



**International Polar Year Project: Pan-Arctic Tracking of Belugas (PATOB)
Spring coordination meeting.
L'Océanographique, 7-8 March 2007**

Attendance by uninvited participants will be limited due to meeting space constraints. Please contact Dr. Mads Peter Heide-Jørgensen (mhj@dpc.dk) for further information about the workshop.

Purpose

The beluga whale, an Arctic cetacean with a circumpolar distribution, occurs in habitats ranging from shallow brackish estuaries to deep offshore pack ice. They are an important subsistence species for many Arctic communities, attract great public attention both in aquariums and in their natural surroundings because of their spectacular appearance, and are good indicators of climate change due to their dependence on the timing of ice-formation and recession. Beluga whales are susceptible to changing patterns of production which cause shifts in prey distribution and timing and distribution of sea ice formation. This may result in changes in foraging strategies or increased risk of mortality in ice entrapments. With rapid changes predicted for the Arctic both for ice coverage and temperatures it is prudent to obtain a synoptic snapshot of the pattern and timing of beluga migrations across the Arctic. This project will instrument 100 beluga whales per year over three years in waters around Svalbard, Greenland, Canada, Alaska and Russia. Free ranging beluga whales will be captured and instrumented with miniature satellite transmitters. Transmitters are programmed to last for a year to provide nearly complete coverage of the annual migration. Onboard sensors will also relay data on diving behavior and associated oceanic conditions. The research consortium consists of scientific representatives from all Arctic countries with resident beluga populations. Field campaigns will commence in 2007. Maps of the movements of each population of beluga whales will be displayed and updated daily on a public web site together with background information and photos from field work. The project will train young scientists during field campaigns and analysis. Movement patterns and dive behavior will be compared to remote sensing data on chlorophyll, sea surface temperature and sea ice extent. Longitudinal comparisons between populations occupying different regions and sea ice or production conditions will elucidate temporal and spatial differences in habitat use and the susceptibility of each population to changing Arctic habitats. The project will provide a circumpolar baseline for understanding regional resilience of a high Arctic predator to the impacts of climate change. The results will also be of importance for the local management of beluga whales as a subsistence resource and participation of local hunters will foster cooperation between scientists and natives.

PATOB websites:

<http://nmml.afsc.noaa.gov/CetaceanAssessment/ipyp-patob.html>

<http://classic.ipy.org/development/eoi/proposal-details.php?id=430>

Preliminary agenda

Meeting hours will be from 9.00 to 16.30

1. Opening of the meeting
2. Presentation of participants
3. Adoption of agenda
4. Appointment of rapporteur
5. Status for progress on project development including current plans for activities, need for support, funding obtained and funding pending decisions:
 - Alaska
 - Canada
 - Greenland
 - Svalbard/Norway
 - Western Russia
 - Eastern Russia
6. Possibilities of joint field activities
7. Data management and data sharing
 - Web site with display of tracks
 - Deposition of data
 - Common analysis
 - Publications
8. Choice of instrument and their setup
 - Location data
 - Dive data
 - Oceanographic data
9. Auxiliary studies:
 - Genetic studies
 - Acoustic studies
 - Sampling
 - Health and condition assessment
10. Next meeting