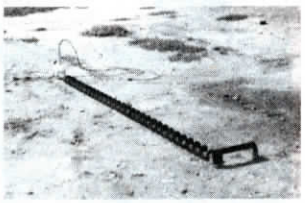
Hand-Held Sweep Auger

"It's a real labor-saver," says Kirk Deardorff, Hale, Mo., about the hand-held sweep auger he built to empty bins.

"When my bins get emptied down they still have about 500 bu. that won't go out the center sump. I have used this labor-saver to pull grain to the center for years," says Deardorff.



He used a 10-ft. length of discarded 4-in. dia. auger and a 1/2-in. electric drill. "I welded a short rod on one end to go in the chuck of the drill and put a wood bearing and drag plate on the other end.

Combine Header Makes Dandy Front-Mount Swather

A 14-ft. combine header from a 1958 Gleaner A makes an inexpensive front-mounted swather for Gerry Alexander, Dill City, Okla.

Alexander mounted the header on a Deere 4440 tractor. The header is driven by a single hydraulic motor and the tractor's hydraulic system. He made a subframe for the header from 3-in. box tubing that's designed to allow flex from side to side. The header can be raised or lowered 27-in. and has 12 in. of float.

"I built this swather for about $800. Comparable-size commercial pull-behind swathers cost about $11,000," says Alexander. "The front mount makes this header easy to operate. The hydraulic motor lets me operate the header at a constant speed regardless of tractor speed. I've cut 1,600 acres of wheat, alfalfa, bermuda grass, and sudan hay since I built the header four years ago, and I've had to replace only one bearing and two belts."

Removing the header is a 20-min. job, says Alexander. "Just remove the hydraulic hoses, and pull two pins on the lower pivots and two bolts on the subframe."

Contact: FARM SHOW Followup, Gerry Alexander, P.O. Box 395, Dill City, Okla. 73641 (ph 405 674-3912).

Red Flag Field Markers

Indiana farmers William Addison and Sons, of Greenfield, mark rocks, holes, weed patches and other problem spots "on the go" with special-make red flags that they toss out from the driver's seat of tractors and combines.

The "Mark It Now" fluorescent red flags are mounted on a 4 in. wood base painted white, with a flat metal weight underneath. A 16 in. stem extends from the base to the 3 by 5 in. flag.

"To mark a rock, for example, you simply open the cab door and toss out a flag. Its center of gravity makes it land upright," explains Dave Addison. "Not having to stop is a big plus. If you stop a big 4 WD tractor with tillage equiment in the ground, you'd better remember to lift the tool before you start up again or you may ruin the clutch. With these flags, there's no need to stop or even slow down."

Interest from other farmers prompted the Addisons to make their "Mark It Now" flag markers available commercially. They retail for $1.25 each.

Contact: FARM SHOW Followup, William Addison and Sons, 462 South 850 East, Greenfield, Ind. 46140 (ph 317 936-5757)

4-WD Tractor Built From Two Case 930's

When Martin LaForge, Arborfield, Sask., decided he needed a more powerful tractor, he coupled his two 90-hp Case 930 tractors into a single 180 hp 4-WD unit.

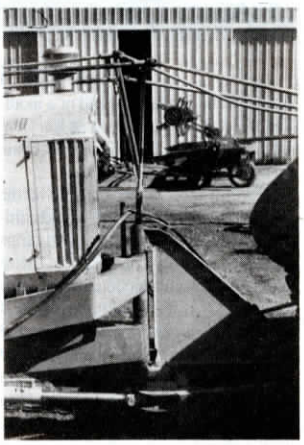
"In 1980, a new tractor in the 180-hp range was selling for around $80,000 and interest rates were about 17%," says LaForge. "The two Cases were worth around $4,000 each, and I spent about $4,000 to build the frame and controls for this unit. The total $12,000 investment was less than a year's interest on a new tractor."

LaForge eliminated the front wheels of both tractors and used a heavy iron frame to couple them together. The front tractor no longer has a set of front wheels, and the rear tractor simply uses the front tractor's rear dual wheels as its front wheels. "The front wheels now bear the entire weight of the front tractor, plus part of the rear tractor as well."

The frame is hinged at the center. A hydraulic motor drives a pair of hydraulic cylinders, one on each side of the tractor. The cylinders work in unison when turning - one pushes out while the other draws in.

The pivot point also allows the tractor to flex in either direction so that all four drive wheels always stay on the ground, even on rolling land. To prevent the hydraulic cylinders from twisting when the tractor "flexes", each cylinder is equipped with a universal-type joint at both ends.

Both engines run. LaForge simply starts the first tractor's engine and leaves it in neutral as he climbs into the cab of the rear tractor. All controls, clutch, throttle and gear shift for the front tractor are operated from the rear tractor by means of long extension arms into the cab.



LaForge synchronized the rpms of the two engines so they run in unison.

The tractor has a wheelbase of 15 1/2 ft. "We used the tractor for five years to pull a 40-ft. Bourgault cultivator. We then bought a 250 hp 4-WD Belarus tractor, but we still use this unit for certain jobs," says LaForge. "With duals all the way around and the long wheelbase, it really stays up well in softer soils and wet spots that other tractors might not get through."

The two engines burn a total of about 8 gal. per hour of fuel. "My Belarus burns about 15 gal. per hour," says LaForge, who adds that he spent about $4,000 to make the conversion. "I'm working on adding a third tractor," he adds.

Story and photos courtesy of Calvin Daniels and Grainews, Winnipeg, Canada

Automatic Chain Oiler

A salvaged automotive windshield washer pump lets Jerry Sheffer, Fletcher, Ohio, quickly and efficiently oil all head and internal drive chains on his combine while sitting in his seat in the cab.

Sheffer mounted the washer pump's 1 gal. reservoir on the side of the combine, pop riveting the tank's original brackets to the sheet metal.

Next, he installed the pump in front of the batteries, near the sides of the straw walkers. Then he installed a switch in the cab and ran electrical wires from it to the pump. He also ran an in-line fuse to the switch.

To deliver the oil, Sheffer used 25 ft. of 3/8 in. clear plastic hose. He used plastic "T's" to split the hose as it comes out of the pump, running each length of hose along the outside of the combine to each particular chain. To operate the oiler, Sheffer simply slips a switch on the panel to pump oil through the hoses.

"We get longer life out of chains now because we oil them more frequently and it takes much less time," says Sheffer. "Also, it's less dangerous because you're not up in the machine, against moving chains, squirting oil."

Sheffer says his only cost was $10 for 25 ft. of hose.

Contact: FARM SHOW Followup, Jerry Sheffer, 8844 N. St., Rt. 589, Fletcher, Ohio 45326 (ph 513 368-3065).