Winter 2002 Volume 7, No. 1

The Coastal Plainer

3381 Skyway Drive, P.O. Box 311, Auburn, AL 36830 Phone: 334 887-4549 Fax: 334 887-4551 Homepage: //seweb.ga.nrcs.usda.gov/mlra15/

Comments from the Acting

By Scott Anderson, Acting MLRA Office Leader

The front office is still vacant here at MO-15, but not for long. The vacancy announcement for the Alabama State Soil Scientist and MO-15 Leader closed on January 17th. By the time you read this newsletter, we may already know who the new Boss will be. Serving as the "Acting" over these last few months has been a rewarding challenge, but I am looking forward to getting into a regular routine again. Our staff here in Auburn and the staffs in all of the MO-15 States have been very supportive during this interim period. I want to say THANKS!

One of the highlights of 2001 was the MO–15 Soils Workshop held at the University of Florida in Gainesville. Originally scheduled for 2000, the workshop was almost cancelled a second time due to budget constraints. Our State Soil Scientists rallied support, however, and made the workshop a reality. All of the soil scientists in the MO region were invited, and

Region #15

MLRA Soil Survey

about 50 attended. Instructors included personnel from the MO staff, the National Soil Survey Center, and the Soil and Water Science Department at the University of Florida. The NRCS staff in Florida and at the University are commended for their efforts in making the workshop a success.

Looking ahead for 2002, I see two main workloads facing MO-15: STATSGO and NASIS interpretations. All of the States will probably be heavily involved in updating STATSGO maps and the related NASIS database as the spring due date looms ahead. This will also be the year that most of our States start using NASIS interpretation tables in soil survey manuscripts. We're already working on a number of concerns to make this happen.

Good luck, and thanks again.

Welcome to Joey Koptis

The staff at MO-15 would like to welcome Joey Koptis to our grand enterprise. Joey is a new soil scientist working in the Tallapoosa County Project Office at Alexander City, Alabama. He grew up on a family farm in Baldwin County. He graduated in 2001 from Auburn University with a B.S. in Agronomy and Soils and a minor in Agribusiness Management. While a student at Auburn, Joey did an internship with the Monsanto Agronomy Center in Loxley. Joey and his wife, Julie, have two small children, Brock and Sierra.

In This Issue:

2 The Coastal Plainer

Soil Scientist's Workshop

By George Martin, Data Quality Specialist

More than 40 soil scientists participated in a professional development workshop in November (fig. 1). The threeday workshop was held on the University of Florida campus in Gainesville. It was hosted by the Soil and Water Science Department, University of Florida; the Florida soil survey staff; and MO-15. Project soil scientists and resource soil scientists from Alabama, Florida, Georgia, Mississippi, and Puerto Rico participated in the workshop. Instructors from the University

of Florida, the National Soil Survey Center, and the MO–15 staff presented information on urban soils, soil taxonomy, NASIS, technical soil services, manuscript preparation and editing, Coastal Plain geomorphology, landscape analysis, and hydric soils.

Two interesting and informative field trips provided participants an opportunity to leave the classroom and get their hands dirty. Wade Hurt and Dr. Willie Harris lead an afternoon field trip to the "high" Flatwoods in the vicinity of Gainesville, where we observed strongly developed spodic horizons, observed and discussed hydric soil indicators, and walked upon the subtle landforms of the Flatwoods (fig. 2). Warren Henderson,

Florida state soil scientist, and Dr. Bill Puckett, director of the Soil Quality Institute, lead a fullday tour from Gainesville to Cedar Key on the Gulf Coast. On this trip, we viewed soils and landscapes developing on the phosphatic clays of the Hawthorn Formation; the karst landscapes of the Chiefland Limestone Plain; soils and landforms of the Gulf Coast Flatwoods; soils on high, relict dunes; and the low energy, tidal marsh ecosystem. Highlights of the trip included a visit to the Devil's Den, which is an underground spring inside a dry cave, and a visit to Manatee Springs State Park, where we observed the huge spring (which has a discharge of 81,000 gallons a minute) and a couple of manatees submerged



Figure 1.—The soil scientists and instructors who participated in the MO-15 Soil Scientist's Workshop held on the University of Florida campus in Gainesville, Florida.

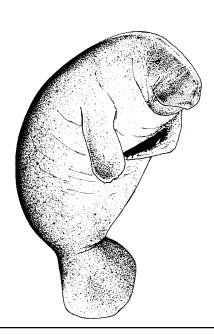


Figure 2.—Dr. Willie Harris, professor of soil mineralogy, University of Florida, presents information on the processes involved in the formation of the spodic horizon in this Spodosol.

in the Suwannee River. Even soil scientists need a break from looking at soils now and then.

I think the workshop was very successful. Most of the soil scientists in MO–15 attended and had the opportunity to visit with one another, the MO staff, and the instructors from the NSSC and the University of Florida. Much information was presented and, hopefully, much was learned.

