

# VIRGINIA ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS

## VAPSS NEWSLETTER

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VAPSS was founded in 1978

April 2013

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Welcome to VAPSS, Jeff Miller. Jeff is VAPSS Executive Secretary. Some of you may know Jeff as the Executive Secretary for the Virginia Christmas Tree Growers Association. We get to share him with them and he gets to meet a whole other group of folks- us. Please be patient with him as he negotiates new ground.

Jeff's e-mail is: [vapss@vapss.org](mailto:vapss@vapss.org); or [hortman48@verizon.net](mailto:hortman48@verizon.net)

-VAPSS celebrates 35 years as a Professional organization. That's pretty good.

Most recent count of member renewals is 32 professionals, with the support of 24 lifetime and emeritus members: we salute you and anticipate further growth.

### ***2013 BOARD OF DIRECTORS***

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PRES. ELECT: Jeff Walker  
(540) 239-9131  
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New Member: David Hall  
(540) 381-0309  
New Member: Shannon Hill  
(804) 264-2228  
NRCS Liaison: Rachael Stull  
VPISU Liaison: Lee Daniels  
and John Galbraith  
Exec. Sec.: Jeff Miller  
(540) 382-7310

Congratulations to Lee Daniels W. Lee Daniels, professor of environmental soil science in the College of Agriculture and Life Sciences at Virginia Tech, recently received a lifetime achievement award from the American Society of Mining and Reclamation. Lee was awarded the William T. Plass Award for his work in the reclamation and rehabilitation of lands impacted by mining, waste disposal, road building and other disturbances. His research has also influenced regulatory policies concerning soil residues generated by coal-fired power plants. Many of us know Lee from college classes, fieldtrip excursions and professional trainings. We offer our congratulations on this lifetime achievement award.

**VAPSS Mission:** *To recognize soils as a non-renewable natural resource and the practice of soil science as an interpretive science; to ensure a class of professionals exists that can properly utilize the large investment the Commonwealth of Virginia has made in the Soil Survey and to ensure the practice of soil science and evaluation meets established minimum standards of education, experience, ethical conduct and professional responsibility and to prevent abuses in the practice of soil science by untrained or unprincipled individuals.*

# VIRGINIA ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS

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Professional Soil Scientists  
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*Postmaster: Address Service Requested*

Remember to call Miss Utilities (811 or 800-552-7001) before you dig and get a ticket number to protect you and everyone on the project. Safety first.

## 2013 ADVERTISING AND ARTICLE DEADLINES

SPRING 2013 (April) due February 15  
SUMMER 2013 (June) due May 15

FALL 2013 (September) due August 15  
WINTER 2013 (December) due November 15

Professional Liability Insurance and Errors & Omissions Insurance are available for Professional Soil Scientists. One firm that I have used is Charles Lunsford Sons & Assoc. They can offer you a quote if you are interested in getting insurance. This is not an advertisement for them-this is so those of you who have asked me recently can just call them directly. Bob Swindell is a nice guy. His contact information is (540) 982-0200 or 800-777-5773 or [bswindel@chaslunsford.com](mailto:bswindel@chaslunsford.com) Good luck, stay safe- Nan.

**Forum?** Go to our VAPSS website, send Lexi Jones an email and she'll set up your access to the forum.  
VAPSS (spell it all out) also has a Facebook page, with photos, announcements and friendly banter.  
Some of us have joined Linked-in, VAPSS has not yet created a group, but could if there is interest.  
We want to learn about you, and these social media are great tools to interact amongst the field of professionals

## Save the date!

**Spring Technical Session - May 23/24 Fairfax Storm water training.** Fairfax County and VAPSS will be presenting a Seasonal High Water Table (SHWT) Workshop in Fairfax County. Announcements forthcoming. This meeting will also serve as a membership meeting, with a short session to vote on amendment to Constitutional powers of Secretary.

### **VAPSS Fall Technical Session- October 17 & 18th**

Soil interpretation and OSE design issues at Fall Zone; more information to follow. VAPSS' first President, Harold Mathews will host our fieldtrip and "papery" sessions. Geomorphology, soil mapping, and landscape interpretation. Engineering aspects will be presented by John Schofield, PE.

Participation at the State Fair was put on hold again this year so that the BOD can concentrate on Licensure.

