



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*

Dear MAWS Members,

I'm sitting at my desk wondering how to appropriately sum up 2017. Much of our time included developing clarifying language for wetlands of special significance (WOSS), which we'll discuss at the annual meeting and you can read about in the Legislative and Technical Committee updates. It has been a productive process thanks to Roger, Lee, and Dale's attention. You'll read all about it in the following pages, and we'll catch you up at the meeting.

Looking back at my 'go-get-'em' message in last year's Obligate, I haven't delivered much. I can't tell if anyone is keeping track besides me. I have excuses, they're good ones: life stepped in, I changed some things, I'll have more time this year; but you don't need these excuses. Bottom line: I didn't have MAWS at the top of my list. Maybe I should have been President when my list was shorter.

The hesitation back then was that I needed to know more, I didn't have the experience I needed to be president. While that's partially true, it's important to have experience—I sold myself short. I could have done this when Rich asked me to consider it 5 or 6 years ago. Being president doesn't mean you need to be the expert wetland scientist in the room—you just have to know the experts. Your job is to keep the momentum up.

In 2018, I'd like to officially start a wetland research subcommittee, and I'm actively looking for a volunteer to chair that committee. Maybe a student, a recent grad, or professor/instructor. The goal is to promote research topics to the rest of the membership, summarize a paper each month, maybe plan to meet up with others for a beverage quarterly to discuss. If this sounds like

something you'd like to do, send me an email, find me at the annual meeting, give me a call.

My message for you all this year is: don't be afraid to get involved, you don't need to be the expert, you don't need boatloads of time to dedicate (but if you have it, that's awesome and we'd love your help!). Take the opportunity to get to know the people you think are the experts, you'll learn from them and they can help steer things in the right direction. We love fresh perspectives.

If anyone would like to be part of the MAWS executive or other committees please contact Danielle Tetreau (Danielle.tetreau@gmail.com or 207-592-2358) or any member of the EC.

Norman Famous Eulogy Marcia Spencer Famous

As you all probably know by now, Norman Famous passed away unexpectedly on Sunday, January 28, 2018 in Augusta, Maine. Norm was born November 12, 1948, and grew up in Prospect Park, Pennsylvania. He earned his Bachelor's Degree in Earth and Space Sciences from Millersville State University (MSU) in Pennsylvania, double majoring in geology and biology. Norm then went on to earn a Master's Degree in Plant Systematics at the University of Maine in Orono, with a thesis on a population analysis of the *Solidago canadensis* complex in extreme eastern North America.

From his earliest years exploring nature with his mother, Norm had an unbridled enthusiasm for the natural world. His letter of recommendation from Dr. Catherine Keever, MSU, to attend graduate school said that while you would never get Norm to do something he didn't want to

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Assembled by L. Leclerc February 2018



do, he had a brilliant mind for the life sciences. She once said that Norm was the most gifted naturalist she had ever met. After graduate school, Norm moved to Machiasport, Maine, situating along the lower Bay of Fundy where his heart found a home.

Norm deeply loved his work and spent his life as a field naturalist, wildlife and wetlands ecologist, gaining renown as an ornithologist, botanist and wetlands scientist with particular expertise in peatlands. Over the years he kindled a fascination for the natural world in most people he met. He retained a vast knowledge of ecosystems and birds (especially shorebirds), and had a remarkable ability to identify birds by song or even the smallest call note heard overhead at night during fall migrations.

In the 1980s Norm led natural history tours with Seafarers Expeditions out of eastern Maine and Canada along the coast and into pelagic seabird waters and summering grounds of the North Atlantic right whale for numerous Audubon societies and museum groups. As well, he led private excursions as Narwhal Expeditions in search of the blue whale in the Gulf of St Lawrence, Quebec.

From the 1990s through to the present, Norm continued his life's work doing projects involving everything from bird censusing, wetland delineation, peatland restoration, and landscape analysis to becoming Roque Island's official naturalist. Largely self-employed, he conducted projects for federal and state agencies, conservation groups, private companies, as well as individuals. Over the years, Norm gained international recognition for his bird and peatland restoration work, in particular Canada and England. Throughout his career, Norm taught courses and workshops on field ornithology, peatland restoration, wetland delineation, and dendrology.

