

The picturesque Mangatini waterfall in the lower Ngakawau gorge is easily accessible via the Charming Creek walkway.

Photo: Guy Salmon

visitor enters the area off the Westport-Greymouth highway a little south of Charleston, reaching the virgin forest by following a long, winding gravel road, surrounded by forest in various stages of recovery from recent devastation.

In the once splendid valley of the Nile, logging roads run in all directions, completely enclosing the still-untouched proposed reserve.

Just to the south is the devastated Tiropahi Ridge, thrust like a dagger into the heart of the Paparoa forests. Peering out from the young pines on the ridge, across to the virgin forests of the Atbara-Nile, one begins to see why it is so unique.

In ancient times, during the tumultuous Pleistocene ice ages, the sea reached far inland, and would have lapped at the Tiropahi ridge just below one's feet, cutting out and depositing wide flat beaches around the toes of the hills. In cold, icy periods the sea level dropped, leaving the newly formed beaches and river terraces stranded. While this was happening, the land was being slowly uplifted, so that the terraces were carried high enough to protect them from the next ice melt and rise in sea level. Six times the sea and rivers rose and cut out terraces, and each time like a moving escalator the terraces were raised a little higher.

The terraces have remained to this day, the oldest ones now standing 190 metres above sea level. They have been dubbed the Candlelight, Whiskey, Caledonian, Addison, Virgin Flat, Waites and Speargrass terraces. The present day beaches and rivers form what is known as the Nile Mile Terrace.

In time the oldest of them have been leached of nutrients, supporting hardy trees adapted to thinner soils: mountain beech, silver pine and mountain toatoa are common. The youngest terraces, by comparison, freshly coated with rich river silts and marine sediments, bristle with tall podocarps and beeches, and are lush with flowering plants, ferns and mosses.

Cupped between the Atbara and the Nile are three of the younger marine terraces — the Speargrass, Nile Mile and Addison — which are not represented in any other protected area, or in the proposed Punakaiki National Park. Here is the last chance to preserve a complete sequence of these terraces, each offering a bounty of hidden information about forest ecology and the changing patterns of time.

Sad mosaic of ravaged landscapes

From low marine terraces to icy mountains, the proposed Atbara-Nile Ecological Reserve would be spectacular and important. The forest falls between two ecological districts, Punakaiki in the south and Foulwind in the north.

The aim of dividing New Zealand into ecological districts — that each district should have examples of unmodified environment protected in reserves — has not

