

Theme Session A Incorporating microbial dynamics in studies of shelf ecosystems

Co-Conveners: John Steele (USA) and Franciscus Colijn (Germany)

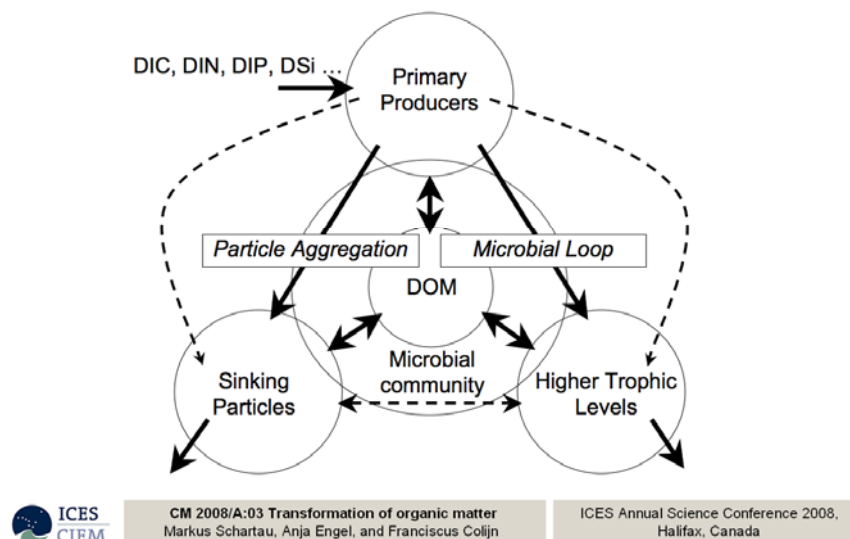
The purpose of Theme Session A was to explore the role of microbial ecology studies in the ICES framework. The response in terms of papers was very good for quality but disappointing in relation to number submitted. Similarly, the attendance at the Session was sparse but we had some very good discussion.

The conclusions of the Conveners were summarized in the following submission to the OCC.

Recommendation for the Oceanography Committee (OCC).

Theme session A, 'Incorporating microbial dynamics in studies of shelf ecosystems' convened by John Steele (US) and Franciscus Colijn (Germany) explored the role of marine microbial ecology in the complexity of marine structure and its importance in ecosystem productivity.

Constraining pathways of organic matter flux -Pathways are linked to quality of DOM and thus to microbial activity-



The session showed that research on microbial dynamics is strongly supported by a community of marine scientists, mainly working outside of ICES.

The importance of understanding the basic principles of lower trophic levels, including the transformation processes of organic matter is underlined by papers in this session. A strong input in this research field comes from bio-molecular and genetic studies, revealing the complexity of the marine microbial communities.

Within ICES (OCC) a still open scientific question is the relationship between primary production and fish production. These relationships are not consistent. A critical question and challenge is to quantify where the losses occur and to what extent they are linked to geographical areas.

Other challenging questions can be deduced from the new ICES Science Plan, such as our changing ocean, and ocean acidification.

The limited size of a microbial community within ICES leads to the following recommendations:

- 1) The expert/working groups WGPBI, WGZE and WGRP are asked to consider building bridges to lower trophic levels by incorporating experience from microbial dynamics.
- 2) To use microbial dynamics as a focus for cooperation with other research organisations such as EUROceans.

There was also a very full and lively discussion of this topic at the second OCC meeting where several speakers re-iterated the need to maintain ICES involvement in this important component of ecosystem studies. Dr William Li of the Bedford Institute offered to continue exploration of the possible range of topics within the ICES community and this offer was warmly welcomed.