# 39th Annual MASE Conference and Business Meeting



## "Advanced Wastewater Treatment Technologies"

Tuesday February 26th, 2019 Jeff's Catering, Brewer, ME



#### In loving memory of a friend we lost

## A tribute written by Aleita "Lee" Burman, C.W.S, C.S.S,.L.S.E

Allan E. Ott, C.S.S., L.S.E. past member of MAPSS and MASE passed away on November 21, 2018 in Bar Harbor, Maine. He was a good man and the soil science profession benefitted from his strong character and excellent work ethic. He will be missed by all who knew and worked with him. In his honor, I would like to prevail upon you the importance of apprenticeship and mentoring of the younger generations of soil scientists.

Allan was my first mentor in the soil science profession, taking me on as an apprentice soil site evaluator in 1992. Allan was an excellent teacher. Yes, he taught me the site evaluation rules and about "passing" soils and system design, etc., but more importantly he taught me how to be an ethical consultant. Allan was not a "rule bender" ( $\mathfrak{S}$ )! He always stressed the importance of consistency and doing good work, no matter what. His lessons have stayed with me throughout my career, and while I didn't fully appreciate them at the time, I certainly do now that I am on my own.

So here is the message to all of you, and my hope for the future of our profession - take someone under your wing! Teach them the profession. Yes, it's a hassle, but we need good, ethical soil site evaluators and soil scientists working in Maine. Pass on your knowledge. Be a guide and a mentor for a young scientist. Be like Allan Ott.





## 39th MASE Annual Meeting Advanced Wastewater Treatment Technologies February 26, 2019 Jeff's Catering 15 Littlefield Rd, Brewer, ME 04412

7:00 - 7:30 Vendor Setup

7:15 - 8:15 Registration - Meet with Vendors

8:15 - 8:20 Opening Remarks - President Russell Martin / Brent Lawson, State Site Evaluator

8:20 - 9:15 David Braley - DHHS Policy on Advanced Treatment Russell Martin - NSF Standards Overview

#### 9:15 - 10:00 **VENDOR BREAK**

#### 10:00 - 12:00 Moderated Advanced Treatment Unit Panel

- Advanced Onsite Solutions Clean Solution
- Aeration Systems OxyPro
- Busse Green Technologies Busse
- Jet Wastewater Treatment Solutions Jet
- J&R Sales & Service Bio-Microbics / SeptiTech
- Maine Septic Solution Fuji Clean
- Septic Preservation Services White Knight / Norweco Singulaire Green
- Chuck Applebee Service Provider
- William Johnson MDEP

#### 12:00 - 1:30 LUNCH & VENDOR BREAK

#### 1:30 - 2:30 Department & Regulatory Updates

- David Braley Subsurface Unit Updates
- William Johnson MDEP Overboard Discharge Program

#### 2:30 - 4:00 Business Meeting

- 2018 Meeting Minutes
- Treasurer's Report
- Executive Directors Report
- Donation Request Envirothon
- Election of Officers
- Prize Drawing



### **MASE President's Message**

Fellow MASE members and friends,

It's been an interesting year as I'm sure most of you have seen an increase in business. The fact that only a few new licensees are coming along as many of us approach the end of our careers should be cause for concern. We should all do what we can to encourage folks to consider becoming licensed site evaluators; if conditions present in the mid-80's ever return their will be a huge need for site evaluations.

As the Department's wastewater staff continues to shrink I would encourage you to consider consulting with your colleagues when you have questions regarding the site evaluation process or past code interpretations. Please feel free to contact me by phone or email with any past code interpretation or design related questions. My combination of public and private sector experience reaching back to the beginnings of the site evaluation process make me uniquely qualified to answer most of those questions.

