

Winter 2007

Mountain Profiles

The newsletter of the West Virginia Association of Professional Soil Scientists

Message from the President...

We have made it through the holidays and still haven't seen much winter to date. This has allowed some of us to take field work well beyond its normal season.

WVAPSS had a very successful 2006. Support of the WVU Soil Judging team which won the National Title and is heading back to the national competition this spring, a very good annual (judged by comments received) meeting in Pt Pleasant back in the summer, and a very informative meeting at the Partnership meeting this past October were just some of the activities. But with the New Year, each of us will be taking on new challenges, for me, pursuit of a PhD. Call me crazy or insane! Hey, they may both fit.



In this issue you will hear about how WVPASS executive council continues to look into the certification process for soil scientists in the state. We are trying to stay up to date on new legislation and policies that might affect soil scientists in our day to day duties and interests and how these changes may affect the certification process. You will also learn how the WVU soil judging team did this year in the regional contest, where the annual field trip will be and topics discussed and viewed, who won the Golden Auger Award, where and how to buy t-shirts, who the new member(s) is/are, and more!!! Please take the time to read the newsletter and stay up to date with what is happening in your society.

-Michael Jones, President

Did You Know

Did you know that there is a Soils Caucus on Capitol Hill, thanks to SSSA? Here's a brief report from the recent meeting:

On 7 December, 45 Congressional staff members and two members of Congress attended the kickoff House Soils Caucus educational briefing, "Challenges and Opportunities Surrounding a New Bioeconomy"! House Soils Caucus co-chairs Reps. Jim Costa (D-CA) and Tom Latham (R-IA) presented opening remarks at the briefing, both of them stressing the importance of the

Caucus as a scientific resource to Congress as well as the contributions it can make in the development of the 2007 Farm Bill and related agricultural, environmental and natural resources legislation.

Four SSSA scientists-Rick Cruse (Iowa State University), Jim Doolittle (South Dakota State University), Gene Kelly (Colorado State University), and Bruce Roberts (Fresno State University)-each provided their perspectives and recommendations, emphasizing the soil, crop and agronomic research questions requiring answers if we are to achieve a sustainable bioeconomy. Prior to the briefing, the four ASA/CSSA/SSSA scientists developed a compelling, one-page handout (all written communications with Congress are generally conducted in a one-page format as staffers and members are inundated daily with publications, documents, legislation, emails, letters, etc) which was provided to staff and can be viewed at <http://www.soils.org/sciencepolicycaucus/bioeconomy.pdf>

What's next? During the coming year, the Science Policy Office of SSSA plans to continue efforts to increase House Soils Caucus membership from the current 27 members to 50 (view current House Soils Caucus membership at <http://www.soils.org/sciencepolicy/caucus/members.pdf> and we need your help. If you haven't already contacted your Representative to urge him or her to join the Caucus, now is the time to act. Please click on our House Soils Caucus action alert at www.sciencepolicyaction.org and follow the simple instructions to get your member on board. It's quick and easy and essential if we are to successfully grow Caucus membership and educate Congress about the importance and role of soils and, ultimately, see increased federal support for soil science.

WVU Soils Team

With their memories of their unprecedented individual and team national championships at the 2006 National Collegiate Soils Contest still fresh in their minds, the WVU Soils Team traveled to Western Kentucky University in October for the 2006 Southeast Regional Soils Contest. The Team left Morgantown, WV, early on Monday, October 16, 2006, and arrived in Bowling Green, KY, that evening. On Tuesday, Wednesday, and Thursday the Team spent 8+ hours a day practicing and preparing for the contest. Students described the physical and morphological properties of the soil at ten different practice sites, then used this information to develop interpretations related to water availability, erosion hazard, and land use planning. The contest, which was held on Friday morning, challenged the students to describe and evaluate four more soil sites. The WVU Soils Team finished fifth among the 12 teams that competed at the 2006 Southeast Regional Soils Contest. This qualifies the Team for the National Collegiate Soils Contest in April 2007 in Utah. The other top finishers were the University of Kentucky, Auburn University, Virginia Tech, and Clemson University.

The members of the 2006 WVU Soils Team are Justin Barnes (junior, Forest Resources Management), Corry Calderone (senior, Agronomy—Soil Science), Kim Godbey (senior, Animal & Veterinary Sciences), Cody Mozena (sophomore, Environmental Protection), Anthony Palmieri (senior, Geology), Randy Riddle (junior, Agronomy—Soil Science), Kent Smith

(junior, Agronomy—Soil Science), and Amber Taylor (junior, Agribusiness Management and Rural Development).



