

## Avian Flu Early Detection System Creates Public View



The public can now view a Web site that shows current information about wild bird sampling for the early detection of highly pathogenic avian influenza (HPAI) in the United States

<http://wildlifedisease.nbii.gov/ai/>. Scientists are using the newly developed database and Web application called HEDDS (HPAI Early Detection Data System) to share information on the sample collection sites, the species sampled, and the test results. The database is available to agencies, organizations, and policymakers involved in avian influenza monitoring and response. The public view, although more limited in scope, shows states where

samples have been collected and includes numbers of samples collected from each state. Scientists will use the data to assess risk and refine monitoring strategies should HPAI be detected in the United States.

HEDDS is a product of the National Biological Information Infrastructure (NBII) Wildlife Disease Information Node (WDIN) housed at the U.S. Geological Survey (USGS) National Wildlife Health Center. With *(continued on page 5)*

## NBII Lends Support to the Birds and the Bees (and Other Pollinators)

Pollinators such as bees, bats, and hummingbirds are critical to the sustainability of wild and cultivated plants throughout the world. Because pollinators face numerous threats to their own sustainability, they are the subject of national and international initiatives to support their conservation. The value of pollinating animals to our agricultural sustainability and ecosystem health is incalculable.



Domestic honeybees alone pollinate approximately \$10 billion worth of crops in the United States each year. Coordinated development of and increased access to pollinator data sets are needed in order to monitor and conserve native pollinators and ultimately to protect the natural and agricultural ecosystems dependent on them.

The U.S. Geological Survey (USGS) Biological Informatics Office (BIO) and the National Biological Information Infrastructure (NBII) are leading national and international efforts to provide high quality and integrated data and information about pollinators to resource managers, decision makers, scientists, and the public. At the national level, the NBII has signed

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# PBIN Invasive Species Early Detection Reporting System Produces Results

In the spring 2006 issue of *Access* we introduced the NBII Pacific Basin Information Node (PBIN) prototype invasive species early detection reporting system for Maui County, HI (see <[pbii.nbii.gov/reportapest/maui](http://pbii.nbii.gov/reportapest/maui)>). This pilot system has created a standardized process for the early detection and rapid assessment of incipient invasive species, greatly enhancing the chance of catching pests in the earliest stages of invasion. The tool was created to bridge the gap between early detection and rapid response by streamlining the existing system for reporting, storing, processing, and communicating pest reports throughout Hawaii.

One of the key ingredients for making the system work has been enlisting public support in the process. This is being accomplished through educational workshops held on the island in collaboration with the Maui and Molokai Invasive Species Committees. The first workshop took

place on March 31, and the second on June 20. Others are planned for the future.

In a typical workshop, attendees are surveyed about why they think early detection and rapid response are important. Next, they learn what

makes Maui so special and why we should care about invasive species issues. This is followed by a brief introduction to the natural history and evolution of the Hawaiian Islands that led to the biological diversity that's being protected today. The audience is then introduced to invasive species vocabulary and taught how to handle early detection and reporting. Participants leave the workshop with the ability to identify at least five priority pests, as well as knowledge of where to report sightings.

The good news? Within a day of the first workshop, reports were received on three target species: bingabing (*Macaranga mapp*), ivy gourd (*Coccinia grandis*), and melestoma species (*Melastoma spp.*). As a result, bingabing has been controlled in all known locations on Maui; control efforts for the other species are under way.

The early detection reporting system will be augmented with the introduction of full color early detection field manuals being

(continued on page 5)



## Have you seen Bingabing (*Macaranga mapp*)?

Maui County Priority Pest for Maui, Molokai, and Lanai:

If you see this priority pest fill out the [online report form](#), go to a [walk-in reporting location](#), or [call in](#) your sighting.



Bingabing's are "leggy"



Flower detail



Bingabing thicket in Hilo, HI

**Identification:**  
Bingabing is an established pest on the islands of Oahu and Hawaii, but has been removed from Maui by the [Maui Invasive Species Committee \(MISC\)](#) and is not known to currently grow in Maui County, (see [map](#).) This distinctive small tree has columnar stems and huge umbrella like leaves. It can grow from 5 - 10 m (15 - 30 ft) tall with round leaves 60 - 100 mm (1 - 4 in) long. Stem attached to the middle of the leaf, rather than the edge. Pink, petal-less flowers form in clusters near the base of the leaf stalk. Young plants may superficially resemble Hawaiian taro (*Colocasia esculenta*.)

