

SECWEPEMC (SHUSWAP) TREE NAMES: KEY TO THE PAST?

Nancy J. Turner
Environmental Studies Program
University of Victoria
Victoria, B.C. V8W 3P4

Marianne Boelscher Ignace
Secwepemc Cultural Education Society/Simon Fraser University Program
Kamloops, B.C. V2H 1H1

and

Brian D. Compton
Department of Botany, The University of British Columbia, Vancouver, B.C.
V6T 1Z4; and
Secwepemc Cultural Education Society/Simon Fraser University Program,
Kamloops, B.C. V2H 1H1

ABSTRACT

Secwepemc terms for 23 species of trees were examined and compared with names in four neighbouring Interior Salish languages. Distributions of these species across southern British Columbia and northern Washington and Idaho were also determined. Of the 23 tree species included in the study, 12 have Secwepemc names cognate with Okanagan and Flathead, whereas only 9 names are cognate between Secwepemc and Nlaka'pamux, and 7 between Secwepemc and Lillooet. Six Secwepemc tree names are unrelated to those of

the other languages. Only two terms, for whitebark pine and Rocky Mountain maple, are cognate between Secwepemc, Lillooet and Nlaka'pamx, but not with Okanagan or Flathead. No terms are cognate exclusively between Secwepemc and Lillooet, yet 8 terms are cognate exclusively between Lillooet and Nlaka'pamx.

INTRODUCTION

Trees are regarded as a discrete unit of cognitively related objects, which are, in almost all indigenous societies, both culturally highly significant and linguistically marked at a generic level, usually by primary lexemes (Berlin et al. 1974; Brown 1977, 1984; Witkowski et al. 1981). As a general taxonomic unit, of a rank commonly termed "life form," "tree" is among the first inclusive taxa to be developed and named in languages (Berlin 1972; Brown 1984). Names for the class, "tree" often derive either through semantic expansion of reference of the folk generic name of a common tree of high salience in a region, or through reference to the woodiness or growth form of trees as a group (Trager 1939; Berlin 1972; Turner 1974; Witkowski et al. 1981). In Shuswap, for example, as well as in Okanagan and Lillooet, the term for tree is derived from the root for "standing upright" (cf. Kuipers 1989; Turner 1988b).

Tree terms are often used in linguistic analyses, together with the known distribution patterns of the tree species named, to give some insights into the historical origins of groups of people (Kinkade 1989; Siebert 1967; Hock 1986). At least one comparable study (Newman 1974) has provided insight into the volume, direction and historical dimension of the borrowing of biological terms from neighbouring tongues into the Salish isolate, Nuxalk,

which has retained relatively few such forms to show evidence of its Salish affiliation. In this study, we examine the corpus of tree names in Secwepemc and compare them with those of neighbouring Interior Salish languages to try to gain a better understanding of the origins of Shuswap-speaking peoples in relation to other Salishan groups. Tree names from other language groups, both Salish and non-Salish, are also cited on occasion to clarify the origins of specific terms.

The Secwepemc¹: Linguistic and Cultural Affiliations

The are the northernmost Salish-speaking occupants of the British Columbia plateau. Besides bordering on three Interior Salish speaking neighbours, i.e. the Lillooet (Stélmx) to the west, the Thompson (xépmx) to the southwest, and the Okanagan (Cwénámx) to the southeast, they are surrounded by numerous other tribes or first nations of a number of different linguistic stocks, including the Chilcotin, Carrier, Sekani, Cree, Stony, Blackfoot, Ktunaxa (Kutenai), and formerly, the Athapaskan-speaking people of the Nicola Valley.

Secwepemc contact and interchange with their Interior Salish neighbours was frequent and resulted in frequent intermarriage, and a general similarity of cultural traits between the Secwepemc and their Salish neighbours has been noted, likely the result of common cultural origins as well as diffusion at a later date (e.g. Teit 1909; Boas 1890; Dawson 1891; Ray 1939; Palmer 1975b). The Secwepemc and their Interior Salish neighbours themselves, in the past as well as today, acknowledged the shared cultural and linguistic heritage, although they saw themselves as politically and culturally distinct nations occupying distinct territories, although obviously, this self-image increased with increasing pressure on their control of land and resources by intruders (c.f. Teit 1909; Memorial to Sir Wilfred Laurier 1910, Secwepemc Nation Tribal Council 1989). Contact and interchange with non-Salish neighbours was far less frequent and intense than contact with their Salish neighbours, with the exception perhaps of the Kinbasket Secwepemc, who interacted with the Ktunaxa since their emigration to the Columbia area in the early 19th century.

The Secwepemc language is most closely related to that of their Thompson neighbours, sharing some 75% cognates (Swadesh 1950; Elmendorf 1965). According to the same sources and based on Swadesh's data, the percentage of shared cognates with Lillooet is 48%, and with Okanagan 50%. Elmendorf (1965; see also Suttles and Elmendorf 1963) also elaborated on the

¹While the correct phonetic rendition of the Shuswap people's self designation in NPA is Sxw pmx, the spelling "Secwepemc" is used here throughout the text to reflect the practical alphabet (see Kuipers, A Shuswap Course) spelling commonly used among the people themselves today.

