University of Nevada, Reno

Washoe Women's Wisdom:
Ethnobotany and Its Role in Contemporary Cultural Identity

A dissertation submitted in partial fulfillment of the
Requirements for the degree of Doctor of Philosophy in
Anthropology

by
Darla L. Garey-Sage

Dr. Catherine S. Fowler / Dissertation Adviser

December, 2003

UMI Number: 3121132

INFORMATION TO USERS

UNIVERSITY OF NEVADA
RENO

THE GRADUATE SCHOOL

We recommend that the dissertation
prepared under our supervision by

DARLA L. GAREY-SAGE

entitled

**Washoe Women's Wisdom:
Ethnobotany and Its Role in Contemporary Cultural Identity**

be accepted in partial fulfillment of the
requirements for the degree of

DOCTOR OF PHILOSOPHY

Catherine S. Fowler, Ph.D., Dissertation Advisor

Warren L. d'Azevedo, Ph.D., Committee Member

William H. Jacobsen, Jr., Ph.D., Committee Member

LaVerne Masayesva-Jeanne, Ph.D., Committee Member

Kate A. Berry, Ph.D., Graduate School Representative

Marsha H. Reed, Ph.D., Associate Dean, Graduate School

December, 2003

Abstract

This research examines ethnobotanical knowledge and its ideology among a group of women elders of the Washoe Tribe of Nevada and California. I propose that differential command of ethnobotanical knowledge marks identity of culture, tribe, family, gender, and person. For the Washoe people, a foraging lifestyle is and has been precluded for more than 150 years, yet native plants continue to be highly valued among this group of women elders.

Using methods of participant-observation and interviews, I compared the traditional plant knowledge demonstrated by the women with that contained in historical records. From this, a compendium of Washoe plants is presented both in narrative and tabular form, something not previously available in the corpus of Washoe scholarship.

Within the last 100 years, recognition and use of native plants has decreased from 196 plants identified in historical records to 73 identified by women elders. Many plants have multiple uses, thus subtotals for categories do not match the total number of plants. Retention rates are as follows: food, 33/93, 35%; grass, hay, and clover, 0/7, 0%; material culture, 30/71, 43%; medicine, 25/56, 45%; and other, 4/21, 19%. The overall rate of retention for use of plants is 95/254, 37%. These rates of retention are limited in their utility, however, because of the incomplete nature and broad time-frame of the historical records and the limited sample size of contemporary research.

Identity is defined herein as adaptive and changing but rooted in the historical past. The women mark their cultural identity by contrasting the 'Indian Way', an ethic of behavior governing interactions with the natural world, with the non-Indian way. Tribal identity differentiates the Washoe Way from that of surrounding tribes and identifies unique characteristics of plants in the respective environments. Familial identity is marked through the authentication and transmission of knowledge from a known family member. Gender identity is only briefly explored, but suggests a historical experience more conducive to retention of traditional knowledge for women. Individual identity is the finest level of distinction, and is based on a person's demonstration and negotiation of their command of traditional knowledge.

Acknowledgements

Research for this dissertation was funded primarily by the Liljeblad Endowment. I am very grateful for the generosity of the endowment in supporting two seasons of field work. Some of this research was also supported by the Washoe Tribe Resource Policy Program, and I appreciate their willingness to share information and resources.

The Milwaukee Public Museum allowed me access to the notes and collection of Samuel L. Barrett, and I thank the staff for their support and interest in this project.

None of this would have ever occurred, however, without the support and spirited encouragement of my committee. Catherine S. Fowler, chair, suggested the topic, introduced me to the joys of ethnobotany, and shepherded me through the labyrinth of graduate school. Drs. d'Azevedo and Jacobsen were exceptionally generous, not only providing access to their field notes, but also offering guidance and unparalleled expertise on matters of Washoe ethnography and linguistics, respectively. Kathleen d'Azevedo shared her valuable field notes on Washoe food with me. I am very grateful to all of these scholars of the Great Basin who faithfully served as my teachers and offered their time, wisdom, and expertise without fail.

On a personal note, I owe a great deal to my family. Research and writing are quite the stern task-masters, but my family never (or hardly ever) complained. My husband, Jon, has been unfailingly patient, as have my daughters, Kiki and Sara, and my sister, Sharla. Thank you all for your stellar support and unwavering faith. I believe friends as well as family make this process possible, and without either, I would have been lost. Laurie Walsh always made me laugh and kept me climbing for that coconut. Lucinda Long provided a much needed sounding board and sympathetic shoulder.

Finally, I want to acknowledge the women of the Washoe Tribe who shared their knowledge, history, and humor with me: I am in your debt. Some of you I only met once or a few times; others spent countless hours and drove thousands of miles with me. Without fail, you have been generous, knowledgeable, kind, and great fun. It has been an honor and a joy to work with you. Thank you.

Table of Contents

List of Tables

List of Figures

Chapter 1
Introduction

The goal for this dissertation is first to present a compendium of Washoe ethnobotanical resources, both historical and contemporary. Many scholars have devoted attention over the past one hundred years to Washoe ethnobotany, but no single source stands alone in detailing the subject. The work of many scholars is thus brought together in this dissertation, and this compilation of the historical and contemporary knowledge base allows comparative and holistic study of the topic, something not present in the corpus of Washoe scholarship.

The second goal is to suggest how ethnobotanical knowledge is used by a specific group of Women Elders[1] in proclaiming their cultural identity. Previous work with this group of Washoe Women Elders suggested that the Indian Way, which includes traditional ethnobotanical knowledge and practice guided by behavioral and spiritual proscriptions, marks contemporary Washoe cultural identity among them (Garey-Sage 1995). The role of these Women Elders seemed particularly important in preserving and protecting this knowledge for the Washoe Tribe, identifying

[1] *Women Elders* are capitalized to identify the specific group of eight women with whom I worked. Other uses of women or elders are not capitalized, identifying women or women elders in general. The group of women with whom I worked self-designated as Elders; I applied the term Women to identify gender-based knowledge.

Women Elders as the teachers and guardians, the ones who shape knowledge into wisdom. This original hypothesis guided my dissertation research.

The research questions for this dissertation were inspired by field work with the Women Elders and by the work, especially, of Hensel (1996) and Jackson (2002). Hensel worked with the Yup'ik people of Southwestern Alaska and presents a very intriguing model of contemporary cultural identity that is based on subsistence knowledge. The Yup'ik are a former hunting and gathering people who, in spite of changing economies, still orient their identity to traditional subsistence practice. The Yup'ik have strong parallels with the Washoe people, also former hunters and gatherers. The Yup'ik, like the Washoe, are people who are aware of their potential loss of cultural identity in a landscape dominated by non-Natives. Few Yup'ik people are able to practice subsistence economy on a full-time basis, yet practice and discourse about subsistence activities remain defining characteristics of a Yup'ik person. Similarly for Washoe Women Elders, traditional ethnobotanical knowledge and practice are highly valued more than a century after the disruption of their traditional way of life. Washoe Women Elders believe it is critical for well-being to harvest traditional foods, medicines, and material culture items, in the process monitoring the environment. These activities require proper behavior on the part of individuals to ensure the maintenance of environmental balance. The Women Elders, like the Yup'ik, also talk about the natural world. They tell stories, grant interviews, participate in pubic forums, and discuss amongst themselves traditional knowledge and lore. Most of these activities are conducted in English, although not exclusively.

Prayers of thanks and intercession are conducted in Washoe; prayer is considered to be an active and powerful practice, and it is in prayer that the use of the Washoe language may be most potent. Women also speak amongst themselves in the Washoe language when discussing plant knowledge, but communicate with researchers and non-speakers in fluent English. Interestingly for the Yup'ik, subsistence discourse does not have to be in the Yup'ik language (particularly as identity negotiations are conducted among non-natives as well as native peoples). For the Washoe Women Elders, however, the use of their native language is still a powerful marker of identity, and also intensifies the ability of the Women to interact successfully with the natural world.

Hensel's (1996) premise of identity is based on both discourse and practice; discourse because it is the more visible arena in which to establish and negotiate identity. The insightfulness of his work is compelling, and strong parallels exist between the Yup'ik and the Washoe people, but there was an element of identity among the Washoe that Hensel does not discuss directly for the Yup'ik. This element is authenticity of knowledge, based on practice or historical experience, not talk. Jackson's (2002) work filled in the missing piece, so to speak. Among contemporary Anishinaabe urban Indian people in an unidentified city in the Upper Great Lakes Region, Jackson observed that the authenticity of "living" the way, not just talking it, is critical to identity, especially when that identity is challenged or usurped by surrounding groups. Jackson had attended an annual business meeting of the county Indian Association, and came face-to-face with competition for Indian identity among a mixed audience of Anishinaabe people and recently self-proclaimed Indians, who for the most part, "traced their American Indian heritage to a Cherokee ancestor several generations back, whom they had not known" (Jackson 2002:5). The Anishinaabe and the newcomers were struggling for control of the organization, and finally, one Anishinaabe stated, "I'm sick of you self-proclaimed experts. You find some old Indian on your family tree and you think you know everything. Then you start telling other people what to do! *Our* elders *lived* it!" (Jackson 2002:5-6). This powerful testament to authentic experience echoes what the Washoe Women Elders voice: one must speak from authentic experience to claim knowledge or identity.

Field work with Washoe Women Elders and readings in the literature of ethnobiology and identity, especially the insights of Hensel and Jackson, have helped to form the research questions this dissertation addresses. First, has traditional ethnobotanical knowledge changed in the last one hundred years (the period for which records are available) among Washoe people, and if so, then second, how has that affected contemporary identity? Historical (both published and archival) records are compared with contemporary data gained from participant-observation fieldwork and interviews to illustrate both the stable and changing nature of resource knowledge[2]. Contemporary data also reflect the ways in which women talk about their own identity. As would be expected, the resource-knowledge base is less extensive than that of fifty years ago, and certainly that of one hundred years ago. In spite of a

---

[2] Plant information is presented in Chapter 4, and also in Appendix A, in which a master list of known plant resources, organized by Washoe terms, is listed in Table 1, with contemporary and historical documentations noted for comparative purposes.

smaller knowledge base, however, the ethic of the Indian Way is still verbally and explicitly espoused by Women Elders. Many resources are still significant to contemporary Washoe, especially as "cultural foods" and for the art and income of basketry. Pine nuts, acorns, berries, wild onions, watercress, willow, bracken fern, rabbits, deer, and groundhog are among the most strongly marked resources.

The third question asks whether authenticity is a factor of identity, and if it is, how is it gained? Elder Women's descriptions of resource utilization is often "authenticated" by prefacing the comments with a reference to how some ancestor taught them, which establishes a genealogy of practicing or living (to use Jackson's term) the traditional way. This serves to not only authenticate one's experience, but also to identify the experience at a family level, allowing for other families' different knowledge and practice, all of which combine to create tribal knowledge. This relates specifically to the dynamic and interactive nature of oral knowledge versus the authoritative tone of written knowledge.

A corollary to the third research question is: how will the next generation gain their authenticity? The contemporary environment for learning, including work and school commitments by younger Washoe and difficult access to traditional activities by Elders, makes it increasingly difficult for younger Washoe to learn traditional knowledge in the way the Elders did. Teaching of traditional knowledge is not a classroom activity; young people need to go out with the Elders, to learn by watching, and ultimately by doing. If there are limited opportunities, as perceived by the Elders, for younger people to have authentic experiences, what will happen to their identity as Washoe? This is a question that seriously concerns the Elders.

Interestingly, in the face of this concern, there comes a different pathway for authenticity. For younger Washoe people and other tribal members who have not had the opportunity for in-depth traditional cultural or *lived* experience, a cultural mechanism, which emphasizes *inheritance* of knowledge, replaces *living* knowledge, or knowledge based on first-hand experience. Using this strategy, people perform some traditional harvest or preparation never before undertaken by them and feel as if an Elder were guiding them spiritually and sometimes literally. This cultural mechanism of inheritance circumvents the restricted access to traditional learning that plagues so many contemporary Indian people. Such a phenomenon is also described by Hensel's work with the Yup'ik (1996), and Castellano's (2000) work. Castellano spent five years as co-director of research with the Royal Commission on Aboriginal Peoples of Canada, which encompasses First Nations, Inuit, and Métis peoples. Features of knowledge across this diverse group of people are detailed in her work, and Castellano refers to the above-discussed process of knowledge inheritance as "revealed knowledge," versus experiential knowledge (2000:24). Through such a pathway, the genealogy of authenticity is maintained, if not by actual environmental experience, then by a more ethereal one. This demonstrates how important authenticity is; if worldly authenticity is appropriated by various "postcolonial settings" (Hensel 1996:4), then the Washoe people will find another way to allow that authenticity of experience. Postcolonial settings include the introduction of wage economy, compulsory education, reservations, government housing, private property, and government restrictions, all of which disrupt traditional cultural patterns. These "settings" affect how individuals are able to define themselves and function as members of a distinct cultural group because, in many ways, the distinctiveness of the cultural group is being eroded by outside mandates. For the Yup'ik people, life in a small town comprising Native and non-Native peoples, and participation in wage economies, disrupt subsistence patterns and demand new avenues of cultural identification. For the Washoe people, similar postcolonial settings or disruptions are evident. Traditional lands were "settled" by ranchers and farmers, children were conscripted into boarding schools with concomitant suppression of language and cultural behaviors, adults were absorbed into wage economies, often seasonal work, and elders were removed from the family by new residence and economic patterns. All of these changes in cultural patterns present challenges for Washoe people to sustain and assert their cultural identity.

And finally, the last question addressed: is the traditional knowledge and skill of women more significant for Washoe Elder identity than that of men? Interesting work by Stanley A. Freed (1960) and Stanley A. and Ruth S. Freed (1963a) suggests restrictions on the contemporary male role that may reduce male influence. Native men tend to have a much different historical experience than women. Men were, and still are, more restricted from their traditional roles of hunter, warrior and provider than are women, who continue to perform domestic duties despite the abrupt changes introduced by loss of traditional lands, loss of political and cultural autonomy, and introduction of wage economies. Women's lives suffered their own assaults during forced assimilation, but their roles as mother, wife, gatherer, and basket-weaver were less intrusive upon EuroAmerican lives and thus stood a better chance of enduring. Women caring for children or gathering plants is much less conspicuous or even threatening than men hunting, fishing, or defending their land and family. Men were competing for valuable and favored resources; women often were not and this created very different historical experiences for men and women, suggesting gender-based influences on contemporary identity. For the most part, however, the seeming domination of women's role has more to do with the fact that plants and women's knowledge were the topics of this dissertation. Men's roles and men's knowledge were not investigated directly, but only revealed in comparative conversations by the Women Elders. Thus, this question is only partially explored in this context. Further research is needed to address gender bias in the Washoe colonial setting and its impact on contemporary identity among Washoe men.

In sum, several aspects of Washoe identity, as explored in the context of ethnobotanical knowledge, are suggested. Women Elders continue to mark traditional ethnobotanical knowledge as important to identity (and important for worldly well-being). Identity is expressed in multiple venues, that of tribe, family, individual, and gender. And identity is authenticated: the Women Elders authenticate their own experiences and describe pathways in which authenticity can be gained when physically precluded. Women's roles may or may not be more significant than men's for tribal identity; further research would be needed to examine men's roles in greater specificity.

Throughout this work, the terms *traditional knowledge* and *traditional ethnobotanical knowledge* are used. Other researchers use the terms *indigenous knowledge* (for example, Dei, Hall, and Rosenberg 2000), *traditional environmental knowledge* (Johnson 1992), *traditional ecological knowledge* (Johannes 1989) or *traditional botanical knowledge* (Cotton 1996). These terms all refer to the knowledge held by indigenous or traditional peoples about their environment, including plants, animals, birds, fish, insects, soil, weather, land management, and so forth. Traditional ethnobotanical knowledge includes the "utilitarian, ecological, and cognitive aspects of both plant use and vegetation management…[and are] concerned with the identification, processing and management of plants used in subsistence, material culture, and medicine, while considering this knowledge within its original spiritual and sociocultural context" (Cotton 1996:60).

Traditional knowledge is holistic versus the reductionist nature of Western science, meaning that for the Washoe Women Elders, plants are not neatly separated from animals, from insects, from weather or from many of the aforementioned topics. For the Women Elders, Washoe ethnoecology would be a more appropriate cover term, but the focus of my research is ethnobotanical, and thus plant information is presented primarily. It should be kept in mind, however, that Washoe traditional knowledge is much larger than ethnobotany; fishing, in particular, provided a wealth of resources to the Washoe people, but the concept of Washoe people as fisherfolk has been overlooked or distorted in the literature on Washoe. My work emphasized the continued importance of fish to Washoe people: women still speak wistfully of going fishing, and men claim they would eat fish every day if it were possible. Fishing is a resource of great significance, and Lindstrom (1992) and d'Azevedo (1992) have addressed the issue, but more needs to be done.

The transcriptions for Washoe established by William H. Jacobsen, Jr. (1964, 1986a, 1996) are used preferentially throughout the dissertation, and all Washoe terms have either been directly transcribed by Jacobsen in other work or verified by him for this dissertation. Terms not recorded by Jacobsen are transcribed as presented by the cited author, although in some instances, Jacobsen has suggested a corrected transcription from the citing author's original but obviously incorrect transcription. These corrected transcriptions are placed in brackets following the citing author's transcription.

Chapter 2
Research Methods

Washoe Women Elders

The Women Elders who were the consultants for this project are members of the Washoe Tribe of Nevada and California, federally recognized since 1936 when their first constitution was approved by the United States Department of the Interior (Constitution and By-Laws of the Washoe Tribe). The tribe is governed by the Washoe Tribal Council, a twelve-member body composed of individuals who are at least one-fourth degree Washoe Indian blood and who are least 21 years of age or older. All members, including the Chairman, are elected by enrolled members of the Tribe.

The federal status of the Tribe is predated by the long tenure the Washoe people have in their home territory, which lies along the base of the eastern Sierra Nevada Mountains, from Honey Lake in the north to the west fork of Walker River in the south, including Antelope Valley (Nevers 1976:3; W. d'Azevedo, personal communication, August 2003). The east face of the Sierra Range formed the western boundary, and from there, Washoe territory extended eastward, including the Carson Range and Lake Tahoe, to the Pine Nut and Virginia Ranges, providing both mountainous and basin environments and yielding a relatively abundant living.

The Washoe are unique among other Indian inhabitants of the Great Basin in that their language is not a member of the Numic family, but is an isolate of the Hokan family (Jacobsen 1986a:107, 1986b). The Women Elders are all fluent speakers of the Washoe language, and most went to school as young children having never spoken English before. Today, the Washoe language faces extinction unless tribal efforts to restore fluency are successful. A Washoe language immersion school has been established in Dresslerville Colony, where tribal members work to teach young Washoe children their ancestral language.

At present, of the 1,600 tribally enrolled members, 660 live on the tribal colonies of Carson, Stewart, Dresslerville (in Nevada), or Woodfords (in California) (Washoe Tribal staff, personal communication, December 2003). The term "colony" describes the small-acreage communities inhabited by Washoe people since 1917, when Reno-Sparks and Carson Indian Colonies were established, followed by Dresslerville. Reno-Sparks Indian Colony is not exclusive to Washoe people and is not under the jurisdiction of the tribe, unlike the other colonies. It was not until almost fifty years later that the two other colonies came under Washoe jurisdiction: Woodfords in 1970, and Stewart in the 1980s. The majority of Women Elders consulted for this project live on Dresslerville Colony (Figure 1: Map of Washoe Lands Today, from Nevers 1976).

Throughout their history of encounter with EuroAmericans, the Washoe never signed a treaty with nor were granted a reservation by the United States Government (d'Azevedo 1993:1). A land claims suit filed by the Washoe tribe in 1951 was

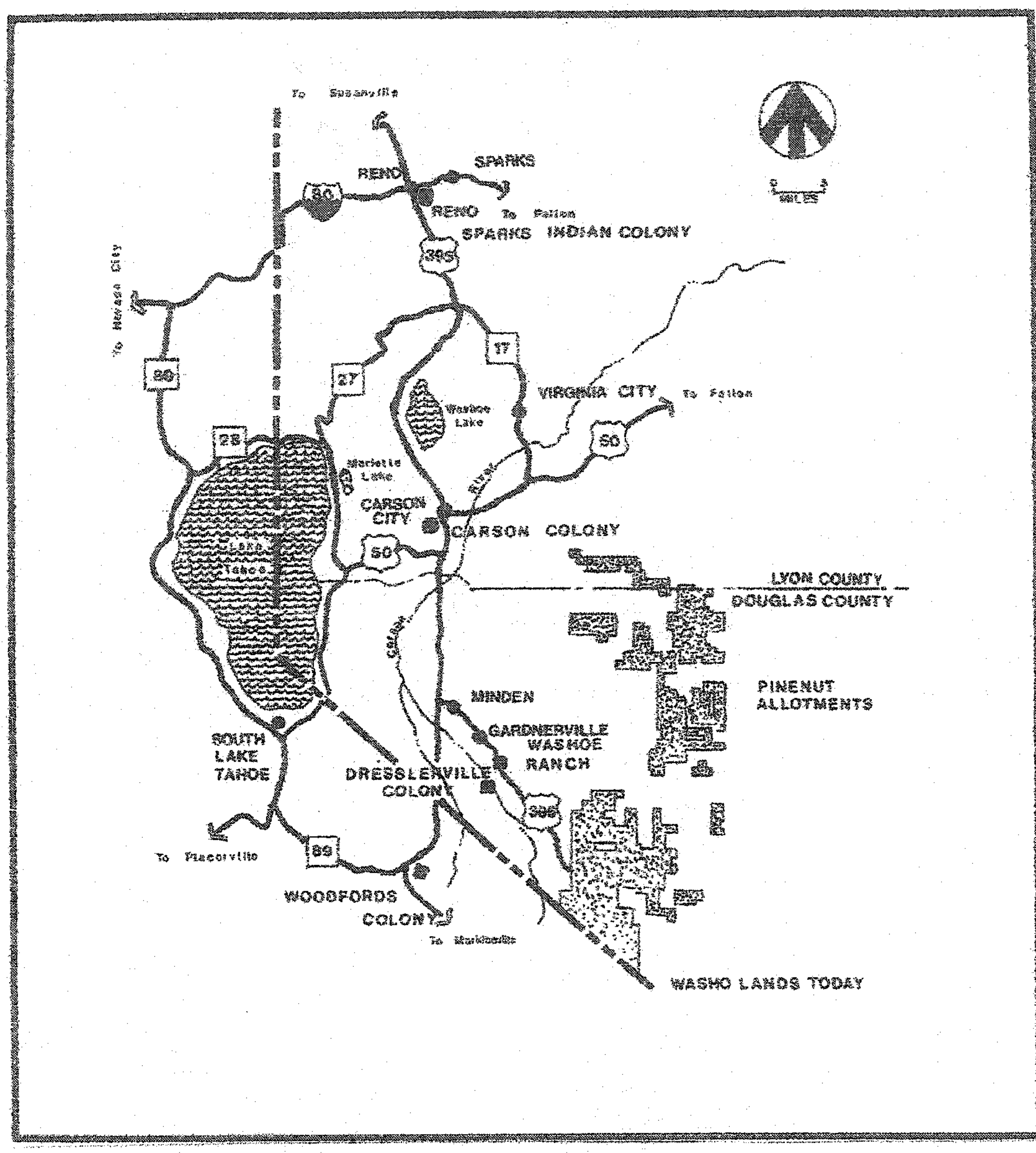

Figure 1. *Map of Washoe Lands Today*, reprinted from Nevers 1976 with permission from the Intertribal Council of Nevada.

resolved in 1970, with a greatly reduced aboriginal territory recognized and a paltry sum of approximately five million dollars awarded (Nevers 1976:91), much less than the 42.8 million dollars the Washoe were seeking as compensation for 9,872 square miles of lost land and resources (d'Azevedo 1986b:496). Washoe lands originally covered approximately 4,000 square miles of "nuclear territory" within a 10,000 square mile extended range (Price 1963:3), but contemporary tribal trust lands comprise approximately 6,000 acres (Washoe Tribal staff, personal communication, December 2003). The approximately 9.375 square miles of tribal lands represents a tiny fraction of original lands: 0.23 per cent of 4,000 square miles (nuclear) and 0.09 per cent of 10,000 square miles (expanded). Prior to acquisition of tribal trust lands, Washoe families had been granted approximately 61,000 acres in pine nut allotments (95.3 square miles), most of which lack water and are thus unsuitable for agriculture or home sites (Nevers 1976:62). Washoe families today often find that their inherited percentage of allotments shrinks with each generation's increasing heirs, maintaining the unsuitability of the allotments for home or business.

Despite the distress and difficulty caused by their encounter with EuroAmericans and the nearly constant predictions of imminent extinction, the Washoe Tribe today remains a visible presence in Northern Nevada and adjacent areas of California. The obvious physical signs of the Washoe presence include the tribal colonies, ranch lands, and tribal headquarters, with its multiple subsidiary departments, including the tribal court, tribal clinic, housing authority, development corporation, and environmental department. Dresslerville Colony, the most populated of the colonies, is the one where most tribal offices are located.

Washoe women of today are known to be fine weavers and artists, and their basketry is much sought after by collectors. The women elders of the tribe are recognized not only for their weaving, but also for their knowledge of the Old Ways. One elder in particular, Mrs. Theresa Smokey Jackson, was well known as a weaver, as a person with traditional knowledge, and as a spiritual leader.

Project History

In 1993, I met Mrs. Theresa Smokey Jackson and two of her sisters, JoAnn Smokey Martinez and Lucille Smokey Morris, the first of the Washoe Women Elders with whom I would work for this dissertation. I was attempting to convince Mrs. Jackson that she should have her life history recorded[3], something to which she was not immediately amenable. In the meantime, I began taking a weekly weaving class from the women and joining them for lunch at the Dresslerville Senior Citizen Center on the days of class. At the same time, I was enrolled in a beginning class of Washoe language, taught by Professor William H. Jacobsen, Jr., and so I would try out some of the pronunciations of Washoe, much to their amusement. From the beginning, the company of these women was highly enjoyable. Finally, I persuaded Mrs. Jackson to

[3]The recording of Mrs. Jackson's life history was sponsored by the University of Nevada, Reno, Oral History Department, and the recordings are on file in the Oral History Department.

consent to having her life history recorded (Garey-Sage 1995), and I was able to convince Mrs. Martinez and Mrs. Morris to record some reminiscences.

Through this work, I had formed the impression from both explicit and implicit statements that central to the identity of these women was the knowledge they held about traditional subsistence activities. Concomitant with these activities was an ethic, termed 'the Indian Way' by Mrs. Jackson, which proselytized a reciprocal harmony between Indian people and the natural world. Mrs. Jackson indicated on many occasions that the Indian way of living was essential for the well-being of all life, not just Washoe life. These powerful statements were both intriguing and perhaps indicative of a broader ethic that seemed to tie her, and possibly other Washoe people, to their environment. It appeared to be an important part of their contemporary ethnic identity, and well worth exploring.

Before formally beginning this research project, I went to Mrs. Jackson and Mrs. Martinez and told them I wanted to conduct research about Washoe plants, and about the ways that the plants affected their lives. Access to information among the Washoe is not something one should take for granted, and I knew I would not be able to undertake such a project if Mrs. Jackson and Mrs. Martinez were not willing to, in effect, "sponsor" me. I explained that I wanted to record as much information as I could about the plants so that the information would not be lost, once their generation of elders passed on. I stressed that this information would be more widely available as a result of my dissertation.

I already knew from my previous work with the women and from ethnographic information that knowledge is not something treated lightly among the Washoe people. Their view of life imbues many things, animate and inanimate, with *wegeléyu*, a power (d'Azevedo 1986b:490-1). Places and things are approached respectfully, always offering prayer first. One never knows what has been left behind by the 'Old Ones.' Knowledge and power are potentially dangerous; they need the mediating wisdom of Elders to dispense them, a belief echoed throughout aboriginal communities. Castellano write that

> Aboriginal people [in Canada] know that knowledge is power and that power can be used for good or evil…This is the reasoning behind the refusal of many elders to allow their presentations to be taped, and their resistance to having their traditional teachings transcribed so that they can be disseminated in print form. Teachers who allow these things relinquish the possibility of adjusting their teaching to the maturity of the learner and thereby influencing the ethical use of knowledge [2000:26].

It is not only the potential abuse of knowledge, intentional or non-intentional, that inspires many elders to resist having their knowledge written down; it is also the nature of written knowledge. Castellano writes that oral knowledge is constantly negotiated, critiqued, analyzed, and judged by the surrounding community, leading many times to a consensus, other times to respectful differences (2000:26, 31). Illustrating such a process, Blurton-Jones and Konner describe arguments and disagreements about animal ecology among !Kung hunters, but note that the goal is almost always to reach an answer or consensus (1989). The hunters are said to report new information forthrightly and to often disbelieve each other and express skepticism. Among the Washoe women who worked on this project, a critical interaction frequently ensued when knowledge was shared; others evaluated the knowledge based on their own experiences and expressed support, critique, sometimes disbelief, or occasionally even scorn. Such intragroup negotiations shape knowledge and reinforce behavioral norms that frown upon those who claim to know too much. This process of continual debate is what gives oral knowledge its dynamic, adaptive quality. Intragroup negotiations take place continually, always adding to the knowledge base. Once that knowledge is written down, however, it becomes frozen in time (static), and by virtue of being in print, it claims ultimate authority (hegemony), both of which are the antithesis of oral knowledge, and those who claim authority or authorship for that knowledge violate traditional behavioral norms.

