MAINE ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS

The Lay of the Land

The Newsletter of the Maine Association of Professional Soil Scientists

Volume 21, Issue #1 www.mapss.org Winter 2017 Edition

THE CASE FOR SOIL SCIENTISTS IN MAINE

David L. Marceau, ME CSS #182; MAPSS President
Gartley & Dorsky Engineering & Surveying

In the fall of 1978 I arrived at the University of Maine in Orono after spending three years at the University of Maine at Presque Isle and two years in Connecticut (after high school). I wanted more than anything to remain in Maine. I also wanted to have a "good job" doing outside work that I could count on as career. I had seen enough of International Paper Company in Jay and one of the poorest cities in Connecticut to be motivated to get a "good job".

My first semester at UMO I took basic soils from Professor Struckmeyer. To me, it was very interesting. So, I explored what it would take to become certified as a soil scientist and site evaluator. What I saw was that Maine would continue to grow and there would be all kinds of problems related to soils that would need to be solved. That's what made me become a certified soil scientist.

Fast forward 39 years to today. I still see the need for soil scientists to solve wastewater, erosion, stabilization, and fertility related problems. Today we have wetland delineations and septic designs occupying a big piece of the pie. However, we are the ones who can best interpret those wet spodic horizons, know which soils are mineral and which are organic, can more precisely identify soils boundaries that can't be shown on the county soil survey, and identify the characteristics of soils that allow good infiltration. Thus, although things have changed, the basic problems that need to be solved have not.

Yes, I'm optimistic. I am employed by a small engineering, surveying and environmental consulting firm that has spent several thousands of dollars paying for class work and professional training so that they will have certified soil scientists on their staff. Thus, people smarter than me, running successful businesses, who have seen many difficult soil calls know that soils are important!

Continued, next page

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Note: Opinions expressed by the authors of articles are not necessarily endorsed by MAPSS

Continued from page 1

As your president I have been hard at work and trying to think outside the box. I think you will find that we have an interesting group of speakers lined up for our annual meeting. The MAPSS technical committee has come up with a proposed methodology for certified soil scientists in Maine to make determinations of hydrologic soil groups, and now that Version 8.0 of the National Indicators for Hydric Soils is out, we are also developing a flow chart for identifying hydric soils. We are looking at ***new ways*** of performing the work we do and how the public can benefit. I understand that to make things work, we in the private sector need to make money, which means we need people who are trained, which means our industry gets recognized… you see where I'm going.

I also want to let you know that I am heading up a group of soils scientists who are planning a fall workshop to be held in Searsmont on the 6th of September. The focus of the workshop will be to identify the characteristics of hydrologic soil groups. We may also try to integrate some new soil mapping techniques into the workshop.

Finally, when you see any MAPSS board member please give them a big shout out. They have helped me make your Association a worthwhile organization. I hope to see you at our annual meeting.

2016-2017 EXECUTIVE COMMITTEE

President – David Marceau
Vice President – Anna Donohue
Past President – Donald Phillips
Treasurer – Gary Fullerton
Secretary – Amy Jones
Director – George Bakajza

2016-2017 COMMITTEE CHAIRS

Technical Chair – Chris Dorion
Webmaster – Matt Dorman
Newsletter – Don Phillips / Kaizad Patel
Education – Vacant
State of Maine Liaison – David Rocque
University of Maine, Orono, Liaison – Ivan Fernandez
USDA NRCS Liaison – Lindsay Hodgman

Note From Your Newsletter Editor: Until I hear otherwise, volunteers for all EC and Committee Chairs (except for Liaisons) for the one-year term beginning on March 15, 2017 will be nominated and voted upon at the upcoming Annual Meeting.

2017-2018 EXECUTIVE COMMITTEE

President – To Be Determined (TBD)
Vice President – TBD
Past President – TBD
Treasurer – TBD
Secretary – TBD
Director – TBD

