



Bachelor or Master student (Biology/Zoology) for the topic

"Ecological succession of Arctic hard bottom communities"

Research Division: Biosciences

The Section Bentho Pelagic Processes offers the theme

"Ecological succession of Arctic hard bottom communities"

for

one Master Thesis or to Bachelor Theses (Biology/Zoology)

Rationale

Knowledge of the long-term establishment of macroepibenthic hard-bottom communities is scarce in Arctic waters. Nevertheless, these are basic parameters of understanding the synecology of the benthic cold-water sub-ecosystem in the course of its maturation after disturbances or when substrate becomes newly available after glacier retreat. Thus, the aim of the offered thesis subject is to describe changes of the species inventory, abundance, and structure including ecological indices of a hard bottom community. The results will also support estimations of carbon and nitrogen cycles of arctic hard bottom communities.

Objectives

- Description of ecological community succession of Arctic hard bottom communities

- Description of biodiversity of establishing Arctic hard bottom communities

Tasks

- Participation in expedition to Spitsbergen (19.08.-19.09.2013)

- Photo documentation and sampling of establishing Arctic hard bottom communities
- Image analyses of pictures taken 6 and 11 (2013) years after substrate exposure
- Species identification

- Multivariate statistics including available data from the first three years of community establishment

- In case the project will be allocated to two Bachelor Theses, the sub-tasks will be discussed with the successful candidates.

Qualification

It is recommended, but not obligatory that you hold a certificate as European Scientific Diver (Forschungstaucher).

If you are interested or if you have any further questions, please contact:

Dr. Jürgen Laudien, Juergen.Laudien(at)awi.de; 0471/4831-1315

Alfred-Wegener-Institut, Helmholtz-Zentrum für Polar- und Meeresforschung, Am Alten Hafen 26, 27568 Bremerhaven