

University of Florida / IFAS
Environmental Horticulture

The Bulletin of the Environmental Horticulture Department

Summer/Fall 2003 Vol. 9 No. 2

NEWS



Message from the Chair



Environmental Horticulture has progressed, expanded and advanced since the department was established in 1956. Many great and talented students have taken our classes. The industry have participated in our field days, short courses and extension programs statewide. And, gardeners have gained valuable information from county agents, publications and our websites. These programs were made possible as a result of a knowledgeable and creative faculty and staff and the support of the UF/IFAS administration, the industry and government agencies. All of these students, alumni, industry, faculty and staff, through their own personal commitments and interest have made Environmental Horticulture at the University of Florida/IFAS a leader both nationally and internationally.

We have moved from a unidimensional program focused on production techniques to a multifaceted one also concerned with environmental sustainability, native plant restoration, landscape management, urban tree establishment and maintenance, wildflower seed production and use, biotechnology, water use efficiency in production and the landscape, and invasive plant management. All of these areas have been established through sound research programs and the teaching program has been modified to inform students about new and emerging issues. And, speaking of teaching, who would have believed 15 years ago that we would offer a College of Agriculture and Life Sciences degree in Environmental Horticulture at six locations in the state with some of the courses offered simultaneously in all locations? The Environmental Horticulture program has adapted to meet the needs of the people and indus-

try in Florida. As we reflect on the past and look to the future, what is next? No doubt, new issues will emerge, new concepts will be developed, and the faculty, students and industry will adapt for the betterment of the environment and our Florida gardeners.

Terrell A. Neel

Environmental Horticulture is GROWING again!

In the latter part of April 2003, a portion of the Environmental Horticulture Department relocated to newly renovated facilities on the south side of the UF campus. Mehrhof Hall and two nearby laboratory and office buildings, formerly housing the Poultry Science Department, were completely renovated and refurbished. Mehrhof Hall (Bldg. 559) now houses the Center for Consumer and Landscape Horticulture as well as computer support staff. The other two facilities are the Plant In Vitro Culture, Molecular Biology and Micropropagation Teaching Laboratories (Bldg. 68) and the Horticultural Systematics Laboratory (Bldg. 550). The move has increased our usable space and allowed some vital restructuring of laboratories to meet changing programmatic needs. This move was timed to coincide with major renovations of W.M. Fifield Hall that are scheduled to continue for at least 24 months. Consult our website at <http://hort.ifas.ufl.edu> for current faculty and staff addresses.

The University of Florida Celebrates its Sesquicentennial Year

In 2003, UF turned 150, and in various publications and events throughout our statewide campuses, evidence of the celebration is present. Even the University's wordmarks have been redesigned for the year-long commemoration. As part of the celebration, our department has designated this edition of the Environmental Horticulture News as its Sesquicentennial edition. The article on page two gives a brief glimpse of the long history of horticulture at this institution. And throughout the pages of the newsletter you will see small reproductions from the cornices, friezes, parapets, and other lettering and ornaments adorning many of the campus' historical buildings.



IN THIS ISSUE

<i>Message from the Chairman</i>	1
<i>Environmental Horticulture is Growing Again</i>	1
<i>UF Celebrates its Sesquicentennial</i>	1
<i>Transitions: UF and Horticulture Evolve Together</i>	2
<i>Alumni News</i>	4
<i>Faculty News</i>	5
<i>Education Corner</i>	6
<i>Scholarships</i>	8
<i>Dr. Bob's Gardening Tips</i>	8
<i>Upcoming Events</i>	8





