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# The Obligate

Maine Association of  
Wetland Scientists

MAWS c/o Dale Knapp @ Stantec  
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## President's Message

by Dale F. Knapp

Welcome one and all to the 2010 obligate. At the annual meeting last year, I took a head-first dive into the presidency to fill a vacant spot and have been doing my best to drive the remaining faithful members of the Executive Committee up a tree. We have all spent the last year wrestling with the economy, and now it is time to start wrestling with the future of MAWS and the future of Maine. If it sounds like we have some lofty goals, YOU BET WE DO. I am going to break from tradition a bit and avoid a recap of what we did last year and take this opportunity to discuss where we want to go in the coming year. The Executive Committee spent a considerable amount of time envisioning steps we can take now to create a more vibrant and influential organization in the coming decade. We also spent quite a bit of time with LD 1240—more on that topic may be found in another section of the Obligate. Let's kick off this rant by reviewing our roots. The following five principles are what the organization was founded on and will serve as our directives in the coming year.

*Purposes: To institute a non-profit organization that will promote the profession and understanding of wetland science in Maine and protect the public interest by:*

- *Establishing a code of ethics and maintaining high professional standards of practice;*
- *Establishing professional qualifications and certifying those qualifications to the public;*
- *Implementing and participating in educational programs pertaining to the study of wetlands and the profession of wetland science for the Association membership and the public;*
- *Supporting and contributing to the expansion of the wetland science research base; and*

- *Promoting policies that contribute to the sound stewardship of wetland resources.*

Some of the areas we as the Executive Committee would like to tackle can be broken down into five distinct sections as well.

1. Membership – We want to increase the active membership by 20 percent by the time we reach our annual meeting in 2011.
2. Awareness - We want to recapture our position as a public stakeholder in dealing with policy and regulation of wetlands in Maine.
3. Workshops – We want to increase the number of workshops we provide each year to our membership and increase the diversity of topics and attendees to capture larger audiences outside of just our immediate membership.
4. Education – We want to increase our presence and participation in spreading awareness of what we do, both in institutions of higher learning and within our communities.
5. Value – We want to provide value to our membership, i.e., truly make being a participant in this organization matter. Increasing membership participation in shaping the direction of the organization will play a vital role in accomplishing this goal.

So how are we going to do all of these things??? We have a couple ideas.

Membership – \$10 for 2010. In light of the difficult economic year for our industry, the decision was made to reduce the cost of an active or affiliate membership to \$10. We also hope to use this low introductory price to bring in new members, get them exposed to the value of being a member, and keep them around. We are going to offer free membership to students for the year. This will hopefully grow some valuable interaction between the

next generation of Maine wetland scientists and those of us who have been around for a decade or two or five.

**Awareness** – This will be accomplished by re-establishing a MAWS technical committee, who will be prepared to respond to proposed regulatory changes by submitting comments and providing expert guidance. Working more actively with regulatory agencies to develop polices will help us reclaim our position as a strong voice and valuable contributor to wetland issues in Maine. We also plan on having some new materials for distribution to the membership (e.g., stickers to put on a car, auger, or PBR) so that people see our logo and know who we are.

**Workshops** – We need to have more workshops over the course of the next year that interest a broader variety of individuals. This will be accomplished by having a standing committee that consists of more than one person responsible for handling workshop development and administration. We need to offer more hands-on workshops, some focused toward the entry level and some geared toward a more experienced audience. Stay tuned for more news on this.

**Education** – To have more direct interaction with students, we are going to put together a PowerPoint and a series of educational flyers, and will offer to guest lecture and perform outreach at schools and universities across the region. This will require dedication and a time commitment from the membership, but this type of outreach will help us achieve the goals of the organization. This is a top priority in the coming year.

**Value** – We are going to increase the frequency of our newsletters and provide them at least bi-annually to keep the membership informed and participating in what we are doing. We are going to establish a regularly-scheduled Executive Committee meeting that will occur once every two months at the same location and time. These meetings will be open to the membership, and those interested are encouraged to attend and get involved. The workshops and awareness will also add value to being a member in MAWS.

Ever throw a strange sentence into the middle of an essay to see if the professor was actually reading the material? Ten dollars to the first person who shakes my hand at the annual meeting and tells me “the white ship flies at night.”

So in closing what has turned into quite a treatise, I want to thank Lauren Leclerc, Alex Finamore, Jennifer West, Jeff Simmons, Kathleen Miller, Danielle Dyer, Rod Kelshaw, Rich Jordan, Jim Boyle, and all those who have paid their dues serving on the Executive Committee. I

want to encourage anyone with an issue or idea to share it with me. Send an email, give a call, or write a letter and let your opinion be known. I am hoping for a busy year for everyone professionally, and I can promise you a busy year from MAWS.

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## **Update from the Ethics Chair**

by Lauren Leclerc

Following the annual MAWS membership meeting in March of 2009, stipend announcements were circulated to Maine colleges and universities. This year we received five stipend applications, which is a record for my time as the MAWS Ethics Chair. Subjects of the applications included paleoenvironmental change, toxicology of swamp sparrows in tidal and non-tidal marshes, assessing ecosystem stability in a restoring salt marsh, fitness and age structure of spotted salamanders in fishless lakes, fish-containing lakes, and vernal pools in Maine, and effects of waterfowl impoundments on Virginia rail and sora populations. This is the first time during my tenure that we have received applications on bird studies. As you can see, efforts have been successful to increase the number of applications received. I am pleased to see that we are getting applications in such a range of disciplines. With so many great applications received this year, it was difficult to choose winners. The 2009 wetland research stipends were awarded to Abby Pearson (salt marsh restoration study) and Amanda Shearin (spotted salamander study). Congratulations to our two winners! I am proud that MAWS continues to support important wetland research!

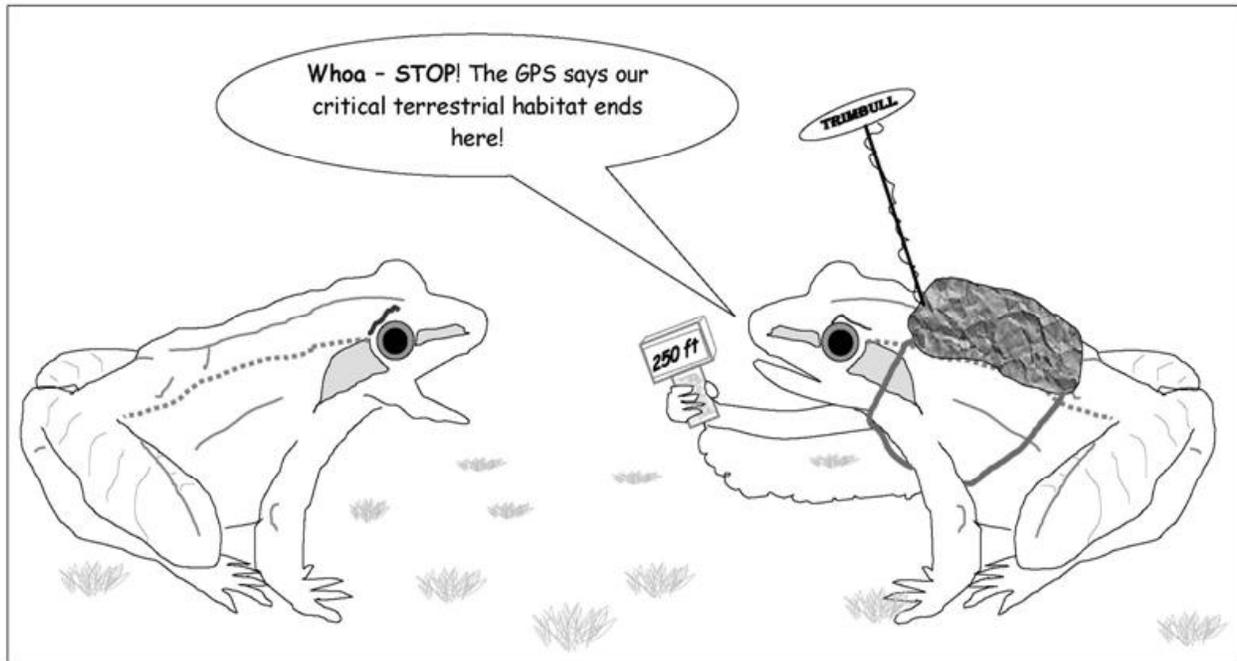
Abby is assessing ecosystem functionality in a restoring salt marsh (Sherman Marsh) using arthropod food webs. By collecting terrestrial arthropods in both Sherman Marsh and an adjacent marsh, Deer Meadow Brook Marsh, and examining the arthropods' interactions with plants, she can determine if Sherman Marsh differs structurally and/or functionally from Deer Meadow Brook Marsh in terms of arthropod compositions and interactions. Ultimately she is assessing if Sherman Marsh is functioning as a healthy marsh (i.e., restoration efforts have been successful) and is transferring carbon from its primary producers to upper trophic levels through predation.

