MANAWATU ESTUARY TRUST

The Manawatu River Estuary

The Manawatu Estuary is the largest and most important estuary in the southern part of the North Island, providing a refuge for thousands of migratory wading birds, both from the northern hemisphere, during the southern summer, and the South Island, during the southern winter. It is one of seven wetlands in New Zealand designated under the Convention on Wetlands of International Importance (more commonly known as the Ramsar Convention).



The Manawatu Estuary is an important wintering ground for waders such as these Bar-tailed Godwits, migrants from the northern hemisphere that nest in eastern Russia and Alaska. It is also important for South Island waterbirds such as the Royal Spoonbill (up to 50% of the national population) and the Wrybill, an endemic New Zealand wader that is vulnerable because of predation while breeding, coupled with ongoing degradation of its breeding habitat on the braided rivers of the South Island.



The salt-marsh ribbonwood plant community in the upper reaches of the estuary supports the largest southern population of the North Island race of the Fernbird (Matata), Bowdleria punctata vealeae



The estuary is a popular spot for birdwatchers and nature lovers generally, as well as with those engaged in fishing, boating, and off-road 4WD motoring. A major challenge in managing the area is to reconcile and make provision for these activities while retaining the area's core natural values

Birds of the Manawatu River Estuary

A total of 93 bird species have been recorded on or around the Manawatu River Estuary. The following are some of the more prominent bird species that occur, and which you might see during the excursion. A full list can be found at http://www.nzbirds.com/birding/manawatubirds.html

Black Shag	Phalacrocorax carbo	Black Backed Gull	Larus dominicanus
Pied Shag	Phalacrocorax varius	Red-billed Gull	Larus scopulinus
Little Shag	Phalacrocorax melanoleucus	Black-billed Gull	Larus bulleri
Little Black Shag	Phalacrocorax sulcirostris	Caspian Tern	Sterna caspia
Black Swan	Cygnus atratus	White-fronted Tern	Sterna striata
Paradise Duck	Tadorna variegata	Pied Stilt	Himantopus himantopus
Mallard Duck	Anas platyrhynchos	Kingfisher	Halcyon sancta
Grey Duck	Anas superciliosa	Skylark	Alauda arvensis
Grey Teal	Anas gracilis	Welcome Swallow	Hirundo tahitica
White-faced Heron	Ardea novaehollandiae	New Zealand Pipit	Anthus novaeseelandiae
Cattle Egret	Bubulcus ibis	Dunnock	Prunella modularis
Royal Spoonbill	Platalea regia	Blackbird	Turdus merula
Australasian Bittern	Botaurus poiciloptilus	Song Thrush	Turdus philomelus
Australasian Harrier	Circus approximans	Fernbird	Bowdleria punctata
Pied Oystercatcher	Haematopus ostralegus	Fantail	Rhipidura fulginosa
Variable Oystercatcher	Haematopus unicolor	Silvereye	Zosterops lateralis
Spur-winged Plover	Vanellus miles	Tui	Prosthermadera
			novaeseelandiae
Pukeko	Porphyrio porphyrio	Yellowhammer	Emberiza citrinella.
Banded Dotterel	Charadrius bicinctus	Chaffinch	Fringilla coelabs
Golden Plover	Pluvialis fulva	Greenfinch	Carduelis chloris
Wrybill	Anarchynchus frontalis	Goldfinch	Cardulelis carduelis
Bar-tailed Godwit	Limosa lapponica	House Sparrow	Passer domesticus
Knot	Calidris canutus	Starling	Sturnus vulgaris
Turnstone	Arenaria interpres	Magpie	Gymnorhina tibicen

Migrant Waders

The Manawatu Estuary supports two groups of migrant waders. One group comprises those species that breed in the South Island during the southern spring and summer, and then winter on estuaries of the North Island, principally the Firth of Thames, adjacent to the Coromandel Peninsular, and the Manukau and Kaipara estuaries. These species include the Wrybill, Pied Oystercatcher, Pied Stilt, and those Banded Dotterel breeding on the Canterbury plains and in the Marlborough region. Some birds of these species also winter on the Manawatu Estuary but its main importance is as a stop-over site for the birds on their migration. In this regard, the Manawatu is particularly important to the Wrybill, supporting more than 1% of the world population of this species on its migration to and from its wintering grounds; up to 70 birds winter on the estuary.

The second group of migratory waders are those that breed during the northern summer mainly in Siberia and western Alaska, and then winter in Australasia, including New Zealand. The most numerous of these are the Bar-tailed Godwit (85,000-110,000 spending the northern winter in New Zealand, ~70% in the North Island), the Lesser Knot (45,000-70,000 birds), and Turnstone (4,000-7,000 birds), all of

which occur on the Manawatu estuary. A number of species occurring on the estuary breed many thousand of kilometres away in eastern Russia and Alaska

Research carried out by scientists in New Zealand and elsewhere along the birds' migration route is showing us something of the remarkable physiological achievements of these birds in flying exceptionally long distances non-stop. In early 2007, satellite-tracking transmitters were implanted in 16 Bar-tailed Godwits, 8 at Farewell Spit and 8 at Miranda on the Firth of Thames. Six birds were successfully tracked to their breeding grounds in Alaska and far-eastern Russia, while one bird remained in New Zealand (at Farewell Spit) throughout the southern winter and into the following spring and summer.

