

## Cub Dump Truck Workhorse

"I don't know what we'd do without it," says David Dowgielewicz about the little dump truck he and his sons, Connor and Adam, made from a 2140 Cub Cadet a couple years ago.

"The kids call it the little wood hauler," he says, noting that it gets plenty of use for that since the New Braintree, Mass., family burns wood for heat. But it's used year round to haul stones, sod, and sticks off the yard and for garden work. Connor, now 9, drives it regularly to his grandparents' house next door to help out with various chores.

The Cub was a retired mower that Dowgielewicz cut and stretched to accommodate a Cub dumpcart he owned. Other than hiring a friend to machine the

driveshaft, he and his sons made all the modifications, added a pillow bearing and used materials they had on hand. The biggest challenge was realigning the transaxle with the engine, because it has a direct driveshaft. They also beefed up the dump cart and moved the pivot point farther back to make it easy to manually dump the 12 cu. ft. box.

Dowgielewicz estimates he spent about \$100 on the project. He notes that the all-in-one dump truck travels easily in snow and up hills – something he couldn't do with a Cub pulling the dumpcart.

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David Dowgielewicz spent only about \$100 to make this handy dump cart out of an old Cub Cadet.

## Home-Built Pea Sheller

After looking at a commercial pea sheller, Ron Forster decided he could build a better one. Where the commercial unit had plastic beaters and drum, he used wood and steel. Best of all, the price of the home-built unit was a lot less.

"A friend's wife needed one for purple hull peas she sells to a local co-op," says Forster. "She asked if I could build her one like the commercial shellers. Mine cost less than \$900, including motors and bearings."

He built the 24-in. dia., 39-in. long drum out of 3/4 by 3-in. wide wood slats set on edge. The drum is covered with hardware cloth sized to allow peas through. He used plywood for the ends (finished side in) and 2-in. square hickory for the beaters. He used angle iron for the framing. One hopper section can be removed for loading and later removing spent hulls and chaff.

The beaters ride on a shaft that turns counter to the shaft that turns the hopper. Each shaft is driven by a different motor. A 1/10 hp motor turns the hopper at only 10 rpm's with a 1/2 hp motor driving the beaters at up to 200 rpm's.

"I have two bearings at either end of the center of the drum to mount the inner and outer shafts," explains Forster.

The outer shaft with its drive pulley is mounted to the drum with a bearing resting on an angle iron cross support. The inner shaft extends from a drive pulley and bearing. That bearing is mounted on an outer frame member, and goes through the drum to a second outer shaft and the second set of bearings. The drum drive motor is mounted on top of the two frame cross members, while the beater shaft drive motor is mounted underneath the drum.

Forster fashioned the beaters by clamping two 12-in. long pieces of hickory back to back. He overlapped ends by 6 in. This formed a 2 by 4-in. section that he center drilled for the 2-in. shaft. He also drilled holes for a carriage bolt to fit on either side of the shaft. After taking the two pieces out of the clamps, he rounded the ends off and bolted them in place on the shaft. Beaters are offset by 15 to 20° to form a spiral and reduce clumping and encourage threshing. Forster was careful to finish all surfaces of wood components with non-toxic, salad bowl quality urethane.

Peas coming through the hardware cloth are deflected by plywood sideboards into a V-shaped, plywood basin under the drum. A flapper door on one side lets peas drop down into a sheet-metal trough when it's closed. When it's open and the loading/unloading drum section has been removed, pods can drop out and fall to the side of the sheller.

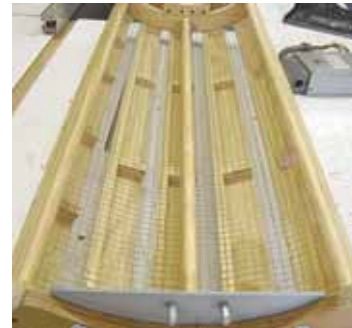
The trough rests at an angle on an off-center shaft driven by a separate small motor. It extends out from the end of the drum with vibration from the shaft keeping peas moving down its length. As the peas cross a screen and drop into a catch pan, a blower under the screen forces chaff and residue out of the chute and into a residue pail.

Forster and his friends are happy with the way the sheller worked out. "It can handle several bushels of pea pods at a time," says Forster. "It can shell out 2 1/2 bu. in less than 10 min."

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Ron Forster used wood and steel to build the beaters and drum on his pea sheller.



View shows beaters with loading section removed (left). Drum is covered with hardware cloth sized to allow peas through.

## Tile Finder Helps Locate Old Lines

"You can locate the full length of a tile line without digging up a field," says Terry Murphy, Maverick, Inc., Slater, Iowa, about the company's new Tile Finder system.

The Tile Finder consists of a 650-ft. reel of heavy copper wire "rod" and a 512 Hz transmitter and receiver. The transmitter sends a signal to the end of the wire rod, which is fed down a line of tile. The handheld receiver shows the exact location and depth of the tile.

"A lot of farmers are buying their own tile plows and spending a lot of time searching for existing tile. Once you find a tile outlet or inlet, you don't always know where that tile goes," says Murphy. "In addition, the transmitter lets you pinpoint exactly where the end of the wire rod is so if the rod hits an obstruction, you can dig down and free it up."

He says customers are saving money

with the system. "One farmer put in several hundred thousand feet of lateral tile and uses his Tile Finder to locate all the tile mains before he goes in with his tile plow. That way he can put in additional tile without damaging any existing tile. Another farmer saved the cost of putting in 20,000 feet of 8-in. tile by using the Tile Finder to locate a lot of main tile lines he didn't know he already had. He canceled the order and simply ran smaller laterals to the existing main tile lines."

Murphy says a locator that's included with the system can also be used to identify the location of many kinds of underground utilities, including phone, cable, gas, electric, and metallic water lines.

The system sells for \$4,570 plus S&H. Contact: FARM SHOW Followup, Maverick, Inc., P.O. Box 466, Slater, Iowa 50244 (ph 800 685-2818; www.gomaverickinc.com).



Tile Finder system comes with a reel of copper wire "rod" and a transmitter and receiver, which show exact location and depth of tile.