One area of current focus is real estate transfer inspections. We need to continue to press the Department to adopt formal rules defining who can do inspections, what a minimum inspection consists of, and how that information is to be reported. Repeatedly sellers are being told their system has to be replaced when it doesn't meet the legal definition, i.e. it is not malfunctioning as defined in the Rules. While this generates more work for us it seems patently unfair that the seller often has to bear the full cost of a replacement system that may not have been necessary. If the buyer is not happy with the inspection report and wants a replacement system, that becomes a negotiating point between buyer and seller. There is a big opportunity here for MASE, in conjunction with someone who primarily does inspections to develop a training program that could go hand in hand with one of the nationally recognized training programs for system inspectors.

Volunteer organizations such as MASE can only function with a steady stream of new faces to assume leadership roles. I encourage you all to consider serving on the Board or volunteering to be on a committee. I hope you all have a happy and productive 2019.

Russell Martin - MASE President



### **VENDOR INFO**

#### **Construction Consultants, Inc.**

#### www.indrain.com

Construction Consultants, Inc was formed in July of 1986 in Livermore, Maine. At that time they did a variety of work including cost estimating, land surveying, site evaluations, as well as consulting work. In 1995 Construction Consultants, Inc introduced the Eljen Products into the State of Maine and began to market them and grow their business. In January 2007 the company was sold and it moved to Gray, Maine. In November 2009 the company moved to its new larger location in Windham, Maine. Since its inception, Construction Consultants, Inc has continued to grow and pride itself on excellent customer service and attention to detail. If you ever need anything, please don't hesitate to let us know.

#### SeptiTech/ Bio-Microbics Maine Inc. www.septitech.com

SeptiTech manufactures a patented, PLC controlled, onsite wastewater treatment systems for residential and commercial (up to 100,000 gpd) applications. Customized treatment programming designed to meet individual site needs assures robust, consistent, reliable treatment. Certified to ETV, NSF-40 and NSF-245 standards, conventional treatment achieves 98% BOD5 and TSS removal and for nitrogen reduction systems, total nitrogen to 19 mg/l or below. All systems include internal discharge pumps and capacity for remote diagnostics and monitoring. With thousands of installed systems, SeptiTech offers a proven, versatile technology to meet virtually any treatment requirement or condition.

#### Frick and Associates

#### www.albertfrick.com

Albert Frick Associates is Maine's local distributor for the Bio-Microbics MicroFAST Treatment System. The MicroFAST Unit is an efficient and reliable treatment solution. It allows for a 50% reduction in the size of a leach field. We are also proud to offer the newly approved BioBarrier Membrane Treatment System. This allows for the smallest septic system in Maine. A 200 sq. ft. leach field could be used to support a 4-bedroom dwelling. Please visit us at our booth to get more information regarding these products.



#### SeptiCAD

#### www.septicad.com

SeptiCAD will be introducing a new and improved version 5 that is fully customizable and supports 30 different systems, including Eljen, Enviro-Septic, all ADS, Arc & Infiltrator chambers, Moundbuster, concrete chambers, stone bed and stone trenches. All system-specific design notes can now be modified through menus. SeptiCAD is an AutoLisp application (plugin) for AutoCAD 2007+(non-LT), AutoCAD Civil 3D, and BricsCAD version 13+. Come see a demonstration of SeptiCAD in action at the MASE 2018 Annual Meeting!

#### **American Concrete**

#### www.americanconcrete.com

Manufacturer of residential and commercial precast concrete septic tanks, grease traps, package pump stations, flow diffuser leaching chambers, holding tanks, distribution boxes, manhole, and catch basins. Stocking distributor for Infiltrator, Enviro-Septic Leach Field Products, and several types of pipe and fittings.

#### **Aeration Systems OxyPro**

#### www.aerationsystemsllc.com

Aeration Systems OxyPro technology is a simple, green solution to today's wastewater challenge. OxyPro Wastewater Treatment Systems work by adding air bubbles to clarified sewage. The air bubbles cause microbes to feed, grow, and reproduce at exponential rates. The microbes flourish in the air rich environment, digesting organic material; reducing the organic material in the clarified sewage thereby creating treated wastewater. The treated wastewater is then passed through a clarifier where solids are settled out and pumped back into the septic tank. The treated wastewater at the top of the clarifier flows out to the leachfield for final treatment.

