# **Internodes**

#### Mark Your Calendar

- Aquatic Plant Management Society 47th Annual Meeting, July 15-18, 2007, Nashville, TN. www.apms.org
- International Soil & Water Conservation Society Conference, July 21 - 25, 2007, Tampa, Florida. The five-day conference will include a session on invasive species. http://www.swcs.org/en/swcs\_international\_ conferences/
- Mid-Atlantic EPPC biannual symposium, cosponsored with the Morris Arboretum, Invasive Plants: Research, Removal and Renewal, August 15-16, 2007, Philadelphia, PA. http://www.ma-eppc.org/
- 9th International Conference on the Ecology and Management of Alien Plant Invasions, September 17-21, 2007, Perth, Australia. www.congresswest.com.au/emapi9/
- 14th North American Weed Management Association (NAWMA) Conference, September 24-27, 2007, Las Vegas, Nevada. www.nawma.org
- Florida Aquatic Plant Management Society (FAPMS) Annual Meeting, October 1-4, 2007, St. Petersburg, Florida. www.fapms.org
- 34th Annual Natural Areas Conference: Some Assembly Required: Preserving Nature in a Fragmented Landscape, October 9-12, 2007, Cleveland, Ohio. http://www.naturalarea.org/ 07conference/
- Right-of-Way & Aquatic Pesticide Applicator Training, October 16-18, 2007, Panama City Beach, FL. http://conference.ifas.ufl. edu/applicator/ or 352-392-5930.

#### New Books

Invasive Plant Responses to Silvicultural Practices in the South, by C.W. Evans, D.J. Moorhead, C.T. Bargeron and G.K. Douce, The University of Georgia, Bugwood Network, BW-2006-03, December 2006. 52 pp. Intended to aid foresters and managers in the southeastern U.S. in developing management plans and managing forests threatened by invasive plants. Includes a herbicide quick reference guide, plant ID, potential mechanisms for spread, and a suite of silvicultural management/control practices. Available at www.invasive.org

**Natural Florida Landscaping** by Laurel Schiller and Dan Walton of Florida Native Plants. "As land is developed in Florida the native flora is removed and usually replaced with non-native vegetation. Wildlife habitat is

reduced, water, fertilizer and pesticide usage increases, and the appearance of Florida is altered. But urban and suburban dwellers can reduce the damage being done to our ecosystems by viewing their yards as part of the natural system. This means using native plants and doing it in a way more attuned to natural places. This small book will help you make a plan that will work for your yard and choose the native plants that will thrive there with minimal care." Paperback \$12.95 ISBN: 1-56164-388-2 Available at bookstores.

Invasive Plants — Guide to Identification and the Impacts and Control of Common North American Species tells the history of invasives, defines their role in natural areas and the economy, describes their role in natural systems, and provides a field guide to over 175 of the most common species in North America. Written by Sylvan Kaufman and Wallace Kaufman. Hard Cover, 464 pp, 250 color photos, \$39.95 http://www.invasiveplantguide.com/home.html

#### **New Publications**

Preventing horticultural introductions of invasive plants: potential efficacy of voluntary initiatives, by J.W. Burt, et al, Biological Invasions 10.1007/s10530-007-9090-4 (2007). "With very little government regulation of horticultural imports of invasive plants, efforts have turned toward fostering voluntary initiatives to encourage self-regulation by the horticulture trade."

Exotic seed dispersal by white-tailed deer in southern Connecticut, by S.C. Williams and J.S. Ward. Natural Areas J. 26:383-390 (2006). "We estimated that the deer herd on site had the potential to disperse 586-1046 viable exotic seeds/day/km2 during the 2002 sampling period and 390-696 viable exotic seeds/day/km2 during the 2003 sampling period."

