

Hillsborough County Extension Service  
5339 County Road 579, Seffner Fl., 33584  
(813) 744-5519 fax (813) 744-5776

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## **Editors Corner**

### **Thoughts on the Drought and Xeriscape - Can We Do Better?**

Dave Palmer

As chief cook and bottle washer of "Growing Concerns," I'm normally quite content to scan the electronic horizon for news and issues of interest to the professional horticulture industries and report them in these pages. Occasionally though an opinion bubbles up out of the depths of my brain and forces it's way into the open.

Several years of drought in Central Florida have been accompanied by serious efforts to solve the water problems. Most of these efforts have been well-intentioned, some have actually been effective, fewer have been well-thought out. Side effects of these efforts include massive public confusion, large amounts of hand-wringing by politicians and bureaucrats and more than a few regulations that ignore science or seem either ludicrous or contradictory or both.

One of the beneficial results of the drought is that some folks seem to be taking a serious interest in Xeriscape (pronounced zer-ah-scape NOT zer-o-scape). Several requests to produce Xeriscape designs from friends and family, have forced me to think about the principles involved. I began my design efforts with the goal of creating a viable landscape design that could survive several months of severe drought (after establishment of course) while watering only every other week. Unfortunately I could not come up with any combination of plants that I felt confident could survive such a scenario. Only then did I realize that the landscapes I was attempting to design for were in full sun. Eureka! If a design won't work in full sun,

why not create partial shade and try again? As it turns out, my inspiration was in front of my eyes. A large portion of my front yard is in partial shade. The shade ranges from light to moderate, but receives enough light to support St Augustine turf. For the last several months (during the worst of the drought) I've limited my irrigation to every other week. Much to my surprise, the St Augustine has survived. By the end of the second week the turf is in pretty thirsty, but alive. The borders of this area get a bit too much sun and have died. These experiences have convinced me that growing a landscape (even a Xeriscape) in full sun is probably not the right thing to do in a state that faces a long term water shortage - drought or no drought.

Exposure to low-volume irrigation and absorptive polymers combined with a little thought have led to the desire to try the Xeriscape concept in partial shade. At this stage of my thinking, the ideal landscape would be have partial shade covering at least 75% of the property and might be prepared by working an appropriate amount of absorptive polymer into the soil.

It sounds good, but will it work? No idea is perfect and I see several problems. Even if you buy the largest trees you can afford or handle, it will be several years before they mature to the point that appropriate shade tolerant plants can be installed. Critical to the whole idea is the quality of the shade. It must be partial shade, open shade, not deep dense shade. Deep dense shade cuts the designers plant choices down considerably. Open shade would be like that provided by an Elm or Golden Raintree in central or north Florida, or Jacaranda or Royal Poinciana in the south. Other options might include Slash Pine, if not planted too far apart, Frangipani, Tababueia, Yaupon Holly, Weeping Willow, Black Olive, Silver Dollar Eucalyptus, Floss Silk Tree, etc.

What do you (or the customer) do while you're waiting for the trees to grow? Install full sun plants and water only as necessary? These days instant gratification is king. How will customers react to a multi-phase landscape installation that might have 5 years between the phases? Hmm...

The benefits seem obvious. Eventually the landscape could look better than many I see today, be more comfortable for people due to the increased shade, and yet use 1/2 the water allowed by our water restrictions. (Currently one day a week in most of West Central Florida)

### **I Wonder**

I wonder how quickly people can change their concept of an "ideal" landscape? If the rains return to normal, will anyone remember the drought of the last few years? I wonder if there's research to support any of these ideas? I wonder how much more commercial and residential development our water resources can handle?

If anyone out there has any experience with or is willing to try these ideas, let me know. If I have a chance I'll pursue them and let you know what happens. Thanks for listening.



