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Plant taxonomy of the Salish and Kootenai Indians of western Montana

Jeffrey Arthur Hart

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PLANT TAXONOMY OF THE SALISH AND KOOTENAI
INDIANS OF WESTERN MONTANA

by

Jeff Hart

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degree of

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\(^1\)Though often called Flathead Indians, the author is using the locally preferred "Salish" (often "Montana Salish").
Salish names for plants has been indispensable.

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CHAPTER I

INTRODUCTION

Although the big game animals such as buffalo, elk, and deer constituted the Indian's primary sustenance, it was the plant kingdom that added variety and spice to his diet. And from these plants also came the medicines that healed the sick and the injured; the scents which perfumed their lodges and sweathouses; the leaves they smoked in their pipes; the shampoos and tonics for their hair; the aromatic properties which warded off unwanted insects; remedies for ailing horses; dyestuffs; and the materials used in manufacture such as for bows, arrow shafts, tepee poles, etc. And for all of these plants known to them, there was a taxonomy which named and often described them. The study of this important but neglected relationship between early peoples and their surrounding vegetation is ethnobotany.

Ethnobotany is an important study, one which helps in gaining a better understanding and a more complete representation of a people's material and mental culture, illuminating evidence of the ethnic psychology and rationale of the tribal rites and religious ceremonies, and serves as a measure of the scope of their "science" (Gilmore, 1932). Furthermore, ethnobotanical studies have been used, as cited

An ethnobotanical study of the Salish and Kootenai Indians of western Montana is especially timely, as there is a diminishing number of older men and women of these tribes who are knowledgeable of the Indian names and uses of plants. The information they possess will be lost to the world if an effort is not made to record, analyze, and preserve it.

To date there has been very little thorough ethnobotanical work done in western Montana (Diettert, 1955; Stubbs, 1966). Now we need to go beyond these incomplete surveys in scope and purpose.

There is an awakening interest among the Indians and other people to record this information regarding the plant life known and used by the Salish and Kootenai people. In this regard this study will serve as a contribution to assist in meeting that end.
CHAPTER II

MATERIALS AND METHODS

During the summer of 1973, an ethnobotanical study of the Confederated Salish and Kootenai Tribes was initiated on the Flathead Indian Reservation in western Montana. First the leaders of the Indian community were consulted to ascertain whether a need existed for a study and to learn from them which of the elderly members of their community might be willing to contribute their time and knowledge to an ethnobotanical study of their respective tribes.

After acquaintance with these elderly members of the Indian community was made, sessions were arranged in which the plants known to them would be discussed. Using herbarium specimens and photographs of representative plants of the area's flora, the interviews with these consultants were tape recorded. This proved to be a very successful technique, though limited in scope. The consultants seemed to have little difficulty in identifying these dried and mounted plants if they had used them or possessed knowledge of their use. The use of the tape recorder also allowed for a relaxed atmosphere in which the consultants could freely and easily discuss the names and uses of the plants.

Later in the field season a somewhat different type of
interview was conducted. In place of dried plants and photographs, questions concerning particular uses of plants such as "what was used for colds, fevers, etc." were asked. This method often proved to be quite productive. Also, their answers correlated with what had been said previously in the earlier interviews. New information of plant and even animal uses not mentioned previously was recalled, making for a more comprehensive study of plant use.

The interpreter and self-taught linguist, Larry Parker, assisted in many of the interviews and transcribed most of the names of plants in his own phonetic orthography.

At the end of the field season, the consultants were paid at a rate of five dollars per hour. This helped to facilitate subsequent interviews with them.

Dr. Anthony Mattina assisted in transcribing Salish and Kootenai plant names from a tape recording made by Larry Parker. The orthography used is the standard one for Salishan languages as found in recent literature.

The linguists Barry Carlson, Anthony Mattina, and Larry Parker assisted in determining the morphemes and etymologies for the plant names.

From the tape recordings of the interviews, the names for the plants as given by other consultants were cross-checked for accuracy. The usages of the plants were also transcribed from the tapes and are presented in the appendices. Throughout the paper, the author refers to the usage of plants in the past tense. It is recognized, however,
that some plants are still in use today. The past tense is used for the sake of consistency, though it inaccurately implies that the plants are no longer used.

The scientific nomenclature used for plants follows that of Hitchcock and Cronquist (1973).

Abbreviations used in this text indicate the Salish and Kootenai consultants, as well as other pertinent sources. They are as follows:


|-----|----------------------------------------------------------------------------------------------------------------------------------|
CHAPTER III

PLANT TAXONOMY

Taxonomy is comprised of nomenclature and classification. According to the Webster dictionary (1970), nomenclature is "the act or process or an instance of naming"; classification is defined as "the systematic arrangement in groups or categories according to established criteria" (1970).

A plant name which does not place it into a specified category but only names it is thus a type of nomenclature, while one which puts the plant into some category or group for whatever the reason is both a nomenclatural as well as a classification scheme.

Nomenclature

The names that people give to plants perhaps can be likened to geographical names (Mattina, 1973). When people first describe a new place, they are unconsciously giving it a name; this description, often lengthy, eventually can become shortened through repeated use, and may eventually in time be clipped and slurred to the point that it becomes a meaningless phonetic symbol (Stewart, 1958).

Similarly, a particular plant might be discovered in
the high mountains by a particular people and found to be a good plant for coughs, sore throats, etc. It could conceivably acquire the name "high-mountain-cough-plant". With repeated usage, this word might lose part or all of its meaning, and in the latter case, would become nothing more than a phonetic symbol identifying a particular kind of plant.

In the Salishan tribes of the Pacific Northwest, for example, many instances of plant names having no apparent meaning occur. The Thompson, Coastal Salish, and Montana Salish call the elderberry, or *Sambucus* sp., /čík'ukʷ/ (Turner, 1973), /číwəq/ (Turner and Bell, 1971), and /čkwíkʷ/ respectively. These words are apparently cognates and through long usage, have seemed to have lost whatever descriptive meaning they might originally have had. Other examples include the Montana Salish, the Spokane, the Thompson, and the Colville word for *Juniperus scopulorum* (Rocky Mountain juniper), /púnip/ (Carlson, 1973; Mattina, 1973; Teit and Steedman, 1973; Turner and Bell, 1973), and the Montana Salish and Thompson (Turner and Bell, 1973) /q'liwyeʔ/ for a species of *Allium* (onion).

Interestingly, many of the names of plants whose etymologies seem analyzable appear to convey no meaning to the people who use them. It might seem that many of the words for plants are then phonetic symbols only, and do not currently convey descriptive meaning of the plant.
Plants are commonly named for outstanding or peculiar features of their morphology, habit, taste, smell, etc.; for the habitats in which they grow; for their medicinal values and other uses; for their relationship to beliefs and religious values; for the roles they play in aspects of a people's culture; for resemblances to other plants; for resemblance to animals or parts of animals, etc. In addition, the significance of borrowing will be discussed.

Descriptive names for a plant's morphological features, habitat, taste, smell, etc. appear to be the most common type. The Thompson name for Geum triflorum is /pəcpúqcən/, 'shaggy head', in reference to the plumose styles of the fruit (Teit and Steedman, 1973). The name that the Montana Salish have for Cirsium sp. (thistle) is /cəq'ciq/, 'prickly', in reference to its sharp, prickly leaves and stem. Arctostaphylos uva-ursi (kinnikinnick) is called by the Montana Salish /sk'ulís/ and contains the morpheme /k'ul/, 'red', in probable reference to the fruit.

A tree's behavior or habit in the wind can be the basis for its name. Populus tremuloides or quaking aspen is named by the Saanich, a coastal Salishan tribe, /q'wíixəp/, 'dancing' (Turner and Bell, 1971), and the Montana Salish call it /mímité/, 'flowing', both for the shimmering or quaking behavior of the leaves in the wind.

Other habits of plants are often manifested in its name, such as vines. The Thompson Indians have named
Clematis columbiana /qəʔəʔ-usnius ʔəwimex/ (?), 'entwining or crossing the upper country or hills' (Teit and Steedman, 1973). The Montana Salish name them /čiʔyələʔikʷ/, 'wrapping or entwining around a tree'.

Taste and smell are often conveyed in the names of plants. Rhamnus purshiana or cascara sagrada is named by the Thompson Indians /təxtəxyuk/, 'bitterwood' (Teit and Steedman, 1973). The Montana Salish have named the big sagebrush, or Artemisia tridentata, /pupu nép/, 'smelly plant'.

The habitat in which a plant grows serves as a useful feature in the naming of plants. Kalmia polifolia, or swamp laurel, is named by the Thompson Indians /pəcpékie qʷuʔyəməxʷ/, 'leaves of watery or wet ground', for its preference to swampy or wet ground (Teit and Steedman, 1973). The Algonqian Indians have named the tamarack /muckigwa'tig/, 'swamp wood', for its preference for boggy environments (Densmore, 1928). The Montana Salish have named Ledum glandulosum, or Labrador tea, /sčtəlé lìťí/, 'mountain tea', and watercress or Rorippa nasturtium-aquaticum has been named /sənkʷaʔlētkʷ/, 'water growth'. And the Thompson Indians have given Artemisia tridentata (big sagebrush) the name /kəwkw̌u/, 'far from water' (Turner, 1973).

The uses of plants, particularly their medicinal uses, are frequently manifested in their names. A species of Antennaria or pussy-toes is called /yəʔiyəʔťúniʔp/, 'cough
plant', by the Thompson Indians, while a species of Euphorbia (spurge) is called /mľam̌enʔescaʔťən/, 'rattlesnake medicine' (Teit and Steedman, 1973), and Erigeron compositus (fleabane) is called /pəx̆ʷmín/, 'the-means-of-chewing-and-spitting-on-to-make-a-poultice' (Turner, 1973). The Montana Salish call Mentha arvensis (mint) /xənʔənəľp/, 'cool plant', possibly for its cooling effect on fever-striken patients. Also, the Montana Salish have the name /sčxəľxəľpú/, 'eye-brightener', for the prince's-pine, Chimaphila umbellata, which is used medicinally for sore eyes.

The utility uses of plants can be indicated in the name. The Cowichan and Montana Salish names for Taxus brevifolia, or yew, are /təx̆ʷəcəľp/ and /ckʷ̕nč̌a/, 'bow-wood' (Turner and Bell, 1971) and 'bow and arrow', respectively. The wood of this evergreen shrub, incidentally, was one of the favorites in the northwest for the making of bows.

Similarity to animals or parts of animals often is a basis for naming some plants. The Thompson Indians have named Achillea millefolium, or yarrow, /qʷuqʷəm̌xəňuʔpəʔ/, 'chipmunk's tail' (Teit and Steedman, 1973), while Chaenectis douglasii (false yarrow) has been given the name /scaʔtnúpeʔ/, 'rattlesnake tail' (Turner, 1973). The Montana Salish have given the shooting star, or Dodocatheon conjugens, the name /xəwít xəwú/, after the American bittern, a bird of the marshes. A species of hawthorn, or Crataegus, the Montana Salish call /sən̓čəľpá(1kʷ)/,
'coyote's wood'. The Makah (Wakashan) of Washington call *Maianthemum dilatum* (false lily-of-the-valley) /tl'i'ikibupt/, 'snake plant' (Gunther, 1945). The names of plants can reflect the importance of a plant to the culture of the people. Before the Dakota (Siouan) were displaced by the Algonqian from the lake country to the plains, their name for the wild rice was /psin/. When they came to the plains, another plant came to occupy primary importance in their lives, *Psoralea esculenta*, or the wild turnip. This plant came to be called /tipsina/, 'little prairie wild rice' (Gilmore, 1919). Plants were given names based on certain beliefs held about them. The Kwakiutl (Wakashan) Indians of British Columbia name a particular species of fungus /kenkenkés/, 'echoe', because it is believed to cause echoes in the woods, and *Nuphar polysepalum* or pond lily is called /lhíwayi setšáwi/, 'beaver's mat', as it is believed that the beaver sleeps on the floating leaves of this plant (Turner and Bell, 1973). The Montana Salish call the wild rose, *Rosa* sp., 'Coyote's berry', because it is believed that Coyote, a legendary figure in Salish mythology, once ate the fruit (hip) of this plant and as a result, his anus began to itch. Coyote scratched and scratched so much that he died! The names that the Indians have for plants often seem to illustrate a lively sense of imagination, perhaps a linking of relationships or criteria that seems somewhat
far removed. The Siouan Indians of the northern plains, for instance, named the pasque flower, *Anemone nuttalliana*, 'twin flower'. As it is the first plant to bloom in the spring, it is regarded by the Siouan Indians with particular affection. This feeling of affection is likened with that felt by a new family experiencing its first young. And thus the name 'twin flower' comes from this likening of the first newborn with the first flowers of the spring (Gilmore, 1932). The Montana Salish name the tomatoes /sx'ya/, 'ants', because of the similarity of appearance of the white colored ant eggs as seen when one breaks open an ant hill to the white colored seeds of the tomato!

The Onondaga Indians have named the pine tree /o-neh'tah/, 'like porcupines holding to a stick' (Beauchamp, 1902), apparently for the long clustered pine needles which resemble porcupine quills. The Onondaga people name the white trillium /o-je-gen-stah/, 'wrinkles on the forehead', for the strongly veined flowers (Beauchamp, 1902).

Dr. Mattina (1973), in studying the language of the Colville Indians of Washington, believes that phrase-length metaphorical expressions seem to be lacking in the language; however, he suggests that many of the words themselves in the language are metaphorical in nature. This may explain, in some instances, the nature of the figurative names which the Indians use for plants.
Different names can be used for the different stages of a plant's growth. The Thompson Indians call the first year's basal growth of the thistle /čkələspų/, while the second year plant is called /ƛāqƛəqt/. In a somewhat different manner the young ponderosa pine is called /səʔétutqʷip/, while the older tree is called /sʔétqʷip/ (Turner, 1973). The Kwakiutl (Wakashan) Indians of British Columbia call a sapling Thuja plicata, or western red cedar, /gwelxmes/, one suitable for collecting bark /dxesekw/, and a full grown tree is called /wilkw/ (Turner and Bell, 1973).

Plants which are extensively used often have many names. Turner and Bell (1973) stated that the Kwakiutl (Wakashan) Indians of British Columbia have some 40 names for the western red cedar, a tree extensively used by these people. The Montana Salish have at least two names for it, /ástkw/ for the wood and /m̕šeip/ for the boughs. The camas, Camassia quamash, goes by the names /sxʷeʔlí/ for the uncooked camas and /ʔitxʷeʔe/ for the cooked camas. A black species of Alectoria, or tree lichen, which is cooked with the camas also goes by two names, /šawtəmqən/ in the uncooked state and /sqʷúla/ in the cooked state.

Some names of plants have been borrowed from other languages. The Tewa (Athapaskan) Indians of New Mexico have some 30 words for plants which were borrowed from Spanish. The alfalfa, for example, is called /alp'alp'a/ and coffee is called /kap'e/ (Robbins, 1916).
The Montana Salish have at least 4 names of plants which are borrowed from French and one from English. Part of the name for Labrador tea, *Ledum glandulosum*, /lití/, 'tea', comes from French, as also do the following: potato, /pátaq/; *Campanula rotundifolia* or harebell /ile'leputé/, 'little bottles'; and oats /lewén/. This certainly points out the influence of the French fur trappers in this area. In addition, the one word borrowed from English is /ápels/, for apples.

It seems, then, that borrowing is more common with introduced plants than with native plants. Furthermore, borrowing may come from their own language. For example, the domestic cherry has been named after the chokecherry, and rhubarb has been named in the Montana Salish language after the cow-parsnip which it resembles superficially. Hopefully, additional research will indicate the influence of borrowing from other tribes.

Sometimes there seems to be a reluctance to name new species, such as introduced species for which people have no use (Chestnut, 1902). Neither the Montana Salish nor the Kootenai have bothered to name the common dandelion, *Taraxicum officinale*. Yet on the other hand, the introduced weed plantain, *Plantago major*, which is used medicinally as a poultice, is named /nìamlqéne?e/, 'bear's ears'.

Even native plants having no use seem to have no names. Pete Beaverhead (1973), a Montana Salish Indian of consider-
able botanical knowledge, was very familiar with some of the plants which were shown to him that apparently had no use. In fact some of them he had, as a youngster, shown to his elders in hope that they would have a name, apparently without any success. Other Indian people also recognized but had no names for some plants shown to them. It may also be that these familiar plants at one time had names, but have long since been forgotten.

Classification

When the names that man gives to plants arrange them into groups or categories based on certain criteria, he is using a classification system.

One of the most fundamental types of classification systems is the binomial nomenclature scheme. Contrary to popular belief, it was not Linneaus who first implemented it, but rather, as Bartlett (1940) believed, is a concept as old as folk science.

We commonly use the binomial nomenclature scheme, though many do not realize it. When we refer to red, white and black oak trees, we are using the binomial nomenclature system no differently than when botanists refer to them as Quercus rubra, Q. alba, and Q. nigra.

Inherent in the binomial nomenclature scheme is the concept of the genus. It is a generic name which is applicable to several of a kind; the varieties of the genus may or may not be specified.
Bartlett (1940) stated that whatever the people or language, there is a naming and classification of the plants and usually a well defined concept of the genus. He points out the beginnings of the concept: (A) "With enlarging experience, people make finer distinctions, and need different names for newly distinguished entities which have previously been called by the same original name. The original name becomes generic in its application; variously qualified, it provides the basis for specific names. (B) As a language becomes cumbersomely rich in separate names for closely similar things, there is a tendency toward grouping or classification under the same name on the basis of newly perceived similarities." As Bartlett (1940) adds, grouping of similar kinds into genera is a linguistic necessity if there is to be flexibility and precision in the nomenclature of the biotic world.

Working in the very rich floras of Malaysia and Sumatra, Bartlett (1940) found numerous instances of the binomial nomenclature system used by the native peoples. For the climbing palms of Malaysia, the natives used the following binomials: /hotang djorling/, /hotang sumambu/, /hotang abonir/, /hotang taritting/, /hotang pahoe/, etc.

The natives of the floristically rich Hawaiian Islands furnish additional examples of the binomial nomenclature. Acacia koa and A. koaia are called /koa/ and /koaia/. And Oxalis corniculata and O. martiana are called /'ihi-'ai/
and '/ihi-pehu/ (Nagata, 1971).

Additional support comes from the Aymara Indians of Bolivia. Since substantial subsistence came from the potato in that region, perhaps it is not too surprising that hundreds of terms are used to designate the various kinds of potatoes. The fundamentals of their taxonomic system for the potato is built on a binomial nomenclature scheme. The second term designates the variety and the first the subvariety. For example, the /larom imilla/ and /hangho imilla/ designates the "blue" and "white" types of "girl" potatoes, while the /chchiar surimama/ and /chchiar sutumari/ designates the "ostrich-mother" and "slippery thing" types of "black" potatoes (La Barre, 1947).

The Navaho (Athapaskan) Indians of the desert floras of the American Southwest display a tendency to use the binomial nomenclature scheme. Their names for the junipers Juniperus communis, J. virginiana and J. pachyphloea are /kat/, /kat-nee-ay-li/, and /kat-dil-tah-li/. In addition, their names for the pigweeds Chenopodium fremontii and C. album are /tlotahi/ and /tlotahitso/ (Matthews, 1886).

