Clearcut Definition

August 14, 2012

Definition:

A clearcut is a forest harvest where less than 60% of the area is sufficiently occupied with trees taller than 1.3 metres¹.

Concept: A clearcut occurs in a harvest area when the open condition dominates and forest edge is minimal (Daniel et al, 1976). A distinct visual and ecological impact results from a clearcut. Through Percolation Theory we understand the critical threshold to maintain ecological connection across an area is approximately 60% (Farina, 2000). An area where less than 60% is sufficiently occupied loses its ecological connectedness and becomes fragmented. As occupied area increases, forest edge increases and the harvest area acts less like a clearcut, encouraging flows of wildlife and other ecological processes.

Measurement:

A harvest is measured as follows to determine whether it is a clearcut:

- Sample points are evenly distributed throughout the harvest area.
- At each point, measurements are taken to determine the minimal stocking level:
 - o IF EITHER
 - A tree exceeding 1. 3 metres in height is found within 1.36 metres of the plot centre.
 - o OR
- 10 m²/ha of basal area, or more, is measured with a 2-factor metric prism from the same point.
- o THEN
 - The point is minimally stocked
- o OTHERWISE, IF
 - Less than 10 m²/ha of basal area is found, the point will be considered partially stocked, where stocking is represented as a percentage of 10 m²/ha.
- If less than 60% of the area is minimally stocked, the harvest will be characterized as a clearcut.

¹ Some clearcuts can be classified as "Restorative" harvests, specifications are in the Clearcut Definition FAQ's.