



# *The Lay of the Land*

The Newsletter of the Maine Association of Professional Soil Scientists

Volume 19, Issue #1

[www.mapss.org](http://www.mapss.org)

Winter 2015 Edition

## **PRESIDENT'S MESSAGE**

*Don Phillips, CSS; MAPSS President; Phillips EcoServices*

Five months ago, I began our last edition of *The Lay of the Land* by writing: “*The soil science profession in Maine is not in vigorous shape. This isn’t news - our profession has been becoming increasingly redundant to competing earth science professions since even before I became President. I wrestled with steps I could take (if any) to solve this problem. I did not want to just sit around and let inertia take over hoping our problem would eventually sort itself out because that would be the lazy way out. But what could I do? What could anybody do? Nobody can turn this issue around all by themselves... The lack of interest in soil science is a nationwide problem but one that isn’t confined only to soil science.*”

So what *can* anybody do? I believe that at least part of the answer is, if enough people do *something*, maybe all of those incremental *something*’s will result in a good end. We’re not there yet, but consider Natalie Lounsbury (who now lives in Turner, Maine), who came up with a fabulous idea to write a legislative Resolution for State lawmakers on behalf of soil sciences. It is copied on page 3. We’ll get a chance to introduce ourselves to Natalie at our upcoming Annual Meeting on March 4<sup>th</sup>. Consider also Dave Marceau, who isn’t sitting around letting somebody else do all the work with his efforts to ensure that soil science maintains high technical standards. Read his article on page 4. He even invites others to comment.

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

*The Maine Association of Professional Soil Scientists (MAPSS) was formed in 1975. The Mission of MAPSS is to promote soil science through the exchange of technical, political, and regulatory information that influence and guide the profession of soil science. MAPSS members have interdisciplinary professional backgrounds in both the private and public sector, including soil consultants, wetland scientists, site evaluators, state and federal government scientists and regulators, students, and others with an interest in the natural sciences. The organization’s goal is to ensure the success and promote the advancement of the soil science profession. MAPSS strives to provide guidance, education, and training to its members and the public on soil science issues of interest and concern.*



Here's another thing we're doing this year - we're bringing soil science to a different venue and audience. We're reaching out to Unity College students, and in particular to those in its Earth & Environmental Sciences program, by holding the upcoming 2015 Annual Meeting at the Unity College Center For The Performing Arts in Unity, Maine. Unity College graduates have already enrolled in Dr. Ivan Fernandez's graduate program in the soil sciences at the University of Maine in Orono. I am also familiar with other Unity graduates who have gone on to have successful careers as wetland scientists within the state. I hope that we can attract some current UC students to attend at least a part of our Annual Meeting, and that we might talk to these students about our profession with the hopes that a slowly improving economy should result in new career opportunities.

We've already done much this year to foster a new awareness of what we do. For instance, we've begun adding educational brochures and pamphlets onto a new link in our website called Current Issues before MAPSS. So far, we've placed two documents there, both intended to share technical information with others – especially regulators – so that they can become more familiar with our products.

We also continued with our traditional outreach stand-bys, such as maintaining a presence at the Common Ground Country Fair. I was there for a day, as were Dave Turcotte, Anna Donohue, Dave Rocque, George Bakajza, and Steve Howell. It may have been my imagination, but I believed that more fairgoers were interested in what we had to say during last October's Fair than in previous years. Read more about the CGF elsewhere in this newsletter.

We also had another successful Natural Resources Workshop at Mt. Blue State Park last September. Many people drove a long way to attend, despite Dave Rocque holding it there for the second year in a row. All prospects look good for yet another successful workshop come this September when we hold it at Sebago Lake State Park. Read more about this elsewhere in this newsletter.

Five months ago, I wrote in our newsletter *"I'm encouraged that our profession has taken a good solid step towards the future."* I think we're doing so again this year, so let's see if we can keep it going.