#### **Septic Preservation Services**

#### www.septicpreservation.com

Septic Preservation Services has been serving all of New England for over 25 years. Starting with Septic inspections we have continually grown to meet the needs of the wastewater industry as well as the community it serves. We currently are a leader in the wastewater sales, service and installation services. Meeting and surpassing the industry and customer needs. Our service is customer driven and engineering minded. We service all Advanced Treatment Systems, old and new. From Over Board Discharge type systems to commercial industrial strength waste. We have certified wastewater operators on staff to meet the requirements of each state we service.

#### **Geomatrix Systems LLC**

#### www.geomatrixsystems.com

Since 1987, Geomatrix Systems LLC has engineered a wide variety of systems for soil and water treatment to help protect the environment. With a multi-disciplined team of engineers and scientists specializing in soils, wastewater treatment, microbiology, hydrogeology and construction management, Geomatrix is uniquely qualified to analyze and solve wastewater treatment problems. Products include Soil Air, GeoMat™ Leaching System and GST™ Leaching Systems.



#### **Infiltrator Water Technologies**

#### www.infiltratorwater.com

Infiltrator Water Technologies is the leading provider of engineered plastic chambers, synthetic aggregate leachfields, tanks, and accessories for the onsite wastewater and stormwater industries. Infiltrator is a pioneer in innovative plastic technologies for underground wastewater management. Onsite wastewater management, in which wastewater is treated and returned to the soil via a septic system, is Infiltrator's largest industry segment. Infiltrator's innovative plastic solutions offer significant advantages over traditional materials including easier, faster, and more cost effective installation, reduced drainfield footprint area and greater design flexibility.

Oakson www.oakson.com

Northeast regional distributor of the Perc-Rite® Drip Dispersal System, approved in all 6 New England states for discharge of primary and secondary effluent. The Perc-Rite® Drip Dispersal system is a non-invasive, flexible, and environmentally sensitive means of wastewater disposal. The system provides equal distribution across hundreds of application points throughout the disposal field. Installation of the drip dispersal tubing can be on a sand bed or plowed/trenched into existing soil conditions with the construction method selected specific to the conditions on the site. The minimum amount of cover material required over the tubing can be as low as 6", resulting in eliminating or significantly reducing mounds.

#### **Maine Septic Solutions**

#### http://www.fujicleanusa.com/distributor/maine-septic-solutions-llc

Fuji Clean advanced wastewater treatment systems are the most popular onsite treatment systems in the world with over 2 million operating systems around the globe. The company offers a wide range of sizes in both standard treatment CE models (NSF-40 certified) and enhanced nitrogen reduction CEN models (NSF-40/245 certified). With an integrated septic tank and small footprint, the lightweight systems offer an ideal solution for tight, difficult-to-access sites. "Contact filtration" treatment includes flow equalization, continuous recirculation and controlled discharge-all powered by on best in class MAC air blower that sips power (about \$4.75/month for residential systems in Maine).



#### **Advanced Onsite Solutions**

#### www.aosne.com

Advanced Onsite Solutions (AOS) manufactures and installs *THE CLEAN SOLUTION*™ aerobic treatment system, an affordable, ecologically sound alternative to the traditional septic system. *THE CLEAN SOLUTION* has been field-tested in more than 2,000 installations. AOS serves the residential and commercial wastewater industries in Maine, New Hampshire, Massachusetts, and Vermont, specializing in design and installation of systems for small lots, sites with setback issues, waterfront and island property, and properties with high-strength wastewater, such as hotels and restaurants.

