

Soil and Water Science Department Publication

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## EXTENSION PROGRAMS

#### COVERING FLORIDA FROM TOP TO BOTTOM

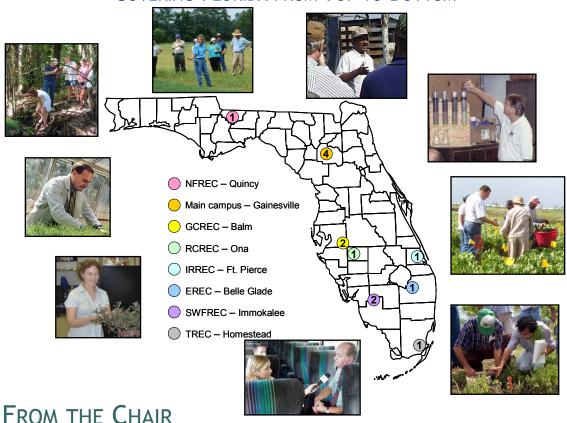


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A simple way to define extension is "educating people so they can solve problems." The Soil and Water Science Department (SWSD) has a cadre of extension faculty (number of faculty at each location shown in the figure above) who conduct programs that help Florida's citizens solve a wide variety of agricultural, urban, and natural resource problems across the state. The Department is committed to excellence in extension education. Tom Obreza serves as SWSD state-wide extension coordinator and provides leadership to coordinate extension programs. Few examples are presented in our newsletter.

The SWSD extension programs address soil and water quality issues in a range of ecosystems including: agricultural lands, forested lands, range lands, urban lands, and wetlands and aquatic systems (springs, shallow lakes, rivers, and estuaries). Additional information on our extension programs can be found at: http://soils.ifas.ufl.edu/extension and http://solutionsforyourlife.ufl.edu/

Florida's water resource issues of concern center on water quality impairment by nutrients and competition for freshwater supply. Thus, a large portion of the department's extension effort is directed towards nutrient and water management for crop production and water quality protection in agricultural, recreational, and urban landuse. Floridians also must understand the importance of natural systems and Continued on Page 5



## Environmental Nutrient Management for High-Intensity Turfgrass Production



Jerry Sartain's nutrient management extension program helps Florida's golf course superintendents maintain top-quality turfgrass while minimizing nutrient losses.

Florida has 1250+ golf courses (and counting), more than any other state. Like agricultural producers, turfgrass managers are under increased pressure to properly manage nitrogen and phosphorus inputs. **Jerry Sartain** educates Florida's golf course superintendents about the latest environmentally-

friendly fertilizer technology and nutritional requirements of intensively-managed southern grasses. He determined that N leaching can be nearly eliminated by using controlled-release fertilizer, and is developing a plant tissue test that improves upon standard soil testing to determine turfgrass needs for P fertilizer. He regularly meets with superintendents across the state to communicate his findings and recommendations. For more information, contact Jerry Sartain at JBS@ufl.edu



Jerry Sartain

# Comprehensive Nutrient Management Plan Training for Technical Service Providers

The USDA-NRCS requires Comprehensive Nutrient Management Plan (CNMP) development for all Confined Animal Feeding Operations. The NRCS allows private individuals to write these plans, but they must first be trained and certified. In collaboration with NRCS, Rao Mylavarapu created a program to train individuals in nutrient management and land treatment practices including the Florida Phosphorus Index. Since 2002, he has trained 213 people. The final training session will be held held December 6-8,2006 in Okeechobee. For more information, visit http://nutrients.ifas.ufl.edu, or contact Rao Mylavarapu at RaoM@ufl.edu.



Rao Mylavarapu explains the utility of the Phosphorus Index to Technical Service Providers-in-training.

## Minimizing Phosphorus Export from the Everglades Agricultural Area



Alan Wright discusses P nutrient management practices with an EAA celery producer.

