



The Obligate

Maine
Association of
Wetland
Scientists
www.maws.me

c/o Lauren Leclerc, TRC
14 Gabriel Drive, Augusta, ME
04330



President's Message *Danielle Tetreau*

I want to thank you all. I appreciate the value we place on wetlands and in wetland science. I feel secure and validated because our resources are more valued and protected than in other places. I appreciate that our state regulatory agencies will remain to protect resources, if or when federal definitions and protections change. I appreciate the time and effort that you all put in to this organization by attending our workshops and meetings, or by sharing interesting trainings or information on our Facebook page. I sincerely appreciate the work that everyone on the Executive Committee (EC) does to move the group along each year.

We've had a relatively quiet year, our biggest accomplishments were coordinating the workshop with the Maine Department of Environmental Protection (MDEP or Department) that Matt Kennedy presents later in this issue, and working as part of MDEP's stakeholder group to update the Chapter 310 language that Roger St. Amand and Dale Knapp discuss later in this issue. We are monitoring the proposed changes to the Waters of the United States (WOTUS) definition and rule and are preparing comments to submit to the Environmental Protection Agency (EPA) when it is released in the Federal Register. As an EC, we've worked since June to find candidates for the upcoming openings on the EC and brainstorm the theme and speakers for the conference and potential workshops.

You'll see in the elections section that Lee Burman whose term as Treasurer is expiring this year, was nominated for President-Elect. At this point, we still have an opening for Treasurer. I'm sure Lee would be happy to describe the time commitment and involvement as Treasurer if you're curious what it entails. You can let us know if you're interested, and maybe we'll recruit you at the meeting. The terms for the EC are two years, which

includes the Treasurer; and individuals cannot serve more than 2 terms in that position.

I encourage anyone who is interested in serving on the EC to get in touch with us. Or let us know if you would like to nominate someone for a leadership position. We respect people's time and commitments to their work and home life, so we keep our meetings to a minimum, both with frequency and time. We try to make the meetings in a central location to all the EC members and provide call-in opportunities if you can't make it in person. It's a good resume booster, a great way to work with colleagues across a variety of wetlands-related professions, and good exposure to the membership. I think I recognize more of your names than I do your faces!

I leave you all in Bryan Emerson's capable hands, leading the group for the next two years. I will fade quietly into the membership after 11 years of involvement. I look forward to where the new perspectives take the group in the future. Thank you for sticking with us. Let us know any time if you have ideas or opportunities for the group.

If anyone would like to be part of the MAWS executive or other committees please contact Bryan Emerson (bryan.emerson@tnc.org or (207) 607-4821) or any member of the EC.



President's Elect's Message *Bryan Emerson*

Greetings MAWS Members,

Wow, two years goes by fast. My time as President-Elect really seems to have flown by. I am excited to start my term as President, and I hope I can bring the same level of dedication, experience, and professionalism as our past presidents. I am stepping into a long line of huge shoes, and I hope I can fill them sufficiently and keep MAWS going strong. First and foremost, I'd like to say a hearty "Thank You!" to Danielle Tetreau for her two years as President. It has been a pleasure to work with her these two years (especially since we don't actually work together day-to-day anymore) and I hope that she will stay involved with the organization and continue to offer her insight and expertise. As for me, as some of you may know, I recently left the consulting field and took a position at The Nature Conservancy. This has been a big change for me professionally, but one that I think will help me bring a different perspective to MAWS. I still get to delineate wetlands now and again, and I even get to do some vernal pool surveys, but I am looking at wetland science through a slightly different lens now. But don't worry, you can take the man out of consulting, but you can't take the consultant out of the man. Or something like that. Over a decade of consulting experience here in Maine won't immediately leave my brain (right?), and I'm hopeful that this change for me will be beneficial to MAWS and help us all look at issues from multiple angles and through multiple lenses.

Now it's time for me to look forward and think about the next two years (that is what the MAWS Constitution says I should do in this article, after all). There have been a lot of reasons lately to be pessimistic about the future, but I am oddly optimistic when I look forward. Maybe that's naïve, maybe it's just plain foolish, but maybe a little

optimism is just what we need right now. For those who know me well, you might not think optimism comes easily to me. And you'd be right. But still, there is hope out there. For one, I am optimistic about the new state administration, for a lot of reasons, but mostly because it will give MAWS new opportunities to engage again at the legislative level and re-establish ourselves as a voice of sound science in Augusta. I am also optimistic about the young people of this world. Students today are thinking big, they know the problems we are facing, and they aren't afraid to tackle them. We, as an organization, need to tap into the youth in our community, support them in their efforts, and let them support us with our organization's goals. They are the future, after all.