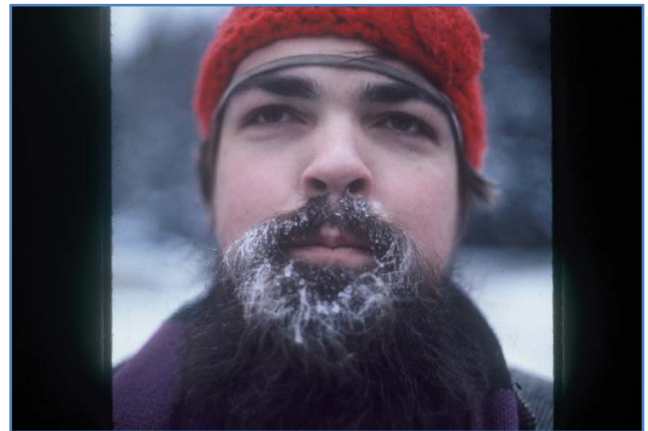
Presently, Norm's lifelong bird studies of east coastal Maine are being permanently archived by the U.S. National Park Service's Acadia National Park. Erica, his daughter and lifelong field companion, is continuing this transfer of five decades of his work. This work is notable because Norm was the first individual to systematically document breeding bird activity for Washington County,

Maine.

Norm was the kindest and gentlest person, with a remarkable and quirky sense of humor that was infectious. He was never-ending cheerful and gregarious, loved life even during the hardest of times, and was a positive force wherever he went.

You are invited to share your Norman stories at the annual meeting.

Memorial Celebration: Norm requested that his ashes be spread along the mudflat staging areas of the Machias River during fall migration so the shorebirds could carry him all over the world. A celebration of Norm's life will be held in July in Machias. For more information, contact Marcia Spencer Famous at 207-623-6072 (mspencerfamous@gmail.com) or daughter Erica Famous at 207-271-7163 (erica.famous@gmail.com).



Norm Famous Eulogy Matt Arsenault

It was 2006, Norm was helping us (Woodlot) out with field work in the Moosehead Lake region. As a passionate birder, he'd leave the field house most mornings well before the rest of us were out of bed and usually not return until the early evening. He was always eager to rattle off the birds as well as interesting plants (notably goldenrods and peatland plants) he encountered throughout the day over dinner and beers. One evening



Norm didn't return. It was pushing 10pm and still no Norm. Although he had a cell phone, most parts of the Moosehead region didn't have cell coverage (and I'm not even sure Norm knew how to use it) – this was also before the days of the SPOT messenger. We knew of the general area where Norm was supposed to be conducting his survey work but he was also notorious for “changing the plans on the fly” leaving it to anyone's guess as to where he was! At 9:45 we started planning our impromptu search party. Just as we're putting on our boots and charting a search area, Norm rolls into the driveway. He was fine and giddy with excitement from all the birds he documented that day including rusty blackbirds, Bicknell's thrush, egrets, and a black-crowned night heron which he called in using a playback. He wasn't stuck, lost, injured, or worse; he was simply just doing what he loved to do. Meanwhile, we were relieved and now wide awake after our unplanned adrenaline rush; so we cracked another beer and sat on the porch sharing more stories of plants, birds, and other forest encounters from the day under the July night sky. Thanks Norm, your enthusiasm for natural history was contagious and inspirational. You will be sorely missed.

Report of the Webmaster – Communications Subcommittee *Dave Brenneman*

The MAWS webpage continues to be available for members at 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. You can also find contact information for the Executive Committee, download past Obligates and in the spring participate in vernal pool phenology reporting. Also, signing up and paying for MAWS sponsored events and paying annual dues is available through the MAWS “store”. Future projects include adding a contact list for interested members detailing the services they provide.

Other outreach options for the membership include our Facebook page (<https://www.facebook.com/groups/mainewetlands/>) and email list (<https://groups.google.com/forum/#!forum/maws-members>). The Facebook page is a great way to interact with fellow wetland scientists and the email list is the primary way the Executive Committee reaches the membership. If you are currently not signed up for either, but would like to be, you can submit a request through either website or email me at the address above. Looking forward to another great year with MAWS!

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) | blburman@gmail.com |
| Audie Arbo | Secretary (2018) | audie.arbo@maine.gov |
| Sarah Watts | Program Chair (2018) | sarah.watts@tetrattech.com |
| Dale Knapp | Legislative Chair (2019) | dale.knapp@tetrattech.com |
| Katelin Nickerson | Membership Chair (2018) | katelin.nickerson@tetrattech.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)



Legislative Committee Update *Rod Kelshaw*

In 2017, the MAWS Legislative Committee continued down the path with a goal to educate and inform with regard to environmental legislative issues. MAWS sent a letter to the Maine State Legislative Joint Standing Committees of the Inland Fisheries and Wildlife (IFW) and the Environment and Natural Resources (ENR). We also attended an introductory work with the Committee.

