

## Marine Life Characterization Webinar August 27, 2014; 12:00 – 1:45 pm

RPB: Mel Cote (EPA), Chris Tompsett (Navy), Bob LaBelle (BOEM), Kathleen Leyden (ME)

Ocean Planning Staff: John Weber, Nick Napoli, Katie Lund, Emily Shumchenia

Marine-life Data Analysis Team (MDAT): Patrick Halpin, Jesse Cleary, Corrie Curtice, Jason Roberts (Duke University), Brian Kinlan & Arliss Winship (NOAA NCCOS)

### Welcome / Introductions

Nick Napoli welcomed participants and introduced RPB members, ocean planning staff, and MDAT team members on the phone. Suggestions and opinions for improving any future webinar updates are welcome.

### Marine life webinar introductory presentation

Nick briefly summarized the June 25<sup>th</sup> Natural Resources Workshop (summary available [here](#)) and discussed the role of the expert work groups in the marine life (species and habitats) characterization project. These ~60 marine life experts will inform MDAT's work and help identify future priorities for marine life spatial data products. Each of the marine mammal/turtle, bird, and fish expert work groups held meetings in August focusing on available datasets and focal species. Expert work group meetings will be held again in September as well as every 4-6 weeks through the end of the year. Public meetings will be held in each state in October. There will also be a regional public forum in late October. Each of these meetings will be an opportunity to discuss progress and provide feedback to the RPB in advance of the next RPB meeting on November 13-14. Finally, Nick discussed recent efforts by an RPB subcommittee to refine general options for conducting additional ecological assessments, focusing on identifying important ecological areas and/or measuring ecosystem health.

### Questions

1. *Will tradeoffs and ecosystem services analyses still be considered as options as discussed at the June 25 workshop? What is the public forum?*

The RPB will consider whether to develop specific options for utilizing tradeoff and ecosystem service analyses in ocean planning.

The public forum is an outcome of the June 26<sup>th</sup> RPB meeting. The idea is to host a regional event, in addition to public meetings in each state, where the public can inform RPB deliberations in advance of its next meeting. The RPB originally discussed hosting it the day before the next RPB meeting, but we are now scheduling it a few weeks in advance in order for public input to be reflected in materials in advance of the November RPB meeting.

2. *Will you be considering ecosystem rarity as one of the criteria for identifying ecologically important areas?*

This topic can fit into any one of the three general categories proposed in the presentation.

3. *Are you considering creating a working group to support discussions of important ecological areas?*

We will likely need analytical assistance, possibly through a contract, and work group support. The decision is dependent on the specific options for identifying important ecological areas and conducting other ecological assessments.

### **MDAT presentation**

Pat Halpin from Duke University and PI of the MDAT team, gave a presentation that described the team's structure and goals for the project, as well as a review of discussion topics covered during each of the marine life expert work group meetings. Pat showed a timeline for creating new spatial data products and examples of data and spatial data products that his team already has in-hand and has developed in the past for each marine life component. Pat opened the floor to questions after discussing each marine life component. Pat's and Nick's responses to those questions are listed below.

### **Questions**

1. *Is Bigelow Lab in Maine involved or at least consulted in any way – impressive ocean research facility?*

We have not reached out to Bigelow specifically yet, please send us contact info/suggestions for particular project contacts or datasets.

One participant noted that Bigelow Lab has more scientists focusing on plankton and ocean processes than macro-organisms. They may be especially helpful when considering important ecological areas and measuring ecosystem health.

2. *What is OBIS?*

OBIS is the Ocean Biogeographic Information System, a consortium of institutions that collects and collates data on marine life in a central repository. Duke University manages OBIS-SEAMAP (Spatial Ecological Analysis of Megavertebate Populations), which aggregates spatially-referenced observation data online for marine mammals, sea birds and sea turtles. Visit <http://seamap.env.duke.edu>.

3. *Are you looking at prey species?*

The environmental covariates that the models currently utilize are likely indirect surrogates for prey species (e.g., a geographic location based on temperature, depth or distance from shore is probably where a specific type of prey aggregates). Prey data have been sparse in the past, but by working with Mike Fogarty's group, we have the ability to potentially use fish (prey) data to help predict the distribution and abundance of whales (predators), for example.

4. *For additional ecological assessments/important ecological areas, is the long range goal to 1) use existing models/assessments to put together or generate NE-wide results, 2) based on existing models,*

*develop a new recommended approach or method relevant to NE RPB to use at some point in the future, 3) use methods in #2 and actually generate new results, 4) other?*

The RPB will consider all of these options recognizing the range of effort and complexity associated with each and their fit into the overall planning timeline.

*5. What is the geographic scope of the final products? The spatial extent of all of these working groups appears to include the Mid-Atlantic as well as the Northeast. Will final products include the Mid-Atlantic?*

The project is largely based on existing modeling approaches that were implemented for the entire Atlantic coast. The opportunity here is to understand what outputs will be necessary for ocean planning in the Northeast and what data from the region could be used to make the products more robust. Cross boundary considerations and coordination are extremely important and we have invited several partners from the Mid-Atlantic to inform product development and the geographic extent of final products.

*6. Were there any discussions about the possibility of using non line-transect data, such as opportunistic sightings in developing marine mammals data products?*

There have been a lot of discussions about the use of opportunistic sighting data. The current modeling framework requires observations from structured line transect surveys. The team and work group are considering opportunities to use opportunistic data to supplement or validate model outputs.

*7. Does the biomass map in the presentation include all species?*

No, this map shows total biomass of species captured by the NOAA Northeast Fisheries Science Center trawl survey aggregated over 2007-2011. NEFSC doesn't provide a list of species for this particular map, but the species captured by the trawl survey are listed on their website.

*8. When do we bring in the human elements of EBM, as far as our interactions with these species and where our own predator-prey relationships exist with them?*

The RPB continues to characterize human uses and their relationship to ocean resources. Mike Fogarty's group from NEFSC has worked to understand commercial and recreational fishing activities and the relationship to species distributions. As planning progresses, there will be increased opportunities to consider human use and ocean resource interactions.

*9. Where in the planning timeline do mitigating human factors come in? The overlap with distribution and abundance products is key.*

Refer to answer to Question 8. We will be increasingly considering the interaction between human activities and ocean resources as marine life products are developed over the next 3-9 months.

10. *Have there been discussions about marine life persistence as an additional data layer?*

MDAT is not currently working on a persistence product, but will take into consideration the different definitions and approaches to mapping species persistence. In order to consider persistence, we would have to answer questions about the geographic scope of the time series data.

11. *With regards to data dissemination, to which online portals will the data go? If the NY Geographic Information Gateway were interested in ingesting information from this work, where would we go to get it?*

Referring to our project flow chart, the first stop for the data is a physical database to aggregate products from all the marine life teams. This database will not be publicly released. Hosting, dissemination, and visualization of final products from the database will be considered with representatives from various portals, including the NE Ocean Data Portal, Mid-Atlantic Data Portal, Marine Cadastre, OBIS-SEAMAP, the NY Geographic Information Gateway, and others.