



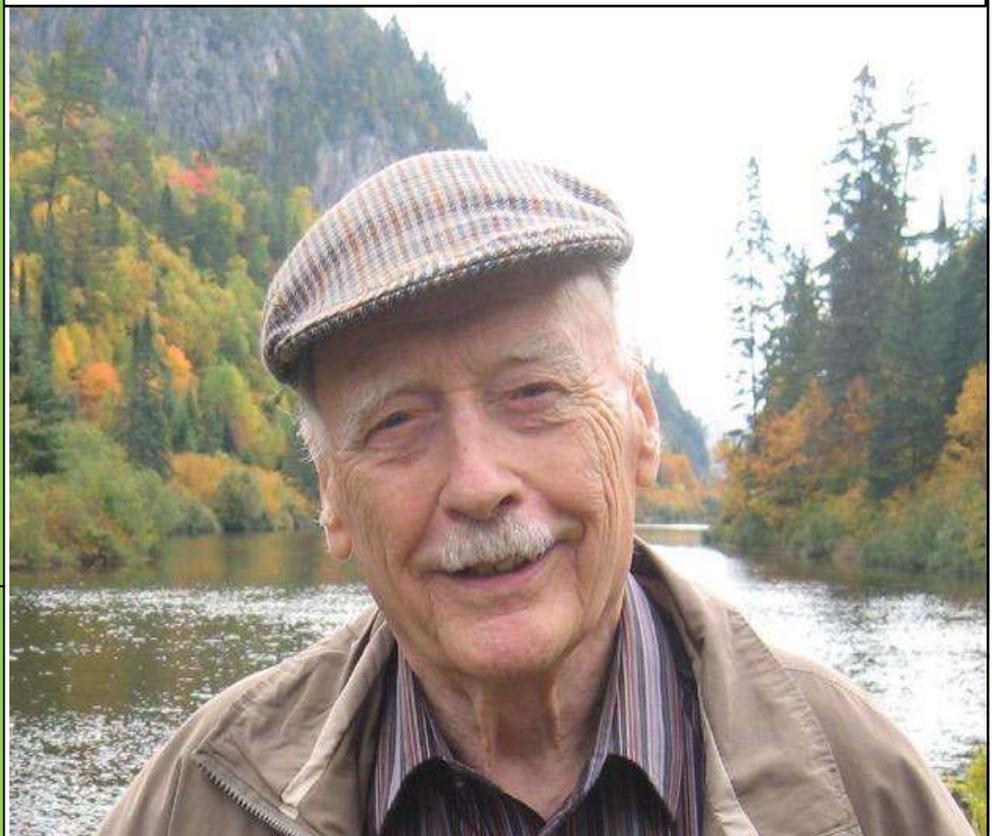
Forestory

Volume 7, Issue 2, Fall 2016

Contents

Black Sturgeon Lake - 3
Lumbering in Sudbury – 6
Averting Disaster – 9
Forest History and
Technology – 15
Art in the Park - 15
People
 Robert Day - 18
 Dr. Kuhlberg - 23
 Ken Armson – 25
Personal Recollections
 Algonquin Park
 Controversy – 28
 Junior Forest Ranger
 Program - 31
Species
 Sugar Maple - 33
Museum/Archives Corner
 Lakehead University - 34
Sylva Recap – 37
Resources – 40
Renewing Nature's Wealth
- 42
Events and News - 44
About the Authors - 45
Membership - 46

***Congratulations to
Ken Armson on his
appointment into the
Order of Canada!***



We want to hear from you!

If you have articles, photographs or images, interesting facts, web links, personal reflections or events that would be suitable for this newsletter, please contact the editor.

Board of Directors

Chair

Mark Kuhlberg, PhD

Past Chair

Ken Armson, O.C., RPF (Ret.)

Members

Rob Galloway, Vice Chair

Sarah Bros RPF

Dave Lemkay

Tom Griffiths RPF

Mike Commito, PhD

Secretary-Treasurer

Patricia Hammond, Forests Ontario

Journal Editor

Scott Miller



Member, Ontario Historical Society

<http://www.ontariohistoricalsociety.ca/en/>

Front Cover Photo Credits:

The photo can be found at:

<https://responsibilitytoengage.wordpress.com/the-figures-environment-panelists-moderator/>

Contact Information

Address

Forest History Society of Ontario

144 Front Street West, Suite 700

Toronto, ON M5J 2L7

Tel: (416) 493-4565

Toll Free: 1-800-387-0790

Fax: (416) 493-4608

Web Site: <http://www.ontarioforesthistorystory.ca>

Face Book Site: <http://www.facebook.com/forest.history.society.of.ontario>

General Email Address: info@ontarioforesthistorystory.ca

Journal Editor and Webmaster Email Address: fsoed@bell.net

Request for Content

Do you have an interesting story to tell about some aspect of forest history in Ontario? Or are you prepared to write an article for the newsletter on some aspect of forest history? Do you know of interesting photographs, documents, web sites or other items that would be suitable for inclusion in the newsletter? If so, please contact the editor to discuss the possibility of publishing your information in the newsletter.

Please provide your comments to the editor on items or themes you would like to see in the newsletter.

Copyright and Use Permissions

It is the author's responsibility to ensure that copyright ownership is acknowledged and appropriate use permissions have been obtained and are acknowledged for all materials published in this document.

Chair's Message: An Ode to Our Leader!

With fall upon us, we face the annual ritual of watching our days get shorter and the temperature drop. These changes remind us that winter is just around the corner, and although some of us dread this time of year, fortunately this autumn has been blessed with some truly magnificent news for the Forest History Society of Ontario (FHSO).

The Governor-General of Canada recently announced that Ken Armson, our founding chairman, has been appointed an Officer of the Order of Canada. Many would probably argue that this honour is long overdue, but all the same it is immensely gratifying to know that Ken has been recognized in this way. There is a lengthy story in this edition of *Forestory* that provides significant insight into Ken's achievements. Suffice it to say that he has arguably done more than anyone to improve the practice of forestry in our country, and in the process has gone to great lengths to preserve its forest history.

I first met Ken roughly twenty-five years ago; gosh how time flies! I was a bright eyed and bushy-tailed Master's in History student (with a full head of hair no less!) who wished to pursue a topic related to Ontario's forests for my Major Research Paper. My enthusiasm for the subject sprang from the many seasons I had spent – and would continue to spend – tree-planting in the wilds of northern Ontario. During my time in the bush someone (I suspect it was Mac Squires up in Thunder Bay) had recommended I contact Ken for help in pursuing my research interests. I can still remember using the public phone at the old Ontario Archives building on Grenville Street in downtown Toronto to call Ken. That was in 1991 or 1992, after all, when land lines were prevalent and email was not! Although my nervousness probably caused me to garble my words, Ken received my inquiry with alacrity. He insisted we meet to discuss my work, and that was the beginning of a long and wonderful quarter century both getting to know him and learning from his encyclopedic knowledge of our forest history. During this time, Ken facilitated my progress in any way he could, including helping me access the occasional cache of company documents that would undoubtedly have been off-limits if he had not vouched for my credibility! Furthermore, he supported me on my journey researching and writing about the early history of Ontario's pulp and paper industry. His help at this time was particularly valuable, because there were those who felt that this subject had been all but exhausted and need not be revisited. It was particularly gratifying to be able to tell Ken that my book about this subject was recently recognized by the Canadian Historical Association as the best work in the field of political history for 2015. Without Ken's assistance, I doubt that project would have seen the light of day.

The most remarkable part about Ken's impact on my understanding of our forest history has been the manner in which he has conveyed his insights and knowledge. His goal was always to enlighten, never indoctrinate, and he most often did so by opening up historical resources to me and let me arrive at my own conclusions about them. That is the stamp of an exemplary mentor, and I can only imagine how all those students whom he taught must have felt as they peered up at him during a lecture or field camp.

On behalf of the FHSO, I wanted to make a toast to Ken for all that he has done for us and congratulate him on this truly landmark achievement.

Mark Kuhlberg

Editor's Message

Another summer has come and gone, and with winter steadily approaching, it seems wise that we take the time to enjoy and appreciate the last few weeks of fall in Ontario. The mild weather will soon pass, and although this will provide Ontarians with many opportunities to engage in some of our most beloved outdoor recreational activities, it will also mark the end of yet another beautiful fall season in the province.

Nonetheless, as I watched our trees and forests change from their usual lush green to a more vibrant blend of red, yellow, and orange, I could not help but be reminded of the fantastic work that the members of the Forest History Society of Ontario (FHSO) have continually produced over the course of my time as the Editor of *Forestry*. When I took over this position exactly one year ago, I was completely unaware of the high level of interest that this journal generates from FHSO members, ordinary Ontarians, and even individuals outside of the province. This, of course, can only be attributed to the contributions of our numerous authors, who each season never fail to provide interesting snippets relating to the political, economic, social, and environmental history of Ontario's forests. The FHSO is grateful to have them at the helm of *Forestry*, for it is their continued enthusiasm which drives the publication of each and every issue.

In fact, earlier this year two of our more prominent members both received recognition for the outstanding work they have done in each of their respective fields. In June, Mark Kuhlberg, Chair of the FHSO and Professor of History at Laurentian University, received the Canadian Historical Association's "Political History Prize – Best Book" for his monograph *In the Power of the Government: The Rise and Fall of Newsprint in Ontario, 1894-1932*. Around the same time, Ken Armson, the FHSO's founder and inaugural chair, was appointed an Officer of the Order of Canada for "his efforts in the public and private sectors to promote forest management and regeneration." More details on Mark and Ken's awards can be found in this issue of *Forestry*. I think I speak for all members of the FHSO when I say congratulations to both Mark and Ken for their incredible achievements, and that we are proud and fortunate to have these two individuals leading the way as we move forward as an organization.

Thank you to all of our contributing authors for their great work, and to our readers for taking the time to read yet another edition of *Forestry*.

Scott Miller

Disturbance and Regeneration at Black Sturgeon Lake

By: Vince Nealis



Black Sturgeon Lake follows a major, north-south fault line between Lake Nipigon and Lake Superior in northern Ontario, Canada (49.36, -88.87, 251 m). It is situated at the southern margin of the boreal zone where mixed forests of white spruce, balsam fir, and trembling aspen north of Lake Superior intersect the Great Lakes-St Lawrence forest region to the west and east. A spruce budworm outbreak in the region in the early 1940s resulted in the identification of Black Sturgeon Lake as a strategic area for mapping susceptibility to spruce budworm by C.E. Atwood, officer-in-charge of the Canadian Forest Service's Forest Insect Laboratory in Sault Ste-Marie. One of the first activities at the field station was release of two parasitoids from British Columbia for biological control of spruce budworm. Perhaps more significant were the first aerial applications of DDT against spruce budworm in 1945. Atwood left in 1946 to become Professor of Forest Entomology at the University of Toronto but his influence continued as graduates of his program became the next generation of forest entomologists.

The completion of the new forestry laboratory in Sault Ste-Marie and expansion of the Forest Insect and Disease Survey in 1945, followed by construction of a field camp at Black Sturgeon Lake, established the area's primary role for spruce budworm research in Ontario. The research was broad

and fundamental ranging from early use of dendrochronology to reconstruct outbreak history (J.R. Blais), to the feeding behavior of budworm larvae (B.M. McGugan), life history of parasitoids (N.R. Brown), and the effects of weather on moth dispersal (W.R. Henson). As the outbreak declined in the late 1940s, Atwood's original intent of estimating impacts on spruce budworm came to the fore with development of a method to quantify defoliation at the shoot level (J.J. Fettes), still in use today, analysis of stand vulnerability (K.B. Turner), and the impact of secondary insects and decay fungi on damaged trees (R.M. Belyea, J.B. Thomas, M. Prebble, and J. Basham). A series of papers in the late 1950s based on work at Black Sturgeon Lake (A.W. Ghent) set the standard for research on regeneration in stands damaged by spruce budworm.

As spruce budworm populations remained low throughout the 1950s, the intensity of research at the Black Sturgeon Lake field station declined as well. Nonetheless, biological material collected there and deposited in museums was referenced in more than 20 systematic publications on diverse forest insects and even fungal hyperparasites. In 1961, research on impact of spruce budworm at Black Sturgeon Lake was revived by R. Fye and J.B. Thomas who re-assessed damage plots established 10 years earlier. They found the dense seedling recruitment following death of over-story trees in the late 1940s had been overcome by invading shrubs and then damaged significantly as dead trees collapsed to the forest floor. The result was high variability in the age and size of the stand components with surviving, large white spruce 'veterans' interspersed among various ages of balsam fir regeneration.

Fye used this opportunity to survey insects attacking conifer cones and seeds at Black Sturgeon Lake and began the first experimental work on natural enemies attacking spruce budworm in non-outbreak conditions by seeding trees with spruce budworm eggs and collecting larvae the next spring. He was the first to note that parasitism was especially high in these low-density populations, particularly by species of parasitoids not abundant in outbreak populations.

C.J. Sanders succeeded Fye at Black Sturgeon Lake in 1966. He identified the difficulties associated with sampling low-density populations of spruce budworm and became interested in the potential of recently-discovered sex pheromones for sampling insects in these situations. Over the next 30 years, Sanders became an authority on pheromones and with the assistance of G. Lucuik used the Black Sturgeon Lake field station to test their discoveries of moth behavior and develop pheromone traps as modern tools in applied ecology. Sanders also carried out regular nesting bird surveys and periodically assessed forest development in the aftermath of the 1940s outbreak so that when spruce budworm populations increased again in the early 1980s, a new generation of research began with a firm baseline on forest condition and the transition to a new outbreak.