One of the main objectives of Everglades Restoration is decreasing phosphorus loads leaving the Everglades Agricultural Area (EAA) with surface water drainage. Alan Wright of the Everglades REC at Belle Glade directs an extension program to help vegetable producers implement crop management practices that minimize P inputs to organic soils in the region. In cooperation with growers, effects of P application methods and rates on the fate of applied P in soil are being tested and disseminated to commercial production managers. The outcomes of these educational efforts are optimization of P fertilization rates for various crops grown on the in the EAA, and ultimately minimization of total P inputs attributed to agriculture. Contact Alan Wright at ALWr@ufl.edu.

## CROP PRODUCTION & WATER QUALITY



#### Suwannee River Partnership Education Team

UF-IFAS Extension is a member of the Suwannee River Partnership, whose mission is to educate local landowners about nutrient and water management in order to minimize nitrate-N loading to the Suwannee and Santa Fe river basins. Considering that there are more than 200 center pivot irrigation systems on extremely sandy soils in the region, proper irrigation management is critical to prevent nitrate leaching. Tom Obreza conducts training sessions and schools that educate county agents and producers about soil waterholding properties, soil water measurement, crop water needs, irrigation system uniformity, and irrigation scheduling. Pre and post tests have documented knowledge gain, which translates into water savings and better nutrient use efficiency throughout the basins. For more information, contact Tom Obreza at Obreza@ufl.edu.



Tom Obreza shows north Florida producers how easily nitrogen fertilizer leaches in sandy soils.

## Protecting the Biscayne Aquifer and Florida Bay from Nutrient Impairment

The Biscayne aquifer supplies fresh water to Biscayne and Florida Bays, and is the primary source of potable water in southeastern Florida. Considering that the local agricultural production area is dominated by highly-porous, rocky limestone soils,



Yuncong Li shows a Homestead grower how tensiometers can help schedule irrigation.

Miami-Dade county's 2+ million residents are concerned about water quality. Yuncong Li, located at Tropical REC-Homestead, educates county agents, government agencies, and producers about management practices that minimize leaching of fertilizers and pesticides. For example, Li showed that most soils contain sufficient plant-available P for crop production without additional P fertilization. As a result, he was able to convince producers to reduce P fertilizer use. He teaches growers how to schedule irrigation, and has helped introduce new cover crops that improve soil fertility, maintain crop production, and help protect water quality by absorbing excess N and P. For more information, visit http://yuncong.ifas.ufl.edu/ or contact Yuncong Li at YunLi@ufl.edu.

### Water & Nutrient Best Management Practices for Strawberry Production

Florida produces about 15% of the USA's strawberries, a nutrient and water-intensive crop, on about 7000 acres near Plant City. **Craig Stanley** of the Gulf Coast REC at Balm coordinates an industry-initiated project to evaluate the effectiveness of water and nutrient BMPs for strawberry production. The goal is to assess the degree of current BMP use, demonstrate BMP effectiveness, and encourage grower adoption of water and



nutrient management practices that will reduce potential contamination of groundwater and surface water bodies. This project involves 11 grower/ cooperators and 21 sampling sites, all on commercial strawberry production operations. Sites were monitored during the production season by weekly sampling leachate collected below the root zone of micro-irrigated strawberry crops. Nitrate-N lost from the fields ranged from 18 lbs/acre (about 13% of applied N) to less



Craig Stanley

than 1 lb/acre, depending on irrigation management intensity. The majority of sites had nitrate-N losses less than 5 lbs/acre, (less than 3% of applied N), indicating that many growers are already effectively using BMPs. For more information, contact Craig Stanley at CDS@ufl.edu.



#### **Best Management Practices for Forage Production**



Cheryl Mackowiak explains what it takes to produce high-quality forage while also preventing off-site nutrient losses.