Let's talk more about goals. My number one goal in these next two years will be to establish a wetland scientist certification program in Maine. Ha! Just kidding, don't worry, I'm not that optimistic. One real goal I do have, though, is to expand and enhance our relationships with our friends in other similar organizations: Maine Association of Professional Soil Scientists (MAPSS), Maine Association of Site Evaluators (MASE), New Hampshire Association of Natural Resource Scientists (NHANRS), Association of Massachusetts Wetland Scientists (AMWS), Society of Wetland Scientists (SWS), just to name a few. I think there are countless opportunities to team up with these organizations to offer more comprehensive trainings and workshops. We can learn a lot from, and teach a lot to, these other organizations.

Increasing membership is always a goal of an incoming President, and I will be no different in that respect. I think we can make our organization attractive to a more diverse group of professionals in the state. I'd also like to expand our educational opportunities. Can we offer more workshops (perhaps in combination with other organizations,



as mentioned above)? Can we expand our workshops to a wider audience, beyond just our membership? Can we engage with students in the schools and teach our youth the wonders of wetland science? These are questions I'd like to explore in the next couple years.

And finally, next year will mark the 30th anniversary of MAWS. Thirty years since that dedicated group of scientists decided to create an organization "that promotes the profession and understanding of wetland science in Maine." We need to recognize and honor that milestone. Expect big things, HUGE things.

I'm quite sure these next two years will go by just as fast as the last two, but if I can function in this role half as well as those who have come before me, I'll be doing alright. Fortunately, I've got a stellar group of fellow Executive Committee members to guide me along. I'm looking forward to getting started.

Thanks for reading.

Report of the Webmaster – Communications Subcommittee *Dave Brenneman*

The MAWS webpage continues to be available for members at <http://www.maws.me>. Highlights of the webpage include the jobs board and upcoming seminars and conferences listings. To add listings

for either, send me an email at maws.webmaster@gmail.com. Additionally, you can find contact information for the Executive Committee, download past editions of *The Obligate* and participate in vernal pool phenology reporting each spring. Also, sign up and payment for MAWS sponsored events and annual dues payment are available through the MAWS "store."

In addition to the above, I have added a new listing of environmental professionals to the site. Interested members are able to add their name to the list when they pay their dues. To be included on the list, your annual dues must be paid in full. Development of this list is in response to continuing requests from state agencies, non-profit organizations, land trusts, etc., for a list of professionals with qualifications in the field of environmental science and consulting.

Other outreach opportunities for the membership include our Facebook page (<https://www.facebook.com/groups/mainewetlands/>) and e-mail list (<https://groups.google.com/forum/#!forum/maws-members>). The Facebook page is a great way to interact with fellow wetland scientists. Like our page if you haven't already. The e-mail list is the primary way the Executive Committee reaches the membership. Folks interested in signing up for the e-mail list can submit a request through either website or email me at the address above.

Table of Executive and Standing Committee Members

Danielle Tetreau	President (2019)	danielle.tetreau@gmail.com
Bryan Emerson	President-elect (2019)	bryan.emerson@tnc.org
Aleita (Lee) Burman	Treasurer (2019)	lblurman@gmail.com
Audie Arbo	Secretary (2020)	audie.arbo@maine.gov
Matt Kennedy	Program Chair (2020)	mkennedy@boyleassociates.net
Dale Knapp	Legislative Chair (2019)	dknapp@boyleassociates.net
David Brenneman	Membership Chair (2020)	dbrenneman@trcsolutions.com
Kevin Ryan	Ethics Chair (2019)	kevinr@fbenvironmental.com
Dave Brenneman	Webmaster – Communications Subcommittee	dbrenneman@trcsolutions.com
Lauren Leclerc	Obligate	lleclerc@trcsolutions.com
Roger St. Amand	Vernal Pool Technical Committee	roger.stamand@gmail.com

(year term expires)

MAWS Technical and Legislative Committees Joint Update Roger St. Amand and Dale Knapp

The MAWS Technical Committee (TC) joined forces with the Legislative Committee (LC) to continue moving forward on two ongoing projects in 2018. The substantive efforts were related to rulemaking with the MDEP Chapter 310 Rule edits and clarifications, and reviewing and providing comments on the MDEP Stream Guide that came out this past year. These efforts included significant time in providing comments to the agency, participating in working sessions, providing testimony, and communicating changes and progress to the MAWS membership.

