

Environmental Horticulture

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NEWS



The Bulletin of the Environmental Horticulture Department at the University of Florida

Message from Our Chairman Terril A. Nell



We are entering a new era with our academic programs - a new interdisciplinary major, Landscape and Nursery Horticulture - that combines knowledge of science and horticulture with the strengths of Agribusiness Management, Communications, and Landscape Architecture and Public Gardens. Our article on page 4 gives an in-depth look at our new academic programs.

Much more is happening in the arena of statewide Environmental Horticulture. Our faculty are striving to make new information readily available to the public on our website at hort.ifas.ufl.edu, and through the Extension digital information source (EDIS) at edis.ifas.ufl.edu. These websites can provide a wide array of information about all aspects of Environmental Horticulture.

Finally, new research topics are expanding the importance of environmental horticulture in the state and are gaining recognition nationally and internationally. These programs deal with: the study of the potential invasiveness of new ornamental plants; establishment and growth of trees in the urban environment; reestablishment of native landscapes in coastal areas, genetic engineering to extend flower life; and studies leading to efficient use of water and nutrients in production and landscapes. Clearly, the use of plants and turfgrass affects the lives of every person in Florida each day. We seek to maintain the Environmental Horticulture and Turfgrass Industries as the "Environmental Stewards" of public landscapes through our research programs.

Our successes are due in large part to our alumni and friends, the university administration, and the industry partnerships we have established within the state, nationally and internationally. Thank you for helping us develop new knowledge to share with our students, the industry and the public.

Public Gardens Tour of Italy May 7th through 17th, 2001

Ten days in Italy visiting some of the oldest gardens in Europe may have seemed like a holiday to some. On the contrary! To the thirty one students and faculty who took part in UF Environmental Horticulture's Public Gardens Tour of Italy, it was a superlative learning experience. Though billed as a public gardens tour, it also featured urban landscapes and production nurseries as well as Italian culture, history, religious and secular architecture, and cuisine. The trip complemented the studies of those whose major specialization in horticulture was either Public Gardens Management or Landscape and Nursery Management.

An all-night flight brought the group into Rome. The Vatican and Sistine Chapel tour was first on the following afternoon. The gardens at Villa d'Este and Villa Lante were the first horticultural attractions with their hilly terrain and mature plant collections. Striking differences in plant materials and climate were immediately apparent. The cool May Mediterranean climate caused significant

differences in flowering season from torrid Florida, allowing the group to witness azaleas, roses and geraniums in full bloom. These first gardens were excellent introductions to the recurring elements of Italian garden design.

The tour had a wide geographic range, extending northward from Rome through Tuscany, along the Riviera, across the Alps into the Piedmont, and into the Lake Como District. Students viewed plant materials unseen in Florida, the grandeur of ancient specimens, and quickly gained a sense of the influence of climate on flora. The merging of history, culture, religion, art and horticulture apparent in Italian garden design was also impressive.

Beginning in Villa Lante, and over the following three days in Florence, students were intrigued by formal hedges, topiary, and numerous examples of pleaching and pollarding on public street trees. During the time in and around Florence, a gem of medieval art and architecture, the group toured one of



Villa d'Este, a landmark garden in Tivoli outside Rome

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In Remembrance



2001 International Master Gardener Conference Hosted by the University of Florida

by Tom Wichman, Florida Master Gardener Coordinator

In late May, the University of Florida hosted the 2001 International Master Gardener Conference and Trade Show in Orlando. The conference was located at the Hilton in the Walt Disney World Resort.

The event opened to welcoming remarks from Dr. Terril Nell, our Department Chair; Dr. Mike Martin the Vice President of IFAS; and Greg Ruse, the Vice President of Disney Construction Manufacturing and Horticulture.

The four-day event was highlighted by three general sessions. Rebecca Kolls of Rebecca's Garden, who often appears on Good Morning America, discussed her experiences as the host of a gardening show. Ruth Kobayashi of Paul Ecke Ranch, and Dr. Dave Clark of our Department, discussed the history and future of plant breeding including genetically modified plants. The presentation by Rene Van Rems of the California Cut Flower Commission gave a history of flowers. Rene's performance was in character as a seventeenth century Flemish artist and was sponsored by a host of companies from the floral industry.

