

Project #: B51

Title: BSIERP: Data Management

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Report Period: April 2008 through September 2008

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Lead Author of Report: Kenneth Coyle

Proposed timeline and milestones within report period: Post data templates on web site; post preliminary retrospective data on password protected web site; set up ftp site for data transfers; set up metadata templates; integrate data management web pages with NPRB web site.

Project Summary: The goal of data management is to provide PIs and eventually the public, with a web-based data access system which they can use to download or view data collected by the BEST-BSIERP project. The data system will be set up so the data can be integrated into the Alaska Marine Information System (AMIS), under development by the Alaska Ocean Observing System (AOOS). After the project is done, the data will be delivered to a national data archive.

Progress Summary: The goals outlined above have been met by data management. We expect to begin receiving additional data for posting in November. Delivery dates for data to the data management group are posted on the web site and listed in the table below. Data sets in native format provided by the PIs will be posted on the password-protected Data Portal on the data management web site. Current data on the Data Portal includes retrospective data and material from the 2007 Healy cruise. When the AMIS software is complete, all data will be integrated into the AMIS database management system. The website was set up using javascript and a DHTML client-side which will interact with PHP and Python server scripts, MySQL and PostgreSQL databases, and the previously existing AOOS REST (Representational State Transfer) and SOAP (Simple Object Access Protocol) services when the AMIS system is completely set up.

Lessons learned and project adjustments: It is critical to bring up any problems that may compromise delivery of data or modeling products within the stated time lines at the PI meetings. We have found that problems or requests which can remain unaddressed for weeks or months are usually rapidly resolved when brought up in the PI meetings. In addition, program managers and PIs in BEST-BSIERP who may require data or model products for their ongoing research will be made aware of potential delays, the causes and the solutions being undertaken. Openness in the PI meetings to potential problems and their solutions is critical to the overall integration of the BEST-BSIERP program.

Integration activity: Coyle has been attending the telephone PI conferences and the modeling meetings. This interaction should help us insure that the data required to integrate the modeling and field efforts can be made available to the PIs in accordance with the stated time lines in the PI work plans and aid in identifying and correcting any problems which may compromise the deadlines.

Education and Outreach: We have been working with Carolyn Rosner to insure that our web site is integrated into the NPRB BSIERP web site and that our web page provides easy access to the data.

Next year's Work plan: We are continuing software development to integrate BSIERP data into the AMIS system. We expect to have AMIS functioning with BEST-BSIERP metadata and datasets by January 2009. Note that we will set up a web page at the Data Management site to list our priorities for tasks to complete for data management and estimated completion dates. These priorities will be based on consensus by the PIs at the PI meetings. This should permit all PIs to be aware of priorities for setting up data postings, visualization and access tools, and should aid the PIs in participating in setting the priorities.

Ongoing work for the lifetime of the project will include:

- Systematic integration of BEST-BSIERP datasets and metadata from PIs into the AMIS data management system.
- Enhancements to the AMIS system with feedback from BSIERP PIs to facilitate data queries, data access and visualizations.

The time lines for data delivery are listed below:

<i>What</i>	<i>Who</i>	<i>Start</i>	<i>Other key dates</i>
Generation of the data templates.	BSIERP PIs	Dec 2007	End March 2008
Template for Metadata	Data Management	March 31	
BSIERP projects on AMIS	Data Management	April 15	
Posting Fish stomach data	Data Management	2-6 months after cruise (Sept – Jan,	Data will come from Aydin, B61

		2008)	
Patch dynamic acoustic data will be posted	Data Management	June, 2009	Data from Benoit, B67
Bird colony vital rates will be posted	Data Management	October 2008	From Byrd, B65
Fish distribution data (not sure we will get anything)	Data Management	No date given	Lorenzo, B60
Oceanography data	Data Management	Now to Sept 2008	Data is coming from Cokelet, B62
Local and traditional knowledge	Data Management	No date given for sending data; timing may depend on release by village councils	Data from Fall, B69
Post Baleen Whale distributions	Data Management	Jan 15, 2009	Data from Friday, B66
Epibenthic video data	Data Management	No date given	Data from Grebmeier, B57
Ground fish bioenergetics	Data Management	March-June 2009	Data from Heintz, B54
Ichthyoplankton survey	Data Management	December 2009	Data from Hillgruber, B53
Forage fish trawl data	Data Management	January 2009	Data from Hollowed, B62
Forage fish acoustic data	Data Management	January – June 2009	Data from Hollowed, B62
Forage fish biophysical data	Data Management	June 2009	Data from Hollowed, B62
Acoustic data	Data Management	December 2008	Delivery of data under discussion, possible formats suggested, Horn, B59
TLK data	Data Management	After community approval	See Huntington timeline, B69
Seabird telemetry	Data Management	January 2009	Data from Irons, B63
Benthic patch data	Data Management	November 2008	Data from Jay, B67
Bird Diet	Data Management	March 2009	Data from Kitasky, B67
Bird Behavior	Data Management	November 2008	Data from Kitasky, B67
Bird Physiology	Data Management	January 2009	Data from Kitasky, B67
Bird CTD data	Data	December 2008	Data from Kitasky,

	Management		B67
Seabird distribution	Data Management	November 2008 to March 2009	Data from Kuletz, B64
POC Export	Data Management	July 2009	Data from Bradley, B56
Fish, Bird, Mammal Retrospective	Data Management	May 2008	Data from Mueter, B68
Local & Traditional Knowledge	Data Management	After community approval	Data from Sepez, B69
Bird & mammal forage	Data Management	Delivery date not given, 2011 suggested	Data from Sigler, B92
Biophysical mooring, physics	Data Management	January 2009	Data from Stabeno, B52
Biophysical mooring, chlorophyll	Data Management	March 2009	Data from Stabeno, B52
Biophysical mooring, zooplankton acoustics	Data Management	September 2009	Data from Stabeno, B52
Biophysical mooring, zooplankton samples	Data Management	September 2010	Data from Stabeno, B52
Fur seal forage	Data Management	June 2009	Data from Trites, B67
Management strategy evaluation model	Data Management	After Aydin submits data, Aydin will provide templates in March	Data from Punt, B73
Integrated economic-ecological models of pollock and cod	Data Management	Requires coordination with Aydin modeling	Data template received.