



**AARON MAHER: NEW  
PRODUCT SALES  
REPRESENTATIVE**



**PLOW DAMAGE: TURN A  
MISTAKE INTO A  
MASTERPIECE**



**COMPOST AS SOURCES OF  
NUTRIENTS: NUTRIENT  
MANAGEMENT REGULATIONS**



## 2016 SPRING NEWSLETTER

Another season is fast approaching and Agresource has been gearing up to continue providing our customers with quality compost, soils and mulch. We have added to our product sales team with Aaron Maher, taking over territory in Southern New England. Aaron has been out and about over the past month introducing himself and dropping samples of material we can provide. Continue reading to find an article about repairing plow damage in an efficient manner and using compost as a source of nutrients. With nutrient management regulations always changing, knowing what is in your compost and how to properly use it is key. Lastly say hello to Miller, the Agresource mascot!

Check us out on Twitter (@Agresource\_Inc) and Facebook for daily updates on what we and the industry as a whole are up to. Discover more about Agresource anytime at [www.agresourceinc.com](http://www.agresourceinc.com).

Agresource Inc.  
100 Main St.  
Amesbury, MA 01913

## **Aaron Maher: Product Sales Representative**

Agresource Inc. is proud to formally announce Aaron Maher as our newest product sales representative covering Connecticut, Rhode Island and Eastern New York. Aaron has over 20 years experience in the Green Industry focusing on turfgrass production. Starting on a Rhode Island turf farm as a laborer, Aaron worked his way from the field to the office expediting orders, dispatching trucks and handling inside sales. Aaron later transitioned to outside sales and has created relationships and business throughout the North East.



As a native of Rhode Island, Aaron is familiar with Southern New England and its variable climates from the coast to the northern boarder. With over 20 years in the Green Industry he has a vast network of industry professionals to reach out to when needed to help in any situation. We have no doubt Aaron will be a valuable asset not only to Agresource, but to our existing and future customers as well.

Reach out to Aaron anytime directly at (401) 275-3272 or [amaher@agresourceinc.com](mailto:amaher@agresourceinc.com) to make an appointment, request samples or answer your questions.

## **Plow Damage – Turn a mistake into a masterpiece**

Mike Carignan



It is the cost of doing business every year, winter comes and goes and leaves us with torn up, unsightly road and driveway edges to contend with. These areas become some of the hardest to re-establish because of multiple factors.

- 1) The ground has been compacted by all the traffic constantly beating it down over the long winter season.

2) Road sand and salt have changed the physical/chemical property of the soil which adversely affects seed establishment and success.

3) Heat from paved areas can overwhelm young seedlings.

How do we work more efficiently and cost effectively to turn those mistakes into a masterpiece of turf? A quality planting medium is the first step to establishment success. A well balanced soil will contain enough organic matter to hold moisture but not too much to saturate the soil. Organic matter will also aid in the retention of vital plant available nutrients to support germination and the plant through the early days of growth.

Where is the organic matter and nutrients coming from? Compost is a nutrient rich product resulting from the controlled biological decomposition of organic material that has been sanitized through the generation of heat and stabilized to the point that it is beneficial to plant growth (US Compost Council). Organic matter is vital to productive soils and healthy plant growth. Compost is an excellent source of organic matter that promotes biologically active soil by adding beneficial micro-organisms. By incorporating compost, it is possible to add life and organic matter to the soil.



Adding life to the soil will replicate native soil systems where shrubs, trees, and grasslands thrived without fertilizer or pesticides. The micro-organisms will thrive and multiply to fight many soil-borne diseases and increase nutrient supply to plants.

Increasing organic matter, retaining moisture, lowering soil bulk density with a lighter weight material and having plant available and slow release nutrients present in the soil all lead to success. Doing the job once is the most efficient way to work. With poor soil quality the seed most likely will still germinate, but long term success will not be viable leading to call backs and doing the work twice, double the work equals double the expense. A phrase from a former boss fits perfectly “we don’t have time to do it right, but we have time to do it over?”

## **Composts as Sources of Nutrients**

Geoff Kuter, Ph.D

When evaluating the use of composts as sources of plant nutrients, consideration should be given to the beneficial impacts of compost amendments on soil properties. Although composts are sources of nutrients they can also effectively lower the risks of nutrient loss by reducing soil erosion and leaching in addition to producing chemical changes in the soil (e.g. addition of Aluminum and Iron) that reduce Phosphorus mobility.

Compost applications can provide, along with valuable organic matter, considerable quantities of both Nitrogen (N) and Phosphorus (P). The levels of nutrients will largely depend upon the types of feedstocks used to make the compost (e.g. manures, food wastes, biosolids, etc.), as well as other factors such as the stability of compost and how the compost is prepared.