Biological Invasions: recommendations for U.S. policy and management, by D.M. Lodge, et al, ESA Report, Ecological Applications 16(6):2035-2054 (2006). "Recent scientific

# Florida Native Plant Society (FNPS) Model Landscape Ordinance Available for Download — http://www.fnps.org/

This model ordinance is intended to be used by local governments that wish to adopt or amend their existing landscape ordinance to encourage or require the use of appropriate native vegetation in all landscaped areas. It provides sample language that can be adopted (in whole or in part) by a local government, and a well-researched and fully referenced section on legal authority to enact landscape ordinances. The goal is to provide a comprehensive plan to promote appropriate native vegetation and best landscaping practices. "Appropriate native vegetation" is vegetation found in the natural community that is suited to the soil, topography, and hydrology of a particular site.

Local governments can derive substantial benefits from promoting and protecting native vegetation that is appropriate to the area, such as achieving water conservation goals, preserving habitat in urban areas, greatly reducing maintenance costs for landscaping, and protecting property values.

Many city and county governments throughout Florida are already taking a pro-active approach:

Brevard - 50% Native vegetation required

**Dade County** - 30% Native vegetation required

**Indian River County** - 50% Native vegetation required

Islamorada - 75% Native vegetation required

**Key Colony Beach** - 50% Native vegetation or xeriscape vegetation required

**Key West** - 70% Native vegetation required

**Lee County** - 75% Native vegetation required for tree species; 50% Native vegetation required for shrub and groundcover species

**Manatee County** - 30% Native vegetation required

Marathon - 70% Native vegetation required

**Monroe County** – 70% Native vegetation required

Miami - 30% Native vegetation required

**Polk County** - Recommends native vegetation and includes native vegetation on the recommended plant list

**St. Lucie County** - 50% Native vegetation or waterwise landscape required

WILDLAND WEEDS 21

and technical advances provide a sound basis for more cost-effective national responses to invasive species. Greater investments in improved technology and management practices would be more than repaid by reduced damages from current and future invasive species. The Ecological Society of America recommends that the federal government take six specific actions."

Mechanical and physical properties of composite panels manufactured from Chinese tallow tree furnish, by T.F. Shupe, et al, Forest Products J. 56(6):64-67 (2006). "This preliminary study indicated that Chinese tallow tree can be successfully used for all three composite panel types [particleboard, fiberboard, and structural flakeboard] to produce panels meeting various American National Standards Institute grades based modulus of rupture, modulus of elasticity, and internal bond."

Invertebrate fauna associated with torpedograss, Panicum repens (*Cyperales: Poaceae*), in *Lake Okeechobee*, Florida, and prospects for biological control, by J.P. Cuda, et al, Florida Entomologist 90(1):238-248 (2007).

Colonization patterns of the invasive Brazilian peppertree, Schinus terebinthifolius, in Florida, by D.A. Williams, et al, Heredity 1-10 (2007). "The evidence for extensive movement throughout the state suggests that Brazilian peppertree will be capable of rapidly recolonizing areas from which it has been eradicated."

Effects of defoliation on growth and reproduction of Brazilian peppertree (Schinus terebinthifolius), by L.W. Treadwell and J.P. Cuda, Weed Science 55:137-142 (2007). "From this simulated herbivory study, we infer that multiple defoliations by insect defoliators have the potential to significantly suppress the growth and fruit production of Brazilian peppertree in Florida."

Resource-use efficiency and plant invasion in low-resource systems, by J.L. Funk and P.M. Vitousek, Nature 446:1079-1081 (2007).

See http://www.nps.gov/plants/alien/fact/mivil. htm for an updated fact sheet on Japanese stiltgrass (*Mycrostegium vimineus*).