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Visit the NBII Home Page at <[www.nbii.gov](http://www.nbii.gov)>.

## Pollinators (continued from page 1)

a Memorandum of Understanding (MOU) with the Coevolution Institute (CoE), coordinator of the North American Pollinator Protection Campaign (NAPPC). NAPPC is a collaborative body representing the interests of over 120 stakeholder organizations in the promotion and protection of the health of pollinating animals, including bees, bats, birds, butterflies, beetles, and others. This MOU represents a great opportunity to combine the unique expertise and knowledge of the CoE-NAPPC membership, and the technology and infrastructural resources of the USGS-NBII, in what promises to be a very strong partnership for pollinator conservation.

At the international level, the NBII has joined a consortium of international organizations to coordinate development of the Pollinators Thematic Network (PTN) of the Inter-American Biodiversity Information Network (IABIN). The Co-Principal Investigators on the IABIN PTN project are Ms. Laurie Adams (Executive Director of the Coevolution Institute), Dr. Antonio

Mauro Saraiva (Coordinator of the Agricultural Automation Lab at the University of Sao Paulo Polytechnic School), and Dr. Michael Ruggiero (USGS-BIO).

The goal of the IABIN PTN is to develop a network of linked and integrated databases among major data sources and IABIN members that share critical content through a common set of data standards and exchange protocols. The primary content will be a dynamic and linked online Catalogue of Pollinators of the Western Hemisphere, which includes data on (1) names (checklists) of bees, hummingbirds, bats, and other important pollinating species; (2) specimens in major collections; (3) pollinator experts; (4) pollinator-plant associations; (5) literature on pollinators; and (6) other data as available (for example, geographic, genetic barcode, and so forth).

IABIN PTN will be interoperable with other IABIN Thematic Networks (for example, invasive species, species, and specimens) and global pollinator initiatives, and will provide Web interfaces in English, Spanish, Portuguese, and French. The NBII

will be a principal institutional partner in this project, providing technical expertise as well as hosting a Web portal for the network.

BIO and the NBII will also work with the Global Biodiversity Information Facility (GBIF) and the United Nations Food and Agriculture Organization (FAO) to design and provide critical content for a Global Pollinator Information Management System. The project will, among other things, work with the taxonomic community to develop a global taxonomic authority file for pollinators and will support the indexing and delivery of pollinator information through the GBIF network by working with natural history collections to digitize pollinator specimen information. Dr. Ruggiero will serve as coordinator of the GBIF portion of the project and as liaison between the GBIF Secretariat, FAO, the taxonomic community, and the world's natural history collections. BIO has provided broad technical and operational expertise in many GBIF program areas and will continue to play a key role in support of this project. 🌿

## NBII in the News

■ On June 1, Invasive Plant Atlas of New England (IPANE) — an NBII Northeast Information Node partner — was highlighted in a National Public Radio (NPR) feature on the environment titled “Invasive Plants Introduced with Good Intentions.” The broadcast, which ran for nearly seven minutes, discussed some of the history behind several common invasive plants introduced in the United States intentionally for a variety of reasons, including the conservation of topsoil. Journalist Nancy Cohen’s interview captured many IPANE facets as she accompanied IPANE Director Les Mehrhoff researching herbarium records at Arnold Arboretum in Boston, visiting a nature preserve to check

for invasions of multiflora rose, and training volunteers for early detection. IPANE Ecologist Nava Tabak was also interviewed in the feature, which can be heard at [http://www.publicbroadcasting.net/wnpr/news.newsmain?action=article&ARTICLE\\_ID=922601](http://www.publicbroadcasting.net/wnpr/news.newsmain?action=article&ARTICLE_ID=922601). This broadcast follows an earlier story on IPANE on NPR’s *Morning Edition*.