**Photo by Chris Dorion**  
**2014 Natural Resources Workshop,**  
**Mt. Blue State Park**



***DRAFT RESOLUTION REGARDING THE MAINE LEGISLATURE RECOGNIZING THE IMPORTANCE OF SOILS TO MAINE'S FUTURE PROSPERITY***

- ✓ ***WHEREAS***, soils are a natural resource that support major economic sectors of our state including agriculture, forestry, and recreation;
- ✓ ***WHEREAS***, healthy soils filter, store, and release fresh water, and soil management is closely linked to the water quality in our groundwater tables, lakes, ponds, rivers, and oceans;
- ✓ ***WHEREAS***, wetland soils mitigate the impacts of major storms and protect our coastal and riverine ecosystems;
- ✓ ***WHEREAS***, soil is a living ecosystem that provides keys to scientific advances that directly impact human health such as the development of new medicines, including recent advances in antibiotic technology developed from a Maine soil;
- ✓ ***WHEREAS***, good soil management can prevent damaging erosion, loss of organic matter, soil compaction, and degradation of soil structure, thereby sustaining the essential ecosystem services provided by soils;
- ✓ ***WHEREAS***, soils are renewable only on geologic time scales, yet support essentially all of the renewable resources upon which Maine's future depends;
- ✓ ***WHEREAS***, the 119<sup>th</sup> Maine legislature has previously designated the Chesuncook soil series as our official State Soil to promote public awareness and education about soil resources;
- ✓ ***WHEREAS***, 2015 has been declared the International Year of Soils by the United Nations General Assembly and celebrated by the Soil Science Society of America and many other organizations.

***THEREFORE, BE IT RESOLVED THAT*** We, the Members of the One Hundred Twenty Seventh Legislature now assembled \_\_\_\_, on behalf of the people we represent, take this opportunity during the International Year of Soils to recognize the essential role of all of Maine's soils in supporting a thriving Maine economy and healthy environment, assuring a sustainable and productive future for the people of Maine.

Natalie Lounsbury, M.S.  
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University of Maryland College Park  
[nplounsbury@gmail.com](mailto:nplounsbury@gmail.com)



## **HOW SOIL SCIENTISTS ARE LOSING THE WAR ON SOIL SCIENCE IN MAINE**

*David L. Marceau ME CSS # 182, Gartley & Dorsky Engineering & Surveying*

Anyone who knows me knows that I am passionate about most things that I do. The way I figure it, if you are going to do something, you should give it all you have. It's the way I'm wired, and it often shows at field seminars and in my writing. So the fact that I choose to call myself a soil scientist above anything else and the fact that it is clear to me that soil scientists in Maine have been losing ground bothers me a lot.

The statements I make in this article are a mixture of my opinions and facts based on standards that have been used to map and record soil data by soil scientists for decades. This article is intended to create discussion among us and hopefully formulate a positive change in soil science in Maine.

I remember when I thought we had lost the first battle in the war on soil science, but I'm not the oldest member of our profession in this state, so it probably started earlier. It was back in the mid-90s when it was determined that wetland delineations were not required to be performed by a soil scientist because it was not "pedology" as defined by the board of certification for soil scientists in Maine. I disagreed with the ruling because I thought that our certification covered the soil part of wetland delineations under "pedology".

I do not mean to be overly critical, especially since it goes both ways. But, having delineated wetlands since 1988 and becoming certified as a wetland scientist in NH in 1990, I also observed that some soil scientists did not have the botanical skills necessary to properly identify wetlands. We all know this conflict continues to this day.

Interestingly, New Hampshire soil scientists avoided this conflict with wetland scientists because the practice of soil science in NH is more narrowly defined as soil mapping. In hindsight, it seems that the wise thing to do *might* have been to go back to the legislature, change the definition of soil science to "soil mapping", and then grandfather in the few soil sciences that did not acquire their license in this manner.

I'm not sure when the next battle in the war took place, but there have been many. It may have been when it was decided that our High Intensity Mapping Standards (HISS) used the National Cooperative Soil Survey Standards (NCSS) as "guidelines" and not as standards to be followed. To me that allowed soil scientists to ignore the taxonomic process of making mapping decisions. I know that use and management is paramount in making good soils maps. However, when you are uncertain how to label a map unit, taxonomy can be a big help. One example is a shallow to bedrock, poorly drained map unit. If you follow the taxonomic process of classifying soils, you will see that the poorly drained condition will lead you to the suborder level of classification, which in Maine is Aquept, Aquent or Aquod, which precedes the subgroup level of classification providing the adjective Lithic to the subgroup Epiaquods (as an example).

I started my career as a soil scientist in New Hampshire performing Order 1 soil mapping which is equivalent to Maine's High Intensity Mapping Standards. *I know, I know, that's New Hampshire and this is*





*Maine, but hear me out.* I've learned that these two methods of soil mapping are very similar. However, they do have two distinct differences. First, any soil map created using NH Order 1 standards *had to follow* the standards of the NCSS. Thus, if conditions a soil scientist found in the field did not match a series currently mapped in the state, you explored other series, with the assistance of the NRCS State Soil Scientist, to see if there were series that you could agree upon that matched your condition. Alternatively, you used taxadjuncts and variants to solve the problem. Reputable soil scientists, no matter where they practice, do not refer to soils as "Dixfield like" or "Adam like", as I have seen done in Maine.

