



NZOAC October Newsletter

As part of GOA-ON's [Ocean Acidification week](#), [The Ocean Foundation](#) introduced the new Pacific Islands Regional OA Training Hub. This exciting initiative will [build capacity in the Pacific Islands](#) through training, equipment distribution, and mentoring. The new Pacific Islands hub is led by Katy Soapi (The Pacific Community) with support from University of the South Pacific, NIWA, and University of Otago. More information about the hub (including training) will be available soon. If you'd like to learn more about Katy's ocean conservation work in Fiji and the Solomon Islands, she was recently highlighted in a Commonwealth Blue Charter [case study](#).

The second call for Activities for the UN's [Ocean Decade](#) is expected in mid-October. New Zealand has yet to lead an Ocean Decade Activity, so this is an opportunity for NZOAC to highlight - and expand - OA work in New Zealand. Activities can be a one-off, standalone initiative (e.g., an event, publication, conference, or training). The NZOAC Council would love to hear your ideas, so please reply to this email if you have an idea for an activity.

Ocean acidification in New Zealand

- Hon Aupito William Sio, Minister for Pacific Peoples, gave a [speech to SPREP Environment Ministers](#) that addressed ocean acidification and warming's "profound effects on Pacific food security, economic and environment resilience, and culture." Sio also highlighted the importance of minimising other stresses to lessen the impact of OA. New Zealand's role in the [New Zealand-Pacific Partnership on Ocean Acidification](#), membership in the [OA Alliance](#), and the collaborative approach used to develop New Zealand's National Ocean Acidification Action Plan were also shared.
- Dunedinites may be interested in the recently announced [Art+Science: Air](#) collaboration series. The organisers would like to engage with ocean scientists with an understanding of marine photosynthesis. The 2018 [Art+Science: Oceans](#) collaboration led to several OA-inspired projects. Several of these artworks were highlighted in a series of Phantom Billboards [street posters](#) as part of The Art+Oceans Ocean Acidification Street Campaign, "[Own The Streets](#)".

Acidification, fisheries, and aquaculture

- A [study](#) from University of Gothenburg and Oregon State University indicates that [wild Pacific oysters may be more adaptable to ocean acidification](#) than hatchery-bred oysters.
- Fisheries New Zealand released the [Review of Sustainability Measures for the 2021 October round](#), which relates to sustainability measures and allowances for fish stocks. The document highlights the continued uncertainty around the links between trawling and OA.
- The Alaska Ocean Acidification Network has released a six-episode podcast ([The Future Ocean: What can carbon policy do for the ocean and our fisheries?](#)) that addresses two pressing concerns for the seafood industry: ocean acidification and ocean warming.
- In other US fisheries news, [NOAA just awarded 2.4 million USD](#) (3.5 million NZD) to support research-industry partnerships that increase resiliency in shellfish aquaculture by addressing the impacts of multiple stressors. Given the strong focus on oysters and mussels in the funded projects, we look forward to seeing the results of these partnerships.

Resources

- The OA Alliance organised an open-access issue of the Coastal Management Journal: [Ocean Acidification: Insight for Policy and Integrated Management](#). These papers focus on the experience of resource managers working to address technical, social, and policy issues related to OA action and management.
- The Ocean Acidification International Coordination Centre ([OA-ICC](#)) has updated their [bibliographic database](#) of over 9,000 OA references.
- *Ocean Acidification, a poem* by Samantha Jones, was recently turned into a [video](#) in partnership with the OA Alliance, The Ocean Foundation, and MEOPAR Ocean Acidification Community of Practice.
- You can now watch the trailer for National Geographic's documentary about the legendary [Jacques Cousteau](#).
- If you need more reasons to be excited about the upcoming [5th International Symposium on the Ocean in a High CO₂ World](#), a promotional video for the conference was shared widely during OA Week.
- From seaweed cultivation to deep storage, learn the basics of ocean-based CO₂ removal with this information sheet from Ocean Visions: [Harnessing the Power of the Ocean to Restore the Climate and the Ocean](#).

Upcoming webinars

- [Turning the tide of parachute science](#), Paris Stefanoudis (University of Oxford) and Sheena Talma (Nekton Foundation), **20 October 2021**.
- [MPAs as part of the climate solution: The role of blue carbon](#), Sara Hutto of the Greater Farallones National Marine Sanctuary, **26 October 2021**.

