2006 Wooster Award

The Wooster Award presentation ceremony took place on October 16, 2006, during the Opening Session of the PICES Fifteenth Annual Meeting in Yokohama, Japan. Dr. Vera Alexander, PICES Chairman, and Dr. Kuh Kim, Science Board Chairman, conducted the ceremony. Dr. Kuh Kim announced that **Dr. Makoto Kashiwai (Japan)** was the recipient of the 2006 Wooster Award and quoted the following Science Board citation (reading of the Science Board citation was accompanied by a special slide show dedicated to Dr. Kashiwai):

In 2000, PICES established an award in honor of Dr. Warren S. Wooster, the principal founder and first Chairman of PICES, and world-renowned researcher and statesman in the area of climate variability and fisheries production. The award is to be given annually to an individual who has made significant scientific contributions to North Pacific marine science; has achieved sustained excellence in research, teaching, administration or a combination of these in the area of the North Pacific; has worked to integrate the various disciplines of the marine sciences; and preferably someone who is or had been actively involved in PICES activities.

Prior recipients of the Wooster Award are Prof. Michael M. Mullin (2001), Prof. Yutaka Nagata (2002), Prof. William Pearcy (2003), Prof. Paul H. LeBlond (2004), and Dr. Daniel Ware (2005). Today, it is with great pleasure that I announce the Warren S. Wooster Award winner for 2006. The Wooster Award for 2006 is being given to Dr. Makoto Kashiwai, a nationally and internationally distinguished interdisciplinary ocean scientist.

Dr. Kashiwai has authored or co-authored more than 20 primary journal articles, book chapters or review papers covering several disciplines that include fine-scale coastal hydrodynamics, biological production and fish population dynamics, and climate-scale ocean variability. His early career was with the Faculty of Fisheries at Kyoto University, where his research used hydraulic model experiments and theory to study tidal exchange, residual circulation and tidal vortices in Kumihama Bay. While in Kyoto, he also investigated the formation of the anoxic layers of water in Kumihama Bay using field observations, and he contributed to the development of a continuous fish egg sampler, which was used in interdisciplinary studies of the microdistribution of fish eggs, larvae and plankton and its relation to ocean microstructure.

In 1986, Dr. Kashiwai moved to the Hokkaido National Fisheries Research Institute where he worked as the Head of the Physical Oceanography Section, and later as the Director of the Fisheries Oceanography Division until his retirement in 2001. During this period, he conducted a series of studies on the oceanographic structure and variability of the Oyashio region and its ecological influences. Among other observations obtained at this time, Dr. Kashiwai began routine physical and ecological observations of the Oyashio region along the "A-Line". This line is now an important time series, which continues today, and which has contributed greatly to the understanding of seasonal to decadal variability of the Oyashio Region. Dr. Kashiwai, with other colleagues, also initiated studies of the relationships between oceanographic variability and fish population dynamics of Japanese sardine and walleye pollock in the Oyashio. In 1989, he organized a special session at an international symposium on "The Okhotsk Sea and sea ice", where the results of the Oyashio project were presented. This symposium marked Makoto's first appearance on the international stage. At the symposium, he met Prof. Yutaka Nagata and Dr. Daniel Ware (both previous Wooster Award winners), and those meetings led him into ecosystem modeling in the Oyashio region and to PICES. Later, Makoto and his Japanese colleagues conducted comparative studies of the La Perouse, Oyashio and Labrador ecosystems under a Japan/Canada Science and Technology Exchange program with Canadian scientists from the Department of Fisheries and Oceans. As part of this work, ecosystem models were developed to compare the impact of interannual and decadal ocean climate variations on lower trophic levels and fish population dynamics between western and eastern boundary current regions.