The 2018 TC committee members (Aleita Burman, Roger St. Amand (TC Chair), Richard Jordan, Rodney Kelshaw, Dale Knapp (LC Chair), Lauren Leclerc, Kathleen Miller, Heather Storlazzi Ward and MAWS President Danielle Tetreau) continued working directly with the MDEP to further the much needed changes to Chapter 310. The MAWS TC and LC participated in stake holder meetings and attended public hearings with MDEP on the proposed rulemaking.

To recap, the TC and LC has been working since 2016 on accomplishing important language clarifications needed in Chapter 310: Wetland and Waterbodies Protection Rules regarding Wetlands of Special Significance (WOSS) definitions. The 310 changes requested in 2017 by MAWS through Routine Technical Rulemaking sought to clarify the language in four of the characteristics under Section 310.4.A.(1)-(8) that describes a WOSS. The proposed revisions focused on the word “contains” to a more practical, field-verifiable definition that limited the characteristic to 250 feet from the WOSS feature, language already used on other areas, such as 310.4.A.(4): Location near GPA great pond. Other proposed edits included clarifications to the definitions for *peatlands* and *emergent marsh vegetation*. Late in 2017, the Department formally denied the petition, but felt the changes had merit and continued the process of Routine Technical Rulemaking to address these issues. The LC and TC participated in stakeholder meetings and ongoing collaboration with MDEP, the Maine Department of Inland Fisheries and Wildlife (MDIF&W), and other interested groups on the changes. A concern surfaced that the proposed revision to 4.A. could lead to a loss of oversight beyond 250 feet on these important wetlands. In May of 2018, the Department issued for public comment the Draft 310 Rules. A notable

change was the addition of language that would allow the Department to extend WOSS jurisdiction if the activity may have adverse impacts. See the last sentence in (5) excerpted from the June draft:

(5) Aquatic vegetation, emergent marsh vegetation or open water. The freshwater wetland contains is within a wetland that under normal circumstances consists of at least 20,000 square feet of aquatic vegetation, emergent marsh vegetation and/or open water, or is contiguous freshwater wetland within 250 feet of the 20,000 square foot or more area described herein, unless the 20,000 or more square foot wetland area is the result of an artificial ponds or impoundment. The Department may extend the boundary of the Wetlands of Special Significance beyond the 250 foot area when it is determined that the proposed activity may unreasonably adversely affect the functions and values of the aquatic vegetation, emergent marsh vegetation, or open water wetland area.

Several members from the MAWS TC and LC attended the public hearing on June 19th and provided comments. After weighing comments, the Department ultimately decided to keep the original language in Section 4.A and abandoned the proposed clarifications to WOSS. This issue of interpretation regarding a wetland that “contains” still exists within the rule and despite strong reasoning behind our proposed changes, we believe the stakeholder group that was formed lacked the background to fully comprehend the issue and unfortunately viewed this as a roll-back of wetland protections. If this effort is to succeed, we will need to gain more political allies, as this turned out to be a process more related to politics than the practical application and interpretation of the rules. The *peatland* and *emergent marsh vegetation* definitions were updated in the revised Rules and do provide additional clarification. These were welcome changes to see made, but certainly not controversial. Please be sure to visit the Department website and get the updated 310 Rules. Information on updated rule can be found here: <https://www.maine.gov/dep/land/rules/index.html>

The TC also worked with the LC to review and provide comments on the MDEP Draft Natural Resources Protection Act (NRPA) Identification Guide for Rivers, Streams and Brooks. The TC & LC began working on this issue in 2016 with a goal of developing a field protocol similar to the Vernal Pool Survey Protocol. After several meetings and discussions with the Department in 2016 and 2017, the MDEP ultimately decided a guide should be developed in-house. The Department draft was released for public comment early in 2018. The LC and TC provided comments to the draft guide in May of 2018. A final guide was published in August and can be found here: <https://www.maine.gov/dep/land/nrpa/documents/NRPA%20Streams%20FINAL.pdf>



We are both of the opinion that the efforts of the Department show a move in the right direction to provide improved consistency, though this Identification Guide fell short of our original goal to provide a field verifiable protocol to make jurisdictional stream determinations more standardized. The movement of this guide appears to diverge from the rules as defined in the NRPA and there exists the potential to exacerbate some of the inconsistencies in stream determinations we originally sought to address. The macroinvertebrate section in the guide is helpful. Time will tell and if needed we can once again wade into the waters of requesting rule changes.

