

A photograph of a rocky shoreline with a large rock in the shallow water of the Baltic Sea. The water is clear and blue, reflecting the sky. The foreground shows a pebbly beach with some driftwood. In the background, there are trees and a clear blue sky.

**WP6 “Climate change impact on ecosystems and biodiversity of the Baltic Sea”**

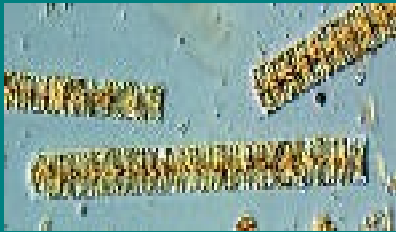
# Tasks:

6a

To forecast the variation of species composition and population dynamics upon the influence of the climate change. To assess the potential influence of the climate change on trophic relationships of the populations; **(Community structure and dynamics);**

# Some ecosystem components:

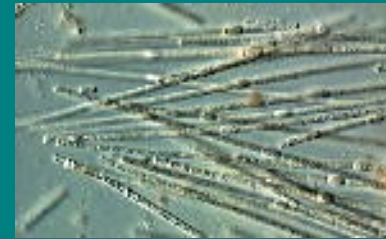
## Phytoplankton



**Achnanthes taeniata**



**Monoraphidium contortum**



**Aphanizomenon flos-aquae**

## Zooplankton



**Eurytemora affinis**



**Acartia bifilosa**



**Bosmina longispina**

# Tasks

## 6b

To develop a long-term prognostic model forecasting fish growth, stock dynamics and structure of fish communities based on climatic and human impact (**Fish community model**);

# Human impact on fish community



# Tasks

**6c**

Provide an advice on development and implementation of policy for sustainable management of marine living resources **(Advice on fisheries policy)**.

# Tasks

## 6d

Provide advice on development and implementation of WFD (coastal and transitional waters), EU maritime policy, EU Marine Strategy Directive and HELCOM Baltic Sea Action Plan (**Advice on environmental policy**).

# Planned outputs

- According to the tasks :
  - ✓ forecasts and models;
  - ✓ advice.
  
- Certainly:
  - ✓ new knowledge;
  - ✓ publications.



# WP participants

Latvian Institute of Aquatic Ecology

Latvian Fish Resources Agency

Institute of Biology, U of Latvia

Faculty of Biology, U of Latvia

# Activities 2006/2007

Analyzing existing material and making  
electronical versions of all data.

Experimental work - estimation of phytoplankton  
community dynamics.

Field work - sampling and analysis for  
assessment of variation in biodiversity, species  
relationships and trophic links.

Development of fish community model.

# Field work



# Activities 2008/2009

- Modelling of impact resulting from the climate change and fluctuation of anthropogenic load on biodiversity and ecosystem productivity - using the results of WP1 and WP5;
- Forecasting dynamics of ecosystem and its components, using the obtained field and experimental data and modelling results;
- Advice, recommendations, publications.

Thank you!

