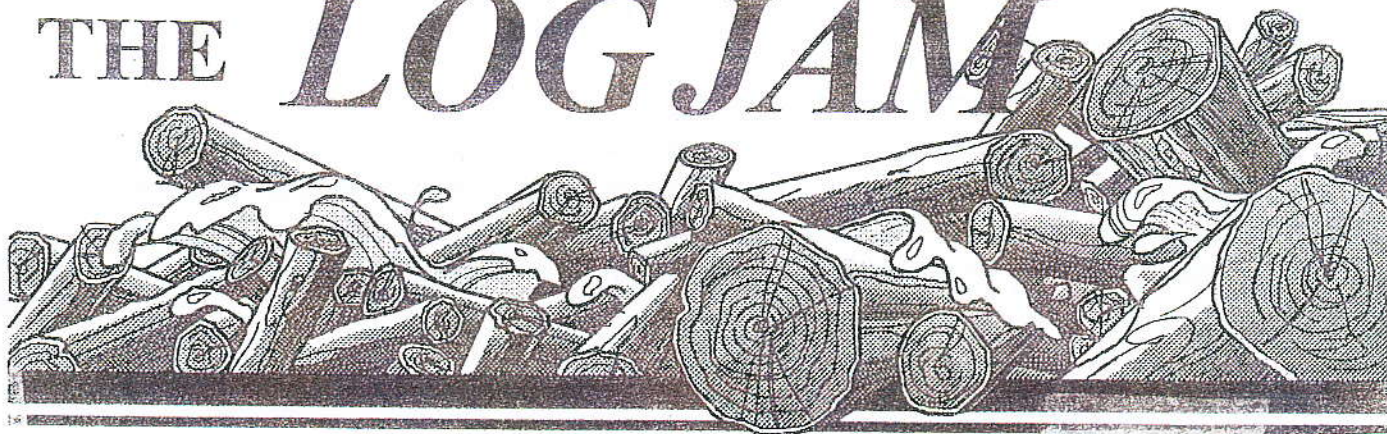


THE LOG JAM



Published by the Woodlot Association of Alberta (WAA)

March, 2013



Thirty-eight year old white spruce plantation pruned to 8 ft

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."

Advertisements in the News Letter may be purchased at the following rates:
Full page - \$100.00; One half page - \$50.00; Quarter page - \$25.00

To place an advertisement - write, draw, etc. how you want it to appear in the News Letter, and fax or e-mail to the editor.

Contact - E-Mail, Address's and Phone

Woodlot Association Office
#104-14020-128 ave. NW
Edmonton, Alta.
T5L - 4M8

E - Mail-----office@woodlot.org

Website-----www.woodlot.org

Phone ---- 1 - 800 - 871 - 5680

News Letter Editor of "The Log Jam"

E-Mail---jurgen.moll@xplornet.com

Phone-----1-780-778-4272

Box 84 , Whitecourt , AB , T7S-1N3

Board of Directors

Peter Mills, Pesident
Beaverlodge (780)354 - 8226

Jurgen moll, Vice President
Whitecourt (780) 778 - 4272

Louise Horstman, Secretary
Morinville (780) 939 - 5858

Bernice Cassady, Treasurer
Edmonton (780) 455 - 9727

Larry Nofziger, Director
Elmworth (780) 354-2710

Warren Stewart, Director
Valleyview (780) 524 - 3178

Herb Cerezke, Director
Edmonton (780) 435 - 6007

Pieter van der Schoot, Past President
Breton (780) 696 2436

NEWS FROM YOUR WAA BOARD

Louise Horstman

Free Lifetime Membership

If you have been a WAA member for 10 years and are either 75 or older or disabled and unable to work, contact us regarding a free lifetime membership (to be given out at our next AGM).

Gift Memberships

Although the season of gift-giving is long over, WAA gift memberships are still available. Give a one-year membership to someone new at the discounted cost of \$25.

Woodlot Demos

Have something you'd like to see in a woodlot demo, seminar or workshop? Let us know and we'll try to arrange for it. Planning is now underway for the summer's demos and other events.

WAA Website is Returning

Arrangements are currently being made with a new website host to get our woodlot website up and running

Leased Land Initiative

The WAA executive is planning to explore the possibility of establishing sustainable woodlots on leased crown land (similar to grazing leases). These would be let to persons who have already established woodlots on their own land. This initiative is the result of a resolution that was passed at our 2012 annual general meeting.

Casino

We are investigating the possibility of raising funds through the casino funding program.

Attention to All Reads of the LogJam

We will now be able to send you the Log Jam as an attachment to an e - mail.

Therefore if you want to receive it in that form rather than a hard copy in the mail you must ask for this service by:

*** Send an Email to the woodlot office telling them that you want to receive the Log Jam in this format . (e-mail ...office@woodlot.org)**

For those that do not want to receive it by e -Mail will continue to receive the Log Jam in the mail as is now the practice, so you don't have to do anything.