The second difference between HISS in Maine and the NH Order 1 standards is that there has always been a line placement standard in New Hampshire, whereas Maine has never had one. NH recognized early on that if soils scientists can't defend a map unit boundary with standards that the general public can understand and accept, then the value of the map itself is greatly diminished. I can see how non-soil scientists could think that all map unit boundaries, no matter the scale, are equal if there are no distinct line placement standards.

In my opinion, we should revise our guidelines to adhere to the stricter guidelines of the NCSS and adopt a line placement standard. This would require soil scientists to be more knowledgeable about taxonomy, make our mapping more uniform, and eliminate the naming of conditions that do not follow NCSS criteria along with taking into consideration use and management. My bet is that I won't win this argument. I know many of you will argue that use and management is the foremost criterion we should follow and that you can't really defend what would seem to be an exact line on a map. For those who disagree with me, I would ask, why have NH soil scientists been successful at defending a line placement standard with state and municipal regulations requiring lot size by soil type standards? Furthermore, I fail to see how "Dixfield like" satisfies any use and management goal and how the public can have confidence in our mapping if we can't defend a line placement standard.

The simplification and abuse of web soil survey data has also contributed to the war on soil science. You can place what some would think is "accurate" county soil survey data on a map of any scale, even though the mapping and its interpretations were never intended to be used at larger scales. Order 2 mapping is performed at 1 inch to 1667 feet and Order 3 mapping it is at approximately 1 inch to 3000 feet, while most maps people print out are at 1 inch to 1000 feet or larger.

Another example is the Web Soil Survey's description of soil horizons. I recently printed out a profile description for Peru and found horizons as H1, H2, H3, etc. Apparently because of the lack of soils science knowledge NRCS has eliminated master horizon and sub-horizon designations which you used to be able to follow and see if you agreed. Now with the H3 designation instead of Bs, for example, you have no idea whether you are in agreement with the concept intended or not.

The way I see it, we consulting soil scientists share part of the blame for losing the war. One example is the data that we submit with our soils surveys to the DEP as part of the site law process. Where is structure in the form Es that we submit? Doesn't structure play a part in water movement? Wouldn't that build a case for some of the borderline calls on texture, consistence or seasonal high water table determinations?

Our Class L soils survey mapping standards are another example, if we are calling these a "soil survey". MAPSS Soil Mapping Standards require that you use the standards of the National Cooperative Soil Survey as



your guide. You can't classify a soil profile using soil taxonomy without all the information contained within its control section; so a mapping standard that only requires you to dig to the depth of a restrictive layer, and not to the depth of the vertical control section, does not follow NCSS standards. Therefore, the Class L standards do not allow you to classify soils, using soil taxonomy, to the series level because you don't know what is contained within the control section. I understand the need to provide good information to engineers and others, but let's not call it a soil survey. Why can't we provide the data that engineers and others are looking for using a different format (does "connotative legend" ring any bells?) and call it a "soil data report", or something of this nature.

You might think that there has been a lot of "harm" done to the public because of these problems. If that's true, then the people who have been harmed seem to be pretty quiet. Maybe it's because they don't ask soil scientists questions before building roads and pouring foundations (i.e. we aren't involved). Or maybe it's because there are large fudge factors in engineering parameters and most good contractors know that coarse grained fill can solve most problems.

The war on soil science is not won by dumbing down the information so that it is no longer meaningful. Making soil maps and producing soil data that are usable to the public are goals we must strive for. However, we should not ignore the professionals who practice around us, or the fundamentals that we used to get us to where we are today. It seems to me that we have sometimes ignored the solid building blocks of our science to provide information that will not stand up to peer review.

I welcome any and all comments. You can reach me via e-mail at: [dmorceau@gartleydorsky.com](mailto:dmorceau@gartleydorsky.com).

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#### 2014-2015 EXECUTIVE COMMITTEE

**President** – Don Phillips

**Vice President** – Anna Donohue

**Past President** – Johanna Szillery

**Treasurer** – Gary Fullerton

**Secretary** – David Turcotte\*

**Director** – George Bakajza

\* will step down if someone is willing to step up

Nominations  
from the floor  
will be  
allowed

#### 2014-2015 COMMITTEE CHAIRS

**Webmaster** – Matt Dorman

**Newsletter** – Don Phillips / Kaizad Patel

**Education** – Steve Howell\*

**Membership** – Unfilled

**University of Maine, Orono, Liaison** –  
Ivan Fernandez

**University of Southern Maine Liaison** –  
Samantha Langley-Turnbaugh

**Technical Chair** – Chris Dorion

**State of Maine Liaison** – David Rocque

**USDA NRCS Liaison** – Lindsay Hodgman

## 12-DFX SOIL SCIENTIST VOLUNTEERS IN HAWAII

*Matt Dorman, USDA NRCS 12-DFX Soil Scientist*

In late July, I visited Hawaii, “The Big Island”, for two full weeks. While there, I assisted the MLRA Soil Survey and the Kona Soil and Water Conservation District as an Earth Team Volunteer. I was exposed to new unique vegetation, landforms and soils from the 8 different climate zones on the island.

