

VRI Ground Sampling Procedures Version 4.8, May 2008
Amendment # 1
Modifications to the Leading Species Site Tree Selection Procedures
April, 2009

The number of leading species sample trees obtained to date on a sample basis has not been satisfactory for VRI Phase II Data Analysis and Adjustment. A statistical analysis of various methods of obtaining more leading species sample trees has been performed (available from the Ministry of Forests, Forest Analysis and Inventory Branch), and the sample tree selection and data collection procedures have been amended.

All projects (including projects where sampling is continuing from previous years), will have a leading species tree (or replacement as described below) collected in all established plots in a cluster. There will be no modifications to the top (T), second (S), or random (R) site tree procedures other than to clarify intent, and this amendment does not affect the National Forest Inventory and Continuous Mentoring Inventory programs.

Normal site tree selection procedures will be used with the following modifications.

General procedure

If a suitable (age or height) leading species sample tree is not found in any given plot in a cluster, a “replacement” tree will be selected. The closest suitable tree of the leading species to the plot center (within a maximum 25m radius of plot centre) will be selected as a replacement. The tree will be tallied as either a “X” tree if it is outside of the .01ha site tree plot or an “O” tree if it is within the .01ha site tree plot. Information is no longer required for a leading species tree that is “not suitable” for either age or height.

Do not record data for the “L” tree that was deemed not suitable, and record comments identifying the not suitable “L” tree (tree number), and the reason it was deemed not suitable for age or height (IE, residual, or a significant broken top, etc).

Occasionally a sample cluster may be in a stand where there all of the stems have the *same reason* for being unsuitable. For example, a wind event has occurred, and the tops of all the trees have been sheared off, or the sample is in a stand where all the stems are dead due to insect or disease. In these instances, record the sample tree data as an X or O tree, but put an “N” for not suitable, with comments. The crew should look within the entire 25m radius prior to selecting a tree that is not suitable (IE dead or broken) in these situations. During analysis the use of this data will be determined.

Detailed procedure modifications

Section 3.1 – Top Height tree plot -Replace existing text in point 2 with this paragraph	Measure a top-height tree, if a dominant or co-dominant tree is available within this plot
Section 3.1 – Top Height tree plot -. Replace existing text in point 5 with this paragraph	If a “suitable” leading species tree is not found within this plot, select a replacement leading species tree that is suitable within 25m of the plot centre.
Section 3.1 – Top height tree plot - Point 6 added	Measure a site tree of the next species in order of basal area, if a dominant or co-dominant tree of that species is available within this plot.
Section 4 – Inventory Cruising – General Procedures – Point 15 added	If a suitable leading species tree is not found within this plot, select a replacement leading species tree that is suitable.
Section 4.8 – Recording Age/Height [Length] Tree Data – “Note” at the bottom of page 88 is modified to read as follows	If a leading species tree is available as per the L tree selection, but is not suitable for either age or height, the L tree will not be collected. Second and top tree data will still be collected regardless of suitability.
Section 4.8 – Non- standard selection types – sub section replaced as follows.	<p>Non-standard selection types:</p> <ul style="list-style-type: none"> • Other (Type = O) a replacement leading species tree in 0.01 ha plot • X extra (Type = X) a replacement leading species tree outside 0.01 ha plot <p>If a suitable (age OR height) leading species tree is not found within the 0.01ha plot (as defined in the following section), the crew will select the closest tree to the plot centre that is: of the leading species, suitable for age <i>and</i> height, and is dominant or co-dominant. The crew should venture no farther than 25m from the plot centre. If a suitable tree is not found within a 25m radius, note this in the comments field. If the closest tree is unsafe (location or hazard above), make a comment and select another tree. Occasionally a sample cluster may be in a stand where there all of the stems have the <i>same reason</i> for being unsuitable. For example, a wind event has occurred, and the tops of all the trees have been sheared off, or the sample is in a stand where all the stems are dead due to insect or disease. In these instances, record the sample tree data as an X or O tree, but put an “N” for not suitable, with comments. The crew should look within the entire 25m radius prior to selecting a tree that is not suitable (IE dead or broken) in these situations. During analysis the use of this data will be determined.</p>
Section 4.8 – Suitability of Age and Height – The second sentence “ <i>The age and height are still recorded in these instances with an "N" placed in the appropriate column</i> ”. is replaced as follows	The age and height are still recorded for Top, Second and Random trees in these instances with an "N" placed in the appropriate column. A leading species (L) tree is not recorded when either age or height is not suitable, and a replacement X or O tree is selected instead.

<p>Section 4.8 – Procedure for selecting Top Height, Leading Species, and Second Species Trees – Point 4(a) bullet 2 is replaced as follows</p>	<ul style="list-style-type: none"> • largest DBH, live, dominant or co-dominant tree of leading species (L tree) if suitable for age and height
<p>Section 4.8 – Procedure for selecting Top Height, Leading Species, and Second Species Trees – Point 4(b) is replaced as follows</p>	<ul style="list-style-type: none"> • largest DBH, live, dominant or co-dominant tree of leading species (L tree) if suitable for age and height
<p>Section 4.8 – Procedure for selecting Top Height, Leading Species, and Second Species Trees – Point 5 is replaced as follows</p>	<p>If a suitable leading species tree is not found within the 0.01 ha plot, select a replacement leading species tree that is suitable for age and height, of the leading species and is co-dominant or dominant. The selected tree shall be closest tree to the plot center that meets these requirements within a radius of 25m and is labelled as follows.</p> <ul style="list-style-type: none"> • Other (Type = O) a replacement Leading species tree in 0.01 ha plot • X extra (Type = X) a replacement leading species tree outside 0.01 ha plot
<p>Section 4.8 - Procedure for selecting Top Height, Leading Species, and Second Species Trees — “Note” at the bottom of page 90 is modified to read as follows</p>	<p>If a leading species tree is available as per the L tree selection, but is not suitable for either age or height, the L tree will not be collected. Second and top tree data will still be collected regardless of suitability.</p>
<p>Section 4.9 - Recording Auxiliary Plot Measurements – Leading Species Tree - add Point 3 on page 99 as follows</p>	<p>If a suitable leading species tree is not found within the 0.01 ha plot, select a replacement leading species tree that is suitable for age and height, of the leading species and is co-dominant or dominant. The selected tree shall be closest tree to the plot center that meets these requirements within a radius of 25m and is labelled as follows.</p> <ul style="list-style-type: none"> • Other (Type = O) a replacement Leading species tree in 0.01 ha plot • X extra (Type = X) a replacement leading species tree outside 0.01 ha plot
<p>Section 4.9 - Recording Auxiliary Plot Measurements — “Note” at the bottom of page 99 is modified to read as follows</p>	<p>If a leading species tree is available as per the L tree selection, but is not suitable for either age or height, the L tree will not be collected.</p>