Presidents Message

Pete Mills

Hello everyone;

Seems like just recently that I was last writing to you all. Time does fly it seems and the days are getting noticeably longer. I'd like to take this opportunity to share some more good news with you. The WAA recently received some additional funding from Alberta Environment and Sustainable Resource Department. This funding (additional to what we announced at the AGM) will be used for general support of woodlot owners and activities here in the province. With that in mind the board really needs your input. While we have a pretty good idea of what we think needs doing we really need to hear your opinion of what you see the needs are for your woodlot. In addition to carrying on such things as the "Logjam", this funding will hopefully allow us to get the web site back up and operational and should allow us to move ahead with seminars or other forms of training directed towards your woodlot concerns. To do that we need to know what those are so please take a moment to let any of us know or leave a message at the office. Hopefully you'll also find something of interest in this issue to help you along with some of the spring chores and maybe a think piece or two with other opinions and regional concerns. Should there be articles that you would like to see or better still that you would like to write please don't hesitate to contact our editor, Jurgen Moll, myself or any of the other board members.

In the meantime if there is anything that either I or any of the other directors can help you with please don't hesitate to contact us or the WAA office.

""News" of the *Woodlot Library*

The Woodlot Library has been maintained for years at the Canadian Forestry Service (CFS) office in Edmonton. But last spring the CFS has discontinued this service by closing the library.

We felt that it would be a benefit for the WAA members to continue having access to this valuable resource. Therefore we have arranged for the contents of the library to be moved to the Blue Ridge community library.

There are some 2000 books and pamphlets which must be catalogued, after which they will become part of the Alberta Library System. Members and the Public will then be able to obtain this material via their local Library.

The cataloging should be completed by early this summer. *(we will let you know)*

Up Coming Events

Board of Directors - Teleconference - **March 24 / 13**
May 26 / 13
June 30 / 13
All calls are at 7pm

Board of Directors **meeting** at Whitecourt **April 27, 2013**, and
August 31, 2013

Part - taking in the **Trade Fair** in Whitecourt **May 10, 11 & 12 , 2013**

Classified Ads



R.W. & SONS CONTRACTING

On-Site Lumber Mill Work

Log owners have your logs band sawed into valuable lumber.

Also assortment of Dry Piled Birch, white poplar & spruce lumber for sale.

Call Bob @ 780-963-4063

This Spot is

Available for

Your Ad

A tree planning contractor's perspective

Cathy Newhook Next Generation Reforestation

Spring is in the air as the days get longer. We are getting ready to plant 20,000,000 trees

You may be thinking of doing the same. Have you ordered your trees yet?

Remember spring trees need to be ordered a year in advance

Ordering growing and planting trees from nurseries

	YEAR 1												YEAR 2									
month	O	N	D	J	F	M	A	M	J	J	A	S	O	N	D	J	F	M	A	M	J	J
Spring 1+0	order	order	order			sow		sow	grow	grow	grow	grow	grow	cold storage	cold storage	cold storage	cold storage	cold storage	cold storage	plant	plant	
Summer 1+0	order	order	order	order	sow	grow	grow	grow	grow	plant	plant											
Summer 2+0	order	order	order	order				sow	grow	grow	grow	grow	grow	grow	grow	grow	grow	grow	grow	grow	plant	

	order
	sow
	grow
	cold storage
	plant

If not you should contact your local nurseries sometimes they have "overruns". They sow extra trees to make sure they have enough to meet the requirement. These extra trees are most available with summer stock. Nurseries usually take orders starting at 10,000 trees. How many to order? For a clear cut average plant 1600 stems or trees per hectare, 1200 trees per hectare is low. Pine you may go as high as 2200 stems per hectare. Spruce do great under planting in Aspen you can plant 800-1000 stems per Hectare.

Seed lots and seed zones: There are over 90 different seed zones in Alberta. You want to get a seed lot as close as possible to where you are planting. Seed source from Southern Alberta will not do well in Northern Alberta. Elevation of seed source should be similar to where it will be planted for best survival

Stock type: 310 410 412 415 512 what does it mean? It refers to the container size the trees were grown in i.e. 410 is growing in a 4 cm diameter container that is 10 cm long. Generally speaking the longer the trees the more care needs to be taken when planting. For unprepared plant ground pick a

shorter plug size i.e. 410 plug. If your plug is longer than 12 cm sometimes the roots are squeezed into the ground slowing growth. Spring trees get you ahead of the competition. 2+ 0 trees are also good for competitive ground as they are older and get a head start

Stock Handling: OK so you have the trees make sure the trees stay cool. They are most fragile when they leave the nursery until they are planted.. So handle with care! Keep them cool avoid rough handling. Spring trees are frozen(dormant) so request the nursery to thaw or if you pick them up frozen give them a few days to thaw. Never plant frozen trees the top will start growing and the roots will be frozen and not able to help. Spring trees Keep boxes closed. Keep seedling dark and cool. Try to plant within 7- 10 days of thawing. If you notice mold it may be a problem to talk to the nursery about. Spring trees should be planted by June 21 so buds can set prior to solace. Summer trees are actively growing they are breathing so as soon as you get the boxes open the boxes to let them transpire "breath" and keep them in filter light in the shade or under a canopy . Plant in 10- 14 days. Monitor moisture and if you can't squeeze water out of plugs water them.

Preparing the land: Working up a field prior to planting is great . Be aware rhizome grasses will multiply when cut up. Be prepared to deal with grass. Understory planting no pre work required.