#### **Presby Environmental**

#### www.presbyeco.com

EnviroFin™ is a passive onsite wastewater treatment and dispersal system designed with a small footprint, to ship easily, and exceed NSF/ANSI Standard 40 treatment. The effluent enters EnviroFin™'s Fin Distribution Unit (FDU) where it settles and breaks down suspended solids. Skimmer tabs located at the FDU's perforations prevent grease and suspended solids from leaving the FDU. The FDU distributes the effluent into the Treatment Fins which are filled with coarse green plastic fibers, creating a massive bacteria treatment area. The Treatment Fins have perforated air duct pipes across the top of each fin providing oxygen to promote bacterial growth.

#### **Water Industries**

#### http://waterindustriesinc.com

Since opening in 1963, We have been operating from our original location in Alton, N.H. under the same management of the Carleton Family. For nearly 50 years we have built a solid reputation in northern New England based on representing the highest quality products available, a vast inventory, and a knowledgeable staff coupled with the best service in the industry. We at Water Industries are very proud to have upheld long lasting relationships with several well known manufacturers.

#### Advanced Drainage Systems, Inc.

#### www.ads-pipe.com

Advanced Drainage Systems, Inc., (NYSE: WMS) (ADS) is the world's largest producer of corrugated HDPE pipe and offers innovative drainage solutions for a variety of industries and applications worldwide including on-site wastewater management. ADS offers a product line that includes Septic Stack ™ pipe systems, and ARC ™ leachfield chambers - for your onsite wastewater management solutions. In addition to N-12 ® pipe, SaniTite ® HP and HP Storm pipe, the company offers a complete line of fittings and accessories including StormTech ® storm water chambers, Nyloplast ® drainage structures, INSERTA TEE ® , and geotextiles.



#### MASE 2018 TREASURER'S REPORT

2018 was a good year for MASE and I hope for all our members as well. The MASE Board has been active in looking for ways to put MASE resources to great use in promoting our profession. Our Executive Director has been a great asset in promoting the Association and keeping things clicking along. The trend of moving to electronic payments has also continued with online banking and PayPal seeing a larger increase in users this year. Using online transactions for registration, payments, and events has made the treasurer's job easier, if slightly more complicated. We have continued to use the Wave online accounting software for bookkeeping. This seems to be working well and is easy to use and free. Our primary bank account is the Key Bank checking account. while we use PayPal for our online transactions. We would appreciate feedback from members on how the online options are working

MASE started out with assets of \$27,593.41 and ended the year at \$25,792.79, a net decrease of \$2,950.62. Our organization has continued to try to use the excess funds in our coffers toward promoting and enhancing our profession.

**Revenue and Expenses:** Revenue for 2018 was \$13,627.50. This is up from last year. Expenses were \$16,577.62 up also from last year's expenses.

The 2018 annual meeting at the Calumet Club brought in \$5,215.00 in revenue this year, and cost for the meeting was a very reasonable \$3,920.90 for a net gain of \$1,158.75.

MASE membership voted to donate \$2,000.00 to the Envirothon in 2018, a substantial increase from last year. MASE Dale Knapp as Executive Director as discussed at last year's annual meeting. Expenses for this year were \$6,000.

The annual summer MASE golf tournament held at the Meadows in Litchfield. We had a great turnout this year. MASE spent a just a bit more than we brought in. Expenses were \$1,170.00 and we brought in \$976.00 from registrations, resulting in a net expense of \$194. Registration numbers were down to a conflicting event this year. The loss was on par with last year. A special thanks to Kathy-Rae Emmi at Septic Systems of Maine and Presby Environmental for providing lunch and some great golf swag!

The annual MASE field day in September was held Augusta in tandem with the Site evaluator exam. We had a great turnout this year and a nice location to boot. Revenues for the event were \$330.00. Expenses were just \$78, for coffee and snacks, thank in large part to donations of an excavator for test pits by Tim Wade, and American Concrete Industries generously providing lunch.

