

Home & Heart



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I grew up in a Mediterranean climate in the Napa Valley north of San Francisco. We only had two seasons—spring and fall. When I moved north to be with Bob-O, I came to know the other two seasons. The upside of winter is watching snow fall. The downside of winter is the cold.

'Bergs

Unless the weather is hot, I am cold. Our friend, Clive Wilkinson, from the Falkland Islands says I'm a hothouse flower. I do not like to have to bundle up in my own house just to stay warm. I think I should be able to wear short sleeves inside in all seasons. This hasn't always been possible at our house.

For some unknown reason, the people who built our house did not think that the extra expense of insulation was a good investment. We've insulated the attic quite well using the pink rolls of insulation. We have changed out the windows from single pane to double pane. We've crawled under the house, where possible, and stapled and chicken-wired insulation between the floor joists. The winter still brings some pretty severe cold spells.

On cold nights, Bob-O says I am "all over him like a cheap suit." When I put my cold feet on him, just to warm them a bit, he says, "Get those 'bergs off me!" He is the warm one in our partnership. I have asked couples we know, and 90 percent of the time, the male is the warm one. I don't know what I'd do without those wintertime BTUs (Bob-O Thermal Units).

Wood Heat

Our house is heated by a woodstove that extends from a fireplace. Bill Battagin, our friend from Taylorsville, installed a safe stainless steel chimney liner for us that lines the chimney and reaches above it on the roof. When he did the job he told us, "If I do this, you will never be able to use this fireplace as a fireplace again." "No problem," we said, "Do it." We have never regretted that decision.

We usually burn a mix of Madrone, Fir, and Oak. These last two winters we have also had well-seasoned barn wood (see *H&H* in *HP64*). Our winter wood consumption is about three to four cords a year. Since I am the one who gets cold, I am stove monitor. One wheelbarrow of assorted split wood will last me two days if it's not too cold.

Ecofan

A couple of months ago, Bob Maynard of Energy Outfitters sent Bob-O a new product to test—the Ecofan. This small stove fan only weighs 20.2 ounces. At eight and one half inches tall and approximately the same width, it doesn't take up much space. It utilizes a thermoelectric module to power the two-bladed fan. We have the Model 800.

The Ecofan is made in Canada by Caframo. It has a one year warranty, and it's very easy to use. Just take it out of the box and set it on the woodstove. The manufacturer recommends that the Ecofan be placed at the back of the stovetop to be better able to draw cooler air. It is important that cooler air be drawn over the cooling fins. Improper placement will reduce the fan's effectiveness and could damage the thermoelectric module. This would also void the warranty.

The Ecofan on top of the woodstove.



Ecofan Temperature Data

	Time	Inside Temp. (°F)	Outside Temp. (°F)	Difference (°F)
No fan	1 PM	66.9	50.7	16.2
No fan	8 AM	60.8	39.6	21.2
No fan	8 AM	58.6	35.6	23.0
No fan	12 PM	62.6	40.6	22.0
Ecofan	8 AM	61.7	29.7	32.0
Ecofan	8 AM	56.8	22.6	34.2
Ecofan	7 PM	67.6	43.7	23.9
Ecofan	8 AM	55.4	26.4	29.0

It is designed for use on woodstoves with normal surface temperatures of 400 to 700°F (200–370°C). Temperatures above 700°F (370°C) will damage the Ecofan. You can buy a stove thermometer to monitor this. The fan blades, which have been designed to deliver a broad cross section of air movement, start turning when the stove surface reaches 135°F (57°C). I used a candy thermometer to determine that.

Since it runs using only the stove's heat, there is no power consumption. The hotter the stove is, the faster the blades turn. The fan is made primarily of anodized extruded aluminum, which doesn't rust or corrode. It is totally quiet.

There is a bi-metal strip in the base of the fan that arches as the stove gets hotter to lift the base off the stove to protect it from overheating. A small gap (the distance between the fan base and the stove) of about 2 mm is good. A gap of over 5 mm means your stove is too hot; you should remove the Ecofan if that happens. A small recessed wire bail pulls out of the top so you can move the Ecofan without getting burned. The fan's design and appearance is compact and efficient.

Does It Work?

I liked it from the beginning. A couple of days after we placed it on our stove, Bob-O asked me if I thought it worked. I replied, "Did you notice that I am in short sleeves and have no shoes or socks on?" I knew the house was warmer with the Ecofan because I was more comfortable. Every night I stoke the stove and shut the damper. In the morning, the fan is still turning. It turns slowly, but the house starts out warmer because of it.

I told Bob-O I was going to write about the Ecofan in my next *Home & Heart*. He said I should take it off the stove and do temperature measurements so I could have a comparison. I was reluctant to do this. I didn't want to be cold and use more wood. But before my column was due, I did remove the Ecofan and recorded some inside and outside temperatures.

Testing

I am not convinced that these temperature readings are going to give you a complete picture. There are too many variables. Is the wind blowing? What kind of wood is in the stove? When did I last stoke the fire? How many times has Bob-O left the front door open while he stands there and calls the dog? I found that with the Ecofan, there was a 23.9 to 34.2°F (13–19°C) difference between the inside and outside temperatures. Without the fan, there was only a 16 to 23°F (9–13°C) difference.

My test—and the only one I need—is the fact that I feel warmer when we use the Ecofan. I am more comfortable and do not wear overclothes in the house. Other people in the house told me they felt colder when I removed the fan for the temperature measurement. My conclusion is that now that I have one, I will never be without one. The cost is US\$95 each—an investment in comfort.

Access

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