



BCTS
BC Timber Sales
Skeena

Standard Operating Procedures CMT SAMPLING PROCEDURES

March 2009

Culturally Modified Trees (CMTs) represent a significant cultural value to First Nations and can provide important information regarding the historic presence and activities of First Nations on a specific site. CMTs that pre-date 1846 are protected from damage, destruction, or alteration under the Heritage Conservation Act (HCA), and may only be harvested under the authority of a Site Alteration Permit (SAP) issued under Section 12 of the HCA.

SAPs generally contain requirements to cut stem-round samples, analyze the samples, and report analysis results to Archaeology Branch and the appropriate First Nations. This standard operating procedure is intended to provide guidance to ensure that SAP requirements are fully met.

Equipment Checklist:

- Power saw
- Metal tags and/or waterproof paper
- Stapler or nails
- Lumber crayon or waterproof felt pen
- Paint
- Pencil
- AIA map (prefer 1:5,000 scale)
- Frame backpack to carry samples to the road (optional).

Pre-Harvest CMT Identification:

BCTS – Timber Technician Responsibility

Where a SAP has been received, ensure that only those CMTs permitted for alteration will be harvested – cutting or alteration of CMT's that are not within the SAP is a contravention of the HCA. A number of CMTs authorized for harvest will be selected for sampling and analysis. It is important that CMTs to be sampled are clearly identified and marked prior to harvest so that they will continue to be identifiable during and following harvest. In addition to flagging ribbon, identifying information should be written on durable materials (e.g. metal tags, waterproof paper) attached to the CMT and may also be painted onto the CMT, as follows:

1. TSL/Cutting Permit/Block number or Road number and station.
2. CMT number, as per AIA report.
3. Where sampling of a specific CMT is mandatory, paint "Sample" onto the CMT.
4. Paint a cut-line above the base of the scar to show the preferred location for cutting the sample.

Cutting of the CMT Sample: Licensee Responsibility under BCTS Supervision

The process of cutting the sample requires diligence to ensure a proper sample is taken for sampling. The following steps are recommended:

1. After falling a CMT, paint the stump top with the CMT number.
2. If the sample will be cut from the CMT at the road or landing ensure the CMT is marked so it can be identified after yarding or skidding.
3. Cut the CMT sample at the approximate location of the cut-line painted on the stem of the tree.
4. If no cut-line is visible, cut the sample so that the scar is included in the sample.
5. For nursing tree samples cut the disc as low on the tree as possible.
6. Cut the disc thin to limit sample weight, but sufficiently thick to remain intact through transport.
7. For large samples, the sample may be limited to a wedge containing the tree pith (centre), if present, and the scar window, lobes, and edges (see Figure 1).
8. If a CMT is destroyed by felling take a sample from the stump or select an alternate CMT sample.

Labelling of the CMT Sample:

Licensee Responsibility under BCTS Supervision

It is imperative that the CMT sample is properly labelled immediately after cutting to ensure proper identification through transportation, storage and analysis. Labelling attached to the stem-round sample should consist of durable materials such as inscribed metal tags or water-proof paper. In addition, the information may be written directly on the stem-round sample with lumber crayon, water-proof felt pen, or paint. Labelling information must include:

1. TSL/Cutting Permit/Block number.
2. CMT number.
3. Date CMT was felled (month/year).
4. For nursing tree CMTs the top or bottom must be identified.

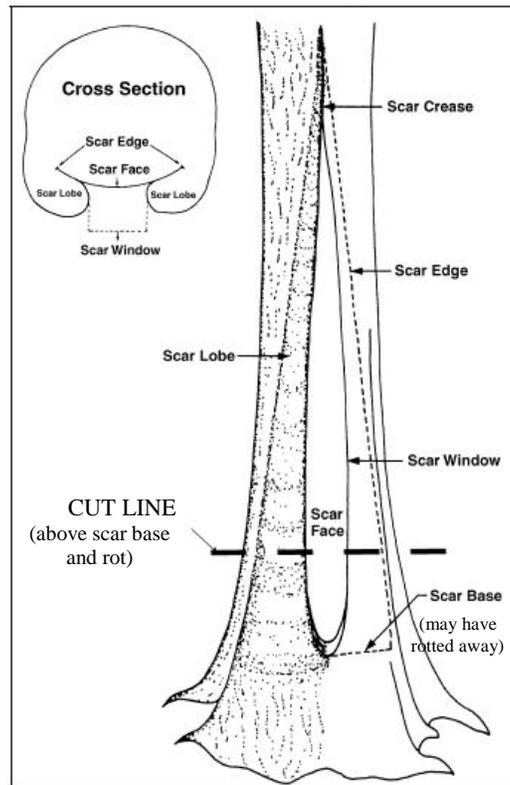
If the disc breaks apart, draw lines on the pieces and/or attach a sketch of the sample showing how the pieces join together. Place all CMT pieces into a burlap sack and attach a label with all information onto the outside of the sack.

Storage of CMT Samples:

BCTS Timber Technician Responsibility

- Deliver the resulting sample to the designated BCTS office or other location approved by BCTS staff.
- Prior to analysis, store CMT samples in a dry, well-ventilated area to dry samples for sanding (wet wood cannot be properly sanded).
- After analysis, offer the CMT samples to the appropriate First Nations for curation. If not accepted by the First Nation, store CMT samples in a location secure from theft and vandalism until the holding period has expired.

FIGURE 1: Sketch of a Typical CMT



For more information refer to the Ministry of Forests publication “*Culturally Modified Trees of British Columbia – A handbook for the identification and recording of culturally modified trees.*” by Arnoud H. Stryd, Arcas Consulting Archaeologists.