Floyd Hall

Newell Hall

The University of Florida is observing its sesquicentennial year in 2003. The wordmarks of the University and all of its major publications have been changed for this special celebratory year. The Environmental Horticulture Department hasn't been a separate department for these 150 years, as it is today; it hasn't been known by its current name for very long (relatively speaking). The growth of the environmental horticulture and turfgrass industries have been especially significant over the last three decades, and during the same period, the UF/IFAS Environmental Horticulture Program has developed into one of the leading research, teaching and extension programs in the U.S. today. Horticulture has occupied a variety of locations in some of the most cherished historical buildings on the University of Florida campus. It has been a continually changing entity, as has the ever-growing and changing University of Florida itself. But it is anything but new. Environmental horticulture has been at the core of the activities and goals of the University of Florida since its earliest inception. The original building in which horticultural activities were housed was Floyd Hall (top left), originally called the Agriculture Building but later named for the doyen of UF horticulture, Wilbur Floyd (pictured at right), who taught all the horticulture and botany courses from the beginnings of the Gainesville campus until his retirement in the late 1930's.

At some point in the 1940's horticulture was structured into three departments, each with its own chairman and faculty. One of these focused on teaching, one on research, and one department's function was extension. The three horticulture departments were combined into a single horticulture department early in 1956, only to be split four ways later that year into Fruit Crops, Vegetable Crops, Ornamental Horticulture, and Food Science and Human Nutrition. The original faculty of this new Ornamental Horticulture Department is pictured on page 4. Dr. Tom Sheehan, one of the original faculty members of the department, still an active emeritus professor, was a major force for the 1980's name change to our department's current epithet, "Environmental Horticulture." On page 4 are pictured the five chairman who preceded the current chair, Dr. Terril Nell (see his message and photograph on page 1).

Transi

The University of Florida

Horticulture Evo



Wilbur Leonidas Floyd, the "father" of UF's horticulture p
building which now b

McCarty Hall

Fifield Hall





Rolfs Hall

ositions: rida and Environmental Evolve Together



ulture program, and decorative horticultural frieze on the
now bears his name.

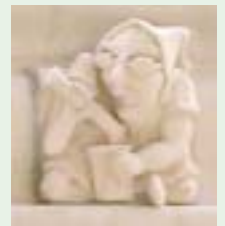
Mehrhof Hall

Even though the Department did not exist in its current form *per se* before 1956, horticultural curricula are part of the earliest University Records. They were also taught in the Florida Agricultural College (Lake City), one of the two immediate predecessors of the University of Florida (along with the East Florida Seminary in Ocala) that were abolished by legislative act to create UF in 1905. The 1908 UF catalog lists six horticulture classes: plant propagation, olericulture, pomology, plant breeding, greenhouse construction and management, and landscape gardening. By 1914, twelve courses were listed, including evolution of cultivated plants, forest mensuration, three courses about citrus, and truck gardening, all of which were subjects important in the predominantly agricultural Florida economy of that era. The University has grown and diversified tremendously since that time; the “offspring” of the original Horticulture Department now occupy many campus buildings and offsite locations in Florida, teach dozens of courses, including distance education courses throughout the state, and disseminate valuable information to millions of Florida residents about state-of-the-art techniques for growing and using plant materials. This growth is phenomenal considering the first Agriculture Building (Floyd Hall) housed eight departments in 1929, only one of which was horticulture!

If the founders of the University had realized what they were creating, they would no doubt have tried to gather more than the initial 900+ acres they purchased out on the western fringes of the small town of Gainesville in 1905.

“This institution was founded to assist well-disposed, ambitious young men, and young women, in obtaining a good education. Idlers, triflers, unruly boys, and refractory girls are not sought. Should such come to us, we will use all reasonable effort to correct their evil ways.....”

(1900 catalog of the Florida Agricultural College in Lake City)



ALUMNI NEWS



'03 Barry Ballard (BS) is with Panhandle Growers, a tree nursery in northern Santa Rosa County. He is also considering graduate school opportunities.

Sherie Burch (BS) is a contract Tree Coordinator for Progress Energy in Ocala. Burch participated in Clemson's University's College of Agriculture, Forestry and Life Sciences Study Abroad program in England, June 7-July 6, 2002.

Ian Cole (BS) is currently working at the National Tropical Botanical Gardens in Kaua'i, Hawaii.

