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The Weekly Planet:: Care for our forests

By ALAN BETTS

Care for our forests

In autumn it's good to spend some time in our forests. They are Vermont's treasure — a rich source of beauty as the leaves turn, and a source of warmth and hope in the face of our cold winters. As the climate warms, we are now responsible for their future, and they will need our respect and care.

Climate change and shrinking petroleum supplies are driving a shift from fossil fuels to more sustainable biofuels. For Vermont, this will mean a larger wood harvest — a change that will affect us all, from our tiny woodlots to our forested hills. How do we balance our human needs with the needs of the forest and of wildlife?

At present, much of our forest land grows, dies and decays to nourish the forest floor, touched little by humanity in recent decades. So we clearly have choices to make here! What we harvest, what we plant, will matter not just for ourselves but for our children.

In my 30 years in Vermont, I have planted quite a few trees, mostly spruce, to offset those I used to construct my post-and-beam frame house in West Pawlet in 1978. Every year I plant 10 "free" trees that I get from membership in the Arbor Day Foundation (probably still not enough though to balance all the firewood I have burned over the years to keep warm).

Five years ago, I planted our first hazelnut bushes, also known as filberts. Two out of three survived and grew, and we had the excitement of harvesting the first crop of nuts last month. We are looking forward to all kinds of tasty nut dishes this winter.

Our personal relationship to the trees and forests around us matters. It affects our thinking and choices — what we teach our children, and what we leave for them and their children. Trees are fundamental to the web of life. The forests protect habitat, store water and remove carbon dioxide from the air. And, of course, they supply us with building materials, fuel wood and maple syrup!

The history of Vermont's forests is fascinating. The early settlers of Vermont logged and cleared half of Vermont's forests for agriculture. Some clearing was unwise: Crops and potatoes were planted on hilly land, and much soil was lost to erosion. Vermont experienced several floods in the early part of the 20th century (1927, 1936, 1938), which were made more severe by the reduced forest cover. But people and agriculture moved west; and the forests have now regrown to cover about 80 percent of the state.

The Biomass Energy Resource Center in Montpelier has been looking at the availability of wood fuel in our region and estimates that only about 15 percent of the new forest growth is presently being harvested for sawlogs, pulp, firewood and biomass. This means our forests are soaking up carbon dioxide and delaying the warming of the Earth's climate. Of course, a lot of forest is protected or inaccessible. As winters get warmer, it is also harder to work in the woods when the ground is unfrozen. But as heating oil gets costly, demand for firewood, wood chips and wood pellets is growing rapidly. When it was so wet this summer, it was again difficult to cut timber in the forests, so wood supplies may be short for the coming winter. If you end up burning green wood, please take extra care to keep your fires hot.

Our forests could provide double the current harvest for fuel, but they need careful long-term management. The climate change we are facing this century will stress our forests, and we may be faced with extensive replanting, as in the 1930s. For ten years, when I was younger, I cut and split my own firewood ? it's a lot of work. We need more skilled people working in the woods. But presently few young people are entering this demanding work.

Transport costs are rising with diesel prices. I remember well a train journey across Austria a couple of years ago. I was struck by two things: the neatly managed forests along the railroad and the stacks of wood waiting to be removed by rail.

There is a second alternative in Vermont for winter fuel, as fossil fuels become scarcer and more costly. Vermont has quite a lot of marginal, underutilized land. Grasses can be grown and converted into pellets as well. You can

get a higher yield in tons per acre, but grass pellets have lower energy content than wood pellets. However, there may soon be competition, as processes are being developed to turn perennial grasses into alcohol for cars.

The local food movement has been growing rapidly, and this has benefited many Vermont farmers. There are many opportunities for us to grow our own local fuels, and stimulate other parts of the Vermont economy, rather than send our dollars overseas. A sustainable society needs to become a reality. But don't forget ? efficiency comes first. It's so much easier to stay warm if you seal and insulate your home; and you then won't need to burn as much fuel!

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On the net

Vermont forests, Agency of Natural Resources

www.anr.state.vt.us/Env99/vtforest.html

Biomass Energy Resource Center

www.biomasscenter.org/

Vermont sustainable heating initiative

www.sustainableheatingvt.org/

Arbor Day Foundation

www.arborday.org/