Some of the other initiatives with which we were involved were:

In 2017, the State legislature took up several different proposed rules relating to regulation of mineral metallic mining. Instead of going into detail of each bill we decided to look at them all in aggregate and write a public statement informing the legislators how the proposed bill concepts, or in some cases how some specific language, could affect Maine's natural resources. MAWS presented testimony as being Neither-For-Nor-Against the proposed Maine metallic mining bills because we did not make the judgment as to whether the State of Maine should allow metallic mining/exploration or if the various documents proposed and currently enacted in their entirety are sufficient to protect the health and safety of the Maine people and the environment. However, if metallic mining and exploration is allowed, there are several amendments that should be made to the existing and/or proposed documents to protect the health and safety of the people and the environment of Maine. There are still changes being made to these proposed rules.

LD 1040: An Act Regarding Permitting Under the Natural Resources Protection Act. MAWS presented public testimony as Ought Not To Pass on LD 1040 An Act Regarding Permitting under the Natural Resources Protection Act. The proposed legislation would have changed several aspects of the Natural Resources Protection Act (NRPA) that protect our wetland and water resources, and would have potentially undermined other areas of NRPA with unintended consequences. MAWS comments were

limited to those parts of the Act that relate to wetlands, streams and permitting and did not cover changes to the drinking water well standards portions of the Act. This bill was placed in the legislative file as "Dead" on April 11, 2017.

Waters of the United States (WOTUS) as directed through Executive Order "RESTORING THE RULE OF LAW, FEDERALISM, AND ECONOMIC GROWTH BY REVIEWING THE "WATERS OF THE UNITED STATES" RULE." This order would not create any new regulations. Instead, it would attempt to clarify types of water to which the regulations within the Clean Water Act applies. This would revise 2015 rulemaking that was done to clarify jurisdiction based on the 2006 Rapanos Supreme Court decision that sought to clarify how far up the watershed federal jurisdiction would reach. The ultimate determination was that wetlands without a hydrological or ecological connection to other navigable waters do not fall within the jurisdiction of the Clean Water Act.

The Environmental Protection Agency (EPA) and the Department of the Army ("the agencies") are publishing a final rule adding an applicability date to the "Clean Water Rule: Definition of 'Waters of the United States'" published June 29, 2015 (the "2015 Rule") of February 6, 2020. On August 27, 2015, the U.S. District Court for the District of North Dakota enjoined the applicability of the 2015 Rule in the 13 States challenging the 2015 Rule in that court. On October 9, 2015, the U.S. Court of Appeals for the Sixth Circuit stayed the 2015 Rule nationwide pending further action of the court. On January 22, 2018, the Supreme Court held that the courts of appeals do not have original jurisdiction to review challenges to the 2015 Rule. With this final rule, the agencies intend to maintain the status quo by adding an applicability date to the 2015 Rule and thus providing continuity and regulatory certainty for regulated entities, the States and Tribes, and the public while the agencies continue to consider possible revisions to the 2015 Rule. This rule is effective on February 6, 2018.



If you want to keep abreast of legislative happenings here are a few websites to watch:

The Maine State legislative page:

<http://legislature.maine.gov/>

128th Legislative Documents:

http://legislature.maine.gov/bills/search_ps.asp

If anyone is interested in becoming involved with the MAWS LC please contact Dale Knapp.

Ethics Update Kevin Ryan

In 2017, MAWS awarded \$750 research stipends to Tessa Dowling and Gregory LeClair. Both Tessa and Greg will be presenting their research at this year's MAWS Annual Membership Meeting on March 22.

Tessa is a Master's Candidate in the Biology Department at the University of New England, working under Drs. Greg Zogg and Steve Travis. She is studying environmental factors that influence growth of salt hay (*Spartina patens*), the dominant plant in high elevation salt marshes in New England, as it attempts to migrate into upland soils as a result of rising sea levels. Tessa's research involves the transplanting of salt hay plugs into upland soil and salt marsh soil under varying salinity and ground litter treatments, and measuring the above and belowground biomass responses to those treatments.