Thus, you can see that none of the women cavalierly agreed to having their knowledge recorded. It is only their concern for the future generations of Washoe that prompted them to this decision. The women I worked with include Mrs. Jackson, Mrs. Martinez, Mrs. Florine Conway, Mrs. Shirley Frank, Mrs. Marie Kizer, Ms. Madelina Henry, Ms. Rina Anthony and Ms. Ninga Anthony, as well as other members of their extended families. I also met and talked with six other elders on a very limited, usually just one-time basis. Some initial interviews were conducted in 1997 and 1998, but more consistent work began in 1999. Interviews were conducted intermittently over a period of two years in the field, where plants could be observed and discussed first hand, as well as in the homes of Elders.

The group of women with whom I worked are all past the age of retirement; they have, for the most part, grown up on the Colonies or on pockets of land still inhabited by Washoe (areas in Markleeville or at Lake Tahoe). They grew up speaking Washoe as their first language, and the majority of them attended Stewart Boarding School. They are primarily conservative about being Washoe. They value the ways of their parents, and they idealize the memories of their youth. The future of the Washoe people, for these women, is inextricably linked to their past.

Among this group of Women Elders there is the belief that their generation is the last one to have any true connection with subsistence-based lifestyles. As very young children, these women would stay with their grandparents while their parents worked in wage economy. This connection with traditional knowledge was disrupted by their attendance at Stewart Indian School. Stewart was a boarding school where young Indian people were taught a traditional EuroAmerican educational curriculum as well as trades or crafts. Several of the women left Stewart Indian School after only one or two years, claiming homesickness or, in the case on one, being so rebellious that she was sent home. For this individual, the arbitrariness and mean-spiritedness of the school was more than she could abide. For the ones who claimed homesickness, the school was so differently structured from their home life they were unable to adjust. Other women stayed and graduated from Stewart, claiming it a useful and educational experience. Thus, although the women share similar cultural backgrounds, they have a wide variety of personalities and life experiences.

The experience these women had at Stewart is a result of the United States policy to Indian people prior to the 1934 Indian Reorganization Act. The goal was to assimilate and Americanize Indian people. "Indian traditions of government, land tenure, religion and community life were ignored, undermined, or even destroyed in this program" (Wall 1952:80). For many of this generation of Washoe Women Elders, Stewart Indian School was an experience that cut them off and isolated them from the lives and traditions of their families. While at Stewart, the women were not allowed to speak the Washoe language; this forced abandonment of their first language similarly isolated them from traditional patterns. Grandparents and parents spoke to and taught young people in Washoe, not in English.

Some of the women stayed at Stewart, but others returned home after only one or two years. Those who returned home were able to continue speaking Washoe with their parents and grandparents, and were able to accompany their families in subsistence activities. These experiences are highly valued and emphasized by the Women Elders. Some of the women who stayed at Stewart returned home after many, many years away; others never left and spent their whole lives in Washoe country. All of the women— whether they left or stayed at Stewart, whether they left Washoe lands for awhile and came back, or never left at all—repeatedly emphasize the almost sacred value of their native language, the knowledge they have of their environment, and the spiritual ethic they embrace. These Women Elders are publicly recognized by the tribe as those who are most frequently called upon to teach and pray and represent the tribe. Many of this group attended the Lake Tahoe Summit Meeting (1997), invited by tribal leadership, and were introduced to then Vice-President Gore, effectively representing *who* and *what* the Washoe are to the federal government. At the funeral of Mrs. Jackson (1999), the Tribal Chairman remarked that the elders are the most precious gift the tribe has; the loss of each is staggering. Additionally, these Women Elders are often the spiritual leaders of their extended families, and some act as spiritual leaders to those outside their families. These Women Elders command profound respect and status.

One should not get the impression, however, that the role of these Elders is unilaterally embraced. As in many other Indian communities, dissent among members is not uncommon. This dissent suggests hunter-gatherer leveling mechanisms, in which all members of the group are equally valuable, and lest someone get the idea they are better than everyone else, let's tell them they're not[4]. As Woodburn puts it, hunter-gatherers are "assertively egalitarian" (1982:431). Granted, modern Washoe are a long way from their foraging past, but social mechanisms and cultural values endure in spite of changes to economy, especially when the cultural identity of the group is linked to traditional aboriginal practice. For the Washoe, who never left their home territory, but instead witnessed its acquisition by EuroAmericans, the highly visible and symbolic presence of their aboriginal territory reinforces a direct link to their history and traditional patterns. Residence in the small community-based colonies and surrounding lands with the concomitant limited economic opportunities also serve to keep Washoe people connected with

---

[4] Richard B. Lee's classic account of hunter-gatherer leveling devices aimed back at the anthropologist is vividly demonstrated in *Eating Christmas in the Kalahari* (1969).

their aboriginal cultural patterns, such as the aforementioned leveling devices that suggest destructive dissent to those witnessing the process. Such dissent and 'leveling' often cause outsiders to lament the fact that the Indians just can't get along. Another way of looking it at, however, is that the Washoe are exercising cultural patterns from their foraging past. Centralized political offices and bureaucratically run institutions are the very opposite of the egalitarian, consensus-based political patterns of foragers. The challenge for contemporary Washoe is to find a way to embrace and maintain their distinctiveness as former foragers (what Mrs. Jackson encapsulated as the Indian Way), while still functioning in the larger sociopolitical arena outside their door. For the Elders, it is their job to keep the past alive; it is the job of younger people to take the Washoe fully into the twenty-first century.

Dissent among tribal members is also fostered by the fact that elders with different experiences command different knowledge bases, different stories, and different methods. This is not abnormal among people; it only becomes problematic when a governing body decides to recognize one group over another. The Women Elders with whom I worked are frequently designated by the tribal government to represent the tribe, but other elders also represent the tribe on other occasions and for other projects. This recognition can often lead to criticism and conflict between groups.

Among this group of Women Elders, who stress the importance of their language, none taught their own children to speak Washoe as English was already dominating their daily interactions. Mrs. Jackson used to say, "I don't know why I didn't talk Washoe to my children." She always spoke Washoe with her parents and often with her husband, but never with her children. For this generation of Elders, their children were attending schools dominated by English; parents were working in jobs that required English; and jobs and schools kept children from spending more time with their grandparents where the Washoe language was still being spoken.

Besides language, other traditional activities waned for many of this generation of women during the period of time raising their children. They were busy and focused on caring for their children and homes, supervising their children's schooling, and performing their own work (many had jobs outside the home to supplement family income). It was not until their children were grown and they retired that many of them began to return to the patterns of their youth. Sisters began spending more time together, speaking Washoe amongst themselves, and going out to gather willow for basketry and other plants.

Thus, these women feel their generation is the last one to have a direct connect with the 'Old Ways', even though they realize their connection is weaker than that of *their* elders. The women explicitly acknowledge the importance of traditional knowledge, and for that reason, Mrs. Jackson and Mrs. Martinez agreed with me that the documentation of Washoe plant knowledge was an important endeavor. I asked them to identify women with whom they thought it would be appropriate to work.

Throughout the project, I followed rather than led these women (not that I *could* have led them). Using the methods of participant-observation, I began a series of weekly field trips with various groupings of these Women Elders. I would pick them up, ask them where we going, and drive where they told me to. We stopped when they said to stop, and we looked at the plants they wanted to see. All of the information collected was explicitly identified by the women as a known resource. I never asked them about a plant they did not mention, because the goal was always to follow their direction, to learn what they identified and marked as important, and hopefully, why. The opposite approach of explicitly asking about plants from a list compiled of historic plant references would have been productive as well, but it was not the method employed herein. My goal was to have the Women Elders identify the resources, so that what they remember and mark for identity is represented without an outsider jogging their memories. It is entirely possible that the resulting number of marked plants would have been larger had another approach been used.

Funding from the Liljeblad Endowment allowed us to start work. After a few preliminary field trips in 1997 and 1998, the first field season began on June 9, 1999 and continued until October 7, 1999, when Mrs. Jackson unexpectedly took ill and passed away. The other women were in mourning and did not want to continue field work at this time. It was a devastating loss for all who knew Mrs. Jackson.

The women would have resumed field work in the spring of 2000 (and were, in fact, disappointed that I was delayed), but graduate studies, work, and children precluded me from resuming field work until April 27, 2001, at which time we began our second field season, again funded by the Liljeblad Endowment. This season lasted through November 2001. The one change to this field season was that, on the insistent urging of one of the Elders (the youngest of the group), I brought several plant books along so she could identify unknown plants. There were many plants the women would see, recognize as significant, but memory failed them. After we acquired the plant books, the Elder who had requested the books cheerfully pored through the books, identifying plants she had seen and felt were important, but now she was able to give them a name, even if it was an English name. Often, it provoked more memories, or, she would read descriptions of plants, trying to match them with information her parents had told her. In an adroit display of bicultural facility, this Elder was using Western science to access Washoe traditional knowledge, in which use rather than form can be the organizing feature. For many of these Washoe Women Elders, their grandmothers and mothers showed them the dried product and discussed harvesting patches, sometimes without discussing the appearance of the living plant or sometimes giving fairly generic descriptions. This is where the lack of full-time subsistence activity with their mothers and grandmothers is evident; for many plants, the Women Elders simply did not have enough time in the "field" with their elders to identify all growth stages of a plant. But, traditional knowledge is adaptive, and this particular Elder was using contemporary resources to reconstruct information.

During both field seasons, I took notes, took pictures, and sometimes collected specimens. For the most part, however, I relied upon the ethnographic identification of plants by the Women Elders. I did not tape record conversations, due to the constraints of transcription and the multi-tasking required to drive, dig for plants, take notes, take pictures, and so on. When conversations are indicated in text, it is a reconstruction of the conversation. To the best of my knowledge, it is a true reflection of the conversation and content expressed by the Women Elders. Particular phrases and sentences were sometimes written down verbatim in my field notes. In general, the two field seasons taught me as much about fieldwork as they did about ethnobotany. In retrospect, I should have paid much more attention to the exact words of the Women Elders so that their voice would have been much stronger in this work. In the field and in interviews, the women are eloquent and passionate, and highly knowledgeable about Washoe plants and the Indian Way.

In 2002, I had the opportunity to conduct subsistence-based interviews for the Washoe Tribe Resources Policy Program in association with one of their research projects. The Tribe generously allowed me to request permission from those interviewed to use this information for dissertation research. I conducted interviews during August, September, and December, 2002, and January, 2003. The use of an interview form, designed specifically to elicit steps of harvesting, processing, and consumption and to note quantities, provided a good complement to the information obtained from the open-ended conversational approach used in field sessions. Most of the information was similar, but in some cases the information was much more comprehensive when using the form, although the consultants did not enjoy the interview process, whereas they all stated repeatedly how much they enjoyed field sessions. The tedious elicitation of highly specific and detailed information during the interview process was tiresome to most of the interviewees. Field trips, in contrast, were relaxed, and focused more on "doing" than on "telling," which echoes the traditional teaching methodology of hunters and gatherers: the teacher performs the task and the student observes and then repeats the task.

Although the field trips were stretched out over two years and supplemented by the tribally sponsored interviews, I do not believe the information collected is comprehensive. As a group, we seemed to have a bias for visiting mountainous areas rather than desert areas, so some plants that might have been recognized and discussed in different habitats are missing. Of the floristic regions, we spent more time in the Sierran and transition regions rather than the Upper Sonoran or Great Basin region (see Chapter 3 for definition of these regions). Among plant communities, we frequented both the lower montane and upper montane regions of the Sierran zone, as well as the nonconiferous communities, especially montane riparian and meadow communities, with the exception of the high altitude short-haired sedge meadows. Lower montane chaparral, white fir and mixed conifer forests, and riparian zones were frequented also. In the transition zone, we spent time in the pinyon-juniper belt, but not nearly to the extent we spent in the Sierran zone, and we only encountered sagebrush scrub zones as they encroached upon the pinyon juniper belt. Grasses in particular were not a focus of our work.

The women were primarily from the Dresslerville area, and had knowledge of regions around Lake Tahoe, Hope Valley, Blue Lake, Silver Lake, and Antelope Valley. We ventured as far south as June Lakes and Mono Lake, and as far west as Jackson, California. We never went into Northern Washoe territory, nor did I interview anyone from that area. Preferred areas included regions around Lake Tahoe, such as Barker Pass, Fallen Leaf, Taylor Creek, Meeks Bay Meadow, and Cathedral Meadow; regions around Markleeville, including Monitor Pass and Wolf Creek Meadow; and from Dresslerville to Hope Valley, past Grass Lake, to Meyers, in addition to many other sites visited less frequently.

Men were not included in the field sessions. Originally, I had planned to work with men as well as women, and made several efforts to get some men involved in the process, but it never quite happened. I spoke informally with a few men throughout the process, but never to the extent I worked with the Women Elders. Eventually, I realized that the women's knowledge was more than enough to attempt to document, and for those who have had the pleasure of being out gathering with Indian ladies, it is quite a joyful occasion. After a while, I simply did not want to sacrifice those dynamics.

Theoretical Approaches

Theoretical concerns for the study of contemporary cultural identity center around whether identity is inherent or constructed, with many scholars accepting identity as negotiated or constructed, following Barth's 1969 model of ethnicity, which shifted studies of ethnicity or cultural identity from content (cultural traits) to boundary maintenance (see, for example, Blu 1980, De Vos and Romanucci-Ross 1975, Eller 1999, Fitzgerald 1993, Glazer and Moynihan 1970, Nagel 1996, Roosens 1989, Sollors 1986, and Spicer 1988). Most agree that cultural content is useful as a marker of identity, but not critical to identity itself. If one marker is no longer available, others will fill its place. Problems with such a notion of constructed identity include the perceived lack of authenticity of such identity (see, for example, Roosen's 1989 description of ethnogenesis among the Huron of Canada).

The other side of the coin, primordialism, sees an inherent basis to identity, but has its own problems. Blood quantum issues (Strong and Van Winkle 1996) and the "freezing" of cultural patterns (Merculieff 1994) stymie Native people, refusing to allow for self-identification or adaptation of cultural practices. There are problems with both the constructed and inherent approaches to identity. Those who view identity as constructed may ultimately belittle Indian identity, whereas those who base identity on some inherent mechanism freeze Indian people in the past, blocking the ability of Aboriginal and Native people to participate in the future.

The same questions present themselves in the so-called revisionist debate among hunter-gatherers. In 1994, Ernest S. Burch, Jr., and Linda J. Ellanna edited a book entitled *Key Issues in Hunter-Gatherer Research*, which deals with the problems emphasized by the revisionist debate, that of using the ambiguous typology of forager to base analysis on and to model human cultural evolution. The revisionist position, represented by Schrire (1984) and Wilmsen (1983), views hunter-gatherers as members of a larger socioeconomic or political group rather than as independent culture with their own separate history and cultural patterning. Lee (1992) argues against such a view, noting that the San Bushmen of the Kalahari have shared historical experiences and self-conception as "hunter-gatherers," establishing validity or authenticity for their status as hunter-gatherers. These issues echo those of the identity debate, especially among former hunter-gatherers who now live in a contemporary and usually urban political economy: are cultures real (i.e., legitimate)? Or is identity constructed, its boundaries reflecting the larger political and economic environment? If it is constructed, can anyone then claim to be a member? Or, are there standards of authenticity to discern membership? The questions of the revisionist debate are the same as those of contemporary identity among foragers, and the positions are more than academic. Political agendas depend on the perceived validity of cultural identity. Lee comments, "It is striking how the largely male, White, and Western poststructuralists are proclaiming the death of the subject, precisely at the moment when alternative voices—women, people of color, Third World and aboriginal people—are struggling to constitute themselves as subjects of history, as the makers of their own history" (1992:36). Ward Churchill (1992), a Native American activist, also decries such an agenda, writing that scholarship (literature and literary criticism, anthropology, history) and popular culture all act to deny Indian and ethnic identity, by usurping and simultaneously deconstructing identity.

The definition of identity adopted herein takes a more moderate stance, considering cultural identity as constructed in that it is adaptive and responsive to changing conditions, but inherent in that it is based on an indigenous and familial experience or shared historical reality. The significance of shared historical experience in contemporary cultural identity is stressed by Hensel (1996), Jackson (2002), and Spicer (1975), as well as Geertz (1973). During field work for this dissertation, the importance of indigenous and familial experience was repeatedly emphasized, in fact, became the standard of authenticity on which identity was based by the Women Elders. The moderate stance mitigates the view of a constructed cultural identity as somehow counterfeit, and also effectively blocks usurping (and weakening) of identity by newcomers; it similarly deflects the primordialist view of hunter-gatherers as frozen in time. Women Elders drive to gathering spots; they use mechanical grinders in place of grinding stones[5]; they freeze berries for later use; they prefer a geologist's pick to a digging stick; does this invalidate their cultural legitimacy? No, it reflects the adaptability of cultural behavior.

Scholars of ethnic identity who embrace the subjectivist paradigm suggest that the selection of particular cultural features to mark identity is irrelevant; features change and adapt according to the social, economic, and political climate. In contrast, hunter-gatherer studies suggest the significance of environmental, including ethnobotanical, knowledge for identity. The field of ethnobotany lends itself to an ethnobotanically based portrait of identity, in which cultural content is significant[6]. The study of ethnobotanical knowledge to reveal sociocultural perceptions and to demonstrate the interrelationship between plants and people are among the explicit goals of ethnobotany (Cotton 1996 and Weber 1986). The study of cultural identity among Washoe Women Elders falls within the realm of sociocultural perceptions, just

---

[5] Rucks 1995 also discusses the continued importance and cultural significance of ground stone milling in a contemporary context.

[6] Elabor-Idemudia states that indigenous knowledge, expressed either through folkways or by traditional practice and transmitted by folk wisdom, is instrumental in maintaining cultural identity, providing a "basis for resistance in later life" against assimilating forces (2000:102).

as the interrelationship of plants and people in this instance is the use of plant knowledge by Women Elders to mark Washoe identity.

Definitions of ethnobotany are abundant, as the field is diverse and prolific, but Ford provides one of the best commentaries, stating that ethnobotany

> lacks a unifying theory, but it does have a common discourse. The historical threads, which give texture to contemporary ethnobotany, derive from a variety of sources. Although botany, anthropology, archaeology, natural history, linguistics, and herbal medicine have contributed to the discipline in an unsystematic manner, the accumulation of methods, viewpoints, and data from each field has enriched and enlivened ethnobotany [1978:29].

Traditionally, ethnobotany has studied the use of plants among non-western people, who most often practice a direct subsistence pattern (e.g., foraging, horticulture, or non-industrial agriculture). The study of ethnobotany does not by its definition preclude non-traditional people, but the practice has historically tended to do just that. "This emphasis, in fact, has provided the most common and misleading definition of ethnobotany—the uses of plants by primitive people" (Ford 1978:31). Cotton observes that ethnobotany focuses not only on how plants are used, "but also on how they are perceived and managed, and on the reciprocal relationships between human societies and the plants on which they depend…" (1996:1).

The study of the role of ethnobotanical knowledge in marking Washoe cultural identity among Women Elders fits within the goals and definitions of ethnobotany. The perception of plants by the Washoe Women Elders, and the interrelationship between the Elders and the plants, include the idea that the plants of Washoe lands identify those who interact with them appropriately as Washoe. The plants need the

Washoe people, and the Washoe people need the plants. Such knowledge and interaction are life-affirming and essential to worldly well-being.

Ethnobotany is only one component of the wider study of ethnoecology, which is "increasingly used to encompass all studies which describe local people's interaction with the natural environment, including subdisciplines such as ethnobiology, ethnobotany, ethnoentomology, and ethnozoology" (Martin 1995:xx). Ethnoscience is also used as a cover term, and "the contemporary definition of the term is the use, importance, and perception of the environment in its most general sense by the original inhabitants of the North American continent or by aboriginal peoples elsewhere" (Ford 1978:40).

The inclusiveness of the terms ethnoscience and ethnoecology reflect the nonreductionist nature of ethnobotany or ethnozoology. Ethnobotany may be concisely defined as the relationship between plants and people, but that relationship includes knowledge of soils, weather, water, and more. Washoe Women Elders were working specifically on plant knowledge, but information about animals, birds, insects, fish, minerals, geography, and weather was often volunteered, demonstrating their ecological approach to traditional knowledge. I did not pursue those topics because they fell outside of the research questions, but had I changed my approach, the information gathered would have been much broader.

Although the study of identity related to ethnobotany is not found in existing literature, the study of cultural or ethnic identity negotiated through discourse comprising subsistence knowledge is modeled by Hensel's work among the Yup'ik of southwestern Alaska (1996). This served as my guide for analysis of identity, based on ethnobotanical data, among Washoe Women Elders. The marking of cultural identity is revealed in how people talk about themselves and how they contrast or align themselves with others; these features highlight what people mark as significant in identifying and defining themselves. For the Washoe Women Elders, the definition of who they are and how they are different from other Indian tribes, from EuroAmericans, from other families within the tribe, or from younger people centers on their knowledge of traditional Washoe patterns, including use of the Washoe language. Knowledge of traditional Washoe life ways in turn is dependent on ethnobotanical knowledge, because the Washoe people, before disruption by the negatively perceived EuroAmerican culture, were a hunting and gathering tribe who lived in a direct and reciprocal relationship with their environment. The process of gathering information about plants spontaneously revealed information about Washoe identity among this group of Washoe Women Elders, for whom gathering was their traditional role.

Methodological Approaches

Investigating the role of ethnobotany in cultural identity among the Women Elders was not a formal process; that is, no surveys or questionnaires were designed to elicit definitions of identity. Rather, work on ethnobotany kept bringing identity to the forefront. Beginning with research for my master's thesis and continuing through the research for this dissertation, the relationship between traditional ethnobotanical knowledge and cultural identity would not be ignored. Women presented ethnobotanical information as *Washoe* knowledge; they contrasted it with Paiute knowledge; they stressed the superiority of Washoe knowledge and behavior to EuroAmerican ways; they explicitly worried about younger Washoe who would not have this important knowledge; they commented obliquely and directly about differing knowledge among families; and they believed the world was falling into harm's way because of the disruption of the Indian Way, specifically for them, the Washoe Way. The study of ethnobotany has long been instrumental in eliciting utilitarian knowledge or cognitive patterns among traditional peoples; in this instance, it vividly elicits features of identity, expanding the usefulness of the ethnobotanical data.

Methodological concerns of working with contemporary and former hunter-gatherers are addressed by Burch (1994). First, he notes that hunter-gatherers are rapidly disappearing, at such an alarming rate that researchers who conducted field work even ten to thirty years ago can no longer replicate their own research. Burch suggests that rather than field ethnography, the focus of investigation must switch to the use of historical records and original field notes of earlier field investigators.

This subject of this dissertation is not the study of hunter-gatherers as a cohesive, distinct social typology, but rather the role of traditional knowledge (based on ancestral hunting and gathering lifeways) in contemporary identity. And Burch is entirely correct. The Washoe no longer practice a foraging way of life, and much has changed, some of it very rapidly. The field work conducted by William H. Jacobsen, Jr., and Warren L. d'Azevedo in the 1950s cannot be replicated now in 2003. Historical documents and the field notes of earlier field workers are available, and some of the unpublished field notes, from Hudson in 1902 all the way through Jacobsen and d'Azevedo in the 1950s, are the most productive resources. Indeed, the ongoing field work of Jacobsen and d'Azevedo spans through to the twenty-first century, yielding an in-depth record of cultural and linguistic change among the Washoe.

Burch (1994) also suggests that historiography will replace ethnography when dealing with hunter-gatherer topics, unless one shifts their focus to the study of social or cultural change. Ethnography is still a productive methodology for those investigations. Identity as a topic of cultural change fits well within this category and lends itself to ethnographic study.

The research for this dissertation has combined the two approaches. For information not available from ethnography, field notes from earlier researchers were available due to the generosity of the scholars. Secondly, the ethnographic component supports work on culture change and/or stability. Plant information is marked and significant to contemporary identity, and remains within the knowledge base of these Elders, although the quantity of knowledge has decreased.

The last criticism offered by Burch applicable to this project is the issue of "read back," in which information is collected by consultants from anthropological sources and then given back to anthropologists as primary data. Burch cautions that one must be on the lookout for this among literate populations, especially when young people seem to know more than the elders (1994:444).

In large measure, read back was not an issue among the Washoe Women Elders. The habit of most consultants is to preface their statements with whoever taught them, i.e., my mother taught me…my grandmother said… and so forth. This serves two purposes. It authenticates the information, and it stresses that the information being provided is not meant to be the ultimate authority, but only their own information. Read back may have been an issue in that most of the Washoe have a copy of *Wa She Shu*, a tribal book written by a Washoe woman who interviewed Washoe elders and researched historical and anthropological records to compile a book about the traditional Washoe. This circumvents Burch's concern of anthropologists informing other anthropologists, in that the book represents cumulative Washoe knowledge, including but not limited to anthropological knowledge. Traditional knowledge in its oral form is based on consensus, as Castellano writes (2000:26). The use of *Wa She Shu* may serve that purpose for Elders in an environment where consensus is not available. The book offers other Washoe viewpoints, used to check and balance their own information. One Elder stated that the Elders now don't know as much as they should, but there is no one left to ask. *Wa She Shu* may serve as someone to ask.

More pragmatic methodological concerns with documenting the contemporary status of traditional ecological knowledge are addressed in a critique of the Dené Cultural Institute's pilot study, from 1989 to 1991, to record traditional knowledge among Dené elders (Johnson and Ruttan 1992). The study was conducted intermittently, and the researchers noted problems of lack of general community involvement, inefficient use of elders' knowledge for training of local researchers and interpretation of data, problems with linguistic and research skills of the local community researchers, and an overall problem with timing. Too often, a hunt or harvest occurred when the outside researchers were not around to document the event.

The problems listed above are pertinent here in two categories. First, the Washoe ethnobotany project did not involve the entire community, but it was not designed to do so. The trust placed in the project by the Women Elders depended on their controlling who was involved. The judicious dispensation of information was dependent on that fact. This was not a tribally sponsored project, nor was it a community-wide survey. The project was designed to work with this particular group of women with whom a relationship was in place.

Second, events often did take place when I was not around. My field work with the Women Elders was not a traditional, residence-based experience. I traveled to Dresslerville on days we arranged, usually once per week. When I tried to push for two days per week, the women replied that it was too much. They either had other obligations or did not have the energy level to devote two full days per week to field trips. Although I often asked to be contacted when events were taking place, it did not happen. I respected the choices the women made about our time together.

The problems with local community researchers did not affect me, as I was the only researcher on this project. Linguistic training by William H. Jacobsen, Jr. in the

Washoe language gave me sufficient familiarity with the language to collect plant names in Washoe. Also, the women were all fluent in English. My conversations with them were always in English. Although the women often reverted to Washoe amongst themselves, someone would always feel sorry for me and tell me what they were saying, especially when a joke was involved.

The Dené project used a "structured conversational approach," which was employed here as well. The researchers among the Dené noted problems with some of the use of abstract English words and concepts, which

> were difficult both to explain to the local researchers, with their limited understanding of English and Western Science, and to translate into North Slavey. Community researchers also found that questions suggesting a control of species often elicited a negative reaction from informants because of the negative connotation that the idea of controlling a wild species has in Dené culture. Similarly, informants were sometimes reluctant to divulge specific numbers of animals harvested. The community researchers explained that this was so because some Dené considered discussion of hunting or trapping success to be bragging or feared the information might be used against them by the government [Johnson and Ruttan 1992:50].

Fortunately for me, there were no translation problems. There were, however, definite negative reactions by the Women Elders to discussions about environmental management that suggested "controlling" nature. The discussion of any type of burning for environmental management was vehemently denied, and the Women Elders stated that the Washoe did not start forest fires like the *dabóʔo* (white people). Questions about purposefully coppicing willow for basketry, sometimes recognized by other groups[7], were denied, because the women embrace a view of Washoe people living with nature, not manipulating it. Nonetheless, the women follow the path left by the Highway Department where it has mown willows to the ground alongside the road. The Highway Department cuts in the spring, and in the fall, the women follow this path so that they can find the straight, new shoots, which are produced by the Highway Department's unintentional coppicing. Additionally, my previous work with Mrs. Jackson had taught me to keep asking in different ways, removing words that may be prejudicial, and eventually, an answer will be forthcoming (although fire was always associated with the irresponsible *dabóʔo*).

Finally, the Dené project researchers concluded that field settings were much more conducive to productive sessions than interviews in the office. Again, I had the same experience. The women enjoyed the field sessions much more than the interview sessions, and that certainly influences the data. Although I had no field sessions with two of the women and their interviews were quite productive, so individual variation plays a role as well.

Other criticisms of traditional knowledge investigation include that biological truths are sometimes embedded in myth, or that differential knowledge exists among consultants, depending on age, gender, social status, intellectual capacity, and profession (Johannes 1989). Embedded biological truths were not a problem herein,

[7] Catherine S. Fowler (1986:94) notes that Paiute women at Walker River specifically recognize this process as productive for creating the desired straight new-growth shoots sought by most basket-weavers.

and again, previous work had identified these women as elders with widely recognized skill and experience concerning traditional knowledge.

One final criticism, not mentioned by the Dené study, but one which must be dealt with, is the idealization of the past, especially when the past is used to define contemporary identity. It is difficult to imagine working with elderly people who do not view the past with a certain romantic or idealized slant, and this was often the case herein. Women Elders may have recounted tales of the past that focused on the distinctiveness of their traditional patterns, while de-emphasizing the changing patterns of contemporary life and identity. Their focus takes them back to a truer time that exists perhaps only in their memories. This idealization of the past does not compromise contemporary identity, but rather, is a powerful statement about identity in and of itself. Women choose to identify themselves based on the patterns and lifeways they recall and interpret as the way it *should* be. They look back on their lives from a seventy- or eighty-year-old perspective, and they mark as significant those things that they now recognize as important. Disturbing and painful memories of prejudice, poverty, failed or abusive relationships, family-related drug and alcohol problems, and other social and personal ills are not ignored, but are specifically related by these women, in large part, to the distance Indian people now have from their traditional pasts. Thus, for the Washoe women with whom I worked, the idealized past is the path to a wiser future, and they want younger Washoe to be able to choose that path.

