

Marvellous Maunganui Bay

by John Booth, Chris Richmond, Robert Willoughby



Rākaumangamanga is the highest peak to the left, above Deep Water Cove. (Image: Salt Air.)

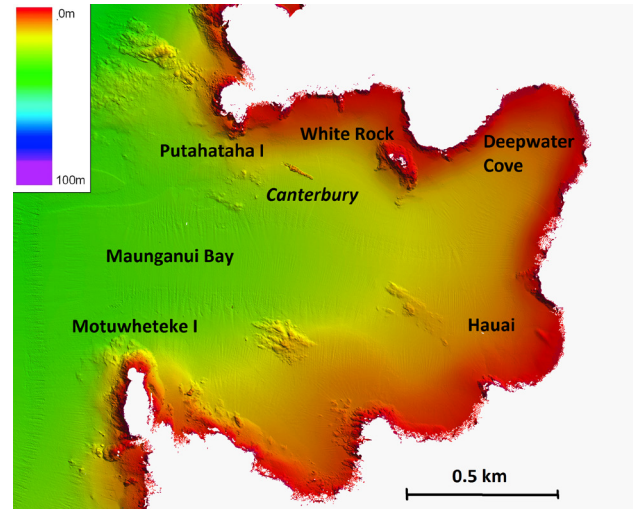
Striated frogfish, golden ribbon groper, Spanish lobster, snake eel, oblong sunfish, Indo-Pacific sergeant, turtles, and dolphins and orca. . . . There's one anchorage in the Bay of Islands that really packs a punch, its cultural and historic legacy – and its biological diversity – coming together to distinguish it from all others.



Maunganui Bay is intermediate between Rawhiti Peninsula and Cape Brett. (Image: Ocean Survey 20/20.!)

And Maunganui Bay (sometimes *Deepwater Cove*, the name of its inner anchorage) is the closest there is to a no-take marine refuge for the entire coast of Aotearoa, from the Poor Knights Islands north to the Three Kings Islands, and south to Taranaki. The Rāhui established there in 2009 under the Fisheries Act by local hapū² has been rolled over every two years since and prohibits all fishing (apart from for kina) so that fish and shellfish stocks can recover after decades of heavy (mainly)

recreational fishing pressure. (Coincidentally, it also ensured that the recently scuttled frigate *Canterbury* did not become an immediate focus of fishing.)



Deep reefs – and the Canterbury – provide texture to the seafloor of Maunganui Bay (although the sonar scans do not distinguish the deepwater channels between the mainland and the islands at the entrance). (Image: Ocean Survey 20/20.!)

Maunganui Bay's backdrop today is the uniformly olive-green of regenerating native bush, the small occasional bright-green areas of rank grass representing the last vestiges of the pastoral farming that once took place on otherwise bare hills. Focussed pest-control - led by the hapū Ngāti Kuta and Patukeha of Te Rāwhiti with the support of Ngā Whenua Rāhui – ensure a recovering natural ngahere with its complement of birds, reptiles and invertebrates – and in due course, we hope, the burrowing seabirds that would have once crowded the peninsula.

And, at last, after decades of heavy fishing pressure, te tini o Tangaroa are also prospering. All this is taking place in a setting of rich habitat diversity.^{3,4}

Physical context

The Cape Brett Peninsula extends like a cautioning finger into the warm, south-moving oceanic flow of the East Auckland Current, its buttresses and great cliffs of greywacke directing some of the water into the Bay of Islands. The entrance to Maunganui Bay itself is bounded by the idyllic jewel-like islands of Putahataha to the north, and Motuwheteke in the south, each with a top-knot of remnant bush. The seafloor within the Bay varies from sand and shingle to rock-reef and reaches a depth of 50 m. The *Canterbury* lies in 30 m of water in the north, near White Rock the only reef to reach so close to the surface. Spectacular arches, caves and coves beckon divers and kayakers in the southeast of the Bay.

