

HEALTHY FOREST COALITION

Reform is Urgently Needed in Nova Scotia' Forests

Clearcutting spells long-term decline for the ecology and economy

Over-harvesting is devastating our working forests. Beauty strips along our highways hide it, but aerial photos show its full extent.

The Department of Natural Resources (DNR) estimates the forest available for harvesting at approximately 2 million hectares. In 2015 statistics from the National Forest Data Base indicated that 89% of Crown land harvests in Nova Scotia were clearcuts. In the same period over 40% of the operable forest had been clearcut. Every year since the early 1990s, when clearcutting with heavy harvesting equipment became the norm, between 30,000 and 50,000 ha. have been cut. These figures imply that trees that begin growing today will be harvested at age 55, or earlier. At that age, conifers are just beginning to absorb significant amounts of CO₂ in stem, branches and roots.

None of these figures reflect the harm that is being done to the land, the soil, the water, the air, other plants or wildlife.

The public has objected:

- In 2000 a Nova Forest Alliance survey found that 80% of a sample of 643 residents of central Nova Scotia wanted forest companies to do more to protect the environment, even if some jobs were lost; for 87% clearcutting should be permitted only in certain cases or banned altogether.
- Between 2007 and 2009 the major public consultation on natural resource strategy conducted by NS Voluntary Planning confirmed that Nova Scotians wanted clearcutting drastically reduced.
- In 2016 an on-line petition protesting clearcut harvesting of biomass for producing electricity was signed by over 4,000 Nova Scotians and some 30,000 world-wide.

In 2011 the government promised to reduce clearcutting by 50%, then weakened its definition of clearcutting. In August, 2016, even that commitment was abandoned.

The Healthy Forest Coalition opposes clearcutting for the following reasons:

- **Clearcutting destroys biodiversity.**
 - Habitat for birds and animals is reduced, causing population decline
 - Plant diversity is reduced
 - Fungi and mosses cannot survive in the dry soils created by clearcutting
 - Shade-tolerant trees do not regenerate
 - Slow-maturing trees succumb to new clearcuts before they cast seed

- **Clearcutting contributes to global warming.**
 - greenhouse gases are released into the atmosphere by harvesting and decay of roots, stumps and woody debris.
 - removal of mature trees greatly reduces the capacity of the forest to sequester carbon.
 - removal of the tree canopy allows soil and water temperatures to rise
 - the forest's role in moderating extreme weather events is compromised.

- **Clearcutting adversely affects forest soils.**
 - Heavy equipment compacts the soil, constraining new growth
 - Vital minerals, such as calcium and nitrogen, are leached out
 - Southwest Nova Scotia has some of North America's poorest soil; clearcutting depletes it so much that new forest growth cannot be sustained

- **Clearcutting depletes the water table.**
 - Root systems and plants that retain moisture in the soil are destroyed
 - Instead of being absorbed by forest soils and being taken up by plant life, snowfall and rainfall is lost in run-off
 - Floods destroy forest, animal and human habitat and sometimes life as well
 - Silt destroys valuable fresh water fish habitat and populations
 - Lakes shrink and wells dry up.
 - Tinder-dry clearings become highly susceptible to fire

- **Clearcutting is associated with even-aged management, monoculture and the use of dangerous chemicals.**
 - Industrial foresters follow clearcutting with plantations of single species which are highly susceptible to disease and pest infestations
 - Competing species are discouraged with herbicides, such as glyphosates, some of which are carcinogenic.
 - Pre-commercial thinning maintains the same age and growth of preferred species in order to ensure 'efficient' harvests
 - Even-aged monocultures are poor habitats for wildlife

- Industrial monocultures are taking the place of our native Acadian forest, a forest of mixed species and, usually, of various age classes that supports a diversity of wildlife.
- **Clearcutting undermines the economy.**
 - Mining the forests for biomass and fibre has severely depleted the number and range of enterprises that used to benefit from wood grown in the Acadian forest. For instance:
 - Cabinet-making and wood-product enterprises have closed for lack of quality wood.
 - Two hardwood flooring firms have closed for the same reason.
 - The value-added by wood-product enterprises has declined sharply. Only wood product manufacturers in Prince Edward Island add less value.
 - Prime lumber is hard to find; we are beginning to import quality timber at a time when the demand for ‘structural timbers’ is increasing
 - Saw-mills have closed; most of those remaining produce ‘dimension lumber’ (studs and 2x6s) and chips for strand board and fuel pellets.
 - Tourism is affected, wilderness tourism seriously so
 - Other non-timber uses of the forest are either in decline or non-longer exist, even maple syrup production has been threatened by clearcutting.
 - Future supplies of high-end timber are in jeopardy
 - Direct and indirect employment in the forest economy has declined
 - Rural communities are weakened.

How can Nova Scotia recover its forests and its forest economy?

The crisis we see today in our forests originated fifty years ago when policy makers decided that the future for our rural communities lay with providing softwood fibre to pulp and paper mills. Nova Scotia’s first major pulp mill had opened in 1929 in Liverpool. It survived the Depression, flourished in W.W. II and by the 1950s was part of North America’s world dominance of the industry. When mills were established at Abercrombie and Port Hawkesbury, it seemed that the problem of rural decline had been resolved. As the century ended, however, advances in paper-making technologies, recycling and the spread of the internet led to decline and retrenchment on the part of Canadian mills. The problem of rural decline returned with a vengeance.

Unfortunately government and the dominant players in our forest economy continued to put their faith in the business model that had served well for fifty years: It was hoped that cheap fibre and a compliant labor force would enable our mills to keep running. Today our remaining mills are struggling and are being replaced by pellet manufacturers and by desperate attempts to derive cheap energy out of wood chips. Clearcutting by ever more efficient machines has encouraged this ‘race to the bottom’ without improving our rural economy, while severely depleting our forests and eliminating many alternative economic uses of our woodlands.