The new journal "Invasive Plant Science and Management" is seeking manuscripts for its first issue to be published the first quarter of 2008. The peer-reviewed journal will focus on fundamental and applied research on invasive plant biology, ecology, management, and restoration of invaded

non-crop areas, as well as on educational, sociopolitical, and technological aspects of invasive plant management. A publication of the Weed Science Society of America. For more information, see http://www.wssa.net/WSSA/Pubs/IPSM.htm

#### In the News

#### The Second Non-native Pet Amnesty

**Event** took place March 24th in Clearwater, FL. Florida Fish and Wildlife Conservation Commission is the lead agency working with the City of Clearwater and Pinellas County Animal Services and many other educational participants. Approximately 300–400 people attended and 50 unwanted exotic pets were turned in to the event. These included frogs, lizards, snakes, etc. All surrendered animals were placed with approved adopters. http://myfwc.com/nonnatives/amnestyDay.html

#### Meijer Stores Remove Two Known Invasives, Unveil New Plant Tag for Garden Centers

The Nature Conservancy has worked with Meijer Stores to recommend non-invasive plants that are best suited for backyards in the Midwest. Shoppers will find 16 percent of Meijer's plants, trees and shrubs marked with a special icon created by a Nature Conservancy volunteer indicating that scientists have determined them to be "Recommended Non-Invasive" species. In addition, Meijer will remove two species from their inventory, Norway maple and Lombardy poplar, both of which are known to be invasive in parts of the Midwest.

All Meijer Back Yard employees will be trained on the new plant tags and invasive species to better understand and explain to shoppers about the dangers of invasive plants and the benefits of using recommended non-invasives.

In Florida, the Conservancy and the Southeast and Florida Exotic Pest Plant Councils also have partnered with the Lowe's chain, which has agreed not to sell 45 species of invasive plants in their garden centers in that state.

FLEPPC has been working similarly with the Florida Nursery, Growers and Landscape Association (FNGLA), Tampa Bay Wholesale Growers (TBWG), the Florida Department of Transportation (FDOT), and others to reduce the availability and use of invasive plants.

### America's Sportsmen Draw Bead on Invaders

from http://www.protectyourwaters.net/

The "Stop Aquatic Hitchhikers!" campaign and web site encourage recreational users to become part of the solution in stopping the transport and spread of invasive hitchhikers.

April 25, 2007 — Brooklyn Center, MN A survey of twenty national hunting and fishing organizations demonstrates a growing concern about the impact that invasive plant, animal and insect species are having on America's woods and waters. Some of the groups are adopting conservation actions to combat invasive species. Wildlife Forever, the non-profit arm of the North American Hunting Club and North American Fishing Club, recently polled sportsmen's groups about their awareness of and attitudes toward invasive species in an effort to foster a national conservation response to the threat posed by invasives.

The largest result in the poll shows that 71% of the groups have an increased awareness about the threat posed by invasive species in recent years compared to 29% who had no change in their awareness. Seventy percent believe that invasive species have significant (35%) or moderate (35%) impact on fish and wildlife issues, while 30% feel invasive species have little or no effect. Fifty-three percent of the groups have increased existing programs or initiated new programs to deal with invasive species (emphasis added).

The National Council for Science and the Environment (NCSE) is pleased to announce the formal launch of the Earth Portal (www.EarthPortal.org).

Earth Portal is a comprehensive, free and dynamic resource for timely, objective, science-based information about the environment built by a global community of environmental experts. In contrast to information from anonymous sources with no quality control, the Earth Portal is created and governed by individuals and organizations who put their names behind their words and where attribution and expert-review for accuracy are fundamental.

The Earth Portal includes:

- Encyclopedia of Earth (www.eoearth. org) has an initial 2,300 articles from over 700 experts from 46 countries, as well as such content partners as the World Wildlife Fund and the United Nations Environment Programme;
- Earth News (www.earthportal.org/news) includes breaking news updates from many sources, with links from key words to Encyclopedia articles, enabling readers to learn about the science behind the headlines;
- Earth Forum (www.earthportal.org/forum) allows the public to engage in discussions with

22 SUMMER 2007



Coral ardisia grazed by cattle.

