WOODLOT Association of Alberta

Newsletter

May 10th, 2022

In this issue:

Board of Directors

Laval Bergeron (pres)
St-Isidore (780)618-6014)
laval@bergeronetfils.farm

Robert Cameron
Debolt (780)957-2292
southpeace@hotmail.com

Elton Kauffman
Bluesky (780)596-3845
eelk@telusplanet

Gordon Kerr
Edmonton (780)434-0512
gordonkerr@shaw.ca

Cathy Newhook
Beaverlodge (780)518-1560
cathy@nextgenreforestation.ca

Larry Nofziger (vice)
Elmworth (780)354-2710
larrynofziger@gmail.com

Tara Jamison
Edmonton (780)849-8818
tara@carsonintegrated.com

Linda Nagge
GP County(780) 538-0823
lindanagge@gmail.com

Jim Szpajcher
St-Paul (780)645-5511
mudman1@telus.net

Rick Keillor
Berwyn (780)597-2136
rkeillor@abnorth.com

Brian Mullen (secretary)
Sturgeon (780)939-2995
bpmullen@hotmail.ca

President's Report

by

Laval Bergeron

Hello everyone,

10th of May today and it feels like winter never left. 5 inches of snow and -6C. Have a not so fun feeling that we will be seeding well into June.. C'est la vie!

As you already know, the **AGM is on the 10th of June** and will be held at the Forest Interpretive Centre in Whitecourt.
Megan Andre from AWES will be making a presentation on where we are in our renewed, if you will, relationship with them and what is happening with the 2B tree Federal Project. We are also trying to get communication going between WAA and local mills. Fingers crossed for a presentation from them. If all goes well, our representative at the national level, CFFO (Canadian Federation of Forest Owners) will give us an update of what is happening across the country. So come one come all, registration is at 10:30am with coffee and goodies, soup and sandwich (locally made) will be served at noon. FREE of charge and for those who want to make a donation, we are good with that :)

At one of our Board meetings, (by the way, I want to thank everyone on the Board for being present at all the meetings, it's truly great to work with everyone with you people) someone mentioned the book « Finding the Mother tree » by Suzanne Simard. I got the book yesterday, I am now at page 90 out of 350 or so and proves to be quite the read. I would love to comment on it right away but Monique would not find that very funny. As she has not read it yet and I'm sure some of you also. If you are interested in Forest, then it's a must!!

As always the newsletter/Logjam is always looking for articles so please do not be shy on what you have to say or what you have seen.

This is my last President's report, I suppose I will miss part of it and probably all of it but I think our Association is due for new blood, new thoughts, different ways of seeing and doing.
Thank you for giving me the stage (for so long) but all good things come to an end and that leaves room for new things to come.

AGM-AGM-AGM-AGM-AGM-AGM-AGM-AGM

***Date*: June 10th, 2022**

***Time*: 10:30am - 4:00 pm , free lunch will be provided**

***Where*: Forest Interpretive Center in Whitecourt**
3002 33 St, Whitecourt

Woodlot Harvesting Profitability and Fiscal Incentives for Silviculture Optimization

Victor Brunette[1]

In the last issue, I told you about my woodlot owner profile. I am 70 years old, I am retired, I own 600 acres (240 hectares) of woodlots on the Québec side of the Ottawa Valley. I sell stumpage but I doubt that I will undertake harvest operations by myself as I get older. I wish I had a fair income tax treatment when my woodlot generates revenues. In Scandinavia, woodlot owners benefit from a forestry savings fund where they can invest wood sale revenues (before tax) and retrieve the investments needed for silviculture and forest regeneration over a period of 15-20 years following harvest.

In the wake of policy making related to climate change, carbon sequestration, species at risk and water for life strategies The Canadian Federation of Forest Owners (CFFO) is lobbying the Canadian government to consider such a personal silvicultural savings and investment plan (PSSIP). The plan, similar to a retirement savings plan (RRSP), would be managed by local banking institutions, would defer income tax treatment in the year of harvest, accumulate interest income and could be used for silviculture and management activities over a period of fifteen to twenty years following harvest.

Plan A:

This is plan A for CFFO. It would be a good fiscal incentive for both the woodlot owner and the forest. In this day and age when the Federal government wants to plant two billion trees, and when good forest management, the production of environmental goods and services and carbon sequestration gain in importance, it would be fair to enable the landowner with progressive fiscal tools to reinvest harvest revenues into his woodlot.