In sum, within this chapter, Washoe Women Elders have been identified, the history of the research project recounted, and the methods and theories used to study contemporary cultural identity among Washoe Women Elders discussed. Theories of cultural identity are found to be less amenable than those of ethnobotany in exploring how plant knowledge may portray cultural identity among a particular subset of the Washoe population. Methodological problems with collecting traditional plant knowledge, because of the nature of oral traditional knowledge, as well as problems with the study of hunter-gatherers in general, have been discussed in relation to this study.

Chapter 3
Historical and Environmental Context

Historical and Ethnographic Sources

The study of Washoe ethnobotany rests on some very important historical and ethnographic sources, but none of the sources stands alone in presenting the subject. Historical sources are combined and compared to gain a fuller picture of Washoe ethnobotany, and, along with contemporary data, are summarized the Table 1, Washoe Plant Resources, which is presented in the Appendix because of its large size. The table is designed to present a master picture of plants known to the Washoe. Narrative discussion of plants is found in Chapter 4.

The historical information spans almost one hundred years and reflects a variety of investigative motives and techniques. Two of the earliest scholars to document traditional Washoe resources and environments were John W. Hudson, collector for the Field Museum of Natural History in Chicago, and Clinton Hart Merriam, director and collector for the United States Biological Survey from 1885 to 1910. Merriam, a physician and naturalist, was then supported by the E. H. Harriman Fund, studying the biology and ethnology of primarily Indian people of California until his retirement in 1936 (dynaweb.oac.cdlib.org:80/dynaweb/ead/berkeley/bancroft/m80_18_cubanc).

John W. Hudson's field report from his 1902 visit to the Washoe people provides a valuable baseline for Washoe ethnography and ethnobotany. The Field Museum of Natural History, Hudson's supporting institution, began to gather Native American ethnographic and archaeological materials to augment its collection obtained for the World's Columbian Exposition. From 1895 to 1910, the Museum actively pursued ethnologic and archaeological collections (www.fmnh.org/ research_collections/photography/collections.htm). Hudson's collection of Washoe material culture is still housed at the Field Museum.

Hudson's focus was on material culture, although he also lists general ethnographic information (such as marriage and death customs, housing, health, and the Washoe origin myth). Hudson reports a total of forty-three plants, twenty-five of which are named botanically (although three cannot be matched to a current botanical name and one additional botanical identification is matched tentatively [Table 1]). He lists eighteen common names and only one Native term (*talatapul*). Hudson's descriptions of camps, material culture, and lifestyle of the Washoe, as well as the use of native plants, paint a rich and deep portrait of early Washoe life. His notes are particularly important in highlighting seed resources, as twelve of his plants are thus identified. He is the only source to describe a bulb, "probably from some Yucca", brought into Washoe territory from the south and cooked into cakes (Hudson 1902:250). Yucca does not technically have a bulb; it is the stalks, seeds, fruits, flowers and apical meristems that are consumed (Fowler 1986:69).

Merriam conducted biological surveys among the Washoe people in Carson Valley, Sierra Valley, Lake Tahoe, and Reno in 1903, 1904, and June of 1935; he also collected Washoe vocabulary words in 1923. This early work is immensely valuable to the biological, historical, and ethnographic record of the Washoe people. In fact, his is the only work until that of Mrs. Juanita Schubert in 1957 (based on contributions by William H. Jacobsen, Jr.) that provides a significant number of taxonomic identifications of Washoe biological resources. Dangberg (in Jacobsen n.d.c.) and Train, Henrichs, and Archer (1941) offer limited botanical identifications. Merriam lists the Washoe terms for seventy-three botanicals, although one is illegible. He also lists fourteen other terms for plants or products not identified botanically. Without Merriam's contribution, much of Washoe biological knowledge would be lost. His work is the single most important resource for botanical identification of Washoe plants.

Following in the path of Merriam and Hudson was Samuel A. Barrett, who visited the Washoe people in 1915 while working under the auspices of the Ethnological Group Building Program of the Milwaukee Public Museum (Barrett 1963:v). He published an ethnographic portrait of the Washoe in 1917, but his field notes and specimens, which are still housed at the Milwaukee Public Museum, are more valuable for an ethnobotanical investigation (Barrett 1916). Twenty-nine items in the collection are considered herein, which consist of either botanical specimens or material culture items from plants. The plants are not identified botanically, but are accompanied by ethnographic descriptions and the Washoe term for them. For the most part, this information is supplemental to information gained elsewhere, but Barrett is unique in collecting specimens of some of the early medicines. Unfortunately, the medicines are not identifiable botanically, but nonetheless, the dried products provide a powerful visual reminder of these plants. Increasing availability of molecular technology, in which identification of plants is based not on reproductive morphology but on molecular profiles, may make identification of these specimens possible.

Grace Dangberg, who was a student of anthropology at the University of California, Berkeley, and also at Columbia for one postgraduate year, began her fieldwork in 1918 with the Washoe people. Dangberg's family was one of the preeminent ranching families in the Carson Valley, and many Washoe people worked on the ranches and in the houses of the Dangbergs. The family of Mrs. Theresa Smokey Jackson, the first consultant with whom I worked, used the name Dangberg as their surname until Mrs. Jackson's father changed the family name to Smokey (Garey-Sage 1995). Mrs. Jackson's paternal grandparents both worked for the Dangbergs, her grandfather as an irrigator and her grandmother as a domestic servant. Most of the Washoe Women Elders remember both Dangberg and the consultants with whom she worked.

Dangberg published on language, myths, and ethnohistory, so her contributions to ethnobotany are indirect and found embedded in myths (1927, 1968) and in her unpublished field notes (1918 to 1922). The field notes were typed into a manuscript form by John A. Price, and it is that manuscript to which I had access

(Dangberg n.d.). Some of the information in the manuscript is from Harry Hawkins, a local rancher born in 1882, while other information comes from Washoe consultants. Her collected texts and miscellaneous information are also found in a series of field notebooks, which are in the possession of William H. Jacobsen, Jr. One notebook in particular offers some information on place names (Dangberg n.d.a.).

The manuscript provides mostly general ethnographic detail, but some plant information is found. Twenty plants are noted, either by common name or Washoe name. Dangberg alone describes the use of wild flax (possibly *Linum lewisii*) for the Washoe, and provides the most extensive discussion available of roasting onions into cakes to be stored for winter. From Dangberg's field notes, William H. Jacobsen, Jr. compiled a list of Washoe plant names collected by her. Dangberg's transcriptions are matched to terms collected by Jacobsen, and both transcriptions along with Dangberg's botanical identification are available in the list produced by Jacobsen (n.d.c.). There are thirty-six plant names of Dangberg's identified by Jacobsen, plus another eleven terms of hers that Jacobsen did not record. In general, Dangberg's work is most useful when compared with other resources.

In published work, Dangberg's 1927 volume of Washoe myths, which has both Washoe and English transcriptions, is more useful for tracking plant names than the translated version published in 1968. Jacobsen (f.n.) worked with a consultant who reviewed Dangberg's Washoe transcriptions, providing another layer of verification for the source. The 1968 volume does give a listing of Washoe place names, however; five are based on plant names.

Almost twenty years later, Edgar Siskin and Omer C. Stewart began their work among the Washoe. These two anthropologists also provide valuable ethnobotanical information about the Washoe, although neither undertook an explicitly ethnobotanical investigation. Siskin and Stewart were both studying the impact of the Peyote Cult among the Washoe, Siskin for his dissertation (1941) and Stewart as part of an ongoing study of peyotism (1944).

Siskin's field notes (1937) contain information on twenty-one plants, mostly medicines, identified by their Washoe name. He also provides good descriptions of the use and general appearance of the plants. It is possible to match fifteen of the plants to Merriam or Schubert's botanical identification based on the Washoe name. Siskin also lists the only ethnographic discussion of the snow plant (*géwe múk̓uš*), a saprophyte (*Sarcodes sanguinea*), that I have seen. In addition, Siskin states that there are 'seven or eight' Washoe medicinal plants 'that are of great importance and much used' (1937), but I have had no luck in discerning the seven or eight from his notes; he does mention *dailbɔ́lbɔli t̓étgiʔ* {*dabólboliʔ* or *daʔilbólboliʔ*] and *nɔ́wi* as very important (these plants are discussed in Chapter 4 and listed in Table 1).

Stewart's 1941 *Cultural Element Distributions, XIV: Northern Paiute*, which includes the Washoe, is useful in identifying botanical resources. Stewart records the use of seventeen plants, but the information is, as the name implies, in list form with limited ethnographic detail. Stewart alone records the use of pickleweed (*Allenrolfea occidentalis*), and nutgrass (*Broidiaea capitata* or *Cyperus rotunda*). Only he and Downs (1966a) record the use of salt brush (*Atriplex*) among the Washoe.

Train, Henrichs, and Archer (1941) conducted a survey of medicinal plants in the Great Basin and included some Washoe medicines in this project, although the information for Washoe is scant compared with other tribes, and is most useful when viewed in conjunction with other information. Twenty-one medicinals are recorded, and the advantage to this source is that botanical identification and description of use are provided along with Washoe terms. The linguistic transcriptions are somewhat of a challenge unless compared with other work. Train, Henrichs, and Archer (1941) are unique in describing the use of angelica (*Angelica brewerii*) among the Washoe, although the Washoe name they record for the plant (*hamúmul dap̓á·p̓ɨliʔ*) is assigned by Schubert (1957b) and Montgomery (1965) to ranger's buttons (*Sphenosciadium capitellum* var. *scabrum*).

The 1950s witnessed much significant work among the Washoe, when Warren L. d'Azevedo, Stanley and Ruth Freed, and William H. Jacobsen, Jr. all began their fieldwork. d'Azevedo and Freed and Freed were both conducting ethnographic study, while Jacobsen concentrated on linguistic research. Both approaches contributed significantly to documentation of ethnobotanical sources. Kathleen d'Azevedo collected information on foods among the Washoe in 1955, and her field notes are a valuable addition to Washoe ethnobotany. K. d'Azevedo recorded thirty-nine foods and medicines in her work. Botanical identification is not provided, but strong ethnographic detail supports the Washoe terms. K. d'Azevedo is the first to record the use of the category "real food" (*démlušému*). One of the women consultants with whom K. d'Azevedo worked described foods stored for winter as "real" food, identified by the Washoe suffix *-šému* (*démlušému*). Foods described to d'Azevedo by this consultant were discussed in terms of whether it was real, i.e., stored, or not stored for winter consumption (see also W. d'Azevedo 1986b:477). An earlier reference by Merriam (1904) identifies cicadas as "real food," but the note is perfunctory and not explained further. In several instances, K. d'Azevedo and Jacobsen are the only sources for a particular food or plant. More recently, Rucks (2001) has written on *wadákša?* (wild or Washoe spinach; *Lupinus polyphyllus*), a plant identified only by K. d'Azevedo and Jacobsen, gathering important ethnographic and botanical information.

Jacobsen's detailed linguistic cataloging of botanical terms is particularly crucial to my work, as his field notes provide the most comprehensive listing of the names of resources and descriptions of any work among the Washoe, providing one hundred forty-seven plant names (plus several names of plant products). Jacobsen's lists of plant (n.d.a, n.d.b.) are structured with each consultant's comments, name, and description of the plant, as well as his transcription of individual pronunciations of plant names. These lists were prepared from his field notebooks covering his 1955 to 1966 field work, and Jacobsen graciously offered me open access, thus sharing both plant lists and field notes with me.

In addition to his comprehensive elicitations, Jacobsen also provides an essential standardized transcription of Washoe plants names. Researchers vary in their linguistic ability, and transcriptions are sometimes a mish-mash of sounds. The standardized terms provided by Jacobsen allow those disparate terms to be linked to the master term, so to speak. This is the primary method used herein to compile and link sources: the matching of linguistic terms and descriptions. Botanical identification is not provided by Jacobsen, although he did collect botanical specimens which he shared with Mrs. Juanita Schubert, who then listed botanical identification in a list she compiled based on Jacobsen's linguistic work (Schubert 1957b). When specimens were not available, Schubert identified plants botanically based on the description offered by Jacobsen's consultants or less frequently by the descriptions and/or botanical identifications offered by Grace Dangberg (in Jacobsen n.d.c.) or Train, Henrichs, and Archer (1941). Schubert's list provides botanical identification of sixty-one resources: thirty-four identifications were from specimens provided by Jacobsen from his field collecting trips with one Washoe woman elder and one male elder; twenty-two identifications were from descriptions provided by Jacobsen's work; three from descriptions from Dangberg's work (in a list provided by Jacobsen [n.d.c.]), one of which was also based on descriptions by Jacobsen and identification by Train, Henrichs, and Archer; and six from the work of Train, Henrichs, and Archer (1941), three of which were also described by Jacobsen and one of which was also described by Dangberg.

Jacobsen and W. d'Azevedo have both long been working on place names; d'Azevedo from an ethnogeographical point of view (1956) and Jacobsen from a linguistic one. Jacobsen currently has thirty-three place names listed that use a plant name (n.d.d.); his work is in progress, however, and he has compiled an index of place names not only from his work, but from that of other historical sources as well (n.d.j.). d'Azevedo's manuscript (1956) was originally keyed to a series of maps, which unfortunately were lost. I have included information pertinent to plants from both of these scholars, but I have not attempted to locate the places or sites, other than what is provided by the authors.

W. d'Azevedo's ethnographic field work among the Washoe also adds significant contributions to Washoe ethnobotany, most particularly in his recording of place names among the historical Washoe, and in his description and analysis of Washoe subsistence. d'Azevedo records thirty-eight plants (1986b:475-6); he also lists three place names based on plants (1986b:468-9), although there are fifty-five place names with plant names listed in his 1956 manuscript.

d'Azevedo's role as editor and author in the 1963 volume, *The Washo Indians of California and Nevada* documented the significant work taking place during the 1950s among the Washoe. This volume made a body of Washoe scholarship available to students and scholars, something sorely lacking until that point in time. Many of the articles in that volume are critical to this work, providing easy access to ethnobotanical information documented by the authors of that volume. In 1966, the volume *The Current Status of Anthropological Research in the Great Basin: 1964* was produced, edited by d'Azevedo, Davis, Fowler, and Suttles, again making contemporary Washoe research, including information significant to an ethno-botanical study, available in published form to scholars and students. d'Azevedo also served as editor for Volume 11, Great Basin, of the *Handbook of North American Indians* series (1986). This volume brings together comprehensive information on all tribes of the Great Basin, and its importance to scholarship is immense. This volume is where students first turn for their investigations, and the volume not only provides in-depth information; it also takes students directly to primary sources.

Edith Van Allen Murphey (1959) published an ethnobotanical description of Great Basin Tribes, listing thirty-one plant resources of the Washoe, but the work lacks specificity. In most instances, she records a generalized usage of the plant without identifying particular uses among individual tribes. She records Washoe name, botanical identification, and common name for the plants, two of which she alone identifies among the Washoe: *mep (Equicetum arvense*) and *modup* (*Rumex crispus*). In a 1995 letter and attached plant list sent to John Amato, who worked with the Dresslerville Senior Center and a group of elders in preparing a native plant garden, Jacobsen verifies transcriptions for plant names in the garden and offers the terms *mípiʔ* and *mó·dop* as *possible* transcriptions for Murphey's terms. Jacobsen does not definitely state these are the appropriate names, but only suggests similarity to known Washoe terms (Jacobsen 1995a).

George E. Montgomery participated in a National Science Foundation field school conducted among the Washoe in 1965 and collected medicinal information related to his study of health systems. He recorded Washoe terms for seventeen medicines, eleven of which are identified botanically. The recordings of medicine are grouped according to illness type, a unique contribution by Montgomery.

In 1966, Stanley Freed presented a description of Washoe campsites around Lake Tahoe and included plant names in association with specific camp sites (two based on plant names). He mentions seventeen plants, including two terms not collected elsewhere (*bEziEziInthE'khi*, a medicinal plant used for eye trouble and sore throat, and *k!ila'tsim*, a kind of berry [1966:80, 82]).

In 1966, *The Two Worlds of the Washo* by James Downs was published. In that work, Downs records subsistence information and lists fifteen food plants (all identified by common names) as well as "grass seeds" He does not enumerate the category. Later, he lists the seeds of rabbit brush, salt brush, mustard, and sand grass as food items. Although Downs's work provides a good overview of subsistence and offers environmental analysis, it does not link plants to either Washoe or botanical terms.

In general, many people provide some information about the Washoe, yielding a total of 196 plants, but a comprehensive ethnobotanical study among the Washoe had never been undertaken. Reconstructing historical information involves compiling bits and pieces, both large and small, from many sources, many of which only incidentally collected ethnobotanical information and none of which systematically or comprehensively detailed Washoe ethnobotany.

Washoe Subsistence Patterns and Resource Zones

The Washoe were traditionally hunters and gatherers and fisherfolk, living on the varied and rich resources of their lands and waters. They lived at the far edge of the western Great Basin and along the eastern face of the Sierra Nevada Mountains, enjoying the relative abundance of resources found within the two great floristic regions of California and the Great Basin.

The Sierra Nevada Mountain range is a dramatic northwest trending fault block that dominates much of California with its gentle western slope juxtaposed against a steep eastern slope (Holland and Kiel 1995:29). The Washoe people lived along the eastern side of the Sierra, from Honey Lake in the north to the western fork of the Walker River in the south (d'Azevedo 1986b:468), including the priceless Lake Tahoe Basin (Figure 2: d'Azevedo's map of Washoe territory, 1986b:468).

At the eastern base of the Sierras, the Great Basin, characterized by its interior drainage, stretches to the east across Nevada and Utah to the Wasatch Range. The Great Basin is part of the Basin and Range physiographic province, an area of generally north to south parallel fault-block mountain ranges and long desert basins (d'Azevedo 1986a:6-7). From the edge of the Sierra to the Truckee Meadows, Pine Nut Mountains, and parts of the Virginia range, the Washoe benefited from the resources of the Great Basin region in addition to those of the Sierra (d'Azevedo 1986b:468).

Where these two great regions meet is the home territory of the Washoe people; here, Great Basin and Sierran features intertwine, often without distinct boundaries. Desert and montane flora and fauna intermingle and combine with abrupt changes in elevation, moisture, soil, and topography along the eastern face, creating impressive diversity of environments (d'Azevedo 1986b; Downs 1966a; Smith 2000). Along the lower elevations of the Eastern Sierra, around 4,500 feet (1,371 meters),

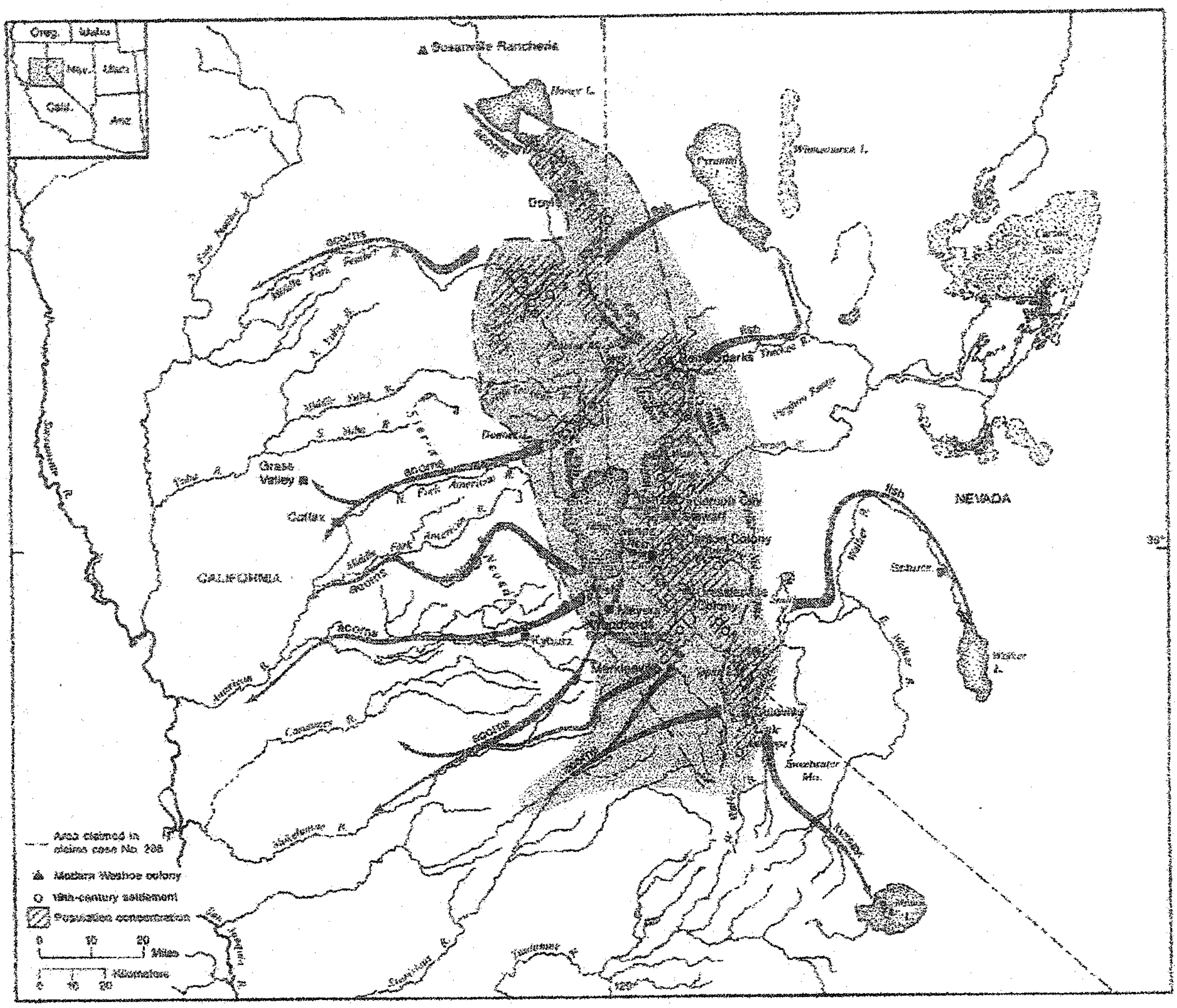

Fig. 1. Early 19th-century Washoe core area (tone) with regional communities: 1, *disem dá?aw detdé?yi?* 'seepweed(?) lake dwellers'; 2, *čó?ya? wáta detdé?yi?* 'tule river dwellers'; 3, *?míčim detdé?yi?* 'grass-place dwellers'; 4, *?álabi? wáta detdé?yi?* 'fish river dwellers'; 5, *?á?waku wáta detdé?yi?* 'cui-ui river dwellers'; 6, *čó?ya? dá?aw detdé?yi?* 'tule lake dwellers'; 7, *?ašéwi wáta detdé?yi?* '(rabbit-) drive river dwellers'; 8, *pá·wa detdé?yi?* 'valley dwellers'; 9, *dačilgá·š dewbeyúmewe? detdé?yi?* 'dwellers in the corner where rivers flow away out'; 10, *?upá·biya detdé?yi?* 'salt-place dwellers'. Arrows show routes to important resources within the total Washoe range. Dashed line delimits the area claimed for the Washoe before the Indian Claims Commission (Docket No. 288), after O.C. Stewart (1966:map 21). Southwestern extension of the core area after Barrett (1917: map1) and Kroeber (1925: pl. 37, 570).

D'AZEVEDO

Figure 2. Map of Washoe Territory from d'Azevedo 1986b; reprinted with permission from d'Azevedo.

are a series of basins or valleys whose floors were the preferred home bases for the Washoe. These valleys are, from north to south, Honey Lake Valley, Sierra Valley, Long Valley, Truckee Meadows, Washoe Valley, Eagle Valley, Carson Valley and Antelope Valley (d'Azevedo forthcoming).

Within the two floristic provinces of California and the Great Basin, d'Azevedo identifies "three major life zones providing abundant and varied plant and animal species" which the Washoe were able to exploit (1986b:466-7). d'Azevedo lists the Boreal zone (6,000 to 10,000+ feet in elevation [1,829 to 3,048 meters]), transition zone (4,500 to 6,000 feet in elevation [1,371 to 1,829 meters), and Upper Sonoran zone (below 4,500 feet [1,371 meters]). These three zones refer to both the California province, with the geographic subdivision (termed 'region' by Hickman 1993) of the Sierra Nevada (Boreal), and the Great Basin floristic province (Upper Sonoran), as well as the intersection between the two, identified by Hickman (1993:44) as the geographic subdivision or region "East of the Sierra Nevada". This area where the Great Basin meets the Sierra is also sometimes called the Eastern Sierra, the transition zone, trans-Sierra, or California transmontane floristic province (Barbour and Major 1977; Holland and Kiel 1995; Smith 2000; Storer and Usinger 1963) (Figure 3, Floristic Provinces of California, Hickman 1993).

Downs (1963a:122) lists four resource or life zones, those of alpine, aspen, pinyon, and artemisian. Downs's alpine and aspen zones describe plant communities or habitats within the regions of the High Sierra Nevada or Boreal zone and refer to upper and lower montane forests, which include upper and lower montane riparian

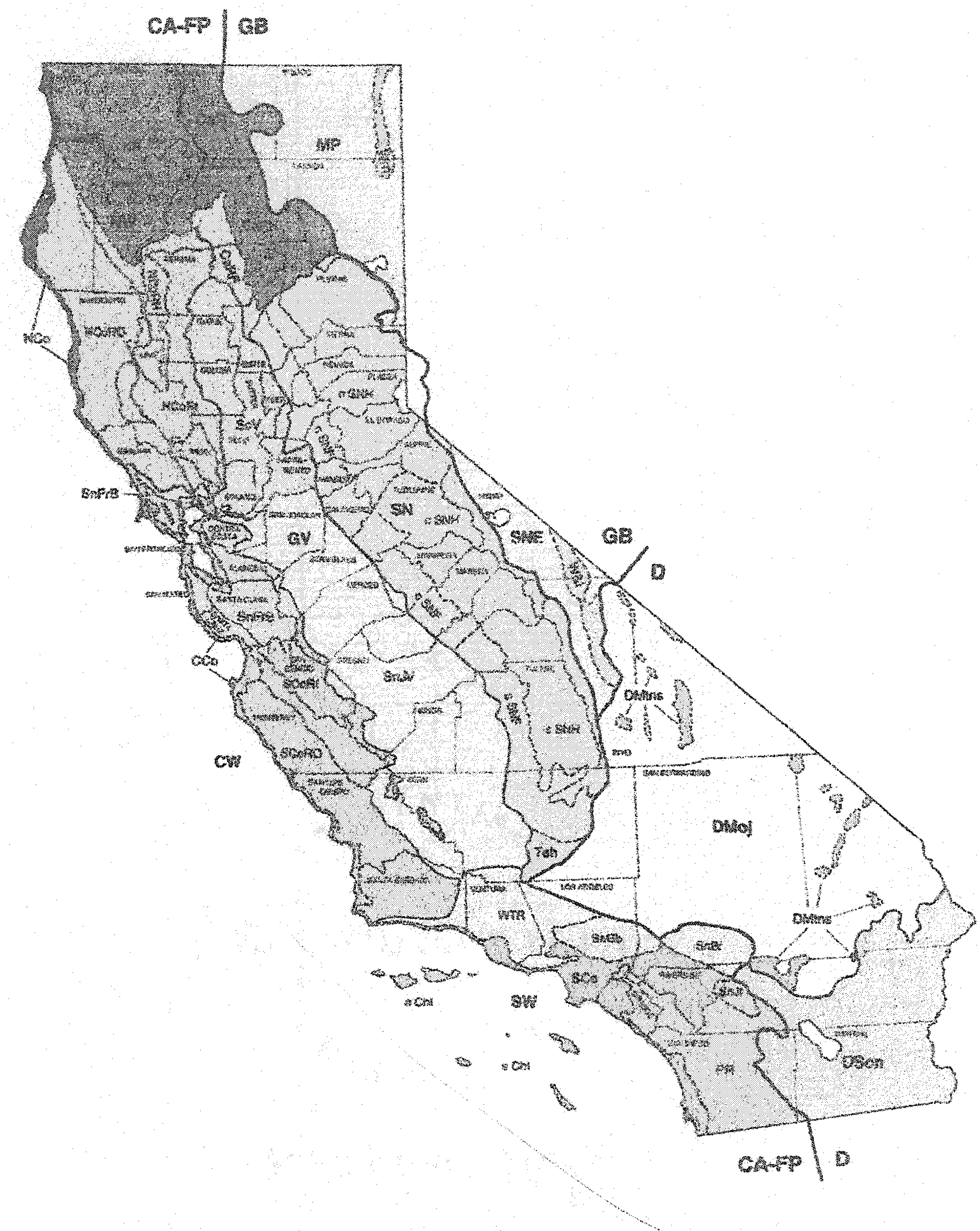

Figure 3. Floristic Provinces of California, from Hickman 1993; reprinted with permission from Jepson Herbarium.

