

## VERNAL POOLS REVISED

What is a vernal pool and why are they important? According to the Maine DEP website, *Vernal pools* or "spring pools" are shallow depressions that usually contain water for only part of the year. They are often associated with forested wetlands. Vernal pools serve as an essential breeding habitat for certain species of wildlife, including salamanders and frogs (amphibians). Juvenile and adult amphibians associated with vernal pools provide an important food source for small carnivores as well as large game species.

In Maine, species that must have access to vernal pools in order to survive and reproduce include wood frogs, spotted and blue-spotted salamanders and fairy shrimp. In Maine, vernal pools with high value for wildlife are called **Significant Vernal Pools**.

Not all vernal pool habitats are considered "significant". In general, a vernal pool habitat is significant if it has a high habitat value, either because (1) a state-listed threatened or endangered species, such as a spotted turtle, or a rare species, such as a ribbon snake, uses it to complete a critical part of its life history, or (2) there is a notable abundance of specific wildlife, such as blue spotted

salamander, wood frog, or fairy shrimp.

"Significant vernal pool habitat" includes the vernal pool itself and the area within a 250 foot radius of the spring or fall high water mark of the pool, which is considered critical terrestrial habitat.

Starting September 1, 2007, **Significant Vernal Pool Habitat** is protected under the Natural Resources Protection Act (NRPA). The regulation are administered by the Maine DEP and are intended to avoid unreasonable impacts on these areas and any disturbance typically requires a permit. There are two

*(Continued on page 3)*

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## 250 OR 500 HOURS? Read the fine print

*By Mike Sullivan*

Has the 250 hour vs. 500 hour engine oil change interval issue been discussed in your shop? I bet it has. Think about it, every time you change engine oil in your loader or excavator you are buying 5 to 10 gallons of engine oil, one or two engine oil filters and because you think ahead and it is cheap insurance, you change out the fuel filters as well. But how frequently? If you bring this up in a room full of mechanics, manufacture reps and equipment owners, sparks will fly; everyone has their own opinion and viewpoint on the subject.

The math: Around 8 gallons of name brand manufactures engine oil (which by the way needs to be a

"low ash" premium oil that will not add to the particulates that can clog the diesel particulate filter) will cost about \$150. The filter another \$30. That's \$180 per engine oil change for parts alone and you still have to pay someone to do it. Let's say it takes 3 hours at an average of \$15 per hour for a labor total of \$45. Now you are at \$225 per oil change in-house. You know it will be even more at a dealer, plus travel time. If you're running 1500 hours per year (approximately 31 hours a week) that is 6 changes at the 250 hour interval or 3 changes at the 500 hour interval. At 250 hours that equals \$1,350 per year, and \$675 per year at the 500 hours interval. If you have a small fleet or a large fleet you can do the math. If you do change the fuel filters at the same time the costs go up. *NOTE: The new ultra low sulfur fuel combined with the Tier 4 smaller micron filter*

*requirements and our ever present water issues due to condensation, I recommend changing the fuel filter and water separator every 250 hours.*

Now let's dive into some of the manufacturer's operator's manuals to see what they say about when the engine oil and filter change intervals. If you look into your operator/maintenance manuals which are provided in the cab of every machine sold, and read less than a high school level English book, you will find that the manufactures don't really tell you which road to take: 250 hours, or 500 hours. There are statements such as: "*If the sulfur content in the fuel is greater than 1.5% by weight, use an oil that has a TBN of 30 and reduce the oil change interval by one-half*", or: "*An engine oil of*

*(Continued on page 8)*

## 2015 NOMINEES FOR MAA DIRECTORS & ALTERNATES

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Daniel Shaw/Steve Farmer  
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Shawn Frank  
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Ted Johnston, Legislative Counsel  
Resource Policy Group, Fayette

**MAA Annual Membership Meeting & Banquet** is set for April 29, 2015 at the Italian Heritage Center in Portland. Social hour begins at 5:00 and gives us a chance to reconnect with others in the Aggregate Industry just as the construction season gets underway. The 2015 nominees for Director are listed to the left..