Recent webinars (now available for streaming)

- GOA-ON has posted [48 webinars](#) from the 2021 Ocean Acidification week. Since this is too much for even the most enthusiastic viewer, we'll highlight a section of these talks each month. First up: NZOAC's Christopher Cornwall gave a plenary talk on [Impacts of Ocean Acidification on Coralline Algae](#).
- Other GOA-ON talks you may be interested in include Ben Harvey's talk on [Simplification of marine ecosystems under ocean acidification](#) and Jan Newton's [The Olympic Coast as a Sentinel: integrated social-ecological vulnerability assessments](#).
- The UN Global Compact's recent [Seaweed as a Nature-Based Solution for Climate Change](#) webinar is now available online.

Recent articles from our members

- [Emersion and relative humidity modulate stress response and recovery dynamics in juvenile mussels](#) (*Perna canaliculus*), Delorme, N.J., Burritt, D.J., Ragg, N.L.C., South, P.M., *Metabolites*
- [Narrow range of temperature and irradiance supports optimal development of *Lessonia corrugata* \(Ochrophyta\) gametophytes: implications for kelp aquaculture and responses to climate change](#), Paine, E.R., Schmid, M., Gaitán-Espitia, J.D., Castle, J., Jameson, I., Sanderson, J.C., Hurd, C.L., *Journal of Applied Phycology*
- [Selection on genes associated with the evolution of divergent life histories: Gamete recognition or something else?](#), Guerra, V.I., Haynes, G., Byrne, M., Hart, M.W., *Evolution and Development*
- [Copper-binding ligands in deep-sea pore waters of the Pacific Ocean and potential impacts of polymetallic nodule mining on the copper cycle](#), Paul, S.A.L., Zitoun, R., Noowong, A., Manirajah, M., Koschinsky, A., *Scientific Reports*

- [Hornera currieae n. sp. \(Cyclostomatida: Horneridae\): A new bathyal cyclostome bryozoan with reproductively induced skeletal plasticity](#), Batson, P.B., Tamberg, Y., Gordon, D.P., Negrini, M., Smith, A.M., Zootaxa
- [Transcriptomic analysis of Nodal – and BMP- associated genes during development to the juvenile seastar in Parvulastra exigua \(Asterinidae\)](#), Byrne, M., Koop, D., Strbenac, D., Cisternas, P., Yang, J.Y.H., Davidson, P.L., Wray, G., Marine Genomics
- [Differential tolerance of species alters the seasonal response of marine epifauna to extreme warming](#), Ledet, J., Campbell, H., Byrne, M., Poore, A.G.B., Science of the Total Environment
- [Near-future oceanic CO₂ delays development and growth in early-stage larvae of the endemic New Zealand sea urchin](#), Evechinus chloroticus, Sewell, M.A., Baker, D.W., Hudson, M.E., Millar, R.B., Hickey, A.J.R., Marine Biology

ECOPs (early career ocean professionals) and outreach happenings

- **ECOP spotlight:** After a number of years working in policy, **Emily Joy Frost** has returned to research as a postdoctoral research fellow in the aquaculture biotechnology research group. Emily's primary focus is molecular biology, with her research focusing on understanding the effect of ocean acidification and temperature on embryonic fate as a means of selective climate change adaptation.
- **Article:** [The lessons I learnt supervising master's students for the first time \(Nature\)](#), You may find this article interesting if you are interested in developing "soft skills" such as communication, mentoring and project management during your PhD journey.