# VIRGINIA ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS

VAPSS BOD is interested in Community Outreach and encourages all of its Members to let other folks know how important soils are. Talk to Garden Clubs, Schools, Civic organizations, your County's Board of Supervisors or Planning Commission. Soil science needs to start marketing itself in line with the times. Board is discussing developing materials for use by our members, including a tri-fold identifying the importance of soils interpretation.

"I think sometimes we're our own worst enemy. As soon as you say the word 'soils', half your audience has gone to sleep. We have to hammer land use, land development, and land policy issues." Larry Baldwin; January 2011 CSA News,

Despite the rumors that Hokie soil judges practice so much that they do not go to class, in May, 2012 Melanie Letalik (left) and Kelly McMillen (right) did graduate and did sit right next to each other and their parents were taken back by the message they sent to the audience. By the way, these young ladies were both on the 2012 national championship team.  
Dr. John M. Galbraith



The VPI Soil Judging Team always needs your support. They work hard and bring home the trophies. Their next excursion is 20-27 April for the National Collegiate Competition in Platteville Wisconsin. The team of 8 students and 2 coaches will represent Virginia Tech. The Regional Soil Judging Competition is in October at Tennessee Tech, Crossville, Tennessee. The Virginia Tech Soil Judging Team finished in first place at the 2012 National Collegiate Soil Judging Championship, sponsored by the Soil Science Society of America. Donations may be sent to John Galbraith, 239 Smyth Hall (0404), Blacksburg, VA 24061.

## PSS Licensure report:

The Board has developed a timeline in consultation with our lobbyist.  
We have the following goals and action items to foster same:

1. Urge Governor McDonnell to endorse the proposed regulations by May 30
2. Move the regulations quickly to the *final regulations* stage by September 11
3. Move the regulations quickly through the executive branch review by December 31
4. Ensure the PSS Board approves the final regulations and the staff submits them to the Virginia Register for the final 30-day public comment period. After 30 days, the regulations will be in effect.

# VIRGINIA ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS

## Board news and Notes:

### VAPSS Board Planning Meeting

Open meeting is scheduled from 10:00-4:00, April 18<sup>th</sup> Department of Forestry Building 900 Natural Resources Drive: Charlottesville, Virginia 22903

### VAPSS OSE Technical Committee reported by: Jeff Walker

VAPSS Board is forming a Committee of members regarding OSE issues including the design and placement of materials into the soil for the purposes of dispersing sewage effluent; Ryan Reed appointed Jeff Walker as Chair of that Committee. Volunteers should contact Jeff by phone or at [walker@swva.net](mailto:walker@swva.net)

In related news Jeff has been delegated to participate in VDH's Technical Advisory Committee charged with participating in revisions to the Sewage Handling and Disposal Regulations. Amendments are being drafted in light of HB1726, which enacts Regulations for use of chambers, bundled styrene and other technology for sewage dispersal in the soil. Topics of concern for the agenda are due April 12<sup>th</sup>, there is a lack of data regarding substituted systems, statistical analysis have not been provided. In my view media within a drainfield must satisfy critical design requirements:

1. Support overlying static and traffic loads.
2. Provide void space for flow equalization & distribution
3. Serve as a point of attachment for fixed film biomass
4. Support a microbial ecology of organisms which compete for BOD

Research assessing changes in pore space, bio-mat formation and related effects on permeability was published by Dr. Robert Siegrist, PE; and Professor at Colorado School of Mines. Summary from 2004 Small Flows are here: [http://www.infiltratorsystems.com/pdfs/SFQ\\_w04\\_JURIED.pdf](http://www.infiltratorsystems.com/pdfs/SFQ_w04_JURIED.pdf)

Further regulatory concerns must be integrated quickly since this legislation is "Fast Track" and is to be implemented within 9 months.

### Ethics, conflict of interest and policy

The philosophical questions that soils professionals encounter in our work raise important concerns for our working relationships. What are the proper roles for professionals engaged in evaluation and design of improvements to private property, how are the regulatory requirements satisfied, how shall the public interests (community and individual) be protected, how do the DPOR Boards evaluate the conduct and standards of licensees? These questions have relevance to current appeals for input by the VDH considering reform of the Regulations and policy. What is a "bare application" does a site with history comply with a public interest in delivering design services by public employees? How does drafting a permit differ from design? How will the public's health, safety, and welfare best be served and protected? This is fertile ground for discussion and debate.