Wyman and Harris (1941) found further substantiating evidence of the Navaho tendency to classify plants. It was found that they have names for a number of botanical species; these Wyman and Harris (1941) called form genera. Those names given to a single botanical species were called Navaho species. The generic names and the specific names
were found to be variously modified by additional qualifying terms to designate species or varieties. Of the 243 stem names for plants, 44 seemed to be form genera names. Within each genus, there were seldom more than three or four kinds. In a surprising number of instances, the species in the Navaho genus are actually members of the modern recognized botanical genus (Wyman and Harris, 1941).

The Navaho (Athapaskan) tend to classify insects with the binomial nomenclature also. The Navaho genus for insects includes those which belong to the same modern biological category (genus, family or order) as well as those organisms which only grossly resemble one another. These categories they distinguish on the basis of structure, habits, or habitat. Furthermore, it is suggested that it is not too unlikely that biological species only distantly related would be put in the Navaho genus. The Navaho "pot-carrier" is used to name members of different modern orders of insects, but which have structural similarities related to incidents of their mythology (Wyman and Bailey, 1964).

The Navaho species of insects are then qualified by modifying the generic names. Subspecies are further distinguished by qualifying the specific name with additional adjectives (Wyman and Bailey, 1964).

The extent to which the Navaho genus has species associated with it depends partially upon the degree to
which superficial differentiation of the genus occurs. Thus while there is only one species of the bedbug from both the modern scientific as well as Navaho (Athapaskan) viewpoint, there are many Navaho modern species of moths recognized. The Navaho recognize, in the latter instance, some 21 species of moths and 13 subspecies based upon color, size, patterns, etc. (Wyman and Bailey, 1964).

As is suggested in some of the previous examples, the instances of usage of the binomial nomenclature scheme appear to be well developed in regions having rich biotic diversity or in those occasions wherein extensive usage of a particular kind or kinds occurs. As Bartlett (1940) indicated, the binomial nomenclature system becomes a linguistic necessity as it enables people to name a far greater number of species with fewer words.

With the Indian tribes of northwestern America, however, it appears that the binomial nomenclature system is poorly developed. It may be that the relative paucity of flora in this region compared with some of the previous examples does not lend itself to the need for the native peoples to develop this type of classification system. The tribes of the northwest no doubt could satisfactorily name all the useful and common species with individual names.

In those situations where more than one species is found within a modern recognized genus, the binomial is seldom utilized. The Montana Salish, for example, call
Betula occidentalis (western birch) /sičeqənélp/, while Betula papyrifera (paper birch) is called /qʷiňá/. Crataegus columbiana (Columbia hawthorn) is called /stemóq/, and Crataegus douglasii (black hawthorn) is called /sxʷeʔné/. And Abies lasiocarpa (alpine fir) is called /manínip/, while Abies grandis (grand fir) is called /qʷílčən/. The Kwakiutl (Wakashan) Indians of coastal British Columbia, a different linguistic affiliation, have given entirely different names to the four species of Rubus or raspberries and to six species of Vaccinium or huckleberries (Turner and Bell, 1973).

The Snohomish (Salishan) of western Washington call Berberis aquifolium and Berberis nervosa (two species of Oregon grape) /qu'bqubitc/ and /swaixats/, respectively. Similarly, the Cowlitz of western Washington call the raspberry species Rubus parviflorus, R. spectablis, R. leucodermis, and R. macropetalus /kũku'cnaš/, /e'ťwan/, /ca'xat/, and /wisi'k/, respectively (Gunther, 1945). Further examples could be cited.

Examples of the generic concept do exist, such as the Montana Salish /cáqʷəlš/ and /sčtxʷé caqʷəlš/ for the western larch, Larix occidentalis, and for the alpine larch, Larix lyallii. These, however, are not very common.

It must be pointed out that not having a binomial nomenclature system for closely related plants does not mean that the northwest Indians did not believe plants to be...
related to one another. On two separate occasions when a picture was shown of the white or paper birch, *Betula papyrifera* to Christine Woodcock and Annie Pierre (1973) and to Pete Beaverhead (1973), reference was made to a kind of birch having reddish-brown bark, most probably *Betula occidentalis*, the western birch. Thus, though having separate names, they are recognized to be related.

On another occasion, Pete Beaverhead (1973) told of another type of *Amelanchier* or serviceberry with reddish-colored fruit called /si'yēye/?. The more common one with better tasting fruit is called /siáq/.

Additionally, Mitch Small Salmon (1973) once made reference to the similarity of grand fir or *Abies grandis* and alpine fir or *Abies lasiocarpa*, even though they have different names /q'ílcan/ and /manílp/, respectively.

On the other hand, the names of some plants seem generic. The Montana Salish name the huckleberry, *Vaccinium globulare*, /st'šá/. As Pete Beaverhead (1973) indicated, different kinds of huckleberries are believed to exist, as some are noted to be too mushy, some bigger, etc. Apparently no specific names are given to these various kinds; the differences are specified by short descriptions and not one-word names.

Teit and Steedman (1973) also pointed this out for the Thompson Indians of British Columbia. The genus *Antennaria* (pussy-toes) is called /yəɬyəɬiʔt-únip/. Different species
...Antennaria microphylla, A. rosea, and A. luzuloides are distinguished through brief descriptions.

Regarding the paucity of binomial nomenclature for plants by the Northwest Indians, it also seems possible (in addition to the relative paucity of flora) that they are using different criteria of nomenclature than some peoples who tend to use this system. It may be that their lively sense of imagination and their common use of metaphors, as pointed out earlier, are more significant features for naming than believed relationships among plants.

Wider relationships among plants are commonly recognized by various peoples. Bartlett (1940) found that the Batak of Sumatra called any slender species of Carex (sedge) /si martihe-tihe/, 'the one who passes for tihe', or 'the tihe-like one' (tihe is a species of sedge or Carex). He suggested that this is an 'inkling of the family concept and a name which is linguistically a reflection of the same kind of thinking that gave us the botanical family names in current scientific use' (Bartlett, 1940).

Teit and Steedman (1973) also found that names given to plants by the Thompson Indians indicated a believed relationship among them. Plants having certain physical characteristics in common are designated as /snuk'toe's/, 'friends'. Thus two or three species of Artemisia are considered related to A. canadensis, and were therefore called /snuk'toe's a sweléip/ (?), 'friends of Artemisia canadensis.'
Gailardia aristida, or brown-eyed Susan, is called by the Thompson Indians /səχ’əm’vekən/, 'little Balsamorhiza flower' (Teit and Steedman, 1973). Both are members of the modern family Compositae or Asteraceae.

Clintonia uniflora, or queen-up bead lily, is called by the Thompson Indians /skemec-úpe?, 'Erythronium-root' (Turner, 1973). Both Clintonia and Erythronium are members of the modern Liliaceae family. In addition, Disporum oregorum (fairy-bell) is called /snúk̓e?se’kalwet/, 'relative of Smilacina' (Turner, 1973). Both again are members of the modern Liliaceae family.

Chimaphila umbellata, or prince's pine, is called by the Thompson Indians /snúk̓e’se’ik-éip/, 'relative of kinnikinnick' (Turner, 1973). Both are members of the modern heath family.

Believed family or generic relationships for plants and animals are not always accurate, at least from the current scientific viewpoint. Organisms can be placed in the same category for reasons which might be viewed from the scientific community as "superficial".

The Batak of Sumatra sometimes place plants of very diverse phylogeny in the same category. Usually physical attributes common to the species in question are reason for their being grouped together (Bartlett, 1940).

The Delaware (Algonqian) Indians similarly place bats and birds in the same category because of similarities of
function (Speck, 1946). Of course this is no different from early Europeans who placed fish and whales in the same category.

It seems that many different criteria for classification of organisms are possible than what modern science uses. The Navaho (Athapaskan), for instance, have a tendency to classify members of the animal kingdom on the basis of types of motion, as the following illustrates:

1. /na'at'i'i/ 'which moves here and there',
2. /na'aləsì/ 'which moves on all fours',
3. /na't'a'i/ 'which fly around', and
4. /na'nanagi'dine'e/, 'crawling and creeping animals'.

In fact, one third of the generic names describe motion (Wyman and Bailey, 1964).

Speck (1946) stated that the Delaware (Algonqian) Indians have designated rough classification systems based on criteria of form and habit. It is not too surprising, then, that they have collective terms for owls, hawks, ducks, woodpeckers, swallows, etc., groups of birds which have similar form and function. Schaeffer (1950) also believed that the Blackfeet classified birds on similarities due to function.

More inclusive and wider classes of plants are frequently recognized. Just as we have named and classified plants as trees, bushes, grasses, weeds, algae, mushrooms,
ferns, etc., so too have many other peoples, including the Montana Salish.

Cronquist (1968) further elaborated on the folk taxonomy of the higher categories of plants and animals. He stated that with the higher vertebrates there is a general correlation of structure, appearance, ecologic niche, and taxonomic affinity. Many of these categories, he continued, are reflected in true folk classifications. This is exemplified by such common names as fish, shark, reptile, snake, lizard, bird, hawk, owl, penguin, squirrel, kangaroo, monkey, etc. The folk classification of vertebrates does not conform in all respects to that of formal taxonomy, but as he suggested, in a great many of cases it does.

The situation among the flowering plants (Cronquist, 1968) is far different. The structural differences which mark the higher taxa of vertebrates have no real parallel among the higher taxa of the flowering plants. Difference of growth habit, which among the vertebrates may delineate different taxa, can be found within the same taxa of flowering plants. It is the minute structure of the flower and fruit which delineates the higher taxa of plants, and thus it is no wonder that early plant taxonomic systems, such as those that recognized trees, shrubs, herbs, vines, etc., cut squarely across natural taxonomic arrangements.

To peoples whose existence is directly dependent upon
the natural world, classification of plants by use frequently occurs. Arber (1970) believed that classification of plants by their uses and medicinal properties is obviously the first suggestion that arises when nature is regarded from the anthropocentric viewpoint.

The Gosiute of Utah, for example, classified medicinal plants according to disease and ailments in which they were used to cure as the following illustrates:

(1) /í-a-na-tsu/, 'wounds and cuts',
(2) /bai-gwi-na-tsu/, 'bruises and swellings',
(3) /waí-a-na-tsu/, 'burns',
(4) /ó-ni-na-tsu/, 'coughs and colds',
(5) /koí-na-tsu/, 'bowel troubles',
(6) /wu-i-na-tsu/, 'worms',
(7) /tîm-bai-na-tsu/, 'venereal diseases',
(8) /tsó-ni-na-tsu/, 'rheumatism',
(9) /bú-i-na-tsu/, 'blood', and
(10) /sí-na-tsu/, 'bladder and kidney troubles'

(Chamberlin, 1911).

The Navaho (Athapaskan) believe that plants fall into large medicinal categories according to:

(1) ceremony in which the plant was used,
(2) etiological factors held responsible for the disease,
(3) the disease itself,
(4) the pharmacological effect of the herbs,
(5) the method of preparation, and
(6) the method of administration.

If a plant's name can not be recalled, then the Navaho will place it in one of the above categories (Wyman and Harris, 1941).

Classification of plants by use was prevalent among early European herbalists too. John Parkinson, in Theatrum botanicum, 1640, classified some plants as "Venemous, Sleepy, and Hurtfull", while others were placed in categories with the 'strange and outlandish plants" (Arber, 1970).

The concept of sex in plants can be a basis for classification. As La Barre (1947) stated, that some plants are considered to be dioecious is not uncommon among Indian tribes of North and South America. The Athapaskan, for instance, visualized large individuals as the males and the smaller individuals as the females. Often these are actually larger and smaller species within a modern genus (Wyman and Harris, 1941). Occasionally specific parts of plants were viewed as female or male. The Thompson Indians viewed individuals of Goodyera oblongifolia having flowering stalks as the female, while the males were thought to lack flowering stalks (Turner, 1973). The Kootenai believe that the flowering stalk of the balsamroot, Balsamorhiza sagittata, to be the female part, while the stalk supporting the leaf, the petiole, to be the male part. No concept of sex in plants has been discovered with the Montana Salish.
Occasionally habitat serves as a basis for classification. The Gosiute, for example, classify water plants as /pá-bu-ip/, the plants growing on rocks as /tím-bo-ip/, the shrubs growing in the mountains or canyons as /toi-ya-datsıp/, and plants growing submerged under the water as /pun-idi-sip/ (Chamberlin, 1911).

Arber (1970) stated that some early European herbalists classified plants by habitat. Also, this is not that much different than modern descriptive plant ecologists who classify plant communities.

Many tribes of the Northwest have what might be called a morphological classification of particular plants, especially those having edible fruits. A systematic means of distinguishing the fruit from the plant is utilized.

With the Montana Salish, for example, the fruit of Rubus parviflorus (thimbleberry) is called /pulpelqən/, while the plant is called /pulpelqənélıp/. The lexical suffix /-eıp/ occurs throughout the Salishan languages; e.g. in the Spokane (Carlson, 1973), the Colville (Mattina, 1973), the Thompson (Turner, 1973), as well as the Montana Salish, and has the meaning of 'plant' (Carlson, 1973; Parker, 1973) and sometimes 'leaves' (Parker, 1973).

In other instances, the Montana Salish designate the plant of species having edible fruits with the lexical suffix /-aิกʷ/, as seen in the word for Shepherdia canadensis (buffalo-berry) /šxʷusəmnáı̝kʷ/. This suffix means 'wood' or
'tree' (Parker, 1973) and seems to be used more frequently in the more woody plant species.

With some species of plants an irregular pattern is used by the Montana Salish to designate the bush or plant from the fruit. One name is used for the fruit, and a completely different name is used for the plant. The fruit of the wild strawberry, for example, is called /diťqəm/, while the plant is called /sənčəšə?stis/.

The Coastal Salish of Vancouver Island uses suffixes to indicate the plant or bush of the fruit yielding plants too. The Cowichan use the suffix /-1p/ and the Comox use the suffix /āi/ (Turner and Bell, 1971).

The Wakashan Indians of British Columbia (the southern Kwakiutl) use the suffix /-mes/ or /-əems/ to indicate the bush or plant of the economic species (Turner and Bell, 1973).

The tribes of western Washington have similar types of suffixes to indicate the plant or bush. The Cowlitz use the suffixes /-ac/ or /-as/; the Klallam use the suffix /-(i)ltc/; the Makah /-abupt/; the Snohomish /-wads/; the Swinomish /-ats/; the Squaxin /-ats/; the Chehalis /-ni/; the Quileute /-(a)put/; the Skagit /-(wa)ts/; the Green River /-a'ts/; and the Skykomish /-adts/ (Güntner, 1945).

The Gosiute of Utah use the suffix /-ump/ for some plants. It conveys the idea of material used for some purpose, especially food. Thus the entire rose plant is called
/tsi-o-pi/, while the edible fruit is called /tsi-ump/. This same system can be seen for currants, sumac, and Oregon grape (Chamberlin, 1911).

The Blackfeet similarly call the fruit of Amelanchier alnifolia /ok-kun-okin/, while the plant is called /oko-nok/ (Johnston, 1970). The Comanche (Uto-Aztecan) also have different names for the fruits and plants in some instances (Carlson and Jones, 1940).

The Kootenai have an apparently somewhat different method of making this distinction. In place of a suffix indicating the plant, they use the term /ak^ka'is/, meaning 'bush'. This term is not used by itself but only for distinguishing the plant from the fruit of economic species (Antise, 1970; Stasso, 1973).
CHAPTER IV

ETYMOLOGY OF SALISH WORDS FOR PLANTS

Morphology

The following Salish words for plants are comprised of roots and affixes. The affixes are of two types: grammatical and lexical. Both will be glossed, but only the lexical affixes add pertinent lexical information. Affixes are marked by hyphens which either precede or follow them, depending on their position relative to the root.

Roots may be modified by partial or full reduplication (repeating some or all of the root) which signal, respectively, a diminutive notion ('small'), or a plural or distributive (collective) notion. Other modifications of roots and affixes include vowel reduction (a, i, u, o, e become e under certain conditions of no stress) and consonant loss (a consonant becomes lost) neither of which need further comment.
General Botanical Terms

1. **algae**
   
   /sənupulexʷé/ (Ad)
   
   /s-(ə)n-up-ulexʷé/: /s-/ Nominal 'it's' (henceforth, 'nom.') (Carlson, 1972); /n-/ locative 'in' (Carlson, 1972); /up/ 'hair' (Carlson, 1973); /-ulexʷé/ '?'.

2. **bush**
   
   /ʔesˈtemp/ (Ad, LP, LP, CW) 'it's bunched'
   
   /ʔes-ˈtem-p/: /ʔes-/ actual (Carlson, 1972) or 'it's' (Parker); /ˈtem/ 'gathered, bunched' (Carlson, 1973; Parker); /-p/ 'non-control' (cf. 66) (Carlson, 1972).

3. **cone**
   
   /sččicēʔe/ (Ad, LP, AP, CW) 'it's a long object'
   
   /s-č-čic-ēʔe/: /s-/ 'nom.' (Carlson, 1972); /ččic/: 'a long object' (Carlson, 1973); /č-/, /-ʔeʔe/ both elements are unclear.

4. **ferns**
   
   /čxʷitîip/ (AP, AV, CW) 'sharp, pointed leaf'
   
   /č-xʷit-îip/: /xʷit/ 'sharp' (Carlson, 1973); /-(e)îip/ 'plant, leaf' (Carlson, 1973; Parker); /č-/'?'.
   
   Parker suggests that the name of this plant describes the toothed nature of the leaves.

5. **ferns**
   
   /təxˈtəxéip/ (PB) 'cushion leaf'
   
   /təx-təx-eip/: /təx/ redupl. 'to spread, cushion'
(Parker); /-e̱/ 'plant' (Carlson, 1973; Parker). This apparently was the name for the fern used in cooking of the camas; it was spread over the hot rocks to protect or cushion the camas from being burned as well as keeping it moist.

6. **flowers, blossom**

/sceʔekʷ/ (Ad, LP, AP, AV, CW) 'to light up' (Parker)
/s-ʔeʔ-/: /s- 'nom.' (Carlson, 1972); /ʔ-/ 'begins to' (Mattina); /e̱kʷ/ 'shiny, bright' (Carlson, 1973).

7. **fruit**

/spiqáʔiq/ (Ad, LP, AP, CW) 'ripe smell'
/s-piqáʔiq/: /s- 'nom.' (Carlson, 1972); /piq/ 'ripe' (Carlson, 1973; Parker); /-ʔiq/ 'fruit' (Carlson, 1973; Parker) or 'smell' (Parker).

8. **grass**

/supúʔlexʷ/ (LP, AV) 'hair on the earth'
/s-upúʔlexʷ/: /s- 'nom.' (Carlson, 1972); /-up/ 'hair' (Carlson, 1973; Parker); /-uʔlexʷ/ 'ground, earth'.

9. **leaves**

/picči/ (Ad, LP, AV)
Apparently unanalyzable.

10. **leaves (evergreen needles)**

/čémeʔe/ (Ad, LP)
Larry Parker suggests that this word may mean 'of the
extremities'. This may be indicative of the position of the needles on the "extremities" of the plant.

