Kaipara Harbour

A Coastal Wetland of International Importance

The Kaipara Harbour lies on the west coast of the North Island near Auckland. It is New Zealand's largest enclosed harbour and an important bird habitat for both native and migratory species (Medway, 2000:12).

Migratory waders

As the southern-most point on the Asia – Pacific flyway (one of the main migration routes for waders), New Zealand provides vital over-wintering grounds for a number of migratory waders. These include snipe, sand-pipers, godwits, plovers and curlew.

About 32 species within this group of waders migrate to New Zealand each year (Heather & Robinson, 1996). Research suggests that about 50% of the bar-tailed godwit and significant numbers of many other species on the Asia – Pacific flyway visit New Zealand each year (A. Riegen, *pers.comm.*, *February 2001*).

In summer over 30 thousand migratory waders arrive from as far away as Siberia during September. While in New Zealand they feed on the abundant shellfish, worms, crabs and hoppers that live in sandflats and mudflats within our harbours. This food supply is crucial for the birds. They rely on it to recover from their long migration and fatten up for the return journey. If they fail to put on sufficient weight, they will not make the long journey back to the northern hemisphere.

New Zealand waders

A number of native waders migrate within New Zealand, travelling between the North and South Islands, such as South Island Pied Oystercatchers and Wrybills. These birds breed on braided river beds in the South Island in spring and then migrate to North Island harbours, including the Kaipara Harbour.

Native shorebirds and seabirds

In addition to migratory waders, New Zealand is home to a number of endemic shorebirds and seabirds that are found no where else in the world. Native shorebirds and seabirds that breed in the Kaipara include:

- NZ fairy terns (an endemic sub-species)
- NZ dotterels (an endemic species)
- Banded dotterels (although these migrate to Australia, they breed only in NZ)
- Black billed gulls (an endemic species. Papakanui Spit, the southern arm of the Kaipara Harbour, is the northern-most breeding colony of this species)
- Variable Oystercatchers (an endemic species)
- White-fronted terns (which breed predominantly in NZ)
- · Caspian terns (a native species).

Native species are most vulnerable during their summer breeding season. The breeding season begins as early as July for some species, and continues as late as February / March for others. Most species lay their eggs between the high tide mark and the top of the frontal dune. Their nest is little more than a scrape in the ground, with the eggs and chicks relying on camoflage and distraction displays by their parents for protection.

Areas of the Kaipara that constitute important habitats for shorebirds and waders

Within the Kaipara Harbour, some sites are of particularly high value.

Papakanui Stewardship Area (South Kaipara Head) is recognised as having high conservation values:

- South Kaipara Head is listed as 'Key Area 9' in the Conservation Management Strategy for the Auckland Conservancy (DOC, 1995:18,113-117).
- Papakanui is recognised in the Directory of Wetlands in New Zealand (DOC, 1996), the Coastal Resources Inventory (DOC, 1994) and the Proposed Auckland Regional Plan: Coastal (ARC, 1999) as being a key nesting area within the Kaipara Harbour.
- Two endangered endemic species fairy tern (*Sterna nereis*) and New Zealand dotterel (*Charadrius obscurus*) and one endemic threatened species variable oystercatcher (*Haemantopus unicolor*) breed on the spit (Parrish & Pulham, 1994a; Parrish & Pulham, 1994b; *unpublished* DOC and Wildlife Service warden's reports).
- Papakanui is an important high tide roost site for native and migratory birds. "There can be up to 10,000 wading birds at this roost site at any one time, with high numbers of of NZ dotterel (Charadrius obscurus), variable oystercatcher (Haematopus unicolor) and wrybill (Anarhynchus frontalis) (three "threatened" species), as well as South Island pied oystercatcher (Haematopus ostralegus finschi), turnstone (Arenaria interpres interpres), fairy tern (Sterna nereis) ("endangered") and red-necked stint (Calidris ruficollis) ("rare arctic")." (DOC, 1994).

The Tapora / Okahukura peninsula contains a number of DOC reserves, particularly in the coastal marine area:

- Big Sand Island is considered by Medway (2000:12) to be "... one of the most important shore-bird sites in New Zealand."
- "Most, if not all, Fairy Terns in New Zealand spend the autumn and early winter around the Kaipara Harbour, particularly in the Waikiri Creek area and at Papakanui Spit..." (Medway, 2000:14).
- Tapora Wildlife Management Reserve is listed by DOC as a Site of Special Wildlife Interest (SSWI) in terms of its habitat value to fernbird as well as bittern, banded rail, spotless crake, wrybill and dotterel (DOC, 1995:322).

Areas of **Araparerera Marginal Strip** are used by waders as a roost site (DOC, 1995:vol3p6), as are areas of private land (OSNZ, *unpublished data*).

The size and inaccessibility of some areas means there are probably other important sites within the harbour for which little data has been collected to date.