These two issues were the focus of the TC & LC work over the last few years and are now wrapped up. As Chair of the TC, I would ask the membership to consider whether this Committee should continue on now that it has fulfilled its duties as charged. If anyone has any specific questions or comments, please connect with either one of us at the annual meeting or by email at: roger@arc-env.com or dknapp@boyleassociates.net

Ethics Update Kevin Ryan

In 2018, MAWS awarded \$1,000 research stipends to Andrew Paine and Charlotte Nash. Both Andrew and Charlotte will be presenting their research at this year's MAWS Annual Membership Meeting on March 14.

Andrew is working towards his Master's Degree in the Department of Natural Resources and the Environment at the University of New Hampshire. His research deals with the effects of sea level rise on salt marsh elevation dynamics. Charlotte is an undergraduate student at Bowdoin College. Her research examines the impacts of tidal restoration on community structure, carbon sequestration potential, and common reed (*Phragmites australis*) invasion in a tidal marsh.

Andrew recently submitted to MAWS the following regarding his research and stipend award:

Salt marshes are coastal wetlands that are periodically flooded with the tides, which requires the plants that live there to tolerate stresses such as high salinity and waterlogged soils. Besides being beautiful ecosystems,



marshes are valued for their ability to limit coastal flooding, improve water quality, and store carbon underground that would otherwise contribute to global warming. Unfortunately, rising sea levels may drown plants and cause marshes to convert to mud flat. Historically, marshes have been able to avoid drowning by building in elevation at a rate similar to that of sea level rise through accumulation of sediment and plant material. As the rate of sea level rise increases, many marshes are no longer keeping up.

*For my research, I set out to answer two main questions: (1) are salt marshes in the Great Bay Estuary building up fast enough to keep pace with sea level rise and (2) how will increased flooding from sea level rise affect the growth of saltmarsh hay (*Spartina patens*) and smooth cordgrass (*Spartina alterniflora*), the two dominant marsh grasses. To determine how fast our marshes were building in elevation, devices that measure relative change in elevation over time, called surface elevation tables (SETs), were previously installed in the marshes. SET measurements revealed that marsh growth was lagging behind the rate of sea level rise by about 2 mm per year, suggesting that plants will experience more flooding as sea level rises. To determine how flooding affects plant growth, I installed pots at different elevations in the marsh. I found that plants at lower elevations (that experience more flooding) don't*



grow as well as plants at upper elevations. My findings suggest that marshes in the Great Bay are not keeping pace with sea level rise and plants will likely contribute less to marsh elevation growth as flooding rates increase.

I would like to thank MAWS for their generous support of this project. The stipend helped me pay for undergraduate assistance and transportation to sites. I hope that my research will help guide decision makers and perhaps entice them to limit impacts of sea level rise by protecting land around salt marshes, allowing for migration inland as sea level rises. I look forward to presenting my full results at the MAWS conference in March

Charlotte submitted to MAWS the following regarding her research and stipend award:

Coastal Maine salt marshes are vibrant ecosystems that serve as habitat and nursery for commercial fish, shell-fish and bait fish, as well as a diverse community of birds. These tidal marshes also provide vital ecosystem services to humans such as flood reduction, improved water quality and carbon sequestration. Salt marshes have one of the highest ecosystem rates of carbon sequestration due to high primary productivity of vascular plants, slow decomposition in anaerobic soils, and vertical accretion of soils due to tides.

However, an estimated twenty percent of Maine salt marshes have reduced tidal flooding. Tidal restrictions across marshes, such as roads and narrow culverts, cause changes to marsh hydrology, so that soil accretion patterns are altered. As well, without tidal influence marsh salinity drops, which alters the composition of microbes to those that release methane and carbon dioxide emissions. These emissions should correlate with a decrease in carbon ground storage.