11. moss
/səŋkʷəspû/ (PB)
/-pu/ 'anus' (Carlson, 1973); this is in reference to the use of a particular kind of moss as an absorbent to keep babies clean. The remainder of the word seems unanalyzable.

12. mushroom
/pə̂əléq̱ine/ (PB, LP, JP, AP, AV, CW) 'smooth head'
/pə̂əlé-q̱ín-e/: /pə̂əl(e)-/ 'smooth' (Parker); /-q̱ín/
'head' (Carlson, 1973; Parker); /-e/ '?'.

13. mushroom (possibly Lycoperdon sp.)
/sʔíts/ (AV) 'to sleep' (Parker)
This is in reference to its use as a sleep inducer.

14. plants
/skʷaʔ1úʔlewxʷ/ (Ad, LP, AV) 'it's growing on the earth'
/s-kʷaʔ1-úʔlewxʷ/: /s-/ 'nom.' (Carlson, 1973);
/-kʷaʔ(1)-/ 'to grow' (Carlson, 1972; Parker);
/-uʔlewxʷ/ 'ground, earth' (Carlson, 1973; Parker).

15. roots
/sɔ̃čʷip/ (Ad, LP, AV)
The etymology of this word is unclear. Mattina suggests that the suffix /-ip/ is a cognate of the Colville /-ip/, meaning 'the other side' or the 'lower end': this meaning is apparently acceptable to Parker.
Parker also thought that /so'xʷ/ meant 'long, attached pieces hanging down, or dangling'.

16. **seeds**

/sənqəčtí/ (AP, CW)

Apparently unanalyzable.

17. **tree**

/?esšít/ (Parker) 'it's standing'

/?es-/ actual (Carlson, 1972), 'it's' (Parker); /šít/ 'to stand' (Carlson, 1973; Parker).

18. **tree, dead and standing**

/čey-e/: /čey/ 'dry' (Carlson, 1973; Parker);

/-é(lp)/ 'plant' (?).

19. **tree (fork of tree)**

/?esnqéyus/ (Parker) 'it's forked in the middle'

/?es-n-qéy-us/: /?es-/ actual (Carlson, 1972), 'it's' (Parker); /n-/ locative 'in' (Carlson, 1972); /qey/ 'forked' (Carlson, 1973; Parker); /-us/ 'middle' (Carlson, 1973; Parker).

20. **tree bark**

/číʔ1elxʷ/ (Ad, LP, AP, CW)

/číʔ1-elxʷ/: /elxʷ/ 'skin, hide' (Carlson, 1973; Parker); /číʔ1/ '?'.

21. **tree branches (on the ground)**

/sčelšelšmé/ (LP, AP, CW)

/s-č-1š-1š- mê/: /s-/ 'nom.' (Carlson, 1972); unanaly-
zable beyond this element.

22. tree branches (still on the tree)
/sččəlčəlɛ/ (Ad, LP) 'they're sticking out'
/s-č-čəl-čəl-ɛ/: /s-/ 'nom.' (Carlson, 1972); /čəl/
redupl. plural 'to stand' (Carlson, 1973) or 'to stick
out' (Parker); /č-/ '?'; /-ɛ/ '?'.

23. tree stump
/ŋx'ču'/ (LP, AP, CW) 'to cut', especially 'close to
the ground'
/ŋ-ŋ'č-u/: /ŋ-/ locative 'in' (Carlson, 1972); /ŋ'č/
this appears to be a cognate of the Spokane /x'wec(i)/
(Carlson, 1973) and the Colville /x'wic/ (Mattina),
meaning 'to cut', especially close to the ground.
Larry Parker believes that this is a good definition.

24. trees
/?esčččíl/ (Parker) 'they are standing'
/?es-čč-číl/: /?es-/ actual (Carlson, 1972), 'it's'
(Parker); /číl/ redupl. plural 'to stand' (Carlson,
1973; Parker).

25. vines
/či'ýa lái'k '/ (Ad, PB, LP, JP, AP, AV, CW) 'wrapping,
twining around a tree' (Parker)
/či'ý-a lái'-aik '/: /či'/ 'to hang down' (Carlson, 1973);
/(-)ya 1/ this may be a cognate with the Spokane /yir/,
meaning 'round' (Carlson, 1973); /-aik'/ 'wood, tree'
(Carlson, 1973; Parker).
26. **weeds**

/čəs·upú?lexʷ/ (Ad, LP, AP, CW) 'bad hair on the earth'
/čəs·-up-u?lexʷ/: /čəs·-/ 'bad' (Carlson, 1973; Parker); /-up/ 'hair' or 'fuzz' (Carlson, 1973; Parker); /-u?lexʷ/ 'ground, earth' (Carlson, 1973; Parker).

27. **wood (dry)**

/χə?máλqʷ/ (Parker) 'dry long cylindrical object'
/χə?m/ 'dry' (Carlson, 1973; Parker); /-άλqʷ/ 'long cylindrical object' (Carlson, 1973; Parker). This term applies to dry logs on the ground.

28. **wood (dry)**

/ιχα?mlúkʷ/ (LP, AP, CW) 'anhydrous wood'
/ιχα?m/ 'anhydrous' (Parker); /-lúkʷ/ 'wood' (Parker).

29. **wood (green)**

/χθλάλqʷ/ (LP, AP, CW) 'raw long cylindrical object'
/χθλ-άλqʷ/: /χθλ/ 'raw' (Parker); /-άλqʷ/ 'a long cylindrical object' (Carlson, 1973; Parker).

30. **woods**

/ŋkʷé/ (Ad, LP, AP, CW)

/ŋ-kʷé/: /ŋ-/ locative 'in' (Carlson, 1972); /kʷé/ this may be a form of /kʷa?/, 'to grow'.
Terms for Individual Species of Plants

31. *Abies grandis* (Dougl.) Forbes
   /qʷílcən/ (PB, MSS)
   /qʷíl-čən/: /qʷíl/ 'song, to talk' (Mattina, Parker);
   /-čən/ 'mouth' (Mattina, Parker). This name is also
   used for Palm Sunday. As the Grand fir has flat
   boughs, it (as well as *Thuja plicata*) was used in
   place of the palm, and hence was called /qʷílcən/.

32. *Abies lasiocarpa* (Hook.) Nutt.
   /mənílp/ (Ad, PB, AP, MSS, CW)
   /mənílp/: /mənί/ this morpheme is unclear. Carl­
   son (1973) suggests that it is a form of /mər(i)m/ 'to
   heal', possibly in reference to its use as a baby
   powder. Another suggestion is that it is a form
   similar to the Colville /maʔmin/ 'to rub' (Mattina).
   /-(e)lp/ 'plant' (Carlson, 1973; Parker).

   /sxʷuʔulá/ (PB, LP, AP, CW)
   /s-xʷuʔ-ulá/: /s-/ 'nom.' (Carlson, 1972); /xʷuʔ/ 
   '?', but compare Colville /xʷiʔ/ 'to break' (Mattina);
   /-ula/ may be a variant of /-uʔlexʷ/ 'land, earth'.

34. *Achillea millefolium* L.
   /nkw̃kʷá/ (Ad, PB, JP, AP, MSS, AV, CW)
   /n-/ locative 'in' (Carlson, 1972); /kʷkʷá/ '?'.

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35. **Achillea millefolium** L.

/ⁿᵉᵖ₃ᵉⁿᶜᵘₓ/ (JP) 'anus wipe'

The leaves of this plant apparently are a good substitute for toilet paper.

36. **Alectororia** sp. (uncooked)

/Ⱬ₃ᵃʷ₃ᵐ₃ᵣ₃₃/ (PB, AP, CW)

/-q₃ₐ₃/ 'head' (Carlson, 1973) is the only part identifiable.

37. **Alectororia** sp. (cooked)

/sqˢᵘʳₐ₃/ (PB)

Parker suggests that this word means 'baked'.

38. **Allium cernuum** Roth

/qʷᵃʳⁱ₢ʷᵉ?ᵉ/ (PB, AP, MSS, AV, CW)

Apparently unanalyzable.

39. **Allium** sp.

/sᵉₜᶜ/ (Ad)

This word seems unanalyzable. Carlson (1973) suggests that this might be a borrowing since /h/ is not very common in Salish.

40. **Alnus incana** (L.) Moench

/ᶜⁱᶜⁱᵗᵉⁿᵉ/ (PB, MSS, AV)

Parker suggests that this may be a shortened form for /ᶜⁱᶜⁱᵗᵉⁿᵉᵖ/.

41. **Amelanchier alnifolia** Nutt. (fruit)

/sⁱᵃⁿ/: /ˢ⁻/ 'nom.' (Carlson, 1972); /ⁱᵃⁿ/ '?'.

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42. **Amelanchier alnifolia** Nutt. (plant)

/siŋé/ (PB, LP, AP, AV, CW)

/s-ŋ-é/: /s-/ 'nom.' (Carlson, 1972); /i(a)ŋ/ '?';

/-e/ short for /-ŋp/ 'plant' (?).

43. **Amelanchier alnifolia** Nutt.

/siye?/ (PB)

This is a name for a variety of the serviceberry which has redder fruit. Parker suggests that its meaning is 'to become discouraged'.

44. **Arctostaphylos uva-ursi** (L.) Spreng. (fruit)

/skulîs/ (PB, LP, AP, AV, CW) 'it's red'

/s-kul-îs/: /s-/ 'nom.' (Carlson, 1972); /k(u)îl/ 'red' (Carlson, 1973; Parker); /-îs/ '?'.

45. **Arctostaphylos uva-ursi** (L.) Spreng. (plant)

/skulîlp/ (PB, JP, AP, AV, CW) 'it's red plant'

/s-kul-îlp/: /s-/ 'nom.' (Carlson, 1973; Parker);

/k(u)îl/ 'red' (Carlson, 1973; Parker); /-îlp/ 'plant' (Carlson, 1973; Parker); /-s/ '?'.

46. **Artemisia ludoviciana** Nutt.

/qəŋqənté/ (Ad, PB, AV)

/qəŋ-qənté/: /qəŋ/ redupl., its meaning is not clear; Mattina suggests that an apparently related Colville form means 'soft' or 'hair'; /-te/ '?'. Parker suggests that this name conveys a meaning of 'to alleviate pain, heartbreak, or sadness'.
47. **Artemisia tridentata** Nutt.

/ˈpuːpuːnɛip/ (PB, LP, AP, AV, CW) 'stink plant'
/ˈpu-pu-n-ɛip/: /ˈpu/ redupl. 'stink' (Carlson, 1973; Parker); /-ɛip/ 'plant' (Carlson, 1973; Parker); /-n- '?'.

48. **Asclepias speciosa** Torr.

/sənəɬqéw/ (Ad)

Apparently unanalyzable.

49. **Balsamorhiza sagittata** (Pursh) Nutt. (root)

/tæ qʷú/ (PB, AV)

Apparently unanalyzable.

50. **Balsamorhiza sagittata** (Pursh) Nutt. (plant)

/mtčúwe/ (Ad, PB, JP, AP, MSS, AV, CW)

This word appears unanalyzable; however, Parker and Mattina suggest a relationship with /m(u)t/ 'to sit'.

51. **Berberis repens** Lindl. (fruit)

/s Łáls/ (Ad, PB, JP, AP, AV, CW)

/s-čál-s/: /s-/ 'nom.' (Carlson, 1972); /čal/ may cognate with Colville /čər/ 'pain, diarrhea'; /-s/ '?'. Parker suggests that this word may have the meaning of 'cold' or 'pain'. The word is cognate with the Thompson /sčəl-séʔ/ 'because it has sour berries' (Turner).

52. **Berberis repens** Lindl. (plant)

/s̥čəsɛip/ (PB)

/s-čəs-ɛip/: /s-/ 'nom.' (Carlson, 1972); /-ɛip/
'plant' (Carlson, 1973; Parker); /čəs/ '?'.

53. Besseya rubra (Doug1.) Rydb.
/čečeξú/) (AV)
Parker believes that this word means 'three round ones'.

54. Betula occidentalis Hook.
/sičəqənɛ́ɛp/) (AP, AV, CW)
/s-i-čəq-en-ɛ́ɛp/: /s/- 'nom.' (Carlson, 1972); /čəq/ 'prickly' or 'bristly' (Carlson, 1973; Parker); /-ɛ́ɛp/ 'plant' (Carlson, 1973, Parker); /i/- '?'; /-ən/ '?'.

55. Betula papyrifera Marsh.
/qən-alq/) (AP, AV, CW)
/q′i-n álq/: /q′i/ 'dusty, dirty' (Parker); /-alq/) 'round' (Carlson, 1973; Parker).

56. Brodiaea douglasii Wats.
/siľús/) (PB)
/siľ-ús/: /-us/ 'eye, face, fire, surface' (Carlson, 1973; Parker); /siľ/ '?'.

57. Calypso bulbosa (L.) Oakes
/sćtásšen/) (LP) 'hard shoe'
/s-č-tás-šen/: /s/- 'nom.' (Carlson, 1972); /təs/ 'hard' (Carlson, 1973; Parker); /-šen/ 'foot, shoe' (Parker); /č/- '?'.

58. Calypso bulbosa (L.) Oakes
/səmə?emqéʔṣis/) (PB) 'woman's shoe'
/səməm?em-𝑞éʔ-ṣis/: /səməmʔem/ 'woman' (Carlson, 1973; Parker); /-qéʔ/ 'pinched, squeezed, shoe' (Mattina,
Parker); /-šis/ related to /-šin/ 'foot' (?) (Mattina).

59. **Camassia quamash** (Pursh) Greene (cooked)

/ʔítxʷeʔeʔ/ (Ad, JP, AP, AV, CW)

Apparently unanalyzable. May be a shortened form of the archaic /sxʷeʔ1ítxʷeʔ/ (Giorda).

60. **Camassia quamash** (Pursh) Greene (uncooked)

/sxʷeʔlí/ (Ad, LP, JP, AP, AV, CW)

Apparently unanalyzable. See above for suggested earlier form.

61. **Campanula rotundifolia** L.

/lélepúte/ (PB) 'little bottles'

This is a borrowing from French, cf. /léputé/ 'bottles' (Parker). The reduplication of the first syllable and the glottalization mark a diminutive.

62. **Carex sp.**

/ʃtapéwé/ (PB)

Parker suggests 'rustling sound' as the meaning conveyed in this word, apparently due to the sound made when one attempts to walk through a dense stand of this plant.

63. **Castilleja sp.**

/sccmélt scéʔekʷ siʔlis/ (PB) 'children's flower food'

/s-ccm-élt/: /s-/ 'nom.' (Carlson, 1972); /c-ccm/ 'children' (Carlson, 1973; Parker); /scéʔekʷ/ 'flower' (Ad, LP, AP, AV, CW); /siʔlis/ 'their food' (Parker).
64. **Castilleja sp.**
   
   \[\text{/stəltələ scə?ek'w/s/ (AP) 'thunder flower'}\]
   \[\text{/s-təl-təl-á/: /s-/ 'nom.' (Carlson, 1972); /təl/ redupl. 'thunder' (Pierre); /s-케ek's/ 'flower' (Ad, LP, AP, AV, CW). /-a/ 'i'.}\]

65. **Ceanothus velutinus Doug.**
   
   \[\text{/kəlɨtɬiyeip/ (Ad, PB, AP, AV, CW) Apparently unanalyzable.}\]

66. **Chimaphila umbellata** (L.) Bart.
   
   \[\text{/sɨxəɬəlpú(s)/ (Ad, PB, JP) 'eye brightener'}\]
   \[\text{/s-č-ɬəɬ-ɬəp-ú(s)/: /s-/ 'nom.' (Carlson, 1972); /ɬəɬ/ redupl. 'to light, to brighten' (Carlson, 1973; Parker); /-p/ 'non-control' (Mattina); /-u(s)/ 'eye' (Carlson, 1973; Parker).}\]

67. **Cicuta douglasii** (DC.) Coult. and Rose
   
   \[\text{/ʔinix'/ (AP, AV, CW) 'poisonous'}\]
   \[\text{/ʔi-nix'/: /nix'/ 'poisonous' (Carlson, 1973; Parker); /ʔi-/ 'i'.}\]

68. **Cirsium sp.** (inedible)
   
   \[\text{/cəqčiq/ (PB, MSS, AV) 'prickly'}\]
   \[\text{/čiq/ redupl. 'prickly' (Carlson, 1973; Parker).}\]

69. **Cirsium sp.** (edible)
   
   \[\text{/sqəɬətmx'á/ (Ad, AV) 'it's a kind of man'}\]
   \[\text{/s-qəɬətm-x'á/: /s-/ 'nom.' (Carlson, 1972); /qəɬətm/ 'man' (Carlson, 1973; Parker); /-x'á/ 'species, kind' (Parker).}\]
70. *Claytonia lanceolata* Pursh

/skwəŋkwi/ (PB, AV)

/s-kwəŋ-kwi/: /s/- 'nom.' (Carlson, 1972); /kwəŋ-/ 'green' (Carlson, 1973; Parker); /-kwi/ '?'.

71. *Cornus stolonifera* Michx. (fruit)

/stéčxʷ/ (PB, AP, AV, CW)

Apparently unanalyzable.

72. *Cornus stolonifera* Michx. (plant)

/sčtxʷé/ (AP, AV, CW)

This word seems to be a shortened form for /sčctxʷalkʷ/, /-alkʷ/ 'wood' (Carlson, 1973; Parker), but is otherwise unclear.

73. *Crataegus columbiana* Howell (fruit)

/stəmőqʷ/ (PB)

/s-təmőqʷ/: /s/- 'nom.' (Carlson, 1972); /təmőqʷ/ '?'.

74. *Crataegus columbiana* Howell (plant)

/stəmqʷp álqʷ/ (PB) 'it's round'

/s-təmqʷ-p álqʷ/: /s/- 'nom.' (Carlson, 1972); /-p/ 'non-control' (Mattina); /-álqʷ/ 'round' (Carlson, 1973; Parker); /təmqʷ/ '?'.

75. *Crataegus douglasii* Lindl. (fruit)

/sxʷeʔné/ (PB, AB) 'it's sharp'

/s-xʷeʔ-né/: Unanalyzable beyond /s/- 'nom.' (Carlson, 1972) and /xʷeʔ/ 'sharp' (Parker).
76. **Crataegus douglasii** Lindl. (plant)
/sx'ə?x'ə?nčēp/ (PB, AV) 'it's sharp plant'
/s-x'ə?-x'ə?-n-č-eip/: /s-/ 'nom.' (Carlson, 1972);
/x'wēp/ redupl. 'sharp' (Parker); /-eip/ 'plant'
(Carlson, 1973; Parker); /-n/ '?'; /-č/ '?'.

77. **Crataegus** sp.
/sənčēlpá/ (PB) 'coyote wood or tree'
/sənčēlp-á/: /sənčēlp/ 'coyote' (Parker); /-a/ may
be a shortened form for /-alk'/ 'wood, tree'.

78. **Delphinium bicolor** Nutt.
/ŋ'iq'wayá/ (PB, AP, CW)
/ŋ-q'i-q'way-a/: /n-/ locative 'in' (Carlson, 1972);
/q'way/ redupl. 'blue' (Carlson, 1973); unanalyzable
beyond these elements.

