## ENVIRONMENTAL STUDIES PROGRAM: ONGOING STUDIES

**Region:** National

**Planning Area(s):** All

**Title:** Archiving of Outer Continental Shelf Invertebrates by the

**Smithsonian Institution** 

**BOEM Information Need(s) to be Addressed:** Continued archiving and long-term

reliable curating of the vast collections of invertebrate specimens acquired through BOEM-sponsored projects are essential elements of biological quality assurance. This effort provides BOEM with the scientific credibility important to stakeholders' acceptance of decision-making in the Offshore Energy and Minerals Program. This BOEM-funded archiving program started in 1979 has been characterized as an important example for the preservation of Federally-funded data collections and specifically highlighted as a significant component of base line information with regard to the 2010 Gulf oil spill.

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**Total Cost:** \$1,095,123 **Period of Performance:** FY 2009-2014

**Conducting Organization:** Smithsonian National Museum of natural History

**BOEM Contact:** Gregory Boland

## **Description:**

Background: The BOEM conducts many biological projects in support of decision-making related to the development of offshore energy and mineral resources. These projects frequently result in large collections of invertebrate specimens. Taxonomy is a critical component to the ecological interpretation of biological data. Archiving of the collections provides for taxonomic verification and for the future use of the collections. The Smithsonian Institution's National Museum of Natural History (NMNH) is the Nation's most reliable and respected repository for biological collections. Since 1979 invertebrate specimens collected through the BOEM Environmental Studies Program have been carefully maintained through the NMNH's archiving standards and made available to taxonomists around the world. During the period 2004-2008, this project was supported by USGS funds that are available for BOEM information needs. In 2007 BOEM and USGS agreed that BOEM would continue support of this project beginning in FY 2009 and the USGS funds previously used to support NMNH would be directed to other BOEM information needs that could be addressed by in-house USGS scientists.

<u>Objectives</u>: An objective of this study is to provide quality assurance for biological data generated through the BOEM Environmental Studies Program. Meeting this objective serves to enhance the credibility of offshore energy and mineral resources decision-making.

Methods: To accomplish the objectives of this project, specifications for the handling, storage, and shipping of invertebrate specimens collected through BOEM environmental studies are included in applicable contracts. These specifications were developed in coordination with the Smithsonian Institution to provide contractors with information required to ensure that the collected specimens are delivered to the NMNH in the best possible condition. The Smithsonian accepts the specimens, checks the condition of the samples and taxonomic identification, and makes them part of the national collections. The collections are then maintained according to the strict guidelines of the NMNH and are made available to other researchers. Semi-annual reports to BOEM provide updates on the numbers of specimens accessioned into the NMNH collections, those remaining to be accessioned, and those on loan to taxonomists around the world. To date, over 260 species new to science have been identified in the BOEM collections.

<u>Current Status</u>: The current contract began in 2009 and is in its 3<sup>rd</sup> of 5 contract years. A new Oregon/northern California cooperative alternate energy study has initiated a process to transfer samples from the NE Pacific to the BOEM invertebrate archiving program for the first time. The most recent semi-annual report documented a total of 4,400 sample lots being cataloged and curated into the NMNH collections between June 1 and December 1, 2011.

**Revised Date:** January 2012

**ESPIS** - All *completed* ESP Studies:

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