"Owner's Report" On Corn-Burning Stoves

FARM SHOWcontacted as many manufacturers of corn, wheat, and other grain burning stoves and furnaces as we could find for names of farmers who've bought and operated corn burners. We're hopeful this report will highlight those corn burning stoves and furnaces that perform with flying colors, and to pinpoint the "lemons" that fail because of poor performance, or failure of the dealer or manufacturer to provide

Lara Heisler, Albion, Michigan: "If you and refill these every couple of days or so. don't have a corn stove, you can't believe how well it heats," says Lara who recently purchased a Country Flame "Harvester"

"We have electric heat in our house, but it was costing us about \$400 a month. My husband decided that since we grow corn, we should be heating with it. We got several brochures for corn stoves. Some of the stoves are really plain. I picked this one because we were putting it in the living room and I wanted something that looked nice. It's all black, with gold trim and legs, and looks like a nice piece of furniture.

"We have small children and I was concerned about having a stove where they could reach it. This isn't like the old wood stoves, though. The glass in the door can get hot, but most of the stove is just warm to the touch, so it's not dangerous to have it in the room with the kids. They like to sit right up next to it and warm up after their baths in the evening.

"We use ceiling fans to circulate the warm air, and the whole house stays comfortably warm. It puts out so much heat that on warmer days, I have to shut it down part of

"My husband easily installed it. No chimney or flue is required. It's simply vented out a side wall.

"Cleaning has been minimal. It has a stirrer in the fire pot, so there's not much ash left. We've been burning corn with about 13.5% moisture. The corn does have some red chaff in it, but as long as the combine does a good job of cleaning the grain, there doesn't seem to be much need to screen it."

Elizabeth and Ralph Hunt, Oakwood, Ohio: "We bought a Traeger portable corn furnace three years ago to heat our farm shop.

'We used it continually last winter while we built cabinets in the shop for a house our son was remodeling. Even with it going all the time, we didn't use more than 150 bu. of corn all winter. It has a 2 1/2 bu. hopper, so we only have to fill it every other day or so. It's a lot easier to maintain than a wood stove, and we like the heat it puts out.

We're now considering buying a similar furnace for the house. We want a furnace instead of a stove, so we can use our existing ductwork for forced air heating."

Elmer and Margaret Swank, Laura, Ohio. "We've had our Grain Comfort stove for six years and it's the main heat source for our three-bedroom home. We no longer have to turn on our electric heat.

"We burn our own corn in it We've also burned wheat but we like the way corn burns better. If you have leftover seed that you can't take back, this is a good way to get rid of it. We use wood pellets to light it but after that, we only burn corn.

'We want the corn to be about 15% moisture, but we've burned 16 or 17% moisture corn without any problems. There have been times when we've had to have the corn dried, but usually, we just burn it as it comes off the combine. "We store six or seven 5-gal. buckets of corn in our garage, In the middle of the winter, we use two buckets of corn a day.

"It costs us very little to heat our home now since we use only about 150 bu. of corn a

"Our house is well insulated so we have no problems with windows fogging over when we use the corn stove. When it's really cold, we use a humidifier in the house to keep the air from being too dry.

"There's no smoky smell in the house like there is with wood, and it's clean. There's not even a smoke smell outside the house, and hardly any smoke coming from the chimney. The only time we ever smell the corn burning is on still, damp, foggy days when there's no wind to carry the smoke

"We clean out the clinkers every other day. There's also a little ash or soot in the stove that needs to be cleaned up periodically. We clean the chimney once a year and never have more than a quart of soot."

Pauline Dennis, Yuma, Colorado: "We bought a Golden Grain 2000 freestanding stove in the fall of 2001 and are very pleased with it. We usually turn it down at night, and once in awhile, our old furnace comes on.

"The warm air from the stove circulates through most of the house, but the bathroom gets cold.

"We're wheat farmers so we tried wheat in the stove, but it doesn't work as well as corn. We bought it cleaned and bagged from a local elevator last year, and that was great.

There was no dust, dirt or chaff in the corn. We're looking at buying it in bulk this year to save a little money. Even when we buy it in bags, though, it's still less expensive to heat with corn than with gas.

"It's a little more work than a gas furnace. We shut it down once a day and remove the clinkers. Besides filling the hopper, that's all that's required.

"Even when we buy it in bags, it's still less expensive to heat with corn than it is with gas."

"I spread the clinkers on my garden where they dissolve.'