Amanda is studying the fitness and age structure of spotted salamander populations in fishless lakes, lakes stocked with fish and vernal pools in Maine. In part, Amanda is using skeletochronology to determine age and growth rates of spotted salamander individuals. This information will be used to compare age structure of spotted salamander populations breeding in these features

to see which are functioning as ecological sinks. In addition, her study is assessing if fishless lakes are an alternative breeding habitat for spotted salamanders and

the effects of fish introduction on amphibian communities.

### "*Ranaway! Ranaway!*"



-c/o Richard Jordan

### **Manuscript Update: Flora Novae Angliae**

by Arthur Haines - Research Botanist with the New England Wild Flower Society

The Flora Novae Angliae manuscript is in its 6th year of preparation. It is to be a technical, partly illustrated manual of New England's tracheophytes (i.e., higher vascular plants) with identification keys, synonymy, distribution, and ecology for the region's approximately 2900 species. At this point, the manual is largely written. What remains is a number of questions concerning plant distribution (such as clarifying a species range or confirming its occurrence in a given state) and identification keys (confirming measurements and character states). The illustrations are also completed at this point and they are currently being digitized for inclusion into the document. The illustrations are mainly of technical characters and will help illuminate the sometimes complicated vocabulary and phrases used to describe plant details. As might be expected, there will be a number of taxonomic changes, which will result in some unfamiliar names and arrangement of families. Therefore, the manual will include a fairly large

bibliography to help students locate additional information to learn about various families and genera.

The biggest hurdle to the manual's completion over the past year has been the number of incorrect distribution statements found in many of the regional floras. One might at first imagine that changes in the flora (i.e., changes in the list of species known to occur in a region) would largely be additions as new species, such as weeds, are found in various states. Though there have been many additions, the largest numbers of changes actually comprise exclusions. There are literally hundreds of statements that can be found in the local literature that are not supported by a voucher specimen. In other words, a species is stated to occur in a given state but there is no herbarium collection to document it. The exclusion of species often is the result of a misidentified herbarium specimen, a specimen collected from a cultivated plant (that was accepted as naturalized by an author), or perpetuated falsehoods. There are many, many cases where an older flora has reported a given species from a given state but the original collector was in error (i.e., the plant was not what they thought it was). This is corrected in the herbarium through annotation of the specimen by a

botanist but later authors miss the fact the plant record was a mistake because they did not perform extensive surveys of the regional museums. Therefore, they continue to erroneously report the species' distribution through the generations of plant literature. In an attempt to reduce this type of error in the future, the Flora Novae Angliae manuscript is noting many of these errors in the text by citing herbarium specimens and noting their correct identification. For more information please log onto [www.newenglandwild.org](http://www.newenglandwild.org).

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### **Field Guide Update: *Cyperaceae of Maine***

by Matt Arsenault

As some have heard through the grapevine, a comprehensive field guide to the Cyperaceae (aka sedge family) in Maine is presently underway. Sedges are found in nearly every community and ecosystem in Maine and are frequently dominant components of many wetland and aquatic systems. Furthermore, over 25% of sedge species are considered rare in Maine. Therefore, accurate identification of sedge species is essential as part of natural resource inventories, ecological evaluations, and other biological surveys of project sites. As nearly every field scientist and natural resource manager can attest to, sedges are by far one of the most challenging plant groups to study and learn as a result of subtle characteristics, complicated botanical terminology, and a general lack of informative photographs. The approximately 600-page field guide will seek to bridge the gap between technical botanical manuals and oversimplified pocket field guides by including easy-to-understand (yet, accurate) species descriptions that highlight the diagnostic characteristics, discussions of similar species differentiation, and multiple color photos for each species of the sedge family known from Maine, including named hybrids. The field guide is a collaborative effort between Glen Mittelhauser of the Maine Natural History Observatory, Alison Dibble of the University of Maine, and Matt Arsenault of Stantec Consulting. Additional assistance for the guide is provided by Don Cameron of the Maine Natural Areas Program and Arthur Haines of the New England Wildflower Society. At the present, approximately 80% of the species descriptions and photographs have been completed. Pending funding availability in 2010, we anticipate finishing the remaining species descriptions and compiling and formatting all the necessary photographs. We will also be developing a user-friendly polychotomous key to the species and groups using a combination of thumbnail images, illustrations, and identifying characteristics that will aid the user in

identifying unknown specimens. 2010 and 2011 will be used to field test the guide and make the appropriate tweaks to species descriptions and keys. We hope to have the book ready for publication by early 2012. Questions about the project should be directed to Matt Arsenault at [matt.arsenault@stantec.com](mailto:matt.arsenault@stantec.com) or Glen Mittelhauser at [purplesandpiper@gmail.com](mailto:purplesandpiper@gmail.com).

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### **WORKSHOP NOTES:**

#### **MAWS Vernal Pool Regulatory Meeting – February 9, 2010**

by Danielle Dyer & the MAWS EC

#### Round Table Participants:

MDEP: Jim Cassida & Marybeth Richardson

LURC: Marcia Spencer-Famous

Corps: Jay Clement & Ruth Ladd

MDIFW: Phillip DeMaynadier

USEPA: Mark Kern & Erica Sachs

#### JURISDICTION

**Corps:** Guided by Section 404 of the Clean Water Act to have jurisdiction over waters of the US and their adjacent wetlands, vernal pools are captured as waters of the US when in a wetland. So, not all vernal pools are jurisdictional waters. Temporary or Permanent Fill requires an Army Corps Permit.

The Corps has no language defining a “vernal pool” beyond the *working* definition in the General Permit: “...special inland waters and wetlands.”

Maine Programmatic General Permit (PGP) General Requirements that apply to vernal pools are:

1. General Requirement 24. Spawning Areas
2. General Requirement 26. Environmental Functions and Values
3. General Requirement 27. Protection of Vernal Pools

*Question from Cole Peters: If a species listed is observed, is it a vernal pool?*

No, but it's important to identify that function of a questionable feature. Erica responded with some clarification that it may take “several years” for a man-made feature to naturalize and earn treatment as a vernal pool.

*Question from Dave Moyses: In the update of the PGP in October 2010, will the 500' buffer become 750'?*

It has in Massachusetts, but not necessarily for Maine.

**MDEP:** Two laws guide vernal pool protection at the state level.

**The Natural Resources Protection Act (NRPA):** NRPA Chapter 310. *Wetlands and Waterbodies Protection Section 4. WOSS Subsection A2. Significant Wildlife Habitat* regulates a significant vernal pool as Significant Wildlife Habitat (SWH), which upgrades the pool to a Wetland of Special Significance. Chapter 335. *Significant Wildlife Habitat, Section 9. Significant Vernal Pool Habitat* regulates the habitat, which includes the pool depression and 250 feet around the pool depression; comprising the habitat. All activities in this habitat area are regulated. The permit required depends on the activities taking place, the amount of proposed impact and the size of the pool. Chapter 305. Permit-by-Rule Section 19. Activities in, on or over significant vernal pool habitat is the most basic permit and is used when the activity impacts less than 25 percent of the total habitat (of what they own...this is different from the federal requirements...if half the pool occurs on their property, it would apply to 25% of their half of the pool).

**Site Location of Development (Site Law):** Site Law regulates vernal pools as unusual natural areas under Chapter 375: *No Adverse Environmental Effect Standard, Section 12. Preservation of Unusual Natural Areas* and Section 15. *Protection of Wildlife and Fisheries*. This is regardless of significance of the vernal pool. The Maine Department of Inland Fisheries and Wildlife (MDIF&W) has review authority and can request additional buffers up to 500' feet.

