



## NZOAC May Newsletter – May 2021

April was an exciting month for the NZOAC community. Christopher Cornwall was awarded the [Prime Minister's MacDiarmid Emerging Scientist Prize](#) for his work on the potential for marine organisms to adapt or acclimate to ocean acidification. Chris will use the award to increase awareness about OA and to better understand the evolutionary mechanisms that allow organisms to gain tolerance to climate change stressors. Chris's research was highlighted in a wide range of media, including a [YouTube video](#), an [RNZ interview](#), and an article in [Stuff](#).

Yesterday, the [Commonwealth Secretariat](#) hosted the launch of [A Policymakers' Handbook for Addressing the Impacts of Ocean Acidification](#) (Christina McGraw, Kim Currie, Cliff Law, and Jesse Vance). Based on discussions with policymakers, scientific experts, the Commonwealth Secretariat, and MFAT, the Handbook is designed to help policymakers identify and implement strategies to address ocean acidification.

### Ocean acidification in New Zealand

- Abby Smith wrote an article for Newsroom ([The science we need for the ocean we want](#)) introducing the UN Decade of Ocean Science for Sustainable Development and calling on the public, elected officials, and Government to take action.
- Radio New Zealand's Allison Ballance revisits her 2010 story on ocean acidification and speaks with Cliff Law to discover [what we've learned in the last decade](#).
- A joint NIWA and DOC project extends the New Zealand [Ocean Acidification Monitoring Network](#) (NZOA-ON) to nine new marine reserve sites. The data is freely available through the NZOA-ON [data portal](#). You can learn more about this collaboration between Kim Currie (NIWA) and Monique Ladds (DOC) [here](#).

### Acidification, fisheries, and aquaculture

- The recording of Dr. Nichole Price's (Bigelow Laboratory for Ocean Sciences, USA) contribution to the OA Alliance's *Mitigation and Building Resilience through Kelp and Seagrass* webinar is available online. [The of Role of Kelp Farming as a Potential Strategy for Remediating Ocean Acidification and Improving Shellfish Cultivation](#).
- A project in Maine (USA) is testing [whether oyster shells can be used to restore shellfish production](#) by increasing the pH of tidal flats. This is similar to Cliff Law's experiments with waste mussel shells in Marlborough Sounds. Learn more about the NIWA-led, mussel shell project through the project [video](#) or [final report](#).

### Articles from our members

- [Feedback mechanisms stabilise degraded turf algal systems at a CO<sub>2</sub> seep site](#), Harvey, B.P., Allen, R., Agostini, S., Hoffmann, L.J., Kon, K., Summerfield, T.C., Wada, S., Hall-Spencer, J.M., Communications Biology.
- [Balancing essential and non-essential metal bioavailability during hatchery rearing of Greenshell mussel \(\*Perna canaliculus\*\) larvae](#), French, A.D., Ragg, N.L.C., Ericson, J.A., Goodwin, E., McDougall, D.R., Mohammadi, A., Vignier, J., Ecotoxicology and Environmental Safety.
- [Self-referencing optical fiber pH sensor for marine microenvironments](#), Chen, W.-H., Dillon, W.D.N., Armstrong, E.A., Moratti, S.C., McGraw, C.M., Talanta.
- [Evolutionary modification of gastrulation in \*Parvulastra exigua\*, an asterinid seastar with holobenthic lecithotrophic development](#), Byrne, M., Selvakumaraswamy, P., Evolution and Development.
- [Compiled Southern Ocean sea surface temperatures correlate with Antarctic Isotope Maxima](#), Anderson, H.J., Pedro, J.B., Bostock, H.C., Chase, Z., Noble, T.L., Quaternary Science Reviews.

## ECOPs (early career ocean professionals) and outreach happenings

- The [Ocean Visions Summit](#) starts in a few weeks and Rebecca Zitoun, Habibeh Hashemi, Wayne Dillon will chair the ECOPs' event sessions. NZOAC ECOPs are encouraged to attend (Registration is free), **18-21 May 2021**
- Denise Chen's first paper, just published in Talanta, was selected as the Featured Article of the 1 April issue: [Self-referencing optical fiber pH sensor for marine microenvironments](#).
- Call for [abstracts](#) and [workshops](#) are open for the virtual International Conference for YOUNG Marine Researchers (ICYMARE), **21-24 September 2021**
- [Registrations](#) are open for the first Virtual Early Career Ocean Professional (V.ECOP) Day, **1 June 2021**. The call for [contributions](#) for the V.ECOP Day has been extended until further notice.
- [World ocean council internship program](#) for graduate students and Early Career Professionals, [application deadline: 30 April 2021](#)
- [Virtual networking for students and early-career professionals](#), hosted by NOAA and North American Association of Fisheries Economists. **18 May 2021**

## Upcoming webinars

- [Fishing communities at a crossroads: Can they survive future crises?](#) North American Association of Fisheries Economists. **4 May 2021**
- [Big Data and the value chain of CO<sub>2</sub> measurements](#), presented by Dr. Dorothee Bakkler and hosted by the European Marine Board on **20 May 2021**. Register [here](#).
- [The Post-2020 Global Biodiversity Framework and its Implications to International Ocean Governance](#) presented by Daniela Diz, hosted by Marine Alliance for Science and Technology for Scotland. **26 May 2021**.

