

VAPSS NEWSLETTER



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*Save The Date!
VAPSS Annual Conference
October 17-18, 2019
Homewood Suites by Hilton
Chester, VA*

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.

VAPSS Develops New Strategic Goals

VAPSS held a Strategic Planning meeting in April 2019. Megan M. Seibel, Ph.D., Extension Specialist acted as our Facilitator. To view the whole document, visit www.vapss.org

VAPSS has standing committees which always need more volunteers. The committees are Membership, PR and Education, Budget and Finance, Tech Advisory, Ethics and the Newsletter.

Reframed Objectives for Consideration and Strategic Work: With consideration to the issues and goals identified in 2005 and the pursuant discussion of the 2019 strategic planning retreat, the facilitator suggested that there are three overarching objectives to consider at this time that warrant exploration and focus moving forward.

After securing agreement of the members present, these were listed as: Megan M. Seibel, Ph.D., Extension Specialist

- 1) Increase membership and enhance service/outreach
- 2) Enhance effectiveness of VAPSS leadership and engagement/accountability with the board
- 3) Scope/function of education and marketing entities

Attendees were divided into work groups and given planning worksheets to complete for these three objective areas to develop goal setting and related action items. Summaries of this work can be found in a separate pdf attachment. Copies of these summaries were also provided to Nan Gray and Jeff Miller for archiving and continued work with VAPSS members as they work to implement what has been identified as actionable.

It is recommended that VAPSS work internally to develop a targeted plan of work to accomplish their goals and think about their leadership (and sustainability plan), diversifying membership, partnering with other professional organizations, further identifying goals for offering educational resources, and proactively working to endorse the role of their profession with formal educational and legislative bodies.

X-ray Fluorescence

Hemp is a great bio accumulator of heavy metals and is used for remediation of polluted sites/soils. Soils used for CBD hemp need to be tested for heavy metals, because the hemp will pick up the heavy metals and could be a problem with the end product, whether used for smoking or for oil.

Soils, and any material, will give off secondary x-rays when bombarded with primary x-rays. An analyzer, of the secondary x-rays fluorescence of the material, can measure chemistry quantitatively. Guidelines for maximum heavy metal content in consumed hemp is still being developed (at this writing).

2019 BOARD OF DIRECTORS

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Virginia Tech Finishes 2nd Place at the National Soil Judging Championship for the Second Consecutive Year Vladu is 1st High Individual



Virginia Tech's National Championship individual
Sabrina Vladu

Sabrina Vladu finished as 1st High Individual out of 101 contestants at the National Collegiate Soil Judging Championship hosted by California Polytechnic State University in San Luis Obispo, California on April 14-18, 2019. The Hokies finished in 3rd place in the group judging event out of 26 teams and took 2nd place out of 26 teams and 2nd place overall. It was the second consecutive year the team has finished 2nd. Sabrina is a senior Environmental Science major in the School of Plant and Environmental Sciences. She is from Yorktown, VA, and is only the second Hokie to win the top title in almost 60 years of contests. Each individual judged (described and interpreted the properties and lab data) of three soils. Behind Vladu was Jenna Floyd of West Virginia University; Katie Fross of Kansas State University; Craig Zemetis of Penn State; and Aubrey Wiechecki of University of Maryland. In the group judging event (two pits judged by the entire team), the Hokies finished behind University Nebraska-Lincoln and University Tennessee-Knoxville; and ahead of

University of Missouri and University Wisconsin-Stevens Point. In the overall score (individual pits plus group judging pits), the Hokies finished just three points behind

University of Maryland (2431 to 2428); but ahead of University Nebraska-Lincoln, North Carolina State University, Kansas State University, University Wisconsin-Stevens Point, Iowa State University, Penn State, Auburn, and University Tennessee-Knoxville. The Southeast Region that Virginia Tech competes in was well represented, with four of the top 10 teams in overall score, three of the top 10 in the group event, and three of the top 10 individuals.



2019 second place overall soil judging team from Virginia Tech (left to right): Coach John Galbraith, Cameron Bermand, Benjamin Smith, Isabella "Izzy" Fish, Annie Konjevoda, Sabrina Vladu, Chris Moritz, Xuanyu "Peter" Guo, Morgan Ré, and Asst. Coach Jaclyn Fiola.

The team was led by 1st place individual finisher Vladu, along with 12th place Christopher Moritz, a recent December graduate Environmental Sciences major from Gloucester, VA; Junior Biological Systems Engineering (BSE) student Ben Smith from Chesterfield, VA; and Cameron Bermand, a recent December graduate Environmental Sciences major from Bedford, New Hampshire. Alternates who competed in the group judging event were Senior Environmental Science major Annie Konjevoda from Falls Church, VA; Junior Biological Engineering and English Technical Writing double major Morgan Ré from Winchester, VA; Junior Environmental Science major Xuanyu "Peter" Guo from Beijing, China; and Isabella "Izzy" Fish, a Genetics and Breeding major from Haymarket, VA. The assistant coach was current PhD graduate student Jaclyn Fiola from Keedysville, MD, whose study is on vineyard soils in Virginia. "I am very proud of the consistent hard work and dedication that the team put in all semester, especially the

Suggestions for Annual Conference speakers or topics????

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seniors and recent graduates who have practiced for two full years or more. That



preparation made their success possible. Now they are fully capable soil scientists.” said coach John Galbraith. “The team learned by traveling to the opposite side of the country to see soils, geology, plants, and agriculture they were unfamiliar with. They saw shrink-swell Vertisols for the first time and unusual subsoils cemented by calcium carbonate. Despite their unfamiliarity, they finished nearly at the top of the list of competing

schools. This group has won two national championships and finished second twice and third once. We are very proud of their accomplishments.”