Florida forages are used for roadsides, recreation, wildlife and livestock. Forages are one of the best agronomic commodities to prevent excess nutrient losses to the environment. Extension agents and producers require timely information to keep fields productive while maintaining good environmental stewardship. To meet this need, the SWSD Extension Specialists Cheryl Mackowiak of the North Florida REC at Quincy and Maria Silveira of the Range Cattle REC at Ona

demonstrate nutrient and water best management practices (BMP) in both north and south Florida. Their efforts focus on developing environmentally sound and economically sustainable forage fertility management options that extension agents can showcase to producers. For example, fertility recommendations have not kept pace with



Maria Silveira

breeders who continue to release ever greater-yielding varieties. Additionally, escalating fertilizer costs combined with increased pressure to use livestock and municipal organic wastes present opportunities to develop alternative fertilizer sources for forages. For more information, contact Cheryl Mackowiak at CLMackowiak@ufl.edu and Maria Silveira at MLAS@ufl.edu.

#### Nutrient Management in Urban and Commercial Landscapes



Amy Shober

When rain falls on yards, roads and parking lots, water flows across impervious surfaces into storm drains, carrying pollutants like fertilizers, pesticides, soil, petroleum products and other pollutants to streams, rivers, and lakes. Pollutants from residential areas threaten the health of Florida's water and ecosystems as much or more than those from agriculture. Amy Shober of the Gulf Coast REC at Balm focuses her extension program on nutrient management issues in Florida's urban landscapes. She is closely linked with the

UF-IFAS Florida Yards and Neighborhoods (FYN) program that encourages homeowners to water efficiently, mulch, recycle, select the least toxic pest control measures, put the right plant in the right place, fertilize only when necessary, provide food, water and shelter for wildlife, protect surface water bodies (i.e., bays, rivers, streams, ponds, etc.) and minimize stormwater rupoff. Proper implementation of EYN practices protects the nature



Amy Shober teaches Florida's urban residents how to manage their yards to prevent ecosystem degradation of neighborhood stormwater retention ponds.

stormwater runoff. Proper implementation of FYN practices protects the natural environment around us for future generations to enjoy. For more information, contact Amy Shober at ALShober@ufl.edu.

#### **Graduating students**

#### **Masters**

Kelly Fischler ,(Mary Collins)
Natalie Balcer, (Mark Clark)
Darren Bishop, (Willie Harris)
Claudia Arrieta, (Samira Daroub)
Travis Richardson, (Peter Nkedi-Kizza)
T.J. Rew, (Don Graetz)

#### PhD

Sampson Agyin-Birikorang, (George O'Connor)
Deoyani Sarkhot, (Nick Comerford)
Olawale Oladeji, (George O'Connor and Jerry Sartain)
Sanjay Lamsal, (Sabine Grunwald)
Maria S.I. Gonzaga, (Lena Ma)
Roseanna Rivero, (Sabine Grunwald)

#### **Incoming students**

Myles Davis, PhD, major advisor, Dean Rhue Kerry Mathews MS, DE David Irick MS, DE Scott Davis, MS (distance), (Tom Obreza)

Diane Racine, MS, DE

## POLLUTION ASSESSMENT & PREVENTION

#### Preventing Pollution of the Indian River Lagoon



Chris Wilson helps citrus growers understand why leaving the sprayer on while turning near a canal is a bad idea.

Surface runoff water from Indian River citrus groves ultimately drains into the Indian River Lagoon or the St. Lucie Estuary, portions of which have been negatively impacted due to poor water quality. Chris Wilson of the Indian River

REC at Ft. Pierce has quantified non-target deposition of pesticides as related to ground sprayer operation techniques, and has identified several BMPs to reduce direct contact of spray materials with drainage canal water. He regularly participates in grower workshops to highlight the ecological consequences of reduced water quality due to individual constituents, and to explain how BMP implementation can be a cost-effective remedy for surface water impairment. For more information, contact Chris Wilson at CWilson@ufl.edu.



**Chris Wilson** 

## **Continuing Education for Agricultural Professionals**

Ed Hanlon of the Southwest Florida REC at Immokalee has been instrumental in the development of the Certified Crop Advisor Program in Florida. The program began in 1994 with direct sponsorship by the Florida Fertilizer and Agrochemical Association (FFAA). Ed has served as a member of the Board of Directors, and continues to offer continuing education units semi-annually at five locations simultaneously, working with Tom Obreza and other departmental faculty members. The pre/post instruments show an average knowledge gain of more than 50%, and is continually praised by CCAs for timely information with reduced travel demands. Ed is currently developing a web-based system for self-study, which should be operational in late 2006. For more information, contact Ed Hanlon at EAHanlon@ufl.edu.