79. **Dodecatheon conjugens** Greene
/χəwít χəwu/ (PB)
This is an onomatopoetic word for the Bittern (Parker).

80. **Dodecatheon conjugens** Greene
/ŋcčəlō/ (AV) 'hooked, nodding'
/ŋ-c-čəl-o/: /n-/ locative 'in' (Carlson, 1972);
/čəl/ 'hooked, nodding' probably in reference to the
nodding condition of the flowers; /c-/, /-o/ '?'.

81. **Elymus cinereus** Scribn. and Merr.
/psspnsōwí/ (PB)
The meaning of this word is not clear. It is not
commonly used currently, but apparently is an archaic
word used in reference to the stems used with hawthorn thorns as spears to condition the young boys to pain in preparation for warfare later in life (Beaverhead). The reduplicated plural /ps-ps/ may be related to a form meaning 'scarred' (Carlson, 1973), or perhaps another meaning 'young, immature' (Pelkoe), or, as Parker believes with another meaning 'too eager or excited'.

82. *Elymus cinereus* Scribn. and Merr.

/\textipa{pa?}-\textipa{pə}-\textipa{a}/: /\textipa{pa?}/ redupl. 'grey, silver, light in color, faded' (Parker); /-\textipa{a}/ '?'; this name applies to the fading of this plant in the fall from green to golden.

83. *Epilobium angustifolium* L.

/\textit{q'ulqonelp}/ (PB) 'dusty head plant'
/\textit{q'u-q'u1-qən-eip}/: /\textit{q'u}/ redupl. 'dusty' (Parker);
/-\textipa{qən}/ 'head' (Carlson, 1973); /-\textipa{eip}/ 'plant' (Carlson, 1973; Parker). This name may describe the plumed fruit giving a "dusty" appearance to the top or "head" of the plant in the fall. It could also describe the leaves.

84. *Equisetum arvense* L.

/\textit{tuxən}/ (Ad, PB, AP, AV, CW)

Apparently unanalyzable, but it appears to be cognate with Thompson /\textit{ʌxən}/ with the meaning 'bushy growth' (Turner).
85. *Erythronium grandiflorum* Pursh

/ˈmáxeʔe/ (PB, AP, CW)

Apparently unanalyzable.

86. *Fragaria virginiana* Duchesne (fruit)

/ˈq̩itq̩em/ (PB, AP, AV, CW)

Apparently unanalyzable.

87. *Fragaria virginiana* Duchesne (plant)

/ˈsænc̩eʔeʔstis/ (PB)

Apparently unanalyzable.


/ˈq̩awxeʔe/ (PB, JP, AP, AV, CW)

/q̩aw-xeʔe/: Parker suggests /q̩aw/ means 'break in two'; /xeʔe/ '?'.

89. *Geranium viscosissimum* F. and M.

/ˈt̩eʔeq̩en̩eɪp/ (PB)

/t̩e-ʔe-q̩en̩-eɪp/: /t̩e/ redupl. 'flattened, crushed' (Parker); /-q̩en/ 'head' (Carlson, 1973); /-eɪp/ 'plant' (Carlson, 1973; Parker). Reference may be to the flattened appearance of the leaves.


/ŋ̩eʔeʔeɪw̩s/ (PB, AP, AV, CW)

/ŋ̩-eʔeʔ-ʔeɪw̩s/: /n-/ locative 'in' (Carlson, 1972); /-ʔeʔ-ʔeɪw̩s/ 'begins to' (Mattina); /-eɪw̩s/ 'middle, half, center' (Carlson, 1973; Parker); /eʔeʔ/ '?'. Pete Beaverhead states that this name means 'to pry open or apart. This is in reference to the peculiar nature
of the leaf; the epidermal layer is easily removed from the rest of the leaf. The leaf is then applied to wounds, burns, etc. as a poultice.

91. **Grindelia squarrosa** (Pursh) Dunal

/ˈtəlˌsɪsqə/ (PB, AP, AV, CW) 'it sticks to horse's hooves'

/ˈtəl-ʃi-sqə/: /ˈtəl/ 'sticky' (Carlson, 1973; Parker); /-ʃi/ (/-ʃən/) 'foot' (Mattina); /-sqə/ (/-sqəxeʔ/) 'horse' (Mattina). Reference is to the oily residues of this plant which might stick to the hooves of horses (Parker).

92. **Heracleum lanatum** Michx.

/ˈkɛʔtə/ (PB, AP, AV, CW)

Parker suggests the meaning 'to cut' (cf. 23).

93. **Heuchera cylindrica** Doug.

/ˈkəpˈkʊp/ (PB) 'sticky'

/cup/ redupl. 'sticky' (Parker).

94. **Hierochloe odorata** (L.) Beauv.

/sxəsˈɛstiyeʔeʔ/ (Ad, PB, AP, AV, CW)

/s-χəs-ɛstiyeʔeʔ/: /s-/ 'nom.' (Carlson, 1972); /χəs/ 'good' (Carlson, 1973; Parker); /ɛstiyeʔeʔ/ 'ʔ'.

95. **Juniperus communis** L.

/ˈciqˈtəqənɪp/ (PB) 'pricky plant'

/ˈciq-ćəq-ən-ɪp/: /ˈciq/ redupl. 'prickly, bristly' (Carlson, 1973; Parker); /-eɪp/ 'plant' (Carlson 1973; Parker); /-ən/ 'ʔ'. Probably in reference to
the prickly or sharp-pointed leaves.

96. Juniperus scopulorum Sarg.
/púnip/ (Ad, PB, LP, AP, AV, CW)
/-ip/ 'plant'; /pun/ '?'

97. Larix lyallii Parl.
/sčtx'é cąq'əlš/ (PB) 'mountain larch'
/sčtx'é/ 'mountain' (Parker); /cąq'əlš/ possibly
cognate with Thompson /cəq'elx/ 'red', possibly in
reference to its reddish cones.

98. Larix occidentalis Nutt. (tree)
/cąq'əlš/ (PB, AP, AV, CW)
See Larix lyallii for etymology.

99. Larix occidentalis Nutt. (boughs)
/čcq'əlšełp/ (PB)
/č-cq'əlš-əłp/: /cq'əls/ see Larix lyallii for
etymology; /-əłp/ 'plant, leaf' (Parker).

100. Larix occidentalis Nutt. (hardened sap)
/sənčəmčəm/ (PB)
/čəm/ '?'

101. Ledum glandulosum Nutt.
/sčtx'e liti/ (PB, AP, AV, CW) 'mountain tea'
/sčtx'e/ 'mountain' (Parker); /liti/ 'tea', borrowed
from French (Parker).

102. Letharia sp.
/sk'alyo/ (PB, AV)
/s-k'əl-yo/: /s-/'nom.' (Carlson, 1972); /k'əl/
'yellow' (Carlson, 1973; Parker); /-yo/ '?'. This lichen is named for its yellow-green color.

103. *Lewisia rediviva* Pursh

*/spéəm/* (Ad, PB, LP, JP, AP, AV, CW)

This word is apparently unanalyzable.

104. *Ligusticum verticillatum* (Geyer) Coult. and Rose

*/χάςχəs/* (Ad, PB, LP, MSS, AV) 'good'

*/χάς/* redupl. 'good' (Carlson, 1973; Parker).


*/siʔicqən/* (PB)

*/siʔic-qən/: /-qən/ 'head' (Carlson, 1973); /siʔic-/'?'.

106. *Lomatium cous* (Wats.) Coult. and Rose

*/pčəliú/* (PB, JP, AP, AV, CW)

Apparently unanalyzable.

107. *Lomatium* sp.

*/čəči/

The name of this plant has been confirmed by Vanderburg and Beaverhead; Carlson (1973) states that it is a species of *Lomatium*.

108. *Lupinus* sp.

*/nqənaqətə̆/* (JP, AV) 'stink plant'

*/nqə-naq-ə̆t-ə̆/: /naq/ redupl. 'to stink or smell' (Carlson, 1973; Parker); /-e/ short for /-eɨp/ 'plant' (?); /-ə̆t/ '?'.

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109. **Lupinus** sp.

/ˈtə-tə-qən-əip/ (PB)

/ˈtə-tə-qən-əip/:

/ˈtə/ redupl. 'spread apart, flattened, crushed' (Parker); /-qən/ 'head' (Carlson, 1973; Parker); /-əip/ 'plant, leaf' (Carlson, 1973; Parker).

110. **Lysichitum americanum** Hulten and St. John

/tɪˈmu?u/ (AP, AV, CW)

Carlson (1973) suggests that this word is related to /tɪˈmu-le?xʍ/ 'spring', but Parker disagrees.

111. **Matricaria matricarioides** (Less.) Porter

/ˈnəcəl-cəltxʷ-qín/ (Ad, PB, AP, AV, CW) 'clustered heads'

/ˈn-əcəl-cəltxʷ-qín/:

/ˈn-/ locative 'in' (Carlson, 1972); /cəl/ redupl. perhaps related to /calxʷ/ 'clustered' (Carlson, 1973); /-qín/ 'head' (Carlson, 1973; Parker).

112. **Mentha arvensis**-L.

/ˈχənχənέ/ (Ad, PB, AP, CW, AV)

/ˈχən-χən-e/:

/ˈχən/ redupl. possibly meaning 'cool' (Parker) or 'blow, drafty' (Carlson, 1973); the reference may be the cool feeling that a tea from this plant imparts to fever-striken patients; /-e(ɪ)p/ 'plant, leaf' (Parker). The leaf is called /ˈχənχənέəip/ and the stem is called /ˈχənχənέəikʷ/ (Beaverhead).
113. **Monarda fistulosa** L.

/ˈtituwi/ (Ad, PB, JP, JP, AV, CW) 'little boys'
(Carlson, 1973; Parker)

114. **Nuphar variegatum** Engelm.

/kʷənēmɨp/ (Ad, PB, MSS)
/kʷən-ēmɨp/: /kʷən/ 'to take or grab' (Carlson, 1973; Parker);
/-eɨp/ 'plant' (Carlson, 1973; Parker);
/-em/ '?'. Reference may be to the difficulty of removing this plant from its water habitat.

115. **Opuntia polyacantha** Haw.

/sxʷəyéneʔ/ (PB, JP, AP, CW) 'sharp ear'
/s-xʷəy-éneʔ/: /s-/ 'nom.' (Carlson, 1972); /xʷəy/ 'sharp' (Carlson, 1973; Parker);
/-eneʔ/ 'ear' (Carlson, 1973; Parker), probably in reference to the fleshy ear-like stems.


/xʷɨt/ (PB, AP, AV, CW)
Probably means 'cut' (Carlson, 1973; Parker). (Cf. 23).


/slúkʷm/ (Ad, PB, AP, AV, CW)
This word appears to be unanalyzable.

118. **Philadelphus lewisii** Pursh

/waxéɨp/ (PB, JP, AP, AV, CW)
/wax-éɨp/: /-eɨp/ 'plant' (Carlson, 1973; Parker);
/wax/ '?'. This form appears to be cognate with Thompson /wəxz-eɨp/ 'separated', a reference to the
branches which are spaced apart (Turner).

119. **Phleum pratense** L.

/ʃɛɛstɛɲeʔe/ (PB) 'insect eggs' (Parker)

Apparently in reference to the closely crowded florets which might be likened to insect eggs.

120. **Picea engelmannii** Parry

/ˈtɛstesɛ/ (PB) 'hard leaf'

/tɛs-tes-e/: /tɛs/ redupl. 'hard' (Carlson, 1973);

/-e/ short for /-ɛlp/ 'plant, leaf' (?). This reference would be to the sharp needles of the spruce.

121. **Pinus contorta** Dougl.

/qʷəqʷəɬit/ (PB, AP, AV, CW)

/qʷə-qʷəɬ-it/ The etymology is unclear.

122. **Pinus ponderosa** Dougl.

/saʔatkʷiʃ/ (Ad, PB, LP, JP, AP, AV, CW)

Apparently unanalyzable beyond /-(e)ɬp/ 'plant'.

123. **Plantago major** L.

/sʔɬəmɬəmɬeʔenəʔe/ (PB) 'bear's ears'

/s-ɬ-ɬəm-ɬəm-ɬeʔenəʔe/: /s-/ 'nom.' (Carlson, 1972);

/ɬəm/ redupl. 'bear' (Carlson, 1973; Parker);

/-enəʔe/ 'ear' (Carlson, 1973; Parker); the remaining elements are unclear. The reference is to the leaves which can be likened to the ears of a bear.

124. **Plantago major** L.

/ʔɬəmɬəmɬeʔenəʔe/ (AP, AV, CW) 'bear's ears'

/ʔ-ɬəm-ɬəm-ɬeʔenəʔe/: /n-/ locative 'in'; see above
for etymology of the remaining elements.

125. *Populus tremuloides* Michx.

/ˈmɪmɪtɛ/ (PB, AP, AV, CW) 'shimmering leaves'
/ˈmɪ-ˈmɪ-tɛ/: /ˈmɪ/ redupl. 'to bleed, flow, shimmer, or shake' (Carlson, 1973; Parker), in reference to the leaves which shimmer in the wind; /-te/ '?'.

126. *Populus trichocarpa* T. and G. (plant)

/múlʃ/ (PB, AP, AV, CW)
/múl-ʃ/: /mul-/ 'to dip water' (Carlson, 1973; Parker), perhaps in reference to the association of this plant with waterways; /-ʃ/ '?'.

127. *Populus trichocarpa* T. and G. (cambium)

/ˈcɛkʷye/ (PB)
/ˈcɛkʷ-yɛ/: /ˈcɛkʷ/ 'shiny, bright' (Carlson, 1973), possibly in reference to the lightness in color of the cambium or inner bark.

128. *Prunus virginiana* L. (fruit)

/ˈɪxʷɪʃo/ (Ad, PB, LP, JP, AP, AV, CW)

This appears to be unanalyzable.

129. *Prunus virginiana* L.

/ˈɪxʷˈɪxʷ-ˈɑikʷ/ (PB, AP, AV)
/ˈɪxʷˈɪxʷ-ˈɑikʷ/: /ˈɪxʷ/ '?' (see 128); /-ɑikʷ/ 'wood, tree' (Carlson, 1973; Parker).

130. *Pseudotsuga menziesii* (Mirbel) Franco

/cqˈeip/ (PB, AV)
/cqˈ-eip/: /ˈeip/ 'plant'; /cq/ '?', possibly cognate
with Thompson. /cq-aip/ 'sticky tree' (Turner).

131. **Pterospora andromedea** Nutt.

/šæŋčələp ɪəpəmɪs/ (Ad, PB) 'coyote's arrow'

/šæŋčələp ɪəpə-mi-s/ /šæŋčələp/ 'coyote' (Carlson, 1973; Parker); /ɪəp(a)/ 'to shoot' (Carlson, 1973; Parker); /-mi(n)/ 'instrument'; /-s/ 'his' (Parker).

This plant, remaining an erect stalk throughout the year in the pine woods, suggests the arrow of Coyote.

132. **Ranunculus glaberrimus** Hook.

/sčiniy ál̄mn/ (PB, AP, AV, CW)

/s-č-iniy ál̄mn/: /s-/ 'nom.' (Carlson, 1972); the remaining elements are not clear. Parker, however, suggests that /yaılmn/ means 'for the purpose of making it circular'. Mattina suggests it may be cognate with the Colville /yir/ 'round'. Carlson (1973) states that a cognate form is the name given to the month of February by the Spokane. There may be a connection here, as this species of buttercup is the first plant to bloom in this region, sometimes coming out in mid-February.

133. **Rhamnus purshiana** DC.

/čəqʷiʔiʷisá/ (Ad)

/čə-qʷi-qʷi-sá/: /qʷi/ redupl. 'belch' (Carlson, 1973). The cascara is apparently named for the pharmacological effect of the bark. If peeled in an upward fashion on the stem and made into a drink,
one would throw up or 'belch'.

134. **Rhus radicans** L.
/suᵊ-aqeʔe/ (LP)
/s-uᵊ-aqeʔe/: /s-/'nom.' (Carlson, 1972); /uᵊ/ 'to burn' (Carlson, 1973; Parker), probably in reference to the skin rash caused by the poison ivy.

135. **Ribes sp.** (gooseberries)
/ŋte/ (PB, AP, AV, CW)
Parker claims that this word means 'to beach, to get to the land from the water'. Probably to refer to proximity of gooseberries to waterways.

136. **Ribes sp.** (currants)
/stamtu/ (AP, CW)
This is not clearly analyzable.

137. **Rorippa nasturtium-aquaticum** (L.) Schinz and Thell
/s₇n-kʷaʔ1-étkʷ/ (AP, AV, CW) 'it's growing in the water'
/s-ën-kʷaʔ1-étkʷ/: /s-/'nom.' (Carlson, 1972); /n-/ locative 'in' (Carlson, 1972); /kʷaʔ(1)/ 'to grow' (Carlson, 1973; Parker); /-étkʷ/ 'water' (Carlson, 1973; Parker).

138. **Rosa woodsii** Lindl. (entire plant)
/xʷəỵé/ (PB) 'sharp'
/xʷəỵ-é/: /xʷəỵ/ 'sharp' (Carlson, 1973), certainly in reference to its spines; /-e/ probably /-eip/ 'plant'.
139. **Rosa woodsii** Lindl. (leaves)

/\textit{x'øyélp}/ (PB)

/\textit{x'øy-élp}/: /\textit{x'øy}/ 'sharp' (Carlson, 1973); /-élp/ 'leaf' (Carlson, 1973; Parker).

140. **Rosa woodsii** Lindl. (woody part).

/\textit{x'øylpáik}/ (PB, AP, AV) 'sharp wood'

/\textit{x'øy-ıp-aík}/: /\textit{x'øy}/ 'sharp' (Carlson, 1973); /-e(ıp)/ 'plant, leaf' (Carlson, 1973); /-aík/ 'wood' (Carlson, 1973; Parker).

141. **Rosa woodsii** Lindl. (fruit)

/\textit{spiqałq x'øyé}/ (AP, CW)

/\textit{spiqałq x'øy-e}/: /\textit{spiqałq}/ 'fruit' (Carlson, 1973; Parker); see etymology for fruit; /\textit{x'øy}/ 'sharp' (Carlson, 1973); /-e(ıp)/ 'plant' (?).

142. **Rosa woodsii** Lindl. (fruit)

/\textit{səŋqəpú}/ (AV) 'place of itching in the anus'

(Parker)

/\textit{s-ən-qə-pú}/: /s-/ 'nom.' (Carlson, 1972); /(ə)n-/ locative 'in' (Carlson, 1972); /qə/ 'to itch' (?); /-pú/ 'anus' (Mattina). The fruit or hips of the rose is often referred to as 'Coyote's berry'. According to the story, Coyote ate the rose hip and as a result, his anus began to itch. He scratched and scratched so much that he died (Vandeburg).

143. **Rubus idaeus** L. (fruit)

/\textit{ílác}/ (PB, AP, AV, CW)
This word is apparently unanalyzable.

144. **Rubus idaeus** L. (bush)

/ɪləclaɪkʷ/ (PB)

/ɪləcl-āɪkʷ/: /ɪləcl/ 'ʔ'; /-əɪkʷ/ 'wood' (Carlson, 1973; Parker).