“Adjacency” only applies to certain types of wetlands, including 20,000 square feet of open water or emergent vegetation and peatlands – NOT VERNAL POOLS.

**LURC:** No specific definition for vernal pools, based on no undue adverse impact and included in the PWL-1 significant wildlife habitat designation, but no definition of a Significant Vernal Pool. They use the MDIFW definition. This allows some flexibility in regulation. The definition, which is forthcoming, will be consistent with NRPA.

**Maine Forest Service:** No definition, relies on Best Management Practices for regulation. “Forested” after a harvest relies on the definition of a forested wetland.

### **WHAT DO WE CALL THESE FEATURES?**

“Vernal pool” functioning man made pool = Corps Pool

“Vernal pool” natural pool, regardless of function = vernal pool

No one really uses the phrase “amphibian breeding area” as it describes a function of a wetland and/or vernal pool and not necessarily part of the vernal pool definition.

**MDEP (J. Cassida):** Site law only regulates SVPs, not vernal pools, and potential vernal pools are considered VPs until springtime surveys.

**MDIFW (P. DeM.):** Anything assessed in the spring, project associated an ABA, VP, SVP. MDIFW wants all that data, positive and negative.



“Classic” example of a manmade (i.e. ATV ruts) yet productive breeding habitat for vernal pool indicator species

*Kathleen Miller Comment/Question: What is the responsibility of Applicant/Client if they are not the landowner (i.e., lease expected)?*

**MDEP (J. Cassida):** landowner must sign off that data can be submitted

**LURC (M. S-F):** Lease agreements are all different and it may not be clear what is included and allowed in the lease.

**MDIFW (P.DeM.):** if landowners are not being used, you cannot submit their data. There is the possibility of providing data with no form, which means there is no public record of it. For example a spreadsheet identifying vernal pools and/or wetlands for an alternatives analysis.

*Additional comment:* To overturn a Significant Vernal Pool designation, vernal pool surveys must document over three consecutive years that the pool does not meet significance.

*Jim Logan comment: Is there a protocol for Significant/Vernal Pool survey requirements?*

No. They will look to MAWS to establish a protocol.

*Comments about number of required visits: One visit is enough to determine if a pool is man made, or if there are hundreds of egg masses. As many as 3-4 visits may be needed in more complicated cases.*

*Danielle Dyer question: If on a first visit a pool is determined to be natural and significant based on the wood frog egg mass count, is a second visit required?*

MDIFW (P.DeM.): No. Data for the spotted salamander is not required, provided the hydroperiod is apparent.

MDEP (J. Cassida): The dry-out timeframe is not a trump card to throw out pools that were determined to be significant based on the egg mass counts.

### Answers to the Proposed Questions

#### **Category 1: What is Required to Show on a Project Resource Map & Disclose to Regulators?**

*1. This is for NRPA and/or Site Law. Does a project become reporting to the DEP if there is NO wetland alteration, however there is alteration w/in 250' of an SVP depression?*

Yes, unless <25% is altered.

*Within 325' of an SVP (adjacency)?*

Adjacency does not apply to vernal pools.

*2. Does a project become reporting to the MDEP if there is NO wetland alteration, however there is alteration (upland or wetland) w/in 250' of a VP or ABA depression?*

NRPA: No, assuming it is not an SVP.

Site Law: Yes, also assuming it is not an SVP.

*Additional Comment:* an alteration in the adjacent terrestrial habitat surrounding a vernal pool (significant or not) would require evaluation pursuant to the no adverse effect on wildlife habitat standards for projects already subject to the Site Location Act review. However, this scenario does not trigger a Site Location review if it otherwise does not require a Site Law permit.

*3. Does a project become reporting to the MDEP and/or Corps if there is at least 1 square foot of wetland alteration if the wetland contains an SVP?*

MDEP: Yes, the wetland is a Wetland of Special Significance

Corps: No, the General Permit Category 1 requires no direct impact to a pool, avoid and minimize impacts within 500' of the surrounding upland, and meet the requirements stated in the PGP.

*4. If there is at least one square foot of wetland alteration on a project, do ALL SVP, VP and ABA's have to be shown on the project site? Within 500' of all project alteration (upland & wetland)?*

State: Yes, the MDIFW wants all VPs, SVPs and ABAs with requisite numbers, which would trigger SVP in a natural pool.

Federal: not necessarily

*5. Are all Site Law projects required to depict ALL SVP, VP, PVP, ABA, and PABA's onsite?*

Yes.

*6. What is required by LURC for any of the previous scenarios?*

Case by case.

#### **Category 2: Case-by-Case Specific Questions**

*1. Can an SVP have permanent hydrology?*

Corps: yes (despite no "SVP")

MDEP: No (we asked how much is permanent, any "regulatory rules of thumb" for determining permanent hydrology—not at this point)

*a. If not, then is this same site feature considered a VP or an ABA?*

MDEP: no, it would be a wetland...maybe

*2. Can a SVP be a complex of connected pits in a pit & mound wetland?*

Corps: Yes

MDIFW: Yes

*a. If so, what is the depression considered to be.*

MDIFW: wait until 2<sup>nd</sup> visit to determine the high water mark, after the spring melt has come down to the normal high water mark

*3. Can an SVP have less than 75 percent existing woody vegetative habitat [read: CANOPY] cover?*

Corps: Yes, but can the pool remain highly productive, what was the productivity with more than 75% canopy cover?

MDEP: yes.

*4. Does a SVP located within a wetland make the entire wetland a WOSS?*

MDEP: Yes

*5. Is wetland located within the 250' habitat of a significant vernal pool WOSS if the pool is not located within the same wetland?*

MDEP: Yes, the entire wetland—even that portion which is outside the 250' buffer—is considered a Wetland of Special Significance.

6. If an underdrain is proposed in a VP or SVP, does this potential impact need to be calculated, and if so, how does the regulatory community suggest doing so?

Yes... if it drains the pool the entire habitat is considered impacted

**Category 3: Requirements for Inspection – Off-Site Features**

1. Are we required to check the Google Earth vernal pool (VP) layer for on-site or near site mapped pools?

Not required, but it's a good idea. The database is updated regularly (i.e., weekly during the busiest time and approximately monthly or every 10-20 pools the rest of the year).

2. Are we required to check aerial photographs & published mapping for off-site wetland connections to off-site mapped VPs?

Not required, the MDEP field staff already does.

Corps: not required, but it's a time savings if we do.

\*\*mapped VPs/SVPs are not included in the agency contact response letters.

3. If an on-site VP extends off-site (off property or outside a ROW) are we required to investigate the pool area off-site?

a. Can we legally do this or is it considered trespassing?

b. Do we have to assume significance if we do not investigate off-site?

c. Can we legally conduct a SVP survey (and potentially register a SVP) on a ROW (e.g., a road ROW) that has deeded access to the town/state, but owned in fee privately?

Corps: do not trespass, survey to the extent that you are allowed and can.

MDEP\*\*: will not consider a pool across property lines an SVP if two-thirds of the pool can be surveyed, a good faith effort was made and the numbers do not exceed:

20 wood frog egg masses

10 spotted salamander egg masses

5 blue spotted salamander egg masses

\*\*(please refer to the attached guidance from MDEP at the end of this article)

*Example Scenario: We are hired to map wetlands along an existing road. The client only has access rights to the existing ROW (e.g. 10 feet off existing pavement).*

1. What outside information do wetland scientists need to gather besides on the ground information (e.g. MDIF&W existing VP data, aerial photo interpretation, etc)?

Previously answered, see above.

2. What should wetland scientists do if the delineation occurs in July, and 25 feet from the pavement (outside of the ROW) the delineator sees a pool of water in a forested wetland?

Previously answered, see above.

3. What if the client specifically says all they are seeking is wetland boundary flags – no reports, no WOSS information, no VP search – but the delineator stumbles upon some PVP/PABA type of features (in or out of the ROW)?

This was decided to be a personal/professional ethical dilemma, use best professional judgement and be specific in disclosing what you did not survey for.

**Category 4: Requirements for Inspection – On-Site Features**

1. What is the required minimum number of site visits for vernal pool identification or dismissal? **EMPHASIS ADDED.**

There is no required minimum number of visits (just one, technically is necessary); one could assume that finding more egg masses (beyond the SVP #'s) would necessitate fewer visits; a man-made pool only necessitates one visit—but be very sure that it's man-made.

