2011 PICES Awards

The presentation ceremony for two prestigious PICES awards took place on October 17, 2011, during the Opening Session at the 2011 PICES Annual Meeting in Khabarovsk, Russia.

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 Pearcy (2003), Paul LeBlond (2004), Daniel Ware (2005), Makoto Kashiwai (2006), Kenneth Denman (2007), Charles Miller (2008), Kuh Kim (2009) and Jeffrey Polovina (2010).

The presentation ceremony was conducted by Drs. Lev Bocharov (PICES Chairman) and Sinjae Yoo (PICES Science Board Chairman). Dr. Yoo introduced the award and read the following Science Board citation:

It is with both great sadness and pleasure I announce that the late Dr. Bernard Megrey is the recipient of the 2011 Wooster Award.

As many of you know, Bern passed away suddenly at the age of 60, almost one year ago (October 1, 2010). The Wooster Award is given annually to an individual who has made significant scientific contributions to North Pacific marine science. In particular, the award recognizes sustained excellence in research, teaching, administration or a combination of the three in the area of North Pacific marine science. Special consideration is given to individuals who have worked to integrate knowledge from the disparate disciplines of marine science.

Bern was born in July 1950, in Latrobe, Pennsylvania. Along his educational pathway, he earned an Associate of Science degree (1971) and a Bachelor of Arts degree (1974) from Cleveland State University in Ohio. Bern began his scientific career in 1978, with a Masters in Environmental Science from Miami University in Ohio, and carried out his doctoral research at the University of Washington. During his doctoral research, Bern found a position with the U.S. National Oceanic and Atmospheric Administration (NOAA), working for the National Marine Fisheries Services at the Northwest Fisheries Science Center and Alaska Fisheries Science Center. In 1987, he became a permanent employee of NOAA. There, he worked on recruitment prediction, and his focus broadened from single species to ecosystems. During his time with the Alaska Fisheries Science Center, Bern's career spanned a broad spectrum of activities within his chosen disciplines, including fish population dynamics, stock assessment, fish reproductive biology, ecosystem simulation and climate impacts on marine ecosystem production.

Bern also worked tirelessly for several professional organizations, most notably the American Fisheries Society (AFS), International Council for the Exploration of the Sea (ICES), Global Ocean Ecosystem Dynamics (GLOBEC) and Ecosystem Studies of Sub-Arctic Seas (ESSAS) projects, and PICES.

Held in the highest regard by his colleagues, he never missed a chance to collaborate, share research, or help others break into or advance their careers in fisheries science. During the course of his career, Bern either wrote or contributed to over 80 articles in primary scientific literature.

*In PICES, Bern chaired the Technical Committee on Data Exchange (TCODE) and co-led the MODEL Task Team under the Climate Change and Carrying Capacity (CCCC) Program. The greatest achievement of this Task Team was the development of the NEMURO (**N**orth Pacific **E**cosystem **M**odel for **U**nderstanding **R**egional **O**ceanography) model. Bern made significant contributions to North Pacific marine science, including understanding of how fluctuations in climate may impact marine ecosystem production.*

The American Fisheries Society recognized Bern's lifetime achievement in 2009 with the Oscar Elton Sette Award for sustained excellence in marine fishery biology. PICES honored Bern's leadership in building an inventory of biophysical data for the North Pacific and creating the PICES Marine Metadata Federation with the 2009 PICES Ocean Monitoring Service Award. In 2011, NOAA awarded him the NOAA Distinguished Career Award for lifetime contributions to NOAA's fishery management.

Bern was highly regarded regionally, nationally and internationally in the field of marine fishery science professionals. His wife, Ronnette, and daughter, Sarah, are

here today to accept the award, and we welcome them to the Russian Federation, to Khabarovsk, to PICES, and to this meeting where we can honor Bern's memory.

Reading of the citation by Dr. Yoo was accompanied by a slide show dedicated to Dr. Megrey (see http://www.pices.int/Wooster_Award/Wooster_recipients/2011_Megrey/2011-Wooster-Award-Megrey.pdf). A commemorative plaque was presented to Dr. Megrey's wife, Mrs. Ronnette Megrey, and his daughter, Sarah (a permanent plaque identifying all recipients of the Wooster Award resides at the PICES Secretariat). After the Annual Meeting, Mrs. Megrey sent the following note to the PICES Secretariat:

"*Our children, Sarah, Nick and Chris, and I would like to thank PICES for honoring Bern with this posthumous award. It is with great appreciation and gratitude that Bern's many friends and colleagues keep his memory alive and honor the work that he performed over his 30+ year career. We are so very happy, and Bern would be touched, that several early career scientists were able to travel to Khabarovsk for this meeting using the Dr. Bernard A. Megrey Fund established by Dr. Megrey's family and friends to support participation of graduate students and early career scientists in PICES Annual Meetings and conferences co-sponsored by the Organization.*"

*Left photo: Dr. Bernard Megrey (left) posing with some members of the NEMURO (**N**orth Pacific **E**cosystem **M**odel for **U**nderstanding **R**egional **O**ceanography) team. Right photo: Dr. Bernard Megrey (left) and representatives of the Russian (Dr. Igor Shevchenko), Canadian (Mr. Robin Brown) and Japanese (Dr. Toru Suzuki) Metadata Federation Project teams with Dr. John Stein (PICES Science Board Chairman) and Dr. Tokio Wada (PICES Chairman) at the 2009 POMA Award presentation ceremony.*

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 or outstanding individuals who have contributed significantly to the advancement of marine science in the North Pacific through long-term ocean monitoring and data management (http://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. In 2009, the award was given to Dr. Bernard Megrey of NOAA's Alaska Fisheries Science Center and Mr. 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. The Station P/Line-P monitoring program that has contributed to the Northeast Pacific's only multi-decadal time series of oceanographic conditions, was the recipient of the award in 2010.