Hierarchical Outline of Geographic Subdivisions

CA-FP

California Floristic Province

- **NW** Northwestern California
  - **NCo** North Coast
  - **KR** Klamath Ranges
  - **NCoR** North Coast Ranges
    - **NCoRO** Outer North Coast Ranges
    - **NCoRH** High North Coast Ranges
    - **NCoRI** Inner North Coast Ranges
- **CaR** Cascade Ranges
  - **CaRF** Cascade Range Foothills
  - **CaRH** High Cascade Range
- **SN** Sierra Nevada
  - **SNF** Sierra Nevada Foothills
    - **n SNF** northern Sierra Nevada Foothills
    - **c SNF** central Sierra Nevada Foothills
    - **s SNF** southern Sierra Nevada Foothills
  - **SNH** High Sierra Nevada
    - **n SNH** northern High Sierra Nevada
    - **c SNH** central High Sierra Nevada
    - **s SNH** southern High Sierra Nevada
  - **Teh** Tehachapi Mountains
- **GV** Great Central Valley
  - **ScV** Sacramento Valley
  - **SnJV** San Joaquin Valley
- **CW** Central Western California
  - **CCo** Central Coast
  - **SnFrB** San Francisco Bay Area
  - **SCoR** South Coast Ranges
    - **SCoRO** Outer South Coast Ranges
    - **SCoRI** Inner South Coast Ranges
- **SW** Southwestern California
  - **SCo** South Coast
  - **ChI** Channel Islands
    - **n ChI** northern Channel Islands
    - **s ChI** southern Channel Islands
  - **TR** Transverse Ranges
    - **WTR** Western Transverse Ranges
    - **SnGb** San Gabriel Mountains
    - **SnBr** San Bernardino Mountains
  - **PR** Peninsular Ranges
    - **SnJt** San Jacinto Mountains

GB

Great Basin Province

- **MP** Modoc Plateau
  - **Wrn** Warner Mountains
- **SNE** East of Sierra Nevada
  - **W&I** White and Inyo Mountains

D

Desert Province

- **DMoj** Mojave Desert
  - **DMtns** Desert Mountains
- **DSon** Sonoran Desert (also known as Colorado Desert)

Figure 3. Key to Floristic Provinces of California.

zones, montane and woodland meadows, and nonconiferous vegetation zones, specifically water birch and aspen, both of which are dependent on adequate water. Water birch is restricted to the southern part of the Sierra, but aspen can be found in all major habitats from the scrub and woodlands of the Transition zone to the higher elevation regions of the Sierra Nevada (Rundel, Parsons, and Gordon 1977:584).

Downs's pinyon and artemisian zones comprise desert woodlands and sagebrush scrub habitats, found in the Transition (Eastern Sierra) region and Great Basin (Upper Sonoran) province.

The impressive variety of factors, such as water, elevation, soils, and sun exposure, found in these floristic provinces, regions, and habitats create multiple specialized microenvironments, each with a fairly distinctive flora. In general, the geographic regions of the floristic provinces are organized into plant communities or habitats defined as 1), upper montane forests, including montane riparian communities, montane or wet meadows and nonconiferous vegetation zones; 2), lower montane forests, including montane chaparral, woodland meadows, and riparian zones; and 3), the transition region, including pinyon and juniper belts, desert riparian communities, and sagebrush scrub habitats (Hanes 1977; Holland and Kiel 1995; Howald 2000; Rundel, Parsons, and Gordon 1977; Storer and Usinger 1963; Vasek and Thorne 1977).

The regions to the north of Lake Tahoe, where the crests of the Sierra are lower, are generally lusher than those to the south, in that the rain shadow effect caused by the high crest of the Sierra is not as dramatic (Howald 2000:94). Washoe regional names, based on directional terms, mirror changes such as this in the resource base, identifying the *wélmeltī?* (northerners), *háŋaleltī?* (southerners), and *ṗá·waʔlu?* (valley dwellers of Carson Valley) (d'Azevedo 1986b:468). d'Azevedo, however, emphasizes the relative nature of these terms, noting, "the people of the Truckee Meadows and northward to Honey Lake recognized themselves as *wélmeltī?* only in a comparative or explanatory context, and all the people to the south of them in Washoe, Eagle, Carson and Antelope Valleys were referred to as *háŋaleltī?*. Yet the people of Washoe and Eagle Valleys were usually called *wélmeltī?* by those to the south of them" (1986b:469). More significant for environmental identification are various locations marked by resource-based names, discussed in Chapter 4, which are specific to an individual resource rather than generalized directional terms.

Washoe plant harvesting took advantage of the multiple resource zones found in their lands. Harvesting of resources was usually conducted within the vicinity of the home base (the valley floors of the Eastern Sierra), although most people would travel greater distances to known resource bonanzas, such as fish runs, rabbit or antelope drives, and pine nuts (d'Azevedo 1986b:470, 472). A highly flexible foraging strategy allowed some people to stay at base camp, others to travel to seasonal camps to harvest known resources, and others to go "visiting" to other valleys, all of which served to spread the population out among a diverse and rich but scattered resource base (d'Azevedo 1986b and Downs 1966a).

Winter was the least active time of year, as resources were scarce. Winter camps, in general, were placed at lower elevations on sites of high ground near rivers and springs (d'Azevedo 1986b:472). Winter housing was more substantial than the shades or arbors favored in better weather. Stored resources were consumed during the lean months, but by spring, people were hungry (Downs 1966a:13). The linguistic category marking stored foods as "real foods" (*démlušému*) highlights the need for supplies to last through winter. "Real" foods, when known, are identified in Chapter 4.

Fishing was an important winter and early spring activity, and some members of the winter camp would go to the higher elevations to fish, relieving pressure on those who remained (usually the elderly and the young) (Downs 1966a:13). Lake Tahoe streams were a valuable source of fish runs, as were the tributaries and rivers of Walker, Pyramid, and Honey Lakes, many of which provided much needed spring and year-round food (d'Azevedo 1986b:473).

Plants also made their spring appearance, providing fresh greens and bulbs. By late spring and through the fall, Washoe people were dispersed into small resource camps, fishing, hunting, and harvesting greens, seeds, bulbs, and berries. A variety of altitudinal zones were utilized. Lower elevations have earlier profusion of plants because of the warmth; as harvest peaks in one zone, people move up the mountain side, following the next harvest patch, or back down to the valley floors to harvest seeds.

After the fish runs, spring would find Washoe people in the lower montane environments, particularly woodland meadows and lower montane riparian zones, harvesting greens and bulbs. Desert riparian environments also hosted good spring food, with their abundance of edible marsh plants.

By summer, people could move up the mountainside, to higher montane meadows and riparian zones, following the later harvest of greens and bulbs, or stay in the lower montane regions to begin the harvest of berries, or travel down the mountainside to begin harvest of grass seeds found in sagebrush shrub and pinyon and juniper belts. By fall, people would congregate in the pinyon and juniper belt to begin the important pine nut harvest. Pine nuts were significant to the Washoe people, providing a storable resource that would see them through the winter. The significance of pine nuts to the Washoe is marked by the exclusive family rights to pine nut groves, a unique occurrence of resource-ownership among them (d'Azevedo 1986b: 474).

Acorns, a valuable resource for northern Washoe but less so for southern Washoe (d'Azevedo 1986b:474), were available on the western side of the Sierra mountains; Washoe people would journey across the mountains in the fall to gather or trade for them, sometimes wintering on the western slope (d'Azevedo 1986b:472; Downs 1966a:11). Treks to Mono Lake, Walker Lake, and Pyramid Lake were other resource journeys undertaken by Washoe people, outside of their core or nuclear area (d'Azevedo 1986b:472; Price 1980:46).

In all, the Washoe people, prior to EuroAmerican settlement of their territory, enjoyed a fairly rich land, as evidenced by one of the highest population densities in the Great Basin: 4 persons per square mile, compared with 2.5 square miles per person in central Nevada (Downs 1966a:11), or 2.7 persons per square mile, compared with one person per 15 square miles for the rest of the Great Basin (Price 1980:46). Their territory was approximately 120 miles long and 40 miles wide, yielding 4,000 square miles of nuclear or core area within a larger 10,000 to 13,000 square mile extended range (d'Azevedo 1986b:468; Downs 1966a:11; Price 1980:46).

EuroAmerican settlement of the region disrupted this way of life for the Washoe people. Beginning in 1825 with Jedediah Smith's trapping expedition, EuroAmericans began their inexorable exploration and settlement of the western Great Basin and Sierra (Price 1980:9). By 1847, the Woodfords Trading Post was established along the West Fork of the Carson River, creating more serious incursions into Washoe lands. The subsequent years, 1848 and 1849, saw a great influx of EuroAmericans associated with the California gold rush; by 1858, the Comstock Lode discovered in Virginia City created havoc for traditional lifeways. "An estimated 20,000 people came to Washo territory in the 'Rush to Washoe.' The pinyon pine forests for many miles around (that had provided nuts to the Washo) were cut down to provide timbers for the mine shafts and charcoal to smelt the ores" (Price 1980:12).

By 1860, 5,000 acres of land were being farmed in Carson Valley, and 10,000 head of cattle, horses, and hogs were pastured in the valleys of Western Nevada (Thompson and West 1881:67); sheep had also made their incursions into the pastures and grasslands of the western valleys. "Overgrazing depleted Washo food in the grass seeds and permanently affected the ecological balance in this period" (Price 1980:12). Around the same time, commercial fishing began in Lake Tahoe, and the quantity of fish taken from the Lake was so great that by the 1880's, "the fish stocks became so depleted that commercial fishing stopped, fish and game laws became established, and even the possession of fish spears became unlawful" (Price 1980:13). Within a twenty-year period, roughly, the fishing at Tahoe was destroyed, which further diminished the ability of the Washoe people to provide for themselves.

Despite these profound environmental disturbances to the region caused by large numbers of people and livestock and farming, by 1902, J. W. Hudson, describing the (Carson) valley of Gardnerville, Nevada, was still able to write: "This valley is far richer in seed foods than any yet seen in California and was doubtless capable of supporting with its game a far denser population of aborigines than any I have yet seen. Carson River is a bald stream and gave abundance of fish and irrigated a large territory. The Washoes entirely possess the Carson Basin to Walker River on the south and on the west to the range just beyond Tahoe" (1902:241-2).

Hudson describes a "paradise" of an environment, yet history tells us there were already thousands of EuroAmericans and their livestock altering the lands and resources by 1902. As early as 1866, an Indian agent had reported to the governor of Nevada that "in view of their rapidly diminishing numbers and the diseases to which they are subjected…the Washoes would soon all be gone" (Annual Report 1866:115-6). The Indian Agent was not alone; there were continuing reports of the predicted and imminent extinction of the Washoe people. It is difficult to reconcile the report of Hudson with such dire statements, although Hudson was engaged in a museum expedition, and thus his focus most likely rested upon recreating the "aboriginal" picture of the Washoe.

By the early 1900s, Washoe population was much reduced; they were living on the periphery of white settlements or ranches, or in impoverished conditions among the colonies. This is also the period when many children were conscripted to attend Stewart Indian School, a boarding facility that taught European culture in the morning and vocational training in the afternoon. Children were punished for speaking their native language, and many lost touch with their families, their history, and their culture through this forced assimilation (Nevers 1976:67).

Stewart Indian School may be one of the most significant factors to influence the traditional knowledge of Washoe people today. The results of EuroAmerican settlement were extreme; loss of lands and resources had tremendous economic consequences. Once the children were taken away from their homes, however, people's families were torn apart. The family among hunting and gathering people is the primary teaching structure; culture is taught by parents, aunts, uncles, and grandparents. Religion, language, traditional knowledge, social norms, and values are all taught within the home by the family. It strikes me as phenomenal that the Washoe have resisted such an assault on their families and homes. The Women Elders who participated in this research were the last to learn directly from those who lived the 'Old Way," before they were taken from home and sent to boarding school. By the time the women came home from Stewart, lives had changed forever. Yet, these Elders continue to stress the value of their early lessons, and young people and middle-aged people come to them, wanting to learn. Valuable information was interrupted, but not destroyed, by the Stewart assault.

Washoe Plant Communities

As discussed above, the territory of the Washoe included multiple plant communities. A more detailed description of each plant community is presented in the following, with dominant plants listed. Not all Washoe plant resources are included in the communities described; rather, the purpose is to present an ecological background of the Sierra Nevada and Great Basin provinces. There were many plants in the environment that were *not* used, or have not been identified historically as being used by the Washoe. Traditional ethnobotanical knowledge requires identification of important plants within a much larger plant community, emphasizing the complexity of traditional ethnobotanical knowledge; the presentation of plant communities below is designed to highlight that fact. Additionally, individual plant resources are often found in multiple plant communities and thus are best referenced in Chapter 4, where habitats and regions identified by Hickman 1993 are noted for all plants.

Sierran or Boreal Zone: Lower Montane Forests. The lower montane forests of the Sierra Nevada Mountains (not the foothills, which are found on the western slope), include ponderosa pine (*Pinus ponderosa)* and Jeffrey pine (*P. jeffreyi*) forests (sometimes called yellow pine forests), montane chaparral, and white fir (*Abies* *concolor*) and mixed conifer forests. Ponderosa forests are characterized by summer soil moisture and active fire history, as the seedlings are intolerant of shade. When fire is suppressed, white fir (mesic sites) and incense cedar (*Calocedrus decurrens*) (xeric sites) increase in distribution (Rundel, Parsons, and Gordon 1977:563-4). White fir is also found at higher elevations and increasingly mesic sites, and ponderosa is replaced by Jeffrey pines about 1,800 meters (5,905 feet) elevation (south of Plumas County) (Holland and Kiel 1995:300; Rundel, Parsons, and Gordon 1977:561).

In lower elevations, ponderosa intersperses with chaparral, and California black oak (*Quercus kelloggii*), ponderosa, and incense cedar are found in chaparral and foothill woodlands under favorable conditions. Montane chaparral refers to several types of shrubby plant communities with "small, thick, stiff, and evergreen leaves" (Hanes 1977:419; Holland and Kiel 1995:175). Distribution of chaparral in the Sierra occurs on dry, steep slopes; the chaparral is known to stabilize these slopes and is an efficient watershed cover, "but…it also consumes most of the soil moisture" (Hanes 1977:419). Dominant shrubs in montane chaparral include multiple species of California lilac (*Ceanothus* spp.), manzanita (*Arctostaphylos* spp.), currants and gooseberries (*Ribes* spp.), and chokecherry and Sierra plum (*Prunus* spp.). Chinquapin (*Chrysolepsis sempervirens* [formerly *Castanopsis* species]), huckleberry oak (*Quercus vaccinifolia*), snow berry (*Symphoricarpus parishii*), and western serviceberry (*Amelanchier alnifolia*) are also dominant shrubs in the montane chaparral (Holland and Kiel 1995:192; Storer and Usinger 1963:115). This zone with its multiple berries is a very productive source for Washoe harvesting.

The white fir and mixed conifer forests are dominant on mesic sites of lower montane forests, commonly occurring from 1,250 to 2,200 meters (4,101 to 7,218 feet). Although white fir is the dominant, other frequent species include sugar pine (*Pinus lambertiana*) and incense cedar. Understory vegetation includes hardwood deciduous trees and shrubs with generally scarce herbaceous covering with the exceptions of meadow areas, which form in moist open areas receiving much sun (Holland and Kiel 1995:315). At lower elevations or on rocky sites, big leaf maple (*Acer macrophyllus*), black oak, canyon live oak (*Quercus chrysolepsis*), manzanita (*Arctostaphylos patula*), mountain misery (*Chamaebatia foliolosa*), mountain whitethorn (*Ceanothus cordulatus*), wild lilac (*C. parvifolius*), and deer brush (*C. intergerrimus*) thrive, especially where fire is frequent. Scouler's willow (*Salix scouleriana*), giant chinquapin (*Chrysolepsis chrysophylla* [formerly *Castanopsis chrysolepsis*]), bitter cherry (*Prunus emarginata*), elderberry (*Sambucus* spp.), and currants and gooseberries are also much evident (Holland and Kiel 1995:315; Rundel, Parsons, and Gordon 1977:565). The berries, willow, incense cedar, and the sugar from sugar pine were all marked resources for the Washoe; additionally, several of the shrubs were important browse for deer and habitat coverage for other small mammals hunted by the Washoe.

Meadow areas below 1,800 meters (5,905 feet) include herbs such as wood strawberry (*Fragaria vesca* [formerly *F. californica*]), *Clintonia uniflora*, rattlesnake plantain (*Goodyera oblongifolia*), wild ginger (*Asarum hartwegii*), and wild iris (*Iris hartwegii*). After fires, on mesic sites, lupines (*Lupinus latifolia* var. *columbianus*) and wild lilac are frequent, as well as snow plant (Rundel, Parsons, and Gordon 1977:569). Strawberries and the greens from lupines were marked resources in these low meadows; the snow plant had no economic use, but figures in Washoe myth and humor.

Riparian zones within the white fir-mixed conifer forest host plants such as white alder (*Alnus rhombifolia*), mountain alder (*A. incana* ssp. *tenuifolia*), big leaf maple, dogwood (*Cornus stolonifera*), western azalea (*Rhododendrom occidentale*), mountain pink currant (*Ribes nevadensis*), thimbleberry (*Rubus parviflorus*), Oregon ash (*Fraxinus latifolia*), ninebark (*Physocarpus capitatus*), black cottonwood (*Populus balsamifera* ssp. *trichocarpa*), quaking aspen (*Populus tremuloides*), water birch (*Betula occidentalis*), and willow spp. (Holland and Kiel 1995:305; Rundel, Parsons, and Gordon 1977:567). This zone provides shrub and tree resources for material culture (basketry and absorbent fibers), habitat for other plants (onions grow well under the aspen), as well as more berries.

<u>Sierran or Boreal Zone: Upper Montane Forests</u>. Plant communities within the upper montane forests include red fir (*Abies magnifica*) forests, Jeffrey pine forests, lodgepole pine (*Pinus contorta* ssp. *murrayana*) forests and the nonconiferous vegetation zones.

Red fir forests occur above elevations of 1,800 to 2,759 meters (5,905 to 9,052 feet) with annual precipitation of 1000 to 1,300 millimeters. South of Lake Tahoe, red fir is less common, seen only on sheltered, gently sloping uplands because of its relatively great moisture needs. Red fir tends to occur in dense, pure stands with a canopy that precludes understory or other conifers. Red fir needs well-drained soils, and when that is lacking, lodgepole pine and quaking aspen replaces it. Too little water and/or poor soil produce Jeffrey pine, western white pine (*Pinus montifolia*), and western juniper (*Juniperus occidentalis*) (Holland and Kiel 1995:316-7).

When fire opens the canopy of red fir forests, understory brush includes wild lilac, manzanita, Sierra gooseberry (*Ribes roezlii*), mountain chinquapin, bitter cherry, and Scouler's willow with occasional presence of black oak. Herbaceous understory is sparse (again, because of the heavy canopy), but in open areas with gravelly soils once can find rockcress (*Arabis platysperma*), violets (*Viola purpurea*), wild buckwheat (*Eriogonum nudum*), *Gayophytum humile* [formerly G. nuttalli], *Monardella odoratissima*, pussypaws (*Calyptridium umbellatum*), squirrel tail (*Elymus elymoides* [formerly *Sitanion hystrix*]), and mules ears (*Wyethia mollis*) (Rundel, Parsons, and Gordon 1977:574). Berries and mules ears provide food, while willow, manzanita, mules ears, and squirrel tail are all utilized in material culture among the Washoe.

In drier regions of the upper montane forest, Jeffrey pine replaces red fir. The Jeffrey is a close relative of the ponderosa pine but much more forgiving of drought, cold weather, and deep snow. South of Lake Tahoe, Jeffrey pines dominate in forests below 2,450 meters (8,038 feet), often forming a distinct zone between red fir and the lower elevation pinyon and juniper woodlands or Great Basin sagebrush scrub (Holland and Kiel 1995:301). Understory of Jeffrey pine forests depends on factors of moisture, sun, and soil, but Great Basin shrubs are common because of their low moisture tolerance. The most important shrubs are big sagebrush (*Artemesia tridentata*), curly leaf mountain mahogany (*Cercocorpus ledifolius*), phlox (*Leptodactylon pungens*), antelope or bitter brush (*Purshia tridentata*), and rabbitbrush (*Chrysothamnus parryi*). Herbaceous understory includes squirrel tail, blue wild rye (*Elymus glaucus*), slender hairgrass (*Deschampia elongata*), needlegrass (*Achnatherum occidentalis* [formerly Stipa]), mules ears, and *M. odoratisima.* At more mesic sites, one finds wild barley (*Hordeum brachyantheum*), brome (*Bromus orcuttiana*), white-veined wintergreen (*Pyrola picta*), and mules ears (Rundel, Parsons, and Gordon 1977:577). The Jeffrey pine understory provides medicines (big sagebrush), source for material culture (mountain mahogany, squirrel tail, and mules ears), and food (blue wild rye and other seed grasses) for the Washoe.

The lodgepole pine forest appears at higher elevations than the red fir forest, at 2,440 to 3,350 meters (8,005 to 10,991 feet) elevation, with annual precipitation of 750 to 1500 millimeters (most of which occurs as winter snow). The lodgepole pine is a shorter tree, and yields a more open canopy. The lodgepole is known for its tolerance of bog-like conditions. Understory shrubs are not significant but may include manzanita, mountain whitethorn, curly leaf mountain mahogany, mountain chinquapin, mountain heather (*Phyllodoce breweri*), and mountain gooseberry (*Ribes* *montigenum*). Herbaceous understory depends on moisture. At the edge of bogs and meadows, the understory is lush with meadow species (see later discussion of meadows); on dryer soils, it is sparse and resembles that of the red fir forest (Holland and Kiel 1995:325). The lodgepole pine is an important material culture source, as are manzanita and mountain mahogany; mountain gooseberries and other meadows plants are food items for the Washoe.

Nonconiferous Vegetation: Deciduous Forest and Montane Riparian Zones. Higher elevations of the Sierra also support populations of nonconiferous trees, specifically water birch and aspen, both of which are dependent on adequate water. Water birch is found at altitudes of 1,500 to 2,750 meters (4,921 to 9,002 feet), and is restricted to the southern part of the Sierra and is completely absent in the central and northern regions. Aspen prefer altitudes of 1,800 to 3,000 meters (5,905 to 9,842 feet) and are found in numerous zones, that of Great Basin scrub, Jeffrey forests, northern juniper woodlands, red fir and lodgepole forests, subalpine, mixed conifer, and ponderosa forests (Rundel, Parsons, and Gordon 1977:584).

Birch and aspen trees are part of the montane riparian communities (Holland and Kiel 1995:423). Lodgepole pine is a frequent associate, and understory shrubs are mostly willow and currants. On some eastern slopes, aspen is bordered by sparse forests or Great Basin scrub (Holland and Kiel 1995:426). Montane riparian communities include shrubs of dogwood, western azalea, thimbleberry, ninebark, sweet shrub (*Calycanthus occidentalis*), wild rose (*Rosa woodsii* var. *ultramontane*), willow, elderberry, and snowberry (Holland and Kiel 1995:424; Howald 2000:160). Riparian zones, both montane and foothill, are rich with herbaceous understory including elk clover (Aralia californica), mugwort (*Artemisia douglasiana*), sedge (*Carex* spp.), nutsedge (*Cyperus* spp.), fireweed (*Epilobium* spp.), horsetail (*Equisetum* spp.), and watercress (*Rorippa nasturium-aquaticum*) (Holland and Kiel 995:422). Washoe foods (berries, watercress, sedge, and nutsedge), medicines (mugwort and wild rose), and sources of material culture (dogwood, wild rose, willow, and horsetail) are found in this community.

<u>Meadows</u>. Meadows are found in every type of forest in the montane and subalpine Sierra. Three types are present: wet meadow, woodland meadow, and short-hair sedge.

Wet meadow is found above 1,800 meters (5,905 feet) in the southern Sierra and is composed of perennial sedges, rushes, and grasses. Large amounts of organic material stain the soil dark, and plants commonly reproduce through rhizomes, a rich source of carbohydrates (Rundel, Parsons, and Gordon 1977:584). *Sphagnum* moss, *Juncus*, and fine-leaved sedge and grass form differing types of wet meadow. The *Sphagnum* moss meadow is easily disrupted versus the tougher-rooted *Juncus*; the resilience of *Juncus* is offset by its low carbohydrate and protein content. Fine-leaved sedge forms on drier, well-drained sandy loams and has good forage value. Plants include sedge, grasses, dwarf bilberry (*Vaccinium caespiatosum* [formerly *V. nivictum*]), and aster (*Aster alpigenus* ssp. *andersonii*) (Rundel, Parsons, and Gordon

1977:584-585). Sedges and grasses formed seeds identified by early Washoe as important to their diet.

Woodland meadows are also found above 1,800 meters (5,905 feet), but grasses and forbs are interspersed with lodgepole pine, willow, aspen, and cottonwood. Herbaceous understory is rich, with grasses, bromes, and lupines (Rundel, Parsons, and Gordon 1977:585). Below 2,900 meters (9,514 feet), the woodland meadow hosts spectacular displays of wildflowers. Included among the woodland meadow herbaceous understory are aster, camas (*Camassia quamash*), shooting stars (*Dodecatheon* spp.), fireweed, daisies (*Erigeron* spp.), cow parsnips (*Heracleum lanatium*), elk thistle, iris, lilies (*Lilium pardalinum* and *L. parvum*), white flowered bog orchid (*Platanthera leucostachys*), evening primrose (*Oenothera elata*), wintercress (*Barbarea orthoceras*), lupines, elephant heads (*Pedicularis groenlandica*), cinquefoil (*Potentilla* spp.), groundsel (*Senecio* spp.), and corn lily (*Veratrum californicum*) (Holland and Kiel 1995:449-50). This zone provides important medicines (cow parsnips, lilies, elephant heads, cinquefoil, and corn lily) as well as foods (camas, wintercress, and lupine) for the Washoe.

The short-haired sedge meadow occurs in altitudes of 2,130 to 2,240 meters (6,988 to 7,349 feet) and comprises a "tough *Carex exsertia* sod which will withstand considerable disturbance. The foliage is extremely frost resistant and is high in carbohydrates and proteins" (Rundel, Parsons, and Gordon 1977:585). This meadow is rich in early season forage, but sheep grazing of the previous century severely disrupted this vegetation, which once disrupted, reestablishes slowly and with difficulty (Holland and Kiel 1995:448; Rundel, Parsons, and Gordon 1977:585). Possibly the seeds of the sedges were harvested, but information is scant on this resource for the Washoe.

Transition Zone. Differentiated from the High Sierra Nevada or boreal zone is the transition zone, which includes the lower altitudes of the lower montane forest and the pinyon-juniper and sagebrush belt of the Pine Nut Mountains, the boundary between the transition zone and the drier Upper Sonoran zone (d'Azevedo 1986b:467). The Washoe people found many of the resources of both the Sierran and Upper Sonoran zones within this transition zone.

The pinyon and juniper woodland is identified by the presence of pinyon or juniper trees emerging above a shrubby or herbaceous understory. Trees include single-needle pinyon (*Pinus monophylla*), Utah juniper (*Juniperus osteosperma*), California juniper (*J. californica*), or four-needle pinyon (*P. quadrifolia*) (Vasek and Thorne 1977:808). The pinyon and juniper woodland is found east of the Sierra Nevada mountains and southward from Alpine County, continuing along the eastern slope of the Sierra. This woodland typically occurs above brush or scrub zones in valleys, but junipers can occur alone on lower slopes, pinyons alone on upper, steeper slopes, and interspersing of the two along midslope (Vasek and Thorne 1977:808). Junipers are more xerophytic than pinyon (Holland and Kiel 1995:397). The single-needled pinyon is one of the most important resources of the Washoe, both historically and contemporarily.

The pinyon and juniper woodland frequently grades into sagebrush scrub in lower elevations or elevations that are less steep, less rocky, hotter, or drier (Howald 2000:161-2). Dominant large shrubs, in addition to the pinyon and juniper, include curly leaf mountain mahogany. Understory plants include sagebrush, rabbitbrush, hop sage (*Grayia spinosa*), greasewood (*Sarcobatus vemiculatus*), Indian tea (*Ephedra viridis*), antelope brush, and desert peach (*Prunus andersonii*) (Howald 2000:162). These shrubs provide many material items (sagebrush, greasewood, desert peach, and antelope brush) and medicine (Indian tea and sagebrush) for the Washoe people.

Desert riparian communities are similar to montane riparian ones, but occur at lower elevations. Willow, black cottonwood, black oak, water birch, cottonwood, wild rose, Jeffrey pine, mountain gooseberry, ponderosa pine, and virgin's bower (*Clemantis ligusticifolia*) are found in the desert riparian community (Howald 2000:152). Material culture and food items are found here.

The sagebrush scrub community is dominated by sagebrush and perennial grasses (Young, Evans, and Major 1977:764). The closeness in the Eastern Sierra of sagebrush scrub to coniferous forests increases diversity to include subdominant species of *Prunus* (bitter cherry, Sierra plum, etc.), antelope brush, currants and gooseberries, snowberry, and rabbitbrush (Young, Evans, and Major 1977:764). Indian tea, hop sage, and desert peach are also dominant (Holland and Kiel 1995:359). Currants and gooseberries were important food sources, and medicinal and material culture resources are also present in the sagebrush shrubs.

Herbaceous plants include rice grass (*Achnatherium hymenoides* [formerly *Oryzopsis hymenoides*]), brome, squirreltail, Great Basin wild rye (*Leymus cinereus* [formerly *Elymus cinereus*]), and blue bunch wheatgrass (*Pseudoroegneria spicata* [formerly *Agropyron spicata*]), all important seed sources for food or items of material culture. Of all the communities, the Great Basin scrub has been most affected by the introduction of grazing. Indigenous grasses have been profoundly disrupted by sheep and cattle grazing (Holland and Kiel 1995:360; Howald 2000:167).

Thus, the plant communities of Washoe lands portray a rich and varied environment. Contemporary Washoe ethnobotany must be situated within the context of these plant zones, the early scholars who recorded historical Washoe ethnobotany, and the traditional subsistence rounds of the Washoe. This context presents a more focused picture of contemporary ethnobotany among Washoe Women Elders.

As mentioned in the beginning of this chapter, a master list of known Washoe plants is compiled into Table 1, Washoe Plant Resources (presented in the Appendix because of its large size). The usefulness of Table 1 is that it lists known plants by Washoe name, botanical name (if known), and common name; also listed are the linguistic and ethnographic documentation of plants, visibly presenting a history of the contribution of researchers. The comparison of historically and contemporarily identified plants can be seen by the dates of ethnographic documentation; my work, the most recent shown in the table, is labeled by Garey-Sage f.n., and marks the 73 resources my consultants identified (of a total 196 plants).

