They Never Imagined How Much a Heat Pump Would Improve Their Lives

As lifelong Mainers, Erik Bartlett and Jan Cleveland know about hard winters. Shoveling snow… scraping ice off windshields… having treacherous footing… and especially worrying about staying warm.

They also know first-hand how much more challenging it is to keep warm if you have any concerns about your heat source. Or if you're on a fixed income. Or you have health conditions that make you more susceptible to the cold.

In 2015, Erik and Jan faced all three issues.

Challenges of winters in Maine

At the time, they used a 30-year-old kerosene monitor heater to heat 750-square feet of their ranch house. The heater still worked, even though a crack in the heat exchanger needed to be fixed. But because of its age, they had a hard time finding anyone to perform maintenance or repairs.

Erik also worried about a repeat of March 2008. That's when the kerosene tank rusted through and leaked. He caught it quickly, so it didn't contaminate his nearby well, but it was difficult and costly to clean up and repair. And he knew it could easily happen again.

Jan had more immediate concerns. Her diabetes meant she felt the cold badly in her hands and feet, so she had to take extra care to keep them warm.

That wasn't easy, though. In the kitchen, where the heater is located, the temperature fluctuated between 66, the setting when the heat turned on, and 70, when the heat cycled off. In the living room, it would be between 64-68, always a couple of degrees cooler.

At those temperatures, her hands hurt most of the time. And doing the crafts she loves made the pain worse.

If money weren't an issue, they could have kept the temperature set in the 70's and been fine. But as a retired couple, they had to balance cost and comfort. High kerosene prices made this difficult. Erik and Jan also never knew how long winter might last, or if they'd get an unexpected cold snap. So they used as little heat as they could to be on the safe side, trying to get through the winter with no more than 200 gallons of kerosene.

With all this in mind, Erik decided it was time to explore other options.

Finding the right solution

Early on, Erik briefly considered a pellet stove, since wood is an abundant renewable resource in Maine. The problem was that the chimney had been blocked off years before. Opening it back up would take over much of the living room and leave no room for the couch.

Erik had another concern with that approach. As he said, “I didn’t want to get something that needs to be ‘fed’ and taken care of all the time.” He wanted a system with a continuous fuel supply.

Natural gas isn’t an option in their area, but he wouldn’t have gone with it anyway, since he wanted to get away from fossil fuels. After switching to electric for his mower, weed whacker, and snow blower, he appreciated how much cleaner it was. He liked the idea of doing the same for heat.

That brought him to a heat pump. The technology intrigued him, how it could draw very warm air from cold outside air. And it met his criteria of being off fossil fuels and not needing constant tending.

He arranged for visits from a couple of installers. Both he and Jan were impressed to learn that air source heat pumps can run at maximum efficiency down to 5 degrees. They knew they might still need to use the monitor for supplemental heat, but they liked the idea of not relying on it as their primary heat source.

They decided to give the heat pump a try. In February 2016, they bought a Fujitsu Halcyon split-air unit, capable of up to 18,000 BTUs. It cost $3,750, but that came down to $3,250 after a $500 rebate from Efficiency Maine.

And they both agree it was money well-spent. Because they got so much more than they expected.

Benefits of the heat pump

The first thing they noticed was more consistent heat. When they set the thermostat, both kitchen and living room stay that temperature.

And because of the efficiency, they can afford to keep the house at 70-72 degrees. Jan can now work on her projects without worrying about her hands and feet.

They also like how easy the heat pump is to maintain. Having the outside unit mounted on the side of the house means they don’t have to shovel around it, and the cover keeps snow and ice out. The only thing they need to do is periodically clean the dust filter to make sure the pump is running efficiently.

But the real test came in the winter of 2017-2018. Early January brought record cold temperatures, dropping to -18 at their house. The heat pump had to work a lot harder, especially since the house isn't airtight. They kept the bedroom closed during the day, but they still had to set the temperature considerably higher, sometimes up to 78, to maintain 70 degrees. But the heat pump held up, and they only needed to use the monitor to supplement the heat on the coldest of days to also keep the bedroom warm.

That winter also reminded them why it helps not to have a system that needs refueling. The prolonged and extreme cold meant many people unexpectedly ran out of heating fuel. Some had to wait over a week for delivery. Erik and Jan, though, could relax, knowing they wouldn't run out.

Even with the unusual cold, and keeping the thermostat at a higher setting, their expenses went down. The heat pump cost $609 in electricity, compared to the $695 they had spent on kerosene in the winter of 2014-2015 – a cost that likely would have been higher in 2017-2018.

They appreciate all this, but their favorite unexpected benefit from the heat pump is cool, dry air in the summer.

Previously, they had a window air conditioner in the kitchen, but they only used it on the worst summer days because it was so loud. It also wasn't very efficient and only helped the immediate area.

Thanks to the cooling aspect of the heat pump, though, they got rid of the window unit. The heat pump keeps the house dry and at a comfortable 70-71 degrees even on the hottest, most humid days. And because it's very quiet, summer is much more peaceful.

The dehumidifying aspect has also helped with Jan's asthma. She now breathes much more easily in the summer.

And Erik is delighted at the price. For the three summer months of 2017, the cost of running the heat pump was only $28.

More comfortable than ever expected

When asked how they like the heat pump, Jan answered simply, "I'm happy." Erik added, "And if Jan's happy, I'm happy."

They're so much more comfortable now, in ways they never expected. They're also relieved not to worry about high kerosene prices or running out of fuel in an especially cold winter. Even if they didn't use it for heat, they think the heat pump would be worth it for the air conditioning, especially for anyone with breathing issues.

And now that they've had it for a couple of years, they can't imagine life without it.