NBII Fisheries and Aquatic Resources Node

Bringing together people and information to promote fisheries conservation

Background

The National Biological Information Infrastructure (NBII) <www.nbii.gov> is an electronic information network that provides access to biological data and information on our nation's plants, animals, and ecosystems. Data and information maintained by federal, state, and local government agencies; non-government organizations; and private-sector organizations are linked through the NBII gateway and made accessible to a variety of audiences including researchers, natural resource managers, decision-makers, educators, students, and other private citizens.

Implementation of the NBII is being accomplished through the development of nodes that serve as interconnected entry points to the NBII and the information held by partners. These nodes function as fully digital, distributed, and interactive systems that focus on developing, acquiring, and managing content on a defined subject area (thematic nodes) or a geographic region (regional nodes). One of the initial thematic nodes created in 2001 was the Fisheries and Aquatic Resources (FAR) Node.

The Node

Fisheries and aquatic resources are economically, ecologically, culturally, and aesthetically important to the nation, yet many of these resources are in decline due to factors such as habitat alteration, degrading water quality, invasive species, water availability, and inadequate stock management. Successful conservation and restoration of these resources requires access to data and information on fish biology, population dynamics, management, hatcheries, water quality, and aquatic habitat and ecosystems. To fill this need, the FAR Node will provide an integrated, comprehensive Web-based resource that will: 1) serve and access fishery and aquatic databases, 2) link to fishery and aquatic resource information sites, and 3) act as a larger scale coordinating site for fisheries and aquatic resources standards. Essentially, the FAR Node will bring together the people and information necessary to promote successful fisheries conservation.

Products

Initial FAR Node efforts have focused on strategic planning and the development of node infrastructure: online mapping and database capabilities and a process for cataloguing existing Internet fisheries resources.

Recent FAR Node products include:

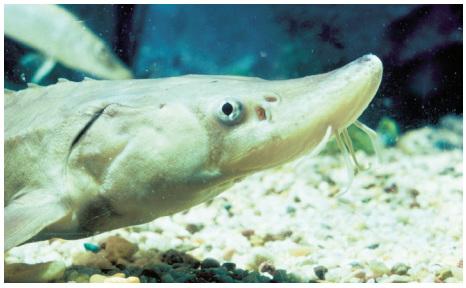
FAR Node strategic plan to guide node content and application development. The Plan was created with the aid of a guidance committee consisting of representatives from a number of different federal, state, and non-government fisheries agencies.

The FAR Node will:

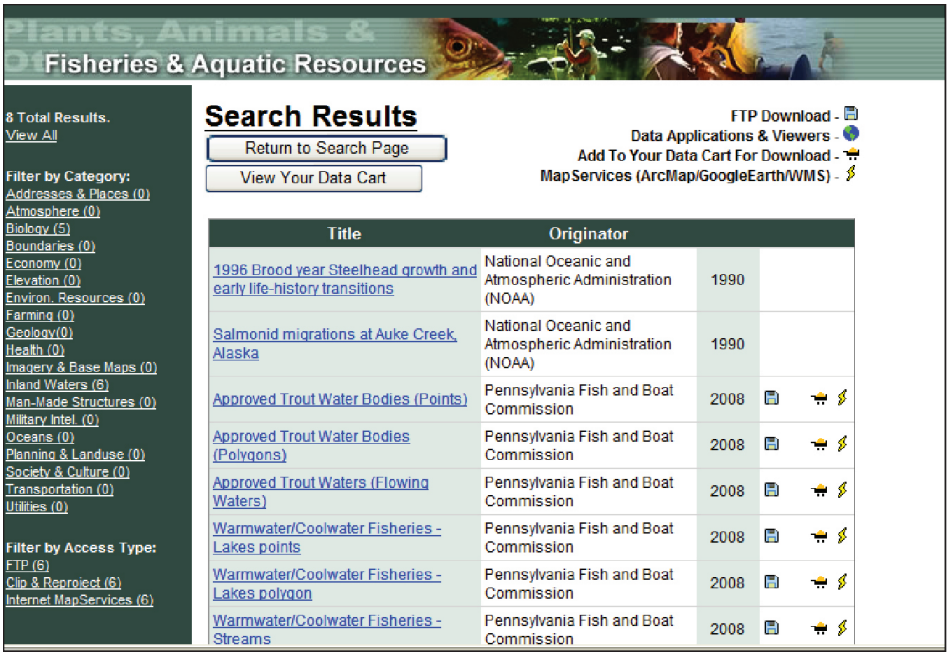
- ***Serve and access fishery and aquatic databases,***
- ***Link to fishery and aquatic resource information sites, and***
- ***Act as a coordinating site for fisheries and aquatic resources standards.***

FAR Data Access Wizard helps you discover and access fisheries-related data. Data can be searched using keywords, themes, geographic extent, and data providers. Most of the available data is in a spatial, or GIS, format and can be accessed in a variety of ways:

- Data can be directly downloaded as-is to your desktop computer.
- Multiple data sets can be added to a "data cart" to be downloaded simultaneously. Data in your data cart can also be clipped to



Sturgeon (left) and brook trout (right). FAR is currently creating information systems for both species. Images from the U.S. Fish and Wildlife Service National Image Library.



FAR Data Accesss Wizard showing results of a theme search. Resources are available for download or for use in Web mapping applications.

a specific geographic area and reprojected on-the-fly prior to download.

- Many data sets can also be viewed online via Web mapping applications or accessed dynamically by a desktop GIS client using ArcIMS or WMS MapServices.

Live Maps and Data contains a collection of databases and mapping applications at global, national, and regional scales. The data that can be accessed include species distributions, fish disease occurrences, and water quality.

FAR Resources on fish and aquatic species, management, data and mapping, recreational information, and educational references of value to aquatic resource professionals.

Projects

Fisheries Information Systems Convergence to bring several distinct fisheries data systems under a common query structure and enable the summarization of nationwide fisheries information from different spatial scales. This effort is in collaboration with those completing the National Fish Habitat Assessment in support of the National Fish Habitat Action Plan.

FishBase for the Americas will enhance Western Hemisphere fisheries information within FishBase by incorporating regional search capabilities, South American fisheries biodiversity maps, Columbian fisheries information, and translations from English into both Spanish and Portuguese.

Eastern Brook Trout Data Management System will be created to aid in updating the status maps of native brook trout encompassing the entire native range of the species.

NBII Collaboration Portal support is provided for Federal Fish Passage Action Plan and Eastern Brook Trout Joint Venture communities, which are linked to the Fisheries and Aquatic Resources Node Community in the portal structure to enhance future collaboration efforts.

Partners

Non-Government and Educational
Penn State Institutes of Energy and the Environment ■ FishBase ■ Conservation Management Institute ■ Michigan State University ■ Loftus Consulting ■ Center for Ecology of the Venezuelan Institute for Scientific Investigations ■ Association of Fish and Wildlife Agencies ■ Atlantic, Pacific, and Gulf States Marine Fisheries Commissions ■ Trout Unlimited

State/Federal
U.S. Geological Survey ■ U.S. Fish and Wildlife Service ■ U.S. Forest Service ■ NOAA-Fisheries ■ Indiana, Wyoming, New York, and other State Natural Resource Agencies ■ Aquatic GAP

International
UN/FAO-Fisheries ■ Inter-American Biodiversity Information Network

For More Information

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