Dual Wheels Keep ATV Safer On Steep Hillsides

Keeping an ATV from tipping over on hillsides is the goal of these ATV-mounted dual wheels that we recently spotted in Practical Farm Ideas, a "what's new" publication for farmers and ranchers in Britain (www.farmideas.co.uk).

Matthew Barbery fitted dual wheels to his Yamaha Big Bear ATV, and he says they make an enormous difference in crossing steep slopes. "The duals make the ATV almost impossible to turn over sideways," he says.

Another advantage is in wet conditions, since the dual wheels leave only a shallow track without damaging the crop.

Barbery puts less air pressure in the outside wheels than the inside ones. On flat, hard surfaces this allows the ATV to ride primarily on the inside tires. The outside wheels come into play only when they're needed. If the machine is being used in wet field conditions, the pressure in all the wheels can be equalized so that the machine's weight is distributed equally.

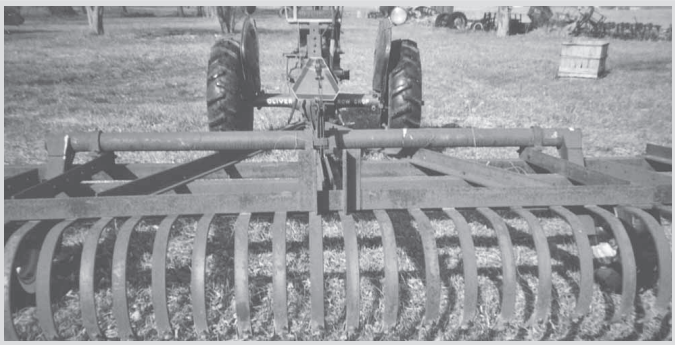
The add-on wheels mount similar to tractor duals. A 6-in. wide metal spacer between the wheel rims keeps the wheels far enough apart to keep mud and debris from clogging up between them. The centers of the wheel rims were cut out to accommodate the spacer. A steel bar welded across the rim is used to pull the outside wheel in toward the inner wheel.

A pair of lugs are welded to the inside part of the inner wheels. A screw tightener hooks over the bar and the ring and is tightened with a wrench.

Dual wheels on his ATV keep Matthew Barbery from tipping over on hillsides.

A 6-in. metal spacer between wheel rims keeps wheels from clogging up with mud.

One disadvantage of the add-on wheels is that they make the ATV much harder to steer, as it wants to go straight ahead when you try to turn. Another disadvantage is the extra width of the ATV, which makes it more difficult to get through narrow gates. It might not hurt to have extra mud guards, either.



Paul Dietz built this low-cost "rock rake" out of an old Allis Chalmers field cultivator.

Field Cultivator "Rock Rake"

Paul Dietz, Hicksville, Ohio, converted an old Allis Chalmers field cultivator into a low-cost "rock rake".

The cultivator was originally equipped with three rows of 1 1/2-in. wide C-shanks mounted on toolbars. He unbolted the shanks from the front two toolbars and moved them on the rear bar, using existing holes in the cultivator frame to bolt them on. The shanks are spaced about 3 in. apart. He also bolted a steel plate onto both ends of the rear toolbar to keep rocks from rolling out to the sides.

"It works great on rocks anywhere from three inches in diameter to as big as a basketball," says Dietz. "I use my Ford 100 hp tractor to pull it and run the shanks three to four inches deep. I drag the rocks to any location where it's convenient to pick them up later, then hydraulically raise the cultivator to deposit the rocks. The shanks are spaced quite close together so it does pull quite a bit of dirt with it."

Contact: FARM SHOW Followup, Paul J. Dietz, 8538 Lake Rd., Hicksville, Ohio 43526 (ph 419 542-7250).

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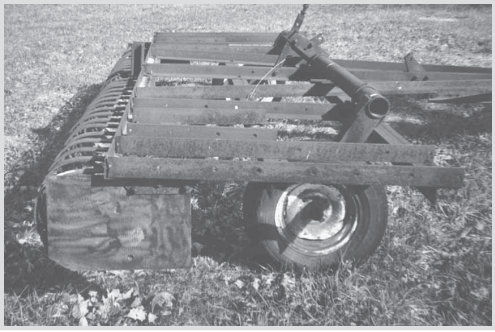

Tree shearer slices through trees up to 3 in. in diameter. Cutting assembly consists of two 14-in. dia., overlapping discs that are smooth with one beveled edge.

