

# Nova Scotia's Forest Sustainability Regulations and Uneven-aged Forest Management: Conflicts and Opportunities

## EXECUTIVE SUMMARY



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## Executive Summary

Nova Scotia's Forest Sustainability Regulations were enacted under the provincial Forests Act in 2000. The regulations require forestry companies and others that acquire over 5,000m<sup>3</sup> of wood annually from private lands to invest in silviculture either on their own operations or those of private woodlot owners, or through contributions to a government silviculture fund. The Department of Natural Resources (DNR) enacted the regulations to ensure that future wood supply would keep pace with expected increases in wood demand. The Department reviews the regulations every five years.

Silviculture that is applied under the regulations must adhere to a set of technical standards, but the regulations do not address harvesting practices that precede silviculture work, nor do they require that silviculture treatments be appropriate for site conditions or conserve non-timber elements of the forested landscape. To date, silviculture applied under the regulations has been overwhelmingly directed at even-aged management, part of the clearcutting model.

The rate of clearcutting in Nova Scotia – averaging over 520 km<sup>2</sup> a year over the past decade – is widely viewed as excessive, and detrimental to most forest ecosystems in the province. Many forestry professionals, including some contractors and processors, are also concerned that the prevalence of even-aged forestry may be foreclosing opportunities to develop a vibrant value-added forestry sector in Nova Scotia, which would rely more heavily on trees managed through uneven-aged management approaches like selection harvesting.

In the spring of 2005, the Standing Tall Campaign of the Ecology Action Centre hosted a workshop with contractors, landowners, and processors who had experience applying or attempting to apply uneven-aged forest management under the Forest Sustainability Regulations. The first objective was to better understand how the participants viewed the regulations. The second objective was to identify how changes to the regulations could better support uneven-aged forest management, and, by extension, a healthier and more diverse forest ecosystem and forest economy in Nova Scotia.

Workshop participants typically held similar views on the philosophy and intent of the regulations, and had similar suggestions on how technical standards and the administration of silviculture funding could be improved to better facilitate the application of uneven-aged forestry approaches.

### **Key findings include:**

Participants found that the regulations, despite their name, do not promote "forest sustainability". They attributed this to the intent of the regulations, which is simply to ensure wood supply. Participants believed that forestry in Nova Scotia was generally unsustainable given its impacts on forest ecosystems, and strongly supported improvements to provincial forest policies.

Participants believed that the Forest Sustainability Regulations greatly influenced forestry practices in Nova Scotia. Various challenges with applying the technical standards for uneven-aged treatments, combined with the lack of funding for such work, were thought to encourage clearcutting at the expense of uneven-aged management, even in cases where the latter would be more silviculturally appropriate.

Participants drew on their experience working with the regulations to propose changes to the technical standards that would make the regulations easier to apply towards uneven-aged management. Many of the suggested changes, while important, are relatively minor. Participants were most interested in simply being able to apply the most appropriate silviculture treatments without being in conflict with the technical standards.

Suggested changes to the technical standards focussed on Category 7, which was designed for "forest quality improvement". In the opinion of many participants, this category does not appreciate the reality of doing silviculture in Nova Scotia's degraded forests. Specific proposed changes to the technical standards include:

- number of trees and minimum diameter requirements for crop tree release;
- allowing a greater variety of tree species to be released or pruned; and
- easing density and spacing requirements for selection management.

It was also proposed that the standards explicitly state that selection management credits can be applied to encourage the development of shade-tolerant species, regardless of a stand's present species composition.

Participants strongly believed that the level of funding for uneven-aged silviculture under the regulations is much too low, and that this has contributed to uneven-aged methods rarely being applied in the woods. They recommended that the per hectare rate of silviculture credits for Category 7 treatments be increased to reflect the true cost of their application. They also strongly recommended that DNR require a portion of all silviculture work done under the regulations, including all work funded by the Sustainable Forestry Fund, be dedicated to uneven-aged treatments. Over the past five years DNR has provided about \$13.5 million in subsidies for silviculture on small private woodlots. Most of that money ends up being used on properties that have already been, or will be, clearcut.

This report has been submitted to the Department of Natural Resources for consideration during its five-year review of the regulations, occurring this year (2005).

## Recommendations

### 1.1. Philosophy and purpose

1. The Forest Sustainability Regulations (FSRs) should place a higher priority on increasing the quality, not just the quantity, of Nova Scotia's wood supply.
2. Opportunities to make the FSRs more conducive to conserving non-timber forest values, in concert with wood supply objectives, should be identified and implemented.
3. The Province should recognize the ecological and economic benefits of uneven-aged and restoration forestry and do more to support landowners, contractors, and registered buyers who want to pursue these forest management approaches.

### 1.2. Technical standards

4. Technical standards for Category 7 should generally be broadened to make them more widely applicable, including in degraded stands.
5. The minimum number of commercial crop trees that must be released under Category 7a should be reduced from 125 per hectare, and credits provided for releasing trees should be proportional to the number of trees released.
6. The diameter requirement for Category 7a should be amended so that credit can be claimed for releasing well-established crop trees with diameters at breast height (dbhs) under 15 cm.
7. The list of species that qualify for crop tree release should be amended to include additional species that respond well to release, such as eastern hemlock.
8. The 5m pruning height requirement for Category 7b should be reviewed so that credit can be claimed for pruning young crop trees.
9. The list of species that qualify for crop tree pruning should be amended to include additional species for which pruning can create a more valuable product, such as red spruce and eastern hemlock.
10. To accurately reflect its purpose, the title of Category 7c should read "selection management for tolerant softwood, mixed wood, and hardwood stands".
11. The technical standard for Category 7c should state explicitly that credits can be claimed regardless of a site's existing species composition.
12. DNR should investigate the creation of a technical standard for Category 7c, designed to limit high-grading and damage to residuals.

13. The technical standards for Category 7c should allow a post-treatment basal area greater than 26m<sup>2</sup>/ha, where achieving the current standard would require too heavy a treatment.
14. The minimum crop tree stocking requirement for Category 7c should either be decreased, or credit be made available for underplanting tolerant species to bring stocking up to the standard.
15. The minimum spacing requirement for Category 7c should be reduced.
16. The Forest Sustainability Regulations should be amended to ensure that the technical standards required for any silviculture work funded through the Sustainable Forestry Fund do not differ from those described in the regulations.

### **1.3.Administration and funding**

17. DNR should re-evaluate the amount of credits provided per hectare of Category 7 silviculture work, and increase that amount to a level that consistently covers the real cost of conducting those treatments.
18. The number of credits that can be initially claimed for Category 7 work should be increased to recognize that the cost of the initial entry typically exceeds that of subsequent entries.
19. All contributions to the Sustainable Forestry Fund should be dedicated to Category 7 treatments.
20. DNR should require registered buyers to allocate a minimum portion of their required silviculture work to Category 7 treatments.
21. DNR should explore a formal partnership with the Nova Scotia Woodlot Owners and Operators Association, to administer Category 7 funding from the Sustainable Forestry Fund.