The first of the new generation was J. Régnière who collaborated with Sanders to improve sampling techniques and developed temperature-dependent phenology models for budworms. They were joined in 1984 by V. Nealis who led the population research at Black Sturgeon Lake from 1985 until the outbreak collapsed in 1997. During this era, a large-scale aerial release of the egg parasitoid, *Trichogramma*, was carried out at Black Sturgeon Lake by S.M. Smith at the University of Toronto with the collaboration of the Canadian Forest Service and University of Guelph. These trials showed that release of parasitoids could provide sufficient, short-term reduction in spruce budworm populations and protect foliage.

By 1996, populations of spruce budworm had declined to levels where they were again difficult to sample but a vegetation survey was carried out (K. Baldwin). Mortality of codominant balsam fir in the aftermath was greater than 75% and basal area of the stand was dominated by a trembling aspen over-story with dense regeneration of balsam fir, as had occurred following the outbreak of the 1940s. A planned study to examine the environmental effects of partial-harvest in the area was pre-empted

by an extensive fire in 1999, and no research has occurred in the area since that time. Black Sturgeon Lake awaits a new generation of researchers to take advantage of its documented cycle of disturbance and regeneration to further inform our understanding of the ecology of boreal forests.

Selected References

- Belyea, R.M. 1952. Death and deterioration of balsam fir weakened by spruce budworm defoliation in Ontario. *Journal of Forestry* 50: 729-738.
- Bourchier, R.S. and Smith, S.M. 1998. Interactions between large-scale inundative releases of *Trichogramma minutum* (Hymenoptera: Trichogrammatidae) and naturally occurring spruce budworm (Lepidoptera: Tortricidae) parasitoids. *Environmental Entomology* 27: 1273-1279.
- Cameron, D.A., Morrison, I.K., Baldwin, K.A., and Kreuzweiser, D.P. 1999. Black Sturgeon Boreal Mixedwood Research Project. *The Forestry Chronicle* 75: 427-430.
- Ghent, A.W. 1958. Mortality of overstory trembling aspen in relation to outbreaks of the forest tent caterpillar and spruce budworm. *Ecology* 39: 222-232.
- Nealis, V.G. and Régnière, J. 2004. Insect-host relationships influencing disturbance by the spruce budworm in a boreal mixedwood forest. *Canadian Journal of Forest Research* 34: 1870-1882.
- Régnière, J. and Nealis, V.G. 2007. Ecological mechanisms of population change during outbreaks of the spruce budworm. *Ecological Entomology* 32: 461-477.
- Sanders, C.J. 1988. Monitoring spruce budworm population density with sex pheromone traps. *The Canadian Entomologist* 120: 175-183.
- Wellington, W.G., Fettes, J.J., Turner, K.B. and Belyea, R.M. 1950. Physical and biological indicators of the development of outbreaks of the spruce budworm, *Choristoneura fumiferanae* (Clem.) (Lepidoptera: Tortricidae). *Canadian Journal of Research* 28: 308-331.

The Rise and Fall of Lumbering in Sudbury

By: Scott Miller

While the city of Sudbury is most often associated with mining, its first natural resource-based industry was actually lumbering. Indeed, years before the true extent of Sudbury's vast mineral wealth had been fully realized, a number of lumbering companies had already established themselves in the area, injecting both money into the local economy and men into its workforce. The city's relationship with lumbering was ultimately short-lived, however. A brief overview of the rise and fall of lumbering in Sudbury provides insight into an often overlooked aspect of Ontario's forest history.



Workers hauling logs in the Sudbury area.

Railroad construction was the main catalyst in the birth of Sudbury's lumbering industry. In 1883, a camp for workers building the Canadian Pacific Railway (CPR) was constructed just north of Lake Ramsey. This development created a sizeable demand for local lumber and also marked the beginning of the community of Sudbury itself. By September of that year, the city's first sawmill, owned by the Leach & Brown Company, was operating out of Minnow Lake, and within a short period a few other mills were established nearby.¹ Along with supplying lumber to the CPR, these sawmills sold finished boards for the construction of local homes and buildings.²

It was not long before Sudbury became the centre of a flourishing lumbering industry. In 1892, an article featured in *The Globe* stated that "The lumbering industry is ... adding to the prosperity of the district," and speculated that "within 25 or 30 miles of Sudbury there are ... about 2,000 men engaged in lumbering."³ The nearby town of Wahnapiatae, for example, eventually developed into "a thriving lumber town" which at one point appeared to have the potential "of becoming a larger community than Sudbury."⁴ One estimate suggested that, at its peak, Sudbury's lumbering industry featured over 25 companies and about one hundred camps.⁵

¹ E.G. Higgins and F.A. Peake, *Sudbury Then and Now: A Pictorial History of Sudbury and Area, 1883-1973* (The Sudbury & District Chamber of Commerce, 1977), 27.

² C.M. Wallace and Ashley Thomson, *Sudbury: Rail Town to Regional Capital* (Toronto: Dundurn Press Limited, 1993), 18.

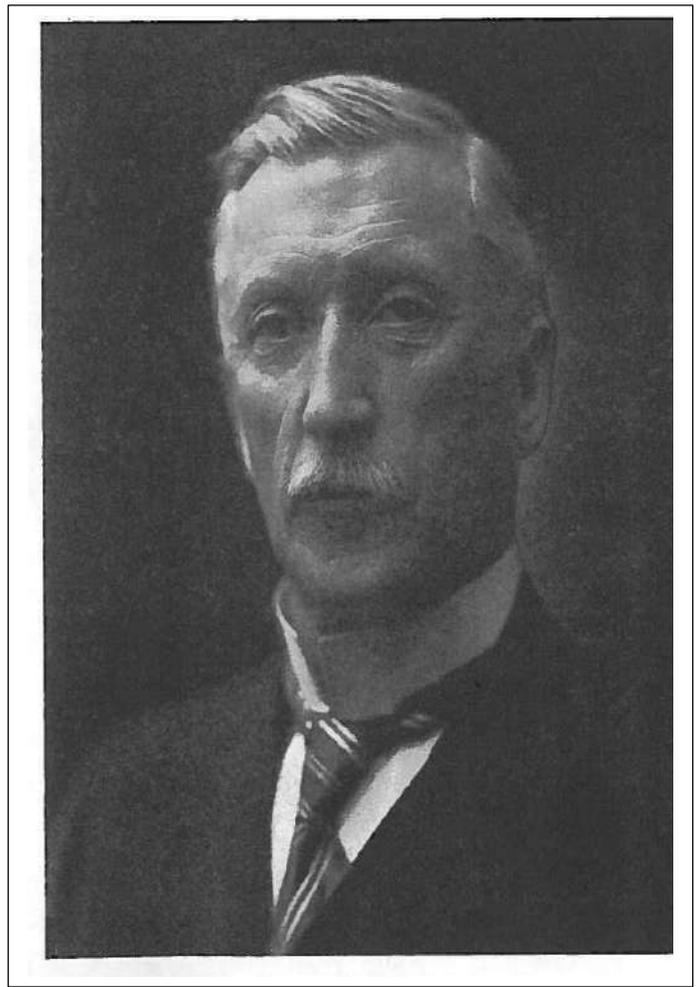
³ "The Sudbury Mining Region," *The Globe*, 20 December 1892, page 6.

⁴ Higgins and Peake, 27.

⁵ *Ibid.*, 31.

Several wealthy and powerful individuals were directly involved with Sudbury's lumbering industry. Businessman W.J. Bell made his fortune in lumbering after having come to the Sudbury area as an employee of the Hale and Booth Lumber Company.⁶ In 1907, for instance, he purchased a timber limit of approximately 93 square miles in size on the North Shore of Georgian Bay near Killarney.⁷ Bell later became president of the Spanish River Lumber Company, which also operated on the North Shore.⁸ Another well-known figure who invested in lumbering in the Sudbury district was Frank Cochrane. The owner of a successful hardware store in Sudbury, Cochrane began buying and selling timber limits in the area in the early 1890s.⁹ His most notable purchase came in 1910, when he and a partner paid \$315,000 for a 36 square mile limit which contained an estimated 60,000,000 feet of pine.¹⁰ Cochrane was also involved in municipal, provincial, and federal politics up until his death in 1917. Over the course of his political career, he served as the mayor of Sudbury, the Minister of Lands and Forests in Premier J.P. Whitney's government, and the Minister of Railways and Canals in the government of Prime Minister Robert Borden.¹¹ It was the likes of Bell, Cochrane, and other early lumber magnates whose companies "kept the town prospering during the early, uncertain days of the mineral discoveries and the first mines."¹²

Unfortunately, by the early twentieth century lumbering was already beginning to decline in Sudbury. By 1910, many of the limits that had been purchased when the area was first opened up by the Ontario government in 1872 had been abandoned.¹³ Furthermore, with Sudbury emerging as the world's leading supplier of nickel in 1913, mining quickly surpassed lumbering as the city's primary economic motor.¹⁴ Nevertheless, it has been said that lumbering continued to be Sudbury's "first line of



Businessman and politician Frank Cochrane (1852-1917) was active in Sudbury's lumbering industry from the 1890s onward.

⁶ Gwenda Hallsworth, " 'A Good Paying Business': Lumbering on the North Shore of Lake Huron, 1850-1910 with Particular Reference to the Sudbury District," (MA Thesis, Laurentian University, 1983), 160.

⁷ Wallace and Thomson, 75.

⁸ Hallsworth, 160.

⁹ Ibid., 161.

¹⁰ Ibid., 59.

¹¹ Scott Young and Astrid Young, *Silent Frank Cochrane: The North's First Great Politician* (Toronto: Macmillan Company of Canada Limited, 1973).

¹² Higgins and Peake, 31.

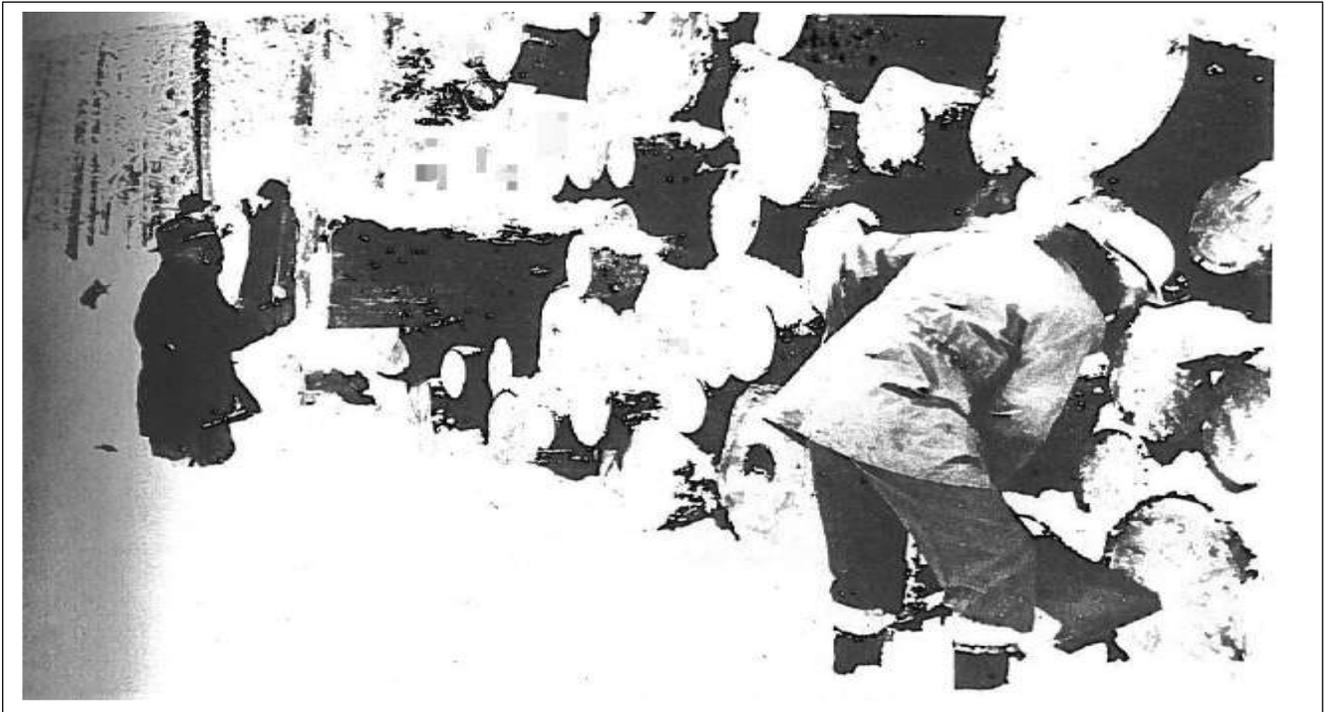
¹³ Hallsworth, 145.

¹⁴ Ian M. Drummond, *Progress without Planning: The Economic History of Ontario from Confederation to the Second World War* (University of Toronto Press, 1987), 57.

defence' throughout the decade, and indeed, until the 1920s."¹⁵ Gwenda Hallsworth best described the history of lumbering in Sudbury when she wrote:

The City of Sudbury gained to an extent from lumber activities and became a service centre. But the long term effects of lumbering are difficult to measure because the industry overlapped with mining which proved to be the mainstay of the area for a long time. It is doubtful if the population of the Sudbury District would have grown to any great extent if the area had not proved to be rich in minerals.¹⁶

Although the impact of lumbering on Sudbury's development pales in comparison to that of mining, it still serves as yet another example of how Ontario's forests have played an important role in shaping communities across the province.



Scalers measuring pine logs near Sudbury.

¹⁵ Wallace and Thomson, 75.