Phillip Hamilton (MS) is currently with DeLeon's Bromeliads, Mt. Dora, FL.

Brett Howell (BS) is 2nd assistant superintendent for Olde Florida Golf Course in Naples, FL.

Joyana Ijams (BS) has been with the Dallas Arboretum since May, 1999. She began as an intern in the Education Department and is now the Coordinator for Adult Programs.

Shelly Langshaw (BS) is opening a nursery in Ft. Walton Beach.

Charles Schaming (BS) is assistant in training at East Lake Golf Club in Atlanta.

'02 Tammy Kohlleppele Bendele (PhD, MS '99) is the Project Coordinator for the West Texas Urban Forestry Council.

'01 Gale Allbritton (MS-NT) is the Assistant Director of Green Industries Institute. She has been selected for the Chancellor's Leadership Seminar, Class of 2003, which trains mid-level community college management for higher leadership roles. Green Industries, a horticulture training institute located in Monticello, FL is a consortium effort of the University of Florida, Florida A&M University, NFCC, and the environmental horticulture industry. Allbritton has over 20 years experience in horticulture and landscape industry education. She also has landscape design and horticulture professional certifications.



Christian Galindo (BS) has been admitted as a fellow of the Longwood Graduate Program, 2003-2005 in Philadelphia, PA. He previously was employed by a landscape design and installation company and retail nursery in Marin County, California.

Heather Myers (BS) has been Alachua County's horticulturist since July 2002.

William Pescara (BS) is Regional Gardener for Post Properties, Inc. in Dallas, TX. He and his wife Katrina Marie Lumpkins are proud parents of their new daughter, Piper Grace.

Meghan Pressley (BS) is starting an ENH graduate program under the direction of Dr. Ed Gilman, Fall 2003.

'00 Jennifer Norris Bray (BS) does interiorscaping for Rentokil Tropical Plant Services in the Gainesville area. She is proud to announce the arrival of Sidney Ashton Bray, November 11, 2002.

"Whit" Williams (BS) is co-owner of First Coast Horticulture, Inc., a company featuring landscape design, maintenance, and lawn fertilization. He previously worked for Agristarts.

'99 Mark Kann (BS) is golfcourse superintendent for Meadow Oaks Golf and Country Club in Hudson, FL.

Laurie Krumfolz Mecca (BS) is a Biological Scientist at the Indian River REC in Ft Pierce, FL under the supervision of Dr. Sandy Wilson. She was married November 16, 2002 to Ryan Mecca. They reside in Port St. Lucie, FL.

Mark Williams (BS) is environmental specialist with the Bureau of Plant and Apiary Inspection, Division of Plant Industry, in Pompano Beach, FL.



Dr. Rick Schoellhorn (PhD '96) was presented with the FNGA 2003 Educator of the year award at its annual convention in June, 2003. This award is presented to an individual who is actively involved with the teaching of horticulture.

'98 Katie Hoffman (BS) is Manager of Gardens for the Massachusetts Horticultural Society in Wellesley, MA.

'95 Doug Brogan (BS), previously with San Felasco Nursery in Gainesville, FL, is employed by Lawn Enforcement Agency in Gainesville, FL, where he is a certified pest control operator and landscape designer.

Mitch Morgan (BS) was highlighted in the *Gainesville Sun* June 29, 2003 for his work as a mosquito and vegetation control technician with the city of Gainesville.

'94 Jorge Moreno (BS-NT) has held several sales positions in the Bayer Corporation, and currently is Senior Field Sales Representative for Bayer Environmental Science. He and his wife Elvia live in Coral Springs and have two children, Camila, 10, and Nicolas, 8.

'83 Mark Wilson (MS-NT) is technical manager for Ball FloraPlant, West Chicago, Illinois. His article *Fine-Tune Your Production Schedule for Angelonia* was featured in *Grower Talks*, December 2002.

'76 Scott Blanton (BS) and his wife Diany own Homestead Specialty Produce, Inc., growing herbs and other specialty produce. They also own a packing house for grocery stores, restaurants and distributors.