2019 third place group judging soil judging team from Virginia Tech (left to right, front): Morgan Ré, Benjamin Smith, Isabella “Izzy” Fish, and Chris Moritz. (Left to right, back row): Xuanyu “Peter” Guo, Annie Konjevoda, Cameron Bermand, and Sabrina Vi

The Virginia Department of Health recently convened its Sewage Handling and Disposal Advisory Committee (SHADAC) to finalize the Hardship Guidelines. Matt Tolley represents VAPSS on the SHADAC.

GUIDANCE MEMORANDA AND POLICY (GMP) 2019-01

Section 32.1-248.4 of the Code of Virginia; Hardship Guidelines

In brief, the SCOPE:

This policy outlines the procedure for means testing of owners who petition the Virginia Department of Health (VDH) for evaluation and design services for onsite sewage systems and private well pursuant to § 32.1-248.4 of the Code (HB 888). This policy also establishes Hardship Guidelines necessary to implement the transition of evaluation and design services for onsite sewage systems and private wells to the private sector, while maintaining VDH as a

Analysis of Carbon Isotopes, Determination of Ground-Water Age, and Estimated Characteristics of the Contaminant Source at Two Fuel-Spill Plumes, Western Cape Cod, Massachusetts, 1996

By Jennifer G Savoie

Water-Resources Investigation Report 98-4112. Department of the Interior and USGS

Abstract

Carbon isotopes were analyzed and ground-water ages were determined for ground-water samples collected from two fuel-spill plumes near the Massachusetts Military Reservation, western Cape Cod, Massachusetts, to provide information on the chemical characteristics of the plumes and their contaminant sources. One contaminant found in the plumes is 1,2-dibromoethane (commonly known as ethylene dibromide, or EDB), which was once used as an additive to fuels. The EDB in the Fuel Spill-12 plume is found with the fuel-related compound benzene; however, in the Fuel Spill-28 plume the EDB has not been clearly identified with any other fuel-related compounds. In this

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Ralph Mendenhall Memories

VAPSS meetings have always welcomed the Spouses of Soil Scientists. I first met Barbara Mendenhall when I met her husband, Ralph Mendenhall. Barbara has enjoyed the VAPSS Newsletter and I asked her for a note to include in this issue. - Nan Gray

In turning 80 this year, I am so thankful to be



mobile without any assistance. I am able to drive and helping those in Assisted Living facility.

Rainy period here but spring is very welcome after long winter weather.

Flowers, blooming trees, deep green grass and birds. No frogs near me!



I am glad VAPSS is alive and well and young people being involved. Good job Olivia.

This bench is located on a walking trail near here. Beautiful surroundings.

[continued page 4]

provider of last resort as outlined in § 32.1-248.4 of the Code. Owners requesting eligible evaluation and design services that do not meet the income eligibility criteria established in the Code or meet the Hardship Guidelines are required to obtain evaluation and design services from the private sector.

This policy became effective July 1, 2019.

You can see previous here: <http://www.townhall.virginia.gov/L/Comments.cfm?GdocForumID=30> .

study, alternative methods were sought to help understand the history and identify a potential source of the Fuel Spill-28 plume because the source could not be identified based on conventional approaches.

Although this is an older publication, it is hoped that those of us interested in leaks from fuel pipelines may find their methods and reasoning of use in determining plume extent, biodegradation of contaminants and water age.

Ralph Mendenhall was a soil mapper. It occurred to me possibly you had not heard that Ralph passed away on October 16, 2012 at age 76.

He was in a care center at the time with multiple health problems.

Ralph was a charter member, state president of VAPSS and active for certification of professional soil scientists. This along with his soils work for VA Tech were very enjoyable for him.

Ralph began working in Chesterfield County May 1974 and VAPSS started several years later.

Take care. Barbara

Safety First

Securing the equipment, we carry in our cars and trucks, is so important. No one wants to share an auto accident with bouncing augers, knives, or hammers flying through the air. A rope or net tied around those things we do not want to hit us is a small cost to prevent personal injury if an accident occurs. Securing our stuff and our safety only takes a moment.

Look inside your vehicle. If you can tie down your gear, it just takes a second, please do it. Common things in our cars include flashlight, orange cone, computers, writing materials, and chains. Chains can be wrapped around something and tied in a knot, or put in a bag that gets tied down or put in the orange cone you keep in your car. If you have stacked compartments or drawers that hold bug spray, sunscreen, spare food, spare clothes, spare boots, nails or spikes or stakes, cover the compartments so that these things are not a danger. For those of us whose car acts as a mobile office for the field, we need to be able to use the things we carry along in the car. Decide if you really need all that stuff in the car with you or can it go in the toolbox or trunk.

Most of us are not looking for an accident to happen, but from this day forth, I am asking you to expect an accident, prepare for it, and cover the dangers in your car. Other people run red lights or may be distracted and hit your car. I tell you this because one of us was injured when the auger bounced, after someone else ran a red light and hit the Soil Scientist's car.

As a former Volunteer Fire Fighter who had to attend to car accidents, and as someone who has seen some car's contents strewn across the highway, you really don't want your car's contents strewn across a highway.

Please be safe and careful and secured. Thank you.

VAPSS Fall meeting is October 17-18, 2019

SAVE THE DATE

Homewood Suites by Hilton

12810 Old Stage Road, Chester, VA 23836

https://homewoodsuites.hilton.com/en/hw/groups/personalized/R/RICCSHW-VAP-20191016/index.html?WT.mc_id=POG

The program is developing with draft title:
“Cannabis, Hops, Christmas Trees and the Soils Connection”
Stay tuned for details!