Planting the trees: Micro site is why people plant trees and not machines. Pick an elevated spot. It makes a big difference in warming the soil better drainage and faster growth. Old stumps are great micro site . Plant a couple inches away from the stump and avoid planting in dry debris make sure the roots are in something you can smear and will hold moisture. Avoid compacted spots if you have a hard time getting the shovel in the ground the roots will not getting going. No aunt hill planting. Pack only what trees you can plant in an hour so you not carrying extra weight and trees don't dry out. Plant trees straight roots straight. Have the top of plug in the interface of where the fermentation layer is. No plug sticking out in the dry litter layer it will wick moisture and kill plant. Try not to bury branches in wet soil. Make sure the hole is closed gently don't squish the roots with a big stomp!

Professional planters can plant 1500 trees a day. Price can be reduced if you pick up the seedlings from nursery. On your land move the seedlings with a quad or truck close to planting area. Supply or pay for meals and accommodation. Travel time to site needs to be considered and their labour price.

Spring and fall is the best time to admire your new plantation.

"May the forest be with you"

New Beetle Species Discovered in the Peace Country

They dwell on the ground floor of the Boreal Forest, but yet they were never discovered...until now. Over the past few years Charlene Wood, a University of Alberta student, has been discovering new beetle species in the Peace Country.

Wood recently received her master's degree from the university's renewable resources department after spending two years studying the forest region between Grimshaw and Manning. To study biodiversity of the boreal forest and what type of habitats are needed by species in it. The end goal is to have a better understanding of how forest management may impact biodiversity and how we can better manage our forests to conserve that biodiversity.

Though she wasn't planning on it, Wood ended up discovering seven new species of beetles as well as 47 known species not known to exist in northern Alberta. The seven species are up to three millimeters in size. Six of them which are closely related, are described as minute brown scavenger beetles. The seventh belongs to the root-eating monotomidae family. They were found feeding off of fungus and other decaying material in the forest deadwood.

Wood collected 8679 specimens in her total journey. The never-seen-before discoveries are any thing but rare. When you think of a new species you would think it's probably very rare, that is often the case, but what she found is that these species are not rare, and are not living in a rare habitat. As the newly discovered monotomidea is a prime example, it was the second most common species that she collected

World wide it is estimated that there are up to a million wood-inhabiting organisms. As more information and studies of deadwood become available, it could directly affect how forest are managed. Forests are managed to remove deadwood for minimizing a few pest species and fear of fires. But now we know that having deadwood is good for natural predators and parasites of some bark beetles.

Having a good amount of deadwood in the forest is actually helping forest productivity.

What are Muskegs....????

Richard Rothwell

Muskegs are areas that are characterized by poorly drained organic soils. Muskegs occur primarily on broad, flat areas or mild depressions of glacial outwash deposits. Abundant precipitation and cool summers are two essential requirements for muskegs to develop. Muskegs form because permafrost, clay or bedrock layers prevent soil water drainage which results in water saturated soils, limited oxygen and cool soil temperatures. These conditions slow the rate of decomposition of plant materials that accumulate on the soil/ground surface, which eventually accumulates to form peat and muskeg. Peat deposits in muskegs can vary from a few centimeters to more than 30 meters deep depending upon underlying topography.

In the Canadian Wetland Classification system, muskegs can be categorized as bogs or fens. Bogs are different from fens in that they receive most of their water from precipitation and have little connection with surrounding groundwater. Fens receive most of their water from local groundwater systems which makes them more nutrient rich (i.e. minerotrophic) than bogs which are low in nutrients (ombrotrophic). Plant diversity in fens is usually greater than in bogs because of their greater nutrient levels. Bogs are higher in elevation than the surrounding landscapes (i.e. domed shape) because of the way peat builds up over time.

The hydrology of bogs and fens is different. Water table levels in both are close to the ground surface. Water table levels in bogs are seasonally more variable than in fens, varying from a few centimeters to more than a meter below the ground surface depending upon the frequency and amount of rainfall. Seasonal water table levels in fens stay close to the ground surface as they are sustained by ground water flows thru the summer season and are not so dependent on rainfall.

Peatland vegetation is very sensitive to changes in water levels and chemistry. Rising water levels can increase the rate of decomposition of acidic peat found in bogs causing a shift to fen conditions. Flooding of muskegs can cause the death of trees and the conversion of a forest peatland to open wetlands. The construction of roads and highway across peatlands causes flooding on the upslope side, and a drainage effect on the downslope side which can convert muskegs and conifer swamps to open peatlands.

Historically wetlands/peatlands were considered to be wastelands and of little value to mankind. Wetlands however play an important role in the environment. Wetlands at local and regional scales can: moderate climate, cycle carbon and nutrients, regulate water availability, improve water quality, reduce soil erosion, provide habitat for plants and animals, provide habitat for endangered, threatened plants and animals. Suggested reading to learn more about wetlands and their important to natural cycles is: Wetlands and Woodlots, Sustaining Wetlands Issues Paper 1995-1 at:
<http://www.wetlandscanada.org/Wetlands%20Woodlots>

On A Miser

*They call thee rich, I deem thee poor
Since if thou dar'st not use thy store,
But sav'st it only for thine heirs
The treasure is not thine, but theirs.*

New thinking about leaving uncut trees around all water bodies

Natural emulation seeks to mimic the way that forces such as fire and wind alter the landscape thereby increasing biodiversity and making for healthy forests. The application of the technique continues to grow and is now being applied to shorelines in place of traditional riparian buffers.