### **Did You Know?**

According to Dr Ron Cherry, chinch bugs colonize in very concentrated areas; they are highly herd oriented. His analogy: islands of chinch bugs in an ocean of turf. There is no reason to treat large areas of turf hoping to catch a few chinch bugs. A better strategy is to treat the highly infested areas along with a band or perimeter around the infestation. (Source: Fla Turf Digest, May / June 2001)

### **First Aid Instructions Revised for Pesticide Labels**

EPA has proposed to revise the format and content of first aid advice on all pesticide labels to make them easier to read. The revision incorporates recommendations from the medical community and the Consumer Labeling Initiative. For existing products, EPA hopes to have label amendments submitted by Oct 1, 2001. (Source: Chemically Speaking May / June 2000)

# New Turf Set to be Released

A new turf called Seashore Paspalum is set to be released in Central Florida very soon, possibly before this newsletter is published. In light of the FX-10 experience, I'd suggest downplaying the "miracle grass" or "silver bullet" attitude that will surely raise it's ugly head. I've been to one sod farm that grows Paspalum and it's gorgeous - when grown by experts. The jury is still out on how the turf will fare when grown by homeowners. It's important that everyone in the green industries get up to speed quickly on this new turf, as questions from customers will begin immediately. *Florida Turf Digest*, the magazine of the Fla Turfgrass Ass'n. had a nice article about the sod business in their May / June 2001 issue. In that article they quoted Dave Dymond, a turfgrass pro and the current General Manager of H&H Sod in Central Florida. Dave says "Anytime a new grass comes out there is an education and learning curve that must be considered. First there are a hundred growers that have to learn to grow it effectively, then there are several thousand



**Paspalum 'Sea Isle I' is a fine textured turf, reminiscent of those commonly used up north. A quarter is shown in the photo.**



**Paul Boswell of Turf America show off 'Sea Isle I' Grown by experts, it looks GOOD!**

lawncare companies who have to modify their techniques to manage it profitably, and then there are millions of homeowners who must learn the limits of their new miracle lawns." Dave sums it up nicely. We're on the edge of a huge learning curve with this new turf. It's not too similar to any other grass we currently grow here in Florida. If you treat it like other types of turf, you can damage or even kill it. It's in the same family as Bahia, so don't even think of using Atrazine on it. Also, It needs to be mowed at around 1 inch - a radical change from the typical St Augustine or Argentine Bahia. Below are listed some websites for more info. I've also put a Paspalum page up on the *ProHort* website (<http://prohort.ifas.ufl.edu/index.htm>) with some pictures taken at the Turf America - Elsberry sod farm.

## Other Paspalum Links:

Seashore Paspalum for Florida Lawns - <http://edis.ifas.ufl.edu/EP059>

Paspalum vaginatum: An Alternative to Bermudagrass

<http://grove.ufl.edu/%7Eturf/turfcult/ralish.html>

Univ of Georgia's Paspalum website -

<http://www.griffin.peachnet.edu/cssci/turf/paspalum/paspalum.htm>

**Natives who beat drums to drive off evil spirits are objects of scorn to smart Americans who blow horns to break up traffic jams. Unknown**

# Upcoming Events

**Great Southern Tree Conference** On Nov 30-Dec 1 the First Annual Great Southern Tree Conference will occur in Gainesville. The entire program will be devoted to "tree selection, landscaping, establishment and marketing issues." the educational program will include outdoor hands-on demonstrations on a 30 acre site supplied by UF.

**Turfgrass Odyssey 2001** FTGA is gearing up for their annual show, the largest turf show in the Southeast. Everything you've ever wanted to know about turfgrass between August 13-15 in Gainesville. Lots of education, CEU's and equipment! The Fla State Turf Equipment Technicians Ass'n is also organizing an educational program for the techs. See the website at <http://www.ftga.org/>

**Florida Nursery and Allied Trade Show (FNATS)** Don't miss the granddaddy of horticulture trade shows in Florida. This year the big event will take place Sept 21-23 in Orlando. Over 900 booths and nearly 10,000 attendees make this event a must-see each year. See the website at <http://www.fnga.org/base.htm?page=fnats>

**Green Industry Expo (GIE)** It's not often that one of the BIG national landscape conferences is in our own backyard. November 10-13 at the Tampa Convention Center three of the national associations will cooperate to host this event. The three associations are: PGMS (Professional Grounds Management Society), ALCA (Associated Landscape Contractors of America) and PLCAA (Professional Lawn Care Association of America). This event is usually attended by 6,000+. Each of the industries will have its own educational conference. This year a new feature will be added - an Interior Landscape Pavilion. Mark your calendars now! And then check out these websites for conference details: <http://www.plcaa.org/> <http://www.alca.org/html/gic2.html> and <http://www.pgms.org/retreat.htm>

## IPM in Schools

Anti-pesticide groups are making inroads on the local and state levels with a campaign to restrict and/or eliminate the use of pesticides in and around schools. In May, the Portland, Oregon Public Schools Board of Education approved a school pest management policy that calls for the implementation of an integrated pest management (IPM) policy that reduces and eliminates, where feasible, the use of pesticides. The policy also prohibits the use of pesticides classified as known or likely carcinogens.