2. For depressions of natural origin, is there a minimum number of indicator species egg masses required to callout a feature as a VP (i.e., should one wood frog egg mass in a natural depression be mapped as a VP)?

MDEP: Yes (we wondered about the converse, no documented masses, but it looks like a VP; there was no answer to this).

Corps: yes, more a function than a pool itself. Better to provide the information so they can judge.

3. For depressions of non-natural origin (ATV, skidder ruts, ect.) is there a minimum number of indicator species egg masses required to identify the feature as an ABA (i.e., should one wood frog egg mass in a non-natural depression be mapped as an ABA)?

MDEP: needs to reported for Site Law.

Corps: identify the occurrence, use best professional judgement and explain it.

There are no size qualifications. Use common sense. There have been no studies that have shown a correlation between size, depth and productivity. we document these occurrences as...?

4. For other site features that contain egg masses (beaver impoundments or streams) is there a minimum number of indicator species egg masses required to identify the feature as an ABA (i.e. is one spotted salamander egg mass in a stream an ABA – should a stream (int. or per.) ever be considered an ABA)?

MDEP: One is enough to submit the forms so they can verify if it is a stream or a feature other than a vernal pool

USEPA: Same. In 500 pools, 5 had egg masses and fish populations, but the 2 were separated by some kind of barrier or water depth. There are no significant numbers of egg masses with fish populations.



Central Maine VP survey with D-net (c/o R. Ladd).

## Category 5: Mitigation

1. Will any clearing of vegetation [read: TREES] within a VP depression require compensation? ABA?

Corps: not filling = no jurisdiction (temporary fill and stump grinding all count as fill and require corps permits)

MDEP: yes, depends on scope and adherence to the 25% in the buffer rule. any fill or alteration is considered a total loss of the vernal pool habitat and must compensate for that entire loss.

2. Will any clearing of vegetation [read: TREES] above the pool (opening the pool) depression require compensation?

See above answer.

3. Does on-site, preexisting, non-forested area within the critical terrestrial habitat [for SVPs] count toward the 75% threshold?

Yes.

4. Does off-site [read OFF-PROPERTY], preexisting, non-forested area within the critical terrestrial habitat [for SVPs] count toward the 75% threshold?

Corps: Yes

MDEP: No

5. Assuming all standards of avoidance and minimization have been met, will creation of vernal pools be looked at favorably as compensation?

MDEP: Not the top choice

Corps: Not the top choice, but have more flexibility

Is preference given to on-site or off-site creation?

Usually off-site.

How much buffer or CTH (wetland and upland) is required to get credit for vernal pool creation?

The maximum extent possible for what you are creating (i.e., 750 feet for an SVP). We wondered how far, at least within the same watershed.

6. Do the DEP and ACOE have differing standards for what is acceptable for a minimum of 75% of the critical terrestrial habitat as unfragmented forest with at least a partly-closed canopy of overstory trees?

In general, as few fragments as possible.

for permit by rule, it must be unfragmented.

For Site Law, they use the differential standard (altering the shape of the buffer to accommodate appropriate habitat.

7. Where's ILF at in terms of all of this? Is there any thoughts of reducing the multiplier for VP impacts where impacts are to upland CTH? ETC.....

Not considering/contemplating any changes for at least 2 years.

8. If preservation of another vernal pool is used as compensation for impacts to a SVP, must it be an SVP of similar size?

Enhancing or protecting a man-made pool in place of a natural pool if it is very productive will be considered acceptable.

How much undisturbed CTH must be preserved along with it? How is this calculated?

Enough to preserve the habitat, 750 feet. There is the possibility of enhancement for this situation.

9. What special considerations must be taken if proposing to move indicator species egg masses from a natural pool or other ABA to a created pool for mitigation?

No net loss of egg masses?

*Jim Boyle comment: The corridor width is ideally 250 feet on either side of a given corridor. If the client chooses to abide by this suggestion, the alternatives for an alternatives analysis are already provided.*

*Alan Haberstock question: If a rare species that is included in the list for vernal pool significance is revealed to occur in the area, but not observed during the survey, is it inferred that the pool is an SVP (if not triggered already by the abundance counts)?*

No, that is not enough. The species must be physically observed. Consider the type of survey you are conducting, it may be a different type of survey for the rare species than for the vernal pool.



*Spotted turtle, a ME-listed "threatened" species found in a York County vernal pool.*

**Additional Comment:** alterations of forested habitat within the 250 foot regulated adjacent terrestrial habitat (ATH) for SVPs (considered the Critical Terrestrial Habitat and subject to the additional 250' buffer) would trigger NRPA review (and may qualify for PBR authorization if net alterations within the applicant's control are less than 25% or the regulated adjacent terrestrial habitat (ATH)).

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**From:** Richardson, Marybeth  
**Sent:** Wednesday, February 10, 2010 8:19 AM  
**To:** Rodney Kelshaw  
**Subject:** FW: vernal pools over property lines

Below are some general guidelines to use when you get a project where this issue comes up, and it will: there's a PSVP (potential significant vernal pool) located partially on the project site and partially on adjacent property. You should use the information below as an approach to assessing these pools for significance, in conjunction with MDIFW.

We won't consider them significant if:

- 1) 2/3 or more of the pool area is surveyed, AND
- 2) no fairy shrimp are detected and amphibian indicator egg mass counts do not exceed the following thresholds: a) Wood Frog--20, b) Spotted Salamander--10, OR c) Blue-spotted Salamander—5, AND
- 3) documentation is provided by the applicant's consultant that a good faith attempt was made to survey the pool across the property line by contacting the owner, and if permission was not granted, characterize how much of the pool was able to be surveyed from the property line without going onto the adjacent property.

Following in CAPS is the rationale for the first two criteria developed by Phillip deMaynadier:

- 1) 2/3 or more of the pool area was surveyed, AND

WE AGREED THAT 2/3 IS AN APPROPRIATE RATIO THAT BALANCES THE DEPARTMENTS NEED TO MINIMIZE ERROR UNDER OUR STATUTORY OBLIGATION TO IDENTIFY AND PROTECT SVPS WHILE RECOGNIZING THAT SOME POOLS CAN NOT BE SURVEYED IN THEIR ENTIRETY DUE TO MISSING PRIVATE PROPERTY PERMISSION. FURTHERMORE, WE AGREED THAT IN MOST CASES -- WITH THE ASSISTANCE OF AERIAL PHOTOGRAPHY, NWI MAPS, AND ON SITE VISUAL ASSESSMENT -- SURVEYORS WILL BE IN A POSITION TO APPROXIMATE THE % OF THE POOL SURVEYED.

- 2) no fairy shrimp were detected and amphibian indicator species egg mass counts did not exceed the following thresholds: a) WF--10, b) SS--5, or c) BS--0.

WE DECIDED TO INCREASE THE EGG MASS THRESHOLDS TO 1/2 THE TOTAL REQUIRED FOR SIGNIFICANCE. WHILE ERRORS IN VERNAL POOL STATUS DETERMINATION WILL OCCUR AS A RESULT OF INCOMPLETE SURVEYS WE HAVE MADE A REASONABLE ATTEMPT TO MINIMIZE THESE BY REQUIRING A COMBINATION OF TWO COMPLEMENTARY CRITERIA I.E. EVIDENCE THAT EGG MASS NUMBERS ARE NOT APPROACHING SIGNIFICANCE LEVELS ACROSS THE MAJORITY OF THE POOL AREA."

## 2010 Legislative Happenings

by Rodney Kelshaw

### 2009 MAWS Legislative Committee Update:



2009 was my first year as the MAWS Legislative Committee (LC) Chair. It has been a good opportunity for me to participate more with MAWS and to learn about the process that develops the rules and laws that affect our profession. Some of the entities the LC follows of are the Maine State legislature, including proposed bills (LD) in several sub-committees, proposed Rule making changes within the DEP, the US. Congress, and other federal agencies including the CORPS and EPA So, what has happened within the past year?

