



Newsletter February 2017

Our aim is to enhance the use of New Zealand's vast marine resources, while ensuring that our marine environment is understood, cared for, and used wisely for the benefit of all, now and in the future.

News

Innovation Fund proposals

Our recent call for Innovation Funding received 40 expressions of interest on varied topics including blue whales and sea cucumbers. Of these, 20 have been invited to submit a full proposal and we expect to fund 9.

"We're pleased with the number received, and the range of topics they covered. The innovation fund is about exploring new avenues, investigating how to use our seas in a sustainable way and adding value to the marine economy, so it's great to have such a variety," says Julie Hall, Director.

The successful projects will be announced in May.



New project for *Tangaroa* programme

Tūhonohono: Tikanga Māori me te Ture Pākehā ki Takutai Moana, led by the University of Waikato, aims to understand and assess the positive and negative consequences of New Zealand's policy and legislation for the use and application of mātauranga and tikanga Māori in the effective management of our marine estate.

The team, led by Dr Robert Joseph from Te Piringa – Faculty of Law, will explore the traditional and contemporary application of tikanga (custom) and mātauranga Māori (Māori knowledge) in sustainable use and restoration of the marine environment, as well as the potential for more informed and relevant decision making. They will examine international case studies for successful examples of collaboration and integration of indigenous knowledge into governance and regulatory management frameworks that we can learn from. The ultimate aim is to create options and models to better support the management of Māori marine interests and activities in a way that embraces Māori knowledge and application.

Connecting with communities

Cook Strait Forum, Porirua

Director Julie Hall spoke at the second Forum meeting, at Takapūwāhia Marae on 24 February. Twenty members of the Forum attended, including iwi, central government (eg Department of Conservation, Ministry for the Environment, Ministry of Transport), regional government (eg Marlborough District Council, Greater Wellington Regional Council), Transpower, and the shipping industry.

The discussion focused on the importance of sharing information and coordinating activities between organisations.

The Cook Strait Forum was established following a Treaty of Waitangi settlement to coordinate information sharing and discussions on issues of concern relating to the Cook Strait.



Nelson Biodiversity Forum

Dr Chris Cornelisen, Leader of the Managed Seas programme, spoke at Nelson City Council Chambers on 5 December. Around 20 individuals attended from councils, stakeholder groups, and initiatives in the region such as Brook Waimarama Sanctuary, Nelson Nature, and Friends of Nelson Haven & Tasman Bay.

Chris gave an update on the Challenge projects getting underway and upcoming engagement in the region. The Forum is updating its strategy, and has identified the Challenge (and implementation of EBM) as a way to align and increase efforts around protecting and enhancing marine biodiversity and resources.

The Nelson Biodiversity Forum is a group of 26 member organisations that work together to identify and align actions to improve biodiversity in the Nelson area.

Congratulations

UC research medal

David Schiel, Leader of Dynamic Seas and Distinguished Prof at the University of Canterbury, was awarded the university's Research Medal in December. In 26 years at UC, he has worked on a wide range of topics in marine science, with internationally recognised contributions in aquaculture, fisheries, kelp forest ecology and the functioning of nearshore ecosystems.



New Fellow of the Royal Society

Valuable Seas programme leader and NIWA scientist Judi Hewitt was officially welcomed as a Fellow of the Royal Society of New Zealand in February. She has been recognised for advancing knowledge of marine biology and environmental science.



Investigating food webs from Kaikoura to Golden Bay

In January, the University of Otago's RV *Polaris II* embarked from Dunedin on its latest marine science voyage.

The six researchers on board had a busy itinerary, collecting oceanographic information, water samples, seaweeds, invertebrates and fish from around 25 locations from Kaikoura, Marlborough Sounds, Tasman-Golden Bay and the Cook Strait.

Dr Steve Wing, Leader of the Ecosystem Connectivity project and Prof of Marine Science at the University of Otago, said, "This was an excellent start to our field studies in the Cook Strait region. We collected the initial samples needed to understand how marine species are connected to their habitats. We've previously studied food webs in Fiordland, the subantarctic islands and Rakiura/Stewart Island, so this work will give

an important comparison of what the 'ecosystem health' is of these different regions."

The team gathered samples to investigate:

- How Kaikoura's food web has been affected by the November earthquake
- How salmon farming affects food webs
- How changes in reef fish communities affect the way the community processes food and nutrients
- The ecological consequences of changes to coastal bivalve/shellfish communities (eg loss of scallop beds due to environmental factors or human activity).

The data will improve coastal, fisheries and marine management by providing essential information to help regulators, industry and other interest groups make more informed decisions. The salmon farming research will provide data to underpin New Zealand's 'green tick' for sustainable, ecologically-sensitive aquaculture.

This field research will be repeated for the next two summers, which will show which processes most affect the connectivity of the region's marine communities, and give a basis for comparison with other marine ecosystems.

Find out more at:
sustainableseaschallenge.co.nz/news-updates



The research team (from left): Steve Wing, Primary Researcher; Alex Connolly, MSc student; Sorrel O'Connell-Milne, Research Assistant; Jacquetta Udy, MSc student; Jack Hall, MSc student; Rebecca McMullin, PhD student.



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