On the west side of the island in the city of Kona, I assisted local soil staff as we visited a Coffee plantation located *Mauka* of a volcano. Huh? Well, the Hawaiian directional word for “inland and upland” is Mauka; the word for “towards the sea” is Makai.

While at the plantation, we provided technical soil services and dug two soil pits to record full pedon descriptions and collect samples. The samples were sieved, weighed, baked and measured for percent organic matter and pH. The soils we found were Puna (Euic, Isothermic Typic Udifolists) and Kapua (Euic, Isothermic Typic Ustifolists). These soils are moderately deep and deep, respectively. They are both sitting above ‘A‘ā lava, which is a sharp and spiny, rigid lava flow. Pahoehoe lava is the name for smooth lava flows.



While visiting, I saw two other soil series: Hapuna (medial-skeletal, amorphic, Isohyperthermic Petrocalcic Duritorrand – see upper photo) and the state soil of Hawaii, Hilo (medial over hydrous, ferrihydritic, isohydritic, isohyperthermic Acrudoxic Dydrudands). I was fortunate enough to visit the city of Hilo, on the west side of the island, about 35 miles from the recent volcanic lava flows in Hawaii. It was here in Hilo that I saw the state soil at the local field office while helping prepare for a soil health training course.



During my Hawaiian adventure, I also went to Mauna Kea observatory information center, tented in the Volcano National Park, witnessed the huge craters and drove on the infamous Mauna Loa Road. I saw Macadamia trees, banana trees, Cocoa trees and countless other species of plants and animals for the first time. If anyone ever has a chance to visit Hawaii I would highly recommend it, you won’t regret it.

***Aloha!***

## EDUCATION REPORT

*David Turcotte, USDA NRCS 12-DFX Soil Scientist*

Over the past year, MAPSS had 1,000 copies of the 2006 version of its brochure reproduced, with a few minor revisions/additions. There are still 800-900 of these left, plus a few hundred copies of the brochure that Rod Kelshaw developed 3 years ago. The Education Panel of the display was also updated, particularly the part that describes soil science at the University of Maine. There is also a “Soils of Maine” Powerpoint presentation (open and subject to change) available to MAPSS members.

As far as venues for the display, the ongoing one continues to be for 3 days at the Common Ground Country Fair (CGCF). I am willing to lead an effort to be there again – Steve Howell thoughtfully and willingly saved the 6 tubs of contrasting soil samples from last year! We also continue to lead a soil trench presentation (see photo alongside) each day at the CGCF. It’d be helpful if we could have a show of hands at the annual meeting as to who would consider helping out in 2015 (over the weekend closest to the fall equinox) – 9 volunteers (with a pass into the Fair and lunch stipend) are ideal.



On a side note, I thought the membership here should be aware of this useful web site: <http://nrcspad.sc.egov.usda.gov/DistributionCenter/>. This web site has many relevant and descriptive soil and water conservation-related practices, publications, proceedings, posters, brochures, etc. Some of the references are quite relevant to most MAPSS members, such as the Soil Health Indicators of Hydric Soils in the United States, Keys to Soil Taxonomy and Field Book for Describing and Sampling Soils <sup>1</sup>.

The materials listed in the above noted website can be mailed to you free of charge, though, of course, there are limitations as to how many copies of each reference can be ordered. Last year I ordered some materials from this web site for the MAPSS display and was able to talk with a live person about the nature and availability of these materials. One of the references was “Conquest of the Land through 7,000 years”, a well written and informative 24-page booklet published in 1953. It was written by Walter C. Lowdermilk, former Assistant Chief of the Soil Conservation Service. Overall it seemed to be historically consistent with “Topsoil & Civilization”, the book that I reviewed and reported about for MAPSS a year ago. The booklet cited some biblical connections, such as the often-timed conflict between shepherd and farmer (or Cain and Abel), what used to be The Land of Milk and Honey, and ending with the “Eleventh Commandment”.

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<sup>1</sup> Don Phillips, MAPSS President, tested this website out and found that, by control - clicking on it, the user enters the NRCS Distribution Site. From there, the user must type in key words for the desired information, then follow directions. I typed in “Healthy Soils”, and was rewarded with a very interesting, readable, and useful document. Try it!