My research focused on searching for a decrease in carbon sequestration in salt marsh soils above and below tidal restrictions. While there has been research on emissions in tidally restricted marshes, I wanted to see if an impact could also be seen belowground. Through the MAWS stipend, I was able to purchase materials to run the soil samples at various depths through a CHN analyzer. I am so grateful for this opportunity from MAWS and look forward to the presentations in March.

Membership Update *David Brenneman*

It has been a fun and humbling experience to join the ranks of the EC and serve as Membership Chair for my first year. I am taking the reins from former Chair, Katelin Nickerson, who did a wonderful job and served MAWS for the past six years. Thanks to Katelin for her dedication to spreading the membership joys of MAWS!

In 2018 we added seven new members as follows:

Name	Status
Chad Flinkstrom	Active
Chris Coppi	Active
Jason Patterson	Affiliate
Joe Roy	Affiliate
Matt Dorman	Affiliate
Sam Hayden	Active
Vannesa O' Donnell	Affiliate

Please join me in welcoming these folks to MAWS!

Seven new members put us a little behind past years, so I'm planning to do a better job of recruiting new members in 2019 and setting a goal of 15 new members by this time next year. Currently the organization has a total membership of 114, which breaks down to 88 active and 26 affiliate. Please contact me at dbrenneman@trcsolutions.com if you or anyone you know would like to become a member of MAWS. We have continued to keep the annual dues low to encourage people to join and offer a great value. Membership entitles you to reduced rates at events, which easily "pays" the annual dues fee and then some. Annual dues for 2019 remain at the same price as past years:

Active Membership - \$25.00 annually
Affiliate Membership - \$15.00 annually
Student Membership - \$10.00 annually

Dues can be paid online or by mail and instructions are available at <http://www.maws.me/store/annual-membership-dues>. Paying your annual dues at the same time you register for the annual meeting is appreciated!

Cheers! I hope everyone has a successful 2019!



Program Chair Update *Matt Kennedy*

Hello MAWS members!

It has been a pleasure to serve on the Executive Committee as the Program Chair for the past year! I want to thank the previous Program Chair, Sarah Watts, for providing me with lots of wisdom and guidance in order to make my transition into this Executive Committee position as smooth as possible.

As most of you know, in only a matter of weeks it will be time for the MAWS Winter Conference and Annual Meeting! We will be returning to our traditional locale on Thursday, March 14, 2019, in Thorne Hall at Bowdoin College in Brunswick, Maine. The theme for this year's conference is Maine's Wetland and Land Use History. Our outgoing President, Danielle Tetreau, will lead us through the agenda. To start us off, Mark Stebbins, the Land Division Director for the Bureau of Land Resources at MDEP, and Jay Clement of the U.S. Army Corps of Engineers (USACE) New England District, will provide us with regulatory updates. They will be followed by Barry Dana, Former Chief of the Penobscot Nation, to discuss the past and present connections between Native Americans and wetland environments. Theresa Kerchner, Executive Director of the Kennebec Land Trust, will then discuss the history of wetlands in relation to 19th century farming in Maine. This will transition nicely into a presentation by Matt Arsenaault, an Ecologist with Stantec Consulting, regarding the identification of grass species. Before our lunch break, we'll hear from our two student stipend winners, Andrew Payne (University of New Hampshire) and Charlotte Nash (Bowdoin College), about their research.

After lunch, Jim Gove, President of Gove Environmental Services, Inc., will discuss the history of hydric soils in the northeastern United States and walk us through several case studies of how wetlands were historically altered. The agenda for rest of the conference is still under development but as soon as it is finalized, I will update the membership on what is in store for the second half of the day. Regardless, after the conference, we'll hold the Annual Business Meeting, which ALL members are encouraged to attend. More than likely, this will be

followed by a casual gathering at a local establishment in downtown Brunswick. I strongly encourage all of the newer members to attend the Annual Business Meeting and the post-event gathering as it not only provides a way to participate in the inner workings of MAWS, but also is a great way to get to know the other awesome and active members of MAWS!

