

OCEANCANADA NEWSLETTER SPRING 2018





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OCEANCANADA NEWS

William Cheung Wins Ehor Boyanowsky Academic of the Year Award



Congratulations to William Cheung, co-lead of *OceanCanada*'s NDIS Working Group and Changing Oceans Cross-Cutting Theme, for winning the Confederation of University Faculty Associations of British Columbia (CUFA BC) Ehor Boyanowsky Academic of the Year Award. The award is in recognition of his contributions to the community beyond the academic world for his research on marine climate change. In addition to being published in prestigious scholarly journals such as *Science* and *Nature*, his work is regularly

highlighted in media outlets, giving him a highly visible international public profile. The award was conferred at a gala dinner on April 12 in Vancouver.

OceanCanada Speaker Series 2018

Building on the success of the 2017 *OceanCanada* Speaker Series at the Vancouver Aquarium, we are excited to announce our 2018 series. The first event, <u>Conserving Our Shorelines: Creating Solutions Through Collaboration</u>, was held on April 17 in Sidney on Vancouver Island, and co-hosted and organized by our partner World Wildlife Fund-Canada. Speakers included people from BC Parks, SeaChange,



Peninsula Streams, Capital Regional District Green Shores Local Government Working Group, Friends of Shoal Harbour, Eagle Wing Tours, and the Tsawout Nation. A video of the evening is available on Facebook. Our next event will be cohosted with the T. Buck Suzuki Environmental Foundation, and will take place on June 18 from 6 pm to 8 pm at the UBC Liu Institute for Global Issues. We will also be having an event later in the year with Skipper Otto's Community Supported Fishery. Stay tuned to our Events page for details of both events!

Ocean Luminaries



Director Rashid Sumaila was among the Ocean Luminaries who spoke on March 2 at the opening of the exhibition Unseen Oceans at the American Museum of Natural History in Washington, DC. Speakers at the event were from various backgrounds: economics, art, conservation, and oceanography. The exhibition allows visitors to view images of different marine ecosystems through state-of-the-art robotics, satellite monitoring, and HD imaging. It runs until January 6, 2019.

Tackling Social and Human Rights Abuses in the Seafood Industry

Nathan Bennett and Lydia Teh were panelists in the webinar, *What we can do to curb social and human rights abuses in the seafood industry.* The webinar, held on February 13 and hosted by Jack Kittinger of Conservation International, included other panelists Katrina Nakamura of Sustainability Incubator, and Yoshi Ota of Washington State University and Nereus. <u>Watch the video on YouTube</u>.

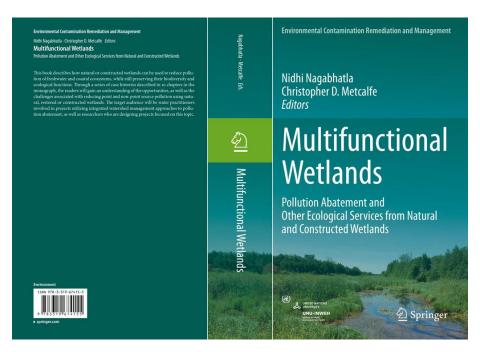


PARTNER & COLLABORATOR NEWS

Ecological Research and Assessment by United Nations University-Institute for Water, Environment and Health (UNU-IWEH)

Nidhi Nagabhatla, Senior Researcher at UNU-IWEH, has recently been involved in three notable activities related to ecology and assessment:

- co-editor of <u>Multifunctional Wetlands</u>: <u>Pollution Abatement and Other</u>
 <u>Ecological Services from Natural and Constructed Wetlands</u>, which vividly
 covers aspects of coastal and marine ecosystems and includes case studies
 from Canada;
- lead author of the chapter "Status and trends: indirect and direct drivers of change" in the <u>Intergovernmental Science-Policy Platform on Biodiversity and Ecosystem Services (IPBES) Global Assessment</u>, which provides extensive coverage of drivers that impact the structure, function and ecosystem services in coastal and marine environments;
- collaborator on the technical report, <u>Ecosystem Based Adaptation Approach</u> <u>for Sustainable Management and Governance of Coastal Ecosystems</u> for the Asia Pacific Network Project, which addresses challenges of ecological conservation and sustainable management of coastal systems.



