

# Horse Trough Garden Features Unique Watering System

Horse trough gardening is a tidy option for gardeners with many advantages: earlier planting, no bending, and less weeding.

Keith Gummeringer is impressed after setting up his first horse trough garden with 25 galvanized livestock water tanks for a client last spring. Gummeringer, a landscape business owner, is working on modifying the idea to share with other clients in West Central Minnesota.

The concept is to have constant water available under the soil and plants via a vertical filler pipe made from 1 1/2-in. pvc. A 3/16-in. rigid pvc screen, cut to slip inside the tank, is supported by several 4-in. pieces of perforated 4-in. pvc pipe. A special soil blend is poured over the screen and the garden is ready to plant. To water, slip a hose in the vertical pipe until it fills the 4-in. space under the soil. It's full when water overflows out the 1/2-in. hole drilled on the side of the tank just above the screen.

"My biggest challenge was finding the dirt – one-third each of vermiculite, peat and organic soil," Gummeringer says. While available at home improvement stores it was very expensive to buy in bags. He found a company that sold the mix in bulk. The 2 by 2 by 6-ft. galvanized stock tanks Gummeringer

used required 16 cu. ft. of soil apiece.

All the materials can be found at farm supply and hardware stores. Plans can be found on several websites, including [www.maryjanesfarm.org](http://www.maryjanesfarm.org).

Besides setting up the tanks, it's important to set up a good foundation.

"You don't want water sitting under the tank, so elevate it a little," Gummeringer says. He leveled the area for his client's garden with a slight slope for drainage. Each tank was placed on a pad of class 5 gravel. He spread about 5 in. of woodchips on the 4-ft. wide walkways between the tanks. "There's no walking through mud or compacting the soil," Gummeringer says, and the chips squelch weed growth.

He notes that he also installed a sprinkling system as plants and seeds need to be watered from above ground at the beginning and occasionally through the summer. But the constant water wicking from the tank through the roots produces amazing growth and lush plants.

Once set up, maintenance is minimal. At the end of the season, remove the dead plants and pull the tank plugs to drain the water. More soil can be added as needed.

"There's a lot of interest in it," Gummeringer



Gummeringer's horse trough garden uses 6-ft. galvanized stock tanks that require 16 cu. ft. of soil apiece. Filler pipe (see arrow) is used to add water to tank.

says. He has seen versions using 5-gal. pails, and he's working on smaller, less expensive designs for clients who may want to grow herbs, for example. The galvanized tanks or other containers used could also be painted, if people don't like the galvanized look, he

adds.

Contact: FARM SHOW Followup, Midwest Tree and Maintenance, P.O. Box 196, Pelican Rapids, Minn. 56572 (ph 701 730-0475; [www.midwesttree.net](http://www.midwesttree.net)).

By Jim Ruen, Contributing Editor

## Multi-Head Garden Tool Gets A Thumbs Up

Alan Johnson has put a real twist on garden tools with a single, quick-change handle that can be fitted with 5 different tools. With receiving slots at either end, you can go to work with two favorite digging points at once.

"I once made a short handled garden tool in a welding class, and it has always been my wife's favorite," explains Johnson. "It had a wide blade on one end and a narrow blade on the other. She liked the interchangeability of it."

Johnson, also the creator of the Maxadyne Wheel Hoe, says his tool offers more control than the traditional round wooden handle.

"My handle has four, 1-in. wide faces with the edges rounded off," explains Johnson. "It's easier to grip and gives better control."

The receiver slots at both ends have a fixed nut to match the slotted head bolts on the tools. An L-shaped tool is provided to tighten the bolts. It fits in its own slot at the center of the handle and is held in place by a heavy-duty rubber band.

While one handle end has a slot on one face of the handle, the other end has slots on the faces to either side of the first. This ensures that while digging with one tool, the second

tool is pointed away from the body whether you are left or right handed.