■ The Northwest and Alaska Fire Research Clearinghouse (FIREHouse) is a Web-based project that provides data and documentation on fire science and technology relevant to Alaska, Idaho, Oregon, and Washington. The project’s goal is to provide “one-



stop shopping” for resource managers, decision makers, scientists, students, and communities who want access to the results of this group’s efforts to understand fire and fuels on public

lands. The NBII Pacific Northwest Information Node helped fund FIREHouse, along with the Joint Fire Science Program and the USDA Forest Service. Read more about FIREHouse in the spring 2006 Forest Service publication *Fire Management Today* (page 8) [http://www.fs.fed.us/fire/fmt/fmt\\_pdfs/FMT66-2.pdf](http://www.fs.fed.us/fire/fmt/fmt_pdfs/FMT66-2.pdf). 🌿

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## NBII-NIN's Jamaica Bay Web Site Continues Progress

Where to begin when tasked with building a Web site to support and drive myriad documented and undocumented conservation efforts on behalf of the New York City estuary Jamaica Bay?

For the National Biological Information Infrastructure Northeast Information Node (NBII-NIN), it meant approaching upwards of 70 federal, state, and city agencies, as well as universities and environmental and local community groups, for descriptive information on projects and data sets. A further charge: the National Park Service (NPS), which manages the 25,000-acre wildlife-rich park located on the southwestern tip of Long Island in the boroughs of Brooklyn and Queens, asked that the Web site be community-driven.

Much of the knowledge of the bay is “sitting in people’s heads, and not on paper,” according to Dan Mundy of the Jamaica Bay Ecowatchers, one of many local bay advocacy groups. But responses to NIN’s requests for information were minimal. In spite of this, NIN staff were able to create content based on NPS-issued permits, which were granted to organizations conducting activities in the bay, and by extracting relevant information from agency, university, and group Web sites.

In addition, staff also built an electronic bibliography containing more than 1,200 citations dating back to 1850, primarily based on the Jamaica Bay Ecological Research and Restoration Team (JABBERT) report, the most comprehensive study of the bay ever performed. The first beta release of the Jamaica Bay Research and Management Information Network (JBRMIN) Web site took place in July 2003, with official release to the public in December 2004.

NIN’s attendance at meetings of the local advocacy group Jamaica Bay Task Force (JBTF) was a breakthrough in learning about the pressing issues



*Providing Web access to the myriad conservation efforts on behalf of Jamaica Bay (pictured here) is a core goal of JBRMIN activities.*

surrounding the bay that were most important to this vocal and informed community. It was also a springboard to obtaining critical briefings on Local Law 71, passed in July 2005, which requires the New York City Department of Environmental Protection (NYC DEP) to construct a watershed protection plan to restore and maintain Jamaica Bay’s water quality and ecological integrity, with the help of an appointed advisory committee. Soon after, the JBRMIN Web site was selected by the National Resources Defense Council (NRDC) to track and publicize committee activity.

JBRMIN’s monthly posting of meeting agendas, as well as the creation of an information home page for Advisory Committee activities, culminated in the release of a preliminary report on June 29, 2006. The plan is now open to the public for comments and recommendations, with a target date of September 2006 for submission to Mayor Bloomberg. Goals of the plan range from reducing soil and sediment contamination to restoring shellfish populations to

protecting salt marshes.

“Though upgrading content and navigation is high on the agenda, we need more,” says NIN’s John Scialdone, referring to his assessment of the development status of the JBRMIN Web site. “More data sets, more maps, more participation.”

While providing activity tracking of Local Law 71 has brought JBRMIN closer to its goal of becoming a community-driven Web site, Scialdone would like to see increased involvement of local advocacy groups. An events calendar added to the site in spring 2006 presents a new opportunity for advocacy groups to post announcements, such as public hearings, educational events, and community cleanup activities, thereby gaining valuable publicity. Scialdone is optimistic that the Local Law 71 activity will lead to increased “buy-in” and build enthusiasm for how the Web site can support the diverse efforts of all stakeholders. To access the JBRMIN Web site, go to <http://nbii-nin.ciesin.columbia.edu/jamaicabay/>.



*Do you have news about an invasive species project you would like to share through this column? The Toolbox is a collection of useful items and highlights related to invasive species information management issues. Please send suggestions for future Toolbox columns to <asimpson@usgs.gov> or <esellers@usgs.gov> and cc: the Access editor, <ron\_sepic@usgs.gov>.*

## Invasive Species Early Detection Rapid Assessment and Response (EDRR) National Framework Web Site Launched

The NBII Invasive Species Information Node (ISIN) has launched a beta Web site designed to facilitate a gap analysis of EDRR projects from around the country. Project elements are grouped into six areas: identification, reporting, expertise, occurrences, assessment, and response. In the future, users will be able to submit EDRR project information for inclusion in the framework. This tool is part of an ongoing interagency effort to coordinate invasive species EDRR information, involving the National Invasive Species Council and the Departments of the Interior, Agriculture, Defense, and Commerce. For more information, see <<http://edrr.nbio.gov>>.

