

**Biological Resources Division
Policy Issuance System**

Issuance Number: 08
Subject: Metadata for Data Sets and Information Products
Originator: Assistant Chief Biologist for Informatics and Outreach
Chair, BRD Geospatial Technology Council

1. **Purpose.** This issuance documents the requirement to create and incorporate into the National Biological Information Infrastructure (NBII) metadata for all Biological Resources Division (BRD)-produced data sets and information products. Following this policy will ensure that BRD is in compliance with Executive Order 12906, OMB Circular A-130, and the American Technology Preeminence Act. Standardized metadata will be created and incorporated into the NBII to document any data set(s) and/or information products (reports, journal articles, etc.) produced as a result of any Biological Resources Division project, program, or study (including projects or studies completed by BRD contractors or cooperators). The metadata produced in response to the above requirements will serve as the BRD Product Catalog.

2. **Policy and Scope.** Metadata will be prepared in compliance with the NBII biological metadata standard (see http://www.fgdc.gov/Standards/Status/sub5_2.html for the full text of the profile). The NBII biological metadata profile includes all elements of, and is fully compliant with, the Federal Geographic Data Committee's Content Standards for Digital Geospatial Metadata (see <http://www.fgdc.gov/Standards/Standards.html> for the full text of the standard), the Federal Information Processing regulations, the Standard Technical Report Documentation Page, and other required standards.

The BRD-created metadata entry software, MetaMaker, may be used to document the metadata which are developed for data set(s). MetaMaker is available for downloading at no cost from the World Wide Web (see <http://www.nbii.gov/metamaker/metamaker.html> for the downloadable tool). For use in documenting information products such as publications and reports, MetaWebber, a Web-based metadata entry form (see <http://biology.usgs.gov/pubs/biblio/> for the metadata input form) may be used. Properly using these tools guarantees that metadata records will be fully compliant with all applicable standards.

3. **Authority.** This policy is issued under the authority of Executive Order 12906, OMB Circular A-130 (revised), and the American Technology Preeminence Act.

4. **Responsibilities.**

A. **Scientists and information product producers must**

- (1) Develop metadata and ensure that it is deposited into the NBII Clearinghouse for all data sets and/or information products for which they are responsible.

- (2) Identify specific needs for additional guidance, training, technical support, and/or other resources needed that would allow for their implementation of the policy.

B. Center Directors and Cooperative Research Unit Leaders must

- (1) Implement this policy at the Center/Unit level.
- (2) Develop Center/Unit-specific operating procedures as needed to implement the policy.
- (3) Ensure that Center/Unit staff responsible for implementing the policy are provided with necessary guidance, resources, training and technical support.

C. Regional Chief Biologists must

- (1) Ensure consistent implementation of the policy within the Region, through the Centers and partners, in accordance with the guidance provided by the Chief Biologist and the Assistant Chief Biologist for Informatics and Outreach.
- (2) Identify and convey to the Chief Biologist and Assistant Chief Biologist for Informatics and Outreach all Center and Regional suggestions for innovative metadata strategies.

D. Chief, Cooperative Research Units must

- (1) Ensure consistent implementation of the policy throughout the Coop Unit Program in accordance with the guidance provided by the Chief Biologist and the Assistant Chief Biologist for Informatics and Outreach.
- (2) Identify and convey to the Chief Biologist and Assistant Chief Biologist for Informatics and Outreach all Coop Unit suggestions for innovative metadata strategies.

E. Assistant Chief Biologist for Informatics and Outreach must

- (1) Develop and disseminate information on metadata policy guidance, standards, protocols, technologies, software tools, and training opportunities.
- (2) Develop and coordinate partnerships or other initiatives to develop innovative metadata strategies.
- (3) Evaluate BRD compliance with the subject policy.

5. Definitions, Standards, Requirements,

- A. **Metadata**: Metadata refers to documentation of information used to describe a data set or information product (e.g., describing the extent of the data, coverage, scale, methods used to collect the data, or citation information, abstract, purpose, etc.).
- B. **Data Set**: A logically meaningful grouping or collection of similar or related data. Data having mostly similar characteristics (source or class of source, processing level and algorithms, etc.).
- C. **Information Product**: The compilation of scientific communication or knowledge such as interpreted facts or data, or opinions in any medium (e.g., print, digital) or form, including textual, numerical, graphical, cartographic, or audiovisual, to be disseminated to a defined audience or customer, either scientific or nonscientific, internal or external. Information product types may include, but are not limited to, publications, maps, journal articles, technical reports, videos, CD-ROMs, computer models, etc.
- D. **MetaMaker**: A PC-based application that can be used for off-line input of metadata for later uploading to a central database.
- E. **MetaWebber**: A web-based application that can be used for direct online input of metadata about all BRD information products (not data sets).
- F. **NBII Metadata Clearinghouse**: The NBII Metadata Clearinghouse is a searchable on-line "catalogue" of standardized metadata-based descriptions of biological data sets and information products. Metadata descriptions follow the NBII's Metadata Standard, which is a superset of the Federal Geographic Data Committee's (FGDC) Content Standards for Digital Geospatial Metadata. The NBII Clearinghouse is composed of a series of cooperating nodes.

6. **Effective and Expiration Dates**. This policy is effective immediately. It will be in effect until it is amended, superseded, or revoked.

/s/ Dennis B. Fenn
Chief Biologist

January 25, 1999
Effective Date