

"Sumo" subsoiler is equipped with a central backbone frame that runs front to rear down middle of machine, forming a rigid spine that carries entire stress load.



Rig breaks up compaction without digging up the soil too much, leaving the field smooth. It's available in 7 and 9-shank models.

By Bill Gergen, Senior Editor

Subsoiler Breaks Up Hardpan, Yet Leaves Field Smooth

"It breaks up compaction without digging up the soil too much, leaving the field smooth," says Sid Patterson, Hepson Equipment Inc., Brandon, Man., about his company's new "Sumo" subsoiler.

He recently began importing the subsoiler from England, and is the only North American distributor. "We brought in the first models last fall and demonstrated them for area farmers under a variety of field conditions. We found they did a great job no matter the soil type."

According to Patterson, the new tillage implement works totally different from other subsoilers on the market. "Most rippers built in North America have a forward slope and a parabolic tine that often brings clay subsoil to the surface. The design of the Sumo subsoiler's shanks lifts and breaks the hardpan without mixing," he says. "If you use the Sumo subsoiler during the fall, you're ready for one-pass seeding the next spring."

The machine's most unusual engineering

feature is its central backbone frame. The frame runs front to rear down the middle of the machine, forming a rigid spine that carries the entire stress load. "The backbone is strong enough that Sumo put a hitch at the back so the operator can pull a drill or other applicator," says Patterson.

The rig is equipped with a pair of steel gauge wheels on front, followed by a series of shanks and a large 2-ft. dia. steel roller that runs the full width of the machine to pack the ground. The machine rides on a pair of large 600/50 R 22.5 transport wheels on back.

There are 8 hydraulic cylinders on the machine -4 to raise and lower the wings, 2 to raise and lower the gauge wheels, and 2 to raise and lower the front end of the machine.

"The shanks are equipped with forwardmounted points that crack the soil profile ahead of each shank and lift and break the hardpan," says Patterson. "The points open a slot for the shank leg to run in, reducing the amount of energy required to pull the implement through the field."

Shank depth is controlled hydraulically with adjustable trip-out shanks. Nitrogen accumulators attached to hydraulic cylinders allow the shanks to trip over big rocks. "You can lock in the amount of pressure you want on the nitrogen accumulators by using locking taps," says Patterson.

The steel gauge wheels are hydraulically adjustable. "The gauge wheels are necessary because with a folding rig like this there's a tremendous amount of suck on the shanks, and you need something to keep the implement's wings from sucking too deep into the ground. The gauge wheels also assist in pulling the shanks out of the ground," says Patterson.

The roller breaks up clods and levels the field. Roller pressure can be adjusted by changing the position of a steel pin. "The roller leaves the ground reasonably compact but doesn't contribute to compaction," says Patterson. "It only firms up the top 3 or 4 in. which gives you a solid surface to work on the next spring. If you dig down with a spade, you'll see the soil below is nice and loose as deep as you want to dig. This spring I was able to drive over Sumo subsoiled fields with my 1/2-ton pickup, which would have been impossible if I had used a conventional subsoiler because it would leave the field loose."

Patterson currently offers the Sumo in 7 and 9-shank models. The 7-shank unit has a working width of 15 ft. and requires 350 hp. It sells for \$68,000. The 9-shank unit has a working width of 18 ft. and requires 450 hp. It sells for \$75,000.

"We also plan to offer an 11-leg machine," says Patterson, who adds that he plans to start selling the Sumo in the U.S. soon.

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Wireless Trap Sends Email When It's Tripped

Raccoons and other critters can send messages by email or phone thanks to new wireless trap monitors that notify you whenever a trap is triggered.

Wildlife Control Supplies (WCS) introduced Trap-AlertTM in late 2011. A single module connects up to four traps within 16 ft. that have sensors installed. When an animal (or something else) sets off a trap, and the magnetic connection is broken, a message is sent to a phone, computer or other communication device notifying the trapper that it has been tripped.

"Everyone who tries it loves it. Most Control Supplie professional trappers immediately see how Conn. 06026 cost effective this product is," says Jarrett shopwcs.com).

Goldstein, manager of customer service for WCS. "It can be used on traps for everything from a mouse to a bear."

Trap-Alert[™] sells for \$535 for the module and four trap sensors. The required subscription plan with a communications company starts at \$39.50/month for 24-months prepaid.

It has all the bells and whistles with GPS to map out the traps, to check the status of your traps anytime, and to check remaining battery power. The rechargeable batteries last 45 to 60 days per charge.

Contact: FARM SHOW Followup, Wildlife Control Supplies, P.O. Box 538, East Granby, Conn. 06026 (ph 877 684-7262; www. shonwes.com)



Low-cost wooden cattle guard measures 18 in. deep, 7 ft. wide and 16 ft. long. Four railroad ties sit crossways in the trench.

Low-Cost Wooden Cattle Guard

Larry Majerus' wooden cattle guard has worked great since he installed it 18 years ago. The cost of replacing it this year cost twice what it was originally, but it's still a good deal.

"The replacement cost \$192 using sawmill rejects," says Majerus. "I installed the original in 1994, and the cattle have only crossed it once when we had 14 in. of snow that filled in the pit and covered the planks."

Majerus doesn't plan any changes to the original design. The pit will stay 18 in. deep, 7 ft. wide and 16 ft. long (left to right). Four railroad ties sit crossways in the 16-ft. long trench.

"I've checked them, and they're still solid with no signs of rot," says Majerus.

The original cattle guard used 8-ft. long,

3 1/2 by 6-in. oak planks set on edge on the ties. Majerus offset the planks on the center tie to get uniform spacing. He is using 16-ft. planks on the new guard. He plans to nail 10-in. long, pressure-treated 2 by 4's to the ties to serve as spacers between the planks.

"I will put pressure-treated 1-in. boards along the outside planks to protect them from soil contact," explains Majerus. "Anything that keeps them away from the dirt helps."

Majerus says the wooden cattle guard stands up well to equipment traffic. "A 30ton well drilling truck drove over it recently without a problem," he says.

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