See the Healthy Forest Coalition website at <http://www.healthyforestcoalition.ca/> for further info.

We must abandon piecemeal efforts that only reinforce the destructive consequences of a failed business model, and, instead, recognize that we must adopt a fresh approach that looks to the long term – the very long term.

Change = Jobs

The first step to renewal will come when:

- Forest businesses and government acknowledge the crisis and the need for major change. This would include ending the substantial support given to industrial forestry and using it instead to assist woodlot owners engaged in selection management and to manufacturing enterprises adding value to Nova Scotian wood products.
- Government recognizes the ecological and economic benefits of uneven-aged and restoration forestry and does more to support landowners, contractors and registered buyers who want to pursue restorative forest management regimes.
- Government rewards restorative management regimes by encouraging enterprises that add value to high quality Nova Scotian forest products and by providing incentives to Nova Scotian homebuilders to use our own forest products.
- Government deals with the devastating decline in the forest economy by providing transition funding to help displaced workers and businesses to adjust.
- Government undertakes a major reorganization of the environment and resource departments so that:
 - The primary function of the lead department in this group is to ensure the ecological well-being of our forests and wildlife, including the restoration of the Acadian forest.
 - Use of natural resources is governed by a need to maintain their long-term sustainability.
 - There is no inherent conflict between exploitation and protection of resources in the mandate of any one agency.
 - Forest policy is based on sound science, and, not as has happened in the recent past, on distorted readings of science.
- Government engages **all** stakeholders equally in long-term planning for our forests. This would include biologists, hikers, tourist operators, manufacturers of non-timber forest products, woodlot owners and conservation-minded woodland owners, not just the mill owners and contractors they have listened to in the past and even now.

While long-term planning is in progress, other steps can be taken to create the conditions for renewal. Government should:

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- Create a schedule for phasing out clearcutting as a harvesting method on Crown land, with re-training next winter and bringing the ban into effect when cutting begins in the Spring of 2018.
- Ban the export of pellets and chips.
- Enforce a rule of ‘no exemptions’ in the conversion of forest land to farm land or blueberry production. To ensure that conversions are genuine, and not clearcuts in disguise, land-owners would be required to file business plans, post bonds and provide proof of funding for agriculture.
- Adopt selection management as the principal regime on Crown lands and the recommended regime on private lands.
- Dedicate special funds for training, or re-training, displaced forest workers as tree markers, woodland planners. Skilled tree markers and management planners will be in demand under a selection management regime.
- Re-train harvester machine operators for selection cutting. Harvester operators are highly skilled. Some are already working in selection cutting. Re-training can be available through NSCC.
- Work cooperatively with harvesters and tree markers. Government monitors should ensure that harvesting conforms to selection management requirements and regulations for conservation of wildlife, plant diversity and clean water.
- Provide woodlot owners with the organizational tools needed to bargain collectively with mills and other major buyers.
- Raise stumpage rates on Crown land to compare with, or exceed, the costs incurred by private woodlot owners.
- Ending or reducing substantially subsidies for hauling roads. Diverting road subsidies to support selection management and reforestation.
- Recognize that wood biomass is not ‘Green Energy’. That:
 - 95% of the mass of a tree (excluding water) comes from CO₂ absorbed from the atmosphere.
 - every time a tree is harvested for fuel (either for heat or to make electricity), this CO₂ is being returned directly to the atmosphere.,
 - the harvested tree is no longer able to sequester further CO₂.
 - any carbon accounting policy that fails to adequately acknowledge these facts is destined to fail.
- Revise the Forest Sustainability Regulations so that higher priority is placed on selection management and on making the regulations more sensitive to non-timber forest values. This would include:
 - Establishing a separate category designed to encourage restoration of the Acadian forest.
 - Making technical standards for Category 7 broader and more widely applicable.

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- Dedicating all contributions to the Sustainable Forestry Fund to treatments in the above two categories.
- Requiring registered buyers to allocate a minimum portion of their required silviculture work to the above two categories.
- Recognize carbon credit regimes that would favour conservative woodlot management.
- Encourage conversion to wind and solar production of electricity by
 - fostering individual investment (through individual RRSP and CEDIF investments) in community energy groups
 - supporting training of interested displaced mill workers in panel and turbine installation
 - encouraging woodlot owners with suitable sites to enter into long-term leases for wind turbines.
 - encouraging conversion to alternative heating systems.

Nova Scotia's forests have been a mainstay of the provincial economy. Despite two centuries of high-grading, clearcutting and abuse, they could still contribute immensely to our well-being and that of the creatures that have lived here for eons. Whether they will or not, depends on us. If we carry on with the harvesting practices that have predominated for the last 30 years, the future, both ecological and economic, will be bleak indeed. If we take steps now to reform forest policies and practices we and our forests will thrive together.

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For further information, you may wish to consult the following:

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http://nfdp.ccfm.org/data/detailed/html/detailed_6100_p_NS.html

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<http://www.healthyforestcoalition.ca/natural-resources-strategy---summary.html#sthash.65guvnmw.dpbs>

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<http://nsforestnotes.ca/2017/03/29/nova-scotia-forests-forestry-birds-mosses-and-biophilia/>

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http://www.bondrup.com/uploads/6/7/6/5/6765532/analysis_of_the_economics_of_forestry_.pdf
<http://www.askecdev.ca/directory/silvicultural-and-economic-comparison-clearcutting-and-partial-cutting-studies>
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