

## 4.6 Stewart Island / Rakiura Archipelago

### SITE LOCATION

Stewart Island/Rakiura, New Zealand's third largest island, lies 30 km off the Southland coastline, from Lat. 46° 39' S to 47° 16' S and Long. 167° 20' E to 168° 14' E.

### SITE DESCRIPTION

The total area of the island archipelago is 172,200 ha. The site excludes all private land, including the three groups of Titi (Muttonbird) Islands. Consequently, the site has a total land area of around 155,000 ha, made up of the following public land administered by the Department of Conservation (see Map 4.6):

- Rakiura National Park (140,000 ha);
- Codfish Island (Whenua Hou) and Bench Island Nature Reserves; and
- Pegasus Nature Reserve and other scenic reserves and conservation areas on Stewart Island/Rakiura.

It also includes the following marine component:

- Paterson Inlet/Whaka a Te Wera Mataitai Reserve (excluding Big Glory Bay) and Ulva Island/Te Wharawhara Marine Reserve.





Paterson Inlet/Whaka a Te Wera looking WSW towards Mt Rakeahua. Ulva Island lies in the middle distance.  
DOC

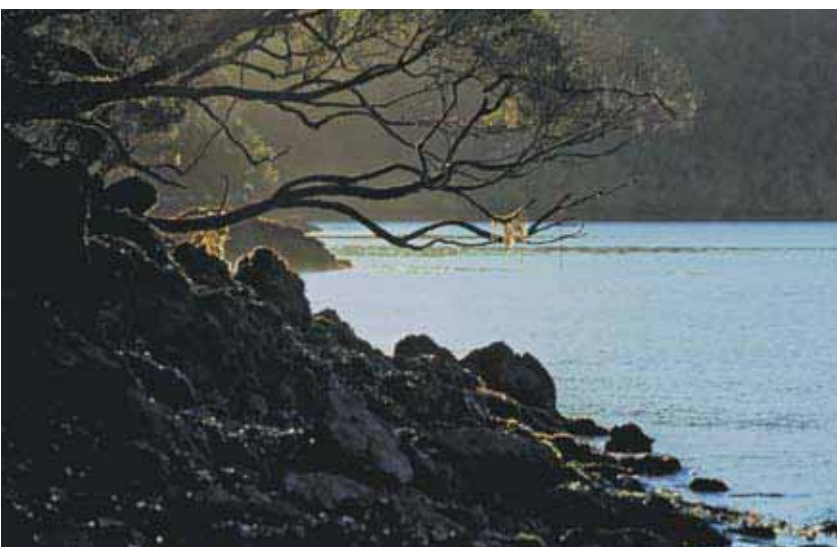
## VALUES THAT MAY JUSTIFY WORLD HERITAGE LISTING

The Advisory Group considers that the site meets criteria (vii) and (ix).

Stewart Island/Rakiura is the most accessible remnant of wild, pre-human New Zealand. It still retains a natural landscape, with many areas of exceptional natural beauty, including:

- Many deep, sheltered inlets along the eastern coastline; Paterson Inlet/Whaka a Te Wera, Port Adventure, Lords River, and Port Pegasus/Pikihatiti;
- A north-western coastline where the Ruggedy Mountains sweep up to jagged crests 500 metres high within only one kilometre of the sea; and
- Southern highlands with a spectacular landscape of bare rock cones and domes, the best known being Gog and Magog in the remote Fraser Peaks, and the granite knobs ranged along the south-eastern side of the Tin Range.

Port Adventure coastline, showing proximity of forest and sea.  
Les Molloy



The intact sequence of the island's indigenous vegetation is the outstanding ecological feature on land, an unbroken green mantle from subalpine shrublands down to thick coastal forest. Rimu is the most common tree, along with plentiful miro and totara, in what are the southernmost podocarp forests in New Zealand. Kamahi and southern rata are also common. The Mason Bay duneland, 15 km long in one magnificent sweep, is of national conservation importance because of its range of threatened plants. These include the sand tussock *Austrofestuca littoralis*, a rare creeping herb *Gunnera hamiltonii*, and the shore spurge *Euphorbia glauca*. Many of the northern beaches (Smokey, Hellfire, and Ruggedy Beaches)

are outstanding examples of natural dune systems free of major weed species and human development.



Left: Granite knob landscape along south-eastern side of Tin Range.  
*Les Molloy*

Right: Mason Bay duneland.  
*Greg Lind, DOC*

The forests of Stewart Island/Rakiura are unusual in that a number of New Zealand's common tree species are absent. The most puzzling to ecologists is the lack of any species of beech (*Nothofagus*), even though the cool, moist conditions would seem to have favoured its survival during the last glaciation. Celery pines (*Phyllocladus*), members of the podocarp family, could also be expected to thrive in the island's humid climate and peaty soils, but they too are absent. The absence of beech accounts for the lack of a sharp bushline, a common feature in most of the mountains of New Zealand. Instead, topography and exposure to wind seem to be more important factors than altitude, allowing taller forest to survive in the sheltered gullies.

