

By Perry Edwards
So you want a wood stove...

My wife and I came to this point this winter. Oil prices were high and the water levels were low at the dams on Blue Lake and Green Lake. Although it looks nice, the fireplace we have was not a good heating source. Most of the heat goes right up the chimney and as the fire dies down the heat from the rest of your house gets sucked up through the chimney too.

We did some checking online and with other folks and here's what we found in our quest. There's a ton of information on woodstoves (and a ton of different woodstoves, gizmos and gadgets). First question is how do you plan to use it. We wanted one to take the chill off but not to use the wood stove every day, every hour. We wanted to save some money on heating bills and still be environmentally sensitive (and we did not want to be cutting wood all the time). With that in mind, we knew we needed a new, EPA approved, efficient stove.

So, how big an area do you want to heat? If you go too small, you'll make the stove work too hard and potentially shorten the life of the stove. If you go too big, you will cook yourself out of the house and always have to damp it down to control the heat. This can cause creosote buildup and chimney fires. Ok, stoves come with area calculations on them. 1,000, 1,500, 2,000 and 2,500 square foot models are common. If you don't know how many square feet your home is, measure the length and width on the outside of the house and multiply those numbers together. Bam, there's the area. However, stove calculations are based on 8-foot ceilings and some standard assumption on heat loss of your house. If your ceilings are higher and your house is not so insulated you'll need to go with a bigger stove than if you have 8-foot ceilings and great insulation. Maybe this is a good time to put some insulation in the attic or under the floor too! There is some great information at this website on figuring out your needs.... Try this one:
http://www.woodstove.com/guidepdfs/woodstove_sizing.pdf.

Do you want a soapstone stove, a sheet metal stove, a cast iron stove, a pellet stove? Soapstone heats and cools slowly so it gives a long, slow heat to your house. It is also pretty expensive starting at about \$1,500 and going way up from there depending on how fancy and beautiful of a stove you want. For the most part a good sheet metal or cast iron stove is equal in heating ability but won't keep the heat as long. We got our sheet metal stove that is designed to heat 1,500 square feet for about \$700. If Biobricks™ or briquets become available in Sitka, you can burn them in a regular wood stove—stay tuned for this topic. There's lots of smaller diameter young growth trees on State and Forest Service Land, maybe someone will make a commercial venture using this biomass. A pellet stove even more efficient than a wood stove and clean because you aren't packing logs into the house but rather a bag of pellets you pour into a hopper. Pellet stoves can only use pellets and don't work if the power goes out. It all depends on your needs and convenience. I'm not going to tell you what brand to buy. Look for the specifications not the brand.

Heat output is measured in BTUs and can tell you a relative way of how much heat a stove puts out and is good when comparing stoves. BTUs are also controlled by the type of wood you burn and how dry it is. Pollution—we wanted to minimize pollution our stove would create. There is a measurement for this. Also, we were only interested in EPA certified wood stoves because they are less polluting (up to 90% less smoke). Should I buy an old stove from someone? Maybe, but keep in mind the efficiency of newer stoves is over 25% higher than a 5 or more year old wood stove your friend's uncle will give you for a few bucks. New wood stoves are in the 75-80% efficiency range.

Gadgets and gizmos. There's lots of fans, outdoor air intakes, etc. out there that claim to give you more heat. The information we found is that most of this was more hype than truth. Ok, if your house is super tight then you might go with an outdoor air intake. What we read was you were more likely to have drafting problems with your chimney pipe with the outdoor air intake. Fans seem like a good idea right—you take the warm air from the outside of the wood stove and the little fan on the stove distributes the air around the room. Again, we read that it doesn't really do much.

Installation time! You want to make sure you install it safely because it would be a bummer to burn your house down after all this work. Make sure you have adequate distance between the stove and the wall (building code is the distances shown in your manual – for ours it was 18 inches from back of stove pipe to the wall...in Sitka you do need a \$25 building permit for this). Also, make sure you use the right size chimney pipe or you may have draft problems. Make sure you don't put carpet or rugs too close so that a rogue ember can pop out and catch the floor on fire.

Using the stove: Use dry wood, as wet/damp wood is smokey, inefficient and causes much more pollution and creosote build-up. Creosote is what causes chimney fires. Don't crank up the fire so much you have to open the door and wear shorts in the winter. It is winter after all! Put on a sweater. Get the stove and house up to a reasonable temperature and shut the damper part ways and let it go. Your fire will last longer and heat more evenly and burn a lot less wood (so you can have fun fishing instead of firewood gathering and splitting).

There's lots of information on the internet—maybe too much. www.woodheat.org is a great resource we found.