An audience of agricultural professionals benefits from the acumen of Ed Hanlon.

#### The 7th Annual Soil and Water Science Research Forum

The 7th Annual Soil and Water Science Research Forum (http://soils.ifas.ufl.edu/forum/) was well attended with introductory remarks presented by Dean for Research Dr. Mark McLellan and a keynote presentation by Dr. Hans Paerl, Kenan Professor from University of North Carolina. A total of 50 papers from students and post-doctoral fellows were presented at the Forum. Thanks to the Faculty Research Forum Committee, Lena Ma (Chair), Mark Clark, Jim Jawitz, Sabine Grunwald, Rao Mylavarapu, and Andy Ogram, for their effort in organizing the Forum. Special thanks to Gabriel Kasozi (graduate student) and to Rhiannon Pollard (Program Assistant) for their hard work in making final arrangements for the Forum. Mark your calendars for the 8th Annual Soil and Water Science Research Forum scheduled for September 7, 2007.

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wetlands in maintaining watershed health, so SWSD extension trains county agents how to conduct watershed education programs at the local level. In addition, our extension faculty work closely with state agencies in addressing water quality issues by conducting demonstration projects. Because Florida is so geographically diverse, two-thirds of SWSD extension specialists are located on the "front lines" at Research and Education Centers from Quincy to Homestead (see map). The ultimate goal of our statewide extension effort is to help Florida strike a balance between sustainable agricultural production, urban growth, and natural resource protection that maintains a high quality and plentiful water supply for all users.

The SWSD extension faculty translate current, relevant soil, water, and environmental science knowledge into user-friendly formats for Florida residents, visitors, industry, business, governmental agencies and county agents. Formats include publications, presentations, in-service training, videos and computer software. The SWSD faculty's basic and applied research supports extension efforts by addressing current and anticipated land, soil, and water resource uses and potential environmental problems. The UF/IFAS Extension Soil Testing Laboratory (ESTL) managed by SWSD offers a variety of tests for mineral soils, container media and irrigation water. Information about these tests can be obtained either directly from the ESTL or by contacting your local County Extension Office. Additional information can be found at: http://soilslab.ifas.ufl.edu/ or by contacting ESTL at:

soilslab@ifas.ufl.edu



#### Patrick Inglett wins 2006 Emil Truog Soil Science Award



The Emil Truog Award is presented by the Soil Science Society of America (SSSA) and is supported through funds originally derived from Society members and a bequest from Dr. Truog's estate. Dr. Truog was one of the founding members of SSSA. The Emil Truog Award is given once a year to one Ph. D. recipient who has made an outstanding contribution to soil science as evidenced by his or her Ph. D. dissertation.

Patrick Inglett is currently a post-doctoral research associate in the Soil and Water Science Department of the University of Florida. His dissertation titled, "Stable Nitrogen Isotopic Ratios as an Indicator of Wetland Eutrophication: A Case Study in the Florida Everglades" investigated processes affecting patterns of  $\delta^{15}$ N in wetland plants and soils. Through his study he was able to demonstrate a new application of such isotopic patterns to indicate phosphorus

pollution. Patrick plans to continue this research as an academic faculty where he hopes to develop a research and teaching program dedicated to the study of coupled carbon, nitrogen, and phosphorus cycles.

