



## **Evolving the BCO-DMO search interface - experience with semantic and smart search**

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Progress is being made toward realizing the promise of the Semantic Web for oceanography. A present challenge is to develop ontologies that can be used to semantically enable data system interfaces for improved data discovery and usability as well as the need to map these ontologies to the underlying data structures and markup languages. Evolving expectations for open access to research data combined with the informatics challenge presented by global ecosystem science themes, may result in more frustration than satisfaction if we are unable to develop efficient data discovery tools; ones that perform at least as well as the familiar telephone.

The Biological and Chemical Oceanography Data Management Office (BCO-DMO) is funded by the National Science Foundation to work with ocean biogeochemistry researchers to improve access to data resulting from their respective programs. BCO-DMO staff members have begun the process of developing an ontology to represent the metadata associated with several legacy databases managed by the BCO-DMO. We will describe the stage of development to date, including challenges encountered, the technologies selected, and the strategies associated with this use case based approach.

<http://bco-dmo.org/>