2017-2018 COMMITTEE CHAIRS

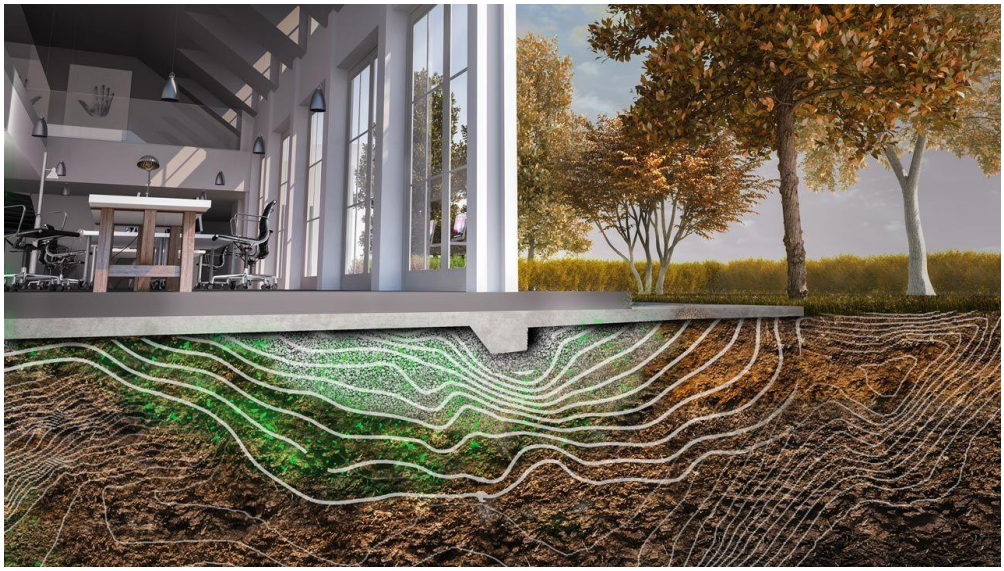
Technical Chair – TBD
Webmaster – TBD
Newsletter – TBD
Education – TBD
State of Maine Liaison – David Rocque
University of Maine, Orono, Liaison – Ivan Fernandez
USDA NRCS Liaison – Lindsay Hodgm

From Gary Fullerton, our Treasurer …

MAPSS 2016 Treasury Report			
MAPSS Checking Account as of 12/31/15			**$11,627.56**
2016 Income:			
2016 Dues (full membership)	$1,225.00	*49 full members at $25.00 each*	
2016 Dues (associate membership)	$165.00	*11 associate members at $15.00 each*	
2016 Dues (student membership)	$0.00	*3 student members at $0.00 each*	
2016 Dues (honorary membership)	$0.00	*3 honorary members at $0.00 each*	
	$1,390.00		
Annual Meeting Registration	$1,200.00	*30 registrants at $40.00 each*	
	$50.00	*1 registrants at $50.00 each*	
	$30.00	*2 students at $15.00 each*	
	$1,280.00		
Sebago Lake Workshop	$1,995.00	*57 registrants at $35.00 each*	
	$1,080.00	*27 registrants at $40.00 each*	
	$240.00	*16 registrants at $15.00 each*	
	$3,315.00		
TOTAL INCOME	**$5,985.00**		
2016 Expenses:			
Envirothon (Maine Association of Conservation D	$2,000.00		
MAWS – 33% Sebago Lake Workshop	$1,105.00		
Annual Meeting Facility (Bates College)	$1,066.34		
Janet Cormier Scholarship	$1,000.00		
Recognitions	$400.70		
Darryl & Penny Brown Scholarship Fund	$250.00		
Website Host (DiscountASP.net)	$120.00		
Flowers for Funeral	$52.75		
Domain Registration (Speedsoft)	$17.95		
Discrepancey	$0.20		
TOTAL EXPENSES	**$6,012.94**		
MAPSS Checking Account as of 12/31/16			**$11,599.62**

A Note From Your Newsletter Editor: On the next two pages, you'll find two articles, courtesy of Dave Rocque who thought we'd all like to read these interesting papers. I certainly enjoyed reading them for different reasons. As for the first one (*Thinking Soil*), I felt like I was glimpsing the future of soil science; and for the second one ('*Certification Update: Certification Specialties for CPSS, CCA*), I was encouraged for the profession as a whole. Specifically, because I had reason to hope that some natural resources mapping people, who may not want to become a full-fledged Certified Soil Scientist, may want to look into this program to enhance their careers, not to mention soil science as a profession.

