



THE UNIVERSITY OF GEORGIA
**CENTER FOR INVASIVE SPECIES
AND
ECOSYSTEM HEALTH**

WARNELL SCHOOL OF
FORESTRY AND NATURAL RESOURCES

COLLEGE OF AGRICULTURAL
AND ENVIRONMENTAL SCIENCES

*UTILIZING PARTNERSHIPS AND INFORMATION
TECHNOLOGY TO ADVANCE INVASIVE SPECIES,
FORESTRY AND AGRICULTURE EDUCATION*



www.bugwood.org

COOPERATORS AND PARTNERS

USDA APHIS PPQ • USDA CSREES

USDA Forest Service - Forest Health Protection

USDA Forest Service - Forest Health Technology Enterprise Team

National Park Service • U.S. Fish and Wildlife Service

Georgia Department of Agriculture • Georgia Forestry Commission

International Society of Arboriculture

Southern Plant Diagnostic Network

The Nature Conservancy

University of Florida • Colorado State University

STATISTICS

The Center's websites have received over 600 Million hits from 70 Million unique users since 2001.

GLOBAL TRAFFIC



MISSION

To serve a lead role in development, consolidation and dissemination of information and programs focused on invasive species, forest health, natural resources and agricultural management through technology development, program implementation, training, applied research and public awareness.

GOALS

Become a preeminent national and international public service and outreach center.

Develop collaboration between UGA and state, university, federal and international partners.

Integrate and develop information and programs.

Produce web sites, publications, posters and presentations. Serve as a clearing house for information, applied research and training.

Promote public awareness, education and applied research.

SERVICES

Educational Internet application development and hosting. Image acquisition, digitization, databasing and delivery.

Electronic early detection, monitoring and mapping tools for invasive species.

Educational resource development including bulletins, publications, posters, CD-ROMs and presentations.

Provide training and support for landowners, natural resource professionals and managers, and the general public.

Full-color design and layout of publications, displays and posters.

Website development and hosting for professional organizations and conferences.

Conversion of educational materials to electronic format with web accessibility.

Update and maintain database-driven information resources.

Provide feeds of images and information to external web applications.

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DATABASE SYSTEM WEBSITES

- Forestry Images, www.ForestryImages.org
- Invasive.org, www.Invasive.org
- IPM Images, www.IPMImages.org
- Insect Images, www.InsectImages.org
- Bugwood Images, images.bugwood.org

OTHER CENTER WEBSITES

- Bugwood, www.bugwood.org
- Bugwood Wiki, wiki.bugwood.org
- Early Detection and Distribution Mapping System, www.eddmaps.org
- Widely Prevalent Fungi, www.prevalentfungi.org
- Forest*A*Syst: Forest Landowner's Assessment Guide, www.forestasyst.org
- Forest Pests of North America, www.forestpests.org
- Bark and Wood Boring Beetles of the World, www.barkbeetles.org
- Cogongrass in the Southeast U.S., www.cogongrass.org
- Georgia Invasive Species Task Force, www.gainvasives.org

HOSTED WEBSITES

- National Network of Invasive Plant Centers, www.invasiveplantcenters.org
- National Association of EPPCs, www.naepcc.org
- Southeast Exotic Pest Plant Council, www.se-epcc.org
- Georgia Exotic Pest Plant Council, www.gaepcc.org
- Florida Exotic Pest Plant Council, www.fleppc.org
- Florida Invasive Species Partnership, www.floridainvasives.org
- Everglades Cisma, www.evergladescisma.org
- Southern Forest Insect Work Conference, www.sfiwc.org
- River to River CWMA, www.rtrcwma.org
- Northern Rockies Invasive Plant Council, www.nripc.org
- Regional Tropical Soda Apple Task Force, www.tropicalsodaapple.org

CONTACT US FOR MORE INFORMATION

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Email: bugwood@uga.edu
Website: www.bugwood.org

SEE IT...

BUGWOOD

Image Database System
images.bugwood.org

- Began in 1994, focusing on forest health, expanded to include agriculture/integrated pest management, invasive species, arboriculture and silvicultural practices
- Archive of easily accessible high resolution images, downloadable in 5 resolutions
- Taxonomically-based fully relational database
- Each image selected and reviewed for quality and content
- Diverse subjects, from plants and insects to fungi and wildlife, from a worldwide network of photographers
- Images are available at no cost for non-profit educational applications, with proper citation

STATISTICS

Over 92,000 images from more than 1,500 photographers, covering 11,800 species/subjects



David Powell, USDA Forest Services, Bugwood.org



Scott Roper, USDA ARS, Bugwood.org



David Calhoun, Bugwood.org



Chris Evans, River at River CWMA, Bugwood.org



David Stephens, Bugwood.org



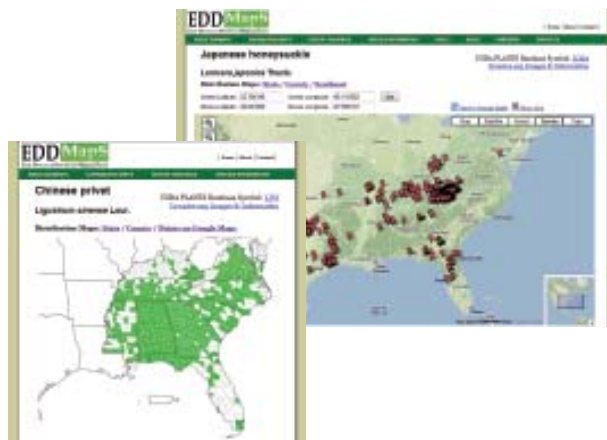
Tom Perna, NPS, Bugwood.org

MAP IT...

EDDMapS

Early Detection & Distribution Mapping System
www.eddmaps.org

- Started in 2005 with Southeast focus, now expanded to regions across the U.S.
- Web-based mapping of invasive species distribution to help fill gaps and identify “leading edge” ranges
- Facilitates implementation of Early Detection and Rapid Response programs with online data entry forms, e-mail alerts and network of expert verifiers
- Fast and easy to use – no knowledge of GIS required
- Data can be searched, queried and downloaded in a variety of formats
- Cooperates with and aggregates data from other invasive species mapping projects
- Custom/hosted applications can be quickly and inexpensively developed
- One database for both local and national data



STATISTICS

Over 413,000 records with 70,000 point records, covering 1,300 species

PROJECTS

Southeast Exotic Pest Plant Council
Florida Exotic Pest Plant Council
Everglades Cooperative Invasive Species Management Area
Alaska Exotic Plant Information Clearinghouse
Mid-Atlantic Exotic Pest Plant Council

BUILD IT...

BUGWOODWiki

wiki.bugwood.org

- USDA CSREES IPM Capstone project, began in 2007
- Content Management System with easy formatting and a full history of changes
- Factsheets on pests, commodities, management information and projects
- Collaborative articles in an expert moderated platform
- Full integration with the Bugwood Image Database for images and taxonomic information
- Allows for project specific interfaces

USE IT...

Images, Maps and Information are used in:

- Web pages
- Newsletters
- PowerPoint presentations
- Newspaper articles
- Posters
- Magazines
- Full-page color prints
- Diagnostic keys
- Television
- Journals
- Text Books

All content on Center websites can be used at no cost for non-profit educational purposes, with proper citation.

CONTRIBUTE...

- Submit your images to the [Bugwood Image Database System](#)
- Add invasive species distribution [EDDMapS](#)
- Become a [BugwoodWiki Scholar](#)

If you are interested in sponsoring websites or projects please contact us at bugwood@uga.edu.