The conference involved as many as twelve concurrent hands-on workshops and educational lectures covering a wide range of horticultural topics. There were nationally known speakers significant representation from the UF Environmental Horticulture Department. A poster display of selected Master Gardener projects from around the country, and educational presentations by the volunteers, gave a per-

spective of the excellent work going on across the U.S.

The horticultural trade show was marked by large crowds, generous vendors, and numerous door prize drawings. Master Gardeners from Florida were recognized for their outstanding projects and many for ten, fifteen, or twenty years of service to the University.

The final day of the conference took place at Epcot. The 2001 International Flower & Garden Festival was in full swing and the Master Gardeners were treated to a private viewing of the Gardens of the World Showcase with the opportunity to meet the gardeners who make the magic. A dessert reception was sponsored by the Epcot International Flower & Garden Festival.

This event was supported by at least 30 generous sponsors, who donated over \$150,000. The conference was attended by 749 Master Gardener Volunteers from 32 states and three countries. It was an incredible opportunity to showcase the University of Florida, IFAS, the statewide Environmental Horticulture Program and the Florida Master Gardener Program.

International Master Gardener Conferences occur every two years. There is a rotation designed to take the event to different regions of the U.S. and Canada. The 2003 conference is scheduled for June 19 - 22 and will be held at the Northern Kentucky Convention Center in Covington, Kentucky.



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Alumni News

Carol Cloud Bailey (BS '76) **Shirley Anderson** (BS '82) **Bob Stamps** (PHD '84), **Laurie Krumfolz** (BS '99) and **Susan Peters** (BS '01) presented papers at the Florida State Horticultural Society Meeting in Stuart, FL, June 2001.

Rick Schoellhorn (PHD '96) and **Svoboda Vladimirova Pennisi** (PHD '99) spoke at the Ohio Florists' Association Short Course in Columbus, Ohio, July, 2001.

'76 **Robert (Weyman) Bussey** (BS) operates an orchid nursery in Mexico with a laboratory and also owns a nursery in Mission, TX. His son Robert attends Southwest Texas University in San Marcos, TX and son Dustin is 16. **Bussey** travels around the United States giving talks on Mexican orchids.

'79 **Carolyn Bartuska** (BS) is Sr. Biological Scientist with **Dr. Jim Barrett** in the Environmental Horticulture Department at UF. She has held this position since she graduated from UF.

'82 **Shirley Anderson** (BS) received the Presidential Gold Medal Award for 2001 at the Florida State Hort. Society meetings, June 2001; her papers, submitted over the past 6 years, have been selected as most meritorious in the Garden & Landscape Section. The Award consisted of a gold medal, a printed certificate, an honorarium of \$500 and her hotel expenses. **Anderson** is a biological scientist with **Dr. Al Dudeck** in the Environmental Horticulture Department.

'82 **Dr. Robert Stamps** (PHD), Professor at the Mid-Florida Research and Education Center in Apopka, received a Superior Accomplishment Award Spring 2001.

'86 **Meg Niederhofer** (MS) has been interviewed numerous times over the summer by the *Gainesville Sun*. Because of her position as Arborist for the City of Gainesville, she has been activity involved in the program to cut down pine trees infested with the pine beetle outbreak that has taken a toll on many of the pine trees in the Gainesville area.



Lisa O'Bea Hall (BS '78) is the new Academic Coordinator for UF's Environmental Horticulture Department in Gainesville. Previously, she was the owner/manager of Tropical Plant Designs by Lisa, Inc. in Ft. Lauderdale.

'88 **Joe Durando** (MS) is co-president of the Florida Native Plant Society-Paynes Prairie Chapter along with **Claudia Larsen**, Biological Scientist with **Dr. Tom Yeager**.

'90 **Heidi Wernett** (PHD) was asked to grow bedding plants and poinsettias for the Green Sea Flower Project by the Yunnan government for the Kunming International Flower Festival Trade Fair in China, September - October 2000. The Yunnan government was so impressed with Wernett's poinsettias, it used more than 1,000 plants for the festival. Because China's national colors are red and yellow, this was a fantastic use of the red poinsettia varieties.

'95 **Marc Smith** (BS) has been area manager for TruGreen Landcare in Reston, VA since December 2000. He and his wife have a daughter Morgan, born January, 2000.

Dennis Seffens (BS) accepted employment with the Dep't. of Ag. and Consumer Services in Orange Park, FL in March 2000. Previously a turfgrass biologist for UF at the West FL REC at Jay, FL, he is now an Environmental Specialist I.

