

# Western Redcedar Bark Harvesting: Skwxwú7mesh Wisdom and People- Plant Relationships

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## **Abstract**

This paper was originally written for Robert Bandringa's INDG 332 course *Indigenous Ethnobotany*. The assignment asked students to research the Indigenous ethnobotanical practices associated with a specific plant that is native to so-called British Columbia and/or the relationship of that plant to a specific First Nation in BC. The paper uses Nature citation style.

This paper explores traditional cedar bark harvesting practices to illustrate how Western Redcedar is integral to Indigenous cultural identity and respectful relationships with plants and place, focusing on the Skwxwú7mesh (Squamish) Nation. The paper provides a literature review of Western Redcedar in B.C. and the Squamish Nation's relationship with the tree, followed by an analysis of traditional cedar bark harvesting processes and the importance of these practices in the context of industrial forestry and climate change. Overall, the reciprocity and wisdom of cedar bark harvesting represents the need to sustain Indigenous perspectives and respectful relationships with plants and places, for the welfare of all beings and future generations.

## **Introduction**

Western Redcedar was one of the first plant species I learned to recognize when I was young. The combination of soft, reddish-brown bark and vivid green, scaly foliage stood out in the forested landscape, like a powerful forest guardian. I became familiar with its distinct cedar scent, from planting cedar saplings along our fence, breathing in the pleasant aromas from my gifted cedar bentwood box, splitting the straight-grained cedar firewood, and smelling the cedar campfire smoke. As the provincial tree of B.C., Western Redcedar (*Thuja plicata* Donn ex D.

Don) exemplifies the Pacific West Coast forest ecosystem and is a valuable provincial resource.<sup>1</sup> However, for northwest coast Indigenous peoples, it is much more than that: it is the tree of life.<sup>2</sup>

In this paper, I explore traditional cedar bark harvesting practices to illustrate how Western Redcedar is integral to Indigenous cultural identity and respectful relationships with plants and place, focusing on the Skwxwú7mesh (Squamish) Nation. I begin with an overview of Western Redcedar in B.C. and the Squamish Nation's relationship with the tree. I then analyze traditional cedar bark harvesting processes and examine the importance of these practices in the context of industrial forestry and climate change. Overall, the reciprocity and wisdom of cedar bark harvesting represents the need to sustain Indigenous perspectives and respectful relationships with plants and places, for the welfare of all beings and future generations.

### **About Western Red Cedar**

According to pollen and plant macrofossil records, Western Redcedar started growing in the Lower Mainland 6000-7000 years ago, during the transition to moist and mild conditions of the late Holocene.<sup>3</sup> Today, they are distributed along B.C.'s coast and inland to the Coast Range, including southeastern B.C.<sup>4</sup> Western Redcedar trees are typically found in moist to wet soils, rich in nutrients, amidst shaded forests of Western Hemlocks and Douglas Firs at low to medium elevations.<sup>4</sup>

Despite its name, Western Redcedar is not a true cedar. Its scientific name is *Thuja plicata* and it belongs to the cypress family, *Cupressaceae*, unlike true cedars which belong to the genus *Cedrus* and pine family.<sup>5</sup> The specific epithet *plicata* derives from a Greek word meaning "folded in plaits", referencing the leaf patterns (see Figure 1). Western Redcedar trees can live for over a thousand years, growing to immense circumferences and reaching heights of 60 metres or more.<sup>4</sup> Western Redcedar wood contains thujaplicin oil, making it rot-resistant and highly prized commercially for power poles, fences, sidings, shingles, and shakes.<sup>5</sup>

In addition to its commercial importance, Western Redcedar is highly salient among B.C. Indigenous cultures. It is considered a keystone cultural species, because it is integral to northwest coast Indigenous cultural identity.<sup>5</sup> All parts of the tree can be used, including the roots, bark, wood, and withes. The bark is harvested in long strips to weave hats, baskets, rope, clothing, and mats.<sup>4</sup> The wood is used in tools, paddles, canoes, and longhouses, and parts of the tree contain important medicinal properties.<sup>4</sup> Its significance is reflected in First

