

PICKUP-MOUNTED UNIT IS CONTROLLED FROM INSIDE CAB

Soil Sampler Drills Through Frozen Ground

"It's the first practical way to take soil samples in frozen ground," says Glenn Spreeman, Schuyler, Neb., who, along with Ron Henggeler, has developed a pickup-mounted soil sampler that drills through both frozen and thawed ground alike, gathering samples any time of year.

"Unless you can handle frozen ground, you can only work during the period after harvest before winter comes or in the spring when both mud and time are a problem. We decided to find an efficient way to take samples in frozen ground," says Spreeman.

He's used his unit successfully for five years.

Using a combination of a 2½ by 24-in. hydraulic cylinder and an orbit motor, the rig takes a core sample 10-in. long in 12 to 15 sec. in thawed ground and 25 to 30 sec. in frozen ground. As the cylinder pushes the bit into the ground, the orbit motor turns it. When the bit is withdrawn, the sample drops off into a box. When several cores have been gathered from the particular sampling area, the operator simply pours the box of cores into a sample bag.

The soil sampler's hydraulics are driven by a pump powered off the engine's fan belt. Mounting brackets attach to the pickup's frame so that, once installed, remounting the sampler is a 5 min. job. The body of the pickup is not altered in any way.



Rig takes a 10-in. long core sample from frozen ground in 25 sec.

"The biggest problem in building the unit was developing the bit. We had to specially design it to take a good sample under rugged conditions. Our bits last 20,000 to 30,000 acres," says Spreeman.

In addition to his own consulting work, Spreeman does some custom sampling for fertilizer dealers. He and Henggeler, who is one of his customers, build the samplers on a custom basis and would like to talk to manufacturers about licensing the idea.

For more information, contact: FARM SHOW Followup, Glenn Spreeman, Ag-Gro-Nomics, 306 Meadow Lane, Schuyler, Neb. 68661 (ph 402 352-2228).

USE OF SIMPLE LEVERAGE PRINCIPLE LETS YOU STAND ERECT AND LIFT

Load-Lifting Tool Saves Your Back

The use of basic physics helped Darrel Longman, Henry, Ill., invent a leverage lifting tool to either pull or swing objects up to 400 lbs. with no bending or back strain.

Working on the basic fulcrum principle, the tool helps move grain augers, tillage equipment for hitching, feeders, refrigerators, snowmobiles, boats, and many other objects.

The new lifting tool consists of a 5-ft., 2-in. steel shaft with a rubber handle. At the base of the shaft is a universal foot to provide lifting stability. An adjustable cable runs through a pulley near the top of the handle and locks into position with a steel washer. The reversible lift hook has one end for non-flat undersurfaces and another for flat undersurfaces.

To pull an object forward, the hook is centered under the machinery and the shaft pulled towards the operator.



Tool helps you pull or swing objects weighing up to 400 lbs.

To swing an object, the hook is attached under one corner and the shaft swung in the direction the object should go. Takes just one hand to operate.

Sells for \$19.95.

For more information, contact: FARM SHOW Followup, Darrel Longman, Bionic Tools, Inc., Rt. 1, Box 63, Henry, Ill. 61537.



International planter mounts at rear of big rig. A spray boom applies herbicides just ahead of the rototiller.

"GO ANYWHERE" ONE-PASS PLANTER

Farmer Builds Huge Self-Propelled Planter

You've never seen a planter like this huge self-propelled one-pass rig built by Wayne Vogel, Fremont, Mich., that tills, plants and applies chemicals in one pass.

FARM SHOW readers may remember Vogel, who built his own articulated combine from the ground up (Vol. 7, No. 3) and who also builds a huge commercial self-propelled hand-pick harvesting machine for automating the harvest of hand-pick vegetable crops (Vol. 9, No. 5).

Vogel built his 4-row self-propelled planter with lots of power and traction so he could get into fields as early as possible and cover a lot of ground. It's a one-pass rig equipped with a heavy-duty rototiller. He built the entire machine from the ground up, including the tiller.

"One man can plant and till 700 acres in 2 weeks or less," says Vogel, who spent \$50,000 to \$60,000 to build the machine using top quality components.

The 4-wheel drive machine is powered by a 250 Cummins engine. Front wheels are hydraulically driven — a feature added after the machine was built to aid steering — while rear wheels are powered

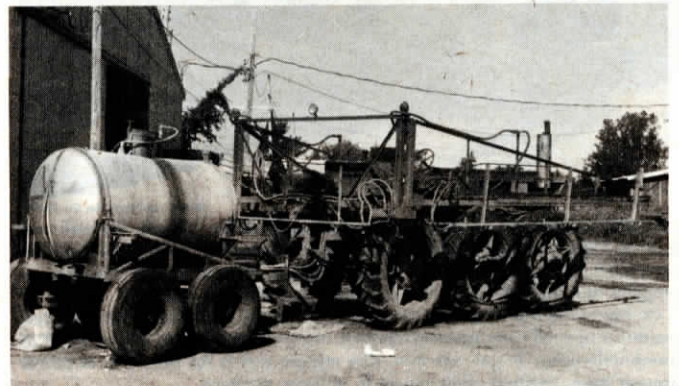
mechanically by a 10-speed Fuller transmission and a planetary gear from an industrial loader. A 200-hp. belt-driven driveshaft powers the rototiller.

Two 250 gal. rear-mounted tanks apply chemicals through a boom mounted just ahead of the tiller. The rear International Cyclo 800 planter was not modified in any way except to convert it from a trailing model to 3-pt. It plants in 34-in. rows, with each of the outside rows planting between the widely spaced rear tractor duals to avoid compaction.

Vogel has used the planting rig for two seasons over ground that he chisel plows in the fall. It travels at 6 to 8 mph.

In addition to his unusual planter, Vogel has also built a one-of-a-kind self-propelled carrot harvester and a 6-wheel drive spray cart that's got 6-full-size tractor tires that'll carry the rig through virtually any difficult ground conditions.

For more information, contact: FARM SHOW Followup, Wayne Vogel, 12191 Maple Island Road, Fremont, Mich. 49412 (ph 616 924-5803).



Vogel also built this 6-WD sprayer that'll work its way through virtually any field conditions.