



“Static pile” method of composting eliminates the need for stirring. Four 30-ft. lengths of 4-in. dia. pvc pipe are connected to a cross pipe “manifold” attached to a squirrel cage furnace fan.



Pipes are spaced far enough apart so inventor Jay Armour can drive a loader tractor between them to build the pile, and later remove the finished compost.

No Turning Required With “Static Pile” Composting

By Dee Goerge, Contributing Editor

The hardest part of composting on a big scale is turning the pile regularly. Jay Armour of Gardiner, N.Y., says his “static pile” method

of composting eliminates the need for stirring up the piles.

He uses inexpensive used parts and, once set up, the system requires very little labor.

Armour, who raises organic vegetables and needs a regular supply of organic compost. Instead of buying it, he set up his own system 2 1/2 years ago. Parts include a fan, pvc pipe and a timer.

Static composting requires air blown through the pile, so he started with a used squirrel cage furnace fan. He used a square plastic bucket and some aluminum sheeting to funnel air from the fan to 4-in. dia. pvc pipe.

He used four 30-ft. lengths of pipe connected to the cross pipe “manifold”. The pipes are spaced far enough apart so that he can drive a tractor with a bucket between them to build the pile and remove the finished compost.

He first covers the pipes with wood chips so that when he scrapes out the compost he knows when to stop before digging into the pvc pipes.

“The key thing is the timer used to turn the fan on and off. If the fan is running all the time the pile won’t heat up,” Armour explains. He experimented with the time while monitoring the pile’s temperature. To keep it at about 160 degrees he set the timer to repeatedly turn the fan on 3 min., then off 20 minutes. The time will vary according to the size of the pile and the material in it. He uses an Autopilot Analog Recycling Time (APCTART) that retails for about \$75.

Armour adds horse manure to the compost pile in the summer and fall. He leaves his



A squirrel-cage fan blows air through a makeshift funnel into the pvc pipe aerators. A timer turns fan on and off periodically.

dump trailer at a horse farm and picks it up when full. If it’s dry, he uses a water sprinkler to add moisture as he builds up the pile to about 6 ft. tall. To avoid the top edge from not getting warm enough, he covers the pile with about 8 in. of finished compost. He leaves the fan on for two weeks, then lets the pile rest for another two weeks. The finished pile is about 25 percent smaller and ready to be used or stored under a UV-resistant, semi-impermeable fabric that protects it from rain, yet allows it to release steam.

“I used to move it when it was finished, then I got wise and figured I’d just take it from there as I needed it. I have two piles next to each other and move the fan, back and forth,” Armour says, so he has a supply of compost being made, while another pile is in process. “I don’t screen the compost. There really isn’t any need to screen it. My finished compost still looks like manure, but

it doesn’t smell like manure.”

He has offered local workshops on static composting and often makes these suggestions: Put the fan in some kind of structure to protect it, and be creative with materials you have on hand to connect the fan to the pvc pipes.

He plans to build a wooden unit to replace the plastic bucket, for example. Armour notes he has made compost in the winter, but it takes longer. He normally waits until spring to use horse and cattle manure gathered during the winter.

“This could be downsized. You can scale it to whatever size you need. Anyone can make compost on their homestead,” he says.

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Handheld “Mini Combine” Field-Tests Grain

There’s no need to drive out to the field with a combine only to find out a crop isn’t ready to harvest, thanks to this new hand-held mini combine that cuts and threshes a clean grain sample in minutes.

“I think of the GrainGoat as a full-size combine that has been shrunk down to the size that you can pick it up and carry it,” says inventor Martin Bremmer. “We’re in an age of precision planting and harvesting, and it’s about time we catch up to today’s high technology with an accurate sample to know when the crop is just right for harvest. Farmers can’t afford to waste time any more going from field to field because the grain wasn’t ready for harvest.”

The battery-powered unit cuts and threshes the grain, depositing it in a sample cup for moisture testing. Moving paddles throw any unwanted plant material onto the ground. A durable nylon strap is used to carry the unit high against the operator’s hip for ease of

carrying through the field.

To obtain a grain sample, the operator lowers the stripper mouth over the grain heads and then pulls a trigger while walking through the field. The grain is threshed with miniature concaves, and finally a blower separates the grain from the trash. Clean grain falls into an attached metal enclosure. The operator turns a compression knob to squeeze the grain sample, then pushes a button to display the moisture on a digital meter.

The unit can be used with wheat, barley, oats, milo, millet, amaranth, and even peas and soybeans. It comes with different screens for different crops.

The GrainGoat sells for \$1,999 plus S&H. Contact: FARM SHOW Followup, Windcall Mfg., Inc., 75345 Road 317, Venango, Neb. 69168 (ph 303 243-1553; www.graingoat.com; martin@graingoat.com).



Hand-held unit threshes grain and deposits it in a sample cup for moisture testing.