THINKING SOIL



‘Thinking soil’ made of bacteria could keep buildings from collapsing

By Elizabeth PennisiOct. 27, 2016 , 8:15 PM

It can be quite costly, even catastrophic, when the land under a building subsides. But genetically engineered microbes may one day keep that from happening if researchers in the United Kingdom are successful. Inspired by undergraduates who made a concrete-repairing bacterium—**dubbed BacillaFilla—for a synthetic biology competition**, a biodesigner and his colleagues have been pushing hard to develop biocement, a material that custom-built soil microbes would produce in response to the changing pressures in soil to help shore up the ground under foundations. Toward that end, the team grew a common gut bacterium in surrogate soil—a “hydrogel” shaped into a cylinder. They subjected the bacteria-laden hydrogel to pressures up to 10 times that experienced at sea level. They identified 122 bacterial genes that increased their activity by at least threefold by the pressure change. The team then modified the bacterial genome so that the regulatory DNA responsible for activating one of these genes was attached to a gene for a protein that glows when produced. **The more pressure exerted on the microbe, the more intensely it glows**, the scientists will report 29 October at the **Association for Computer Aided Design in Architecture conference** in Ann Arbor, Michigan. In addition, at the meeting, they will describe a computer program that predicts how the microbe will react to forces, such as water pressure, transferred through soil under a building foundation (as depicted in the illustration). Eventually the researchers plan to replace the glowing protein gene with genes that make biocement, creating a “thinking soil” that will keep buildings safe and be a self-constructing foundation. The effort is part of a growing movement to incorporate biology into architecture, they note.

DOI: 10.1126/science.aal0313

Certification Update: Certification Specialties for CPSS, CCA

Luther Smith
Director of Professional Development and Business Relations
lsmith@sciencesocieties.org
608-268-4977

There are many people doing soils-related work who may not have the formal education in soil science as described to qualify for the Certified Professional Soil Science (CPSS) program. They may have a bachelor's degree or higher in ecology, environmental science, biology, or some related discipline, but not all of the soil science course work. This individual would not qualify for CPSS due to the course work requirement, and currently there is no certification that would meet their needs, but that is about to change.

In January 2017, the Soils Certifying Board will launch a new soils-focused certification—Certified Soil Technician (CST). This certification will be for individuals who are doing soil science-related work but do not have the B.S.-level education in soil science or the amount of course work needed to qualify for the CPSS program. The CST certification will require passing the Fundamentals in Soil Science exam and signing the same code of ethics as the CPSS certification, but the years of experience requirement will be fewer at three years and the education requirement will be an associate degree with at least seven semester credits in soils along with three references. The CST certification does not replace or compete with CPSS or APSS. Each has different requirements, and CST could be a step towards CPSS if the individual would decide to return to school to earn the necessary course work.

Like many professions, CST, APSS, and CPSS have different levels of knowledge and skills proven through examination and documentation of experience and education. Jobs follow the same pattern, so it is not expected that a CST would be doing the same things as a CPSS. Each certification will serve different audiences, even some that might be new to SSSA.

The CST certification will not be available in states that have state soils licensing programs. Please visit **www.soils.org/certifications** for more details about CST, APSS, and CPSS as well as the licensing states' requirements. If you are in a soil science licensing state, you want to make sure you follow their procedures to become licensed.

Change for CPSS

The Soils Certifying Board while designing CST also reviewed the requirements for CPSS, evaluating data around the soils exams and statistics related to the programs. Although the exam data is sound for both the fundamentals and professional practices exams, the board decided that the professional practices exam was not needed for someone to become a CPSS. So starting in 2017, the CPSS certification will no longer require the professional practices exam but will still require the fundamentals exam. This will create a clearer distinction between certification and state licensing. States that have soil science/classifier licensing programs and use the professional practices exam will continue to do so, and SSSA will continue to provide it.

CCA Specialty Certifications

"I'm glad you are doing this. I need the help and don't have the time." That's what an Illinois farmer told me when he heard me talk about the CCA specialties that were being developed, specifically, the Sustainability (SSp) certification.

The ICCA program launched the 4R nutrient management specialist (4R NMS) certification in 2015. This year, we added two more, SSp and IPM Resistance Management (RMS). All three are off to a good start, and while none are mandatory, you do have to be a CCA first before adding one or more of the specialties.

The registration deadline for the 3 Feb. 2017 exam is 9 December. Each specialty requires passing a scenario-based, multiple-choice exam to earn it and additional CEUs in the related category to maintain it with the 40 total CEU minimum remaining unchanged. Go to **www.certifiedcropadviser.org/exams** for more details.

I'm asked at times why we need these specialty certifications—isn't CCA good enough? Certainly the CCA certification is great and has defined the profession of crop advising. It's not a matter of being good enough. It's not a matter of being good enough. I like to use the comparison of the medical professions. There are family practice doctors, generalists, and there are medical specialists. The CCA is the broad scope, agronomy generalist while one of the specialties has a more narrow focus and adds more knowledge in that area. It allows and supports CCAs who have focused their work in one of these areas to gain more recognition and build awareness for their professional expertise. It is also helping to meet a need as described by government agencies, industry professionals, and farmers.

