WP3 status as of April 1, 2009 (Brian MacKenzie, DTU-Aqua)

## Main activities:

1. initial discussions regarding data extraction of reproductive volume data from NPZD models

2. data variable selection and configuration/scaling

3. dissemination of concepts and approaches: 1) ICES/Helcom Working Group on Integrated Assessment of the Baltic Sea (WG IAB); 2) future meetings – ICES Annual Science Conference, Berlin, September 2009.

4. initital Ecopath data analyses and model preparations.

5. staffing issues - Uni. Gothenberg, DTU-Aqua

6. acidification and bioclimatic envelope modelling

7. future action priorities for coming weeks and months

Details:

1. Initial discussions regarding data extraction of reproductive volume data from NPZD models. A joint phone meeting with wp1 leader Kari Eilola, Elin Almroth and BRM was held shortly after Eco-support kickoff meeting (Jan. 30) to discuss reproductive volume data derived from NPZD biogeochemical models for the Baltic Sea. These data are needed for both historical hindcasting and validation purposes, and for future projections. Details of how the data are calculated and scaled (spatial, temporal) were discussed and some general aspects related to its influence on cod biology. WP1 and wp2 colleagues will prepare datasets for different combinations of climate and eutrophication in coming months and provide to wp3. Joint papers for publication are planned.

2. WP3 leader has contacted wp participants about data requirements and circulated the template data table prepared at the kickoff meeting for completion. Replies received from BNI, DTU-Aqua, IMR-Sweden, Gothenberg. Consolidated table to be sent to wp1 and wp2 leaders within next 1-2 weeks. Leaders of wp 1, 2 and 3 need to discuss how to progress and coordinate the data compilation, extraction, storage, and formats.

3. BRM presented the project at the ICES/Helcom WGIAB in Rostock during its meeting March 17-21. The focus of the presentation was on wp3 because this wp was most related to the working group's activities and Terms of Reference. BRM also had sub-group discussions with several participating Eco-support colleagues and their representatives of associated institutes (Swedish Bd. of Fisheries) regarding the data requirements for wp3 at the WG meeting, and email contact subsequently. A consolidated table will be sent to wp1 and wp2 leaders within next 1-2 weeks. Leaders of wp 1, 2 and 3 need to discuss how to progress and coordinate the data compilation, extraction, storage, and formats.

BRM also contacted Eco-support coordinator regarding presentation of Eco-support at ICES conference, September, Berlin. Project will submit joint abstract for deadline April 20, 2009; presentation given by BRM in coordinator's absence.

4. BNI and DTU-Aqua colleagues have started to re-structure the Ecopath food web model and have provided a revised a sketch of the model structure. They have also started the calibration of this food web model.

5. Staffing issues.

- DTU-Aqua will have support from two younger scientists (postdocs). Some of our Eco-support funds will be used for these colleagues. They participate already in respectively the ICES WGIAB and WG Baltic Fisheries Assessment (WGBFAS). One colleague has been collaborating with BNI (Thorsten Blenkner) for past 1-2 years on Ecopath model developments for fish population applications.

-Univ. Gothenberg appointed Elin Renborg to their PhD position (Elin started 1st March).

6. Acidification consequences on biota. UG has begun literature search to establish relevant background for Bioclimate Envelope Modelling (plan to begin with *Mytilus edulis* - we appreciate that this isn't a major component of the EwE models to be used in Ecosupport, however *Mytilus* is a major component in benthic-pelagic coupling in the Baltic, and [more importantly] there's a wealth of literature available for it. We also have unpublished data on acidification impacts of key life-cycle components in *Mytilus*, and therefore figure we can use this as a model organism to develop the relevant methodologies before transferring these to key species in the EwE models.

- begun literature / ocean acidification network search to summarise impacts of acidification on key species in EwE models (*Acartia*, sprat, herring, cod).

- begun preliminary experiments on effects of acidification on highly susceptible species in Kattegat.

7. Future action priorities for next weeks and months:

-contact to leaders of wp1 and wp2 regarding data compilation and extraction -submission of abstract to ICES for September conference (deadline April 20).