

# UBC ocean fisheries researchers win major U.S. environmental prize

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Dr. Daniel Pauly and Dr. Rashid Sumaila. Credit: Kim Bellavance.

Two University of British Columbia ocean fisheries experts—marine biologist Dr. Daniel Pauly and fisheries economist Dr. Rashid Sumaila—have been awarded the 2023 Tyler Prize for Environmental Achievement.

The \$250,000 (U.S.) award, administered by the University of Southern California, is often described as the Nobel Prize for the environment.

“Our lives and livelihoods depend on the ocean, which covers more than 70 per cent of Earth,” said Julia Marton-Lefèvre, chair of the Tyler Prize for Environmental Achievement. “The Tyler Prize Executive Committee recognizes Professors Pauly’s and Sumaila’s outstanding individual and complementary achievements towards the conservation of this global life-source. By pioneering analytical approaches and knowledge platforms to assess the global state of world fisheries, they have discovered viable solutions, offering policymakers a realistic pathway towards the sustainable management of ocean fisheries.”

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Both professors are long-time colleagues at UBC’s Institute for the Oceans and Fisheries who have published extensively on the ecological and economic effects of overfishing on the high seas. They said that winning the Tyler Prize gives them an opportunity to spread an urgent and evidence-based message: all fishing on the high seas should be banned.

“A high seas fishing ban is one of the most effective ways to reverse the damage inflicted on the ocean through decades of unsustainable overfishing, mostly at the hands of wealthy Western countries,” said Dr. Pauly. “Our modelling shows that closing the high seas would result in no loss in total global catch—just a more equitable distribution. Most commercially fished species move back and forth between the high seas and coastal areas, where they can be caught in a country’s exclusive economic zone (EEZ).”

“Creating no-take marine reserves is something we must do. Banning fishing in the high seas, which is the area outside maritime countries’ 200-nautical-mile EEZ, will create a critically-needed ‘fish bank’ for the world,” said Dr. Sumaila.

Dr. Pauly, who has been the world’s most-cited fisheries scientist since 2010, has spent four decades documenting the rapid decline of marine and fresh-water fish. He gained worldwide recognition for popularizing the term “Shifting Baselines”, which explains how knowledge of environmental declines fades over time, leading to a misguided understanding of change on our planet. Dr. Pauly is the Founder and Principal Investigator of the UBC research initiative Sea Around Us.

Dr. Sumaila, jointly appointed at UBC’s School of Public Policy and Global Affairs, noted that support for a high seas fishing ban continues to grow, and that the closing of Antarctica’s Ross Sea in 2016, which created the world’s largest marine protected area, served as a valuable model.

“Rashid and Daniel are an incredible duo,” said Dr. Meigan Aronson, Dean, UBC Science. “Their work has had an immense impact on our understanding of ocean fisheries and marine sustainability, and generated a wealth of policy outcomes around the globe. We couldn’t be prouder of this recognition from the Tyler Prize Executive Committee.”

“More than 190 countries committed to the agreement at the Convention of Biodiversity Conference of the Parties (COP15) in December to protect 30 per cent of their land and waters by 2030—so there are good signs of progress,” said Dr. Sumaila. “But we must move faster. Overfishing increases global emergencies such as climate change, biodiversity loss and food insecurity—particularly for already vulnerable communities, such as Indigenous Peoples and populations in the Global South.”

Dr. Sumaila’s work in fisheries and natural resource projects around the world has made him the world’s most cited fisheries economist, natural resource economist, and ocean policy expert. His research focuses on bioeconomics, marine ecosystem valuation and the analysis of global issues such as fisheries subsidies, marine protected areas, illegal fishing, climate change, marine plastic pollution, and oil spills. His life’s work is driven by the question of how to “bequeath a healthy ocean to our children and grandchildren, so they too can have the option to do the same.”

## About the Tyler Prize

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Established in 1973 by the late John and Alice Tyler, the Tyler Prize for Environmental Achievement is one of the first international premier awards for environmental science, environmental health, and energy.

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