### State of Maine:

- The 124<sup>th</sup> Maine Legislature first regular session convened on 12/3/2008 and adjourned on 6/17/2009. The second regular session convened on 1/6/2010 and is scheduled to adjourn on 4/21/2010. During the first session there were several LDs that directly affected MAWS.
- LD 107 was "An Act To Change the Classification of Man-made Wetlands". The MAWS Executive Committee (EC) wrote a letter to the Natural Resources Committee (NRC) and spoke during the public hearing requesting that the NRC not support LD 107. LD 107 did not pass.

L.D. 1240 a "Resolve, To License Wetland Scientists" is the resolve submitted by MAWS that would create a licensing process for wetland scientists/delineators in the State of Maine. The MAWS EC wrote a letter to the Business, Research and Economic Development Committee (BREDC) and spoke during the public hearing requesting that the BREDC support LD 1240. This was changed to a resolve and became public law - Resolve Chapter 73. It directs the Dept of Professional and Financial Regulation to develop a licensing protocol for wetland scientists in collaboration with the DEP and the Maine Association of Wetland Scientists and to report to the BRED Committee by December 2, 2009. This committee is authorized to introduce legislation related to this report to the Second Regular Session of the 124th Legislature. The EC submitted the "Sunrise Review for LD 1240", which is the information we provide the legislature to help them decide on moving forward with the certification process. Information from this and other surveys is

being used to develop a Sunrise Review report, which was due by February 15<sup>th</sup>. It will be submitted to the Business, Research and Economic Development Committee (BRED), which handled the original legislation. BRED Committee members reviewed the report, which is now part of public record. The Committee can then do whatever its members believe is best---move forward with licensure, decline to do so, etc. For more information, refer to Dale Knapp's article ('...*Certification/BRED Update*') below.

- There are proposed changes to the DEP Site Location of Development Act (Site Law or SLODA). This is currently going through the rule making process and there have been multiple public hearings. This process can be followed on the DEP website at [www.maine.gov/dep/rulemaking.htm](http://www.maine.gov/dep/rulemaking.htm).
- Chapter 305, Permit by Rule Standards, Section 10 Stream proposed amendments. These proposed amendments are a result of new legislation, Public Laws 2009 Chapter 460, which directed the Department to amend Chapter 305 to require municipalities to achieve natural stream flow when they are repairing or maintaining roads or stream crossings. This rulemaking sets significant new standards for stream crossing projects. It is currently being heard by the Natural Resources Committee.

### Federal Government:

- The Clean Water Restoration Act was introduced during the U.S. 110th Congress and re-introduced in the 111th Congress. It would amend the Clean Water Act (CWA), to "clarify the jurisdiction of the United States" and establish the CWA's application to U.S. waters, including interstate wetlands, tributaries, territorial seas, "intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds." At the time this was written the U.S. Senate was still having hearings on amendments to the Clean Water Restoration Act. The 1972 Clean Water Act regulated wetland loss in the U.S. The Supreme Court ruled (in 2001 & 2006) that the law never intended to protect isolated wetlands like prairie potholes and removed some of these protections, putting more than 20 million acres of America's most important wetlands at risk of destruction. The Senate Environment and Public Works Committee recently took the first steps to restoring Clean Water Act protections to millions of acres of wetlands and thousands of miles of streams by passing the Baucus-Klobuchar

Compromise for Clean Water. The bill now goes to the Senate floor.

- The U. S. Army Corps of Engineers released a Proposed Revision of New England District Compensatory Mitigation Guidance. Public comments were open from December 15, 2009 to February 1, 2010.
- **The interim Northcentral and Northeast Regional Supplement for Corps 1987 Wetland Delineation Manual is now out.** The U.S. Army Corps of Engineers, New England District, announces the publication and one-year trial implementation period of the Interim Northcentral and Northeast Regional Supplement (“supplement”) to the 1987 Wetland Delineation Manual (“1987 Manual”). This interim document will be tested for one year prior to finalization; the one year period will be effective 30 days from the date of this public notice. The supplement will be field tested by interagency teams of state and Federal scientists to assess its clarity and ease of use, and to determine whether its use will result in any spatial changes in wetland delineation for Clean Water Act purposes. Comments on this supplement should be submitted to Karen Mulligan (CECW-CO), U.S. Army

If anyone has interest in being a member of the MAWS LC please see me at the annual MAWS meeting or contact me by phone or email. I would like to plan a LC meeting for soon after the annual MAWS meeting to set goals for the upcoming year. If anyone is interested in getting periodic email updates regarding LC information please sign up on the MAWS membership email list on the MAWS website.

Email: [rkeshaw@boyleassociates.net](mailto:rkeshaw@boyleassociates.net)

Phone: (207) 944-6776

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## Wetland Scientist Certification/BRED Update

by Dale Knapp

Well, it looks like we are coming to another turning point in the road in our pursuit of credentialing wetland scientists in Maine. The results of the Sunrise Review from the Department of Professional and Financial Regulation (DPFR) were not the results for which we had hoped. As Jim and I sat with Representative Eberle in front of the Business, Research, and Economic Development (BRED) Committee, it certainly felt like we were not going to get far. Prior to the start of the meeting, Anne Head, the Commissioner of DPFR approached me to commend the group for putting

together “one of the best submissions she has ever received”. While we may have expected and hoped for more, her compliment was sincere and demonstrates that our efforts did not go unnoticed.

In question was the need for constitutional policing of a profession, and if justified, the least burdensome method of regulation. While the final decision is up to the BRED Committee, they do not typically go against the opinion of DPFR. Ms. Head stated that there was no question that wetland science requires specialized skill. However, the area in which we did not clearly tip the scale was in demonstrating a clear risk to the public health, safety, and welfare. The DPFR needed more specific examples of citations, litigation, or other cases wherein this risk was clearly demonstrated. We have this in common with every other profession that has participated in the Sunrise Review process since 1991, with one exception. The Board typically reviews 3-4 of these license application sunrise reviews each year and has only approved one since 1991. So we were really throwing a pebble at a giant. We made a few comments to the committee regarding ways in which we might more clearly demonstrate a threat to public health, safety, and welfare. Ultimately, the BRED Committee did not kill the bill, and instead let us walk away to spend some time considering next steps and digesting the materials provided by the DPFR.

After the meeting, we spoke briefly in the hallway with Andy Fisk, Deputy Commissioner of MDEP and with State Representative Jane Eberle, sponsor of LD 1240. They both thought it would be advisable to set up a meeting with MDEP to gather information and have continued, higher level discussion. In addition, during her testimony, Commissioner Head mentioned some less burdensome methods of certification. I am also going to schedule a follow-up meeting with Commissioner Head to gather information on what other options we may have.

Prior to finalizing the Obligate, I had hoped to have more information, but this is where we stand today. The Executive Committee and the Certification Subcommittee will be discussing the next steps to take in the coming two weeks, giving us much more to discuss during the business session of the annual meeting. This is a process that has been underway for a long time, and the saga is nowhere near over. LD 1240 was an important step toward certification, and I want to again commend all those involved for their hard work. We have learned much in this process that will assist us as we determine a path forward. Thanks to Don and Jim, who have held the

position of Certification Subcommittee Chairs, for all their efforts supporting the directives of the MAWS membership. So whether or not you want to hear more, I promise we'll discuss this matter further at the annual meeting.

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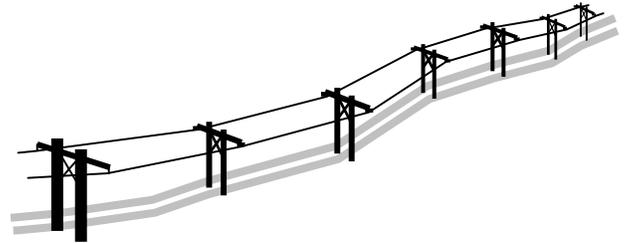
## What is A Class L Soil Survey?

by Dave Rocque

As one of the primary reviewers of proposed windfarm projects, I was given the task of determining the level of soil survey necessary to allow for the proper location and design of access roads and review of their construction techniques. My preference would have been to require a Class A High Intensity Soil Survey but I realized it was not practical for such large projects in remote areas of the state. In addition, they would be prohibitively expensive and time consuming for projects which the Governor and Legislature are strongly pushing. So, the question became "what is the minimum amount of information necessary to give the road designers and project reviewers what they need and is reasonably practical". After giving it considerable thought, I came to the conclusion that the soil related issues for which information was most needed were hydrology and erosion potential. Other factors such as depth to bedrock were less important for the soil survey because they would be determined during the geotechnical investigation. Looking over what the soil scientist soil mapping guidelines, it became evident to me that none of our existing classes of soil survey fit the bill so I provided applicants with verbal guidance on what information was needed and how that information could be collected by soil scientists. It was an evolving process that had to become formalized in the fall of 2008. The Maine Department of Environmental Protection was designated as the lead regulatory agency for all windpower projects in the State where any segment was located in an organized territory (including the transmission line). MDEP wanted to put the soil mapping requirements for windpower access roads in writing so I developed language you can find in their Site Location of Development Application Form. They didn't however, want it to be restricted to access roads for windfarm projects so it now includes fairways, trails and other linear projects with little or no adjacent development. I suspected there would be much confusion over how to conduct a soil survey meeting the requirements for linear projects in the Site Law Application so I decided creating a new class of soil survey would be in order. It was adopted by the Maine Association of Professional Soil Scientists at their 2009 annual meeting and is now part of

their Guidelines for Maine Certified Soil Scientists for Soil Identification and Mapping.