Todd Magnuson, Dealers Livestock, Mitchell, South Dakota ph 605 995-6000: "We have a fabrication shop where we make bulk bins for livestock feeding systems. For three years now, we've been heating the shop with corn stoves. We're using three of them right now, including a Golden Grain 3100 portable furnace and two Snowflame corn stoves. The two Snowflame stoves put out 40,000 btu, while the 3100 is rated from 13,000 to 180,000 btu, depending on the speed of grain delivery.

"In the winter, we use about 215 bu. of corn per month to heat the shop. That costs us a lot less than gas or oil.

"We buy corn that's no more than 14 percent moisture from local growers. It burns and flows better when it's at least that dry. We screen the corn to get out the larger pieces of stalks and cobs. It's not necessary for the Golden Grain, but the Snowflames work

better with screened corn.

We store our corn outside the shop in one of the bins we build. We put augers inside the shop building with downspouts to deliver corn to each of the stoves, so we don't have to carry any corn.

"We're building this kind of a delivery system for sale for anyone with a corn stove who would like to get away from carrying

Tony Swingley, Selma, Indiana: "Our Grainmaster corn-burning fireplace insert is one of the best investments we've ever

"We live in a house my grandfather built in 1957. It's a 2,800 sq. ft. all brick single story house, built on a concrete slab. It has radiant electric heat in the ceilings. It was one of the most modern at the time, but that electric heat got awfully expensive.

"On the average, we're heating the house with only 150 to 170 bu. of corn a year. It's been years since we've had the electric heat turned on. I'm not even sure it works any

"The corn burner is convenient and easy to use. It doesn't require a lot of cleanup, unlike our wood burner. We usually take out the clinkers twice a day. It's a simple process and you don't have to let the fire go out. You just shut off the power so the auger and the blower stop, and then open the door, take out the clinkers and close the door. I usually wipe down the glass in the door while I'm doing it. It takes less than five minutes.

"There's no soot and ash in the house, and no smoke. I've burned corn and corn mixed with wheat in it. I've used it to get rid of old wheat seed I couldn't return. Straight corn seems to work the best, however.

"I carry the corn in 5-gal. buckets, and on the coldest days, we use only about three

State-Of-The-Art Corn-Burning Stove

"It looks good enough to go in any living room and burns more efficiently than any other corn or pellet-burning stove on the market," says Bob Walker, president of Bixby Energy Systems, Elk River, Minn. The Bixby stove features a revolutionary new combustion system that concentrates oxygen from the air and drives it into the combustion

"It creates a hotter, more efficient burn that yields more energy from the fuel it burns than any corn-burning stove on the market," says Walker. "This stove will burn shelled corn, wood pellets, or special biomass pellets that we have developed which turns almost any organic material into fuel. Each million btu's produced by this stove costs less than \$6."

Walker is already famous as inventor of the "Sleep Number" air bed marketed by Select Comfort, Inc. That revolutionary product has been a phenomenal success, with more than one million beds sold to date.

When Walker decided to go into the stove business, he wanted to build state-of-the-art equipment unlike anything else on the market. He has put an equal amount of work into creating new pelleted fuels made from ag products which can be used in addition to corn. He's made pellets from cornstalks, silage, sunflower hulls, soybean meal, beet pulp and many other residue products. The pelleted feeds are sold in 40-lb. bags or in



Bixby corn-burning stove features a new combustion system that is said to drive oxygen into the firebox.

The gold-trimmed stove comes in five colors. It weighs 300 lbs. and runs off 120volt power. An extra large fuel hopper holds two bu. of shelled corn or pellets. It measures 33 in. high and about 30 in. in dia. You simply vent through an outside wall. Sells for \$2,795.

Inside, the Bixby stove is different from anything else on the market. It starts up easily with the push of a button, using electricity to start the fire. You can electronically adjust output between 8,000 and 50,000 btu's on a touch pad. It screens out cob residue and has a patented feed system that eliminates problems sometimes caused by augers. The stove has a special high-burn system which automatically clears the firepot periodically. The double-walled exhaust vent brings in fresh air from the outside.

Bixby set up a new manufacturing plant this past summer and has already sold thousands of units

Contact: FARM SHOW Followup, Bixby Energy Systems, Box 667, Elk River, Minn. 55330 (ph 763 428-1806; fax 763 428-7903; E-mail: sales@bixbyenergy.com; Website: www.bixbyenergy.com).