geographic and temporal divisions between the Interior Salish languages. He posited Okanagan as the link between the Northwestern group comprising Lillooet, Secwepemc and Thompson, and the Southeastern group represented by Kalispel, Spokane, Flathead and Coeur d'Alene. Elmdorf, in comparing cognate percentage with spatial distance and contact intervals among these groups (op.cit. 69), noted that "...It is obvious that territorial proximity and intervals of contact correspond closely to cognate relations. This suggests in turn that the differentiation of the present-day IS languages has taken place during a period in which their relative spatial arrangement has remained more or less constant." He postulated further that "the fact that all other members of the Salish stock occur west of Lillooet, and in contact only with the westernmost IS speech communities, indicates the direction of expansion as southeastward" (op.cit.:72). In a temporal sense, he suggests that, following an IS split from Coast Salish, the northwestern speech communities (Lil/Tho-Shu) split from the Southeastern speakers, accompanying a migration in that direction. Subsequently, Thompson [Nlakapamux] and Secwepemc split, accompanied by a northward expansion of the latter. The latter movement, in turn, may explain the etymological origin of the Secwepemc self-designation as resulting from the root xw p- [cwep] "to spread, unfold", hence Secwepemc = "spread-out people" [s pref. = nominalizer; mx suff. = "people"]. The split and migration within the Northwestern group, in turn, co-incided with similar splits in the southeastern group (ibid.). However, these spatial relations based on shared cognates in general may not tell the entire picture as to internal connections and diffusion between the groups. Environmental and geographic factors may play a role here and it is useful to turn to an examination of the latter.

The Secwepemc Environment and Vegetation

Secwepemc traditional territory covers a vast and diverse area, including dry valleys, rolling grasslands, extensive plateau lands, and high mountain ranges. The area is drained by the North and South Thompson and Fraser rivers and their tributaries, and, in the southeastern part, by the Columbia river system. In all, the region encompasses 180,000 square kilometers, and extends from west of the Fraser River at Dog Creek and Canoe Creek, east as far as Jasper House, beyond the Rocky Mountains. Maps of Secwepemc territory, and the seven major divisions of the Shuswap Nation, are shown in Introduction to the Shuswap (Secwepemc Cultural Education Society 1986; see also Teit 1909).

As would be expected over such a diverse area, there are significant variations in climate, and in plant and animal life. In all, Shuswap territory encompasses nine major vegetation zones: Alpine Tundra; Sub-Boreal Pine - Spruce; Sub-Boreal Spruce; Engelmann Spruce - Subalpine Fir; Montane Spruce; Bunchgrass; Ponderosa Pine; Interior Douglas-fir; Interior Cedar - Hemlock (cf. Ministry of Forests 1988). Of these, all except for Alpine Tundra and Bunchgrass are characterized by assemblages of dominant forest trees and associated plants and animals. Thus, Secwepemc culture and history, like that of most other Aboriginal Peoples of western North America, is closely intertwined with forest ecosystems, and it is not surprising that virtually every tree species occurring in Secwepemc territory has its own, generic-level name, and a relatively high degree of cultural significance.

One ecological phenomenon of Secwepemc territory should be noted particularly in the context of this study: the rain shadow effect of the Coast and Cascade Mountain ranges, producing a large belt of relatively dry landscape running in a general north-south direction in the central interior of British Columbia, Washington and Oregon. This dry landscape, commonly known as the Interior Dry Belt, is bordered on the east by the Monashee, Purcell and Selkirk Mountain ranges, which, being of higher elevation, have a moister climate. The leeward side of these ranges is again dryer, but most of the lands of the Columbia and associated drainages in the eastern part of Secwepemc territory have relatively high levels of precipitation. This region is known as the Interior Wet Belt.

In general terms, Secwepemc territory is evenly extended over the Interior Dry Belt and the Interior Wet Belt, and these belts extend southward into Okanagan and Flathead Interior Salish territories. To the west of Secwepemc territory, the Lillooet and Nlaka'pamx peoples occupy homelands that straddle the Coast and Cascade ranges, where the climate is moist, and extend into the western part of the Interior Dry Belt.

Secwepemc people thus share the Interior Dry Belt, and its associated vegetation with the Lillooet, Nlaka'pamx, but whereas all three groups also have moist, heavily forested ecosystems within their territories, often with the same associated tree species, the moist forests of the Secwepemc lands are part of the Interior Wet Belt, while the moist forests of Lillooet and Nlaka'pamux lands are within the Coastal Montane forest lands. This factor may be significant when one is considering at what stage historically groups of Salish people encountered particular tree species.

Another factor to consider when investigating peoples' historical association with trees is that the distribution of the tree species themselves has not remained static. Since the retreat of the last continental glaciers, approximately 10,000 years ago, vegetation distribution has changed considerably (Pielou 1991). On the basis of pollen records from cores taken in lake bottoms and bogs in central and eastern British Columbia, paleoecologist Dr. Richard Hebda (personal communication to NT, July 1992) has determined that lodgepole pine (*Pinus contorta*) and trembling aspen (*Populus tremuloides*) have been common and widespread throughout the interior since the time of the ice retreat. Douglas-fir (*Pseudotsuga menziesii*) also came into the region relatively early, probably within the last 8,000 to 10,000 years ago, and has apparently replaced lodgepole pine in many areas (Pielou 1991). The establishment of western red-cedar (*Thuja plicata*) was apparently considerably more recent, possibly 2,000 years ago. Pollen from a species of the cypress family (Cupressaceae), probably of Rocky Mountain juniper (*Juniperus scopulorum*), indicates a long-standing presence of this species.

Obviously more data are required on the history of dispersal of various tree species, particularly in terms of which would have been available to the Secwepemc and other Interior Salish peoples at the time of their arrival to the area. As further paleoecological research is undertaken in the region, more answers should be forthcoming.

RESULTS

Table 1 lists the trees occurring within Secwepemc territory, with their Secwepemc names, and those of adjacent Interior Salish peoples. Notes on

general importance in the traditional Interior Salish economies, and on any special circumstances relating to individual species are also provided in Table 1.

