Graduprojekti Phytoplankton community in the Baltic Sea

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Background

There are a lot of data on the Baltic Sea that for most parts sits in some old databases and is not used for anything. In this project we would like to utilize existing data to address some basic biological questions regarding the Baltic Sea.

The project will deal with the phytoplankton community in the Baltic Sea. Phytoplankton are single cell algae that get their energy from photosynthesis. They are the grass of the sea, and the basis of the food web in the Baltic Sea. There are several groups of phytoplankton. Blue-green algae (sinilevä) are one such phytoplankton group, and probably the best known to the general public, due to its toxic bloom and general nuisance to humans during the holiday season.

Questions in brief

1.) We would like to test some specific hypothesis on how the weather patterns and ice conditions affect the spring phytoplankton community.
2.) What effect do the spring phytoplankton community have on the summer community?
3.) Is there a correlation between the amount of blue-green algae between consecutive years, i.e. how critical is the life cycle / recruitment process?

Who we would like

We are searching for a person who wants to do his/her Master of Science thesis in statistics and modelling, and who has an interest in the Baltic Sea and/or environmental issues.

What we offer

We offer access to the Baltic Sea databases and interesting, and environmental relevant, questions. Our aim is that the project would lead new and better understanding of the Baltic Sea ecosystem.

For more information, contact Bob O'Hara (bob.ohara@helsinki.fi) or Kristian Spilling (kristian.spilling@ymparisto.fi).