

NUTRIENT
APPLICATION
GUIDELINES ON NONAGRICULTURAL TURF



FOOD WASTE COMPOSTING



AGRESOIL TOPDRESSING COMPOST ON SPORTS FIELDS



2015 FALL NEWSLETTER

How quickly the seasons change from never ending snow storms of February to the hazy/humid days of July and August. Now with night time temperatures dropping once again into the 50's we look ahead to fall. Topdressing is a popular fall project for many turf managers who are looking to cultivate strong roots before we turn back to a blanket of snow. In Massachusetts and Connecticut, new nutrient application guidelines are out and it could affect your management practices. In this edition of the newsletter you will find a summary of the important sections of the new guidelines for non-agricultural turf and strategies for staying within compliance. We will also look into our 16 year partnership with the Lowell Folk Festival and food waste composting.

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Agresource Inc. 100 Main St. Amesbury, MA 01913

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Restrictions on the use of Phosphorus containing fertilizers and Plant nutrients on established turf and lawns

Massachusetts has recently enacted nutrient management regulation and is joining other states that have limits on the use of phosphorus containing fertilizers and plant nutrients on turf. Phosphorus, in addition to nitrogen, can cause water pollution if over applied and legislation is intended to protect inland water resources that are at risk.

Unfortunately the rules established by various states are not consistent with one another as to what types of turf areas are affected and what types of products are considered as fertilizers/plant nutrients. Turf managers and landscapers should be familiar with the rules in the state where they are working and follow these rules when topdressing established turf with compost.

Massachusetts divides the regulation into two categories for non-agricultural turf; phosphorus containing fertilizers and plant nutrients. In Massachusetts there is no distinction between golf courses, sports fields and other non-agricultural turf areas. Compost falls under the category of plant nutrient in Massachusetts and therefore has slightly different regulations as compared to a phosphorus containing fertilizer. Any application of a phosphorus containing fertilizer not for the purpose of: establishing turf on bare ground, applying in accordance with the turf establishment guidelines of Umass Extension, repair of land disturbed by construction or tillage, or a lawn patch product has been used, must have a soil test showing a soil phosphorus deficiency. An application of plant nutrients (compost included) can be applied with out a soil test under the above listed conditions, but the amount of nutrient applied must be known and kept with in the Umass BMP guidelines of total nutrient applied per year.

Legislation in CT does not distinguish between composts and traditional fertilizers, treating them as comparable products, but does exempt golf courses and agriculture from regulations. All other non-agricultural turf follows guidelines listed above for soil testing needs.

Links to various guidance documents are provided below.

Turf managers and landscapers need to follow the rules when using compost to make sure that applications are performed properly. In general, compost and phosphorus containing fertilizers can only be used on established turf when soil testing shows that there is a deficiency in soil phosphorus levels (<40 ppm). Rates of phosphorus application will then be adjusted based on the results of the soil testing. The need for Phosphorus in new seeding and in turf renovation is recognized in the Best Management Practices provided through The University of Massachusetts.

Thus applying compost when renovating turf or when re-seeding or making repairs to worn turf areas is allowed regardless of the existing soil phosphorus levels.

Applications of composts (and phosphorus containing fertilizers) is not allowed on established turf from December 1st through March 1st in MA and March 15th in CT, not allowed on impervious surfaces and prohibited within 15 feet (CT) and 20 feet (MA) of surface water bodies.

Whenever compost is being used we recommend that you follow good management practices.

1. Soil testing should be performed before application to adjust the application rate and to insure that existing soil Phosphorus levels are not excessive.

- 2. Compost does contain nutrients and should not be spread on frozen ground or immediately before heavy rain is forecasted.
- 3. Compost should be incorporated into the soil as soon as possible after application. Core aerate when topdressing lawns.
- 4. Do not store the compost near surface water bodies.
- 5. Sweep compost from driveways and sidewalks after top dressing.

Remember that compost topdressing on established turf can be safely performed in accordance with the new rules and that the proper use of compost can reduce risks that nutrients will enter vulnerable surface water bodies. Compost amendments will improve soil physical properties and thus reduce compaction and erosion and therefore increasing water infiltration.

If considering top dressing or implementing a top dressing program please contact us for further information.