Dr. Kashiwai has been generous in serving the ocean science community at both the national and international levels. He served as a member on several committees of the Japanese Society of Fisheries Oceanography, and later as the Vice-President of that society. OK, but what has he done for PICES, you wonder. Well, his service to PICES has been also extensive and in many roles. He was a member of PICES' Working Group 1 on the Okhotsk Sea and Oyashio Region. Japan offered to host the PICES Third Annual Meeting in Nemuro in 1994. Makoto was appointed the main local coordinator of the meeting. On October 5th, 10 days before the start of the Annual Meeting, an 8.1-magnitude earthquake occurred in the southern

Kurils and northern Hokkaido. The arranged venue for the PICES meeting was severely damaged and unusable. Makoto took the lead in arranging alternate facilities and preparing everything from scratch for the meeting, which was finally held primarily in the Nemuro-city library. At the same meeting, Dr. Kashiwai convened a PICES-GLOBEC workshop and was appointed the Co-Chairman of the PICES-GLOBEC initiative on Climate Change and Carrying Capacity (CCCC). He devoted significant time toward getting the CCCC Program up and running, establishing task teams, and contributing scientifically to the MODEL Task Team. At PICES IV in 1995, he succeeded his friend and colleague, Dr. Daniel Ware, as the Chairman of the Science Board of PICES. His term as the Science Board Chairman concluded in 1998, and that same year, the Japanese Government appointed him as national delegate to PICES. Thus, in a few short years, he had served as Co-Chairman of the first PICES scientific program, as Science Board Chairman, and as a national delegate on Governing Council. But, that apparently was not enough, for in 2000 he became again the Co-Chairman of the CCCC Program for another three years.

In his recent "retirement" years, Makoto has continued his study of the Oyashio ecosystem, he has coordinated a cooperative study of Nemuro-city and SakhNIRO, Russia, on the larval transport of the Hanasaki crab, and he has been an adjunct professor at the Tokyo University of Agriculture, where he continues to teach fisheries oceanography of the subarctic Pacific to undergraduate and graduate students.

In conclusion, Dr. Makoto Kashiwai is an active leader in fisheries oceanography, on theoretical and observational studies of the structure and variability of the Oyashio, and has contributed greatly to the goal of international cooperation and collaboration on North Pacific Ocean research in general, and through PICES specifically. He is eminently qualified and a worthy recipient of the Wooster Award of PICES, and we are pleased to honor him today with this award.

Dr. Wooster was the Chairman of PICES during the first year when Dr. Kashiwai served as the Science Board Chairman, and they also co-chaired the PICES/GLOBEC CCCC Implementation Panel and developed a special working relationship. Dr. Alexander read the following tribute sent by Dr. Wooster:

It is an honor for me to participate in this award to Makoto Kashiwai, one of the early and most substantial contributors to the scientific programs of PICES. He first made his mark with development of the CCCC Program, Climate Change and Carrying Capacity. While the question was inspired by the threat of saturating the North Pacific with expatriate salmon, its broad scope became clear in Makoto's classic paper on the history of the carrying capacity concept. This demonstrated that carrying capacity was not just an arbitrary and ill-defined constant in a theoretical productivity equation, but was an index of ecosystem productivity and a variable function of environmental change. It made evident, to me at least, that the carrying capacity for a specific population, for example that of Steller sea lions, could change with the climate as did the availability of suitable food. The development of this program, to which Makoto has made major contributions, has been fundamental towards achieving the scientific goals of PICES.

Of course, as the Science Board makes clear in its citation, Makoto has been involved in most scientific activities of PICES, so perhaps that which I have emphasized is not the most significant. But it has certainly clarified the way I look at the effects of climate variations on marine ecosystems, so perhaps the education of this oceanographer at least is worth recognizing. In my view the case for presenting this award to Makoto Kashiwai is crystal clear.

Dr. Alexander presented a commemorative plaque to Dr. Kashiwai (a permanent plaque identifying Wooster Award winners resides at the PICES Secretariat in Sidney, British Columbia, Canada), who accepted the award with the following remarks:

Thank you, Vera. Thank you, Dr. Kim. This is the greatest honour of my life.

