

## Scope

Zooplankton play a pivotal role in aquatic ecosystems and global biogeochemical cycles. They function as prey for economically important fish, grazers of primary production, and drivers of carbon and nutrient cycles. Their population and community dynamics, including their growth, mortality, distribution, and diversity, structure the ecosystem. At the same time, a changing environment influences their dynamics. Climate change is profoundly impacting marine ecosystems through changes in zooplankton. A combination of new technologies and techniques, together with classical *in situ* and laboratory studies, is required to understand the changing ecosystems. In response to the need to understand zooplankton dynamics, their sensitivity to change, and the resultant effects on ecosystems, ICES and PICES are holding the 5<sup>th</sup> International Zooplankton Production Symposium as a forum to discuss zooplankton and their role in the global ecosystem.

## Outcome

Selected papers (oral and poster) from the symposium will be included in a special issue of the *ICES Journal of Marine Science* ([www.ices.dk/products/icesjournal.asp](http://www.ices.dk/products/icesjournal.asp)) scheduled for publication in 2012.

## Structure and Scientific Program

A 5-day symposium will consist of:

- › Plenary sessions in the morning of Day 1 (to introduce session themes) and in the afternoon of Day 5 (to summarize results and provide a wrap-up of the symposium);
- › Two parallel theme sessions in the afternoon of Day 1, all of Day 2, and in the mornings of Days 4 and 5;
- › Workshops all of Day 3.

Scientific sessions will include invited and contributed papers. Contributed papers will be selected for oral and poster presentation.

Posters will be on display for the duration of the symposium. Evening poster sessions/receptions will take place on Days 2 and 3. Poster presenters are expected to be available to answer questions. All coffee breaks and receptions will be held in the poster area to maximize opportunities to view the contributions and to interact with the presenters.

## Social Events

- › Welcome Reception on Day 1.
- › Evening poster sessions/receptions on Days 2 and 3.
- › Afternoon sightseeing followed by a symposium dinner on Day 4.

## Selected Themes

A core set of themes for sessions and workshops was identified by the Scientific Steering Committee:

### Sessions

- › Effects of climate variability on secondary production and community structure
- › Ecological interactions: links to upper and lower trophic levels
- › Zooplankton life histories: spatial connectivity, dormancy, and life cycle closure
- › Small scale processes and patterns
- › Zooplankton in upwelling and coastal systems
- › Zooplankton in polar ecosystems and extreme environments
- › Zooplankton physiology and bioenergetics
- › The role of zooplankton in biogeochemical cycles

### Workshops

- › Zooplankton Individual Based Models
- › Advances in genomic and molecular studies of zooplankton
- › Updates and comparisons of zooplankton time series
- › Impacts of ocean acidification
- › Automated visual plankton identification
- › New technologies

## Additional Themes

The scientific community is invited to propose two more theme sessions or workshops. For those interested in submitting a proposal, please e-mail the PICES Secretariat ([secretariat@pices.int](mailto:secretariat@pices.int)) or fill out the form on the symposium website.

