

# Compost Use for Improved Soil

## Gardening/Vegetable Production

It is feasible to less mature compost in vegetable production, as long as it is incorporated sufficiently in advance of planting.



A rate of 1-2 tons compost per acre is common practice.



## Improves Highly Compacted Soils

Compost reduces the bulk density of damaged soil.



Before compost addition



After compost addition

## What is Compost?

An organic matter resource that has the unique ability to improve the chemical, physical, and biological characteristics of soils.



## Nursery/Growing Media

In determining how much compost to use, plant requirements and compost characteristics should be taken into consideration.



The use of compost as a growing media has, in general, been shown to reduce fertilizer and liming requirements, improve crop vigor, increase the number of flowers per plant, reduce the need for fungicides, and improve root growth.

## Benefits of Using Compost

- Improves soil structure, porosity and density, creating a better plant root environment.
- Increases water infiltration and permeability in heavy soils.
- Improves water holding capacity, reducing water loss and making nutrients more plant available.
- Supplies significant quantities of organic matter and a variety of macro and micronutrients as well as beneficial microorganisms.
- Buffers soil pH and improves cation exchange capacity (CEC) of soils and growing media, improving their ability to hold nutrients for plant use.
- Binds contaminants within the organic matter and helps to suppress disease.

Find your compost here: <http://compost.css.cornell.edu/maps.html>

## Landscaping and Tree Planting/Backfill

The addition of compost improves the physical structure of the soil, which in turn, promotes root development and heightens a plant's resistance to stress.

Use as mulch in established beds. It fulfills the functions of a mulch, and has the ability to provide plant nutrients.

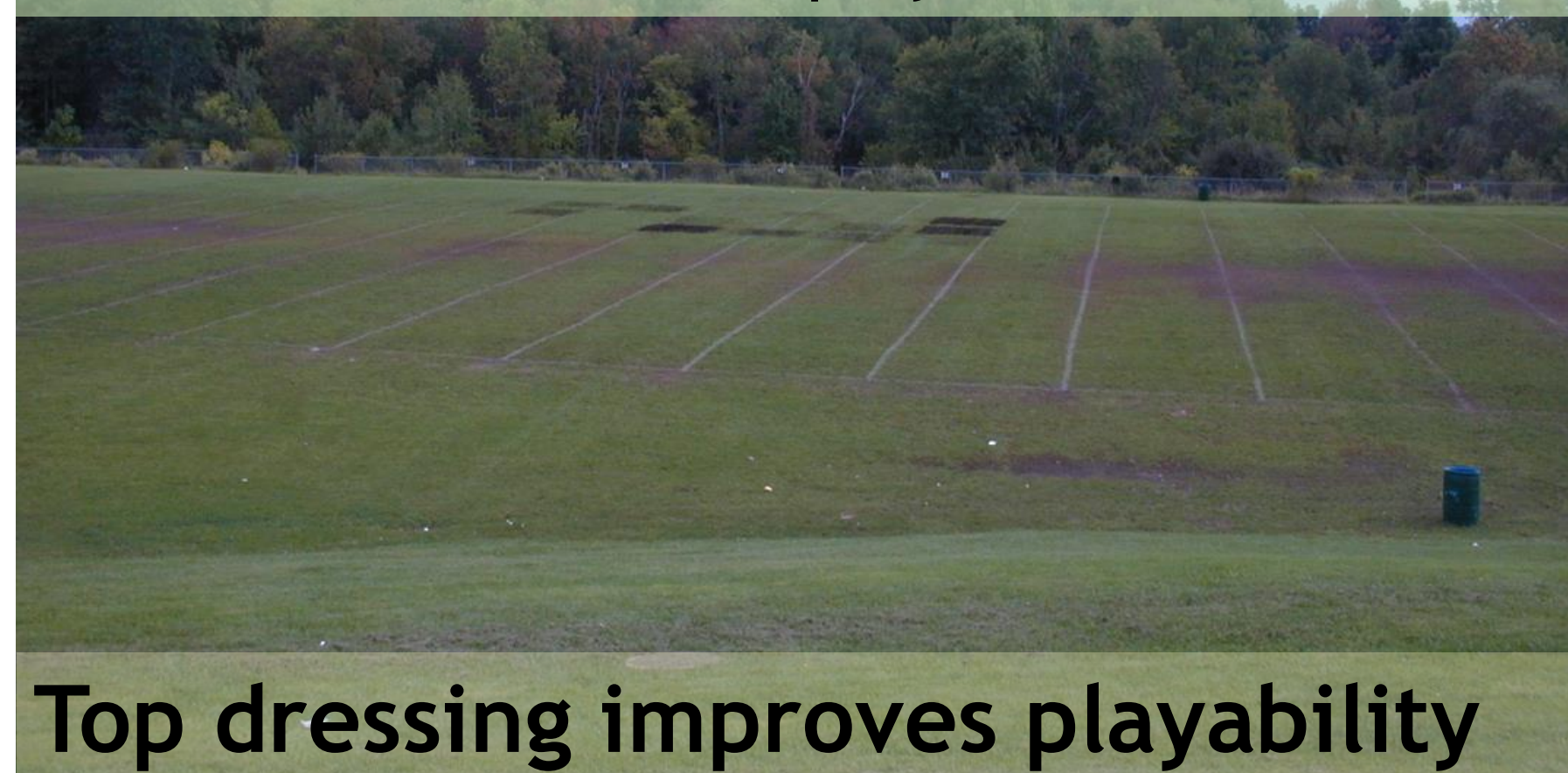


Use up to 50% compost in tree planting and most horticultural applications.



## Athletic Fields Parks and Lawns: Maintenance and Establishment

Athletic fields are prone to compaction due to heavy traffic, use of fields when wet, and weight of vehicles on the fields. Wet and/or hard surfaces can cause injury to the turf and the players.



Top dressing improves playability

Addition of organic matter promotes aggregation of soil particles, increasing porosity and reducing bulk density to make a less compact soil.



Compost promotes faster turf establishment, improved turf density and color, increased rooting, and less need for fertilizer and irrigation.