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

*Salt marshes are important ecosystems that act as water purifiers, buffers against coastal storms, and vital habitat for fish nurseries and waterfowl. Currently, sea level rise is increasing inundation levels in this ecosystem and altering vegetation zone boundaries. Typical New England salt marsh vegetation is divided into two zones; the high marsh, dominated by salt hay (*Spartina patens*) and the low marsh, dominated by smooth cordgrass (*Spartina alterniflora*). Rising sea levels drives the low marsh inland, which squeezes the high marsh between the encroaching low marsh and the upland. To maintain a high marsh community, the salt marsh must migrate into the upland.*

The MAWS Wetland Research stipend allowed me to purchase the equipment I needed to test environmental factors that might limit the ability for salt hay to grow in upland soil. We collected 240 salt hay plugs from three salt marshes along the coast of Southern Maine, and transplanted them into 5 gallon pots with either marsh or upland soil. The salt hay plugs were also subjected to either a high or low salinity level (to account for coastal variations), and the presence or absence of ground litter (which can act as a physical barrier and inhibit growth). Growth was measured by taking the dried weight of the stems (aboveground biomass) and rhizomes (belowground biomass) at the end of one growing season.

Preliminary results show an overall average decrease in both aboveground and belowground biomass in plugs grown in upland versus marsh soil. High salinity levels appeared to decrease biomass, but litter treatments did not seem to affect aboveground growth. The final results of this experiment will give insight into the ability for salt hay to migrate inland, and help conservation efforts to prioritize areas adjacent to salt marshes where high marsh migration will have the greatest likelihood of success.

Gregory LeClair is an undergraduate student in his senior year studying Wildlife Biology at Unity College. LeClair, partnered with professors from the college and biologists from the Maine Department of Inland Fisheries and Wildlife and is researching habitat use and population dynamics of the wood turtle (*Glyptemys insculpta*), a Priority 1 Species in the state with its status currently under review. Starting in the summer of 2018, LeClair will also be partaking in research on nesting behavior and



ecology of Maine's wood turtles. The first year of this study, partially funded by MAWS, served in the capacity of LeClair's undergraduate thesis, A Conservation Context for a Central Maine Population of Wood Turtles.



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

Wood turtles are a truly fantastic species. I was first introduced to them in 2016 when, while working as a herpetological technician for Unity College, I found the first recorded wood turtle in the area in decades with my coworkers. With bright orange legs, sculpted shells, and golden eye irises, it's no wonder they're so valuable in the pet trade. Sadly, between over collection, disturbance, and habitat loss, wood turtles are in decline throughout their range and are considered endangered by the International Union for Conservation of Nature (IUCN) Red List. Maine currently has wood turtles listed as a species of special concern, but these declines have prompted a review of that status and state-wide surveys are underway.

My research focused on a singular population in central Maine to learn it inside-out, primarily through three lenses; population size, population viability, and habitat use. By understanding these three lenses, we can begin to develop

an understanding for how many wood turtles there are, how they fare under certain conditions like harvesting of adult females versus if the population was left alone, and what habitat characteristics we should manage for in the event critical habitat needs to be designated. This is all being accomplished through an array of techniques; mark-recapture, telemetry, ArcGIS mapping, population simulations through the program VORTEX, and coming this summer, remote data collection using camera traps to monitor nesting with the possibility of using drones for surveys and habitat mapping.

It is my hope that my research will contribute to the status review of the species and inform management decisions. Although my thesis concluded in December, I will be continuing work through my school that will help us develop a stronger picture of what these incredible turtles face in the future and what we can do to protect them.

It is with great gratitude that I thank MAWS for their support of this project. While the funds went towards purchasing radio-telemetry equipment, waders, gas, a GPS unit, and instruments for gathering data on the turtles, it was ultimately an investment in conservation research that will hopefully prove useful in proactively protecting a species. Thank you, MAWS; I eagerly look forward to sharing my work and talking turtles with you this spring.





Membership Update *Katelin Nickerson*

As this is my last membership update, I would like to use this space to reflect and look to the future. Since I took on the role of membership chair in 2012, we have welcomed 33 new members. While our membership list is always in flux, this number is actually higher than I thought it would be. There are times when it feels we are not gaining many new members, we gained two new members in 2017, and there are times we have a lot of new and enthusiastic interest in our organization. Over the past six years I have seen new members become active in the organization as well as older members take on new leadership roles in the executive committee or one of our other committees. No matter how little time or how long someone have been a member of MAWS, we all benefit when members become leaders or take on active roles within the group.

We currently have 109 active and 29 affiliate members for a total of 138 members! It would be great to see that number grow and have new (or veteran) members with fresh ideas get involved in leadership roles in the organization. Looking to the future, I have one last project before I leave. I am finally putting together a membership directory to post on our website. This will hopefully provide a source for people looking for wetland professionals in their local area. As I take on this task, you will likely be hearing from me over the next few months to confirm contact information and get final approval to post your information in the directory. I think this will be a great tool for developers, private landowners, and regulators looking to point permit applicants to a source that provides a comprehensive list of qualified wetland professionals here in Maine.