Early days

This part of the Bay of Islands is rich in Polynesian tradition, having been first visited by the ancestral navigators Kupe and Ngake. Rākaumangamanga, towering 360 m in the background above Maunganui Bay, marks the southwestern-most point of the Polynesian triangle, the others being Rapanui (Easter Island) and Hawai'i. Ohututea, halfway between Maunganui Bay and Cape Brett, is where the Mātaatua waka stopped on its journey north from Bay of Plenty for Puhī to step ashore and establish the Ngāpuhi iwi. Putahataha and Motuwheteke are sentinel islands to Ngāti Kuta and Patukeha, the Bay itself occupied by many prominent Ngāpuhi chiefs who cultivated the land and managed the fishery.

Being a sheltered setting adjacent to oceanic waters meant Maunganui Bay was fished year-round, its schools of pelagics like kahawai and kingfish, and bottom fish such as tarakihi and butterfish – and everything in between – making it very worthwhile. Its shelter and reliable freshwater also meant it was a good home base from which to sortie further to sea. Although the steepness of the terrain would not have allowed extensive cultivation, there are many archaeological sites in the area.

At times during the mid- to late-1800s, Deep Water Cove would have reeked of rendered whale-oil because for a time it was a shore-whaling station.⁵ Focused on migrating humpbacks that were northbound in winter and southbound in late spring/early summer, hunting most often took place just outside the Bay of Islands itself, and once killed, a whale would be beached. Then began the laborious process of flensing and mincing the blubber into smaller pieces - *bible leaves* - before being pitched into try pots where it was boiled to extract the oil.

Ever a haven for sailors navigating the coast, Deep Water Cove itself had, by the early-1900s, become a popular headquarters for visiting – mainly foreign – deep-sea anglers.

‘Built by Puke Cross and his brother, Deep Water Cove fishing camp consisted of a lodge and two cabins, which could accommodate up to twelve anglers at one time.’⁶, and several other cottages were built by enthusiastic fishermen such as the Londoner H. White-Wickham. The dining room ‘spans a typical New Zealand bush-clad gully, with a rippling stream beneath, and its walls are simply the glorious Native bush of New Zealand.



Fishing cottages at Deep Water Cove about 1935. (Image: Russell Museum.)

Large trees, undisturbed by civilisation, thrust their trunks through the floor and continue through the roof'.⁷

A photograph from 1962 shows some of the cottages still there – but appearing battered and over-ventilated. Today all that remains are chimneys.

Today's rich biodiversity

What distinguishes Maunganui Bay today is the variety and abundance of fish and other marine-life which divers and snorkelers can get to see. The swirl of subtropical water induced by the Cape Brett Peninsula ensures seasonal arrivals close to shore of flying fish and sunfish, skipjack and marlin, and also the year-round presence of subtropical fishes along inner shores, and especially in the more sheltered embayments like Maunganui Bay. Only the offshore Poor Knights Islands 50 km to the southeast have as many varieties of rare or unusual warm-water fishes and invertebrates.⁸⁻¹⁰ In addition, in the north of Maunganui Bay is an artificial reef, the frigate *Canterbury*. The ship was scuttled there late in 2007, and over the following years, colonised by

seaweeds, invertebrates and fishes. It provides habitats seldom seen in nature – such as handrails (illuminated with exquisite jewelled-anemones), extensive flat vertical surfaces (colonised by filter-feeding animals), and room-shaped caverns (to suit even the shyest of fishes). *The Captain*, a 6-kg snapper, patrols the *Canterbury*, and the kingfish, kahawai blue maomao and sweep school above it.¹¹

Among the fishes, although snapper seem to be increasing in both abundance and size,¹¹ it will be a long time before their mean size reaches that of the Poor Knights or Leigh refuges.¹²

Many of the exotic fish are diminutive and easily overlooked – but not so the sporadic beefy Queensland groper, half-mooned groper and golden ribbon groper; nor the Lord Howe moray eel.¹³ Others seen at Maunganui Bay in recent summers include striated frogfish, oblong sunfish, blue knifefish, Indo-Pacific sergeant damselfish, and bullet tuna.¹⁴ The more-common giant boarfish are usually seen in pairs until schools of 20-30 of them appear in spring.¹¹ The small