Above: Kakapo 'Alice' with chick 'Manu', Codfish Island (Whenua Hou), May 1997.  
*Don Merton, DOC*

Below: Southern tokoeka, Stewart Island/Rakiura.  
*Brent Beaven, DOC*

Stewart Island/Rakiura's significance as a habitat for terrestrial endangered species was dramatically confirmed in 1977 with the 'rediscovery' of the country's only remaining viable population of the nocturnal ground parrot, kakapo. All of the kakapo remaining in the low forest/shrublands around the head of the Robertson River, Deceit Peaks and Mt Rakeahua localities were relocated to Codfish Island (Whenua Hou) and other



predator-free islands over the following 15 years. The conservation importance of Codfish Island was enhanced in 1998 by the eradication of kiore, contributing to the outstanding success of 24 kakapo chicks hatching in the 2002 breeding season.

Stewart Island/Rakiura is also notable for the southern tokoeka, a distinct variety of the Fiordland brown kiwi. The island is fortunately still free of many introduced animal pests (stoats, ferrets, weasels, mice, goats, pigs and rabbits) which have caused so much ecological damage elsewhere in the country.



The freshwater ecosystems of Stewart Island/Rakiura are significant habitats for indigenous freshwater communities because of the absence of human-induced modifications and introduced species. Indeed, of all the groups of indigenous species on Stewart Island/Rakiura, the freshwater communities are arguably the most intact. The Freshwater and Rakeahua Rivers, the main rivers feeding into Paterson Inlet/ Whaka a Te Wera, are of outstanding scientific value as two of the last remaining large, floodplain river systems in New Zealand that have remained essentially free of human-induced impacts throughout their catchments. They also contain abundant populations of giant kokopu, a nationally threatened fish species. In their entirety, the island's freshwater communities are of great importance as the largest, most diverse examples of intact freshwater ecosystems that are probably representative of those which occurred in mainland New Zealand prior to the impact of European settlement.

The coastal waters around Stewart Island/Rakiura have a remarkable density and diversity of seaweeds and some interesting species of shellfish. Paterson Inlet/Whaka a Te Wera is the largest and most pristine sheltered, shallow-water harbour in New Zealand. Intact catchment vegetation has resulted in extremely low rates of sediment input to the inlet, enabling a wide variety of seafloor life to flourish. Thus the inlet is renowned for the diversity of its echinoderms (sea cucumbers, sea urchins (kina), and starfish), seaweeds and brachiopods. Many of these occur at shallow, diveable depths of only 15–20 metres. Paterson Inlet/Whaka a Te Wera's rich seaweed communities contain around 270 species (or 70% of all the seaweeds around the entire coastline of the island), which provide habitats for some of the 56 different species of fish recorded there. The inlet is also notable as one of the richest and most accessible brachiopod habitats in the world. Brachiopods, or lamp shells, are a very ancient type of filter-feeding shellfish, 'living fossils' long extinct in most of the world's seas, supplanted in evolution by more modern bivalve molluscs such as oysters and mussels.

## INTEGRITY, MANAGEMENT AND RISK ISSUES

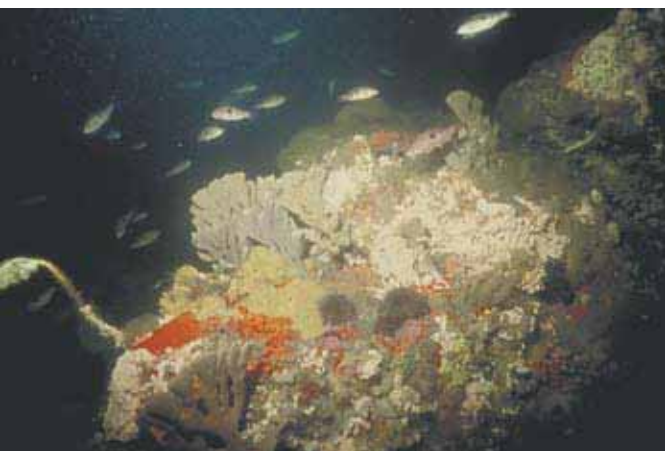
The site has a very high degree of physical and biological integrity. Most of the site has a high level of legal protection as national park, nature reserve or marine reserve. The new Paterson Inlet/Whaka a Te Wera Mataitai Reserve, where sustainable levels of fish, seaweed or other marine life can be harvested, is being managed under by-laws by a caretaker group from the tangata whenua and the Stewart Island community.

Because Rakiura National Park was only designated in 2002, a park management plan is still in preparation but is expected to be in place in the next couple of years. The small

size and fragmentation of the Ulva Island/Te Wharawhara Marine Reserve has been widely criticised in marine conservation circles and the ability of the present mix of marine reserve and mataitai over most of the inlet to conserve this unique marine environment will need to be monitored very closely.

Some of the privately-owned Titi Islands, such as Big South Cape Island (Taukihepa) have high conservation values, and at some time in the future consideration could be given to approaching the owners to see if they wish to add them to the proposed site. These sites are the last remaining sites where titi (shearwater) are still annually harvested by iwi Maori in New Zealand, and hence have cultural significance.

Marine habitat, Te Wharawhara/  
Ulva Island Marine Reserve.  
*DOC*



Wetlands and heath-like  
shrublands around the lower  
Freshwater River; Paterson  
Inlet/Whaka a Te Wera in the  
distance.  
*Sean Cooper, DOC*