In all, 14 coniferous species and 9 broad-leaves deciduous species (or groups of closely related species) are considered. Of these, six have individual folk generic-level names in Secwepemc. Only two of these (western larch and white pine) are obviously analyzable in Secwepemc, except for the suffix *-ətp*, or variants of it, indicating "plantness, which is used in at least 14 of the tree terms. In general, unanalyzability is taken as an indication of a term that is either very ancient, and has, over the years, lost its original meaning to most speakers of a language, or one that is borrowed from another language, where its original meaning may be still perceived (Hess n.d.). In the case of Secwepemc, cognate forms at least some of these names are readily analyzable in other Salishan languages.

Historical linguistic relationships, however, are confounded by the development of so-called "folk etymologies," where the original meaning or derivation of a word may be obscured by the imposition of another, possibly culturally more appropriate, meaning. This semantic shift may be accompanied by a phonological shift to produce a better "fit" for its new meaning. For example, in English, the name, "strawberry," is actually derived, not from "straw," but from the old Anglo Saxon word, "*streow*," for "trailing long the ground," as in "strew." Similar folk etymologies are evident for the words, "dandelion," (originally from French "*dent de lion*"), and "Jerusalem artichoke" (originally from Italian "*girasole*" for "sunflower") (cf. Berlin 1972; Turner 1974). Other processes that occur in the development of language

include "translation borrowings," and semantic shifts of terms to apply to different, more culturally or ecologically salient species. Terms may also be applied to one species on the basis of a perceived relationship with another species, or, a basic term may apply to two or more types of plants, one of which is often the "type" plant of primary importance, and the other(s) subsumed within the sphere of influence of the first.

Nevertheless, the Secwepemc tree terms presented in Table 1 seem relatively unambiguous in their application, with the possible exception of the names for grand fir and subalpine fir.

Secwepemc Tree Terms in Relation to Tree Distribution

When Secwepemc tree terms are examined together with those of neighbouring Salish groups according to the known distribution patterns of the trees themselves, do any patterns emerge that might give insights into historical and geographical relationships?

Table 2 shows tree species falling within particular categories of cognate relationships, together with notations on the distributions of these species. A comparison of Secwepemc tree names with those of Chilcotin (Myers, Turner and Hebda, unpublished notes on Chilcotin ethnobotany, 1989), Kootenay (Hart 1974; Hart et al. 1978), and Sahaptin (Hunn 1990) reveals no apparent similarities or cognates, although note that the Okanagan name for tree willow is apparently related to the Sahaptin name.

With this relatively small sample of tree terms, there seems to be no obvious relationship between tree distribution and linguistic affiliation of Secwepemc tree names. However, there are some interesting potential relationships that need to be further investigated.

DISCUSSION

Tree Names, Tree Distributions and Linguistic Affinities

It may be notable that lodgepole pine, Rocky Mountain juniper and paper birch, all evidently of ancient and widespread occurrence in British Columbia's Interior, have names that are apparently unanalyzable, and have cognates in all five study languages. "Pine" (including both lodgepole pine and ponderosa pine) was an highly salient plant taxon among contemporary Secwepemc university students polled in a recent SCES/SFU Program ethnobotany class—a fact undoubtedly related to its common appearance in Secwepemc territory. On the other hand, western red cedar, a tree of recent origin to the area, and with a definite disjunct distribution (i.e. with a coastal occurrence, absent from the Interior Dry Belt, and re-occurring in the Interior Wet Belt), has a Secwepemc name affiliated only with Okanagan and Flathead. Another species with a disjunct distribution, whose Secwepemc name has eastern Salish affiliations only, is Engelmann spruce. Still, there are trees whose Secwepemc names are affiliated with Lillooet and Nlaka'pamux only, including one (Rocky Mountain maple), with continuous distribution, and one (whitebark pine) with restricted, timberline distribution across the Interior. Of the six species with apparently unique Secwepemc names, unrelated to those of the other languages, three (white pine, western hemlock

and cascara) have disjunct distributions, and three (mountain and green alders, willow, and choke cherry) have relatively continuous distributions.

Perhaps most significant in this comparison of tree terms is the sparsity of etymons encompassing Secwepemc, Lillooet and Nlaka'pamux exclusively, and the relatively large number of etymons encompassing Secwepemc, Okanagan, and Flathead. At the same time, a close affiliation between Lillooet and Nlaka'pamux is indicated, with several examples, especially in Lillooet, of affiliations with Coast Salish languages and/or Nuxalk (Bella Coola).

The Secwepemc share one major feature with Okanagan and Flathead which might give an answer to their apparently closer relationship vis-a-vis their nomenclature of trees: These three groups are further removed than Nlaka'pamux and Lillooet from the apparent Proto-Salishan homeland, as determined by Kinkade (1989), namely, the lower Fraser valley and environs. To arrive at their present locations, Secwepemc, Okanagan and Flathead peoples would all have had to traverse the Interior Dry Belt, where certain tree species—those with disjunct distributions—would have been absent. Did such a migration occur before these three languages diverged? Such large scale movement of peoples may have occurred over a period of hundreds, or thousands, of years. Could the original (Proto-Salish) names for trees like western red-cedar have been forgotten in the interim? If so, new names for these trees would have had to have been developed when they were once again encountered. Would these new terms have been developed by an eastward-travelling group of people, who came in contact with the Interior Wet Belt? Are the Secwepemc therefore more closely allied historically with the

Okanagan and Flathead, having broken away from them after crossing the Interior Dry Belt and moved northwards along the Interior Wet Belt?