¹⁶ Hallsworth, 147.

Averting and Reversing Disaster: The Lessons of the Ghost Towns of the Larose Forest

By: Dr. John Bacher

The history of environmental protection in Ontario to a remarkable degree has been shaped by the need to avert and reverse disasters. By the beginning of the twentieth century, mass deforestation, human induced fires, floods, and desertification were raising concerns about the future of the province's forests. Much of the effort to protect the environment subsequently has been to prevent such catastrophes and to restore the ecological health of the landscape through the restoration of forest cover in watersheds.

Ghost towns have a powerful aura around them, full of prophetic warnings. Such lessons about human limitations in the face of the powers of nature are quite vivid in the three ghost towns of the Larose Forest. All that remains of Grant, Gagnon, and Lemieux are their cemeteries. The largest of the three, Gagnon, had about a hundred buildings, and how has ruins which are marked by nature trails.¹

Nowhere else in Ontario have achievements in conservation in response to deforestation been as spectacular as in the watershed of the South Nation river. The success was made particularly evident by the return of mammal species such as bear, otter, beaver, deer, and even moose. The return of wildlife was part of the reversal of deforestation and desertification which had created widespread wastelands that had become known as the Bourget Desert. It had been caused by the deliberate use of farmers and railways to clear land. This damage was subsequently intensified by the eating of tree saplings by grazing animals. Minor fires for land clearing were ignited into threatening holocausts wiping out villages by sudden gusts of wind. Clearing forests with fire on 5 October 1897 caused the villages of Casselman, South Indian, Grant, and Cheney all to be destroyed. Three people were killed by the fires.²



A moose roaming in the Larose Forest. With moose declining in much of eastern North America, the fact that the species has made a comeback in eastern Ontario is quite a wonderful tribute to the effectiveness of conservation efforts here.

¹ "Ferdinand Larose," *Wikipedia*, https://en.wikipedia.org/wiki/Ferdinand_Larose (accessed 28 July 2016).

² Alexandra D. de Quimper, *Grant: The People, the Settlement, the Story* (South Nation, Alexander D. de Quimper, 2002), 6-7.

The rescue of the South Nation basin was largely a result of the creation of the 28,000 acre Larose Forest. It emerged through massive afforestation and public land acquisition that began in 1926. The forest's growth continues from revenues derived from selective logging that is used to purchase more land. As employment collapsed when the forests vanished and farms became deserts, planting trees became a major source of employment in the region.

This impressive legacy is underscored by the reforestation of the lands of two ghost towns, Grant and Gagnon. Their residents, who had been dependent on logging and agriculture, abandoned them because of desertification. This is seen most vividly in the cemetery of Grant, the only remains of this ghost town. It is surrounded by what now have become the beautiful, towering white pines of the Larose Forest. The shrine like quality of the landscape lead many who view it to believe it is an ancient Indian graveyard.³

Grant and Gagnon became ghost towns in the 1950s as part of the transition of the South Nation watershed from a desert to a well-managed landscape of forests and agriculture. This was the legacy of the remarkable agronomist, Ferdinand Larose, who used the tools shaped by Ontario's pioneering forester Edmund Zavitz: the Agreement Forest program of 1921 and the Conservation Authorities Act of 1946.

The story of the third ghost town of the Larose Forest, Lemieux, is quite different from the rescue from the Bourget Desert. It is also more hopeful since a catastrophe was averted rather than being corrected. The averting action took place between 1989 and 1991, the same time as Ontario's environmental movement surged.



Photo taken earlier this year of the cemetery located in the ghost town of Grant.

The efficient way in which the transition of the community to a ghost town was managed was a tribute to the capacity of Ontario to avert a potential catastrophe through effective conservationist action. What sparked the intervention that rescued the people of Lemieux was a landslide in Quebec that killed 31 people and destroyed 40 homes in the village of Saint-Jean-Vianney in 1971. The village,

³ Ibid, 10; "Lemieux, Ontario," https://en.wikipedia.org/wiki/Lemieux,_Ontario (accessed 28 July 2016); "Grant, Ontario," https://en.wikipedia.org/wiki/Grant,_Ontario (accessed 28 July 2016); "The Ghost Towns," *South Nation Conservation*, <http://www.nation.on.ca/recreation/geocaching/historical-geo-passport/ghost-towns> (accessed 28 July 2016).

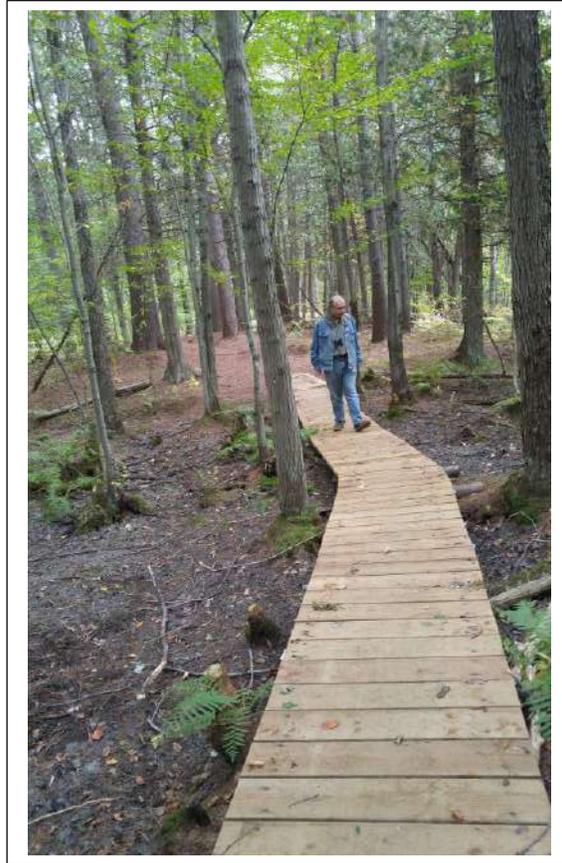
which had a population of 1,266 people, was subsequently closed. The entire community was evacuated. It was later found that a landslide had taken place here five hundred years earlier.⁴

The landslide at Saint-Jean Vianney was followed by another landslide of seventy acres of the same soil type, Leda Clay, along the South Nation River. This clay is a rock flour created by glacial abrasion, vulnerable to the loss of shear strength. These soils are present throughout the Ottawa Valley and the St. Lawrence Lowland region. Leda Clays originate in sedimentation created by the vanished Champlain Sea. Following the last ice age, the South Nation River cut a valley 23 metres in depth. At Lemieux, a zone of Leda Clay forms the lower part of the valley sides making the area vulnerable to landslides.⁵

The South Nation landslide of 1971 triggered investigations by the South Nation Conservation Authority. It conducted soil tests along the river to search for places where human life could be imperilled through similar events. By 1989 it was decided that the town be evacuated. All 28 properties over a two year period were sold to the provincial government for a combined total of \$2.5 million. This resulted in financial benefits to former residents. During these two years there was considerable debate, with many sceptics denying a disaster would come. Some entire structures were relocated to safe zones. Only the village's cemetery remains. The last structure was dismantled on August 4, 1991.⁶

Heavy rains are usually a prelude to landslides on exposed Leda Clay soils, causing them to liquefy. This is what took place on 20 June, 1993, less than two years after the evacuation had been completed. Some 17 hectares of farmland on the edge of Lemieux plunged into the South Nation River, creating a crater 329 metres wide and 18 metres deep.⁷

Two years following the landslide the slope was slightly regraded to reduce erosion. The scars of the landslide's slope were seeded with grasses, legumes, and 7,600 trees. Former highway lands that collapsed into the crater have been reforested. Lands deep in the



Author walking in former ghost town of Grant, now completely part of Larose Forest except for cemetery and school.

⁴ "Lemieux, Ontario," https://en.wikipedia.org/wiki/Lemieux,_Ontario (accessed 28 July 2016); "Saint-Jean-Vianney," <https://en.wikipedia.org/wiki/Saint-Jean-Vianney> (accessed 28 July 2016).

⁵ G. R. Brooks, J. M. Aylsworth, S. G. Evans and D. E. Lawrence, "The Lemieux Landslide of June 20, 1993, South Nation Valley, southeastern Ontario - a photographic record," https://www.nation.on.ca/sites/default/files/Photographic%20Record_Lemieux%20Landslide_G.R%20Brooks,%20et%20al_Natural%20Resources%20Canada_1993.pdf (accessed 28 July 2016).

⁶ Tom Van Dunsen, "Landslide dangers along South Nation River mapped out," *Ottawa Sun*, 28 November, 2012.

⁷ "Lemieux, Ontario," https://en.wikipedia.org/wiki/Lemieux,_Ontario (accessed 28 July 2016).

crater have slowly become reforested through natural regeneration. For educational purposes a number of commemorative plaques explain the story.⁸

The three ghost towns of the Larose Forest tell an important story about the impact of disasters on our communities and our environment. It has been said that when Ferdinand Larose began his mission people “just laughed at him.” This mocking of a prophet illustrates how conservation lessons, although important, are frequently resisted.⁹

⁸ Ibid.; Van Dunsen.

⁹ De Quimper, 34.

Forest History and Technology

By: Ken Armson

Innovation and new technologies are around us every day: in the workplace, at home, and as we travel. In this age of electronics we come to expect an almost continuous succession of new devices and processes as normal, but this has not always been the case. The history of innovation and technology in the forestry sector has many examples of different patterns of development. Many have been initiated by individuals in response to perceived needs that are often economic in nature, but also have social and environmental aspects as well. Another feature which can play an important role is the availability of a process or technology outside of the field of a particular endeavour but which can be applied within a sector such as forestry. A prime example of this was the development of reliable hydraulic systems after World War Two (WWII) and their use in spawning equipment for logging such as skidders and hydraulic shears as mechanization evolved through the 1950s and 1960s. Sometimes the initial rationale for the development and use of a particular piece of equipment has additional positive consequences. The best example of this was the installation of wide tires on skidders based on lowering operating costs but which provided for a positive effect environmentally when used on organic forest soils.

Often there is a long lead time between the original innovation and its general use outside of its intended purpose. An example of this can be seen in the invention of saws. The first circular saw was invented in 1777 in England. Until then logs were sawed in pits by two men with a straight saw, one man in the pit and the other above. At this time gang saws (straight saws fixed in a rack and powered by water or by steam) were in use. For large logs, circular saws had to be larger, resulting in wider kerfs and greater wastage of wood. The invention of the band saw in 1808 was seen as the solution, but the problem was that the metal used to make the continuous ribbon of metal could not stand up to the stresses involved. It was not until 50 years later that a process for tempering the steel was invented in France that enabled the band saw to become a key factor in the burgeoning of the pine lumbering industry in eastern Canada.

It has been stated that “The development of the chainsaw represents one of the longest lead-in times in the history of mechanical technology.”¹ The concept of a moving chain with teeth was a medical invention of the late eighteenth century as a means to cut into human bones. The first North American patent for a chainsaw was issued in the United States in 1858, but James Shand, a Manitoba millwright and farmer, obtained a patent in 1918 and took a working model a year later to British Columbia to try to interest the lumber industry there. Shand was ultimately unsuccessful, and his patent lapsed in 1930. The first production models came from Germany in 1927 and a model was tried in Québec in 1929. By the mid-1930s there was an increasing interest especially in British Columbia, where Bloedel Stewart and Welch tried a two-man saw in 1937. The saws were heavy and it was not until after WWII, with the use of aluminum and light weight small gas engines, that the modern chainsaw appeared. The eastern Canadian pulp and paper industry did not seriously adopt it until the mid-1950s.

Canadian innovation in tree harvesting is best illustrated with the Beloit harvester. The idea for such a machine originated with the woodlands staff of Marathon Paper Mills in Marathon, Ontario. The company engaged Bob Larson to develop such a machine and by 1963 a patent was issued and the rights to manufacture such harvesters were acquired by the Beloit Corporation in Wisconsin. Another

¹ C. Ross Silverdale, *Broadaxe to Flying Shear: The Mechanization of Forest Harvesting East of the Rockies* (1997).

area of Canadian innovation in forestry is that of the container seedling stock for reforestation and certain types of site preparation equipment, but that is a story for another time.

Become a member of your provincial forest history organization:

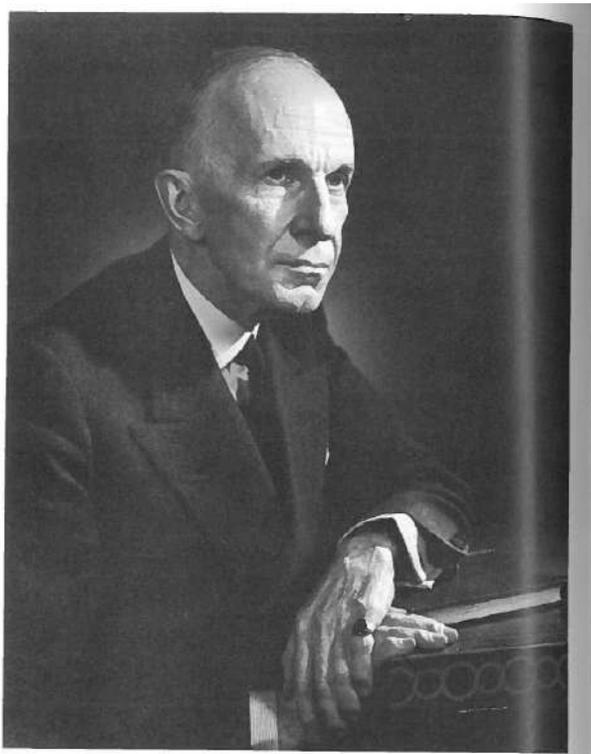
- Forest History Association of British Columbia, 564 Oliver Street, Victoria B.C., V8S 4W3.
E-mail: info@fhabc.org. www.fhabc.org
- Forest History Association of Alberta, 22 Hutchinson Place, St. Albert, AB. T8N 6R3.
E-mail fhaa@albertaforesthistor.ca. www.albertaforesthistor.ca
- Forest History Society of Ontario, Ste. 700 – 144 Front Street West, Toronto, ON M5J 2L7.
E-mai: info@ontarioforesthistor.ca. www.ontarioforesthistor.ca
- Société d'histoire forestière du Québec, 1000 3^e Avenue, P.O. Box 52063, Québec, Qc. G1L 2X4 E-mail: info@histoiresforestieres.com. www.histoiresforestieres.com.