(l to r) Barnes, Taylor, Palmieri, Godbey, Mozena, Calderone, Riddle, and Smith

There were 81 student participants in the 2006 Southeast Regional Soils Contest. Two WVU students finished among the top ten individual scorers. Justin Barnes placed sixth and Kent Smith was seventh. The other competitors from WVU also finished well:

- 16 Tony Palmieri
- 17 Randy Riddle
- 24 Corry Calderone
- 28 Kim Godbey
- 39 Amber Taylor
- 61 Cody Mozena



Corry, reigning national champion, evaluates soil color of a sample at one of the practice sites.



Justin considers the texture of a sample at one of the practice sites

Without support from various sources, this enriching student experience would not be possible. The WVU Soils Team received generous support from the WVU Division of Plant and Soil Sciences, the WVU Plant & Soil Sciences Club, the WVU Student Government Association, the West Virginia Association of Professional Soil Scientists, the West Virginia Chapter of the Soil & Water Conservation Society, the Monongahela Soil and Water Conservation District, and donations from alumni of the WVU Soils Team.

For more information on the WVU Soils Team, please contact Jim Thompson (james.thompson@mail.wvu.edu) or visit the web site <http://www.caf.wvu.edu/plsc/soilscience/Thompson/Courses/agrn125/>.

Grassland Evaluation Contest

The 2007 Grassland Evaluation Contest will be held in Jackson's Mill in conjunction with the annual Beef Expo. The judging site will be a typical pasture used for livestock grazing. A scenario with the landowner's goals for livestock and wildlife production will be provided along with the appropriate soil survey information, aerial photos, maps, scorecards and other relevant information. The contestants will first determine the condition of the field then make corrective decisions based on sound agricultural practices compatible with the landowner's goals.

The Grassland Evaluation Contest consists of four sections: Grassland Condition, Soil Interpretation, Wildlife Habitat, and Plant Identification. Each of these factors will be considered in evaluating the pasture to best utilize the resource and to help make useful management decisions.

This contest is for 4-H and FFA teams. Each member of the winning team receives a \$500 scholarship. The winning team will represent West Virginia in the Mid America contest (which is held in Springfield, Missouri in June). Each member of the second winning team receives a \$250 scholarship. The top scoring individual will receive a \$500 scholarship.

Sponsors for the Grassland Evaluation Contest include the WV Grassland Steering committee, NRCS, WVCA, WV Cooperative Extension Service, Agricultural Research Service, Farm Bureau, RC&D councils, WV Conservation Districts, WV FFA, WVAPSS, and many individuals who offer their time and/or money.

For more information on this year's Grassland Evaluation Contest, please contact Gary Redden, NRCS Grassland Specialist/Soil Conservationist (304-255-9225 ext. 136) or Barbara Greenleaf, NRCS Grassland Specialist (304-422-9072 ext. 43).

New Member(s)

Please welcome the following individual(s) that have become members of WVAPSS in the past 6 months.

Aron Satler – USDA-NRCS – Oak Hill, WV
LaRae Baker – USDA-NRCS – Weston, WV

WVAPSS Conservation Partnership Meeting 2006

The Partnership conference was held the last week of October at the Charleston Town Center Marriott. Thanks to everyone that showed up. We had three great speakers from West Virginia Dept. Environmental Protection, West Virginia Dept. of Health, and WVU Extension. Subjects discussed were sludge application, septic system design, and animal waste regulations. The talks were long but very informative. I have received lots of very positive feedback from our members about the speakers and speakers about our members. By showing the speakers our interests in their respective fields and our knowledge of the subjects and seeing just how stretched each of the departments are with the employees on staff, we have taken a big stride toward the certification process for soil scientists in the state.

Several of our members presented at this past meeting. Steve Carpenter and Wendy Noll had a live hook-up to the Web Soil Survey which went very well and Mary Beth Adams discussed results on long term watershed research on the Fernow Experimental Forest and how it applies to soil and water conservation.

Soil Scientist of the Year

For some of you this maybe old news but I thought it necessary to inform the entire membership of one of our members who recently received an honor few achieve. The 2005 National Field Soil Scientist Award presented by the US Forest Service was given to Stephanie Connolly this past spring. For those who do not know Stephanie, she is currently the Forest Soil Scientist for the Monongahela National Forest. Please give congratulations to Stephanie when you see her on this accomplishment.

WVAPSS Annual Meeting 2007

The annual WVAPSS meeting this coming “summer” is going to be June 1 and 2. The tentative location for the meeting is Tygart Valley State Park on Friday evening with the field trip to be held in the vicinity Saturday. Please mark your calendars, check the web site and look for emails for further details.