As usual, we are seeking approval for Continuing Education Units (CEUs) for the MAWS Winter Conference and Annual Meeting from the State Site Evaluator for the Subsurface Wastewater Program and the Maine Department of Economic and Community Development Code Enforcement Officers (CEO) Program. We'll be providing Certificates of Attendance for this event. We will also be providing a limited number of handouts (PowerPoint notes pages) of the speaker presentations again this year; come early to make sure you get a copy!

We are keeping the registration fee structure consistent with the last few years: registration is \$45 for MAWS members (not including annual dues); \$60 for non-members, and \$20 for students. For payment received AFTER March 4, 2018 (10 days prior to the event), including payment at the door, add \$10: \$55 for MAWS members, \$70 for non-members. Student registration will remain \$20. We look forward to seeing you there!

Since last year's Annual Meeting, MAWS hosted a workshop at Viles Arboretum in December 2018 to review MDEP's finalized NRPA Identification Guide for Rivers, Streams, and Brooks. MDEP Biologist and author of the guide, Tom Danielson, led us through a presentation that focused on the science and biology of the guide, while Dawn Hollowell, Regional Licensing & Compliance Manager at MDEP, provided a policy perspective. I want to thank Tom and Dawn for leading the workshop along with all of the MAWS members who attended and participated in the discussion.

Looking ahead, one of my goals is to gather more feedback from the MAWS membership about what you all would appreciate seeing MAWS focus its efforts on in terms of workshop and social event organizations. Therefore, at this year's winter conference, I will be



handing out a short anonymous survey that I graciously ask that you fill out completely and honestly. Hopefully, this survey will allow MAWS to better serve the wetland scientist community of Maine. I'll end by stating the obvious, if you have any ideas for upcoming MAWS workshops or social events, please do not hesitate to reach out me! See you all in Brunswick!

If anyone has a workshop idea or would like to assist in organizing workshops and activities for MAWS, please contact Program Chair, Matt Kennedy (mkennedy@boyleassociates.net).

Another Soil and Natural Resources Workshop at Reid State Park David Rocque

Save the date: *Wednesday, September 4, 2019.*

I have been talked into organizing another soils and natural resources workshop and have chosen Reid State Park for a couple of reasons. First, it is centrally located and one of my favorite places. And, second, I think it will be interesting to revisit some of the sites used 10 years ago when we first held a workshop there to see if there have been any changes in interpretations.

One of the sites, where I was stationed 10 years ago, I believed had oxygenated groundwater, accounting for the lack of redoximorphic features even though most of the soil pits in the transect had a groundwater table at or near the surface most of the year. Shortly after the last workshop, I installed Iris Tubes by the soil pits to make a more positive determination and the tubes are still there for you to see the result.

As in the past, I will include soil pit evaluations for septic systems, soil series determinations, hydric soil determinations and, new this year, Ksat determinations for Hydrologic Soil Group assignments. Also included will be vernal pool evaluations, wetland determinations, vegetated buffer stormwater treatment evaluations, stream determinations and where to begin measuring for setbacks in the shoreland zone. There will be a couple of soil pits in a back-sand dune. As you know, it is very challenging to make hydric soil determinations in sandy soils.

I will be assembling an all-star team of experts to classify any new soil pits excavated for the workshop and USACE, MDEP, Land Use Planning Commission (LUPC), and Department of Health and Human Services (DHHS) will all be involved to make determinations and then explain them to workshop participants during the discussion session at the waterfront pavilion. As usual, the workshop is being sponsored by MAPSS, MASE and MAWS. Should be a fun, entertaining and educational time for all.



Maine Association of Wetland Scientists Annual Business Meeting

Minutes of Meeting

Subject: Maine Association of Wetland Scientists (MAWS) Annual Business Meeting

Date: March 22, 2018

Time: 4:03 PM – 4:58 PM

Location: Thorne Hall, Bowdoin College, Brunswick, Maine

Attendees: MAWS Membership and Executive Committee

Danielle Tetreau called the annual business meeting to order at 4:03 pm. From Danielle Tetreau: Thank you, I'm happy to be here to conduct the meeting. Thanks Brad for last year.

Executive Committee

Secretary Report (Audie)- Minutes from last year's meeting are in the Obligate. Katelin- motion to accept the minutes as in Obligate- seconded, motion passed.

Program Chair (Sarah)- This last year was not a particularly active year for workshops. Danielle thanked Sarah for her good work these past years as Program Chair. Workshop suggestions from the group: Audie- MDEP/Tom Danielson stream guidance; Sarah- Ruth Ladd Stream In-Lieu Fee; and Katelin- Stormwater, AMWS combined workshop.