Nations' languages, which have several terms for the tree's parts. In Hul'qum'inum', the tree is **xpeyʔ-əlp**, the wood is **xpeyʔ**, and the inner bark is **slówəy**, derived from **ləw**, which means "to come off (as bark)".<sup>6</sup> The tree is also spiritually powerful. Strength can be regained by touching the bark or standing with one's back to the tree.<sup>4</sup> According to Coast Salish origin stories, the Creator made the Western Redcedar tree in honour of a kind man who was generous with gifts, so the man's spirit can continue to help his people.<sup>4</sup>

### About the Skwxwú7mesh Nation

The Skwxwú7mesh-ulh Stélmexw (Squamish People) have a complex and rich history, tied to the rivers, lakes, and mountains.<sup>7</sup> Their territory is over 6000 km<sup>2</sup>,



*Thuja plicata*  
Figure 1. *Thuja plicata* illustration. Source: *The Illustrated Flora of British Columbia*.

including Howe sound, Burrard inlet, Indian arm, and the Squamish, Cheakamus, Elaho, and Mamquam rivers (see Figure 2).<sup>8</sup> They speak Skwxwú7mesh Snichem and have been an oral society.<sup>8</sup>

The Squamish Nation has an intimate relationship with Western Redcedar, linked to both everyday and ceremonial practices. The wood is used for **chátwilh** (canoe carving) and **sch'etxw** (welcome poles).<sup>7</sup> The bark is used for traditional regalia, hats, and baskets. It is also used to make rope, because it is strong and malleable and maintains its strength over time, even in water.<sup>9</sup> According to Squamish Nation origin stories, before the Great Flood the Creator told the people to make rope out of Western Redcedar bark. When the floods came, the people tied their canoes to the peak of Nch'kay (Garibaldi) using cedar bark rope to withstand the storm.<sup>9</sup>

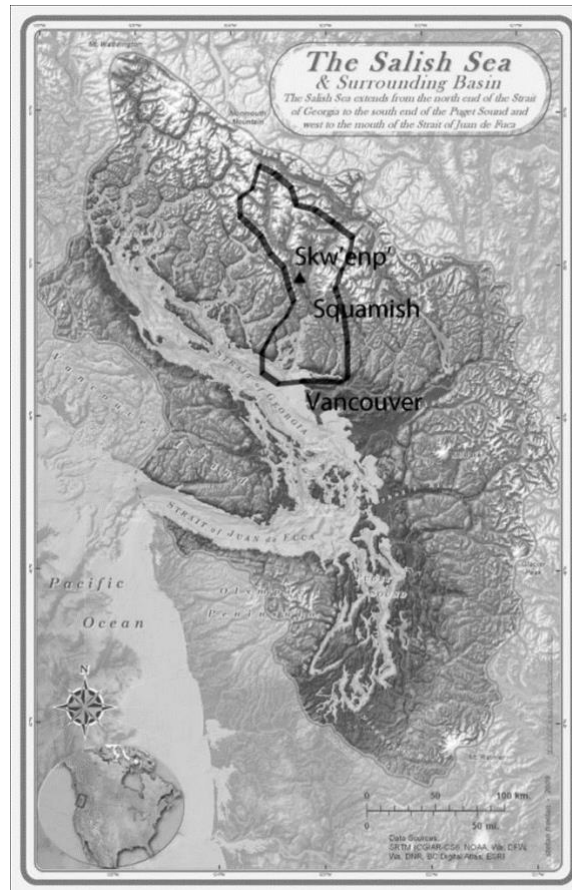


Figure 2. Squamish Territory. Source: Rudy Reimer (2016).

### **Skwxwú7mesh Cedar Bark Harvesting**

When humans started harvesting and weaving Western Redcedar bark thousands of years ago, it was revolutionary. According to Haida weaver Dolores Churchill, it enabled northwest coast Indigenous Peoples to come out of caves and build thatched rooves for dwellings, make baskets and containers to carry food, and weave malleable clothes.<sup>10</sup> Women typically harvested cedar bark, which requires plant knowledge, careful skill, and experience. The bark provided the essentials of daily living, and to this day it enriches cultural ceremonies and enables self-expression through beautiful basket-weaving.<sup>2,11</sup>