Conservation of shorebird and wader habitat

Fundamental to long-term conservation of species is conservation of their habitats. The three main threats to the long-term conservation of migratory waterbirds are habitat loss, habitat degradation and harvesting of waterbirds. Loss of habitat has led to declines in a number of species. Some of the most catastrophic declines have taken place in the last few decades, and the list of threatened species in the Asia-Pacific region has expanded rapidly to include species from a whole variety of waterbird groups.

In the Northland / Auckland region the five most important sites for waders and shorebirds are Paerengarenga, Rangaunu, Kaipara and Manukau harbours and the Firth of Thames (Medway, 2000). In 1990 Forest and Bird and the Department of Conservation nominated an area in the Firth of Thames (commonly referred to as Miranda) for designation as a Ramsar site. The Ramsar nomination was accepted by the Minister of Conservation, but no further sites have been gazetted in New Zealand since this time. The importance of shorebird and wader habitats on the other four key northern harbours remains unrecognised and relatively unprotected.

Ramsar status for the Kaipara Harbour

Forest and Bird wants to see the Kaipara given Ramsar status as a coastal wetland of international impor-

tance.

The Convention on Wetlands of International Importance Especially as Waterfowl Habitat was signed in 1971 in the town of Ramsar, Iran. The convention aims to address encroachment into wetland habitats by promoting the wise use of all wetlands and by seeking special protection for those wetlands of international significance.

The Kaipara Harbour, and Papakanui / Tapora / Pouto in particular, meet several of the criterion for Wetlands of International Importance.

Criterion 2: A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.

New Zealand fairy terns (critically endangered), New Zealand dotterels (endangered) and variable oyster-catchers (threatened) all nest at Papakanui. Until recently, New Zealand fairy terns also nested at Tapora.

Criterion 4: A wetland should be considered internationally important if it supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.

Each year thousands of migratory waders visit the Kaipara Harbour during the northern hemisphere winter. Studies by the New Zealand Wader Study Group and other ornithological groups have shown that some birds migrate here from as far away as Siberia. On arrival they must recover body fat lost during their migration. Of equal importance is the ability of waders to increase body mass for the return journey to their breeding grounds in the northern hemisphere.

Studies also strongly indicate that the Kaipara Harbour, and Waionui Lagoon in particular, is a pre-migratory meeting site for waders.

Areas such as Papakanui Spit (where there is access to both open waters and a fast-flowing, shallow, tidal estuary) are important breeding sites for New Zealand fairy terns. Shallow estuaries appear to be a critical factor in the location of fairy tern nesting sites. This is possibly because fairy terns feed off the surface of the water and must be able to see their prey. During bad weather, parent birds may find it hard to find fish with which to feed their young. Shallow estuaries therefore give parent birds a sheltered place they can find fish for their chicks during periods of bad weather. Studies indicate that this species rarely, if ever, nests in areas where there is not access to both open water and an estuary of this description (Gwenda Pulham, pers.comm.. Jan. 2001).

Criterion 5: A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds.

Census data collected by the Ornithological Society of New Zealand and the New Zealand Wader Study Group since 1993 demonstrates that the Southern Kaipara Harbour regularly supports 27,000 to 32,000 waders (*Unpublished data collected between 1993-2000 by members of the Ornithological Society of New Zealand and the New Zealand Wader Study Group*).

Criterion 6: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.

Data collected by the NZ Wader Study Group and Ornithological Society of NZ indicates that the Kaipara currently supports over 1% of the populations of a number of species, including:

SUMMER *Pied Oystercatcher 2.2% *Turnstone 8.5% *Lesser Knot 17.3%

	*Bar-tailed godwit	13.2%
WINTER	*Pied Oystercatcher	10.8%
	*Pied Stilt	1.8%
	*Wrybill	2.6%
	*Lesser Knot	3.4%
	*Bar-tailed godwit	8.0%

(Unpublished data collected by OSNZ and NZWSG: A.Riegen, pers.comm. April.2001).

According to Medway (2000), "Big Sand Island and Papakanui Spit are two of the most important post-breeding sites for the endangered New Zealand dotterel". The Kaipara Harbour supports between 1.8% (summer) and 2.8% (winter) of the endangered, endemic New Zealand dotterel (A.Riegen, pers.comm.April 2001).

The Kaipara also supports over 1% of the critically endangered New Zealand fairy tern, an endemic subspecies. Medway (2000:14) states that, "Most, if not all, Fairy Terns in New Zealand spend the autumn and early winter around the Kaipara Harbour, particularly in the Waikari Creek area and at Papakanui Spit, which is one of only three known nesting sites of this critically endangered bird."

Implications of designating appropriate areas within the Kaipara as Coastal Wetlands of International Significance (Ramsar sites)

The main purpose of Ramsar sites is to raise awareness and status of the site so communities will realise the value of the area as a wetland resources and manage it appropriately. Five wetlands in New Zealand that are currently recognised as being of international importance under the Ramsar Convention, including Miranda and Farewell Spit. This has impacted positively on the management of these areas.

There is no direct supporting legislation for the Ramsar Convention in New Zealand. However, as sites with recognised international importance, it could be expected that Ramsar sites would have at least national significance under the Resource Management Act, 1991.