'74 Chet Peckett (BS) owner of Peckett's Inc., Apopka, FL, was featured in *Snapshots of Apopka, Growertalks*, January 2003.

'67 Ron Garl (BS), a leading golf course architect, was recently elected to the International Network of Golf Advisory Board and is president of Ron Garl Golf Course Design. Garl was presented with a Distinguished Alumni Award at 2003 Spring Commencement.

OBITUARY

Martin Charles Glasser (BS '76) died August 17th. He loved propagating and growing all types of plants, especially orchids, and was a member of the Greater Pensacola Orchid Society. He was selected volunteer of the year at the ARC Gateway greenhouses, an organization that trains, employs and works with people with developmental and physical disabilities. Martin was an avid Gator Football fan and loved tailgating with his friends.

FACULTY NEWS

Tom Yeager - Developing Environmentally Friendly Best Management Practices for Horticulture



Tom Yeager studies fertilizing to minimize nitrogen leaching.



Prototype of the multi-pot box. Bottom area is a water reservoir. Containers rest on wicking material that absorbs water.

Environmental quality has become a paramount concern for today's society. Now, more than ever, this issue has become crucial to agricultural operations because of urban sprawl and the resulting increased contact of urban with agricultural areas. Agriculture operations have always used environmentally conscious practices, but now, the phrase "BMP's," or "Best Management Practices," is employed. Producers of nursery and other crops have realized the need to become proactive in their communication of the beneficial effects of their management practices to society now that society increasingly questions what goes on around it.

Dr. Tom Yeager of the Environmental Horticulture Department has been conducting research to develop BMP's for nursery operations for several years now. He is not alone; collaboration and financial support for this research has come from a variety of sources such as the nursery industry, private companies, Horticultural Research Institute, Water Management Districts, Florida Department of Environmental Protection, Florida Department of Agriculture and Consumer Services, USDA-ARS, UF, and various associations and endowments. Research has involved a team approach with faculty from Research and Education Centers, USDA-ARS, and other disciplines such as Agricultural and Biological Engineering, Food and Resource Economics, and Soil and Water Science.

In nursery production, a major concern is to minimize nitrogen runoff from excess fertilization. This runoff contaminates groundwater and eventually, drinking water. Research has focused on minimizing fertilization and use of water resources, together with the monitoring of nitrate runoff. Dr. Yeager stresses that the development of BMP's should avoid assumption, relying instead on sound and thorough research. His research over the years has included studies of container spacing, irrigation methods, measuring nitrate runoff, types of plant and multiplant containers, soil media, and interfaces between growing area and the underlying ground.

FACULTY FOCUS



Mike Scheiber
Assistant Professor (MREC Apopka)

Statewide Environmental Horticulture welcomes Dr. Michele 'Mike' Scheiber. Mike has a 60/40 Teaching/Research appointment and comes to us from Louisiana via the University of Georgia. She was born in California and raised in Louisiana. As a result of her experience on the Nursery and Landscape judging team with the local FFA chapter, Mike decided to study horticulture. She earned her B.S. in 1994 in Plant Science/Horticulture from Louisiana Tech., and completed her M.S. and Ph.D. at the University of Georgia. Although her specialization was in Ornamental Plant Breeding, she will focus her research on Plant Physiology emphasizing 'water-wise' landscaping.

Mike will teach Residential Landscape Design, Landscape Plant Estab-

lishment and Landscape and Turfgrass Management. She will also advise matriculating students, oversee their Practical Work Experience, and establish and advise the MREC student government and Horticulture club. She will do collaborative research with other statewide faculty, including Ed Gilman and Sudeep Vyapari. She is developing several landscape projects focusing on water use and water conservation, investigating cultural practices and management strategies. Mike is actively seeking grants to support her research and further develop the MREC Teaching Garden. This one-acre garden will be an on-going project for MREC students and Master Gardeners, and will benefit MREC classes and the local community.

