

## **FIX IT UP!**

*Bruce Turner*

### Fired Up over Biomass Heating

If you ever watch an old Western about a cattle drive across the plains, there's always a scene where the cowpokes are gathered around the fire at the end of the day. But did you ever wonder where that fire came from? After all, there wasn't any wood lying around. Out on the plains, you could look to the horizon in every direction and never see a tree.

The answer, cowboys and cowgirls, is buffalo dung. The buffalo left their pies all over the prairie, and they burned hot, long and steady. (Presumably they also smelled pretty bad, but then so did the cows, the horses and the cowboys themselves.) This was one of the first American uses of biomass energy, the burning of organic waste to generate heat. In a way, those drovers were setting the stage for future environmentalists. And biomass is now – excuse the obvious pun – the hot new home heating alternative in our part of the world.

There's nothing new about biomass. Cities burn their trash for energy or harvest methane from it, and biodiesel fuel for trucks and buses is in widespread use. But for home use, most people in the Bay Area still heat their houses with gas and electricity and still use wood in their wood stoves. All those energy sources are increasingly expensive and may produce some sort of pollution.

About 20 years ago, the first pellet stoves came along. They burn fiber pellets made of compressed wood, like those packaged fireplace logs. People love the heat they generate, the convenience, the lack of ash and the vastly lower cost compared with gas, electricity or wood.

Pellet stoves have continued to evolve; today they are lower maintenance and more efficient than ever. And now improved stove technology has produced a new generation of remarkably efficient, EPA-rated biomass stoves that burn corn, barley, cherry pits, rice hulls, walnut hulls and other organic materials.

It's amazing. You can buy inexpensive grain at the local feed store (if you don't have your own cornfield out back) and just dump it into the freestanding stove or fireplace insert. What really fires me up is that these new-generation heaters burn so hot and clean. They produce very little ash and push almost no harmful emissions into the atmosphere, keeping our air cleaner and reducing greenhouse gases. And heating your home with renewable resources like biomass can help reduce our dependence on foreign oil.

Biomass works just as well in furnaces as in space heaters, and enormous biomass furnaces are now used in commercial buildings and private homes for central heating. You just load up the furnace's hopper every few days with whatever biomass you're using, and an automated timer connected to the thermostat dictates how much fuel is released into the burner over time.

The market for biomass heating is growing like crazy. I spent a recent weekend at the Hearth Products Expo (yeah, that's the kind of thing contractors do on their time off), and got a look at some really spectacular products by some very fast-growing companies. If this wave of the future looks interesting, do your research and compare the stoves and furnaces coming onto the market. You may find yourself joining a long line of biomass fans who've realized those old-time cowboys had the right idea.

Minus the buffalo pies, of course.

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