## He Built His Own Leaf Vacuum

"I take care of a church property that's 18 miles from where I live. I wanted to use a leaf vacuum but I couldn't justify the cost and I also wanted one I could tow on the highway," says Leonard Lilienthal, Roosevelt, Utah.

He started with a walk-behind vacuum. "It was a pain to use as it would plug up and I'd get dirty emptying the bag, which had to be done frequently," says Lilienthal. "I dismantled the machine and built a small trailer out of an axle from an old tent camper. I mounted the unit's engine and blower assembly on the trailer, along with a plywood box."

The box's rear panel opens up to remove the leaves and is held in place by three bolts with wing nuts. He built an adapter boot for the mower deck from a short length of plastic 4-in. sewer pipe. He bought a 15-ft. length of 4-in. dia. vacuum hose from a company called Trac-Vac and made some couplings

"There's only about 4 ft. of hose between the vacuum and the mower deck. When I need to suck up leaves that I can't reach. I remove the hose from the mower deck and couple on the other length of hose. That way I can get into flower beds and around the base of shrubs and into irrigation ditches," says

He spent about \$300 to build the machine. The most expensive item was the hose which cost \$104. I purchased the walk-behind vacuum years ago at a pawn shop. The only problem with the rig is that it has a lot of suction. I have to be careful if there's any gravel around where I'm cleaning up or it'll pick up gravel and small rocks," notes Lilienthal.

Contact: FARM SHOW Followup, Leonard Lilienthal, Rt. 1, Box 1836, Roosevelt, Utah 84066.



To build this leaf vacuum, Leonard Lilienthal dismantled a walk-behind vacuum and mounted its engine and blower assembly on a trailer, along with a plywood box.

## **Home-Built Backhoe Tows Behind ATV**

When Thomas Gerrier wanted to dig a foundation for his house, he had to get creative to get the job done.

"We couldn't get in with a big machine, so I priced a commercial backhoe attachment and then decided to build my own," he says. "I used mostly scrap metal so the material cost worked out to less than \$500.3

The backhoe rides on a pair of 12-in. wheels and tows behind Gerrier's ATV. Power is supplied by a 5 hp Honda gas engine with an 11 gpm pump. The backhoe operates off four stacked valves powered by the pump. A metal implement seat mounts on the unit for the operator. The 12-in. wide bucket can reach 4 1/2 ft. down and out 10 ft.

The boom was built out of 4 by 6-in, tubing. The bucket is built from 3/16-in, plate reinforced with 1/2-in. thick plate.

The unit operates with four hydraulic cylinders - one to raise and lower the boom, one to extend the boom, one to tilt the bucket, and one to rotate the operator's platform. It's equipped with a pair of outriggers.

"Commercial backhoes for 4-wheelers are available, but they're not very big or rugged. The hardest part was in the engineering design. I had to make wood templates to get the correct angles and cylinder strokes for the backhoe and loader.

"I use my Honda 400 4-wheeler to pull it. I found that picking up big 400 to 500-



Gerrier's backhoe rides on a pair of 12-in. wheels and tows behind his ATV. Power is supplied by a 5 hp Honda gas engine with an 11 gpm pump

lb. rocks caused the ATV's back end to The axle had a broken spindle so I bought raise up, so I mounted a 30-gal. plastic barrel filled with water on back of the ATV as a counterweight.

"I got a lot of the components from my neighbors, including the axle and wheels.

a new one for \$75. I paid \$350 for the four valve banks

Contact: FARM SHOW Followup, Thomas J. Gerrier, Box 90, W. Farmington, Maine 04992 (ph 207 778-4344).



Muhr Farms assembled this water truck with used equipment including a 1981 Mack tandem, a 3,800-gal. water tank, and a truck wrecker pump.

## Water Truck Fills Sprayer, Fights Fires

Besides being a useful vehicle on Muhr Farms, a water truck serves as backup for local fire protection. Blaine Muhr, along with his father and brother, of Francis, Saskatchewan, assembled the truck with used equipment: a 1981 Mack tandem, a 3,800gal. water tank, and a truck wrecker pump.

"The truck has a 3-in. pto pump that fills the truck in approximately 18 minutes," Muhr says. "There's also a 2-in. gas-powered pump to load the water out to the sprayer. We're on call with the local fire departments. They like the large water supply and short time to load."

He pulls water from dugouts with the selfpriming gear pump.

The Muhrs' neighbors know they can call if there's a fire during harvest. With long distances to town, it's nice to have protection nearby. The Muhrs also use the truck to water down roads to control dust during parades and other events.

When they're not putting out fires, the Muhrs use the truck on more than 6,000 acres of grain crops to tow a sprayer to the field and supply it with water.

"With 3,800 gallons of water ready for the field, this works great for us. One man can spray 1,000 acres per day and eliminate a hired man," Blaine says.

Contact: FARM SHOW Followup, Blaine Muhr, P. O. Box 90, Francis, Saskatchewan, Canada SOG 1VO (ph 306-245-3750; muhrfarms@sasktel.net).



Comfy back support adjusts to support your back on rough terrain. It also folds down flat to become an additional seat.

## Bolt-On Backrest For ATV's

If you spend a lot of time on an ATV, you'll like this comfy new back support.

The Ride N' Rest adjusts to support your back on rough terrain, says Paul Meeks, president of Great Day, Inc.

"It has an aircraft aluminum frame, with a 2-in. thick, cushioned back, covered with high density, waterproof, 400 denier nylon," he says. "It's weatherproof and versatile. After using the U-bolts provided to quickly attach the Ride N' Rest to the ATV's rear cargo racks, it can either be conveniently adjusted at the desired position and angle, or folded down flat to become an additional seat cushion.'

It comes in either black or camo, and fits all ATV brands, including Honda, Kawasaki, Polaris, Bombardier, Arctic Cat, Yamaha and Suzuki.

The manufacturer's suggested retail price is \$106 (plus S&H).

Contact: FARM SHOW Followup, Great Day, Inc., Box 472, Tallulah, La. 71282 (ph 866 649-1918; sales@greatdayinc.com; www.greatdayinc.com).