The 4R NMS certification is currently available in 17 states and one Canadian province with plans to expand it to all states and provinces over the coming year or two. The SSp certification is available in all states while RMS is available in all states except California and Arizona.

doi:10.2134/csa2016-61-12-17

MAPSS TECHNICAL COMMITTEE MEETING MINUTES

Purpose: A Proposal for presentation to the membership during the upcoming MAPSS Annual Meeting for Maine CSS's to assign Hydrologic Soil Groups based upon onsite soil information?

Augusta, ME, USDA Service Center Conference Room – 1:00 pm January 17, 2017

Attendees: Chris Dorion, Tony Jenkins (NRCS), Dave Marceau (MAPSS President), Greg Granger (NRCS), Dave Rocque, Don Phillips, George Bakajza, Nick Butler (NRCS), Roger St. Amand, and Rod Kelshaw. Thomas Peragallo called in.

The MAPSS Technical Committee (TC) met with Tony Jenkins (NRCS State Soil Scientist & Resource Conservationist), other NRCS Soil Scientists, and the Technical Committee to discuss how to proceed with determining our own Hydrologic Soil Groups, as opposed to relying strictly on the HSG assigned by NRCS for a series in a given location. The meeting was called to order at 1:10 by Dave Marceau, who quickly reviewed what transpired during our first HSG meeting on April 25, 2014. Minutes from that meeting can be reviewed by clicking on Determining HSG Designations From Soil Test Pit Data.

During the 2014 meeting, Tony Jenkins listed 8 *Key Issues*, of which 3 were arguably the most important as brought up below in order of discussion.

#1) Determining the Depth to Water Impermeable Layer (i.e., do we measure from the top of the mineral soil surface, or from the top of the ground surface?): Attendees quickly settled on the top of the mineral soil surface.

#2) Determining Depth to the High Water Table: Dave M lobbied for a cut-off at 2% abundance of redox features, not 1% as NRCS has identified in some cases, since this percentage is already the standard used by our peers in the private sector. Dave R agreed and reminded that 2% has historically been used in other Drainage Class and/or Wetland Delineation methodologies. Tony agreed.

3) Assigning K_{sat} of Least Transmissive Layer in depth range: Dave Marceau stated that we might want to come back to this issue, since it is arguably the crux of making sound HSG designations.

Dave M requested that the call for water impermeable layer should be discussed so that soil scientists know if Firm or Very Firm consistence was required. Tony interjected that recent measurements made by an amoozemeter (by NRCS Soil Scientist Karen Dudley) did not produce confident readings, stating that they were "… very high." He recommended that if CSS's were to make a critical Consistence call, then if we should err it should be on the side of caution (i.e., call it 'Very Firm') because it would be easier to defend. Dave R agreed, since "real world"

situations suggest that some clients may contract with a 2nd CSS for a more favorable opinion, which could result in potential liability if the 1st CSS's call differed. Given these constraints and the difficulty of determining K_{sat} values for least transmissive layers, Tony suggested that we may want to consider the "Rhode Island Method"[1] (RIM), which relies upon texture as one of the three properties to make HSG determinations. According to Tony, "it is the simplistic way to go". Dave R agreed, and stated that if we want to come up with marketable product, then using a refined RIM method, based on Maine conditions, may be doable.

At 1:40 pm, Tom Peragallo (Co-Chair, New England Hydric Soil Technical Committee; & Chair, NH Board of Natural Scientists) called in from NH. To bring him up to date, Dave M briefly asked for his opinion regarding how NH dealt with using the RIM method of using textures to make Ksat determinations. Tom answered by saying that certified soil scientists in NH had formed a technical committee to review the HSG issue and identify "problem series" then proposed a solution to the NH DES. However, he was notified a short time ago that DES officials had gone forward with a solution using series data from 2009 without their input. This rendered their efforts useless. Tom also said that the RIM method was somewhat contentious at first so discussions were discontinued, but the technical committee went back to it upon hitting "dead ends" with the alternative method (assigning K_{sat} values to soil series, developed by Karen Dudley).

Dave R brought up how other soil properties could be utilized, and suggested Bulk Density values. However, he stated the issue was getting complicated, so discouraged further consideration relating to it.