Annual MASE expenses in 2018 were offset by the generous education donations from Construction Consultants, and sponsor support by Septic Systems of Maine, Presby, and American Concrete Industries. The Board is always looking for ideas to enhance education and promote our organization. Please let President Russ Martin know if you have ideas. As always the Board welcomes and needs input from members! Your time and help would be greatly appreciated. Thanks very much for the opportunity to serve as your treasurer, and best wishes for a prosperous 2019!

Respectfully Submitted, Roger St. Amand, Treasurer



## Profit and Loss

#### MASE

Date Range: Jan 01, 2018 to Dec 31, 2018

ACCOUNTS	Jan 01, 2018
ACCOUNTS	to Dec 31, 2018

Total Income	\$13,627.00
Program Income – Membership Dues	\$3,655.00
Product Sales- Hats/Tees	\$300.00
Miscellaneous Revenue	\$151.00
Golf Tournament Fees	\$976.00
Field Day Workshop Program Fee	\$330.00
Direct Public Support – Business Contributions	\$3,000.00
Annual Meeting Vendor Fee	\$2,675.00
Annual Meeting Program Fees	\$2,540.00
Income	

Total Cost of Goods Sold	\$0.00
--------------------------	--------

Gross Profit	\$13,627.00
As a percentage of Total Income	100.00%

Operating Expenses	
Annual Meeting Expense	\$3,920.90
Bank Service Charges	\$148.29
Contract Services	\$6,000.00
Field Workshop Expense	\$78.72
Gifts	\$173.74

Profit and Loss - MASE
Date Range: Jan 01, 2018 to Dec 31, 2018

Created on Feb 11, 2019

Page 1/2



Operating Expenses	
Golf Tournament Expenses	\$1,170.00
Insurance – General Liability	\$639.00
Legal Fees	\$35.00
Memberships & Dues	\$350.00
Printing and Reproduction	\$81.24
Promotions/ Advertising	\$1,200.00
Travel Expense	\$465.56
Website	\$315.17
donations	\$2,000.00
Total Operating Expenses	\$16,577.62
Net Profit	-\$2,950.62
As a percentage of Total Income	-21.65%



## **Balance Sheet**

### MASE

As of Dec 31, 2018

ACCOUNTS	Dec 31, 2018
Assets	
Total Cash and Bank	\$25,792.79
Total Other Current Assets	\$0.00
Total Long-term Assets	\$0.00
Total Assets	\$25,792.79
Liabilities	
Total Current Liabilities	\$0.00
Total Long-term Liabilities	\$0.00
Total Liabilities	\$0.00
Equity	
Total Other Equity	-\$150.00
Total Retained Earnings	\$25,942.79
Total Equity	\$25,792.79



## 2018 Annual Business Meeting

Le Club Calumet, Augusta, Maine - Tuesday, February 27, 2018

Meeting was held at the Calumet Club in Augusta, Maine. This is a first time venue for the meeting. The business meeting began at 2:00 pm. A call to order was made by President Tim Wade with a gentle yet firm rap of the gavel. Deceased members of MASE were recognized including Dick Sweet, Dana Morton, and Jason Courbron

The 2017 meeting minutes were included in the program handout. A motion was made and seconded to accept the minutes. The minutes were unanimously approved.

#### Treasurer's Report:

Treasurer Roger St. Amand presented the Treasurer's Report from 2017. The Treasurers Report was included with the meeting program handout.

A comment from the floor questioned if the entire amount from the mutual fund should be kept in the checking account. Alternatives are being researched.

A motion was made and seconded to accept the treasurer's report as read. The report was unanimously approved.

#### Golf Tournament

Dave Kamila once again organized the golf tournament and presented report which was in the program handout. The tournament has been renamed "Dick Sweet Memorial 150," in honor of long time member and golfing participant Dick Sweet. The new annual winner trophy was presented to Andy Pierce.

