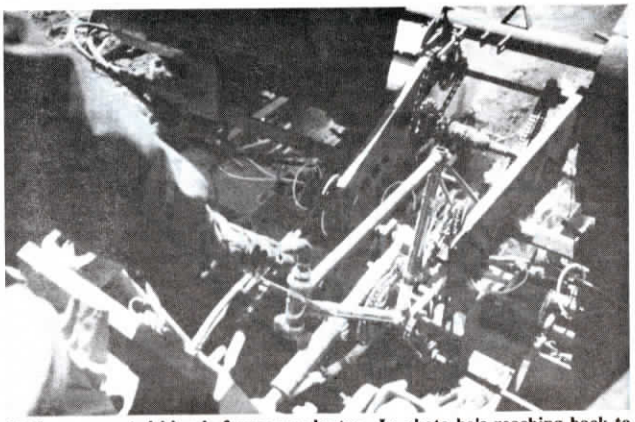


McEwen mounted bicycle frame on planter. In photo he's reaching back to change gears with shifter, which he remounted on pipe extended toward tractor.

"Bicycle Drive" On Cultivator Delivers On-The-Go Control Of Fertilizer Rates

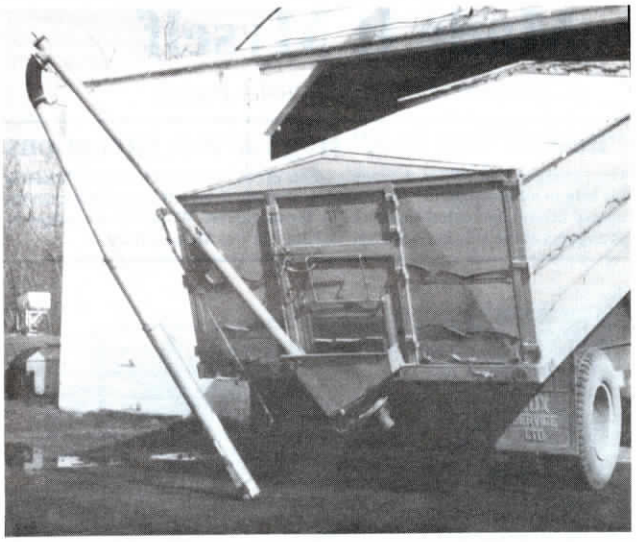
You've never seen anything like the "bicycle drive" fertilizer delivery system that lets Ron McEwen, Wyoming, Ontario, control dry fertilizer rates on-the-go as he cultivates.

McEwen removed front wheel, forks, and handlebars from a 10-speed bicycle and mounted the frame on the frame of a Deere 494 planter which he bolted onto the toolbar of his Buffalo 4630 4-row cultivator. The bicycle's main drive chain turns the bicycle's rear wheel shaft which chain drives a countershaft controlling a pair of planter fertilizer boxes mounted at rear of the cultivator. McEwen remounted the bicycle gear shift on a copper pipe that extends toward the tractor. He uses the bicycle's gear shift to change sprocket gear ratios to control fertilizer rates.

"It saves me money by letting me apply fertilizer according to soil type rather than applying one rate over the entire field, and it cost less than $500 to build," says McEwen. "I apply most of my phosphate during planting and potash during first cultivation. Soil test grid maps showed I wasn't applying enough potash on sandy soils and too much on heavy soils. My bicycle applicator lets me apply higher rates of fertilizer where needed. I tape a grid map of the field to the tractor fender. To know where I am in the field in relation to the map I numbered the electric poles on one side of my field, with each pole representing a number on the map. When I want to increase fertilizer rates I simply reach back and nudge the bicycle gears up a gear or two without having to take my eyes off the row."

McEwen cut the right pedal off the bicycle, leaving the two drive sprockets intact. He removed the left pedal and mounted a sprocket in its place. Two countershafts were necessary - one on front of the toolbar and one under the tractor axle which acts as a hinge for the small wheel assembly as well as being part of the powertrain. A small rubber tire runs inside the rim of the tractor's rear wheel. A spring on the 3-pt. hitch pulls the small rubber wheel against the rim. Raising the 3-pt. hitch and cultivator disengages the fertilizer drive. He dismantled the rear bicycle wheel and discarded the rim and spokes, then welded a sprocket to the original axle. A chain leads from the sprocket to the planter's original countershaft. All of the original speed options are still available as well as the 10-speed on-the-go speed changes. All bicycle sprocket ratios were calculated for exact fertilizer ratios.

Contact: FARM SHOW Followup, Ron McEwen, Box 204, 569 Thames St., Wyoming, Ontario, Canada N0N 1T0 (ph 519 845-3901).



Endgate Drill Fill Auger

"It works great and cost only $250 to build," says William Stephaniuk, Wishart, Sask., who converted his truck's 13-ft. long side drill fill auger to an endgate model which lets him haul both seed and fertilizer at the same time.