Next, Drainage Class was brought up as a determiner as opposed to the depth of the water table. Dave M asked Tom if a Moderately Well Drained series like Deerfield (mesic cousin to our Croghan series) would get just one HSG assigned to it, and not two based on the depth of its SHWT which may be 24" to the mineral soil surface? Tom replied, Yes. Tom stated that this series would get a 'C' HSG if using what the NH Technical Committee was considering. However, if using the NRCS National Engineering Handbook's Table 7-1, it would be assigned two different HSG's based upon its variable depths to the SHWT. These two HSG's would be 'D' (if SHWT <24") or 'A' (if SHWT ≥24").

Tony questioned Tom if NH uses a soil series based list of HSG's, or a site-specific methodology to assign one? He replied that it uses a soil series based list, unless the soil scientist was "in a Udipsamments or something like that." Tony then asked why not use the RIM, to which Tom responded that they had problems with some of the HSG Triangle assignments. Tony then suggested that perhaps Maine should use Table 7.1 in the NRCS National Engineering

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[1]: RI Method for Determining Hydrologic Soil Group by Site Specific Soil Mapping – Final Draft; Mark Stolt, Professor of Pedology, University of Rhode Island.

Handbook so as not to deviate. Dave R agreed, but said that deciding which method to use ought to be the TC's decision, and that if the TC decides to use the RIM, then the triangle would be a good place to start based upon Maine conditions. At this point (2:25 pm), Tom had to leave the discussion.

Discussion went back and forth among attendees for almost an hour, with pros and cons of using each option. For instance, Tony noted that the RIM triangle was missing several common textures found in Maine, such as loam, silty clay loam, and loamy fine sand. He noted that its top three cells color-coded green (i.e., 'A' HSG) appeared incorrect. Dave R mentioned that in his experience, few CSS's can differentiate between loam versus fine sandy loam textures. Don asked if there is a lab in Maine that can measure textures? Roger replied that SW Cole Engineering still does. Dave M mentioned that our members will have to sharpen our skills in identifying textures while out in the field. Roger asked what would happen if, after relying on a Maine based RIM, on-site findings result in a non-favorable call? In response, some attendees suggested that we could use RIM as an option. Don volunteered that he, for one, hasn't been convinced that continuing our efforts to assign HSG's would be worth the risk of liability, which triggered a response by Dave R that by taking that risk, MAPSS could add value to our products.

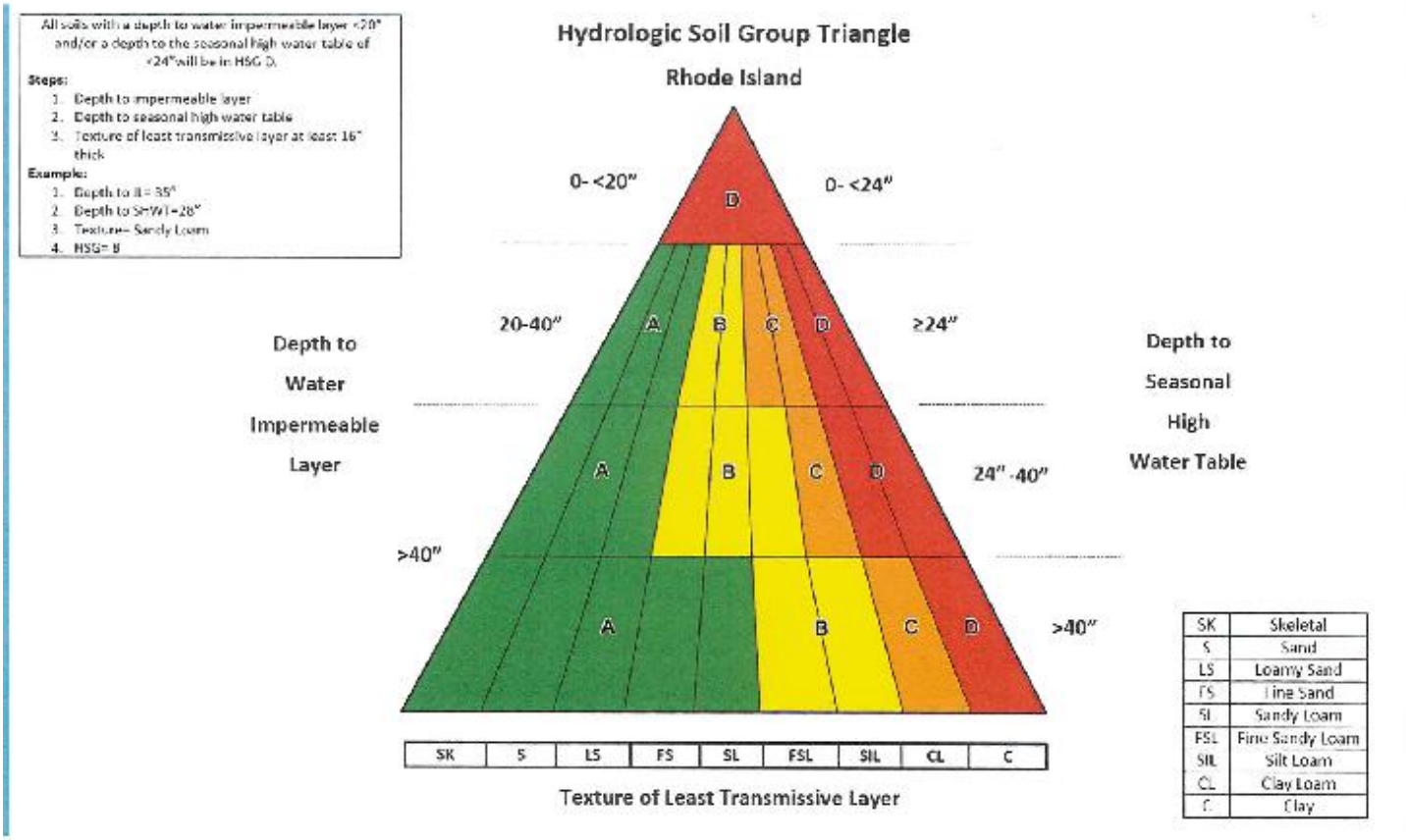
Dave M asked for a show of hands to see where we stood on moving forward with a proposal, or not. A majority show of hands would indicate that the TC would prepare a proposal that would be put in the next Newsletter, which is scheduled to go out on or before February 15. The vote was a unanimous Yes. Wrapping up, Dave M asked if anyone could volunteer to edit the RI HSG triangle, and for others to look carefully at it to propose potential changes and report back.

