

## Custom-Built Corn-Burning Stoves

When Roger Erickson got fed up with the high cost of heating his shop, he built a stove that burned corn. It worked so well he has custom-built and sold another 14 stoves.

"Why farmers aren't burning corn, I just don't understand," says Erickson, shaking his head. "If you have a dryer, just dry 300 bushels down to 13 percent, and you have a great fuel."

Even buying the corn retail makes sense to him. This past year, he built a corn stove with a boiler unit for a 3,600-sq. ft. house that was kept at 78 degrees all winter. The stove cost the homeowner \$5,000 and he burned 330 bushels of corn.

"He thought I was a hero," says Erickson. "His propane bill for previous winters ran \$900/month. Now it costs him less than a month's fuel for the entire season."

Erickson's stove and corn hoppers are housed in look-a-like cabinets. Each unit

stands 24 in. wide by 38 in. deep and 48 in. high. An auger from the 8-bu. storage unit feeds about 2 bu. each day into the aluminum cast firepot in the stove unit. A fan on a thermostat controls the rate of burn. Once the stove is lit, maintenance while needed is minimal.

"If you burn clean 13 percent corn and spend about 5 min. a day on the stove, it will be trouble free," says Erickson. "If you use 15 percent moisture or higher field corn, you'll have problems, like the firepot filling up with clinkers."

Cleaning out the stove is easy thanks to a large access front door and an ash drawer. Each bushel of corn produces enough ash to fill a 5-lb. sugar bag.

"You can tie into existing duct work in a house or just blow the heat into the air in a shop like mine," says Erickson. "The fellow who bought the boiler put it in the basement



Erickson's stove and corn hoppers are housed in look-a-like cabinets that stand 24 in. wide by 38 in. deep and 48 in. high.

and just tied into the existing boiler lines." Contact: FARM SHOW Followup, Roger Erickson, Erickson Machine, 1114 East 4<sup>th</sup>

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Large post-pulling plate pulls wood posts 3 1/2 to 6 in. in dia.

## Simple New Post-Pulling Plates

Everybody else on Bob Payne's farm was busy one day when he needed to pull some posts. Instead of waiting for help, he went into his shop and made a post-pulling plate that let him pull 20 posts by himself in less than a half hour using a front end loader. After making numerous prototypes, his post-pulling plates are now on the market.

They come in several sizes and are made from a 1/2-in. steel plate with holes that fit the post's shape.

The small ones fit over T-posts, U-posts, chain-link posts, corner posts and contractor stakes, while the large one pulls wood posts 3 1/2 in. dia. up to 6 in. in dia.

Each plate comes with a clevis attached to it for hooking to a chain. Sara Hand, Marketing Director, has had people ask her why people would want to buy the plates when they could make them in their shop. "With the cost of steel, and the time you would spend, it's just not worth it for most people," she responds.

The small plate sells for \$29.95 and the large plate sells for \$39.95 plus S&H.

Diverse Specialties also offers a Bi-Pod Post Puller. "We refer to our puller as a lifetime tool. You go out, you use it, you throw it in the shop and it hangs out there until the next time you need it," she says. "Thirty years from now, you're still going to be able to use it. It's not going to become outdated."



All plates are made from 1/2-in. thick steel.



Small plates fit over T-posts, U-posts, chain-link posts, corner posts and contractor stakes.

The Bi-pod Puller sells for \$79.99 plus S&H.

Contact: FARM SHOW Followup, Diverse Specialties, Inc., 5512 60<sup>th</sup> Way North, St. Petersburg, Fla. 33709 (ph 877 248-8387; email: info@diversespecialties.com; website: www.diversespecialties.com).

## Remote Shut-Down Could Save Your Life

Augers, pto shafts, and belts are only some of the things that make farming one of the most dangerous occupations. A new remote shut down system invented by an Idaho farmer is a relatively easy way to build in a bit more safety.

Ted Lacy has a certified seed plant on his farm and long ago recognized the danger it represented with its multiple motors, belts and augers. While wiring everything through a single emergency switch made it possible for immediate shutdown, Lacy realized that wasn't enough.

"I was working by myself one day when I wondered, what if I couldn't make it to the switch?" recalls Lacy.

A few garage door opener parts later and he had a remote control for the shut down. After thinking about other danger areas around the farm, he decided to adapt his shut down to 12-volt equipment, too. The result is a wireless safety switch that can be used as a safety lock and shut down and, when equipped with GPS, even notifies emergency personnel where you are.

"We used the best commercial receivers and transmitters on the market," says Lacy. "The system works at a half mile line of sight or 200 to 300 ft. around steel buildings. We also have repeater units that can be put in to extend the distance."

Lacy formed Red Fox Enterprises, and now markets four models of the safety switch: The Fox Paws 100 will not only shut down an engine, but will also prevent it from starting unless the transmitter button is pushed. It is ideal for situations where young children have access to dangerous equipment.

The Fox Paws 200 is a simple emergency shut down, but will not interfere with start up. It and the 100 both sell for \$595.

The Fox Paws 300 can be equipped with GPS (total price with GPS unit is \$1,400). When GPS equipped, the unit has a 30-sec. alarm. When the switch is first activated, a buzzer goes off. If the operator doesn't hit the shutoff switch a second time within the 30 seconds, a message is transmitted to a call center. Operators there attempt to reach pre-



When equipped with GPS, wireless safety switch notifies emergency personnel where you are and shuts down 12-volt equipment.

registered phone numbers such as cell phone, home line and a backup number. If there's no answer, a call is placed to 911 with information on what roads the implement is near and how many feet off the road it is.

Lacy's fourth unit is designed for use with 120/240/480-volt AC single or 3-phase applications. The \$1,795 unit includes the transmitter and circuitry needed to hook into large grain handling systems. At his own seed plant installation, Lacy notes that the entire plant can shut down in 2 to 3 seconds.

"Even with shields on all our equipment, I once had the wind blow my coat and shirt tail up into a belt," he says. "The remote shut down everything immediately."

Lacy has reviewed OSHA records of farm deaths from 1990 through 2000. He estimates that his remote unit might have reduced fatalities by as much as 18 to 20 percent.

"There hasn't been a lot of safety work done on ag machinery," says Lacy. "If we can save just one person, it's worth it."

He is considering making the Fox Paws 300 mobile so it could be used on multiple pieces of equipment. An existing option is a warning light that can be installed on the roof of the machine and is activated by the remote at shut down.

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