In case you are wondering why it is being called a Class L instead of Class E Soil Survey, it is because this class of soil survey is quite different from the others. Soil survey criteria become progressively less detailed as you move from Class A through Class D. If the new standard was called Class E, a logical conclusion might be that it was even less detailed than a Class D Soil Survey. That however, is not the case. By calling the new soil survey Class L, I hoped it might be assumed this one was completely different from the others. You can find a link to the Class L soil standards at the website of the Maine Association of Professional Soil Scientists – [www.mapss.org](http://www.mapss.org).



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## Membership Committee Update

by Danielle Dyer

Membership has thus far received one new member application since last year. A goal for the organization this year is to increase membership by 20% in 2010. We will accomplish this through organizational outreach, attracting student members by college and university outreach and including more professors of wetland science topics as Courtesy members from all Maine and New Hampshire colleges and universities. If anyone has suggestions for academic memberships, please send me an email. We hope to operate a booth at the MOFGA Common Ground Fair in 2010, we welcome your input and submissions of art for our table materials.

About 60% of the membership paid their dues without a reminder in June, up from last year. I am still working at getting email addresses updated on the membership list and progress is steady. If you have moved or changed employment, please don't forget to update your contact information with MAWS! We are still missing some members, and the list is growing! If anyone knows how to contact any of the following former members please send me an email [[danielle.dyer@stantec.com](mailto:danielle.dyer@stantec.com)] with any information you may have!

*Robert Bryan  
Stewart Fefer  
Ivan Fernandez  
Sylvia Michaud  
Scott Norman  
Terry Ramborger  
Josh Royte  
Dave Santillo*

*Mathew Schweisberg  
Rachel Stevens  
Danielle Swan  
Stephen Walker  
Mark Whitehead  
Keith Williams  
Don Witherell*

As always, if you have questions about your membership status or would like to upgrade your membership, please send me an email [danielle.dyer@stantec.com](mailto:danielle.dyer@stantec.com).

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## **Workshop Announcement: Intermediate Grass Identification**

**March 12, 2010**

12:00 to 4:00 pm

Location: The Delta Institute

219 Dead River Road - Bowdoinham, ME

(directions at [www.arthurhaines.com/delta.htm](http://www.arthurhaines.com/delta.htm))

### Agenda

11:00 – 12:00           Lecture by Arthur Haines  
12:00 – 4:00           Guided keying of specimens

Cost: \$30/person

**Space is limited to 15 people** and registration will be *on first-come first-served basis*. **To register**, please contact Laura Lapierre by email at [llapierre@normandeau.com](mailto:llapierre@normandeau.com) or by phone at (207)797-7717 ext. 110. We ask that payment be sent in after confirmation that you are on the list. Payment must be received by March 5<sup>th</sup> in order to secure your spot in the class. Make checks payable to MAWS and sent to MAWS, att: Laura Lapierre, Normandeau Associates, 80 Leighton Road, Falmouth, ME, 04015. Please provide your address, email, and whether you need a certificate of attendance.

Please bring your lunch and a hand lens. Relevant keys will be posted to Arthur's website prior to the date. A copy should be printed out and brought to the workshop. If inclement weather is predicted we will email out a cancellation/postponement notice the night before.

This workshop has been approved for *1 CEU* for Wetland Scientists and *2 CEU* credits for Foresters from the New Hampshire Joint Board.

**\*No Refunds for Individual Cancellations\***

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## **Just What Are Soils With Oxyaquic Conditions In The Upper Part**

by Dave Rocque

There has been a lot of talk recently about soils with "oxyaquic conditions". I have to admit; much of the talk has been by me or started by me. That is because, in my position as State Soil Scientists, people come to me with all manner of soil related questions and problems. I frequently get asked to do site visits to properties where problem soils are found and I am expected to provide answers (I rarely get to see standard soil profiles). I also review all manner of proposed projects including wind farms proposed to take place on soils where no other development has been allowed because anything above 2700 feet in elevation is a protected natural resource. Add to the mix a natural curiosity and personal need to know the why and how things look the way they do and the result is some pretty interesting conclusions. One of those conclusions is that Maine has a significant amount of soils with oxyaquic conditions. Simply put, that means they are soils with a seasonal high groundwater table that has oxygen in it so reducing conditions are not present during the growing season. To be sure, most of our soils have an occasional or short term groundwater table with oxygen in it but this phenomenon becomes a bigger problem when the oxygen rich groundwater table is present for long periods of time. Standard procedures for determining the seasonal groundwater table rely upon observation of soil morphological features that develop under anaerobic conditions. That works reasonably well for the purpose for which soil classification was originally developed; agriculture. Most agriculture is on relatively flat areas where anaerobic conditions develop if the seasonal groundwater table is present for a couple of weeks or more during the growing season. It does not work very well for sites that have long continuous slopes such as are common in our Western Maine Mountains (such areas can though also be found in other parts of the state). These areas have large contributing watersheds and the soils are nearly always lodgment tills (or are shallow to bedrock glacial till soils). Rainfall and/or snowmelt infiltrate the shallow depth of soil over hardpan or bedrock and then travel along that interface until reaching a wetland or waterbody. This moving groundwater carries oxygen in it so anaerobic conditions are not present, necessary for the formation of redoximorphic features. That was not much of a problem in the past because little development activity occurred in areas with these conditions. That is changing now however, with ski resort expansions and even more importantly, wind farm development. For use and management of these soils, it does not matter whether or not the groundwater table has oxygen in it or not. It is a problem which can impact roads and other infrastructure but can also impact downgradient wetlands and

waterbodies that depend on the continuous feed of cool clean groundwater. If the groundwater flow is interrupted or altered, downgradient resources will be altered with a chain reaction of impacts being the end result. I realized it was therefore necessary to develop criteria that could be used to identify these soils on a consistent basis.

I succeeded in convincing the Maine Association of Professional Soil Scientists last year to adopt standards for recognizing and mapping soils with oxyaquic conditions in the upper part and have developed a checklist for determining the likelihood for finding soils with oxyaquic conditions in the upper part. I have even gone so far as to develop a draft indicator for soils with oxyaquic conditions in the upper part and have developed a key for use by Site Evaluators (septic system designers) to determine the seasonal groundwater table that includes indicators for oxyaquic soils. In addition to the importance of recognizing soils with oxyaquic conditions in the upper part for use and management, ACOE has indicated they may recognize them as being found in wetlands even though they technically are not hydric soils (which by definition must have anaerobic conditions during the growing season). As a result of the workshop held at Reid State Park last year, the New England Division of the ACOE has requested an official position and guidance by the ACOE hierarchy on the subject. If they are told to include soils with oxyaquic conditions in the upper part as wetland soils, criteria for identifying them will become very important to wetland scientists.

Stay tuned for more on the subject as it develops. You might want to plan a visit to Saddleback Mountain this September 1 for a workshop on problem soils and sites (see workshop description below).