The MAPSS TC meeting was adjourned at about 3:35 pm.

3rd Draft Minutes submitted on January 19th, 2017 by Don Phillips

Clockwise, from L to R, Dave Marceau (MAPSS President), Don Phillips, Greg Granger, Tony Jenkins, Chris Dorion, George Bakajza, Dave Rocque, Roger St. Amand. Missing: Nick Butler and Rod Kelshaw

Yet Another Note From Your Newsletter Editor: Did anyone catch what was paraphrased during the January 17th Technical Committee meeting, as reported on page 8 of this newsletter, top paragraph, …*that if the TC decides to use the RIM, then the triangle would be a good place to start based upon Maine conditions.* The triangle is shown below, and this editor wagers that it probably won't be the last time members will see it. Indeed, in the words of another highly respected TC member *"[We] should start with the triangle and associated pubs [and] build it out from there later."* Stay tuned because these are interesting times in Maine's soil science community.



And HERE'S the LAST Note From Your Newsletter Editor: You've all made it through the dry technical information contained in this issue. So, before you turn the page to the routine Annual Meeting info – the agenda, a map showing where the Wells Conference Center is, a Visitor Parking Permit, and (importantly) a Registration to attend – I want to give you, courtesy of our chief newsletter contributor Dave Rocque, some fun stuff to read. Think of it as a 'Time Out' and read what's in this Soils4Teachers link.

2017 Annual Meeting Agenda
Maine Association of Professional Soil Scientists
Wells Conference Center
University of Maine, Orono
Wednesday, March 15, 2017

8:00 - 8:30 **Registration** (coffee and pastries provided)

8:30 – 8:45 **President's Introduction – David Marceau, MAPSS President**

8:45 -9:00 **Techniques to Prevent Soil Erosion on Camp Roads and other Non-vegetated Surfaces**
William Laflamme, Non-Point Source Pollution Coordinator, MDEP

9:30 -9:045 **Break**

9:45 – 12 **Business Meeting moderated by David Marceau**

- Treasurer's Report – *Gary Fullerton*
- Secretary's Report – *Amy Jones*
- Technical Committee Update – *Chris Dorion*
- UMaine Update – *Ivan Fernandez ,* School of Forestry, University of Maine
- Envirothon Committee – David Rocque
- JEC Scholarship Award Winner – *David Marceau*
  1. Vote to determine amount of JEC Scholarship for next year
- Technical Committee
  1. Proposal for identifying Hydrologic Soil Groups in Maine – *Tony Jenkins, NRCS State Soil Scientist*
  2. Version 4.0 of the New England Field Indicator for Identifying Hydric Soils- *Dave Rocque, Maine State Soil Scientist*
- MAWS Update – Rod Kelshaw
- Election of Officers – Nominating Committee – *Anna Donahue*