Golden Auger Winner 2006

The Golden Auger Award recognizes outstanding commitment and unselfish contribution to the field of soil science and the soil survey program in West Virginia over the current year. It is a joint award given by the West Virginia Association of Professional Soil Scientists and the USDA-Natural Resources Conservation Service. The nomination is made from the members of WVAPSS. The selection is made by the past recipients of the award. The Golden Auger Award recognizes a year of high achievement among soil scientists in the State of West Virginia. The recipient is presented the award at the Partnership Conference. This year's winner is James "Skip" Bell. Make sure to congratulate him if you have not already done so.



Golden Auger Award presented to Skip Bell. Steve Carpenter (left), USDA-NRCS State Soil Scientist and Mike Jones (right), WVAPSS President.

2006 Fundraiser Raffle

Last year's annual meeting created a new committee charged with raising funds for our growing donations to educational causes. Mark Van Lear, Katy McBride, Wendy Noll, Dave Kingsbury, Dr. Sencindiver, Eileen O'Neill and Mike Jones convened mostly by email to organize the raffle. The prize, a weekend get-away to Snowshoe Mountain Resort, included a dinner and music ride on the Cass Scenic Railroad as well as a \$50 restaurant gift certificate (total cost to WVAPSS = \$549). WVAPSS members showed great effort in selling over 300 of the 500 tickets, and netting \$695.86. These funds will support groups such as the WVU Soil Judging Team (hopefully this year they will defend their national title!), as well as Grassland Judging and Envirothon teams throughout the state.

And the winner of the raffle: Carolyn Cole of Ripley, WV. You may recognize her as the wife of member Carlos Cole. Congratulations to Carolyn and the Cole family, and many thanks to all who supported this important fundraiser.

2007-2008 Executive Council Members

It is that time of year again when we need to start thinking about nominations for officers. We are in need of a Public Relations / Education committee chair person. Mark Van Lear has transferred to Richmond, Virginia and resigned his position. He did a great job with the state soil brochure, raffle, and other duties while chairing that committee. Anyone interested in being on the executive council in this capacity or knows of a good candidate(s) for one or both positions needed on the executive council; please let someone on the executive council know. The two positions that will be elected this year are; Vice President and standing committee chairperson.

Current members:

Past President – John Sencindiver

President – Michael Jones

Vice-President – Dave Kingsbury

Secretary – Mary Beth Adams

Executive Council Seat - Katy McBride

Ethics and registration – Eileen O’Neil

Public Relations and Education – **Vacant**

State Soil Monoliths Get a Face Lift

Two monoliths of the West Virginia state soil recently got a face lift from artist Sue Bell. The monoliths of Monongahela silt loam were collected from the Gary Butts farm in Berkeley County in 2005. Everyone who saw this soil in the field agreed that it was a superb example of the Monongahela series. The fragipan was a thing of beauty with prominent yellowish red iron concentrations adjacent to distinct, light gray prism faces. The dark grayish brown Ap horizon, nearly 14 inches thick, evidence that the landscape had been devotedly cared for by Mr. Butts. However, upon drying and preservation, the colors of the profiles faded so much that one could barely distinguish the Ap horizon from the Btx. The soils looked dead. The mono-liths were practically mono-chromatic!

Since one of these monoliths is destined for the Smithsonian Soils Exhibit, something had to be done. That’s when NRCS State Soil Scientist Steve Carpenter had a brain storm. Why not ask Sue Bell to use her artistic skills to bring the monoliths back to life. Could she restore the natural colors of the monoliths to their moist field state? Sue agreed to give it a try.

So, armed with a pedon description, Munsell Soil Color Chart, some profile photos, and her trusty paint brushes, she set to work. Little did she know the hardships that lie ahead!

Working in the conference area of the MO13 office in Morgantown, Sue had to endure a barrage of “friendly advice” from her soil scientist husband. This area is a little too yellowthis area needs to be a little redder....make these pores a little darker...geeeez!

Ever the trooper, Sue persevered, and the results were remarkable! The monoliths look even better than they did in the field. Both are now on display in the MO13 office. One will be taken Washington, D.C. later this year to be part of the Soils Sustain Life display at the Smithsonian Museum of Natural History. The other will stay on permanent display in Morgantown.



A restored Monolith



Sue Bell at work in the MO 13 conference room.

WV Soil Survey News

NRCS SOIL SURVEY STAFF WORK TOWARD A 2007 COMPLETION DATE FOR DIGITAL SOILS DATA.

By Steve Carpenter, NRCS State Soil Scientist –WV

2007 will be a benchmark year for the NRCS Soil Survey Program nationwide. It is the year that all existing soil surveys are to be converted from paper to digital. NRCS, which has been working on this initiative since 1995, hopes to complete this monumental project by the end of the year and make the data available via the Web Soil Survey and the Soil Data Mart.