We, the MO staff, appreciate the support shown by the State Soil Scientists and State Conservationists who budgeted travel for their soils staff and encouraged their attendance. We thank all of the instructors for their time and effort spent to ensure the success of the workshop. Special thanks to Dr. Willie Harris, Wade Hurt, Warren Henderson, and Benita Rogers for their efforts in hosting and coordinating the workshop.



The Coastal Plainer

Soil Survey Update, Suwannee County, Florida

By Frank C. Watts, Soil Scientist, Baldwin, Florida

The soils staff in Florida has recently been highly active in updating soil surveys. One soil survey area being updated is Suwannee County.

The soil scientists who had formerly mapped the county had primarily used 60-inch augers. Some of the pedons were described to a depth of 80 inches or more, but most of the mapping was done to a

depth of 60 inches. Investigation to a depth of 80 inches has become necessary because of the 2-meter requirements in "Soil Taxonomy." Specifically, the soils that were sandy and did not have diagnostic horizons within a depth of 60 inches had to be remapped. In Suwannee County, for example, the Blanton series had to be remapped. Soil scientists from the area all know that the Blanton series has an argillic horizon at a depth of 40 to 80 inches. Not so in the Suwannee County soil survey report. For example, map unit BfB,

Blanton fine sand, high, is sandy throughout. During remapping, this map unit was found to be mostly the Alpin series with inclusions of the Lakeland and Troup series.

After the soils that are sandy throughout were remapped, then all the map units were transected to determine the composition by soil type (series). The transect data were entered into the computer, and it spit out the results. When necessary, the map units were renamed.

The Suwannee County soil survey update also divided some individual soil series into



Figure 3.—The party members for the updated Soil Survey of Suwannee County. From left to right, they are Ken Liudahl, Eddie Cummings, Alfred Jones, Jeff Allen, Robert Weatherspoon, David Howell, and Frank Watts. Greg Brannon, data quality specialist, is on the far right. The survey party updated more than 206,500 acres of soil in Suwannee County this last fiscal year; and if the creeks don't rise and flood, the party hopes to update the rest of the county in the year 2002. About 100,000 acres was also mapped for the update of the Soil Survey of Pinellas County.

many map unit phases. Again, the Blanton series is a good example. Blanton fine sand, high, moderately shallow (BhB), was found to be the Blanton series in complex with the Susquehanna and Alpin series; Blanton fine sand, low (BmB), was found to be the Blanton series in complex with the Alpin and Bonneau series: Blanton fine sand, low, moderately shallow (BnB), was found to be the Bonneau series in complex with the Ocilla and Susquehanna series: and Blanton-Bowie-Susquehanna complex (BoB) was found to be Blanton and Bonneau soilssometimes in complex with the Susquehanna series. For two of the map units, Blanton-Chiefland fine sand (BtB) and Blanton-Kalmia-Leaf complex. not enough transects were made for the soils to be renamed.

Also involved in the update was the testing of the Alpin series to determine if it was in the uncoated or coated family and the testing of the Susquehanna series to determine if it was an Alfisol or a Ultisol and to determine its mineralogy and phosphorus content.

The soil scientists also found out it was important to use old black-and-white photographs as well as infrared photographs. The black-and-white photographs showed the natural vegetation in many areas that were later cleared and used for planted pine plantations, urban development, or both. Landforms are easier to differentiate in areas of

natural vegetation, and most soils can be correlated to certain landforms. Areas of hydric soils could be seen using the infrared photographs. In places, "different tones" could be used to differentiate soil types. These soils were not differentiated in the earlier soil survey because many of the new soil series were established after the soil survey was completed.

The soil scientists also studied United States Geological Survey topographic maps to relate land and image features.

The soil scientists plan to use chemical, physical, mineralogical, and engineering test data from the published soil surveys of Columbia, Gilchrist, Hamilton, Lafayette, and Madison Counties for the updated soil survey of Suwannee County. The previous soil survey of Suwannee County did not include any lab data.

The update of the Soil Survey of Suwannee County is being completed under the leadership of Warren Henderson, state soil scientist, and Robert Weatherspoon, soil survey project leader. Greg Brannon is the data quality specialist. Those present during the initial progress review are shown in figure 3.

NRCS Rescues Coast Guard

From "NRCS This Week," January 25th.

When the U.S. Coast Guard developed its Alabama marine waterways oil spill GIS modeling software, they discovered that there weren't sufficient funds to buy the ortho-imagery data they needed for the project. The Coast Guard sent out 150 requests for GIS data to other Federal, State, and private organizations; and NRCS in Alabama came to the rescue. With more than 100 ortho-imagery images of Alabama's marine waterways, NRCS had what Coast Guard needed. Additionally, NRCS provided office space for Will Page, an employee of the Coast Guard contractor, Southeast Digital Mapping, to set up his equipment and begin copying the NRCS digital aerial ortho-imagery needed to customize the USCG software. The NRCS ortho-imagery will save the Coast Guard tens of thousands of dollars, and subsequent GIS data sharing among agencies should amount to millions saved.

