

2010 PICES Awards

The presentation ceremony for two prestigious PICES awards took place on October 25, 2010, during the Opening Session at PICES-2010 in Portland, Oregon, U.S.A.

Wooster Award

In 2000, PICES established an annual award for scientists who have made significant contributions to North Pacific marine science; have achieved sustained excellence in research, teaching, administration, or a combination of these in the area of the North Pacific; have worked to integrate the various disciplines of the marine sciences; and preferably, all of these in association with PICES. The award was named in honour of Professor Warren S. Wooster, a principal founder and the first Chairman of PICES, a world-renowned researcher of climate variability and fisheries production. He was not only a distinguished scientist, but also an ambassador of international scientific cooperation. Though Professor Wooster passed away in October 2008, his spirit will live in our minds through this Award. Award description, nomination process and selection criteria are posted on the PICES website at http://www.pices.int/Wooster_Award/default.aspx. Prior recipients of the Wooster Award were Michael Mullin (2001), Yutaka Nagata (2002), William Percy (2003), Paul LeBlond (2004), Daniel Ware (2005), Makoto Kashiwai (2006), Kenneth Denman (2007), Charles Miller (2008) and Kuh Kim (2009).

The presentation ceremony was conducted by Drs. Tokio Wada (PICES Chairman) and John Stein (PICES Science Board Chairman). After Dr. Wada introduced the award, the following Science Board citation was read by Dr. Stein (reading of the citation was accompanied by a slide show dedicated to Dr. Jeffrey Polovina):

It gives me great pleasure to announce that the Wooster Award for 2010 is being given to Dr. Jeffrey J. Polovina, world-renowned oceanographer with NOAA's Pacific Islands Fisheries Science Center. Dr. Polovina's groundbreaking contributions to climate and marine ecosystem research epitomize the PICES approach of integrating oceanographic factors and biological modeling to significantly advance ecosystem management.

During an exemplary career that spans 30 years, one would never guess that Dr. Polovina did not start out in fisheries. Regardless, his insights as a trained mathematician and statistician may have formed the basis of a landmark scientific achievement in the 1980s—the development of an innovative marine ecosystem model, ECOPATH, to describe energy flow through a coral reef food web. ECOPATH was the first model to apply a type of statistics called “path analysis” to the field of marine ecology, and Dr. Polovina's role in its development was recognized as one of NOAA's

Top Ten scientific breakthroughs in the agency's first 200 years. The model's elegant simplicity and ability to accurately identify ecological relationships has since revolutionized scientists' ability to understand complex marine ecosystems around the world.

Much like the ocean itself, the scope of Dr. Polovina's innovative scientific research is wide and deep. With over 115 publications to his name, Dr. Polovina has demonstrated incredible breadth in his theoretical, analytical, and direct approaches to tackle some of the most challenging questions about marine ecosystems and the species that inhabit them. For over a decade, he and his team have made extensive use of satellite remotely-sensed oceanographic data to better understand ecosystem dynamics in the central North Pacific. By combining remotely-sensed data with electronic tracking data from large pelagic animals, Dr. Polovina provided remarkable new insights into the migration and forage habitats of loggerhead sea turtles, bigeye tuna, whale sharks, and whales. His research interests also include the applications of remote sensing and ocean circulation models to fisheries issues and, particularly, protected species of the Hawaiian Islands. Moreover, his distinguished career is anchored by early studies on the impact of climate change on marine fisheries as well as more recent discoveries of how global warming may be contributing to the world's expanding biological ocean deserts.

Dr. Polovina has worn many hats in his service to the PICES community. His significant roles have included: co-convening a major session on Pacific climate variability for the 2000 PICES “Beyond El-Niño” Conference, co-guest-editing a PICES special issue on the marine ecosystem impacts of climate variability in 2001, and helping organize the 2002 PICES symposium on “Transitional Areas in the North Pacific”. More recently, he served as a member of the Study Group on Fisheries and Ecosystem Responses to Recent Regime Shifts and was honored to deliver the keynote lecture at PICES-2004 on the applications of electronic tags as oceanographic sensors.

Dr. Polovina's contributions to the international scientific community and award recognition may have thrust him into the limelight, but behind the scenes he is equally engaged in mentoring and training the next generation of scientists. He has served as a strong advocate of his staff scientists' participation in PICES activities, as evident in the contributions of Drs. Michael Seki, Réka Domokos, Evan Howell and Donald Kobayashi at past PICES meetings and, hopefully, for years to come.