Conferences, events, and workshops

- [Connecting the world of biodiversity data: standards uniting people, processes, and tools](#) (virtual), **18-22 October 2021**
- [IMBIZO 6: Marine Biosphere Research: Buoyant Solutions for Ocean Sustainability](#) (virtual), **18-22 October 2021**
- [World Climate Research Program \(WCRP\) Workshop on Extremes in Climate Prediction Ensembles \(ExCPEnS\)](#) (virtual), **25-28 October 2021**
- [Oceans of Knowledge](#) (hybrid), **26-27 October 2021**
- [UN Climate Change Conference-COP26](#) (hybrid), **31 October-12 November 2021**
- [IMBeR West Pacific Symposium](#) (free, virtual event), **22-25 November 2021**
- [International Workshop on Application of ocean science and technology for the practice of sustainable "Blue Economy" in developing countries](#) (virtual), **8-9 November 2021**
- [In New Zealand Australasian Coasts & Ports Conference 2021](#). Christchurch, New Zealand, **30 November- 3 December 2021**
- [International Ocean Data Conference](#) (virtual), **14-16 February 2022**
- [2022 Conference for Shellfish Growers](#), **7-8 March 2022**
- [Ocean Sciences Meeting 2022](#) (hybrid), **27 Feb - 4 Mar 2022**
- [The 8th International Symposium on Gas Transfer at Water Surfaces](#) (in person), **17-20 May 2022**
- [The 5th International Symposium on the Ocean in a High CO₂ World](#) (in person), **13-16 September 2022**
- [NZOAC - 15th NZOAC Conference](#), Nelson, New Zealand, **2-3 November 2022 (TBC)**

International opportunities

- Call for contributions to the [2nd Ocean Observer workshop](#), **7 October 2021**
- [Space for Planet Earth Challenge](#), The Challenge is open to residents of New Zealand, Australia and the Pacific Islands. **31 October 2021**

Jobs

- [Supervising Fisheries and Marine Officer \(Aquatic Biosecurity\)](#) with the Department of Primary Industries and Regional Development in Perth, WA, Australia. Closes 6 October, 2021.
- [Deputy Director/ Science Director CSIRO Oceans & Atmosphere](#) with CSIRO with locations in Melbourne, Perth, Hobart, Canberra and Brisbane, Australia. Closes 10 October, 2021.
- [Director Mineral Resources](#) with CSIRO in Brisbane, Queensland, Australia. Closes 10 October 2021.
- [Te Kuwaha Graduate Programme](#) with the National Institute for Water and Atmospheric Research (NIWA) in Hamilton, NEw Zealand. Closes 10 October, 2021.
- [Science Engagement Staff/Communicators](#) with the Auckland Council in Auckland, New Zealand. (Entry level). Closes 16 October, 2021.
- [Senior Adviser Readiness Science Products](#) with the City of Wellington, in Wellington, New Zealand. Closes 18 October, 2021.
- [Marine Science Researcher](#) for the local Council in Marlborough Sounds, New Zealand. Term position. Closes 25 October, 2021.
- [Project Coordinator](#) with the Blue Cradle Foundation in Christchurch, New Zealand. Part-time, remote.
- [Teaching Fellow - Ecology](#) with the University of Otago in Dunedin, New Zealand.
- [Associate/Principal - Marine Science Consultant](#) with SLR Consulting in Nelson, New Zealand.
- [Nursery Manager](#) with Willie Creek Pearl Farm in Broome, WA, Australia.
- [Marine Technician](#) with Australian NAVY in Hobart, Tasmania, Australia.
- [Aquatic Ecologist](#) with Stantec Australia Pty Ltd in Perth, WA, Australia.
- [Postdoc - Modelling Wind Energy and Shellfish Fisheries](#) with Rutgers University at the Haskin Shellfish Research Laboratory in Port Norris, NJ, USA.
- [Postdoc - Fisheries and Aquatic Ecology](#) with Delaware State University in Dover, DE, USA.
- [Postdoc - MAP Shellfish Stock Assessment](#) with the Virginia Institute of Marine Science in Gloucester, VA, USA.
- [Postdoc - San Francisco Bay River Plume](#) with Rutgers University, Dept. of Marine & Coastal Science in New Brunswick, NJ, USA.
- [Postdoc - Marine Symbiosis](#) with the University of New Hampshire in Durham NH, USA.
- [Postdoc - Fisheries Conservation](#) with the University of Washington in Seattle, WA, USA.
- [Postdoc - Fisheries Simulation Modelling](#) with Saltwater, Inc. in Anchorage, AK, USA.
- [Postdoc - Modeling Interactions among Wind Energy and Shellfish Fisheries](#) with Rutgers University at the Haskin Shellfish Research Laboratory in Port Norris, NJ, USA.

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 mailing list, reply with "Subscribe" in the subject line. If you would like to unsubscribe from the NZOAC mailing list, reply with "Unsubscribe" in the subject line.

Cheers,

Christina McGraw, Habibeh Hashemi, Jesse Vance, Rebecca Zitoun, and the NZOAC Council