Skwxwú7mesh cedar bark harvesters abide by the principles of the Honourable Harvest, common across Indigenous cultures: take only what you need, and use everything you take.<sup>9</sup> They use ancient and dependable harvesting methods, and only de-bark portions of the tree to ensure the tree is not killed from infestation or stunted growth.<sup>2</sup> A harvester who killed a tree with improper harvesting would be cursed by other Western Redcedars.<sup>12</sup> Cedar bark harvesting is a sacred process for the Squamish Nation, conducted in a 2-week window from mid-May to June, when the sap is flowing and the bark peels off easily.<sup>9</sup> To determine the harvesting period, harvesters also rely on plant phenology and intuition, taking cues from dogwood bloom times and temperature changes.<sup>2</sup> The process of cedar bark harvesting, described below and depicted in Figure 3, is sourced from videos featuring Jessica Silvey and Tracy Williams from Squamish Nation, unless noted otherwise.<sup>11,13</sup> First, finding the right tree is a critical process.

The best are tall, straight, and “huggable”, with vertically-lined bark and few low branches. It is said that the tree picks the harvester. Then, Squamish Nation members make offerings of tobacco and say a prayer. Harvesters put their hand on the tree, introduce themselves in their language, explain why the bark is needed, ask the Cedar’s spirit for permission, and give thanks. Expressing gratitude is important to show respect for the gifts of the Cedar beings and ensure a good future supply.<sup>2</sup>

The bark pulling begins by finding a spot facing uphill, with few branches, and space to back away while pulling the bark. Harvesters use a hatchet (or adze) to make a small horizontal cut near the base of the tree, about 10-15 cm wide. Two long

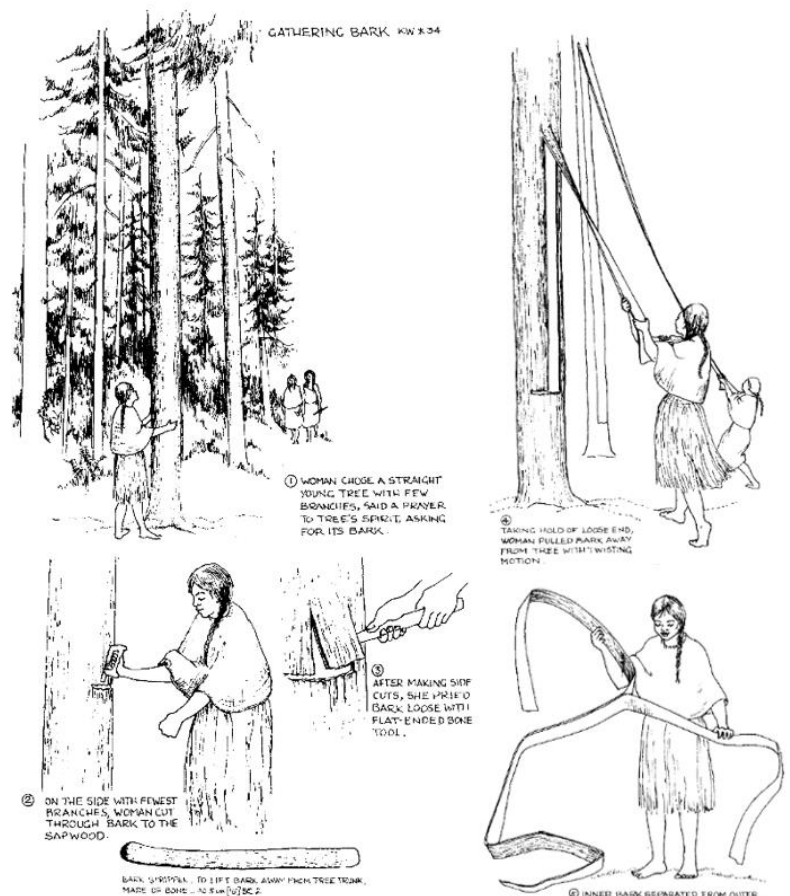


Figure 3. Cedar bark harvesting. Source: Stewart, H. *Cedar: tree of life to the Northwest Coast Indians*.

vertical lines are then cut into the bark with a knife, upwards from the edges of the original cut. The bark is pried off the tree with the hatchet (in the past they used a wooden wedge or bone tool) until the harvester has a good grip, then they pull off a ribbon of bark away from the tree at a 45-degree angle, while walking backwards. Sometimes the strip can run 12 metres up a straight cedar trunk, however, the higher it goes, the harder it is to pull due to the angle.