#### 2006 Soil Science Professional Service Award presented to Wade Hurt

The Soil Science Professional Service Award, given by the Soil Science Society of America (SSSA), is awarded to scientists who have provided distinguished service to the soil science profession. Wade Hurt, a soil scientist with USDA-Natural Resources Conservation Service, was selected to receive this award. Wade is on the staff of the National Soil Survey Center located in Lincoln, NE and courtesy faculty in the Soil and Water Science Department at the University of Florida. He also serves as NRCS National Leader for Hydric Soils. His work focuses mainly on hydric and subaqueous soils and soil interpretations for nutrient and pesticide management. Hurt has been active in SSSA and has served on its Glossary Committee. Four times a year, Wade teaches Hydric Soils short course to environmental professionals.



**K. Ramesh Reddy** was selected to present the first William Patrick Wetland Biogeochemistry Memorial Lecture at the 2006 Annual meetings of Soil Science Society of America, Nov. 12-16, 2006. Indianapolis, IN.

**Solomon Haile** (major advisor, affiliate distinguished professor **PK Nair**; co-chair, **Vimala Nair**), was awarded the 1<sup>st</sup> place in recognition of outstanding achievement in the 2006 Minority Student Poster Presentation at the Annual Meetings ASA/CSSA/SSSA held in Indianapolis in November 2006. **Manohardeep Josan** (major advisor, **Vimala Nair**) received an "Honorable Mention" at the same competition.

James Jawitz received the 2006 Alpha Zeta Professor of the Year for the College of Agriculture and Life Sciences.

2006 - American Water Resources Association UF Student Chapter (James Jawitz - club advisor) received Honorable Mention for National Outstanding Student Chapter.

**Jehangir Bhadha**, PhD student selected for 2006 William V. Storch Award (\$1000) for excellence in graduate studies from the Florida Chapter of the American Water Resources Association. (**James Jawitz** - major advisor)

Rao Mylavarapu received the Hornsby Extension Professor award for the year 2006-2007.

Rao Mylavarapu has been (1) elected as a Board member of Soil & Plant Analysis Council, 2006-2009; (2) elected as the Vice-Chair, SERA-IEG-6 on Methodology, Interpretation, and Implementation of Soil, Plant, Byproduct, and Water Analyses, 2006-2008; and (3) nominated as USDA-CSREES Southern Water Quality Program representative on EPA Region 4 Nutrient Criteria Development Regional Technical Advisory Group.

**Susan Curry** and **Rao Mylavarapu**, received the UF/IFAS Gold Image Award for USDA CSREES Southern Water Quality Nutrient Management Team Regional Newsletter.

**Ann Wilkie** received one of five "Sustainable Solutions Awards" presented nationwide to University academic departments that exemplify principles of environmental sustainability. The award was given for her innovative manure management system.

Nick Comerford was selected to receive a 2006 IFAS International Fellow Award.

Service pins are awarded to the following USPS/TEAMS staff members: **Susan Curry** - 5 years; **Elizabeth Kennelly** - 5 years; **Martin Sandquist** - 20 years.

Scott Brinton, Chemist, was selected to receive the SWSD Superior Accomplishment Award.

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## WATERSHED EDUCATION-



#### Watershed Education and Low Impact Development (LID)

Florida's expanding population is causing severe encroachment of the urban sector onto former agricultural land and natural areas. Significant land use changes have resulted in impairment of many state water bodies, presenting new challenges to water resource management and water quality protection. To meet new educational needs of Florida's county extension agents, Mark Clark helped form the UF-IFAS "Watershed Education Team," a group of Extension Specialists that conducts annual multi-disciplinary watershed in-service trainings. Clark is also involved in the Program for Resource Efficient Communities, a diverse team of extension faculty offering workshops to county planners, growth managers and developers about LID stormwater practices and sustainable development strategies. These programs have improved extension agent understanding of physical, chemical, and regulatory factors influencing watershed processes and management. They have also inspired several master plan developments in Florida to propose alternative LID stormwater designs. For example, six additional county governments have requested workshops to help them better evaluate alternative growth strategies. For more information, visit http://wetlandextension.ifas.ufl.edu/ and http://www.energy.ufl.edu, or contact Mark Clark at ClarkMW@ufl.edu.



Mark Clark shows county extension agents how to measure stream flow and calculate pollutant loads.