## BOARD OF CERTIFICATION FOR GEOLOGISTS AND SOIL SCIENTISTS: RECENT ACTIVITIES

*David Rocque, Maine Department of Agriculture*

The Board of Certification for Geologists and Soil Scientists' most recent meeting was on December 2, 2014. Items on the agenda that may be of interest to MAPSS members included a discussion of *Exemption Requests from Licensing Requirements, Requiring Continuing Education Credits* and *Establishing an Inactive or Retired License Category*.

Accompanying the Board at all meetings are: a Board Clerk, a Board Administrator and an Assistant Attorney General who provide us with all the pertinent materials and guidance we need to properly deliberate issues brought before us.

**Exemption From Licensing Requirements** - Our statutes for licensing requirements include 5 categories for exemptions. They include subsurface sewage (wastewater) disposal (site evaluators), subordinate employees working under a licensed soil scientist, U.S. Government employees doing soil science work for the government and 2 categories for nonresident private consultants practicing in Maine. Our discussion focused on the two categories of nonresident private consultants.

The first category is titled “**Nonresidents practicing less than 30 days**” and reads as follows: “A person not a resident of and having no established place of business in this State, practicing or offering to practice the profession of geologist or soil scientist when that practice does not exceed in the aggregate more than 30 days in any calendar year, provided that the person is legally qualified by registration to practice the profession in his own state or country in which the requirements and qualifications for obtaining a certificate or registration are equivalent to those specified in this chapter.”

The second category is titled: “**Nonresidents becoming residents or persons practicing for more than 30 days**” and reads as follows: “A person not a resident of and having no established place of business in this State, or who has recently become a resident thereof, practicing or offering to practice for more than 30 days in any calendar year the practice of geologist or soil scientist, if he has filed with the commission an application for a certification and has paid the fee required by this chapter. The exemption shall continue only for such time as the Board requires for the consideration of the application for registration, provided that such a person is legally qualified to practice that profession in his own state or country in which the requirements and qualifications for obtaining a certificate of registration are equivalent to those specified in this chapter”.

As underlined above, the greatest difficulty for the board in handling such requests is deciding what “equivalent” means (for those states that do have licensing requirements) – we do not feel it is intended to mean “the same”, but how close it has to be, to be considered “equivalent”. This is not only true for material covered by the examinations, but also the qualifications required for individuals applying to take the exams. We currently use a national exam for the fundamentals of soil science, but not for the professional practice section. It was the Board’s feeling that the national exam for professional practice was too strongly geared to activities



practiced more commonly in other parts of the country than here in Maine. Also, the national professional practice exam is a “one shoe fits all” exam, while our Board offers what are referred to as “Soil Science Specialty Area” exams. The most commonly taken specialty exam covers pedology and is geared for soil mappers. This exam requires knowledge of the *Maine Association of Professional Soil Scientists Guidelines for Maine Certified Soil Scientists for Soil Identification and Mapping*. Our Board decided to keep and revise our own professional practice exams. We are therefore, the only state with a certifying exam that covers the Maine soil mapping guidelines. To date, the Board has not approved any requests for exemption for either geologists or soil scientists. We are, however, currently considering such a request from a New Hampshire resident. New Hampshire has soils as close to Maine’s as any in the country but a different exam and several avenues to qualify to take the exam. We require a 4 year degree and 15 credit hours in soil science plus 3 years of experience. New Hampshire allows 3 avenues for qualification including one similar to ours, another that allows an individual to have an associate degree with 1 more year of experience and the last category which does not require any degree but the same number of credit hours in soil science and 6 years of experience. We are looking into what is covered by the New Hampshire exam before making a final decision. Stay tuned.

The issue of requiring **Continuing Education Credits** has been discussed before and rejected for a number of reasons including: difficulty/cost/time required to assure suitable courses are made available to licensees so that they can reasonably obtain the required credits; difficulty/cost/time tracking licensees to make sure they meet this requirement and last but not least, no demonstrated need for requiring recertification credits. The Board’s opinion at the December meeting was the same as in the past – that this would be solving a problem that does not exist.

The last item the Board discussed which may be of interest to MAPSS members was the **creation of a category of licensee for inactive and/or retired individuals**. As you are painfully aware, our current license renewal fees are \$170.00 per year. That is a steep price to pay to keep a license for someone who does not intend to use it again. A number of retired licensees have mentioned to me that they might keep their license if it wasn’t so expensive to do so. It would be beneficial for us to have those individuals maintain their licenses, which may encourage them to continue some level of activity with the organization. Otherwise, we generally lose their knowledge and expertise, which is detrimental to the organization and the profession. As I understand it, the decision of what, if any, category could be created and what the registration fee will be is up to the Commissioner of the Department of Professional and Financial Regulation (PFR), not the Board. We can make such a request to the Commissioner, which we have done, and we have to make the final decision, but the process does not go beyond the first step unless it is supported by the Commissioner. If a new category of license renewal is approved by the Commissioner and the Board, it will take rule-making before it can take effect. Stay tuned for this one as well.

