

# Kahurangi National Park and Farewell Spit

## SITE LOCATION

Kahurangi National Park (452,889 ha) occupies the north-west corner of Nelson at the northern end of the South Island. Farewell Spit Nature Reserve (11,423 ha) extends out from the park's northernmost point near Cape Farewell, as an arc around the northern side of Golden Bay.

## SITE DESCRIPTION

Kahurangi National Park is centred on the Tasman Mountains and the Arthur and Matiri Ranges; it extends to the Tasman Sea in the west and is bounded by the gorges of the Buller River in the south and the Motueka and Takaka Rivers in the east. Although none of the peaks are higher than 2000 m, the park is a remote, mountainous wilderness with a core area (the 87,000 ha Tasman Wilderness Area) which is completely undeveloped.



The geodiversity of Kahurangi National Park is outstanding and the most complex in any of New Zealand's large protected areas. The bands of granite, sandstone, quartzite and marble, and overlying younger sedimentary rocks (specially limestone and dolomite) account for the diversity of striking landforms - in particular, the karst features and caves of Mt Owen, Mt Arthur and the Oparara Basin, as well as the Matiri Plateau and Garibaldi Ridge.

The diversity of rock types, soils, topography and climates throughout Kahurangi has produced a remarkable array of ecosystems. With decreasing altitude, these range from alpine screes, cirque tarns, alpine bogs, and fellfield, down through snow tussock grasslands and subalpine shrublands, to montane rainforests (beech) and, at the lowest altitudes, humid coastal rainforest (podocarps, rata and nikau palms), dunelands, estuaries and swamps. Furthermore, very distinctive vegetation communities reflect the marked chemical and physical differences in the

soils occurring on the diverse rock types - the diversity of flowering herbs on the high fertility soils of the limestone and marble; the distinctive mountain neinei or 'pineapple scrub' (*Dracophyllum*) of the wet, infertile soils in the granite areas; and the heath-like or prostrate forms of plants in the ultramafic areas.

Farewell Spit is a one kilometer-wide arc of sand that extends for almost 30 km, enclosing 10,000 ha of intertidal sandflats along its southern edge. Strong north-westerly winds constantly sweep the sand which accumulates on the spit out into the shallows of Golden Bay, creating an outstanding habitat for shore birds. Both Kahurangi National Park and Farewell Spit are protected and managed by the Department of Conservation.



Fluted marble cliffs on Garibaldi Ridge, Kahurangi National Park.  
*Craig Potton*

## VALUES THAT MAY JUSTIFY NATURAL WORLD HERITAGE LISTING

The high degree of naturalness and the wilderness character of Kahurangi National Park are the outstanding landscape features of this large site. No other protected area in New Zealand has such a diversity of geological history and rock types, landforms and plant communities. In addition, the complex tectonic history of the area, coupled with the isolation of local plant and animal communities during the ice ages, has given Kahurangi an extraordinary level of endemism in both its flora and its invertebrate, giant land snail and native fish fauna. Key features attesting to the outstanding universal values of the site include:

- The best sequence of Palaeozoic rocks in New Zealand, indicating the collision of three ancient continents and offering insights into the tectonic history of the southwest Pacific and Antarctica during the past 500 million years.



Coastal forest containing nikau palms, near mouth of Big River, Kahurangi National Park.  
*Craig Potton*

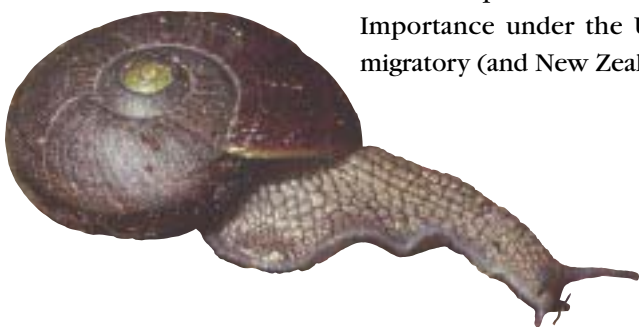


Island Lake, a cirque lake below Aorere Peak in the Tasman Mountains, Kahurangi National Park. This landscape is part of the Tasman Wilderness Area.

Les Molloy

The endemic land snail *Powelliphanta gilliesi* has many distinct forms which are often confined to specific locations within Kahurangi National Park.

Dave Hansford



- The oldest fossils in New Zealand, with sites of international significance giving a 220 million year record from the Cambrian (trilobites, brachiopods), through the Ordovician (graptolites), to the Devonian geological period. In addition, Permian fossils at Parapara Peak provide a unique biological link to the ancient Gondwana landmass.
- A wide range of spectacular surface landforms, including:
  - the most intact remnants of New Zealand's Cretaceous peneplain (at Mt Arthur Tablelands and Goulard Downs)
  - the only places in New Zealand where Tertiary marine sediments overlay peneplain remnants to give cliffed 'mesa-like' plateaux (Thousand Acre Plateau and Garibaldi Ridge)
  - the glaciated landforms of the Lockett Range, Cobb Valley and Tasman Mountains
  - the Oparara Arch (the largest of its kind in Australasia) and the other limestone arches of the Oparara Basin, and the limestone cliffs of the lower Heaphy Valley
  - the many earthquake-dammed lakes (like Lake Matiri) and the earthquake modified landscapes of the Murchison-Mokihinui locality
  - the largest sand spit in New Zealand.
- The glaciated karst landforms (karrenfeld, pavements, and dry cirque basins) in the marble of Mt Owen and Mt Arthur, considered the best in the Southern Hemisphere.
- The extensive cave systems under Mt Owen and Mt Arthur containing some of the longest (Bulmer, 55 km), deepest (Nettlebed, almost 900m) and oldest (700,000 years) caves in New Zealand. They are considered some of the most outstanding in the Southern Hemisphere.
- The Honeycomb Hill cave system in the Oparara Basin contains internationally important sub-fossil bird remains (including an extinct giant eagle) dating back 20,000 years.
- Kahurangi National Park contains almost half of New Zealand's total number of higher plants (1226, out of around 2500 species), and a remarkable 80% of our alpine flora species.
- Kahurangi has one of the highest levels of plant endemism in New Zealand (64 species, 60% of which occur in alpine ecosystems); the park is also the northern or southern limit for many common trees, shrubs or alpine herbs.
- Kahurangi is the major centre of evolution of the genus *Powelliphanta*, the colourful giant land snails, with almost half of the 64 known taxa only found within the park. The park is also internationally recognised for its variety of cave-dwelling invertebrates.
- Farewell Spit Nature Reserve has been designated a Wetland of International Importance under the UN 'Ramsar' Convention because of its significance for migratory (and New Zealand) wading birds.



Farewell Spit at sunset.  
*Craig Potton*



Turnstones, bar-tailed godwits,  
and South Island pied  
oystercatchers.  
*R. Sutton, DOC*

## RELEVANT INTEGRITY ISSUES FOR DISCUSSION

The proposed site has a very high level of physical, biological, legal and management integrity.

Should the site include adjacent protected areas which also have outstanding features (eg, the Canaan karst of Abel Tasman National Park (Harwoods Hole), the Riwaka Resurgence and Waikoropupu Springs)?