Chapter 4
Washoe Ethnobotany

All Washoe plants for which I have found information are listed and discussed in the following pages. Plants are numbered and correspond to the entry number in Table 1, Washoe Plant Resources, in Appendix A. There are 196 plants, and 13 plant products, which are also given numbers, although their numbers begin with P. Alternate names for the same plant are grouped together in the text, but listed alphabetically in Table 1.

Entries are placed into categories suggested by use, as a result of my organization. When a plant has several uses, it is described in one section and cross-referenced in other appropriate groupings. Within the groupings, plants are listed alphabetically.

These groupings or categories into which I have placed plants and plant products are not based on work with consultants, although this does not necessarily preclude native taxonomies. Categories are organized based on descriptions provided by consultants. Elicitation of native taxonomy was not a goal of this dissertation, and the utility and basis for these categories only became apparent during writing; furthermore, these categories subsume many historical resources as well as contemporary ones, so native taxonomies would have been reconstructions in large measure, if possible, even if it had been an explicit goal of this work.

The few broader categories suggested by field work and review of ethnographic and linguistic field notes include *mú·ċuk* (borrowed term from Numic languages), 'medicine', and *démlu,* 'food'. Food is further differentiated as *démlušému,* 'real' or stored food, versus food that is not stored (presumably, *démlu*). There are tantalizing clues to categories such as things picked, or dug, or gathered, found in Jacobsen's field notes, but such suggestions are preliminary and not investigated by field work (for example, *ʔlémiʔéweʔ* 'things that have been gathered, like berries'; *ʔlémiʔi* 'she's gathering plant food'; *ʔlémiʔgišuweʔi* 'she's going out to gather plant food'; *diwekLémiʔi* 'I found a nest of eggs'; *lépeli* 'I'm digging'; *lémdegi* or *lé·degi* 'I'm digging up roots, potatoes, etc.'; *golsísiʔ déwši*; he's digging for potatoes; *láhaʔgišuweʔi* 'I'm going collecting, begging'; [Jacobsen f.n.]).

Plant names herein are thus grouped into categories based on use, such as basketry, or sometimes by plant family, such as willow, oak, or lupine, if plants are explicitly identified using the English term by consultants ('an oak plant', 'like a lupine', 'a willow'). The category 'willow' (*hímu*) contains several plants with bipartite names (*hímu dadóšoŋiʔ* and so forth). 'Cottonwood' and 'pine nut tree' modify the term for 'mushroom' (*mačilólo*), much as other plants are modified by plant parts.

Food (*démlu*) is the first category presented, and it is further divided into berries, greens, mushrooms, nuts, other, roots/bulbs, seeds, stems, and sweeteners;

again, these groupings are based on descriptions by consultants or by obvious categories. *Démlušému* is noted when it has been identified by consultants, particularly in K. d'Azevedo's work (1955). Grasses for which no specific use is discussed are lumped together based on their description as "a grass." This precedes the category of material culture, which is subdivided into basketry and willow, buckbrush, brush/trees, fiber, needles, other, and stems. Buckbrush appears to be a glossing of several shrubs that provide deer browse or habitat. The category of brush/tree is something of a composite group, which more than any other group reflects my own bias. Medicines are presented next, followed by medicine: charms and medicine: fumigants. The last category, 'other', is divided into inedible berries, intoxicants, lupines, unspecified, and unspecified-flowers subsections.

Within the categories, entries are listed alphabetically. Plant names with the glottalized consonants /p̓/, /t̓/, and /k̓/ follow entries beginning with the respective non-glottalized consonants; the phoneme /š/ follows /s/; /ŋ/ follows /n/; /ɨ/ follows /i/; and words beginning with a glottal stop /ʔ/ occur at the end of the alphabet. Vowel length is ignored for purposes of alphabetizing. A guide to the pronunciation of Washoe phonemes is presented in Jacobsen 1964 and 1996.

The format of the entries is to list the Washoe name in bold typeface, followed by the common name in regular type, and botanical name in italic type, if known. If common and botanical names are not known, they are not presented.

Botanical names (Latin binomials) and publishing authors are listed as presented in Hickman 1993. The listing of the botanical name is followed by the abbreviation for the publishing author who validated the botanical name, as per guidelines in Hickman (1993:8). Abbreviations for publishing author can be checked against full names in Mabberley 1990. When two publishing authors are listed, the first is placed in parentheses, acknowledging the original documentation, but the second author has refined or modified classification of the plant (such as reassigning a genus, species, or subspecies designation). General information on habitat and distribution is presented after the listing of names.

Contemporary and historical ethnographic information is then discussed. For plants about which I collected information, my data is presented first (unmarked by a date), followed by historical entries, listed in chronological order with dates. For plants about which I did not collect data, only historical information is presented and thus an early date (i.e., Hudson 1902) will appear following information on habitat and distribution.

Linguistic information, when known, is presented last. This includes literal translations of plant names, analysis of plant names, and use of plant names in place names, all of which were provided and/or corrected by William H. Jacobsen, Jr., although any mistakes herein (and certainly there are some) are a product of my own limitations. If information was provided about the geographic location of a place name, I included it, but when the location is not identified, it means that it is unknown to me. Information about borrowings of plant names is also presented in this last section.

Names of Plants: Metaphors, Structures, Colors, and Size.

Several patterns are seen in the naming of plants. One of the more entertaining is the use of human or animal body parts/products in plant names, referring to the resemblance between those body parts and the plants. For example: *báʔlew ċigú·guš* 'Paiute stomach', *deċímeliʔ* 'having whiskers', *dílek ċópaliʔ* 'having duck snot', *demuḱó·ḱoyiʔ* 'having joints', *géwe múkuš* 'coyote penis', *gó·ťaʔ máḱaw* 'frog necklace'; *máʔkiʔ ʔíyek* 'rattlesnake fangs', *ṗísew madá·biʔ* or *ṗísew gumadá·biʔ* 'having earrings', *ṗóʔlo ṗísew* 'rat ear', *ṗušálaʔ ʔáṗɨl* 'mouse tail', *séwɨt yá·gil* 'porcupine testicles', *sí·su máyap* 'bird claw', *táníw ċigú·guš* 'Miwok stomach', and *ʔúċuliʔ Má·dut* 'chipmunk tongue'. These names are humorous, as well as highly descriptive and memorable.

Plant names also are based on behaviors, habits, or characteristics of humans or animals: *dewbímiš ʔitbasáʔ* 'Maidu's decoration', referring to redbud, for which the Washoe traded with Maidu to decorate their baskets, *díťeš ʔémlu* 'prairie dog food', *mušé·gew mó·baʔ* 'bear mat', *mušé·gew ʔémlu* 'wild animal or bear food', *ťá·ba ʔémlu* 'grizzly bear food', *ʔó·gal ʔémlu* 'mountain sheep food', *ṗušálaʔ ʔithímu* 'mouse willow' (most likely this refers to the grey color of the mouse, which is the color of this type of willow; it could also, however, refer to the mouse's habitat), *géwe ʔámɨl* 'what coyote gathers', and *délem damʔlá·ḱɨm* 'what shrew chews off'. This type of pattern clearly embeds ecological knowledge, as well as being highly descriptive, like the aforementioned category.

Less vivid is the more mundane use of plant parts/structures combined with the plant names to identify specific parts of the plant. These include *bóyoŋ* 'pine needle'; *dáʔmaʔ* 'thorn, sticker, porcupine quill'; *í·dew* and *á·daš*, the first referring to a slender root, and the second to a fleshy or meaty root; *ṗálaʔ* 'seeds' as in pine nut and watermelon, 'pit' or 'seed inside a fruit'; *šálaʔ* 'pitch' or 'sap'; *ṗá·ṗil* 'flower'; *étg* 'fruit or seeds in a flower'; *yá·gaʔ* 'pine cone' or 'pod'; and *yáʔy* 'leaf' (Jacobsen f.n.). These words are used to specify a part of a plant and thus are used in conjunction with the plant name; occasionally, they function independently and then contain prefixes that allow that construction (see individual discussions under plant entries). The word *íċig* 'stem' is embedded in a few names also.

Colors are sometimes used, but are contained within the word itself, rather than functioning as a separate modifying word (unlike plant parts). Three shades of red are identified: *ásaŋ*; *ášuŋ*, and *íleg*; one shade of black, *áyaw*; one shade of white, *ápuʔ*; and one shade of green/yellow, *áċim*. Other colors exist in the language, of course, but in terms of plant names, these are the colors mentioned, and of these, the three shades of red occur more frequently.

The diminutive suffix *-á·ċi* is seen on two plant names, and the suggested diminutive suffix *-hu/Lu* also occurs. Large plants are not similarly identified. One plant uses *-ŋáŋaʔ*, meaning 'false,' so that the plant (a columbine) is described as a 'false tiger lily,' noting the similar appearance between the columbine and tiger lily. Other descriptive characteristics, such as 'round', 'dry', or 'having bushy flowers', are also reflected in plant names. Natural elements and/or phenomena are sometimes used for some plant names: ‘water flowers’, ‘water’s flower’, and ‘thunder flower’ and ‘thunder leaf’ are examples of this pattern.

Many plant names are arbitrary, having no obvious association between the plant and its name, but when plant names can be analysed, the information is presented under each plant entry.

Plants in Place Names

Jacobsen notes that “a common pattern of formation of names of places and persons is the use of a verb theme” that uses “third-person expanded with a noun [such as a plant name] expressing the subject”; for example, *dá·bal k̓ilá?am* ‘sagebrush pointing into valley’; *má·daš wedí?iš* ‘pine tree standing’; *t̓áša? ?lúwe?* ‘cottonwood trees standing’; and *símiši? góhat* ‘lodgepole pines stretching across’ (noun as subject with verb theme that uses a third person prefix) (Jacobsen 1964:499-500).

Another pattern is that of using plant names to identify bodies of water, presumably to identify resources available around these streams, springs, and lakes. Bodies of water are not identified only by plant names, of course, but we see several occurrences of plant names with water terms: *balŋáċaŋ wát̓a* ‘antelope brush stream’, *ċó?ya? dá?aw* ‘tule lake’ (Washoe Lake), *hímu díme?* ‘willow spring’, *peċúmeli? má?lɨm* ‘wild rose confluence’, and *dísem ?ló?om* ‘seep weed spring’ (Jacobsen n.d.d., f.n.). Similarly, geographic features can be identified by plant names: *ṗó?lo ṗísew dalá?ak* ‘rat’s ear mountain’ (Jacobsen n.d.d.).

Place names can also be identified solely by a plant name: *mugáwLu*, the name of a medicine, referring to 'Rubicon Point', versus *mugáwLu wata*, referring to a small stream about one and one-half miles south of Meeks Bay; and *maʔálaŋiʔ*, the plant name for 'strawberry' referring to 'Little Valley at Franktown' (Jacobsen n.d.d.) (see individual plant entries for locations).

Plant references can also occur in place names descriptive of habitation locations. Jacobsen notes there are three forms that refer to settlements, of which only the first two are found in place names: *detdéʔyiʔ*, 'dwellers' or ' permanent settlement'; *ťáŋaliʔ*, 'permanent smaller settlement'; and *ťáyadi*, 'temporary camp' (personal communication, 2003). These two forms are added onto existing place names, including those those use plant names; most of these place names occur independently without *detdéʔyiʔ* or *ťáŋaliʔ*.

Rarely, people might be identified as 'eaters'. Washoe people who lived in the Woodfords region were sometimes referred to as *bóšdiʔ ťémʔluʔ* 'wild onion eaters' (d'Azevedo forthcoming). Jacobsen (1966:128) notes the same pattern of using the term *ťémʔluʔ* 'eaters' when the Washoe identify the Paiutes around Mono Lake as *mečibá·bašiʔ ťémʔluʔ* 'kutsavi eaters'. This suggests a borrowing of an adjacent naming pattern used by Paiute people who name bands as 'eaters' of locally important resources (Jacobsen 1966:128; see also C. Fowler 1982 for discussion of Northern Paiute band-naming patterns and their functions). The use of *ťémʔluʔ* is also seen in the naming of creatures, such as *ťánu ťémʔluʔ* 'man-eater' (Jacobsen 1964:354).

Other Uses of Plant Names

Other uses of plant terms include five added to animal names, one describing a calendar month, and four personal names with plant names included. The animal names are: *dá·bal* [sagebrush] *ʔithóʔlaʔ* 'a badger species' (Jacobsen n.d.e.), *hímu* [willow] *pečíš* 'king fisher' or 'owl species' (Jacobsen n.d.f), *ṭá·gɨm* [pine nut] *ʔáši* 'sings pine nuts to sleep' (Jacobsen n.d.h.), *ṭá·gɨm gúšu* 'pine nut pet' (Garey-Sage f.n.), and *dó·čaʔ* [Indian balsam] *ʔí·dɨp* 'insect similar to locust, but smaller' (Jacobsen n.d.h.). The month name, *dá·bal dí·be*, refers to 'when sagebrush seeds are formed' (Jacobsen f.n., Dangberg n.d.). Personal names with plant name references include *pánča* (presumably short for *ʔulipánča* 'watercress'), a man's name; *wayámhu dawá·laš*, literally 'the seed as his bread', a man's name; *dé·guš ṭí·keʔ* 'grinds sweet potatoes', a man's name; and *cámduʔ* 'cherry', a women's name (Jacobsen 1964:471 and f.n.).

Washoe Borrowings of Plant Names

Jacobsen (1966:127; 1978:124, 127, 134, 138-140; 1986a:108-10; 1986b:40-3) has noted the patterns of borrowings from other languages into Washoe. The borrowing of plant names into Washoe is associated with regional resources. For example, Miwok languages to the mountainous west of the Washoe provide terms for two oak species (*šagá·šaʔ* and *wíliši*ʔ); the distribution of oak is primarily to the west of the Sierran crest, and terms for these two species of oaks come from this direction (Jacobsen 1978:127). Other terms from Miwok include green manzanita (*ʔeyéyeʔ*), a brodiaea (*dú·ni?*), an unidentified medicinal plant (*héli?*), and the medicine *lókgo yáy?* (the leaves from the California bay or pepperwood tree); the manzanita and brodiaea both have mountainous distributions, and the pepperwood tree is found in the Sierra Nevada foothills. Also from Miwok is the term for the mountain lupine, which is leached and eaten as a green: *wadákša?*. From Maidu is the term for a hard-shelled nut (*tó·ni?*, *tú·ni?*, *tó·ni* or *dú·ni*), also a mountain plant.

From the east, where their Numic neighbors reside, the Washoe incorporated more terms for plants. These resources are found in the transitional, desert, and marsh environments of the Numic peoples. The term for sego lily (*kókši?*) is borrowed, although this plant has an eastern Sierran as well as sagebrush scrub distribution; the death camas (*kogidésmi?*) also found in mountain and sagebrush zones, is also borrowed from Numic languages. The prickly poppy (*sah'-ge-dah*, *tsagida*, *sag-ee-da*, possibly *šagá·du?*), the prickly pear cactus (*ná·bu*), as well as the term for cat-tail seeds (*sá·bu*) are borrowed. Interestingly, Washoe does not borrow the term for cat-tail (*mahaťálal*), but does borrow the term for the seeds (*sá·bu*), which are harvested. This may be the case because most Northern Paiute plant names are actually plant <u>food</u> names, referring to the specific parts eaten (C. S. Fowler, personal communication, December 2003).

Two grass species (*wayámhu* and *šó?ŋi?*) are borrowed, as well as one tree and one shrub: white fir (*šáwa?*) and desert peach (*ċipápa*). The cover term for medicine (*mú·ċuk*) and the name of one of the most important medicines (*dó·ċa?*) also come from Numic languages. Although this might suggest that more medicines come from the Numic environments of sagebrush, desert, and marsh, the Washoe anecdotally believe that the ‘mountain’ Washoe know more about medicines than the ‘valley’ Washoe. Many of the most highly ranked medicines come from high Sierran environments; thus, the borrowing of the cover term is somewhat surprising.

Plants

181. ʔuliMóŋil. The Women Elders offered this as the generic term for plant, when I asked, “Do you have a word for all plants, like the word ‘plant’ in English?” One consultant, however, questioned whether the term was only applied to plants that “you plant”.

Jacobsen (f.n.) records the word, noting both *ʔuliMóŋil and ʔulikMóŋil* as the term for ‘plant’. This term is also collected by Lowie (1963:21). Lowie collected Washoe tales or myths in 1926, and publications in 1939 and 1963 present this work. The 1963 publication (posthumous) lists the term *tiuliwamó^{n}il* [*diʔuliwaMóŋil*] twice: *ike tiuliwamó^{n}il ihuki* ‘when (?) my plants are dry’, and *mεmi·’le tiuliwamó^{n}il tipá·ga’ tigúcu sukú·ti ihuki* ‘everything, my plants, my cow, my cattle, my dog, (are) dry.’

The word *Móŋil* means ‘to grow’ (Jacobsen 1964:173), and the prefix *ʔuli-* is noun-deriving and is seen in two other plants names: *ʔulihóla* and *ʔulipánċa* (Jacobsen 1964:471). The prefix can also identify kin when it is added to intransitive verb stems to create nouns of kinship: *ʔulišáwlam* [*ʔuli* + *šáwlam*, the verb meaning ‘to be a girl'], identifying a female relative not in the direct line of descent, or a female friend (Jacobsen 1964:492).

The use of *ʔuli-* with *Móŋil* probably only indicates a noun derivation, although the use of a kinship term to identify plants is sometimes seen in ethnobotanical work. The very close and familial relationship many indigenous people express when talking about native plants can be expressed with kin terms. Interestingly, the Washoe people may have used this prefix *ʔuli-* or *ʔulik* (regional variant) to indicate kinship when describing *domesticated* plants, or the plants of *dabóʔo* (white people) rather than describing relationships with native plants. For example, in 1883, Henry W. Henshaw collected Washoe vocabulary terms from Carson City, Nevada, for the Bureau of American Ethnology, Smithsonian Institution. He records the term *wu-lik-mőñ-il* for apple tree; similarly, consultants of Jacobsen (f.n.) record the phrase: *golsísiʔ wádiŋ dabóʔo ʔuliʔMóŋɨl,* contrasting the potatoes *(golsísiʔ)* that grew long ago with the potatoes (*golsísiʔ*) now (*wádiŋ*) white man *dabóʔo* plant (*ʔuliʔMóŋɨl*). Lowie's (1963:21) recordings in which he uses the term list 'everything, my plants, my cow, my cattle, my dog, (are) dry.' Note that the other terms listed are all domesticated species, suggesting a domesticated status for *tiuliwamőⁿil [diʔuliwaMóŋil]* 'my plants' as well.

<u>Food: Berries.</u>

2. bá·duʔ (elderberry, *Sambucus* spp.). Schubert (1957b) identifies the elderberry species as *S. glauca* Nutt. and *S. velutina* D&H, but Hickman (1993:474-5)

and Mozingo (1987:247-8) list *S. melanocarpa* A. Gray and *S. mexicana* C. Presl as the blue-fruited varieties of elderberry. *S. melanocarpa* (listed by Mozingo as a variety of *S. racemosa*, but placed into its own species by Hickman) is generally a shorter shrub, 1 to 2 meters (3.28 to 6.56 feet), with non-glaucous fruits, whereas *S. mexicana* [formerly *S. caerulea* Raf.] is taller, 2 to 8 meters (6.56 to 24.25 feet), with glaucous fruits. Both occur along stream sides, but *S. melanocarpa* is found along the edges of meadows or coniferous forests, from 1,800 to 3,600 meters (5,905 to 11,811 feet) in elevation. *S. mexicana* is found below 3,000 meters (9,842 feet) in open forest areas (Hickman 1993:474). The red elderberry, *S. racemosa* (L), is a common plant in moist places in elevations below 3,300 meters (10,827 feet) (Hickman 1993:474), but is not recognized or harvested by contemporary Washoe Elders.

Elderberries today play a large role in subsistence, and the use of elderberry for the staff for the Washoe Girl's Dance (a ceremony to mark the onset of menses) is still very important. Women actively search out and monitor elderberry bushes, waiting for the right time to harvest (when they are ripe and juicy, properly sweet as identified by the ice blue color, but before the birds get them). They also keep an eye out for straight long stalks. The Women were hesitant to harvest potential staffs, offering the explanation that they would know where to find one when the time came. This sentiment is echoed frequently: always monitor, but never take until you need it; then, take what you need, but always leave some for the birds, bears, or other creatures. Never strip one bush or one patch; harvest selectively.

The elderberries are found on hillsides, often on steep slopes among rocks, so one is admonished to watch out for rattlesnakes. Once the berry clusters are cut, they will keep for several days. The large stems are cut off, but for jelly, the little stems can be left in. If one is making a pie, however, the small stems must be individually removed, a very time-consuming process. The berries are washed outside, preferably, and then brought inside to boil for jelly (adding water and apples, the pectin in the apples acting to jell the juice). After boiling, the mixture is strained through a jelly sack (flour sack sewn into a cone shape) overnight. The sack is hung outside on a stout limb, allowing the juice to drip into a pan. The strained juice is then matched cup for cup with sugar and boiled until it thickens. A beautiful, dark purple jelly is thus made from the berries (Washoe Tribe Resources Policy Program 2002).

The berries also can be air dried and then cooked in the winter when needed (boil and add sugar). To make a pie, wash and clean the berries of all their stems, and mix with flour and sugar to make the pie filling.

One family noted that their brother had warned them that some elderberries were poisonous, and so to only eat the berries with which they were familiar. All the Women Elders gathered the blue elderberry, but none harvested the red elderberry. All elderberry seeds contain hydrocyanic acid, a compound that may lead to mild cyanide poisoning (nausea and diarrhea) if taken in large enough quantities. Red elderberries have higher concentrations of hydrocyanic acid than the blue and should generally be regarded as toxic (Tilford 1997:54). However, thoroughly cooking the fruits or straining out the seeds of the blue elderberry makes the berry safe to consume. This information is ethnographically demonstrated by both the statement of some elderberries being poisonous and the practice of cooking and straining the berries for jellies, and cooking for pies. None of the consultants actively identified the red elderberry; rather, their traditional practice precludes its harvest.

Hudson is the first to list elderberry for the Washoe, noting its use as a "seed food" (berries) and the use of its hollow stem, presumably, for a whistle (1902:240). When Merriam first recorded this berry, he listed it as the huckleberry (*Vaccinium*, family Ericaceae versus family Capifoliaceae for elderberry), and later added elderberry (*Sambucus*) as *doo-bah'-do* (1904, 1923). Although it is not unusual for an ethnobotanical term to comprise two or more Western species, or more rarely, genera, we cannot be sure if Merriam correctly recorded both genera as belonging to *bá·duʔ*, as he is the only individual to record huckleberry for *bá·duʔ*. Multiple species of *Vaccinium* are found in the Sierra Nevada Mountains, most with dark berries, however, and *V. uliginosum* L. ssp. *occidentale* (A. Gray) Hultén, the western blueberry, is glaucous like the elderberry (Hickman 1993:567), leading to similar appearance and use. Merriam, however, also records multiple berries for *šuʔwétɨk*, serviceberry, so this may be a function of the nature of Merriam's work rather than native classification.

Dangberg lists the Washoe name and defines it as elderberry and elderberry stalk (in Jacobsen n.d.c.[8]), and in her manuscript describes the use of elderberry

[8] Information cited as Dangberg in Jacobsen n.d.c. is found in a list compiled by William H. Jacobsen, Jr. in which Dangberg's transcription and definition are compared with Jacobsen's.

rattles (n.d.: 52). Dangberg (1927:424-5 and 1968:81) in her recording of Washoe tales describes the hollow stem of the elderberry stalk, noting its use as a funnel for the Weasel brothers to pour out contaminated soup. K. d'Azevedo (1955) describes the elderberry as being gathered in the fall around Woodfords and Topaz Lake in the foothills and in the full sunlight. Her consultants said the berries were never eaten raw, but were always dried for the winter (*démlušému*). Jacobsen's consultants (n.d.a.) all identify *bá·du?* as elderberry, and one (the same consultant who worked with K. d'Azevedo) states that elderberries were dried and saved for winter.

Freed and Freed (1963a:28) and Price (1963:103, 1980:23) describe the importance of the elderberry staff in the girl's puberty dance. The elderberry staff is a long, straight piece of elderberry wood, about seven feet long, peeled and painted with red ochre (Price 1980:23). It is called *bá·du? ċúhu?* (Jacobsen's transcription cited in Price 1963:103). The elderberry staff can be seen as the embodiment of the girl's idealized future, existing in the present, to help the girl achieve her status as a strong and productive Washoe woman. The disposal of the staff after the ceremony is equally important, because the staff is "believed to aid the girl throughout her life, giving her legs the strength and lightness to climb mountains" (Price 1980:23). The staff is taken by a male relative and hidden, upright, in a tree in the hills so that it will always be safe and continue to represent the young woman's strength.

Supporting the idea of importance of the elderberry staff as a critical support for the young girl, Mozingo (1987:247-50) notes that elderberry wood is very hard, but, in general, its use is limited by the smallish size of the brush.

17. ċámdu? (Western chokecherry, *Prunus virgininia* var. *demissa* [Nutt.] Torrey). The *Prunus* genus comprises many fruits, all with varying degrees of hydrocyanic acid in their seeds (Hickman 1993:969). The Western chokecherry is found on rocky slopes, canyons, shrubland, oak and pine woodland, and coniferous forest from 100 to 2,900 meters (328 to 9,514 feet), in both the California and Great Basin provinces (Hickman 1993:970).

Like *bá·du?* (elderberry) and *bóšdi?* (wild onion), *ċámdu?* is a contemporary resource given much attention. The berries have one seed in them. Women can make jam or jelly from them or eat the berries plain. Trees vary in their fruit; some trees have very sweet fruit, whereas others are quite sour. The fruit is said to leave a funny film in the mouth. Large berries are desirable, and trees with adequate moisture produce bigger berries. For harvest, the berries need to be almost black. River banks are good locations for *ċámdu?*, and along Monitor Pass, across the deep canyon, are large, overgrown stands of *ċámdu?*. The Women Elders gaze across the canyon, acknowledging the huge barrier between them and the trees, and lament their inaccessibility.

The trees are often bushy, but straight stems are prized for braces for winnowing trays and burden baskets. When the wood dries, it is very tough, much tougher than willow and therefore ideal for braces, and "good for arrows, too". One consultant's mother had a hard time finding chokecherry wood and "in desperation" used wild rose stalks. Although not as good as *ċámdu?*, the wild rose stalk is more readily available and will work in a pinch. Another utilitarian source of braces is *šu?wétik* (serviceberry). One consultant made the observation that serviceberry produces a knobbier wood and would be used on utilitarian baskets; when aesthetics are a concern, *čámdu?* is preferred with its smoother, "prettier" wood.

Once, when harvesting, *čámdu?* was found on the highway side of the canyon along Monitor Pass. The Women reached as high as they could for berries, but many berries remained high out of reach, fat, dark, and not yet discovered by the birds. The Women laughed at their frustration and remarked that they should have brought their *beyú·gum* (pine nut harvesting poles) to reach the higher berries.

In addition to birds, black bears are said to be very fond of *čámdu?.* One can always tell they've been there because of their scat and their general destructiveness.

Recorded first by Merriam (1904), and subsequently by Dangberg (Jacobsen n.d.c.) and Murphey (1959), no ethnographic information is offered by these sources other than name and use as a food. Consultants to K. d'Azevedo (1955) provide more description. The chokecherries grow in canyons around Woodfords and in the pine nut range. The berries are harvested in the fall. "In the old days," the berries were dried for winter use, but also sometimes eaten raw when picked, or mashed in a basket with a rock in order to get out the seeds, leaving the pulp for consumption. Jacobsen (n.d.a.) records the fact that berries were dried and saved for the winter (*démlušému*) and could be found in the mountains or along river banks. Chokecherry is said by the Washoe to mark "old camp grounds," by virtue of large clumps of bushes growing where seeds were discarded (Downs 1966a:19).

The place name of *čámdu? wáťa* is described by Dangberg (n.d.a.), and translates to 'chokecherry stream' (Jacobsen n.d.k.).

31. dáwal (buckberry, *Shepherdia argentea* Nutt.). This thorny shrub is found along streams, river bottoms, and on slopes from 1,000 to 2,000 meters (3,280 to 6,560 feet) in the central Sierra Nevada region (Hickman 1993:542). See discussion of *balŋáčaŋ* (antelope or bitter brush) and *dúhul* (mountain mahogany) as well.

Contemporary consultants describe *dáwal* as buckberry, a plant with sharp thorns. The berries have a very tart flavor, so a pudding is made from it. The berries are cooked and strained, then the pulp is added to *hadíˑna?* (a mixture of commercial flour, water, salt, and sugar; the term comes from borrowing of Spanish *harina* [Jacobsen 1966:128, 2002]) to make the pudding. They call the pudding *dáwal*, just like the berry.

The Women note that the Paiute people eat it differently; they are said to just add water to the pulp. The Washoe way is much tastier, according to the Women, as the Paiute *dáwal* is much too strong. One Elder observes that the Paiute ate it that way because the plant was so plentiful in their territory; the Washoe, in contrast, had to travel farther to get it and hence it was more special.

Hudson (1902:246) may be the first to describe the plant, although he ambiguously says that arrow shafts are made of buck brush, which can refer to any of several species, including buckberry. One of Jacobsen's consultants states that buckberries grow on buck brush (n.d.a.), but other species are also identified as buck brush (see Material Culture: Buck brush)

Jacobsen (n.d.a.) records that the berries are edible and were dried for winter (*démlušému*). One consultant added that the tree grows only east of Reno, about a mile from the Indian Colony. Schubert (1957b) gives the botanical identification of *Shepherdia argentea*, based on a specimen.

