

Views from VanDeWalle

Brandy VanDeWalle, UNL Extension Educator in Fillmore County
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Keeping Warm with Corn... As heating costs continue to rise, more Americans are turning to corn-burning stoves to heat their house. So, how do you know if a corn-burning stove is in your future?

Once relegated to farmhouses and cabins, corn-burning and more common wood-burning stoves began growing in popularity four years ago among environmentally-minded consumers interested in cheaper and renewable energy. Mike Haefner, president of Minnesota-based American Energy Systems said there were about 65,000 corn stoves sold in the US last year. He expects about 150,000 will be sold this year and at least 350,000 next year. In Nebraska we have an abundant supply of dry shelled corn. According to Tom Dorn, UNL Extension Educator in Lancaster County, the corn used as fuel in stoves does not have to be top quality. There are however two requirements of corn fuel: 1) The shelled corn must be dry, preferably 15% moisture content or less. Higher moisture corn will have a lower heat value per unit weight than "dry" corn. Moist corn may also cause flow problems through the fuel loading auger.

2) The shelled corn must be free of fines. Dirty corn which has a lot of cob pieces will cause problems with the fuel loading auger.

A number of different manufacturers are presently making corn burning stoves. They are available in a variety of sizes and styles and are sold as stoves (some can be modified as a fireplace insert), space heaters, hot air furnaces, boilers for use in hot water radiator systems. One thing to consider with the freestanding stove or space heaters is the surface temperature of exposed metal parts. This is especially important if there are small children in the house. The equipment to construct a corn storage system is readily available. Corn can be handled manually with shovels and buckets or the entire system can be automated with hoppers and augers. The size of fuel hoppers also varies greatly. This hopper size can range from holding one day to ten days supply of fuel. Two reasons corn is so attractive as a heat source are that dry shelled corn is so easily handled and in plentiful supply. Shelled corn also has a high heat energy per unit weight. 15% moisture corn has about 7000 BTU per pound.

Before you can accurately compare heating with corn to other heating fuels you have to look at a number of factors. Not only is price of the fuel important, but also the heating efficiency of the heating system and the energy content of a unit of each fuel. In conclusion, corn-burning stoves can be a great heating alternative, but there are many factors that must be considered prior to purchasing. More information can be found at <http://acreage.unl.edu/newsletter/dec2005.htm#Two>.

Happy Holidays and wishing you and your family a wonderful New Year!!!

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The preceding information in part was taken from "Burning Shelled Corn as Heating Fuel" written by Tom Dorn, UNL Extension Educator and can be found and from www.drudgereport.com.

Upcoming Events:

January 9th – CSP Sign-Up Information Workshop Meeting @ American Legion Building in Shickley, 9 a.m. – Noon.

January 10th – Crop Protection Clinic @ Chances "R" Restaurant in York, 8:30 a.m. – 4:00 p.m.

January 12th – Crop Profitability Seminar (focusing mostly on sorghum) @ Saline Center (Hwy. 15 & County Rd. M in Saline County), 9:00 a.m. – 3:00 p.m.

January 24th – "Partners In Progress – Beef Seminar" sponsored by the Farmers and Ranchers College @ U.S. Meat Animal Research Center near Clay Center, 9 a.m. – 3:15 p.m.

January 26th – Reduced Tillage Seminar @ Sutton Legion Hall, 10:00 a.m. – 2:00 p.m.