**FMI:** See registration insert in the newsletter.

**MAA/Kents Hill School 10th Annual Marlee Johnston Memorial Scholarship Golf Tournament** is again at the beautiful nationally ranked Belgrade Lakes Golf Club on Monday, June 22, 2015. Look for registration information in the mail or visit [www.kentshill.org/golf](http://www.kentshill.org/golf). This Tournament fills every year so register early.

**FMI:** Email [tedjohnston@gwi.net](mailto:tedjohnston@gwi.net) or [jfortin@kentshill.org](mailto:jfortin@kentshill.org).

## Sand & Gravel News

Sand & Gravel News is a periodic publication of the Maine Aggregate Association and is available free as a service to its membership. For a membership information contact us:

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(Continued from page 1)

## VERNAL POOLS

options are available: Obtain a full individual NRPA Permit or certain activities qualify under Permit-By-Rule (PBR).

Under PBR, the regulations allow for up to 25% of the area designated as critical terrestrial habitat to be used. The basic standards under the PBR require:

(1) No disturbance within the vernal pool depression;

(2) Except for activities in existing developed areas, a minimum of 75% of the critical terrestrial habitat (e.g. the 250 foot buffer around the depression) must be maintained as unfragmented forest with at least a partly-closed canopy of trees to provide shade, deep litter and woody debris;

(3) Forest corridors connecting wetlands and significant vernal pools must be maintained or restored

(4) Forest floor disturbance must be minimized; and

(5) Native vegetation and downed woody debris must be maintain.

This year, the Maine Legislature

is considering LD 153, *An Act to Amend Setback Requirements and Standards Related to Species Migration under the Laws Regulating Development near Vernal Pools*. This bill is sponsored by Representative Dick Campbell (R-Orrington) and MAA testified in support of LD 153 at the Public Hearing.

LD 153 requires the DEP to adopt new rules that would allow activities closer than 250 feet if the landowner could demonstrate that an alternative directional corridor area of regulation would provide habitat protection value equal to or greater than would the fixed radial area of regulation. In other words, if the species that utilize the vernal pool as habitat move in an identifiable corridor and allowing development within the 250-foot setback would not impact that corridor, the DEP could approve such activity. LD 153 requires that DEP work with the Maine Department of Inland Fisheries & Wildlife to establish the rules.

At the time of publishing, LD 153 had received the unanimous vote of the Environment & Natural Resources Committee will likely pass the full Legislature and

become available in 2016.

According to a 2010 Northeast Partners in Amphibian and Reptile Conservation (NEPARC) report entitled *Summary of Vernal Pool Regulations in the Northeast*, Maine regulations for Vernal Pool buffers are among the more restrictive than any other state in the northeast. According to the report, not all states have regulations protecting vernal pools and in only 6 of the 15 included in the report have statewide Vernal Pools regulations.

NEPARC is funded by the U.S. Geological Survey and according to its web page, is dedicated to the conservation of herpetofauna, reptiles and amphibians, and their habitats. The Northeast region includes New England to Virginia and Washington D.C. plus New York, Pennsylvania, and West Virginia. For a full copy of the 23 page report visit the NEPARC website: [www.pwrc.usgs/neparc](http://www.pwrc.usgs/neparc)

For more information contact your local legislator or visit the DEP Vernal Pool web page:

[https://www1.maine.gov/dep/land/nrpa/vernalpools/fs-vernal\\_pools\\_intro.html](https://www1.maine.gov/dep/land/nrpa/vernalpools/fs-vernal_pools_intro.html)

## DETERMINING SIGNITIFANT VERNAL POOLS

According to the Maine DEP, vernal pools may include flat topography with depressions or pit-and-mound topography, fingernail clams, caddisfly cases, and evidence of temporary flooding.

However, only “Significant Vernal Pools” are subject to DEP regulations. A “Significant Vernal

Pool” can only be determined by the DEP or by an individual who has experience and training in either wetland ecology or wildlife ecology and has the qualifications to identify and document a significant vernal pool. For more information on identification, see Chapter 335, and this fact sheet: *Vernal Pools - A Significant Wildlife Habitat*.

A vernal pool is “Significant” if there is documented use by a state-

listed rare, endangered or threatened species that commonly require a vernal pool to complete a critical portion of their life-history. Examples of vernal pool dependent state-listed endangered or threatened species include, Blanding's turtles, Spotted turtles, and Bog haunter dragonflies among others.