"We have found there is no blanket, short-cut method for getting the conservation job done. There is no quick and easy way out."

—Hugh Hammond Bennett

Soils of Alabama Video

By Julie Best, Public Affairs Specialist

The NRCS, MO-15 soils staff in cooperation with Dr. Doug Phillips, producer of the Discovering Alabama public television program, has created a video entitled "Soils of Alabama." The video was made with the support of the Alabama State Soil and Water Conservation Committee. The video premiered at the annual meeting of the Alabama Association of Conservation Districts in November. Dr. Phillips attended the meeting and gave a brief explanation of how the video will be used. The Soils of Alabama segment will air in the spring. It was made available after the first of the year. The video is being used to raise awareness about the diversity of the soil in Alabama and the significance of soil in our environment. In addition to being a part of the Discovering Alabama public television broadcast, the video will be available to school systems throughout the State.

Ode to My Spell Chequer

Author Unknown

Eye have a spell chequer, it came with my pea sea. It plainly marques four my revue miss steaks eye kin knot see. Eye strike a key and type a word and weight four it two say, Weather eye am wrong oar write, it shows me strait a weigh. As soon as a mist ache is maid. it nose bee fore two long. And eye can put the error rite, it's rare lea ever wrong. Eye have run this poem threw it, I am shore your pleased too no, It's letter perfect awl the weigh. My chequer tolled me sew.

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, sex, religion, age, disability, political beliefs, sexual orientation, or marital or family status. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination, write USDA, Director, Office of Civil Rights, Room 326-W, Whitten Building, 1400 Independence Avenue, SW, Washington, D.C. 20250-9410 or call (202) 720-5964 (voice and TDD). USDA is an equal opportunity provider and employer.

Two Types of Satisfied Customers

By Warren Henderson, Florida State Soil Scientist

Believe it or not, there are still hundreds—or perhaps even thousands—of customers out there who don't have access to the Internet. Talk of the "super highway" is Greek to those who only have access to a "dirt road." Yes, the hard copy of the published soil survey is requested much more than one would think. In fact, we've exhausted our 4,000 to 5,000 copies in a number of offices throughout the State. Thanks to our editors from the MLRA Office. however, we are in good shape again. The "Historical Replica CDs" have saved the day. The District Offices are happy with the CDs, knowing they can either print certain sections of the text or tables or a particular map for the "dirtroad customer" or burn a CD for the "super-highway customer." Each customer is happy with the product, and as we get more of the maps scanned for the recently published surveys that have not been SSURGO certified. the Internet customers will definitely become happy campers.

There is one thing that I failed to mention. The cost of mailing out soil surveys has been drastically reduced. Especially when the postage is for a historical replica on CD.

Horace Smith Receives Public Service Award

For his distinguished leadership in developing the Scholars program and in bringing the 1890 land-grant community into full partnership with the work of his division in practical ways, the 59th Professional Agricultural Workers Conference conferred on Horace Smith its 2001 George Washington Carver Public Service Hall of Fame Award, which is given to individuals working in significant partnership with the 1890 land-grant institutions.

Horace Smith grew up on a small tobacco farm near Clarkton, North Carolina. He received a B.S. in soil science from Virginia State University in 1964 and immediately began a career as a soil scientist with the USDA Soil Conservation Service in Champaign, Illinois. In 1972, he received an M.S. in soil genesis and classification from Ohio State University. He worked with the Soil Conservation Service and the Natural **Resources Conservation** Service in progressively more responsible positions in six states and the District of Columbia

Horace received numerous awards during his career and represented the agency on short-term assignments in Central America, South America, Africa, Europe, and the Far East. In 1996, he became Director of the Soil Survey Division of NRCS. He provided

leadership for the federal part of the National Cooperative Soil Survey (NCSS) and for planning, directing, and coordinating the agency's comprehensive Soil Survey Program. He gave leadership and guidance for the National Soil Survey Center and the Soil Quality Institute. He provided particular impetus for developing soil survey interpretations for urban and urban-fringe areas and areas with limited resource farmers.

As director of the Soil Survey
Division, Horace worked on behalf
of the 1890 land-grant institutions.
He made them full partners in the
NCSS, inviting them to all meetings, conferences, and other
activities on the state, national,
and international levels. Several
such meetings have been held on
the campuses of the institutions,

and many of their scientists and scholars have presented technical papers. He established a Soil Science Scholars Program at five of the 1890 institutions and soil survey offices at three. At the 1999 meeting of the American Society of Agronomy, he cited "Contributions of Graduates from 1890 Institutions to the National Cooperative Soil Survey during the 20th Century."

A registered soil scientist with the American Registry of Certified Professionals in Agronomy, Crops, and Soils, Mr. Smith is a member of the American Society of Agronomy, the Soil Science Society of America, the International Union of Soil Sciences, and other professional organizations. Mr. Smith is married and the father of three grown children.



Figure 4.—Horace Smith, retired director of the Soil Survey Division, was awarded the 2001 George Washington Carver Public Service Hall of Fame Award.