For both levels of government, this also ought to be plan A, because the program investments would necessarily be invested into best management practices. Amounts withdraw for purposes other than silviculture or woodlot investments would be taxed fully.

For a landowner like me (600 acres), who has a tough time with the tax man who questions continuously my "reasonable expectation of profit", a personal silvicultural savings and investment plan (PSSIP) would allow me to better balance my revenues and expenses, and justify such silviculture and roads maintenance even if I am harvesting sporadically, like every 10 years.

A personal silvicultural savings and investment plan would also encourage more harvesting to happen, higher volumes per harvest, an economy of scale to attract competent jobbers who normally would not be interested to move machinery on my woodlot every year. Furthermore, sporadic stumpage revenues, if reinvested in the PSSIP would not be taxed in the year of harvest, or would not influence my old age pension benefits. This currently is a major deterrent when comes the decision to harvest large quantities of wood or when the conditions of markets are optimal for the landowner.

Plan B:

In Quebec, individual woodlot owners or corporations with a woodlot owner recognized status (detaining a 10 year management plan) have benefitted recently from an income averaging mechanism. For the period covering 2020 to 2025, an amount not exceeding 85% of a net harvest revenue can be deferred for a period not exceeding 10 years.

One has to declare 15% in the first year and a minimum of 10% of the residual amount every year following. This mechanism provides more income and fiscal stability for the landowner, without affecting his average income tax rate.

This mechanism, however, only applies at the provincial level, in Quebec, where we file a separate income tax report for the province. If the Federal government would apply it, then most provinces would follow suit. Yet, this program can be termed to be plan B. It is a fiscal tool for the landowner but it does not guarantee that the money will be reinvested in the woodlot. Let us encourage the Canadian Federation of Forest Owners to continue lobbying for a personal silvicultural savings and investment plan (PSSIP) for the greater benefit of landowners and woodlots.

[1] **Retired professional forester, WEP manager 2004-2006, and woodlot owner in the Ottawa Valley**

IMPORTANT ANIMAL-CAUSED TREE STEM DAMAGES

Submitted by H. Cerezke

Tree damages caused by various animal species commonly occur in orchards, tree nurseries, shelterbelts, on ornamental and shade trees, as well as on trees in the forest landscape. Most damages result from feeding injuries such as browse where buds, branch tips, foliage and tree tops are pruned or broken off. Bark scraping often results from ungulates (deer, elk, moose) when they rub tree stems with their antlers. Other more serious injuries result from debarking of stems and branches that can seriously affect tree growth, cause stem deformities and tree mortality. This report describes important animal species that contribute tree damages in Alberta periodically, especially debarking type injuries. Information is also presented on some specific behavioural patterns and also on damage prevention and control aspects.

1

Voles (Meadow Mice): Several species of voles occur in Alberta, but the two most common species causing feeding damage are the red-backed vole (*Clethrionomys gapperi)* and meadow vole (*Microtus pennsylvanicus*). Both species may cycle through periods of low to high population numbers when they can cause serious injuries to young conifer seedlings, small trees and shrubs, and even garden vegetables such as carrots and beets. Of the two species, damages caused by the meadow vole appear to be the most widespread and serious. In urban areas, for example, adult meadow voles tunnel under the snow on lawns where they may feed on grass and shrubs, leaving well-marked trails in the spring time after snow melt. On young conifer seedlings, small trees including fruit trees and shrubs, debarking of stems occurs at ground level and may extend up the stem and on branches (Figure 1 illustrates a young tamarack tree killed by extensive vole bark feeding). The girdling activity kills many plants and can be identified by small incisor marks on the debarked areas, and by the presence of small fecal pellets at the base of the damaged stem. Natural predators of voles include hawks, owls, weasels, foxes, coyotes and snakes. Fruit trees and other small trees can be protected by placing cylinders of fine wire mesh and other tree guards around the stem bases. Since most feeding damage occurs during winter months, trampling the snow around the base of trees can discourage tunneling to the tree base. Trapping adult voles in baited traps is also an effective method of control.