Ecotrust Releases Phase One Report of North Coast Innovation Lab



The North Coast Innovation Lab is an Ecotrust initiative focused on the future of Prince Rupert to allow people to work together on projects for building a resilient local economy and develop a sense of community well-being through four focus areas:

- growing the local economy for fish and marine products;
- enhancing collaboration and sharing of information and resources;
- developing social enterprise and entrepreneurship;
- engaging youth in downtown revitalization and placemaking.

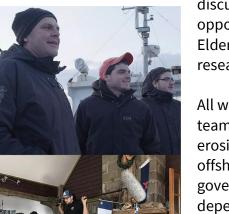


Beginning in 2018, the first phase of the project was to design the program, largely through community outreach and interviews. This was followed by the presentation of findings and sharing ideas within the community. Next, partnerships will be formalized and pilot projects created. It is anticipated that between four to eight projects will be conducted throughout 2019 and 2020. Read the phase one report.



VIDEO UPDATE

In early 2018, Knowledge Mobilization (KM) team members Ian Mauro and Vincent L'Hérault travelled to the Magdalen Islands to meet with community members to



discuss ocean-related priorities and project opportunities. They interviewed local fishermen, Elders, local organizations, people in the Merinov research centre, politicians, and members of the public.

All were very interested in pursuing film work with the team in the following areas: climate change and erosion, climate change and biodiversity/economy, offshore oil/gas exploration and marine resources, governance and fishing licenses, and petrodependence and renewal energy. An *OceanCanada* video based on this material is expected to be completed by summer 2019.



MEDIA COVERAGE

May 23.	Ocean Summit sponsored by the Volvo Group spotlights the problem of plastic in the world's oceans. Recycling Product News.
May 23.	Global ocean leaders urge Commissioner Vella to end EU overfishing. European Supermarket Magazine.
May 18.	<u>It pays to invest in biodiversity</u> . National Post.
May 17.	It pays to invest in biodiversity. The Conversation.
May 14.	<u>Insurance turns to coral reefs and mangroves as ocean risks surge.</u> Reuters.
May 8.	Bill C-68 enshrines human dimensions in Canadian fisheries law. Policy Options.
May 6.	With warmer water, fish need more oxygen than their gills can supply. Sentinel Source.
May 3.	Should nations close the high seas to fishing? Re.Think.
April 28.	Warm water could mean less oxygen, smaller fish. Panama City News Herald.
April 24.	<u>Cientistas alertam que aquecimento global vai deixar peixes nanicos.</u> Gazeta do Povo.
April 30.	Climate change could deplete fish stocks without better data, international agreements, researchers say. The Star Vancouver.
April 23.	<u>"Malos y feos", subsidios a pesca</u> . Cuarto Poder.
April 23.	Beberapa terumbu karang kuat hadapi gelombang panas. Republika.
April 20.	Heat waves are roasting reefs, but some corals may be resilient. Science News.
April 18.	"Bad and ugly," fishing subsidies. El Universal.
April 10.	Fishers uncertain future; are subsidies to blame? Modern Ghana.
March 18.	New research finds reefs help protect vulnerable Caribbean fish from climate change. Jamaica Observer.

March 16. Reefs help protect vulnerable Caribbean fish from climate change. Science Daily.

March 16. Reefs help protect vulnerable Caribbean fish from climate change. Phys.org.

March 14. <u>As Alaskan waters warm, market squid extend their reach northward.</u> Undark.

March 13. <u>Dollars for disaster: Daniel Pauly and Rashid Sumaila discuss how</u> governments subsidize overfishing. Oceana.

March 2. <u>Fishmeal landings under fire</u>. The Fish Site.

March 2. The world has two years to meet marine protection goal. Can it be done? National Geographic.

February 28. Overfishing poses risks for investors. Eco Business.

February 20. <u>Investing in nature outweigh costs</u>. Stockholm Resilience Centre.

