



One-Pass Seeding With Moldboard Plow

Two British farmers who wanted to reduce passes over the field but didn't want to give up their moldboard plow solved the problem by making a special drill to pull behind their plow so they can seed small grains in one pass.

Developed by John Hepworth and his son Chris in Hornsea, England, the HF drill is now on the market. The two men farm in an area with heavy soils that have to be turned over each year but are easily susceptible to compaction.

The system uses a specially-built drill that's mounted on large discs which break

up the soil ahead of seed tubes. The drill tows behind a furrow press, hitching to the press with a universal joint. That allows it to flex in the field and rotate on headlands when used with a reversible plow.

Manufacturer Alan Nelson says the one-pass planting rig has been tried on both light and heavy soils with good results. Two drill sizes are available to fit 4 and 6-bottom plows, starting at about \$8,000.

Contact: FARM SHOW Followup, Falcon Agricultural Machinery Ltd., Great Haywood, Stafford ST18 0ST England (ph 0889 882701; fax 0889 882561).

Bolt-On "Bog Cogs" Float Over Mud

"It's almost like putting tracks on," say manufacturers of new "Bog Cogs", bolt-on drums that attach to tractors, combines, trucks, cars, recreational vehicles and any other wheeled equipment that has to work in muddy conditions.

Karl Blair of Wessex Plc., manufacturer, says they can even be used on a tractor working in a bunker silo.

Made out of superhard plastic and alloy steel, the serrated drums simply bolt in place over the wheel. A special set of lug nuts mount permanently on the wheels. Takes just 5 min. to mount a set of four Bog Cogs. On a hard surface, they clear the ground so you can leave them in place when you get through the soft terrain.

"They're easy to use, virtually indestructible and they boost traction because the teeth dig in," says Blair.



Bog Cogs nest together for compact storage on the vehicle. They sell for about \$500 a set. The company is looking for a U.S. distributor.

Contact: FARM SHOW Followup, Wessex (UK) Plc., Unit 4, Porsham Close, Belliver Industrial Estate, Roborough, Plymouth PL6 7DB England (ph 0752 766833; fax 0752 766811).



Bale Accumulator Stacks Bales End-To-End

"We think it's the best tow-behind bale hauler because it lays bales end-to-end so you don't have to handle them again," says Gérard Beillet, representative of Doucet S.A., manufacturer of a new-style tow-along bale hauler.

Designed to be hitched to the back of any round baler, it operates automatically. As each bale comes out the back of the baler, it is shifted hydraulically - first to the right, then to the left, and the third bale is held at center. Each bale shift is identified by a light and sound signal in the tractor cab so the operator knows when to shut the rear baler door.

The new bale handler consists of a curved cradle running crosswise behind the baler. It has a set of support wheels under it that retract when the cradle is unloaded to the rear. A pair of 2-way cylinders shove bales to either side of the trailer, activated by levers that the bales hit as they come out of the baler.

Sells for about \$3,800.

Contact: FARM SHOW Followup, Doucet S.A., B.P. 22, 3, rue du Chateau, 51210 Montmirail, France (ph 26 81 21 04; fax 26 81 68 88).

"Splitter" Improves Crop Flow Into Combine

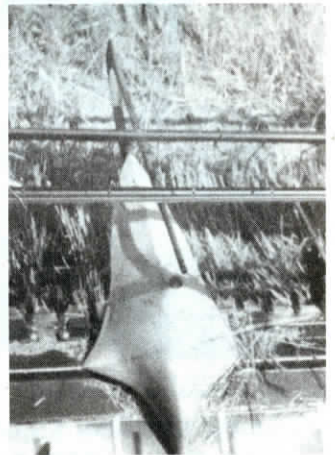
It's a simple idea but it works, says J.M. Barbas, manufacturer of a new "crop splitter" for grainheads that's designed to improve crop flow into the combine by eliminating plugups at the feederhouse.

The problem is that grain is fed into the center of the header from both sides of the grainhead by the feeder auger. Grain cut at the center of the auger often jams up because it gets caught in the flow of material coming from the sides.

The crop splitter consists of a pointed divider that directs flow of material in the center of the header to either side so that it joins the flow of crop material into the feederhouse rather than trying to feed right into the middle of it. Barbas says it lets you increase field speed as much as 10 percent while at the same time virtually eliminating plugups.

Made of lightweight metal, the splitter fits any grainhead, simply bolting to the center of the platform. Sells for \$675.

Contact: FARM SHOW Followup, Bar-



bas ET Plailly, Usine de la Plaine, 41800 TROO, France (ph 54 72 58 55; fax 54 72 40 76).

Anti-Sucking Device For Cows

If you've had trouble with cows sucking on other cows, you'll like this new anti-sucking device that fits over the head and gives the animal a mild electrical shock if it reaches down to drink.

H. Weiland of Rheintechnik in Germany explains that calves weaned early often still have a sucking urge far beyond what seems normal, resulting in grown cows sucking on other cows.

"Damage and injury to teats and udders is far greater than most farmers think," says Weiland, noting that a German dairy institute estimated that 11 percent of cows have the sucking problem at some point. "In addition to udder damage, the average sucking dairy cow drinks about 2 1/2 gal. a day which is lost to the bottom line."

The device is powered by a standard 9-volt battery. Four electrodes rest against the cow's forehead. An infrared sensor on the front of the box senses when the head comes up against an object - another cow - and



emits a mild shock which causes the cow to pull back.

Sells for \$250.

Contact: FARM SHOW Followup, Rheintechnik, Weiland & Kaspar KG, 5413 Bendorf/Rhein, Germany (ph 042 42 55 22; fax 042 42 507 88).

Strong Competition Brings Robot Milkers To Market

It's only a matter of time before robot milking machines make it to the U.S. market, say several foreign manufacturers who are in the process of introducing their robotic milkers to European farmers.

Two Dutch companies - Gascoigne and Manus - showed their systems at recent European shows. Manus delivered six robot milkers to farmers in March and Gascoigne plans to have production units on farms before the end of the year. A German company, Duvelsdorf, has been automatically milking 14 cows daily for the past year with its system at the Institute for Milk Production in Kiel. Earlier this year it installed a robotic system on a 70-cow herd and plans to have robot milkers on the market by 1994.

The Dutch Manus milker uses ultrasound sensors to pick up the right front teat and then guides the cups to the other teats in order. It takes 20 sec. to attach all the cups. A 2-stall system sells for right at \$160,000.

The German Duvelsdorf system uses a computer to keep track of each cow. The

first time a cow is milked, information about the position of the teats (length, height and width) is fed into the computer. A neck collar tells the computer which cow is entering the milking stall. Cups are placed on each teat individually by a single robot arm. Light sensors in a U-shaped holder at the end of the arm guide the cups into position. Once all teat cups are in place, the robot tests milk quality by measuring electrical conductivity in each quarter. If one quarter varies from the average of the others, milk is diverted to a separate tank. After milking, cups and teats are flushed automatically. One of the biggest practical problems with the system is removing dirt from the udder before milking, say researchers. A big advantage is that a herd can be milked 3, 4 or even 5 times a day, boosting production.

Robot milkers are also under development in England and, in the U.S., a robot milker is undergoing tests at the University of Maryland. (Excerpted from *Farmer's Weekly*)