'97 **Allen Boatman** (BS) teaches vocational horticulture at the Orient Road Jail in Tampa, FL.

'98 **Greg Alan Freas** (BS) married Michelle N. Moffett April 7, 2001

Jennifer Magavero (BS) is currently a Landscape Supervisor for North Florida Landscapes.

'99 **Carmine Oliverio** (BS), an inspector with the State Department of Environmental Protection, was quoted in the *Gainesville Sun* July 16, 2001, speaking about the accumulation of animal waste in Gilchrist County dairies resulting in a large fly population around area homes and recreation areas. **Oliverio** is pursuing an MS in Environmental Engineering.

Elan Miavitz (BS) Collier County urban horticulture agent, received the Gold Award (First Place) in the newspaper series category for *Sheltering Butterflies*

at the conference of Association of Natural Resource Extension Professionals, June 2-5 in Naples.

Svoboda Vladimirova Pennisi (PHD) has published three papers - one in *Greenhouse Grower Magazine* and two in *New Physiologist*. **Pennisi** also co-authored an article for *Ornamental Outlook*, Recommendations for Subirrigation of Bedding Plants. **Pennisi** is an extension floriculture specialist in the Dep't. of Horticulture at the Univ. of Georgia, Tifton, GA.

'00 **Karen Bishop** (BS) and **Carol Keiper-Bennett** (BS '00) are graduate students in Landscape Architecture.

Federico Fiallos (BS) is employed by Keebler, Inc. in quality control and assurance in Howell, MI. Previously, he was with Del Monte in Miami.

Wesley Higgins (PHD) was recently named to fill the Jessie B. Cox Chair of Tropical Botany by the Jessie B. Cox Charitable Trust, based in Boston, MA. **Higgins** is Director of Systematics at the Marie Selby Botanical Gardens in Sarasota, FL.

'01 **Kelly Barnes** (BS) and **Hector Perez** (MS) were married in Jacksonville, FL August 11, 2001. They have moved to Hawaii, where **Perez** will study for his MS degree at the University of Hawaii.

Jennifer Roll (BS) has begun graduate student in the Plant Molecular and Cellular Biology (PMCB) under the guidance of **Dr. David Clark**. **Roll** received a Graduate Alumni Fellowship to aid in her studies.

John Steele (BS) was pictured in the *Gainesville Sun* May 6, 2001 at the graduation ceremony at the Stephen C. O'Connell Center at UF Spring 2001.

Brad Yoder (MS-NT) is co-authoring a series of five trade articles with **Dr. Terri Nell** for *Grower Talks Magazine*. **Yoder** accepted a product manager position at Yoder Brothers.



Student News

Environmental Horticulture's New 21st Century Curriculum

The Environmental Horticulture Department at the University of Florida announced major changes to its **Landscape and Nursery Management** program. In an effort to better connect with the demands of the growing environmental horticulture industry and academic discipline, faculty has recently developed a new undergraduate interdisciplinary major.

Drawing upon expertise in landscape architecture, agricultural business, agricultural communications and horticultural sciences, the new program offers three specializations for students: landscape and nursery management, public gardens management, and environmental horticulture operations. Additional supporting course work in technical agriculture is provided by soil and water science, entomology and nematology, forestry and plant sciences.

A minor in Agricultural Business will be awarded to all students in the landscape & nursery management specialization. They will be exposed to courses in business and human resource management, finance, strategic selling, and marketing.

"This new curriculum will prepare our students to meet the challenges of business today. That means a well-rounded individual who understands all aspects of the horticulture industry. Graduates will be capable of working with people, while understanding the concepts of good design, maintenance and successful growing practices," states Dr. Terri Nell, department chair.

Understanding the importance of work experience, students are required to complete an internship for a minimum of two months at a landscape management firm, nursery or plant production facility.

With the program offered in five locations throughout the state, the Department of Environmental Horticulture is actively seeking new students to fill this current demand for knowledgeable, experienced individuals.