Legislative Chair Report (Rod)- Waters of the U.S.- Clean Water Rule possible changes. Maine NRPA- WOSS definition changes.

Treasurer Report (Lauren for Lee)- Page 12 of the Obligate- \$780 increase with a balance of \$10,757. Motion to accept report as in Obligate. Treasurer's report motion passed. Question was asked if there was any way to make money from our accounts? Not really was the answer.

Membership Report (Katelin)- Two new members were added in 2017 and three new members were added in 2018. ~One hundred thirty "active" members- list needs to be gone through and any members who haven't paid in five years will be moved to the "former" list. Lauren- Suggestion to have the first year of membership free. Membership list on website will be created. Chris Dorion- MAPS uses check in at annual meeting for



confirmation. Tim- How about sending email that says we are posting emails and if they want to change/remove contact membership chair.

Ethics (Kevin)- We had two very strong presentations this year. Three candidates submitted applications this year. Two were funded in the amount of \$1,000. EC needs to vote. Danielle motioned we change the name of the stipend to “Norman C. Famous Wetland Research Stipend” Seconded- passed unanimously.

Standing Committee Report

Education: Not discussed.

Vernal Pool Technical Committee/WOSS (Roger)- See the Obligate update article.

Outreach Committee (Dave)- Website largely unchanged-will be working with Katelin to get professional directory up- continue to use Facebook and other social media to reach membership. Vernal pool reporting for FB/Website will continue- is there any way to send connect AMWS group vernal pool reports? Working towards replacing webmaster with a real webmaster. LinkedIn- we have one but nothing happens.

Research Subcommittee Chair: Highlighting wetland research- any way to get collaboration with either New England groups? Need to form a committee and need a chair – Rich Jordan.

Open Committees:

Secretary: Audie Arbo

Program Chair: Matt Kennedy

Membership Chair: Dave Brenneman

Research Subcommittee Chair: Rich Jordan

Motion to approve all open committee positions (the slate). Motion passed unanimously.

Envirothon was awarded \$1,050 last year. Motion for \$1,500 for Envirothon for 2018. Seconded-motion passed unanimously.

Open Floor:

Motion for 2019- \$2,000 Norman C. Famous Research Stipend- seconded, unanimously passed.

Respectfully submitted by:

Audie Arbo

MAWS Secretary

2/12/2019



MAWS Financial Statement - 2018	
From January 01, 2018 - December 31, 2018	
Respectfully Submitted to the MAWS Membership, February 11, 2019, by Aleita Burman, Treasurer	
Beginning Balance 01/01/18	\$ 10,757.94
Ending Balance 12/31/18	\$ 8,921.77
2018 LOSS	-\$1,836.17
INCOME	
1 Annual Meeting (Bowdoin College - March 22, 2018)	\$ 4,264.82
2 Membership Dues	\$ 1,478.71
3 MAWS Merchandise	\$ 24.31
(A) TOTAL INCOME	\$ 5,767.84
EXPENDITURES	
1 Annual Meeting (Bowdoin College - March 22, 2108)	\$ 3,278.92
2 MAWS Stream Workshop (Viles Arboretum - November 30, 2018)	\$ 293.93
3 Envirothon Grant	\$ 1,500.00
4 Student Research Stipend Awards (2)	\$ 2,000.00
5 MISN Workshop Donation	\$ 250.00
6 Bank Fees, Stripe & Squarespace Fees, Sec State Filing, Misc.	\$ 281.16
(B) TOTAL EXPENDITURES	\$ 7,604.01
2018 LOSS (A-B)	-\$1,836.17
GAIN / LOSS	
1 Annual Meeting	\$ 985.90
2 Membership Dues	\$ 1,478.71
3 MAWS Merchandise	\$ 24.31
4 Workshops	\$ 293.93
5 Envirothon Grant / Student Stipends / MISN Donation	\$ 3,750.00
6 Other Expenses	\$ 281.16
2018 LOSS	-\$1,836.17



