



# Cultural Resources

## Culturally Scarred Trees

In 2004, Glacier National Park in cooperation with the Preservation Department of the Confederated Salish and Kootenai Tribes, Salish Kootenai College, and the Rocky Mountains CESU, began surveying culturally scarred trees within the park. The trees had been scarred by the American Indian practice of peeling back the bark to expose the cambium layer.

In the vicinity of Glacier National Park, this has been an important food source for Kootenai, Salish and Pend d'Oreille people for thousands of years.

The inner cambium layer of Ponderosa Pine is edible and extremely rich in nutrients. During spring, the cambium layer, which is about 1/16 of an inch thick, is sweetened from the sap within, much like maple syrup. In the vicinity of Glacier National Park, this has been an important food source for Kootenai, Salish and Pend d'Oreille people for thousands of years. Culturally scarred trees- on which the bark has been peeled to remove the cambium layer- are significant remnants of these activities.

To obtain the sweet bark layer and the sap, the outer bark was first cut with an ax or stone knife. The incision was about waist high on the trunk and about a foot long. A pole was thrust in



Members of the 2004 culturally scarred tree survey team record a Ponderosa Pine in a burned area of Glacier National Park.

to the incision, and upward beneath the bark, serving as a lever to loosen the bark from the tree. Once a strip was started, the bark was then peeled back. A knife was used to scrape off the juicy layers on the inside of the bark, or on the exposed trees. This procedure did not kill the tree, but left an elongated scar.

The best time for obtaining bark was in the spring, when the sap was running. "It is best," said Kootenai Chief Baptiste Mathias, "when it is watery and not sticky" (White, 1954). Spring also was the easiest time to peel the bark. Bark that was not consumed

on the spot was stored for later use.

The journals of the Lewis and Clark Expedition include several references to peeled trees:

*"..saw where the native had peeled the bark off the pine trees about this same season. This the indian woman with us informs that they do to obtain the sap and soft part of the wood and bark for food...July 19 1805, near the Gates of the Rocky Mountains on the Missouri River, near Helena, Montana, I made camp at 8 on this road and particularly on this creek Indians have peeled a number of Pine*

Photographs below: culturally scarred Ponderosa Pine trees in Glacier National Park.



*for the under bark which they eat at a certain Season of the year, I am told in the spring they make use of this bark. September 12, 1805, on Lolo creek, in Western Montana.*

Thain White, an early Flathead Lake amateur ethnographer, had this to say about culturally scarred trees:

*“While they were enroute to the Pacific Ocean in 1805, Sacajawea told Lewis and Clark that her people, the Shoshoni, peeled off the inner bark of the trees and ate it as food. Yet, in spite of the fact this information has been available. . . it comes somewhat as a surprise to many that the Indians once consumed quantities of bark as a delicacy and as a food. Many have noticed and have wondered why so many tree trunks in Northwestern Montana bear large scars, and they have assumed that the damage was caused by wild animals, fires, or some other natural enemy. A few have realized that they were actually scarred as a result of native economic and subsistence activities” (White 1954).*

Francis Auld, a member of the Confederated Salish and Kootenai Tribes who helped direct the Glacier Survey, noted that the cambium layer was considered to be very healthy

food, and an important dietary supplement. The inner bark that was not consumed on the spot was saved for later use.

In addition to Ponderosa Pine, American Indians also obtained edible bark from Lodgepole pine, white pine, quaking aspen, and western larch.

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Meaningful comparative studies of culturally scarred trees require large tracts of un-impacted old-growth forest. There are only a handful of such areas left in the Northern Rocky Ecosystem, and Glacier is one of the few areas that contain the well-preserved old-growth forests required for this type of study. At this time, there have been 37 individual tree sites containing 73 individual scarred trees identified within Glacier National Park. These trees are managed as archeological sites, and it is very important to leave them undisturbed.