# VIRGINIA ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS

The OSE fields do not currently have Regulations regarding Ethics, CPSS Code has a good example which would form the basis for such regulation and set a standard of practice governing responsibility to client, public and other professionals.

Code of Virginia 18VAC145-20-160;

A Certified Professional Soil Scientist:

1. Shall not submit any false statements, make any misrepresentations or fail to disclose any facts requested concerning any application for certification or recertification.
2. Shall not engage in any fraud, deceit or misrepresentation in advertising, in soliciting or in providing professional services.
3. Shall not knowingly sign, stamp, or seal any plans, drawings, blueprints, surveys, reports, specifications, maps or other documents not prepared or reviewed and approved by the certificate holder.
4. Shall not knowingly represent a client or employer on a project on which the certificate holder represents or has represented another client or employer without making full disclosure thereof.
5. Shall express a professional opinion only when it is founded on adequate knowledge of established facts at issue and based on a background of technical competence in the subject matter.
6. Shall not knowingly misrepresent factual information in expressing a professional opinion.
7. Shall immediately notify the client or employer and the appropriate regulatory agency if the certificate holder's professional judgment is overruled and not adhered to when advising appropriate parties of any circumstances of a substantial threat to the public health, safety, or welfare.
8. Shall exercise reasonable care when rendering professional services and shall apply the technical knowledge, skill and terminology ordinarily applied by practicing soil scientists.

Soil Science Society of America offers a webinar "*Ethics or That Little Grey Area You Need to Pay Attention To...*" The seminar is available 24/7, cost is \$25.

Found on SSSA website at: <https://www.soils.org/certifications/cpss-cpsc/self-study/>

VAPSS is seated by Regulation on the SHADAC Board which offers recommendations to VDH on policy, regulations and standards.

Our Delegate is Matt Tolley, and alternate Jeff Walker who are interested in your views.

Most recent meeting was Jan 23<sup>rd</sup>.

Minutes can be reviewed: <http://townhall.virginia.gov> Search Secretariat "Department of Health" using filter options will help you find your documents.

CPSS Board meets June 5<sup>th</sup>; other meetings and agenda items may be viewed through Town Hall. <http://townhall.virginia.gov> Search "Commerce and Trade" using filter options.

# VIRGINIA ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS

## ***Soil Scientists visit an Archeological site*** Reported by: Lew Manhart; CPSS

I'm sure that most of us have dug into a "middens" (old term) or new term "anthropogenic features" while examining a soil profile! Last June, VAPSS members were invited to visit and provide technical soil expertise at Virginia's first colony, Jamestown Settlement. Miles Maynes invited VAPSS members to visit the Jamestown archeological dig. Miles is a Utah State University soils student interning with Preservation Virginia for the summer.

Three VAPSS members, Rachael Stull, Dr. Gregg Monnett and Lew Manhart took Miles up on his generous offer. Miles wanted some Virginia soil expertise to help interpret the soil samples collected at the dig. Archeologists that dig at a location initially remove and screen all soil. The initial screening removes the large, visible artifacts. It also destroys most of the structure and mix textures and colors. Some of the soil is sampled, bagged and tagged for further analysis and separation. Some soil samples are washed clean to separate all soil material from small artifacts. Soil color is a readily visible feature and helps *distinguish undisturbed soil from disturbed soil.*



In the dig, it gives archeologist an initial indication that humans may have affected the site. Soil pH influences the preservation of artifact. While in the pits we observed deep buried A horizons above B horizons with redoximorphic features, which suggested wet soil conditions at the Jamestown fort. This result was surprising since the fort sits on a bluff 20 to 30 feet above the James River. It was suggested by the Archeologists that the thick A-horizons were due to Indians bringing in soil amendments over hundreds of years to the area where the fort is located.



Artifacts are often encrusted in a thick dense coat of soil material. Artifacts (sword hanger) look very different after crust removal. Other soil samples are tagged and stored for future study and analysis. Michael Lavin, Senior Archaeological Conservator for Preservation Virginia gave us a grand tour of the Jamestown Dig, up close and personal! Soil Scientist and Archeologist have a lot in common, both study "old stuff" and want to know how and why it got there and what it means.