Dr. Yoo introduced the award and read the following Science Board citation:

*Long-term monitoring observations are particularly critical to detecting and understanding ecosystem changes. The PICES Ocean Monitoring Service Award (POMA) was established to acknowledge monitoring and data management activities that contribute to the progress of marine science in the North Pacific. It is my great pleasure to announce that the 2011 POMA award goes to the NFRDI (National Fisheries Research and Development Institute of Korea) **N**etwork of **S**erial Oceanographic **O**bservations (NSO).*

Since the foundation of the Fisheries Experimental Station in 1921, the predecessor of NFRDI, NSO has been carried out for the purpose of monitoring climate variability and oceanographic conditions, and also for collecting information on fishing grounds and anthropogenic effects in Korean waters. The unique data and information collected by the observations provide the basis for assessing the status of the ecosystem and managing fisheries in the seas around the Korean Peninsula. Accumulated data also have enabled

studies of long-term changes in the region. NSO has been one of the key monitoring systems in the marginal seas of the Northwest Pacific and is a good example of long-term oceanographic monitoring in the world.

In the beginning of NSO, 6 observation lines were surveyed occasionally from 2 to 6 times a year. In 1935, 14 observation lines covered the entire seas adjacent to Korea and expanded up to 100 miles from the coast. Among the lines at that time, 4 lines were located in North Korean waters. Oceanographic data collected in North Korean waters, which are hardly obtainable nowadays, were published in the book form of oceanographic charts. The Korea Oceanographic Data Center (KODC) operated by NFRDI keeps these precious old books. In 1961, NSO was reorganized for the Cooperative Study of the Kuroshio project to a bimonthly surveyed grid, with 175 stations from 22 observation lines. The present-day grid includes 196 stations from 25 lines around the Korean Peninsula and in the northern East China Sea surveyed from 4 to 6 times per year.

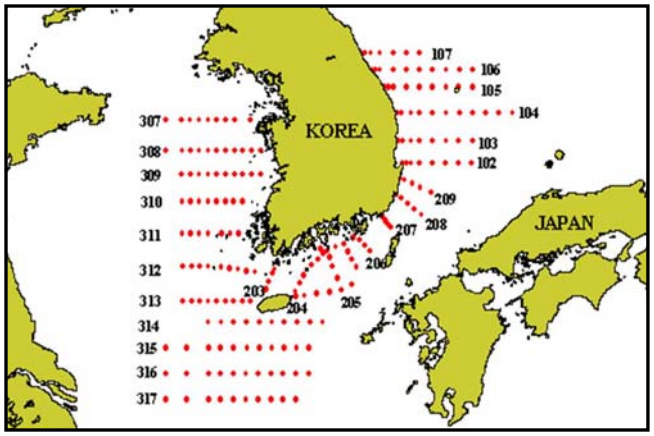

*Fig. 1 The current grid for the Korean **N**etwork of **S**erial Oceanographic **O**bservations (NSO).*

NSO has guided the Korean oceanographic community to modernization of oceanographic equipment and standardization of seawater analysis methods. NFRDI has been provided a huge amount of oceanographic data and information obtained by NSO for domestic and international users in many ways. For example, the "annual reports of NSO" have been published every year since 1952. They include the data on water temperature, salinity, dissolved oxygen, nutrients, zooplankton, and meteorological variables. Statistical analysis of the NSO data has been provided intermittently by the "Oceanographic handbook of the neighboring seas of Korea". NFRDI has sent the NSO data to up to 200 institutes in the world, and those data have been used for various research. The vertical temperature and salinity profiles from ship observations are prepared and released within 2 days of observation time. The NSO data are also released at the KODC website. Near real-time ocean bulletins for several serial lines have been released at the NFRDI website. The data can also be used for monthly ocean forecasts, providing simple statistical information. NFRDI is now planning a real-time/near-real time automated transmission system for oceanographic data to be used for ocean forecast modeling. The accomplishments of NSO are so numerous that we cannot mention all of them here. Many students and researchers have used the NSO data for academic purposes, and the research results are utilized for marine and fisheries policy issues by policy makers. Furthermore, the long-term NSO data have expedited climate research, providing data with clear signals of regime shifts and warming in the Northwest Pacific. In addition, NSO has supported domestic and international researchers to share NSO data and gives an opportunity of boarding its research vessels.

Please join me in congratulating Dr. Yangho Choi, NFRDI senior researcher, who is receiving the 2011 POMA Award on behalf of the hundreds of people, past and present, who contributed to the Korean Network of Serial Oceanographic Observations over the past nine decades.

Dr. Yangho Choi (left) accepting the POMA Award from Dr. Lev Bocharov (PICES Chairman).

Reading of the citation was accompanied by a slide show dedicated to the NFRDI Network (see http://www.pices.int/awards/ POMA_award/2011-POMA/2011-POMA.pdf). A commemorative plaque (a permanent plaque identifying all recipients of POMA resides at the PICES Secretariat) was presented to Dr. Choi who accepted the award with the following remarks of appreciation:

"*It is a great honor for me to have a chance to accept this award on behalf of the Korean **N**etwork of **S**erial Oceanographic **O**bservations (NSO). First of all, I would like to thank PICES and its MONITOR Committee and Technical Committee on Data Exchange for selecting our Network for this year's PICES Ocean Monitoring Service Award. As you know, our Network has a very long history–more than 90 years. I am not sure that this could be achieved without any contributions and sacrifices. On behalf of the NSO Monitoring Group, I would like to thank the hundreds of people, past and present, who contributed to this monitoring program over the past 90 years. I am confident that every member of the NSO Monitoring Group will work hard to serve the best data to you all. Thank you very much.*"