When I heard from my old PICES friends that they were planning to nominate me as a candidate for the PICES Wooster Award of this year, I felt a strong hesitation, because I do not feel that I am a great professor or excellent scientist as the previous recipients. But they told me that the major reason for my nomination is that I am one of the first generation PICES scientists that is brought up by PICES and helped to shape the Organization today. I could not deny that and so I accepted the nomination, which will be a strong encouragement for present and future PICES scientists, especially from non-English-speaking countries.

I can clearly remember the words of Dr. Warren Wooster, back in 1995, when I hesitated to accept the position of Science Board Chairman because of my insufficient English speaking ability. Warren said, "My expectation is not in your English speaking ability". I thought, at that time, that Warren might have found in me some possible capability to cope with the role of Science Board Chairman. Now I am sure that Warren meant nothing but my incapability in English itself. It was very important for PICES at that time, for any scientist from a non-English-speaking country to sit in a major driving seat of PICES, because, except for 2 member countries in North America, the rest of the 4 member countries on the western side of the Pacific are non-English-speaking countries.

My first project was to compose the Chairman's Handbook. The most important task for me was to incorporate the guideline "Use slow and clear English, not machine-gun talk", which was much help through my PICES days. This might be one of the expectations of Warren. This Handbook was not an instruction booklet made by the Secretariat, but a driving manual for new Chairmen of any subsidiary body of PICES, hoping that PICES can be an organization driven by scientists.

During my Science Board Chairmanship, both PICES and I benefited from the powerful participation of elder and younger colleagues, and it was a truly rich and enjoyable time. Thus, this award is a proof of the achievement by all the PICES scientists who shared my PICES days with me. So, I would like to ask all of the PICES colleagues here to share this honour and happiness with me. Thank you.

Dr. Makoto Kashiwai is congratulated by family and friends at the Welcome Reception: daughter-in-law, son, Makoto, Dr. Vera Alexander, Dr. Tadashi Inada,Christina Chiu, Dr. Tokio Wada and Dr. Alexander Bychkov.

We are now soliciting nominations for the 2007 Wooster Award. Award description and selection criteria can be found on our website at http://www.pices.int/Wooster_Award/default.aspx. The closing date for nominations is April 15, 2007. The award will be presented during the Opening Session of PICES XVI on October 29, 2007, in Victoria, Canada.

Thank you note from the Past-Chairman of PICES

Dr. Vera Alexander has been involved in PICES since the first planning activities in the early 1980s, and served as one of the two national U.S. delegates during the first PICES decade. She was Vice-Chairman of PICES from 1998–2002 and chaired the Organization from 2002–2006. Her second term as PICES Chairman was completed at PICES XV in Yokohama, and she will continue to be on Governing Council as the Past Chairman. Vera's scientific background is in biological oceanography. Recently stepping down as Dean and Professor at the University of Alaska Fairbanks, she is now devoting her time to national and international marine science affairs. In addition to her work with PICES, she is serving as President of the Arctic Research Consortium of the United States and is on the Scientific Steering Committee and the U.S. National Committee for the Census of Marine Life. Vera requested to have the following note to the PICES scientific community in this issue of PICES Press.

PICES XV was my last Annual Meeting as Chairman of the Governing Council. The past four years have been enjoyable, albeit at time stressful, but it has been a tremendous honor to serve this marvelous organization. PICES has made steady progress in contributing to and serving the member nations as well as the North Pacific Ocean science community, and its future is bright. The concept of addressing those scientific issues that can only be approached through multi-national cooperation is being implemented successfully. I was overwhelmed by the generosity of the PICES community in Yokohama. At the Closing Session, I was awarded a beautiful framed very special fossil fish. Also, at the Chairman's Reception I was showered with so many extraordinary gifts from delegations and from others that I was completely unable to thank everyone appropriately! So I am taking this avenue to let you know that I was extremely moved by your support and generosity, and to provide my heartfelt thanks.