Once the ribbon tapers off and falls down, the tree is left with a “honey-coloured scar”, glistening with sap.<sup>2</sup> The bark does not grow back, although the tree continues to grow around the scar. In total, harvesters remove no more than two hand-widths off a tree’s circumference to ensure its survival. The inner bark of Western Redcedar, which is the lighter, softer material adjacent to the outer bark, contains secondary phloem – the vascular tissue that transports and distributes organic nutrients throughout the tree.<sup>14</sup> If too much bark is removed, the tree cannot transport nutrients from leaves to roots and vice versa, and it dies. Afterwards, harvesters peel away the outer bark from the inner bark by hand or using a knife, and the outer bark is either left in the forest or used for fuel. For transportation, the strips of inner bark are folded into a bundle and tied together with the tapered end. As an act of reciprocity, sometimes harvesters leave food scraps in the forest to support other wildlife.<sup>2</sup>

Today, the harvesting process continues to play social and ceremonial roles for the Squamish Nation. Because harvesting only occurs a few times a year, the process is treasured as an opportunity for nation members to get together, give thanks, gather traditional materials, and pass on traditional knowledge to younger generations.<sup>9</sup>

Previously harvested Western Redcedars are called Culturally Modified Trees (CMTs), which have a distinctive upside-down V-shaped patch of missing bark.<sup>6</sup> Thousands of CMTs exist along B.C.’s coast and can be several hundred years old. Forest utilization sites containing CMTs created prior to 1864 are protected under B.C.’s Heritage Conservation Act (1996).<sup>12</sup> These living examples of reciprocity and respectful relationships with the land demonstrate the truly sustainable nature of Indigenous harvesting methods, passed down through many generations.

### **Lessons for Forest Management**

Indigenous Peoples recognize that their physical, social, mental, and spiritual health is shaped by practicing their traditional way of life and living in harmony with the land.<sup>5</sup> Cultural values of reciprocity and reverence for non-human beings

are reflected in ancient practices of harvesting Western Redcedar bark. However, B.C. commercial forestry practices prize timber production over cultural and ecological values, and therefore face several challenges. Western Redcedar is commonly harvested by clear-cutting vast sections of land, and damaged non-merchantable wood is sometimes burned in piles.<sup>5</sup> These destructive practices drastically alter ecosystem function and create vulnerable monocultural second-growth forests. Anthropogenic climate change exacerbates the dire situation of Western Redcedar, which is highly susceptible to summer drought due to the wood's thin cell walls that can collapse without sufficient water.<sup>6</sup> This kills the tree or results in tree-top die-back, particularly when combined with root damage from highway construction or other human disturbances.<sup>6</sup>

Forest management in B.C. requires a fundamental paradigm shift, and traditional Skwxwú7mesh cedar bark harvesting offers several lessons. First, forest management does not solely comprise intensive resource manipulation, where humans exert control or domination over other species to ensure sustained profits. At the other extreme, it also doesn't imply that resource harvesting should be meandering and opportunistic, as colonizers perceived First Nations management practices to be.<sup>15</sup> Rather, it represents a continuum of practices, including more light-handed methods that focus on actively and regularly revisiting and managing a range of plant-gathering sites through kin-centric and reciprocal stewardship.<sup>15</sup>

Continuous learning and adaptation is the second lesson. Indigenous peoples refined diverse knowledge systems and landscape-level management practices over thousands of years, via group-to-group knowledge-sharing, generation-to-generation cultural transmission, and continuous observation, experience, practice, and monitoring.<sup>15</sup> For example, through careful experimentation and adjustment, cedar bark harvesters learned that Western Redcedars would eventually heal if a piece of bark was removed, but would die if girdled.<sup>15</sup> This learning was transferred and adapted to other management contexts, habitats, and plant species. Modern forest management's overfocus on theoretical models rather than local context-specific knowledge misses the benefits of "learning-by-doing" and can lead to poor management.<sup>15</sup>

Lastly, cedar bark harvesting demonstrates the importance of harmonizing management with belief systems and worldviews. Indigenous peoples practice "deep management", in which management knowledge and protocols are embedded in ancient wisdom, narratives, and beliefs, passed across generations via stories, ceremonies, and art.<sup>15</sup> For example, the Squamish Nation leaves many

cedar trees unharvested, in harmony with the Indigenous philosophy that current decisions must benefit seven generations into the future.<sup>8</sup> As Nancy Turner notes, “such management systems may be difficult for those outside a culture to understand or interpret”,<sup>15</sup> but they are nonetheless central to informing future management.