Red Squirrels: Red squirrels (*Tomiasciurus hudsonicus*) have been reported to cause significant debarking damages in juvenile lodgepole pine stands in British Columbia and Alberta. The damage typically included the stripping of bark and gnawing. Pine stands of fire origin as well as stands recently thinned have generally suffered highest incidence of damage. Trees attacked commonly have stem diameters at breast height greater than six centimeters; the squirrels often showed a preference for the larger most vigorous trees. The debarking may occur on any part of the stem with strips of bark removed, which are not consumed but accumulate at the tree base. The squirrels feed on the cambium and phloem tissues, and most damage occurs during May to July. In one study in western Alberta, 18 percent of trees surveyed reported new damage while 68 percent of previously damaged trees were re-attacked. Although the debarking injuries have resulted in low

tree mortality, the effects of partial girdling can result in reduced tree vigour and stem growth, and the wounds can allow entry of stem pathogens. Some silvicultural prescriptions have been suggested to reduce the incidence of damages in juvenile pine stands.

Other squirrel damages may include bud and shoot clipping, especially during their cone harvest. On pine trees, the removal of cones can cause significant bark wounds at the site of cone attachment and result in the death of the branch tip distal to the cone. Dead branch tips may appear later throughout the crown and give the appearance of ``red flagging``. Squirrel gnawing of bark often occurs at the margins of pine stem rust cankers, thus adding to the injury already caused by the rust infection.

Snowshoe Hare: Snowshoe hares (*Lepus americanus*) are found throughout Alberta and undergo wide population fluctuations that peak and decline over an 8 to11 year cycle. While hares normally feed on a variety of broadleaved plants and grasses, they will change to browsing on buds, bark and small twigs during winter months when green vegetation is unavailable and during peak abundance. Feeding damages may occur in orchards, tree nurseries, shelterbelts, gardens and in young regeneration forests.

On young pine trees, especially of less than six centimeters stem diameter, trees are often partially or completely girdled around the base. The debarked areas will have teeth marks and the bark will be consumed. Lower branches and buds may also be clipped off (see Figure 2 showing young lodgepole pine trees killed from feeding damage at and above the snow line). Most snowshoe hare feeding damage occurs during November to April period. Tell-tale signs will show an abundance of hare fecal pellets around tree bases. Browsing on small trees and shrubs may commonly occur in nurseries or on landscape plantings and on some garden plants.


2

Snowshoe hares have a number of important predators such as lynx, foxes, coyotes and owls. In addition, several effective protective measures can be deployed to help reduce the risk of hare damages. These measures include the use of repellents, mechanical tree guards such as wire mesh, fencing, habitat manipulation and trapping.

Porcupine: Porcupine (*Erethizon dorsatum*) occur throughout the province, especially near stands of wooded areas. Most porcupine feeding damages on trees occur during winter months when woody plants become a staple of their diet. During such time, various tree species are susceptible to their bark feeding and gnawing on stems, branches, twigs and bark. Susceptible tree species include pines, spruces, tamarack, willow, and several other hardwood species including fruit-bearing trees.


3

Residential urban areas adjacent to wooded ravines where porcupines inhabit may experience damage on adjacent landscape trees such a Scotch pine and apple varieties, which can be especially attractive. Most common and effective measures to prevent porcupine damage include trapping and removal, by deploying repellents, and by exclusion such as installing sheet metal or aluminum flashing around the base of each tree. Figure 3 shows the stem of a large white spruce with patches of debarked areas. Note the presence of current and older feeding patches, indicating re-visitations to a selected tree.

Black Bear: The incidence of tree damages caused by black bears (*Ursus americanus*) is common in various parts of North America, particularly in the Pacific Northwest from California to Alaska, and somewhat less common in British Columbia and Alberta. While black bears are implicated in causing damages to livestock, orchard trees, apiaries, and are a concern for human safety, their bark stripping damages to mature trees and in regeneration forests may not be as well appreciated or documented.


4

When black bears leave their dens in the spring, they often encounter a scarcity of food. At such times they can resort to stripping the bark off trees with their claws and teeth, then scrape the cambium and outer sapwood with their incisors. The spring-formed vascular tissues may contain up to five percent of free sugars, which provides a rich source of energy food. The bark stripping occurs on the lower bole and may extend up the stem one and a half meters (see Figure 4 that shows how the bark is torn upward from the root collar. An adjacent spruce has also been attacked). Trees 15 to 30 years old are often preferred, and damage may completely girdle and kill the tree. However, trees of any age are vulnerable and can include conifer species such as western hemlock, Douglas-fir, Engelmann and white spruces, and lodgepole pine. During a survey of a 20-year-old lodgepole pine stand in Kootenay National Park, an estimated 5-10 percent of trees were killed by bark stripping during a single spring period. At another location north of Lesser Slave Lake, six or more large mature white spruce were completely girdled by bark stripping, all within the same spring period. The tree species preferred by black bears appears to vary by region. Their feeding behaviour on trees usually ends abruptly by early summer.