Future Directions of Inquiry

Such speculations are only that. A much more comprehensive examination of the entire body of Secwepemc biological terms, and a determination of the distribution patterns of the plants and animals named, is needed before any real conclusions can be drawn. Other Salishan languages need to be drawn in to such a study. Columbian, for example, would be a key language to incorporate. Comparison with the biological lexicons of non-Salish languages such as neighbouring Athapaskan, and even Upper North Wakashan and Tsimshianic languages, could also prove valuable in contributing to the understanding of arboreal and other biological terms in Interior Salish and other indigenous languages of British Columbia.

From an examination of 23 tree names in Secwepemc and four other Interior Salish languages, we found a greater affinity in terms of shared cognates among Secwepemc, Okanagan and Flathead than between Secwepemc, Lillooet and Nlaka'pamux. On the other hand, Lillooet and Nlaka'pamux tree names, have greater linguistic affiliations with each other, and for both there is a greater affiliation with Coast Salish tree names. Further comparative research on biological terms in Interior Salish languages is needed to determine if linguistic relationships are in any way related to biotic distributions, to other Salish arboreal terminology and to those terms in more geographically and linguistically distant languages.

We hope to undertake further comparative analysis of Secwepemc plant names during the course of our three-year Secwepemc Ethnobotany Study. We have called this study "More than the Sum of the Parts," and, indeed, this description seems to fit.

ACKNOWLEDGEMENTS

We are grateful to the speakers of Secwepemc and other Aboriginal languages for their knowledge of plant terms, incorporated into this paper. Major Secwepemc contributors include: Bill Arnouse, Aimee August, Leslie Jules, Nellie Taylor, Mary Thomas and Ida William. Other Aboriginal consultants are named in the works referred to for their languages, as per the footnote in Table 1. Our work was facilitated by the Secwepemc Cultural Education Society and the Shuswap Nation Tribal Council. We would also like to thank the following people for their contributions: Dr. Dwight Gardiner; Dr. Jan van Eijk; Dr. M. Dale Kinkade; Dr. Laurence C. Thompson; M. Terry Thompson; Dr. Leslie Saxon; Dr. Bill Poser; Randy Bouchard; Dorothy Kennedy; Brian Compton; Alison Davis; Bob May; Ron Ignace; and Dr. Richard Hebda. The project was funded in part by a grant from the Social Sciences and Humanities Research Council of Canada (#410-91-0550) to the authors. (Others???)

REFERENCES

- Berlin, Brent. 1972. Speculations on the growth of ethnobotanical nomenclature. Journal of Language in Society 1:63-98.
- Berlin, Brent, Dennis E. Breedlove and Peter H. Raven. 1973. General principles of classification and nomenclature in folk biology. American Anthropologist 75: 214-242.
- Berlin, Brent, Dennis E. Breedlove and Peter H. Raven. 1974. Principles of Tzeltal Plant Classification. An Introduction to the Botanical Ethnography of a Mayan-Speaking People of Highland Chiapas. Academic Press, NY.
- Bouchard, Randy and Dorothy Kennedy, British Columbia Indian Language Project, Victoria, personal communication, from unpublished field notes on Comox, 1973-1978.
- Bouchard, Randy and Nancy J. Turner. 1976. Ethnobotany of the Squamish Indian People of British Columbia. Unpubl. Rpt. to the Squamish Indian Band. British Columbia Indian Language Project, Victoria.
- Brown, Cecil H. 1977. Folk Botanical Life Forms. Thesis. U. of

- Brown, Cecil H. 1984. Language and Living Things. Uniformities in Folk Classification and Naming. Rutgers University Press, New Brunswick, NJ.
- Elmendorf, William W. 1965. Linguistic and Geographic Relations in the Northern Plateau Area. Southwestern Journal of Anthropology 21:63-73.
- Fleisher, Mark S. 1980. The Ethnobotany of the Clallam Indians of Western Washington. Northwest Anthropological Research Notes 14(2): 192-210.
- Franklin, Jerry F. and C.T. Dyrness. 1973. Natural Vegetation of Oregon and Washington. United States Department of Agriculture, Forest Service General Technical Report PNW-8, Portland, OR.
- Galloway, Brent. 1982. Upper Stó:lo Ethnobotany. Coqualeetza Education Training Centre, Sardis, B.C.
- Garman, E.H. 1970. Pocket Guide to the Trees and Shrubs in British Columbia. British Columbia Forest Service, Department of Lands, Forests and Water Resources, Victoria, British Columbia.
- Hart, Jeff. 1974. Plant Taxonomy of the Salish and Kootenai Indians of Western Montana. Unpublished M.A. thesis, University of Montana, Missoula.
- Hart, Jeff. 1979. The Ethnobotany of the Flathead Indians of Western Montana. Botanical Museum Leaflets, Harvard University 27 (10): 261-307.

Hart, Jeffrey A., Nancy J. Turner and Lawrence R. Morgan. 1978.

Ethnobotany of the Kootenai Indians of Western North America.

Unpublished Report to the Kootenay Indian Area Council, Cranbrook,
British Columbia.

Hess, Thom. n.d. Borrowed Words and British Columbia Prehistory.

Unpublished ms., in author's possession, Department of Linguistics,
University of Victoria, Victoria, British Columbia.

Hock, Hans Henrich. 1986. Principles of Historical Linguistics. Mouton de
Gruyter, Berlin, Germany.

Hunn, Eugene S. (with James Selam and Family). 1990. Nch'i-Wá'na "The Big
River". Mid-Columbia Indians and Their Land. University of
Washington Press, Seattle.

Kinkade, M. Dale. 1989. Prehistory of Salishan Languages. (Need full citation).
Paper read at the 88th Annual Meeting of the American
Anthropological Association, Washington, DC.

Kinkade, M. Dale. 1991. Upper Chehalis Dictionary. University of Montana
Occasional Publications in Linguistics, No. 7, Missoula.

