

**10 TO 30 PERCENT LESS WEAR  
AND THEY ALWAYS STAY SHARP**

## Long-Lasting Sweep "Never Loses Its Point"

"Our new chisel plow sweep has a high center that adds strength and maintains its point as it wears. They last longer and pull easier than conventional sweeps," says Allen Elock, Ag-Mate Mfg., Glendon, Alberta.

Elock manufactures two types of sweeps - 4-in. wide beavertails (also sometimes called furrowers, dragsters, or reversibles) and 2-in. wide "spikesters". Both types of sweeps are 18 in. long and 5/16-in. thick.

"We weren't happy with the sweeps we were using on our chisel plow because the V-shaped point wore off too fast leaving a rounded point that rolled the soil in front of it and pulled hard," says Elock. "Our sweep is curved and built with a high center that keeps the point sharp and causes both sides of the sweep to wear evenly. The high center gives the sweep enough strength that it can be built 2 in. longer than conventional sweeps without cracking or breaking. Our sweep is also 5/16 in. thick compared to 1/4-in. for most conventional sweeps. The combination of a longer and thicker sweep results in up to 30% less wear, and the permanent point reduces drag by as much as 50%, cutting horsepower requirements. Another benefit is better penetration and soil movement because the point splits the soil and throws it to both sides. The bolt heads are protected from wear by deep counter-sunk slots set in the high center ridge."

Sells for \$6.50.



Allen Elock holds a 2-in. wide spikester in his right hand and a 4-in. beavertail in his left.

For more information, contact: FARM SHOW Followup, Ag-Mate Mfg., P.O. Box 63, Glendon, Alberta, Canada T0A 1P0 (ph 403 635-2647).

## MILLS LOGS UP TO 36 FT. LONG

### He Built House With A Chainsaw Sawmill

When Ronald Kurtz decided to build his own log home on his farm near Wooster, Ohio, he started talking to sawmill operators in his area but couldn't find a mill that could saw the 36-ft. logs he needed for his cabin.

"We also looked at the new portable bandsaws that are on the market. With the costs of these saws starting at about \$5,000, however, I decided to build my own saw using a chainsaw that I already had.

"The sawmill is very simple. It consists of a track, three adjustable log-holding bunks, and the saw carriage. The log is laid on either two or three bunks, depending on the length, and they're adjusted for the depth of cut. The saw is mounted stationary in the carriage, which is pushed by hand down the track.

"I used a Stihl 075 chainsaw with a 32-in. bar and regular round tooth chain. With this chain, you get a very smooth cut. By changing to a special ripping chain, a coarse rustic cut can be achieved. That's the cut we used for the finished side inside the cabin. The maximum diameter of the log that can be cut on this saw is 20 in. and the length is 36 ft. with 40 ft. of track.

"The saw is very inexpensive to operate. The total fuel used to saw all logs (on three sides of each log), boards, and posts was less than 25 gal. on this 24 by 32 ft., 1 1/2-story cabin. We resharpened the chain after



Chainsaw fitted with 32-in. bar rigid-mounts on sawmill frame. Frame rolls down track to saw log which remains stationary.

about every two tanks of fuel. This can be done by removing the saw from the carriage. We started the house with a new chain and it's still in use.

"The total costs of materials to build the sawmill, excluding the chainsaw, was under \$450. At this time I do not expect to build these saws commercially but I can make plans available."

Contact: FARM SHOW Followup, Ronald Kurtz, R.L. Kurtz Enterprises, P.O. Box 942, Wooster, Ohio 44691-0942 (ph 216 262-6146).

## NO TRACTORS, NO COMPACTION

### New Irrigation "Planter" Is Ultimate In No-Till

They're calling it the "ultimate in no-till" - a planting and fertilizing system that mounts on a center pivot or linear irrigator to provide "tractorless" planting of crops.

The Mobile Irrigation Planting System, or MIPS, uses a stream of high-pressure water to dig a furrow, and then places the seed and covers it. It can also inject sub-surface fertilizer while planting.

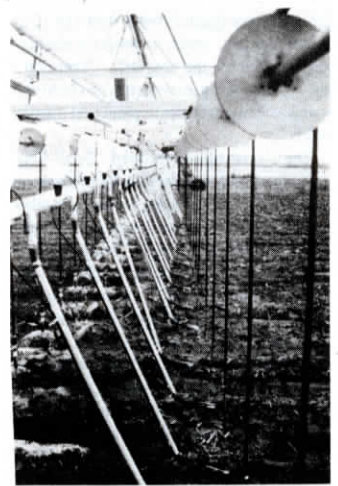
MIPS has been tested for the past two years by Dr. Bill Lyle and James P. Bordovsky, ag engineers at the Texas experiment station near Plainview, and has so far been used for planting corn, cotton, wheat and grain sorghum.

"It eliminates compaction during planting and fertilizing and has the potential to be the best planting system ever in heavy residue conditions," says Lyle, noting that four patents have already been applied for on the first-of-its-kind system.

Seed is suspended in a water-trapping gel and is carried under pressure down a line that's separate from the main irrigation supply to drop tubes on the individual row units. Pressurized manifolds have accumulators that look like upside down pop bottles to ensure even seed distribution the length of the irrigator. Seed can be placed at different depths, depending on water pressure which ranges from 5 to 50 psi. A separate nozzle injects fertilizer as deep as 8 to 10 in. using high pressure. A flat trailing "shoe" covers the seed right behind the seed tube. During planting the irrigator moves at just 1/2 to 1 ft. per minute.

Lyle's prototype system is installed on a linear irrigator, although he says it will work fine on a center pivot. One problem with installing the system on an irrigator is that they're designed to stop and start as they move across the field. In order to use the system to plant, the machine must be set up to keep moving without stopping. Lyle had to design new electronic variable frequency controls to keep the system moving continuously.

Lyle says other researchers have tried "seedigation" in the past but says it's never worked well because seed is placed on the soil surface. "We think this is the system of



Drop tubes carry seed to furrows dug by high pressure water.



Seed depth is changed by regulating water pressure. A trailing metal shoe covers furrow.

the future with the potential to eliminate all trips over the field except for harvest," says Lyle, noting however that there are still bugs to work out of the system before it's ready for market. Some irrigation systems, for example, may have to be reinforced to handle the extra equipment.

Contact: FARM SHOW Followup, Dr. Bill Lyle, Texas Agricultural Experiment Station, Highway 70, Halfway, Texas/Olton Route, Plainview, Texas 79072 (ph 806 889-3315)

## GIVES INSTANT READING

### Grain Temperature Probe

Unlike conventional probes, the new Fast-temp delivers an instant digital reading.

Fasttemp is easily inserted into any types of grain and is accurate to plus or minus 2°, according to the manufacturer. Helps monitor and pinpoint areas of possible spoilage, map airflow through the bin, and to identify the need for aeration.

Made of durable aircraft aluminum, its arrow tip retrieves a small handful of grain when the probe is retracted. Operates on one AA battery and is available in a long (telescopes from 4.5 to 7.5 ft.) or short (telescopes from 2.5 to 4 ft.) models. Both models, available in F or C, sell for \$199.

For more information, contact: FARM SHOW Followup, Fasttemp, Javelin Division of Kaufman Inc., 301 Hollywood Dr., WestLaFayette, Ind. 47906 (317 463-0215).