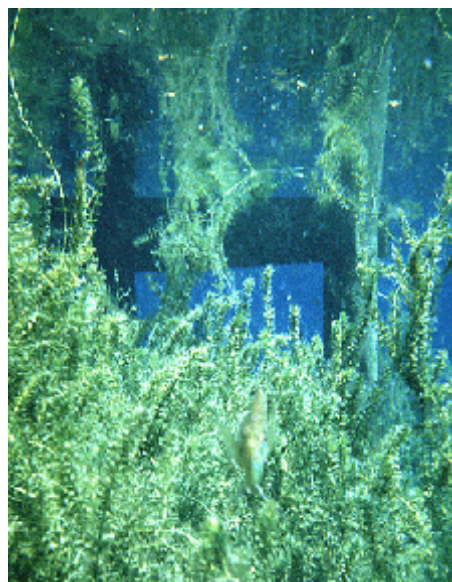
Responsible Industry for a Safe Environment (RISE), a coalition of pesticide industry manufacturers, reports it and other green industry organizations have been negotiating with Beyond Pesticides (formerly called the National Coalition Against the Misuse of Pesticides) (NCAMP), a Washington, D.C.-based lobbying group for a compromise agreement.

"So far industry and the environmentalists have agreed to require states to establish a school pest management plan that must be submitted to EPA for approval. Each local school district would then be required to implement its own plan, based on the state plan. These plans would allow consideration of all pest control methods including pesticide applications. The compromise agreement does not require that pesticides be used only as a last resort," writes Allen James, RISE president. However, James adds that the parties to the negotiation are not in agreement over the contents of a letter that would be sent home to parents, with NCAMP insisting that the letter state that pesticides cause adverse health effects. (*Source: Landscape Management - Week in Review - Week of June 11-18, 2001*)

**I used to be schizophrenic,  
but we're okay now.  
Erica Gardner**

# News on the Continuing Invasions

- Scientists are teaming up to find ways to reverse the spread of **hydrilla**, an exotic weed that grows underwater and clogs numerous waterways and reservoirs in southern parts of North America. The Agricultural Research Service and a company called SePRO are cooperating to introduce effective bioherbicides that can be integrated with current control efforts. The fungus called *Mycocleptodiscus terrestris* may help keep some native American weeds in check. Applying a little extra measure of the fungus as a bioherbicide at the right time may be just the ticket for keeping the hydrilla - originally from Asia - from flourishing. Development of a safe, biological control measure should help reduce the environmental and economic impact of hydrilla, which grows so competitively with other aquatic plants that biological diversity may be threatened in many lakes and streams. (Source: ARS News Service April 26, 2001)



**Hydrilla**

- Agricultural Research Service scientists and colleagues have identified a team of two organisms-the Fergusonina fly and the nematode Fergusobia-that might help limit the spread of the **invasive weed *Melaleuca quinquenervia***. The female Fergusonina fly carries the nematodes in her ovaries and deposits them-along with her eggs-into young melaleuca buds. The female Fergusobia nematodes and the fly larvae that hatch, then feed on enlarged plant cells created by the microscopic nematodes. Eventually, galls form on infested buds, preventing flowers and seeds from developing. To avoid introducing biological control agents that might impact non-target organisms, host-specificity studies were conducted in Australia. Preliminary indications are that this fly/nematode pairing is so host-specific that each pair affects only a single species of melaleuca, eucalyptus, or closely related species. If the duo performs well in host-specificity tests in Florida, it might soon be released at melaleuca-infested locations. more info can be found at: <http://www.ars.usda.gov/is/AR/archive/apr01/bush0401.htm> (Source: ARS New Service April 25, 2001)

**It is my observation that too many people are spending money that they haven't earned to buy things they don't need to impress people they don't like.**