As always, please contact me at katelin.nickerson@tetrattech.com if you have questions about your membership, if you would like to become a new member, or if you want to upgrade to be an active member. It has been a pleasure serving on the executive committee and I plan to continue stay active in this great organization in the future.

Program Chair Update *Sarah Watts*

Hello MAWS members!

Well here we are again MAWS members: another year has passed, and it's time for the **MAWS Winter Conference and Annual Meeting!** We've got a great slate planned for you, as we return to Bowdoin again, on **Thursday March 22, 2018, at Thorne Hall, Bowdoin College, in Brunswick, Maine.** Our theme this year is **Connections – Maine Wetlands and Waterbodies.** Our President, Danielle Tetreau, will spearhead the meeting this year. We've got Mark Stebbins, the new Land Division Director for the Bureau of Land Resources at Maine Department of Environmental Protection (MDEP), and the reliable and ever present voice of reason Jay Clement from the United States Army Corps of Engineers (USACE) New England District, to kick us off with some regulatory updates at the state and federal level. Then Steve Koenig, Executive Director of Project SHARE (Salmon Habitat and River Enhancement) and Shri Verrill, Habitat Restoration Project Coordinator for the Downeast Salmon Federation will be talking to us about Atlantic salmon habitat and river enhancement, connections and community. Then, we'll hear from our two student stipend winners, Tessa Dowling (University of New England) and Gregory LeClair (Unity College), about their research, and Derek Yorks from Maine Department of Inland Fisheries and Wildlife will share his experience with conservation of Blanding's and spotted turtles in Maine.

After a lunch break, we have a panel discussion planned, with representatives from many of the wetlands organizations from across New England. Matt Kennedy from Credere Associates will moderate the discussion on collaboration, communication, and connections. Danielle Tetreau will represent MAWS, Scott Smyers will represent the Association of Massachusetts Wetland Scientists (AMWS), Marla Stelk will represent the Association of State Wetland Managers (ASWM), and Jennifer M. Karberg, Ph.D., will represent the Society of Wetland Scientists (SWS), New England Chapter. Anyone that would like to submit questions for our panel, please contact Danielle or me! Following the panel discussion, Dave Rocque, Maine's State Soil Scientist will



talk about vegetated stormwater treatment buffers, Lauren Swett of Woodard & Curran and Rich Jordan of TRC Solutions will fill us in on their enhancement and restoration work on Capisic Pond, and Doug Roncarati of the City of Portland Department of Public Works will discuss reuniting Capisic Brook and its headwater wetlands.

Following these talks, MAWS extends an opportunity for members, colleagues, and friends to share memories of Norm Famous with the group.

After a short break, we'll hold the Annual Business Meeting, which everyone is welcome to attend. More than likely, this will be followed by some afterhours fun at a local establishment in downtown Brunswick. Please feel free to join us!

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 last year: registration is \$45 for MAWS members (not including annual dues); \$60 for non-members, and \$20 for students. For payment received AFTER March 12, 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!

Lastly, it is bittersweet to write this, my 8th and final Program Chair write-up for the Obligate! A true sun-setting Board Member, I have little else to report this year on other workshops or events, besides the Winter Conference and Annual Meeting—my “pinnacle” event—yet another indicator that it is time to hand the reins to someone new. Matt Kennedy of Credere Associates, a relative newcomer to the field of wetlands and MAWS,

compared to some of us, has volunteered to run for the Program Chair position. Let's hope he gets the votes to clinch it at the Annual Business Meeting portion of this event! 😊

Despite a diminished future role, no one ever *really* leaves the MAWS Executive Committee, and I expect to see many of your lovely faces at future workshops, events, and meetings. See you in March!

If anyone has a workshop idea or would like to assist in organizing workshops and activities for MAWS, please contact Program Chair, Sarah Watts (sarah.watts@tetratech.com or 207-358-2383).

MAWS Technical Committee Update- Roger St. Amand

The MAWS Technical Committee (TC) (Aleita Burman, Richard Jordan, Rodney Kelshaw, Dale Knapp, Jim Logan, Lauren Leclerc, Kathleen Miller, Heather Storlazzi Ward and MAWS President Danielle Tetreau), have made some great progress over 2017. The stream determination protocol we explored in 2016 has been taken over by MDEP to develop internally and we understand they are getting to having a draft ready. This year's focus was the proposed edits to the MDEP Chapter 310: Wetland and Waterbodies Protection Rules regarding WOSS definitions. This topic has been something MAWS has been interested in for over a decade.

