

Workshop on Synthesis of hydrographic, phytoplankton, microbial plankton and zooplankton time series in the North Atlantic and adjacent seas (WKSERIES)

2012/2/SSGEF16 A Workshop on Synthesis of hydrographic, phytoplankton, microbial plankton and zooplankton time series in the North Atlantic and adjacent seas (WKSERIES), chaired by Lidia Yebra*, Spain, and Alexandra Kraberg*, Germany, will be held at ICES Headquarters, Copenhagen, Denmark, in late 2013 to:

- a) Review plankton and hydrographic time series data in ICES and adjacent areas;
- b) Identify relevant time-series analysis techniques;
- c) Analyse variability and trends in plankton and hydrographic conditions;
- d) Analyse variability and trends in distribution and phenology for the different taxa;
- e) Review trophic interactions amongst taxonomic or functional groups within the time-series;
- f) Discuss pan-regional trends in hydrography, phytoplankton, microbial plankton and zooplankton distribution and timing (seasonality);
- g) Prepare one or more synthesis papers that summarize the state of lower trophic levels and their relationship to hydrography and other environmental properties.

Potential participants: Members of the WGPME and WGZE.

WKSERIES will report by 31 October 2013 (via SSGEF) for the attention of SCICOM.

Supporting information

Priority	The results of the Workshop will provide ICES with synthetic pan-regional view of the relationships between the physical, chemical environment and plankton communities in the context of climate change. The Workshop aims relate to SCICOM Codes 113, 115 and 162. This activity is of high priority and central to ecosystem approaches.
Scientific justification	There is potential for more complex joint analysis of existing time-series data on phytoplankton and other planktonic microbes, zooplankton, hydrography, and climate as summarized in existing ICES Plankton Status Reports time-series data. The Zooplankton and the Phytoplankton and Microbial Plankton Status Reports now cover time-series of 40 and close to 100 sites, respectively, located in Western and Eastern North Atlantic, Nordic, Barents, Baltic, North Sea, Northwestern Iberian, and Mediterranean Seas. Parallel reports on hydrography also exist. Synthesis of these data provides an opportunity to create a more comprehensive examination of long-term plankton community changes, foodweb dynamics/shifts and more precise model parametrizations. An example of similar analysis carried out for seven different subregions of the Baltic Sea (ICES CRR 302) gives an example how the understanding of the ecosystem change due to e.g. climate and anthropogenic impact may benefit from the multiple time-series analyses.
Resource requirements	Resource required to undertake the activities of this group is negligible.
Participants	The Workshop will consist of 10-20 participants (WGPME and WGZE members).
Secretariat facilities	Meeting room for Workshop.
Financial	No financial implications.
Linkages to advisory	The Groups involved report to the SSGEF, SCICOM and ACOM. Mainly

committees	WGZE and WGPME provide scientific information on plankton and ecosystems to the SSICC and welcome input from other committees, working/ study groups etc.
Linkages to other committees or groups	Any and all expert groups interested in marine ecosystem monitoring and assessments (e.g. WGOH, WGNARS), modelling and/or plankton studies, including fish and shellfish life histories and recruitment studies. Strong working links have been developed between WGZE and WGPME, as well as with Mediterranean colleagues (CIESM).
Linkages to other organizations	Links with WGHABD are intended and some contact is maintained. The WGZE input to REGNS is an ongoing effort. The Zooplankton and Phytoplankton and Microbial Plankton Status Reports are of interest and practical use for a wide range of national and international research groups, programs and agencies such as PICES, CIESM, GOOS , and IMBER. Increasingly marine research, marine management and even marine institutes are re-aligning to take an ecosystem view. These linked and collaborative approaches between many working and study groups must be encouraged. IGBP, SCOR, ESF, COML/ CMarZ, and others have research activities meetings etc., of interest and relevant to the activities of the WGZE and WGPME. Contacts are maintained through networking and collaborative activities.