The True Value of Woodlots: 27.01.16

Ontario is blessed with an abundance of air, water and soil, the building blocks of life. We also have vast forested land giving the impression of a limitless supply. Upon closer examination, however, we realize that the picture varies depending on where we look.

In the northern portion of the province, the forest cover approaches 100%, with almost all being Crown land. As we travel southward, we see a dramatic increase in population density, agricultural activity and private ownership. Forests make up a much smaller percentage of the landscape, and these wooded lands are predominantly privately owned.

A 2002 study entitled “Canada’s Privately Owned Forest Lands; Their Management and Economic Importance” by Tony Rotherham, RPF, reveals that Ontario has 170,000 private woodlot owners with a total forest of 5.5 million hectares, the average size being 20 hectares.

[link to study]

The Ontario Woodlot Association believes that the wellbeing of a society is directly linked to its proximity to healthy forests and advocates for the wise use of our private woodlands.

The first step is to recognize, and perhaps even celebrate, their vital importance.

Trees:

We like our trees; we have a subconscious connection to them. Our back yards and neighbourhoods are often defined by the trees they contain. Given the option, we would usually choose to live beside a tree.

Of all the elements that make up the natural world, trees, it could be argued, have the most impact on us. They are the visible reminder that we are not the biggest thing on this planet. While trees may appear to be static as we drive by, those who understand them know that they are continually dying, growing and reclaiming spaces. Were we to die out, trees would continue.

So perhaps, we should slow down, and take a moment to acknowledge their importance.

Trees are the lungs of this planet, taking in carbon dioxide, creating oxygen and storing carbon. Walking among them is a rejuvenating experience largely because of the oxygen rich environment. Even in an urban setting, trees are a positive influence on air quality.

Our climate is moderated by trees, resulting in lower energy consumption for those living under their influence. Again, this is true even in urban areas when thoughtful landscape design maximizes their micro-climatic potential. A homeowner who employs the shading services of trees on the south and west sides of the house enjoys a considerable reduction in energy consumption during the hot season.

A 2012 study done by the U.S. Department of Agriculture, Forestry Service, for the City of Toronto [link to study] states “The urban forest currently stores an estimated 1.1 million metric tons of carbon valued at CAD$25.0 million. In addition, these trees remove about 46,700 metric tons of carbon per year (CAD$1.1 million per year) and about 1,905
Individual trees can have historic significance and even be a focal point for a neighbourhood or community. They can increase property values for the homeowner and others on the street. Ironically, the true value of an urban tree is often not realized until it’s removed and we measure the reaction of the neighbours.

Down through history, different species of trees have been at the centre of entire civilizations. One example of this relationship is the western red cedar and the Haida peoples. Even in the first non-indigenous communities in Upper Canada, the entire societal structure was largely based on the unique uses of different tree species on the landscape. Wheelwrights, coopers, boat builders and furniture makers used wood appropriate to their discipline. Even today, in our world of plastics, we feel a strong connection to pine, oak, maple and other woods provided by our native trees.

Architect William McDonough perhaps summed it up best when he said “Design something that makes oxygen, sequesters carbon, fixes nitrogen, distills water, accrues solar energy as fuel, makes complex sugars and food, creates microclimates, changes colours with the seasons and self-replicates.”

http://www.ted.com/talks/william_mcdonough_on_cradle_to_cradle_design?language=en

When Trees Gather:

Individual trees can be a powerful presence on our landscape, but when trees congregate into forests, the real magic happens.

If, for example, we were to examine a 10 acre (4 hectare) forest, which is probably the average size of a farm woodlot, we would find it possesses all the attributes of the individual trees but also displays additional characteristics as well. The flora and fauna would be different than if those trees were planted as individuals over a larger area.

Having a block of continuous tree cover provides for movement of animals which might not be possible otherwise. For instance, flying squirrels, which really only glide; would not survive without neighbouring trees.

If that 10 acres is along a stream, the forest, with its root network and leaf litter controlling soil erosion, has a positive effect on the water resources in the area. The slower melt of the snowpack in the spring and the interception of heavy rainfall events ensure that groundwater is recharged, erosion is lessened, and there is less siltation of the harbour in the city downstream. That treed shoreline also provides the shade necessary to stabilize temperatures for creatures hatching and living in the shallow water.