February 8. <u>It's fishy: rise in warm-water species found off our coasts</u>. Irish Times.

February 5. Why salmon eating insects instead of fish is better for environment.

National Geographic.

February 2. <u>Une étude aux îles de la Madeleine sur les changements climatiques</u>. Radio-Canada.

January 31. Shark found washed up on Delta beach. Vancouver is Awesome.



RESEARCHER IN PROFILE



Ratana Chuenpagdee is Professor in the Department of Geography, Memorial University of Newfoundland. From 2006 to 2016, she held the Canada Research Chair (Tier 2) in Natural Resource Sustainability and Community Development. She is an expert on policy and governance of oceans and coasts, with a focus on fisheries, particularly small-scale fisheries.

She has been instrumental in the development and application of 'Interactive Governance Theory.' Her contributions include co-editing three books and writing

several peer-reviewed journal articles. Together with students and colleagues, she applies interactive governance to examine fisheries and coastal ecosystems in Canada, Malawi, South Korea, Spain, Tanzania and Thailand. Since 2012, she has directed a major initiative, Too Big To Ignore (TBTI): Global Partnership for Small-Scale Fisheries Research, funded by the Social Sciences and Humanities Research Council of Canada (SSHRC) Partnership Program.

Through working in collaboration with 15 partner organizations and more than 400 members from around the world, TBTI aims at elevating the profile of small-scale fisheries, rectifying their marginalization in national and international policies, and improving governance for fisheries sustainability worldwide. As part of this partnership, she's been involved in the development and the implementation of the Food and Agriculture Organization (FAO) of the United Nations Voluntary Guidelines on Securing Sustainable Small-Scale Fisheries, and co-edited the book, *The Small-Scale Fisheries Guidelines: Global Implementation* (Springer 2017), with Svein Jentoft, María José Barragán-Paladines, and Nicole Franz.

Currently, she is leading the research module <u>Informing Governance Responses in a Changing Ocean</u> for the Ocean Frontier Institute (OFI), a collaborative research initiative between Dalhousie University, Memorial University of Newfoundland, and the University of Prince Edward Island, in partnership with several organizations including the *OceanCanada* Partnership. As a collaborator of *OceanCanada*, and with her work in TBTI and OFI, Ratana's goal is to support capacity building in transdisciplinary research and governance for global ocean sustainability, as well as the viability of small-scale fisheries and coastal communities around the world.

RECENT PUBLICATIONS

JOURNAL ARTICLES

Bennett NJ, Whitty TS, Finkbeiner E, Pittman J, Bassett H, Gelcich S, Allison EH. 2018. (*Environmental Management*) Environmental stewardship: a conceptual review and analytical framework.

Davies TE, **Epstein G**, Aguilera SE, Brooks CM, Cox M, Evans LS, Maxwell SM, Nenadovic M, **Ban NC**. 2018. (*PLoS One*) <u>Assessing trade-offs in large marine</u> protected areas.

Domingo T, Starosta K, Chester A, Williams J, Lehnert SJ, Gantner N, **Alava JJ**. 2018. (*Canadian Journal of Chemistry*) <u>Fukushima-derived radioactivity measurements in Pacific salmon and soil samples collected in British Columbia, Canada</u>. (Awarded the 2018 *Canadian Journal of Chemistry* Best Paper Award by the *Canadian Journal of Chemistry* Editorial Board and the journal's publisher, Canadian Science Publishing)

Eckert LE, **Ban NC**, Frid A, McGreer M. 2018. (*Aquatic Conservation: Marine and Freshwater Ecosystems*) Diving back in time: extending historical baselines for Yelloweye rockfish with Indigenous knowledge.

Friedman RS, Law EA, **Bennett NJ**, Ives CD, Thorn JPR, Wilson KA. 2018. (*Environmental Research Letters*) How just and just how? A systematic review of social equity in conservation research.

