Report to PICES from the Scientific Committee on Oceanic Research

SCOR has been working since 1957 to bring together international groups of ocean scientists to plan new research projects and to work together to overcome barriers to ocean science and highlight new research areas. According to SCOR's parent, the International Council for Science (ICSU), "…every oceanographer is familiar with at least some of SCOR's impressive list of accomplishments. This organization has a rich history of successes with working groups that have vetted methods of sample collection and analysis, and brainstormed topics for future research. Well known is the reputation of SCOR for its extensive outreach to scientists, laboratories, and research organizations in the developing world. Over the last 45 years, many developed country oceanographers made their first contacts with developing country scientists through SCOR meetings and reports. Prior to its first major programmatic accomplishment - the Indian Ocean Expedition in the early 1960s - major oceanographic expeditions were largely the works of individual nations or individual laboratories. SCOR, more than any other organization, is responsible for the widespread international cooperation that is characteristic of modern ocean science."

In the past year, SCOR-related projects have produced the following publications:

- From Basin-Scale Meeting funded through IOC: de Young, B., M. Heath, F. Werner, F. Chai, B. Megrey, and P. Monfray. 2004. Challenges of modeling ocean basin ecosystems. *Science* 304:1463-1466.
- From IGBP/SCOR Global Iron Cycle Fast-Track Initiative: Jickells, T.D. et al. 2005. Global iron connections between desert dust, ocean biogeochemistry, and climate. *Science* 308:67-71.
- From SCOR/IOC WG 119 on Quantitative Ecosystem Indicators for Fisheries Management: Daan et al. (eds.). 2005. Quantitative Ecosystem Indicators for Fisheries Management. *ICES Journal of Marine Science* 62:307-614.
- From SCOR/IMAGES WG 113 on Evolution of the Asian Monsoon in Marine Records: Comparison Between Indian and East Indian Subsystems: Wang, P. et al. 2005. Evolution and variability of the Asian monsoon system: State of the art and outstanding issues. *Quaternary Science Reviews* 24:595-629.
- Two publications resulted from the symposium on The Oceans in a High-CO_2 World: Cicerone et al. 2004. The Ocean in a High-CO_2 World. *Oceanography* Magazine 17(3):72-78 and Cicerone et al. 2004. The Ocean in a High CO_2 World. *EOS* 85:351, 353.
- From the Global Ocean Ecosystem Dynamics (GLOBEC) project: Hunt, G.L., Jr and K.F. Drinkwater (Eds.). 2005. *Ecosystem Studies of Sub-Arctic Seas (ESSAS) Science Plan.* GLOBEC Report No.19 and Maury, O. and P. Lehodey (Eds.). 2005. *Climate Impacts on Oceanic TOp Predators (CLIOTOP). Science Plan and Implementation Strategy*. GLOBEC Report No.18.
- From the Global Ecology and Oceanography of Harmful Algal Blooms (GEOHAB) program: GEOHAB. 2005. *Research Plan on HABs in Upwelling Systems*. IOC, Paris.

Other recent news from SCOR is given in SCOR Newsletter #3 (see appended). SCOR will hold its 37th Executive Committee Meeting in Cairns, Queensland, Australia on 29 August-1 September 2005. The meeting will review all ongoing SCOR activities and will also select two new working groups to begin supporting in 2006, out of 6 groups proposed. The 2006 SCOR General Meeting will be held in Concepción, Chile.

SCOR appreciates that continued regional support that PICES contributes to help implement SCOR activities in the North Pacific region. PICES is a major regional participant in the Global Ocean Ecosystem Dynamics (GLOBEC) project, through the PICES/GLOBEC Climate Change and Carrying Capacity (CCCC). PICES also contributes to other SCOR-sponsored international research projects, including the Surface Ocean-Lower Atmosphere Study (SOLAS), the Integrated Marine Biogeochemistry and Ecosystem Research (IMBER), and the Global Ecology and Oceanography of Harmful Algal Blooms Program (GEOHAB).

The International Ocean Carbon Coordinated Project (IOCCP), co-sponsored by SCOR and IOC, is designed to interface with existing regional-scale research and observation groups that have an interest in ocean carbon. IOCCP is working to establish international agreements on observation methods, best practices, data management, and data sharing that will lead to the joint development of global data products and synthesis activities documenting the ocean carbon cycle. PICES, through its Working Groups on *CO_2 in the North Pacific* (WG 13, 1998-2001) and *Biogeochemical data integration and synthesis* (WG 17, 2002-2005), has been long acting as a regional coordinator for these activities. PICES established (in 2005) a Section on *Carbon and Climate*, which should provide clear channels of communication to IOCCP, and to SOLAS and IMBER.

PICES has also helped SCOR with recent SCOR working groups. PICES collaboration with SCOR-IOC Working Group 119 on Quantitative Ecosystem Indicators for Fisheries Management started with PICES' involvement in planning and organizing the International Symposium on "*Quantitative ecosystem indicators for fisheries management*" (March 31-April 3, 2003, in Paris, France). In October 2004, PICES established a new Working Group (WG 19) on *Ecosystem-based management science and its application to the North Pacific*. This Working Group will definitely benefit from activities of SCOR-IOC WG 119. One of the terms of reference for PICES WG 19 directly states "Evaluate the indicators from the 2004 Symposium on "*Quantitative Ecosystem Indicators for Fisheries Management*" for usefulness and application to the North Pacific. A workshop on "Climate variability, zooplankton abundance and distribution – comparative opportunities from the world's oceans" convened during the 3rd PICES/ICES/GLOBEC Zooplankton Production Symposium (May 2003, Gijón, Spain) led to a proposal submitted to SCOR for a Working Group on Global Comparisons of Zooplankton Time Series. This proposal was approved at the 27th SCOR General Meeting in September 2004. PICES strongly supported formation of this Working Group and agreed to provide funding for one additional member from the North Pacific (Dr. Harold P. Batchelder, Oregon State University, U.S.A.) to participate in its activities. Some future meetings of the SCOR Working Group are planned to be held in conjunction with symposia organized by PICES: the symposium on "*Climate variability and ecosystem impacts on the North Pacific: A basin-scale synthesis*" (April 2006) and the 4th International Zooplankton Production Symposium on "*Human and climate forcing of zooplankton populations*" (May 2007).