145. **Rubus leucodermis** Dougl. (fruit)

/mcǔkʷ/ (AP, CW)

The etymology is not clear. Parker suggests that it has the meaning of 'pull, something liked or admired'. Mattina suggests that it may be cognate with the Colville /cukʷ/ 'pull'.

146. **Rubus parviflorus** Nutt. (fruit)

/púlpəlqən/ (PB, AP, AV, CW)

/pul-pəl-qən/: /pul/ redupl. 'easy' (Carlson, 1973); /-qən/ 'head' (Carlson, 1973; Parker). The reference could be to the ease with which the fruits are removed from the plant.

147. **Rubus parviflorus** Nutt. (plant)

/pulpəlqənɛǐp/ (PB)

/pul-pəl-qən-ɛǐp/: /pul/ redupl. 'easy' (Carlson, 1973); /-qən/ 'head' (Carlson, 1973; Parker); /-ɛǐp/ 'plant' (Carlson, 1973; Parker).

148. **Salix** sp. (tentative)

/qəwʔəwpuli/ (AV)

/qəw-qəw-puli/ 'habitual mover' (Parker). This species of willow is one which is easily bent (Vandeburg).
149. **Salix** sp.  
/\textipa{ppú}/ (PB, LP, AV)  
The root which underlied this word is uncertain.

150. **Salix** sp.  (catkin)  
/sli-ti\textipa{či}/ (AP, AV, CW) 'bitch dog' (Parker)

151. **Salix** sp.  (tentative)  
/spu\textipa{qǝye}/ (AV) 'multi-colored rope'  
/spu\textipa{-qǝye}/: /spu/ 'rope, hemp' (Parker); /-qǝye/  
'multicolored' (Parker). The reference is to the use  
to which it is put, i.e. in making rope.

152. **Sambucus racemosa** L. (fruit)  
/\textipa{čikʷ}/ (PB, AP, AV, CW)  
The root is /\textipa{čikʷ}/, with basic meaning uncertain.

153. **Sambucus racemosa** L. (bush)  
/\textipa{čikʷ\textipa{aikʷ}/ (PB, AP, CW)  
/\textipa{čikʷ-aikʷ}/: /-aikʷ/ 'wood' (Carlson, 1973; Parker); see 152.

154. **Scirpus acutus** Muhl.  
/tkʷ\textipa{tín}/ (PB)  
Parker suggests that this word means 'close together',  
possibly in reference to the dense growth habit of  
these plants.

155. **Shepherdia canadensis** (L)_Nutt. (fruit)  
/s\textipa{x̂us-øm}/ (Ad, PB, LP, JP, AP, AV, CW) 'foam berry'  
/s-\textipa{x̂us-øm}/: /s-/ 'nom.' (Carlson, 1972); /\textipa{x̂us}/  
'foam' (Carlson, 1973; Parker); /-øm/ '?'. This
plant is named for the fruit which when vigorously beaten, foams. This frothy food is eaten like ice cream.

156. *Shepherdia canadensis* (L.) Nutt. (bush)
/sxʷusəmnáłkʷ/ (PB, AP, CW)
See above for etymology; /-əłkʷ/ 'wood' (Carlson, 1973; Parker); /-əmn/ 'instrumental' (?)

/təšiyélp/ (PB)
/təšiy-élp/: /-élp/ 'plant' (Carlson, 1973; Parker);
/təšiy/ '?'

158. *Sorbus scopulina* Greene
/smxe sʔílis/ (PB) 'grizzly bear's food'
/s-mxe sʔílis/: /s-/ 'nom.' (Carlson, 1972); /mxe/ 'grizzly bear' (Parker);
/sʔílis/ 'food' (Parker).

159. *Sorbus scopulina* Greene
/txʷəxʷəwé/ (AV, CW)
This word is not clearly analyzable.

160. *Symphoricarpos albus* (L.) Blake (general name)
/stəmtəmn̓yá/ (PB, AP, AV, CW)
/s-təm-təm-n̓yá/: /s-/ 'nom.' (Carlson, 1972); /təm/ redupl. 'corpse', probably in reference to the white fruit which might be thought of as ghostly or corpse-like; /-n̓yá/ '?'.

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161. *Symphoricarpos albus* (L.) Blake (fruit)

/stəmtəmnyáilq/ (PB) 'corpseberry'

/s-təm-təm-ný-áilq/: see above for etymology; /-áilq/ 'fruit' (Carlson, 1973; Parker).

162. *Symphoricarpos albus* (L.) Blake (wood)

/stəmtəmnyáik'/ (PB) 'corpsewood'

/s-təm-təm-ný-áik'/: see above for etymology;

/-áik'/ 'wood' (Carlson, 1973; Parker).

163. *Symphoricarpos albus* (L.) Blake (leaves)

/stəmtəmnyéip/ (PB) 'corpse leaf'

/s-təm-təm-ný-éip/: see above for etymology; /-éip/ 'plant, leaf' (Parker).

164. *Taxus brevifolia* Nutt.

/ck'ncá/ (PB, LP) 'bow-wood'

/ck'-nč-a/: /ck'/ 'drag, pull' (Carlson, 1973);

/-nč/ 'weapon, bow' (Carlson, 1973); /-a(ik')/ (?)

'wood' (Carlson, 1973; Parker). This was one of the favored plants for making bows.

165. *Thalictrum occidentale* Gray

/px'cú/ (AV)

/px'-cú/: /px'/ 'to smell or give off an odor'

(Carlson, 1973), or 'to disseminate' (Parker); /-cu/ 'oneself' (Parker).

166. *Thuja plicata* Donn. (wood)

/ástk'/ (PB, AP, CW)

This word is not clearly analyzable.
167. *Thuja plicata* Donn. (boughs)

/ŋš-eíp/ (PB, AP, CW)

/ŋš-eíp/: /ŋš/ '?'; /eíp/ 'plant, leaf' (Parker).

168. *Tsuga mertensiana* Bong. Carv

/pl-tné/ (PB)

/pl-tné/: /pl/ 'thick' (Carlson, 1973); /-tné/ '?'.

169. *Typha latifolia* L. (leaves)

/pišip/ (PB, AP, AV, CW)

/piš-íp/: /piš/- 'to scrape' (Carlson, 1973);

/-eíp/ 'plant, leaf' (Parker).

170. *Typha latifolia* L. (spike)

/sx̱stqé/ (PB) 'good head'

/s-χ̱s-t-qé/: /s/- 'nom.' (Carlson, 1972); /χ̱s/ 'good' (Carlson, 1973; Parker); /-t/ 'stative';

/-qe/ possibly related to /-qin/ 'head' (Parker).

171. *Urtica dioica* L.

/ccaxéíp/ (PB, AP, AV, CW) 'sting leaf'

/c-ccax-éíp/: /cax/ 'to stick or sting' (Parker);

/-eíp/ 'plant, leaf' (Parker); /c/- '?'. This name is in reference to the leaves which impart a stinging sensation.

172. *Vaccinium globulare* Rydb. (fruit)

/stšá/ (PB, LP, AP, AV, CW)

/s-tš-á/: /s/- 'nom.' (Carlson, 1972); /tš/ 'sweet'

(Carlson, 1973; Parker), in reference to the sweet
berries.

173. **Vaccinium globulare** Rydb. (bush)

/stəʃiˈqɛl/ (PB, AP, CW) 'sweet plant'

/s-təʃ-ʃ-eɨp/: /s-/ 'nom.' (Carlson, 1972); /təʃ/ 'sweet' (Carlson, 1973; Parker); /eɨp/ 'plant'

174. **Vaccinium scoparium** Leiberg (fruit)

/sɨpt/ (PB, AP, AV, CW)

The root appears to be /sip/.

175. **Vaccinium scoparium** Leiberg (bush)

/sɨptkʷˈaɪkʷ/ (PB)

/sɨptkʷ-ˈaɪkʷ/: /-aɪkʷ/ 'wood' (Carlson, 1973; Parker); /sip/ see above.

176. **Veratrum viride** Ait.

/stəsʰoʔo/ (JP, JP, AV, CW)

/s-təsʰoʔo/: /s-/ 'nom.' (Carlson, 1972); /təsʰoʔo/ 'sneeze' (Carlson, 1973; Parker). This plant is named for the medicinal properties of the root; in powdered form it is capable of inducing sneezing and thus clearing the nasal passages.

177. **Verbascum thapsus** L.

/ˈɛkʷəlˈkʷəsəqɨs/ (PB, LP) 'train's seeds'

/ˈɛ-ɛkʷəlˈkʷ-əsəqɨs/: /ˈɛkʷəlˈkʷ/ 'railroad, train'

(Carlson, 1973); /-əsəqɨs/ may mean 'seed' as Parker suggests; /ɛ-/ '?'. This plant is named for the fact that it was first observed by the Montana Salish along
railroad tracks, and it is believed that its origin was due to seeds falling out the train.

178. *Viola* sp.
/ˌmsəmsəʔ/ (PB, AV)
This word is not clearly analyzable.

179. *Xanthium* sp.
/wuˈpúpt/ (LP)
/wuˈp-up-t/: /wuˈp/ redupl. 'hairy' (Parker); /-t/ 'stative'.

180. *Xerophyllum* tenax (Pursh) Nutt.
/səlčesˈtiyéʔ/ (PB, AP, AV, CW)
/s-əl-čes-tiˈiyéʔ/: /s-/ 'nom.' (Carlson, 1972);
/čes/ 'bad, to be sore'; as Pete Beaverhead explains, this is one of the most worthless plants known to the Salish. He adds anecdotally that one can very easily slip on this plant on the steep mountain slopes and become very mad.

181. *Zigadenus* elegans Pursh
/iwéstən/ (PB, AP, AV, CW)
Apparently unanalyzable.
Domesticated Plants

182. apples
/ˈɑːpəls/ (LP)
This is a borrowed word from English.

183. barley
/ʃax'alix'ú/ (LP) 'fox-tail' (Parker)
/ʃ-x'ə-ʃ'alix'-ú/: /ʃ'alix'/ redupl. diminutive for 'fox' (Parker); /-u(ps)/ (?) 'tail' (Mattina). This name is apparently in reference to the inflorence which resembles the tail of a fox. /ʃ/ 'ʔ'.

184. beans (kidney)
/ʃəmtəmtó/ (LP) 'little kidneys'
/ʃ-m-ʃ-ʃto/: /ʃ-/ 'subordinate' (Parker); /ʃto/ 'kidney' (Parker). This name is in reference to the shape of kidney beans, which look like little kidneys.

185. beets (red)
/ʃəmʌm/ (LP) 'dark red ones'
/ʃʌm/ redupl. 'blood or dark red ones' (Parker).

186. cantelope
/ʃtəx?á/ (LP)
Parker states that this conveys the meaning that 'the covering is all marked up'.

187. carrot
/ʃəˈlʊkʷm/ (LP)
This form is not clearly analyzable. It is the same
name given to *Perideridia gairdneri*, the Yampa or wild carrot.

188. celery

/χάςχές/ or /χ'έ/ (LP)

See etymologies of *Ligusticum verticillatum* and *Heracleum lanatum*.

189. cherries

/ιχ'ίο/ (LP)

This word, also the same one used for *Prunus virginiana*, seems to be unanalyzable.

190. corn

/ικ'αιλι/ (LP)

/ι-κ'αλι/: /ι-/'subordinate' (Parker); /κ'α/ redupl. 'yellow' (Carlson, 1973; Parker); /-i/ '?'.

191. oats

/ιεύɛν/ (LP)

This is a borrowing from French.

192. oranges

/χ'ομπυ/ (LP)

/χ-ομ-πυ/: /ομ/ 'orange, tan colored' (Carlson, 1973; Parker); /χ-/, /-pu/ '?'.

193. pears

/χ'ομ:'ομ-μ/ (LP)

/χ-ομ-'ομ-μ/: /ομ/ redupl. 'taper' (Parker), in reference to the tapering condition of the fruit; /c-/, /-u/ '?'.

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194. peas
/lipwá/ (LP)
This is a borrowed word from French.

195. pineapple
/sččiceʔe/ (LP)
See etymology of cone.

196. potatoes
/patáq/ (LP)
This word is borrowed from French (Parker).

197. rhubarb
/xʷte/
See etymology of Heracleum lanatum.

198. rutabaga
/məl-milkʷ/ (LP) 'round ones'
/məl-milkʷ/: /milkʷ/ redupl. plural 'round ones'
(Parker).

199. squash (and pumkin)
/sqálixʷqən/ (LP) 'man's head'
/sqalixʷ-qən/: /sqalixʷ/ 'man, people' (Mattina);
/-qən/ 'head' (Carlson, 1973; Parker).

200. strawberry
/qítqəm/ (LP)
This is not clearly analyzable.

201. tomatoes
/sxʷyá/ (LP) 'ants' (Parker)
The tomato is called 'ants' because of the similarity
of appearance of the white colored ant eggs when an ant hill is broken open to the white colored seeds of the tomatoes.

202. watermelon
\( /cq\ "enq\ "i/ \) (LP)
\( /c-q\ "en-q\ "i/: /q\ "in/ 'green' (Parker); /c-/ '?.

203. wheat
\( /spq\ i/ \) (LP)
\( /sp\ '-qi/: /sp/ 'to beat, hit with a stick' (Carlson, 1973); /-qi(n)/ (?) 'head'. This name seems to be in reference to the method of harvest, in which the heads are thrashed or beaten.
CHAPTER V

TENTATIVE LIST OF KOOTENAI BOTANICAL TERMS

General Botanical Terms

1. algae /aqwəq⁰iwəwətiyał/
2. bark /akîñoqqał/
3. bush /akʷkâʔis/
4. cone /aq⁰úpał/
5. fern /nâkə'nəm/
6. flowers /aknûk'yuk⁰w/
7. fruit /akiłk'yuk⁰u/
8. grass /cəhâł/
9. grass (green) /ak'małîʔiʔit/
10. grass (lawn) /aq'q'Iupiʔiʔit/
11. leaves /aq'wîsqpqik/
12. roots /ak'k'púkam/
13. tree (standing) /nakqâki/
14. trees (plural) /aq'q'úpûn/
15. tumbleweed /qak'meq'mûqaʔ/
16. vine /qaʔiqaʔaqawûtis/

Terms for Individual Species of Plants

17. Abies lasiocarpa (Hook.) Nutt. /tisîůiał/
18. Acer glabrum Torr. /ak'wuk'îáʔwuk/

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<td>/ʔuқачқэттάнаʔ/</td>
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<td>20.</td>
<td><em>Alectoria</em> sp.</td>
<td>/ʔąла/</td>
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<td>21.</td>
<td><em>Allium cernuum</em> Roth</td>
<td>/sxáyuʁʷ/</td>
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<td>22.</td>
<td><em>Amelanchier alnifolia</em> Nutt.</td>
<td>/skʷʊムʊʔ/</td>
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<td>23.</td>
<td><em>Arctostaphylos uva-ursi</em> (L.) Sprong.</td>
<td>/səқάwʊʔ/</td>
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<td>24.</td>
<td><em>Artemesia tridentata</em> Nutt.</td>
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<td>25.</td>
<td><em>Balsamorhiza sagittata</em> (Pursh) Nutt.</td>
<td>/χέ1/</td>
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<td>26.</td>
<td><em>Berberis repens</em> Lindl.</td>
<td>/nάहуҳ/</td>
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<td>27.</td>
<td><em>Betula</em> sp.</td>
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<td>28.</td>
<td><em>Calochortus</em> sp.</td>
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<td>29.</td>
<td><em>Camassia quamash</em> (Pursh) Greene</td>
<td>/χápiʔ/</td>
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<td>30.</td>
<td><em>Ceanothus velutinus</em> Dougl.</td>
<td>/kəλίяxaχапѡуқ/</td>
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<td>31.</td>
<td><em>Cicuta douglasii</em> (DC.) Coult. &amp; Rose</td>
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<td>32.</td>
<td><em>Cirsium</em> sp. (edible)</td>
<td>/nuлáқңа/</td>
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<td>33.</td>
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<td>/кcuкʷyectoʔѡʔaʔ/</td>
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<td><em>Claytonia lancelata</em> Pursh</td>
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<td>35.</td>
<td><em>Cornus stolonifera</em> Michx.</td>
<td>/миokʷəкʷиʔиʔиʔа/</td>
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<td>36.</td>
<td><em>Crataegus</em> sp.</td>
<td>/kάла/</td>
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<td>37.</td>
<td><em>Crataegus</em> sp. (bush)</td>
<td>/кəйʔиʔѡуқ/</td>
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<td>38.</td>
<td><em>Elymus cinereus</em> Scribn. &amp; Merr.</td>
<td>/ақינқəвəʔaiʔ/</td>
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<td>39.</td>
<td><em>Equisetum arvense</em> L.</td>
<td>/ѡаса/</td>
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<td>40.</td>
<td><em>Erythronium grandiflorum</em> Pursh</td>
<td>/маъа/</td>
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<td>41.</td>
<td><em>Fragaria Virginiana</em> Duchesne</td>
<td>/ақʷукʷу/</td>
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42. *Fritillaria pudica* (Pursh) Spreng. /ink'úum/
43. *Heracleum lanatum* Michx. /wúmaí/
44. *Juniperus scopulorum* Sarg. /ak'kwíúlaí/
45. *Larix occidentale* Nutt. /k'wéstit/
46. *Ledum glandulosum* Nutt. /ak'wuíi?it/
47. *Lewisia rediviva* Pursh /nəqámcu/
48. *Ligusticum verticillatum* (Geyer) Coult. & Rose /áyut/
49. *Lomatium cous* (Wats.) Coult. & Rose /pk'ínánána/
50. *Monarda fistulosa* L. /máta/
51. *Nuphar variegatum* Engelm. /ínk'wui/
53. *Pinus contorta* Dougl. /?iíti?/
55. *Pinus ponderosa* Dougl. /hímu/
56. *Plantago major* L. /núpk’w ak’kwatís/
57. *Populus trichocarpa* T. & G. /ak’íúmak/
58. *Prunus virginiana* L. /akíimak/
59. *Pseudotsuga menziesii* (Mirbel) Franco /íu/
60. *Rhus radicans* L. /aq’úwuk/
61. *Ribes sp.* /kišyítin/
62. *Rosa sp.* /k’wámáwuk/
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<td>67</td>
<td><em>Scirpus acutus</em> Muhl.</td>
<td>/tnáʔ/</td>
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<td>68</td>
<td><em>Shepherdia canadensis</em> (L.) Nutt.</td>
<td>/kʷəpatiʔwuk/</td>
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<td>69</td>
<td><em>Sorbus scopulina</em> Greene</td>
<td>/yaltíʔmáʔ/</td>
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<td>70</td>
<td><em>Symphoricarpos albus</em> (L.) Blake</td>
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<td>71</td>
<td><em>Thuja plicata</em> Donn.</td>
<td>/ʔcmát/</td>
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<tr>
<td>72</td>
<td><em>Typha latifolia</em> L.</td>
<td>/ʔmčíʔlái/</td>
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<td><em>Urtica dioica</em> L.</td>
<td>/cukʷkʷúnáʔ/</td>
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<td><em>Vaccinium globulare</em> Rydb.</td>
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<tr>
<td>75</td>
<td><em>Vaccinium scoparium</em> Leiberg</td>
<td>/nupxámúʔ/</td>
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<tr>
<td>76</td>
<td><em>Xerophyllum tenax</em> (Pursh) Nutt.</td>
<td>/nisnúpaʔ/</td>
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**Domesticated Plants**

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CHAPTER VI

SUMMARY

The names given to plants are impressionistic. That is, they are named for outstanding features of a plant's morphology, habit, taste, smell, etc. Furthermore, plants are generally named for their medicinal value; for their relationship to a peoples' beliefs and religion; for their roles in a peoples' culture; and for resemblance to other plants and even to animals.