The TC met several times in the spring to develop language that would clarify the definitions in Chapter 310. The proposed edits included clarification of the definitions of “peatlands” and “emergent marsh vegetation”, and clarifications to language in Section 4 regarding WOSS criteria. The committee worked closely with Mike Mullen at MDEP before he retired. Mike's thoughtful input and willingness to work with MAWS was instrumental in developing the 310 draft. We extend our deepest appreciation and wish Mike well in his retirement!

In June, MAWS submitted proposed Chapter 310 revisions to MDEP under the formal petition process. A special



thanks here to Lee Burman, who took on the bulk of the editorial work. Dale, Danielle and Kathleen Miller were also instrumental in getting the final version submitted. Mark Bergeron, MDEP Land Bureau Director, took over for Mike as the primary contact. Over the summer MDEP reviewed the petition internally. In August the MDEP formally denied the petition but thought many of the ideas had merit. MDEP suggested that a larger stakeholder group be convened to discuss the revisions and move toward Department-initiated rulemaking. Mark Bergeron, Policy Director, Tina Zabeirek, and other key MDEP staff continued proactively working with MAWS to keep this moving.

As this became more of a legislative issue, in the fall the process shifted to the capable hands of the Legislative Committee led by Dale Knapp. Members of the TC, including Lee Burman, myself, as well as President Danielle Tetreau have continued to assist Dale as the process unfolds. Over the winter a stakeholder meeting was held that provided some valuable feedback on proposed revisions. The process is continuing to move ahead and we look forward to a positive outcome this year.

If anyone has any specific questions or comments, please catch up with me at annual meeting or via anytime by email at: roger@arc-env.com.

Field Indicators for Identifying Hydric Soils in New England Version 4

The New England Hydric Soil Technical Committee (NEHSTC) has completed Version 4 of the Field Indicators for Identifying Hydric Soils in New England. According to their website:

This version supersedes older versions of the Indicators and is approved for use in New England (Vermont, New Hampshire, Maine, Massachusetts, Connecticut, and Rhode Island). We are releasing this version as a working copy for wetland and soil scientists to use in the field for wetland ID and delineation. We plan to publish a copy through the New England Interstate Water Pollution Control Commission in the fall of 2017. Please send any errors, comments, or suggestions to: jim.turenne@ri.usda.gov

Version 4 download:

<https://drive.google.com/file/d/oB8MlyFoiOGOKWCowRXdYQ2dIbW8/view?usp=sharing>

Supplement 1(Cheatsheet):

<https://drive.google.com/file/d/oB8MlyFoiOGOKWVNTMTZGRidJNoU/view?usp=sharing>

Memo from USACOE on use of Version 4 for Chapter 5 situations:

<https://drive.google.com/open?id=oB8MlyFoiOGOKMGZGUiZuanpyNTg>

For previous versions of New England Indicators visit: <http://www.neiwpcc.org/hydricsoils.asp>



Maine Association of Wetland Scientists Annual Business Meeting

Minutes of Meeting

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

Date: March 23, 2017

Time: 3:47 PM – 5:04 PM

Location: Thorne Hall, Bowdoin College, Brunswick, Maine

Attendees: MAWS Membership and Executive Committee

Brad Agius called the annual business meeting to order at 3:47 pm. From Danielle Tetreau: She is really looking forward to the next two years. Please reach out to her with any suggestions or concerns. A science subcommittee for research is being looked at.

Executive Committee

Secretary Report (Audie)- Motion to accept the minutes from last year. Motion seconded and passed.

Program Chair (Sarah)- Open to ideas for workshops. Lee- mitigation workshop in Orono with three sites. The University of Maine will host the mitigation workshop with sign-off from the Environmental Protection Agency (EPA). Timing open for discussion. Dave Rocque is not doing workshop this year. The Maine Association of Professional Soil Scientists (MAPSS) workshop will be September 6th. Possible collaboration in 2018 for a workshop with them. The Wildlife Society (TWS) Maine chapter- perhaps a workshop with them.

Legislative Chair Report (Rod)- Katelin presented for the Committee on Environment and Natural Resources to reintroduce MAWS.

Federal: House bill to terminate EPA by 2018, Executive Order: USACE RAPANOS ruling- what is jurisdictional for USACE to review?

State: Mineral Mining Bill- public comment neither for nor against only commented on our area of expertise- Dale presented it. Jim Boyle will be there for next discussion. LD1040-NRPA- will have a public hearing. MAWS should send letter “ought not to pass” Someone will go to public hearing.