Krajina, V.J., K. Klinka and J. Worrall. 1982. Distribution and Ecological
Characteristics of Trees and Shrubs of British Columbia. The University
of British Columbia, Faculty of Forestry, Vancouver.

Kuipers, A. H. 1989. A Report on Shuswap with a Squamish Lexical Appendix.
Peeters-Selaf, Paris, France.

Ministry of Forests. 1988. Biogeoclimatic Zones of British Columbia (Map).
British Columbia Ministry of Forests, Victoria.

Newman, Stanley. 1974. Linguistic Retention and Diffusion in Bella Coola.
Language in Society 3:201-214.

Palmer, Gary. 1975a. Shuswap Indian Ethnobotany. Syesis 8: 29-81.

Palmer, Gary. 1975b. Cultural Ecology in the Canadian Plateau: Pre-Contact to
the Early Contact Period in the Territory of the Southern Shuswap
Indians of British Columbia. Northwest Anthropological Research Notes
9(2):199-245.

Pielou, C.P. 1991. After the Ice Age. The Return of Life to Glaciated North
America. The University of Chicago Press, Chicago and London.

Ray, Verne. 1932. The Sanpoil and Nespelem: Salish Peoples of Northeastern
Washington. University of Washington Publications in Anthropology,
Vol. 5.

Secwepemc Cultural Education Society. 1986. Introduction to the Shuswap.
Shuswap Cultural Series, Book 1. SCES, Kamloops, British Columbia.

- Siebert, Frank T. Jr. 1967. The Original Home of the Proto-Algonquian People. Contributions to Anthropology: Linguistics I (Algonquian). National Museum of Canada Bulletin 214, Department of the Secretary of State, Ottawa.
- Taylor, T.M.C. 1973. The Rose Family of British Columbia. British Columbia Provincial Museum Handbook No. 30, Victoria.
- Teit, James A. 1909. The Shuswap. Vol. 2, Pt. 4, The Jesup North Pacific Expedition, Memoir of the American Museum of Natural History, New York. G.E. Stechert, New York.
- Teit, James A. 1973 (facsimile of orig., 1930). The Salishan Tribes of the Western Plateaus, edited by Franz Boas. Extract from Bureau of American Ethnology, 45th Annual Report, 1927-28, Smithsonian Institution, Washington, DC. Reprinted by Shorey Book Store, Seattle, WA).
- Trager, G. 1939. "Cottonwood" = "Tree": a Southwestern Linguistic Trait. International Journal of American Linguistics 9:117-118.
- Turner, Nancy J. 1973. The Ethnobotany of the Bella Coola Indians of British Columbia, Syesis 6:193-220.
- Turner, Nancy J. 1974. Plant Taxonomic Systems and Ethnobotany of Three Contemporary Indian Groups of the Pacific Northwest (Haida, Bella Coola and Lillooet). Syesis, Vol. 7, Supplement 1.

- Turner, Nancy J. 1987. General Plant Categories in Thompson and Lillooet, Two Interior Salish Languages of British Columbia. Journal of Ethnobiology 7(1):55-82.
- Turner, Nancy J. 1988a. "The Importance of a Rose": Evaluating Cultural Significance of Plants in Thompson and Lillooet Interior Salish. American Anthropologist 90(2):272-290.
- Turner, Nancy J. 1988b. Ethnobotany of Coniferous Trees in Thompson and Lillooet Interior Salish of British Columbia. Economic Botany 42(2):177-194.
- Turner, Nancy J. and Marcus A. M. Bell. 1971. The Ethnobotany of the Coast Salish Indians of Vancouver Island. Economic Botany 25(1): 63-104.
- Turner, Nancy J. and Marcus A. M. Bell. 1973. The Ethnobotany of the Southern Kwakiutl Indians of British Columbia. Economic Botany 27(3): 257-310.
- Turner, Nancy J., Randy Bouchard and Dorothy I.D. Kennedy. 1980. Ethnobotany of the Okanagan-Colville Indians of British Columbia and Washington. British Columbia Provincial Museum, Occasional Paper No. 21, Victoria, B.C.

- Turner, Nancy J., Randy Bouchard, Dorothy Kennedy and Jan Van Eijk. 1987. Plant Knowledge of the Stl'at'imx (Lillooet) People of British Columbia. Unpublished ms., in possession of the first author, Environmental Studies Program, University of Victoria, Victoria, B.C.
- Turner, Nancy J. and Barbara S. Efrat. 1982. Ethnobotany of the Hesquiat Indians of Vancouver Island. British Columbia Provincial Museum (now Royal British Columbia Museum) Cultural Recovery Paper No. 2, Victoria.
- Turner, Nancy J., Richard J. Hebda and Timothy Montler. in prep. Some Important Plants of the Ts'enichlhen (Saanich) and Owutsun (Cowichan) People of Southern Vancouver Island. With Violet Williams and Elsie Claxton. Unpublished ms., Environmental Studies Program, University of Victoria.
- Turner, Nancy J., John Thomas, Barry F. Carlson and Robert T. Ogilvie. 1983. Ethnobotany of the Nitinaht Indians of Vancouver Island. British Columbia Provincial Museum (now Royal British Columbia Museum), Occasional Paper No. 24, Victoria.
- Turner, Nancy J., Laurence C. Thompson, M. Terry Thompson and Annie Z. York. 1990. Thompson Ethnobotany: Knowledge and Usage of Plants by the Thompson Indians of British Columbia. Royal British Columbia Museum, Memoir No. 3, Victoria, B.C.

- Turner, Nancy J. and Jan Timmers. 1972. Sechelt Plant Names. Unpublished ms., in Turner's possession.
- Witkowski, Stanley R., Cecil H. Brown, and Paul K. Chase. 1981. Where do Tree Terms Come From? Man (N.S.) 16:1-14.

