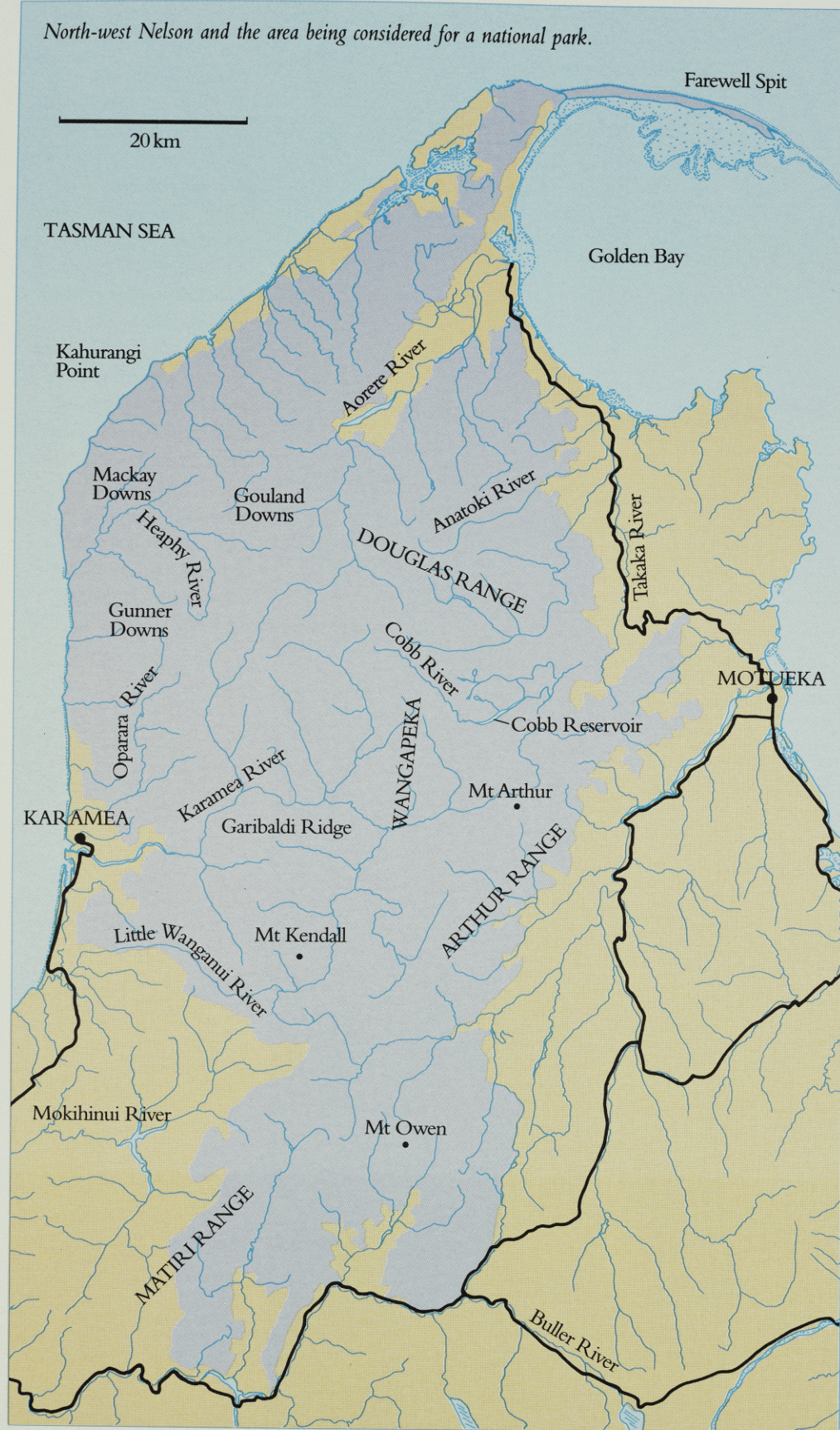


North-west Nelson and the area being considered for a national park.



Between the Heaphy River and Kahurangi Point is the northernmost breeding fur seal colony in New Zealand. On rocky outcrops are the common coastal plants of this part of the world. These include succulents related to the familiar garden fat-hen that have adapted to the full blast of the salt-laden sea. Slightly further back from the tideline the shore hebe displays lilac flowers, protecting beneath its tangled branches the coastal spleenwort, tiny filmy ferns and the prostrate *Peperomia unvilleana*, which is near its southern limit.

INLAND from the coastal limestone, clear patches stand out from the beech-covered, granite hill country. These are the downlands, covered by red tussock, umbrella fern and wire rush. The Mackay Downs are the lowest, while Goulard, Gunner and Gorton downs are at higher altitudes.

Many plant species are found on the downlands: amongst the tussock, in the bogs, by little creeks, and in the forests covering the tongues of limestone that protrude out into the tussock. A few species grow nowhere else but on the

Opposite: A thick cap of resistant Tertiary limestone has given rise to the spectacular landforms of Garibaldi Ridge. The limestone "islands" of Garibaldi, Matiri Tops and the Thousand Acre Plateau overlie the resistant granite and are capped by ridges and needlepoints of mudstone. These plateaux support unusually fertile soils and diverse ecosystems, while the incisions of the surrounding rivers have resulted in sheer cliffs. ►

Goulard Downs, such as the little yellow-flowered *Bulbinella talbotii*.

There are other surprises on the downlands, especially on warm foggy nights. These conditions suit the giant land snails, *Powelliphanta*, and perhaps evoke the climates of the ancient land mass of Gondwana where they evolved along with the tuatara and kiwis.

Each of the many *Powelliphanta* snail species lives as if on an island, separated by mountain chains and also, more recently, by the fragmentation of Nelson's once almost-continuous forest cover. Several species are confined to areas of limestone, like those at Mokihiui or in the Oparara, partly because the snails require the limestone to make their shells and eggs. Many species have striking concentric and radial markings, and warm colours of tawny fawns or rich chocolate browns. It now appears that the wonderful variety of these snails is the result of a very long evolutionary history rather than the widely-held misconception that they rapidly radiated into many colour forms during recent mountain-top isolation.



KATH WALKER

Most of the world's species of giant carnivorous *Powelliphanta* snails occur only in north-west Nelson. Here a wide range of species and subspecies reflect the range of habitats. The largest snails are almost 10 cm across and weigh more than sparrows. The problem today for the snails is that introduced goats destroy their habitat, while pigs root for the snails and their hard limey eggs.