

A letter concerning Provincial harvesting plans and Shelburne County forests from Robert Bancroft, Wildlife Biologist and Donna Crossland, MScF

We are responding to concerns brought to our attention over proposed forest harvests in the Deception Lake area. Citizens living in the area of Shelburne and Deception Lake are correct in their perception that clearcut, or modified clearcut practices that take place over low fertility soils will lead to further declines of both forests and aquatic health, as well as reducing future wealth and land use options. We hope to provide you with some information that may enhance your awareness of local forestry issues and may potentially aid a request to the Province for the adoption of more suitable forest practices for your district.

The proposed 'variable retention' harvests in the Deception Lake area are modified clearcuts that will leave land mainly barren of forest, retaining only 20-30 % of trees on the landscape. The forests near Deception Lake are young and degraded, and from what we can deduce, have an estimated age of only 25-40 years, recovering from previous disturbances (clearcuts and early wildfires that were repeatedly ignited by human activity from the 1700s to recent times). Trees are too young and poorly formed to produce quality saw logs.

These factors fall far short of the ecological forestry practices envisioned by the Independent Forest Review delivered by Dr Lahey in August 2018, and which recognized critical flaws in the 'Forest Management Guides' that are used to derive harvest prescriptions. In other words, the guides used for harvest proposals near Deception Lake and elsewhere are incorrect and biased towards clearcutting. Nonetheless the guides continue to be applied in the same way 16 months later, with only some interim measures added to retain small percentages of trees within the clearcuts. These harvest proposals have no place in ecologically-healthy forest practices.

In the mid-1960's, as a UNB undergraduate student, I, Bob Bancroft, was employed for three summers at the Maritime Forest Research Centre, Fredericton, NB. The job involved field work in western NS and I became well-acquainted with Shelburne forests. At the same time a forester, Roy Strang, was also employed by the Maritime Forest Research Centre to study western Nova Scotia for its potential forestry suitability. One of his papers is attached. Strang's conclusions published in 1971 were: *"Pollen analysis suggests that the area has, for many centuries, been a very open woodland and that the present community is a reflection of soil poverty as well as of periodic burning. Because the site is so unproductive, it is suggested that wilderness recreation is the best land use."*

Shelburne area is beautiful, with many positive attributes, but has the misfortune to be located on slow weathering bedrock that cannot replenish soil nutrients quickly enough to compensate nutrients that were lost via wildfires and clearcut harvesting, both of which lay the soils bare, allowing calcium, nitrogen and other nutrients that are essential for plant growth to leach away in precipitation events. Without the retention of continuous forest cover, nutrient deficiencies worsen and the land's inherent ability to buffer streams that flow through the forests is lost, lowering the pH required to sustain salmon and trout populations. This interconnectedness of healthy forests and streams continues to be over-looked by land managers.

Since Strang's report, growing conditions of southwestern NS were researched by Dr Kevin Keys, NS Lands & Forestry (NSLF), who analysed soil nutrients and developed a nutrient budget model. His conclusions validate

what Strang already knew some 50 years earlier; that this unique landscape is severely depleted and acidified and some forestry practices such as plantation forestry are unwise.

Added to the issues outlined above, repeated clearcut harvesting coupled with decades of acid rain deposition cause soil acidification stress, leading to declines in forest health, productivity, and, if continued, can turn forest land to unproductive heathland. Recent soil testing concluded that southwestern soils are showing few signs of recovery in response to lower levels of acid rain.

NSLF is proposing harvest plans that are inappropriate for these soil types, with too much taken away, too fast. On-site regeneration after these harvests will be stunted as a result of inadequate levels of calcium and other minerals. Clearcutting itself exposes soils to the drying effects of direct sunlight, increases erosion by wind and water and destroys soil carbon stores, with organic carbon in humus and peat transforming to carbon dioxide that contributes to greenhouse gases and climate change. Shelburne's uniquely fragile soils are less able to grow forests as it once did prior to extensive disturbance. We believe that a century or more of careful forest management and restoration is required to restore ecosystem health.

If the province cannot stop the forest/wildlife degradation, perhaps municipalities can? Public land should simply not be plundered for private profits. Successive provincial governments, while in power, have allowed business/corporate interests to progressively degrade our forests and their wildlife with impunity.

On an economic vein, one might ask whether anyone in Shelburne County directly benefits adequately from Crown land forestry. Are local harvesters employed and will local mills receive the wood? Can local firewood be purchased from these cuts? (In some areas there has been a shortage of firewood, while WestFor reports high volumes of firewood produced.) What products will be made from such young forests and where is the wood being sent? Do economic dividends generated from current harvests compare to projected values if these forests were left to mature. Are the economic dividends generated from this wood justifiable, when much of this wood is destined to be trucked great distances away to be chipped and eventually burned?

The future for the municipality and citizens of Shelburne deserves the adoption of more ecological and sustainable forest management. A key answer is that harvest practices must retain adequate residual forest cover to protect soils and shelter wildlife and biodiversity values. Remove no more than 10-30 % of trees on a single harvest entry and maintain long harvest rotation lengths of at least 100 years, preferably longer. Request that hardwoods remain uncut, since they have the capacity to restore soil health. Dead and dying trees will also restore soil and do not constitute an emergency to harvest. Retain long-lived species. Ironically, many of these solutions were also stated in Keys et al. (2016). The department is not applying its own science. We agree with Strang that planting trees (or plantation forestry) is unwise, owing to the expense to the taxpayer, and the poor soils. Plantation forestry would require impractical and expensive soil amendments to off-set nutrient losses.

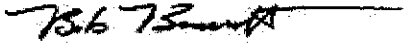
You may also consider requesting a delay in any further harvest proposals until ecological forest practices are adopted on the sensitive soils of Shelburne County. The current lack of landscape level planning has already resulted in large areas of cumulative clearcuts, with inadequate regard to the needs of mainland moose and other wildlife. Recreational desires of hunters, tourists, cottage owners, etc, should be more carefully considered. Some citizens have surmised that harvest proposals are being rushed through the departmental processes for approval and stockpiling before potentially more stringent ecological harvests are adopted.

It is critical to treat the land and its forests in your area more carefully, owing to the highly sensitive soils which are the foundation to both forest and streams. Dr. Strang's prescription of "wilderness recreation" may

be the wisest and best land use. When and if forests recover from past abuses, a more thoughtful and higher value forest industry can be created.

Thank you for your time.

Sincerely,

A handwritten signature in black ink, appearing to read "R. Bancroft", followed by a horizontal line.

Robert Bancroft

and

Donna Crossland MScF