

## Workshop on NE Pacific Coastal Ecosystems (2008 Call for Salmon Survival Forecasts)

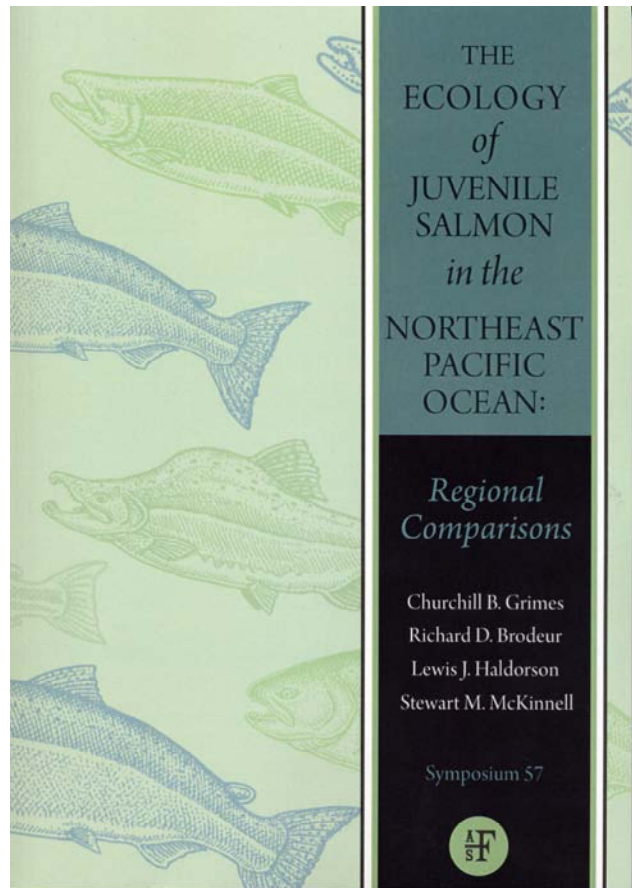
by Marc Trudel and Skip McKinnell

Coastal ocean ecosystem sampling programs in the Northeast Pacific are providing new insights into the dynamics of the region's marine resources. Each year since 1999, a dedicated cadre of scientists has been gathering at one of the coastal laboratories for a couple of days to compare recent observations of the coastal ocean ecosystem, to put these new observations within the context of what has happened in the past, to offer interpretations of changes in pattern or abundance, should they appear, and just recently, to formulate ideas about the likely consequences of what has occurred.

The changes from year to year have not been subtle. The period from late 1988 to the 1998 El Niño is characterized as one of the warmest in historical record of temperature measurements. Declines in abundance of many subarctic species from plankton to seabirds were coincident with this persistent anomaly. Following the 1998 El Niño, coastal ocean temperatures dropped abruptly for several years and subarctic species increased in abundance. Descriptions of these changes, as they occurred, have appeared in previous PICES Press articles (Peterson and McKinnell, 2000; McKinnell, 2001; McKinnell, 2002; Emmett, 2003). The brief period of enhanced subarctic influence along the Oregon, Washington and southern British Columbia coasts ended with the 2002/03 El Niño. Then a 2-year period of extreme surface warmth in the Gulf of Alaska followed. These changes were of special interest to salmon biologists who saw marine survival reach its lowest recorded values for many populations that went to sea during the summer of 2005.

Beginning in 2007, extra time was allocated at our annual workshops to allow the participants an opportunity to provide their expectations of the future consequences for salmon of the current ocean state. While not yet as sophisticated as the ENSO (El Niño Southern Oscillation) forecasting forum, multiple qualitative forecasts of anticipated marine survival were recorded, and the performance of these forecasts will be reviewed in 2008. The advantages of producing multiple forecasts generated independently are similar to the arguments used by the Intergovernmental Panel on Climate Change (IPCC) to garner support for their climate models; greater confidence is placed in the forecasts if a majority of the models indicate the same future. The advantage with a salmon forecasting forum is that these models of nature can be tested annually. In 2005, the group organized a symposium

to focus on regional comparisons of Pacific salmon ecology in the Northeast Pacific at the annual meeting of the American Fisheries Society (AFS) in Anchorage, Alaska. Authors from California to Alaska pooled their data, analysis, interpretation, and wisdom. The resulting collection of papers has just been published as Volume 57 of the AFS Symposium Series, "*The ecology of juvenile salmon in the Northeast Pacific Ocean*".



*New book on regional comparisons of  
salmon ecology in the sea.*

The workshop in 2008 will take place at the Coast Bastion Hotel in Nanaimo, Canada, from April 28–29. While these dates are somewhat later than normal, it will allow the workshop participants an opportunity to attend an Open House at the Pacific Biological Station (PBS) on the preceding Saturday or Sunday. PBS is celebrating its centennial anniversary in 2008.

### Northeast Pacific Coastal Ecosystem Workshop and Forecasting Forum

April 28–29, 2008, Nanaimo, British Columbia, Canada

For information contact: Dr. Marc Trudel (trudelm@pac.dfo-mpo.gc.ca)