Chairmen of Ornamental / Environmental Horticulture 1956-1991



Edgar W. McElwee
1956-1970



Eliot C. Roberts
1970-1971



James W. Strobel
1971-1975



William J. Carpenter
1975-1985



Thomas J. Sheehan
1985-1991



The faculty of Ornamental Horticulture in 1956. Pictured from left to right are Thomas J. Sheehan, Sam E. McFadden, Edgar W. McElwee, John V. Watkins, Ralph D. Dickey and Gene Nutter.

EDUCATION CORNER

2003 Student Trip Destination : Costa Rica



In early May, 31 students, faculty and staff from the statewide Environmental Horticulture Department embarked on a ten-day journey to several areas of Costa Rica. The group toured a multitude of sights by bus, beginning with the lush tropical foliage and avian life of the seaside resort town of Punta Leona. The city of Cartago and the National Shrine, followed by Linda Vista (Ball Horticulture) with its impatiens bedding plant breeding seed production programs, were next. The group spent four days in the Orosi Valley, an area rich in horticultural operations. They also got an education in changing ecotypes, vegetation and agricultural operations as they moved from sea level to 10,000 ft. to visit the famous Irazu volcano and national park, almost 6000 acres of primary forest which includes a cloud forest.

Other agricultural/horticultural operations visited were: *Florexpo*, a major producer of cut flowers, bedding plants, and unrooted cuttings of poinsettia and coleus for shipment to Europe and the U.S.; coffee plantations, one of which ships to Starbucks; cut flower and foliage producer *Finca Plantas y Flores Ornamentales*; *Agricola Sol* in la Tigra (second largest foliage producer in Costa Rica); and orchid tissue culture propagator and grower *Taisuco de Costa Rica*. They also visited *Fides North America*, a most impressive company owned by *Kirin* (Japan), that runs 17 acres of covered greenhouse space where cuttings of kalanchoe, chrysanthemum, geranium, New Guinea impatiens, and fortunea are produced.

A visit to Costa Rica would not be complete without a trip to the Arenal Rainforest, where the group ascended 240 feet and moved across the top of the tree canopy via zip line, viewing tropical foliage as well as the bird, butterfly and monkey fauna. The group's final destination was Tabacon, a lush 32-acre resort and gardens at the foot of the Arenal volcano. Tropical trees and foliage bank the volcanic waters which flow through the entire area into small waterfalls and pools where guests soak and relax. It was a fitting end for ten rigorous days of horticultural exploration. Everyone agreed that Costa Rica was a pleasant destination worth revisiting.



Taisuco de Costa Rica



The group

Technology Training Takes Doctoral Student to Germany

The investigation of plant stress tolerance is a basic study that will eventually lead to the engineering of plants tolerant to extreme temperatures. Dr. Charles Guy's laboratory in the Environmental Horticulture Department has been working with the much-studied relative of cabbage, *Arabidopsis* [see the article on pg. 6 of the Environmental Horticulture News vol.8(1) (2002)] as a model to understand these processes in plants. His laboratory is now integrating two new cutting-edge technologies known as "plant microarrays" and "metabolic profiling," techniques that have been used in the past to study both plants and animals, to further their understanding of the complicated mechanisms plants employ when they respond to heat and cold stresses.

Currently, there are no facilities to study metabolic profiling in the United States, so a collaboration was established with Dr. Joachim Kopka at the Max Planck Institute (MPI) in Golm, Germany. A doctoral student in Guy's laboratory, Fatma Kaplan, traveled to Germany in February to train in metabolic profiling analysis procedures using gas chromatography mass spectrometry (GC-MS) techniques. This collaboration will bring cutting-edge scientific techniques to the University of Florida and hopefully be a dynamic methodology in the continual attempt to improve agriculture.



Orchid Short Course 2003



The 2nd Orchid Production and Culture short-course took place at the Morikami Museum Auditorium, in Delray Beach, April 5-6. Dr. Wagner Vendrame from UF's Tropical Research and Education Center tailored the program to the needs of both students and orchid enthusiasts.