**Brandy Rhodes**

## Did You Know?

**A new tool** for monitoring stem-boring and soil pests has been invented by scientists with USDA ARS and Acoustic Emission Consulting Inc. The hand-held device allows users to hear the insects while drowning out background noises. The ultrasonic tool can distinguish and identify certain feeding noises, identify them as specific pests and relay that information on a read-out. (Source: Weekly NMPRO e-mail for May 29, 2001)

**Southern pine beetle** populations have exploded in Florida's Alachua and Marion counties, according to Fla. Dept. of Ag and Consumer Services. FDACS is urging consumers to monitor pine trees and contact the Fla. Division of Forestry for assistance if infestations of the tree-killing bark beetles are suspected. Drought conditions are blamed for the population explosion. (Source: Weekly NMPRO e-mail for May 1, 2001) For more info: <http://www.ifas.ufl.edu/~eny3541>

**Australian botanists** recently discovered a species of tree dating back at least 90 million years.

The "living fossil" has unofficially been named the Nightcap oak because it was discovered in the Nightcap Range rainforest near Byron Bay. Peter Weston of Sydney's Royal Botanic Gardens identified the tree after botanist Robert Kooyman discovered a stand of 20 mature trees. Not a true oak, the tree belongs to the Proteaceae family. The Sydney Royal Botanic Gardens has taken cuttings from the trees. (Source: *Weekly NMPRO e-mail for January 9, 2001*)

An Agricultural Research Service scientist has identified **several key mechanisms**

**responsible for insecticide resistance** in one of the world's most intrusive cockroach species. Steven M. Valles, an entomologist at the ARS Center in Gainesville, Fla., has been studying strains of the German cockroach (*Blattella germanica*) to determine how they develop resistance to insecticides. He discovered that several strains of the German cockroach possess a unique membrane-bound substance, called esterase, that detoxifies certain insecticides. This enhanced ability greatly increases the amount of insecticide needed to kill cockroaches possessing the enzyme. In related studies, Valles and Ke Dong of Michigan State University studied what's called knockdown resistance (kdr), an insecticide-resistance mechanism caused by mutations in nervous system proteins of some insects. They identified a gene mutation associated with kdr in 83 percent of German cockroach field populations they surveyed. The scientists later found two new mutations that were shown to make the roaches more resistant to pyrethroid and related insecticides. According to Valles, the research will be used in future studies to possibly develop kits capable of detecting insecticide resistance in field populations of German cockroaches (and possibly other insects). This would allow exterminators to choose the most effective control methods. (Source: *ARS News Service June 5 2001*)

## Pesticide Potpourri

**DuPont** recently announced that it will discontinue the manufacture of its fungicide

**benomyl** and will phase out sales of **Benlate®** in all its forms from the global market. No sales will occur after December 31, 2001, and they expect all product will clear the channels of trade by the end of 2002. DuPont advised customers that this is not a product recall, but a voluntary business decision based on a review of global market conditions and other factors. (Source: *E-mail from UF Pesticide Information Office 4/19/01*)

Horseweed (*Conyza canadensis*) along the US east coast joins ryegrass in Australia and goosegrass in Malasia as known **glyphosate** (Roundup, etc) - resistant plants.

The horseweed plants collected from Delaware were greenhouse cultured and found to withstand glyphosate at 10 times the normal lethal dosage and that the resistance was due to normal pesticide resistance (Failure to rotate pesticides properly). (Source: *Chemically Speaking, March 2001*)

**Bendiocarb** is being discontinued through the Food Quality Protection Act, according to Bob Froelich, marketing manager of Scotts Co. Plant Protection Products.

Bendiocarb is the common name of Scotts' **Closure 76WP** and several other insecticide brands used to control a broad range of pests including black vine weevil, aphids, thrips, scale, mealybugs, bronze birch borer, bagworms and Japanese beetle. Scotts will not be able to sell the product after Dec. 31, but distributors have a period to sell the pesticide while inventory remains. (Source: *Weekly NMPRO e-mail for June 5, 2001*)

**Helena Chemical Co** has requested cancellation of aquatic uses of **Barrage® HF** (2,4D, ethylhexyl ester) The cancellation will become effective Oct 22, 2001.