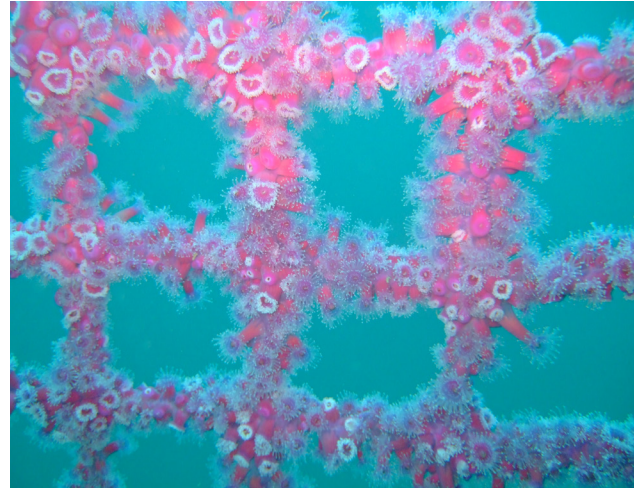


The Canterbury is a magnet for pelagic fish, including kingfish. (Image: Northland Dive.)

fish include a rich variety of cryptic blennies.¹⁵ Among the invertebrates of particular note are the Spanish lobster and the highly migratory packhorse rock lobster, whose numbers are increasing.¹¹ Many packhorse are quite large but few are of legal-size; this lobster has to be 217 mm in tail length (and weigh around 1 kg) before it is legal to harvest, and almost all are engaged in a great northward migration that

eventually takes them to the main breeding area near Cape Rēinga. This species – as well as the red rock lobster – are now more abundant inside the Rāhui area than outside.¹⁶ Smaller, but no less spectacular, are the banded coral shrimps.

A feature of almost all shallow reefs of the main basin of the Bay of Islands is the sea-urchin barren, where the



Packhorse rock lobster (left) and jewel anemones (right). (Images: Paihia Dive.)

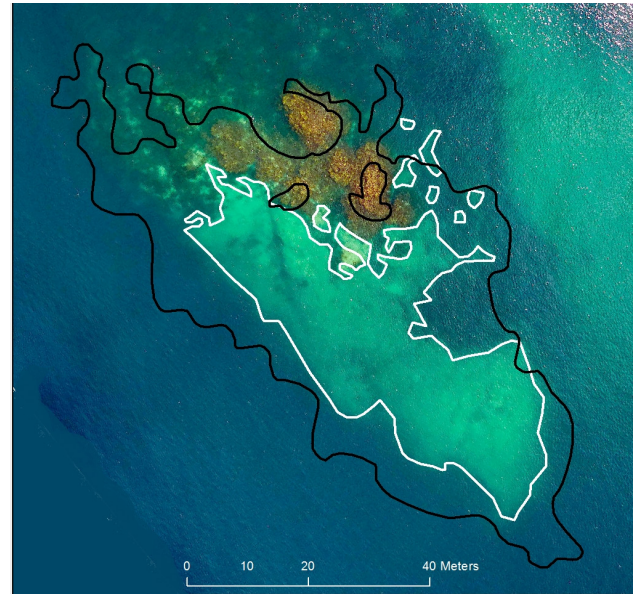
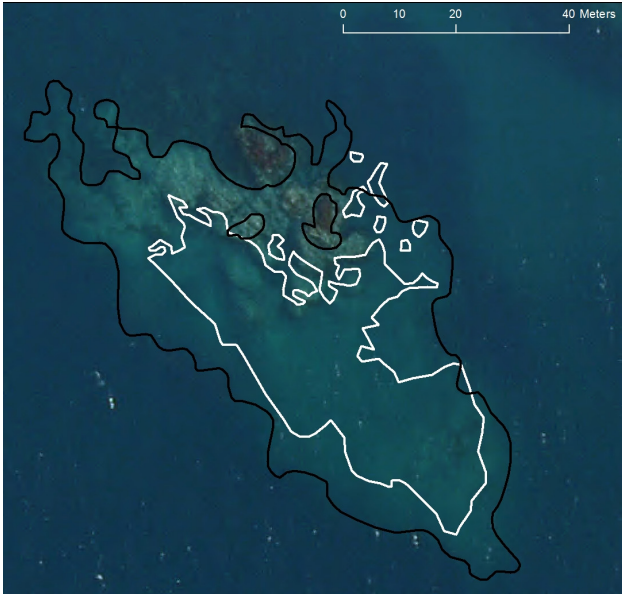
overharvesting of key predators such as large snapper and large rock lobsters which has led to an explosion in the number of seaweed-eating urchins (particularly kina) to explode in number.^{5, 17-19} The loss of shallow-reef kelp is likely to have led to a multitude of ecologically cascading consequences, most of them not yet even recognised let alone understood. *Fish Forever* – a local group championing areas of marine protection in the Bay of Islands²⁰ – wondered whether the absence of legal-fishing for eight years in Maunganui Bay had by 2017 brought about any significant reduction in the extent of the urchin barrens. But only one of seven sites – White Rock – had suggestions of significant decrease in extent.¹⁹ The absence of significant reduction in the extent of urchin barrens at most sites is probably because it is simply too soon for much recovery of kelp to be discernible (full recovery took more than 25 years at the no-take Leigh Marine Reserve). Also,

