

GALESBURG
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Beating the high cost of heat

Wood, corn popular alternative fuel sources

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Galesburg, TN – Larry Derry's home has the warmth and glow of an indoor fireplace without wood or the expense of propane or natural gas.

It's powered by corn, 24 hours a day, every day.

"We can sit here in our recliner and watch the fire," said Derry from rural Knoxville. "It's just like having a fireplace."

In Galva, Alan Johnston keeps his 3,000-square-foot home at 70 degrees, warmer than he would have 15 years ago when he didn't have an outdoor wood furnace keeping the family comfortable.

"I hated paying for gas," Johnston said, referring to \$400 monthly heating bills.

These local residents have made their comfort a business and sell alternative heating methods – ways to heat homes and buildings outside of a natural gas or propane-driven furnace, standard indoor fireplaces or

indoor wood burners. And when gas prices go up, so does the interest in their products.

"With higher prices, I've definitely gotten a lot more people interested in them," said Johnston of Johnston Sales.

The main selling point is that people can afford to keep their homes warmer than they would with common natural gas or propane furnaces once the unit is paid for. A natural gas or propane system still is in place for back-up heating, but the owners are less subject to variability in gas prices. The savings have been several hundred dollars for Johnston and Derry.

"I could never afford to heat my house at the temperature I've got it without this wood burner," says Ron Hall from rural Knoxville, who keeps his 2,800-square-foot house at 78 degrees.

Hall has an outdoor wood furnace that provides heat

for his home. With an abundant supply of wood, he says he can afford to keep the temperature at that level in the house all day and night. No more dealing with cold mornings or chilly fall weather to avoid using extra gas for his furnace.

Hall figures he'll have his wood furnace paid off in seven years. But it's tough to compare to gas. He keeps his house much warmer than before, so it's probably more like four years or less, he said. The furnace can last for years, too. The Central Boiler he has carries a 25-year limited warranty.

The Halls run their wood furnace from about September to May, just as Johnston does.

Derry, the owner of Heat With Corn, said the amount of corn used depends on the temperature, home size and insulation.

"I usually burn about one bushel of corn a day," he said.

He last paid \$1.70 a bushel to get corn at a grain elevator. Rarely does his back-up gas furnace kick on.

Johnston also sells corn furnaces, which are the size and shape of a water heater. They must be sheltered, but operate as his wood furnaces do with indoor forced air furnaces or radiant floor heating.

Using corn or wood involves manual labor, which may be a turn-off to some. A pickup truck may be handy to have, too, as well as chain saw in the case of wood.

But some love cutting wood or already have an abundant supply. Hall, a career conservationist, knows a landowner usually has a tree down somewhere or is clearing brush. Plus, chopping wood is a hobby for Hall.

"I just enjoy cutting wood," he said.

So, he gets the recreation. His wife enjoys the heat.

For Derry, grabbing a five gallon bucket of shelled corn from his gravity wagon is "a whole lot easier than cutting wood."

Outdoor wood furnace

Cost: \$5,200 to \$6,000 (approximate).

How it works: The Central Boiler-brand wood furnace is an outdoor structure that looks like a tin-sided outhouse with a silver chimney. A small access door on the front opens to toss wood into the fire box, which is surrounded by water. The boilers come in different sizes, but Johnston's is 385 gallons. The unit regulates its temperature. The heated water from it is pumped to a single structure or multiple buildings through insulated underground pipes. The heat can be used for either a forced-air furnace or radiant floor heating system. Johnston has both in his home.

Maintenance: Johnston usually tends to his furnace once a day to add wood, twice if the weather is quite cold. Ashes must be cleaned out three to four times a season. The water must be tested and treated, if necessary.

Indoor corn stove

Cost: \$2,000 and up, depending on decorative features.

How it works: The

Countryside-brand stove is about three feet tall and just over two feet wide and two feet deep. Derry's is black with a gold-trimmed window in front. The stove must be positioned at least one inch from a wall and a three-inch exhaust pipe must be placed through the wall, like a dryer vent.

The stove holds 75 pounds of shelled corn and slowly augers corn into the fire (about a half dozen kernels every 10 to 15 seconds) depending on the heat settings selected on the side control panel. The kernels slowly drop from a brick-sized container through a hole the size of a pop cap into the fire. There, steel fingers stir the corn to avoid clumping. This system is intended to complement a house furnace. Derry's house, though, is open enough and small enough that it rarely needs the gas furnace.

Maintenance: Derry adds a five-gallon bucket of corn a day. Once a day he knocks any ashes from the inside with a rod. Once a week he takes 15 minutes to clean the interior and pull out the ash box to empty the ashes, which can be used on gardens or flower beds.