INTERNSHIPS

Jenny Hayes completed her summer internship with Congressman Adam Putnam in Washington, D.C. Jenny is a member of Florida Blue Key, has been elected to the Golden Key National Honor Society, and has received numerous scholarships and awards since entering Environmental Horticulture's undergraduate program. After graduation, she plans to study business and agriculture law. Congressman Putnam said of Hayes, "Jenny really jumped into her responsibilities here. I was an intern for Congressman Charles Canady so I've seen what an internship is like from the other side," reported Putnam. "Not only is Jenny sharp, but her knowledge and appreciation of the challenges facing Florida's Agriculture industry allowed her to contribute to the development of the Farm Bill in a way few summer interns could."



Congressman Adam Putnam and Jenny Hayes

Other Internships this Summer

Erin Alvarez
Kelly Barnes
Sherie Burch
Christian Galindo
Shelly Langshaw
Heather M. Martin
Jennifer Parrish
William Pescara
Shelley A. Ringold
James R. Spratt
Stephen C. Toomoth
Clint M. White
Richard A. White
Justin Winn
Jeannette Wooding

Shemin Nurseries division of Weyerhaeuser (Alpharetta, GA)
Jon George/Cottage Gardens, Inc. (Gainesville, FL)
City of Gainesville/Parks Division (Gainesville, FL)
Chicago Botanic Gardens (Glencoe, IL)
The Gourd Garden (Santa Rosa Beach, FL)
City of Gainesville/Parks Division (Gainesville, FL)
Stewart's Greenhouses, Inc. (Mount Dora, FL)
Post Properties (Atlanta, GA)
Greenbriar Nurseries, Inc. (Ocala, FL)
Oxbow Golf & Cuntry Club (La Belle, FL)
Gardens of Merit (Seminole, FL)
University of Florida-Jay Experiment Station (Jay, FL)
Environmental Care (Tampa, FL)
Kerry's Bromeliad Nursery, Inc. (Homestead, FL)
Ft. Lauderdale REC (Ft. Lauderdale, FL)

All students, upon completion of their internship, will receive a Gene and Barbara Batson Scholarship.



Steve Toomoth, an ENH senior, at his internship with Gardens of Merit in Seminole, FL.

Statewide Program Highlight

Jeanette Wooding: Back to School, Back to Life

by Kimberly K. Moore, Asst. Prof., Ft. Laud. REC



There are many unique students enrolled in our statewide program. I had the pleasure to work with one of them this summer in my laboratory. Jeanette Wooding received one of UF's College of Agricultural and Life Sciences research internships. She be-

came a part of the Environmental Horticulture Department in an interesting way.

Jeanette, originally from Jamaica, has lived in South Florida since 1978. She was a legal secretary for 14 years, put her two children through medical school, and enjoyed gardening and floral arranging in her free time. After her children finished medical school, she decided to return to school herself.

Jeanette was working toward an AA degree in health service administration when her husband passed away. She sought comfort in her garden, and one day, while working there with her son, she confided her uncertainty about what to do after graduation. He suggested a career in something she loved - gardening. With this thought, Jeanette visited the Fort Lauderdale REC and decided to pursue an Environmental Horticulture degree. After putting two children through medical school, her children are now paying for their mother to get her own degree.

Looking around at Jeanette's garden, it is obvious that she loves what she does. Jeanette said she "found" herself in her garden, which brings her joy during difficult times. When she graduates, Jeanette wants to teach others about the pleasures gardening can bring them. She is considering a master's degree in Landscape Architecture or becoming involved in cooperative extension.



Environmental Horticulture Scholarships continue to top the mark

Environmental Horticulture Students gathered over \$56,000 in scholarships during the first half of 2001