In addition, the names given to plants by North American Indians often can illustrate an abstract sense of imagination. It appears also that there is a tendency not to name non-utilized species of plants, and new and introduced plants which are utilized are usually either named for their likeness to plants already known or the name is borrowed from another language.

And finally, the original names, though at first descriptive, eventually through long and repeated usage lose the original descriptive meaning and become only phonetic symbols identifying a particular species of plant.

A common folk taxonomic system for plants and animals includes the binomial nomenclature. It appears, however,
to be poorly developed in the Northwestern Indian tribes. This may be a function of a different criteria in naming, and it does not indicate a belief among the tribes of a lack of relationship among plants.

More inclusive taxonomic categories are recognized. With animals, the higher taxa are based on correlation of function, structure, appearance, and ecologic niche, and often parallel modern classification. With plants, the higher taxa are infrequently represented. Broad categories such as trees, shrubs, grasses, vines, etc. commonly occur; these categories seldom parallel modern taxonomic classifications as widely varying growth forms frequently occur in the same natural group.

Other classifications for plants include: systems based upon usage; systems based upon believed concepts of sex in plants; systems based upon habitats of plants; and systems that distinguish the fruit from the plant of the economic species.
APPENDIX I:

PLANTS USED BY THE MONTANA SALISH

Foods

Roots, Bulbs, and Underground Stems

1. *Allium cernuum* Roth

   The bulbs of this common species of onion were frequently eaten. They were not cooked as camas was, but rather were eaten raw or used for flavoring soups and meats. They apparently were not kept for winter use (Ad, RD, AP, JP, RS, CW).

2. *Allium douglasii* Hook

   These mild and sweet onions are known to be found in Montana only near Hot Springs. They were eaten fresh or dried, though they didn't keep very long, and were sometimes eaten with *Alectoria* (RD).


   The tough, woody roots could be made palatable by being baked in a fire pit for at least three days (RS).


   It is not clear that this species was eaten. PB believes that it may have been, while AV believes it to be poisonous.
5. **Camassia quamash** (Pursh) Greene

A great quantity of the camas bulbs were eaten by the Montana Salish. RD claimed that the Bigsams each consumed about eight gallons each year.

The bulbs were normally gathered just after the plant had bloomed (RS, AV), which is usually in late June to early August, depending upon the elevation.

Camas Prairie (AP, JP, RS, CW), Evaro Hill (JP), parts of the Bitterroot Valley (JP, RS), in the vicinity of Seeley Lake (RS), Potomac (JP), and lower Jocko Canyon (CM) were noted as places where the camas could be found in greater abundance. The bulbs found in Camas Prairie were noted for their sweetness, though were of smaller size (RS).

Camas bulbs were typically baked in a fire pit, which measured approximately one and one half feet deep by several feet wide. Rocks placed on the burning wood were in turn covered by layers of various types of leafy vegetation, including ferns, slough grass, birch branches with intact leaves, geranium tops, skunk cabbage leaves, lupine, *Alectoria*, willow, and bark. More recently cloth, canvas, or burlap bags have been used. Within these layers of succulent vegetation were placed the camas bulbs. If the Alectoria used was not wet, then water was poured on the leaves to produce a steam. This can be later done by pouring water down a hole made by leaving a stick in the pit when dirt was piled on. A fire was then kindled on top of this; in about two to three days the camas was ready to eat (AP, JP, RS, AV, CW).

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The cooked camas, dark in color and sweet in taste, could be eaten immediately, dried and stored for future use, ground up with a stone pestle, or more recently ground with a meat grinder and made into little cakes. Flour, cream and sugar in recent times have been added (AP, JP, RS, AV, CW).

Camas in recent times has been boiled down to make a gravy with flour (RS, AV), or to make a sweet tasting hot beverage (RS).

6. *Cirsium* sp.

The roots were peeled and baked in a fire pit for two to three hours; they were not dried (RS).

7. *Claytonia lanceolata* Pursh

The enlarged roots of the spring beauty or "Indian potato" were the first root crop gathered by the Montana Salish, being available in the middle of April (RS). The roots were washed and boiled after eating (JP, RS, AV).

8. *Erythronium grandiflorum* Pursh

The bulbs of the glacier lily are known to be edible (PB, JP).


The corm of the yellowbell was collected about the same time of the year as the bitterroot. They were washed and often eaten with it (RD, AP, JP, AV, CW).

10. *Lewisia rediviva* Pursh

In early May the Salish women dug from the dry foothills the -root. This was done just before it began to bloom, as the
epidermal layer of the root slipped off more easily than if it had already bloomed. Once dug, the roots were peeled, washed, and dried in the sun. Sometimes the reddish inner core or stele which is believed to be responsible for imparting the bitter taste was removed, but sometimes it was left intact. In fact, some people actually prefer the smaller, more bitter tasting bitterroots than the larger, blander varieties occurring farther west (JP,RS,AV).

The common method of cooking bitterroot was steaming the roots for a few minutes on a lattice work of small twigs above water in a kettle (AP,RS,CW). Dried bitterroots were boiled in water, sometimes with serviceberries or huckleberries (RS). Also, a broth was made from the boiled bitterroots (AP,CW). Bitterroots were also once sweetened with camas, but more recently they have been sweetened with sugar (RS).

More bitterroot was eaten than camas. RD stated they each annually consumed approximately eight gallons of camas.

11. Lomatium cous (Wats.) Coult & Rose

Biscuit-root was dug after it bloomed in the spring (RS). The roots were peeled and eaten raw (RS,AV), boiled (RS,AV) or pounded into little cakes or bricks and dried in the sun (JP,RS). The dried bricks or "biscuits" could be stored for a long time, and were carried on long hikes and marches (JP).

12. Lomatium macrocarpum (Nutt.) Coult, & Rose

The young, fresh roots eaten raw are bitter-tasting, but if allowed to dry, lose some of the bitter taste. Older roots are generally too fibrous and stringy to be eaten (RD).

Roots of "Indian carrot" were gathered in July (AP, RS, CW) when the flowers were well developed (AP, AV, CW). They were washed and eaten fresh (RS, AV) or could be boiled, mashed and made into little round cakes and dried (RS) and stored for winter use (Ad, AV).

14. *Typha latifolia* L.

PB remembers that old timers once ate the oily roots.

Edible Fruits

1. *Amelanchier alnifolia* Nutt.

The fruit of this plant certainly constituted one of the most important food items of the Montana Salish. Ripening in mid summer, they were normally sun-dried and stored for future use (Ad, RS, AV).

Serviceberries were cooked with flour to make a gravy (AP, CW), or mixed with bitterroot, milk and sugar to make them more tasty (Ad, AV).

Some people preferred to mash the fruits and form them into little cakes to dry in the sun; powdered leaves of *Monarda fistulosa* and *Mentha arvensis* sprinkled over them kept the flies away (RS).

2. *Arctostaphylos uva-ursi* (L.) Spreng.

The fruit was eaten raw (RS), fried and eaten (RS, AV), or boiled with sugar and made into a broth (AP, CW). RS claims that fried kinnikinnick berries taste sweet and can be gathered from
the bush anytime during the winter, thus staving off starvation in hard times.

3. **Berberis repens** Lindl.

    RS claims that the fruit was never used for food until sugar was made available in recent times. RD reports, however, that they were eaten fresh when ripe. They could also be pounded and cooked into a jam (RD), though much sugar was added (AV). Dried, the fruit was saved for future use (RD).

4. **Cornus stolonifera** Michx.

    Though apparently bitter, the fruit was eaten raw or mixed with serviceberries. It was prepared in a similar fashion as the serviceberry (RD,AP,AV,CW).

5. **Crataegus columbiana** Howell

    **Crataegus douglasii** Lindl.

    The fruits of these species were pounded or ground as were chokecherries, and eaten raw or cooked, or allowed to sun-dry in small round cakes. Often they were mixed with other fruits, like chokecherries. They constituted an especially important fruit in years when the serviceberry crop was poor; they could be gathered in the winter months, as some fruits remain on the bush all winter (RD,RS).

6. **Fragaria virginiana** Duchesne

    The fruits were only eaten fresh (AP,RS,AV,CW).
7. *Prunus virginiana* L.

Chokecherries were the last of the fruits to be collected; in fact, freezing in early fall is believed to improve their taste and to make them sweeter (RS).

Though sometimes eaten fresh (RS), chokecherries were usually prepared for later use. The individual chokecherries were pounded and pulverized with a pestle. Round cakes were made from the mashed fruit and placed in the sun to dry. These could be saved for winter use, in which case they would be soaked in water for eating (Ad, JP, RS). In recent times, meat grinders have been used to pulverize the chokecherries (RS, AV).

Chokecherries were often mixed with other fruits, such as *Berberis repens* and *Crataegus* spp. (RD, RS).


The Montana Salish differentiated between the gooseberries, the *Ribes* having prickly stems, and the currants, those not having prickly stems. Both seemed to have been used similarly, though not extensively (AP, RS, CW).

Often they were eaten fresh, cooked, or sometimes dried for future use (PB, RD, AP, RS, CW). Apparently they have not been collected in recent times, as the fruits have been wormy (RD). AV stated that the gooseberries are eaten when still red, as the more mature and darker fruits tend to be more wormy.


The rose hips apparently were never utilized too much by the Montana Salish before the introduction of sugar which led to its
use in jellies (RS). It may be that the hips were used during especially hard winters, as they remain on the bush all winter and were easily obtained.

10. **Rubus idaeus** L.

Wild raspberries were of small economic importance and were normally eaten fresh. The fruits were seldom dried for later use (RS).

11. **Rubus leucodermis** Dougl.

These fruits were certainly eaten, but probably were of small economic importance as *R. idaeus*.

12. **Rubus parviflora** Nutt.

The fruits were eaten fresh only (RD, AP, RS, CW) and probably were never plentiful enough to gather in quantity.

13. **Sambucus cerulea** Raf.  
**Sambucus racemosa** L.

RD reported from the Bigsams that the use of elderberry came only recently when sugar became available to make the fruit more palatable.

For immediate consumption they were boiled and eaten (RS); for later use they were boiled and sun-dried (RS, AV), or canned or jammed (AV).

14. **Shepherdia canadensis** (L.) Nutt.

"Ice cream berries", gathered in the middle of August, were placed in a bowl with water and beaten until foamy, and then this
froth was eaten (Ad, AP, JP, CW). This frothy "ice cream" is bitter-tasting, but can be made better tasting by adding sugar (AV). The fruit could be dried and saved for winter use (Ad, RS, AP, JP, AV, CW). In recent years the women have used freezers to preserve the fruit for winter use (AP, CW).

15. Vaccinium globulare Rydb.

The huckleberry was the most important fruit gathered (RS). RD suggests that they were mostly eaten in season, but some were sun-dried and saved for winter use (RS). In winter the dried huckleberries were boiled and eaten with various species of roots. They were not mixed with pemmican or meat (RS).

16. Vaccinium scoparium Leigberg

Although eaten when found, these very small fruits were seldom picked and stored for later use (AP, RS, AV, CW).

Potherbs and Greens

1. Balsamorhiza sagittata (Pursh) Nutt.

The flowering stems were peeled and eaten like celery (Ad, AP, JP, MSS, RS, CW) or cooked as a green (Ad).

2. Chenopodium sp. L.

Young plants were cooked as potherbs (RS).

3. Cirsium sp. Mill.

The young thistle stems were peeled and eaten raw like celery (Ad, RD, AV). Two species of thistle are recognized, one which is considered to be edible and one which is not (AV).
Years ago there was a taboo against picking too much thistle, as it was believed that it might become exterminated (PB).

4. **Heracleum lanatum** Michx.
   The young stalks were peeled and eaten raw (RD, AP, RS, AV, CW).

5. **Rorippa nasturtium-aquaticum** (L.) Schinz & Thell.
   The watercress was cooked as a potherb (RS, AV); the stalk was occasionally eaten raw like celery (RS).

**Edible Seeds**

1. **Galium boreale** L.
   These seeds are considered edible by the Montana Salish, but were seldom eaten (RS).

2. **Pinus albicaulis** Engelm.
   The seeds were eaten (RD); presumably they were prepared as were the seeds of **Pinus monticola**.

3. **Pinus monticola** Doug.
   Green cones were put into a fire, removed after they had cracked open, and then the partially roasted seeds were eaten (RS).

4. **Pinus ponderosa** Doug.
   The seeds were eaten (RD, RS); they were prepared as were the seeds of **Pinus monticola** (RS).
Teas and Beverages

   The sap from the birch was drunk as a beverage (PB, RD).
   It was collected from hollowed out cavities in the trunks (PB).

2. *Camassia quamash* (Pursh) Greene
   A sweet-tasting hot beverage was made from boiled camas bulbs (RS).

3. *Mentha arvensis* L.
   A tea was made from the foliage (PB).

4. *Monarda fistulosa* L.
   A tea was made from the leaves; sugar was added to sweeten it (AP,CW).

Gums, Saps and Barks

   The milky sap was dried and used like a chewing gum (Ad).

2. *Larix occidentalis* Nutt.
   The hardened sap was collected from the larch as well as pine trees. It was chewed as a gum (AP, RS, AV).
   A sweet syrup was made from the sap; it was collected from hollowed out portions of the trunk. It was then allowed to remain there for some time so that natural evaporation would concentrate the sugars (AP, RS, CW).
3. **Pinus contorta** Dougl.

   The pitch collected from the bark was chewed like gum. The sap and cambium from the peeled bark was sparingly eaten (too much was thought to cause a belly-ache) (RS).

4. **Pinus ponderosa** Dougl.

   The sap from the ponderosa pine was preferred more than any other conifer. The bark was peeled in late April or early May when the sap was running. An incision made with a knife or axe prior to peeling was made to test the flow and sweetness of the sap. The rib bone of a buffalo or elk was used to peel the bark, as its natural flexibility and curvature facilitated its being worked under the bark. Once removed, the bark was scraped on the inside to remove the edible cambium and sap (RS).

5. **Populus trichocarpa** T. & G.

   The sap from the cottonwood was valued more than that of any other tree. Only the young trees were peeled, as the bark from the older trees was difficult to remove. The thin, transparent strips of cambium were removed in a similar fashion as was the cambium of ponderosa pine, and were chewed for its sap (RS).

**Mushrooms**

1. **Armillaria mellea** (Fr.) Karst.

2. **Collbia** sp. Kummer

3. **Russila** sp. Pers. ex S. F. Gray
The pileus of these mushrooms were removed; the caps were then boiled in a rich meat broth (JP, RS, AV) or fried (JP).

Miscellaneous Foods

1. *Alectoria* sp.
   
   This common species of black tree lichen was soaked in water and baked with camas or separately. If baked separately, then it was left in the fire pit only over night. The resulting black, gelatinous mass was either eaten with camas, or it was sun-dried and powdered and mixed with the sweet powder made from camas. With water added, the resulting thick paste was eaten more as a luxury food than as a staple (RS). Each family consumed about 25 pounds of this lichen each year (T-H).

2. *Castilleja* sp. *Mutis* ex *L. F.*

   The children were fond of sucking the nectar from the Indian paintbrush flower (PB, RD, JP).

Condiments

1. *Allium cernuum* Roth

   The bulbs were used for flavoring soups and meats (RS).

2. *Arctostaphylos uva-ursi* (L.) Spreng.

   The dried and powdered fruit was sprinkled on liver as a condiment. It could also be mixed with lard and eaten (RS). This may have been a recent innovation.
3. **Mentha arvensis** L.

The crumbled and powdered leaves were used as a flavoring agent in the absence of salt and pepper (RS).

**Medicines**

1. **Abies grandis** (Dougl.) Forbes

PB claims that the resin from the punctured blister was sweetened and drunk for whooping cough. The resin could also be rubbed on the throat and chest for colds. An eyewash was made by boiling the bruised needles (RS).

2. **Abies lasiocarpa** (Hook.) Nutt.

The needles were dried, pounded into a powder, and mixed with grease or marrow; this was then rubbed on diseased or infected skin; if the skin disease was open and runny, then the finely powdered needles were sprinkled directly on the festering sore (PB).

For cuts, the hardened resin was pulverized, mixed with warmed lard, and then applied to the wound (MSS).

3. **Achillea millefolium** L.

The leaves were mashed by chewing them or were mashed in water and then wound around cuts, bad bruises, and open wounds to stop bleeding and to act as a disinfectant (Ad, PB, RDRD, AP, MSS, RS, AV, CW).
The leaves and stems were also boiled to make a bitter tea for colds (RD,RS).

For toothache, the leaves were compressed on the particular tooth causing the pain (AP,CW).

A solution made from the boiled leaves was used for aching backs and legs (Ad).

4. **Arctostaphylos uva-ursi** (L.) Spreng.

   The dried and powdered leaves have been used on burns to help promote rapid healing (AP,RS,CW). A tea made from the leaves was drunk for colds and coughs (AP,CW). For earaches, smoke from the leaves was inhaled from a pipe and then blown into the aching ear with the removed pipestem (RS).

5. **Armillaria mellea** (Fr.) Karst.

   The cottonwood mushroom as well as one growing on **Larix occidentale** was placed on aching teeth (PB).

6. **Artemisia dracunculus** L.

   Swoolen feet and legs were treated by placing them into the decoction made from this plant and by rubbing the boiled plant over the affected areas (Ad).

7. **Artemisia ludoviciana** Nutt.

   Several uses were made of this plant. A decoction from the foliage was used externally for bruises (PB), placed in bath water along with a similar decoction from **Rosa** for itchiness (Ad).
or was drunk as a bitter, strong tasting tea for colds (RS).
A decoction was used to wash areas affected with poison ivy (Ad).

8. Artemisia tridentata Nutt.
   A tea made from the sagebrush was drunk as a remedy for colds and pneumonia (RS).

   The roots were either eaten fresh or were dried, pulverized, and made into a tea; this was taken for stomach ache (RD).

10. Aster conspicuus Lindl.
    A tea made from the roots was used in the treatment of gonorrhea (PB).

    The leaves were used as a poultice for swellings (MSS) or burns (AP,CW). A tea made from the roots was drunk for tuberculosis (AV), whooping cough (AV), to increase urinary flow (AV), or as a physic (JP).

    Several medicinal uses were reported. The roots were cleaned, chewed or crushed, and placed on cuts with a clean cloth; this was changed three times a day. In about three days the cut was healed (PB).
    A decoction made from the roots had several uses. It was drunk as a tea to alleviate coughing (AP,CW), to facilitate the delivery of the placenta of pregnant women (RS), for venereal...
diseases (RS), as a contraceptive (RS), and for rheumatism too (AP,CW). A solution from the boiled roots was also used as an eyewash (RD).