Price provides a name for the thorn of the buck brush, *dauwatl dama* [*dáwal dáʔmaʔ* 'buck brush thorn'] in his glossary, emphasizing the thorny nature of this plant (1980:71). Nevers states that *šuʔwétik* is buckberry, but most sources consider *šuʔwétik* to be serviceberry. *Shoo we tuc Watah* (*šuʔwétik wáťa*, McKinney Creek) is said to be a prime spot for harvesting the berry (Nevers 1976:6, 8).

Dangberg (n.d.a.) records the place name *dáwal wáťa*, 'buckberry stream' (Jacobsen n.d.k.), but the location of this stream is not known to me. Jacobsen (f.n.) and d'Azevedo (1956) list the place name *dáwal díme?* 'buckberry water' (Jacobsen n.d.k.). It describes a spring between Bald Mountain and Sorensen Flat, east of Gardnerville, or a spring among the Pine Nut Hills (Jacobsen n.d.d.); d'Azevedo (1956) describes the location as a spring in the canyon below a particular hill where an individual is buried.

S. argentea, dáwal, has an interesting historical footnote. The fruit, which is said to be sour, was made into sauce eaten with buffalo meat along the Overland Trail (from Julesburg, Colorado, to Fort Bridger, Wyoming), hence its other common name of buffaloberry (Hickman 1993:542).

44. [deʔilélegiʔ ťétgiʔ]. (botanical identification unknown). Price (1980) records *d¢ell¢gi d¢tki* as a 'red berry.' The term translates to 'having red seeds' (Jacobsen, personal communication, 2003), and probably represents a characterization of a plant rather than an actual name (see also Freed's recording of *beʒiyé·ʒiŋ ťétgiʔ*, meaning 'having little seeds' [discussed under Medicines]).

75. ǩilá·čim. (botanical identification unknown). *K!ila'tsim* is recorded by Freed (1966:81-2) as a kind of berry gathered at a camp site on Watson Creek a short distance from Lake Tahoe. Jacobsen analyses the name to mean 'green-faced' (personal communication, 2003). The prefix *ǩil*^{V}- means to face or point in a certain direction; the stem *áčim* means 'green' or 'yellow' (Jacobsen 1964:327 and personal communication, 2003). There is a yellow variety of *séwit yá·gil* (Sierra gooseberry, *Ribes roezlii* Regel) that one Elder mentioned; possibly there is some connection between the two. *Nanhólwa* is the yellow current; possibly this is another name for it.

86. magólolo? or maŋólolo?. (Sierra plum, *Prunus subcordata* Benth.). This plant is shrub or tree-like, less than 8 meters tall (26 feet). It is found in mixed ever green or coniferous forest from 100 to 1900 meters (328 to 6,234 feet) throughout the Sierra Nevada (Hickman 1993:970).

Jacobsen's consultants (n.d.a.) identify it as a plant species with edible berries; as a wild plum; as small and reddish, growing on mountains; and one person recognizes the word but can't identify the plant.

97. maʔálaŋiʔ (wild or mountain strawberry, *Fragaria virginiana* Duchesne). Mountain strawberries are found in meadow and forest openings from 1,200 to 3,300 meters (3,937 to 1,827 feet) throughout the high Sierra Nevada region. Hickman notes that the plants of the central portion of the high Sierra Nevada are unusually large (1993:952).

The wild strawberry is a favorite delicacy of the Women Elders. When we first encountered it, the Women talked about how sweet the wild fruit is and how much they enjoyed eating it as children at Lake Tahoe. One Elder observed that the fruit seemed smaller now than in the past, and another offered the observance that the drier climate experienced in the past several years may have caused the stunted fruit.

Once an Elder inadvertently stepped on a wild strawberry plant, and she was quite upset to have needlessly ruined the fruit of a native plant. This sentiment echoes throughout the harvest of the native foods, that of the increased value and really precious nature of all these plants and the need to use and care for them wisely.

Merriam (1904) lists both thimbleberry (*Rubus parviflorus*) and strawberry (*F. virginiana*) as *mah-ah'-lang'e, mă-ah'-la^{h}ng* [*maʔálaŋiʔ*], but he is the only source to do so. Jacobsen (n.d.a.) records the plant as wild strawberries, and Schubert (1957b) provides the botanical identifications of *F. virginiana* var. *platypetala* (wild strawberry) and *F. californica* (wood strawberry) based on descriptions. Downs (1966a) notes the consumption of wild strawberries as part of his generalized discussion of subsistence, as do Nevers (1976:10) and W. d'Azevedo (1986b:475).

Merriam (1904) also records the term ma-ah'-lang et'-took [*maʔálaŋiʔ ʔétik*], meaning 'strawberry seeds', differentiating between the plant and its products, much as acorn nuts are sometimes called *málɨŋ ʔétik* and pine nuts still in their shell are called *ťá·gim ʔétik* (Jacobsen f.n.).

The place name of *máʔalaŋiʔ* refers to a place near "Strawberry"; also a flat near *šuʔwétik*, a place west of Franktown; also identified as a slope west of Washoe Lake (Jacobsen n.d.d.). Strawberry or *máʔalaŋiʔ* is also defined as being Little Valley at Franktown (Jacobsen f.n., d'Azevedo 1956).

98. máʔkiʔ ʔíyek (*Ribes velutinum* E. Greene, wild gooseberry). The thorny stem of this plant identifies it readily. The distribution is in sagebrush steppe, juniper woodland and pine forests from 700 to 2500 meters (2,297 to 8,202 feet) throughout the high Sierra Nevada region and the Great Basin province (Hickman 1993:679).

According to the Women Elders, this plant is encountered among the pine nut trees. It buries its barbs into you when you're trying to get to the base of trees to harvest pine nuts. It has good berries on it and the bears are quite fond of it. This may preclude harvesting from particular trees, as it is difficult to work through the thorny shrub and it may be a preferred area for bears. One consultant observed that the 'Old Timers' cleared out the bottom of pine nut trees so that harvesting would be easier (discussed under *ťá·gim*).

Máʔkiʔ ʔíyek is not only named for its snakelike barbs, it is also identified as a home for rattlesnakes. It is their territory, where they have their nests, and one must be careful when harvesting pine nuts to avoid the plant. It is thick, barbed, and potentially dangerous, and it blocks access to the pine nut trees.

Dangberg (Jacobsen n.d.c.) lists the term for this plant, but Jacobsen is the first to record information. His consultants describe it as a brush species with stickers, growing in the Pine Nut Hills, which looks similar to gooseberry. The sharp stickers were noted by one consultant to be used to poke through warts in various directions in order to remove them (Jacobsen n.d.b.).

111. nanhólwa (currants, *Ribes aureums* Pursh). Golden currants are found in many habitats below 3000 meters (9,843 feet) throughout the high Sierra Nevada and the Great Basin (Hickman 1993:677).

The Women Elders identify and harvest currants, but seemed to have a preference for elderberry and Sierra gooseberry when in the field. One Elder said her mother used to gather currants by Grass Lake in a meadow. All berries were canned or made into jellies by the Women and their mothers and grandmothers.

Schubert identified the botanical name for golden currant, based on a description of the plant (1957b). Jacobsen (n.d.a.) lists it as a plant with edible berries that turn yellow when ripe, possibly gooseberries. Currants and gooseberries are both in the *Ribes* genus, distinguished by the presence of spines on gooseberries. Murphey (1959) identifies this as *R. hudsonianum* A. Richards var. *petiolare* (Douglas) Jancz., the western black currant (Murphey lists *R. petiolare*, but Hickman (1993) notes the newer classification), describing it as a food.

126. séwɨt yá·gɨl (Sierra gooseberry, *Ribes roezlii* Regel). The Sierra gooseberry is found in forests, chaparral, and woodlands below 2800 meters (9,186 feet) in all of the high Sierra Nevada region (Hickman 1993:679).

Early in the field experience, the Elders set out to find some *séwɨt yá·gɨl*. We went to an area where they had previously found the plant, but there were no plants. One remarked that the plant used to be more plentiful; another replied, 'the *dabóʔo* (white people) chased them all away'; and a third, 'they chase all the plants away'.

On subsequent trips, we visited known sites that were also now missing the plant. The Elders mourned this loss and thought the plant was gone (the Forest Service did attempt to eradicate all gooseberries in the 1940s because of a virus it carries). Subsequently, we found lots of *séwɨt yá·gɨl* (in locations new to the Women), but it was always greeted as a bonus by the Elders; their worldview clearly sees native plants as being threatened by *dabóʔo.*

The first patch we encountered, the Elders were so excited to find the plant that we spent the entire day harvesting the berries. The fruits are covered with sharp spines, so it calls for some caution. One Elder, however, ate the fruits directly off the bush. She took the spine-covered berries into her mouth and peeled the outside skin with her teeth to get at the inside pulp; she than spat out the skin.

Other Elders harvested the berries into buckets to take home to make jelly. One Elder brought a stick to harvest the berries; she would strike the branch with ripe berries and they would drop into her bucket. Others picked the berries with gloves on their hands or even bare-handed. One Elder commented that the super-ripe berries don't jell as well, so leave those. The yellow and red varieties both make good, sweet jelly.

While in the berry patch, an Elder spotted bear scat with chokecherries in it. She also saw an area that looked like a bear had tromped vegetation, so we all kept our eyes open for bear. At the same spot, we found a "squirrel table," where the squirrels had taken the berries onto the top of a tree stump and sucked the berries to get at the pulp, leaving the dried skins behind. Along with the berry skins were pine nut shells. The squirrels use tree trunks as a hard, flat surface on which to crack open the pine cones.

In the late summer at the end of the second field season, we came across a patch the Women had seen the previous year. A *dabóʔo* was harvesting the berries, and the Women Elders refused to go to that site for the rest of the summer, respecting the fact that the other woman was there first. By the second year, the Women were willing to go look at the site, but the berries were stunted and dry. The Women said this was a result of the extremely dry summer. We were also surrounded by smoke from forest fires, and the Women expressed how depressing and suffocating the smoke was; they also commented again that Washoe do not start forest fires, only *dabóʔo.*

Two other Elders also commented that gooseberries were more plentiful in the past; they talked about one person who had a manual juice press to get juice out. To harvest, you shoud wear gloves or use a stick to beat ripe berries off the bush, and pick the individual berries, not clusters like elderberry. The berries make great jelly, so bring home several buckets. The fruit will keep for a few days, but then you need to wash it, boil it in water, strain it overnight in a jelly sack (old flour sacks sewn into a funnel shape), and then make jelly from the juice (sugar and juice in equal parts). The fruit juice doesn't need pectin to jell (Washoe Tribe Resources Policy Program 2002).

Merriam (1904) recorded the Sierra gooseberry, and K. d'Azevedo (1955) states that it is gathered in the fall of the year and is used to make pies and jellies. Her consultant would gather the berry at Lake Tahoe "below Meyers Station."

Freed (1966:78) writes that all berries except *séwɨt yáˑgɨl* could be dried and stored for winter. Porcupine berries might be sieved through a basket and the mush eaten in the minimally processed state. The camp site of *ʔláˑm wáťa* (on the southeastern side of Lake Tahoe) was noted for the multiple berries found in the area. Blackwood Creek is also listed by Freed (1966) as a camp site known for availability of *séwɨt yáˑgɨl*.

Jacobsen (n.d.a.) observes that the wild gooseberry plant name literally means 'porcupine testicles'.

kabadima [? díme?]. Riddell (1960:84) lists a location of *kabadima* (number 33), identified as 'gooseberry spring.' The first part of this word, *kaba*, is not seemingly similar to any Washoe terms for berries, although possibly it refers to *ťáˑba* 'grizzly bear' as bears are known for their fondness for berries. Jacobsen (n.d.d.) and d'Azevedo (1956) both list *ťáˑba wáťa* 'grizzly bear stream', another water source, but there is no other information on *tá'ba díme?*, so Riddell's place name remains something of a mystery.

146. šu?wétɨk (Serviceberry, *Amelanchier alnifolia* Nutt.) The service- or june berry is found in open shrublands and coniferous forests from 50 to 2,600 meters (164 to 8,530 feet) throughout the northern and central high Sierra Nevada region (Hickman 1993:946)

Women Elders use the wood from this bush to make braces for winnowing and burden baskets. It is considered more serviceable than other woods, such as chokecherry. The berries are edible and turn black when ripe. Two Elders commented that they did not care for the taste, as it was a slimy berry. This berry is canned only; jelly is not made from it.

Merriam (1904) is the only source to identify blackberries (*Rubus vitifolius*) as *šu?wétɨk*, although one of Jacobsen's consultants identifies it as "wild black berries" (n.d.a.) (the berries are nearly black when fully ripe). Merriam also lists serviceberry (*A. alnifolia*), coffeeberry (*Rhamnus californica*), and chinquapin (*Chrysolepsis* spp.) as *šu?wétik* (1904). Hudson (1902) writes that the blackberry was useful as arrows and rims for large baskets, and that *Amelanchier* was a berry food also used in twined baskets.

K. d'Azevedo's consultant (1955) states that it is a dark blue berry, which grows up in the Pine Nut Hills in the canyons by water. The berries were gathered along with pine nuts and were also eaten fresh. The berries were crushed to get the seeds out, and then the pulp was left to sit for a while so that it would jell. "Indians say this is like our jello" (1955). Jacobsen's other consultants list the plant as a tall tree species with berries that have two seeds. The wood is hard and used for fish spears and arrows. To eat the berries, they were squeezed through a basket and then jelled (Jacobsen n.d.a.).

Dangberg (1968:66) identifies a Washoe place named after service berries in the creation myth, identifying the significance of *šuʔwétɨk* as a food source. Freed (1966:78, 80-1) notes three specific camp locations where *šuʔwétɨk* is found, and one is named *šuʔwétɨk wáťa*, identified as Chambers Creek or McKinney Creek (also, Jacobsen n.d.d., Nevers 1976). The place name of *šuʔwétɨk* is noted as a place west of Franktown, a slight sandy hill (Dangberg n.d.a., d'Azevedo 1956, Jacobsen n.d.d.).

See P12. ʔeyéyeʔ, discussed under Medicine: Charms.

180. ʔulihólaʔ (Mountain gooseberries, botanical identification unknown). Only Jacobsen provides this plant name, and it is described by one of his consultants simply as 'mountain gooseberries' (n.d.b.). This plant contains the same prefix seen on *ʔulipánča* and *ʔuliMóŋil* (discussed under Food: Greens and Plants, respectively).

Food: Greens

11. bóšdiʔ (wild onion greens, *Allium campanulatem.*). The genus *Allium* refers to perennial plants characterized by distinctive onion odor and taste. There are

500 species worldwide, and the genus is especially common in California (Hickman 1993:1172). The species designation is provided by Rucks 2001.

Contemporary Washoe women place a great deal of importance on finding and gathering *bóšdiʔ*. The leaves of the plant are harvested by breaking the stems off at the base; the bulbs are not eaten and gatherers are cautioned not to pull up the bulbs. Children, when first learning to pick *bóšdiʔ*, always pull up the bulbs, according to the women. One consultant comments that if you eat the roots, the plant will be gone; if you eat the leaves, pretty soon you'll have a nice little family of *bóšdiʔ* plants. This statement eloquently reflects the nurturing, maternal attitude many Washoe women have toward the native plants. Another Elder stated that their (Washoe) plants do better when people care for them and harvest them. *Bóšdiʔ* dies out when people don't harvest it (see also the comments about *báŋkuš*, Indian tobacco). Indian people are responsible for the well-being of all plants and animals, the water and the land, according to these Elders. It is their heritage to care for the Earth.

Grass is seen as a threat to patches of *bóšdiʔ*, as Women believe it chokes out the native plant. Under the aspen trees is a desirable gathering place for the onion greens; the aspen gives the greens a good taste. One Elder's mother said that cattle grazing through the aspen groves ruin the *bóšdiʔ*, not only by contaminating it, but also by the fact that their droppings encourage the growth of grass.

Under pine trees is also a good spot. Leaves are picked when young and tender, prior to blossoming. Once the tips of the leaves turn brown, the plant is too old to harvest. To have its peak taste, *bóšdi?* must have received sufficient rainfall. Dry weather prevents the plant from developing its full flavor.

Bóšdi? is eaten raw. Once harvested, the leaves will keep for a few days so Women take extra home to feed their families. The raw leaves are sometimes rolled up and salted or just eaten like salad greens. The plant does not store well, so if one gathers extra, it's good to share with others.

Like many of the native plants, *bóšdi?* is considered to be restorative to health and well-being. Many of the Women Elders express a sense of deep contentment when harvesting and eating native foods. They crave the flavors and textures of the wild plants. Quite often, the Women return to the same areas their mothers frequented, and they talk about memories and old times. They laugh and tease and call out to one another as they gather. They also keep an eye out for unwanted visitors. We backed out of one *bóšdi?* patch when an Elder spotted bear tracks. "This is part of what we are taught. They are our survival skills. Always look for tracks. Always find a landmark to guide you. Remember, you're in their territory. Show respect for it. Don't abuse it."

Bóšdi? and *bá·du?* (elderberries) are highly marked plants for the Women, and are more easily found along roadways or in adjacent open areas. The continued incursion of fences, private property, "No Trespassing" signs, and even age limit the gathering landscape for Women Elders and thus plants that flourish along roads become increasingly accessible and important. Plants that may have been only one of many resources in the past take on greater importance as access to landscape shrinks.

Dangberg (Jacobsen n.d.c.) provides the earliest description of *bóšdiʔ*, simply noting the Washoe name and genus, *Cellium* [sic; *Allium*]. K. d'Azevedo (1955) writes that this onion was not stored, but people would gather enough to last two or three days. People would go long distances to find the onion, to Double Springs Flat, to Markleeville, along the Woodfords creek, and in the foothills beyond Carson by Washo Lake.

Jacobsen's consultants say *bóšdiʔ* is wild onion; one said it is used as medicine for a bad appetite (n.d.a.). W. d'Azevedo (forthcoming) notes that residents of the Woodfords region were sometimes referred to as "wild onion eaters" by the Carson Valley Washoe (*bóšdiʔ t'émʔluʔ*).

14. búyeʔ (wild onion, *Allium platycaule*). My work elicits the term *búyeʔ delpílpiliʔ*, a swamp onion, which is cooked as a patty on a rock, mixed with other greens. The color of this plant is a faded green and the name is said by one consultant to refer to the shape of the leaves, which are flat and wide. She states that frequently Washoe plant names describe some physical attribute of the plant. Jacobsen's consultants list *depílpiliʔ* as meaning 'flat,' and *mehélpil* as hot cakes, referring to their flat shape and using the same stem *ílpil* (Jacobsen, personal communication, 2003).

The green of the plant was gathered and combined with other greens; water was added to the mixture and then the mush was then laid on top of fire-heated rocks to cook. The mush was formed into cakes by hand and dried to form a storable food item. We passed stands of *búye?* on several outings, but the Women Elders indicated no desire to harvest any.

K. d'Azevedo's consultants describe this plant as a wild onion, or wild garlic. The entire plant is harvested, roots and all. The plant is then cooked with hot rocks, formed into cakes and dried for winter food. The consultant states that the cakes look like "cow manure" (1955). This was considered a "major food" and still eaten as of the 1950s. Jacobsen's consultants call the plant wild onion with flat leaves or wild garlic, whose small roots were cooked and covered with *bóšdi?*(n.d.a.).

One consultant identifies several plants as 'wild onions': *búye?, bóšdi?, sésmi?,* and *géwe ?ámił* (Jacobsen f.n.). The same pattern of grouping several specific plants into one category is seen with *hímu* (willow) and *mačilólo* (mushroom). Unfortunately it is not possible to determine if consultants are describing native classifications, or if they are using English descriptive terms. No Washoe cover term for 'onion,' presents itself, in contrast with 'willow', for which *hímu* is used in the name of most of the plants included in this larger grouping. Mushroom has only two plants further specificed within the grouping: cottonwood and pine nut mushrooms, both of which use the term *mačilólo* in their names.

Jacobsen (n.d.d.) records the place-name of *búye? badámaduwe?*, a camping place to the west, on the trail to hunting grounds, which Rucks (2001) identifies as Bagley Valley, based on the field notes of Siskin (1937). She also procured a contemporary botanical identification of a specimen of *búye?* as *Allium platycaule* (2001:6-11). Jacobsen (n.d.j..) also lists *búye? badámadam* as a place name. The difference between the two names is the directional suffixes *-uweʔ and -am*, indicating directional reference to the speaker: 'hence' and 'away to' respectively (Jacobsen 1964:564).

23. čišó·liʔ (miner's lettuce, *Claytonia perfoliata* ssp. *depressa* (A. Gray) John M. Miller and Chambers; formerly *Montia* perfoliata var. *depressa* (A. Gray) Jepson). Identified botanically by Schubert (1957b) based on a specimen, *C. perfoliata* is found on open, disturbed sites and shrub lands below 2,500 meters (8,202 feet) in the Great Basin (Hickman 1993:900).

This plant is listed by Dangberg (Jacobsen n.d.c.), and described ethnographically by K. d'Azevedo (1955) and Jacobsen (n.d.a). Consultants to K. d'Azevedo describe the plant as wild lettuce that grows all over the mountains by Topaz Lake and also in California. Along with *bóšdiʔ, čišó·liʔ* is gathered in the spring and eaten raw, but this particular woman thought the plant was no longer eaten (as of 1955). Jacobsen's consultants also call the plant wild lettuce and describe it as having long stems with leaves that point upward (n.d.a.). Downs (1966a) and d'Azevedo (1986b) both list it as a green that is gathered.

33. debíʔleʔ or deʔebíʔle. (botanical identification unknown). Only Jacobsen records this plant (n.d.a.). One consultant says *debíʔleʔ* is a leafy plant with edible roots, and another says *deʔebíʔleʔ* is cooked and dried *búyeʔ* or meat. The prefix *ʔ̣bᵉ-* in *deʔébíʔleʔ* refers to 'scratching or squeezing by the hand [pinching],' perhaps as in

pinching off some of the dried patty (Jacobsen 1964:267 and personal communication, 2003).

141. šɨlk̓a, sɨlk̓a, or šɨlk̓aʔ. (botanical identification unknown). A plant similar to wild lettuce, with leaves spread out on the ground; it was not eaten much, but the leaves could be eaten (Jacoben n.d.a.). *šɨlk̓aʔ*, *bóšdiʔ*, and *c̓išó·liʔ* are listed as the three foods Washoe ate without cooking (Jacobsen f.n.).

161. wadákšaʔ (wild spinach, *Lupinus polyphyllus*). A variety of lupine, w*adákšaʔ* is tall and found at higher elevations. Known as wild spinach, it was gathered by one Elder for her mother. The plant is considered one of the spring greens and is said to contain essential elements. Children were told they had to eat it, and older people craved its taste. The cut leaves and stalk were soaked to get the bitterness out.

K. d'Azevedo records that wild spinach grows high in the California mountains and was only eaten during the summer (1955). Jacobsen (n.d.a.) writes that it is a plant species, wild spinach, which grows around Lake Tahoe, has blue flowers, and its roots were eaten. The plant was soaked to get the bitterness out. Downs (1966a) notes the harvest of wild spinach. Rucks (2001:6-30), who provides the botanical identification, writes that wild spinach was leached and steamed and dried into large cakes.

The name for Washoe spinach most likely comes from the Miwok languages to the east: Central Sierran Miwok has the term *watakša*, referring to cabbage (Freeland and Broadbent 1960:68); Southern Sierran Miwok lists *watak-ha* as mountain lupine; and Plains Miwok lists *wataksa* as poppy(?) (Jacobsen personal communication, 2003; Callahan 1984).

See also 164. wayámhu, discussed under Food: Seeds.

182. ʔulipánča (watercress; one of three possible species: western yellow cress (*Rorippa curvisiliqua* (Hook) Britton), *Rorippa sinuata* var. *integra* (Torrey & A. Gray) A. Hitchie, or winter cress (*Barbarea vulgaris*). All grow in water. Yellow or water cress, *R. curvisiliqua* is said to be uncommon, but found along stream banks, seepage areas, and lakes shores at elevations less than 900 meters (2,953 feet) throughout California floristic province. *R. sinuate* is found along lake shores, playas, and wet depressions from 900 to 1900 meters (2,953 to 6,234 feet) throughout the Great Basin (Hickman 1993:434). Common wintercress, *B. vulgaris*, is found in disturbed sites at less than 1000 meters (3,281 feet) in the Great Basin (Hickman 1993:404).

Washoe Women gather and remember their mothers gathering watercress in the spring in creeks. They would eat it raw in a salad, or boil it in water and eat it like spinach, or fry it with bacon. The green is said to have a peppery taste. It grows in water and will produce "babies" to spread itself. The introduction of cattle into many of the meadows precludes the gathering of watercress from those streams because of contamination.

Stewart (1941) lists *R. curvisiliqua* as harvested. K. d'Azevedo records that watercress was gathered in the summer from streams in the low mountains (1955). Schubert (1957b) lists all three species as watercress, and Jacobsen (n.d.a.) writes that it is water-grass[9] or watercress, a plant that was eaten.

Jacobsen (1964:471) records the instance of a man's name derived or shortened from this: *pánċa.* The place name *ʔulipánċa* is the name of a spring north of Holbrook Junction (Jacobsen f.n.). d'Azevedo (1956) describes it as a small stream at the south side of the highway (?), facing the hills on the west and about one-half mile above Mountain House. d'Azevedo notes it as a well-known gathering place for *ʔulipánċa* and other plants.

Food: Mushrooms

80. maċilólo or meċilolo (mushrooms).

81. ťá·gɨm maċilólo (pine nut mushrooms).

82. ťáša? maċilólo (cottonwood mushrooms).

The caps only of wild mushrooms are eaten, according to one Elder. At Meek's Bay, where a stream runs into the Lake is an area referred to by the Women as *maċilólo guwáťa*; *maċilólo* defined as meaning wild mushroom and *guwáťa* as its

---

9 Jacobsen speculates that the term 'water-grass' may result from a mishearing or mislearning by Washoe people of the term 'watercress' (personal communication, 2003).

stream. Freed (1966:80) identifies the area as *ma'yalaw wO'tha* [*may?yála wáťa*] (Meeks Bay Creek).

The Women then discussed that *wáťa* means stream or river, and that *wáťašému* is the name of the Carson River, and *wáťa ŋá?miŋ* refers to the 'river's baby or child' (kinship term) that runs by the Washoe Ranch.

Merriam (1923) records edible mushrooms as *mah-tse-lo'-lo* [*mačilólo*], but also lists *tah'sh-sha* [*ťáša?*] (cottonwood) for edible mushrooms (puff-balls) on cottonwoods. It is not clear whether Merriam is referring to the cotton produced by cottonwoods, identified in his 1904 work as *das-sap-bab'-bl* or *tow-bab'l* [*ťáša? ṗá·ṗɨl* or*dawṗá·ṗɨl*] (*ṗá·ṗɨl* means flowers, plural) or to some mushroom or growth that grows near or on cottonwoods. K. d'Azevedo (1955) offers clarification. She describes two types of mushrooms: *ťá·gɨm mačilólo* (pine nut mushrooms) and *ťáša? mačilólo* (cottonwood mushrooms). The pine nut mushroom was gathered in spring from around the pine nut trees, and the cottonwood mushroom was similarly found around cottonwoods. One of K. d'Azevedo's consultants states that she used to gather cottonwood mushrooms in Carson City (around the train depot) and sell them to local residents. This consultant stated that the mushrooms were dried and shredded to be stored as a winter food (*démlušému*).

Dangberg lists *motsilolo* as possibly toadstool or mushroom (Jacobsen n.d.c.). Jacobsen's consultants state that mushrooms grew at the foot of the Sierras, among cottonwood trees. Some were eaten, and some were poisonous (Jacobsen n.d.a.). Freed (1966:82) lists a camp site along Watson Creek on the northwest side of Lake

Tahoe as a favored spot for gathering mushrooms. W. d'Azevedo (f.n.) records that mushrooms were found under pine needles and were eaten in the spring after rains; to test them for edibility, the mushrooms were cut open. If the center is yellow, then the plant is poisonous.

Food: Nuts

91. máliŋ and 92. malŋá·či (acorns from oak, *Quercus* spp. *Q. californicus* identified by Merriam [1904)] for *máliŋ* and *Q. vaccinigolia* for *malŋá·či*). Possibly *Q. kelloggii* Newb., the California black oak, is the more appropriate designation as *Q. californica* is not listed in Hickman 1993. *Q. kelloggii* is found along slopes, in valleys, woodlands, and coniferous forests from 200 to 2,400 meters (656 to 7,874 feet) throughout the California floristic province with exclusions in the Great Central Valley, and the south coast and Channel Islands of southwestern California (Hickman 993:662).

Q. wislizeni A. DC., interior live oak, seems a potential candidate for *malŋá·či*. The live oak is found in canyons, slopes, valleys, chaparral, and pine-oak woodlands below 2,000 meters (6,562 feet) in the western foothills of the Sierra Nevada foothills (Hickman 1993:662). The oak *šagá·šaʔ* may be this species, however; Callahan (1984) presents the Plains Miwok term *sa·sa* for live oak, identified botanically by C. Hart Merriam (1979) as *Q. wizlizei.*

The Women Elders state they prefer the live (white) oak, however, and they go to California's western slope to procure the acorns of the live oak. Acorns are a favored plant because the Women Elders love acorn biscuits. The acorn trees do not grow in their area, so they travel to the western slope to gather acorns. One Elder pointed out the location of a section of an old trail for going across the pass to gather acorns.

The notion of wide-open acorn groves available for harvest is not accurate for these Elders. People go to harvest where they know someone (perhaps a relative) and have been invited to share the crop. One Elder told of an incident in which a relative invited her to come gather acorns, as the relative said it was the biggest harvest they had seen in thirty years. The bountiful crop was restricted to a small area, however, as other relatives and friends who had been contacted said it was a bad year for acorn. The Elder invited some people to go with her to harvest. Later, other people went to the site without this Elder, and the relative (who had the acorns) and the Elder were both upset that the other people had shown up without the proper intermediary or invitation.