Federal research scientist Dr. David Kreutzweiser, in collaboration with the OMNR has been studying the effect of shoreline natural emulation in an effort to understand its impact and how best to employ the technique. Dr Kreutzweiser is based in Sault Ste. Marie, Ontario.

"Up until recently the implications of natural disturbance emulation for aquatic ecosystems have not been considered. Riparian buffers are stand alone reserves around water bodies such as lakes and streams; the problem is we are beginning to see that as these are applied systematically across the landscape that they are creating unnatural linear patterns around water bodies. New regulations are beginning to move toward this emulation of natural disturbance recognizing that natural disturbance also occurs in shoreline forests," Kreutzweiser said. "Especially in the boreal forest these riparian buffers create unnatural stands where there is limited opportunity for renewal or regeneration. Regeneration increase shorelines habitat complexity."

Kreutzweiser explains that until recently the goal has been to apply natural disturbance emulation to shorelines to support terrestrial biodiversity while trying to avoid harmful alterations to water. His research suggests that disturbance may also be a benefit for the aquatic ecosystem.

"Natural aquatic ecosystems also require periodic disturbance to sustain themselves.

What we want to do it is be sure that we can apply this emulated disturbance on shorelines in a careful fashion to meet the objectives of increasing shoreline habitat complexity but still protecting water resources," Kreutzweiser said. "There are areas in which intentional shoreline disturbance would be applied in order to emulate natural disturbance but in other cases where shorelines are particularly sensitive we would not encourage logging there. Our research is looking at those aspects."

One particular constraint to the application of the technique is the degree of wetness of a shoreline Kreutzweiser calls these areas hydrologically connected and they are particularly sensitive to disturbance. Logging disturbance is discouraged in wet areas but acceptable in drier areas, which is similar to the way fire disturbance works naturally.

In studying the White River Riparian Harvesting Project Kreutzweiser and his team measured the response to intentional shoreline disturbance along streams by looking at songbird and in-stream communities. The research showed that habitat complexity was increased; shifts were caused in songbird communities that were similar to those in some disturbed areas. There were minimal affects on adjacent water bodies.

"There is much more that needs to be done, there are still uncertainties around this whole issue. There are two key uncertainties, first; what exactly are natural shoreline disturbance patterns? We have a general sense of that but we are now trying to get a project together that will give us a finer resolution view at natural shoreline disturbance," Kreutzweiser said. "The second thing is to get a better understanding of how well forest management actually does mimic natural disturbance patterns."

Another area of inquiry will be determining over what timescale change will be acceptable. Kreuzweiser says they now know that logging does not cause the same immediate impacts as fire for example, but over time they are likely to converge. He and his team want figure out what that timescale is and adjust logging practices to converge with natural disturbance as quickly as possible.

"We are looking at watersheds that burned naturally and comparing the responses in those streams to streams that were logged with conventional buffers and streams that are in watersheds that have not been disturbed for decades," Kreuzweiser said. "That helps us to determine what changes we would expect to occur in response to natural disturbance that in turn helps to set the benchmarks for a logging situation. That is where we are headed now."

"We are beginning to understand that the key to maintaining the diverse and functional landscape is complexity," Kreuzweiser said. "So if we can use management approaches to maintain habitat complexity on the landscape, including aquatic habitats, that seems to be a positive." ♦

Larch trees next to face being wiped out as half of Britain's species at threat from diseases from abroad

Half of Britain's trees could be wiped out by diseases shipped into the country through the boom in horticulture and gardening, an expert warned today.

Centuries-old oaks, beautiful horse chestnut 'conker' trees and host of other treasured native species are threatened by the lack of control over imports, said William Theed, whose Brendon Hill forests in Somerset were the first in the UK to be diagnosed with the larch-killing phytophthora ramorum disease.

Mr Theed, who has been growing trees for over half a century, says that 'wave after wave' of diseases are being imported into this country and that Dutch-elm style plagues could soon become the norm, leaving our countryside looking far different for generations to come.

'It is too late for the British native larch' predicted Mr Theed, who owns more than 1,500 acres of forest. 'With that tree I would say we are looking at the same scenario as we were with elm. Our grandchildren will know a Britain which is larch-less. But that pattern could be repeated with other trees.

'Unless we get a grip of it we are going to lose half our trees. You are talking about waves of trees disappearing.'

Dr John Morgan, head of the Forestry Commission's Plant Health Service, refused to distance himself from Mr Theed's doomwatch warning.

'He's got a point - the globalisation of trade is recognised as potentially increasing the threat. What regulators need to do is put control measures into place to prevent diseases coming in.

'The rate at which globalisation has increased has exceeded the rate at which regulators have caught up with threats - sometimes of diseases that are as yet unknown.

'That is recognised in the current EU plant health regime - the proposals to develop a new regime are under way now and as a member state we will get sight of these soon and be able to participate in a review. We would certainly urge anybody with an interest in trees to get involved.'

Only last month the Forestry Commission published a range of simple biosecurity measures which people can take to help protect Britain's trees.

A few weeks ago came the news that nearly 50,000 native larch trees in the beautiful Forest of Dean, Gloucestershire, are being axed because they are stricken with a disease brought in from abroad.



