

## "Downspout" Garden Irrigation

You can put rainwater to work irrigating garden beds with a super simple, downspout irrigation system. When Ted Sponsel and his avid gardening wife Linden Staciokas built a garden bed under a house eave, the system saved them time and hassle with watering. Sponsel says his downspout system was easy to install and kept a perennially dry garden area well watered.

"The area under the house eaves never got any rain," explains Sponsel. "Building a raised bed there and installing this system put the water and space to work. With the open bottom bed, any extra water just drained through."

The system consisted of a length of 4-in., flood irrigation pvc pipe with drain holes already installed. He buried it down the center of the partially filled bed. At the far end, he capped the pipe with a solid end. To supply the pipe with water, Sponsel extended the downspout to the near end of the irrigation pipe.

"I picked up a matching diameter pvc

plumbing fitting. It had one round side to match the pipe and a square mouth on the other side to match the square downspout end," he says. "Once that was placed on the input end of the irrigation pipe, I simply directed the downspout pipe into it."

The only tricky part was getting the slope on the irrigation pipe right. If there wasn't enough slope the water flowed out the near end of the pipe. Too much slope and most of the water flowed out the far end.

Sponsel ran a hose onto the roof and through the downspout. He then adjusted the slope so the water flowed out evenly across the length of the pipe. Once he was satisfied, he firmed up the soil and added manure and more soil to the bed.

The only other addition to the system was to add wire mesh over the top of the downspout to keep out leaves.

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When Ted Sponsel built a garden bed next to his house, he put rainwater to work by building a simple downspout irrigation system.

## High-Clearance Garden Tractor

Ken Hulsey, 75, and Lamar Owens, 75, joke that they built a "retired" tractor. The builders -- and all the parts they used -- were all well past retirement age when the West Monroe, La., friends put the tractor together.

Their creation is a simple design with 27-in. clearance that Hulsey uses to work his garden.

"I was a mechanical engineer and I didn't like the design of available garden tractors," Hulsey explains. "They were either so low they damaged the plants or too large for small gardens. Most of them have poor visibility for working small plants."

He wanted a high-clearance tractor that would go slow enough to safely work around small plants with good visibility up front.

While Hulsey had a fair-sized scrap pile of his own, Owens, a retired rancher, had the mother lode of old equipment including some his father had owned. The friends combined

their old equipment, scrap, tools and talent to make a tractor that Hulsey calls the "Phoenix" because it rose from the ashes.

"There are parts from 3 or 4 different mowers in it," Hulsey says. "The back wheels and lots of framework are off an old horse-drawn, 2-row planter. The plows came off a Ford cultivator that I could never successfully use before."

The 11 hp riding mower engine is behind the seat, so Hulsey has a perfect view under his feet while he sits in a comfortable bass boat seat. The front wheels and spindles are from an old boat trailer. The transaxle off a lawn mower has 5 gears, with a speed range from extremely slow for working around 3-in. tall plants to faster than a person can run.

Phoenix has hydraulic-actuated toolbars, one in front of the driver and one behind the back wheels to easily lift and lower front and back equipment.



"It has parts from all kinds of old equipment in it," say Ken Hulsey and Lamar Owens, who built this high-clearance garden tractor.

"I can drive over 4-ft. corn without damaging it," Hulsey says.

He added cleats to the old steel planter wheels, which pulls the tractor well under most conditions.

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Three soaker hoses run length of garden and are clamped to a pvc pipe at each end of garden. A shutoff valve is used to control water pressure.

## Garden Watering System

Ray Bricker recently sent FARM SHOW photos of the simple, low-cost watering system he uses on his raised gardens.

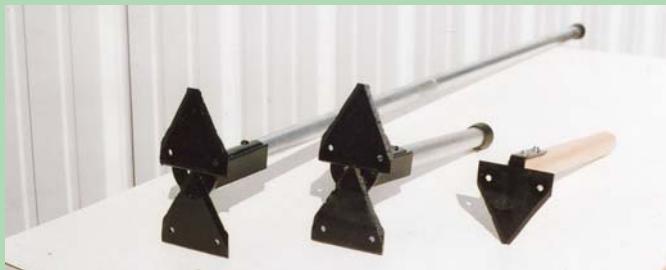
"Raised gardens require a lot of water, and I've tried about every method there is without success. I had been using a hose and sprinkler system, but I could only water half the garden at a time because there wasn't enough water pressure from the tap water in our house. Then my 92-year-old mother suggested I set up a system of soaker hoses, which require very low water pressure. I now use them on all 5 of my raised gardens."

The gardens measure 4 ft. wide by 10 ft. long. He cuts 3 soaker hoses the length of

each garden and clamps all 3 to a length of pvc pipe at each end of the garden, which serves as a return hose to provide even water pressure. A shutoff valve is used to set the water pressure.

"Once I use the shut-off valve to set the water pressure, I never touch the valve again. All I do is turn on the faucet. I plan to set the system up on a timer so the water comes on automatically," says Bricker.

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Terry Morgel makes garden hoes from used sickle sections. Two hoes have double sickle sections welded to a large flat washer.

## Made-It-Myself" Garden Tools

Terry Morgel, Avon, Minn., recently sent FARM SHOW photos of a couple of low-cost gardening tools he invented.

### Sickle section hoes

"I made these hoes from used sickle sections. My wife likes to use them in her flower garden," says Morgel. "Two of the hoes shown are equipped with double sickle sections welded to a large flat washer. A 4-in. length of 1-in. angle iron is welded to the washer a little off center so the handle will be centered. The handle is attached to the angle iron with 3/16-in. bolts. I used 3/4-in. dia. electrical conduit for the handle, but you could also use wood."

"The other short-handled hoe uses a single sickle section welded to an L-shaped metal bracket, which is screwed to a 1-ft. long wooden handle."



Long lasting garden markers were made by cutting apart a 20-gal. plastic barrel.

### Plastic barrel garden markers

Morgel made long lasting garden markers by cutting apart a 20-gal. plastic barrel. He says the markers won't rot and can be used year after year. He used a table saw to cut up the barrel.

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