

CONSERVATION FARMING IN THE SCITUATE RESERVOIR WATERSHED

Volume 3

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Scituate Reservoir Watershed Education Program

Passing on...



...Clean Water

A Collaboration Between:

NORTHERN RHODE ISLAND CONSERVATION DISTRICT

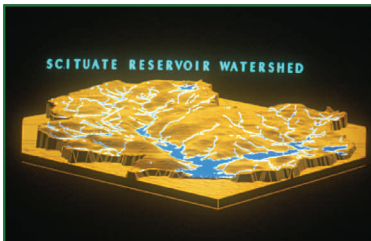
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Above is a 3-D image of the Scituate Reservoir Watershed.

Portions of Foster, Gloucester, Scituate, Johnston, and Cranston comprise this land area.

The Scituate Reservoir, lying in the lowest part of this land area, catches all water flowing over this watershed.

The Scituate Reservoir is the main source of drinking water in Rhode Island.

2012 Bulletins:

January Issue, *Vol. 1*— Nutrients, Water Quality and Rhode Island's Farms

June Issue, *Vol. 2*— Pest Management: Prevention and Control of Pests on Your Farm

September Issue, *Vol. 3*— Composting: Don't Treat Your Soil Like Dirt!

Composting: Don't Treat Your Soil Like Dirt!

Composting is the act of taking decaying organic matter (leaves, vegetables, grass clippings, and coffee grounds) and turning it into healthy, fertile soil—all while reducing the amount of garbage that you throw away each week! Just collecting these materials in a heap isn't enough—it is important to foster the community of macro and micro invertebrates (tiny organisms that live in the soil) which aid in the breakdown of organic matter. Creating your own compost is easy and fun, and can add nutrients and soil structure to your soil when added to your garden!

Composting Basics

Maintain the right ratio and turning schedule for maximum productivity and minimum undesirable odors:

For every pail of "Green"

- Fruit and vegetable scraps
- Egg shells
- Coffee grounds
- Fresh plant material, i.e. green leaves
- Grass clippings
- Paper: i.e. used paper towel and shredded newspaper
- Livestock manure

Add 2-3 pails of "Brown"

- Dead leaves & pine needles
- Nut shells
- Hay
- Wood chips and sawdust
- Dryer lint
- Hair
- Egg cartons
- Tea bags
- Ashes from the fireplace

Avoid:

- Oils, meat, bones, fish
- Pet Waste
- Weeds and diseased plants
- Chemically treated grass clippings

Stick to a 1:3 green to brown ratio!

Eliminate odors, speed decomposition, and create a more fertile finished product!

- "Green" adds nitrogen and moisture
- "Brown" adds carbon (energy)



Picture © Kerry K. Taylor, www.squawkfox.com 2009

Temperature & Turning

Turning the pile every 1-3 weeks will make sure that microorganisms in the middle have enough oxygen, and it will ensure all the material has an opportunity to be in the middle of the pile where higher temperatures make composting most efficient. Turning your compost can make the process take **months** instead of **years!**



Composting At Home

Depending on your goals and the space, time and money you are willing to devote to composting there are many options:

- Build your own composting unit—as simple as a pile on the ground or as complex as a three stage turning system
- Purchase a composting unit
- Compost indoors with worms (see below)



Pictures © Cornell Waste Management Institute, 2011



If you are most interested in reducing waste, a simple holding area made of wood and wire or a prefab bin is sufficient.

To create a large quantity of high quality compost more

quickly, a three stage turning unit is more efficient. The collection of material in each holding area should be large enough so that the center heats up.



Tip: When the center cools

down it's time to turn. If it isn't heating up at all you may need to add more "green" or moisten the pile.

Tip: Save leaves from the fall to keep a pile of "brown" materials on hand all year for covering up the "green" when you add to your compost!



Got Worms?

Vermiculture, n.: The use of specially bred earthworms, esp. to aerate soil and convert organic matter into compost.

Why worms?

- Dramatically speeds composting process
- No need to turn
- Can be kept indoors
- No odors
- Very little "brown" material required
- Simple and cost effective to establish and maintain
- Worms can digest half of their body weight in food scraps per day!

For more information, or to purchase Red Wiggler worms:



The Worm Ladies of Charlestown:
WormLadies.com



Manna Farm: MannaFarm.com

On The Farm

Compost is more than just a manure pile!

- If you do not have the time or resources to properly compost manure on your own farm, consider finding another composting facility to take your manure!
- To get your manure composting quickly:
 - Turn often
 - Monitor Temperature
 - Maintain proper moisture
 - Minimize bedding materials



It is best to keep your compost—or your manure pile—off the ground.

- Concrete or gravel pads provide a good working surface for turning compost and protect water quality. **Funding may be available to help you construct a concrete pad for manure compost and storage.**
- Siting your manure or compost pile is very important—consider where runoff will go when it rains. It is up to you to protect groundwater for your own well and the Scituate Reservoir! **Technical assistance for designing manure compost and storage facilities may be available—contact us at 401-934-0840!**



Composting Resources

- URI's Home*A*Syst
<http://www.uri.edu/ce/wq/has>
 - Fact sheets and workshops available on managing livestock on small acreage.
- Cornell's Composting Fact Sheets:
<http://cwmi.css.cornell.edu/factsheets.htm>
 - Valuable information on manure, mortality and home composting, as well as improving compost quality and marketing compost
- Natural Resource Conservation Service (NRCS)
<http://www.ri.nrcs.usda.gov/>
 - Opportunities for financial/technical assistance