Table 1. Secwepemc Tree Terms, with Names in Neighbouring Interior Salish Languages*

CONIFEROUS TREES

Common Juniper (*Juniperus communis* L.)

Secwepemc	c'ic'əxc'əxt, sc'əmerh̓p
Lillooet	c'ik-cəkt-əz' (?)
Nlaka'pamux	c'ic'x-c'əx-t
Okanagan	snc'ic'qpnə? ('prickly')
Flathead	c'iqc'əqen-tp ('prickly-plant'); juniper bush: q'léstəmn̓t (cf. q'əlf 'cook, roast, ripe, ripen')

(7 see Haisla c'ixc'as h̓s̓g'ic'ələs 'swamp-evergreen leaves' for *J. communis*)Rocky Mountain Juniper (*Juniperus scopulorum* Sarg.)

Secwepemc	pun-tp (P)
Lillooet	pún-tp, pún-tp
Nlaka'pamux	pún-tp
Okanagan	pun-tp
Flathead	pún-tp

(7 see also Sahaptin pú.sh-a.sh (fruit: pu.sh) (for *J. scopulorum* and *J. occidentalis*)Western Red-cedar (*Thuja plicata* Don ex D. Don)

Secwepemc	estq̓ (P); estq̓̓p (MBI; DG)
Lillooet	cələw-əz' (cf. Nuxalk cələw-tp; Upper Chehalis cələw)
Nlaka'pamux	k'əł-tp, k'əłk'-tp
Okanagan	mx-tp, estq̓̓
Flathead	əstk̓ (boughs - msh-ətp)

Grand Fir [*Abies grandis* (Dougl. ex D. Don) Lindl.]

Secwepemc	məłén-tp (? mainly <i>A. lasiocarpa</i>)
Lillooet	məłín-tp/nməs-aka? (also <i>A. lasiocarpa</i>)
Nlaka'pamux	x'sətp/ x'əxtl'x-aka? ('sweet branch')? (also <i>A. lasiocarpa</i> , <i>A. amabilis</i>)
Okanagan	(s)l'ək'łí?tp (cf. l'ik̓ 'burst')/ məłít̓p (mainly <i>A. lasiocarpa</i>)
Flathead	q'łlcan

Subalpine Fir [*Abies lasiocarpa* (Hook.) Nutt.]

Secwepemc	məłén-tp
Lillooet	məłín-tp/nməs-aka?
Nlaka'pamux	tl'sətp/ tl'əxtl'x-aka? ('sweet branch') (also <i>A. grandis</i>)
Okanagan	(s)l'ək'łí?tp (cf. l'ik̓ 'burst')/ məłít̓p (also <i>A. grandis</i>)
Flathead	mənín-tp (cf. məł(i)m 'to heal' ?)

Western Larch (*Larix occidentalis* Nutt.)

Secwepemc	cəq̓'əłtc̓̓ ('red bark')
Lillooet	-
Nlaka'pamux	cəq̓'-əlx (cf. cəq̓̓ 'red')
Okanagan	cłq̓'lx
Flathead	cəq̓'əłsh (cf. cəq̓'əlx 'red' in Nlaka'pamux)

Engelmann Spruce (*Picea engelmannii* Parry ex Engelm. and
White Spruce [*P. glauca* (Moench) Voss])

Secwepemc	xsétp
Lillooet	cáx-az'/c'q"-ətp [cf. Halkomelem - c'q"-étp (cf. c'əq" 'poke, pierce, stab') and ? Upper Chehalis caqət, both for Sitka spruce]
Nlaka'pamux	cxəʔz-étp (? lit. 'rustling-plant') (see note for Lillooet, above)
Okanagan	t'ést'as-fətp (lit. 'hard tree')/ c'q'əqt ('prickly')
Flathead	t'ast'es é (lit. 'hard leaf'; sharp)

Whitebark Pine (*Pinus albicaulis* Engelm.)

Secwepemc	scak'-étp
Lillooet	s-c'ək' (edible seeds, cones), c'k'-əz' (tree)
Nlaka'pamux	s-c'ək' (edible seeds, cones), s-c'k'-éʔiʔp (tree)
Okanagan	sk'əwk'aw (edible seeds); sk'əw'k'əw'-fəʔp (tree) (cf. also Coeur d'Alene "sowí sttc" - Teit 1973:91)
Flathead	-

Lodgepole Pine (*Pinus contorta* Dougl. ex Loud.)

Secwepemc	q"əq"l'f'it
Lillooet	q"l'it, q"l'it-əz'
Nlaka'pamux	q"ʔit/ q"iʔt-étp
Okanagan	q"əq"əf'f'it
Flathead	q"əq"əlit

(cf. also ? Sechelt - qəq'ín-əy; Comox - qəq'ín-əy; and Kwakwaka'wakw -
qəqəsalʔəms (also for *P. monticola*)

White Pine (*Pinus monticola* Dougl. ex D. Don)

Secwepemc	səl'éwʔ (lit. 'two-containers')
Lillooet	zax-əlmíx"-əz' ('tall land plant')
Nlaka'pamux	zix"eʔ, zix"eh-étp
Okanagan	x"iʔələq" (t'i'yf' 'bark canoe')
Flathead	čəip'a (approx.)