Several renowned orchid specialists gave presentations. Dave Baskin from Kerry's Bromeliads entertained attendees by comparing wholesale orchid production to a shoe factory; Paul Martin Brown of the UF Herbarium enlightened the crowd on wild orchids of North America; Dr. Wesley Higgins and Diana Folsom from Marie Selby Botanical Gardens spoke about orchid diversity, and Georgia Tasker, a journalist from the Miami Herald, gave a broad view of orchids in the news. Also, Dr. Kimberly Klock-Moore from Environmental Horticulture at the Fort Lauderdale REC reviewed orchid nutrition and Drs. Robert McMillan and Catharine Mannion spoke about orchid diseases and orchid pests, respectively.

UF-IFAS students had first priority to register for this one credit course, which included an enjoyable tour of the beautiful International Orchid Center at the American Orchid Society. The Environmental Horticulture Department is extremely thankful to the Boca Raton Orchid Society for their assistance in supporting and organizing the short course, which had plenty of positive feedback. Comments were made about its easily understood form, the usefulness of the AOS tour in showing active research methods used in orchid production, and new information passed along about curing orchids of diseases.

ALUMNI CAREER NIGHT

Once again, Alumni Career Night was a highlight of the spring semester. The evening program hosted six graduates of the Environmental Horticulture department who are currently working in some aspect of the “green industry.” This year’s participants included Mark Kann ('99) of Meadow Oaks Golf and C.C., Doug Brogan ('95) of The Lawn Enforcement Agency Inc., Joan Bradshaw ('85), City of St. Petersburg Conservation Specialist, David Ressler ('96), Cherry Lake Tree Farm, Jennifer Norris Bray ('00), Rentokil Interiors, and Whit Williams ('00), First Coast Horticultural.

Students and alumni sat down in an open forum after a delicious meal and discussed job search, interviews, and what to expect once out in the industry. Alumni advised which special classes to take and how to prepare for the job market. The top two recommendations were “network” and “don’t always go for the top paying position, be sure you will be comfortable in the job you choose.” The alumni also visited with faculty and discussed potential job and internship opportunities with individual students. Students were pleasantly surprised during this enjoyable evening at how much helpful information they received. If you would like to participate in next year’s event please contact Lisa Hall at lhall@ifas.ufl.edu.



INTERNSHIP NEWS

Internships are a valuable learning experience and often are a good starting point for a career. Many of our students’ internships have resulted in their employment. Students must complete at least two months at an internship site; some choose to stay as long as a full year, such as Erin Eckhardt (Longwood Gardens). With the help of faculty and staff, we have students traveling worldwide. Jennifer Parrish combined a study abroad program in Australia with a two-week internship at the National Tropical Botanical Gardens in Kaua’i, Hawaii. Other students expand their backgrounds with multiple internships. Grace Chapman, interning at Mackinac Island Grand Resort in Michigan, leaves for an internship at the Royal Botanic Gardens, Kew, England in September.



Tristen Smith at the Hyatt Grand Cypress during her internship with OneSource



Alison DeBatt interning at Ball Horticultural Company

Summer 2003 ENH and Turfgrass Internships

NAME	COMPANY AND LOCATION
Alison DeBatt	Ball Helix, West Chicago, IL
Amy Alexander	Florida Yards & Neighborhoods, Gainesville
Andrea Tristen Smith	One Source / Grand Hyatt, Orlando
Andrew Gilliam	Bartlett Tree Experts, Tallahassee
Ashley Stonecipher	Walt Disney World, Lake Buena Vista
Austin Bryant	DPI State of Florida, Avon Park
Benjamin Williams	Prince Cont/ The Villages, Wildwood
Bobby Harris	Gainesville Div.of Parks & Rec, Gainesville
Bruce Prock	Atlanta Athletic Club, Duluth, GA
Fabrian Chester	Sammy Mizell, Tampa
Ian Ring	Pinehurst Resort, Pinehurst, NC
James Davis	Universal Orlando, Orlando
Jason Rehberg	Turfgrass America, Ruskin
Josh Crawford	Valley Crest, Orlando
Karen Kim	Pikes Family Nursery, Atlanta, GA
Matthew Moyer	Missouri Botanic Gardens, St. Louis, MO
Matthew Simoneaux	Powell Gardens, Kingville, MO
Mike Dehgan	One Source, Lady Lake
Tyson Tedder	Legends at Orange Lake, Kissimmee