#### Envirothon

The Envirothon sent Tim a letter asking for a donation of "beyond" \$1,150. Dale Feinseff from Kennebec Soil & Water Conservation District presented an overview. A motion was made and seconded to donate \$1,500 to the Envirothon. This was further amended to donate \$2,000. The motion passed.

#### Review of Previous Year

Tim gave presentation on year in review:

- · Testified on septic inspector bill
- · Hired Executive Director, Dale Knapp
- Participated in MBOIA Annual Meeting



- Host new annual Dick Sweet Memorial 150
- · Field Day at Stevenson's Farm
- · Habitat for Humanity Septic System installation
- Website upgrades
- · Completed septic system installation video

#### Slate of Officers:

The 2017 officers were:

Tim Wade, President
Russ Martin, Vice-President
Roger St. Amand, Treasurer
Richard Green, Secretary
Dana Altaver, Director
Dave Studer, Director
Bryanna Denis, Director

The proposed slate of officers for 2018 are:

Russ Martin, President
No nominee for Vice-President
Roger St. Amand, Treasurer
Richard Green, Secretary
Dana Altaver, Director
Dave Studer, Director
Natalie Marceau, Director

There is no nominee for Vice President. Glenn Angell was nominated as a joke. Mo Dube, Licensed Septic Inspector, was nominated as Vice-President. Moved, seconded, approved.

Gavel was passed to Russ Martin.

Dave Moyse spoke in favor of better attendance at golf tournament event Tim Wade was given a big hand.

Moved and seconded to adjourn, approved. Adjourned at 2:35.

Respectfully Submitted,

Richard Green, Secretary



Envirothon January 29, 2019

Dear Mr. Wade, The Maine Association of Conservation Districts (MACD], its Board, and membership want to thank you for the generous Envirothon donation you made for the 2017-18 school year program. The increase to \$2,000 was great. We request that the MASE provide sponsorship for the current year of Envirothon.

Here in Maine we have begun our 2018-19 school year Envirothon season. The Maine Envirothon requests a donation from MASE to help with the costs of operating our program. Our Fall Field Days in September and October was open to schools and students even if they did NOT compete in the Maine Envirothon. It is a further investment into the program's growth. This year's Fall Field Days are completed. We will have a similar introduction for schools in March before the 2019 competitions. Registration is beginning for the 2019 competitions. We are coordinating the sites for the four Regional competitions and one State competition in Maine.

Your financial support will help our efforts to further grow the number of teams competing and provide support to both competing schools and the staff and advisors who may be considering the Maine Envirothon experience. Currently 50 60 teams compete annually in addition to the students who use the fall and spring workshops. Maine's team at the National/International competitions, did so well they placed 6th overall. That is a position we hope to repeat. Your financial support is part of that effort.

Should you choose to become a sponsor/donor we will acknowledge that support on our new website and other public information. Depending upon the donation, that may include a listing on our student t-shirts.. Please take the opportunity to check our current website at www.maineenvirothon.org to learn more of Maine's Envirothon program. Feel free to offer suggestions for improvement.

This work cannot be done without the continued support of our sponsors. We hope you can match or increase the size of your donation for the coming year. This money goes toward improving our program operations and keeping costs to the teams at a minimum to encourage continued and new participation: We are continuing our path of program growth and development. We hope the MASE will be able to assist us in our efforts! Yours in Conservation,

Andy Keed - Chair of Maine Envirothon Fundraising Committee



#### **Website Technical Contractor Update:**

It's hard to believe but 2019 will mark the fifth year that I've been involved with MASE's website. In that time a new website was launched and new features like the Find a Site Evaluator tool were realized. There weren't many changes to the website in the past year so most of my time was spent making sure the website was kept up to date and secure. One of those changes you may have noticed is that there is a little a padlock icon next the web address when you visit the website now. That padlock indicates that MASE has a security certificate accompanying the website and that data entered into the website is protected. Google Chrome has gone as far as to give users warnings when they go to a website without a security certificate and it is particularly important to look for when entering personal data such as payment information. There was also a great video added to the front page on septic installations, so if you haven't checked it out yet I recommend that you do! It's been a pleasure working with the organization and I'm excited to see where the website goes moving forward.

