Tractor Mower Converted For ATV

Inspired by a FARM SHOW article about a fellow who had built a sicklebar mower onto his ATV, Robert Herron of Barrys Bay, Ontario, built his own unit but took a different approach.

"The other guy (Dale Depee - Vol. 28, No. 4) mounted the sicklebar on one side of the ATV's foot rest and put the engine to power it on the other side," Herron says. "I thought, why couldn't I build a pull-type mower? I do quite a bit of weed cutting along the road and some haying on small fields."

He bought an old International pull-type tractor mower with a 7 1/2-ft. sickle bar and set about modifying it in his spare time.

"I made my own hitch and mounted a 9 hp Honda engine on it. Since I wasn't sure how well it would work, I didn't want to spend too much money so I didn't put a clutch on it. I mounted a direct drive belt instead. Once I saw how well it worked I put on a centrifugal force clutch," Herron explains. To lift the mower, Herron bought a 12-volt self-contained hydraulic power pack that runs off the ATV battery. The only mower control he has on the ATV is a push button to raise and lower the sickle bar. For safety reasons, Herron also hooked up a throttle cable to the height adjustment mechanism, so that when he lifts the cutting bar up, the clutch disengages, but the engine stays running. This works well when he needs to avoid obstacles as he's mowing.

Herron says the sickle bar lifts just as high as if a tractor was pulling it - $2\ 1/2$ ft.

The final touches were guards over the belts and pulleys, and a paint job.

"It works really well and I've never seen another one like it," he says. "In all, it cost me about \$1,600 because I bought everything new, except for the used mower, which was in good shape."

He built the unit in 2005 and has used it extensively since then.



Robert Herron pulls a modified 7 1/2-ft. sicklebar behind his ATV, mounting a 9 hp Honda engine on it.

Herron points out that a small two-wheel drive ATV wouldn't be able to pull it. He drives a Honda 350 Fourtrax, which pulls the mower with no problem, even on hills.

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Chandler's first step to making great cider is to run it through a garbage disposal set up specifically for that purpose. It mounts on the underside of a sheet of plywood.



Hydraulic jackpowered press is used to squeeze out the juice from apples. The press sits in a plastic shower base that acts as a catch basin.

Cider System Makes Use Of Excess Apples

What better way to dispose of excess apples than by making them into cider? Bruce Chandler built a hydraulic jack-powered press to squeeze out the juice. His first step to making great cider is to run it through a garbage disposal set up specifically for that purpose.

"The better job you do crushing the apples, the more juice you get," explains Chandler. "Running them through a garbage disposal just soups them."

His garbage disposal mounts on the underside of a sheet of plywood. Chandler simply cut a hole in it to fit the disposal unit. A piece of 1 1/4-in. plastic pipe comes off the bottom of the disposal in an L-shape and shoots the minced apples into a food-grade bucket.

"If we were going to sell cider, I would rebuild the work area using stainless steel or Formica, but this works fine for us," he says. Chandler built his press using two pairs of

Chandler built his press using two pairs of 3-ft. long 2 by 6-in. boards for uprights and a 28-in. long 4 by 4-in. bridge to press the jack nose against. To keep the jack from pressing into the wood, the underside of the bridge is covered with a metal plate.

The uprights are bolted to the 4 by 4-in. bridge and to a 16-in. square, 4-in. high base. The entire press sits in a plastic shower base that Chandler bought new.

The ground-up apples are poured out on sheets of muslin cloth. The sides are folded over to make a square pad about 16 in. square. Squares of cloth-covered pomace are alternated in a stack with plywood separators on the press. Stacking continues until there is only room for the hydraulic jack and a 2-in.

high, 16-in. square press base.

"I cut 3/4-in. thick, 16-in. plywood squares with a dado blade set to cut 1/2 in. deep, and at 1/2-in. spaces," explains Chandler about his separator boards. "Then I flip the boards over and cut channels perpendicular to those on the first side. This leaves 1/2-in. deep grooves on both sides with a waffle board pattern of 1/2-in. holes for the juice to run along and through."

All wood parts, including the separator boards, the press base and uprights, are sealed with paraffin to keep apple cider from soaking in. Chandler suggests warming the wood and the brush before applying the melted wax. Having everything warm encourages the hot wax to spread out and coat the wood.

When he cranks on the jack handle to

squeeze out the juice, cider runs out into the basin and through its drain into containers.

"The amount we get depends on the type of apples and how juicy they are," he says.

Chandler advises letting the cider sit in containers for about 24 hours before siphoning off the juice. This leaves any sediment behind. He then mixes juice from different varieties to get the flavor he prefers.

"We raise 8 varieties of apples, but our favorite mix is Early Gold and State Fair, which are sweet, with Spartan, which is medium tart," says Chandler.

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Non-Slip ATV Rack Tray

Conventional ATV racks are great for hauling bulky loads but not for carrying small tools, which can fall between the cross bars and scratch the ATV's body or get lost. And there's no way to take a dog along with you. This new ATV "rack tray" mounts over the existing racks to provide a solid, yet "catchy" surface that solves those problems.

The rack tray consists of a weatherproof, formed ABS thick plastic frame fitted around pieces of Astroturf carpet. One tray fits on front and one on back. Both trays simply attach with plastic zin ties.

"The Astroturf keeps cargo from sliding around and also makes it more comfortable for a dog or even an extra passenger to ride along. The dog has a base to sink its paws into and hang on," says inventor Roger

Kuntz. "Also, it protects the ATV body and racks from abrasion and damage."

Kuntz says he came up with the idea because he often wants to haul tools or his dog on his ATV. "In the past, every time I bought an ATV I would cut out a wooden board and lay it on top of the ATV rack, then glue a section of carpet to it."

Kuntz says he's willing to build rack trays for others if there's enough interest. "It costs a lot to develop a mold so I'd need multiple orders before I can go into production," he notes.

He says the units would sell for \$69.95 including S&H.

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Rack tray mounts over ATV's existing racks to provide a solid, yet "catchy" surface. Works great for carrying small tools or the family dog.

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