CLUB NEWS

ENVIRONMENTAL HORTICULTURE CLUB

Spring Semester was an especially busy one for the club. In January, students designed the floral decorations for the Sesquicentennial Celebration opening ceremony and parties as a fundraising event. Later that month, they attended TPIE in south Florida, networking with growers and attending meetings and other events. The club was awarded Most Outstanding for Community Service at the University of Florida for their work with the Alachua County Youth Fair Horticulture Expo, the City of Gainesville’s Dreamers’ Garden, and Idylwild Elementary School’s student Butterfly Garden. Their final fundraising event included the spring hydrangea sale to earn funds for the Costa Rica student trip and the annual Spring Banquet. The elegant Spring Banquet, held at the Thomas Center, was an evening of great food, fun, and awards to faculty and students. A special award of appreciation was given to Dr. Dennis McConnell “for his personal commitment and sincere dedication to the success of students throughout the years.” The semester ended with 13 club members participating in the long-anticipated trip to Costa Rica.

TURFGRASS CLUB

The Turfgrass Club’s spring semester was busy as well as entertaining. At this year’s GCSAA convention in Atlanta, the club made contacts and let off mid-semester steam. In the annual UF vs. Lake City golf tournament at Haile Plantation, the UF boys held their own in a close match that was more friendly than competitive. They also devoted time to the local Boys and Girls Club by helping refurbish one of their baseball fields. Their big fundraising event this year was installing a large landscape for a local homeowner. The club worked diligently for more two days to complete the project in time for the homeowner’s party. They got a good taste of working under a deadline with no flexibility! Congratulations to the new club president, Bruce Prock, and his newly elected fellow officers. The semester ended with an end of the year hog roast, which gave spotlight to some of the best barbeques ever eaten thanks to both Jim Spratt and Dr. Jerry Sartain.

SCHOLARSHIPS - See Page 8

Dr. Bob's Gardening Tips

Dr. Robert J. Black

On the web at:
<http://hort.ifas.ufl.edu>
 Click on
 "Home Gardening"



Hobby Greenhouses

A small greenhouse can be a relaxing and useful hobby. It can be used to grow specialty crops such as orchids, germinate seeds and root cuttings for the outdoor garden, and grow vegetables out of season. A carefully chosen and constructed greenhouse can be enjoyed year round.

The first step is to decide whether you want a homemade or a ready-made greenhouse. Ready-made greenhouses are precisely built, and are usually more attractive than homemade types, but are usually more expensive and don't always fit your situation. Homemade greenhouses can be made from scraps, are therefore much cheaper, and can be built to the size that will fit your particular needs.

Before building or buying a greenhouse, select a suitable location. The area available will determine the size and type of greenhouse you will build. Located the greenhouse for maximum sunlight, especially in morning, but preferably all day. The southern or southeastern exposure is the best. Eastern exposure is the next choice, where morning

sun is available. Next best are southwest and west, though western exposures will probably need summer shading. Northern is poor, except for tropical foliage plants, African violets and orchids.

Locate the greenhouse near sources of water, fuel for heating and electricity. This will substantially reduce building costs.

There are two basic types of greenhouses: attached and freestanding. The attached greenhouse is built against a building using the existing structure for one or more of its sides and has the advantage of easy access in bad weather. It is also cheaper to heat because it shares a wall with your house. The freestanding greenhouse has more growing space, costs more initially, and costs more to heat.