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**Workshop Announcement: Cool Climate Soil, Hydrology & Site Evaluator Soil Pit Classification Saddleback Ski Resort Wednesday, September 1, 2010**

by Dave Rocque

The Maine Association of Professional Soil Scientists, in conjunction with the Maine Association of Wetland Scientists, the Maine Association of Site Evaluators, the Society of Soil Scientists of Northern New England and the Maine Forest Service is pleased to announce a workshop which focuses soil and hydrology conditions unique to the western Maine Mountains, northern Maine and some coastal areas. These areas have cooler and wetter climates than the central and southern parts of the state which affects soil development and hydrology conditions. The workshop includes a hands-on field

exercise as well as a group discussion at the conclusion of the field exercise.

The sites included in this workshop are commonly found in the western Maine Mountains. In the past, development in the mountains was limited to a few individual homes and ski resort areas. That is rapidly changing however due to the present interest in wind power farms. The political leaders of the State of Maine have expressed an interest in making Maine a leader in wind power generation which means a fast track for development up and on the mountains. In doing so, natural resource specialists and developers have encountered such features as groundwater seeps, oxyaquic soil conditions, underground streams and boulder fields that have upland plants growing in organic duff on top of the boulders but there is water standing or flowing between the boulders. The question is what are these areas? Are they protected natural resources? At a minimum, they are features that need to be recognized and identified in the field so that construction can take place that minimizes the alteration of the natural hydrology and results in appropriately built roads and infrastructure.

The workshop will feature 5 sites with 3 or 4 numbered soil pits per site for a total of 17 soil pits. Most of the sites will also include other flagged areas for participants to observe that have unique features such as stone filled subsurface drainage channels or boulder fields covered by organic duff that are forested. Some of the soil pits are located on long continuous slopes while others are located in between boulders in the boulder fields. All of the sites have soil pits located in wetter and drier areas. The soil pits have been monitored twice weekly by employees of the Saddleback Ski Lodge for 2 years so there will be good groundwater table data. Soils in the pits will be described by a team comprised of NRCS Resource Soil Scientists Dave Wilkinson and Greg Granger, State Soil Scientist, Dave Rocque, State Site Evaluator Doug Coombs and immediate past president of MAPSS Chris Dorion. The team will provide the closest match to a soil series (based on shallow hand dug soil pits), soil drainage class (this will include using the recently adopted oxyaquic conditions criteria), hydric determination (both New England Field Indicators and the National Indicators) and Subsurface Wastewater Disposal Rules Classification (using the newly developed key for determining the seasonal groundwater table for Site Evaluators).

Registration will be at the base lodge from 8:30 am to 9:00 am. Participants will be given a map showing the location of the sites they are to visit as well as other

handouts including a (draft) Check List for Oxyaquic Soils and a (draft) Key for Determining the Seasonal Groundwater Table for Site Evaluators. They will then be free to visit the 5 sites until 1:00 pm. Each of the sites will have a soil scientist or site evaluator stationed there to show you where the soil pits are and point out other areas flagged for making an observation. Participants are to make their own determinations regarding soil classifications and site classifications but can ask the site monitor technical questions.

After the conclusion of the field portion of the workshop, participants will gather at the base lodge for a power point presentation and discussion of each site. Leading the wetland identification discussion will be Paul Minkin, Senior Wetland Scientist with the Army Corps of Engineers Regional Office in Concord, Mass. He led the field testing of the Draft Interim Supplement throughout New England 2 years ago. Leading the discussion of the soil pits for Site Evaluator determinations will be Doug Coombs, State Site Evaluator. Also present will be Mike Mullen from MDEP, Scott Rollins from LURC, Mike Sheehan from ACOE and Dave Rocque who will MC and try to keep things moving along in a lively manner as well as lead the discussions of the soil pits. Lunch is on your own but there is a cafeteria in the base lodge which offers sandwiches and drinks along with snacks.

Expected outcomes of the workshop include clarification of how to classify some unique sites/areas/conditions found in the Western Maine Mountains and the identification of soils with oxyaquic conditions. This should prove helpful to anyone involved with all types of development in the Mountains and for forestry management and logging operations.

This workshop should have broad appeal to soil scientists, wetland scientists, site evaluators, code enforcement officers, planners, municipal officials, regulators, lake association members, foresters and the general public. You can participate at whatever level is appropriate for your background and knowledge (the experts at each transect site will provide the level of assistance you require).

It should be a fun and informative day for all at a very scenic location.

**REGISTRATION:**

Please log onto [www.mapss.org](http://www.mapss.org) or [mainewetlands.org](http://mainewetlands.org) for registration forms and additional information on this and other workshops.

<b>MAWS Financial Statement – FY 2009</b> (For period of January 22, 2009 to February 16, 2010)	
<i>Respectfully Submitted to MAWS Membership, 15 February 2010, Kathleen Miller, Treasurer</i>	
Balance 01/21/2009	<b>\$5,965.19</b>
Balance 02/16/2010	<b>\$6,628.59</b>
<b>INCOME</b>	
Membership Dues & Annual Meeting	\$5,380.00
Workshops Including February 2009 Vernal Pool, Delta Institute Grasses, & February 2010 Vernal Pool Workshop	\$3,705.00
<b>TOTAL INCOME:</b>	<b>\$9,085.00</b>
<b>EXPENDITURES</b>	
2009 Annual Meeting	\$3,071.08
Envirothon Grant	\$1,000.00
Student Research Grants	\$1,089.00
Workshop Expenses	\$2,398.32
P.O. Box Rental	\$72.00
Website Hosting (2 years)	276.40
Postage and Copying (includes <i>Obligate</i> )	\$310.85
Other (MAWS stickers)	203.95
<b>TOTAL EXPENDITURES:</b>	<b>\$8,421.60</b>



Make sure you log onto [www.mainewetlands.org](http://www.mainewetlands.org) and check your status on the MAWS email list. You can change your information, see archives of all emails sent to the list, sign up to receive emails as a digest, and sign up for MAWS subcommittee email lists.

Also – now you can:



# MAWS Annual Meeting Business Meeting Agenda

March 26, 2010

3:50 – 5:00 p.m.

*Attendees to the Business Meeting Will Receive 2 Additional CEU's from the NH Joint Board*

## 1. Executive Committee Reports and Updates.

2. **Election:** The following EC positions will be elected at the 2010 annual meeting. Nominations will also be accepted from the floor.

Position	Candidates*	Position	Candidates
Ethics Chairperson	Mark Goodwin	Program Chairperson	Sarah Watts
	Laura Lapierre		

\*Candidate bios are included below.

## 3. Update from the MAWS Certification Subcommittee.

## 4. Update from MAWS Vernal Pool SOP Working Group.

### MAWS EC 2010 Candidate Biographies

#### Mark Goodwin – Ethics

As a lifelong resident of Maine, I received a Bachelors of Science Degree in Resource Economics and Environmental Policy from the University of Maine in 1998. Currently, I am employed by Burns and McDonnell Engineering in Portland, Maine as an Environmental Manager. My primary interests in the environmental field include wetland ecology and environmental compliance. As such, I'm seeking the nomination for Ethics Chair in the interest of maintaining and protecting the state of Maine's wetlands.

#### Laura Lapierre –Ethics

Laura works for Normandeau Associates as a Wetland Scientist. Laura hopes to add her fresh perspective to the MAWS Executive Committee by running for the Ethics Chair. As Ethics Chair she would like to focus on increasing scholarship program outreach to expand the number of applicants. Laura is also interested in helping the Program Chair with tasks and sharing ideas for future workshops. In her two years at Normandeau she has been involved with delineations on wind projects, transmission lines, and small scale developments in Maine and New Hampshire. Laura graduated from McGill University in Montreal, QC, Canada, where she received a Master of Science degree in Biology upon completion of her thesis titled *Environmental niche partitioning among riparian sedges (Cyperaceae: Carex) in the St. Lawrence Valley, Quebec*. Laura received a Bachelor Degree in Environmental Biology from Unity College in Maine. Since becoming a MAWS member, Laura has volunteered at the 2009 wetland delineation,

identification, and site evaluator soil pit classification workshop and has helped Jennifer West with MAWS workshop registration. Previously she has volunteered for The Nature Conservancy, New England Wildflower Society, Manomet Center for Conservation Sciences, and Vermont State Parks.