MAWS Business Meeting Agenda 2019 Annual Meeting - March 14

1. President's Introduction and Update – Danielle Tetreau
2. Executive & Standing Committee Updates
 Secretary Update (approval of minutes from 2018 annual meeting) – Audie Arbo
 Program Chair Update – Matt Kennedy
 Legislative Chair Update – Dale Knapp
 Treasurer Update – Lee Burman
 Membership Chair Update – Dave Brenneman
 Ethics Chair Update – Kevin Ryan
 Ad-hoc Subcommittees:
 Education/Student Outreach Committee – Lee Burman
 Vernal Pool Technical Committee – Roger St. Amand
 Outreach Committee (maws.me & Obligate) – Lauren Leclerc

3. Executive Committee Elections (*2-year terms*)

Open Committee Chair Position	Nominees (<i>nominations will also be accepted from the floor</i>):
President-elect	Aleita (Lee) Burman
Treasurer	
Legislative Chair	Dale Knapp (<i>incumbent</i>), Rich Jordan
Ethics Chair	Kevin Ryan (<i>incumbent</i>)

4. Norman C. Famous Wetland Research Stipend Discussion and Award Vote
5. Envirothon Donation - Discussion and Award Vote
6. MAWS – AMWS collaboration for 2020 Northeast Natural History Conference symposium
7. Open Floor Discussion
8. President's Closing Message, Meeting Adjourns



**Maine Association of Wetland Scientists
Winter Conference & Annual Meeting
Thursday, March 14, 2019
Thorne Hall (Bldg 67), Bowdoin College, Brunswick, ME**

**Maine's Wetland and Land Use History
DRAFT AGENDA**

- 7:45 – 8:25 **Registration**
- 8:25 – 8:30 **Welcome, Introduction of Speakers**, Danielle Tetreau, MAWS President
- 8:30 – 8:55 **MDEP Regulatory Updates**, Mark Stebbins, Land Division Director, Bureau of Land Resources, Maine Department of Environmental Protection (25 min)
- 8:55 – 9:20 **USACE Regulatory Update**, Jay Clement, U.S. Army Corps of Engineers New England District (25 min)
- 9:20 – 10:00 **[Title TBD on Native American Past and Present Connections to Wetlands]**, Barry Dana, Former Chief, Penobscot Nation (40 min)
- 10:00 – 10:20 **Wetlands and 19th Century Farming in Maine: Ditching the Meadows, Muck, Peat, and Meadow Hay**, Theresa Kerchner, Executive Director, Kennebec Land Trust (20 min)
- 10:20 – 10:40 **Break**
- 10:40 – 11:20 **Grasses of Maine: Why we love them, why we hate them, why we need them**, Matt Arsenault, Ecologist, Stantec Consulting (40 min)
- 11:20 – 11:40 **Potential Effects of Sea-Level Rise on Salt Marsh Elevation Dynamics in a New Hampshire Estuary**, Andre Payne, MSc Natural Resources and the Environment, University of New Hampshire – MAWS Stipend Winner (20 min)
- 11:40 – 12:00 **Tidal Restriction Impacts on Salt Marsh Carbon Sequestration**, Charlotte Nash, B.S. Environmental Studies, Bowdoin College – MAWS Stipend Winner (20 min)
- 12:00 – 1:00 **Lunch Break**
- 1:00 – 1:10 **Envirothon Plug**, Dale Finseth, Kennebec Soil and Water Conservation District (10 min)
- 1:10 – 1:40 **An Overview of the History of Hydric Soils in the US, with Emphasis on the Northeast**, Jim Gove, President, Gove Environmental Services, Inc. (30 min)
- 1:40 – 3:00 ****This portion of the agenda remains tentative. MAWS will update the membership as soon it is finalized! ****
- 3:00 – 3:15 **Break**
- 3:15 – 4:00 **Annual Business Meeting**

We will provide Certificates of Attendance for attendees at the conference for 5.5 hours of contact time and 0.75 hour for the annual business meeting.

**Maine Association of Wetland Scientists
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Maine's Wetland and Land Use History

➔ **Register** online at: <http://mainewetlands.org/store/>

For those that prefer, you may register on line, and send payment to:
Aleita Burman, MAWS Treasurer, P.O. Box 145, Orrington, ME 04474

Any questions, please feel free to call or email Matt Kennedy,
MAWS Program Chair, Phone: (978)-578-6801, Email: mkennedy@boyleassociates.net

Registration should be received by March 4, 2019

No Refunds for Cancellations

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