

Sault College, To the Bush!

Sault College Forestry Students Learn About Sustainable Forestry and the Environment at Stokely Creek/King Mountain

Thursday, October 1, 2009

You could not have asked for a more beautiful fall day! Mark Harvey, Professor of forestry studies at Sault College, led seventeen second year students along the lower northern slopes of King Mountain, on a six hour extended tree marking lab.

What is Tree Marking all about?

The first few hours of the lab on King Mountain were spent conducting a pre tree marking inventory in a sugar maple and yellow birch forest.



Mark Harvey showing students the different tree species present.

The tree marking inventory is used to guide tree markers so they can make good, sustainable forest management decisions. Tree marking is a forestry practice that is used to maintain and improve the health and quality of forested areas and at the same time it helps conserve other forest values such as wildlife habitat. The tree marking technique has been refined through years of experience and scientific research. The Ministry of Natural Resources and partners such as Sault College, train and audit tree markers to ensure a very high quality of tree marking is carried out throughout the province.

Students learn how to do a pre tree marking inventory

With a starting point and a compass heading to follow, crews of three students established a cruise line of seven prism plots, each spaced at thirty meters. At each plot the crew collected information on basal area, tree species, tree diameter and some tree heights in order to assess the condition of the forest. Trees counted in the plots were recorded on the tally sheets as AGS (Acceptable Growing Stock) or UGS (Unacceptable Growing Stock). This is done by inspecting the tree from top to bottom to determine the tree's health and vigour. If fungal diseases, cracks in the stems, or decay were present, it would be tallied as a UGS tree. Although no trees are being removed in conjunction with this learning exercise, when applied in an actual forest management operation, trees to be removed are marked with a band of orange spray paint. Wildlife trees may in some instances be marked with blue paint.

Students learn to spot, identify and conserve wildlife values

Another very important component of a tree marking inventory is to assess wildlife and recreational values in the area. A specific minimum number of wildlife trees must be retained per hectare (2.47 acres per hectare). A wildlife tree is one that has a stick nest in it, cavities for feeding

or nesting or a tree that provides food. A minimum of 10 food producing trees called mast trees and 10 solitary conifers are retained per hectare to meet wildlife food, shelter and habitat needs. Students are also trained to spot rare plants such as the Brauns Holly Fern, and Oval leaved-bilberry that are found along the slopes of King Mountain. Steps are then taken by tree markers to ensure that forestry practices will not disturb the habitat of sensitive or rare animal and plant species.

The Tree Marking Prescription

The final step of the tree marking inventory is to write a tree marking prescription using the inventory data as a source of information about the forest. The prescription helps to set goals for forest management and guides tree markers decision making.

Students enjoy tree marking and understand its importance, as it incorporates all the aspects of ecologically sustainable forestry. Tree marking can open our eyes to important values found in the forest.

The rest of the class

Instead of going back to the class room for the rest of the lab, the second part of the lab was conducted in the forest, with note taking and discussions on Hardwood Silvicultural Systems and Tree Marking. An exercise followed involving individual tree inspection for defects and AGS/UGS trees.

The Algoma Highlands Conservancy Promotes Environmental Education

The Algoma Highlands Conservancy uses a variety of approaches to promote environmental education and sustainable forest management as two of our core values.

Allowing local academic institutions to use the Stokely Creek/King Mountain area as an easily accessible living classroom is a key mechanism with considerable impact on local students. Field trips such as that described above allow students to visualize and experience the natural world first hand while discussing general concepts and learning practical techniques. The Stokely Creek/King Mountain property offers an excellent array of forest types and habitat for educational learning with an extensive trail network allowing access and a safe learning environment for students of all ages. The conservancy is continuously seeking opportunities to work with educational institutes and public interest groups to facilitate learning about and enjoying nature.

Anna Rodgers, for the
Algoma Highlands Conservancy



What better place to learn about nature than from nature itself!