



A Reconnaissance of Satchie Creek's Hesquiaht Culturally Modified Trees

By David Black, Stephen Charleson, Karen Charleson, James Cole, Nan Macy, Dennis Morgan, David Silverberg, and Sarah Tyne

On 5 August, 2007, Hooksum Outdoor School and Environmental Learning Institute, conducted a reconnaissance expedition in Satchie Creek watershed to assess the creek's physical fish quality and the presence of culturally modified trees. Satchie Creek is in the Yaksis Hahoutley of the Hesquiaht First Nation of Nuuchahnulth First Nations. The Hesquiaht First Nation's territory is in the northern Clayoquot Sound on the west side of Vancouver Island. In the midst of decades of controversial treaty and land use negotiations, the Clayoquot Sound Watershed was declared a UNESCO Biosphere Reserve in January 2000. Biosphere designation recognizes global appreciation of Clayoquot sound's exceptional natural and cultural values and attributes. One example of these values and attributes are the rare watersheds in cultural old growth conditions.

Satchie Creek watershed is one of two remaining culturally modified old growth coastal temperate rainforest drainages in the Hesquiaht Lake watershed. Satchie Creek watershed is approximately 2500 hectares. At the Hesquiaht Lake outlet, Satchie Creek is a third order creek with 4 significant 2nd order sub-watersheds.



In the Hesquiaht Harbor watershed, a culturally modified tree is a tree that has been altered by Hesquiaht people as a part of their traditional use of the forest. There are many kinds of culturally modified trees in the Hesquiaht watershed. Examples include trees with bark removed, stumps and felled for logs, trees tested for soundness, trees with scars from plank removal, relict wedges and trees cut for wood or kindling.

We utilized protocol described in “Culturally Modified Trees of British Columbia” published by the Ministry of Forests in February 1997. This handbook suggests 2 levels of investigation. Level 1 is for a site reconnaissance. Level 2 is for detailed observations on individual trees.

In our reconnaissance of Satchie Creek, we walked up the river approximately 3 km. We had one day, 5 August, to investigate CMTs in the creek. When we spotted likely cedars on adjacent slopes we visited these areas. Almost without exception heavily cedared slopes contained CMTs. There is an apparently high density of CMTs.

In fact the canopy of the forest was over 25% open and the diversity of large trees high. Old growth of Western Red Cedar, Balsam Fir, Western Hemlock, Douglas Fir and Sitka Spruce were abundant. Minor amounts of Pacific Yew were observed. There is a healthy understory comprising salal, huckleberry spp and fern spp.. It is plausible that some component of this openness is due to aboriginal logging. A gap analysis is necessary to test this hypothesis.

We identified 4 significant sites with a minimum of 2 CMTs. At two of these sites we made level 2 observations. A few of these trees exhibited multiple events on a single tree. Thus a recording might be “Site 1 Level 2 Tree 2 Event 3”. We want to emphasize the reconnaissance nature of this expedition. There are numerous other CMT sites adjacent to those noted as level 1 or level 2 sites.

These areas have been used in a “sustainable” way for hundreds if not thousands of years. With the evidence of the CMTs one can note multiple ways in which the trees have provided various materials important to the daily lives of the Hesquiaht people. Additionally, this has been accomplished over a remarkably long period of time while leaving the forest and the surrounding stream beds apparently ecologically intact. The companion stream study concludes that the stream is in upper acceptable condition.

CMTs are protected by BC law unless local First Nation's council say they can be logged. This is called consultation. A legal obligation to consult First Nations. Logging companies interpret this as just the council making the decision. There is no true requirement for community consent. Trees in Satchie Creek are far enough away from the coast that they don't get salted. Thus they do not split and make for ideal canoe logs. These attributes are also attractive to an extractive industry. However given the rarity of cultural old growth values remaining in the Hesquiaht watershed it would seem only prudent to preserve these values and attributes given they are irreplaceable, even in a 2000 year management cycle.

Site 1



Location

Waypoint 199

GPS 09U0689706

UTM5487363

Elevation 3 meters

Accuracy 8 meters

Western red cedars

c-1

7.6 m bark strip

c-2

6.1 m bark strip

c-3

abandoned canoe log (unused because of hollow center), metal axe markings, therefore after 1790, pre-1890 (crosscut saw intro)



c-4

fallen log, partially used for planking

c-5



cluster of 3 western red cedars, bark stripped

age event 130-150 years, based on healing scar thickness

age event 100 years, based on healing scar thickness, second stripping ?

c-6

cluster of 3 western red cedars, bark stripped

age event 75 years, based on healing scar thickness

c-7

cluster of 3 western red cedars, bark stripped

Site 1, Level 2

C5

Species: Western red cedar

Class: bark strip (bs)

Type: tapered (t)

Features: located bearing 60 degrees from waypoint 199/downed log C3

Tree circumference: 547 cm



C6

Species:Western Red Cedar

Class: bark stripped

Type: tapered

Class: other modified tree (OM)

Type: kindling collection tree (K)

Features: kindling removal scars in the form of metal chop marks (adze or chisel?) in the dry hollow interior dating 1600's.



Fotos by Steven Charlesen

Site 2, Level 1

Location

99U0689861

UTM 5487392

Waypoint 200

Riverbed

C1

One modified tree, 3 events

Western Red Cedar

Event 1

Class: Aboriginally logged (AL)

Type: Planked Tree (P)



Site 2 Level 2

Event 1

12.12 meters cut abandoned with chop marks

10.90 meter plank

Event 2

Log cut with axe, leaving exploration hole for kindling

C 2

Experimental cut, testing a section looking for suitability(plank for roof or side of house), notch up above 40 feet up from tree bottom, couldn't tell if it was done before or after felling, notch 35 cm x 15 cm



Foto by Sarah Tyne

Foto by Steven Charlesen

Site 3 Level 1

Location:

09U0690104

UTM 5487344

Waypoint 201

Elevation

77 meters

Western Red Cedar

Site dimension

34 meters X 100 meters

C1

Class: Aboriginally logged (AL)

Type: Felled Tree (F)

4.24 meter plank with a depth of 40 cm

3.63 meter plank

4.24 meter plank

7.57 m Hollowed out center, steven charlesen had never seen, possibly abandoned hollowed out canoe

Comments: Barberchair Stump, interesting standardized lengths for cedar planks; classics, oldest known aboriginally logged feature

C2

Location

09U0690177

UTM 5487238

Waypoint 202

150 meters from C1, angled upstream 15 m from river

Western red cedar, Barber chair, bottom third used,

Site 4 Level 1

Location 09U0690351

UTM 5487152

Waypoint 203

Elevation 34 m

Site area: 100 m x 60 m

2 trees

C1

Western Red Cedar

Class: Bark Strip

Type: Tapered

Bark Strip is 5.15 m long, tapered 5 cm, max width 15.24 cm

C2

Uphill from C1

6 stumps with 1 barber chair



Additional CMT Photos by Sarah Tyne:



