

# Highlights

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## April 2017 *Cruising Manual* Changes

The *Cruising Manual* is available on the Internet at:

<http://www2.gov.bc.ca/gov/content/industry/forestry/competitive-forest-industry/timber-pricing/timber-cruising/timber-cruising-manual>

Section	Description
<b>1.1 – Definitions</b>	Definitions added for firmwood, net merchantable area and soundwood.
<b>2.2 – Cruise Plans</b>	<p>Clarification that Timber Sale Managers must maintain cruise plans on file in areas where district staff do not check cruise BCTS.</p> <p>Clarification that polygons that are connected (vs separated) by a constructed linear type cannot be considered the same timber type.</p>
<b>2.3 – Sampling Error Objectives</b>	<p>Rewording of maximum grid size statements.</p> <p>Clarification that the maximum ratio of count to full measure plots for both the coast and interior is 3:1.</p>
<b>2.3.1 – Scale Based Cutting Authorities</b>	Simplification of wording around the ability to waive sampling error. Grid may be any equal interval of 100 m or less. An average of 4.0 trees per plot per block must be achieved regardless of grid size.
<b>2.3.4 – General Cruise Based Cutting Authorities – Coast Only</b>	<p>Clarification that the 4.0 trees per plot requirement is on a block basis.</p> <p>Clarification that the size requirements are based on net merchantable area.</p> <p>Clarification that BCTS must continue to collect both loss factor and CGNF cruise data until CGNF is fully implemented across the Coast.</p>
<b>2.3.4 – Cutting Authorities within the Great Bear Rainforest North</b>	<p>Change from Northern Great Bear Rainforest to Great Bear Rainforest North.</p> <p>Clarification that the 4.0 trees per plot requirement is on a block basis.</p> <p>Clarification that the size requirements are based on net</p>

	<p>merchantable area.</p> <p>Clarification that BCTS must continue to collect both loss factor and CGNF cruise data until CGNF is fully implemented across the Coast.</p>
<p><b>2.4.1</b> – Standards for the Location of Plots Using a Grid</p>	<p>Clarification that when using local grids, each cutblock must have its own grid. Timber types may have different grid intervals, but must be on the same grid as the cutblock.</p> <p>Clarification that rectangular grids are not permitted. Licensees may choose between square or staggered grids but the choice must be consistently applied within an identifiable unit.</p>
<p><b>2.4.2.1</b> – Office Cruise Plan Procedure</p>	<p>Clarification that the reduction of a grid to meet the minimum number of plots per type should be done from the point where the grid originates, but only for that type.</p>
<p><b>2.4.3</b> – Standards for the Location of Additional Plots to Meet Sampling Error</p>	<p>Clarification that where a new grid is designed, that it should be of the same orientation and pattern as the existing grid.</p> <p>Housekeeping.</p>
<p><b>2.5.1</b> – Standards for Re-cruising</p>	<p>Process to determine maturity of timber for the purposes of this section has been added.</p>
<p><b>2.5.2</b> – Unsafe to Cruise</p>	<p>If a safe portion of the same type is not available adjacent to the unsafe area, the methodology of determining cruise volume and value is subject to mutual agreement between the licensee, or Timber Sales Manager, and the Regional Executive Director.</p>
<p><b>2.5.3</b> – Cruising Patch Cut Silviculture Systems</p>	<p>Clarification that each type within the cut block may have different grid intervals but must originate from the same point of intersection as the cutblock.</p>
<p><b>2.5.4</b> – Schedule “A” (Private) and Schedule “B” Crown Lands</p>	<p>A chart has been added specifying the requirements for cruising and compiling blocks that contain more than one type of land.</p>
<p><b>2.7.2</b> – Count Plots</p>	<p>Clarification that when orphan trees occur during or because of field work, data from the orphan species will be moved to the nearest measure plot in the same timber type with the same BAF.</p> <p>More details have been added to the options for dealing with orphan trees due to office changes and they have been listed in order of preference.</p>

<p><b>3.1 – Introduction</b></p>	<p>Clarification that if the cruise is not consistent with the procedures in the manual that corrective action may be required before the cruise data is used in an appraisal.</p>
<p><b>3.2.1 – Cruise Plan Map Standards</b></p>	<p>Clarification that the items required in Table 3-1 may be submitted in a cruise plan or on a cruise plan map.</p>
<p><b>Table 3-1</b></p>	<p>Addition of requirement to indicate whether the permit is cruise based or scale based.</p> <p>Clarification that direction of travel and strip line location is not required for GPS located plots. Direction of travel for GPS located plots can be determined from the prp table and/or shape file.</p> <p>Clarification that the location of plots on the final cruise map must be the actual location of the plots in the field.</p> <p>Removal of requirement for contour lines on cruise plan or final cruise maps.</p>
<p><b>3.3 – Principles</b></p>	<p>Additional detail has been provided around the required level of check cruising:</p> <ul style="list-style-type: none"> <li>• The 10.0% or 5 plot minimum is based on the sample population identified by the check cruiser (block, cruiser, permit, etc).</li> <li>• The 10.0% or 5 plot minimum is only required when a rejection is based on tree data attributes or plot slopes.</li> <li>• If the rejection is based on measure plot data, the minimum 10.0% or 5 plots must be measure plots.</li> <li>• If less than the 5 plot or 10.0% minimum has been audited and there is mutual agreement between the check cruiser and cruiser/licensee representative, the cruise may be accepted or rejected.</li> </ul> <p>Clarification that the cruising field work will be assessed according to the Cruising Manual in effect at the time the field work was completed.</p>
<p><b>3.4 – Tree Data</b></p>	<p>Additional information provided for recording the age in 10's when age class 13 and 14 trees are present in a plot.</p>
<p><b>3.5 – Survey and Area Measurement Standards</b></p>	<p>Housekeeping</p> <p>Clarification of the minimum distance requirement of 5.0m between the PRP and the cruise plot.</p>
<p><b>3.6 – Plot slopes</b></p>	<p>Either of the two plot slope standards must be exceeded before the standard is determined to be incorrect. (previously both standards needed to be exceeded)</p>

<p><b>3.7 – Check Cruise Dispute Mechanism</b></p>	<p>Clarification that the 30 days previously mentioned in Step 3 are from the time of the site visit in Step 2.</p>
<p><b>3.8 – Cruise Data Submissions</b></p>	<p>Clarification that the PRP table is only required in pdf format, when requested.</p>
<p><b>4.3.1.5 – Plot number or letter</b></p>	<p>Clarification that certain steps are applicable for both conventional and GPS methods of plot location. Slight wording changes for the establishment of reference points.</p> <p>Clarification that the PRP must be at least 5.0m from the cruise plot.</p> <p>More detail around the choice of a PRP: Trees that may be large enough to incur deflection and interference of GPS signals are not acceptable.</p> <p>Clarification that if a PRP cannot be established within tolerances, the cruise plot must be located using conventional methods.</p>
<p><b>4.3.1.8 – Ages in 10’s</b></p>	<p>Additional information provided for recording the age in 10’s when age class 13 and 14 trees are present in a plot.</p> <p>Clarification that for the purposes of compiling Coastal loss factor cruises, block maturity is based on both coniferous and deciduous volume.</p>
<p><b>4.3.1.15 – Prism Sweep</b></p>	<p>Additional detail provided regarding the measurement of oblong or oddly shaped trees and stems that have been shattered at DBH where a portion of the stem lies outside of the plot.</p> <p>Rewording of the statement around measuring boundary trees that are to be harvested or stubbed.</p> <p>Removal of the statement that BAFs can only be changed in variable timber type polygons.</p> <p>A restriction on BAF changes has been introduced. The BAF can only be changed to a BAF value within 50% of the original BAF, unless a professional rationale is provided.</p> <p>Clarification that the block edge for walkthrough purposes is determined by projecting a line between the outer most face of the merchantable trees on the edge of the opening.</p> <p>Clarification that the road centreline will be used as the block boundary where a road permit right of way forms the block boundary but is not marked in the field.</p>

<b>4.3.2.6 – Tree Class</b>	Housekeeping. Clarification that soundwood and firmwood are analogous when assessing tree classes 3 and 4. Clarification that tree classes 5 and 8 are for living trees.
<b>4.3.2.19 – Positions 64 to 90</b>	Clarification that these fields are only used in Coastal CGNF cruises.
<b>4.4 – Reverse side of Cruise Tally Sheet</b>	Clarification that the date on the back of the cruise card must be the date the field work was completed, not the date that the card is signed by the cruiser.
<b>5.4.3 – Coast Block Maturity Indicator</b>	Clarification that block maturity is based on both coniferous and deciduous stems.
<b>5.9 – Percent Reduction</b>	Clarification that the percent reduction must be consistent with the specifications in the site plan and/or schedule B. When a range of stems is stated in the prescription, the percent reduction input will be based on the average in that range. Caution provided to consider whether dead stems will actually be reserved from harvest when identifying percent reductions.
<b>5.10.1 – Summary of Required/Optional Reports and digital files</b>	Removal of file extension “mof” for ASCII files as this extension is no longer used.
<b>Age and Height Class Limits Table</b>	Change of age in this table to age in 10’s.
<b>Cruise Compilation Loss Factor Table</b>	Addition of an updated PSYU Cross Reference Procedure to be consistent with Mapview changes.
<b>A.6.1.2 – Attack codes for Balsam, White Pine, Yellow Pine and Lodgepole Pine</b>	New wording for Grey Attack Code 3: Grey attack trees that have been dead for many years often no longer show evidence of beetle attack. In beetle attacked stands, it is acceptable for check cruisers to extend the “benefit of the doubt” on Grey Attack Code 3 classifications if these trees show signs of significant bark loss and other signs of long-time mortality but no remaining bark beetle signs (beetles, pitch-tubes, frass, exit holes, blue stain, etc.). Cruisers are still expected to look for beetle sign and to rationalize their damage codes if they suspect these sign to be removed, obscured, or faded.
<b>A.6.2.3 – Heavy Damage –</b>	Definition added for extensive shallow charring.

Code C	
<b>A.6.3 – Down Trees</b>	Additional detail added to support the classification of damage codes E and G.  Damage call matrix added to the manual.
<b>Ten Meter Log Table</b>	Addition of species specific tables. Timber cruisers may choose to either use a general or species/maturity specific table to calculate the 50% firmwood threshold, but should document which tables they use.
<b>FS 693 Provincial Cruise Plan</b>	Addition of scale/ MPB cruise and green cruise based sale indicator.
<b>FS 694 Provincial Cruise Plan and Map Check List</b>	Addition of cruise based/scale based indicator.
<b>Magnetic Declination</b>	Declinations updated to September 2016.
<b>A.4.2.1 - Conks</b>	Clarification that <i>Fomitopsis pinicola</i> is only considered a suspect indicator on large, old wounds on live trees.