Woodlots also provide seasonal seeps and ponds that are utilized by a variety of amphibians (Blue-spotted Salamander, Red-spotted Newt, Gray Tree Frog, Spring Peeper, etc.) as woodland-breeding...
ponds. The tree cover ensures that the unpolluted water, free of predatory fish will remain through the spring breeding season.

Now, if we look at a larger block of forest, say 100 acres (40 hectares), we would see additional benefits. At this size the woodlot begins to develop an “interior”, that part which is more than 100 metres in from the edge. In this forest interior, we would see another community of species, different from those living in the perimeter. We would also see a more complex system of movement by plants and animals because of the larger unbroken tree cover.

If this 100 acre woodlot were to abut others, and we were lucky enough to explore 1000 acres (400 hectares) of unbroken tree cover, we would really have something to celebrate. In southern Ontario, where there are more pressures on woodlots, it should be considered a jewel in our landscape.

At this scale, we can start thinking about watersheds, and the importance of the “landscape perspective”. Dr. Gray Merriam, in his article “The Watershed…Where Biodiversity is Made… and Maintained” (S&W Report, Vol. 75) writes “the living things on each small area in the watershed depend on connections with much larger areas and with other distant habitats. (For example) Without that connection to, and support from the rest of the watershed, you would not see any Great Blue Herons where you live.”

To this we can add Thomas Snowman’s “The Value of Ontario Woodlots in Protecting Drinking Water Supplies” (S&W Report, Vol. 82) where he estimates the municipal value of pure water delivered by an acre of forest to be $3000 to $6000.

In “Forest Cover Percentages” by Ken Elliott, RPF (S&W Report, Vol 66), the author references numerous studies on forest cover and concludes that a landscape should consist of a minimum of 25 to 30% treed cover. Regarding forest birds he writes “In the Ottawa-Carleton region, which is approximately 30% forested, 100% of the species that should occur in this landscape are present. Contrasting, Essex region, where only 5% forest cover remains, almost 40% of its suite of forest birds has been lost.”

Using Our Forests Wisely:

Forested lands are a key component of Ontario’s identity. Woodlands provide much of the biodiversity, wildlife habitat, water and air quality we too often take for granted. However, private woodlots are also significant producers of forest products we use every day, from building materials and paper to maple syrup and fine furniture.

The challenge for private forest owners in Ontario is to manage their properties sustainably so that they will continue to contribute to the local economy and, at the same time, provide the environmental services that are essential to our society.

One example of a win/win situation is when an improvement thinning is carried out removing the poor and diseased trees for firewood while leaving the healthy and better formed trees more room to grow. The resultant firewood contributes to the local economy, reduces the amount of fossil fuel consumed and leaves the future woodlot healthier and more productive. A more detailed examination of the OWA position on firewood can be found at:
Across the province, private woodlots come in all sizes and make up. Some properties have rich deep soil which grow high quality trees, but are also ideally suited for agricultural crops. Other woodlots are on poorer soil where growth rates are slower or where previous over-harvesting has left the forest in an unhealthy condition. Still other forests are near densely populated areas and are threatened by development pressures. Invasive species, diseases and pests threaten our forests on a large scale.

To deal with the various pressures on our woodlands requires a comprehensive, informed approach. Landowners need the knowledge, encouragement and assistance to properly manage their lands for their own benefit and enjoyment while still providing the value society as a whole derives from the intact forested landscape.

The Ontario government’s Managed Forest Tax Incentive Program rewards, with a reduced property tax assessment (and lower tax rate), those landowners who register a forest management plan under the program. www.ontario.ca/page/managed-forest-tax-incentive-program

The Ontario Wood program was also initiated to encourage the use of local wood and help producers find markets. www.ontario.ca/page/ontario-wood

The Ontario Woodlot Association supports programs such as these which encourage sustainable forest management and recommends that ways be examined to assist landowners affected by invasive species and other challenges that are beyond their resources to address.

Summary:

Whatever measure is used, be it environmental services, public well-being, economics or cultural significance, Ontario’s private forests receive high marks for their contribution to society.

The Ontario Woodlot Association advocates for best forestry practices on private lands, providing landowners with sustainable forest management information and advice. The OWA believes that forests can be managed for economic return as well as biodiversity, wildlife habitat and improved forest health, and it supports any initiative that encourages and assists woodlot owners to achieve these goals.

Healthy, productive forests for future generations is our priority and the OWA is the voice for those who are working to this objective in their woods.