

Rotating Washer Makes Cleaning Vegetables Easy

By Klaire Howerton

Washing multiple pounds of carrots and other root vegetables at a time for his CSA program and farmers market booth was a tedious chore for Curtis Millsap at Millsap Farm in Springfield, Mo. To speed up the process, he asked his neighbor, Avery Broyles, to build him an automatic root washer.

Curtis provided Avery with a photo of a root washer he found online to use as a model. Parts used include pine board strips, 24-in. drainage culvert pipe, 1/4-in. bolts with lock nuts, galvanized pipe, pvc pipe, a 1/8-hp. motor off an old treadmill, castors, an on/off switch, and a serpentine belt from an '02 Impala.

The pine boards make up the drum of the root washer, as well as the ramp that the root vegetables roll down into the drum.

There are 3 sections of the drainage culvert fastened around the outer edges of the drum, with castors attached to the wood stand that fit into the grooves of the drainage culvert. They allow the drum to rotate via the serpentine belt attached to the treadmill motor. A hose is attached to the galvanized pipe, which runs into pvc pipe installed on the interior of the drum and allows water to spray down into the drum as it rotates to wash the vegetables. The spray can be adjusted by a union on the pvc pipe. The root washer unit plugs into a 110-volt outlet.

The root washer can hold up to 40 lbs. of carrots at a time, Curtis says, and he figures it saves 2 man hours every wash.

Contact: FARM SHOW Followup, Millsap Farm, 6593 Emu Lane, Springfield, Mo. 65803.



Pieces of corrugated drainage pipe provide tracks for roller.



Jayne Merner Senecal in Rhode Island makes high quality organic compost and sells it across a 3-state area.

He Started Small, Grew Slowly To Build Compost Business

After 40 years of operation, Earth Care Farm now markets 5,000 cu. yds. of high-quality compost every year across a 3-state area. Michael Merner started the business in rural Rhode Island with his garden compost pile. Merner's daughter, Jayne Merner Senecal, who now owns the business, says others could do the same.

"Build your business slowly," she advises compost business wannabees. "Set up your site well ahead of time."

Part of setting up a site includes thinking about buffer zones with neighbors and considering what traffic patterns will be now and after the business grows.

"Think about what size you will eventually need to be to make the business financially viable," says Senecal. "Leave as big a buffer as possible and be transparent with neighbors about truck traffic and potential odors."

Senecal advises working on good relations with neighbors. She recalls her father plowing snow for them and sharing garden produce in the summer.

"Talk to your neighbors about what you want to do and what the benefits are to the environment," says Senecal. "We had a new neighbor who tried to start a group to get us out. No one else would join, and eventually they realized how beneficial our business was to the area."

Part of starting small, she notes, is not investing in big equipment, like the \$400,000 screener they now use. Instead,

get a feel for how compost-making works at the site and fine-tune it.

When Michael Merner started the business, one challenge was getting enough material to compost.

"My dad would meet with towns about getting leaves and wood chips, as well as with food processors and fishermen. Now people know we can save them money over hauling material to landfills, so they call us," says Senecal.

Earth Care Farm takes in around 75 tons per day of food scraps, manure from farms and a zoo, fish, shell fish, seaweed, leaves, wood chips, coffee grounds and bedding. Tipping fees vary from no charge for chipped brush and sawdust to \$50 per ton for shellfish, clam bellies and other fish offal. A very specific list of what can be composted is maintained and followed. As a result, the final product is organic certified. The company sells compost screened to 1/2-in. or less particle size, as well as a raised bed mix, potting soil and Home Compost Inoculant. The latter is a combination of compost tea and screened compost that helps people start their own compost pile.

Senecal points to the diversity of feedstocks as vital to the compost the company produces. She recognizes the more diverse the feedstock, the more diverse the microorganisms and micronutrients found in the compost. Having sufficient carbon materials on hand is vital.

"We always have a stockpile of wood chips and leaves on hand and immediately mix it

Organic Certified Compost Sells Better

If you're thinking about selling compost, getting organic certification might be a good move. Organic marketing consultant Ron Alexander says there are many reasons to get certified through the Organic Materials Review Institute (OMRI), or similar state-based certification programs.

"Certification makes it easier to sell to organic farmers," says Alexander, author of "The Practical Guide to Compost Marketing and Sales". "A growing number of wholesale buyers and retailers are requesting or requiring it. Having an OMRI Listing can raise product value and assist in product branding."

Getting certification depends on feedstocks and the composting process. For example, while yard trimmings, food waste and manure are allowed, biosolids are not. Alexander advises that the listing entity will require a full description of your composting process, as well as details related to pathogen destruction and contaminant content.

"It's also important to have processes in place to remove physical contaminants, including biodegradable plastics, before composting or anaerobic digestion," says Alexander.

He points to the rapid growth in organic food production as a good reason for certification. An even better reason may be the even faster growth in demand from landscaping and retail sectors.

Alexander warns that certification can take some time, usually 3 to 6 mos. The cost depends on the size of the company and the number of ingredients in a product.



A growing number of wholesale buyers and retailers are requiring organic certification.

"It is important to remember that it is the product, not the composting facility, that is certified. Listing entities may require a site inspection if significant changes are made to either processing or ingredients," says Alexander.

For details of what is needed to list a product and maintain certification, contact Alexander.

Contact: FARM SHOW Followup, R. Alexander Associates, 1212 Eastham Dr., Apex, N.C. 27502 (ph 919 367-8350; Ron@alexassoc.net; www.alexassoc.net).

with nitrogen-rich material as it comes in," says Senecal. "The biggest mistake made is to not have enough carbon and then get odors because the pile is too nitrogen-rich."

Following existing regulations from the start is also important, adds Senecal. "If your state or county doesn't have rules, offer to get involved writing them like my dad did," she says. "Otherwise, they may be written by people who don't understand the business. While some neighboring states have 8-ft. limits on pile heights, my dad was able to explain the science behind why higher piles were needed."

Senecal emphasizes that the work with neighbors and regulators doesn't end when the business is up and running. She points

to the importance of keeping the operation visibly neat. She also encourages visitor tours and maintains gardens to show the benefits of compost to plant and soil health.

"Even with all the work we've done with neighbors, every time a house goes up for sale in the neighborhood, we get a little concerned," says Senecal. "We try to keep communications open and encourage them to call if a truck is going too fast or there are other problems. We want to talk about things before they get out of hand."

Contact: FARM SHOW Followup, Earth Care Farm, 89A Country Dr., Charlestown, R.I. 02813 (ph 401 364-9930; www.earthcarefarm.com).