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Addendum

I have recently received information that suggests geographical variation in the predator-mobbing behaviour of another shorebird species, the Upland Sandpiper. Observers have reported an absence of mobbing by Upland Sandpipers in Alaska (B. Kessel pers. comm.), Manitoba (E.H. Miller pers. comm.), and North Dakota (K.F. Higgins pers. comm.). However, Daniel E. Bowen (pers. comm.) described unequivocal examples of mobbing of humans and one instance of mobbing of a coyote (Canis latrans) in Kansas. He further opined that only parents with young weighing less than 30 g exhibit mobbing. If this is true, and certainly it is clear that in many species both the intensity and the form of antipredator behaviour change during the nesting cycle (pers. obs., unpubl. data), it underscores the importance of making observations throughout the breeding season.

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WINTERING BEHAVIOUR AND SITE FAITHFULNESS OF AMERICAN GOLDEN PLOVERS *PLUVIALIS DOMINICA FULVA* IN HAWAII

by Oscar W. Johnson, Patricia Johnson and Philip Bruner

In August 1979, we initiated a comprehensive study of the wintering biology of the American Golden Plover on the island of Oahu, Hawaii. The major areas under investigation are: behaviour, moult and fat cycles, and the chronology of migration. Certain preliminary findings through October 1980 can be reported at this time.

Adult plovers reach their wintering grounds beginning in August. Most still retained one quarter to one half of their breeding plumage upon arrival. Juveniles did not begin to arrive until late September.

During the winter of 1979-80, we caught plovers in mist-nets and colour-banded them for individual identification. We subsequently chronicled the behaviour of 37 marked birds over extended periods through spring migration, 25-26 April 1980.

The wintering population was composed of territorial and non-territorial birds in approximately equal proportions. Of the banded birds, 23 were territorial and 14 non-territorial. Territories were occupied in a wide range of habitats, with lawns and brushy pastures especially favoured. Territorial birds fed, loafed, preened, and slept on their territories during daylight hours for the entire winter cycle. At night, they roosted communally on nearby small islands. (Note: The study site for this work lacked the urban roof-top roosts found elsewhere on the island: such roosts are described in the next paper.- Ed.). Territorial defence behaviours ranged from brief confrontations and chases to violent aerial fights, and were particularly intense during territory establishment in fall. Based on collected specimens, some juveniles of both sexes established territories, but most territory holders were adults, predominantly males.

In fall 1980, 30 of 37 marked birds (81%) returned to the study area. Each returning individual behaved as it had during the previous winter: in all, 16 territorial and 14 non-territorial. Moreover, each of the territorial birds reoccupied the same territory it had defended previously.

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