On a trip to Jackson, California, the Elders pointed out the live oaks they prefer to use for acorn biscuit. The black oak, which has darker green leaves and a darker bark, produces a longer acorn, which makes a firmer biscuit. The Women prefer the live oak acorns. Adjacent to the live oaks were several incense cedars (*ʔitmahá·waʔ*). Incense cedar is used in the preparation of acorn biscuits, and the Women Elders pointed out the natural association of these two trees.

To test acorns one of the Elder's relative throws the acorn on the table; if it makes a hollow sound, then the acorn is no good. Acorns are gathered and then stored for a full year to age (they will store in the shell for two to three years). One Elder stated that her family preferred acorns to pine nuts for winter storage because acorns keep better than pine nuts.

Many of the Women spread a blanket or canvas under a bed and let the nuts dry in the house all winter. The acorns will mold if they don't dry properly. In the spring, after the nuts have dried all winter, the acorns are first cracked or shelled and must be used within a week after shelling (otherwise, the nut will become rancid). A rock is used to crack the shell and then the shell is peeled off with a knife. Once the shells are removed, then the reddish skin on the exterior of the nut and between the two halves of the nut must be peeled off with a knife. One Elder told of how they would lay the nuts out in the sun and sprinkle them with water; the sun would then cause the skin to blister and make it easier to remove. The nut is now ready to be pounded on a grinding stone. The nuts are pounded and then cleaned in a winnowing tray several times to get the flour to the right consistency. Acorn flour ground too finely won't leach properly according to one of the Elder's grandmother. Incense cedar is mixed into the flour during the grinding to give it a nice flavor. The flour is now ready to leach.

Cold river or creek water is needed to properly make acorn biscuits. The nut flour is first roasted and then taken to the acorn pit, which has been scooped out of sand by the water. The pit is constructed with a rim and lined with cloth or grass or leaves, whatever is available close by but something that will let the water drain through it. For instance, Stewart (1941) writes that the acorns were leached in sage-lined pits. Incense cedar boughs are then placed on top of the flour in the pit and water is poured over the flour, many times, until the water runs clear and the flour is white. The boughs give the flour flavor and disperse the water as it is poured over the flour. The cleaned flour/paste is now ready for biscuit making. The top film is scraped off and used to flavor soups or some other food, but is not good for the acorn biscuits. The paste is mixed with water and boiled until it forms the right consistency for biscuits. The biscuit paste is then dropped into the gentle cold water, which has been directed to flow into the pit, and the cold water causes the flour to gel instantly, forming the biscuit. The biscuits are left in the water all afternoon and are ready to eat by evening (Washoe Tribe Resources Policy Program 2002).

Hudson (1902) only notes that the leach pit for acorns is found in the sand along Lake Tahoe. Merriam (1904) records that the black oak, *Q. californica* (possibly means *Q. kelloggii* Newb, California Black oak) is common on the west side of Honey Lake.

There are indications that acorns are found in Washoe territory: d'Azevedo (1986b:471) writes that the black acorn was found in the west of Honey Lake Valley and was an important resource for the Northern Washoe. Barrett (1916) also writes that acorns were obtained from the extreme western part of Washoe territory, or through trade with the Miwok and Maidu. Jacobsen (n.d.d. and f.n.) records the place names of *máliŋ beyúmeweʔ*, meaning 'acorns came down' and located about two miles north of Millford (California, by Honey Lake). d'Azevedo also records this site, and notes that the acorns here were a food source for the Washoe people of the area (1956:78). Jacobsen also records Amadi Hot Springs (*dísem ʔlóʔom*), as a location between Doyle and Millford (California). In this region, the Washoe camped all along the western slope of the hills. Acorn country is said to occur north of Millford (Jacobsen n.d.d.).

Freed (1966:78) notes that if no other acorns were available, the Washoe collected white oak acorns (*malŋatsi* [*malŋá·ċi*]), "which are described as resembling acorns and growing on bushes five or six feet high".

K. d'Azevedo (1955) records extensive information on acorns, noting that they were gathered mostly from Big Trees in California (with a place name of *ṗá·l* per W. d'Azevedo 1956 and Jacobsen n.d.d.). It took four days to travel on foot to get there, and journeys to gather the acorn would take place after the harvest of pine nuts was completed. If there was time, people would shell the nuts in California ('having time' meaning that there was no trouble with the Indian tribe in that area). Acorns were relied upon for winter food (*démlušému*) in the same way as pine nuts. The nuts were dried, shelled, and skinned before being pounded into flour. It was hard work and took two people to accomplish, so enough was made for three or four days at a time.

Once the acorn was ground into flour, a hollow place was made in the sand with the acorn shells placed in the bottom to improve drainage. A cloth was placed over the shells and the flour placed on top of the cloth. Whenever there was wind, another cloth was placed on top of the flour. The whole pile was then covered with boughs ("Cedar, I think"). Hot water was poured over the boughs onto the flour until the bitterness was gone. "The boughs are for flavor." Sometimes, if one wanted more flavor, one could stir the boiling water, in which the biscuits were made, with the cedar bough.

While the water was being leached through the flour, rocks the size of oranges (but ones that won't split) were being heated in a fire. When the flour was fully leached, it was thinned with warm water, and hot rocks added until the mixture boils. "It will get thick, but not as thick as mush." With a bowl, the hot acorn mixture was scooped out and poured into cold water. It was left in the water until the mixture is gels. The finished product was the acorn biscuits.

W. d'Azevedo records information on relay-caching, wherein large quantities of acorns could be carried over the mountains in stages, mostly among Northern Washoe; southern Washoe depended less on acorns as a staple because of the burden of transporting them farther distances (1986b:474). He also notes that the technology used by the Washoe to process acorns is one they share with California (W. d'Azevedo 1986b:474).

Acorn nuts are sometimes called *máliŋ ʔétɨk* (acorn seeds) (Jacobsen f.n.). The suffix *-á·c̓i* in *malŋá·c̓i* carries a diminutive meaning, thus describing a 'small oak', in the same way that *šú·gɨlá·c̓i* means 'small sunflower' (Jacobsen 1964:477).

150. tó·ni, tó·niʔ, tú·niʔ (California hazel, *Corylus rostrata* var. *californica*). Hickman (1993:366) identifies only one species of this genus: *Corylus cornuta* Marsh. var. *californica* (A. DC.) W. Sharp. This plant prefers moist, shady spots at altitudes

less than 2100 meters (6,890 feet) and is found in the Sierra Nevada range; its nuts are edible (Hickman 1993:366).

Merriam records this plant (1904), and Schubert provides a botanical identfication based on a description. Jacobsen (n.d.a.) writes that this is the California hard-shell nuts. The name is likely borrowed from Maidu or Miwok into Washoe (Jacobsen 1978:127, 139); Callahan (1984, 1987) identifies Northern Sierra Miwok and Plains Miwok *ʔu·nu* as buckeye, *Quercus californica* (botanical identification comes from Merriam in Heizer 1979).

155. ťá·gɨm (pine nuts, *Pinus monophylla* Torrey and Frémont). The singleleaf pinyon is found in pinyon and juniper woodlands below 2800 meters (9,186 feet) throughout the central and southern high Sierra Nevada region and Sierra Nevada east region (Hickman 1993:120).

For Washoe Indian people, and other tribal people of the Great Basin, pine nuts are a major resource. The significance of this resource continues to be marked among contemporary Women Elders.

During the period of our field work, the pine nut crops were disappointing. One year, the poor crop was attributed to a sacred ceremony that was conducted improperly. When sacred things are treated improperly, bad results happen, according to the Elders. Other years the poor crops were related to the dry weather and general environmental disturbance the Elders perceive as related to EuroAmerican stewardship (or lack thereof).

The Elders say the 'Old Timers' watch the trees all year when they are out gathering or hunting; they begin the previous fall, looking for the *méde?*, the small buds that will become next year's pine nuts. Once the buds form, the plant needs rain for the buds to mature. When it is time to harvest, the people who have watched the trees all year know where to go for productive gathering.

When the trees turn yellow, it means the trees are either very dry or wormy. The wormy cones are empty of nuts and are the first to open. Empty pine nut shells are called *t̓áha?*, from the stem *áha?*, which means to be in poverty, to be lacking, to be in need. Thus the empty pine nut shells are impoverished and in need of the nut!

Cones are *yá·ga?*, and *yák̓iš* is the cone fully opened with the nut visible. People have to be industrious and watchful to beat the birds (in the trees) and squirrels (on the ground) to the pine nuts. Bears don't seem to eat the *tá·gɨm* according to one Elder; she's never seen pine nuts in bear scat.

One Elder says that you can tell the groves where the 'Old Timers' harvested because the bottom branches are cut off the trees so that people can work under the trees once the cones are knocked down (sheep will also clean out the bottom areas, she says). She says the Old People kept the trees cleaned and cleared of lower branches and undergrowth, making harvest an easier process, also creating a nicer looking grove. Another Elder stated that *t̓á·gɨm* is never cut; if branches are desired, dead wood is collected from the ground.

Ṫá·gɨm ?á·ša is said to name the Pine Nut Hills, and *t̓á·gɨm ?má·š* is one's pine nut territory. The *?má·š* is the area where a family camps every year at the same spot;

the pounding rock on your *ʔmá·š* belongs to you and people must ask permission *in Washoe* to use your *ʔmá·š* or your *ʔlá·m* (grinding rock).

People put their *ʔitbeyú·gum* (also referred to as *beyú·gum*, long poles made of tamarack used to knock cones/burrs down) in the area where they are working; this is a useful storage device and also lets other people know that people gather pine nuts here. Elderberry staffs from the girl's puberty dance are also placed in a pine nut tree and then people know never to touch that staff or to reuse it.

To harvest, people start at the lower elevations and work their way up the hill. The *beyú·gum* are used to knock the cones down from the tall branches. A shorter stick (no name given) is used to beat lower branches to knock those cones off. Young people don't know how to do this properly and will break the branches, which ruins the tree. *ʔitbeyú·gum* is a stick with a hook on the end. *Bíheʔ* refers to a willow stick with a willow hook lashed onto it with something tough, like wire. When we encountered two poles propped in a juniper tree among the pine nuts, they were identified as "Paiute" poles by one Elder because they were willow.

Another Elder said her mother always said, first, watch for the rain to wash the pitch away, then let the sun and wind come out to open the cones, then it's time for harvest. In general, pine nut trees are thought by one Elder to do better on the shade side of the hill.

Belé·yu refers to a looped stirring stick used to make pine nut soup. The material for this comes from a pine nut tree that is growing underneath a mature pine nut tree. That way, you know that the little tree doesn't have a chance to grow up and be a mature tree, so you're not wasting valuable pine nut trees.

Pine nut soup left outside to freeze is their "ice cream."

The wood of *tá'gim* is preferable to that of juniper for burning. There is a small green bug found inside the cone of the pine nuts, known as *tá'gim gúšuʔ* 'pine nut pet'; people are not supposed to kill this bug.

Hudson (1902) records that pine nuts are cracked by toasting and then broken on a flat stone using a cylindrical hand stone. The broken shells are separated by wind casting (with baskets) and the meat of the nut is then ground finely and mixed with hot water and cooked until stiff. The uncooked nut meal is very oil and nutritious "to a healthy stomach," and the toasted nut or bread made from it is "extremely nutritious and palatable" (Hudson 1902:238). He also describes the caching of pine nuts, noting they were stored in bee-hive shaped granaries on the ends of stilts to protect the contents from rodents; the granaries were thatched with grass (1902:248). Merriam (1904) correctly identifies the tree, and Barrett (1916) collects pine nuts, noting that the nuts were a very important food for the Washoe, eaten either as a mush or raw.

Stewart (1941) lists multiple culture traits associated with pine nuts, but probably most significantly that of family-owned plots. K. d'Azevedo (1955) writes that "in the old days," a ritualized washing or bathing in the river occurred prior to gathering pine nuts. Consultants of K. d'Azevedo no longer participated in such a ritual, but would wash at home to prepare for the harvest. The harvest is described, beginning with construction of a roasting pit in the sand lined with sagebrush; the cones are knocked down from trees into baskets and then dumped into the pit. The sagebrush is set on fire and burns while several people turn the cones (or burrs) with long poles to prevent them from burning, not an easy task. Once the burrs are roasted, the burnt sagebrush is removed (if left, the nuts will taste bitter). The pit is then covered with hot sand and the burrs are left to steam or bake for about one hour. Once the burrs are done, they are pulled out of the pit and "peeled like an artichoke, two seeds in each direction." The burrs are then left to dry for several days on a canvas cloth. If this preparation is successful, the nuts will keep for two or three years without spoiling. This is how the nuts are stored, to protect people through the winter with food.

The first pine nuts are gathered in August and roasted for storage; later in September, ripe nuts will be gathered. The same procedure as described by Hudson is followed for ripe nuts, except that d'Azevedo's consultant describes another step of roasting. After the nuts have been separated from their shells, they are returned to a basket with charcoal to roast more. A little flour is ground from some nuts and this is sprinkled with water over the remaining nuts to clean off the charcoal marks. The flour is worked into the nuts with the hands. In the wintertime, when children were confined and bored, as a special treat, the thick pine nut dough was shaped into little animals and left outside to freeze overnight (K. d'Azevedo 1955).

Freed and Freed (1963a) write about the pine nut dance, which is no longer held. A man would dream about the pine nuts and pray for them. This individual was not an Indian doctor, but he had power. He prayed that the pine nuts would be plentiful and not full of worms. He was the leader of the pine nut dance and decided when pine nuts were ready to pick. If people picked without his approval, then the nuts would be bad.

Nevers (1976) writes that Nentusu [*nénťušu*, from the verb *nénťuš*, 'to be an old lady' (Jacobsen 1964:359)], the Old Woman who created the Washoe, lived in the Pine Nut Hills, and she commanded the pinyon trees to grow to feed her children (also Dangberg 1927, 1968). Price (1980) and d'Azevedo (1986b) both present excellent published summaries of the pine nut harvest. Contemporary accounts gathered for the Washoe Tribe Resources Policy Program (2002) show great similarity to these early accounts (with the exception of caching, which was not describd by contemporary consultants), marking how important the pine nut harvest still is to many Washoe.

Ṫá·gɨm ʔlúweʔ is a place name that describes a pointed hill past *malǩó·biʔ wáťaʔá·š* (?), on the left of the road as one heads toward Yerington (Jacobsen n.d.d.). d'Azevedo (1956:8) describes this site as "a little bare-topped hill with a few pine nut trees where a few families sometimes wintered (Smoky [family], mainly)". d'Azevedo (1956) also describes this site as a small permanent settlement: *ťá·gɨm ʔlúweʔ ťáŋaliʔ*. Nevers (1976:4) describes *ťá·gɨm ʔá·ša* as the name for the Pine Nut Hills.

Food: Other.

10. bó·p̓oʔ (sticky-leaf rabbitbrush, *Chysothamnus viscidiflorus* (Hook.) Nutt.). Sticky-leaf or green rabbitbrush is commonly associated with sagebrush and pinyon-junipers and is a common shrub in disturbed sites, often crowding out other shrubs (Mozingo 1987:299-300). Elevational distribution is from 900 to 4,000 meters (2,953 to 13,123 feet) (Hickman 1993:232). Like its close relative rubber rabbitbrush (*C. nauseosus* [Pallas] Britton), green rabbitbrush offers limited browse to deer in winter, but birds, rabbits, and other small mammals consume the fruit and leaves with relish (Mozingo 1987:292)

Rabbitbrush was never explicitly discussed by the Women Elders. The only mention of it came when they were asked if blooming rabbitbrush indicated readiness of the pine nut harvest (something I had heard as folk knowledge among non-Indians). The Women responded that blooming rabbitbrush is not always a good sign for the pine nut harvest. If the rabbitbrush blooms too early, as it does in unusual years, then the cones will not be mature, so one has to monitor several indicators of harvest, again pointing out the ecological approach traditional Washoe knowledge employs.

Merriam (1904) identifies the plant with both Washoe and botanical names (*C. occidentalis*). Stewart notes the presence of *C. nauseosus* among the Washoe, associating it with Northern Paiute uses of chewing; he notes that Paiute women and girls chewed the small lumps of some secretion at the top of the roots "as we chew gum" (1941:375, 428). Dangberg identifies *bobo* as rubber brush (Jacobsen n.d.c.)

and records it from myth as something not to be eaten (1927:400). Schubert (1957b) provides the botanical identification of *C. viscidiflorus* from a specimen, and Murphey observes that the lumps and knots on limbs of *C. nauseosus* are chewed (1959:56). Jacobsen's consultants also identify it as a chewing gum, but call it variously goldenrod or grease brush and note that the roots are chewed upon (n.d.a.). One consultant identified 'grease bush chewing gum' as *bó·p̓oʔ šá·laʔ ʔitbemú·k̓ul* (rabbitbrush, pitch, something to be chewed) (Jacobsen f.n.).

Reed and Stetler lists the use of blossoms as a dye (1962). Only Downs (1966a:19) lists rabbitbrush seeds as a source of food; in contradiction to this is the Washoe myth which states that rabbitbrush is food for the snowshoe or mountain rabbit [*mú·k̓i*][10], and people are admonished not to eat it (Dangberg 1927:400-1 and 1968:47).

Nevers (1976:21) writes that the Washoe tattooed themselves using acorn juice and burnt rabbitbrush mixed with water; the purpose of the tattoo was to help identify kidnapped individuals (in their ongoing conflicts with the *Tan eu [tániw]* (Miwok), kidnapping was a standard tactic).

The name *bó·p̓oʔ* is possibly derived from the stem *á·bu*, meaning 'goose-pimples, pimples, small bumps' (Jacobsen 1964:358). Perhaps the name comes from the lumps and knots of secretions described on the plant by Murphey (1959).

---

[10]Mountain rabbit is more correct. Merriam 1904 records *mú·k̓i* as the white-tailed jack rabbit (*Lepus campestrus* group, identified as *L. townsendi* in Storer and Usinger 1963:327). Jacobsen (f.n.) records the identification of *dalá̓ʔak gumpélew* (mountain jack rabbit) for *mú·k̓i*.

The lumps come from the latex in the stems extracted by chewing (Mozingo 1987:289).

Jacobsen (n.d.d.) identifies the place of *bó·p̓oʔ k̓ilaʔmam*, a rabbit-drive place near Carson. The name translates to 'rabbitbrush pointing out.' Interestingly, the place name is identified by the plant, which is the habitat of rabbits, rather than by *pélew*, the name of the jackrabbit that inhabited the valleys and for which rabbit drives were conducted. d'Azevedo (1956:41) records *bó·p̓oʔ k̓ilaʔmam* as "a flat just this side of Carson City—by the dump—where rabbit drives used to be held".

Riddell (1960:82) identifies the place name *bokodalap*, [*bó·p̓oʔ daláʔak*]; it refers to "the name for the mountain on the west side of Winnemucca Valley, and on the east side of Pyramid Lake. This mountain is now called Tule Mountain". d'Azevedo (1956) identifies *bó·p̓oʔ daláʔak* as Fort Sage Mountain.

See 25. dá·bal, discussed under Medicine.

166. wehené·ne, dewehené·ne, wehiné·ne (thorny skeleton weed, *Lygodesmia spinosa*). Identified botanically by Merriam (1904), *L. spinosa* has been reclassified to *Stephanomeria spinosa* (Nutt.) Tomb. This small "subshrub" is found in deserts, scrub, and on dry mountain slopes from 1,200 to 3,300 meters (3,937 to 10,827 feet) throughout the high Sierra Nevada and into Nevada (Hickman 1993:348).

Merriam (1904), Train, Henrichs, and Archer (1941:102), and Murphey (1959:57) all identify this as a chewing gum; Murphey (1959:66) also identifies *waaha nane* as *S. exigua*, another species. Jacobsen (n.d.a.) records that it is a plant with roots that has rubbery bumps, which were chewed upon; the plant also has thorns or stickers.

This plant was pointed out to me by one of the Women Elders both in their native garden and in the field, although I did not recognize the botanical identification nor did I collect a specimen.

Food: Roots, Bulbs

3. bá·le?, bá·la?, bá·li?. (botanical identification unknown). K. d'Azevedo (1955), W. d'Azevedo (1956) and Jacobsen (n.d.a.) list this plant. Most of Jacobsen's consultants say this means barley, but one woman comments that this was already the name of a plant before the whites came. It has edible roots, joints in the stalk, and a juice in the stems that was sucked on. Another woman consultant, working with K. d'Azevedo, calls the plant sweet root and offers the following story: "My grandmother told me, long time ago people used to dig bala for food, over there across from Stewart, near them hot springs. They used to go and dig them and eat them and they were all alright that time. Next time when they went back in the spring they ate them and just fell over and died right there. Don't know why, but think you can still see those peoples bones, all them people that ate it." "We get scared and never eat bala no more." The consultant describes *bá·la?* as being sort of like *?ulipánča*, watercress (K. d'Azevedo 1955).

Jacobsen (personal communication, 2003) suggests that the word *bá·leʔ* implies a borrowing from the English word 'barley', as Washoe vowel harmony would select for the term *bá·laʔ*, but then pointed out d'Azevedo's reference to the plant, which describes it as a root.

d'Azevedo (1956:34-35) writes about a plant that is found in the area of Dangberg Hot Springs [*ʔmá·s ťi·yel ʔlóʔma*] and he provides this text about b<u>a</u>li' [*bá·liʔ*]:

> There once was a great famine in the whole southern Washo area. This happened long before the whites came into the area. Hundreds and hundreds of people wandered about looking for food—there were no pinenuts, little water, and plants dried up and game left the area. They finally began to gather around those hot springs, because there was one plant which continued to grow there in abundance—this was called b<u>a</u>li'. It stil grows there in small amounts and that is the only place where it grows. The root of this plant was eaten. The plant itself gows quite high with waving frond stalks.
>
> While these people had gathered here in great numbers, there was a sudden epidemic. They began to die off in great numbers—so fast that they could scarcely be buried. People began moving away. Those that were left were unable to bury all the dead. They threw some of them into the hot springs—others, they just left where they died. Soon everyone left the place. They left all their belongings there with the dead. No one ever returned to live there.
>
> In later years a few families did live near there now and then. (This must be the period of Geroge's story [George Snooks].)
>
> The people had two explanations for the epidemic. Some said it was the plant, b<u>a</u>li'; and no one ever ate that root again…

15. camas (Camassia quamash (Pursh) E. Greene, Camas). This useful bulb is found in damp forests, meadows, and streamsides below 3,300 meters (10,827 feet) throughout the high Sierra Nevada mountains, although the subspecies *breviflora* Gould is restricted to northern Sierra Nevada Mountains, adjacent to the Modoc Plateau (Hickman 1993:1189).

This widely used bulb of the Plateau culture region and among Northern Paiute peoples of Oregon (Fowler and Liljeblad 1986:441) seems to have little documentation among the Washoe people. No Washoe term for this plant has been found. Stewart (1941) suggests its possible use among Washoe, and d'Azevedo lists it as a resource. He writes: "As early as March, camas was gathered in the Sierra Nevada foothills, and it is reported in one source to have been eaten raw (Camp 1960:206)" (d'Azevedo (1986b:473-4). Certainly camas is found in the region, but my work with Women Elders did not mark camas as a resource. We came upon a meadow full of camas in bloom, but the Women did not identify the plant.

There are several terms for Washoe 'potatoes' that are not linked to specific plants, and it is possible that a Washoe term exists for camas, but it may be one whose definition has been lost among contemporary consultants. One Woman Elder did state that they were taught not to gather any plants in the region of death camas (*kogidésmiʔ*, *Zigadenus* spp.), because one could not be sure of the plants, and the threat of the *kogidésmiʔ* was too great. It is possible that the similar appearance of the two plants without blossoms and the overlapping habitats caused Washoe people to abandon camas as a resource, especially when so many other plants were available.

16. čáhaʔ (onion, garlic; *Allium anceps*, S. Watson). The *Allium* genus is characterized by its onion odor and taste and has 500 species throughout the world, but especially in California. *Allium anceps* is found on barren clay and rocky slopes, 1,200 to 1,550 meters (3,937 to 5,085 feet) in western Nevada (Hickman 1993:1176).

Identified by Dangberg (Dangberg n.d. and Jacobsen n.d.c), and Jacobsen (n.d.a.), this plant is known as wild garlic. Schubert (1957b) identified the plant as *Allium anceps*, based on Dangberg's botanical identification (*Cellium anceps* [sic]) (Jacobsen n.d.c.).

Jacobsen's consultants offer that it is an edible root species, a wild plant with seeds that taste like garlic, and that is grows in dry places.

Dangberg's field notes (n.d.: 4, 60) describe a treatment of *tsaha*. She describes the process on page 4, without identifying the plant, but later on page 60 describes the resource as *tsaha* and notes that Hawkins, a local rancher, provided the description. She writes that women gathered wild onions in large quantities with a digging stick of mountain mahogany, 1.5 meters (approximately five feet) long. Onions were placed in burden baskets and then placed in a large pile while a large conical pit was being dug. She writes "then take out rocks," which suggests the pit had a fire burning in it, to heat the earth and the rocks for pit roasting. Once the rocks were taken out, cedar boughs were used to line the pit and onions placed on top of the boughs. More boughs were placed on top of the onions and the whole pit then covered with dirt and hot rocks. The onions were left to pit roast over night and dissolved into a syrupy pulp. In the morning, the stones and dirt were removed and people would then "claw out wads of stuff." The pulp was formed into a flat cake, one to two inches thick and up to a foot across. These cakes were dried and stored. To be eaten, "chunks" were twisted off.

See also Food: Greens for more information on other onions.

19. čé·gelhu (wild onion, *Allium* spp.). This onion is identified *as A. tribracteatum* var. *parvum* by Schubert (1957b), based on the description provided by Dangberg (Jacobsen n.d.c.). Hickman describes *A. tribracreatum* (no var. *parvum*) as three bracted onion, which has a rare distribution and is found on volcanic slopes from 1,300 to 3,000 meters (4,265 to 9,842 feet) in the central high Sierra Nevada, especially Tuolumne county (Hickman 1993:1179). *A. parvum*, as identified by Dangberg (Jacobsen n.d.c.), however, is common on stony clay slopes and taluses from 1,200 to 2,800 meters (3,937 to 9,186 feet) throughout northern and central Sierra Nevada (Hickman 1993:1178).

Gathered around Dresslerville by young children, the bulb was eaten as a snack. Contemporary consultants describe it as very strong tasting, like garlic, with grayish green leaves, small purple flowers, and bigger and more spread out than *bóšdiʔ*. The bulb is eaten and the flavor is much stronger than that of *bóšdiʔ*.

This plant was never harvested for storage (K. d'Azevedo 1955). The plant is consumed opportunistically, especially by children in the spring in the fields around Dresslerville. The school teacher complained that the children "smelled like skunks" from eating the edible root that grows among sagebrush. Some children, however, are no longer knowledgeable about plants and two children were poisoned "from digging up the wrong thing" (K. d'Azevedo 1955).

Jacobsen gathered similar information, although one consultant added that this wild onion grew around Loyalton (n.d.a.).

20. čigíʔdebiʔ or čigí·debiʔ (water parsnip, *Sium* spp.?). Hudson writes that another root food came from the *Sium cicutaefolium* (1902:240), but Hickman only lists one species of the genus *Sium*, that of *S. suave* Walter. This plant grows in the wet soils of swamps, marshes and along stream banks below 2,000 meters (6,562 feet) in the Great Basin (Hickman 1993:164).

Schubert (1957b) identifies *čigíʔdebiʔ* based on a specimen. The plant is described variously by Jacobsen's consultants as having edible roots; as looking like *díme? dé·guš* (a poison), but eaten; as having roots sticking out from the main body in various directions; and as growing around water, being eaten, having a sweet taste and looking similar to water parsnips (*díme? dé·guš*) (Jacobsen n.d.a.). Schubert lists the common name as water parsnip, which is the poisonous *díme? dé·guš*; Washoe consultants refer to the wild parsnip (Western water hemlock) as water parsnip.

See also 33. debíʔleʔ or deʔebíʔle, discussed under Food: Greens.

36. dé·guš (wild sweet potatoes, see also *golsísiʔ or gusísiʔ*; *Perideridia bolanderi* (A. Gray) Nelson & J.F. Macbr). The genus *Perideridia* is known as yampah, a common resource for many tribes of the Great Basin (Fowler 1986:70-1). *P. bolanderi* is found in meadows, scrub, pine forest, blue-oak woodlands, and summer-dry clay soil from 600 to 2,000 meters (1,968 to 6,562 feet) in the Sierra Nevada and Great Basin floristic provinces (Hickman 1993:160).

Washoe consultants state that both *dé·guš* and *golsísi?* are eaten, but identify *dé·guš* as sweet potato and *golsísi?* as potato. Both grow in the Pine Nut Hills in dry areas and in drier parts of meadows. The plant identified as *dé·guš* by consultants is found in Meek's Bay Meadow and Cathedral Meadows and was at first thought to be *dabólboli?* (white brodiaea), then tentatively identified as *golsísi?*, but ultimately confirmed as *dé·guš*. It must be remembered that these are elderly women whose memories for some of these plants is refreshed by time and exposure.

Women Elders never identified *golsísi?* or other potatoes, only *dé·guš*. The Women say that the potatoes are small, thumb-sized, and have a strong flavor. They usually gather enough for a meal. The potatoes are washed and boiled for consumption (Washoe Tribe Resources Policy Program 2002).