## Downloadable Video: “Dangerous Travelers: Controlling Invasive Plants Along America’s Roadways”

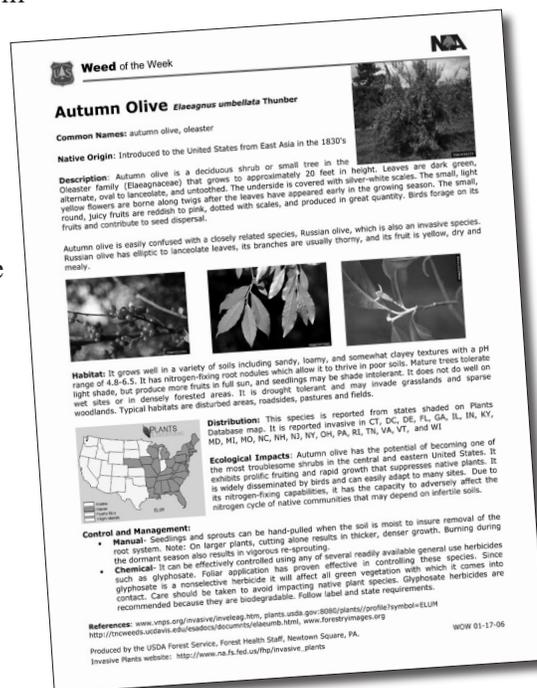
This 26-minute video is an excellent program to show at local invasive plant events. It was produced by the National Forest System Invasive Species Management Program and the Engineering Program in a broad partnership effort including



the Department of Transportation Federal Highway Administration, the U.S. Fish and Wildlife Service National Wildlife Refuge System, the Pennsylvania Department of Transportation, and others. For more information, see <<http://www.fs.fed.us/invasivespecies/prevention/dangeroustravelers.shtml>>.

## Weekly Weeder Fact Sheets Provided by U.S. Forest Service

These brief species profile fact sheets are designed to provide information about specific invasive plants that exist in the northeastern and midwestern United States. Feel



free to link to these facts sheets or print and distribute them. Use of the fact sheets should cite the USDA

Forest Service, Northeastern Area, Forest Health Protections Invasive Plants Web site as the source: <[http://na.fs.fed.us/fhp/invasive\\_plants/weeds/index.shtml](http://na.fs.fed.us/fhp/invasive_plants/weeds/index.shtml)>.

## “The Quiet Invasion: A Guide to Invasive Plants of the Galveston Bay Area”

NBII Central Southwest/Gulf Coast Information Node (CSWGCIN) partners Houston Advanced Research Center and the Galveston Bay Estuary Program have produced a new invasive plant field guide. The guide will help homeowners, land managers, and gardening enthusiasts living in the Lower Galveston Bay Watershed to recognize invasive plants; to understand the impacts of these species on people and the surrounding environment; to choose appropriate methods to control established invasive plants; and to choose native plant alternatives. Contact Lisa Gonzalez at <[lgonzalez@harc.edu](mailto:lgonzalez@harc.edu)> or view the Web version of the guide at <<http://www.galvbayinvasives.org/>>.

## Global Invasive Species Information Network (GISIN) Invasive Species Profile Schema (IAS-PS)

An invasive species profile schema was created by ISIN partner Michael Browne, of the Invasive Species Specialist Group, with State Department funds granted to the Secretariat of the Convention on Biological Diversity. An information document describing GISIN’s progress in developing the IAS-PS was presented at the Eighth Conference of the Parties of the Convention on Biological Diversity in March. The pdf document link is <<http://www.biodiv.org/doc/meetings/cop/cop-08/information/cop-08-inf-35-en.pdf>>.

*(continued on page 7)*

## International Connections

### Inter-American Biodiversity Information Network Celebrates Launch of New Thematic Networks, Holds Coordination Meetings

Representatives from eight nations in the Americas and several leading biodiversity and data management organizations gathered in Washington, DC, from June 14-16 for the first Inter-American Biodiversity Information Network (IABIN) Executive Committee (IEC) Meeting. Ambassadors and Ministerial representatives from Latin America, the Caribbean, and the United States met with representatives of IABIN's six Thematic Networks (TNs – Ecosystems, Invasive Species, Pollinators, Protected Areas, Species, and Specimens) to approve their yearly work plans and ensure coordination with national and regional efforts in the Americas. IEC members, including IABIN Chair Gladys Cotter, provided the IABIN Secretariat and the Organization of American States with valuable feedback and priorities on biodiversity conservation and policy issues in the Americas, and began the process of developing value-added tools to help in conservation planning throughout the hemisphere.