Respectfully Submitted,

Mutt

Matt Zetterman



## 2nd Annual Dick Sweet Memorial 150 Golf Tournament Results

By: Dave Kamila

Our 2nd Annual Dick Sweet Memorial Golf Tournament in Honor of our longtime player and all around nice guy Dick Sweet was held on June 15<sup>th</sup> under bluebird skies at the Meadows in Litchfield.

The course is now under new management and new owner Randal Anderson put on a great event for us this year.

Winning Team: We tried tying one of Andy's hands behind his back to no avail as he led his team of Russ Martin and Nino Emmi to repeat of his last year's win with another dominating performance at 7 under.

Second Place Team: Kathi Emmi's crew of Roger St. Amand, Justin Brown and George Patton came in at 4 under.

Ladies Longest Drive: Kathi Emmi continued her domination off the ladies tee..

Men's Longest Drive: Dennis Healy won the men's title.

Closest to the Pins:

No. 3: Will Ellsworth 39'-0""

No. 7: Kelly Austin 5'-3"

No.15: Jeff McElroy 6'-9"

No. 17 Andy Pierce 2'-3"

Looking ahead to next year, the tentative date is Friday, June 14<sup>th</sup> at the Meadows. This date was chosen so as not to conflict with AE tournament at Spring Meadows on the 21st. Please mark your calendars and plan to join us for some friendly competition, a few brews, lunch and prizes. No experience required, I'll even supply you some clubs if you're game.









## **Return To Reid State Park**

## ANOTHER SOIL AND NATURAL RESOURCES WORKSHOP LED BY 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 ACOE, MDEP, LUPC and 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.



MASE Gets Mentioned in the Maine Geologist Thanks to Dan Locke!

## Soil Test Pits: A Potential Learning Opportunity

By Daniel B. Locke, Hydrogeologist, Maine Geological Survey

Have you ever wanted to learn more about soils, but simply do not have the time to take formal classes? The Maine Department of Human Services tests individuals who desire to become soil evaluators and designers of subsurface wastewater disposal systems. An important part of this testing process involves field evaluation of soils within selected test pits at a designated locality The focus here is not to map or name the soils the way a soil scientist does, but to characterize them following the Maine Subsurface Wastewater Disposal Rules. The localities are chosen each year with an emphasis on providing the broadest range of soil parent materials that a site evaluator is likely to encounter. The field portion of the exam focuses on the applicant's ability to identify soils concerning to parent material, textural classification, drainage conditions and depth to limiting factors (such as the water table, a hydraulically restrictive firm layer, or the bedrock surface. Prior to the test, a team of experts log the test pits and attempt to identify those pits where opinions coincide and differ. The day after the field exam, the Maine Association of Site Evaluators (MASE) convenes their annual field seminar which involves the logging of all pits followed by in-depth discussion of the findings. This is the opportunity for interested parties to descend into pits to examine the soils first-hand and to ask questions from others.

While this seminar is generally looked upon as a refresher for site evaluators and an educational event for site evaluators in training, it could also be looked upon as an opportunity for anyone interested in learning about Maine soils. This might be a particularly good opportunity for high school earth science teachers! The MASE Annual Field Seminar is typically held in late September. Individuals interested in attending this event, should contact Dale Knapp, MASE Executive Director at <a href="maseexecutivedirector@gmail.com">maseexecutivedirector@gmail.com</a> and ask to be placed on the e-mail list for the annual field day.



## **NOTES**




EVALUAL
Thank you for attending the 2019 MASE Annual Meeting
Check us out at <u>www.mainese.com</u>
and remember to register as a member to be included in event announcements.
And don't forget to like us on Facebook!