Treasurer Report (Lee)- This report was in the Obligate- increase of \$7,000 in 2015 to \$10,000 in 2016, with \$2800 from membership/workshops. Motion to approve the report as in the Obligate. Motion seconded and approved.



Membership Report (Katelin)- MAWS gained 2 new members in 2016. We are trying to get members names on the website. University staff and state staff memberships fluctuate. Any way to put credits towards student's class? Discussed MDEP increased attendance.

Ethics (Kevin/Shri)- Stipend winners: Greg LeClair- stream riparian habitat by wood turtles and Tessa Dowling for high salt marsh growth. Stipend discussion- \$2,000 total possible increase for each or don't split award? Splitting has benefits by filling a presenter spot in annual meeting. Motion for MAWS to awards up to two stipends of \$1,000 each. Motion passed.

Standing Committee Report

Vernal Pool Technical Committee (Roger)- V SAMP: MAWS sent letter saying this needs more flushing out. WOSS definition changes- committee working with Mike Mullen, thinks this can go routine technical, get a formal petition to Mike prior to his retirement. Stream document: Tom Danielson of MDEP has draft to send to MAWS. Lee did lots of edits/input.

Outreach Committee (Dave)- Website has not really changed. The jobs board needs to stay up to date. New initiative is the membership list on the website. Facebook page continues to be updated with the news and workshops. VP chorusing will be posted on the website and Facebook.

Open Committees:

President: Bryan Emerson

Treasurer: Lee Burman

Legislative Chair: Dale Knapp

Ethics Chair: Kevin Ryan

Motion to approve all open committee positions. Motion passed.

Envirothon asked for \$1,050. Motion to award Envirothon \$1,050. Motion passed.

Open Floor:

March for Science April 22, City hall Portland.

QA/QC of wetland delineations being asked for by MDEP now.

Respectfully submitted by:

Audie Arbo

MAWS Secretary

2/15/2018



| MAWS Financial Statement - 2017 | | |
|---|-------------------------------|--------------------|
| From January 01, 2017 - December 31, 2017 | | |
| Respectfully Submitted to the MAWS Membership, January 12, 2018, by Aleita Burman, Treasurer | | |
| Beginning Balance 01/01/17 | | \$ 9,990.22 |
| Ending Balance 12/31/17 | | \$10,757.94 |
| | 2017 GAIN | \$ 767.72 |
| INCOME | | |
| 1 Annual Meeting (Bowdoin College - March 31, 2016) | | \$ 4,042.63 |
| 2 Membership Dues | | \$ 1,864.62 |
| 3 MAWS Merchandise | | \$ 127.50 |
| 4 MAWS Share of Sebago Lake Workshop (September 07, 2017) | | \$ 1,120.00 |
| 5 MAWS Mitigation Workshop (University of Maine- March 09, 2016) | | \$ 165.00 |
| | (A) TOTAL INCOME | \$ 7,319.75 |
| EXPENDITURES | | |
| 1 Annual Meeting (Bowdoin College - March 31, 2016) | | \$ 3,169.08 |
| 2 MAWS Mitigation Workshop (University of Maine- March 09, 2016) | | \$ 75.00 |
| 3 Envirothon Grant | | \$ 1,050.00 |
| 4 Student Research Stipend Awards (2) | | \$ 1,500.00 |
| 5 MISN Workshop Donation | | \$ 250.00 |
| 6 Bank Fees, Stripe & Squarespace Fees, Sec State Filing, Misc. | | \$ 507.95 |
| | (B) TOTAL EXPENDITURES | \$ 6,552.03 |
| | 2017 GAIN (A-B) | \$ 767.72 |
| GAIN / LOSS | | |
| 1 Annual Meeting | | \$ 873.55 |
| 2 Membership Dues | | \$ 1,864.62 |
| 3 MAWS Merchandise | | \$ 127.50 |
| 4 Workshops | | \$ 1,210.00 |
| 5 Envirothon Grant / Student Stipends / MISN Donation | | \$ 2,800.00 |
| 6 Other Expenses | | \$ 507.95 |
| | 2017 GAIN | \$ 767.72 |



