"X" Furnace Burns Crop Fuel

After years of chucking wood into his home-built double barrel stove, Tim Myers decided he wanted to burn farm fuels in it - such as corn, oats, wheat, soybeans, wood pellets and pellets made from switchgrass - because they're cheaper and he wanted an automatic fuel-feeding system.

So he rebuilt the stove, adding a homemade 4-in. dia. burn pot equipped with a built-in agitator, an electric-operated automatic feed conveyor system, and a timer to control burn time. Crop material is conveyed from a 2-bu. metal hopper to the burn pot. Three small electric motors mounted below the hopper are used to operate the blower, agitator, and conveyor.

The rebuilt stove worked so well he decided to build a commercial unit that's even more efficient. The "X" furnace, as he calls it, has the burn pot and agitator located in the bottom half of an X-shaped metal firebox. The top half is divided into four baffled chambers that serve as heat exchangers. "The addition of the baffles results in more heated surface area than the barrels could provide," says Myers.

"The heated air circulates from chamber to chamber. The longer you make the heat travel, and the more metal there is to absorb the heat, the more efficiently the system dissipates heat."

A rectangular container positioned next to the X furnace serves two purposes. The top half is used to store crop material and is manually filled by removing the lid. Crop material is automatically conveyed through a tube and into the X furnace. The bottom half of the container houses the electric motors.

"It lets you heat an entire home for a fraction of the cost of other stoves on the market," says Myers. "I've used it to burn a wide variety of crop materials including corn, oats, wheat, soybeans, wood pellets and switch grass pellets. I like to use corn as a base fuel and mix the others in a 50-50 mix. However, I can also burn straight corn if we want. I figure that 90 bu. of corn and 90 bu. of oats will easily get me through an entire winter.

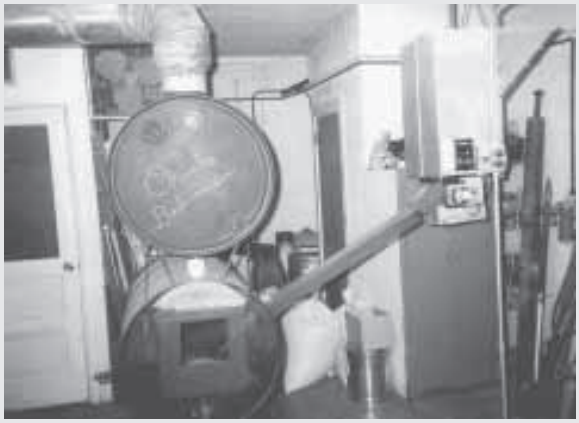
"It saves money because crop materials are usually cheaper than wood. The three motors, when they're operating, consume no more electricity than a 100-watt bulb.

"This stove's burn pot creates a smaller but much more intense fire than a conventional burn pot. Most commercial multi-fuel stoves control the intensity of the burn by adjusting how much air is introduced into the burn pot. However, when you're working with a small fire you need an extremely accurate fuel feeding system.

"The timer offers four different settings - six minutes on, 8 minutes on, 10 minutes on, and a steady burn. You can regulate the conveyor's speed to further control the temperature."

Myers is looking for a manufacturer for the X furnace. He expects that if it was manufactured it would sell for just over $1,000.

He also plans to offer a kit for anyone who wants to put together their own double barrel stove kit, or convert an existing barrel stove. The kit includes the burn pot, agitator, blower, conveyor, electric motors, and plumbing to go from the hopper into the burn pot through the side of the barrel. The kit will sell for less than $500.



Tim Myers rebuilt his double barrel stove to handle corn, oats, and other fuels.

Crop material is automatically conveyed from a 2-bu. metal hopper to specially designed burn pot (above), which is equipped with a built-in agitator. The rebuilt stove worked so well he decided to build a commercial unit called the "X" furnace (right).

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"Super Stable" 2-Wheeled Wheelbarrow

"I wanted to use my wheelbarrow to move firewood into our house, but it was too unstable. So I replaced the single wheel on front with an axle and two 12-in. high wheels. Now the wheelbarrow is a lot more stable and also much easier to use," says Ken Voigt, Wausau, Wis.

Voigt started with a single-wheeled wheelbarrow. He removed the single wheel from the frame and mounted the axle and wheels in its place. The axle is made from a 1-in. dia. stainless steel shaft and is secured to uprights on the frame by a pair of set screws.

The back part of the frame supports a pair of handlebars that extend up and outward, which makes the wheelbarrow easy to pick up. Soft rubber covers make the handlebars easy on the hands.

"I made sure I spaced the wheels 29 inches apart so they would fit through the doors on our house," says Voigt.

Contact: FARM SHOW Followup, Ken Voigt, 9208 Pasture Lane, Wausau, Wis. 54403 (ph 715 842-8471; KV57@aol.com).

By replacing the single wheel on his wheelbarrow with an axle and two 12-in. wheels, Ken Voigt was able to make it a lot more stable and easier to use.

Magpie Decoy Brings In Coyotes

If it squawks like a magpie and looks like a magpie, it might just be a Squawking Magpie predator decoy from E.L.K., Inc.

"The first time I set one up, I had 15 to 20 magpies fly in and sit in a nearby tree squawking back," says Don Laubach, E.L.K., Inc. "They were looking for the kill site. In the West, when coyotes hear magpies, they come looking, and so do other magpies."

The decoy squawks for 40 seconds and is silent for 20 seconds before repeating its call. Laubach says coyotes walk right up to it to check it out.

Laubach notes that magpies are considered a pest in Canada and can be hunted there to reduce pressure on songbirds. He has also sold the decoy to bird watchers.

"Birds of prey, hawks and eagles, will come at a great distance to see what a magpie is squawking about," says Laubach.

The wildlife specialist has built a business around calling wild animals, including turkeys, deer and multiple methods of attracting coyotes. He ships his magpies, DVD's and other materials all over the world.

He notes that the Squawking Magpie, which sells for $39.95 plus shipping, is gaining popularity even in areas where the bird is not normally found.

Magpie decoy squawks for 40 seconds and is silent for 20 seconds before repeating its call. Coyotes walk right up to it to check it out.

"It will still bring coyotes in," he says. "There is something about hearing birds squawking."

Contact: FARM SHOW Followup, E.L.K., Inc, P.O. Box 85, Gardiner, Montana 59030 (toll free 800 272-4355; info@elkinc.net; www.elkinc.com).

Remote-Controlled Searchlight For ATV's

"It can be used on a wide variety of vehicles but is great on an ATV," says Arlen Mickelsen, Superior Outdoor Power, Inc., Superior, Neb., about the remote-controlled Go-Light.

The company mounted one on the front rack of a Yamaha 4-wheeler at the recent Husker Harvest show near Grand Island, Neb. The light runs off the ATV battery. A wireless handheld remote is used to rotate the Go-Light up to 270 degrees and also tilt it up or down. The light comes with a variety of brackets, allowing it to be mounted on different kinds of vehicles.

"It works great for handling calves at night, because you can adjust the direction of the light without having to be on the ATV. You can also adjust the light's direction on-the-go," says Mickelsen. "Go-Light makes both cord and cordless remote models. However, I prefer the cordless models because they can be mounted on just about anything. We've mounted the lights on combines, pickups, utility vehicles, etc. Go-Lights come with suction cups and magnetic shoes, and we can custom build brackets to fit your needs."

Remote-controlled Go-Light runs off the ATV battery. A wireless handheld remote is used to rotate the light up to 270 degrees and also tilt it up or down.

Go-Light prices start at $149 plus S&H.

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