

25 Years of PICES:

Celebrating the Past, Imagining the Future

November 1-13, 2016
San Diego, USA

North Pacific Marine
Science Organization
2016 Annual Meeting



25th anniversary of PICES

San Diego, CA

1-13 November 2016

PSG members are invited to submit an abstract to a session entitled "**Understanding our Changing Oceans through Species Distributions and Habitat Models based on Remotely Sensed Data**" with ecologists, oceanographers, and social scientists. Dr. Rob Suryan (Oregon State University) is our invited speaker.

Session co-Chairs: Patrick O'Hara, Yutaka Watanuki, Elliott Hazen, and Sei-Ichi Saitoh

Session Description

Determining marine animal distributions directly through at-sea observations or tracking is costly and logistically challenging. Moreover, even with limitless time and resources, information is limited because many species disperse over long distances including trans-hemispheric migrants. Species Distribution Models (SDMs) provide a tool to estimate present distributions and to project into the future (assuming species-environment relationships remain strong), but these models require substantial environmental data to accurately predict distribution and change. Increasingly, SDM approaches rely on remotely-sensed satellite data as indices of environmental conditions, particularly as proxies for primary and possibly secondary productivity. Satellite datasets are inexpensive to use, widely served, well-documented (i.e., scientifically defensible), and globally synoptic, allowing for easy spatio-temporal comparisons. However, satellite-borne sensors measure characteristics of the ocean at the surface while marine organisms respond to spatial and temporal features of the ocean at depth, which may require more complex approaches. In this session, we will investigate the opportunities and challenges of using satellite-based habitat models and ways we can advance SDMs for a better understanding of our changing oceans and for improving management. In particular, we solicit papers exploring the benefits and tradeoffs of using satellite-borne data to detect mechanisms of distributional and range shifts. This session will provide the PICES community and the FUTURE program with a better sense of the quality of fisheries, seabird, and marine mammal SDM under development in relation to climate change in the North Pacific.

Submission Deadline: Monday 20 June 2016 (likely to be extended to July 1st)

Abstract submission: <http://meetings.pices.int/meetings/annual/2016/pices/submissions>

For more information, please contact:

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PICES meeting website: <http://meetings.pices.int/Meetings/Annual/2016/PICES/Scope>