Nearly 50,000 native larch trees are being axed in the Forest of Dean in Gloucestershire

Around 36,000 trees have already been felled by the Forestry Commission and now another 12,000 on six hectares of the forest have been confirmed as having the phytophthora ramorum germ, and will be chopped down in a desperate bid to stop it spreading.

The disease is carried in spores and is fatal to larch trees, and it was first discovered in the Forest of Dean in June.

Kevin Stannard, deputy surveyor for the Forestry Commission in the forest, said 'There is nothing we can do to stop the spread of the disease, which travels on the wind, apart from felling the infected trees.'

'One of the problems we are facing is that the larch tree makes up a lot of the autumn colours seen at tourist attractions such as Mallard's Pike.'

Even more sites are expected to follow, with researchers investigating other areas where they believe the disease has spread.

It means the area of trees having to be felled either completely or partially is approaching 80 hectares and likely to pass 100 when more sites are identified.

Felling is starting this month.

Mr Stannard said 'We will be replacing all felled trees with a different species. This is a new disease that was first identified in Cornwall in 2009. The thing is, if we were to lose the larch, people would adapt and forget about it, much like when Dutch Elm disease devastated hedgerows, people have forgotten about that now.

'This disease has the potential to take larch out of every forest on the western fringe of the UK.'

Local councillor Martin Quaile said 'The whole thing really is very distressing. All we can do is to give the Forestry Commission our full support on this, but it is very sad for us all.'

Mr Stannard has previously said the infection could return again, meaning, over the course of the next few years, 880 hectares (2,174 acres) could eventually be lost, meaning the felling of 700,000 trees.

That's all of the Forest of Dean's larch trees, which make up 11 per cent of the total forest.

In November last year it was reported that the Forestry Commission was felling 11,000 infected larch trees at Cardinham Woods, a beauty spot popular with walkers near Bodmin, Cornwall, to halt the ramorum disease spreading to other plant species across a wider area.

As well as being killed by the disease, the larches also produce very high quantities of the infective spores that spread it.

Forestry Commission experts have been surveying woodlands in the South West and elsewhere to identify and treat infected sites, and have been working closely with owners with infected trees on their land.

John Ebsary, area forester for Cornwall, said last November: 'We've already felled infected larch trees in and around the Glynn Valley and at Idless Woods near Truro, and we now have to carry this work out in Cardinham, Dunmere and East Woods.

'It's disappointing having to fell trees before they reach full maturity, but they are dying from this highly destructive disease, and we have to try to contain it and prevent any further spread.

'The work will mean some areas of Cardinham are closed to the public for short periods for safety reasons, but we will try to keep disruption to an absolute minimum.

'Visitors to the forest can help minimise the spread of the disease by following simple bio-security instructions on signs around the area. These include washing footwear before leaving the forest.'

Users of the popular Camel tourist trail could also be affected by the felling at East Wood, but the Forestry Commission says it is keeping disruption to a minimum, and asks that people pay close attention to signage in the area.

'We'd like to reassure people who enjoy visiting these woods that most areas will be re-planted with new trees in time, or left to naturally regenerate' Mr Ebsary said.

'However, we'll plant different tree species that aren't susceptible to *P. ramorum*, because the pathogen can stay viable in the soil for several years.'

Just How Old Is Methuselah

A bristlecone pine on a mountain in California is considered the world's oldest living thing. Named Methuselah, it is estimated to be 4 600 years old. Scientists studying the ancient tree and other like it believe that Methuselah's seed sprouted at about the same time the pyramids were built.

Cut the Forest Down Now

As an economist I don't make predictions about climate change. I do try to understand what climate change means for the economy, though, because I need to know where the climate is going to make predictions about the Northern economy.

Of our two major industries, mining is not likely to be affected much by climate change. Forestry is a different matter. The band of forests across the middle of Ontario produces most of the province's dimensional lumber, pulp and paper, plywood and oriented strand board. It put the bread and butter on the table for most Northern communities.

The Ontario Forest Research Institute has been studying the effect of climate change on the Northern forests. The results are pretty scary. Summer temperatures in our major forest production areas will be four to five degrees higher. Winter temperatures will be five to six degrees higher. In the western half of northwestern Ontario, precipitation will drop by almost 10 per cent. These changes will result in considerably drier soils and slower growth. The length of the fire season will increase by up to 25 days.

By 2070, the 'climate envelope' for the Boreal forest will have moved far to the North. The trees won't move, of course – they will sit where they are as insects and diseases increase. With no or little increase in precipitation, evaporation will increase, resulting in increased frequency of uncontrollable forest fires and more large burns. Essentially the trees will die and rot or burn – they will literally vanish into thin air.

Growth conditions will improve in the Far North of the province, but trees migrate very slowly. Based on historic migration rates, the butternut populations need 450 years to expand their range by 90 km. In 50 years the climate envelope for our Boreal forest will be more than 900 migration years to the north.

All this is based on a relatively moderate change forecast. Many – maybe most – analysts expect more extreme warming because there is virtually no chance of slowing carbon emissions in the next 10 years.

The moderate forecast used by the Ontario Forest Research Institute has a dramatic economic implication: cut more trees now! Use it or lose it. We should start to salvage the existing wood before we lose it.

Forestry Economics 101 provides another reason why we should accelerate the Northern harvest in the face of climate change. Each year a tree adds a certain amount of wood. If the value of the new wood is greater than the interest you would get if you sold the log and banked the money, you let the tree grow. Otherwise, you cut it down. With high temperatures and drier conditions, trees will grow more slowly. The value of the new wood is lower so you harvest sooner.