Ponderosa Pine (*Pinus ponderosa* Dougl. ex P. & C. Lawson)

Secwepemc	s'əltq"ətp (P)
Lillooet	(s-)ʔəp'q"-əz',
Nlaka'pamux	s-ʔéltq"-tp
Okanagan	s'əltq"-tp,
Flathead	səʔətk"-tp

Douglas-fir [*Pseudotsuga menziesii* (Mirb.) Franco]

Secwepemc	cq'ətp
Lillooet	s-xəp-ʔúli (lit. 'real-tree') (but cf. c'q'əq'ləp - Douglas- fir sapling)
Nlaka'pamux	c'q'-étp (lit. ?sticky-plant')
Okanagan	c'q'-l'ətp
Flathead	cq'-étp

Western Hemlock [*Tsuga heterophylla* (Raf.) Sarg.]

Secwepemc	pəptnénitk"-tp/t'ne'ýt'k"-tp
Lillooet	p'úx'tn-əz'
Nlaka'pamux	x"ik"əstn-étp ('scrubber-plant')
Okanagan	-
Flathead	p'it'ihé (? 'thick-')

Western Yew (*Taxus brevifolia* Nutt.)

Secwepemc	skəník (BC, DG; orig. Dawson 1891:17)
Lillooet	ḵəmq'-éz' (cf. Straits Salish ḵəng'q'-itč; Squamish ḵəmq'-éy; Upper Chehalis ḵəmq'í; Kwakwaka'wakw ḵə'mq'í; Henaksiala/Haisla ḵmq'əs; Heiltsuk ḵmq'əs; Oowekyala ḵmq'əs)
Nlaka'pamux	t'é?x'-ətp (cf. Halkomelem téx'ac (lit. 'bow-plant'), OR ck-in'ək, OR ck-in'ək-étp ('hew-plant'))
Okanagan	ck'ink ('bow'); OR nak'núk' (cf. Ray 1932)
Flathead	ck'hčá (lit. 'bow-wood')

DECIDUOUS TREES

Rocky Mountain Maple (*Acer glabrum* Torr.)

Secwepemc	c'wətn (P)
Lillooet	c'wətn-əz'
Nlaka'pamux	c'əx'tn-étp (lit. 'scabby-plant')
Okanagan	spəkm-fíp
Flathead	sx'uXulá

(? see Henaksiala/Haisla c'əwika'as 'snowshoe tree')

Mountain and Green Alders (*Alnus crispa* L; *A. tenuifolia* Nutt.)

Secwepemc	k'ək'l-?étp, k'la-?étp
Lillooet	zəsaw-əz' (cf. Halkomelem wəsəwəy; Squamish yəsaw-əy)
Nlaka'pamux	zasuʔs-étp ('forest plant') (see note for Lillooet, above)
Okanagan	k'íʔk'íʔtn'-fíp (? lit. 'dry, dry-tree' - Ray 1932, for Sanpoil/Nespelem, <i>A. tenuifolia</i>)
Flathead	č'íčitəhə (possessive, short for č'íčitən-étp)

Paper, or White Birch (*Betula papyrifera* Marsh.)

Secwepemc	q'əqwítn-tp
Lillooet	q'əʔín-əz'
Nlaka'pamux	q'ítn-tp
Okanagan	q'ín
Flathead	q'íh-éiq' (cf. q'í 'dusty/dirty'; -éiq' 'round')

Cottonwood, or Balsam Poplar (*Populus balsamifera* Torr. & Gray. ex Hook.)

Secwepemc	mulx
Lillooet	naq'-nq'-əz' (cf. Upper Chehalis nq'í, Squamish q'əniq'-əy and Kwakwaka'wakw q'əniq'í, OR q'əniq' for cottonwood) [but NOTE: míməlx 'bushy' cognate with Sec and Ok: mulx]
Nlaka'pamux	naq'-nq'-ac'(-étp) (cf. note under Lillooet, above); mulx (Nicola Valley); [NOTE: muyx 'bush' is cognate with Sec and Ok: mulx]
Okanagan	mulx
Flathead	múish (cf. mul- 'to dip water')

Trembling Aspen, or White Poplar (*Populus tremuloides* Michx.)

Secwepemc	məlməttəttətp (P)
Lillooet	wəw-əlkzəʔ/c'ənxn-əz' (Pamb)
Nlaka'pamux	wəl-wəlc-étp ('shivering-plant')
Okanagan	məlmətt-fíp
Flathead	mímítə (lit. 'shimmering leaves')

Note: name means 'dancing-plant' in Straits Salish and Cowichan Halkomelem, and 'shimmering-leaves' in Squamish.

Bitter Cherry (<i>Prunus emarginata</i> (Dougl. ex Hook.) Walpers)	
Secwepemc	paktén [also pin cherry (<i>Prunus pensylvanica</i> L.)]
Lillooet	pssúss-ez'/?(w'x'-ez'
Nlaka'pamux	spoz-oss-étp/ paktén (bark) [cf. Nuxalk pítkn-tp (bark pítkn)]
Okanagan	péktén' (bark)/paktén'fip
Flathead	-

Choke Cherry (*Prunus virginiana* L.)

Secwepemc	tk'lsəʔétp (P)
Lillooet	zəlk'úʔ-ez'
Nlaka'pamux	zəlk'uʔ-étp
Okanagan	tax'x'-fip (cf. Halkomelem tax'-təx' (cf. tx'-ót 'spit-it-out'; Tait dialect)
Flathead	tx'x'-étk' (fruit: tx'x'ó) (cf. also Coeur d'Alène 'təx'təx' - Teit 1973:88)

Cascara (*Rhamnus purshiana* DC.)

Secwepemc	tén-tn
Lillooet	q'əy'x-tap/q'əy'x-tn [cf. Halkomelem q'əy'x-ətp (cf. q'əy'x 'black') and Straits Salish q'əy'x-ətp]
Nlaka'pamux	q'əy'x-ətp (see note for Lillooet, above)/stx-əyq'
Okanagan	ktəptəpsələq'
Flathead	čəq'iq'isó (cf. q'iq' 'belch')

Pacific Willow and other large Willow species (*Salix lasiandra* Benth.; *Salix* spp.)