Art in the Park

Vincent Massey and Artistic Representations of Ontario's Forests

By: Scott Miller

Ontario's forests have long been a source of artistic inspiration. The province's natural landscape has been memorialized by countless artists over the years, with many of their works receiving praise and recognition at both home and abroad. While he himself was not an artist, one individual who devoted considerable energy toward promoting Canadian artwork in general was Vincent Massey (1887-1967). A prominent businessman and diplomat, Massey regularly provided Canadian artists with platforms to display their work, some of which captured the essence of Ontario's woodlands. Consequently, Massey must be given credit for having indirectly exposed many people to the awe-inspiring nature of the province's vast forests.



Canadian diplomat Vincent Massey (1887-1967) was an avid promoter of Canadian art and culture.

Massey was heavily involved with Canadian business, politics, and culture throughout his life. He married his wife Alice in 1915, and together they shared a lifelong passion for art. In fact, in 1925 Massey was made trustee of the National Gallery in Ottawa where he served until 1952. By 1921 he was the president of the highly successful Massey-Harris Company, but four years later he left the corporate world and began his career in politics after being made a minister without portfolio in the Cabinet of Mackenzie King's Liberal government.² In 1935, King appointed Massey as the high

² Vincent Massey, *What's Past is Prologue* (Toronto: Macmillan, 1963), 80-94.

commissioner for Canada in London, a diplomatic position intended to give Canada the opportunity to represent its various interests - financial, commercial, military and more – within the British Empire.³

Over the course of his career as high commissioner, which lasted until 1946, Massey coupled his political duties with a personal desire to promote Canadian culture in Britain, and artwork was one of the primary means by which he aimed to achieve this goal. For example, in the autumn of 1938, Massey and the National Gallery in Ottawa organized *A Century of Canadian Art*, an exhibit which displayed exactly what its title implied at the Tate Gallery in London. The grand opening was 14 October, and within the first two weeks about 22,000 people had visited the exhibit.⁴ It featured a wide range of pieces, including contemporary paintings by Tom Thomson and the members of the Group of Seven. Since both Thomson and the Group of Seven are famous for having depicted images of the Canadian landscape in general and Ontario's forests in particular, it is safe to assume that the latter was featured in at least some capacity during *A Century of Canadian Art*. Regardless, the show received widespread critical acclaim, and was "considered wider in scope and more representative than any exhibition of Canadian art previously seen in Britain or in Canada."⁵ Furthermore, Massey used his various connections in Britain to help the National Gallery in Ottawa and the Art Gallery of Toronto acquire new artwork and gain exposure abroad.⁶ He also became greatly influenced by British models of state-supported art, encouraging the Canadian federal government to adopt similar strategies as their imperial counterparts.⁷



***A Century of Canadian Art at the Tate Gallery in London
(1938).***

³ Roy MacLaren, *Commissions High: Canada in London, 1870-1971* (McGill-Queen's University Press, 2006), 308.

⁴ Karen A. Finlay, *The Force of Culture: Vincent Massey and Canadian Sovereignty* (Toronto: University of Toronto Press, 2004), 170-173.

⁵ "Our History: 1930s," *National Gallery of Canada*, <https://www.gallery.ca/en/about/1930s.php> (accessed 1 November 2016).

⁶ Finlay, 169-170.

⁷ *Ibid.*, 7.

Evidently, then, Massey undoubtedly had a significant impact on Canadian artwork during his lifetime, and, more precisely, provided opportunities for artistic representations of Ontario's forests to receive widespread recognition in Canada and overseas. Although his legacy has been characterized largely by his political achievements, one must not overlook Massey's important contributions to the development of Canadian culture.



***Northern Lake* (1928) by A.Y. Jackson of the Group of Seven.
This painting was donated to the National Gallery of Canada
by Massey.**

Remembering Robert Day (1931-2016)

The following was previously published in "The Forestry Chronicle." The FHSO has been given permission to reuse it here.

Robert John Day
1931 – 2016



Robert John Day passed away in St. Joseph's hospital in Thunder Bay on May 25th with his family by his side. Bob was born September 9th, 1931 in Oxford, England, the youngest of three children and the only son. At the age of 19 he was conscripted into the British Army, achieving the rank of 2nd lieutenant. In 1952, he enrolled at Oxford University where he studied forestry. After graduating with honours, he was awarded a Forestry Fellowship and completed his Masters at the University of New Brunswick. It was there that he met his wife of 33 years, Susan Laverty.

Bob taught at the University of Toronto, Lakehead University and Lae University of Technology, Papua New Guinea. He was a world-renowned leader, teacher and researcher in silviculture; his enthusiasm and energy inspired numerous students and colleagues [seen in the testaments below].

He loved carpentry, created magnificent flower and vegetable gardens, enjoyed Nordic skiing, and was a master marionette puppeteer, producing puppet shows for and with children in his community. Bob adored painting, riding his e-bike, and most of all, spending time with his family. He was a spiritual man, involved in the Brotherhood of St. Andrew's men's church group with his son Ralph.

Bob is survived by his children: Rebecca Winnett-Day, Bill Day (Helene), Ralph Day (Wendy) and Rachel Day; his grandchildren Barbara Vukmanich, Andrew Vukmanich, Paul Vukmanich, Jonathan Day, Matthieu Day, Jessica Day, and Adam Day; and by his sisters Ann Norman and Barbara Richards and their children. He is predeceased by his parents William and Ida Day, and his dear friend Mary Duchnicki.

The funeral service was held June 4th at St. Thomas Anglican Church in Thunder Bay with internment at the Riverside Cemetery.

[*Editor's note:* The above tribute was read at Bob's "Celebration of Life" ceremony but it says little of the influence he had on so many people—students, colleagues, others unknown—and so we offer here some personal remembrances of one very special person].

"His nickname was 'Eagle Day.' Some thought it was because he 'soared' over all of us (which indeed he did) or perhaps because he was so keen on everything and all-seeing. Well, the truth is more mundane. Bob's nickname was born the autumn of 1967 and awarded by the Class of 6T7 simply because the CFL's Toronto Argonauts had picked up a new quarterback by the name of Herman Sidney 'Eagle' Day. Both 'Eagles' had a lot of class and a lot of style." *Ron Ayling, 6T7*

"Bob was a character! He used to give me heck for talking in the back row—and he was right to do so. He was such a strong field forester—he took us to places like Thessalon to appreciate the big red pines. I remember he kept us very busy in the evenings with homework so we wouldn't find other ways to spend our time. He and Dr. Murray did a tag team delivery of the silviculture course. Gord Murray was the straight man—Bob was definitely more of the storyteller! Even forty years ago, Bob was involved in research. That made him unique in the School and the University. He was responsible for bringing people like Irwin Smith to Lakehead to establish the LU Seedling Technology Research Centre (LUSTR)." *Professor Nancy Luckai, Coordinator, FoReST Laboratory, Lakehead University*

"I am attaching a copy of a self-portrait that Bob did of himself back in 2004 following a trip back to Alberta with his youngest daughter (Rachel) to re-visit some of his original lodgepole pine stand dynamics work from his very early days with the CFS. Bob was a very accomplished painter and developed a real knack for portraiture. His paintings were on display at the funeral reception following his memorial service. I asked his eldest son, Bill, whether I could take a picture of his self-portrait as this image was 'quintessential' Bob—red plaid bush coat, glasses pulled down over his nose so he could see, his big bushy eyebrows, hands the size of a bear's paw, a calculator in hand (likely a TI-59 programmable from his early years) as he is either calculating the RSI of the stand or its normal stocking. This is how I and many, if not all his graduate students and 4th year silviculture students likely remember him. It is interesting that the trees behind him (in the portrait) have epicormic branching and almost have a 'tree fern' look to the foliage. I wonder if Bob was testing us as he had spent time as a visiting professor in Papua New Guinea where he fell in love with the southern hemisphere 'crop' species such as radiata pine and the eucalypts. We all had a good chuckle that Bob was still testing us and perhaps setting us up for the 'take down' as he often did in field school and labs.

I remember Bob as a 'larger-than-life' individual who was a big kid at heart (albeit totally politically incorrect on many instances by current standards), had a personal passion, stamina, and energy for being in the field, whether it was in a rain storm or in deep snow. Bob enjoyed dynamic discussions—provided he was holding the upper hand in the case being made—and made you think

that he marched to the beat of his own drum. Bob was one of a handful of applied science folks who helped move the quality of reforestation planning and activities ahead in boreal Ontario through his applied research and development activities involving natural regeneration and boreal fire ecology (Quetico fire studies), bare-root and container nursery stock production and their over-winter storage, production of one of the first landform/soils-based silviculture guides—something that I took and advanced in my own career in the development of the ecological and management interpretations associated with Ontario's more recent FEC/ELC systems, and of course—booms on—vegetation management and stand improvement practices. He was instrumental in the development of quantitative silviculture and crop-planning tools and introducing that aspect of strategic stand-level planning to Ontario during the late 1980s—something that has been totally lost in today's forest management planning and operational silvicultural environment—leaving us to hope that somehow the 'crop' value of the trees and stands (healthy and productive species growing on the right site with the correct initial spacing) will, in time, yield both the necessary forest production metrics (growth, yield wood quality, stem form), habitat and environmental services that Ontarians continue to expect from their publically held forests (run-on sentence—Bob's red pen would be out on this one!). He believed in evidence-based science—not just a modeled abstraction of reality that appears on our computer screen in the many forest management models we use for the evaluation of sustainability and forest harvest regulation these days. Bob was one who could look at a stand table, a yield curve or a plot on a stand density diagram, and then paint you a word picture of what that illustration represented in the way of site occupancy, stand composition, structure and function—and of course stand level growth and yield.

As I approach my own retirement this fall after 35 mostly successful years with the OMNRF in the field, I attribute much of my career success and a passion for boreal forest ecology, vegetation management and boreal mixed-wood silviculture to Bob and his ability to communicate with the practitioner in the field. I regularly thank the Creator for him having taken a risk on me as a non-forester entering into his graduate program. It inspired me to go on and continue to take undergraduate courses well after I graduated with my MScF. I always liked to believe that he saw a glimpse of the 'hybrid vigor' potential in me, coming from a background in agriculture and soils and vegetation ecology, along with my as yet unabated curiosity of Ontario's forested ecosystems." *Bill Towill, Site & Program Coordinator, OMNRF*

"All of us that worked with Bob will remember him: an imposing, energetic forester, brimming with ideas, who would listen as well as he could speak. Working with him created a positive environment, whether it was camping in the wilderness or figuring a new procedure to determine the quality of nursery stock. Teaching his students in the best ways he could was his greatest ambition. If nothing else worked, he would call on his experience in the British army and assure attention. I first met Bob professionally at his presentation on herbicides, where he demonstrated the harmlessness of whatever he was promoting by taking a drink of it on stage! It launched me into a research program that paid big public dividends. He launched many careers far beyond the periphery of Lakehead graduates and the world is the better for it; one of the deep satisfactions of a teaching career. Soon after he arrived in Thunder Bay and for many years, he and his wife Susan and later on his children too became our close partners in annual canoe trips and camping outings with our local forestry friends. We would see him really relax. With Susan he was a good camper but his fishing skills never

made it up to par. Once when he did catch the only fish on a trip, he became so excited that he tipped his canoe with his wife in it. With the ice just out, it was not pretty! In his last years Bob suffered innumerable physical set-backs that handicapped his interests and activities. We visited in the summer of 2014, and he seemed resigned to the physical limitations of wheelchairs and so forth, getting much satisfaction from his children around him. Bob died surrounded by his family on May 25th. We lost a good friend, dedicated to his professional and family responsibilities.” *Dolf & Anne Wynia, Langton, Ontario*

“It was 1967 while attending North Toronto Collegiate Institute that I was walking between tables in the cafeteria that I picked up a brochure on the Faculty of Forestry at the University of Toronto. It was a brochure announcing that there would be an Open House at the Faculty on George Street. Prospective students and others that wanted to learn about what the University had to offer in the way of forestry education were invited to attend. This seems like a weird twist in the possibilities for a career for me, as I was focused on gaining entrance to the U.S. Air Force Academy in Colorado Springs, and failing that, engineering at Waterloo. In any case, I attended the Open House and on the second floor I wandered into an office and guess who greeted me—Bob Day. We talked; actually he talked, I listened. What amazed me was his enthusiastic manner in describing the profession of forestry and the great responsibility that foresters have in managing Canada’s forest resources. Enthusiasm was Bob’s hallmark. I entered the Faculty of Forestry in the Class of 7T1. I remained enthralled with Bob’s teachings in class. Bob would be ripping through his experiences in silviculture, and with historical accounts of English and German forestry. His students clearly had difficulty keeping up or even catching the significance of what he was saying.