Our next Board meeting is scheduled for March 3, 2015, the day before the MAPSS Annual Meeting.



## **2015 Annual Meeting Program Agenda**

Unity College Center for the Performing Arts, Unity, Maine  
March 4, 2015

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

8:30 - 10:15 **BUSINESS MEETING**

- President's Introduction – *Donald Phillips*
- Welcome to Unity College – *Dr. Michael Evans, Provost and VP for Academic Affairs*
- Treasurer's Report – *Gary Fullerton*
- Secretary's Report – *David Turcotte*
- University of Maine Update – *Ivan Fernandez*
- Envirothon Update & 2015 Natural Resource Workshop, Sebago Lake St. Pk. – *David Rocque*
- MAWS Update – *Rod Kelshaw*
- Education Committee and JEC Scholarship Award Winner(s) – *Steve Howell and/or Anna Donahue*
- Vote to allow members to have a proxy vote for them at future meetings
- Election Of Officers - Nominating Committee (*Anna Donahue*)

10:15 - 10:30 **BREAK**

### **NEW BUSINESS**

10:30 – 11:15 **Earthworms and their Ecological Impact**

*Erika Latty, Ph.D.; Assoc. Professor of Botany, Unity College*

11:15 – 12:15 **Macroinvertebrates of Small Streams: A Critical Criterion for NRPA Stream Determinations**

*Tom Danielson, ME DEP Biomonitoring Unit*

12:15 - 1:00 **BUFFET LUNCH**

1:00 - 1:45 **Erosion and Sediment Control BMP Manual Revisions; MAPSS Connotative Legend; Proposed New Rules, etc.**

*MDEP Staff, including Marianne Hubert (Stormwater Engineering, ME DEP)*

1:45 – 2:30 **ME Land Use Planning Commission Update – Proposed Revisions to Freshwater Wetlands, Water Bodies, and “Flowing Waters” (i.e., Rivers, Streams and Brooks) Regulations**

*Stacie Beyer (Sr. Planner, LUPC)*

2:30 - 2:45 **BREAK**

2:45 - 3:30 **USDA-NRCS Welcome to our new State Soil Scientist & Web Soil Survey: A Short Demonstration**

*Kimberly McCracken, ME & NH State Soil Scientist USDA-NRCS, Durham, NH*  
*Lindsay Hodgman, NRCS Liaison to MAPSS*

3:30 - 4:00 **DRAFT 2015 Resolution to the State Legislature**

*Natalie Lounsbury, ME & Northeast Regional Project Coordinator, University of Maryland*



## 2015 Annual Meeting Registration \*

Wednesday March 4, 2015  
Unity College Center for the Performing Arts, Unity, Maine  
[www.mapss.org](http://www.mapss.org)

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 Members - **\$25** Associate Members - **\$15** Students - **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 been an associate member for at least 3 years.

**Registration Fee:** \_\_\_\_\_ *Note: Registration deadline is Friday, February 27, 2015*

Full and Associate Members - **\$40** Non-members - **\$50**

Students - **Free** for just the meeting (no lunch)/ **\$15** (including lunch)