Secwepemc	q'əlsétp (P)
Lillooet	x'úʔi'-əz' ('firedrill plant') [cf. ? Squamish x'əy'-əy ('pussy willow'), and Halkomelem xəlcap-ətp (lit. 'firedrill-plant' - <i>S. lasiandra</i>); OR tx'ətp-ez'
Nlaka'pamux	zúy-yaq' tek stx-étp/swuʔt-étp/swawt-étp ('fish plant')
Okanagan	həw-fʔtp [cf. Sahaptin hahəw (<i>S. amygdaloides</i>)]
Flathead	q'əwq'əwpuł ('habitual mover'); OR ppú

Note: The following Lillooet and Nlaka'pamux tree names, not listed in Table 1, are cognate with Coast Salish forms: flowering dogwood, broadleaved maple, and red alder.

* Terms are taken from the following sources:

Secwepemc: most originally from Palmer 1975; all checked with contemporary Secwepemc speakers by MBI, and/or BDC and/or Dwight Gardiner; analysis checked in Kuipers 1989; Lillooet: Turner et al. 1987; Nlaka'pamux (Thompson): Turner et al. 1990; Okanagan: Turner, Bouchard and Kennedy 1980; Flathead: Hart 1974, 1979; Halkomelem: Galloway 1982; Turner, Hebda and Montler. in prep.; Squamish: Bouchard and Turner 1976; Sechelt: Turner and Timmers 1972; Comox: Bouchard and Kennedy, British Columbia Indian Language Project, Victoria, personal communication, from unpublished field notes, 1973-1978; Nuxalk (Bella Coola): Turner 1973; Upper Chehalis: Kinkade 1990; Sahaptin: Hunn 1990; Kwakwaka'wakw: Turner and Bell 1973; Upper North Wakashan, including Henaksiala/Halsla, Heiltsuk, and Oowekyala - notes from BDC's unpublished doctoral research; Kootenay: Hart 1974.

Table 2. Linguistic Affinities of Secwepemc (Shsuwap) Tree Names, With Notes on Distribution and Traditional Uses of Tree Species [Note: Sec = Secwepemc; NI = Nlaka'pamux (Thompson); LI = Lillooet; OK = Okanagan; FI = Flathead]

Affinity Class for Secwepemc Name	Tree Species	Distribution	Major Traditional Uses*
1 (Sec name cognate with NI, LI, OK and FI)	Rocky Mountain juniper	dry interior zone; east of Cascades to Rocky mts	wood for bows; boughs used as incense, fumigant; medicine;
1	lodgepole pine	widespread from Coast to Rocky mts, except driest valleys of interior	cambium eaten; wood for fuel, construction; pitch for medicinal salve
1	paper birch	widespread in moist areas from Coast to Rocky mts	bark for containers; wood for fuel
2 (Sec name cognate with OK and/or Flathead, but not NI or LI)	western red-cedar	Coastal forests to east side of Cascades, then in Interior wet belt	roots for coiled baskets; wood for dugout canoes (inner bark little used by interior peoples)
2	Engelmann and white spruce	Interior forests from Cascades to Rocky mts; absent from dry interior	bark for containers; wood for fuel; pitch for medicinal salve
2	black cottonwood	widespread throughout, esp. along waterways	inner bark eaten; bark for containers; wood for dugout canoes, fuel, construction; bark and bud resin for medicine
2	trembling aspen	common and widespread throughout	wood for construction, fuel; bark for medicine

3 (Sec name cognate with OK, FI and NI, but not LI)	ponderosa pine	dry interior zone; east of Cascades to Rocky mts	inner bark eaten; wood for construction, fuel; pitch for medicinal salve
3	Douglas-fir	common and widespread throughout	sugar produced from boughs eaten; boughs used for flooring, pit-cooking; pitch for medicinal salve
3	bitter cherry	general throughout, except driest Interior zone	bark used for cordage, decoration of cedar-root baskets
3	common juniper	occurs throughout in upland forests	"berries" chewed casually; boughs used for medicine
3	Pacific yew	Coastal forests to east side of Cascades, then in Interior wet belt	tough wood used for bows, snowshoe frames
4 (Sec name cognate with NI, LI, but not OK and/or FI)	whitebark pine	timberline tree of Cascades, Rockies and ranges west of Rockies	large seeds eaten; an important food for many
4	Rocky Mountain maple	common and widespread throughout	inner bark used for cordage; wood for snowshoe frames, construction
5 (Sec name cognate with LI, OK, FI but not NI)	subalpine fir	Interior forests from Cascades to Rocky mts; absent from dry interior	boughs used for bedding, incense; pitch and bark an important medicine

6 (Sec name unrelated to Li, NI, Ok or FI)	white pine	Coastal forests to east side of Cascades, then in Interior wet belt	bark used for containers, canoes; pitch and bark for medicine
6	western hemlock	Coastal forests to east side of Cascades, then in Interior wet belt	boughs for scrubbers in ritual bathing; pitch and bark for medicine
6	mountain alders	moist sites, especially montane, from Coast to Rockies	bark used for red dye, and for medicine
6	cascara	Coastal forests to east side of Cascades, then in Interior wet belt	bark used as laxative medicine and tonic
6	willow (tree)	common in moist sites throughout	inner bark used for cordage; wood for fire-making; bark, leaves used for medicine
6	choke cherry	common and widespread throughout	fruits eaten; bark used for medicine

* Most of these applications are general for Interior Salish. For further details on use, refer to Palmer (1975), Turner (1978, 1979, 1988b), Turner et al. 1980, 1990.