NBII Central Southwest/Gulf Coast Information Node

The Central Southwest Gulf Coast Information Node focuses on coastal issues, critical habitat, and invasive species.

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 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 regional nodes is the Central Southwest/Gulf Coast Information Node (CSWGCIN).

Central Southwest/Gulf Coast Information Node

CSWGCIN (pronounced sis-wig-in) is a partnership of the Houston Advanced Research Center (HARC) in The Woodlands, TX, and the U.S.


Gulf Coast Beach

Geological Survey (USGS) National Wetlands Research Center (NWRC), headquartered in Lafayette, LA. CSWGCIN represents a wide range of biologically diverse communities.The region is undergoing rapid population growth and is experiencing significant stress (e.g., drought, fires, floods, hurricanes, deforestation, wetland loss, urban sprawl, and invasive species). In response to these increasing pressures on natural resources, management agencies and scientists have created research projects that are targeted at developing better ways to restore and manage these valuable resources.

All of these projects result in new data and information. The NBII will help integrate diverse existing geologic, water, biological, and other environmental data so that they can be analyzed and used to make informed decisions regarding the region's natural resources and ecosystems.

Regional Initiatives

Coastal Wetlands

CSWGCIN locates and links to numerous sources of information describing the state of Gulf Coast wetlands. CSWGCIN also actively develops tools to aid resource managers in the restoration and
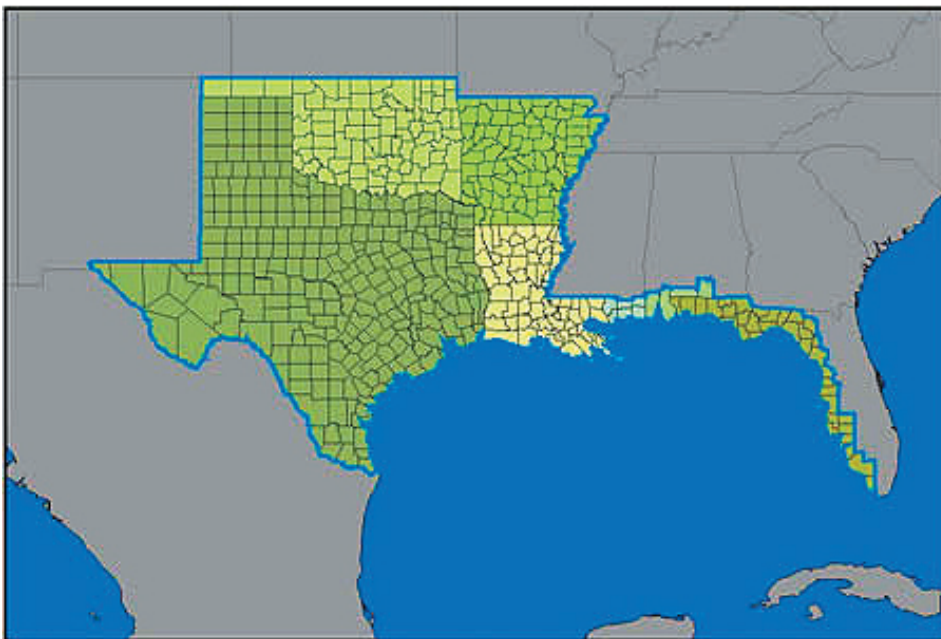
Map of CSWGCIN Region

conservation of this vital habitat. Tools include analysis of the use of LIDAR data in wetland delineation and the West Galveston Bay habitat restoration site and water quality mapping application.

Comprehensive Web Resources
Research specialists daily mine the Web and other sources for direct links to information pertinent to the node's region. They evaluate the information for authenticity, reliability, and usefulness before annotating for node users.

Education and Outreach
CSWGCIN is committed to education and outreach through an intensive program of interactions and demonstrations with scientists, K-16 educators, information professionals, and librarians. Educational programs and E-mail news alerts for CSWGCIN educational and outreach activities are being developed.

Big Bend Plant Project
This project involves the collection and verification of biological data using handheld PC units. This project has produced many exciting discoveries on the rare and endangered plants of Big Bend National Park (the Park). Using the CSWGCIN-provided handheld units, Park staff

Coastal Prairie:
Asclepias incarnata *and prairie remnant*

Photo credit: Larry Allain / USGS

have been able to document, report, and photograph rare and threatened plants throughout the Park.

Stream Mapping Project
CSWGCIN worked with the Texas Parks and Wildlife Department to link stream location data with ecologically significant stream data to build an ArcIMS interactive mapping application.
The application includes not just data of ecologically significant stream segments but also data from the Texas Commission on Environmental Quality's 303(d) list of impaired waters. Interactive mapping applications that show the geographically linked sets of data can be viewed on the CSWGCIN Web site.

Visual Data Library
CSWGCIN is making available in the public domain thousands of natural resource images of animals and plant species, including many from the highly endangered coastal prairie ecosystem of Louisiana and Texas.

Invasive Species Database
CSWGCIN includes many different ecosystems ranging from humid, semitropical coastal swamps to arid, mountainous terrain. CSWGCIN is also home to large metropolitan areas, shipping ports, and an international border. The confluence of diverse habitats and intense human activity results in the introduction of

Big Bend Plants:
Selinocarpus parvifolius *and* Anulocaulis leiosolenus

Photo credit: Larry Allain / USGS

exotic, invasive species. The Invasive Species Database provides data including fact sheets, taxonomic facts, bibliographic references, and photos of invasive species in the CSWGCIN region.

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Find us on the Web at:
<http://cswgcin.nbii.org>.