

## WADER CONSERVATION - GENERAL PRINCIPLES.

While surveying the wader habitats of the Swan River, Peel Inlet and the Harvey Estuary, some general principles of wading-bird habitat conservation became evident.

1. The feeding and roosting areas of wading-birds are tidal flats (mud or sand) and their adjacent shoreline.

Feeding activity is generally confined to the shore's edge and to those areas of the flats covered by 0-6 inches of water.

At depths greater than 6 inches the food which the flats contain is inaccessible.

Dredging of tidal flats therefore completely destroys their use as feeding grounds for waders.

2. Analysis of stomach contents showed that whereas the long-beaked waders (Red-necked Avocet, White-headed Stilt, Banded Stilt, Bar-tailed Godwits and Greenshanks) were feeding exclusively on fauna which the tidal flats contained (largely Polychaetes and Gastropods) the short-beaked waders (notably Little Stint) were feeding mainly on insects and spiders, much of which came from the bushland adjacent to the flats.

For this reason any future proposals for the conservation of wader habitats should include the preservation of a substantial area of bush backing as well as the preservation of the sand flats on which the birds feed.

3. It is generally believed that the creation of islands by the dumping of dredged mud or sand is beneficial to wildlife in the area. This is a complete fallacy. Islands created in this manner have no tidal flats extending from their shoreline and are therefore useless as feeding grounds for waders. They are of little use as roosting grounds since waders roost adjacent to their feeding grounds.

The creation of islands and tidal flats similar to the natural islands in Peel Inlet (see Preliminary Survey of Peel Inlet and Harvey Estuary section 1.0.) may however be beneficial to wildlife provided the islands and flats are similarly affected by the tide and contain sufficient food.

4. Disturbance of waders by vehicles, motorbikes, boats, people and dogs causes a reduction in bird numbers and should therefore be prevented.

The erection of high cyclone-mesh fences paralld to the shoreline and at least  $1\frac{1}{2}$  chains from it as well as notices prohibiting entry to the enclosed area of shoreline and tidal flats, appears to be the best method of controlling disturbances where the land behind the shore has been developed for public use.

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