Please join me in congratulating Dr. Jeffrey Polovina as the recipient of the 2010 Wooster Award.

A commemorative plaque was presented to Dr. Polovina (a permanent plaque identifying all Wooster Award recipients resides at the PICES Secretariat), who accepted the award with the following remarks:

Thank you, Drs. Wada and Stein. What a surprising and amazing honor! I am especially humbled, given the outstanding scientific talent in the PICES community and that represented by the previous awardees. This award is especially significant to me for several reasons. In the late 1980s, we observed ecosystem changes in the Hawaiian Archipelago and invited Dr. Wooster to Hawaii to help us develop a research program to understand those changes. Thus, Dr. Wooster's guidance helped shape the direction of

much of my subsequent research on decadal variation. Secondly, while much of my research focuses on the subtropical ecosystem south of the PICES geographic area of interest, the PICES community represents my intellectual home. Its approach of addressing large spatial-scale dynamics, physical-biological linkages, and complete ecosystems has always had great appeal to me. Lastly, I would like to acknowledge that my achievements are the result of contributions from many wonderful colleagues, mentors, and co-authors, and I am truly grateful to the collaborations over many years with the talented staff of the Ecosystems and Oceanography Division of the Pacific Islands Fisheries Science Center.



Left photo: Dr. Jeffrey Polovina posing with Dr. John Stein (left, PICES Science Board Chairman) and Dr. Larry Robinson (right, Assistant Secretary of Commerce for Oceans and Atmosphere and Deputy Administrator for the U.S. National Oceanic and Atmospheric Administration) after receiving the 2010 Wooster Award. Right photo: Getting inspiration from a juvenile Hawaiian green sea turtle in preparing for the PICES-2004 keynote lecture on "Send out the turtle fleet"; George Balazs, leader of the Pacific Islands Fisheries Science Center marine turtle research program, holds the turtle.



POMA Award

Progress in many aspects of marine science is based on ocean observations, monitoring, and management and dissemination of data provided by these activities. However, these activities are often behind the scenes and so inconspicuous that they are seldom evaluated appropriately. To remedy this, a PICES Ocean Monitoring Service Award (POMA) was established in 2007 to recognize the sustained accomplishments of those engaged in monitoring, data management, and communication. This award aims to acknowledge organizations, groups and outstanding individuals who have contributed significantly to the advancement of marine science in the North Pacific through long-term ocean monitoring and data management (www.pices.int/awards/POMA_award/POMA_award.aspx). The first award was presented in 2008 to the training ship T/S *Oshoro-maru* of Hokkaido University, Japan, for her long-term ecological monitoring activities in the northern North Pacific, and the 2009 award was given to Dr. Bernard A. Megrey of NOAA-Fisheries' Alaska Fisheries Science Center and Mr. S. Allen Macklin of NOAA's Pacific Marine Environmental Laboratory for their sustained efforts, vision, and leadership in building an

inventory of biophysical data for the North Pacific, and creating the PICES Marine Metadata Federation.

At the presentation ceremony, Dr. Wada introduced the award, and Dr. Stein read the Science Board citation:

It is with great pleasure for me to announce that the 2010 POMA award goes to the Station Papa/Line-P monitoring program.

*The seeds that grew into Line-P were sown during the Second World War. With the increase in the number of trans-Pacific flights, there was a need to monitor marine weather systems in the North Pacific. In 1943, the first vessel to occupy Station Peter, as it was then known, was the U.S. Coast Guard cutter *Haida*, and since then many ships have occupied Line-P and Station Papa. The first hydrographic casts at the station began in 1959, and this was the start of Line-P observations. And for the past 60 years, Ocean Station Papa and Line-P have contributed to the region's only multi-decadal time series of oceanographic conditions for the Northeast Pacific Ocean. Today, the Line-P oceanographic sampling program is comprised of 27 hydrographic stations leading to Station Papa, and*

forms the backbone for cutting-edge, multi-disciplinary research on ocean dynamics, biology and chemistry.

Throughout its history, the rich data provided by this unique monitoring program have given scientists around the world opportunities to revolutionize the field of ocean science and participate in international projects that probe today's most pressing challenges in the physics, biology and chemistry of the ocean—including studies of El Niño, ocean storms, and iron enrichment. The long-term surveys along Line-P have also served as an integral component of global reports on the dynamics and status of our oceans, as well as a training ground for the next generation of oceanographers who have completed (or someday imagine completing) graduate research degrees on Line-P.