‘Enthusiasm’ was both Bob’s hallmark and his middle name. This was clearly evident at Spring Camp at the ranger station [May at the Dorset Ranger Station near Huntsville, Ontario]. One day our class in its second year was preparing for a day-long field trip on glacial geology and its relationship to decision-making in silviculture. It was a long hot day and towards the end of the afternoon we had one more stop, so we all thought. After that stop, we piled back on to the bus and were looking forward to a nice ride back to the ranger station and a hot dinner. Well, who would have guessed—Bob saw something in the field that he felt everyone should know about. He cared that his students learned as much as possible. The bus came to a screeching halt and Bob, who always sat in the front, jumped off the bus and (literally) ran into the field. It wasn’t long before he noticed that no one was following him—so with a stern look on his reddening face, and perhaps with a touch of disappointment, he arrived back at the bus and yelled at the top of his voice, “Okay you bastards! Off the bus!” We got off the bus. We needed to be force-fed sometimes.” *Keith McClain, Class of 7T1*

“I first met Bob in 1954 at the Department of Forestry, Oxford University when he was in his final undergraduate year and I was a graduate student. His father, W.R. Day, was the Lecturer in forest pathology and I would go out on field trips with him and his students—he was unlike any other forest pathologist—he carried a spade and looked at trees as whole entities and dug soil pits! Bob took after him.

When I returned to the University of Toronto in 1956, I followed his move to UNB to take his Master’s degree in forestry, and then his joining the Canadian Forest Service in their Calgary office where he focused on the regeneration of forests around Blairmore. In 1963, Professor Bob Hosie, who taught silviculture at Toronto, announced that he would retire in 1965 and I suggested to Dean Bernie Sisam that Bob Day should be considered as his possible replacement. I happened to be

going to Alberta and BC that summer and Bernie suggested that I meet with Bob and sound him out about coming to Toronto. I did and the result was that Bob joined the Faculty in June 1965 and remained there until 1972. After his arrival I spoke with Steve Brodie, head of the Timber Branch in the Ontario Department of Lands & Forests and suggested that it would be good idea if they sponsored Bob during his first year on trips around the province to get to know the forest conditions and L & F field staff, which they did. This resulted in Bob having a great rapport with L & F personnel.

As students of those years can attest, Bob and I were a team, joined in 1967 by Bob Fessenden. Bob focused on the application of herbicides because competing vegetation was one of the chief causes of poor survival and growth in many efforts at regeneration. Much of our team fieldwork centred on the Englehart Management Unit (EMU) near Swastika. In part because that was where we began the IV year fall silviculture field camp but also because the Swastika nursery and Junior Ranger camp at Burt Lake provided useful facilities and accommodation, and most importantly the Lands & Forest staff (later MNR) were most helpful. Those annual weeks at Swastika provide many delightful memories including the planting of the 1967 centennial plot which is still visible from the air (see photo).

In Toronto, the three of us and our students conducted laboratory and greenhouse studies at Glendon Hall, located on the grounds of York University. Both there, and in the field during the summers, I think, without any exaggeration that the presence of Bob Day provided some of the most exciting and fun times in our forest studies that any group could have. It was a stimulating period, not without occasions of frustration with Bob when he forgot, lost or mislaid some essential piece of equipment or document!

I believe that one of the most satisfying projects that he and I engaged in as a pair was the establishment of the Nelder spacing plots on the Englehart Unit. The sheer mental and physical exertion of putting them in place acted as a bonding between us. Research can have unintended consequences. As a result of Bob's experience in Alberta, he wanted to try out test plantations of lodgepole pine from three latitudinal locations in Alberta to check their performance in Ontario against jack pine on the EMU. To do this he acquired the appropriate seed lots which Ken Reese, who was the Swastika nursery superintendent, obligingly sowed and raised to outplanting size as 2+0 stock. Bob then laid out a series of plots in which, in total, 10 000 lodgepole pine seedlings were planted, each identified by an adjacent steel pin. This was a year or so before he left Toronto for Lakehead University. During this same period, I had a PhD student, Syd Shea who was undertaking a major study on growth and yield of jack pine. One aspect was to determine the cause of cankers which caused the distortion of growth in the lower stems of jack pine such that the value of the butt log for lumber was significantly reduced. Shea was able to reveal that infection by sweet fern blister rust (*Cronartium comptoniae*) could occur in the seedling stage rather than much later, and an inspection of jack pine and lodgepole pine seedlings in the nursery showed that the lodgepole were much more infected than jack pine. After Bob had left, I would periodically inspect the plantations and when they were about two metres high I noticed some were beginning to flower, and with a shock I realized that any interbreeding between the two pine species could result in the introduction of an increased susceptibility to the canker into the jack pine population. The result—my technician made a special trip to pull up every lodgepole pine and destroy all 10 000.

I know from my later contacts with former students of Bob's when he was at Lakehead University, that he had a major effect, or perhaps the right word is impact, in his teaching and research. No one who had any dealings with Bob could claim they weren't impressed one way or another. No matter what the subject or occasion underlying it there would be his spirit of infectious humour and humanity and that perhaps is his greatest legacy." *Ken Armson O.C., R.P.F.(ret.)*

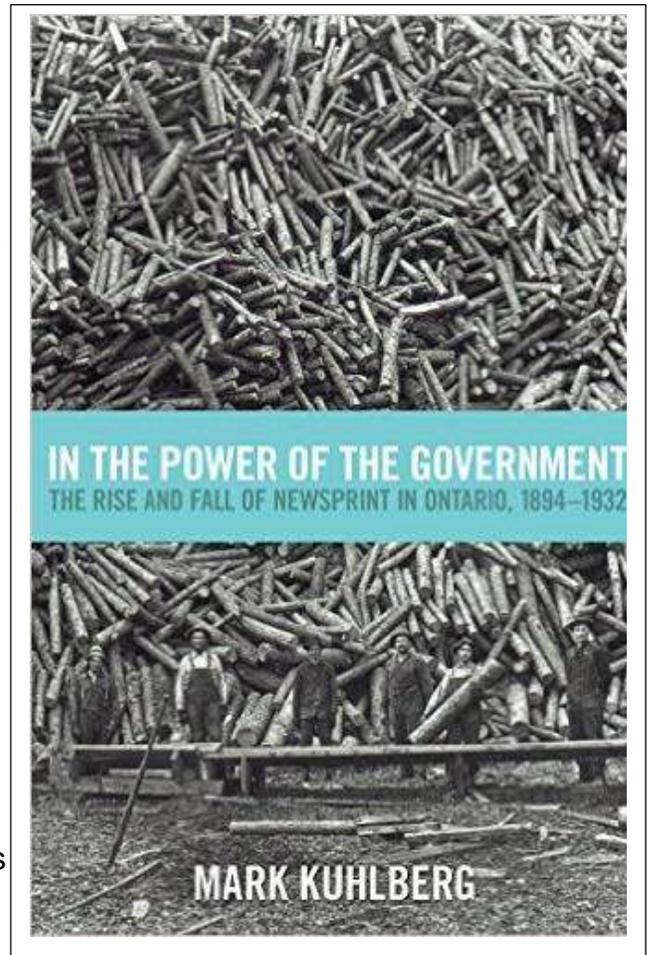
"There are a lot of trees growing in a lot of places because of Bob Day." *Professor Nancy Luckai, Coordinator, FoReST Laboratory, Lakehead University*

Mark Kuhlberg: Winner of the CHA's 2016 "Political History Prize – Best Book"

Each year, the Canadian Historical Association (CHA) awards a series of prizes as part of its mandate to promote and recognize excellence in the field of Canadian history. In June of 2016, the CHA selected *In the Power of the Government: The Rise and Fall of Newsprint in Ontario, 1894-1932* (University of Toronto Press, 2015) by Dr. Mark Kuhlberg as this year's winner of its "Political History Prize – Best Book." The CHA asserts that "This prize is awarded for an outstanding, well-written book judged to have made an original, significant, and meritorious contribution to the field of Canadian political history." In explaining its decision to recognize *In the Power of the Government* as the 2015 recipient of this particular award, the CHA praised Dr. Kuhlberg's work for "the originality of its argument and the truly prodigious amount of research that informs it."

In the Power of the Government chronicles the rise and fall of Ontario's pulp and paper industry between 1894 and 1932. In doing so, it demonstrates that we have long misunderstood the relationship that developed between the mill owners and the provincial government. For nearly half a century, it has been argued that the politicians at Queen's Park – and all provincial capitals in Canada – fell all over themselves in trying to help the paper makers establish and expand their operations. This book makes clear, however, that this was hardly the case, and thus offers a forcefully argued challenge to the orthodox literature on the subject. Kuhlberg asserts that the provincial government actually had many reasons to offer the pulp and paper industry a cool reception and relatively little support as it established itself in Ontario. These included the drive to colonize the province's northern reaches, the politicians' existing loyalty to the lumbermen and the pulpwood exporters, and the dangers inherent in being associated with "big business" during an era when "titans of industry" were hardly beloved by the general public. Most importantly, the politicians saw the province's pulpwood and water powers first and foremost as commodities to be used for political gain. Doling them out according to patronage considerations was thus the goal, and a remarkable tale – often involving corrupt dealings – was the result. For these reasons, this book offers a remarkable new perspective on the dynamics that shaped relations between industry and government in Ontario's forests.

Dr. Mark Kuhlberg, Professor of History at Laurentian University and a member of the Canadian Institute of Forestry, has both practical and academic experience in forestry. He spent 20 seasons working in the tree-planting industry in northern Ontario and Alberta, and at least as long researching



the history of forest policy in Ontario. In fact, *In the Power of the Government* evolved from his doctoral dissertation, which he completed at York University in 2002. Mark's publications span many sub-fields of history, including the realms of business, environmental, political, education and Aboriginal History, and his fields of expertise are Ontario's forest history in particular and the history of Canada's woodlands in general. He is also the Director of Laurentian's MA History program, the Chair of the Forest History Society of Ontario, and is active in the contemporary forestry world through his involvement in several committees and councils.



Dr. Mark Kuhlberg

Honouring Kenneth A. Armson: A Man of the Highest Order

By: Mark Kuhlberg

The iconic baseball player and manager, Casey Stengel, who was oft-times referred to as the “Old Perfessor,” once remarked that “there comes a time in every man’s life, and I have had several of them.” For numerous reasons, this phrase is equally applicable to the FHSO’s founder and inaugural chairman, Kenneth Avery Armson. His life and professional career have been marked by so many achievements that a summary of them reads like a highlight reel of forestry’s most sensational moments over the last **seventy-plus years** (Ken entered his profession before most of us were even born)! We are grateful that the Governor General of Canada recently recognized Ken’s truly landmark contributions to improving the health of our country’s forests by appointing him an Officer of the Order of Canada. Rarely in our great nation’s history has someone has been recognized in this way for having been a “forest management advocate.”

Ken’s story begins in Newtonbrook, Ontario, which is now part of North York in the upper reaches of the City of Toronto, in February 1927. He attended schools both locally and in the United Kingdom. Near the end of the Second World War, Ken entered the military and served with the Canadian Occupation Forces in Germany after the conflict ended. He enrolled in the Faculty of Forestry at the University of Toronto in 1947, and graduated four years later. He immediately took a job with the Research Division of the Ontario Department of Lands and Forests (now the Ministry of Natural Resources and Forestry), but was soon hired by the forestry school from whence he had graduated. He began his teaching career as a Lecturer at the Faculty, and took a leave of absence to go overseas again in the mid-1950s, this time to pursue a Diploma of Forestry at the esteemed Oxford University. During the same decade Ken worked on the arcane-sounding RC-17, a cooperative research project involving several forest companies and the provincial and federal forestry services. It was based on the Black River watershed near Manitouwadge, a site on which Ken had worked as a summer student for the old Ontario Paper Company. He also helped establish the former soils laboratory at Glendon College (now a satellite campus of York University in Toronto) during the mid-1950s.

Ken’s contributions at the Faculty of Forestry were truly remarkable, and he left one of the school’s largest living legacies. In terms of academics, he enjoyed rapid promotion through its ranks at the University of Toronto, culminating with his appointment as a Full Professor in 1968. During his career, he published over 100 professional and academic papers. But he probably had his biggest impact teaching students both inside and outside the classroom. For roughly one quarter century, Ken instructed and mentored them by being an exemplary role model, an expert in his field, and a true professional. Today, Ken counts legions of his former students – some of whom are long since retired! – among his closest colleagues and friends. He continues to be invited as a guest of honour to the reunions that various classes of Faculty graduates hold. On these celebratory occasions, he is often regaled with stories of the unbridled enthusiasm and passion he brought to his teaching; most tales involve soil pits of unfathomable depths and Ken positioned within them, regardless of the weather. It would be difficult to think of a greater testament to the extraordinary impact he had on a whole generation of forestry students than to read the list of guests at the dinner that honoured his appointment as an Officer of the Order of Canada and to realize how many of them had first met Ken in a class that he taught.

But in many ways his career was only just beginning while he was at the University of Toronto. In the mid-1970s, the Ontario government recognized that the province's commercial forests were not regenerating adequately, and it committed to taking steps to rectify the situation. To undertake the task it seconded Ken from the Faculty of Forestry. Although it was a Herculean task, he tackled it with his typical aplomb. The product of Ken's investigation was a landmark report, most commonly cited using the name of its author, in 1976 that would completely recast how Ontario cared for its woodlands. It entailed the industry taking over responsibility for forest management and in exchange receiving far more secure tenure, in the form of "Forest Management Agreements," to the timberland over which it would act as the steward. Moreover, Ken also assisted in improving both the quantity and quality of tree seedlings produced in Ontario; they would be essential to regenerating areas that were harvested in the future and the large backlog of cutovers that had not been re-stocked to the most valuable commercial species. In this regard, he helped introduce the "paper-pot" system, which was developed in Scandinavia, for growing large volumes of seedlings and facilitating their planting in the province's forests. During the late 1980s and into the 1990s, Ken played the leading role in representing the Ministry of Natural Resources during the Environmental Assessment hearings. By this time, he had overseen a virtual revolution in Ontario's approach to managing its forests. This was *the* critical step in the process that allowed the province to become a world leader in terms of woodland stewardship.

