



CLEAN ENERGY TAKES THE SPOTLIGHT ON NATIONAL BIOENERGY DAY

National Forest Products Week, observed annually during the third week of October, highlights the integral role that forests play within our economy and our society. Celebrated at the heart of this holiday week is National Bioenergy Day where the spotlight shines on the production, use, and advantages of bioenergy within the United States. Bioenergy is a form of renewable, clean energy that is produced using organic solid matter such as wood, agricultural residues, and food waste. These feedstocks are sourced from a variety of industries that put their 'waste' to work to produce transportation fuels, heat, and electricity.

In observation of the holiday, staff at the Ryegate Associates wood-fired biomass plant in East Ryegate, VT, hosted a "visit your local power plant" event where the community was invited to tour the facility and

experience day-to-day operations, while also learning about the critical role that facilities like Ryegate play within the local forest products industry and surrounding communities.

The Ryegate facility has been operational since 1992 and currently employs 21 professionals, including an on-site, state certified Forester. The plant produces approximately 160,000 megawatts of power annually, supplying domestic clean energy to households in Vermont. Ryegate uses whole-tree wood chips as a feedstock, sourced from low-grade timber harvested during essential forest management activities within the state. Ryegate's procurement of locally sourced chips indirectly employs approximately 250 individuals and provides an essential outlet for low quality timber, a vital component of successful forest management efforts in Vermont.



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Ryegate is also working on a significant upgrade project that will increase efficiency by at least 50%. Following the mantra of putting 'waste' to work, the facility is on track to install a Waste Heat Recovery module onto their flue-stack that will capture waste heat and route it into a low temperature belt drying unit. This environmentally friendly dryer system will be used to dry green wood chips, generating additional heat energy on-site. These efforts build upon a long history of environmental stewardship demonstrated by Ryegate.

As an added benefit, wood-fired biomass facilities like Ryegate produce **wood ash** as a residual of the power production process. **Wood ash** excels as a safe, sustainable, and effective fertilizer that is used by farmers to replenish nutrients essential for successful crop yields, including organic potassium and the fast-acting liming agent calcium carbonate. Potassium in particular can be a challenge for farms to secure as commercial forms of this mineral can be cost-prohibitive and availability is often subject to importation from Canada, Russia, and other foreign suppliers. Sourcing these key minerals domestically and sustainably is a win-win and ensures local nutrients are recycled back into our soils. RMI has been a partner of Ryegate Associates for 24 years and has recycled the **wood ash** they produce for use on farm fields throughout New England.

National Bioenergy Day allows us the opportunity to recognize and celebrate clean, sustainable energy production in the Northeast. Biomass facilities like Ryegate Associates offer substantial contributions to the region, including the provision of jobs, revenue, and power to rural communities, and act as crucial components within the local forest products and agricultural industries. These facilities have long histories of environmental stewardship and continue to increase the efficiency of their operations to best serve their customers, communities, and the environment. We encourage others to learn about their local biomass operations and to explore the numerous benefits these facilities bring to our communities and our forests!



RMI employees Justin, Devon, and April (pictured on the left) attending the Ryegate Biomass Facility tour.

Wood Ash, a by-product of wood burning biomass facilities like Ryegate, ready to be spread on agricultural land.





PIG ROAST REVIVAL FOR RMI 30TH ANNIVERSARY

On Saturday, September 21st, we observed RMI's thirty-year anniversary with a revival of our beloved pig roast celebration where friends gathered alongside staff for a day full of hearty food and lively entertainment. The event was an opportunity for us to show our appreciation for the customers, partners, and the invaluable relationships that made the 30th anniversary possible.

RMI was founded in 1994 by President Shelagh Connelly, Vice President Marty Riehs, and Senior Project Manager Charley Hanson, and was created to provide innovative, sustainable recycling solutions to the generators of organic residuals. Today, we serve New England and Eastern New York as an industry leader and recycle over 350,000 cubic yards of wood ash, paper fiber, and biosolids annually.

Shelagh remarked, "I feel fortunate to have stumbled into this recycling world in my first job out of college as a soil sampler. I got to visit farm fields all across New Hampshire and meet some of the hardest working farmers in places that are incredibly rural and beautiful. This led to many years of learning the science and policy behind recycling these fertilizer products, and now 36 years later to be running RMI and employing 25 people who are all passionate about their jobs and committed to being outstanding in our field!"

Many of the attendees at the 30th anniversary pig roast were individuals that have been a part of RMI's story since the very beginning.