During a survey of mountain pine beetle killed trees in Kootenay National Park, bark stripping damage by bears was recorded at most of 28 plot locations examined, and occurred about equally on Engelmann spruce and lodgepole pine. Douglas-fir was also well represented at the sites but none were found with bear damage. Figure 5 shows an older scarred area at the base of an Engelmann spruce, that has provided an entry for carpenter ants to invade into the stem and the wound may also have allowed entry of stem decay pathogens, indicating an ecological consequence initiated by the bark stripping. The potential damage by bears in young reforestation areas may become more significant in the future, since it was reported in the Pacific Northwest, that a single bear can strip bark from as many as 70 trees in one day.


5

Yellow-bellied Sapsucker: Yellow-bellied sapsuckers (*Sphyrapicus varius*) are small woodpecker species that feed on the sap of many tree species, and can be a serious tree pest. They commonly attack species of pine, birch, maple and apple as well as other ornamental hardwoods and fruit trees. The damage consists of a series of holes in the bark in either horizontal or vertical rows on tree trunks or large branches. Figure 6 illustrates the peck holes on the stem of a young Scotch pine, a commonly preferred host. As the sap flows into the holes, the sapsucker feeds on the sap along with any insects that are attracted to the sap. The sapsuckers may periodically enlarge the holes and will visit the same stems repeatedly. Since the yellow-bellied sapsucker is a migratory species and a summer resident in Alberta, its tree damage will extend throughout the spring and summer season. Trees used as a food source may be visited several timed each day and may be re-visited for several years. Tree stems can be completely girdled if the peck holes are closely concentrated and encircle the stem, thus resulting in top killing, especially of young trees. Most damages can result in reduced vigour of the attacked trees.


6

Methods deployed to reduce the risk of sapsucker damage include wrapping the damaged areas with a loose, coarse material such as burlap or lightweight netting to discourage re-visits, or using noise-making devices. Yellow-bellied sapsuckers are protected under the Migratory Birds Convention Act, and may not be killed or captured, or its eggs destroyed.

Classified Ads

Free to all members

Privately Owned Mill
looking for timber

Willing to work with any size of privately owned woodlot and will consider any species of product. Willing to selectively harvest smaller or larger numbers, customize stump height, will consider any creative deal(cash, trade for lumber, with or without loading and transport etc). Will perform with utmost respect for the timber, surrounding environment and woodlot/land owners wishes.

Give me a call to discuss your vision.

Dan - 780-753-1544.

Next Generation Reforestation Ltd.

Contact:

email: will@nextgenerationreforestation.com

Tel: (780) 532-2220

SOIL DAMAGE AUDITS

Precise measurement of soil change from disturbance:

- Volume/depth
- Texture/structure
- Compaction/density
- Chemical (salt, pH, organic matter)
- Hydraulics/water flow
- Drainage/erosion
- Stones and gravels
- Land capability

Ivan Whitson, Ph.D, P.Ag
Senior Soil Scientist
35 years of experience in soil survey, research, interpretation, and evaluation

I Whitson Innovations Inc.
PO Box 1241 Station Main
Edmonton, Alberta T5J 2M8
iwhitson@telus.net
780-717-7363

A soil damage audit provides a higher standard of evidence.

Our Mission Statement

The Woodlot Association of Alberta's purpose is to promote leadership in sustainable forest management by encouraging the development of Private forest by increasing awareness of their inherent social, economic and environmental values.

Address of Beaverlodge office for renewal:

Woodlot association office
Box 303
Beaverlodge, AB
T0H-0C0

email: jess@olsonsbookeeping.ca
tel: 1-800-871-5680
Web: www.woodlot.org

AGM-AGM-AGM-AGM-AGM-AGM-AGM-AGM

Date: June 10th

Time: 10:30am - 4:00 pm

Where: Forest Interpretive Center in Whitecourt

Printed by K & C Graphics(2008) Inc