12 - 1:00 **Lunch and review of Poster presentations**

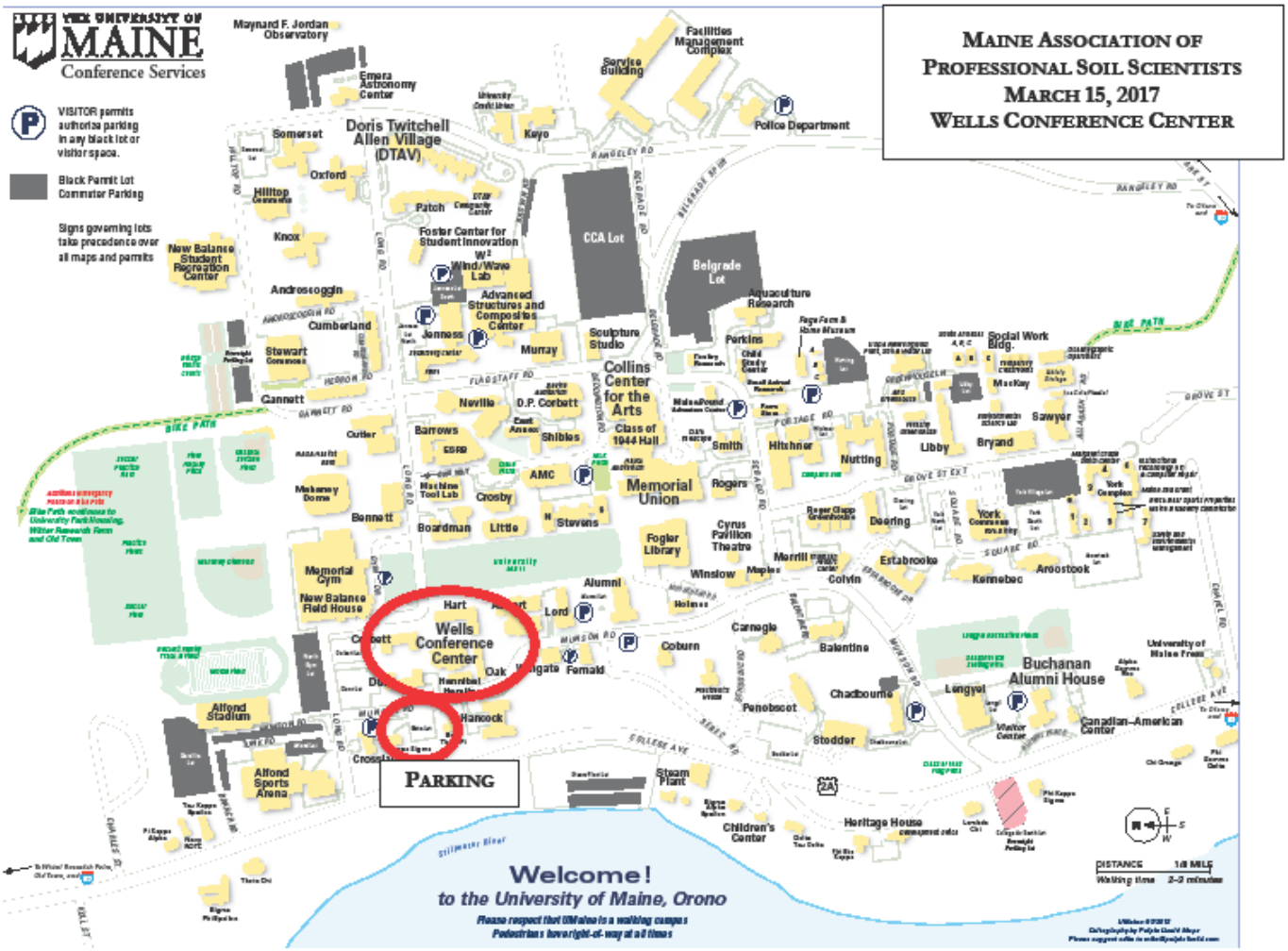
1 - 1:45 **The Ups and Downs of Simulating Watershed Processes in the Maine Terrain**
Sean Smith, Assist. Professor, School of Earth and Climate Sciences, University of Maine