**(add \$10 if registering at the door; lunch will not be guaranteed)**

**Total Amount Enclosed:** \_\_\_\_\_

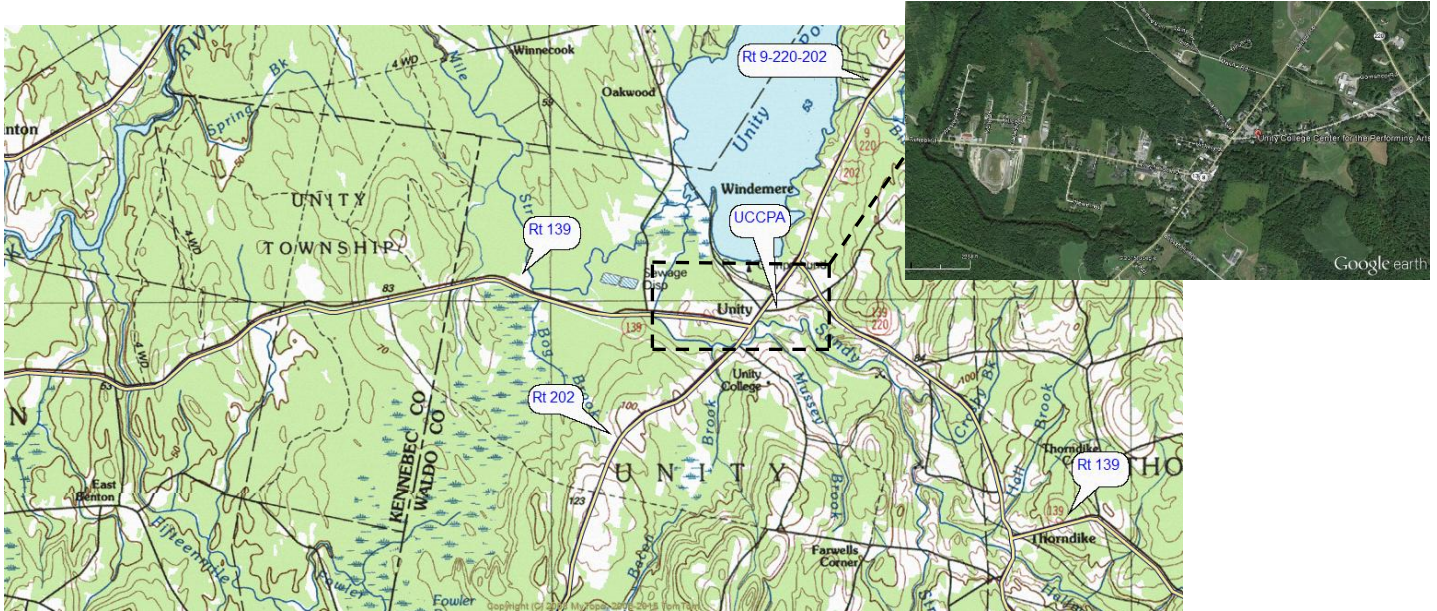
Please submit form and check made payable to **MAPSS** and mail to:

**Gary Fullerton** 104 Millturn Road; Limington, ME 04049  
[gfullerton@sebagotechnics.com](mailto:gfullerton@sebagotechnics.com)

\*Maine Licensed Site Evaluators will be awarded 6 professional development hours for full day attendance



## SITE LOCATION MAP FOR ANNUAL MEETING





## MAPSS 2014 Treasury Report

**MAPSS Checking Account as of 12/31/13** **\$11,502.56**

**2014 Income:**

2014 Dues (full membership)	\$1,300.00	52 full members at \$25.00 each
2014 Dues (associate membership)	\$255.00	17 associate members at \$15.00 each
2014 Dues (student membership)	\$0.00	3 student members at \$0.00 each
	\$0.00	3 honorary members at \$0.00 each
	<b>\$1,555.00</b>	
Annual Meeting Registration	\$1,640.00	41 registrants at \$40.00 each
	\$50.00	1 registrant at \$50.00 each
	\$45.00	3 students at \$15.00 each
	\$20.00	1 registrant at \$20.00 each
	<b>\$1,755.00</b>	
Mt. Blue Workshop	\$805.00	23 registrants at \$35.00 each
	\$320.00	8 registrants at \$40.00 each
	\$150.00	15 registrants at \$10.00 each
	<b>\$1,275.00</b>	
<b>TOTAL INCOME</b>	<b>\$4,585.00</b>	

**2014 Expenses:**

Annual Meeting Facility (University of Maine)	\$1,398.80
Envirothon (Maine Association of Conservation Districts)	\$2,000.00
Janet Cormier Scholarship	\$1,000.00
Brochures	\$358.70
Toothaker Scholarship Fund	\$250.00
Common Ground Fair	\$135.00
Annual Meeting Deposit 2015	\$125.00
Website Host (DiscountASP.net)	\$120.00
Mt. Blue Workshop	\$60.00
Display Board	\$26.91
Domain Registration (Speedsoft)	\$0.00
<b>TOTAL EXPENSES</b>	<b>\$5,474.41</b>

**MAPSS Checking Account as of 12/31/14** **\$10,613.15**



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## 2015 SOILS AND NATURAL RESOURCE WORKSHOP

*Sebago Lake State Park  
Wednesday, September 9, 2015*

The 2015 MAPSS/MAWS/MASE/SSSNNE Soils and Natural Resource Workshop will be held at Sebago Lake State Park in the town of Casco, Maine on September 9, 2015 from 9:00 am until 3:30 pm. Check-in will be in the Park Headquarters on Park Access Road from 8:30 am to 9:00 am. You will be given a location map to sites you are to visit. **Carpooling is recommended** because of limited parking at some of the sites located beside the various access roads.

