

US Geological Survey Core Science Metadata Clearinghouse

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PROJECT END DATE: September 30, 2015

SPONSOR: US Geological Survey Core Science and Synthesis (CSAS)

PARTNERS: USGS Core Science Metadata Clearinghouse has a number of partners from agencies in the US federal, state, and local governments, as well as international, non-profit, private and multi-sector agencies and universities. A complete list can be found at: <http://mercury.ornl.gov/clearinghouse>

PROJECT WEBSITE: <http://mercury.ornl.gov/clearinghouse/about.jsp>

PROJECT DESCRIPTION

The USGS Core Science Metadata Clearinghouse is a broad, collaborative program to provide increased access to data and information on the nation's biological resources. The Clearinghouse links diverse, high-quality biological databases, information products, and analytical tools maintained by USGS partners and other contributors in government agencies, academic institutions, non-government organizations, and private industry. USGS metadata partners and collaborators also work on new standards, tools, and technologies that make it easier to find, integrate, and apply Earth and biological resources information. Resource managers, scientists, educators, and the general public use the Clearinghouse to answer a wide range of questions related to the management, use, or conservation of this nation's biological resources. The Clearinghouse is an aggregator of metadata records, meaning that many different organizations provide records to be searched in one place. USGS Clearinghouse Partners maintain control of their metadata records, and provide access to them. The Clearinghouse uses a weekly harvesting process, replacing records copied the week previous from each partner.

The USGS Metadata Clearinghouse can be searched by a term or phrase of interest from the Simple Search screen. The Advanced Search allows users to create a more complex or focused search by providing a variety of search parameters. After an initial search, the results page offers users the ability to filter results further, by narrowing the type of data, originator, and dates. In addition, data providers can be selected. This filtering process continues as users carry on their search. Clicking on "View Full Metadata" gives users a brief view of the record, but the user can choose to see a full metadata record describing the search topic.

SIGNIFICANCE

The USGS CSAS Clearinghouse contains metadata records describing datasets largely focused on wildlife biology, ecology, environmental science, temperature, geospatial data layers documenting land cover and stewardship (ownership and management), and more. The CSAS provides visualizations of the data contained in the Clearinghouse to illustrate where the data are collected, and the types of data contained in the system. The Clearinghouse is a powerful resource for scientists, allowing them to share and access information about important research in natural resources, much of which relates to climate change science. With over 98,000 records from over 90 data providers, the possibilities for collaborations and data exchange are endless—important factors to accurate climate change research.

NOTABLE ACHIEVEMENTS

USGS Core Science Metadata Clearinghouse has been actively harvesting new Earth and biological related metadata records, the system currently serves more than 98,000 metadata records from over 90 data providers with anticipation to cross 100,000 records by early 2012. The USGS Clearinghouse is using Mercury (<http://mercury.ornl.gov>) software

National Biological Information Infrastructure (NBII) Metadata Clearinghouse

toolset, which is an ORNL developed metadata management tool based on various opensource technologies.

Standards supported in the USGS Clearinghouse: Metadata standards allow computers to exchange information easily, and allow users to access and compare information quickly and easily. The metadata records found in the Clearinghouse follow the Federal Geographic Data Committee (FGDC) Content Standard for Digital Geospatial Metadata. Many of the records also utilize the Biological Data Profile, which are fields added to the standard that extend a record to include information about taxonomy, methodology, and analytical tools used in the creation of a dataset.