

**Workshop on**  
***“Introduction to Rapid Assessment Survey methodologies for detecting non-indigenous marine species”***

**Sponsors:**

North Pacific Marine Science Organization (PICES)  
Fisheries Research Agency of Japan  
Northwest Pacific Action Plan (NOWPAP)  
IOC Sub-Commission for the Western Pacific (WESTPAC)

**Venue:**

Seikai National Fisheries Research Institute (Nagasaki, Japan)

**Dates:**

Feb 8-9, 2012

**Convenors:**

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**Participants:**

By invitation only; maximum 20, with emphasis on NE Asian countries

**Background:**

The North Pacific Marine Science Organization (PICES) has been studying non-indigenous marine species in the North Pacific since 2006. The Intergovernmental Oceanographic Commission's Sub-Commission for the Western Pacific (WESTPAC) has been assisting WESTPAC countries in studying marine non-indigenous species since 2009, and non-indigenous species are an area of interest for the Northwest Pacific Action Plan (NOWPAP). Thus, non-indigenous marine species continue to be a priority research topic for each organization and collaborations between PICES, WESTPAC, and NOWPAP will help scientists around the Pacific Ocean to better understand their respective ecosystems and stimulate cooperation to improve scientific knowledge on this important topic.

**Workshop objectives:**

- 1) Provide a contextual perspective on why monitoring for non-indigenous species is important;
- 2) Educate participants in RAS methodologies and demonstrate their application;
- 3) Provide participants of an overview of the PICES WG-21 database and show how all can benefit from such an application.

**Description:**

Rapid Assessment Surveys (RAS) are one approach to quickly characterize the native, non-native and cryptogenic species present in different locations. Although specific methods vary slightly based on habitats being sampled or taxonomic groups being characterized, PICES WG 21 on *Non-indigenous Aquatic Species* ([http://www.pices.int/members/working\\_groups/wg21.aspx](http://www.pices.int/members/working_groups/wg21.aspx)) has developed methodologies that have been used within member countries to identify non-indigenous species in both intertidal and subtidal habitats. Intertidal habitats have been sampled using both a timed walk and quadrat/grab sampling methods, and subtidal habitats have been sampled using (tunicate) collectors, trapping for macrofauna (primarily crabs) and a survey of the fouling communities on floating docks and their associated structure. Species-level identification can be done using traditional morphological taxonomy, but more often it is becoming necessary to confirm these identifications using genetic markers. Given the global nature of biological invasions, it is important to engage those beyond PICES member countries. Thus, this demonstration workshop will provide participants with the tools to conduct surveys in their own

countries and provide a context to why this type of activity is essential and how information on non-native species will be shared among developing and with PICES member countries to benefit all. The assignment of status (native, non-native or cryptogenic) occurs following species identification.

Draft Workshop Agenda:

**Day 1**

- 09:00-09:30 Welcome and Introductions
- 09:30-09:50 Overview PICES
- 9:50-10:10 Overview of WESTPAC
- 10:10-10:30 Overview of NOWPAP
- 10:30-10:50 Coffee Break
- 10:50-12:30 Introduction to Rapid Assessment Surveys (RAS)
- 12:30-14:00 Lunch
- 14:00-17:00 Dock scrapings and laboratory identifications (field trip/hands-on training)
- 18:00 Dinner

**Day 2**

- 9:00-12:30 Mini-Lecture Series
  - Background: Non-indigenous species: Why be concerned?
  - Introduction to PICES WG21 Database
  - Database questions/hands-on use (Webinar) (*if possible*)
  - Non-indigenous species projects around the Pacific
  - Application of genetic techniques to understand invasions
- 12:30-14:00 Lunch
- 14:00-16:00 Discussion: Advancing our understanding of non-indigenous species around the Pacific and potential collaboration among PICES/WESTPAC/NOWPAP
- 16:00 Adjourn