

## David Lyall (1817 – 1895)

David Lyall, one of a number of Scottish surgeons whose names were to become well known in New Zealand botany, was born on 1 June 1817 in Auchenblae, Aberdeenshire. He studied medicine at the University of Aberdeen, having previously been admitted to the Royal College of Surgeons in Edinburgh, and began his career as ship's surgeon on a whaler bound for Greenland.

In 1839 he joined the Royal Navy and was appointed assistant surgeon on HMS *Terror*, companion ship to *Erebus*, on Captain James Ross's scientific expedition to the Antarctic. During the three weeks spent at the Auckland Islands in November 1840 and at Campbell Island 150 miles to the southeast, Lyall and Joseph Hooker, surgeon and naturalist on *Erebus*, devoted themselves to observing the wildlife, studying the seashore and collecting specimens of the unique plants they found. Lyall was responsible for the botanical collection, and by their return in 1842 had a herbarium of around 1500 species, including a collection of algae, described by Hooker as "an important addition to Antarctic botany."

Lyall served in the Mediterranean until 1847, when he was appointed surgeon and naturalist on HMS *Acheron*, an early steamship under the command of Captain Stokes, on a detailed survey of the New Zealand coast. Botanising mainly in the south of the South Island, Stewart Island and the Snares, Lyall amassed an extensive collection of the lower groups of plants, in which he was particularly interested, and made other important discoveries, including the beautiful white-flowered buttercup *Ranunculus lyallii*. He also wrote a scientific paper on the flightless New Zealand parrot, the now endangered kakapo (*Strigops habroptilus*).

After serving on an 1852 Arctic expedition to search for Sir John Franklin, and in the Baltic during the Crimean War, he joined surveying ships in the Pacific. His transfer to the Land Boundary Commission, surveying the border between British Columbia and USA, enabled him to collect plants again. On his return to Britain he took up an appointment at Kew Gardens, where he wrote the first account of the vegetation zones of the west coast of North America. He was elected a fellow of the Linnean Society in 1862, and in 1866 he married Miss F A Rowe, daughter of Dr Rowe of Haverfordwest. He retired from the Navy in 1873. Never fully recovering from a broken arm, he died at Cheltenham in 1895, survived by his three children.

David Lyall is remembered in the names of a Wellington suburb, and a group of islands in Victoria Land, Antarctica. Sir Joseph Hooker named the genus *Lyallia*, a cushion plant found on Kerguelen Island in the southern ocean, and several New Zealand plant species, including trees, herbs, an orchid and a lichen, after him. He also dedicated his large illustrated *Handbook of New Zealand Flora* (1853) to William Colenso, Andrew Sinclair and David Lyall, noting that the work owed much to their enthusiasm and energy



### *Ranunculus lyallii*

The genus *Ranunculus* is widespread in temperate regions. At least 17 of New Zealand's 32 buttercup species reach the alpine zone. The great mountain buttercup, *Ranunculus lyallii*, erroneously known as the Mount Cook lily, is a summer-green herb a metre or more high, with round leathery leaves up to 400 mm across on stout leaf stalks. During December and January tall, branched flower stalks bear showy panicles of white-petalled flowers with golden stamens and a central green cone of spirally arranged carpels. Once prominent in the wetter subalpine and low-alpine herbfields of South and Stewart Islands, *Ranunculus lyallii* has suffered from grazing by introduced game animals, and large plants now tend to be restricted to inaccessible bluffs or to areas where animals are discouraged by heavy human traffic.