### **Conclusion**

As a student in the Western science-dominated field of Resource and Environmental Management, I must learn to centre Indigenous perspectives in my studies, work, and relationships with plants and place. I understand the value of practicing “Two-Eyed Seeing”, i.e., seeing through the lenses of Indigenous ways of knowing and Western scientific knowledge concurrently, for the benefit of all.<sup>16</sup>

Overall, Western Redcedar bark harvesting reminds me of the responsibility I have as an environment student to understand and respect Indigenous cultures, histories, and relationships with the land, and to view these perspectives concurrently with my scientific learnings. By respecting Indigenous wisdom, relationships, reciprocity, and responsibility, I can promote the mutual flourishing of humans and nature. Not only does this approach generate more ecologically-sound outcomes, but it leads to more equitable outcomes that elevate Indigenous and local knowledge. In the words of Elder Margaret George, we must acknowledge “all our relations” and balance our relationships with other people, cultures, and all living and non-living things in the movement towards a more sustainable and equitable future.



## References

1. B.C. Symbols. *Province of British Columbia*  
<https://www2.gov.bc.ca/gov/content/governments/celebrating-british-columbia/symbols-of-bc>.
2. Stewart, H. *Cedar: tree of life to the Northwest Coast Indians*. (Douglas & McIntyre, 1984).
3. *Proceedings of the Cedar Symposium : growing western redcedar and yellow-cypress on the Charlotte Islands/Haida Gwaii*. (Province of British Columbia, 1996).
4. Pojar, D. J. & MacKinnon, A. *Plants of Coastal British Columbia: Including Washington, Oregon and Alaska*. (Lone Pine Publishing, 2016).
5. Zahn, M. J., Palmer, M. I. & Turner, N. J. “Everything We Do, It’s Cedar”: First Nation and Ecologically-Based Forester Land Management Philosophies in Coastal British Columbia. *J. Ethnobiol.* **38**, 314–332 (2018).
6. Western Red Cedar (*Thuja plicata*) - Provincial tree of British Columbia. *Ecoforestry Institute Society* <https://www.ecoforestry.ca/plant-of-the-month-february> (2019).
7. Baker, P. & Jardey, S. *Cultural Cedar Tree Program Policy 2021*. [https://www.squamish.net/wp-content/uploads/2021/09/Cultural-Cedar-Tree-Policy\\_Public.pdf](https://www.squamish.net/wp-content/uploads/2021/09/Cultural-Cedar-Tree-Policy_Public.pdf) (2021).
8. History. *SLCC Squamish Lil’wat Cultural Centre* <https://slcc.ca/history/>.
9. The Tradition of Cedar Bark Harvesting and Weaving. *Squamish Real Estate Group* <https://squamish.com/cedar-bark-harvesting-weaving/> (2017).
10. Visit Ketchikan. *Ketchikan | Cedar Bark Weaving*. (YouTube, 2012).
11. Museum of Anthropology. *Knowledge Keepers: Cedar Harvest*. (YouTube, 2020).
12. Huang, A. Cedar. *Indigenous Foundations*  
<https://indigenousfoundations.arts.ubc.ca/cedar/>.
13. The Creative Native Series, Inc. *Northwest Coast Squamish Cedar Basket Weaving*. (Overdrive).
14. Alden, H. Coast salish weaving: Hair of the dog and cedar bark. *Wiley Analytical Science* (2021).
15. Turner, N. J., Deur, D. & Lepofsky, D. Plant Management Systems of British Columbia’s First Peoples. *BC Stud.* 107-111,113-118,120-133,255-256 (2013).
16. Bartlett, C., Marshall, M. & Marshall, A. Two-Eyed Seeing and other lessons learned within a co-learning journey of bringing together indigenous and

mainstream knowledges and ways of knowing. *J. Environ. Stud. Sci.* **2**, 331–340 (2012).

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