As Charley shared, "our first customer was Bridgewater Power Company just down the road, and we still work with this crew today. We are fortunate to partner with companies that are like-minded in their commitment to the environment and doing the right thing."



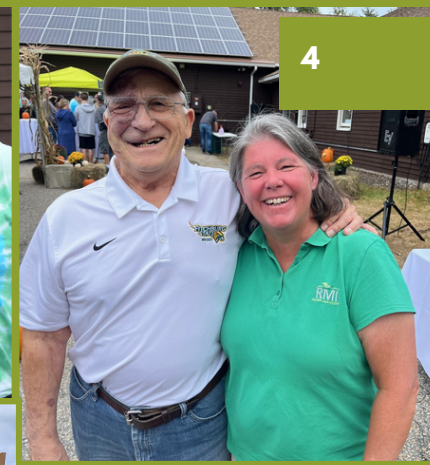
RMI owners Shelagh, Marty, and Charley cutting the celebratory cake.

Despite the changes and challenges over the years, we have never lost sight of our mission or core values and continually strive to do right by those we serve. Our team attributes RMI's success to strong relationships built within the local farming and land management communities, as well as a commitment to excellence that is shared by each and every employee.

PIG ROAST REVIVAL FOR RMI 30TH ANNIVERSARY

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Marty concluded, "I am quite proud that we have been successful for thirty years but none of those successes or years would have been possible without the trust of our customers or the guidance of our government regulators who have weathered many a storm from the sway of public opinion in which we operate, and they continue to hold us to such high standards. But the scope and breadth of our success would not be possible without the hard-working team of equipment operators, field staff, compliance and office personnel, and salespeople who have excelled at their jobs to keep RMI the success we are. Thank you all!"



A GOAT IN THE CLASSROOM? YOU BETTER BAAA-LIEVE IT



Charley reading Gregory, The Terrible Eater to students at the Sandwich Center School.



Principal Connelly of the Jennie D. Blake School joining Brandy, Charley and Buster.

RMI Senior Project Manager Charley Hanson and Sales Representative Brandy Thomas, along with a very special four-legged guest, have been bringing story time to life at New Hampshire elementary schools. Students, faculty, and staff eagerly joined in to hear Charley regale the room with a reading of Mitchell Sharmat's popular children's book *Gregory, the Terrible Eater*, a tale of a young goat with some truly unusual eating habits. Following the story, Charley and Brandy herded the lively little baby goat Buster into the classroom for a meet-and-greet with the audience. Students are encouraged to interact with Buster and to ask questions, especially about the eating habits of real goats!

Goat story time has been a great opportunity to foster a connection between students and animals they may be otherwise unfamiliar with, as well as to introduce them to some of the wonderful aspects of farm life. It's also a fun way for us to give back to our community. Our thanks go out to the Sandwich Center School and the Jennie D. Blake School for inviting Charley, Brandy, and Buster into the classroom.



What is Manufactured Topsoil?

Manufactured Topsoil (MFT) is an exceptionally productive, cost-effective, and sustainable alternative to stripping native loam for the restoration of disturbed lands. MFT is composed of locally sourced, environmentally sound recycled materials that support lush, healthy vegetative cover requiring little additional input or maintenance. With an increase in both cost and scarcity of native topsoil, MFT is the ideal solution for roadside construction projects and reclamations.

RMI partners with topsoil manufacturers throughout the Northeast as a supplier of bulk paper fiber, biosolids, wood ash, and other nutrient rich, recycled components used to create topsoil or augment underperforming loam. The end product boasts improved water holding capacity, superior erosion resistance, and denser plant growth compared to traditional loam. These materials are also incredibly cost-effective, saving money for both our partners and their end users.



The reclamation of a stripped gravel pit in Massachusetts using MFT.

What do the different components of MFT do?

While blends are job specific and are tailored to the exact needs of the project, all MFT recipes generally contain a few key components. Healthy plant growth and development requires nitrogen and phosphorous, and biosolids are an active source of both. The nutrients contained in biosolids are in plant available, slow-release form and provide sustenance over an extended period of time.

This results in more consistent growth and also protects surrounding ground water from excess nutrient leaching. Biosolids, as well as paper fiber, are also natural sources of organic matter. The backbone of healthy soil, abundant organic matter leads to improved soil structure, increased water and nutrient capacity, and vigorous plant growth. Potassium, a necessary and often expensive nutrient to source is supplied organically through the addition of rich, dark colored ash wood ash, which along with paper fiber, naturally increases the pH of topsoil to allow for better nutrient absorption.