<u>Name</u>	<u>Scholarship</u>
Carmen Aracama	CALS - Alumni Fellowship
Kristen Barry	Jasper Joiner Sch
Pamela Brown	Orlando Garden Club - Mary S. Compton
Henry Bryant	National Foliage Fdn - James H Davis
Sheri Burch	FNGA - Dade Co - Stan Weyrick Mem Sch Orlando Garden Club - Ann Guthrie Sch
Michael Darcangelo	Florida Rural Rehab Corp
Erin Eckhardt	FNGA - Tampa Bay
Nathan Eisner	Env Hort Grad Student Assn
Michael Harrell	National Foliage Fdn - James H Davis
Jenny Hayes	J. Wayne Reitz Scholar FNGA (Homestead) Stan Weyrick Mem Sch Garden Club of the Halifax Country Club Orlando Garden Club - Mary S. Compton FNGA - Royal Palm Chapter William F. Ward Memorial Sch
Jason Jandrew	Jasper Joiner Sch
Fatma Kaplan	IFAS Travel Grant Graduate Student Council Travel Award IFAS Travel Grant
Cerina Lamar	National Foliage Fdn - James H. Davis Lisa Burton Sch
Shelly Langshaw	Florida Rural Rehab Corp
Jennifer Parrish	National Foliage Fdn - James H. Davis
Christina Perez	National Foliage Fdn - James H. Davis
Hector Perez	Env Hort Grad Student Assn Jasper Joiner Sch
Nickalus Pressler	Bloom 'N Grow Garden Soc Frank Ward Memorial Sch
Meghan Pressley	FNGA - Dade County
Josiah Raymer	Farm Credit Banks Sch
Jim Spratt	FTGA General Sch
Beverly Struzick	Florida Rural Rehab Corp
Dong Sung	Grad Student Council Travel Award IFAS Travel Grant IFAS Travel Grant
Andrew Sutherland	Farm Credit Banks Sch
Stephen Toomoth	Men's Garden Club of Jacksonville National Foliage Fdn - James H. Davis Lisa Burton Sch
Italy Public Gardens	National Foliage Fdn - James H. Davis

Graduating Students Summer 2001

<u>Undergraduate</u>	<u>Graduate</u>
Kelly Barnes	James Aldrich
Christian Galindo	Gale Allbritton
William Pescara	Nathan Eisner
Meghan Presley	Adam Thomas

Italy trip (continued from pg.1)

Italy's largest container nurseries. Dr. Francesco Ferrini of the University of Florence organized the nursery visit and then provided a tour of an Italian Experiment Station. Tours of Boboli Gardens and Villa Chigi Cetinali Gardens provided excellent examples of landscape design and maintenance. The complexities of preserving aged landscapes were apparent. In Pisa, beside the Leaning Tower, the group visited the Orto Botanico, deemed the oldest existing botanic garden established expressly for the purpose of study. This garden had several ancient specimens, including a centuries-old wisteria vine and massive *Ginkgo* trees.

The Italian Riviera offered more than the picturesque Mediterranean Sea. A stop at a cactus production greenhouse facility built into the terraced geography was very informative, followed by a visit to Villa Durazzo Pallavicini Gardens. The last day in the Riviera region featured a family-run cut foliage operation, and the NIRP international rose breeding facility.

After traveling through the Alps and into the Piedmont region, the University of Turin Horticulture Department was next on the agenda. Professora Elena Accati, the head of the Turin landscape horticulture program and her students provided a nighttime walking tour of Turin and a morning stroll through, Turin's large public park, the Parco del Valentino. The walk ended at the University Botanic Gardens, where several unusual specimens, such as yellow rhododendron, and botanic research collections are maintained. The Director spoke about planning, funding and maintenance of the facility.

The last stops of the trip were in the Lake Como area. The gardens on the Borromean Isles, Isola dei Pescatori and Isle Madre, could only be reached by boat, making for an enchanting experience. A

sixteenth century planting of Himalayan Cypress and a bamboo collection were examples of the outstanding variety of plant materials used in each island's botanic collection. Our students were able to broaden their horticultural knowledge outside the typical classroom setting significantly by touring nurseries, horticulture research facilities, and public gardens in a foreign land. Planning is now under way for next year's trip to the Netherlands. A major highlight will be the Floriade flower show, held only once every ten years.



Villa Chigi Cetinale Gardens, outside Rome



Valentino Park in Turin, along the River Po



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ON NEW FACULTY

Everett Emino
Professor of Floriculture



Another new member to the Environmental Horticulture team is **Everett Emino**, originally from Upton, Massachusetts. Dr. Emino has been a member of our department since July, 1987, but during the last fourteen years, he served as IFAS Assistant Dean for Research and Assistant Director of the Florida Agricultural Experiment Station. Effective February 1st, 2001, Everett has given up his administrative responsibilities and assumed responsibilities in the Department as Professor of Floriculture.

Everett started his academic career at Stockbridge School of Agriculture at the University of Massachusetts with an A.S. degree, then a B.S. degree at the University of Massachusetts. Both his M.S. and Ph.D. degrees are from Michigan State University. After the MS degree he joined the faculty of Michigan State University as an instructor and was coordinator of the commercial floriculture program at MSU's Institute of Agricultural Technology. After completing his Ph.D., he returned to the University of Massachusetts for a short time before moving to Texas A&M University, where he developed a research program in greenhouse crop cultural systems and taught greenhouse management to Texas Aggies. Dr. Emino then moved to the University of Connecticut where he became Head of the Department of Plant Science before coming to the University of Florida.

