ABUNDANCE, DIET AND FEEDING BEHAVIOUR OF THE WHIMBREL Numenius phaeopus variegatus IN RHYLL INLET, VICTORIA

P DANN

Department of Zoology, University of Melbourne, Parkville, Victoria 3052

Present address: Penguin Reserve Committee of Management, P.O. Box 97, Cowes, Phillip Island, Victoria 3922

Received 6 December 1991

Information is presented on the numbers, diet and behaviour of Whimbrels feeding in the Rhyll Inlet in Western Port, Victoria in 1977-78. Monthly mean numbers increased gradually throughout spring to a maximum of 22 in 1977 in summer and 28 in 1978 in autumn. Crabs comprised 93 per cent of the prey items and shrimps made up the remaining 7 per cent of the diet. The most numerous prev species found in an analysis of regurgitated pellets was the Tasselled Crab *Pilumnus fissifrons*. Whimbrel preferred to feed out of the water in mudflat areas with a 10 per cent to 50 per cent covering of eelgrass and the majority of feeding actions observed (199) were pecks (39%) or jabs (38%) and the rest were probes (23%). Pecks were never seen to result in prev capture, whereas 12 per cent of jabs and 24 per cent of probes were followed by obvious handling and swallowing of food. The mean duration of six feeding periods in September and October 1978 was 240 minutes per diurnal tidal cycle (s.d. ± 56.0) and ranged from 170 to 300 minutes. The mean rate of feeding actions was 0.15 per second (s.d. ± 0.07) [or one feeding action every 6.7 seconds] and ranged from 0.08 to 0.33 during 62 minutes of observations. Their success rate was 0.02 prey items per second (s.d. ± 0.02) for one prey capture every 50 seconds] and ranged from 0.004 to 0.06 prey per second. Crustaceans have been the only type of food from intertidal areas found in the diet of variegatus in Australia and New Zealand although molluscs have been recorded in the diet in India and Vanuatu.