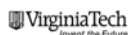


## Compost and the Lawn

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**One area of “organic” turf care that almost everyone can agree upon is how beneficial compost can be in turf management. But...**

- Pay attention to quality
- Pay attention to quantity
- Incorporation before establishment and/or remediation of poor soil – ABSOLUTELY
- Patience in its use as a topdressing (“over the top”) amendment... NOTE: it can be mis- (i.e. over-) applied

### What is compost?

- A very complex, highly degraded organic material that has been decomposed to a very stable state by microbial activity

### Compost is NOT:

- Manure
- Peat
- Chemical fertilizer
- Soil
- Fresh landscape material collected off the street
- But it might be produced from manure, leaves, wood chips, food wastes, and other assorted carbon bulking agents

### When you hear COMPOST, you should think/see/smell:

- Earthy smell... no “rotting” odors
- Something you are not afraid to “run your fingers through”
- Stable... C:N ratios
- An organic component of a landscape management program

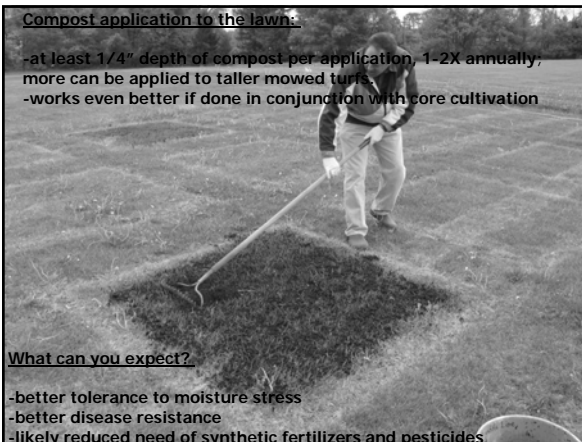
Appearance, size, and odor	
Color:	Brown to black
Size (surface applications):	¼ to ¾ inch
Size (incorporated):	¼ to ½
Odor:	“Earthy”
Physical appearance	
Moisture content:	30 to 50 percent
Organic matter:	Greater than 30 percent
Ash content:	Less than 70 percent
Chemical properties	
Carbon : nitrogen ratio:	Below or equal to 30:1
Nitrogen:	0.5 to 3.0 percent
Phosphorus:	Greater than 0.2 percent
pH:	6.0 to 8.0
Metals:	Determined by state and federal agencies
Soluble salts:	Depends on turf species, type of salt, concentration, and application method. Consult test lab or other expert to determine how this will affect the turf.
*Use this information only as a general guide. Some composts have properties that do not fall within these guidelines yet are acceptable in certain situations. Others, though they may fit these criteria, may have serious drawbacks.	

## How can compost be used?

- As a mulch
- As a substitute for peat
- As a soil amendment
- As a very dilute fertilizer, but really more so as an organic amendment that “feeds” the soil more so than feeding very complex, highly degraded organic material that has been decomposed to a very stable state by microbial activity

### Compost application to the lawn:

- at least 1/4" depth of compost per application, 1-2X annually; more can be applied to taller mowed turfs
- works even better if done in conjunction with core cultivation



### What can you expect?

- better tolerance to moisture stress
- better disease resistance
- likely reduced need of synthetic fertilizers and pesticides

## Some other benefits?

- Improve soil structure
- Improve water and nutrient holding capacity, drought tolerance
- Reduce compaction
- Reduce erosion, particularly on embankments, roadsides
- Diverts materials from landfills

... and there are many others

## Cultivation and Compost

- Can you also perform this in conjunction with a compost application?



- Research indicates compost applied prior to aeration.



- Awesome opportunity to enhance the soil, encourage seed germination etc.

**Suggested amounts of compost (cubic yards) per unit area applied to established turf as surface applications or tilled into soil prior to establishment.**

Unit area in square feet	Inches of compost applied				
	Surface application	Tilled into soil			
	¼	½	1	1½	2
1,000	1*	2	3	5	6
5,000	4	8	15	23	31
10,000	8	15	31	46	62
20,000	15	31	62	93	123
30,000	23	43	93	139	185
40,000	31	62	123	185	247

\*amounts of compost in cubic yards rounded to nearest whole numbers.

Using Composts to Improve Turf Performance  
Dr. Peter Landschoot, Penn State University

www.weblogs.cals.vt.edu/lawn\_garden/