"It's the best system on the market for moving snow with a 4-wheeler," says Ken Wren about the hydraulic-powered blade he uses on his Polaris Sportsman 500 ATV.

ATV Fitted With Powered Snow Blade

When Ken Wren of Richfield, Minn., bought a new Polaris Sportsman 500 4-WD ATV last fall, he also bought a 4-ft. front-mount blade for it. The problem was that he had to raise and lower the blade manually with a lever. And to change the blade's angle, he had to get off the rig and do it by hand.

His friend, Jeff Parker, solved the problem with a power kit that operates off the 4-wheeler's battery. It includes an electric/hydraulic power unit, a small hydraulic cylinder, and an electric winch. The winch raises or lowers the blade, and the cylinder rotates it left or right. Both operations are controlled by switches on the ATV's handlebars,

"It's really easy to operate and works great for clearing snow from my driveway and an alley behind my house," says Wren. "It works even better than a pickup-mounted blade because it allows me to work in small areas where a pickup can't go. The blade and power unit detach together as one unit from the blade's mounting frame, which stays with the ATV. To remove the blade and power unit, I simply pull two pins and unplug two wires."

Parker says the power unit is the same one used on Merc Cruiser motorboats for the tilt and trim. He plans to market the kit soon and says it will fit most ATV brands and models. He expects the kit to sell for less than $500.

Kit bolts onto front part of blade mounting frame. It includes an electric/hydraulic power unit, a small hydraulic cylinder, and wiring.

"I also plan to make kits for garden tractors," he adds.

Contact: FARM SHOW Followup, Jeff Parker, 9010 Chicago Ave. S., Bloomington, Minn. 55420 (ph 952 884-4326).

TenHulzen's "paddlewheel terrace plow" has a 3-ft. share that loosens soil up to 10 in. deep. Above the share is a short moldboard that drops soil onto a paddlewheel, which throws soil up onto the top of terrace.

Home-Built Paddlewheel Plow Rebuilds Terraces With Ease

Since most of Don TenHulzen's Firth, Nebraska, farm is terraced, he spends a lot of time in terrace maintenance.

To make that job faster and easier, TenHulzen made what he calls a "paddle wheel terrace plow."

His 3-point mounted plow has a 3-ft. share that loosens soil up to 10 in. deep. The share was cut from an old grader blade. Above that is a short moldboard that drops the soil onto a paddlewheel that throws the soil up onto the top of the terrace. TenHulzen shaped the moldboard in his farm shop press from a piece of 1/4-in. plate steel. Everything mounts on a frame made of 4 by 6 in. rectangular tube steel.

The paddle wheel is about 6 ft. in diameter and has three 8-in. wide paddles cut from 1/4-in. steel. The original design had six paddles, but he found that was too many. They cut back to four, but three worked even better.

The paddle wheel runs on a hub mounted on the plow frame. The hub is actually the bearing and mount from an Allis Chalmers disk. A hydraulic motor with 1-in. inlets chain drives the paddle wheel. A number 60 roller chain connects a 4-in. sprocket on the motor with a 2-ft. sprocket on the paddle wheel.

Paddlewheel is 6 ft. in dia. and has three 8-in. wide steel paddles.

"We tried to gear the wheel slower by putting a restricter in the hydraulic line, but it didn't work as well as putting the larger sprocket on the hub," he says.

"The paddlewheel is geared so it doesn't turn fast, but it can throw soil as far as 20 ft.," he says. "I pull it with a 4020 John Deere."

To rebuild terraces, TenHulzen makes one to three passes with the plow on the uphill side of the terrace. "I can rebuild a half mile of terrace in about 45 minutes," he says.

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On-Farm Elevator Stands The Test Of Time

By Pat Rediger

When Dominic Schmitz constructed a grain elevator on his farm in 1929, he built it to last. Today, the 12,000-bushel elevator is still used by his grandchildren.

Only 27 at the time, Schmitz owned his own sawmill and used lumber from his land to build the elevator. He also owned the hardware store and a garage in nearby Shellbrook, Saskatchewan.

Spikes were bought through the hardware business and labor was cheap. The elevator was completed in 1931.

"It was the talk of the town," says Smith. "There was no such thing as a farmer who owned his own elevator. There were country elevators, but a farmer-owned elevator was unheard of," says W.T. Smith, Schmitz's son (he changed his name about 50 years ago).

The elevator was only slightly smaller than the one in town. It featured a 60-ft. leg, while the one in town had an 80-ft. leg. It was also constructed of 2 by 4s instead of 2 by 6s.

The original elevator held 12,000 bushels. It contained six bins that each held 2,000 bushels. All of the grain was trucked out of the elevator since it was not located on a rail line.

Although Schmitz drew up the plans rather quickly, his planning has stood the test of time. Very few modifications have had to be made as the decades have passed.

"We haven't had to make many improvements over the years," says Smith. "We added a tin roof and constructed an addition in the 1960's. The addition was an open shed with a sloping roof."

The elevator was completely repainted in 1991 and in 1999 a metal hopper bottom granary was attached to the elevator. A second one was added the following year.

Dominic Schmitz, Shellbrook, Sask., built his own grain elevator in 1931, and it's still standing.