



Biobaler has flail knives on front that cut young trees, feeding them into bale chamber.

## Modified Baler Harvests Willow, Poplar Trees

By Janis Schole, Contributing Editor

Round bale furnace owners will soon have a new long-burning fuel to use.

If you've got at least a 130 hp tractor and bushy wasteland, such as the willow-growing areas surrounding bogs or sloughs, you're all set to use the new WB55 Biobaler. Trees can also be cultivated for baling.

The patented Biobaler will harvest young willow, aspen, alder and poplar, converting standing trees up to 4-in. dia. into compacted, netted, round bales that handle like conventional round bales.

The bales dry out completely after about six months in storage and, depending on the end use, can be burned, chipped or pelleted at various stages of drying.

The one-pass harvester was invented in Quebec by Philippe Savoie, Luc D'Amours and Frédéric Lavoie. Commercialization is being handled by D'Amours and Lavoie through their company, FLD Biomass Technology.

The Prairie Farm Rehabilitation Administration (PFRA) Shelterbelt Centre in Indian

Head, Sask., tested the first willow baler prototype in the fall of 2007 and is continuing to evaluate it this year. The inventors also ran some trials in Florida and Georgia.

The first prototype can bale 3-in. dia. trees, including the occasional one with a 4-in. dia., but the inventors are currently building a heavier, second prototype that can handle a steady supply of 4-in. dia. trees. They expect this prototype to be ready in late August and have plans to demonstrate it in the U.S. in October.

The PFRA-tested unit produces bales weighing between 770 and 880 lbs. It's a modified New Holland BR 740 round baler. Instead of a standard windrow pickup in front, it's fitted with heavy flail knives that turn on a 2,200-rpm rotor. The shredder breaks down the trunks/stems so they're flexible before they enter the bale chamber for wrapping.

"We harvested in the fall when all the leaves were shed. It took an average of two minutes to produce a 48-in. dia. bale. They handle in the same way as regular bales and



Standing trees up to 4 in. in diameter are compacted into round bales that handle like conventional round bales.



Heavy flail knives on front turn on a 2,200-rpm motor.

store well," PFRA manager Bill Schroeder says.

Lavoie points out that the Biobaler can be used to harvest trees any time during the year, and although bales made from trees in the leafed-out stage have a slightly higher moisture content, there haven't been any heating or mold problems.

The Biobaler's drawbar is offset from the tractor so you don't drive over the willows and it swivels on the hitch for either left or right side operation.

For at least the past 15 or 20 years, willow plantations have been well established in Europe, the UK and Sweden as a heat source, a biomass for electrical generation, and also as a feed source. Evaluation there has shown

that it's better than grain straw or switch grass because it's much cleaner burning and more efficient.

Lavoie says the retail price for the WB55 Biobaler is estimated to be about \$112,000 (Canada) plus S&H.

The inventors have appointed Supertrak Inc. of Punta Gorda, Fla. as their U.S. distributor. Canadian inquiries can be directed to FLD Biomass Technology.

Contact: FARM SHOW Followup, FLD Biomass Technology, 5125, De la Plaisance, Chesterville, Q.C., Canada GOP 1J0 (ph 819 382-2952; [www.fldbimass.com](http://www.fldbimass.com)); or Supertrak, Inc., 26855 Airport Rd., Punta Gorda, Fla. 33982 (ph 800 446-9858 or 941 505-7800; [www.supertrak.com](http://www.supertrak.com)).

## Add-On Motors Fit Any Bike

Justin Stancil has the answer for high gas prices. His motorized bike kits are saving his customers big money in gas while avoiding insurance, fees and licenses needed for mopeds and large scooters.

"You'll get from 160 to 180 miles per gallon," he says. "I sell kits that range in price from \$215 on up. Here in Texas, fees and insurance alone for a moped or scooter can run \$300."

Stancil sells and installs Gaijin motors over the phone and through his website. He rides a bike equipped with a G38cc kit to make deliveries for his day job in College Station, Texas. It has more than 8,000 miles on it, and Stancil reports it is "still kicking strong."

"My fastest motor kit can run stock at 30 mph, and with a gear ratio change, you can boost it to 45 mph," he says. "If you do run out of gas, you can still use it like a normal bike and pedal home."

Stancil says he enjoys seeing a bike he equipped going down the road. He likes knowing he is helping someone beat the gas crunch. He notes that some of his customers might otherwise not be able to afford to drive.

In addition to kits, Stancil does installations. Most of his installed bikes sell for around \$400.

Contact: FARM SHOW Followup, Justin Stancil, 1600 Welsh Ave #294, Colledge Sta-



Motorized bike kit saves on gas while avoiding insurance, fees and licenses needed for mopeds and large scooters.



In addition to kits, Justin Stancil does installations on bikes.

tion, Texas 77840 (ph 979 422-8338; [turboschaos@yahoo.com](mailto:turboschaos@yahoo.com); [www.tranquillas.com/turbo](http://www.tranquillas.com/turbo)).

Wind turbine materials, plans, how-to books, magnets, blades, and more are available from CMS Magnetics.



## Build Your Own Windmill

CMS Magnetics offers a one-stop shop for wind turbine materials, plans, how-to books, and a whole lot more. The company also offers a variety of high power and traditional magnets, as well as kits and applications for their use.

"Our wind energy sales are booming," says Lee. "Individual parts are where we do our biggest business. You can order many of the parts needed, as well as plans, and build from scratch or order kits with everything included."

Parts offered include magnets, blades, bolts/nuts/washers and magnet wire. CMS distributes packaged 500 W, 1 kW, 3 kW and

5 kW system kits. All have been marketed for three or more years and feature a low start up speed of 4.4 mph winds. Prices vary from \$1,259 for the 500 W unit to \$11,487 for the 5 kW unit.

A catalog can be downloaded as a PDF from the CMS website, or a paper version can be requested from the company.

Contact: FARM SHOW Followup, CMS Magnetics, 1108 Summit Ave., Suite 8, Plano, Texas 75074 (ph 972 516-0692; toll free 866 342-1300; fax 972 516-0697; [jefflee@magnetsrc.com](mailto:jefflee@magnetsrc.com); [www.magnet4sale.com](http://www.magnet4sale.com)).