

NBII Southern Appalachian Information Node

Making the region's
biodiversity information
available for
decision-making

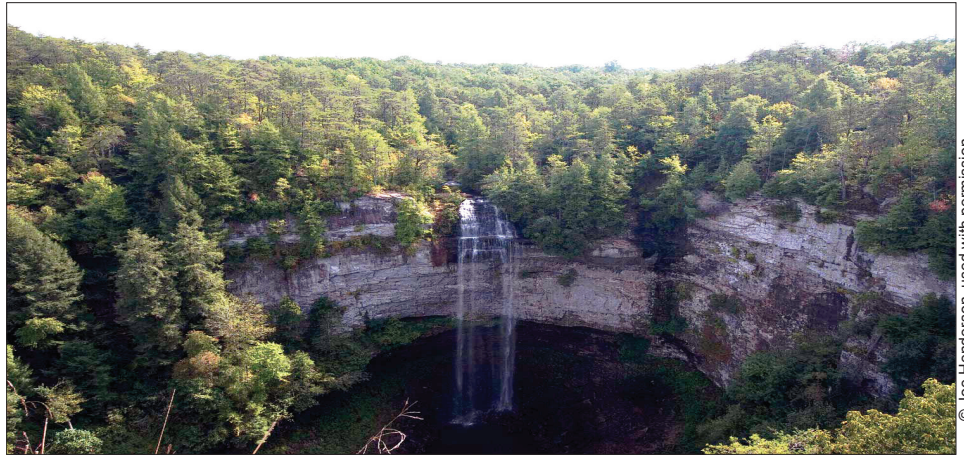
Background

The National Biological Information Infrastructure (NBII) www.nbio.gov is an electronic information network that provides access to biological data and information on our nation's plants, animals, and ecosystems.

The NBII gateway links data and information maintained by federal, state, and local government agencies; non-government organizations; and private-sector organizations, and makes the data and information accessible to a variety of audiences including researchers, natural resource managers, decision-makers, educators, students, and other private citizens.

The NBII's information network is being developed as 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). The NBII Southern Appalachian Information Node (SAIN) is one of several regional nodes established in 2001.

SAIN is a unique source for biodiversity data and information on the Southern Appalachian region and has been working to make biodiversity information available for



Fall Creek Falls at Fall Creek Falls State Park, Tennessee

decision-making in the public and private sectors throughout the region. SAIN's general service area comprises the states of Alabama, Kentucky, Mississippi, and Tennessee. However, recognizing that the biodiversity and ecological issues of interest do not stop at state borders, they are addressed within the context of the biodiversity issues originating within these states.

Why Is SAIN Important?

Policies regarding land use, transportation infrastructure, community development, as well as major state and federal capital investments, all require a careful balance between economic, social, and environmental factors. This balancing



Non-native invasive — heavenly bamboo
(*Nanandina domestica*)

in turn requires accessible and accurate data. Without good data, good policy is difficult to develop. NBII-SAIN makes that data accessible to both policy makers and stakeholders.

SAIN's core mission is captured in the goal of making the region's biodiversity information available for decision-making. To accomplish this mission, SAIN facilitates access to diverse, high-quality, biological data resources and analytical tools maintained by partners in government agencies, academic institutions, non-government organizations (NGOs), and private industry.

SAIN Today

SAIN is working to bring together a vast amount of biodiversity and ecosystem information that has been collected, but has yet to be made readily available to scientists and those who are making environmental decisions for the region. SAIN works with an expanding network of collaborating partners to identify information gaps and to find the most effective ways to fill them. SAIN's initiatives have resulted in increased accessibility to accurate, science-based information addressing a wide array of

critical concerns such as:

- invasive alien species that threaten southeastern forests and parks,
- fire management, both controlled and wild, and
- information on rare species and ecological communities.

SAIN's infrastructure supports GIS-based visualization tools and implements data standards to maximize user access to information. SAIN brings together technology tools, information management standards, and a network of collaborating partners to provide specific solutions for connecting data users and data generators. Here are just a few examples:

- SAIN has facilitated the work of the **Eastern Brook Trout Joint Venture** by creating an interactive mapping system that allows state and federal wildlife managers to visualize population assessments across management boundaries.
- SAIN is supporting the **Society of Herbarium Curators and the Southeast Regional Network of Expertise and Collections** in an effort to share information from 150 herbaria in 15 southeastern states. In linking the databases of each of the herbaria, SAIN is creating **DarwinCore** standard metadata to make the information globally accessible.
- SAIN is providing centralized access to fire research data and information products in collaboration with the



Photo credit: U.S. National Park Service

A natural arch at the U.S. National Park Service Obed Wild and Scenic River, Tennessee

Fire Research and Management Exchange System – Southern Fire Portal.

- SAIN supports the **Southern Appalachian Volunteer Environmental Monitoring** project by hosting data and creating geospatial products of citizen-provided environmental monitoring information.
- SAIN supports collaboration among multidisciplinary groups from the government and NGOs involved in environmental monitoring initiatives along the 2,000 mile Appalachian Trail corridor by supporting the **Appalachian Trail Environmental Monitoring Community** Web site

and collaboration portal.

- SAIN is providing broader access to the EPA-developed decision support tool by hosting a Web-based version of the Southeast Ecological Framework **GeoBook**.
- SAIN, partnering with the Department of Energy Oak Ridge National Laboratory, maintains the **NBII Metadata Clearinghouse** that provides access to over 40 distributed biological metadata clearinghouse nodes.
- SAIN is providing centralized access to species ecology and life history profile information, GAP distribution data, taxonomic information, and other electronic data products related to species identified as “in need of greatest conservation” in **State Wildlife Action Plans**.

What You Can Do

- Join the partnership and develop cooperative initiatives.
- Volunteer data, time, expertise, equipment, or funding to make your information more accessible for decision-making.
- Report back to SAIN how you are using our biodiversity information — and how SAIN offerings might be improved.

For More Information

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Find us on the Web at:
<http://sain.nbio.gov>.



Photo credit: Ginger L. Corbin/U.S. Fish and Wildlife Service

Prescribed fire at the Carolina Sandhills National Wildlife Refuge, South Carolina