## THE AHURIRI ESTUARY The story of an urban wetland

By David Appleton

URING THE 19TH CENTURY 3,800 ha of swamp and tidal lagoon sprawled between the embryonic Napier township and distant inland hills. Dominant in this sheet of wetlands was an expanse of tidal flood, shell-banks and islets, known to the Maori as Te Whanganui-o-Rotu, a lagoon rich in shellfish, finfish and birdlife and an important source of kai moana for the occupants of numerous surrounding villages.

However, these natural wetlands were decisively altered by the 1931 earthquake and its two-metre land upheaval, followed by the construction of a network of stopbanks and sluices that, over a period of years, helped to transform the great lagoon and its surrounding swamps into today's city suburbs, airport and pastoral flatlands. The remains of Te Whanganui-o-Rotu lagoon exist today only as scattered pockets of saline marshland, spread around the 450ha stopbank-constricted tidal estuary. This winds its way inland below the wave-cut hill faces that in earlier times stood as a barrier between the ocean's overflow and the palisaded villages of the local Kahungunu people.

## **Unique Resource**

Thus, irreversible change shaped Napier and its surroundings, despite which the Ahuriri Estuary and wetlands remain a unique and valuable natural resource in Hawke's Bay. Fisheries researchers have revealed that the tidal waterway provides both breeding and feeding areas for fish species that are not present in other estuaries in Hawke's Bay. Indeed, the estuary functions as an irreplaceable food-source for shoals of immature coastal fish species such as kahawai, mullet and trevally. During summer, runnels and submerged mudflats provide a rich feeding area for myriads of tiny flat-fish, while mature flounders scour the channels for food, in company with parore and grey mullet.

Similarly, a wide variety of birds depend upon the tidal flats and saline wetlands, both as a food-source and for sheltered roosting. Flocks of summer-visiting godwits pick over the mudflats and, as the tide floods in across their feeding rounds, they rise, wheeling up and across to the nearby Southern Marsh, to alight and sleep away the high-tide hours. Rarer Arctic breeding birds occasionally drop in to join the godwits: pectoral and sharptailed sandpipers, stints, curlew and marsh sandpipers, and once a shy, solitary yellowlegs (Tringa flavipes) that had wandered over from the Americas. A pair of gull-billed terns stayed for several years while this summer two dusky-winged marsh terns (Chlidonias leucopterus) hawk insects, swallow-like, above the lagoons.

There are few places in New Zealand where such a variety of migratory birds can be seen. So, despite its restricted area and city-edge location, the estuary has become



The Ahuriri Estuary is today but a shadow of its former self, having been affected by the 1931 earthquake, drainage and reclamation. The latest threat to it is from a planned motorway, destined to slice through the Northern Pond and the Southern Marsh (see map). The area in the foreground is planned to have a slip-road across it, to feed traffic from Westshore, onto the motorway. It provides a rich feeding and roosting area for ducks, black swans and some waders. During the winter, up to 40 harriers occupy a communal roost that is located in the rush beds, on the right of the "pond". The motorway is planned to run directly beside the roost site. Photo: David Appleton

rather special for both local and visiting birders.

During 1987 the transformation of government departments into state-owned enterprises resulted in a widespread land reallocation exercise and this eventually saw most of the estuarine waterway and some wetlands passed over to the Department of Conservation. Government activities during the past two years have accelerated plans for changes in coastal land management with

local authorities clamouring for control of both estuaries and foreshores. The current picture of legislative change remains blurred as parliamentary Bills, now under consideration, would place tidal waterways under Crown title but regional authority management, with mandatory management plans to be finally approved by the Minister for Conservation; this is, however, yet to be finalised. Ex-Harbour Board-owned wetlands around the estuary remain subject to outstanding title

