



Michigan Compost Markets

A project
to create
composting
opportunities

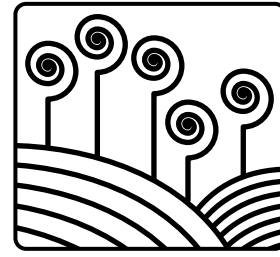
Landscaping and Lawn Care

Landscapers currently use large volumes of “topsoil” or prepared topsoil and soil enhancements to improve poor natural soils or subsoils to support the growth of decorative landscapes. The need for and function of amendments such as peat, composted manure, processed bark and aged sawdust vary depending on the attributes of existing soils, type of plants grown and aesthetic preference. Landscapers are also the leading end-market for composted yard trimmings, as many have discovered its versatility and unique benefits that provide an exceptional foundation for successful plantings.

Landscaping contractors buy soil products that meet their needs for availability, consistency, price and quality. The importance of reliably available material that produces predictable results cannot be over-emphasized. An initial purchase price comparable to or below similar products encourages trials. Quality reflects key functions that landscapers look for in a soil conditioner, although end users can compensate for field conditions to some extent to achieve desired growth performance. Issues of importance include ease of handling, aesthetics, durability, nutrient content, and chemical parameters such as pH and soluble salts.

The landscaping market includes diverse applications, from roadside flower beds prepared under contract with the Michigan Department of Transportation, to residential turf installations. Landscape contractors commonly work for both public and private clients. Decreasing availability and increasing costs of quality topsoil has made landscaping an excellent market for yard clippings compost.

Compost improves the physical, biological and chemical characteristics of soil. Like peat moss, compost raises the organic content of a soil, thereby reducing bulk density and increasing water holding capacity. Unlike peat, compost is biologically alive, a characteristic related to nutrient availability and disease suppression.



Markets

Fact Sheet Series

Compost Markets Assessment

Major markets for composted yard clippings include landscapers, nurseries, sports turf, topsoil blenders, home gardeners, agriculture, and emerging specialty uses. Users of traditional soil products are discovering the benefits of compost now that Michigan's ban on yard clippings landfilling is making quality compost more readily available. This fact sheet series explores the unique concerns, practices and potential of each market.

Market segment description:

This sector includes architects who specify materials for projects and contractors who install, maintain and re-landscape. Michigan landscape firms are mostly small businesses that annually earn \$600,000 and purchase 400 cubic yards of excavated topsoil.

Decreasing availability and increasing costs of high quality topsoil has made landscaping an excellent market for yard clippings compost.

An estimated 3500 landscaping and lawn care companies are listed by the Michigan Department of Agriculture as landscape contractors, growers, retail outlets for garden supplies, suppliers to professional growers or involved in landscape management. These companies managed an average of 288 acres each, or approximately 721,200 total acres (**source:** The MI Turfgrass Foundation, 1988).

Market segment capacity: According to the MI Turfgrass Foundation, landscaping and lawn care companies spent approximately \$712,000 on topdressing for turf establishment, \$4.3 million for mulch and \$16.5 million for fertilizers in 1988.

Advantages of compost use in the landscaping industry

Compost has many properties that make it useful as a soil additive, mulch and as topdressing. Application of compost increases the soil's organic matter content, water holding capacity, cation exchange capacity and improves soil structure. These traits make compost important for erosion control and turf establishment. It is generally less expensive than sphagnum peat and comparable in cost to reed-sedge peat or high quality topsoil.

Challenges to overcome:

Concerns about compost use in this market segment include color, uniformity, aroma, effect on plant use, decomposition and possible weed seeds.

Typical dollar value for compost in this segment:

Compost must be priced at a level nearly equivalent to excavated topsoil and reed-sedge peat. Excavated topsoil currently costs approximately \$7 per cubic yard

Quality requirements for the Landscaping Market

If it is to be used by landscapers, compost must have:

An acceptable color

Consistent texture and uniform appearance

Good or neutral aroma

Decay slowly

Plant growth enhancement

Little or no contaminants (plastics, glass, etc)

Compost producers must be able to ensure that their product will promote growth of grass and other plants. Successful field trials that document plant response will be important to adoption of compost by landscapers.

(Spring 1995), reed-sedge peat is commonly \$11.75 per cubic yard when sold in bulk and compost used by landscapers typically averages \$11.50 per cubic yard.

Breaking into this market segment:

Composters have been successful in developing landscaping clients through education, demonstration plots and providing small amounts of finished compost samples to prospective buyers.

Application information

Flowerbed planting:

Landscapers report success with a 2:1 or 3:1 topsoil/compost mixture incorporating compost into the upper 4 to 6 inches of soil. One firm uses two inches of compost tilled in to a depth of four to six inches on 90% of their sites for shrubs, flower beds and turf. Traverse City uses 3-4" of compost incorporated into the upper 10-12" of soil when planting flowerbeds.

Backfill mixes for tree planting:

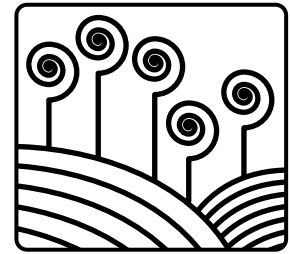
Traverse City uses a 50/50 mix of compost and existing soil for tree planting. City guidelines for planting trees includes 20 to 40 percent compost in the total volume required for backfilling.

Turf:

Experts recommend using one inch of compost tilled to a depth of five inches, equivalent to 20 percent by volume. For poorer soils, a two inch layer of compost is recommended. Traverse City applies 3-4" of compost on erosion projects to seed a perennial rye.

Golf course construction:

One Michigan golf course consistently uses a mix in construction of fairways and roughs that is composed of 60% sand and 40% compost that has been screened to a very small grain size. Putting greens are made with sand only, since compost is thought to decompose too quickly for use in greens.



Markets

Project Partners

Resource Recycling Systems, Inc. (RRS)

Center for Microbial Ecology, Michigan State University

Southeast Oakland County Resource Recovery Authority (SOCRRA)

For information call: RRS at 734 996-1361

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