Contracting Parties are expected to manage Ramsar sites so as to maintain the ecological characteristics for which they were nominated. However, as the Convention is an international agreement, it is up to each country to work out how it can best achieve this. For this reason, Ramsar status could be included as part of a wider management strategy for an area or as one of a number of protection mechanisms.

Designating an area as a Wetland of International Importance / Ramsar site does not mean that the Convention over-rides sovereignty of any nation, including signatory nations, with respect to management of wetland resources. In addition, there are clauses which allow countries to remove wetlands they have designated as being of international importance from the list if it is in their national interest to develop them in a way that would be contrary to the Convention.

WHAT YOU CAN DO TO HELP

- Write to Rob McCallum (Auckland Conservator, Dept. Conservation, Private Bag 68-908, AUCKLAND) to:
 - 1. express your support for appropriate areas of the Kaipara Harbour to be declared a Wetland of International Importance / Ramsar site(s); and,
 - 2. let him know that you feel raising the profile of the Kaipara by recognising its international importance for coastal birds is an important step in securing protection from future threats to the area.

- Send a copy of your letter to Forest and Bird, PO Box 106-085, Downtown, AUCKLAND or office@ak.forest-bird.org.nz
- Join Forest and Bird and help us to help the Kaipara. Phone 0800-200-064, write to PO Box 631 WELLINGTON or email office@wn.forest-bird.org.nz
- Contact the Ornithological Society of New Zealand (PO Box 12-397, WELLINGTON; <u>www.osnz.org.nz</u>) or New Zealand Wader Study Group to find out how you can become involved in research into shorebirds and waders in the Kaipara Harbour.

RELATED WEBSITES:

Visit the Ramsar website at <u>www.ramsar.org</u>

REFERENCES:

- ARC (1999) Auckland Regional Plan: Coastal highlighted to indicate provisions appealed (September 1999). Auckland Regional Council, NEW ZEALAND.
- Department of Conservation (1994) *Coastal Resources Inventory*. Department of Conservation, NEW ZEALAND.
- Department of Conservation (1995) *Conservation Management Strategy: Auckland Conservancy, volumes I-III.* Department of Conservation, NEW ZEALAND.
- Department of Conservation (1996) *Directory of Wetlands in New Zealand*. Department of Conservation, NEW ZEALAND.
- Heather, B; Robertson, H. (1996) *The Fieldguide to the Birds of New Zealand*. Penguin Books, Albany, NEW ZEALAND.
- Hewison, G. (1994) A guideline of New Zealand's International Obligations Affecting the Coastal Environment. Department of Conservation, NEW ZEALAND.
- Lyster, S. (1985) *International Wildlife Law*. A publication of the Research Centre for International Law, University of Cambridge in association with the International Union for Conservation of Nature and Natural Resources. Gomer Press, GREAT BRITAIN.
- Medway, D.G. (2000) *The Reed Field Guide to Common New Zealand Shorebirds*. Reed Publications, NEW ZEALAND.

The Ramsar Convention on Wetlands

The Criteria for Identifying Wetlands of International Importance

as adopted by the 4th, 6th, and 7th Meetings of the Conference of the Contracting Parties to the Convention on Wetlands (Ramsar, Iran, 1971) to guide implementation of Article 2.1 on designation of Ramsar sites

[Note: This is just a simple list of the Criteria themselves out of their explanatory settings. They should properly be used as part of the <u>Strategic Framework and guidelines for the future development of the List of Wetlands of International Importance</u> adopted by COP7, 1999.1

Group A of the Criteria. Sites containing representative, rare or unique wetland types

Criterion 1: A wetland should be considered internationally important if it contains a representative, rare, or unique example of a natural or near-natural wetland type found within the appropriate biogeographic region.

Group B of the Criteria. Sites of international importance for conserving biological diversity

Criteria based on species and ecological communities

Criterion 2: A wetland should be considered internationally important if it supports vulnerable, endangered, or critically endangered species or threatened ecological communities.

Criterion 3: A wetland should be considered internationally important if it supports populations of plant and/or animal species important for maintaining the biological diversity of a particular biogeographic region.

Criterion 4: A wetland should be considered internationally important if it supports plant and/or animal species at a critical stage in their life cycles, or provides refuge during adverse conditions.

Specific criteria based on waterbirds

Criterion 5: A wetland should be considered internationally important if it regularly supports 20,000 or more waterbirds.

Criterion 6: A wetland should be considered internationally important if it regularly supports 1% of the individuals in a population of one species or subspecies of waterbird.

Specific criteria based on fish

Criterion 7: A wetland should be considered internationally important if it supports a significant proportion of indigenous fish subspecies, species or families, life-history stages, species interactions and/or populations that are representative of wetland benefits and/or values and thereby contributes to global biological diversity.

Criterion 8: A wetland should be considered internationally important if it is an important source of food for fishes, spawning ground, nursery and/or migration path on which fish stocks, either within the wetland or elsewhere, depend.

See www.ramsar.org for more information about the Ramsar Convention.