#### Coral Ardisia Kills Cows

A Seminole County cattle rancher recently lost 23 mature cows in a matter of weeks. He sent one of the deceased animals to the University of Florida for necropsy and was informed that the cow succumbed to poisoning and there were "white seeds" in the gut. Upon inspection of the oak hammocks within the specific rangeland, the rancher discovered that coral ardisia (*Ardisia crenata*) plants and seeds were being heavily grazed by the cattle (the "white seeds" were apparently the remnants of the ardisia's red seeds). He has not lost any more cows since they were moved from the infested rangeland to an adjacent pasture. It appears that the cows were left to forage in an area with more oak hammock than pasture and they heavily foraged a 1–2 acre patch of ardisia in the interior. The top 1/3 of the plants were consumed (seeds, branches, and foliage). Brent Sellers of the UF/IFAS Agriculture and Researach Education Center in Ona is preparing a fact sheet on the topic to alert ranchers.

experts, ask questions and get answers, and to participate in community debates about issues that matter to them;

• Environment in Focus (www.earthportal. org/?page\_id=70) provides an exploration of a major issue each week—energy, climate change, environmental economics and other topics—led by a prominent expert in the subject and involving articles, news, places, discussions, Q&A, interesting facts, and more.

The National Council for Science and the Environment (www.NCSEonline.org) is a not-for-profit organization dedicated to improving the scientific basis for environmental decision-making. The NCSE specializes in programs that foster collaboration among diverse institutions, communities and individuals.

#### A new invasive species outreach brochure and poster provides gardeners and homeowners with best management practices to prevent invasive plants from spreading



to parklands and natural areas. The material was developed in cooperation with the National Park Service, The Garden Club of America, the National Invasive Species Council and many others. To request free copies, email Lynda Brick (lbrick@wildflower.org) with your address and quantity requested. 3,000 brochures are on hand and more can be ordered if necessary.

http://www.wildflower.org phone: 512.232.0110 PDF files for the brochure & poster are at http://wildflower.utexas.edu/plantwise/ from the Invasive Species Council (Australia)

#### The Weedy Truth about Biofuels

With climate change so much in the news, biofuel crops are attracting interest, but initial investigations by the Invasive Species Council (Australia) have found that many of these are potential major weeds—putting the economy and the environment at risk.

"For example a biodiesel company in Queensland has called on farmers to grow jatropha (also called physic nut), an Indian plant that is banned in Western Australia and the Northern Territory because of its weediness. Jatropha is also closely related to bellyache bush—one of the worst weeds of grazing lands in northern Australia - and like bellyache bush it is poisonous to livestock. It could be a disaster if this plant was deliberately put in the ground as a crop in Australia," said ISC spokesman Tim Low.

The ISC has found that other known major weeds touted as biofuel crops include Chinese tallow tree, castor oil plant, reed canary grass, giant reed and Chinee apple. For example Chinese tallow tree is one of America's worst weeds, and it was recently declared a noxious weed in northern New South Wales because it is invading land so rapidly.

To see the Weed Science Society of America's white paper on "Biofuels and Invasive Plant Species," visit www.wssa.net

## Invasive Species Cause Big Economic Loss in China

www.chinaview.cn 2007-04-21 10:31:08 WUHAN, April 21 (Xinhua) — Invasive plant species have brought hazards to rice, wheat, corn and other crops in China and caused big economic loss, said a scientist with the Chinese Academy of Sciences (CAS).

Water hyacinth is also posing a serious problem in rivers, lakes and ponds. There are more than 280 foreign invasive species of plants and animals in China, with 18 aquatic plant species and 170 terrestrial plant species. Half of the species are from America and about one-fifth from Europe.

Statistics show that invasive species have caused a total economic loss of 14.45 billion U.S. dollars in China between 2001 and 2003, with direct and indirect economic losses accounting for 16.5 and 83.41 percent.

### **THANK YOU**

to the following sponsors for supporting this issue of WILDLAND WEEDS:

BASF
Syngenta Professional Products p. 24
Biosorb p. 19
Dow AgroSciences p. 15
UAP Timberlandp. 7
Applied Biochemists p. 18
Allstate Resource Management p. 11
Applied Aquatic Management p. 19
Aquatic Plant Managementp. 13
Aquatic Vegetation Control p. 19
Great Outdoors Publishing Co p. 11
Pandion Systemsp. 19
Vegetation Solutions LLCp. 11

WILDLAND WEEDS 23