Ballast water woes

NEW ZEALAND'S problems with introduced plants and animals does not end at the shoreline. Like other countries with a highly endemic flora and fauna, New Zealand's waters are particularly at risk from the introduction of exotic marine organisms.

The ballast tanks of international cargo ships are mobile aquaria, transporting organisms across the seas to be discharged in visiting ports. Unlike the problems of more visible marine environmental calamities such as oil spills, the problems of pests introduced through ballast water discharge are chronic, cumulative and irreversible. The introduced organisms have the potential to wipe out marine life, destroy shellfish industries and threaten human health.

As a net exporter of bulk cargoes, this country is also a leading importer of ballast water from around the world.

Since 1975 over ten new species of exotic organisms have been found in our coastal waters. These include seaweeds, crustaceans and molluscs and it is likely that most of them were introduced via ballast water. Some, including the large seaweed *Undaria pinnatifida* introduced from Japan, are succeeding well in disturbed environments and may displace the natural marine flora. There are likely to be many more we don't know about.

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The spores of the Japanese seaweed Undaria pinnatifida *are dispersed by sea currents. In 1987 it was discovered in Wellington Harbour and it is now known from ports as far south as Timaru.*

Last year MAF instituted a system of voluntary controls on overseas ballast discharge. Vessels which need to discharge ballast in New Zealand waters are now asked to exchange their initial water at sea. This is thought to remove about 90 percent of stowaway organisms.

A survey over six months of 792 ships suggested that over 90 percent were complying with the new controls. However some ships' masters were unable to give a sample of ballast water upon request and others indicated that they would not comply with the controls until they became compulsory.

Australia and New Zealand have pressed the International Maritime Organisation to set up international rules on the discharge of ballast water, but to date the IMO has only established a working group to research the issue.

Global warming is only likely to make matters worse. Transport by ballast will be an easy way for organisms to "test" their ability to colonise changed environments.

Little spot moves to Mana

A LITTLE SPOTTED kiwi, long thought to be extinct on the mainland, was moved to a patch of forest on Mana Island last October. The bird, discovered at Franz Josef, was originally thought to be a great spotted kiwi but genetic testing showed otherwise.

The last confirmed sighting of the smaller species in the South Island was in 1938 and the bird is now only found on off-shore sanctuaries such as Kapiti, Red Mercury, Hen and Long Islands.

DoC moved the bird, despite local opposition, because of what it saw as considerable risks posed by dogs, cats and stoats in the Franz Josef area.

The department plans at present to keep the lone bird, a female, separated from other, genetically different, little spotted kiwi on nearby Kapiti Island. Officers from the kiwi recovery programme hope to find a mate from any remaining southern population during searches around Franz Josef this summer.

The controversy surrounding the shifting of this one bird highlights the need for DoC to consult with local conservationists and conservation boards before taking precipitate action on the future of endangered species.

IAN CLOSE

Footnote: In news just to hand, a new kiwi species has been described from Okarito forest in Westland National Park. It has long been known that the 60-100 "brown" kiwi at Okarito were a distinct population. Genetic analysis has now confirmed that the birds are sufficiently different to be classed as a separate species. The Okarito birds, now an instant endangered species, are greyer than brown kiwi with white feathers on the head and neck.

One bird and a lot of attention. After blessings from Ngai Tahu and Ngati Toa kaumatua, the little spotted kiwi was released into its new Mana Island home.