

Practical Workshop on
Production methodologies and measurements for in situ zooplankton
Phase 1

PICES Working Group 37 and Yokohama National University are conducting a 3-day practical workshop (22–24 October, 2018) at Yokohama National University to introduce students and early career scientists to information about several approaches for estimating zooplankton production. Included in the course is both shipboard coastal sampling of zooplankton and instruction in the laboratory on methods of estimating production. This practical workshop is limited to 10 participants due to vessel capacity and classroom facility limitations. The workshop is aimed at early arrivals to the PICES Annual Meeting and is envisioned as the first of two workshops (Phase 2 in 2019, date TBD) on the topic of estimation of zooplankton production.

Scope

Zooplankton production represents a quantitative proxy for the functional response of marine ecosystems to regional and global climate change because material and energy scattering in the lower food web is integrated by zooplankton communities. In the last half century, many methodologies for measuring zooplankton production have been developed as described in the ICES Zooplankton Methodology Manual. Unfortunately, the applications to zooplankton population and community in nature remain limited due to the specific knowledge and handlings for these methodologies. In this workshop, participants will estimate zooplankton growth or production with several methodologies using zooplankton samples and share the practical tricks. We also encourage international network and collaborations on zooplankton production measurements among early career scientists and students from PICES member countries through this workshop.

Sponsors

PICES BIO/Working Group on *Zooplankton Production Methodologies, Applications and Measurements in PICES Regions* (WG 37)
Yokohama National University
Japan Science and Promotion Society

Organizers

Toru Kobari (WG 37)
Akash Sastri (WG 37)

Local Organizing Committee (LOC)

Toru Kobari (Chair: Kagoshima University)
Shinji Shimode (Yokohama National University)
Koichi Ara (Nihon University)

Date

22–24 October, 2018 (Monday to Wednesday, just before the [PICES 2018 Annual Meeting](#))

Venue

Manazuru Marine Center for Environmental Research and Education, Yokohama National University

<http://www.mmcer.ynu.ac.jp/mmcer/top.html>

Maximum number of participants

10 early career scientists or students

Registration

- ✓ All applicants must email a curriculum vita including their name, institutional information, nationality, gender and email address to the Chair of the LOC (kobari@fish.kagoshima-u.ac.jp). Deadline for registration is 15 June 2018. Considering international balance among the PICES member countries, participants will be decided by the LOC on a first-come-first-served basis. All applicants will receive the decision by email from the LOC by 30 June.
- ✓ Note: PICES is not providing financial support for participants to attend the workshop.
- ✓ There is no registration fee, but participants will be required to pay their own meals and transportation costs to the Manazuru Marine Center during the workshop. Accommodation and facility are provided for the participants by grants-in-aid for scientific research from the Japan Science and Promotion Society (17K00522).

Practical Workshop Schedule

October 22 (Monday)

19:00–21:00 Opening ceremony and ice breaker

October 23 (Tuesday)

07:30–08:30 Breakfast (bring own meal)

08:30–09:30 Loading sampling gears and lecture for on-board sampling

09:30–12:00 On-board sampling

12:00–13:00 Lunch (pre-ordered lunch box)

13:00–15:00 Laboratory work

Sorting for egg production method (Dr. Shimode)

15:00–15:30 Coffee break

15:30–17:30 Laboratory work

Imaging for live zooplankton (TBA)

18:00–19:00 Dinner (make own meals)

19:00–21:00 Night session

October 24 (Wednesday)

07:30–08:30 Breakfast (bring own meals before coming)

08:30–12:00 Laboratory work

Counting eggs and estimating egg production (Dr. Shimode)

12:00–13:00 Lunch (pre-ordered lunch box)

13:00–15:00 Laboratory work

Application of empirical models to in situ zooplankton (Dr. Ara)

15:00–15:30 Closing ceremony

15:30 Break up

Note

- ✓ Participants should bring the following items:
 - Laptop PC (MS Excel pre-installed)
 - Rain suits, boots and work clothes for onboard sampling (if necessary)
 - Medicine for motion sickness (if necessary)
 - Bath amenity and towel
- ✓ The Chair of the LOC will send an “email” to all participants if this practical workshop is cancelled by severe storms on the day before this workshop (i.e., 21 October, 2018).
- ✓ Participants should bring their own meals for breakfast on Tuesday and Wednesday. The LOC will support all participants on transportation to local shops.
- ✓ All participants will make their own dinner on Tuesday. All participants and the others will pool funds to purchase food, which is cooked in a kitchen.