

NZOAC and PI-TOA Newsletter

Last month, Cawthron hosted the <u>2023 NZOAC Conference</u>, which was held in conjunction with the Climate Change Resilience in Aquaculture Symposium. This event brought together approximately 70 researchers, industry representatives, and community members to discuss OA and other climate change impacts. A big thanks to <u>Cawthron's</u> Jo Copedo, Jess Ericson, and Norman Ragg for organising this event.

GOA-ON <u>Pier2Peer Scholarships</u> are available to help support international collaborations between mentors and mentees that result in tangible gains in technical capacity, cooperation and knowledge. The next application deadline is 20 October 2023.

Ocean Acidification Week is back for 2023! <u>GOA-ON's OA Week</u> is a virtual multi-day forum to highlight OA research. This year it will be held from 30 October - 3 November and will include opportunities to learn more about the <u>OARS</u> UN Ocean Decade Programme and the <u>ICONEC early</u> career network.

Ocean acidification in the New Zealand and the Pacific

- <u>SPC's</u> Katy Soapi and Azaria Pickering discussed the work of the Pacific Island Ocean Acidification Centre (<u>PIOAC</u>) in a photo-filled <u>ABC News article</u>.
- <u>Christopher Cornwall's</u> (Victoria University of Wellington) and and <u>Wendy Nelson's</u>
 (Auckland War Memorial Museum) recent article in <u>The Conversation</u> discusses the importance of New Zealand's 1,100 species of seaweeds and the <u>impacts of warming</u>, <u>sedimentation</u>, and OA on kelp and calcifying algae. Their recent multiple stressor study on seaweed ecosystems was also highlighted in the New Zealand Herald: <u>Scientists sound</u> <u>warning for NZ's 'environmentally critical' kelp forests as waters heat up</u>.
- New Zealand's <u>Fisheries Industry Transformation Plan</u> recognises OA as a threat to biodiversity and ecosystem function.
- The <u>Pacific Islands Conference on Ocean Science and Ocean Management</u> was held in Fiji in September, with PI-TOA members presenting in sessions on The Ocean Decade in the Pacific, ECOP and ICONET opportunities, and OA science.
- Niue has launched a <u>plan to protect Pacific Ocean by sponsoring sections of it</u>. Threats include illegal fishing and plastic waste, as well as human-caused climate change, leading to warmer and more acidic oceans, altering ecosystems for underwater species.
- <u>PI-TOA GOA-ON Regional Hub</u> is currently recruiting new steering committee members. To submit an application, please e-mail the GOA-ON Secretariat with a statement of interest, explanation of relevant experience, and a CV by 6 October 2023.

Resources

<u>The OA Alliance's</u> work to bring together governments and organisations to address OA continues with two recent outputs: <u>recommendations to protect seafood security and sovereignty</u> and an article about the Makah Tribe's work to develop an <u>OA Action Plan</u>.

- The <u>Youth Ocean Action Toolkit</u> from <u>The Ocean Foundation</u> includes sample graphics and posts to help youth raise awareness about the changing ocean.
- <u>The Ocean Foundation</u> also launched an <u>Ocean Science Equity Initiative</u> that highlights the link between a community's well being and their ability to participate in ocean monitoring.
- A new tool from ETH Zürich lets users display regional OA through colourful strips and bars.
- Interested in predicting future OA conditions? A recent open–access article summaries <u>10</u> <u>global surface OA indicators</u> based on 14 Earth System Models.
- <u>Daily highlights</u> from the recent Southern Ocean Observing System (<u>SOOS</u>) Symposium are now available online.
- **Streaming:** SOARCE Webinar Series <u>A new wave of ocean acidification communication:</u> engaging communities using StoryMaps, Claire Fackler, Liz Perotti, and Natalie Lord.
- Streaming: GOA-ON Webinar Series Global Ocean Acidification Indicators and the NOAA strategy for Carbon Dioxide Removal Research, Li-qing Jiang and Jessica Cross.

Selected recent articles from our members

- <u>Developing Capacity for Ocean Science and Technology</u>, Miloslavich P.; Zitoun R.; et al., Blue Economy: An Ocean Science Perspective
- Marine Flora of French Polynesia: An Updated List Using DNA Barcoding and Traditional Approaches, Vieira C.; Kim M.S.; et al., Biology
- Quantification of lipid droplets in hatchery reared veliger larvae of the green-lipped mussel, Perna canaliculus, Zamora L.N.; Jury J.A.; et al., Aquaculture
- <u>Understanding ecosystem services for climate change resilience in coastal environments: a case study of low-canopy sub-tidal seagrass beds in Fiji, Muna L.R.; Brodie G.; et al., Frontiers in Marine Science</u>
- Reduction in size of the calcifying phytoplankton Calcidiscus leptoporus to environmental changes between the Holocene and modern Subantarctic Southern Ocean, Rigual-Hernández A.S.; Langer G.; et al, Frontiers in Marine Science
- Quantifying Net Community Production and Calcification at Station ALOHA Near Hawai'i: Insights and Limitations From a Dual Tracer Carbon Budget Approach, Knor L.A.C.M.; Sabine C.L.; et al., Global Biogeochemical Cycles
- <u>Seaweed biogeochemistry: Global assessment of C:N and C:P ratios and implications for</u> ocean afforestation, Sheppard E.J.; Hurd C.L.; et al., Journal of Phycology
- <u>Decadal Trends in the Oceanic Storage of Anthropogenic Carbon From 1994 to 2014</u>, Müller J.D.; Gruber N.; et al., AGU Advances
- Predicting the impacts of climate change on New Zealand's seaweed-based ecosystems,
 Cornwall C.E.; Nelson W.A.; et al., New Zealand Journal of Botany