Nufarm Americas Inc has requested cancellation of drainage, ditchbank, lake, pond, aquatic site and sugarcane uses of **Nufarm 2,4D LV-6** (2,4D ethylhexyl ester) They

have also requested the cancellation of Weedone LV4 IOE Broadleaf Herbicide (2,4D ethylhexyl ester) Both cancellations will become effective Oct 22, 2001.

**Bayer** has requested cancellation of **Tempo 2** Lawn and Ornamental Insecticide. The cancellation will become effective Oct 22, 2001 (*Source: chemically Speaking May 2001*)

## Certified Nursery Tree Program

Several years ago the Florida Grades and Standards for Nursery Trees and Palms came into being. Until the summer of 2000, there was no program in place to ensure that a buyer was getting the grade of stock requested. In many cases if a landscape contractor was not trained in the Grades and Standards, the material arriving on site could be inconsistent with the specifications of the landscape architect and might not be evaluated until the final inspection.

A cooperative effort between the Division of Plant Industry (DPI) and the Fla Chapter of ISA has established such a program, called the Florida Nursery Tree Grading Program. As of summer of 2000 the first 32 professionals were trained as Registered Nursery Tree Graders.

The program is designed to train experienced nursery managers, arboricultural consultants, government employees and DPI inspectors in doing tree and palm grading, following the recently revised Fla Grades and Standards.

An ISA Registered Tree Grader is the only professional qualified to provide an ISA Certified Tree Tag. The tags will identify a tree as a Florida Fancy, Florida # 1, Florida # 2 or Cull quality. The tags are designed to be permanently placed on trees and palms to clearly identify the quality grade of the item for a three month time frame.

For more information on the Tree Grading Program and ISA Certified Trees and tagging, contact the Florida Chapter of the ISA at 352-379-3808 or see the website at <http://www.floridaisa.org/> (*Source:Commercial Clippings Oct 2000*)



**Florida Chapter - International Society of Arboriculture**

## Further Reading

**Sandy Florida Soils Present Unique Nutritional Challenge** - This is an excellent somewhat technical discussion of fertilizer technology. The article is in the May / June 2001 issue of FTGA's Florida Turf Digest.

**Managing Diseases** - Not highly technical, but lots of solid information. It can be found in the June 2001 issue of *Landscape Management* magazine.

## Industry Future Appears Rosy

The lawn and garden market is expected to grow to \$26 billion by 2005, according to "The U.S. Lawn & Garden Market," a study from Packaged Facts, attributing the boon largely to 77 million maturing boomers, most of whom have become affluent homeowners. "Because beautifying a home while improving its value is important to any homeowner, investing in high-ticket landscaping products and services is considered both realistic and feasible," said Richard Koulbanis, Sr. VP. at MarketResearch.com. Lawn equipment sales hit a historic high of \$12.6 billion in 2000; lawn and garden supplies increased nearly 5% to \$4.9 billion in 2000; and professional lawn-care services grew to \$3.4 billion, up 12% from '99, the survey said. (*Source: The Weekly Dirt, for 19 Jun. '01*)

# HCC Fall Schedule

Hillsborough Community College's fall schedule of horticulture classes is as follows:

- HOS 1030 (3hr) Horticulture Science - 5:30-6:45pm Mon & Wed Rm PFLS 109
- ORH 1510 (3hr) Plant Identification I - 7:00-9:50pm Mon Rm PFLS 109
- ORH 1820 (3hr) Irrigation & Water Mgmt - 5:30-8:30pm Thur Rm PFLS 109
- SOS 1120 (3hr) Soils & Fertilizers - 5:30-8:30pm Tues Rm PFLS 109
- ORH 1021 (3hr) Plant Propagation -8:00 - 9:50am Sat Lowry Park
- ORH 1021L (2hr) Plant Propagation Lab - 10:00am - 1:50pm Sat Lowry Park
- HOS 1016 (3hr) Horticulture Math & Chemistry -7:00 - 9:50pm Wed Rm PFLS 109
- ORH 1524 (3hr) Native Uplant Plants (D) - 6:00 - 7:50pm Thur Lowry Park

For more info call Fred Webb at 757-2104 or Joan Raynor at 757-2112

## Did You Know

**Fire ants** have gone Down Under. Imported red fire ants were discovered for the first time on the continent in Queensland this year, according to Greenworld, an Australian horticultural trade publication. They were found at 27 sites, including 1 wholesale/retail nursery operation. Queensland Nursery Industry Assoc. advised members to check all facilities and plant materials. (Source: *Weekly NMPRO e-mail for May 15, 2001*)

