

7 Acknowledgements

Numerous colleagues have inadvertently contributed to WG12 over the past several years through timely discussions of fisheries, stock conditions and population dynamics. These discussions have occurred in a wide variety of fishery management meetings as well as the more traditional symposia and workshops referenced above. Understanding gained through participation in these forums and discussions and the importance of continuing them must hence be acknowledged, along with the large contribution of member nations to supporting infrastructure and research. Many important contributions are anonymously placed in the World Wide Web as well and are acknowledged as a rich source of information. We especially thank Susan Ashcroft of the California Department of Fish and Game for providing information on the San Francisco Bay shrimp fishery, and Dr. Jung Hwa Choi, PICES Secretariat, for his assistance in the formatting of this document.

Contributions by non-members also added to the usefulness of our deliberations. We thank: Jan Armstrong for taking excellent notes during our long and very productive meeting in Nemuro; Dr. Jiro Kittaka for allowing us to visit the Tokyo Science University's Nemuro City Fisheries Research Institute, the City of Nemuro and its organising committee for their excellent planning, support and hospitality, The Honorable Oyho-san, Mayor of Nemuro for his personal interest; Dr. P. Livingston for her presentation at Fairbanks concerning the workings of GLOBEC; Dr. M. Kashiwai for his presentation at Fairbanks concerning the general workings of PICES; the Chinese meeting organizers, Qingdao; Jan Haaga of the National Marine fisheries Service Kodiak Laboratory for graphics and plates; Clair Armistead of the Kodiak Laboratory for ARCINFO plots.

7.1 Other matters

The Working Group noted with pleasure that the NAFO/PICES/ICES Symposium "Pandalid Shrimp Fisheries - Science and Management at the Millennium" took place in Dartmouth, Nova

Scotia, September 8-10, 1999, with Jim Boutillier of WG 12 as the PICES Co-convenor. PICES involvement with this workshop had been recommended by WG 12 and we were glad to we could participate in its planning. The last international workshop dealing with Pandalidae was in Iceland in 1993 and the last symposium dealing with pandalid shrimps worldwide was the "International Pandalid Shrimp Symposium" held by University of Alaska Sea Grant in Kodiak, Alaska, in 1979. There were 96 participants in the recent joint symposium including eight invited speakers to four sessions. Sessions included: 1) environmental and trophic considerations, 2) stock assessments, 3) management, and, 4) harvesting and processing. There were 23 oral presentations and 15 posters. The symposium was attended by representatives from 15 nations.

We are glad to note that WG 12 meetings have lead to cooperative Canadian-South Korean projects. Dr. In Ja Yeon worked in Nanaimo with Dr. Glen Jamieson and colleagues during 2000-2001, and Dr. Sung-Yun Hong is spending his 2001/2002 sabbatical in Vancouver and Nanaimo, Canada, with DFO researchers. As a result of contacts made at the working group, a two-year (1999-2000), joint South Korea-Canada collaborative program, involving Dr. Hong, Dr. Ian Perry (DFO, Canada) and Mr. Boutillier was established to develop early life history information on select shrimp and crab species. A South Korean student, Wongyu Park, who completed his M.Sc. under Dr. Hong at Pusan National Fisheries University, has spent a number of months working in Nanaimo describing the early life histories of a number of crustacean species. Larvae of sidestriped shrimp, dock shrimp, bristly crab (*Acantolithodes hispidus*) and a grooved Tanner crab (*Chionoectes tanneri*) were successfully reared and described (manuscripts for primary publication are in preparation). This research will aid studies of shrimp and crab recruitment and abundance fluctuations, as well as help with determining if grooved and benizuwai Tanner crabs represent distinct species or simply separate populations on either side of the North Pacific. This work also laid the foundation for a

Ph.D. study by Mr. Park at the University of Alaska, Juneau, that is now in progress. Part of this work was funded through the PICES Trust Fund.

We thank our Chinese colleagues for introducing us to shrimp aquaculture in China and particularly

for organizing a trip to their experimental station. The extent of aquacultural production was impressive. We note that world-wide aquacultural production has generally been growing at a greater rate than landings from wild stocks in recent years according to FAO Statistics.