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# Green Log Homes Give a Connection to Nature

By Brock Haroldson, ConnectPress Editor

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Log homes have been in existence for thousands of years and have been constructed for hundreds of years in the United States. But it was in the early 70s that the industry saw revitalization. “As part of the back to nature movement, people decided they wanted to build their own log home,” owner of Gastineau Log Homes, Lynn Gastineau said. “It wasn’t that somebody said ‘hey, I bet people would love to live in log homes again,’ … it was a completely consumer driven industry.” There are now many log homes across the country, and in addition to the natural ambiance that consumers love, people are finding out the green, sustainable aspects of log homes.

Gastineau Log Homes is located in New Bloomfield, MO and according to Lynn Gastineau; they are the world’s largest producer of oak log homes. “Logs are probably the most sustainable building material that we can build from,” she said. “In Missouri, there’s 15 million acres of forest land … which is an increase of one million acres just since 1972.” It takes a little while for them to grow, but logs are a renewable and sustainable resource, unlike many other building materials. “We plant, in Missouri, six million tree seedlings per year, and in the U.S., there’s six tree seedlings planted for every tree that’s harvested,” Gastineau said. Using logs is also beneficial to the health of forests as a whole she said. “If we don’t use a certain amount of our forests then it becomes unhealthy, it gets too old.”

Another log home company with a sustainable outlook is Estermerwalt Log Homes located in Honesdale, Pennsylvania. The company was started as a saw mill and lumber yard in 1883 by the current owner Kurt Propst’s great-grandfather. Propst also agrees that trees are a green resource. “I don’t know what to say to someone who thinks you should never cut down a tree, because within our country, it is a, I hate to say the word crop, but in a way it is,” Propst said. “It’s a renewable resource, it’s not a resource like fuel oil … Where we are in Northeast Pennsylvania, you can’t keep trees from growing. If a farmer doesn’t take care of a field in 30 or 40 years it’s hard to walk through the new growth.”

There is also very little wasted materials in log home production. At Estermerwalt, they use the sawdust that is produced from their operations as fuel for the

Photo: Interior, Estermerwalt Log Homes, Honesdale, PA

dry kilns. “We figure we’ve saved well over a million gallons of fuel oil,” Propst said. The way Gastineau uses logs also means there is no waste. “We use a lot of tree tops, which is a part of the tree that is typically not used in normal manufacturing of wood,” she said. “In the saw mill today, with the barkers and the chippers and everything there is no waste in a saw mill what so ever.”

There is also resource savings in the materials not being used. “If you think about what it takes to do your typical frame construction, where you’ve got framing lumber, you have sheeting, you have some sort of exterior siding, you have insulation and you have drywall on the inside and you have house wrap … you think about what it takes to manufacture each one of those products, the fuel the chemicals, the effort it takes to produce each one,” Gastineau said. If you compare this to the log home process, there are much fewer resources expended. The logs replace all of the products in traditional framed construction. “You put the log wall up once,” Propst said. “Your, done. It’s done outside and it’s done inside. So there’s no insulation to do, there’s no sheathing to put on … you use a lot of wood, but again we’ve said that wood is a good thing.”

The time that it takes to construct a log home can be much less than other types of construction. “Again, once you’ve put the log wall up your finished, no other steps to be performed,” Propst said. “As long as someone knows what they’re doing, usually it’s up in a matter of days.”

Logs also can be more energy efficient than other types of construction. Propst said that it depends on the season how much energy savings you can get. “Sometimes they’re just as good as a conventional house, and other times they really excel,” he said. “I’ve seen numbers in spring and fall as high as the high forties, forty percent better than conventionally insulated homes.”

“Log walls don’t lose their insulation value,” Gastineau said. “In any type of insulation there is, from fiberglass to cellulose to foam to anything that’s used, all of it deteriorates over time and loses its R-value whereas a log wall will not … definitely more energy efficient over the lifetime of the structure.”

That leads into another sustainable aspect of log homes, their longevity. “People don’t expect a home to last more than 150 years,” Gastineau said. “If you built a log home, they will last much longer than that,

Photo: Estermerwalt Log Homes, Honesdale, PA

but in 150 year if you didn't want to use the house as a home anymore you could literally tear it down and use the logs for something else."

The costs of constructing log homes are equivalent to other types of custom construction and a little bit more than conventional construction said Gastineau and Propst. The cost of the logs themselves may not be much more, but since log homes a typically a retirement home or the last home someone will purchase, they tend to use nicer extras. But the added costs may be worth it for the sustainability and just the overall sense of being connected to nature. "Having lived in a log home myself for 33 years, being in a natural environment like that is just better for your soul," Gastineau said. "It gives you a feeling of nurturing and connection with nature that you just can't get with any other type of construction."

Photo: Estemerwalt Log Homes Log in Production