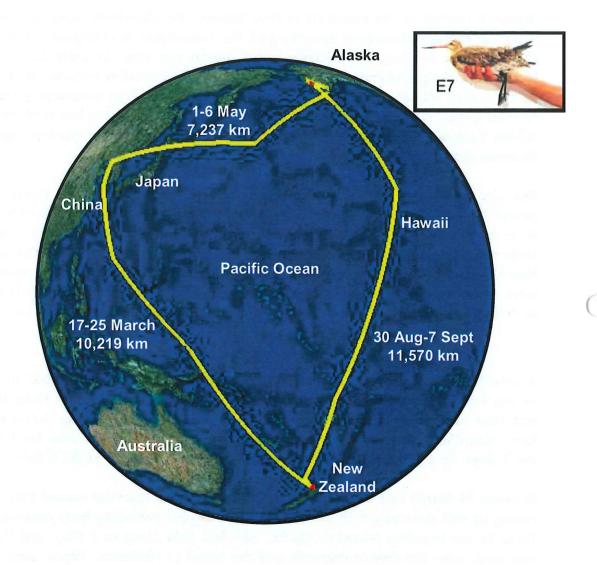
One bird, a female, "E7", was tracked all the way from New Zealand to her breeding ground in Alaska, via China and the Korean Peninsula, and then back to New Zealand in an remarkable non-stop flight across the Pacific Ocean from Alaska. Two other birds were tracked on the same route but they stopped short of New Zealand, one in New Caledonia (E5), the other in Papua New Guinea (Z0), where they remained for some weeks until their transmitters failed. A fourth godwit was tracked from Alaska to Pavuvu Island in the Solomon Islands before its transmitter went off the air.

The travels of E7

A satellite-tracking transmitter was implanted in E7 on 6 February 2007 at Miranda on the Firth of Thames. At about 8 am on 17 March 2007 she left Piako (Miranda) and flew non-stop to Yalu Jiang, a nature reserve on the border between North Korea and China. She arrived there on 24 March after flying non-stop for 10,219 km for 7 days 13 hours (or 181 hours in all), at an average speed of 56.5 kph.

Between 24 March and 1 May 2007, she spent most of the time around Yalu Jiang, moving up and down about 45 km of coast, presumably recouping body reserves before flying to her breeding ground in Alaska. She left Yalu Jiang on 1 May, and flew eastwards over the Korean Peninsula and the island of Hokkaido, Japan, along a line that took her south of the Aleutian Islands. On 15 May she reached her final destination, about 610 km NNW of Port Heiden on the Yukon Delta in Alaska. In all, she had travelled a total of 17,456 km from Piako, involving about 14.5 days (350 hrs) of flying. She nested in that area.

On 29 August (or 06h00 on 30 August NZ time), she headed south over the Alaskan Peninsula and out over the Pacific, towards Hawaii. On 1 September 2007, just over 600 km north of the island of Kauai, Hawaii, she turned SW, arriving at the Miranda Estuary sometime on the night of 7^{th} September. She had flown 11,570 km non-stop in $8\frac{1}{2}$ days (204 hr), an average speed of 56.7 kph. In all, her migration route covered 29,181 km. The important thing is not just that E7 did all this, but that she showed that it can be done, as tens of thousands of godwits do each year, migrating between New Zealand (and Australia) and their breeding grounds in eastern Siberia and



Migration route of female Bar-tailed Godwit E7 from New Zealand to Alaska, via China and the Korean Peninsula (March-May), and back across the Pacific (August-September)

Written by Peter Frost, from OSNZ Wanganui.

Photo credits

Peter Frost: frontpiece; birdwatchers on the Manawatu; White-faced Heron; Royal Spoonbill; Red-billed Gull; Caspian Tern; Wrybill; E7 migration (from Google Earth and information given at http://alaska.usgs.gov/science/biology/shorebirds/barg_updates.html)

Paul Gibson: Bar-tailed Godwit flock; Fernbird; Black-billed Gull; Black-backed Gull; Bar-tailed Godwit; Red Knot; Banded Dotterel; Pied Stilt; Pied Oystercatcher; Variable Oystercatcher

Scott Streit (http://www.bird-friends.com/): Ruddy Turnstone



White-faced Heron (Matuku-moana) Ardea novaehollandiae



Red-billed Gull (Tarapunga or Akiaki) Larus novaehollandiae



Black-backed Gull (Karoro)
Larus dominicanus



Royal Spoonbill (Kotuku-ngutupapa) Platalea regia



Black-billed Gull (Tarapunga) Larus bulleri



Caspian Tern (Taranui) Sterna caspia



Bar-tailed Godwit (Kuaka) Limosa lapponica



Banded Dotterel (Tuturiwhatu) Charadrius bicinctus



Turnstone Arenaria interpres



Pied Oystercatcher (Torea) Haematopus ostralegus



Red or Lesser Knot (Huahou) Calidris canutus



Wrybill (Ngutuparore) Anarhynchus frontalis



Pied Stilt (Poaka) Himantopus himantopus



Variable Oystercatcher (Toreapango) Haematopus unicolor