Another means to determine if a vernal pool is “Significant” is the

(Continued on page 6)

## News from the Maine Aggregate Association State Council of the Joseph A. Holmes Safety Association

By Chip Laite

### MSHA to Increase Enforcement and Outreach

On January 30<sup>th</sup> MSHA held a Stakeholders meeting to discuss the increase of fatalities over the last 16 months. There have been 37 deaths at Metal & Nonmetal mines with 4 of those deaths in the last month.

MSHA's efforts will focus attention and the enforcement tools available on the types of conditions that have caused these deaths, and on the specific categories of work where increased deaths have occurred. Of the 37 fatalities, 27 were at surface mines and 9 of those were sand & gravel operations. MSHA inspectors, managers and educational field staff will be engaging with miners and mine operators to talk about this troubling trend and the need to ensure that safety standards are met, proper training is conducted and engrained, and protections are in place to protect miners.

In Maine there are 244 intermittent or active mines and 200 are listed as Sand & Gravel Operations. Maine Aggregate Association members make up 58% of these mines or 142. Of our members' mines, the majority operate with less than 5 miners (102 or 72%).

Last year in Maine there were 7 injuries; Some were minor, but some could have been a fatality. We need to do better!

It is our responsibility to educate our employees/miners to prevent injuries at our mines. MSHA does

provide some tools on its website, [www.msha.gov](http://www.msha.gov) to assist in the training. They have dedicated a page specifically for training tools, [www.msha.gov/training](http://www.msha.gov/training). Also the Educational Field and Small Mine Services can provide assistance, call Denis Rickey at 603-703-6958.

Currently, MSHA's FY2016 budget provides funding for the State Grants Program which provides assistance to Maine SafetyWorks. SafetyWorks helps many Maine Miners receive the required safety training. This, along with additional funding for development of audiovisual materials,

### MAA Sponsors Spring Thaw

This year the Maine Aggregate Association State Council of the Joseph A. Holmes Safety Association held two Spring Thaw Safety Seminars: On March 11<sup>th</sup> in Portland; and, on March 12<sup>th</sup> in Bangor Together there were 120 attendees at these training seminars.

Support from industry was great! Milton CAT and Thompson/Rolac Equipment were the primary sponsors and Milton CAT brought a Metso LT106 portable jaw crusher to both locations.

The program included: Hoisting and Rigging Safety by Don Partridge of Associated General Contractors of Maine (AGC); MSHA's Top 20 Citations for the Sand, Gravel & Rock Industries, by Janet Hughes of Hughes Brothers;. Crusher & Screen Safety by Matt Gerten from Metso; Miners' Rights

by Chip Laite; Fall Protection by N.H. Bragg & Son's Joe Ditzel; Ladder Safety by Cliff Berry of Maine's SafetyWorks; and, "Focus 5" by Gene Fadrigon of Gorham Sand & Gravel. A walk-around of the Metso LT106 Portable Jaw Crusher was also provided.

Sponsors included: The Rowley Agency, Central Equipment/White Sign, Cross Agency, Colmar Belting, EESSCO N.H., Telsmith, Jordan Equipment, N.H. Bragg & Son, Polycor of New England, Maine Department of Labor SafetyWorks, Chadwick-BaRoss, and Resource Policy Group. The Associated General Contractors of Maine and the Associated Builders and Contractors of Maine were also very supportive.

The Safety Seminars are designed to assist gravel pit and rock quarry owners and operators to gain a better understanding of MSHA regulations and provide information to assist them in compliance, including the annual refresher training requirements.

Denis Rickey of MSHA's Educational Field and Small Mine Services spoke about the high number of fatalities and mining industry accidents in 2014, and emphasized MSHA's focus on doing better. Recordkeeping and Reporting requirements are an essential components of MSHA regulations and Mr. Rickey provided detailed information about compliance. In addition, two MSHA inspectors were available to help answer

*(Continued on page 5)*

*(Continued from page 4)*

**SPRING THAW**

questions. MSHA support for this event was very helpful and well received by the attendees.

Staying current with environmental, labor, health, safety, wages & taxes rules and regulations is daunting. The Spring Thaw provides a valuable resource to help better navigate this regulatory maze. More importantly, staying current helps us continue providing safe work places for our employees.

