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New Zealand Marine Studies Centre

Annual Report



The New Zealand Marine Studies Centre (NZMSC) provides a window into marine research at the University of Otago. The Centre offers marine education programmes for all ages. Our mission is to foster understanding and appreciation of New Zealand's unique marine environment and responsibility towards its conservation.

2017 Highlights

6154

school students and their teachers attended curriculum-linked programmes at the NZMSC.

1055

people participated in group marine experiences organised by the NZMSC.

4740

students and teachers attended programmes in the Nelson/Marlborough/Tasman region.



New Teaching Laboratory

After a year of demolition and construction, 2017 saw the completion of the new teaching laboratory at Portobello and the first classes taught there. The Lab is used for University classes and school groups. As part of the project facilities in the NZMSC have also been upgraded and new extension added.



Aquavan Ready for the Road

The new Aquavan has been completely fitted out and is now available to support research and education programmes. With pumps, recirculating tanks, chillers, mains and generator power, the van can take equipment and live animals on the road for multi-day trips.



Programme strengths

All secondary teachers surveyed indicated the strengths of the programmes were the hands-on nature of the activities, access to live animals and plants, science expertise of the staff and use of equipment and resources. Staff passion and teaching skills and student engagement also rated very highly.



What Teachers Say

"Staff enthusiasm for biology is refreshing."

"Engaged the kids brilliantly."

"Programme well developed and suited for purpose."

"Stimulating content. I learn something new each time I come."

"Amazing and passionate educators."





Ocean Acidification Workshops

Following the production of the *Ocean of Tomorrow* teacher resource book, the NZMSC have run workshops in 8 locations throughout NZ involving over 200 secondary teachers showing educators how they can deliver practical lessons that focus on the impact of ocean acidification on the marine environment.

New NZ Seashore Field Guide

NZMSC Director, Sally Carson, and photographer, Rod Morris, combined their skills and have produced a Collins Field Guide to the NZ Seashore, published in November 2017. The book covers animals and plants from the whole of NZ, but Rod says that 80% of the species can be found in Otago Harbour!



Resources in Te Reo Māori

The popular "Rocky Shore Who Eats Who" educational colouring book has now been translated into te reo. Copies of "Te Ākau Pōhatuhatu: Ka kai ā wai i ā wai?" are now available from the NZMSC free of charge. This and other te reo guides and books are also available on our website.

Sediment and Seashores Project

The NZMSC gained funding to continue working with local schools to monitor the Otago Harbour to see what the effects of sedimentation caused by dredging may have on rocky shore communities. Using citizen science tools such as Marine Metre Squared to tackle real issues of concern to the public.



Public Outreach

During events such as Seaweed, Wild Dunedin and the Heritage Festival the NZMSC has run workshops to engage with the community. As there is no longer a public aquarium at Portobello participants enjoy the opportunity to visit the Centre and view the animals we hold here for our education programmes.

Exceptional Performance

Sally Carson, NZMSC Director, was selected as a joint winner of the 2017 Award for Exceptional Performance by General Staff. Sally has worked at the University for 26 years and has been inspiring young people to become marine scientists since the day she started through outreach programmes and development of educational resources. The award is well-deserved recognition of her outstanding service to the University.



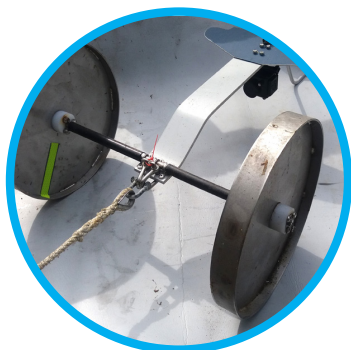


G&T Research Published

The NZMSC education team have had chapters on their research into Gifted & Talented programmes published in two books: "Policy and Practice in Science Education for the Gifted: Approaches from diverse national contexts" (2017) and "Interplay of Creativity and Giftedness in Science" (2016).

Conference Presentations

The team have presented at several conferences, including the International Citizen Science Association Conference in St Paul, Minnesota, notably on our Citizen Science tool, Marine Metre Squared (Mm2) and our involvement in participatory science projects.



Sea Floor Monitoring in Nelson

In the 'Voyage of Discovery' programme, aboard "Steadfast" students discover what lives above, in, on and under the ocean. Using a trawl is quite destructive. A new wheeled video unit allows students to see the seafloor, while doing minimal damage. Markings on the wheels allow quantitative data to be collected.

Ministry of Education LEOTC Contract

The Centre receives funding for education programmes from the Ministry of Education. A new "Learning Experiences Outside The Classroom" contract has just been granted for three years (2018-21) meaning that the work of the NZMSC can continue both in Dunedin and the Nelson area.



Lab-in-a-Box

The NZMSC education team used the University's Lab-in-a-Box to run education programmes and teacher workshops in the Gisborne region from 30 October to 3 November. More than 384 students and teachers from 5 schools took part in our Seashore Science Skills programme.

Full details of the school programmes we offer, public events and projects we organise, and the free resources available to teachers and educators, can be found on our website.

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