STANDING TALL
FORESTS FOR LIFE

## Memorandum

To: SmartWood Audit Team
Attn.: Keith Moore

From: Minga O'Brien, M.Sc.
Forest Conservation Coordinator
Ecology Action Centre

## Re: Recommended field sites for SmartWood assessment team

This memo outlines the Ecology Action Centre's suggestions for field visits during the SEPH assessment. All page and grid locations refer to the 2001 Nova Scotia Map Atlas, unless otherwise noted.

### Site #1: Stevenson Rd., Middle Melford, Guysborough County, manual weeding, August, 2006

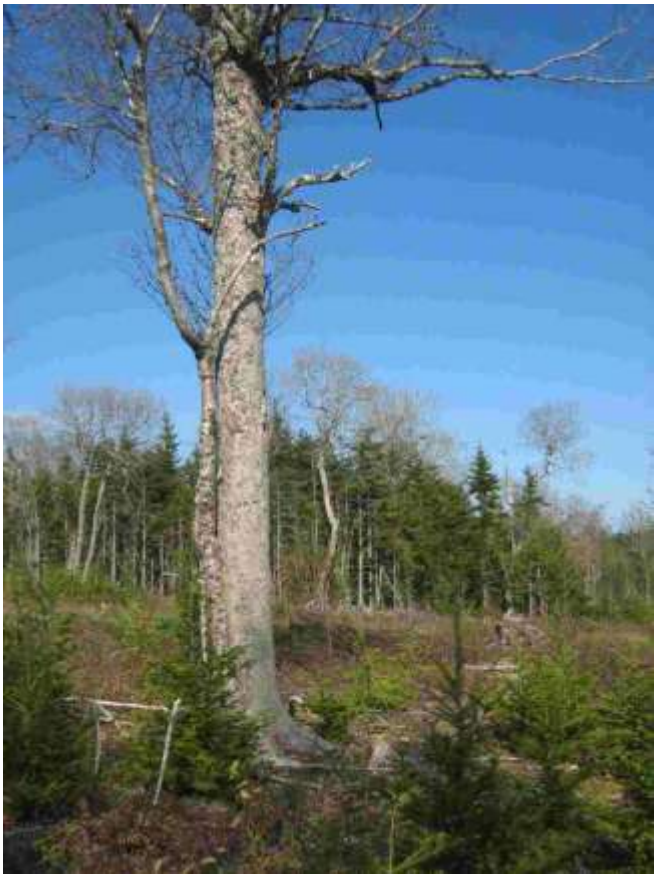
#### Location

District 2E, MU 224706; p. 43, quadrat W1, 3 cm east of the west grid line and ¼ cm south of the north grid line.

This 200-ha manual weeding site is located ~ 1 km to the south of Englands Lake.

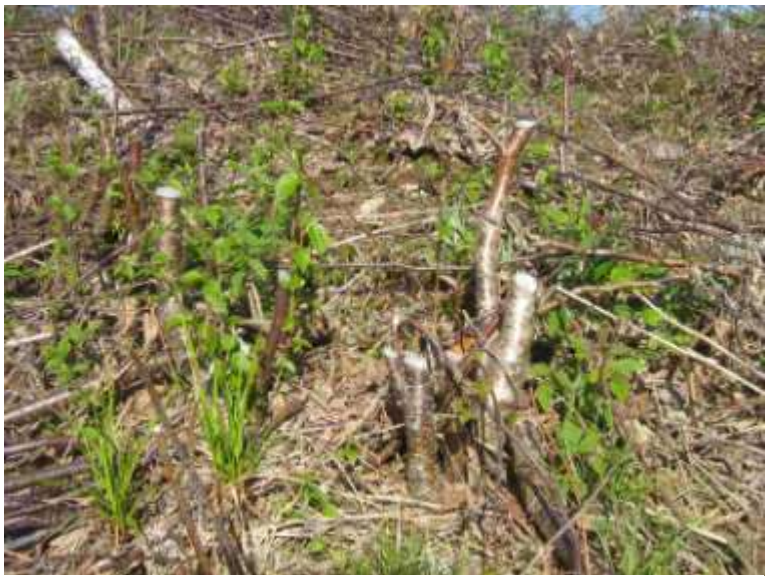
This site was planted to black spruce several years ago, and was being out-competed largely by yellow birch, as well as red maple and white birch. Contractors were told to remove competing hardwoods, which included cutting many young yellow birch stems. Remnant mature yellow birch and sugar maple trees were present, as well as a few white pine.

