ramoana's sub-tidal sand flats are the home for large numbers of juvenile flatfish in summer and autumn — these fish sustain the local trawl fishery. A rich community of snails, bivalves, anemones, worms and crustaceans thrive amongst the eelgrass which grows on the low tide sand flats. The eelgrass is also grazed by grey and mallard ducks and in winter by up to 300 black swans. The cockle population is high, and the cockles are amongst the largest known in New Zealand. Invertebrates in the sand provide food for large flocks of the common waders and plovers and for rarer migrant waders. Mid-tide sand flats support large numbers of burrowing invertebrates, and provide an important low tide roosting area for large flocks of gulls and terns.

Best known of the biological communities at Aramoana are the salt marshes. The lower salt marsh stretches above the eastern

tidal flats, on and inland of the crescent of low sandy islets which provide the only reliable high tide roosts for the large flocks of wading birds in the harbour. Its short turf, dominated by two native salt marsh plants, glasswort (Sarcocornia quinqueflora previously Salicornia australis) and Samolus repens, supports a rich assemblage of sandhoppers, crabs, mudsnails and insects. Wading birds eat these at high tide, especially important during winter storms.

Inland of the lower marsh is the salt meadow or middle marsh, with its denser and more continuous turf of several more salt marsh plant species. Above this again, out of reach of all but the highest spring tides, is the upper marsh. Characterised by the salt marsh shrub Plagianthus divaricatus and the tall jointed rush Leptocarpus similis, it is absent from most other Otago salt marshes: removed for farming, or covered by rubbish dumps.

Especially important at

Aramoana are sand ridges, probably former beaches, and the intervening swampy areas known as slack, characterised by flax and jointed rush. There is no comparable area in Otago, and throughout New Zealand such areas are much depleted.

The tidal flats are the most important areas for waders in Otago. Rare migratory waders are more common here than elsewhere in eastern Otago, and godwits, oystercatchers, pied stilts and banded dotterels all find a home here. Ducks and black swans use Aramoana for breeding, feeding and resting, and as a refuge during the shooting season.

Aramoana is a prime area of study for nearby Otago University with its specialist facilities for marine research. It provides a baseline for measuring and monitoring changes in coastal ecosystems, thus allowing better and more informed decisions for managing these areas. The sand

ridges also can give clues about the coastal evolution of southern New Zealand, especially as coastal erosion is such a grave problem, affecting rural, urban and industrial land.

Most of this article has focussed on the threat to the people, plants and animals posed by industry at Aramoana. It would also be an affront to the physical beauty of the area. The landscape around Aramoana is magnificent and the area has an air of untrodden isolation, despite its popularity. The royal albatross colony, the only mainland example in the world, is immediately opposite. Aramoana is central to the view from much of Port Chalmers, and from many other harbourside settlements. Of particular importance is its relationship, both physical and spiritual, to the Maori community and marae of Otakau, on the opposite shore of the harbour.

HOLLYFORD

THE TONIC OF THE WILDERNESS

Sick of city living? Take a tonic. Enjoy from 3 to 5

remote Hollyford Valley, Fiordland National Park.

See unspoiled scenery,

seal colony, glow worms, penguinis and historic

Martin's Bay. Go fishing, swimming and generally

enjoy the organised freedom, comfortable

best medicine in the

TELEPHONE 4300

world

cabins, good company and friendly service.

Give yourself some of the

P.O. BOX 216 INVERCARGILL

days of walking and jet boating in the beautiful

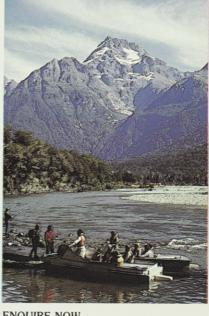
Holiday with the Experts

We invite you to share these superb outdoor experiences . . .

Gentle Adventures
Discovering Nature
Pioneering History Adventure
Nature Photography
The Volcano Adventure
Birds of Forest, Lakes & Streams
Spinning The Fleece
Plants of Mountain & Forest
Natural History Adventure
Landscape Painting Safari
FOR FREE BROCHURE

WRITE OR PHONE NOW **Venturetreks**

P.O. Box 37-610, Parnell, Auckland, New Zealand. Ph: 799-855 Telex: NZ2401



ENQUIRE NOW AT YOUR LOCAL TRAVEL AGENT OR POST THIS COUPON.

PLEASE FORWARD YOUR FREE BROCHURE:

ADDRESS

APPROX DATE INTERESTED

LOGO

HOLLYFORD TOURIST & TRAVEL CO LTD