And then Ken entered a new phase of his career. After he left the employ of the provincial government he continued practising forestry as a consultant for various companies and interests. During this phase of his career he played a central role in developing standards for sustainable forest management with the Canadian Standards Association. He also served as a director with Boise Cascade Canada and Rainy River Inc. and acted as a senior forestry auditor with Ernst & Young. At the same time, he traveled widely to expand his understanding of silvicultural practices around the world and to share his knowledge of them with his professional colleagues. Moreover, he remained committed to forestry education. For example, he began helping to enlighten high school teachers about modern forestry practices in Ontario, and wrote a book to help realize this end. In addition, he increasingly turned his attention to Ontario's forest history. He began researching and writing in this field, and his publications include *Ontario's Forests: A Historical Perspective* and a book about the legendary lumber baron, John Waldie, and Waldie's family. And then, roughly 6 years ago, Ken decided to lead the way in establishing the Forest History Society of Ontario to ensure that there was a formal organization to discover, preserve and promote our province's forest history.

We at the FHSO cannot say enough to thank Ken for all that he has done for us. His tireless efforts to improve how our woodlands are managed have resulted in our province being thrust onto the leading edge of international forestry practices; all Canadians should be grateful for Ken's service in this regard. Moreover, his profound commitment to fostering an appreciation for our forest history through the FHSO has given us a wonderful platform from which to tell all the rich stories that have yet to be told about Ontario's woodlands and all the creatures that reside within them. Ken, as one of your colleagues put it, the Order of Canada has been enriched by your appointment to it. We wish you the heartiest of congratulations on this extraordinary achievement.

This photo captures Ken Armson (second from left) as a student at the Faculty of Forestry's spring camp in Dorset, Ontario, in May 1949. He is listening to Professor T.W. Dwight (far left) along with John M. Anderson (second from right) and Michael Adam (far right) speak about the growth of white pine, a stand of which is visible in the background (Courtesy Ken Armson).



Personal Recollections

Reflections on the Algonquin Park Controversy, 1968 – 1974

By: Ken Armson, O.C., R.P.F. (ret.)

The summer, fall, and winter of 1968 were characterized by a spate of articles in the Toronto newspapers about the controversy surrounding logging in Algonquin Park. For example, on 26 July *The Globe and Mail* devoted the front page of its third section to an article by reporter Don Delaplante titled “Park Lumbering: management or mess?” Delaplante explained how the Algonquin Wildlands League was protesting the presence of a logging road which crossed a portage around Otterslide Creek rapids in Algonquin Park. Although the reporter interviewed a number of canoeists who were not complaining about lumbermen, it is clear that the League was voicing the concerns of many who wanted logging out of the park.⁸ Then, on 30 July, the *Toronto Telegram*’s Mackenzie Porter reported on his recent visit to Algonquin Park in an article titled “The So-called Rape of Algonquin Park is Rot.” The voices of opposition continued on towards the latter part of the year and then broke into the press following the release of a “Master Plan” for the park that was unveiled by Renee Brunelle, the Minister of Lands and Forests, on 4 November. It proposed the park would be divided into zones, stressing multiple use and limiting harvesting in some of them. This caused an eruption of protest from the Wildlands League expressed in the *Toronto Telegram* on 5 November in an article titled “Algonquin Park plan branded an attempt to defraud public.” The Minister stated there would be public meetings in Pembroke, Huntsville and Toronto. The plan also drew a negative response from the forest industry citing prohibition of forestry operations in July and August and the excessive restriction of 500-yard reserves around shorelines. At a press conference, the operations manager for Consolidated-Bathurst Ltd. stated that “The plan is so restrictive that we won’t be able to live with it.”

In all the heated discussions that the Master Plan evoked, it was evident that the original objectives for which Algonquin Park was established in 1884 were often lost sight of. First and foremost was the need to preserve the watersheds which had once been essential for the driving of the pine logs by the lumbering companies cutting in and adjacent to the park. Other objectives related to the preservation of the forests; protection of game, fish, birds, and fur bearing animals; to provide an area for forestry experimentation; and lastly to serve as a health resort and pleasure ground for the benefit, advantage and enjoyment of the people of the province. However, it was perceived by many of the vociferous opponents of any form of harvesting of timber that the park should be a wilderness. A prime example of this mentality appeared in a letter to the editor in the *Globe and Mail* on 8 November, 1968. Written by a professor of economics, the article read “I appeal to all to preserve Algonquin Park, as a complete wilderness, before it is too late. Once gone it is lost forever.” The Master Plan proposed the identification of five zones within the park for specific purposes: primitive, recreation, natural, historic, and multiple use. The last zone would be where forestry operations would occur. Needless to say, it was this division which generated the main opposition from both sides: the anti-logging and the pro-logging groups.

It was at this time that I was drawn into the altercations. On 12 November, the Ontario Professional Foresters Association (OPFA) held its annual meeting in the Lord Simcoe Hotel in downtown Toronto. As President, I was asked by the *Toronto Star* what the position of the OPFA was on the Master Plan for the Algonquin Park. We didn’t have one, but I said we would have a statement prior to the public meeting in Toronto, scheduled for 28 November. The OPFA’s statement was generally in favor of the zones, but considered the 500-yard reservation on shorelines to be excessive and instead

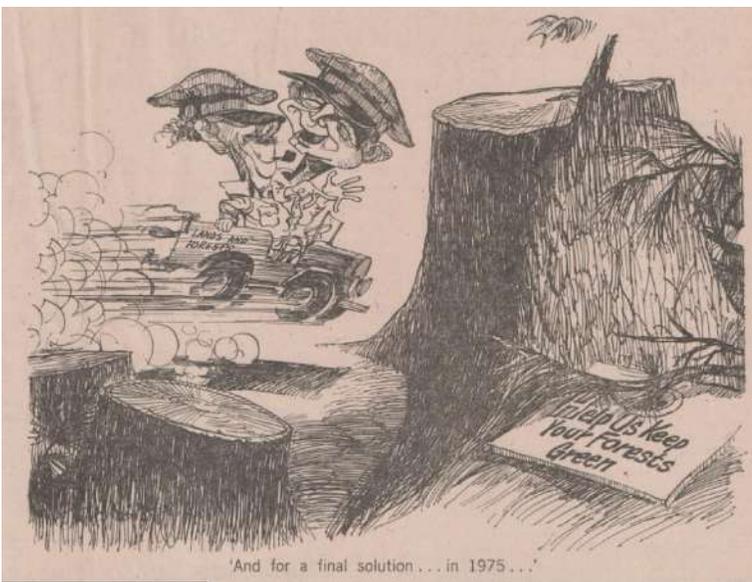
⁸ Don Delaplante, “Park lumbering: management or mess?,” *The Globe and Mail*, 26 July 1968, page 21.

recommended 500 feet. In the multiple use zone, the OPFA criticized the fact that logging and road building would not be permitted during July and August, arguing that for the 24 companies operating in the park this would jeopardize the retention of their labour force and hence economic viability. In the recreation zone, the OPFA saw this as an opportunity for the implementation of forest land management to enhance recreational and aesthetic objectives. The statement concluded: "if the park is to be managed in order to achieve the optimum social and economic benefits compatible with the primary purpose of the park, there must not only be a plan but an intelligent implementation in which the owners of the land, the managers of the land and the users of the land work toward achieving these desired benefits." In retrospect, it is obvious that the restriction of forestry activities in July and August has been effective and readily managed.

Through December, 1968 the war of words raged on, but it is worth pointing out that the brief presented to Minister Renee Brunelle by the Algonquin Wildlands League was in agreement with allowing for multiple use, including lumbering in the eastern half of the Park. One of the more notable letters sent into the newspapers during this time was written by Ralph Bice of Kearney, which is a small community situated on the west side of Algonquin Park. In the *Toronto Telegram* on 7 December, 1968, he wrote:

In your report of the meeting in Huntsville over the new master plan for Algonquin Park, you described me as the founder of the Algonquin Wildlands League. I am sorry but I cannot claim that honor. I was one of the early members. Some of us have been around Algonquin Park for many years, in my case almost 60, and my father and grandfather before that. It is not nice to see what has been happening to such a fine playground. It is to be hoped that the men who prepared the master plan, while it is not perfect, will stand their ground.

In April 1969, Minister Brunelle held a meeting with the major protagonists, such as the Wildlands League and the forest industry, and stated that the plan for the park would not be completed. Instead, he announced he was setting up a task force to report on the issue by 1975. Moreover, during this period logging would still continue. This evoked an editorial outburst from the *Globe and Mail*, which on 16 April, 1969 published an article titled "The erosion of a trust." The editorial was in favour of the proposal from the Wildlands League, which was a compromise allowing for multiple use including logging in the east half of the park.⁹



Cartoon featured in an editorial published by *The Globe and Mail* in April 1969 in response to Minister Brunelle's decision to set up a task force to study the issues surrounding logging activities in Algonquin Park.

⁹ "The erosion of a trust," *The Globe and Mail*, 16 April 1969, page 6.

The Minister's decision to set up a task force was denigrated by the press and the opponents against logging in the park. Then, in 1974, the Algonquin Forestry Authority Act came into effect. This legislation established a body which was tasked with: managing the production and objectives for regulating the flow of logs; maintaining and improving employment in the forest industry; and ensuring a reasonable price for the logs produced. The existing individual company timber licenses in Algonquin Park were revoked. The body was to be an operating Crown Agency with a board of directors appointed by the Minister with representation from local communities and interests. In 1975, the Authority took over control of harvesting activities which continued to be done by the individual companies, while the Ministry was responsible for silviculture. In 1983 the Ministry and the Authority signed an agreement, now known as the Algonquin Forestry Agreement, whereby the Authority took over full forest management and is subject to the 1994 Crown Forest Sustainability Act. It now undergoes the same Ministry audits as other Sustainable Forest Licensees in Ontario every 5 to 7 years and in addition is audited and certified to the International Environmental Management System (ISO 14001) and the Canadian Standards Association's Sustainable Forest Management standard (CSA Z809). Reports for the most recent audits by the Ministry and the CSA are available on the web – www.independentauditsOntario and www.algonquinforestryauthoritycertification. Reviewing these reports allows one to appreciate the high level of professional forestry and environmentally responsible management occurring in an area that 50 years ago was the subject of major controversy and, retrospectively, much ignorance, misconception, misunderstanding, and emotion.

Junior Forest Ranger Program

By: Garry Paget

The Junior Forest Ranger Program (JFRP) began in 1944. In its first year it employed 21 youth, and eventually grew to offer about 804 positions each summer. In fact, a high of 2,000 positions was reached in 1973, and at its peak the program operated more than 50 camps. During the 1990s the program became known as the Ontario Rangers. Over 78,000 youth participated in the program over the 68 years it was active.

Wages paid to those who participated in the JFRP fluctuated over time. Individuals were paid \$3 per day in 1953, \$5 in 1967, \$10 in 1975, and \$15 by 1986. This initially included room and board but that was later removed in 1990 when pay reflected the minimum wage minus a deduction for room and board. By 1991 the rate was \$26.49 per day. However, the 2012 rate of pay reflected the Ontario minimum wage less a deduction for room and board.

During the early years the program was only open to boys but that changed in 1973 when girls were accepted for the first time. All male or all female camps were now the norm. Around the same time the first designated bilingual camp appeared at Bonner Lake Ontario Ranger Camp in Kapuskasing. Then, in 1989, an all-female bilingual camp operating out of White Lake in the Wawa District was established.

By 2008 the MNR and the Ministry of Education collaborated to offer a cooperative education program at specified camps. From 2009 to 2010, the Ontario Ranger Program (the so-called “new and improved” JFRP Program) grew its co-op program to six camps, acquired \$3.2 million of federal monies for camp rebuild projects, and delivered a substantial amount of natural resources management work in general. In 2012, the MNR indicated the Ontario Ranger Program’s thirteen camps offered 278 positions. Seven of these camps offered co-op opportunities while another two contained a bilingual component.

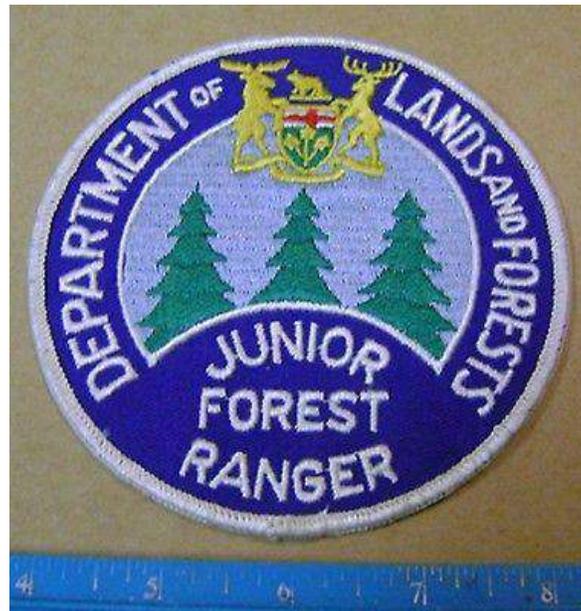


This yellow hard hat, actually worn by the author, identified the wearer as a Junior Forest Ranger.