Guidance on the use of fertilizers and compost can be found at various extension websites. The following are some examples and address the mandates of various turf rules:

http://extension.umass.edu/turf/publications-resources/best-management-practices

https://extension.unh.edu/resources/files/Resource004116_Rep5835.pdf

http://www.sustainability.uconn.edu/Lawnfertilizerrecommendations.html

https://extension.unh.edu/resources/files/Resource002468_Rep3617.pdf

http://www.mass.gov/eea/docs/agr/docs/draft-nutrient-management-regulations.pdf

Conant High School Field Renovation with Agresoil Topdressing Compost

High school athletics put a major amount of stress on their sports fields with multiple teams practicing and competing on the same surface in a very condensed season. Often environmental conditions are not ideal for growth and recovery due to early spring and late fall schedules. Because of this heavy use it is imperative for field managers to have the ability to not only strengthen their turf in order to contest with the added stress, but the proper soil structure and nutrients to expedite wear recovery in high traffic areas. Field manager Brian Lloyd of Conant High School in Jaffrey, NH took an active approach to improving his field. With the help of Rick Brassor from Atlantic Golf & Turf, both men decided on a program for the highly used field.

In late May, the day started out with deep tine aeration to break up compaction deep in the soil, quickly followed by a slice seeder placing high quality seed into the soil profile. The final step was to spread the entire field with 35 yards/acre of Agresoil Topdressing Compost out of Merrimack, NH using a tow behind spin type spreader. With favorable temperatures over the next week, the field went from thin coverage to a dense healthy stand of healthy turf that has set the stage for success through out the athletic schedule.

With the summer coming to a close, fall is the perfect time to get out and topdress those sports fields and lawn areas that need recovery. A small amount of available nutrients will speed up recovery this year and the benefit of organic matter in the soil will help to with nutrient and water holding capacity going forward.



Worn turf coming out of winter



Deep tine aeration followed by slice seeding



Agresoil Topdressing Compost applied with tow behind rotary spreader



8 days after process the center of the field is dense and healthy



Brian Lloyd, field manager pleased with the results

Composting Food Wastes from Fairs, Festivals and Special Events: The Lowell Folk Festival® Experience



Since 2001, Agresource has been composting source separated food wastes collected at the Lowell Folk Festival. What started as a pilot program has grown to become a model program and in 2004 the Lowell Folk Festival received the Massachusetts Recycling Coalition's Institutional Recycling Award.

The Lowell Folk Festival initiated its recycling and composting program after performing a comprehensive waste audit showing that over 98% of the trash generated during the festival originated at the food vendor booths and

that a significant portion consisted of food and soiled paper. In 2001 the initial program was started as a pilot. The program has since grown to the point that 90 to 95 % of the solid waste stream is being diverted from more than 200,000 people who attend the three-day event.

The key to the success of the composting program was a ban on all plastics distributed from the food booths. All plates, bowls and cups were made of paper and food vendors gave out only compostable utensils made with a cornstarch polymer. To insure compliance, during the first few years the Festival Foundation provided these utensils at no cost to the vendors. In order to facilitate the diversion of compostable wastes and expand the recycling program, about 100 Trash/Recycling Areas were located throughout the festival grounds. Compostable waste deposited in green barrels included, food, paper plates and napkins, biodegradable utensils and miscellaneous soiled paper. The barrels were taken to the central "Recycling Center" for further sorting. Material collected in the barrels was dumped onto a sorting table and contaminates such as plastic lids, wrappers, and miscellaneous containers were removed. It is estimated that contaminates represent less than 5% of the material deposited in the barrels.

Educational booths are set up illustrating the different efforts being made in the City of Lowell to increase recycling and composting, and to decrease litter. In an effort to educate the public about the benefits of composting and recycling samples of finished compost from the previous year were provided.

Compostable materials were transported by the City of Lowell to the Ipswich Compost Facility managed by Agresource. The Folk Festival materials were added to leaves and yards wastes for composting. The compost pile is turned periodically to facilitate



the biological composting process. After an extended period of time the compost is screened to remove any sticks and stones and plastic material that may not have been removed during the sorting

process. Compost has been provided to the city and placed around bushes and shrubbery within the National Park.

Further information of the Lowell Folk Festival Program is available from the EPA web site www.epa.gov/recycleonthego or from Pat Scanlon of Scanlon Associates.

Agresource, Inc., 100 Main St. Amesbury, MA 01913 800-313-3320 wwww.agresourceinc.com