A strong tasting tea made from either the fresh or dried roots was drunk for colds (RS); it was also taken as a physic (RS,AV).

A salve was made by mixing the dried and powdered leaves with lard or grease; this was applied to burns and sores (RD,RS). Also, the leaves were used directly as a poultice (AP,CW).

15. Chimaphila umbellata (L.) Bart.
A decoction from the leaves was used as an eyewash for sore eyes, especially due to heat, smoke, or perspiration (Ad, PB,JP).

16. Clematis columbiana (Nutt.) T. & G.
From this species and C. ligusticifolia was derived a medicine used for a type of itch and sores, especially around the neck (RD).

17. Clematis hirsutissima Pursh
The entire plant was boiled to make a solution used as an itch medicine; the affected areas were washed with the solution and rubbed with the boiled plant (RS,AV).

18. Clematis ligusticifolia Nutt.
The stems and leaves were boiled to make an eyewash, though
it apparently didn't work very well (Ad). It was also used for itchiness and sores (see above).

19. *Equisetum arvense* L.

A tea made from the whole plant was used as a diuretic (Ad, PB).

20. *Geranium viscosissimum* F. & M.

There seems to be some confusion as to the correct identity of what is called ceci. RS claims it to be this species of *Geranium*, while Barry Carlson claims it to be a species of *Lomatium*.

The baked roots were used as a poultice on wounds, cuts, or swellings (PB), or a solution from the boiled roots was used on swellings (Ad). The scum resulting from boiling the roots was used externally for wart treatment, or the milky sap was directly applied from a fresh plant (RS, AV). A mashed root placed inside a buckskin or cloth was tightly bound around painful breasts or in cases of milk fever (RS).

21. *Geum triflorum* Pursh

Fresh or dried roots of this plant were boiled to make a tea which was drunk for chills (RD).


The epidermal layer of the leaf was peeled off; the leaf was then plastered on burns, cuts, boils and sores from which the pus was drawn out (PB, RD, AP, RS, T-H, AV, CW).
23. **Grindelia squarrosa** (Pursh) Dunal

   A tea made from the boiled stem and leaves was drunk for colds, pneumonia, fever, whooping cough, tuberculosis, or just to perk one up (Ad, PB, AP, RS, CW).

24. **Heracleum lanatum** Michx

   The dried or fresh roots were made into a poultice which was used on swellings, especially of the feet (RD).

25. **Heuchera cylindrica** Dougl.

   The root was boiled to make a tea which was used for stomach ache and diarrhea; or the root could be chewed directly for immediate results. Of all the plants for stomach ache and diarrhea, this was the most successful medicine known (PB, RS, T-H).

26. **Hierochloe odorata** (L.) Beauv.

   A tea made from sweetgrass was drunk for colds, fevers (Ad, AV) and to alleviate sharp pains inside (PB). It was also mixed with the seeds of **Thalictrum occidentale** and made into a tea for colds also (RS).

27. **Juniperus scopulorum** Sarg.

   A tea made from the boughs was drunk for colds, pneumonia, and fevers (Ad, AP, MSS, CW): it is believed by some that the tea made from boughs having the fleshy cones intact is stronger (Ad). The tea was also drunk as a general tonic (RD). For rheumatism and arthritis a decoction applied externally to the affected areas supposedly alleviates the pain, but does not cure it (PB).
28. **Ledum glandulosum** Nutt.
   
   A decoction made by boiling the leaves and twigs was used as an eyewash (Ad).

29. **Letharia** sp.
   
   A childbirth medicine was made from a species of "moss", very possible *Letharia*. The expectant mother's body was rubbed with it (RS,AV).

   A yellow lichen found on the Douglas fir, very possibly *Letharia* also, was used as a toothache medicine. It was soaked in hot water for ten to fifteen minutes and then placed in the area of the cavity or toothache. It is believed that this plant is poisonous, so the patient was warned about not swallowing the saliva. In a short while, the pain of the tooth would be alleviated. In a few days the tooth would break apart in pieces (PB).

   Sores and scabs were first washed and then this lichen was placed on the affected area as a poultice (AP,CW).

30. **Lewisia rediviva** Pursh
   
   Tea made from the roots was drunk for heart trouble (RS,AV). It can also be taken for pleurisy (RS) as well as for lactating women to increase the flow of milk (PB,T-H,AV).

31. **Ligusticum verticillatsum** (Geyer) Coul. & Rose
   
   This popular medicine is still in widespread usage. Its favorite use seems to be for colds and sore throats; the dried roots can be chewed (JP,RS,T-H), and an infusion can be made.
from the roots and drunk (JP, RS, T-H, AV), or the leaves could be smoked with tobacco for relief (JP, RS, AV). The tea from the roots has been used for fevers too (MSS).

The root was chewed and rubbed on the person's body for seizures. Cigarettes mixed with this plant were then smoked; this supposedly calms the person (Ad).

32. **Lithospermum ruderale** Dougl.

A tea made from either the fresh or dried roots was drunk for pleurisy and similar ailments (RD), while a tea made from the foliage was drunk for diarrhea (RS).

33. **Lonicera involucrata** (Rich.) Banks

The fruit were eaten to expel worms (Ad) or as a powerful laxative (RS).

34. **Lycoperdon** sp.

The powdery spores of the puffballs were rubbed on eyelids and cheeks of infants to induce sleep (RS, AV).

35. **Matricaria matricariodes** (Less.) Porter

A tea made from the pineapple weed was drunk for colds (Ad, AP, AV, CW), fevers (AP, CW), including perspiration (AV), diarrhea (PB), upset stomach (Ad, PB); and for women at childbirth to give them energy and to build up their blood (RD), and to help deliver the placenta (RS). The tea was also blended with *Letharia* for the preceding medication (RS). A tea made from this plant was given to young girls having menstrual cramps (RS).
36. *Mentha arvensis* L.

A tea made from the peppermint was drunk for colds (RS,T-H), coughs (T-H), and when mixed with *Juniperus scopulorum*, for fevers (Ad). The green leaves were also packed around aching teeth (RS).

37. *Monarda fistulosa* L.

A tea from this plant was made for colds (Ad, JP,RS,AV), fevers (Ad, PB,AP,RS,AV,CW), coughs (AP,RS,CW), to increase milk flow in nursing mothers (Ad), and as a general tonic (T-H).

The leaves were packed around aching teeth to bring relief (AP,CW). Dried bundles of plants were hung in rooms, presumably its pleasant odor brought relief to those having colds (RD). A cloth soaked in a tea made from this plant was placed on eyes to relieve soreness (PB).

38. *Nepeta cataria* L.

A tea made from the stems and leaves was taken to induce prespiration to break fever (RS).


There were various medicinal uses of the pond lily. The tea made from the roots was drunk for VD, in which case it supposedly opens the urinary ducts; the crushed roots were also applied directly to the affected parts (PB). The decoction from the boiled roots was mixed with bathwater for rheumatism (Ad) or was applied to bruises (PB). A poultice made from the peeled, washed and baked roots was applied to infected sores (RS).
40. *Opuntia polyacantha* Hawn

   The stems were burned to remove the spines, then washed and boiled; the resulting tea drunk for diarrhea (Ad). The crushed stems were placed directly on backaches (AP,CW), presumably after the spines were removed.

41. *Osmorhiza occidentalis* (Nutt.) Torr.

   A tea made from the roots was drunk for colds (AP,RS,CW) and for coughs and sore throats (PB), or the root was chewed until tasteless for similar results (PB).

42. *Pachistima myrsinites* (Pursh) Raf.

   A tea made from the roots was drunk for syphilis (PB).

43. *Pinus contorta* Dougl.

   A medicine for burns was made from the lodgepole pine. The resin from the tree was collected and heated in a can until it turned black. One part of bone marrow was added to four parts of the heated resin and mixed with one's hands until no longer sticky. This was molded into flat cakes which were placed on burns (PB).

   For boils, a mixture of axle grease, Climax Chewing Tobacco and resin was applied.

44. *Pinus ponderosa* Dougl.

   Medically, the ponderosa pine had several uses. The warmed resin was placed on boils; a leaf of *Berberis repens* was placed over this until it broke (Ad).

   For dandruff, the pointed ends of the green needles were jabbed into the scalp (MSS).

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Placed on the abdomen of mothers giving birth, the heated needles helped to deliver the placenta (T-H).

The pitch, heated and mixed with melted animal tallow, was applied with a piece of canvas for rheumatism and backache (RS).

45. **Plantago major** L.

The leaves were variously used as a poultice for cuts and sores (Ad, PB, RD, AP, RS, AV, CW). The leaves were softened in hot water and put on sores (RS, AV), crushed and placed on infected cuts (PB), crushed and mixed with sugar and placed on cuts (AP, CW), or powdered and mixed with grease and placed on cuts (Ad). It is believed that the pus will be drawn out with the application of this leaf (AP, RS, CW).

46. **Plantago patagonica** Jacq.

For toothaches, either fresh or dried ribegrass was packed around the tooth and in the carie to deaden the pain (RS).

47. **Populus tremuloides** Michx.

A tea made from the bark was drunk for ruptures (RS, AV).

48. **Populus trichocarpa** T. & G.

The leaves were used either fresh or dried as a poultice to draw pus out of a wound (AV) or for boils (RS). Young cottonwood branches, roots of **Rosa** and **Potentilla glandulosa** were boiled to make a tea drunk for syphilis (RD).
49. **Prunus virginiana** L.

A tea made from the bark and branches was drunk for diarrhea (PB, AP, CW). Or for intestinal worms, a tea made from the bark which was peeled downward was drunk (if the bark was peeled upward, it is believed that the stomach contents would be regurgitated) (RS).

The resin from chokecherry was warmed, strained, and when cool, used as eyedrops for sore eyes (PB, RS).

50. **Pseudotsuga menziesii** (Mirbel) Franco

A tea from the needles was made for colds (RS).

51. **Pterospora andromedea** Nutt.

A whitish colored growth found on the roots was used for toothache. It was put in the area of the cavity to alleviate the pain (PB).

52. **Ranunculus glaberrimus** Hook.

The plant was crushed, and with a piece of canvas or buckskin, applied as a poultice to burn blisters and open running sores (RS, AV). However, PB recognized it as a poisonous plant and warned not to place it on sores as it would worsen them.

53. **Rhamnus purshiana** DC.

The tea made from the bark was drunk as a laxative (Ad, PB, AV). If the bark was whittled upward to make the tea, then one's stomach contents would be regurgitated; however, if the bark was whittled downward, then it is believed that one's stomach contents would leave through the anus (Ad, AV).
54. **Rhus glabra** L.

A tea made from the leaves and branches was drunk for tuberculosis. In this treatment, the patient could not use salt or sugar as it is believed that this would make him cough (RS). Eating several of the fruits acted as a laxative (RS).

55. **Rosa woodsii** Lindl.

An eyewash was made for sore eyes, caused by excessive exposure to the sun (PB, RD, AP, RS, CW). The decoction was made from the petals (RD, the bark (PB), or the roots (RS).

56. **Rubus idaeus** L.

A tea made from the stems and leaves was taken for diarrhea (RS).

57. **Salix** spp.

The bark was used for the treatment of cuts (PB, RS, AV). In one medicinal preparation hot water was poured over the bark; this solution was used to wash the wound; a powder from the finely crushed bark was placed on the cut with a clean cloth. The bandage needed to be changed only once a day, and in two, three, or four days the cut was healed (PB). The bark was also chewed and put on cuts and abrasions directly (RS, AV).

An eyewash was used which was made from a species having greenish leaves found near Arlee. The bark, leaves, or young stem tips were used to make the eyewash (RD, AV).
The bark of a different species was used for diarrhea, dysentery and summer flu (RD, AV). RD states that it is one having silvery leaves; the bark was chewed for relief.


*Sambucus racemosa* L.

A tea made from the bark was drunk to help deliver the placenta (PB).


This plant was a source of an eyewash (PB, AP, AV, CW). It was made by boiling the debarked branches (PB, AP, CW).

60. *Sorbus scopulina* Greene

A tea made from the leaves and twigs was drunk for tuberculosis and coughs (PB, RD, AP, CW). A tea made from the fruit was drunk for ailments such as vomiting of blood (RD). Eating the fruit directly was reported to alleviate tiredness, hunger, thirst and fatigue in about ten minutes (PB).

61. *Symphoricarpos albus* (L.) Blake

The fruit or the leaves was crushed and applied to wet sores (AV), chapped or injured skin (RD), or to scabs of cuts and burns to promote healing with no scarring (RS). An eyewash was made from this species and *Rosa* mixed together (PB). If one poked his eye when hunting, for example, the fruit of the snowberry plant was chewed; the resulting juice was placed in the eye. At first the eye muscles tighten up, but soon would feel better (PB).
62. **Tanacetum vulgare** L.

   The crushed leaves were placed on burns (RS).

63. **Thalictrum occidentale** Gray

   The dried seeds were boiled to make a tea for colds, chills, and fevers (RS, AV). Sometimes **Hierochloe odorata** was boiled with the seeds to make a more effective medication (RS).

64. **Urtica** spp.

   A tea was made from the leaves of **Urtica dioica** for fits (apparently epilepsy), insanity, or temper tantrums. For rheumatism, feet were soaked in a decoction of the leaves of **Urtica gracilis** (RS).

   In the sweathouse, the nettles were used for backaches (AP, CW).

65. **Vaccinium globulare** Rydb.

   A tea made from the roots or the stem was drunk for heart trouble (PB, AV): for kidney trouble, a tea from the leaves and the stem was drunk (AP, CW). A decoction from the roots was used for rheumatism and arthritis (AV).

66. **Veratrum viride** Ait.

   This plant was used as a decongestant. Powder from the dried roots was sniffed up the nose. The resultant sneezing cleared up the nasal passages (AP, RS, AV, CW). As this medicine has a powerful reaction, it was not given to children (AV).
67. *Viola* sp. L.

The roots for a species of violet were made into a tea and was drunk for colds, flu, chills, and fever (PB,T-H,RS,AV). This tea was given particularly to children, as it is mild (RS,AV). A poultice for mumps was made from the roots (PB).

**Plants Used for Smoking**

1. *Arctostaphylos uva-ursi* (L.) Spreng.

   The leaves of kinnikinnick were dried in either an oven or sweathouse (JP) and mixed with a more flammable material, such as tobacco, and smoked (Ad, PB, RD, AP, JP, RS, AV, CW). It was also smoked with the dried bark of red willow (probably *Cornus stolonifera*), or the dried roots of *Veratrum viride* or *Osmorhiza occidentale* (RS).

2. *Chimaphila umbellata* (L.) Bart.

   After drying in the sweathouse, the leaves were smoked (PB).


   The bark was dried and smoked with tobacco (AP, AV, CW).


   The dried root was smoked as mentioned above (RS).

5. *Veratrum viride* Ait.

   A small amount of the dried root was smoked with tobacco, as mentioned above (RS).
Incense, Scents, Perfumes, and Other Toiletries

1. *Abies grandis* (Dougl.) Forbes
   
   The needles were dried, finely pulverized, and used as a baby powder (RS).

2. *Abies lasiocarpa* (Hook.) Nutt.
   
   From the dried and powdered needles a baby powder was made (PB, RD, AV): it was used on baby rashes caused by excessive urination (PB). The needles were placed on the stove as an incense (Ad, PB, AV) or hung on the walls to give the room a pleasant aroma (AV). The pulverized needles were also used to scent shawls (AP, CW) or used as a body scent (PB).

3. *Achillea millefolium* L.
   
   The flower heads were rubbed in the armpits as a deodorant (RS, AV).

4. *Artemisia ludoviciana* Nutt.
   
   The foliage of the plant and that of the Douglas fir were placed in the sweathouse as an incense (Ad).

5. *Claopodium crispifolium*
   
   This absorbent moss was used to line cradle boards and as a padding inside baby diapers. Placed both fore and aft, the moss lining lasted a full twelve hours, and then was washed and reused again (PB).
6. **Gilia aggregata** (Pursh) Spreng.

   The dried plants with *Lomatium simplex* were placed in perfume bags and were thought to give off a pleasant aroma (RD).

7. **Hierochloe odorata** (L.) Beauv.

   The aromatic properties of sweetgrass were well known to the Montana Salish. The blades were braided into three ply ropes and placed in suitcases with clothes (AP, RS, CW); or the aroma was imparted to the clothes by burning the sweetgrass beneath them (RS). It is believed that this would keep bugs away (AP, CW). Sweetgrass was burned on stovetops as incense (Ad, RS).

8. **Juniperus scopulorum** L.

   Boughs of juniper were burned on stovetops as incense (Ad, PB, RS, AV) or used as a body scent (PB).

9. **Mentha arvensis** L.

   The peppermint was placed in the corners of houses for its pleasant aroma (PB, RD). It was also placed on the floors of the sweathouse (RD).

10. **Thalictrum occidentale** Gray

    The dried seeds were chewed until pulverized and rubbed on the hair and body as a perfume (RS).

**Hair Washes, Oils, Tonics, and Shampoos**

1. **Abies lasiocarpa** (Hook.) Nutt.

   The finely powdered needles were mixed in equal proportions with lard and applied to the hair as an oil; it imparts a fragrant
evergreen scent and a greenish color to the hair (Ad, PB). A mixture was used to make a hair restorer (Ad), of the foliage or stems of Abies lasiocarpa, Artemisia ludoviciana, Ceanothus velutinus, Ligusticium verticillatum and Pterospora andromedea.

2. Clematis columbiana (Nutt.) T. & G.
   The stems and leaves were boiled to make a solution used as a hair restorer (RD,AV) or a shampoo (RS).

3. Clematis ligusticifolia Nutt.
   The young leaves and stems were boiled to make a solution used as a hair restorer (RD).

4. Larix occidentalis Nutt.
   The gummy sap was used to plaster hair in place (RS).

5. Lonicera ciliosa (Pursh) DC.
   This vine was boiled to make a shampoo and to make the hair grow longer. Apparently no distinction was made between this vine and Clematis columbiana (RS).

   This plant was mixed with several other species and used as a hair restorer as mentioned above. It was also boiled with Clematis columbiana to make a shampoo (RS).

7. Verbascum blattaria L.
   This plant was boiled to make a shampoo which lathers like soap. It was thought to turn the hair darker. It was collected at any time of the year (RS).

The roots were boiled to make a solution which was applied to the scalp; it was thought to act as a hair restorer (RD).

**Poisonous Plants**

1. *Cicuta douglasii* (DC.) Coult. & Rose

   The water hemlock is recognized to be poisonous (AP,AV,CW).

2. *Lupinus* sp. L.

   PB believes this plant to be poisonous to sheep, while JP believes that horses like to eat it.


   This is recognized by some to be poisonous (AP,AV,CW).

4. *Zigadenus elegans* Pursh

   The bulb is recognized to be poisonous and is avoided (PB,RD,AV).

**Bug Repellants**

1. *Matricaria matricarioides* (Less.) Porter

2. *Mentha arvensis* L.

3. *Monarda fistulosa* L.