In September 2012, this all came to a screeching halt when the provincial government, with no public consultation, decided to close the Ontario Ranger Program. It cited the fact that the almost \$1.6 million operating cost was too much for the provincial budget to handle, in spite of having just spent \$3.2 million provided by the federal government to upgrade the Ranger Camp infrastructure. This

program had grown to provide some of Ontario's youth with opportunities to gain valuable work and leadership experience while, in some cases, earning high school credits, and the government's replacement program was rather lacklustre. It consisted of teams of four teenagers going to a work site with a foreman each morning then going home at the end of the day. It was a job, pure and simple.

The "new program," though it was better than nothing, in no way replaced what had begun as the JFRP, which saw groups of up to 24 young people leave their homes for eight weeks at a time, live in a camp with complete strangers, learn how to interact, work and live with these strangers, and perform jobs they probably had never imagined themselves ever doing. How could a simple "8-4" job ever replace such a unique learning opportunity? It was more than a job: it was a life changing experience!



This crest was presented to each JFR at the end of their summer.

The JFRP brought young people into a working environment that could not be replaced by the day program the government tried to promote. When the shutdown of the program was announced a group known as Friends of the Ontario Ranger Program organized in a vain attempt to convince the provincial government to reverse its decision. This effort ultimately proved futile, as the government was not willing to even discuss the program's demise. Still, the hope remains alive that the JFRP will one day return to Ontario.

Nevertheless, many youth remember their experiences as members of the program, whether they were more recent or "from the good old days!" These memories continue to have a positive effect on those who will carry them for the rest of their lives.

CREDITS

1. James Pickett, C.D., B.A. (Hons), M.A., Ed. D.

A Course Facilitator for Brock University's Adult Education Degree program and proud alumnus of the Junior Forest Ranger Program. James provided a lot of the information used in this article.

Species

Sugar Maple (*Acer saccharum*)



The sugar maple is a large tree found in central and southern Ontario. It can grow up to 35 metres tall and can live for over 200 years. In the fall, the sugar maple's yellowish-green leaves turn yellow, orange, or red. This tree thrives in deep, rich, well-drained soils as its roots are deep and wide-spreading. Its smooth, gray bark becomes darker and splits into ridges as the tree ages. Seeds from the sugar maple are contained in "keys" which are 30 to 35 millimetres long. Moreover, seed is produced each year, with an abundant crop emerging every 7 years.¹⁰

The sugar maple also holds strong economic and cultural significance in Canada in general and in Ontario in particular. Its leaf is found on the Canadian flag, and it is actually the country's official national tree.¹¹ Furthermore, the sugar maple's sweet sap is the primary source of maple syrup. It takes about 40 litres of sugar map sap to make 1 litre of maple syrup. The maple industry in Ontario is quite large, with one estimate suggesting that it has "an overall economic benefit of \$53 million."¹²

¹⁰ "Sugar Maple," *Government of Ontario*, <https://www.ontario.ca/page/sugar-maple> (accessed 8 November 2016).

¹¹ *Ibid.*

¹² "About Us," *Ontario Maple Syrup Producers Association*, <http://www.omspa.ca/omspa-info/about-us/> (accessed 8 November 2016).

The Archives/Museums Corner

The Lakehead University Archives: A developing resource for forest history

By: Sara Janes

Lakehead University's archival collections were established as part of the Library, early in the University's history. After a number of years with no dedicated staffing, I was hired as University Archivist in 2016 and given a mandate to revitalize and expand the program, and to increase university and public access to the collections. I was also able to increase the archives' staffing to about 1.6 FTE.

So far this year we've processed several new collections, made all of our finding aids accessible online, and are very close to launching a digital collections site where everyone can browse through digitized photographs and documents from anywhere in the world.

Access

At the moment, the Archives is holding limited opening hours, but is also open by appointment. If you're interested in conducting research, or would like to visit for a quick tour, get in touch. You can look through our collections database and listings at archives.lakeheadu.ca, although bear in mind that this is still incomplete, and will have more information added to it regularly.

Collections

The Archives has traditionally collected records that relate to the Thunder Bay region. The forests and forest products industry in particular have been a big part of this region's history and development.

Some of the collections and fonds that will be of interest to this Society are:

Oscar Styffe fonds:

Oscar Styffe was a prominent businessman who operated a timber firm as well as Gravel and Lake Services Ltd in Port Arthur. The collection, primarily 1929-1969, consists of correspondence, ledgers, scrapbooks, pamphlets and photographs primarily related to the forest products industry.

Other Lumber Company records:

We have small amounts of material from the Arrow River Company (dating 1899-1944) and Pigeon River Lumber Company (dating 1929-1947). Both of these two fonds include correspondence, charts, and records of logging rights.

Harold S Braun fonds:

Braun was the former Principal of Lakehead Technical Institute, Principal of Lakehead College of Arts, Science and Technology, and the first Dean of University Schools at Lakehead University.

These papers, however, relate primarily to his research and advocacy around Quetico Provincial Park, particularly the issues of logging and forest conservation. Most papers are circa 1970-1971.

Ken Armson slides:

Forester Ken Armson donated a set of several thousand photographic slides, depicting forests and forest management, silviculture, soils, tree nurseries, and more. These slides range from the 1950s to 1990s.

Bill Addison fonds:

These records relate to advocacy work on the development and management of Provincial Parks in Ontario, including work with the Save Quetico Committee, the Coalition for Wilderness, and Parks for Tomorrow. These three groups were often in direct correspondence with the Ontario Department of Lands and Forests / Ministry of Natural Resources, and the records contain many government reports.

Lands for Life, Boreal West Roundtable, and Living Legacy Trust collection:

The Ontario Government undertook the "Lands for Life" land use planning exercise in the 1990s. Our collections include records of the Boreal West Roundtable, involving public consultations, as well as reports, and records of the resulting Living Legacy Trust funding program.

Political papers:

Local political representatives had a hand in shaping the province's and nation's policies around forests and forestry. Two fonds at Lakehead that particularly reflect this influence are those of Frederick O. Robinson, CCF MLA from 1943-1951 and later Mayor of Port Arthur, and Douglas Fisher, CCF/NDP MP from 1957-1965. There are other political collections with less of a focus on forests, and some that have not been processed yet

Northern Studies Resource Centre:

Located next to the Archives, the Northern Studies Resource Centre houses a large number of books on local and regional topics. The Resource Centre was established in 1988 in conjunction with the founding of the Centre for Northern Studies (CNS). A major goal of NSRC was to support the research activities of the Centre for Northern Studies, expand the resources available for research on 'the North', and to encourage interest in northern and regional research. Since that time the Resource Centre has grown to become a vital component in support of Northern Studies curriculum and research at Lakehead University.

The Centre has a substantial collection of forestry related materials with a focus on northwestern Ontario. The collection includes silviculture guides, forest audits, and forest management plans. Materials reflecting the impact of Aboriginal initiatives on forest management and other natural resources are an important component of the collection. Holdings also include the full collection of documents relating to the Class Environmental Assessment for Timber Management on Crown Lands in Ontario and the Royal Commission on the Northern Environment.

Other Strengths:

I would be remiss to not mention our other significant collecting areas. These include Finnish immigrants and local Finnish-Canadian culture and life; unions, activism, and politics; Lakehead's faculty research and work; and University history. We also have maps, photographs, and various collections reflecting the history of government, business, industry, architecture, culture, and the arts in Thunder Bay and nearby communities.

Collecting

The Lakehead University Archives is not actively collecting new materials over the next few months, while we work out how our storage space will be redeveloped, and catch up on a significant processing backlog. However, over the long term, we do intend to bring in new fonds and new collections reflecting the history of our forests, their human uses, and natural ecosystems. I would be very interested in discussing our plans in more detail with anyone who is interested in learning more, or who may wish to donate records.

Although we've made significant progress in increasing access to the Lakehead University Archives this year, there's still a lot of material that hasn't yet been processed. New resources may come to light over the next months and years. We'll keep adding more listings to the FHSO's Archival Collections Directory, as well as updating the finding aids on our own website.

To learn more, you can contact me directly at sjanes1@lakeheadu.ca, or visit archives.lakeheadu.ca, or find us on Facebook or Twitter.

Sylva Recap

The Ontario Department of Lands and Forests published for many years a journal known as "Sylva." The purpose of this journal was to highlight changes in policy, individuals, and the comings and goings of staff. Sylva contains nuggets for forest history that will be selected for each edition of the journal. The following was provided by Sherry Hambly.

"Research in Silviculture" by A.P. Leslie (Sylva, Volume 7, Issue 3, 1951, pages 21-24)

What is silviculture research and why does the government engage in it? Silviculture means culture of the forest and the practising silviculturist or forester is actually a forest farmer, cultivating the soil and obtaining crops of wood. He does little direct cultivating with such machines as ploughs and harrows but he has to cultivate by other means. Why should it be necessary to cultivate forest soil? Do not trees reproduce themselves fully under natural conditions without interference by man? Trees produce seed like field crops and this seed requires a seed bed in which to fall at the proper time and be protected from animals and birds and get the proper heat and moisture for germination and growth, but this seed bed is not always available at the right time unless man interferes in some way with the natural forest.

You know or have heard about the rotation of crops on the farm, where the farmers, to avoid depleting the soil or producing other harmful effects, follow one crop with another that uses the soil elements to a different degree and returns some different material to maintain fertility. Thus wheat may be followed by alfalfa which takes out different elements than the wheat and returns nitrogen through the bacteria on the roots which fix the nitrogen of the atmosphere in a form usable by plants. Nitrogen is a very important fertilizer and we pay a great deal of money for nitrates that are obtained artificially. Any plant then that captures atmospheric nitrogen and makes it available for plant use is valuable indeed. Among trees and shrubs which do this we have the locusts, alders, and New Jersey tea. Think of this the next time you are moving through a dense alder swamp with the flies and mosquitoes swarming around.

Farmers have been at their business for a long time and know a great deal about what their crops require and how to give it to them. Furthermore, governments, fertilizer companies, packing companies and other large organizations have spent a great deal of money in finding out how the farmer can get the best returns for his labour.

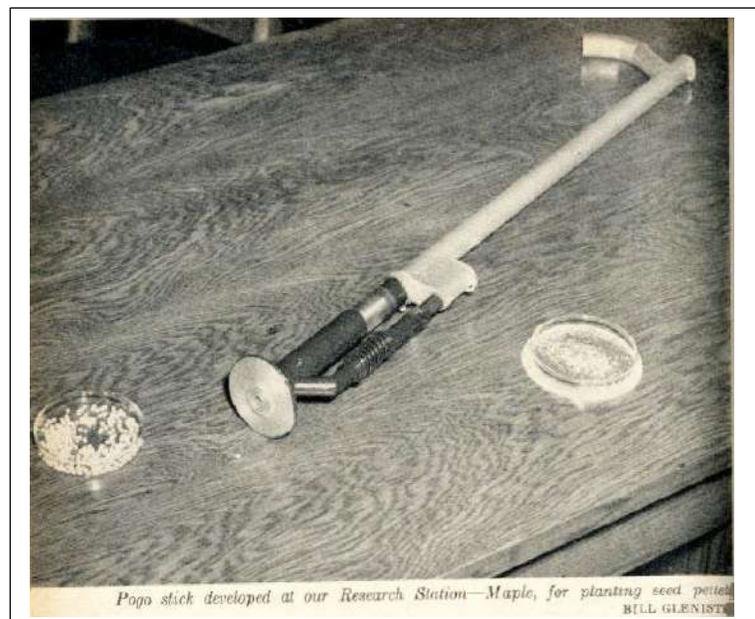
Foresters have been at their job for a much shorter time and only a small part of the money spent on agricultural research has been spent on forest research. In fact research in Canada was only undertaken about 1930, a little longer in the U.S.A. and much longer in Scandinavia, France and Germany. Furthermore, most of the research in forestry in this country has been done on how to cut trees and get them to the mill and make them into pulp and paper and lumber. Not very much has been done until recently on how to grow them. We are now awake to the fact that trees must be growing before they can be cut and used and some of the species at least do not establish themselves easily. For example, white spruce, one of our important trees in the north, does not reproduce itself readily or in sufficient numbers following logging. Balsam, a very much less valuable species takes its place. Nor does white pine reproduce fully at present in the northern part of its range. Jack pine also under the ordinary system of logging does not succeed itself. The yellow birch is not being maintained at its former level. This knowledge disturbed the forest operators and the

government and led to a study of these species, to determine the frequency and quantity of seed crops and what kind of seed bed was necessary, the light and soil conditions required for germination, survival and best growth. This gave some knowledge of how to cut the forest and leave conditions right for succeeding growth. Sometimes it is impossible to have enough of the proper species grow naturally to meet our needs and then we have to reforest artificially by planting or seeding. The Department has planted white pine in the forest around Temagami. The Spruce Falls Power and Paper Company at Kapuskasing has established a nursery for forest trees and is reforesting part of their limits with spruce. Planting is also often necessary in the case of other species. We are here dealing only with forest planting and not with reforestation of waste lands and abandoned farms which will be discussed later.

Many of our forests originated following fires and while I am not advising the use of fire as a silvicultural tool there are many who do. The jack pine for a long time appeared to be impossible to reproduce following ordinary methods of logging because the cones remained on the branches and of the slash and refused to open to release the seed unless they were brought close to the ground. This tree normally has its cones opened by the heat of a forest fire and the seed finds a good bed in the ashes of the burned litter.

