

Air-pollution solution could be as easy as funding woodsheds

The wood you put in a wood stove needs to be dry. In that respect, many of us are all wet.

Excerpts from an article by Tux Turkel tturkel@pressherald.com Staff Writer for the Portland Press Herald

Winter's not messing around this year, and with the heating season off to a frigid start, here's a multiple-choice question about wood heat and air pollution. What's the best way to cut the smoke and lung-damaging particles coming from dirty-burning wood stoves?

- A. Force stove makers to produce super-clean machines, even if it adds hundreds of dollars to the price.
- B. Give people up to \$2,000 to trade old, inefficient wood stoves for new, cleaner-burning models.
- C. Give folks \$200 to build a woodshed.



Yes, it's a trick question. Stove makers and government regulators have been fighting over the first two answers. (On Friday, the Environmental Protection Agency enacted the tougher wood-fired heater standards, effective beginning in 2015.)

I'm picking the woodshed. After 30 years of feeding wood stoves, I've come to appreciate the benefits of burning dry, seasoned wood. But these days, maybe the basics are being overshadowed by our fascination with the latest technology. Look at what's going on.

With a car, fuel economy suffers when you put the pedal to the metal on the interstate. With a wood stove, air quality suffers when you push down on the draft control for a long, low fire.

But gasoline is gasoline. Not so with a cord of firewood. With wood heat, what you burn is as important as how you operate the stove. I'm a keen observer of what people burn. From early spring to late fall, I ride my bicycle around my suburban community. I notice what people are doing with firewood in their yards.

I ride by the house of a guy who suffers from Firewood Pile OCD (obsessive-compulsive disorder). Neatly stacked rows are bookended between trees, like New England stone walls. I see where well-meaning people run a narrow tarp or plywood strips over the top, like a hat that somehow can keep wind-driven weather off the stacks. I notice other piles draped with tattered tarps, as if just the intention of providing a snug cover will keep the wood dry. I see piles in the driveway delivered after Labor Day. They can't possibly dry in time.

Once the winter begins, it's easy to see the result of poorly seasoned wood and low-burning fires. The thick, dark plume coming from one chimney near my house looks like the cardinals in the Sistine Chapel are having a tough time picking a new pope.

Much of this is understandable. Properly seasoned firewood has a moisture content of less than 20 percent. That means, at a minimum, buying green wood in the early spring, stacking it out in the summer heat and drying winds, and putting it under cover by the first day of autumn. But the sad truth is, many Mainers simply don't have \$400 to \$600 in April for heat they don't need until October.

This dilemma has many people in denial about just how green their firewood is. Want a reality check? Look in the firebox. If you see steam and bubbles at the log end, if you hear a hissing sound, that's money going up the flue, along with air pollution and creosote-forming gases.

Low burns also are understandable. Folks want their precious pile to last as long as possible. Ideally, they'd load the stove before Halloween and the same logs would still be burning around the time the first pitch gets hurled at Fenway.

Dry, seasoned wood, by contrast, starts right up. Given adequate air, the fire burns high and hot. When you go outside and look at the chimney plume, there's not much to see.

All this brings me back around to the woodshed. The Internet is full of shed designs, if anyone needs inspiration. Short of storing wood in a barn or a roomy garage, building a woodshed could be the most cost-effective way to clean the air.

Dry, seasoned wood. It has to be part of the clean-air solution. No matter how you stack it.