According to the "Natural Landscapes of Nova Scotia", the dominant landscape ecosystems for this area are (1) Well drained sugar maple - yellow birch - American beech hills with gap natural disturbance regime; and (2) Imperfectly drained red spruce (eastern hemlock, white pine) undulating terrain with patch/infrequent stand initiating natural disturbance regime.



***SITE 1: Yellow birch in midst of clearcut & Black spruce plantation***

***Site 1: Competition cleared around softwoods***



***Site 1: Recently weeded young yellow birch saplings***

Planting this site to Black spruce, and removing much of the vigorous yellow birch regeneration conflicts with the purpose and intent of the Maritime FSC standards, and in particular, standard 6.3.

## Site #2: MacKay Road, Trafalgar, planned hardwood harvest

### Location

MacKay Road, off Ellen Brown Road and Hwy 374, near Trafalgar. Page 40, quadrat X4. It is 3.5-4 cm to the east of the west grid line, and 1.5-2 cm north of the south grid line of quadrat X4.

This site has not yet been cut, possibly as a result of the concerns raised during our September field tour.

Proposed treatments for this site included group selection, strip cut, overstory removal and clearcuts.

***Site 2: Young sugar maple stand***

We are concerned about these prescriptions because:

- this is one of the few stands left in the area that had some semblance to its natural, site-evolved species;
- there are few older stands left in the entire County;
- the site has considerable potential for uneven-aged management and maintenance as a tolerant mixedwood stand;
- many of the sugar maple are young;
- it is unclear what a group selection would do to improve quality or maintain sugar maple on the site;
- the proposed prescriptions could significantly alter the structure and composition of this stand, reducing the tolerant softwood and hardwood component, and compromising future quality; and,
- SEPH could use this opportunity to learn and experiment with restoration.

## Site #3: Dean Settlement Road, Trafalgar, recent clearcut in fir/spruce

### Location

Off the Dean Settlement Road, about 2 km from the junction with Hwy 374. The logging road starts across from Porcupine Lake. Page 40, Y5; 1 cm to the east of the west grid line, and 3 cm to the north of the south grid line.

This recently harvested site was comprised of balsam fir, spruce and intolerant hardwoods. Logging had continued throughout very rainy weather in June, resulting in considerable rutting throughout the harvest block and on the main trail leading to the block, which was located in a poorly drained, low-lying area.

***Site 3: Skid trails and ruts in clearcut***

The team queried the degree of damage, and the impacts on long-term site productivity. When asked to explain the damage, local managers mentioned the unusually heavy rains in June and July, and that under normal conditions the rutting and scarring would not have been so severe. We were also told that rut depth did not exceed SEPH's allowable limits and that forwarding operations were suspended twice on this site. SEPH has said that their primary concern on this particular site was prevention of siltation into the small stream at the bottom of the hill.

We remain concerned because:

- Climate patterns appear to have shifted such that wet weather near the coast in June and July has become fairly common.
- The soil damage to this site appeared to be extensive, but Stora's concerns were mainly directed toward potential damage to the nearby stream, and not to onsite productivity.
- The initial location of the access trail in a wet, low-lying area demonstrated poor planning.