The size of a greenhouse is influenced by available space, location, intended use and cost. It should be large enough to house plant benches, a work bench and storage materials. Larger greenhouses are easier to manage because the temperature fluctuates very slowly.

Greenhouses are made with glass, fiberglass, polyethylene, or vinyl coverings. Glass houses are very attractive, permanent, and expensive. These houses should be built by a greenhouse manufacturer or purchased in a ready-to-assemble package because they are difficult to construct.

Fiberglass is an excellent greenhouse covering. It is lightweight, strong and nearly hail proof, has good light transmission and requires only a simple superstructure for support. Poor grades of fiberglass will discolor and reduce light penetration, so use a grade that is guaranteed for 10-20 years. The type covered with a polyvinyl fluoride film resists weathering and extends its life. If you

select fiberglass, choose the clearest grade and do not use colored fiberglass.

Plastic film is cheap but temporary. It is lightweight and has good light transmission, but in sunlight it deteriorates rapidly and must be replaced every three to eight months. UV-resistant polyethylene is more expensive, but will last much longer.

Wood, steel or aluminum is used for the supporting framework of greenhouses. Only pressure-treated lumber or rot-resistant woods such as redwood and cypress should be used when building a wood-frame greenhouse. Steel requires constant maintenance to prevent rust. Aluminum is the best material because it is lightweight, strong, requires little maintenance and will last many years.

Glass and fiberglass greenhouses should be built on permanent foundations which in Florida, where winters are mild, can be nothing more than a wooden sill of 2x6 boards or a six-inch concrete footing. The foundation should never be higher than the plant benches and no higher than 10-15" if plants are to be grown on the ground. Plastic greenhouses can be placed on the ground.

Before buying or building a greenhouse, give careful thought to the size, style and kind of control desired. Learn about the problems of people who have greenhouses and check local building codes and zoning laws before you start construction.



Upcoming Events

FNATS 2003 Show

Orange Cty. Convention Ctr., Orlando, FL
 September 25th-27th, 2003
 URL: <http://www.fnga.org>

Great Southern Tree Conference

Hilton Hotel & Conf. Ctr., Gainesville, FL
 December 4th-5th, 2003
 URL: <http://www.GreatSouthernTreeConference.org>

TPIE 2004

Broward Cty. Convention Ctr.,
 Ft. Lauderdale, FL
 January 15th-17th, 2004
 URL: <http://www.fnga.org>

Visit our Trade Show Booth

#859 at FNATS Orlando, Sept 25th-27th
 and TPIE, Ft. Lauderdale,
 January 15th-17th

SCHOLARSHIPS

Environmental Horticulture students brought in \$68,900 in scholarships in the first six months of 2003.

Ag Women's Club	\$ 500	IFAS Scholarships (\$ 8,200)	
Alumni Fellowship	15,000	Edgar Martin	1,000
American Orchid Society	3,000	Farm Credit Bureau	1,000
AS Plant Biologist	500	Florida Rural Rehab. Corp.	4,000
Batson Scholarship	1,000	Lykes	1,000
Bartlett Tree Foundation	2,000	William Ward	1,200
Bloom 'N Grow Garden Society	5,000	IFAS Travel Grant	400
ENH Graduate Student Assn	200	James H. Davis	18,000
FNGA Front Runner Chapter	500	Joiner Travel Grant	600
FNGA Royal Palm Chapter	500	Lisa Burton	1,000
Garden Club of America	2,000	Mosmiller Grant	2,000
Halifax Country Garden Club	1,000	Orlando Garden Club	6,000
		PMCB Graduate Talk Competition	500

The Environmental Horticulture News is published twice yearly. Contributors: Lisa Hall, Judy Wilson, Bart Schutzman, and Mary Ann Andrews. Editing, layout and design by Bart Schutzman and Mary Ann Andrews. Contact us at (352) 392-1831, fax (352) 392-3870, or visit our website at <http://hort.ifas.ufl.edu>.