Rapid harvest will provide jobs for Northerners. It will also open the way for 'assisted migration.' Assisted migration is the new term for helping populations move from places that won't support them to places that will. In forestry, assisted migration means planting species that will be adapted to the new conditions instead of waiting for the birds to do the job for us. It's also an opportunity to make sure that the new forest includes lots of high-value species and gives us a forest that is ready to harvest again sooner. Assisted migration would mean more jobs for Northern communities.

Foresters are wary of assisted migration. We don't understand the ecology of forests nearly well enough to do a really good job. Of course, we don't have a lot of time to be too fussy. The alternative seems to be letting big chunks of forest die and burn, then waiting a century or two for natural replacement. It is better to start experimenting and just accept the fact that we will make some mistakes. If the Ontario Forest Research Institute is right, nothing we can do will be worse than what we have already done.

The 'wait and see' approach will lead to a steady decline in the population of Northern Ontario. The 'salvage and assist' approach could actually increase the region's population and expand the economy. And it changes the relationship between the people of Northern Ontario and the forest - Northerners will finally take responsibility for the forests they depend on.

(Editors Note - One mans opinion, some what extreme)

Reminder

Just a reminder that the **fire season** starts on **MARCH, 1** after which a fire permit is required, continue to use caution when in your woodlot either working or recreating ; by:

*Carrying some fire fighting tools ie, axe, shovel, water bag, etc. * **Keep the exhaust clean on quad or other motorized equipment.** * **Check the spark arrester on power-saw.** * **Don't smoke , or sit down when having a smoke , make sure the butt is out cold.** * **Carry a cell phone to ask for help if you have a fire.** * **Get a fire permit for any burning** * **good Luck**

One year, I decided to buy my mother-in-law a cemetery plot
as a Christmas gift....

Th next year, I didn't buy her a gift.

When she asked me why, I replied,

"Well, you still haven't used the gift I bought you last year"

And that's how the fight stared

Give the Gift that Lasts

This an opportunity for you to give a friend, neighbor, or relative, whom you think would like to develop a patch of brush that is on their land into a Woodlot. A one year membership to the [Woodlot Association of Alberta](#), for a reduced rate of \$20.00.

How can you do this, Clip out the gift certificate application (*below*) fill it out and mail it to [Jurgen Moll, Box 84, Whitecourt, Alberta, T7S-1N3](#), along with your cheque of \$20.00 (*make cheque out to the Woodlot Association of Alberta*)

We will then send your candidate a certificate that he/she is now a member of the WAA for one year. Gifted to them by your self , along with a copy of the Log Jam .

=====

I _____ would like to buy a one year membership to the Woodlot Association of Alberta as a gift at the reduced rate of \$20.00,

For: Mr. / Mrs. _____ of

_____ Phone No. _____

Mailing Address : _____

E -mail Address _____

Enclosed is a cheque for \$20.00 made out to the WAA

Signature _____

Editorial

This is turning into a tough winter, in particular for the smallest herbivores such as shrews, mice, squirrels and rabbits. The winter started out great for these little beings, with some two feet of snow to give them shelter from cold and predator attacks. But now with the warming, chinook winds and some rain, much of the snow blanket is gone or turned into ice. This reduces their shelter from both the cold and predators such as coyotes, fox and lynx.

It will not be as hard on those that live in an undisturbed forest. Which offers many places of refuge such as under windfalls, in willow bushes, here they find their traditional shelters.

Whereas in the standard clear-cut where all the trees are removed there remains little cover for these little beings. For the large timber companies are legislated to pile and burn all logging debris. Then to aid reforestation many areas are blanket sprayed to eliminate competition from grasses and herbaceous plants. This makes perfect sense when one only considers the production of timber, and not all the other creatures that make a living on this land.

What then can one do if you carry out a clear-cut on your woodlot, to give the little beings a chance of survival. To start with leave the debris on the ground, and create some brush piles make them some two meters high by three meters across. Place them no closer than 60 meters from the standing forest, in case of a wildfire. Should you need to use a herbicide to reduce competition if planting the new forest, spot spray rather than a blanket spraying to kill all plants.

In this way we can help to maintain a healthy ecosystem, for the little beings are at the bottom of the food chain, if they are eliminated the food chain is broken and other species can not survive.

Reminder - Membership Renewals *due* November 1/12

For members who's membership expires in 2012 it will expire on

October 31, 2012

If you do not recall when your membership expires, call the WAA office at - **1-800-871-5680** - and ask Kim for your expiry date.

(Send your membership dues to the WAA office - Thanks)

New report highlights the importance of innovative tree planting techniques

Trees Ontario released a progressive report that combines modern afforestation methods with decades of planting experience. *Alternative Approaches to Afforestation* pushes the boundaries of conventional tree planting models by offering comprehensive afforestation and reforestation methodologies which consider carbon sequestration, biodiversity conservation, soil protection, as well as sustainable use of raw materials in a balanced way.

Afforestation is the establishment of forests on open lands that have not been covered by forests for approximately 50 years. This practice has many benefits including soil stabilization, site rehabilitation, protection of riparian areas and the provision of wood products, wildlife habitat, recreational opportunities, and flood control. Afforestation efforts also contribute significantly to carbon sequestration to meet obligations under the Kyoto Protocol.