   These three species were used to keep bugs off meat and berries. The leaves were dried, powdered, and sprinkled over fresh meat or fruit. Or entire plants of *Matricaria*
M. matricarioides were put in alternate layers in parfleches with meat or berries (PB,RS).

Mentha arvensis was also used in suitcases or in houses to keep bugs away (Ad, PB).

Horse Medicines

1. Amelanchier alnifolia Nutt.

This plant was used for lame horses. A sharpened stick from it was stuck deeply into the swollen ankle, whereafter blood and other liquidous matter drained out. The root of a yet unidentified plant was then used for medication (PB).

2. Geranium viscosissimum F. & M.

A decoction from the roots was rubbed on sores, cuts, rope burns, and was apparently good for keeping woodticks off. An application of this solution around the nose kept flies away (Ad, AV, RS).

Shavings from the dried root mixed with charcoal were burned, over which the horse's nose was held; this helped to alleviate distemper, pneumonia, coughing, and running nose (RS, AV).

3. Grindelia squarrosa (Pursh) Dunal

This sticky plant was rubbed on sore horses' hooves, and is believed to toughen them (RS, AV).


The boughs were burned with charcoal in a can held beneath the sick horse's nose (PB).
5. **Nuphar variegatum** Engelm.

The boiled and crushed roots were placed on deep cuts (PB).

***Plants Used in Manufacture***

1. **Acer glabrum** Torr.

The branches were used in the making of arrow shafts, pipe-stems (PB), and as framework in the building of sweathouses (RD).

2. **Amelanchier alnifolia** Nutt.

The stems of this plant were used in the manufacture of arrowshafts, though stems from *Acer* were preferred (PB).

3. **Cornus stolonifera** Michx.

The branches were used in the construction of sweathouses (RD).

4. **Elymus cinereus** Scribn. & Merr.

The young Indian boys once placed hawthorne points on the shoots of ryegrass. These were used as spears to inflict pain on one another in preparation for warfare (PB).

5. **Heracleum lanatum** Michx.

The dried and matured hollow stems were used to make elk whistles (PB,RD,AP,AV,CW).

6. **Philadelphus lewisii** Pursh

Pipestems (RD,AV), bows (JP), combs (AV), and arrow shafts (AV) were made from the branches.
   Tepee poles were selected from this tree species (AP, RS, CW).

8. *Salix sp.* L.
   The branches were used in making sweathouses (AV). A species of willow was used in the making of ropes, baskets, etc. (RS, AV). AV states that this species is found in the Blackfoot Valley and stands five to six feet tall; the rope was made from the bark and was used for horses.

   *Sambucus racemosa* L.
   A flute or whistle was made from the hollow stems (Ad, PB).

    The bulrush was used for tying tents together or for braiding mats or rugs (RD).

    The wood of this conifer was used to make bows (PB, RD).
    Boiled sinew or muscle was used to varnish the well-seasoned wood to waterproof it and to prevent it from warping (PB).

    Baskets or bags were made from the bark (PB, AP, AV, CW).
    The strips of bark were woven into differently shaped baskets; a single, large piece of bark was shaped into a bag. The former were used primarily for berry picking, while the latter were used for storage (PB).
13. *Typha latifolia* L.

The leaves were used for weaving baskets for meat and fish (AV), and for making mats for the sweathouse (AP,CW).

**Plants for Tanning and Smoking Hides**

1. *Artemisia ludoviciana* Nutt.

Hides were rubbed with the foliage of this plant before they were soaked; this apparently prevented them from souring (RS).

2. *Pseudotsuga menziesii* (Mirbel) Franco

The rooted wood of this tree was used to smoke hides (AV).

**Dye Plants**

1. *Alnus incana* (L.) Moench

The bark was boiled and the resulting solution was used to give moccasins a yellow color (MSS,AV), feathers a reddish brown color (PB), and human hair a flaming red color (RS).

2. *Letharia* sp.

This lichen was once used to dye feathers (PB).
APPENDIX II:

PLANTS USED BY THE KOOTENAI INDIANS

1. *Achillea millefolium* L.

   This plant was used for toothache; the leaves were placed on the aching tooth; the "juices" from the leaf are believed to soothe the pain (*An*). The leaves were chewed and rubbed on aching legs for rheumatism (*Au*).

2. *Alectorhiza sp.*

   This was prepared with camas and onions in the fire pit and eaten (*T-H*).

3. *Allium cernuum* Roth

   The bulb was readily eaten. It was baked with camas (*PS, T-H*). In more recent times sugar and milk have been added (*PS*).

4. *Amelanchier alnifolia* Nutt.

   Only the fruits of this plant, *Prunus virginiana*, and *Vaccinium globulare* were of economic importance (*T-H*). The serviceberry fruits were eaten fresh (*An*), boiled (*An*), or sun-dried for later use (*An, PS, T-H*). Dry they could be prepared with flour, sugar, milk, and camas (*PS*), mixed with fruits of *Symphoricarpos albus* and flour (*An*), or made into cakes (*T-H*).
5. **Arctostaphylos uva-ursi** (L.) Spreng.

Kinnikinnik berries were never systematically gathered and stored but were considered an emergency food only. They were left on the shrub and used as needed. They were prepared by boiling (T-H).

The dried leaves were smoked in a pipe (Au, PS). A decoction from the leaves was used as an eyewash (An).

6. **Balsamorhiza sagittata** (Pursh) Nutt.

The stalk supporting the leaf is considered to be the "boy" or "man" part while the stalk supporting the flower is considered to be the "girl" or "woman" part (An). The former, peeled and eaten raw, is believed to be better tasting than the latter (An, PS).

7. **Berberis repens** Lindl.

In recent times these fruits have been pulverized, mixed with milk and sugar, and eaten (Au, PS).

8. **Camassia quamash** (Pursh) Greene

The collection, manner of preparation, and role of the camas in Kootenai culture was very similar to that of the Montana Salish (T-H).

9. **Ceanothus velutinus** Dougl.

A decoction from this plant was used as a hair grower (PS).

10. **Claytonia lanceolata** Pursh

The enlarged roots were boiled and eaten (PS).

The oily bark of this plant was used to make fiber for rope. Three strands of peeled bark were first thigh-twined separately and then plaited together (T-H).

12. *Fragaria virginiana* Duchesne

The fruit was eaten (PS).


The leaf was removed of its epidermal layer and then applied as a poultice to cuts and sores (An).


The young stems were eaten (PS).

15. *Juniperus scopulorum* Sarg.

The boughs were burned on stove tops as incense (An, PS) to alleviate colds (An). A tea made from the leaves was drunk for coles (PS), though some thought it to be too strong tasting (An).


A refreshing tea was made from this plant (PS).

17. *Lewisia rediviva* Pursh

The manner of collection and preparation of the bitterroot was similar to that of the Montana Salish (An). T-H reported that they were never pounded dried or cooked into a meal and shaped into cakes as did some of their neighbors, but were boiled by themselves or put into a stew with meat.
18. **Ligusticum verticillatum** (Geyer) Coult. & Rose

   The root was smoked for sore throats (PS), mashed and rubbed on sore arms (Au), or made into a tea taken for heart problems (An).

19. **Monarda fistulosa** L.

   A tea made from this plant was taken for kidney problems (An). Placed on rocks in the sweathouse, it acted as a perfume (PS).


   The root of this plant is recognized to have two tastes, depending upon if it were collected before or during flowering. It is in the latter condition that the root is preferred (PS).

21. **Populus trichocarpa** T. & G.

   The leaves were used as a poultice (An).

22. **Prunus virginiana** L.

   From this plant, *Amelanchier alnifolia*, and *Vaccinium globulare* came the three main economic fruits (T-H). The fruits of **Prunus virginiana** were pulverized (An, Au), formed into cakes or paddies and sun-dried for future use (An, Au, T-H). Sometimes sugar was added (Au).

   The branches with the bark intact were boiled to yield a tea; this was drunk for diarrhea (An) or stomach ache (PS).

23. **Ribes sp.** L.

   The fruits are recognized to be edible (PS).
24. *Rosa* sp. L.

The fruits or "hips" are recognized to be edible (An, PS).
A decoction made from the stems and flowers was used to wash oneself; it was thought to purify one who has lost a member of the family through death. This usage apparently stems from the influence of the Catholic religion (PS).


The froth from the beaten fruit was eaten (An, Au, PS).
Special precaution was taken in its preparation to insure a good froth. Grease in the bowl or on the spoon (Au) or too much odor of tobacco smoke (PS) is believed to prevent adequate foaming.

26. *Symphoricarpos albus* (L.) Blake

The bark was chewed and placed on cuts (An).

27. *Typha latifolia* L.

The leaves were used as flooring material in the sweathouse (PS).


The fruit of this plant, *Amelanchier alnifolia*, and *Prunus virginiana* were the three main economic fruit species utilized by the Kootenai. The fruits were sun-dried and frequently made into cakes (T-H).

29. *Vaccinium scoparium* Leigberg

The fruits of this plant were eaten (PS). If one saw this plant, then it was expected that *Vaccinium globulare* would be found in the vicinity.
APPENDIX III:

COMMON NAMES OF PLANTS USED BY THE SALISH AND KOOTENAI INDIANS

1. Abies grandis (Dougl.) Forbes  grand fir
2. Abies lasiocarpa (Hook.) Nutt.  alpine fir
3. Acer glabrum Torr.  Rocky Mountain maple
4. Achillea millefolium L.  yarrow
5. Alectoria sp.  lichen
6. Allium cernuum Roth  nodding onion
7. Allium douglasii Hook.  Douglas' onion
8. Alnus incana (L.) Moench  mountain alder
9. Amelanchier alnifolia Nutt.  serviceberry, Juneberry
10. Arctostaphylos uva-ursi (L.) Spreng.  kinnikinnick, bearberry
11. Armillaria mellea (Fr.) Karst.  cottonwood mushroom
12. Artemisia dracunculus L.  tarragon, sage, dragon sagewort
13. Artemisia ludoviciana Nutt.  sagebrush, mugwort, wormwood
14. Artemisia tridentata Nutt.  big sagebrush
15. Asclepias speciosa Torr.  milkweed
16. Aster conspicuus Lindl.  showy aster
17. Balsamorhiza sagittata (Pursh) Nutt.  balsamroot
18. Berberis repens Lindl.  Oregongrape, mahonia
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<th>No.</th>
<th>Scientific Name</th>
<th>Common Name</th>
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<td>19</td>
<td>Besseya rubra (Dougl.) Rydb.</td>
<td>red besseya, kitten-tails</td>
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<td>20</td>
<td>Betula occidentalis Hook.</td>
<td>western burch</td>
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<td>Betula papyrifera Marsh.</td>
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<td>Brodiaea douglasii Wats.</td>
<td>brodiaea</td>
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<td>Calypso bulbosa (L.) Oakes</td>
<td>fairy-slipper</td>
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<td>Camassia quamash (Pursh) Greene</td>
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<td>Campanula rotundifolia L.</td>
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<td>Chimaphila umbellata (L.) Bart.</td>
<td>prince's-pine, pipsissewa</td>
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<td>Cicuta douglasii (DC.) Coult. &amp; Rose</td>
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<td>Cirsium sp.</td>
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<td>springbeauty</td>
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<td>35</td>
<td>Clematis columbiana (Nutt.,) T. &amp; G.</td>
<td>clematis, virgin's-bower</td>
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<td>36</td>
<td>Clematis hirsutissima Pursh</td>
<td>sugarbowls</td>
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<td>37</td>
<td>Clematis ligusticifolia Nutt.</td>
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<td>Collybia sp.</td>
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<td>39</td>
<td>Cornus stolonifera Michx.</td>
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<td>Crataegus columbiana Howell</td>
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<td>Delphinium bicolor Nutt.</td>
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</table>
43. **Dodecatheon conjugens** Greene
44. **Elaeagnus commutata** Bernh.
45. **Elymus cinereus** Scribn. & Merr.
46. **Epilobium angustifolium** L.
47. **Equisetum arvense** L.
48. **Erythronium grandiflorum** Pursh
49. **Fragaria virginiana** Duchesne
50. **Fritillaria pudica** (Pursh) Spreng.
51. **Galium boreale** L.
52. **Geranium viscosissimum** F. & M.
53. **Geum triflorum** Pursh
54. **Gilia aggregata** (Pursh) Spreng
55. **Goodyera oblongifolia** Raf.
56. **Grindelia squarrosa** (Pursh) Dunal
57. **Heracleum lanatum** Michx.
58. **Heuchera cylindrica** Dougl.
59. **Hierochloe odorata** (L.) Beauv.
60. **Juniperus communis** L.
61. **Juniperus scopulorum** Sarg.
62. **Larix lyallii** Parl.
63. **Larix occidentalis** Nutt.
64. **Ledum glandulosum** Nutt.
65. **Letharia sp.**
66. **Lewisia rediviva** Pursh
67. **Liquisticum verticillatum** (Geyer) Coult. & Rose

shooting star
silverberry, elaeagnus
giant wildrye
firewood
horsetail, scouring-rush
glacier-lily
wild strawberry
yellow bell
bedstraw
sticky purple geranium
avens, prairie smoke
gilia
rattlesnake-plantain
gumweed
cow-parsnip
sweetroot
common juniper
Rocky Mountain juniper
alpine larch
western larch
Labrador tea
bitterroot
licorice-root

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68. Lithospermum ruderale Dougl.  
groomwell, pucoon
69. Lomatium couss (Wats.) Coult. & Rose  
biscuit-root
70. Lomatium macrocarpum (Nutt.) Coult. & Rose  
lomatium, desert parsley
71. Lonicera ciliosa (Pursh) DC.  
orange honeysuckle
72. Lonicera involucrata (Rich.) Banks  
beearberry, black twinberry
73. Lupinus sp.  
lupine
74. Lycoperdon sp.  
puffball
75. Lysichitum americanum Hulten & St. John  
skunk cabbage
76. Matricaria matricarioides (Less.) Porter  
pineapple weed
77. Mentha arvensis L.  
mint, peppermint
78. Monarda fistulosa L.  
horsemint, wild bergamot
79. Nepeta cataria L.  
catnip
80. Nuphar variegatum Engelm.  
pond lily
81. Opuntia polyacantha Haw.  
prickly-pear cactus
82. Osmorhiza occidentalis (Nutt.) Torr.  
sweet-cicely
83. Pachistima myrsinites (Pursh) Raf.  
mountain lover
yampah
85. Philadelphus lewisii Pursh  
mockorange
86. Phleum pratense L.  
Timothy grass
87. Picea engelmannii Parry  
Engelmann spruce
88. Pinus albicaulis Engelm.  
white bark pine
89. Pinus contorta Dougl.  
lodgepole pine
90. Pinus monticola Dougl.  
white pine
91. Pinus ponderosa Dougl.  
ponderosa pine, yellow pine
92. Plantago major L.  
plantain
93. **Plantago patagona** Jacq. ribegrass  
94. **Populus tremuloides** Michx. quaking-aspen  
95. **Potentilla glandulosa**  
96. **Prunus virginiana** L. chokecherry  
97. **Pseudotsuga menziesii** (Mirbel) Franco Douglas fir  
98. **Pterospora andromedea** Nutt. pine drops  
99. **Ranunculus glaberrimus** Hook. sagebrush buttercup  
100. **Rhamnus purshiana** DC. cascara sagrada  
101. **Rhus glabra** L. smooth sumac  
102. **Rhus radicans** L. poison ivy  
103. **Ribes sp.** gooseberry, currant  
104. **Rorippa nasturtium-aquaticum** (L.) Schinz & Thell. watercress  
105. **Rosa woodsii** Lindl. wild rose  
106. **Rubus idaeus** L. red raspberry  
107. **Rubus luecodermis** Dougl. blackcap, black raspberry  
108. **Rubus parviflorus** Nutt. thimbleberry  
109. **Rumex occidentalis** Wats. dock, sorrel  
110. **Russula sp. Pers. ex S.F. Gray**  
111. **Salix sp.** willow  
112. **Sambucus cerulea** Raf. blue elderberry  
113. **Sambucus racemosa** L. black elderberry  
114. **Scirpus acutus** Muhl. bulrush  
115. **Shepherdia canadensis** (L.) Nutt. buffalo berry  
116. **Smilacina stellata** (L.) Desf. false Solomon's seal  
117. **Sorbus scopulina** Greene mountain ash  
118. **Symphoricarpos albus** (L.) Blake snowberry
119. Tanacetum vulgare L. tansy
120. Taxus brevifolia Nutt. western yew
121. Thalictrum occidentale Gray meadow rue
122. Thuja plicata Donn. western red cedar
123. Tsuga mertensiana (Bong.) Carr. mountain hemlock
124. Typha latifolia L. cat-tail
125. Urtica dioica L. stinging nettles
126. Urtica gracilis (Ait.) Seland. stinging nettles
127. Vaccinium globulare Rydb. huckleberry
128. Vaccinium scoparium Leiberg grouseberry, whortleberry
129. Veratrum viride Ait. false hellebore
130. Verbascum blattaria L. moth mullien
131. Verbascum thapsus L. flannel mullien
132. Viola sp. wild violet
133. Xanthium sp. cocklebur
134. Xerophyllum tenax (Pursh) Nutt. beargrass
135. Zigadenus elegans Pursh death-camas
A medicine from the gall of the bear was used for heart problems. The gall was hung for about three weeks and allowed to become hard and green; hot water was poured over scrappings from the dried gall; the resulting yellow tea was then drunk (Ad, PB). Pete Beaverhead once had heart problems, but after taking this medication, he has not had heart trouble for three years. Bob and Sophia Adams claim that it will help if the patient "is not too far gone"; both have used this medication.

A medicine from the castor oil gland of the beaver was used for earache. The gland was dried, cut into small pieces, and wrapped in a cloth; hot water was then poured over it. The liquid was squeezed out and dropped into the ear (Ad, PB). This gland was also used as a perfume (PB).

Another medicine for earache (and sores too) was made from skunk oil, in which case it was also dropped into the aching ear (AV).

For toothaches, the tongue of the pileated woodpecker was poking into the aching tooth (AV).

Rattlesnake bites were often treated by only the medicine man (PB). But a common method of treatment if a medicine man was not available was to wrap smoked buckskin on the snake bite (Ad, AV).
Spider webs were placed on cuts and were thought to stop bleeding (RS,AV).

Part of a skunk hide was placed in cradles to induce babies to sleep (MSS).

The Montana Salish had a special poison for persons whom they disliked and desired to give a slow death. A live toad was hung by its hind legs and allowed to slowly die. The liquid that dropped from its mouth was collected in a cup and then mixed with some kind of food. The person who would eat this food would not be able to detect the presence of the poison, and in a few weeks would have begun to have died a slow death (PB)!

Yellow and red dye was obtained from pulverized rocks of some kind found near Drummond. The designs on Indian suitcases came from these rocks (Ad).

Various kinds of rocks were used to make bowls of pipes. Yellow and red rocks found east of Missoula were found to be more suitable than most. Farther east on the plains another rock, which is dark in color, was thought to be the best (PB).
LITERATURE CITATION


Chestnut, V. K. 1902. Plants Used by the Indians of Mendocino County, California, Contributions to U.S. Nat. Herbarium, Bull. VIII, No. 3.


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