As Everett transitions from 20 years in administration to full-time faculty status

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NEW USE FOR OLD TIRES: GRIND THEM UP AND TOSS THEM ON ATHLETIC FIELDS

Published in the UF News, June 18, 2001

Ed Hunter

If anyone is wondering what to do with millions of recalled Firestone tires, a University of Florida researcher has a suggestion: Grind them up and spread them on athletic fields and golf courses. UF turfgrass specialist Grady Miller said ground-up tires, also known as crumb rubber, could help increase the durability of turf used in high-traffic applications. "We want to prevent the kind of damage people can cause to turfgrass," said Miller, an assistant professor Environmental Horticulture. "Turf can be stripped out by cleats in the goal and corner-kick areas of soccer fields and between the hash marks on football fields. "For golf courses, it's primarily where carts enter and exit near greens and tees," he said.

Miller is testing the rubber product on test plots of grass on the UF campus, on a Gainesville-area golf course and several area athletic fields. In one method, the crumb rubber – and two other compounds being evaluated – are spread evenly over the top of grass, a process known as top-dressing. In another process called aerification, researchers literally punch small holes in the ground and fill them with test material. Eventually, the products work their way down into the soil layers, where they may deliver the strongest protective benefit, he said.

Miller said after more than a year of study, the crumb rubber does seem to protect grass to some degree. While more research is needed to assess the amount of that protection, the use of the crumb rubber could provide another



Grady Miller, a turfgrass specialist with the Environmental Horticulture Department at Gainesville, spreads crumb rubber on a test plot of grass on the UF campus. Miller says crumb rubber, made from ground-up automobile tires, could help protect grass used in high-traffic areas such as golf courses and athletic fields. He said the process also is a safe way to recycle old tires and keep them out of landfills. (AP photo by Eric Zamora, UF/IFAS)

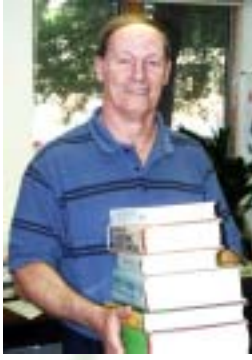
benefit, he said. "The fact that we can recycle a waste product like old tires and improve turf condition at the same time is a great thing," Miller said. "When tires are processed into crumb rubber, the steel belts and all potentially hazardous metals are removed. This leaves an essentially inert compound that will stay in the soil and protect the turf for several years," he said. "We may actually have a different use for rubber that can potentially improve how we manage turf." According to Miller, managers and athletes alike would benefit if grass in athletic

fields could be made healthier. "Turf managers would benefit because it might be easier to manage grass which may require less fertilizer or water," Miller said. "End users would benefit as well in that they may be able to play on better-quality turf."

During the course of the study, Miller said, researchers noticed an unexpected outcome from using the product. "The black rubber absorbs a lot of heat," Miller said, "and last year we noticed a strong greening effect with this particular treatment. This may have been caused by heat transfer from the rubber to the grass early in the spring during the period when grasses are just starting to actively grow." In addition to the crumb-rubber product, researchers are evaluating ordinary sand and a heat-treated clay compound Miller said could prove particularly useful in water-starved areas. "The porous ceramic compound holds water, so there's been a lot of interest from environmental groups and turf managers," Miller said. "The goal is to find ways to reduce water use by holding more moisture in the soil."

Miller said the bottom line is to determine if any of the materials actually help the grass. "We are still trying to work out the differences between the three treatments and see if one of them has any specific advantage," Miller said. "One may protect against physical damage better, while another may have better water retention or just may improve grass density. "When you cover grass with sand, it often promotes denser growth," he said. "This may be a benefit of the sand that we don't see with these other coarser materials."

Dr. Bob's Fall Gardening Tips



by Dr. Robert J. Black

As the temperature begins to moderate, the desire to work in the yard returns to most Floridians. For most of us, it's just been too hot to do anything but try to keep the lawn from becoming a hay field. As a result, many hours of hard work will be required to restore our landscapes to what they looked like in the spring. This is not all bad since most of us enjoy working outdoors and we all can use the exercise.