"The rehabilitation work through afforestation techniques can, over time, initiate ecosystem restoration and recovery with respect to ecosystem health, integrity and sustainability," said Al Corlett, Trees Ontario's Program Manager and one of the report's contributing authors. "When used together with current planting methods, these techniques can promote greater biodiversity, help reduce the impacts of invasive insects and disease infestations, and increase forest health."

"Successful tree planting is a complex undertaking that requires close attention to a myriad of factors, including tree seed forecasting and collection, project planning, site and soil assessment, nursery stock production, tending and assessment operations, as well as technical education," said Robert Keen, RPF, Trees Ontario's CEO. "Trees Ontario's latest report will ensure that best practices, including the application of conventional and alternative afforestation methods, are implemented into the multi-layered tree planting infrastructure in order to enhance sector capacity and expertise."

Paul Gagnon, Lands & Waters Supervisor at the Long Point Region Conservation Authority, has taken part in an alternative afforestation project with the support of Trees Ontario and was also in attendance during the launch of the report. "For successful restoration efforts, innovative methods should be considered in combination with traditional techniques," Gagnon noted. "Several key alternative techniques, with a greater focus on ecological restoration, include planting of a wide variety of native tree species on a single site, planting trees in groups instead of rows, and using native plants to control weeds."

In today's current economic climate, it is critical for tree planting agencies to prioritize efforts and focus on areas where forest restoration will have the greatest ecological impact. Trees Ontario's latest report provides

Ontario's afforestation experts with unique restoration-based field procedures that can be integrated into various planting programs across the province with an innovative focus on biodiversity and enhanced resilience to climate change.

Regenerating the Boreal Forest

Jurgen Moll

The Boreal Forest has existed since the last ice - age some 10,000 years ago. It is the land form and soils that were left behind by the ice - age that dictate what species grow in our forests.

Every land form you encounter in Alberta is a result of this ice - age, from plains, hills, valleys, and lakes. As are the underlying subsoils these range from gravels, sand, silty tills and clays, each subsoil has tree species that are best adapted to it. A broad thumb nail sketch is the sandy soils require a deep rooted tree namely the pines, the silty tills are best suited for the poplars and some conifers, whereas the spruces do well on the heavy clay soils.

The reason that the different species are best adapted to a particular subsoil type is their water retaining properties. Whereas the sands retain water for a very short period, but the clays on the other end of the scale retain water for an extended period.

This does of course not mean that only certain species will grow on a site, for if one plants trees there they may well grow well, by nature alone they may not due to a lack of a seed source.

The natural Boreal Forest is a fire origin forest, in that it has been found that this forest has over the centuries it has burnt every 130 years. This is due to the very variable extremes of the climate, which has wet periods that are followed by drought

Therefore the forest must have the tools to regenerate following a fire to start a new forest. Some of the species are well equipped to regenerate, such as the Pines and Black Spruce whose cones are serotinous and require heat to open them thus releasing the seeds. Whereas the Poplars and Birch will sucker from the stump and root nodes, and can also be regenerated by seeds from adjacent live stands as the seeds can travel considerable distances dependent on the winds.

This leaves the White Spruce which is regenerated only from seeds, but because its cones open every fall and the seeds are dispersed, few of these if any survive the fire to start a new forest, therefore a living seed source must survive the fire.

The question is how do some remnants of the original spruce forest survive in a large crown fire. Because a crown fire is not discriminatory, rather it will burn everything that is dry enough to catch on fire as it sweeps across a forest.

These unburned remnants are found, on the edge of a muskeg, along a wet drainage and by a creek. It is easy to understand why they survive along a creek or a wet draw, but why do they survive on the edge of a muskeg when the entire muskeg is burnt and also the trees further from the muskeg.

The reason that these strips of trees did not burn lies in what caused the muskeg to exist, that being the clay subsoil which is not an even plain but has many depressions that once upon a time were small shallow lakes. That have slowly filled in with dead vegetation which has turned into peat, but the lake is still there and the peat is saturated in water.

These treed muskegs are the exclusive domain of the Black Spruce, the reason being that this spruce has the ability to have a very shallow lateral rooting system just above the water table of the old lake it grows upon.

Around the edge of these muskegs White Spruce grow which has a much deeper rooting system. Its roots will penetrate well into the clay subsoil. Therefore when the area experiences a drought, what happens is. The water table drops in the old lake on which the treed muskeg grows, the roots of the Black Spruce can no longer reach the water so they become tender dry. Whereas the White Spruce along the edge of the muskeg continue to draw water from the clay subsoil which continues to retain moisture, because water tends to move very slowly through clay.

With the moisture that the White Spruce gets from the clay subsoil it will continue to transpire water vapor which will protect it from the fire storm. But the muskeg will be totally burnt as will the trees further up hill from the muskeg.

These White Spruce will reseed the surrounding area, in the next several years. They will undoubtedly have a considerable seed crop, as when trees are stressed they tend to produce more seed. The spruce seed is distributed by wind and can travel up to one mile. The fire has created many micro sites on which seeds can germinate and grow the new forest.

That is why there are large spruce forests in the boreal zone largely thanks to the numerous muskegs it contains.

