

Estuarine feeding by Lapwings *Venellus vanellus* and Golden Plovers *Pluvialis apricaria*

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Preliminary observations are presented on intertidal feeding by Lapwings and Golden Plovers in eastern England. It is considered that the use of estuaries for foraging may be more prevalent than is realised. Warmer autumns resulting from global warming may make traditional feeding areas in cereal fields unsuitable due to rapid crop growth. More systematic data on estuarine feeding are required to determine if this is a developing habit.

Keywords: Lapwing, Golden Plover, Estuaries, Feeding

Lapwings and Golden Plovers are widespread and common winter visitors in eastern England, where they feed extensively on fields of winter cereals. Although they occur regularly in estuaries, it is generally thought they use them mainly for roosting (Ferns 1992), resorting to feeding in the intertidal habitat only during periods of severe weather (Prater 1981). A recent review of the ecology and conservation needs of Lapwings (Tucker *et al.* 1994) made no mention of their use of estuaries. In a national survey of Golden Plovers, birds were found feeding in intertidal land only in Scotland and northern England, but only a very small proportion (Fuller & Lloyd 1981).

In a three year study of the feeding ecology of the two species on farmland in north-east Essex (Mason & Macdonald 1999), low numbers of birds were found in the second two winters. The mild autumn weather had accelerated the growth of

cereals such that it had exceeded the critical height for feeding (110 mm for Lapwing, 90 mm for Golden Plover) by the end of November. It was suggested that, if these growing conditions become the norm, Lapwings and Golden Plovers would be forced to leave traditional wintering grounds for destinations further south, where they face heavy hunting pressure, or they would resort to feeding in local estuaries, where they may compete with other species. This paper presents casual observations of the feeding of the two species in the Stour Estuary on the Essex/Suffolk boundary.

Small numbers of Lapwings occur on the estuary from the middle of June, probably birds from the small, local breeding population. A count of 202 Lapwings on 17 August 1996 for the entire south shore of the estuary is typical. These birds appear to be permanent summer residents, where they feed at the top of the shore in the

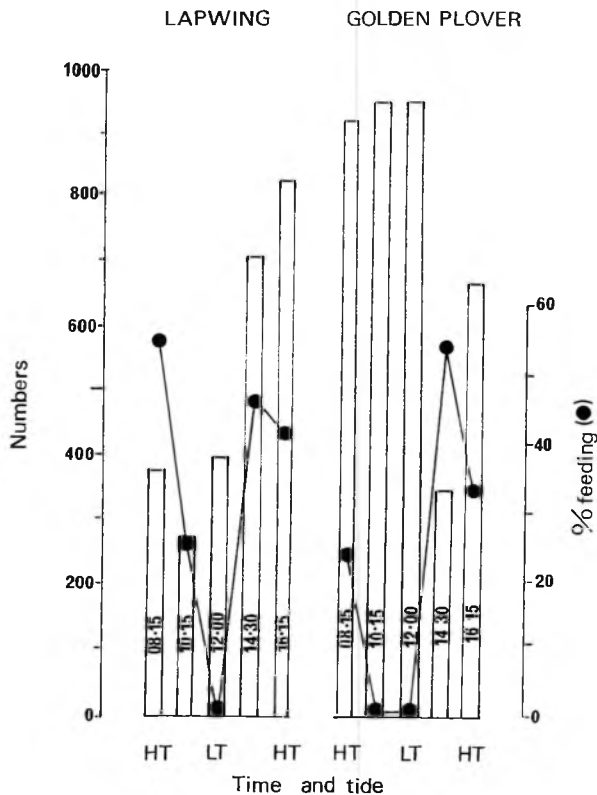


Figure 1. The numbers of Lapwings and Golden Plovers, with percentage of birds foraging, on intertidal mudflats at Mistley Bay, Stour Estuary, Essex, during a tidal cycle in March 1995.

mud between clumps of the rapidly eroding salt marsh, apparently holding small feeding territories which they defend against other Lapwings. A very small number of Golden Plovers is present during the summer but it is not known whether they feed intertidally. The majority of birds of both species arrive in the district in late October and November (Mason & Macdonald 1999).

Casual observations of feeding behaviour were made during winter at Mistley Bay (TM 112324), a large area of intertidal mudflats at the head of the Stour Estuary. On 3 March 1995 observations were made over a tidal cycle (**Figure 1**),

under calm, sunny conditions. More than 50% of Lapwings were feeding at low tide in the morning. The proportion declined as the tide rose and all roosted at high tide. As the tide fell, about 50% of an enlarged flock were feeding. The Golden Plover flock was larger than that of Lapwing but only about 25% of birds were feeding in the morning and they roosted earlier than Lapwings. On the falling tide some 54% of birds were feeding.

In the 1995/96 winter counts of 5500 Lapwings and 2000 Golden Plovers were made on 14 November 1995 and 2700 Lapwings and 2900 Golden Plovers on 1 December 1995. Conditions were mild

and the majority of birds were roosting. There was a period of very cold weather at the end of December. On 29 December 1995 all of the 880 Lapwings and 370 Golden Plovers were actively foraging. The cold spell was short lived and on a very mild 11 January 1996 45% of 1250 Lapwings and 19% of 120 Golden Plovers were feeding at low tide.

Although these observations are few and opportunistic they indicate that intertidal feeding by Lapwings and Golden Plovers may be more prevalent than hitherto realised. It may be a developing phenomenon. In view of our observations on the rapid growth of winter cereal crops in mild autumns, rendering large areas of traditional feeding habitat unsuitable (Mason & Macdonald 1999), and the likelihood that this could become the norm with global warming, more systematic observations on the feeding of these two species in the intertidal zone is required.

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