

## Business Is Booming For Farmer's Worm "Reactor"

Here's a new twist on worm farming that could put money in your pocket two or three different ways.

Dan Holcombe says business is booming for his giant "worm reactor", an on-farm garbage disposal operation that uses garbage-eating worms to turn organic waste into nutrient-rich plant food.

"You can collect dumping fees of up to \$50 per ton and end up with a byproduct you can use on your own farm. You can even go into the bait business, if you don't want to expand your reactor as the worm population grows," says Holcombe, owner of the "reactor" near Clackamas, Ore. He wants to set up more reactors on farms in his part of the country and anywhere else there's interest.

"We've been doing this seriously since 1988," Holcombe says. "We're recycling 5 to 6 tons of organic waste a day, seven days a week, collected from 16 grocery stores in

our area. That includes waste food, produce and paper. We're harvesting about half that amount back in worm castings, which we package in 1 cu. ft. bags mixed with peat moss and retail for \$2.83 apiece.

"When castings are applied to a weak houseplant, for example, you can literally see the difference overnight. It also makes a great fertilizer for field crops and is easy to spread."

Castings are the byproduct of 2 to 3-in. long red worms called manure or litter worms. They're common to the Pacific Northwest but can be found almost anywhere. They sell for anywhere from \$7 to \$25 a lb.

Hundreds of thousands are placed in the "reactor" to eat up garbage. Holcombe's reactor is 120-ft. long by 8-ft. wide by 2 ft. deep. It has hydraulic scrapers underneath the bed that push composted material out through a heavy mesh screen in the bottom



Castings from Holcombe's "reactor" are used as plant food or soil amendments.

to be packaged and sold or spread on fields.

"It's a lot of work," Holcombe says. "You have to decide how much time per day or week you can devote to it and design the reactor accordingly."

Most likely, you'll need a state license or permit to operate a reactor, especially if you have waste delivered to your site. Obtaining permits can sometimes be a two or three year process, Holcombe notes.

You'll also need to tap into a reliable waste source. Grocery stores are preferred

over restaurants because there are fewer health issues to deal with in raw produce as compared to prepared food, he says.

Holcombe sees worm "reactors" as the way of the future for handling not only food wastes but animal wastes as well.

Contact: FARM SHOW Followup, Oregon Soil Corporation, 1324 Beaver Lane, Oregon City, Ore. 97045 (ph 503 557-9742).

## COMPANY SELLS CAST ALUMINUM REPRODUCTIONS OF 1800's TOOLS

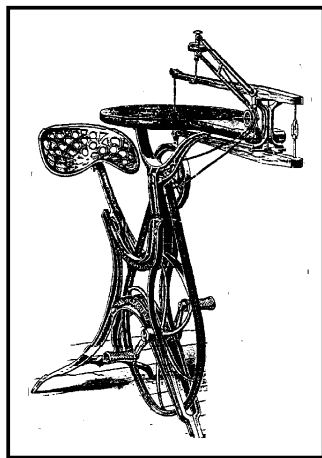
### "Pedal-Powered" Woodworking Tools

You can do woodworking the old-fashioned way with the cast aluminum reproductions of old-fashion foot or hand-powered tools produced by a Missouri company.

The Tool Co., of Raymore, recently ran an ad in *Small Farmer's Journal* that showed a reproduction of the Barnes Velocipede No. 2 scroll saw. The ad stated, "So elegant that originals are sought by tool collectors. In addition to its pleasing appearance, it's a very accurate and usable tool. Crafts people have found it to be a great attraction when working craft shows."

The saw can be used to do intricate, detailed work because you can slow it way down, says Ray Lawler, owner. "It definitely has an advantage over motorized tools that can be used at only one speed. During Victorian times this saw was even used to cut gingerbread trim. Some pedal-powered tools make big, heavy cuts and you need good legs to operate them. However, the scroll saw has a small, fine blade so it doesn't require a lot of power. Working it is like riding a bike on a flat surface just fast enough to keep going.

"A lot of companies made pedal-powered woodworking tools in the late 1800's. About 15,000 to 20,000 pedal-powered saws were built over a 50-year period and there are an estimated 1,000 still in existence. Barnes Co. of Rockford, Ill., made a complete line of pedal-powered tools including table saws, wood lathes, circular saws, and scroll saws. The Velocipede No. 2 was a commercial saw designed for a 1 to 5-man carpenter shop. Bigger shops used steam-powered machines. The company also made a bench top motorized version of the same saw before it stopped making them in the 1920's when small electric motors became available.



The Velocipede No. 2 was a pedal-powered commercial scroll saw designed for 1 to 5 man carpenter shops.

"We sell several pattern books that show how to make a wide variety of items. We also sell 'Toy Plans from Santa's Workshop' that show how to make train sets, stick horses, helicopters, climbing bears, Model A toy car and truck set, etc."

The Velocipede No. 2 sells for \$1,195 plus \$40 S&H. A boring attachment equipped with a drill bit that bolts onto the saw sells for \$150. Pattern books sell for \$12 apiece; toy plans for \$2 to \$6.

For a free catalog, contact: FARM SHOW Followup, The Tool Co., 812 N. Kurzweil Rd., Dept. SFJ, Raymore, Mo. 64083 (ph 816 331-4499).



Kenneth Wagner finds his corn shock tighteners at antique stores, farm auctions, and from other collectors. They're getting harder and harder to find, he says.

MORE THAN 50 PIECES SO FAR

## Midwest Farmer Collects Corn Shock Tighteners

You don't have to go to an Amish colony to find corn shocks and the tools used to make them. A retired Trempealeau, Wis., farmer has more shock "tighteners" than you can shake a stick at.

"I started collecting corn shock tighteners about 30 years ago because they're such a pure example of farmer-generated inventions," says Kenneth Wagner. "No two are alike. Some are 4 ft. long and shaped like harpoons, others are 3 in. long and shaped more like a hook. But they all had the same purpose - to make it a little easier to compress 25 or 30 stalks into one shock, then tie them together with twine so they would dry in the field."

Wagner's collection consists of more than 50 different types of shock tools, some dating back as far as the 1860's.

Wagner paid \$279 for one corn shock tightener which is made of braided rawhide and the crotches of two tree branches.

He also has a number of commercial models which are mostly made of metal. For example, he has two tools once sold by

Sears, Roebuck and Co. One has a sickle section attached to it to make it easier to cut the twine once the shock is tied.

He also has one of the few shock tighteners ever patented, a small wooden pulley-type device, made by the Jiffey Pulley Co. in 1888. It's never been used. Another was invented by a Trempealeau farmer who had his tool mass produced at a local foundry.

Wagner obtains shock tools at antique stores or farm auctions or from a few other collectors he knows. Another collector in Pennsylvania has a collection about as big as Wagner's, he says.

Prices are usually \$2 to \$3. The \$279 braided tool is the most he's ever paid for one.

"They're getting harder to find all the time," Wagner says.

Contact: FARM SHOW Followup, Kenneth R. Wagner, 11771 Chase St., Trempealeau, Wis. 54661-9802 (ph 608 534-6428).