Standard MFT ingredients - Biosolids, Paper Fiber, and Wood Ash.

Where is it used?

Municipal and roadside construction projects often require a hefty amount of topsoil to be trucked in and spread during the final stages of the project to ensure the revegetation of disturbed areas. In these scenarios, the areas requiring new topsoil are unique in that they often contain sloped and somewhat challenging terrain and are located in areas highly visible by the public. These factors require the use of topsoil that is naturally erosion resistant and that can grow sustained, visually appealing groundcover that does not require an extensive amount of maintenance.

CULTIVATING SUCCESS WITH MANUFACTURED TOPSOIL

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One recently completed project utilizing MFT composed of RMI's soil amendments was the construction of a local park and ride that required approximately 2,600 cubic yards of topsoil. The topography of the site included a highly visible berm with significantly sloped sides.

To create the topsoil used for this job, RMI's partner company mixed paper fiber, sand, biosolids, and wood ash using the following blend recipe:

Material	Mixture Ratio
Paper Fiber	5
Sand	5
Biosolids	1
Wood Ash	1/2

The material was mixed and then placed in a windrow to mature for three months to encourage robust microbial activity. Once the curing process was complete, the finished MFT was trucked to site and spread with conventional construction equipment. To finalize the project, the MFT was seeded with conservation mix to grow a cover of grasses, wildflowers, and legumes.

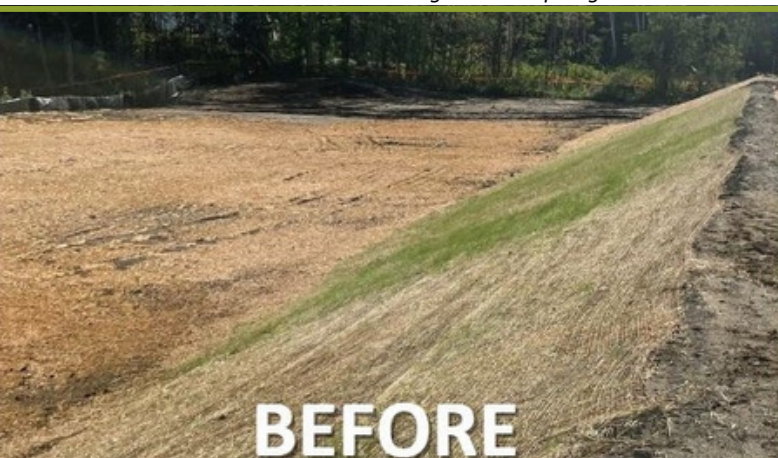


Pictured above: Screening and stockpiling the MFT. Pictured Below: Before & after photos of the fully revegetated Park & Ride.

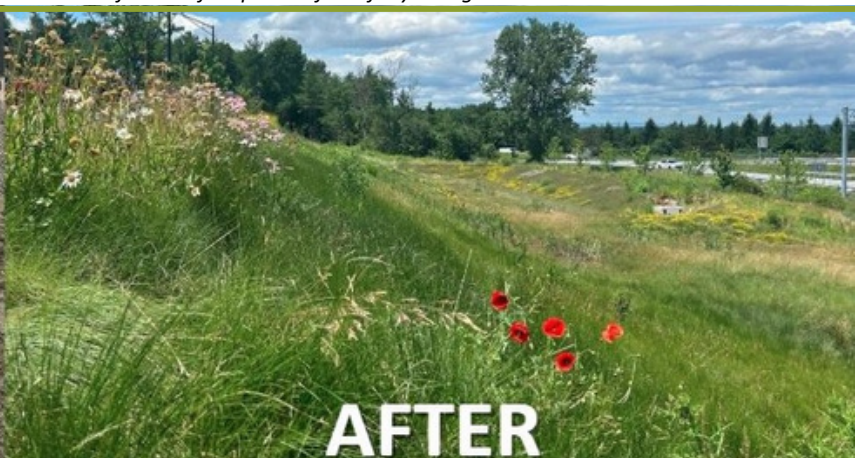
Fueled by the vigorous biological activity and a perfectly curated blend of nutrients, visible greenery began sprouting up shortly after seeding and by two weeks the MFT was supporting healthy, consistent growth. By two months, any areas that had been previously bare were now supporting a dense cover of grass. We visited this site for a one-year post project check-in and found that the landscape boasted a lush and varied vegetative cover including various species of wildflower, clover, and grasses. The sloped sections of the Park and Ride held steadily and experienced very minimal soil loss, and the landscape's overall good health was very evident.