despite being illegal, some fishing for species beyond sea urchins has continued to take place – particularly near the outer margins of Maunganui Bay – possibly sufficient to prevent a recovery, in abundance and size of the keystone predators.

In celebrating, we look to what's there – but also to what is absent. There are no alien species known at Maunganui Bay – but we need to be vigilant, particularly for the invasive laminarian kelp *Undaria*. The large and black *long-spined urchin* that is becoming more common along much of the east Northland coast is very much native – although also occurring in Australia.

Precious place

Maunganui Bay is the closest we have in the Bay of Islands to a seamless blend of pristine landscape and



The area of the urchin barren at White Rock in 2009 (left, with estimated extent indicated by black line) was, in plan view, 0.326 ha, whereas in 2017 (right, white line) it had reduced to 0.138 ha.¹⁹

The different ambient lighting – as well as increased vigour – lead to a more noticeable crown of seaweed forest in 2017.

(Images: Oceans 20/20; Dean Wright Photography.)

seascape. No human lives here. Gullies of prime bush prosper amongst the regenerating headlands and ridges; you can drink the freshwater, and there are no significant sources of silt. Soon we can expect burrowing seabirds like petrels to return and – eventually – the original guano-fuelled terrestrial ecosystem to re-emerge. Meanwhile the abundance, size and diversity of marine creatures will proliferate – to eventually become an equivalent to the Waipōua Forest of underwater Bay of Islands.

We are fortunate for the foresight of Ngāti Kuta and

Patukeha in instigating, and rolling-over, the Rāhui; for the kaitiaki-like role of the dive operators (especially Northland Dive and Paihia Dive); and for *Fish Forever* (especially Dean Wright) working with hapū to ensure that the restricted fishing in the Rāhui is well known about.

Whether you want to scuba dive the entire *Canterbury*, or you are content to snorkel over White Reef or around Putahataha Island – or simply want to put your head under the water with a mask on while being rowed about in a dinghy: as the Dilmah tea man urges, ‘Do try it.’

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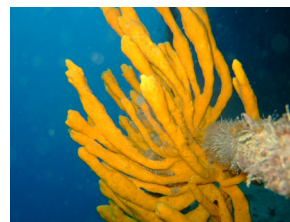
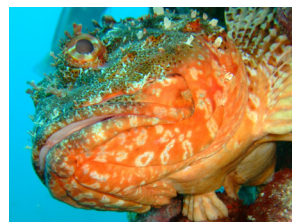
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*Prolific and varied seafife in Maunganui Bay, including on the scuttled frigate Canterbury (from top left). Nudibranch, *Dendrodoris denisoni*; green-lipped mussel, *Perna canaliculus*; and mottled moray, *Gymnothorax prionodon*. Red pigfish, *Bodianus vulpinus*; crested weedfish, *Cristiceps aurantiacus*; Jack mackerel, *Trachurus declivus*; and organ-pipe sponge, *Callyspongia latituba*. Feather star, *Cenolia spanoschistum*; crested blenny, *Parablennius laticlavius*; northern scorpionfish, *Scorpaena cardinalis*; and blue-eyed triple fin, *Notoclinops segmentatus*, and Acidean *Clavelina sp.* *Axinella sp.* sponge; and banded coral shrimp, *Stenopus hispidus*. (Images: Paihia Dive.)*

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