1:45 – 2:30 **Soil Science Ethics: How to handle difficult decisions with clients, regulators and the general public-** *Darryl Toucette*, Human Resource Manager, NRCS, Augusta, ME

2:30 – 2:45 **Break**

2:45 – 3:30 **GIS for Land Development Decision Making**
Jon Giles GIS Manager, Licensed Land Surveyor, Sebago Technics

3:30 – 4:00 **Wrap up**


THE UNIVERSITY OF MAINE
Conference Services
VISITOR permits authorize parking in any black lot or visitor space.
Black Permit Lot Commuter Parking
Signs governing lots take precedence over all maps and permits
MAINE ASSOCIATION OF PROFESSIONAL SOIL SCIENTISTS
MARCH 15, 2017
WELLS CONFERENCE CENTER
Maynard F. Jordan Observatory
Emera Astronomy Center
Facilities Management Complex
Service Building
Police Department
Doris Twitchell Allen Village (DTAV)
Somerset
Oxford
Hilltop Commons
Knox
Androscoggin
Cumberland
Stewart Commons
Cannett
New Balance Student Recreation Center
Patch
Foster Center for Student Innovation
Wind/Wave Lab
Advanced Structures and Composites Center
CCA Lot
Belgrade Lot
Aquaculture Research
Jonness
Murray
Sculpture Studio
Collins Center for the Arts
Neville
D.P. Corbett
Class of 1944 Hall
Barrows
Shibles
Cutler
Mahaney Dome
Bennett
Boardman
Little
Crosby
Machine Tool Lab
AMC
Memorial Union
Stevens
Rogers
Fogler Library
Cyrus Pavilion Theatre
Smith
Hitchner
Nutting
Libby
Bryand
Sawyer
MacKay
Social Work Bldg.
Parkins
Child Study Center
Deering
Roger Clapp Greenhouse
York Commons
York Complex
Estabrooke
Aroostook
Kennebec
Colvin
Merrill
Winslow
Maples
Memorial Gym
New Balance Field House
Alumni
Lord
Hart
Wells Conference Center
Oak
Hancock
Coburn
Carnegie
Balentine
Chadbourne
Penobscot
Stodder
Lengyel
Buchanan Alumni House
Canadian-American Center
University of Maine Press
Alfond Stadium
Alfond Sports Arena
Steam Plant
Children's Center
Heritage House
PARKING
Welcome!
to the University of Maine, Orono
Please respect that UMaine is a walking campus
Pedestrians have right-of-way at all times
DISTANCE 1/8 MILE
Walking time 2-3 minutes

THE UNIVERSITY OF MAINE
Conference Services

VISITOR PARKING PERMIT

Valid in Black Commuter Lots and
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March 15, 2017

Maine Association of Professional Soil Scientists

Parking in fire-lane, handicap, loading-zone, non-paved areas, or service vehicle areas
(except when authorized) is expressly prohibited;
vehicles in violation will be cited and removed at owner's expense.

Office of Parking Services
523 Doris Twitchell Allen Village, Community Center
Telephone: 581.4047

Please display on front right corner of dash of vehicle.

Maine Association of Professional Soil Scientists
2017 Annual Meeting Registration
Wednesday, March 15, 2017
Wells Conference Center, University of Maine, Orono

Name _____

Company or Affiliation_____

Address:_____

Work Phone:_____ Cell Phone:_____

Fax:_____ E-mail:_____

Are you a Maine Certified Soil Scientist? _____ If yes, License #: _____

Are you a USDA-NRCS Soil Scientist? _____ If yes, How many years in Maine? _____

Are you SSSA Certified? _____ APSS _____ CPSS _____ Certification #:_____

Membership Dues: _____

*Full Member - **$25** Associate Member - **$15** Students who attend annual meeting - **Free**

*Full members must be Certified Soil Scientists in Maine, NRCS Soil Scientists working in Maine for at least 3 years, or have taught collegiate courses in soil science in Maine and has been an associate member for at least 3 years.

Registration Fee: _____ Note: Registration deadline is Friday, March 10, 2017

Full and Associate Members - **$40** Students - **$15** Non-members - **$50**
(add $10 if registering at the door; lunch will not be guaranteed)

Total Amount Enclosed: _____

Please submit form and check made payable to **MAPSS** and mail to:

Gary Fullerton
104 Millturn Road
Limington, ME 04049

for more information: www.mapss.org

gfullerton@sebagotechnics.com

Note: CEUs pending for Maine Licensed Site Evaluators