***Site 3: Ruts in clearcut***

## Site #4: Sunnybrae Wildlife Management Area, clearcut in pine-dominated site

### Location

Sunnybrae Wildlife Management Area. Page 40, Z3; 4 cm east of the west grid line, and 1.5 cm to the north of the south grid line.

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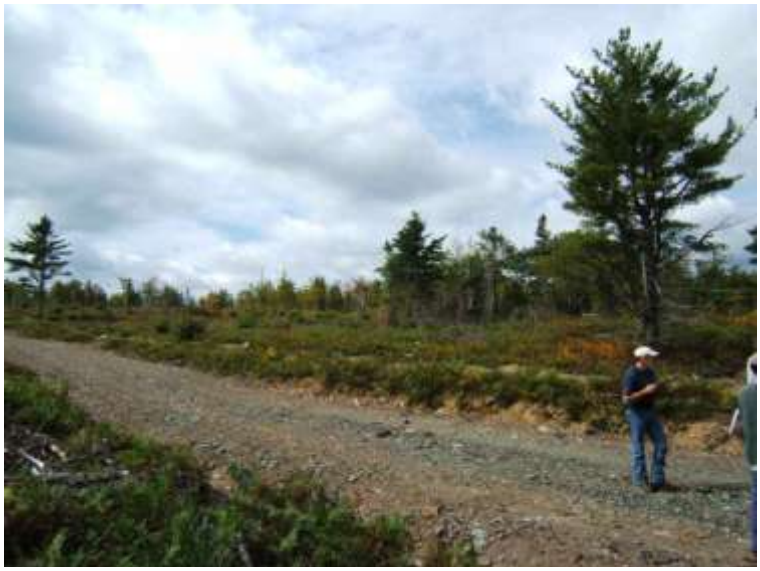
This site was cut 2 or 3 years ago, and has been planted to spruce. It had a component of white pine, evident from the white pine around the edge of the clearcut, a few good-sized pine throughout the clearcut, and numerous pine and other conifer seedlings.

The remnant pine have weevil damage, which would suggest that any new pine regeneration, growing in open conditions, will also incur weevil damage.

We are concerned that SEPH's preference for spruce pulp and lumber is leading to the marginalization of merchantable pine from this site. The open conditions will continue to result in weeviled white pine, which would suggest the managers are not managing for optimal value.



***Site 4:White pine with weevil-damaged trunks in clearcut***

## Site #5: Weaver's Mountain, thinning in tolerant hardwoods

### Location

Weavers Mountain, near Barney's River Station (Crown parcel with powerline going through it).

Page 31, X4, to the south of the power line, and to the east of the logging road, 4 cm to the east of the west grid line, and 1 cm to the north of the south grid line.

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This site is dominated by tolerant hardwoods. A trespass harvest took place in a portion of the stand. This was followed by additional thinning in 2005.

We are concerned that the treatment has altered the ecological characteristics of this forest. The following set of photographs demonstrates cutting up to vernal pools, inadequate maintenance of cavity and large-dimension trees, fragmentation and edge effects.

Hardwood quality had also been compromised. Canopy openings were large and residual

***Site 5: Cutting in tolerant hardwood stand, Weaver's Mountain***

stocking levels low, risking increased incidence of stump sprouts, epicormic branching, sunscald, top decline, stem forks, invasion of undesirables and shorter clear bole length.

There was no targeted removal of poorly formed and diseased trees, and there was no apparent plan in place to move towards residual stocking levels by size class for the maximization of sawlog production.

Since visiting this site, we have been shown several examples of hardwood management that suggest a much greater level of care and attention to growing quality hardwoods. Stora personnel have also recently participated on a hardwood management course.

Nevertheless, we remain concerned that:

- Openings for forest access roads are unnecessarily wide, over-exposing large numbers of edge trees;
- Protocols and procedures for maintaining key wildlife habitat features in hardwood stands are not adequately developed or applied on the ground; and
- Insufficient improvement work is being carried out in many hardwood stands.