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## Evapotranspiration-Based Citrus Irrigation Scheduling

Water needed to irrigate citrus groves competes with residential, industrial, and recreational demands for an increasingly scarce resource. A computer model that predicts citrus water use was developed by Kelly Morgan of the Southwest Florida REC at Immokalee to help growers schedule irrigation and increase water use efficiency. Six stations in cooperating groves collect weather and soil water content data that the model uses to estimate daily evapotranspiration (ET), predict soil water content, and determine irrigation schedules. Growers irrigating by these schedules have shown confidence in their accuracy as they become more comfortable with the technology. The model has been developed into a grower irrigation scheduling tool that is available on the FAWN website (http://fawn.ifas.ufl.edu, under the Management Tools menu). For more information, contact Kelly Morgan at ktm@ufl.edu.



Kelly Morgan

**Lauren Dillard** was selected to receive the SWSD Outstanding Undergraduate Award.

**Kirandeep Mann** received the Hunt Brothers Fellowship to pursue her doctorate degree.

**7**<sup>th</sup> **Annual SWSD Research Forum winners:** Best oral presentation winner - **Josan Manohardeep**; Best poster presentation winners - **A. Albertin**; **D. Herrera**; **C. Hicks**; and **T. J. Rew** 

William K. Robertson Fellowship. This fellowship is granted annually to an outstanding graduate student in Soil and Water Science on the basis of excellence in academics and research. Recipient of the Fellowship: Kimberly Epps and Caitlin Hicks

**Sam Polston Scholarship**: This scholarship is given annually to an outstanding graduate student in Soil and Water Science. Recipient of the Fellowship: **Sampson Agyin-Birikorang** and **Angelique Keppler** 

**Victor W. Carlisle Fellowship:** This fellowship will go annually (if a worthy awardee is found) to a graduate student studying Pedology (soil genesis, classification, and soil survey) or Soil Mineralogy in the Soil and Water Science Department. Recipient of the Fellowship: **Kelly Fischler** 

Frederick Buren Smith Scholarship. This award, paid from the F.B. Smith Scholarship Endowment established by long-time Chair F.B. Smith, is given to "an outstanding undergraduate student" in Soil and Water Science. Recipient of the Fellowship: Rotem Shahar

The UF Agronomy and Soils Club recently traveled to Indianapolis for the 2006 National SASES (Students of Agronomy, Soils and Environmental Sciences) Meeting. Taking nine members, the club competed and excelled in a number of contests against schools from across the nation. Charlie Nealis placed fourth in the speech contest and Brianne Schobert placed first for her visual presentation. Charlie was also elected as National SASES treasurer for the coming year. The club won first place in the Club Poster Contest and won the Quiz Bowl for the second year in a row. Four club members were chosen among many across the country as being Golden Scholar Students and were able to participate in special learning sessions as well as have a mentor from another university. Club Advisors: Don Graetz and Lori Snyder.

#### James M. Davidson



Dr. James M. Davidson, (former Professor of Soil Physics) and Emeritus Vice President of Agriculture and Natural Resources, Institute of Food and Agricultural Sciences, University of Florida, passed away September 26, 2006 at the E.T. York Hospice Care Center in Gainesville, after a long illness. He was 72 years old. Dr. Davison was born on April 16, 1934 in The Dalles, OR. He attended The Dalles High School in 1950. Before

coming to Florida, Davidson taught at Oklahoma State University and held laboratory research posts at Oregon State University and the University of California, Davis. He earned a bachelor's degree in soil science at Oregon State in 1956 and stayed to earn a master's in soil physics in 1958. He earned a doctorate in soil physics at the University of California. Davis in 1965.