Low-Cost "Tree Shearer" For ATV's, Skid Loaders

This new ATV-mounted tree shearer slices through trees up to 3 in. in diameter, yet requires no outside power source.

The unit will work on any 400cc or larger 4-WD ATV.

"It's built simple and is almost maintenance-free," says inventor Dale Kohlmeyer of Washington, Kansas.

The tree shearer consists of a cutting assembly and mounting bracket that attaches with two quick release pins to a "push tube" (not supplied) that mounts permanently on the ATV frame. The mounting bracket can also be bolted to a snow blade mounting frame that bolts onto the push tube.

The cutting assembly consists of two 14-in. dia., overlapping earth metal blades that are smooth with one beveled edge. Each blade rotates on a 5/8-in. dia. bolt that attaches to a bearing that's welded to the blade hub.

The unit, which weighs about 50 lbs., is raised and lowered by attaching a lifting device (not supplied) whether it's manual lift, cable winch, or electrical lift.

To cut the tree, you lower the shearer to ground level and slowly drive forward, centering the tree between the two discs.

"The overlapping blades cut through the tree much the same as a scissors cuts through paper," says Kohlmeyer. "It cuts the tree at ground level without leaving a stump. I made it to cut down cedar trees, but it'll also handle hardwood trees such as locusts. However, with hardwoods the tree diameter can't be more than 1 1/2 in. A stop on back of the unit keeps the blades from getting stuck in larger trees. Once the tree has been cut, it may be necessary to lower the cutting assembly while backing up, which will allow the blades to rotate in reverse and self-clean themselves from grass and small trees. "

Kohlmeyer recommends cutting with the ATV in 2-WD. That way, if you try to cut a tree that's too big the wheels can slip which will reduce stress on the cutting assembly. He also recommends using an ATV with at least 350 cc to have enough ground clearance. Four wheel drive is needed in order to provide more traction when backing up, especially on hillsides. "The forward motion of the ATV and its weight does the cutting, so it's best to go about 1 to 2 mph while cutting," he says.

There has to be constant pressure between the two blades in order for the unit to work properly, he says. The pressure is increased or decreased by changing the size of shim washers between the blade bolt and the mounting frame.

The cutting assembly sells for about $350. "When you add the cost of a push tube and lift mechanism, your total cost will be somewhere in the $700 to $800 area," says Kohlmeyer. "I make my living farming and sell only to dealers located in Kansas, Nebraska and Missouri. I don't sell direct to farmers or ranchers."

Quick-tach models for skid steer loaders are also available. "The skid loader model has a beefed-up top plate with a heavy double roll bearing, to handle the extra downpressure of a skid loader," notes Kohlmeyer.

The skid loader model sells for $750 to $850.

Contact: FARM SHOW Followup, Dale D. Kohlmeyer, Double D Klippers, LLC, 1591 Rainbow Rd., Washington, Kansas 66968 (ph 785 325-2636; elad@carrollsweb.com).

John O' Brien uses 1/2-ton concrete dividers to direct cattle in his feedyard. They weigh 1,100 lbs. apiece and can be lifted by eye bolts on top.

Concrete Feedlot Dividers

Here's an idea from an Iowa cattle feeder.

John O'Brien uses 1/2-ton concrete dividers to direct cattle in his feedyard. The solid barriers are made by a local Redi-Mix plant that makes them up for bunk silos. They weigh 1,100 lbs. apiece and can be lifted by eye bolts on top.

O'Brien uses them for a loading chute walk alley, as pen dividers, gate anchors, and to make a storage area for hay and corn gluten. He says they stand up to a lot more punishment than any other method of fencing.

Contact: FARM SHOW Followup, John O'Brien, 5922 Airview Drive, Dubuque, Iowa 52003 (ph 563 556-8917).