A job of this magnitude can be overwhelming unless you approach it in steps. The logical first step is a general clean-up of the home grounds. Remove those summer annuals which are beginning to look shabby. Weed and remove tree branches and other trash from flower and shrub beds. Edge sidewalks, driveways and beds if you have neglected this task during the summer months.

After the clean-up is accomplished, you are ready to move to more enjoyable tasks. If you want a fall flower garden, start preparing a good planting bed. Locate the bed in an area which receives full sun at least half a day and stay away from large trees. Tree roots are strong competitors for fertilizer and water so plant your flowers in a spot where trees will not compete. Spade or till the planting site six inches deep several weeks before planting. Incorporate two to three inches of organic matter and a complete fertilizer such as 6-6-6 at the rate of two pounds per 100 square feet of bed area.



Hardy annuals you can plant in late September include alyssum, calendula, candytuft, dianthus, baby's-breath, nasturtium, pansy, petunia, phlox, snapdragons, statice, sweet peas, and viola. These are just a few of the plants which can be started now. Don't forget that September is the month to apply a fall application of fertilizer to St. Augustine and bahiagrass lawns. Centipede lawns should have been fertilized last month. A complete fertilizer such as a 16-4-8 should be applied at the rate of one pound of actual nitrogen per 1000 square feet of lawn. Shrubs and trees which do not receive fertilizer when the lawn is fertilized should receive an application at this time.

September and October are the months when gibberellic acid is used on camellias. On many varieties, the flower size may be increased significantly, producing a bloom much earlier than would be the case without treatment.

Select a well developed flower bud. Remove the pointed growth bud adjacent to the flower bud. A small cup will be left where the growth bud has been removed. Fill the cup with one drop of the acid solution. Usually a difference in bud size between treated and untreated camellia buds is apparent in a week. By encouraging earlier flowering in camellias, freeze damage is reduced and flowers become available for holiday decorations.

Watch your lawn and ornamental plants for pests. It's still warm enough for insects like scales, white flies, mites, aphids, and caterpillars to be damaging shrubs. Sod webworms and armyworms can ravage lawns and brown patch disease can be a problem. Watch out for these problems and start control measures as soon as you notice damage.

This should keep you busy until it's time to start raking leaves. Remember to take your time and don't try to do everything in one day. Fall gardening can be a very relaxing and enjoyable experience.

For more Dr. Bob Gardening Tips, visit <http://hort.ifas.ufl.edu/gt>.

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Everett R. Emino (continued from pg.6)

he will develop a research program focusing on cultural systems for greenhouse and outdoor production of cut flowers, cultural physiology of greenhouse crops and the horticultural and agronomic utilization of compost for sustainable agricultural systems. He will join faculty from our teaching programs around the state in developing the plant propagation course for interactive distance education. He will be responsible for teaching the plant propagation laboratory in Gainesville and other courses that will enhance the Landscape and Nursery Management Specialization. Everett is also looking forward to mentoring graduate students and having graduate students join his research program. As part of the transition, Dr. Emino will be spending next summer on a six month faculty development leave.

Dr. Emino has two grown children and two grandchildren. He and Jeanette MacBean of Truro, Nova Scotia were recently married and returned to Gainesville after a honeymoon in Cape Breton Island, Nova Scotia. In addition to his new responsibilities in the department he is looking forward to spending time with his wife and grandchildren and using his vacation time at his farm.

Upcoming Events

Great Southern Tree Conference

Gainesville - November 30 - December 1
at the UF Hotel and Conference Center
and the GSTC Demonstration Site
(contact: JGrabosky@mail.ifas.ufl.edu or
visit <http://www.fnga.org>).

Poinsettia Field Day

Gainesville at the UF Plant Sci. Facility
Commercial - Dec. 4th, 8:30am - 3:30pm
General Public - Dec. 5th, 9:00am - 3:00pm
(contact: MNelson@mail.ifas.ufl.edu)

Georgia-Florida 2001 Green Industry Updates for Nursery, Greenhouse, and Landscape Organizations

Cairo, GA - Oct. 30th
Tallahassee, FL - Oct. 31st
Jacksonville, FL - Nov. 1st
(web site www.ugatiftonconference.org/registration/2001%20Green%20Industry.htm)