Assistants will be present at each of the sites to point out the soil pits and other areas where you are to make observations (and determinations). You have from 9:00 am – 12:30 pm to visit the sites. After visiting the field sites, travel to Songo Beach for a 1:30 pm – 3:30 pm discussion of the sites and soils by state, local and federal regulators and experts. **Lunch is on your own.** There are a number of excellent places to enjoy your lunch including Songo Beach, the park boat launch and Songo Locks where you can watch boats being raised or lowered to go up or down river. The workshop has 7 sites which include sandy spodosol soils, flood plain soils, lacustrine sediments in pit and mound topography with an albic horizon, boulder fields in wet and upland areas, streams within the shoreland zone controlled by lake levels in Sebago Lake and vernal pools. Sebago Lake water levels are carefully controlled with a drawdown of over 5 feet making it difficult to determine where to begin measuring for shoreland zone setbacks. These are challenging sites that will generate a good deal of discussion. Experts as well as State, local, Portland Water District and Federal Regulators will be present to answer questions and provide valuable guidance for dealing with these difficult sites and soils. See attached workshop description for more details.

**The cost of the workshop is \$35.00** for MAPSS/MAWS/MASE/SSSNNE members or associate members and **\$40.00 for all others.**

Please send your checks, payable to MAPSS, to:

**Gary Fullerton, 104 Mill Turn Road, Limington, Maine 04049-3141**

Though registrations will be accepted the day of the workshop, for planning purposes, we ask that you register by August 25. Check [www.mapss.org](http://www.mapss.org) for background information and updates.

If you have any questions about the workshop, call David Rocque at 287-2666 or send him an e-mail at [david.rocque@maine.gov](mailto:david.rocque@maine.gov).



**Registration for MAPSS/MAWS/MASE/SSSNNE  
2015 Soils and Natural Resource Workshop**

Park Headquarters, Park Access Road  
Sebago Lake State Park, Casco, Maine

**Name:** \_\_\_\_\_

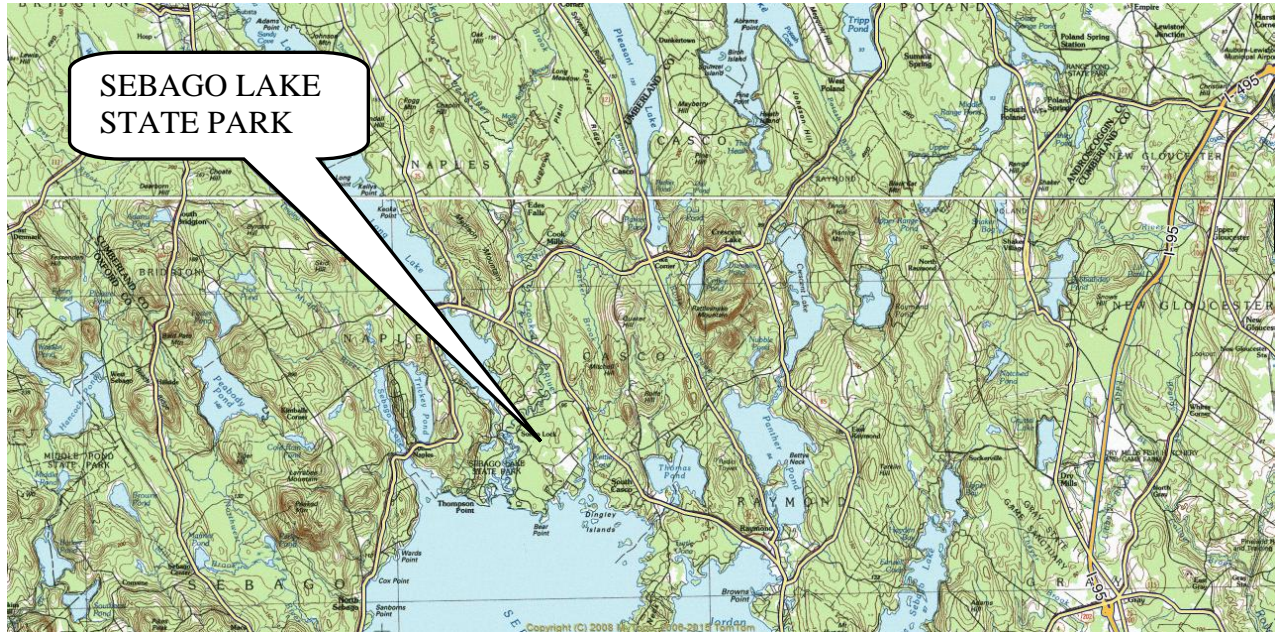
**Address:** \_\_\_\_\_

**Phone Number:** \_\_\_\_\_ **E-mail:** \_\_\_\_\_

**Number Attending Workshop:** \_\_\_\_\_ **x \$35.00** \_\_\_\_\_  
\_\_\_\_\_ **x \$40.00** \_\_\_\_\_



## SEBAGO LAKE STATE PARK SITE LOCATION MAP



## SEBAGO LAKE STATE PARK - MAPSS WORKSHOP 2015 REGISTRATION AND WRAP-UP LOCATIONS