West Virginia has only 9 more survey reports to complete in order to make the goal with all 55 counties being available. Six of these are currently at the Digitizing Units in Richmond and Madison waiting to be processed. This will be a major milestone for the soil survey program. Instead of waiting 45 years to update a county database, we can do it in a manner of days using digital techniques. It is a whole new age!

The MLRA Region 13 office in Morgantown is working on a new technology that will allow field soil scientists to “check out” portions of soil survey areas for updating and then drop them back into the database. You will see the soil survey staff working to update the soils across broad landscapes instead of being encumbered by artificial political boundaries. The soil survey database will be delivered through the Web Soil Survey and will be dynamic in nature where updates to the data will be transparent to the user.

The Web Soil Survey has been a huge success for the soils program. The Internet traffic hitting the Web Soil Survey has become so large that NRCS has upgraded the server twice already and it is still overwhelmed at times. If you have not had a chance to use the Web Soil Survey, you should do so at: <http://websoilsurvey.nrcs.usda.gov/app/> .

NRCS has spent about \$15 million per year since 1995 in getting this database to the public in this format. The Agency estimates that the database is worth at least \$5 billion. An asset this valuable now has an adequate home, the Web Soil Survey. It delivers soil information world-wide, 24/7 and you don't have to wait 5 years for the report to come out on paper. Check it out!

On the lighter side – with Ron Estep

TURN THE LIGHTS ON

In past decades soil scientists have avoided the spotlight. That position was reserved for the extroverts. However, during recent years soil scientists have found themselves in more prominent roles, due largely to the importance of their science to our environmentally conscious society.

The emergence of soil scientists into the spotlight may have its origins in an incident that occurred in southern West Virginia. A young soils man was making a holiday visit home to his brothers, one of whom was a coach at a local high school. Someone suggested that they visit the high school to play a late-evening game of basketball. The game was played in rather unimpressive fashion, and the boys piled into the car for the trip home.

It was during this trip that the soil scientist was forced into a position of prominence. It began with stomach cramps that progressed from awful to unbearable. Whether it was caused by too much exercise or perhaps by excess consumption of the Tug River drinking water, I do not know. I do know that he needed relief. He ordered the driver to pull over

immediately, and he jumped over the hillside below the highway. His secluded latrine was located between the road above and the railroad tracks a little further downslope.

Mother Nature has a way of putting one's priorities in order, and the man's first priority was to rid himself of whatever was boiling inside his duodenum. This he did—and did—and continued to do.

This event would have probably gone unnoticed in the annals of history, except for the aforementioned railroad tracks. Around the bend rumbled a large locomotive with a glowing headlamp that must have been two feet in diameter. The entire hillside was suddenly illuminated as brightly as any summer day, and the squatting soil scientist was in the very center of the illumination. Though very reticent, he had been suddenly thrust unwillingly into the spotlight.

During the several years that have followed the incident, many soil scientists, despite their desire to go about their business in relative seclusion, have similarly found themselves and their science prominently displayed for public scrutiny. Some may disagree, but I suspect that it all began on a brushy hillside in southern West Virginia.

A Brief Book Review - Recommended Reading for All Soil Scientists

The Worst Hard Time, by Timothy Egan, tells the story of those who survived the Great American Dustbowl of the 1930s. A National Book Award winner, it is also "a classic disaster tale" (New York Times) that describes one of the U.S.'s greatest environmental disasters -- all directly traceable to abuse and lack of understanding of the importance of soil ecosystems. It also describes the genesis of the Soil Conservation Service, and Hugh Bennett's ambitious plans to save the Dustbowl regions of Texas, Oklahoma, Kansas, Colorado, Kansas and Nebraska. It's a great read, and full of interest to soil scientists and lay people.

Have you paid your dues?

Just a quick reminder, there is still time to pay your 2006-2007 dues. As in the past, dues are \$15 for the year and can be sent to:

Mary Beth Adams
USDA Forest Service
PO Box 404
Parsons, West Virginia 26287.

Coming Soon

There will be a new link on the web site soon. Archives of past newsletters and possibly other event news and photos will be available there.

T-shirts for sale!!

We have a nice selection of the new style WVAPSS t-shirts. These shirts are high quality, 100% cotton, with the WVAPSS logo over the left breast. Short sleeves are \$10.00 and long sleeves are \$12.00. Both are available in medium, large, and x-large in white, gray, navy and hunter green. To order, contact Mary Beth Adams. Her phone number is 304-478-2000, and the email address is mbadams@fs.fed.us.



Thanks

I would like to thank everyone that contributed to the newsletter.