There is relatively widespread agreement that most (nearly 90%) of the total N in composts is organic and thus slow release. This N is available over time as microbial activity results in transformation into a water soluble form. The plant available N (PAN) in the first growing season obtained from the application of compost will be about 10 to 20 % of the organic fraction in addition to the Ammonium and Nitrate N fraction; the water soluble forms of N.

However determining P availability when using composts is less clear and more complex. Most (likely 60 to 100%) of the total P is likely available to plants but most of this P is not water soluble and may be of limited availability for germinating seeds and new roots. In addition, the N to P ratios in composts are not balanced. When compost is applied based on the amount of plant available N, it is very likely that plant available P will be provided at excessive rates.

However, compost is not fertilizer and evaluating use of compost strictly based on the nutrient content is not appropriate. The benefits of using compost as a soil amendment extend beyond just the supply of plant nutrients. Compost amendments provide positive impacts on soil physical, chemical, and biological properties. For example, organic matter applied with composts improves soil structure and will lead to both increased water holding capacity and improved infiltration of water. Furthermore, compost amendments will reduce soil bulk density and soil compaction allowing for improved root growth, which in turn allows for not only better uptake of nutrients but also reduce the loss of nutrients from surface runoff.

Therefore when making recommendations as to the use of composts, consideration should be given not only to the impact on soil nutrient levels, but also the soil improvements that result in reduced runoff. The benefits to plant growth (in particular root growth) and soil

properties in many cases will reduce the impact of the added nutrients and lessen the overall losses of nutrients.

Composts application rates should not be solely based on nutrient levels but also considering the myriad benefits to soil properties and enhanced root growth. Consideration should be the relatively low levels of water soluble nutrients (particularly low levels of water soluble P) and the improvements to soil properties when evaluating the risks that nutrients will be lost either by leaching or runoff.

Compost testing shows that the water extractable P (WEP) in compost is relatively low in comparison with manures and fertilizers; often less than 10 % of the total P. The amount of water extractable P in compost will vary depending on the type of compost. Compost with high concentrations of Aluminum (Al) and Iron (Fe) will have lower levels of water extractable P. Although amending soils with compost will result in an increase in the overall levels of P in soils, only a small fraction is readily subject to leaching and thus risks that P will be lost from the soil are less than might be expected when considering the total P that is provided. When the ratio of P to Aluminum and Iron is sufficiently low not only will all the P be bound and not readily lost from the soil but the soil will be able to absorb additional P inputs.

Although it is difficult to make generalizations about the availability of nutrients that will be released from composts applications to various soils, it is clear that in many cases when applying composts the use of P containing fertilizer can be reduced significantly if not eliminated entirely.

When using compost as a soil amendment soil testing should be performed for both soil organic matter and for soil P.

The attached chart can be used to assist in making decisions regarding use of compost based on soil testing results.

Soils that are low or deficient in organic matter will benefit from the use of composts and use of composts to build up soil organic matter should be encouraged where soil testing also shows that nutrient levels are less than optimal (the Top Left Box).

If soils are low in organic matter but also have optimal or above optimal P levels, (Top Right Box) compost should not be used unless there is an evaluation of site specific risk factors that would impact transport of P. If compost is used, then only a compost with low levels of P or high levels of Aluminum and Iron should be applied.

In contrast, when soil organic matter levels are at levels that are adequate, (Bottom Left and Right Boxes) the further addition of compost is not required and thus not recommended. In



particular, where repeated use of organic amendments has led to adequate soil organic levels and high levels of soil phosphorus that are adequate to support plant growth (Bottom Right Box), both the further addition of composts and fertilizers containing P should be ceased entirely.

		<u>Soil Test Results for Phosphorus</u>	
		Below Optimum -	Above Optimum +
<u>% Soil Organic Matter</u>	Low -	Use compost at levels necessary to reach adequate Organic Matter  Reduce or eliminate fertilizer applications based on compost nutrient levels	Consider site risk factors and use only Low P composts  Eliminate fertilizer applications
	Adequate +	Do not make further compost applications  Use fertilizers at rates based on soil testing	Do not make further compost applications  Eliminate fertilizer applications

### **Agresource Mascot: Miller aka "Sludge"**

Introducing Miller aka "Sludge" as the official Agresource Inc. mascot. A 5 month old Golden Doodle, Miller can be seen on the road, at the job site or curling up under a desk after a long days work. Like any retriever Miller has an appetite for sticks, stones and whatever else is in his path. He is turning into quite the people person as he gets older so when you see him out and about stop to say hello!