#### Sarah Watts –Program

Sarah Watts is a wetland scientist with more than 12 years of professional experience in wetland ecology and management, water resources planning, and wetland restoration and mitigation planning. She completed her Master's degree in Environmental Management in 2000 at the Duke University Nicholas School of the Environment, with a concentration in Wetland Resource Ecology. Sarah has worked professionally in Maine since 2000, with Tetra Tech, Inc., formerly Northern Ecological Associates, and has been a MAWS member since 2002 (I think). Her work has included performing numerous wetland delineations; preparing environmental permitting packages to meet state and Federal jurisdictional requirements; performing habitat evaluations and wetland functional analyses; and, planning, designing, or monitoring wetland restoration projects. Sarah has participated in many of the workshops that MAWS has sponsored or organized, and is interested in throwing her own organizational talents into furthering MAWS' goal of educating and expanding its membership. She would welcome the opportunity to become a part of the Executive Committee in the Program Chair position, and become more involved in shaping the future direction of the organization. You can contact Sarah at [sarah.watts@tetrattech.com](mailto:sarah.watts@tetrattech.com)

**Maine Association of Wetland Scientists Winter Conference & Annual Meeting Agenda:**

**MAINE'S EVOLVING LANDSCAPE**

**Friday, March 26, 2010**

**Maple Hill Farm B&B, 11 Inn Road, Hallowell, ME**

The Maine Association of Wetland Scientists will be holding its annual meeting at Maple Hill Farm in Hallowell. For directions go to <http://www.maplebb.com/>. Registration for MAWS members is \$35 (not including annual dues); for non-members, \$40, and for students, \$20. Members, please take this opportunity to continue your support of MAWS by paying your annual dues. Please complete the attached registration form and return to MAWS no later than **March 19<sup>th</sup>**.

**AGENDA**

- 8:00 – 8:30     **Registration**
- 8:30 – 8:40     **Welcome, Introduction of Speakers**
- 8:40 – 9:40     **An Ecological Observatory in a Climate of Change: Bear Brook at 20 years.** Ivan Fernandez, University of Maine.
- 9:40 –10:20     **Fitness and Age Structure of Spotted Salamander Populations in Fishless Lakes, Fish-Containing Lakes, and Vernal Pools in Maine.** Amanda Shearin, University of Maine at Orono, 2009 MAWS Stipend winner.
- 10:20– 10:40    **Break**
- 10:40-11:10     **Assessing Ecosystem Functionality in a Restoring Salt Marsh using Arthropod Food Webs.** Abby Pearson, University of Southern Maine at, 2009 Stipend winner.
- 11:10-11:45     **DEP Regulatory Update,** Jim Cassida and Mike Mullen, Maine Department of Environmental Protection
- 11:45 – 12:45    **Lunch**
- 12:45 – 1:30     **Federal Updates on Wetland Delineation, Mitigation, and PGP.-** Ruth Ladd and Paul Minkin, New England District Corps of Engineers.
- 1:30 – 2:15**     **“Oxyaquic Soils - What Are They, Can They be a Wetland Indicator, Where Are They Found and How Do I Know When I am Looking at One”.** David Rocque, Maine State Soil Scientist.
- 2:15-2:30       **Break**
- 2:30-3:20       **The Maine Natural Resource Conservation Program: Maine’s In-Lieu Fee Compensation Program–** Alex Mas, Director of Strategic Partnerships, The Nature Conservancy.
- 3:20-3:50       **Is Myriophyllum heterophyllum a Threat to the Ecology of Maine's Aquatic Ecosystems?** Jacolyn Bailey, University of Maine, Orono, MAWS 2008 Stipend Winner.
- 3:50-5:00       **Annual meeting-** Executive Board and committees update, election, etc. Members attending the annual meeting will receive an additional 2CEU’s from the NH Joint Board.

If you have any questions, contact MAWS Program Chair, Jennifer West by e-mail [jwest@normandeau.com](mailto:jwest@normandeau.com).

**REGISTRATION FOR MAWS ANNUAL MEETING**

Please mail a copy of this registration form and payment to: MAWS c/o Kathleen Miller, Treasurer, 18 Mallard Drive, Gorham, ME 04038 (email: Kathleen.Miller@tetrattech.com)

Registration and check should be received no later than March 19, 2010. Make checks payable to MAWS.

Name: \_\_\_\_\_ Affiliation: \_\_\_\_\_

Address: \_\_\_\_\_ City/State: \_\_\_\_\_

Telephone: \_\_\_\_\_ email: \_\_\_\_\_

**Registration fee**, which includes food and facility charges:

MAWS member:	\$35***	_____
non-members:	\$40	_____
student:	\$20**	_____

\*\*\*2009 Dues must be paid in full to receive membership rate for this event.

Membership runs from January 1 to December 31.

\*\* Proof of student status must be provided with registration.

**Annual Dues:** Dues are reduced for active and affiliate members for 2010.

MAWS member:	\$10	_____
Affiliate:	\$10	_____
Student:	waived for 2010	_____

**Total Payment:** \_\_\_\_\_

The NH Joint Board has awarded **1 CEU** for Wetland Scientists and **1 CEU** for Soil Scientists for attendance at the conference. Members attending the annual meeting will receive an additional **2 CEU's**.

***Please indicate if you need a certificate of attendance: Yes No***

No Refunds for Individual Cancellations

## MAWS Visioning Survey 2010

**The Maine Association of Wetland Scientists Executive Committee is seeking feedback on what the membership is looking for MAWS to do/be as an organization.**

Please fill out this survey and submit at the Annual Meeting on March 27; or send to MAWS c/o Dale Knapp, Stantec, 30 Park Drive, Topsham, ME 04086; or email to lleclerc@boyleassociates.net

1. If you had to select one priority for MAWS within the next five years, what would it be?
  - a. Training/education for MAWS membership
  - b. Outreach to planning boards, CEOs, regarding wetlands regulations
  - c. Wetlands training/education for the public (schools, towns, fairs)
  - d. More regulatory agency, Maine lawmaker interface, regarding wetlands issues
  - e. Other \_\_\_\_\_
2. What are other major areas that you would like to see MAWS focus on in the next five years?
3. Are we meeting the objectives set forth in our governing documents?
4. What do you think is the most valuable aspect of MAWS?

### **Membership –**

5. Do you have ideas for increasing MAWS membership? If so, what are they?

6. What groups or subsets of people are not members of MAWS now but are ones you would like to see become involved in the organization?
7. If you know wetlands professionals working in Maine that do not participate in MAWS, which statement below best describes the reason why?
  - a. Philosophical differences
  - b. Cost of membership
  - c. Perceives MAWS as unwelcoming to new people and new ideas
  - d. Other \_\_\_\_\_
8. Do you currently receive the email directed to the membership en masse?  
Yes          No  
If not, why? \_\_\_\_\_
9. How do you think the process of membership renewal and dues payment can be improved?

### **Awareness –**

10. Do you support increasing the visibility of MAWS in the arena of public awareness?

11. Do you think the role of wetland scientist/environmental consultant is diminished or delegitimized during project planning? If so how can that be changed?

12. Has it been your experience that Maine's wetlands regulations are being interpreted correctly and followed consistently throughout the State?

Yes No

If not, why?\_\_\_\_\_.

**Workshops –**

13. Would you like MAWS to offer more seminars/workshops? Yes No

14. What is a topic you would like to see covered in a MAWS workshop?

15. Traditionally MAWS has kept workshop fees low by using volunteers from MAWS, MAPSS and Universities. Are you willing to pay more for a workshop/seminar from a presenter that has authored a field guide or book and charges a fee? Yes No Comment:

16. Does your company reimburse you for workshop attendance?

Yes No Self-Employed Other \_\_\_\_\_

17. What is the maximum amount that you or your company would be willing to pay for a half day session (assuming 1 CEU is issued)?

\$30 \$50 \$75 Other \_\_\_\_\_

18. What is the maximum amount that you or your company would be willing for a full day workshop (assuming >1 CEUs are issued)?

\$30 \$50 \$75 \$100 other\_\_\_\_\_

**Education –**

19. Do you think a primary goal of MAWS should be to focus on education of the general public, planning boards and CEO's regarding wetland regulations?

20. Are you interested in MAWS participating in elementary and high-school education about wetlands?

Yes No

**Value –**

21. How can the MAWS website, email list and Facebook presence be more useful for you?

In closing, we would like MAWS to be a valuable organization for you to participate in and be a part of. So one final question:

22. What kind of job do you think MAWS is doing and how can our performance be improved?