**Champion Tree Project Int'l.** plans to replenish the woods of Mount Vernon with genetic copies, including red ash. The group wants to grow clones of national champion trees registered with American Forests' Nat'l. Register of Big Trees. Clones also may wind up in Arlington National Cemetery and in Salt Lake City for the 2002 Winter Olympics. Growers David and Jared Milarch started the project, and with funds from the National Tree Trust, clones are being grown in nurseries. (518) 477-6100; <http://www.championtrees.org> (Source: *Weekly NMPRO e-mail for June 19, 2001*)

## Business News

- **Van Water & Rogers**, pest control supplier is changing it's name to **Vopak** to become more closely aligned with it's parent company Royal Vopak.
- **Dow Chemical** recently announced that it will purchase **Rohm and Haas** Agricultural Chemical
- **ProSource One**, formerly Terra Industries, will be purchased by the **Royster Clark Group**
- **John Deere** recently announced plans to acquire the parent company of **Century Rain Aid**.
- **Environmental Care Industries** (ECI) recently stated that they had made more acquisitions in the past 12 months that any other period in it's history.
- **OneSource** acquired **Austin Outdoor Services** in Florida.

**Beer is proof that God loves us and wants us to be happy.**  
**Benjamin Franklin**

# SWFWMD Wins Native Plant Design Award

The South Florida Water Management District (SWFWMD) was honored at the Florida Native Plant Society's 21<sup>st</sup> Annual Conference as a "Design With Natives" award winner. Florida Certified Landscape Designer Steve Fairtrace designed the winning landscape that was installed at the West Palm Beach Field Station.

The design philosophy was to incorporate plant material from ecological communities that may be found in the geographical area. The project addressed the use of native plant material, water conservation and a reduction in maintenance costs. For more information on the Florida Certified Landscape Designer program contact FNGA at 1-800-375-3642 (*Source FNGAS's Greenline Magazine May 2001*)

## Interesting Websites

**CEU's** - Don't forget to keep track of your CEU's. With some licenses renewing at 4 year intervals, it's easy to forget.. This website will keep you abreast of upcoming CEU classes. <http://pest.ifas.ufl.edu/ceu.htm>

**Sports Turf** - I hadn't run across the The Sports Turf Managers Association before, check out their website: <http://www.sportsturfmanager.com/>

**Encephalitis** - UF's Florida Medical Entomology Lab in Vero Beach has put up a website on encephalitis (both in English and in Spanish) at <http://eis.ifas.ufl.edu/> Lots of good info!

**Invasive Plant Mgmt** - DEP's Bureau of Invasive Plant Management has information on aquatic permits, FAQ's a list of publications and a section on grants and contracts. <http://www.dep.state.fl.us/stland/bapm/index.htm>

**Insects** - Two websites have moved: Two more insect WWW sites at UF have moved to new locations. USDA Whitefly Knowledgebase moved to <http://whiteflies.ifas.ufl.edu/>  
UF Mole Cricket Knowledgebase moved to <http://molecrickets.ifas.ufl.edu/>

**2001 Pest Control Guide for Turfgrass Managers** - This is a handy publication, lots of good info on weed, disease, insect and nematode control options by numerous researchers at UF. Its available either at:

<http://hort.ifas.ufl.edu/turf/PestControl/2001PestControlGuide.pdf> or...

[http://wfrec.ifas.ufl.edu/faculty/unruh/2001\\_UF\\_Pest\\_Control\\_Guide\\_for\\_Turfgrass\\_Managers.PDF](http://wfrec.ifas.ufl.edu/faculty/unruh/2001_UF_Pest_Control_Guide_for_Turfgrass_Managers.PDF)

**Weird Plant Newsletter** - <http://web.tampabay.rr.com/vanweb/killerWPnews.htm>

Interesting website! - features include 'What's in a Name?' and 'Plants that Changed History' in addition to some interesting plant facts & stories.