A change in the method of logging brought about by the economic necessity of getting more wood cut for the same money gave some improvement in the jack pine reproduction problem and pointed the way to a complete solution. This method called the "high lead system" is one whereby the trees are drawn in full lengths to a central point by cables and sawed into log lengths there. Dragging the trees breaks up the branches and many cones are brought to earth where they are opened by the heat of the sun. The released seed finds a good seedbed in the disturbed soil and the result is a better second crop of jack pine. It is not good enough yet but it is better than before.

Where natural regeneration from the seeds on the forest trees fails then we must reforest by planting or seeding. The Department of Lands and Forests gathers considerable quantities of seed every year and sows it in seed beds in nurseries located at five places in the province. The young trees are used for government reforestation on abandoned farm lands or are distributed free to private landowners. There is a school of thought among foresters that seed might be directly sown to advantage where natural regeneration has failed and where planting of young trees is too difficult or costly. Seeds may be coated or "pelletized" in various ways with fertilizers, rodent and insect repellants to increase the germination and survival, and have been sown on the ground by hand, and from the air, in the latter case mostly over recent burned country that would not reforest naturally. A further development along the same line is the invention of a "walking stick" seed planter which will bury a single seed or pellet in a desired location while the operator is walking through the bush.



The following will give a general idea of some of the problems confronting the people who engage in what is known as silvicultural research. The problems are of long duration and decades will pass before we see the results of present efforts. It is most important to devote much thought to the research that is to be carried on and to constantly revise procedures so that time and money will be well spent and the forest improved as a result of research. Cessation of work in the middle of a project has always been one of the bugbears of forest research as this almost always results in a loss of time and money already spent on the work. The future prosperity of this country depends on the maintenance of the forest which includes fish and wildlife as well as wood resources. The maintenance of the forest depends on proper and adequate silviculture research.

Books / Articles / Web Sites or Other Resources

All of the information found below was provided by Sherry Hambly.

Taming the Deadliest Professions of the Ontario Wilderness

Workplace Safety North (WSN) is an independent not-for-profit organization that provides health and safety services, training, and resources for forestry, paper, printing and other organizations. To commemorate 100 years of health and safety in the forestry sector, WSN published a short history of this aspect of the forest industry on their website on January 6, 2015.

This historical overview details the legislation, organizations and significant events that have shaped the development of health and safety in the forestry sector over the past century.

This historical overview can be accessed here:

<https://www.workplacesafetynorth.ca/news/news-post/taming-deadliest-professions-ontario-wilderness?platform=hootsuite> .

The State of Canada's Forests Annual Report 2016

The federal government has been tracking the state of Canada's forests for 28 years. Each annual report on the state of the forest provides historical tracking of changes in key forest health indicators.

The report can be accessed here:

<http://www.nrcan.gc.ca/forests/report/16496> .

Westmeath Township History Project

<http://hwtproject.ca/lumbering/>

This website documents the local forest history of Westmeath Township situated along the Ottawa River near Pembroke, Ontario. The website includes quite a comprehensive overview of the following topics:

- Lumbering - Timber Baron Alex Fraser, Arklan Farm and Fraser's Landing
- Vern Price, the Shantymen, The Camboose, and Cruisers
- Sawmills
- The ICO, Booms and Culbute Ship Canal
- John D. Dunfield's Lumbering in the Ottawa Valley
- The Log Drives

Besides written material on the above topics, the site is augmented by photographs, illustrations and reference material.

Patricia Bowley, Farm Forestry in Agriculture in Southern Ontario, ca. 1850 – 1940: Evolving Strategies for the Management and Conservation of Forests, Soils and Water on Private Lands

Scientia Canadensis: Canadian Journal of the History of Science, Technology and Volume 38, Number 1, 2015, p. 22-49

Abstract

Early settlers in southern Ontario aspired to become prosperous land-owning farmers; they began by cutting trees. Within a few decades, wind and water, unimpeded by forest cover, devastated soil and crops. Farmers were encouraged by groups such as the Ontario Fruit Growers' Association to reforest some of their land. Farm forestry, as part of scientific agriculture, had a strong beginning in the early 1900s with the Ontario Agricultural and Experimental Union, but that movement was poorly supported until the 1930s, when the relationship between deforestation and water supplies reached a crisis. The Ontario Conservation and Reforestation Association (OCRA) and the Ontario Crop Improvement Association (OCIA) were created in agricultural southern Ontario in 1937-8 after a disastrously hot dry summer. Each organization interpreted the conservation of natural resources in profoundly different ways: the OCRA as a movement to create forest resources on public property, and the OCIA as management of privately-owned farmlands to improve crop production.

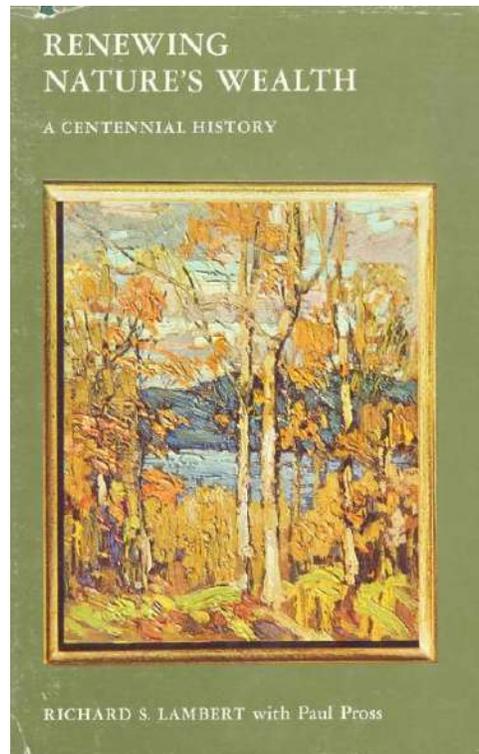
Seeing Green: The Use and Abuse of American Environmental Images. By Finis Dunaway. Chicago: University of Chicago Press, 2015. 337 pp.

Part of a review from *Environmental History* 21 (January 2016), p. 160.

Seeing Green: The Use and Abuse of American Environmental Images is a complementary extension to Finis Dunaway's first book, *Natural Visions: The Power of Images in American Environmental Reform* (University of Chicago Press, 2005). In this second book, Dunaway continues a central theme begun in his earlier work, the importance of images as active rhetorical agents in the shaping of mainstream American environmentalism. Picking up where *Natural Visions* left off, *Seeing Green* completes the American environmental history timeline, focusing not on the conservation movement of the first half of the twentieth century but on the modern environmental movement that evolved in post-World War II America and extends into the present.

Finis Dunaway is a professor in environmental history at Trent University, Peterborough ON.

Renewing Nature's Wealth



Lambert, Richard S. and Pross, Paul. *Renewing Nature's Wealth: A Centennial History of the Public Management of Lands, Forests, & Wildlife in Ontario, 1763-1967*. Toronto: The Ontario Department of Lands and Forests, 1967.

Renewing Nature's Wealth is approaching the 50th anniversary of its original publication, and yet it still manages to offer readers valuable information on an important part of Ontario's history. The book covers a span of nearly 200 years, describing the impact made by a civilized people upon the primitive forest that originally covered the land. It also traces the development of Ontario's natural resources under public administration from an early state of confusion and waste down to the modern era of conservation and scientific management. We will provide a précis of one chapter of this book in each edition of *Forestry*.

Chapter 13: Pulp and Paper – A New Forest Industry (pages 250-276)

The late nineteenth to early twentieth century witnessed the rise of a new forest industry in Ontario: pulp and paper. Beginning in the early 1890s, the provincial government signed a series of agreements with a number of companies who sought to exploit Ontario's forests in order to capitalize on the growing demand for pulp and paper products, particularly in the United States (US). However, by the turn of the century "actual progress was failing to meet expectations," as a number of these companies were either struggling financially or still in the process of constructing their mills. Nonetheless, the Department of Crown Lands "was tolerant" and "reminded the impatient of the vast financial resources needed before any pulp and paper venture ... could be undertaken."

The results of the 1905 provincial election ultimately had a significant impact on Ontario's pulp and paper industry. Shortly after Premier J.P. Whitney and the Conservative Party came to power, Frank

Cochrane, Minister of the newly dubbed Department of Lands and Mines, cancelled five pulpwood agreements on the grounds that the companies in question had failed to meet the required conditions. Although these old agreements were reoffered for sale through public auctions in 1906 and again in 1907, high American tariffs on pulp and paper products had scared away many potential investors and thus only two concessions were actually sold. The Ontario government soon adopted a number of new Crown timber regulations in hopes of spurring development in the industry, but this merely fostered a breeding ground for corrupt dealings. More specifically, multiple loopholes opened up which allowed operators to ship Ontario cordwood to American mills despite the provincial government's protectionist policy on pulpwood exports (the so-called "manufacturing condition"). Consequently, American interests were largely discouraged from building their mills in Canada because they could simply import the pulpwood and manufacture it in the US. The upshot was that "The benefits that should have accrued to the Ontario pulp and paper industry were postponed until the 1920s by the avarice of the exporters and the compliance of the Government."

In 1920, the provincial government, led by Premier E.C. Drury and the United Farmers of Ontario, appointed a royal commission to investigate the allegedly corrupt administration of Crown timber by its Conservative predecessors. By the time the Timber Commission had concluded its work in 1922, it found "the Conservative administration guilty of lax procedures in connection with the export of pulpwood, and of ineffective control of the field staff." The commission "also uncovered irregularities in the conduct of timber sales." For example, it was discovered that from 1917 to 1919, G. Howard Ferguson, the Minister of Lands, Forests, and Mines, had illicitly given away over 1,500 square miles of Crown timber to various political patrons. While many believed that these revelations would destroy Ferguson's career, he would go on to serve as the Premier of Ontario from 1923 to 1930.

It was not long before Ontario's pulp and paper industry began to decline. The elimination of the US tariff on pulpwood in 1913, coupled with an increase in American demand for these products, initially allowed the industry to enter "an era of construction and production." In fact, by 1928 Ontario was home to over a dozen mills which produced thousands of tons of paper daily. However, overproduction quickly drove the price of newsprint down, which went from nearly \$80 a ton in 1924 to just half that ten years later. Unsurprisingly, with the onslaught of the Great Depression, by the early 1930s Ontario's pulp and paper industry was on the brink of collapse.



Events – Upcoming

8th Annual General Meeting

Forest History Society of Ontario

**2:00 p.m. at the
Nottawasaga Inn,
Alliston**

February 9th 2017

**Guest Speaker: Ken
Armson, O.C.**

About the Authors

Scott Miller: Editor of *Forestry*. He currently works as a Researcher/Writer in the History Department at Laurentian University in Sudbury, Ontario.

Vince Nealis: An Insect Ecologist with the Pacific Forestry Centre in Victoria, British Columbia.

Garry Paget: A retired Air Traffic Controller who currently works as a Safety Instructor for a major Ontario training company and member of the FHSO. He was both a Junior and Senior Forest Ranger with the then Department of Lands & Forests. Garry is currently doing genealogy research and discovering some interesting history of his Paget family's connection to forestry and lumbering in Ontario.

Sara Janes: Archivist at Lakehead University in Thunder Bay, Ontario.

John Bacher: Historian and environmentalist from St. Catharines, Ontario; author of *Two Billion Trees and Counting: The Legacy of Edmund Zavitz*.

Ken Armson, O.C., RPF (Ret.): Past Chair of the FHSO; former Professor of Forestry at the University of Toronto; former Chief Forester with the Ontario Ministry of Natural Resources; former Forestry Consultant; Author. Appointed an Officer of the Order of Canada in 2016.

Sherry Hambly: After a rewarding career in various capacities in resource management in British Columbia and Ontario, Sherry is enjoying researching Ontario's forest history and helping to make it available for others to enjoy.

Mark Kuhlberg: Chair of the FHSO and Professor of History at Laurentian University.

Forest History Society of Ontario

Membership Form

Thank You For Your Support!

The mission of the Society is:

“To further the knowledge, understanding and preservation of Ontario’s forest history” and to accomplish this with the following objectives:

1. To preserve forest and forest conservation history;
2. To encourage and further the development and recognition of forest history;
3. To support research and studies of forest history;
4. To support the archival preservation of records and materials relating to forest history, and
5. To promote the better understanding of forest history through public education.



The Society has two ongoing projects, both available on our website:

www.ontarioforesthistor.ca

The first is a catalogue of publications dealing with all aspects of Ontario’s forest history. Members can submit contributions on our website.

The second is the identification and listing of collections and materials relating to Ontario’s forest history. The Society works with established archives such as the Archives of Ontario and several university archives to facilitate the preservation of significant collections.

The Society publishes a newsletter, **Forestory**, twice a year – Spring and Fall - containing informative articles on Ontario forest history.

(The FHSO has a privacy policy. Your information will not be shared or sold.)

You can initiate or renew your membership online by clicking on the link below:

<http://www.ontarioforesthistor.ca/index.php/membership>

Or, by filling out and submitting the form below, with your cheque, to the address listed below:

| | | | | | |
|----------------|--|-----------------|--|--------------------|--|
| Name | | | | | |
| Address | | | | | |
| City | | Province | | Postal Code | |
| Phone | | Email | | | |

| | |
|--|--|
| Membership Type – Please Check One | Please Make Cheque Payable To: Forest History Society of Ontario 144 Front Street West, Suite 700 Toronto ON M5J 2L7 |
| <input type="checkbox"/> FHSO Annual Membership - \$45.00 | |
| <input type="checkbox"/> FHSO Student Membership - \$15.00 | |
| <input type="checkbox"/> FHSO Institution/Corporate Membership - \$100.00 | |
| <input type="checkbox"/> FHSO Membership for OFA / OWA / OHS Members - \$30.00 | |