ECOPs (early career ocean professionals) and outreach happenings

- The first online meeting of ECOP Australia and New Zealand took place in August. This was a
 chance for participants to discuss the concept, objectives and planned activities for an ECOP
 ANZ Node and strategise the next steps such as launching a regional survey for this area. If
 you are an ECOP based in or from Australia and New Zealand, you are welcome to get
 involved and join the Teams Community.
- <u>Trevor Platt Fellowship for Early Career Researchers in Oceanography</u> to undertake research at Plymouth Marine Laboratory, UK. Apply by **15 December 2023.**.
- International Climate Protection Fellowship, deadline 1 February 2023.

Conferences, events, and workshops

- Ocean Practices: OBPS Workshop VII (virtual), 9 13 October 2023
- Symposium of Women in Carcinology (online), 23 25 October 2023
- <u>Coastal Futures 2024</u> (hybrid) 2024, London, UK, **24 -25 January 2024**

- Ocean Sciences, New Orleans, 18 23 February 2024
- XI SCAR Open Science Conference (Antarctic Science: Crossroads for a New Hope), Pucón, Chile, 19 - 23 August 2024
- <u>IMBIZO 7</u> (Transitioning towards sustainable ocean governance by 2030: Commitments and Challenges), Rabat, Morocco, **23 26 September 2024**

International opportunities

- Explorers Club Discovery Expedition Grants, rolling deadlines.
- <u>Lenfest Request for proposals:</u> Including Indigenous Knowledge in Ocean and Coastal Evidence-Based Decision-Making. Deadline **16 October 2023**.
- Nominations for the Ocean Decade Advisory Committee are open. Deadline 30 October 2023.
- Workshop: <u>Intellectual Property Management and Commercialisation</u>, TeachOceans, 2
 November 2023.

Jobs

- Research Fellow in Marine/Geospatial Science with the Queensland University of Technology in Brisbane, Australia. Closes **27 September**.
- Marine Ecology Technician with NIWA in Hamilton, New Zealand. Closes 1 October.
- Resource Management Scientist with NIWA in Auckland, New Zealand. Closes 1 October.
- Laboratory Technician with Cawthron in Nelson, New Zealand. Closes 2 October.
- <u>Fish Ecologist Long Term Monitoring</u> with the Australian Institute of Marine Science in Townsville, Australia. Closes **2 October**.
- Fisheries Consultant with MRAG Asia Pacific Pty Ltd in Brisbane, Australia. Closes 2 October.
- Ocean Science Officer with the Pacific Community in Suva, Fiji. Closes 4 October.
- <u>SeaSim Experimental Scientist</u> with the Australian Institute of Marine Science in Townsville, Australia. Closes 8 October.
- <u>Lecturer in Marine Biology</u> with the University of Western Australia in Perth, Australia.
 Closes 10 October.
- <u>Research Scientist Coastal Oceanography</u> with the Australian Institute of Marine Science in Darwin, Australia. Closes **16 October**.
- <u>Principal Marine Scientist</u> with RPS Group in Auckland, New Zealand.
- Marine Mammal Observer with Downer NZ in Picton, New Zealand.
- Marine Technician with the NZ Rock Lobster Industry Council Ltd in Wellington, New Zealand.
- <u>Pou Whakarae Hiringa Taiao/Chief Scientist</u> with JacksonStone & Partners in Wellington, New Zealand.
- Principal Aquatic Ecologist with NGH in Brisbane, Australia.
- Senior Aquatic Ecologist with NGH in Townsville, Australia.
- <u>Postdoctoral Researcher Marine Ecology</u> with the University of Tasmania in Hobart, Australia. Closes **20 October**.
- <u>PhD Defining how inter-bacterial symbioses regulate aquatic ecosystem health</u> with the University of Technology Sydney in Sydney, Australia. Closes **31 October**.
- <u>PhD Dissecting primary production in dark environments</u> with Monash University, in Melbourne, Australia.
- <u>PhD Resolving ocean convection: new knowledge for a changing Antarctica</u> with the University of Melbourne in Melbourne, Australia.
- <u>PhD Replenishment of reef fish populations</u> with Victoria University of Wellington in Wellington, New Zealand.

If you have news, opportunities, resources, or a published article you'd like included in the next newsletter, let us know by replying to this e-mail.

If you would like to subscribe to the NZOAC / PI-TOA newsletter mailing list, reply with "Subscribe" in the subject line. If you would like to unsubscribe from this mailing list, reply with "Unsubscribe" in the subject line.

Cheers,

Christina McGraw (University of Otago), Rebecca Zitoun (GEOMAR), Kim Currie (NIWA), Lea Muetzel (University of Otago)