



Wetland Soils
A project review



Compostable Plastics



Turf Repair and
Restoration



2018 FALL NEWSLETTER

A slow spring turned into a hazy, hot and humid summer with challenging weather patterns stretching across the north east. Fall is the best time to repair any turf loss experienced through out the summer, get some tips on how to go about restoring your turf to top form from the article below. You will also find an update on a manufactured soil project and Agresource's insight into what are compostable plastics.

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Wetland Soil

Cleaning up a contaminated site in Amesbury, MA along the Powwow River and matching existing soils with imported engineered material.



Engineered wetland soils are created to mimic the natural environment where plant and animal populations have adapted to saturated conditions. To create these soils Agresource blends organic material with fine, silty sand in specific ratios to create the hydric conditions that will hold moisture in the soil, sustain standing water and supply slow release nutrients to the vegetation for establishment. Each wetland environment is different and each engineered soil will reflect that difference.



One project in particular dealt with cleaning up an old mill site along the Powwow River in Amesbury, MA. This project required the excavation of contaminated soils and importing of over 3,500 yards of a new manufactured wetland soil material. The existing soils were tested before removal and imported material blended to meet the specifications of the existing soil. The new wetland areas nestled in a curve in the river goes from saturated to dry

depending on the river depth and time of year. Vegetation has taken hold and wildlife has made their way back to the newly constructed and cleaned up parcel of land.



What are “Compostable” Plastics?

In recent years there has been a proliferation of products being offered for sale labeled as either “biodegradable” or “compostable.” In efforts to promote sustainability and reduce plastic litter many communities across Massachusetts have banned single use plastic shopping bags but allow the use of “biodegradable” bags.

There is considerable confusion about what is meant by the terms “Biodegradable” and “Compostable” and what types of products are compatible with composting programs and will actually breakdown safely. Many of the plastic products that are labeled as “Biodegradable” do not in fact breakdown in composting facilities and thus are not truly “Compostable.” In addition, some of the plastic products labeled and certified as “Compostable” will only breakdown when exposed to high temperatures that are achieved in large scale facilities and thus may not be acceptable in small

home-scale composters. In addition, “Compostable” products that require high temperatures may not breakdown in anaerobic digestion facilities that operate at lower temperatures.

For more than 20 years Agresource has operated a regional composting facility in Ipswich MA and we accept a variety of feedstocks including food wastes and leaves and yard wastes. Over the years we have followed the development of compostable products and have established common sense policies regarding the products that we accept. Other composting facilities may have their own policies. Agresource only accepts products that are certified as compostable by the Biodegradable Products Institute (BPI) and have meet the ASTM standards and test methods for composting (e.g. ASTM 6400). Those products (bags, cutlery, cups and plates) that meet the BPI certification program are independently tested to assure that they will degrade during the composting process.



Because many products appear similar to traditional plastics it is important to look for the BPI logo or check the BPI website (www.bpiworld.org) to insure that products are certified compostable. All too often a manufacturer may claim that a product is “Compostable” but the product should be BPI certified product.

Compostable cutlery (knives, forks and spoons) even when BPI certified, can be problematic for some composting facilities because they may be slow to degrade in comparison with paper and compostable products that are thin. However, we have found that the certified compostable products do breakdown over time in the same way that woody materials which are also slow to decompose but do breakdown over time.

Paper and paper packaging that are often used to handle food can also create confusion. Although natural waxes used in food grade products will degrade, we have found that many products that may appear to be wax coated (such as milk, juice and ice cream cartons) are instead plastic coated and thus should not be included with other compostable materials.

Turf Repair and Restoration



Now is the time to tackle problem areas in lawns and turf where there are areas of sparse growth and bare ground. Core aeration along with over seeding of new turfgrass varieties are useful tools in repairing stressed areas. Utilizing a compost topdressing will improve the chances of success and promote the rapid establishment of new turf growth. A compost topdressing (typically 1/4 to 1/3 inch thickness) when core aeration is performed will supply organic matter and plant nutrients and thus will help with the quick establishment of newly seeded or sodded areas.

Compost can be spread after core aeration and seeding is performed. In order to maximize seed/soil contact, the treated areas should be raked or a drag mat should be used to break up the soil cores. The process of breaking up the soil cores will also facilitate the job of working the compost down into the soil profile.

In general, compost topdressing recommendations call for a layer of about 1/4 to 1/3-inch thickness. This application rate will require about 0.75 to 1.0 cubic yards of compost per 1,000 square foot. Depending on the severity of the damage to the turf and the aggressiveness of the aeration, greater amounts of compost can be applied to and worked into areas where there are extensive areas of bare soil. Where there is bare soil, a steel rake can be used to break up the surface of the soil and insure that the compost is incorporated into the soil surface.





If a complete restoration is required, e.g. removal of all vegetation and re-seeding, compost should be thoroughly incorporated into the top four to six inches of the soil before seeding. A two-inch layer of compost spread over the entire surface is generally recommended to supply organic matter, nutrients and increase water holding capacity. The soil should be tested as a baseline and the rate of compost amendment adjusted accordingly.