

In accordance with new Data Management regulations within the Biological Oceanography Program, the following amendments to the original and previously approved Data Management Plan for Nicole Misarti (Award # 1263848, University of Alaska Fairbanks) and Bruce Finney (Award # 1155426, Idaho State University) as collaborative PI's.

Original Approved 2011 Data Management Plan

Several types of data and physical samples will be created during this project. First, we will be collecting fragments of shell from marine invertebrates and bone from sea otters from archaeological samples. All samples from archaeological and historical sea otter bones will be collected from already curated collections at various museums. Modern invertebrates will be collected from field sites in the Kodiak Archipelago and frozen. Both the modern and archaeological samples will be labeled and stored at CAMAS at ISU. A portion of each sample will be used for collagen extraction and isotopic analysis. Collagen will be labeled and stored in freezers at CAMAS. The resulting data on isotopic ratios will be stored on simple spreadsheets and shared among all of the members of the project. Metadata about the isotope values will be created according to the specifications of the Ecological Metadata Language (<http://knb.ecoinformatics.org/software/eml/>). The metadata, along with an abstract and keywords, will be available to the public through the Knowledge Network for Biocomplexity (KNB; <http://knb.ecoinformatics.org>).

Within three years following the completion of the project, all samples and data will be made publicly available. Frozen modern organisms and fragments of faunal remains will continue to be housed at CAMAS and provided to researchers by request for up to 2 years. Raw data will be shared with other researchers by including it along with the metadata served by KNB, or as supplementary information in peer-reviewed papers. Raw data will also be posted on the Oregon State University, College of Oceanic and Atmospheric Research FTP site, along with PDF versions of public lectures and conference presentations. This FTP site is accessible by the public. Copies of all outcomes will be provided to the library at the Alutiiq Museum as well. All of the data and presentations will be accessible to allow for the redistribution (commercial and non-commercial) and production of derivatives from our work (the equivalent of the Creative Commons' BY-SA license).

Revised 2014 Data Management Plan

Several types of data and physical samples will be created during this project. First, we will be sampling bone from sea otter remains from archaeological sites. All samples from archaeological and historical sea otter bones will be collected from already curated collections at various museums. These collections already belong to museums, in this case the University of

Alaska Museum of the North and the Burke Museum at University of Washington. We will be sampling from these collections and once isotope data is generated we will keep the extracted collagen in freezers at the University of Alaska Fairbanks for a period of three (3) years, which in general is the maximum life-span of collagen for analytical purposes. Both museums require that the actual bone samples be returned to their care and that data from their collection be added to their museum data base.

Modern invertebrates will be collected from field sites in the Kodiak Archipelago in summers 2012 and 2013. All samples will be immediately labeled and frozen. These invertebrates will be dissected and subsampled for isotope analysis. Any remaining portion will be stored in freezers at the University of Alaska Fairbanks for five (5) years and made available to other researchers upon request.

The resulting data on isotopic ratios for both bone collagen and invertebrate tissues will be stored on simple spreadsheets and shared among all of the members of the project. Metadata about the isotope values will be created according to the specifications of the Ecological Metadata Language. The metadata will be archived with BCO-DMO. The 2012 intertidal metadata will be archived by Fall of 2014 and 2013 intertidal metadata will be archived by Spring 2015.

The raw isotope data for all samples will be added to the metadata archived with BCO-DMO within two (2) years of the end of funding for this project. It will also be available via supplemental information in any peer-reviewed articles. Archaeological and historic sea otter isotope data will additionally be made available through either the Burke Museum or the Museum of the North as is required by agreements with both museums. Copies of all outcomes (papers, presentations, posters etc) will be provided to the library at the Alutiiq Museum, per their request, as well. All of the data and presentations will be accessible to allow for the redistribution (commercial and non-commercial) and production of derivatives from our work (the equivalent of the Creative Commons' BY-SA license).

Summary: Inventory of data types and projected schedule for public data sharing

Metadata on 2012 field samples (type, location, etc.)	Dec. 2014
Metadata on 2013 field samples (type, location, etc.)	May. 2015
Metadata on archaeological sea otter samples (type, location, date; note- sample acquisition still in progress)	May 2015
Stable isotope data on invertebrate and otter samples	May 2017