*(This is my theory and not based on any scientific study, rather from observations on my woodlot that contains several small muskegs. Perhaps someday a student may carry out a study and prove me wrong. **But till then I will Stick to my theory.**)*

Our Woodlot

Dennis Quintilio

Our woodlot is our home and also a land base for a herd of working horses that we use in the mountains every summer. This is our second woodlot, the first was a quarter section which we purchased in 1969 and sold in 1979 when we moved to Hinton. During those ten years we ordered tree seed from across Canada and Europe and started a small nursery in the garden. Our plan was to sell young tree stock to local landscapers as well as out-plant in our own fields. The ten years went by quickly and when we moved the neighbors came over and lifted all the trees that were still not transplanted or sold. We enjoy travelling back to the area south west of Stony Plain and looking at the rows of trees that all originated in that humble little nursery in the garden-time flies. We purchased the current home quarter and leased an adjacent quarter in the year 2000 from John Guy, who was born and raised about 3km to the west, north of Cherhill. John was a landscaper and had planted Colorado blue spruce, and also white spruce seedlings he dug out locally, for use in his landscape business. He also logged and sawed lumber on the home quarter which is predominantly stocked with white spruce that is around 80 years old. Our first projects included fencing and cross-fencing both quarters, clearing about 20 acres and seeding to grass/legume for horse pasture, and digging five dugouts.

We started selling 6-10 foot white spruce to a couple of landscape companies after we were set up for the horses, and also tending a plantation John had established. The white spruce plantation was about 26 yrs old with 6 ft x6 ft spacing and was doing well other than the bottom branches had died and created quite a fire hazard. It was easy to clean off most of the dead branches up to a height of 8 ft using a heavy club and then use a pruning saw for the remaining live branches. The plantation is now 38 yrs old and the plan is to evaluate each tree based on current DBH and annual leader growth and thin the least thrifty trees in 2015. The remaining trees will be increment bored over time to determine the increase in annual ring growth as a result of the thinning release. This is a great

project to involve the grandkids and teach them about basic woodlot management including setting up a rabbit trapline in the winter to discourage damage to adjacent seedlings.

The next major project was to complete a shelterbelt along the east boundary of the home quarter. John had planted white spruce seedlings and hoed out the weeds by hand for many years before the shelterbelt shaded in but it did not extend to corner of the property. One of the landscapers we were selling trees to had a good tree spade and so we horse traded with him to out-plant another 100 six ft spruce trees to complete the shelterbelt. It was a dry year so there was a lot of water pumped from the closest dugout to ensure the trees survived. We now have one-half mile of shelterbelt that is home for many birds including rough grouse that seem to defy traffic along the County road.

We have two wood stoves burning all winter so the horses are used for skidding and hauling trees cut from fence lines or blow down. A stone boat with a log rack is used with horses once snow falls to bring four foot bolts into the yard where they are bucked, split and stacked for the following year. Over time we have cut or improved trails for skidding trees and horse travel with a sleigh or wagon, and most importantly for fire guards. Although logging on a large scale has not occurred we have brought in a portable band saw several times to produce rough lumber for our use, and some for our kids that always seem to be building something.

After mapping the forest types from an update aerial photograph we have continued to increase the horse pasture through rotary mowing of marginal brush land and implemented stand tending in selected white spruce juvenile stands. Under planting of white spruce seedlings in pure aspen stands leaped ahead in 2010 when the WAA program kicked in and so far the seedlings have not been discovered by rabbits. This may be due to two bumper seed crops that have established white spruce regeneration throughout the quarter. Not only have we had the good fortune of these two seed crops there have also been a few tremendous growing years for our young seedlings. As a result a very vigorous spruce understory has developed in 12 years and this new inventory will be

factored into an updated woodlot management plan-due when I retire in a couple of years.

Since the woodlot is also our home there are many added benefits that come with a predominantly forested environment. In November we deer hunt right from the house and spend many hours walking the trails and trying to rattle in a monster whitetail buck-so far Leanne has outhunted me as she is more patient or luckier. We don't have to shoot any rough grouse as they like to fly into the house or shop windows on a regular basis so we have the frying pan ready and waiting. A fish pond on the property produces 3-4 lb rainbows so they also go in the frying pan with the misguided grouse. There are always mushrooms to add flavor to any meal and a large garden produces summer vegetables, and raspberries and Saskatoon's. A year round presence of birds provides an opportunity to observe breeding and nesting activity, habitat preference and feeding methods of song birds, woodpeckers, hawks, and owls.

One always has to factor in the maintenance effort required for a woodlot in support of short and long term goals. Our maintenance includes eliminating noxious weeds, reducing wildfire hazard, monitoring disease and insect damage, rotary mowing of trails and pastures, and stand tending. Following strong wind events there is always a salvage operation along fence lines or in the yard for either saw logs or firewood. We have noticed that east winds produce the most blow down as the older trees seem to have developed a firmness for the prevailing west winds. The tree tops from the salvage operations need to be piled and burned when snow depth allows for a safe fire but only if piled on upland clay soil as opposed to deep organic peat layers.

I guess our conclusion after 12 years of improving our woodlot is that the financial goals are outweighed by all the other benefits so the next plan will reflect wildlife, watershed and aesthetic values to a greater degree. The primary tool to manage for these values however, is selective harvesting of the older white spruce stands while protecting the understory.