Stephaniuk mounted a 7-in. deep triangular-shaped metal hopper on the rear of the truck box's frame. He mounted the auger inside the hopper but removed the 12-volt electric motor, replacing it with a hydraulic motor that's operated by the truck's pto-driven hydraulic pump. He installed a hexagon-shaped box, 4 ft. wide and 8 ft. long, made out of plywood, inside the box. Fertilizer is loaded into the inner enclosure while seed is loaded between the inner walls and the sides of the truck box. There are three "lift-up" chutes in the endgate. The two outside chutes unload seed and the middle chute unloads fertilizer.

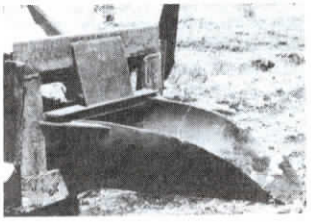
Stephaniuk has used the truck and drill fill auger to seed 600 to 700 acres of small grains for each of the past eight years. "I had been using two trucks equipped with side-mounted drill fill augers. The side-mounted augers prevented me from using rollover tarps on top of the trucks while my endgate model lets me cover the entire box. I patterned my system after a commercial add-on model with a steel fertilizer box. It cost about $1,200, but I built mine for $275. The only difference is that my auger and drive shaft aren't hinged in the middle so they can't be folded across the tailgate for transport. The end of the auger sticks out from the side of the truck box about 3 ft. which isn't much of a problem. The truck box holds 350 bu. of seed and the fertilizer box holds about 2 1/2 tons of fertilizer. It takes only about 10 minutes to install or remove the hopper and auger which are held in place by three bolts."

Contact: FARM SHOW Followup, William Stephaniuk, Box 166, Wishart, Saskatchewan, Canada S0A 4R0 (ph 306 576-2204).

Loader-Mounted Tree Scoop

Transplanting trees up to 4 ft. tall with this home-built tree scoop is as easy as using a loader bucket, according to South Dakotan Paul Redfield, who mounted the scoop on his 8N Ford front-end loader.

The innovative new tree scoop was built by his neighbor, Lee Yaeger, for use on a skid steer loader. "One day he moved about 1,000 2 to 3-ft. tall trees using a skid steer in a field alongside a highway. People kept stopping to see what he was doing. They'd never seen anything like it," says Redfield.

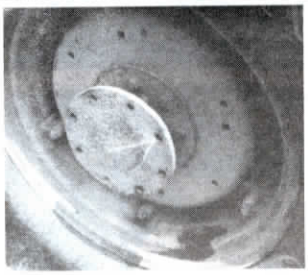


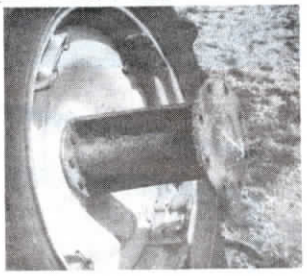
The scoop, made of rolled plate steel, is about 2 ft. across and can dig down 3 to 4 ft. Redfield points it into the ground with the loader and then drives it in by moving the tractor ahead. Then he lifts it out of the ground by tilting the bucket cylinder as he raises the loader.

"It works slick, just like a big shovel," he says. "Does the job of a hydraulic-powered tree spade that would cost $25 per tree to rent."

Redfield says the tree scoop could be built on a custom basis if there's enough interest.

Contact: FARM SHOW Followup, Paul Redfield, Rt. 2, Box 50, Madison, S. Dak. 57042 (ph 605 256-3431).





Nifty Way To Mount Tractor Duals

Putting spacer hubs on both the tractor wheel and dual wheel makes it easy to bolt on an the extra wheel when needed.

"I've used these hubs and extra wheels for 15 years with good results on rough and steep land. They stabilize the tractor when bushhogging steep hillsides," says W. A. Gibbs, Elmwood, Tenn.

He used heavy plate steel to make the spacers. The spacer on the tractor wheel protrudes just 2 1/2 in. so it's inside the edge of the tire. That way the hub is out of the way when duals aren't needed.

The spacer on the extra wheel hub is about 15 in. long and is strengthened by three 1 by 2-in. gussets. Each spacer has a flat round plate on the end. The two plates bolt together to hold the wheel on. The long spacer on the extra wheel stays on all the time. To mount the wheel, Gibbs rolls the extra wheel up alongside the tractor, lines up the spacer bolt holes and fastens the spacers together.

"I reverse the tread on the extra wheel so it runs to the rear. It increases traction backing up on steep ground and doesn't hurt forward pulling ability much," says Gibbs. He uses slightly narrower tires on the outside dual wheels than the tires on the tractor because "they give plenty of traction and stability yet don't put so much strain on the tractor."

Contact: W.A. Gibbs, Rt. 1, Box 54, Elmwood, Tenn. 38560.