Intchama JF, **Belhabib D**, Tomás Jumpe RJ. 2018. (*Frontiers in Marine Science*)

<u>Assessing Guinea Bissau's legal and illegal unreported and unregulated fisheries and the surveillance efforts to tackle them.</u>

Maharaj RR, Lam VWY, Pauly D, **Cheung WWL**. 2018. (*Marine Ecology Progress Series*) Regional variability in the sensitivity of Caribbean reef fish assemblages to ocean warming.

McIvor R, Milewski I, **Loucks R**, **Smith R**. 2018. (*Estuarine*, *Coastal and Shelf Science*) Estimating nitrogen loading and far-field dispersal potential from background sources and coastal finfish aquaculture: a simple framework and case study in Atlantic Canada.

O'Leary BC, **Ban NC**, Fernandez M, Friedlander AM, García-Borboroglu P, Golbuu Y, Guidetti P, Harris JM, Hawkins JP, Langlois T, McCauley DJ, Pikitch EK, Richmond RH, Roberts CM. 2018. (*BioScience*) Addressing criticisms of large-scale Marine Protected Areas.

Ommer R. 2018. (ICES Journal of Marine Science) <u>Curiosity, interdisciplinarity, and</u> giving back.

Pennino MG, Rufener MC, Thomé-Souza MJF, Carvalho AR, Lopes PFM, **Sumaila UR.** 2018. (*Scientific Reports*) <u>Searching for a compromise between biological and economic demands to protect vulnerable habitats.</u>

Sala E, Lubchenco J, Grorud-Colvert K, Novelli C, Roberts C, **Sumaila UR**. 2018. (*Marine Policy*) Assessing real progress towards effective ocean protection.

Sumaila UR, Rodriguez CM, Schultz M, Sharma R, Tyrrell TD, Masundire H, Damodaran A, Bellot Rojas M, Rosales RMP, Jung TY, Hickey V, Solhaug T, Vause J, Ervin J, Smith S, Rayment M. 2018. (*Current Opinion in Environmental Sustainability*) Investments to reverse biodiversity loss are economically beneficial.

Teh LCL, Pauly D. 2018. (*Frontiers in Marine Science*) Who brings in the fish? The relative contribution of small-scale and industrial fisheries to food security in Southeast Asia.

Teh LSL, **Cheung WWL**, Christensen V, **Sumaila UR**. 2018. (*Current Opinion in Environmental Sustainability*) Can we meet the Target? Status and future trends for fisheries sustainability.

Wabnitz CCC, Lam VWY, Reygondeau G, **Teh LCL**, Al-Abdulrazzak D, Khalfallah M, Pauly D, Palomares MLD, Zeller D, **Cheung W**. 2018. (*PLoS ONE*) <u>Climate change impacts on marine biodiversity, fisheries and society in the Arabian Gulf</u>.

BOOK CHAPTERS

De Fontaubert C, Lange GM, **Sumaila UR**. 2018. (*The Changing Wealth of Nations 2018: Building a Sustainable Future*) Subsidies reduce marine fisheries wealth.

Sumaila UR, **Schuhbauer A**. 2018. (*Advances in Fisheries Bioeconomics*) <u>A simple</u> application of bioeconomics to fisheries subsidies.

VanderZwaag DL. 2018. (Ocean Law Debates: The 50-Year Legacy and Emerging Issues for the Years Ahead) Governance of the Arctic Ocean beyond national jurisdiction: cooperative currents, restless sea.

SYMPOSIUM PAPERS

Saunders P. 2018. <u>Management and enforcement challenges for highly migratory species: the case of Atlantic bluefin tuna</u>. Environment in the Courtroom: Enforcement Issues and Canadian Wildlife Protection. Canadian Institute of Resources Law and University of Calgary Faculty of Law.

Sumaila UR, et al. 2018. <u>Visions for nature and nature's contributions to people for the 21st century</u>. Report from an IPBES visioning workshop held on 4-8 September 2017 in Auckland, New Zealand.

RECENT PRESENTATIONS

Montreal, QC. May 23, 2018. Fortier, Martin; Burgess, Henry; Mauro, Ian.