Industry support is essential to the Spring Thaw. We've listed our sponsors – please support them.

**MAA Sponsors  
Train the Trainer**

In early February, Maine Aggregate Association State Council of the Joseph A. Holmes Safety

Association sponsored a 3-day Train the Trainer Workshop. The event was hosted by Shaw Brothers in Gorham and attended by 11 trainers from MAA member companies.

Blane Shrewsberry and Denis Rickey, MSHA Training Specialists from the Educational Field and Small Mine Services provided the training.

The course was developed to improve instructional skills, abilities, and knowledge of mine trainers. Topics included, Principles of Adult Instruction, Outlining the Training Content, Determining the Instructional Methods, Developing and Using Training Aids, Developing a Lesson Plan, Using Facilitation Skills, and Part 46 Requirements. The participants also developed and presented a 15-minute training segment on a health or safety topic

in 30 CFR Part 46/48.

This training is required for the Part 48 (Underground) instructor approval. While the mine operations in Maine do not require an "Approved" trainer, the information will be very useful to the attendees in their future training efforts.

It was also suggested by some of the attendees that MSHA develop a specific "Part 46 Instructor Development Workshop" targeted specifically to assist Sand & Gravel and Stone mine operators to provide better training and help protect our miners from injuries and accidents.

*Chip Laite is Aggregate Manager for Sargent Corporation and serves as President of the MAA State Council of the Joseph A. Holmes Safety Association*

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(Continued from page 3)

### VERNAL POOLS

presence of certain pool-breeding amphibians in a certain abundance during a certain time of the spring.

According to the DEP, optimal times for counting egg masses of pool-breeding amphibians vary according to geographic location and weather. For instance, during cold springs, breeding can begin as much as 2 weeks later than it does in warm, wet springs. The optimal time to count masses is

just past the peak breeding period. For wood frogs, this occurs approximately 2 weeks after they start full choruses. Wood frog egg masses hatch very quickly and are more difficult to count much past peak breeding. Salamanders do not have one peak; they often take 4 to 6 weeks to complete egg-laying. Furthermore, their egg masses do not hatch quickly and can be surveyed later than those of wood frogs.

The following Table list the Maine DEP guidelines for optimal times for counting egg masses:

Region	Wood Frogs	Salamanders
Northern Maine	May 5 to May 20	May 15 to June 5
Central Maine	April 25 to May 10	May 5 to May 25
Southern Maine	April 10 to April 25	April 20 to May 10

For more information visit the Maine DEP website at: <https://www1.maine.gov/dep/land/nrpa/vernalpools/index.html>, or

Call the Regional Office closest to you and ask to speak to someone in the Bureau of Land regarding Significant Vernal Pools:

- Presque Isle (Northern Regional Office): 207-764-0477 or 888-769-1053
- Bangor (Eastern Regional Office): 207-941-4570 or 888-769-1137
- Augusta (Central Regional Office): 207-287-3901 or 800-452-1942
- Portland (Southern Regional Office): 207-822-6300 or 888-769-1036

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www.resourcepolicygroup.com**

## NSSGA Update

*By Gene Weldon*

This March I attended the Annual National Sand Stone & Gravel Association show. As your MAA representative, following is a brief summary of some of the key items.

First and foremost, a national long term highway funding solution is at the top of everyone's priority list. As most of you know, we continue to try to patch this ever expanding pothole with a few Band-Aids that only temporarily cover up the infection that is growing in our nation's infrastructure. While it is far from popular to entertain increasing the gas tax, we should at least educate ourselves to exactly what an increase at the Federal level would mean. On the next page is one proposal that helps illustrate what an increase could look like. While I realize not all of us will agree on what the solution should be, I would encourage each of you to keep an open mind, because ultimately we can't build anything without some way to pay for it.

NSSGA continues to monitor, analyze, and respond to health & safety issues including the National Institute of Occupational Safety & Health (NIOSH), MSHA enforcement and penalties, and best practices. During our safety committee meeting NSSGA shared examples of what a new safety data sheet (SDS) should look like for Granite, Limestone, and Sand and Gravel; we will post a link from our MAA website so your company can view these as well.