MAWS Business Meeting Agenda 2018 Annual Meeting - March 22

1. President's Introduction and Update – Danielle Tetreau
2. Executive & Standing Committee Updates
 - Secretary Update (approval of minutes from 2017 annual meeting) – Audie Arbo
 - Program Chair Update – Sarah Watts
 - Legislative Chair Update – Dale Knapp
 - Treasurer Update – Lee Burman
 - Membership Chair Update – Katelin Nickerson
 - Ethics Chair Update – Kevin Ryan
 - Ad-hoc Subcommittees:
 - Education/Student Outreach Committee – Lee Burman
 - Vernal Pool Technical Committee – Roger St. Amand
 - Outreach Committee (Web & Obligate) – Dave Brenneman and Lauren Leclerc
3. Executive Committee Elections (*2-year terms*)

| Open Committee Chair Position | Nominees (<i>nominations will also be accepted from the floor</i>): |
|--|--|
| Secretary | Audie Arbo |
| Program Chair | Matt Kennedy |
| Membership Chair | Dave Brenneman |
| Webmaster | TBD |
| <i>Research Subcommittee Chair (new)</i> | TBD |

4. MAWS Research Stipend Discussion and Award Vote
 - a. Recommended name change: Norman C. Famous Wetland Research Stipend
5. Envirothon Donation - Discussion and Award Vote
6. Open Floor Discussion
7. President's Closing Message, Meeting Adjourns



**Maine Association of Wetland Scientists
Winter Conference & Annual Meeting
Thursday, March 22, 2018
Thorne Hall (Bldg 67), Bowdoin College, Brunswick, ME**

**Connections – Maine Wetlands and Waterbodies
AGENDA**

(We will provide Certificates of Attendance for attendees at the conference for 6.0 hours of contact time for the conference and 1 hour for the annual business meeting.)

- 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 – 9:50 **Salmon Habitat and River Enhancement**, Steven Koenig, Executive Director, Project SHARE (Salmon Habitat and River Enhancement) (30 min)
- 9:50 – 10:20 **Salmon Habitat Connections and Community**, Shri Verrill, Habitat Restoration Project Coordinator, Downeast Salmon Federation (30 min)
- 10:20 – 10:40 **Break**
- 10:40 – 11:00 **Factors Influencing the Growth of Salt Hay (*Spartina patens*) in upland soils**, Tessa Dowling, MS Candidate in the Biology Department, University of New England – MAWS Stipend Winner (20 min)
- 11:00 – 11:20 **A Conservation Context for Wood Turtles (*Glyptemys insculpta*)**, Gregory LeClair, B.S. Wildlife Biology, School of Biodiversity Conservation, Unity College – MAWS Stipend Winner (20 min)
- 11:20 – 12:05 **Conservation of Blanding's and Spotted Turtles in Maine**, Derek T. Yorks, M.S., Wildlife Biologist – Reptile, Amphibian, and Invertebrate Group, Maine Department of Inland Fisheries and Wildlife (45 min)
- 12:05 – 1:05 **Lunch Break**
- 1:05 – 2:05 **PANEL DISCUSSION: Collaboration, Communication and Connections**, Matt Kennedy, Credere Associates, LLC will moderate (1 hour); Danielle Tetreau, Maine Department of Transportation, and President of MAWS; Scott Smyers, M.S., Vice President & Senior Scientist, Oxbow Associates, Inc., and President of the Association of Massachusetts Wetland Scientists (AMWS); Marla J. Stelk, Policy Analyst, Association of State Wetland Managers (ASWM); Jennifer M. Karberg, Ph.D., Research Program Supervisor, Nantucket Conservation Foundation, Inc., and President of Society of Wetland Scientists (SWS), New England Chapter
- 2:05 – 2:35 **A New Approach to the Evaluation and Design of Vegetated Stormwater Treatment Buffers & ENVIROTHON Plug**, Dave Rocque, Maine State Soil Scientist (30 min)
- 2:35 – 3:05 **Starting from the Bottom – Capisic Pond Enhancement & The Importance of Collaboration & Public Input in Restoration**, Lauren Swett, Technical Manager, Woodard & Curran and Rich Jordan, TRC Solutions (30 min)
- 3:05 – 3:35 **Capisic Brook: Reuniting A Stream and Its Headwater Wetlands**, Doug Roncarati, Stormwater Program Coordinator, City of Portland, Dept. of Public Works, Water Resources Division (30 min)
- 3:35 – 4:00 **Opportunity for Sharing Memories of Norm Famous**
- 4:00 – 4:15 **Break**
- 4:15 – 5:00 **Annual Business Meeting**

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Connections – Maine Wetlands and Waterbodies

➔ **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 Sarah Watts,
MAWS Program Chair, Phone: (207) 358-2383, Email: sarah.watts@tetrattech.com

Registration should be received by March 12, 2018

No Refunds for Cancellations

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