

Culturally Modified Tree Data

Culturally modified trees (CMTs) occur commonly in Southeast Alaska and represent trees that have been altered by humans in the past. Usually these modifications consist of removal of strips of bark or other alterations made to the woody portion of the tree. Table A-1 presents examples of common types of CMTs typically observed in Southeast Alaska. In most cases, archaeologists are concerned with indigenous Native use of the trees, but early trapping and logging also left impacts that are still much in evidence along the entire length of the Northwest Coast.

To determine whether a scar is natural or of human origin, the following criteria are used to recognize a cultural modification.

- Tool marks are usually present in the modification scar.
- Scars usually display a uniform shape: rectangular, oval, sometimes long and tapered.
- No bark is present in the scar.
- One to three or more scars occur on the same tree.
- Very few or no branches are present within the scar.
- Scars that start above the base of the trunk are likely cultural.
- Scars that are both horizontal at the top and base resulting in a rectangular shape are likely cultural.
- The presence of multiple scars increases the likelihood of them being cultural.
- No galleries from engraver beetles are present on the scar face.
- Well-rounded healing lobes (lip growth) that fold under the edge of the scar are present.
- Scar is associated with other bark-stripped trees in the immediate vicinity.
- Tree is straight and well-formed (may not be the case after 300 years of lobing).
- Burning scars are present that are restricted to limited areas of a tree.
- Carvings or painted graphs are observed on tree.

_	Usual Tree		
Туре	Species	Description and Use	Illustration
Triangular Bark Strip	Cedar Red (<i>Thuja plicata</i>) Yellow (<i>Chamaecyparis</i> nootkatensis)	The most common of all CMTs. Made by removal of a long thin strip of bark. Chop marks are made at the base of the tree, deep enough to get fingers under the bark. The bark was then pulled out and up in order to remove the long narrow strip of fiber. The outer layer of bark was then separated from the cambium, which was processed and saved for use in making baskets, braided into rope, pounded into fibers for the weaving of clothing or mats. With rare exceptions, these scars are located on the uphill side of tree and have large, rounded healing lobes on either side of the scar.	
RECTANGULAR Bark Strip	Cedar Red (<i>Thuja plicata</i>) Yellow (<i>Chamaecyparis</i> <i>nootkatensis</i>)	A large, rectangular slab of bark is removed. Axe or stone adze marks may be seen at the top and bottom of the scar. Often, bark adjacent to the removed section will have sloughed off due to lack of nutrients. Slabs were used in the making of temporary shelters, roofing, etc.	

Common CMTs found in Southeast Alaska (Adapted from USFS Tongass National Forest handout)

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Туре	Usual Tree Species	Description and Use	Illustration
BLAZE	Most commonly seen on Spruce (<i>Picea</i>) and Hemlock (<i>Tsuga</i>)	A small removal of bark from any species of tree usually associated with hack marks. This type of scar may have been used as a trail marker or as an area boundary marker and may be historic or prehistoric in origin.	
OVAL SCAR	Spruce (<i>Picea</i>) and Hemlock (<i>Tsuga</i>)	This rather large tear-dropped strip is found on hemlock and spruce trees, sometimes associated with hack marks. The inner bark could be used as a food item and the spruce was cut in such a way that pitch would ooze out along the top and side of the scar and puddle at the bottom, where it could be gathered for use as glue or filler	
Plank Removal	Cedar Red (<i>Thuja plicata</i>) Yellow (<i>Chamaecyparis</i> nootkatensis)	A long rectangular scar similar to a square cut, but cut deep into the woody portion of the tree to obtain boards for the construction of Tlingit, Haida, and Tsimshian long house. A slab of wood was removed from a standing, live tree with an adze and wedges.	
ALCOVE TREES	Cedar Red (<i>Thuja plicata</i>) Yellow (<i>Chamaecyparis</i> nootkatensis)	This obvious scar is marked by a large hole into the heart or center of the tree. One type of alcove was used as a test pit made by Natives to check out the center of a red cedar before cutting it down in order to find out if the tree was solid and worthy of canoe construction. Early trappers also used these holes to hide their marten traps. Another type was made large enough to enable a person to get out of the weather. Natives and early travelers would lay large slabs of bark against the tree to create a shelter.	
Hacked	All species	Numerous hacks or chop mark scars appear in all species of trees along the area close to shore. Splinters of wood may have been removed to obtain dry kindling for starting a fire.	
BURNED TREE	All species	A tree that shoes signs of having had a fire built near its base. Alcove trees that have been used for shelter often show signs of repeated fire use.	
Stump	All species	Rarely an old cedar tree stump can be recognized as having been cut down for use in the making of canoes, totem poles, houseposts, etc. This type of CMT is probably more common than is apparent, but owing to rot and the buildup of moss, it is not easily recognized. Two ways of spotting one are: (1) no fallen tree trunk is associated with the stump or (2) no obvious signs are evident of having been cut by a logger, such as a flat or sawed surface with springboard notch.	