Chip Laite, President of the Maine State Council of the Joseph A. Holmes Safety Association has been very active in working with MSHA to protect our workers by providing training and resources to

*(Continued on page 7)*

(Continued from page 6)

## NSSGA

our mine operators.

NSSGA continues to monitor, analyze, and respond to environmental issues including the proposed Waters of the United States (WOTUS) rule. If adopted by the Army Corps of Engineers and Environmental Protection Agency, the definition of waters subject to federal regulations would be greatly expanded and have the potential to impact all of our operations.

As a state aggregate association member we have the opportunity to guide NSSGA and bring our concerns and successes to a larger audience. The value from the support of this national association is significant and I can assure you we have all benefitted from this partnership in some way.

NSSGA is offering a new membership plan called the e-producer, targeted at supporting small mine operators. Designed for producers operating a single location with less than 10 non-office staff, your eProducer membership is less than \$1 per day. [www.nssga.org/eProducer](http://www.nssga.org/eProducer)

If you have question or concerns you would like to share with us please contact us.

<http://maineaggregate.org/about/contact-us/>

I look forward to seeing each of you at our annual meeting in April.

*Gene Weldon is Senior Environmental Manager for The Lane Construction Corporation and is current President of the MAA*

# SMALL CHANGE

American drivers pay an average \$94 a year to access over 11,618 miles of highways, roads and bridges. These funds come from a modest 18.4¢ per gallon tax on each gallon of gasoline. Since the gas tax hasn't changed since 1993 and the cost of building and maintaining roads has risen, the Highway Trust fund is slowly going in the red. With a growing number of potholes, cracked roads and traffic jams plaguing America, we need a common-sense and responsible way to pay for improving our infrastructure.

## AVERAGE ANNUAL FUEL TAXES PAID BY PASSENGER VEHICLES



## HOW WILL A 12¢ INCREASE IN THE GAS TAX IMPACT DRIVERS?



**The Murphy-Corker Proposal:**  
an effective and responsible way to save the Highway Trust Fund

**NSSGA**  
NATIONAL STONE, SAND & GRAVEL ASSOCIATION

\*Source: Government Accountability Office (GAO)

## GAS TAX CHALLENGES

Despite the dismal condition of our highways and the inadequacy of existing gas tax programs, there are significant challenges that any reform must address:

- ◆ Rising fuel efficiency and construction costs have significantly reduced the purchasing power of state gas taxes.
- ◆ Any increase in state gas taxes will be of little help in the long-term unless steps are taken to ensure that the tax can withstand future increases in fuel efficiency and construction costs.
- ◆ Like most taxes on consumption, state gas taxes are inevitably regressive—impacting low-income families far more heavily than any other group.

(Continued from page 1)

## HOURS

*quality class CJ-4 is mandatory for Tier4i/StageIIIB machines, due to its low content of substances that would otherwise clog the diesel particulate filter”, or from another manual: “A 500 hour engine oil change interval is available, provided that the operating conditions and recommended multi-grade oil types are met. When these requirements are not met, shorten the oil change interval to 250 hours, or use an oil sampling and analysis program to determine an acceptable oil change interval”. These are just a few of the statements in manuals you will find; what do they mean?*

Basically I believe that all of the manufacturers are telling you to:

1) Use the proper specification of

filters and oils. This is not negotiable, and if not adhered to (especially with the Tier4i and final engines), can lead to shortened engine and component life and premature soot loading.

2) Use your best judgment. Are you in a harsh environment? A good rule of thumb is how often you have to change out or clean your outer air filter. If you find yourself pulling the air filter and banging it against a tire or track constantly, you should probably be changing oil at the 250 hour interval.

3) Use oil sampling regularly. This service is offered by the dealers and also by your local oil distributor. You can watch the analysis reports and make

judgment calls based on the reports.

4) Ask your dealer. Talk to your mechanics and listen to what they recommend.

Bottom line is just that. Yes, maintenance costs affect your bottom line, but improper maintenance and maintenance intervals can cost you way more in repair costs and down time. Oils, filters and a few man hours are cheap insurance for your machines when done with the right materials and on schedule.

*Mike Sullivan works at Nortrax in Westbrook and serves on the MAA Board of Directors*

# Sand & Gravel NEWS

MAINE AGGREGATE ASSOCIATION

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