Dr. Davidson came to UF/IFAS in 1972, as a visiting associate professor and joined the faculty as a soil science professor in 1974. From 1979 to 1992, Davidson served as Assistant Dean and Dean for Research for UF/IFAS. As Dean for Research, he was responsible for UF/IFAS research programs in 23 academic departments and 13 research and education centers throughout Florida. His research focused on the movement of pesticides and other organic contaminants through the soil. He is a fellow of the Soil Science Society of America, the American Society of Agronomy, and is listed in American Men of Sciences; Men of Achievement; Who's Who in the South; Who's Who in Science and Engineering. Davidson was awarded the Distinguished Service Award of the Soil Science Society of America. He has served on national committees investigating groundwater quality, including a committee of the U.S. Environmental Protection Agency and co-chaired the National Research Council committee on the Everglades. Jim Davidson, was inducted into the Agricultural Hall of Fame in 2005 for his outstanding contributions as a teacher, researcher, and a leader for agricultural and natural resource programs.

Dr. Davidson is survived by his wife - Peg; Mother - Kathryn Davidson; Father-in-law - Maurice Tewinkel; Sister - Kathy Altig; Brother - Ed Davidson; Daughters and sons-in-law - David and Debbie Burden; Sam and Jodi Bates; Ray and Michelle Crowder; Grandchildren: Melissa and Natalie Burden; Trevor, Maggie and Emma Bates; Ryan and Lindsay Crowder; and many friends and colleagues. He was preceded in death by his father, Melvin Davidson. Memorial contributions may be made payable to the University of Florida Foundation - SHARE (specify the *Davidson Graduate Student Travel Scholarship Fund*) and sent to Office of Development - SHARE, P.O. Box 110170, Gainesville, FL 32611-0170. Expressions of condolence may be sent to Mrs. Peg Davidson, 4421 NW 20<sup>TH</sup> Place, Gainesville, FL 32605

#### Victor W. Carlisle

Dr. Victor W. Carlisle, Professor Emeritus of Soil and Water Science at the University of Florida, passed away September 29, 2006 at the E.T. York Hospice Care Center in Gainesville, after a long illness. Dr. Carlisle was born on October 3, 1922 in Bunnell, Florida. He attended Flagler County public schools and graduated from Bunnell High School in 1940. He received his B.S. from UF in 1947 after a



three-year interruption for military service as a pilot with the Army Air Force in World War II. He began employment with the Soil and Water Science Department in 1948 as a soil surveyor. He later returned to the classroom and received his M.S. in 1954 and Ph.D. in 1962, both in soil science from the University of Florida. Dr. Carlisle was the University of Florida's state soil survey leader and coordinator of the Soil Characterization Laboratory. For six consecutive years he was cited among the top 100 UF faculty in total grant funding. Dr. Carlisle retired from the University of Florida in 1990, but remained active in departmental activities. In retirement he also was active as a private consultant, concentrating on hydric soil identification and delineation. In the late 90s Dr. Carlisle established the Victor W. Carlisle Fellowship Endowment, which provides an annual monetary award to an outstanding graduate student studying pedology or mineralogy in the Soil and Water Science Department.

Over the course of his career, Vic served as president of the Soil and Water Conservation Society-Florida Chapter, the Soil and Crop Science Society of Florida, and the Florida Association of Environmental Soil Scientists (of which organization he was a founding member in the 1970s). Dr. Carlisle was named the Distinguished Soil Classifier by the Florida Association of Environmental Soil Scientists, and he received the professional Achievement Award from the Soil and Water Conservation Society. Vic was a member of ASA, SSSA, IUSS, the Soil and Crop Science Society of Florida, the Florida Academy of Sciences, the Florida Association of Environmental Soil Scientists, Florida Defenders of the Environment, the Soil and Water Conservation Society, Gamma Sigma Delta, and Sigma Xi.

Dr. Carlisle is survived by his wife of 56 years, Dorothy, three daughters, three granddaughters, and many relatives, friends, and colleagues. Memorial contributions may be made payable to the University of Florida Foundation - SHARE (specify the *V.W. Carlisle Fellowship Endowment Fund 7437*) and sent to Office of Development - SHARE, P.O. Box 110170, Gainesville, FL 32611-0170. Expressions of condolence may be sent to Mrs. Dorothy Carlisle, 4308 SW 19th Terrace, Gainesville, FL 32608-4019.