



Nature's Furnace Horse Power Goes Green

Pictured here, John Kimberlin shows off his Nature's Furnace.

*By Sherri Geistkemper
Apples 'n Oats reporter*

Upon returning home and seeing the overwhelming mound of manure that had accumulated from renting out his horse facility, then-professional horse trainer, John Kimberlin, was struck with an idea. Knowing that the cost to haul the manure offsite would be great, and that there was entirely too much to spread, Kimberlin had the idea to burn the manure as a form of fuel.

Putting the Idea to Work

Since 1996, Kimberlin's vision has been constantly evolving. And because Nature's Furnace is a pollution-free form of energy, Kimberlin's vision has gained global interest.

Originally, Kimberlin envisioned his product for usage at large horse facilities such as race tracks, but Europe was urgently calling. Due to a massive outbreak of botulism, the government had banned the practice of spreading manure in the poultry industry.

The need was there and they [Europeans] are very, very environmentally conscious. After they went to all organic birds in Europe, botulism ran rapid and was spreading through the waste. Because they were ground-applying the waste, it contaminated other livestock," recalls Kimberlin. (Nature's Furnace is also looking at Spain as a future customer with the tomato industry.)

"My time is now entirely devoted to this project. I was a horse trainer for thirty-five years and knew I couldn't do that forever," says Kimberlin. "There are many engineers contributing to this project. My role currently is to organize the efforts."

Kimberlin's ultimate goal with Nature's Furnace is to see his brainchild used in the equine industry. His concept takes organic materials, which can include horse manure, saw dust, and crop wastes to name a few, and uses natural energy to heat buildings. "Because it is small and simple, the unit can be placed right where the waste is created," says Kimberlin.

Keeping it Simple

Simplicity was the key to making this project fly. "With these units, all the owner has to do is keep the hopper filled, set the thermostat and clean up the ash," explains Kimberlin. "All of the weed seeds, bacteria, and parasites are sterilized when they go through the furnace and the resulting pot ash comes out at about 3% of its original weight. And the resulting fertilizer is fantastic!"

This concept not only saves the expense and labor associated with manure removal,



"Nature's Furnace" - Ready to Roll

it also eliminates or reduces visual and odorous nuisances, storm wastes, tipping fees and ground pollution. The ground pollution issue in itself will save land owners greatly by helping to prevent the spreading of weed seed, parasites and bacteria. This in turn will reduce the need to ground spray and for animal medications. Reducing the usage of herbicides will in turn reduce ground water and run-off contamination and costs associated with pH changes in the soils.

This is a green energy, which means that if you have a tree and it is all cut up and used for sawdust, when the sawdust has served its purpose, it typically goes onto the fields or to the landfill," explains Kimberlin. "That tree gives off the same amount of carbon dioxide whether it rots or is combusted. Interestingly enough, that's also the same amount of carbon dioxide that it took the tree to grow initially. The big push is towards finding a simple way to use biomass, such as this, on site."

Additionally, it is essentially free heat. Once the unit is purchased and installed, the only outside cost is a small electricity bill generated from running the unit's internal moving components.

The Future of the Furnace

Kimberlin owns the patents and has licensed their usage with three different companies, which represent the three forms of energy. There is a furnace-heat system that is capable of servicing up to a fifty-stall horse facility, a fluid system that is capable of servicing up to a one-hundred-stall horse facility, and the steam unit will service up to a two-hundred-stall horse facility. His companies are currently setting up centers to sell and service the units in the Continental US and Canada.

"This is going to help a lot of people. It will offset some of our fossil fuel usage and reduce our landfills from filling up," says Kimberlin. "I'm especially glad that it will help the equine industry. That industry has helped me so much throughout my life and it feels good to be able to give something back."

