## Simple Simon Soil Sampler

Once they've used the Simple Simon Soil Sampler, soil testers never want to use anything else, says Mike Machek about his patented invention. His manually controlled device has advantages over other more automated systems.

"You manually control how fast you take the sample," he says. "You can go fast in good conditions. If the ground is frozen or dry you take your time."

Simple Simon uses a carbide tip auger, which breaks up dirt clods for a better sample. It runs off a 12-volt electric motor and has adjustable depth settings from 4 to 10 in.

Made of stainless steel, the soil sampler mounts on the side of 4-wheelers. Machek also offers a sampler that fits on a UTV. Customers mount it in a variety of ways, from using zip ties to building receivers and brackets.

"You never have to get off," he says. Lift the arm to start the motor and push the auger to the depth you want. Take as many cores as you want and dump them in a bag for testing.

Machek has sold the soil sampler to professional testers and farmers all across the U.S. The Simple Simon Soil Sampler sells for \$2,780 delivered and can be ordered direct.

Contact: FARM SHOW Followup, Precision Ag Resources, Inc., 27 Gail Rd., Willard, N.C. 28478 (ph 800 899-5502; www. simplesoilsampler.com; precisionag1@juno.com).



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Dennis Fisher uses both ends of his John Deere A tractor to install fence posts. A big Shaver post driver mounts on front and a 4-in. auger operates under pressure on back.

## Double-Headed, Post-Driving "A"

Dennis Fisher uses both ends of his John Deere A to drive fence posts, especially big corner posts on his hilly and rocky soils. The A is equipped with a 4-in. auger that operates under pressure on the rear end. On front, he has a big Shaver driver with special modifications.

"I can back up to the fence line and make a pilot hole with the auger about 4 ft. deep," says Fisher. "Tractor hydraulics drive the auger motor and the sleeve on the mast that holds the auger."

The cylinder on the mast is from an old F11 front-end loader. The mast is fabricated from 4 by 6-in. steel tubing. Fisher says the mast and cylinder are sturdy enough that when lowered against the ground, they can lift the tractor's rear end.

"With the pressure of the cylinder on it, the auger can work its way down between the rocks to create a pilot hole," says Fisher.

Once the pilot hole is complete, Fisher turns the tractor around and brings the driver into position. In addition to some extra steel weight added to the hammer, Fisher mounted it to a plate with a pivot point.

"We can swing the driver as much as 2 1/2 feet by pulling the lock pin," says Fisher. "It works just like a hinge and saves a lot of getting up and down from the tractor."

Fischer also replaced the small hand wheels that adjust the pitch and angle with larger wheels. "They make it much easier to adjust the driver," he says.

To pull old posts out of the ground, he hooks a chain to the sleeve on the mast, wraps it around the post and activates the cylinder.

Fischer designed the mast and auger with 3-pt. style brackets. He uses an adjustable top link arm to straighten the mast before starting the auger. The brackets give him the option



To pull posts out of the ground, Fisher hooks a chain to a sleeve on the mast that holds the auger.

of using the auger on another tractor. That's something he may have to do after having the pair of fencing tools on the old A for more than 16 years.

"My dad bought the A at a neighbor's farm sale, and it sat around until we added the post hole auger and driver," explains Fisher. "Now the neighbor's son would like to buy it back. We may have to find a different tractor for putting in posts."

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Karl Moritz owns this rare Danuser CD1 post hole digger designed for garden tractors. Only 289 were made from 1966 to 1977.

## Rare Garden Tractor Post Hole Digger

Karl Moritz skipped his high school prom to pick up a rare Danuser post hole digger designed for garden tractors. An avid lawn and garden equipment collector, the high school student knew how rare it was. Only 289 were made from 1966 to 1977.

"I had an email from Glenn Danuser, vice president of Danuser Machine Co., saying that he had been contacted by someone wanting to possibly get rid of a CD1," says Moritz.

Moritz promptly called the number. Ronnie Collins, Altus, Okla., had a CD1 that was used on his father's Deere 140 to do custom fencing until 1980. After retiring it, it had been kept inside until 20 years ago, when needing the room, Collins set it outside.

"He told me it was all original except for hydraulic cylinders used to replace the original turnbuckles for adjusting the pitch," recalls Moritz. "He sent me a picture showing all the parts, and everything seemed to be in good shape."

Built to fit a wide variety of garden tractors, the CD1 (called the A-10 by Allis) Compact Tractor Digger has a lasting reputation. According to the website www.cubcadetman. com, the CD1 was made for at least 10 different garden tractor brands. Only the sub frame mount and pto drives differed from one brand to another.

The CD1's auger head is connected to a hydraulic cylinder by cable for raising and lowering. A dual V-belt drive, powered by a jackshaft from the tractor, powers the auger rotation. Hydraulic power is provided by the tractor or a separate pump.

The John Deere model had a belt and pulley drive pump and reservoir mounted to the front of the subframe. The CD1 has a maximum 30 in. depth and had 4, 6, 8, 10, 12 or 14-in. dia. augers.

Moritz made the deal and, travelling with his father and a friend, made the trip from Pennsylvania to Oklahoma to pick it up. Once he got it home, the fun began.

"I took the shafts, bearings and pulleys out of the subframe to replace them,"



The CD1 was made for at least 10 different garden tractor brands.

says Moritz. "A local machine shop built new shafts and put in new U-joints on the driveshaft. Another shop had the pulleys and belts I needed."

Once everything was reassembled, Moritz mounted the subframe under his own Deere 140. Mounting the heavy mast to the subframe was the tough part. With the hydraulic pump and weight box mounted to the front of the subframe and everything hooked up, Moritz fired up the tractor and the digger.

"With a small cloud of dirt and dust, the auger turned over for the first time in over 35 years," he says. "Later, I tried it out. Everything ran flawlessly, and it dug a perfect bel?"

Moritz is now in college, but still actively searching for garden tractor attachments. "Right now we are looking for a Viking Roller/Seeder and a set of adjustable back wheels for the back of a garden tractor," says Moritz.

You can see the Compact Tractor Digger in action at www.farmshow.com.

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