The Line-P archive provides a unique picture of the mean state in one part of our global oceans, and has proven critical in developing our ideas of how the ocean evolves. There are far too many people involved in this monitoring program to list. But there are managers who have ensured excellence in ocean sampling along Line-P. In chronological order, they are John P. Tully to whom we owe the original concept, Sus Tabata who years ago showed the power of a long time series, Frank Whitney who managed the program as it expanded to become a training ground for students and PhD theses, and finally, Marie Robert, who is presently juggling the myriad of demands from many universities and other research laboratories.

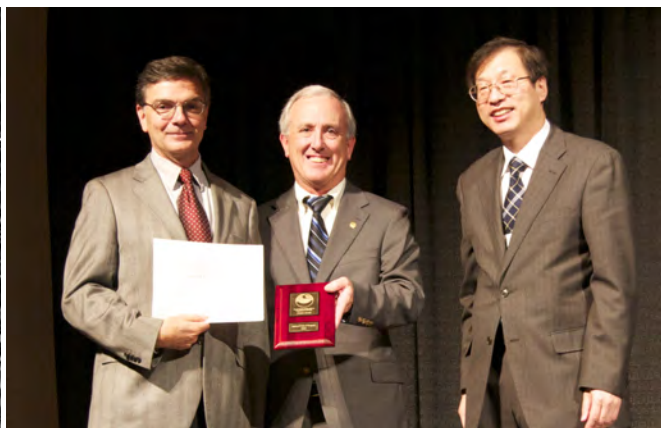
Please join me in congratulating Dr. Bill Crawford, Head of the State of the Ocean section at the Institute of Ocean Sciences at Fisheries and Oceans Canada, who is receiving the 2010 POMA Award on behalf of the thousands of people, past and present, who contributed to the Station Papa/Line-P monitoring program for the past six decades. Their sustained efforts, extraordinary vision, and dedicated leadership have built an invaluable resource that captures

the changing biophysical conditions of the North Pacific and have had a profound impact on the development of ocean science.

Reading of the citation was accompanied by a slide show dedicated to the various people who have contributed to the program for the past six decades. A commemorative plaque (a permanent one identifying all POMA recipients resides at the PICES Secretariat) and a certificate were presented to Dr. William Crawford who accepted the award with the following remarks of appreciation:

I was honoured when asked to accept this award on behalf of Marie Robert and the Station Papa/Line-P monitoring program. My role is mainly administrative, as many of the Line-P scientists are in my section of Fisheries and Oceans Canada. This morning I compiled a list of 36 scientists who stand out among the thousands of persons who contributed to this program over the past years. I admit it is biased to recent years because my knowledge of the start of the program is limited. In mostly chronological order: John Tully, Sus Tabata, Tim Parsons, Robin Lebrasseur, John Strickland, Cary McAllister, John Garrett, Bob Stewart, Cedric Mann, John Davis, C.S. Wong, Paul Harrison, Ken Denman, Peter Nüiler, John Love, Reg Bigham, Bernard Minkley, Laura Richards, Frank Whitney, Tim Soutar, Howard Freeland, Robin Brown, Wendy Richardson, Mike Arychuk, Marie Robert, Ron Bellegay, Janet Barwell-Clarke, Lisa Miller, Keith Johnson, Sophie Johannessen, Angelica Peña, Jim Christian, Hugh MacLean, Doug Anderson, David Mackas, and our data quality queen: Germaine Gatien.

On behalf of Fisheries and Oceans Canada, Marie Robert (godmother), the three godfathers (John Tully, Sus Tabata and Frank Whitney), the list of 36, and the cast of thousands, thank you, PICES, for this great honour.



Left photo: Two early “godfathers” of the Station Papa/Line-P monitoring program, Drs. John P. Tully (front row, with the pipe) and Sus Tabata (front row, right). Right photo: Dr. William Crawford (left) accepting the POMA from Dr. John Stein (center, PICES Science Board Chairman) and Dr. Tokio Wada (right, PICES Chairman).

We congratulate Dr. Jeffrey Polovina, and all those who contributed to the Station Papa/Line-P monitoring program, as recipients of the Wooster and POMA awards for 2010.