss-Custard and will be called henceforth code-ring. It consists of a tall yellow plastic ring with horizontal black stripes on three positions. These stripes can be thick, thin or absent. In conjunction with the code-ring the birds ringed in the Exe estuary wear a small-sized colourband on the same part of the leg and some birds have an additional colour band on their other leg (see Fig.1). Leo Zwarts and Piet Zegers from the Netherlands also use code-rings but they are of various colours and the colour-bands are always on a different part of the leg or on a different leg altogether. Extreme care should be taken when thus-equipped birds are observed. Slightly less tricky is the multicolour-band provincely used on Shohar when there oploars are strick on one talk ring. Also, ordinary oploars are are an previously used on Shokholm where three colours are stuck on one tall ring. Also, ordinary colour rings are not as ordinary as they might seem. Up to four bands can be found below the joint on one leg and a maximum of two above the joint on one leg in some ringing schemes. Although the number of colours used per scheme usually doesn't exceed six the total number used is extraordinary: white, yellow, orange, red, dark red, pale green, green, dark green, pale blue, blue, dark blue, dark brown and black. Sometimes the metal ring or the absence of a ring is considered a colour as well. A useful clue to nationality of Oystercatchers is that Dutch birds usually wear their metal ring above the joint; most others wear it below. On occasion people have used wing tags with a combination of colours and the latest fashion seems to be leg flags combined with staining. In Table 1 a summary of the ringing schemes is given as well as the total number of oystercatchers involved.

Although mudflats are almost ideally suited for reading rings, mud-splatters can cause nonexisting stripes on coderings and seawater causes fading in some colour rings. Sometimes the yellow coating of the Goss-Custard code-rings has chipped off, leaving random black blobs on the ring. Colour rings tend to fall off or slip down. In this respect the extreme longevity of oystercatchers is not very helpful. According to Niko Tinbergen one pair ringed more than 15 years ago by Mike Norton-Griffiths still breeds every year at Ravenglass.

-29-

Table 1. Summary of colour-ringing schemes for Oystercatchers

| | | approx. number | |
|--------------------------------|-----------------------|----------------|---|
| Ringing site | <u>year(s)</u> | marked to date | ringing method |
| Arkholme,UK | 1978 -> | 50 | 4 colour rings on left leg below joint (bottom colour always black), metal ring on right, as well as wing tag with various colours. |
| Ythan,UK. | 1966–1977 | 500 | from 1 to 3 colour rings; sometimes a triple colour. Some birds carry flags and wing tags. Rings below joint. |
| Skokholm,UK. | 1963-1975 | 300 | triple colour ring on one leg below joint and one colour ring |
| | | (ca 100 alive) | and metal on other leg below joint. |
| Isle of May, UK. | 1973 | 10 | 2 colours on one leg, 1 colour on other. Rings below joint. |
| Exe estuary,UK. | 1976- | 466 | code-ring with colour band(s) in conjunction, sometimes additional colour ring (see Fig.1). |
| Exe estuary,UK. | 1976 -} | 400 | single tall colour-ring (stripeless code-ring) |
| Plym estuary,UK. | ? | 40 | single tall colour-ring |
| Camel estuary,UK | ? | 40 | single tall colour-ring |
| Friesland, Neth. | 1975–1978 | 750 | from 1 to 5 colour rings; with a maximum on one leg of 2 below joint and 1 above (see Fig.1). |
| Friesland, Neth. | 1977 -> | 2000 | code-ring and colour rings (the latter not on the same part of the same leg as the code-ring). |
| Ebro Delta, Spain | 1979-7 | 30 | White ring above joint and metal below joint on right; blue, white or mauve ring plus in some cases a white ring on left above joint. |
| Viksfjord, Norway | 1976 - 1978 | 178 | 2 colour rings + metal, all below joint; 2 on 1 leg, 1 on other |
| Rogaland, Norway | ? | 105 | up to three rings on each leg; all below joint |
| Tautra, Norway | ? | 50 | no details available at the moment |
| Oland, Sweden | 1978 -> | ? | colour rings; no details available at the moment |
| Gironde, France | 1979–1980 | 50 | single red ring on left leg or single blue ring on either left or right. |
| Banc d'Arguin, Mauritania 1976 | | ? | single orange ring. |
| Sites in NW Europe | 1980→ | 500 | temporary leg flag wrapped around metal ring (above or below joint) in combination with plumage dye. |



Figure 1. Types of colour-ring combinations used by Jan Hulscher and John Goss-Custard. Note that foot deformities, often caused by sheep's wool, are particularly common in some Oystercatcher populations.

At this stage it should be clear that if an identification by an experienced observer is to stand any chance of being a rotation of the metal band.
in case of code rings: colour, thickness and position of stripes.

A description of age, and size of the white collar-band, can be a further check on the correctness of the observation. Finally I would guess that any information on food items taken, or social behaviour, will always be welcome.

This article was born when John Goss-Custard complained about other people's oystercatchers being mistaken for his. It would never have been written though, if it were not for my genuine concern that good opportunities to gather valuable information (thousands of colour-banded oystercatchers combined with an even greater number of enthusiastic birdwatchers) were being missed, because of the disastrous complexity of ringing schemes. Mike Pienkowski provided me with information on ringing schemes with which I was not familiar.

Bruno Ens, Edward Grey Institute, Department of Zoology, South Parks Road, Oxford OX1 3PS, GB.