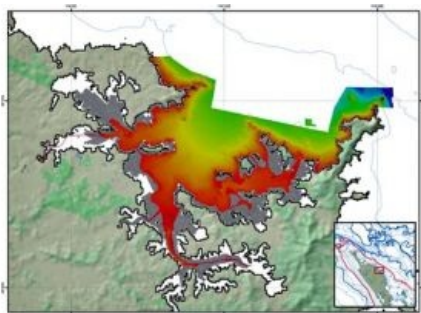


Ocean Survey 20/20 Resumes



Hopes are high that marine life previously unrecorded in New Zealand will be found during the second phase of the three-vessel Ocean Survey 20/20 Bay of Islands project. The survey resumed off the Far North coast in July 2009, before moving into the Bay itself in August.

A team of 35 scientists and crew aboard the National Institute of Water and Atmospheric Research (NIWA) vessel *Tangaroa* are due to start a 20 day sampling programme between the Poor Knights Islands and Spirits Bay on Saturday 4th July.

Working around the clock, the team will sample along the coast and record marine life and associated water temperature, sediments, nutrients, salinity and other data from depths between 50 and 200 metres.

Project leader Dr Mark Morrison of NIWA said there was a high probability that *Tangaroa's* scientists will uncover species new to New Zealand waters and some new to science. "The warm subtropical East Auckland Current sweeps in close to Northland from time to time, and brings with it subtropical fish and invertebrates normally found north-east of New Zealand."

Dr Morrison said the current's impact has been well studied in the shallower waters around the Poor Knights and to a lesser extent in harbours such as Parengarenga.

"But with the exception of Spirits Bay this will be the first time that deeper reefs and soft sediment systems between 50 and 200 metres will have been looked at in detail. These deeper locations are expected to hold very different assemblages of species than in the shallower bays. We expect to see some very new things, including species not recorded before from New Zealand waters, and perhaps whole new communities in terms of their species composition."

Biodiversity surveying techniques will include "flying" deep-tow video and still cameras over the seabed and deepwater reefs at night to record marine species. Dr Morrison said this technique would capitalise on the recent discovery that many species such as snapper descended to just above the seafloor at night to rest and were not disturbed by cameras.

"Baited cameras" used during the day will help identify other species present, including larger fish such as hapuka. Trawls will be used to sample fish, and core samples will be taken to see what lives on and in seafloor sediment.

Once *Tangaroa's* work is completed the focus of the survey shifts in August to inshore and onshore biodiversity sampling from the shoreline out to 50 metres depth, mostly within the Bay of Islands.

For this part of the survey, scientists will be based on the smaller RV *Kaharoa* and *Rangatahi III*, with dive teams and shore sampling teams gathering information from the deeper reaches of the Bay of Islands right up to estuary margins and beaches. The work will include biological, water and sediment sampling.

The project's first phase, a detailed seabed mapping exercise carried out last year, helped identify where to focus the biodiversity sampling survey.

The project is coordinated by Land Information New Zealand (LINZ), and is being carried out in conjunction with the [Department of Conservation](#) and [Ministry of Fisheries](#), with input from local stakeholders including the [Northland Regional](#) and [Far North District](#) councils, tangata whenua and Bay of Islands Maritime Park Inc.

LINZ acting General Manager Policy Richard O'Reilly said the comprehensive baseline data being gathered will be of particular use to regional and local authorities, government agencies and the general public when coastal management decisions are being made.