**The Exotic Invasion of Florida** - <http://doacs.state.fl.us/~pi/enpp/ento/exoticsinflorida.htm>

Did you know that from 1986 to 2000, 150 species of "exotic" arthropods (insects, spiders and mites) have been found and believed established in Florida. Dr. M.C. Thomas states that "Almost every month, a new exotic arthropod is detected in the state. Some turn out to be serious agricultural pests.." See the list at this site.

**"Biologically speaking, if something bites you it's more likely to be female."  
Desmond Morris.**

## Calendar of Events

**Jul 3 - Pesticide Testing Polk** 9am call 863-533-0765 reservations.

**Jul 10 - Pesticide Testing Hillsborough County** (9:00am - 2nd Tuesday of the month)  
813-744-5519

- Jul 12-15 - American Nursery & Landscape Assn (ANLA) Annual Conference,**  
Cleveland 202-789-2900
- Jul 13 - FNGA Landscape Certification Exam,** PTEC, St Pete, Fl., contact Merry Mott,  
FNGA 1-800-375-3642
- Jul 18 - Pesticide Testing Pinellas County** 9am sharp, Call Paula at 582-2456 for  
reservations.
- Jul 20 - Urban Tree Short Course -** Miami-Dade Extension, Homestead, contact Joe  
Garofalo 305-348-3311
- Jul 22-25, 2001 - ASHS 2001 -** Sacramento, CA, American Society for Horticultural  
Science see the website at: <http://www.ashs.org/events/ashs2001/ashs2001.html>
- Aug 1 - Pesticide Testing Polk County** 9am call 863-533-0765 reservations.
- Aug 2 - Quarterly Pesticide Training,** Sarasota. **FREE.** 2 Core CEU's, Call Pat  
Porchey or Barbara Lechky at 941-316-1000 or e-mail Mark Shelby at  
mshelby@gnv.ifas.ufl.edu to register.
- Aug 3 - Fla Certified Crop Advisor Exam -** So Fla Community College, Avon Park,  
contact FFAA 863-293-4827
- Aug. 3-5, 2001 - SNA 2001 Trade Show and Convention -** Atlanta, GA, Southern  
Nursery Association see the website: <http://www.sna.org/tradeshows/sna2001.shtml>
- Aug 7 - Pesticide Testing Hillsborough County** (9:00am - 2nd Tuesday of the month)  
813-744-5519
- Aug 13-15 FTGA's "Turfgrass Odyssey"** Gainesville. See the website at:  
<http://www.ftga.org/>
- Aug 14-16 - Limited Commercial Landscape Maintenance Certification & Test  
Seminar,** North Port Contact Mark Shelby at (941) 316-1000 or Kim Konczal at  
(850) 994-3181 for more information.
- Aug 15 - Pesticide Testing Pinellas County** 9am sharp, Call Paula at 582-2456 for  
reservations.
- Aug 25 - Limited Commercial Landscape Maintenance Certification Workshop &  
Test -** Pinellas County Extension Office 727-582-2110.
- Aug 28-30 - Certified Pest Control Operators Convention,** Lake Buena Vista, FL.,  
contact CPCO 954-724-8806.
- Sep 4 - Pesticide Testing Polk County -** 9am call 863-533-0765 reservations.
- Sep 11 - Pesticide Testing Hillsborough County** (9:00am - 2nd Tuesday of the  
month) 813-744-5519
- Sep 11 - Core CEU Class,** Palmetto, for details call 941-722-4524 or see the webpage  
at 2001 Core Training Dates.
- Sep19 - Pesticide Testing Pinellas County -** 9am sharp, Call Paula at 582-2456 for  
reservations.
- Sept. 21-23, 2001 - Florida Nursery and Allied Trade Show (FNATS) -** Orlando, FL.,  
Florida Nurserymen and Growers' Association (800-375-3642) <http://www.fnga.org/>
- Sep 22-25 - Amer Society of Landscape Architects Annual Meeting,** Montreal 202-  
898-2444.
- Oct 1 - Pesticide Testing Polk County** 9am call 863-533-0765 reservations.
- Oct 9 - Pesticide Testing Hillsborough County** (9:00am - 2nd Tuesday of the month)  
813-744-5519.
- Oct 17 - Pesticide Testing Pinellas County** 9am sharp, Call Paula at 582-2456 for  
reservations.

# DO YOU KNOW SOMEONE THAT MIGHT LIKE OR NEED TO READ THIS NEWSLETTER?

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