Enhanced research-technology and policy cooperation. Panel at Arctic Systainal

Enhanced research-technology and policy cooperation. Panel at Arctic Sustainability Summit.

Newport, RI. May 18, 2018. Sumaila, Rashid; Svensson, Lisa; Rolfe, Jason.Setting the scene: how plastic pollution is affecting ocean health. Ocean Summit.

Southampton, Bermuda. May 9, 2018. Baughman McLeod, Kathy; Sumaila, Rashid; Niehörster, Falk; Way, Mark.

Natural capital and ecosystem services. Interactive working group, Ocean Risk Summit.

Galicia, Spain. May 2, 2018. Sumaila, Rashid.

The role of climate change, fisheries subsidies and large scale high seas protection on the conservation and fair sharing of the global ocean. Keynote address at Martec 18, International Conference on Advances in Marine Technologies Applied to Discard Mitigation and Management.

Singapore. April 27, 2018. Sumaila, Rashid.

Doomsday analysis – the economic, social, and food security outcomes of IUU fishing. APEC Experts Workshop on Illegal, Unreported and Unregulated Fishing.

Vancouver, BC. April 12, 2018. Sumaila, Rashid.

Turn the high seas into a fish bank for the world? Nature Vancouver, Vancouver Natural History Society-Marine Biology Section.

Seattle, WA. April 4, 2018. Bennett, Nathan.

Coastal and Indigenous community access to marine resources in Canada. Salish Sea Ecosystem Conference.

Cambridge, UK. March 28, 2018. Sumaila, Rashid.

The conservation and fair sharing of ocean and fishery resources: contributions from fisheries economics. Plenary talk at Student Conference on Conservation Science, Department of Zoology, University of Cambridge.

Chicago, Il. March 16, 2018. Mauro, Ian.

Climate change and Canada. Climate Change Knows No Borders Panel at Loyola Climate Change Conference. Loyola University.

Vancouver, BC. March 16, 2018. Sumaila, Rashid.

Subsidies, climate change, high seas protection and the fair sharing of the global ocean. UBC Institute for the Oceans and Fisheries Seminar Series.

Columbia, MO. March 13-14, 2018. Mauro, Ian.

Climate, cinema and cartography: digital storytelling and climate change. University of Missouri.

Climate change and global conflict. University of Missouri.

Qapirangajuq: Inuit Knowledge and Climate Change. RagTag Cinema (film presentation)

Warsaw, Poland. March 9, 2018. Sumaila, Rashid.

Introductory remarks for the Oceans session, The plastic paradox: a dilemma for consumers. European Young Leaders Seminar.

Calgary, Alberta. March 2-3, 2018. Saunders, Phillip.

Management and enforcement challenges for highly migratory species: the case of Atlantic bluefin tuna. CIRL Symposium on Enforcement Issues in Canadian Wildlife Protection.

Everett, WA. March 2, 2018. Ban, Natalie.

Breaking down disciplinary boundaries: opportunities and challenges in inter- and trans-disciplinary research. Pacific Estuarine Research Society Conference.

Winnipeg, MB. February 28, 2018. Mauro, Ian; Blair, D.

Climate Atlas of Canada and Health Canada. Special Presentation for Health Canada's Associate Deputy Minister (Christine Donoghue) and Assistant Deputy Minister (Tina Green).

Wellington, New Zealand. February 21-23, 2018. Engler-Palma, Cecilia.

Ocean acidification post-Paris: gauging law and policy responses in light of emerging scientific projections. 2nd Pacific Climate Change Conference.

Brussels, Belgium. February 21, 2018. Sumaila, Rashid.

The oceans are our lives. Countdown to 2020: How Far Has the EU Come in Ending Overfishing?

Vladivostok, Russia. February 12, 2018. VanderZwaag, David.

Law of the sea and ocean governance in the Arctic: conflict, cooperation and challenges. Far Eastern Federal University Seminar.



Photo Credit: Linnéa Engström





The OceanCanada Partnership is a Social Sciences and Humanities Research Council (SSHRC) project that brings partners from across Canada together to holistically study the challenges and opportunities facing Canada's oceans and coastal communities.