FARM SHOW ordered a set of Johnson's VersaTill tools with a 48-in. handle. The package included the Bird Beak, Diamond Point, Bear Claw (rake head), Duck Foot and Big Vee tools. A short, one-handed handle is also available. I tried them out in raised beds, fresh-tilled ground and in hard-packed ground. "The Bird Beak and Diamond Point worked great for weeding in tight spaces and loosening hard packed soil around rhubarb plants," says contributing editor Jim Ruen. "Both were easy to control and dug surprisingly deep, pulling up rhizomes from crab grass and other problem weeds."

The Duck Foot has a V-shaped tip to grab weed roots as you hoe. Ruen reports it eliminates the frustration of chopping at roots in soft soil and having them slide off to the side of a hoe point.

"The Bear Claw combines the best features of a mini-rake and wide hoe blade," he says. "It was great for running just under the soil surface to prepare established raised beds. It handled shallow weeds and stood up to aggressive use on larger weeds. The multiple points really chopped up the bed, yet could

be used to rake weeds to the side."

The Big Vee is a very aggressive point designed for trenching or making holes for setting plants or bulbs. It also works great as a "chop" blade for digging up heavier ground.

"The four-faced handle was a treat," says Ruen. "It provided a great deal more control than round handles do, yet it was easy on the hands and made it easy to 'torque' the tool heads with a little twist when chopping under or close to plant stems.

"I wasn't sure about having a tool at either end of the handle, but it wasn't a problem at all," says Ruen. "In fact, the added weight provided more balance, and the shaft of the second tool added even more control to the four-faced handle."

Multiple tool kits with the long handle range in price from \$67.05 to \$106.78. Tools and the long handle are priced individually at \$27.90. The short handle, which also accommodates two tools, is priced at \$19.95.

Contact: FARM SHOW Followup, Diversified DenTool, P.O. Box 490, Pine River, Minn. 56474 (ph toll free 800 950-9431; [aljohn@uslink.net](mailto:aljohn@uslink.net); [www.weedwithspeed.com](http://www.weedwithspeed.com)).



With receiving slots at either end, you can go to work with 2 favorite digging points at once.



Single, quick-change handle can be fitted with 5 different tools.

## Tiller Designed To Dig Deep For Tilling Or Shallow To Weed

Dissatisfaction with tillers on the market led retired scientist Kai Lee on a quest to build a better tiller. After years of development, the Portage, Mich., inventor came up with more than just a tiller. He calls his machine the Counter-Rotating Weeding & Tilling Machine.

"It's a double-duty machine," Lee says. "Conventional tillers can't chop weeds 6 ft. tall. This chops them up, working down to 6 in. deep."

Lee's machine has two shafts. The front one turns forward, and the back one goes backward rapidly to cut weeds into pieces and break up soil. The 12-in., heat-treated, high carbon steel digging discs look similar to circular saw blades and can be easily removed for sharpening. They are self-cleaning and deflect rocks and debris.

"When it's running slower it goes deeper," Lee says. "For cultivating or weeding you can

go fast to take care of weeds very quickly."

The tiller operates at speeds from almost stationary up to 2 mph. Strategically balanced on two wheels, it handles easily for all size gardens – even with just one hand.

Lee offers three models ranging from 15 to 32 in. wide (\$2,500 to \$3,200). All have commercial grade Honda engines – 6.5 hp on the smaller models and 8 hp on the widest one. They are powder-coated for durability.

Lee is currently selling his machines to organic and farm market farmers in the Midwest. Videos on his website shows it in action. It comes with a 2-year limited warranty on the machine and a 3-year warranty on the engine.

Contact: FARM SHOW Followup, Kai Lee, Innovative Devices, Inc., 5235 Raborn Ct., Portage, Mich. 49024 (ph 269 567-8862; [www.tillerweeder.com](http://www.tillerweeder.com)).



Tiller has 2 shafts. One on front turns forward, and the back one turns backward rapidly to cut weeds into pieces and break up the soil.