Why is MFT the way to go?

Both our partner company and the town were very pleased with the results of the MFT used at the Park and Ride, and with the associated cost savings to the project. The successful restoration of the site was dependent upon the utilization of a robust, productive topsoil, able to withstand erosion and support vigorous plant growth. MFT composed of RMI's soil amendments satisfied the many requirements of this project and prevented the stripping of native topsoil for this purpose. By choosing to use an environmentally sound product composed of renewable, recycled, and locally produced soil amendments, key nutrients were thus recycled back into local soils in a safe and sustainable manner.



BEFORE



AFTER





Gathering at the Northeast Residuals & Biosolids Conference

Two of the largest annual Northeastern water recovery conferences took place in November 2024 and January 2025, generating a lot of excitement from the industry. The two-day Northeast Biosolids & Residuals Conference held in Providence, RI and the four-day New England Water Environment Association Conference and Exhibit held in Boston, MA, were each bustling with attendees. Organized by WEF and NEWEA respectively, these conferences unite professionals within the water industry and provide an opportunity for collaboration between the storm water, wastewater, and drinking water sectors, and are an excellent way to connect to others within the residuals management world.

The biosolids buzz at both conferences included updates on the latest-greatest dryer technology, residuals management challenges in New England, and success stories including the land application of biosolids to completely restore barren mine lands in Appalachia. While challenges as a result of limited long-term biosolids disposal options came up frequently in discussion, collectively we work towards solutions to these problems and continue to foster a collaborative approach to the future of residuals management.

Following these two conferences, the “[Water’s Worth It](#)” Legislative Breakfast, hosted by a coalition of water associations, took place in Concord, NH on March 6th. This event was well attended by water professionals and state legislators who united to discuss the most pressing challenges currently faced by the water industry, including infrastructure funding, energy, workforce

development, and increased cybersecurity threats. Attendees of this event emphasize the importance of support for the water industry and advocate for legislation that promotes responsible, science-based water management practices.

Both the Northeast Biosolids & Residuals Conference and the New England Water Environment Association Conference, as well as the Legislative Breakfast, aim to unite water professionals and provide a platform for education and collaborative discussion. The many sectors of the water industry joining forces to work towards sustainable solutions, sound legislation, and technological developments benefits not only the industry, but our communities and our environment as well.



Daryl Dean has been a driver with RMI since April of 2020 and is based out of our facility in New Hampton, New Hampshire. He is incredibly mechanically savvy and regularly provides his top-notch mechanic services at RMI. Daryl is now driving RMI-23, our newest Peterbilt tractor trailer. He is meticulous with the care and maintenance of both his truck and trailer, keeping everything looking its best even during mud season. In the first few months of 2025 alone, Daryl delivered a total of 2,196 loads of material, weighing a total of 65,310 tons, and drove a total of 304,065 miles. **Keep up the great work, Daryl!**



SPRING SOIL SAMPLING

Was your prior year yield not up to par? Spring is a great time to collect soil samples for lab analysis to determine the overall health fertility of your soil. While some prefer to sample during the Fall season, Spring sampling is also a great option! Timing is everything of course, and getting the job done prior to planting season is not always feasible. You may also encounter overly saturated soils due to heavy rain events or very dry soil conditions due to drought that could skew results, so there can of course be some challenges!

Generally, at least 10-12 core samples of the top 6 inches of soil are combined to form a composite sample to send to the lab. It is very important that the sample is representative as the lab measures only a tiny fraction of the sample sent. The “plow furrow” or top 6 inches of soil in a one-acre area is equivalent to approximately 2 million pounds, meaning that a great deal depends on that tiny fraction of soil!

If you are feeling unsure about the process, RMI offers soil sampling services and will coordinate with the appropriate laboratory to get you the data that you need to make informed decisions. Your RMI Sales Representative can help you schedule sampling, or feel free to call our office at 603-536-8900!



Our most diligent Soil Sampler, Mookie.



RMI DELIVERS HOLIDAY CHEER

We've said it before and we'll say it again, we have AWESOME customers! What we do wouldn't be possible without the biomass plants, paper generators, water resource recovery facilities, and other environmentally conscious industries that partner with us to help make the world a little greener every day. Our annual wreath delivery is just one of the ways we say thank you to these truly fantastic folks.

Thanks for reading!
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