## Recent webinars (now available for streaming)

- [What Do You \(Really\) Need to Know to Understand Multiple Stressors?](#) (Sam Dupont, Christina McGraw, Christopher Cornwall, GOA-ON webinar series). There was a lively follow-up discussion on the [Ocean Acidification Information Exchange](#) (OAIE).
- [Canada's Ocean Acidification Community of Practice](#) (Kristina Barclay, GOA-ON webinar series)
- [Webinar for educators on the problem of OA](#) (Oregon State University)
- [CO<sub>2</sub> in seawater reference materials: Yesterday, today, and tomorrow](#) (Andrew Dickson, U.S. Interagency Working Group on Ocean Acidification webinar)

## Conferences, events, and workshops

- The Global Biogeochemical-Argo Fleet: Knowledge to Action Workshop ([Virtual Workshop](#)), **May 4, 11, 18, 25 and June 1**.
- Virtual OceanVisions 2021 Summit: Towards a Global Ecosystem for Ocean Solutions, Scripps Institute ([Virtual Summit](#)), **18-20 May 2021**.
- The 8th International Symposium on Gas Transfer at Water Surfaces ([Virtual Symposium](#)). **19 May 2021**.
- [First International Conference of the United Nations Decade of Ocean Science for Sustainable Development](#), **June 1<sup>st</sup>, 2021 – July 2022**.
- ASLO 2021 Aquatic Sciences Annual Meeting ([Virtual Meeting](#)), **22-27 June 2021**.
- **In New Zealand:** New Zealand Marine Science Society [2021 Conference](#). Tauranga, New Zealand, **5-8 July 2021**.
- Advances in Marine Ecosystem Modelling Research (AMEMR) Symposium ([Virtual Conference](#)), **12-15 July 2021**.
- **In New Zealand:** Physiomar [2021 Conference](#). Nelson, New Zealand, **7-10 September 2021**.
- Update: [The 5th International Symposium on the Ocean in a High CO<sub>2</sub> World](#) has been postponed until **13-16 September 2022**.

## Resources

- The [OA Alliance](#) has made the recording and resources for their [Communicating OA Science to Policy Makers Workshop](#) available online.
- UNESCO's [Ocean Literacy Portal](#) includes freely available articles, videos and posters to help create an ocean-literate community.
- [Crabby's Reef](#) is a new arcade-style game designed to increase awareness of OA. As Crabby, you'll navigate life on the ocean floor. As you move up levels, Crabby is transported to a more acidic future, which is reflected by an increasingly blurred screen.

## Opportunities

- [POGO call for proposals for 2021-2022](#) (working groups, observational training, travel support, and other ocean observing-related initiatives), **1 June**.
- There is a call for proposals for online Satellite Activities as part of the [Ocean Decade Laboratories](#).

## Jobs

- [Asia Pacific Policy Lead](#), Conservation International, Multiple Locations: Auckland, NZ; Jakarta, Indonesia, Manila, Philippines, Singapore.
- [Assistant Research Scientist, Ocean Fronts and Climate Change](#), Conservation International, Santa Barbara, CA, USA.
- [Associate Scientist](#), CIRES/NOAA PSL, Boulder, CO, USA.
- [Chief Scientist](#), University of South Florida, St. Petersburg, FL, USA. 3 May.
- [Ocean Conservation Fellow](#), Monterey Bay Aquarium, Monterey, CA, USA.
- [Postdoc: Marine microbial ecology](#), Simons Foundation, USA and Canada, Closes 14 May.
- [Postdoc: Ocean acidification effects on marine fishes](#), NOAA-NMFS Alaska Fisheries Science Center, Newport OR, USA. Closes 1 May.
- [Postdoc: Coastal and estuarine ecology](#), Nelson Mandela University, Port Elizabeth, South Africa
- [Postdoc: Coastal Carbon Cycle](#) in the Ecosystem Science and Modeling lab, Harte Research Institute/Texas A&M University-Corpus Christi.
- [Postdoc: Marine Chemistry and Carbon Dioxide Removal](#), Pacific Marine Environmental Laboratory, Seattle, WA, USA
- [Postdoc: Ocean Acidification and Multiple Stressor Extremes](#), Princeton University, Princeton, NJ, USA. Closes 1 May.
- [Research Scientist: Reef Fish Ecologist](#), Australian Institute of Marine Science, Perth, WA, Australia. Closes 19 May.
- [Postdoc: Coral Ecology](#), Australian Institute of Marine Science, Perth, WA, Australia. Closes 18 May.
- [Postdoc: Metapopulation Model Integration, Reef Restoration and Adaptation Program](#), Australian Institute of Marine Science, Perth, WA, AUS. Closes 21 May.
- [Postdoc: Coastal Ocean Modelling](#), Pacific Northwest National Laboratory, Sequim, WA, USA. Closes 23 May.

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.

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Cheers,

Christina McGraw, on behalf of the NZOAC Council