Earlier in the week, information technology experts from the TNs met with the World Bank, the Organization of American States, and the NBII to continue technical coordination and data integration between the member nations and institutions of IABIN. An IABIN Technical Working Group



(TWG) established at this meeting will promote interoperability of IABIN's data and products as each TN and member nation undertakes national and regional data access and sharing activities.

For more information, please contact Ben Wheeler <[bwheeler@usgs.gov](mailto:bwheeler@usgs.gov)>.

### Ecosystems Gap Analysis Completed in Paraguay

Guyra Paraguay, a Paraguayan non-government organization that has worked cooperatively with the NBII for several years, has completed a draft gap analysis of ecosystems in Paraguay. Signatories to the Convention on Biological Diversity (CBD) are required to undertake gap analyses of biodiversity protection in their nations by the end of 2006, but such analyses require assembling information that sometimes can be difficult to access, particularly for nations of high biodiversity such as Paraguay. This project, part of the

Global Integrated Trends Analysis Network (GITAN) and with continued support from the USGS Gap Analysis and Geographic Analysis and Monitoring Programs, illustrates how a country can move toward compliance with such international requirements by conducting a rapid gap analysis of ecosystems.

Results, showing that 55 ecosystems of the 101 identified for the country are not protected at all and only 24 ecosystems are well protected, were presented at the Eighth CBD Conference of the Parties, held in Curitiba, Brazil, in March 2006 and were well received by participants. The project will culminate in a standardized database that will be compatible with regional and global ecosystems maps and will be served through the GITAN Data Toolkit, another NBII-GITAN initiative. For more information about the project, please contact John Mosesso <[john\\_mosesso@usgs.gov](mailto:john_mosesso@usgs.gov)> or Andrea Grosse <[agrosse@usgs.gov](mailto:agrosse@usgs.gov)>.

### *Invasives (continued from page 6)*

You can access and contribute to the Wiki-based discussion of the schema and other standards being developed by GISIN. Visit the home page at <<http://www.gisnetwork.org>> for details.

GISIN has also created a moderated listserv that is operated by the Global Biodiversity Information Facility and has approximately 150 members. To join, e-mail Annie Simpson at <[asimpson@usgs.gov](mailto:asimpson@usgs.gov)>.

### Upcoming Metadata Workshop

**Introduction to Metadata**  
September 12–13, Seattle, WA

For more information, contact Viv Hutchison at <[vhutchison@usgs.gov](mailto:vhutchison@usgs.gov)> or 206/526-6282, ext. 329.

## Upcoming Events of NBII Interest

Northeastern Transportation and Wildlife Conference, Bethel, ME.	September 10–13	Eastern North America Invasives Learning Network Workshop, Saratoga Springs, NY.	October 3–5
American Fisheries Society Annual Meeting, Lake Placid, NY.	September 10–14	EcoHealth One: The First Biennial Meeting of the International EcoHealth Association, Madison, WI.	October 7–10
Annual Meeting of the Association of Fish and Wildlife Agencies, Aspen, CO.	September 17–22	Biotechnology and Bioinformatics Symposium, Provo, UT.	October 20
Managing Drought and Water Scarcity in Vulnerable Environments, Geological Society of America, Longmont, CO.	September 18–20	The Pursuit of Science: Geological Society of America Annual Meeting, Philadelphia, PA.	October 22–25
Washington Summit on Climate Stabilization, Washington, DC.	September 18–21	Society of Environmental Journalists Annual Conference, Burlington, VT.	October 25–29
Wildlife Society Conference, Anchorage, AK.	September 23–27	X National Congress of Ichthyology, Autonomous University of Querétaro, Mexico.	October 23–27
IEEE Symposium on Computational Intelligence in Bioinformatics and Computational Biology, Toronto, Canada.	September 28–29	Carnivores 2006: Habitats, Challenges, and Opportunities, St. Petersburg, FL.	November 12–15



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