

Table 2. Dates of marking and first sighting of the 10 marked Grey Plovers present at Teesmouth only during 1978/79 and 1981/82 winters.

Table 1. Dates of first sighting of marked Grey Plovers during the 1981/82 winter (data up to 31 January 1982).		Month						
		S	O	N	D	J	F	M
		1978/79						
		J	A	S	O	N	D	J
Total No. seen		2	20	8	2	9	12	37
No. not seen last winter (1980/81)		0	1	0	1	0	0	19
		1981/82						
		Month of first sighting						
		0	0	0	0	10	0	0

Dugan & Pienkowski, in press) that one advantage of occupying a territory in autumn (often the same territory in successive years) was that it ensured a good feeding area for the whole winter. However one of the ten Grey Plovers, returning in January 1982 after several years' absence, acquired a feeding territory by squeezing in between others on one of the main territorial areas. Both of the adjacent territory holders had defended sites there throughout at least 3 previous winters. Thus, occupation of a territory in early autumn does not always ensure sole use of the whole area by the owner through the winter. Furthermore, territorial behaviour does not limit the total number of Grey Plovers which can feed on these main territorial areas of Seal Sands.

References

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## ESTIMATING THE PREFLEDGING MORTALITY OF WADERS: A COMMENT ON YATES' PROPOSAL

by Christopher P.F. Redfern

Yates (1981) has drawn attention to the fact that our knowledge of the mortality of wader pulli is sparse, or non-existent, and proposes that the age and habitat for all wader pulli ringed should be recorded on BTO schedules for later analysis. There should be little difficulty in recording the habitat in which pulli are ringed but such data must be interpreted with caution. It will have to be assumed that the 'ringing habitat' is the same as that used by the young during the prefledging period. From my experience, this is not necessarily so, especially when pulli are ringed soon after hatching. For example, Lapwings *Vanellus vanellus* in one Peeblesshire colony nested largely on blanket bog, but the young tended to move off the nesting habitat onto adjacent pasture soon (1-3 days) after hatching.

Recording the age of a brood or pullus presents a more immediate problem and it might be better to record a measure of the physiological age (i.e. state of development) of the birds, rather than attempting to estimate chronological age in the field. It can then be left to the analyst to interpret mortality in relation to physiological age. Because growth rates may vary geographically and annually (e.g. Jackson & Jackson 1980), it might be more valid to express prefledging mortality in terms of the mortality relative to the proportion of growth completed, rather than as a chronological age-specific mortality. The weight of each pullus ringed is the simplest and most useful measurement to record.

The recording of habitat and weight should be obligatory (as far as is possible) for all wader pulli. These data would, as Yates points out, clearly be of value and it is perhaps hard to justify not collecting them as a matter of routine.

References

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B.J.Yates comments:

I agree with most of the comment, by C.P.F.Redferns, on my proposal. However, I still consider bill length to be most suitable in the Redshank *Tringa totanus* (and probably most long billed birds) for assessing age. It shows no post-hatching decline, and is far less variable (therefore, more accurate) than weight. In estimating chronological age it is the physiological age that is estimated and which is then interpreted, for convenience, as time.