Barrett in 1916 collected a specimen of this, calling it a food resembling the sweet potato; he noted that it was usually eaten raw. K. d'Azevedo's consultants (1955) said it is a sweet potato, too, but said this particular root was stored for winter food (*démlušému*). *Dé·guš* was gathered in the summer, along rivers on the valley floor. At the time of d'Azevedo's work (1955), the consultant complained that sheep eat the plant before one can harvest it now. *Dé·guš* has been applied to the potatoes they get in commercial groceries.

W. d'Azevedo (1986b), Downs (1966a), Nevers (1976), and Stewart (1941) all note the harvest and consumption of wild potatoes, but detailed descriptions are lacking. Most note that several varieties of wild potatoes were eaten *(dé·guš, golsísi?, má?al*), but disagreement exists as to whether *dé·guš* was eaten raw (Barrett 1916) or stored (K. d'Azevedo 1955). Downs says that all potatoes were consumed immediately, as they did not occur in sufficient enough quantities to store; he also says gooseberry (see *séwit yá·giɬ*) was not stored as there was no method of preserving it (1966a:18-9). K. d'Azevedo (1955) records that *golsísiʔ* was never stored.

The terms *dé·guš* and *golsísiʔ* appear to have survived more linguisticaly than has *máʔal* or *maʔsák̓a*, other types of potatoes also elicited by Jacobsen (n.d.a.) in the work I did with contemporary Women Elders. Jack (1978) suggests that white brodiaea is the potato *maʔsák̓a*, that *golsísiʔ* is blue dicks (identified as *Brodiaea capitata* by Jack, but Hickman (1993) identifies blue dicks as *Dichelostemma capitatatum* [Benth.] A. W. Wood, formerly *Brodiaea pulchella* [Salisb.] E Greene and *D. pulchella* [Salisb.] A. A. Heller). Jack also suggests that *máʔal* is perhaps yampah (*Perideridia* spp.), a well-known food source for many Indian people. Botanical identification provided by Rucks 2001 identifies *dé·guš* as *P. bolanderi*.

The Basin-wide use of yampah would suggest it as a highly ranked resource and as a term that should be retained, but camas (*Camassia quamash*) is equally highly ranked among Plateau people, yet evidence for it among southern and valley Washoe is lacking both linguistically and ethnographically, even though camas is found in several of the woodland meadows, such as Cathedral Meadows off Fallen Leaf Lake Road (south of Lake Tahoe).

The description of these 'potatoes' is complemented by examples from Northern Sierra and Southern Sierra Miwok, which have the term *wa·la*, meaning wild potatoes (bluebells?) and a brodiaea bulb, respectively (Callahan 1984). This term is very close to the Washoe term *wá·laš*, meaning 'bread', and suggests a borrowing of the term from Miwok, relating to a starchy product (Jacobsen, personal communication, 2003).

37. délem damʔlá·k̓ɨm or délem damʔlá·k̓ɨmiʔ. (*Lupinus*, species not known). Merriam (1904) identifies this as herb lupine (*Lupinus* spp.), and writes that the root is good to eat. Murphey (1959:6) calls *dellem* [*délem*] silver lupine (*Lupinus* spp.). Jacobsen's consultants identify it as a flower species that grows among sagebrush and pine nuts. It translates literally to 'what the shrew chews off' (Jacobsen n.d.b.).

45. dí·ge or dí·geʔ. (Nevada biscuitroot, *Lomatium nevadense* (S. wats.) Coult. & Rose). Listed by Dangberg (Jacobsen n.d.c.), *diigɛ* is identified as cous or biscuit root, *Cogswellia nevadensis* (*Cogswellia* is an early category for *Lomatium*). *Lomatium nevadense* (S. Wats.) Coult. & Rose, is commonly known as Nevada Biscuitroot (USDA Plant Resources), and is found in sagebrush, woodland, and desert scrub habitats from 1,000 to 3,000 meters (3,281 to 9,843 feet) (Hickman 1993:154).

Lomatium dissectum var. *multifidum* (*dó·ċaʔ*) is a very important and significant medicine for the Washoe, but this particular plant, called Sierra lomatium by Graff (1999:94), is a food source, but apparently not a significant one. Identified only by Jacobsen, this is some kind of wild plant, which was not a main food, but children sometimes ate them. Apparently, the root was eaten (Jacobsen n.d.a.).

58. golsísiʔ or gusísiʔ (wild potatoes, botanical identification unknown). Refer to *dé·guš* for contemporary discussion of *golsísiʔ*. This thumb-sized potato is said to grow in the pinyon and juniper area of sagebrush scrub area in rocky places. It is harvested by using a digging stick or sharpened spring from a car. Women gather enough for a meal and it is either eaten raw or boiled and eaten. The potato does not store well (Washoe Tribe Resources Policy Program 2002).

K. d'Azevedo (1955) writes that these white potatoes were never stored. They were dug out of rocky places up in the Pine Nut Hills and people boiled and ate them while harvesting pine nuts. Jacobsen's consultants (n.d.a.) also state that the wild potato grows in rocky places in the Pine Nut Hills. Rucks (2001:6-29) offers a tentative identification of *Brodiaea hyacininia [hyacinthina]*.

The term *golsísiʔ* comprises a noun-deriving prefix *gol-* and the noun stem *sísiʔ*, meaning 'gland, saliva gland, tonsil' (Jacobsen 1964:471).

73. kókšiʔ (sego lily, *Calochotus bruneaunis* Nelson & J.F. Macbr. [formerly *C. nuttalli* Torrey var. *bruneaunis*)]. The sego lily is found among dry shrubs or grass in the pinyon and juniper woodland, from 1,700 to 3,000 meters (5,577 to 9,843 feet), especially in the eastern Sierra Nevada (Hickman 1993:1185).

The fields around Dresslerville used to be filled with *kókšiʔ* when the Elders were younger. In the soft dirt of the fields, one could easily dig the bulbs. When we found some along the side of a mountain pass in very rocky terrain, it was almost impossible to get the bulbs out.

Children around Dresslervile would gather *kókšiʔ* and *ċé·gelhu* (wild onion) to eat as snacks. The bulbs were very crunchy and children would eat them raw. Older women would gather the bulbs and boil them for meals.

When we went to Jackson, California, to look at acorns, we passed large stands of *kókšiʔ* along the roadside in bloom. The Women Elders were very, very pleased to see the quantity of plants and the unusual pink color of the blossoms (they are white in Nevada). One Elder commented that she thought *kókšiʔ* was a Nevada plant and was surprised to see it so abundant in California. The abundance of the plant was taken as a very good sign by the Women for Indian food plants; so often, they believe plants are scarcer now than in the past, so the sight of a healthy population was very exciting to them. One Woman thought the changes in our climates over the past years may have affected the distribution of *kókšiʔ*, allowing it to thrive in California rather than Nevada (the Women actually cross between California and Nevada frequently; I believe the distinction has more to do with the western slope versus the eastern one).

Merriam in 1904 lists *kawk-se* [*kókšiʔ*] as a member of the genus *Brodiaea* and *kok'-se* [*kókšiʔ*] as a member of the genus *Calochortus.* Dangberg (Jacobsen n.d.c.) lists *koksi* [*kókšiʔ*] as *Calochortus*, the mariposa lily.

K. d'Azevedo (1955) describes it as a plant growing among the sagebrush that has a round edible root which is gathered in the springtime. The plant was common in Carson Valley and most ate it raw. If an abundance was found, however, it could be boiled up like potatoes. It was not gathered for winter food.

Schubert (1957b) identifies sego lily as *C. nuttalli* Torr. based on a specimen. Murphey (1959) records that Indians in Northern Nevada dug the bulbs in early spring, soon after the plant sprouted. Jacobsen (n.d.a.) describes the plant as one with round edible roots that grows among the sagebrush.

Both *kókši?* and *kogidésmi?* are borrowings into Washoe from a Numic form and the Northern Paiute language, respectively (Jacobsen 1978:124). The Washoe word *kókši?* appears to relate more closely to the Kawaiisu form *kogosi-vɨ*, 'root of *paguusi*' than to *kó'gi*, the Northern Paiute name for sego lily, which is the borrowed first part of *kogidésmi?* (Jacobsen 1986b:41).

77. lagamba. (Purplespot fritillary, *Fritillaria atropurpura*). Only Dangberg (Jacobsen n.d.c.) records this plant, which she identifies as *Fritillaria atropurpura*. Hickman (1993:1194) identifies the genus as containing bulbs of some species that were eaten by Indians of North America. *F. atropurpura* Nutt. is a common plant, found in leaf molds under trees from 1,000 to 3,000 meters (3,281 to 9,843 feet) throughout the Sierra Nevada and Great Basin regions (Hickman 1993:1195).

C. Fowler (1986:75) identifies *F. atropurpura* as purplespot fritillary, the bulbs of which were eaten by Nevada Northern Paiute and Utah Southern Paiute and possibly Northern Ute. There is no further mention of this plant for the Washoe.

96. máʔal. (botanical identification unknown). Only Jacobsen (n.d.a.) and Dangberg (1927) list this Washoe term, which is described as wild potatoes, the size of marbles, or as a wild plant species that was eaten, and as cat-tails by Dangberg [*mahaťálal*]. In the discussion of *dé·guš*, I noted that most ethnographers observe that several varieties of wild potatoes were eaten, but detailed information on individual 'potatoes' is lacking, especially for *máʔal.* Jack (1978) tentatively identified *máʔal* as *Perideridia* (yampah), but Rucks's 2001 noting of *dé·guš* as *Perideridia* seems to negate Jack's suggestion. Dangberg (1927) refers to both *maal yaga* and *maal yagul* [*máʔal yá·gaʔ* and *máʔal yá·gil*] 'potato cone or pod' and 'potato testicles', possibly relating the shape of the potatoes (cat-tails?) to male anatomy, much like the term *séwɨt yá·gɨl* 'porcupine testicles' for Sierra gooseberries.

99. maʔsáǩa or masáǩa. (botanical identification unknown). Jacobsen (n.d.a.) writes that the plant has a root similar to *dé·guš*, but smaller. The plant has small white flowers and grows below Myers Station. K. d'Azevedo (1955) elicits the description of a plant with white flowers and edible root, which grows flat to the ground. The plant is gathered every summer at Lake Tahoe in a " 'little flat' just below Myers Station". The roots were boiled and eaten, but never stored. Freed (1966:78) records that a type of root, *ma'sakha*, was collected at *lamwO'tha* [*ʔlá·m wáťa*], a small stream with a camping place where the stream enters Lake Tahoe, near Edgewood.

Jack (1978) hypothesized that *maʔsáǩa* could be identified botanically as white brodiaea, but one of the Women Elders identified white brodiaea as *dé·guš*, while Rucks (2001) collected *P. bolanderi* as *dé·guš*. Clearly, there are multiple plants with small edible corms or bulbs glossed under the heading, 'potato,' but the finer distinctions of species identification is not strong in the contemporary record.

See also 122. sašáǩa or šašáǩa, discussed under Material Culture: Brush/Tree.

123. sáʔaš. Dangberg (Jacobsen n.d.c.) identifies *tsaac* [*sáʔaš*] as *Thalesia purpurea* (?) as cancer root. Jacobsen (n.d.b.) describes it as a root species that was eaten and which grows in the Carson Valley. He notes that the consultant applied this word to a specimen of *séǩeš*.

124. séǩeš or čéǩeš and (bitter root, *Lewisia rediviva* Pursh.). This plant is found in various rocky, sandy and ground, clay, shale, etc., and in open woodlands and sagebrush shrub with pine, oak, or juniper, from 60 to 3,000 meters (197 to 9,843 feet) throughout the Sierra Nevada and east Sierra Nevada (Hickman 1993:903).

Dangberg (Jacobsen n.d.c.) lists this as *tsεgεc*, bitter root, *Lewisia rediviva*, and possibly *watsεkεc*, lily. She identifies as an important food in Washoe myth, noting that 'Old Woman' digs *sεkεc* (bitter root) for the hungry child (1927:394-5). *Sεǩεc* is also identified in the Star Brides story, recorded by Jacobsen (f.n.). Schubert (1957b) identifies the plant as *L. rediviva*, based on a specimen.

Jacobsen (n.d.d.) records the place name *sék̓eš ʔlúweʔ* 'bitter roots sitting', a place near Buckeye. d'Azevedo (1956) identifies *sék̓eš ʔlúweʔ* as located one-half mile east of Gardnerville.

See also 125. sésmiʔ, discussed under Material Culture: Fiber.

127. silá·t̓awhu (tiger lily, *Lilium parvum* Kell.), and

128. silá·t̓awhuŋáŋa (columbine, *Aquilegia* spp.). The tiger or alpine lily is found in wet meadows, willow thickets, and streams in coniferous forests from 1,400 to 2,,900 meters (4,953 to 9,514 feet) throughout the north and central high Sierra Nevada region (Hickman 1993:1200). Two species of the columbine are found in Washoe territory: *A. formosa* and *A. pubescens.* The two blend and hybridize in the high Sierra Nevada, but in general share habitat and distribution, although *A. pubescens* is found in higher elevations (Hickman 1993:913).

When we first encountered the tiger lily, the Women were very excited to find this plant; it was another plant they had thought lost. It was first misidentified as a medicine whose root is used. Later, when we encountered the plant in a plentiful location, one of the Elders dug the plant and found a root ball with lots of rootlets. "This is Indian Rice," she pronounced. "We boil it and it puffs up." She called both plants *silá·t̓awhu*, but said there is a medicinal plant (that looks the same) with a root used for medicine as well as the plant with the rootlets used as Indian Rice. When we encountered another site with an abundant population, the Women again expressed how surprised they were by the healthy number of plants.

This overlapping of names for similar-appearing plants with different uses may be indicated by Merriam's transcription of *Sil-lat-ta-huŋ-ah-ah* [*silá·t̓awhuŋáŋa*] for the columbine (*Aquilegia* spp.). The auxiliary verb *-ŋáŋa* means 'to pretend' or 'false' (Jacobsen 1964:559); thus, the medicinal plant, the columbine, is called a false tiger lily, recognizing the closeness of their appearance. The Elder was indeed correct; there are two plants that look very much the same, but one is used for medicine and the other for food. Without Merriam's transcription, this distinction woud have been lost.

Train, Henrichs, and Archer record that *Aquilegia,* the columbine, is a medicinal plant among Paiute and Shoshone people (1941:37). This is the plant known as *silá·t̓awhuŋáŋa* for the Washoe. Jacobsen lists *silá·t̓awhu* as the tiger lily, which grows in springs. Its root is white, and it has kernels like corn that used to be eaten. The plant species grows around Lake Tahoe (n.d.a.). Schubert (1957b) and Murphey (1959) also record the plant as the tiger lily.

194. yucca? (*Yucca whipplei-?*). Hudson (1902:251) writes that a "bread or cake was made here from the baked bulbs of a certain plant found further to the south, probably from some yucca. It is sweet it in taste, but full of fine fibrous material, making it objectionable in mastication." This is the only reference to yucca, a plant with a desert distribution. *Y. whipplei* Torrey, is found in chaparral, coastal or desert

scrub below 2,500 meters (8,202 feet) in the southern Sierra Nevada, especially on the eastern slope (Hickman 1993:1210). Yucca does not actually have a bulb, however, and no other reference indicates trade with southern neighbors for this food, nor are there any loanwords associated with it.

187. *Brodiaea capitata* or *Cyperus rotunda*, nut grass. This resource is described by Stewart 1941 as a food source of the Washoe.

Food: Seeds

See 16. ċáha?, discussed under Food: Roots/Bulbs.

18. [ċawási?, or sawási?] Tsawasii (*Balsamorrhiza incana*). Only Dangberg (Jacobsen n.d.c.) lists this term. She identifies it as balsamroot, *Balsamorrhiza incana* [sic]. Hickman (1993:212-3) lists no species of *Balsamorhiza* by the name *B. incana*, nor does he identify any name changes that would match with *B. incana.* Other species of *Balsamorhiza* are found in the Great Basin and Sierra Nevada regions, and *šú·gilá·ċi* is identified as *Balsamorhiza sagittata* by Washoe consultants.

27. dáhal (sand seed, *Mentzelia congesta* Torrey and A. Gray). The genus *Mentzelia* is commonly known as Blazing Star. *M. congesta* is found on disturbed slopes, pine forests, sagebrush scrub, and pinyon and juniper woodlands from 1,500 to 2,700 meters (4,921 to 8,858 feet) along the eastern slope of the Sierra Nevada;

other species of *Mentzelia* are also found along the eastern Sierra Nevada and Great Basin in similar habitats (Hickman 1993:743-4).

Contemporary women know that *dáhal* is a fire follower; they tell of the Acorn Fire that happened in 1994 and how they harvested *dáhal* the following year at the site of the fire. By the subsequent year, however, the plant was "gone." The Women Elders deny any deliberate burning to encourage growth of the plant, and state emphatically that the Washoe do not cause fires like *dabóʔo* (white people) do.

Dáhal has dark brown seeds, which are harvested in the fall. One can either harvest with a seedbeater and basket, or spread a cloth underneath the plant to gather the seeds when the pods are shattered. The hulls are cleaned from the seeds with a *mudá·l* (seed winnowing tray) and the wind blows the chaff right out; one woman's mother would blow on it to get rid of the chaff if there was no wind. After cleaning, the seeds are browned in a pan on the stove (no oil necessary), then a *gámum* (oblong rock, "like a rolling pin") is used to grind it. A separate grinding rock is used to grind only *dáhal* because it is so oily; in fact, the ground product is more of a paste than a flour. Water is added to some flour to make a gravy, and then the *dáhal* paste is added and it is boiled. The soup is then ready to eat. Sometimes sugar was added to make a sweet, dessert soup (Washoe Tribe Resources Policy Program 2002).

This is a meal the women like to prepare for their annual cultural dinner (a meal of traditional foods usually held in December), but it depends on finding *dáhal* available for harvest. *Dáhal* is said to have a peanut flavor and is preferred over

ʔmé·c̓ɨm (wild mustard). The *dáhal* found in Northern Paiute country (Shurz) is considered to be a different type than that of the Washoe and more abundant.

Merriam (1904) lists *dáhal* as the smallest of seeds, used for seasoning, but he does not provide a botanical identification. Barrett collected seeds, calling them "the small angular seeds of the stinkweed" (1916). Perhaps he meant stickweed or stick leaf, as *Mentzelia* is sometimes called (Graf 1999:197); it is also called pigweed (Schubert [1957b]). Siskin lists the use of the seed, *dáhal* (1937), and Stewart notes the use of Blazing Star, *M. albicaulis*, among the Washoe (1941:375, 428).

K. d'Azevedo's consultants identify *dáhal* as a fire follower and a small plant with edible seeds. "In the old days Indians looked for the fired places, for they knew they would find *dáhal* there in the summer" (K. d'Azevedo 1955). Cooked first in a frying pan, the seeds are then ground on a grinding stone until oily, "like peanut butter." "Nowadays, it is used to flavor flour soup" (K. d'Azevedo 1955).

Schubert provides the botanical identification as *M. congesta* (1957b), and Jacobsen's consultants describe it as a small plant with edible seed; one called it "bloated wheat," which comes up after a fire, and when sheep eat it, they get bloated quick. Another said the seeds are eaten and cooked, nowadays, in a frying pan, and another described *dáhal* as black seeds, known as sand seed (Jacobsen n.d.a.).

Downs makes the observation that, although the Washoe were well aware of pigweed as a fire follower, they made no deliberate attempt to burn areas to encourage growth (1963b:143). Similarly, the Washoe did not burn to encourage the growth of tobacco, another known fire follower (Stewart 1941:429, Downs 1963b:142).

Freed (1966:82) notes the collection of seeds at a camp site on Watson Creek, a short distance from Lake Tahoe, where *mA'sum* [*ʔmé·c̓im*], pigweed seed [*dáhal*], *cugIlatsi* [*šú·gilá·c̓i*] and *sEsmE'* [*sésmiʔ*] were harvested.

Dangberg's recording of Washoe myths demonstrates the importance of *dáhal*, by noting that Nentusu [*néntušu*], the old woman who created the Washoe, commanded the "pigweed" [*dáhal*] to grow to feed her children (1927:442-3 and 1968:38).

50. dísem. The only botanical identification offered for this plant is by Jack (1978), who described this plant as *Suaeda depressa.* This has been reclassified as *S.calceoliformis* (Hook.) Moquin, found in dry, saline or alkaline wetland soils below 2,200 meters (7,218 feet), with the common name 'horned sea-blite' (Hickman 1993:515).

K. d'Azevedo (1955) lists this as a seed that is found near Honey Lake, but her consultant states she doesn't know much about it, because "it doesn't grow in my area". Honey Lake is in what is considered Northern Washoe territory, and the consultant was from the Carson Valley area. Another consultant confirms the northern distribution, stating "They have a salty taste, one time they bring them from the north and I tasted them" (K. d'Azevedo 1955). W. d'Azevedo gives the place name of *dísem dáʔaw* for Honey Lake, and those who live around this area are called *dísem* *dáʔaw detdéʔyiʔ* ([seepweed?]-lake dwellers (forthcoming:33 and 1986b:468). Riddell (1960:82) also records *dihsuhm* [*dísem*] as the name for Honey Lake.

Jacobsen's consultants (n.d.a.) list *dísem* as a plant-seed species that grows around Honey Lake, which was eaten by Northern Washoe. The plant is about two-feet tall and produces brownish-reddish seeds. A spring (Amadi Hot Springs) between Doyle and Millford is named *dísem ʔlóʔom*; Washoe camped all along the western slope of the hills, around springs (Jacobsen n.d.d.). d'Azevedo (1956) records that Long Valley [*ċóʔyaʔ wáťa detdéʔyiʔ*] had as its main seed *desem* [*dísem*], said to be similar to *šú·gɨl* and *ʔmé·ċɨm*, but larger.

84. madukpápa or medukpápa. (botanical identification unknown). Jacobsen (n.d.b.) lists this plant as one with sharp leaves, the seeds of which were eaten; also, a plant that grows in the Valley (Carson).

85. madukwáwLu or medukwáwLu (*Helianthus annus* L., common sunflower). The sunflower is highly variable, readily hybridizing. It occurs in disturbed areas, shrubland, and many other habitats, below 1,900 meters (6,234 feet), throughout California and to eastern North America (Hickman 1993:278).

Merriam (1904) records *mo-do-kwah-loo tow-pap'-pl* [*madukwáwLu dawṗá·ṗɨl*] as *H. annus*, the wild sunflower. Stewart (1941) notes it as a resource, and K. d'Azevedo (1955) gives the details that this is one of three kinds of sunflower seeds: *šú·gɨl, šú·gɨlá·ċi*, and *madukwáwLu;* the last is the smallest of the three. "The plants grow quite tall, and they grow in the valley [Carson] near wheatfields. The seeds are gathered and dried, pounded with a rock to take off the shell, ground into flour, and made into mush. Sometimes they are mixed with pinenuts; sometimes eaten as flour and washed down with water" (K. d'Azevedo 1955).

Downs (1966a) adds that native sunflower seeds were ground into flour, but he does not distinguish between species. This is one of the words ending with the diminutive suffix *-hu/Lu* (Jacobsen 1964:481).

87. mahá·k̓u. (botanical identification unknown). Jacobsen (n.d.b.) records this term for 'sunflower,' which is similar to *šú·gil*, and is identified in the place name *mahá·k̓u wát̓a*, Burton Creek. In contrast, Freed (1966) lists the name *wO'thanamIn* [*wát̓a ŋáʔmiŋ*] (baby river) for Burton Creek, and Women Elders listed the name *wát̓a ŋáʔmiŋ* for the "baby river" that runs by the Washoe Ranch.

101. memí·dewiʔ (*Chenopodium album* L., pigweed or lamb's quarters). This plant is found commonly in disturbed sites, such as roadsides and fields, below 1,800 meters (5,905 feet) throughout California and temperate climates worldwide; it is probably a native of Europe (Hickman 1993:508).

Hudson (1902:241) lists *C. album* as a 'seed food' of the Washoe, but the linking to a Washoe term comes from Merriam (1904). He records the term *mam-me-ta-we* [*memí·dewiʔ*] for *C. album.*

W. d'Azevedo (f.n.) records this term to describe an unidentified plant, with a common name of 'roots.' The word means 'roots' literally, and is related to the word for root or sinew, *í·dew*. There are actually two kinds of roots described in Washoe, and this particular term refers to a more linear, ropey type versus the meaty or fleshy type of root described by the term *á·daš* as in *šú·gil ʔá·daš*.

105. mó·dop (*Rumex crispus*, curly dock). This plant is abundant in disturbed sites below 2,500 meters (8,202 feet) throughout California and North America; it is native to Eurasia (Hickman 1993:894). Murphey (1959) lists *modup* as the Washoe name for dock (*Rumex* spp.). Hudson (1902:241) writes that "the rumex was a seed food. It was ground up and soaked in water." *Mó·dop* is offered by Jacobsen (1995a) as a tentative transcription.

P4. sá·bu, or mahalťalal ʔétik, seeds of the cat-tail, *Typha latifolia* (Jacobsen n.d.a. and f.n.). The seeds of the cat-tail have a separate name, *sá·bu*, than the plant from which the product comes, *mahaťálal*, much as *nanómba* is the product from the sugar pine, *simťá·gim*. This does not appear to be a general trend; mostly, products are closely identified with the plant from which they come, as the alternative name *mahaťálal ʔéťik* suggests. *Sá·bu* is borrowed from Numic into Washoe, but "the Washo word has undergone a change and narrowing of meaning, as the Numic forms compared mean 'tule'" (Jacobsen 1978:127, 139). A place name, *sá·bu ṗá·w*, is noted by both Jacobsen (f.n.) and d'Azevedo (1956). Described as a very old settlement, the location is described by consultants as possibly south, west, northwest or northeast of Dresslerville (d'Azevedo 1956). It is also described as a flat near Indian Ranch (Jacobsen f.n.).

121. sámsaʔ or sámsa (*Oryzopsis hymenoides*, Indian Rice Grass). *O. hymenoides* has been reclassified to *Achnatherum hymenoides* (Roemer & Schultes) Barkworth. This plant is found in dry, well-drained and often sandy soils, throughout the desert-shrub, sagebrush shrub, and pinyon-juniper communities below 3,400 meters (11,155 feet) in the Sierra Nevada and Great Basin regions (and elsewhere) (Hickman 1993:1226). The plant is noted as being highly palatable to livestock and as a valued food source of Native Americans (Hickman 1993:1226).

For such a valuable resource, the lack of documentation among Washoe is surprising (not unlike the camas or yampah). Only Murphey (1959) offers a Washoe name (*sam sut*), and only Stewart (1941) and Downs (1966a) note the use of Indian rice grass among the Washoe. Downs (1966a) notes 'wild grass seeds' in general, not even specifically identifying Indian rice grass. The plant name *wayámhu*, however, is borrowed from Numic, which is "compared to the stem for 'Indian rice grass' (Jacobsen 1978:127, 140). See 164. wayámhu discussed also in this section.

Jacobsen offers the tentative transcription of *sámsaʔ*, which is the term for a shaman's rattle (personal communication, 2003).

See also 134. šagá·du or šagá·duʔ, discussed under <u>Medicine</u>.

143. šú·gil (sunflower, mules ears or wooly wyethia, *Wyethia mollis* Gray). Wooly wyethia is found in open forests and dry rocky slopes from 1,200 to 3,400 meters (3,937 to 11,155 feet) in the north and central Sierra Nevada (Hickman 1993:359).

Contemporary women tell how the leaves from *šú·gil* are used to wrap small animals, like *díteš* (prairie dog), for roasting, and that the new shoots of *šú·gil* are good to eat. We saw lots of variation in the size and distribution of this plant; one Elder stated that the *šú·gil*-like plant which is found high in the mountains and is smaller than the lower elevation populations was not *šú·gil*; it was a member of the same family, but not the same *šú·gil* the Women Elders normally identify. Location and elevation were defining features she listed for *šú·gil*.

Hudson (1902) states that the seed of the sunflower is a common food, and Merriam (1904) records that the base of the stem of *šú·gil* (*Wyethia*) is good to eat. Dangberg (n.d.) writes that the severed umbilicus of a girl infant is buried in the root of *šú·gil*, symbolizing that the girl should be an industrious gatherer of seeds. The seeds of *šú·gil* were one of the most valued foods of the Washoe, per Dangberg (n.d.). Similarly, Price (1963:99) observes that the severed umbilicus of a girl infant is placed into the root of a living sunflower (*šú·gil*), into which a hole has been bored.

Train, Henrichs, and Archer (1941:148) write that the root of *šú·gil* (*W. mollis*) can be boiled into high concentration tea to make a physic or emetic. One-half cup of the strong tea should be taken. Stewart (1941:375, 425) records four kinds of sunflower seeds used by the Washoe (*Wyethia mollis, Helianthus annuus,* *Wyethia ovata*, and an unknown type).

K. d'Azevedo (1955) lists *šú'gil* as the largest of three kinds of sunflower seeds; the other two are *šú'gilá'ċi* (balsam root, *Balsamorhiza sagittata*) and *madukwáwlu* (common sunflower, *Helianthus annus*). The plant *šú'gil* is noted to grow both in California and Nevada, and seeds are gathered easily along the highway where the plant is found. For all three kinds of sunflower seeds, the process is to gather and dry the seeds, which are then pounded with a rock to take off the shell. The shelled seeds are pounded into a flour and made into a mush. Sometimes the seeds are mixed with pine nuts, or sometimes the flour is eaten and washed down with water.

Jacobsen lists *šú'gil* as sunflower, the seeds of which were eaten (n.d.a.). Freed (1966) notes sunflower seeds were found at the camp site by Burton creek (north of the Truckee River) on the northern side of Lake Tahoe. Dangberg (1927, 1968) records in the origin myth of the Washoe that Old Woman, Nentusu [*néntušu*], ordered the wooly wyethia to grow to feed her children.

The place name *šú'gil yegími?* describes Pleasant Valley, southwest of Markleeville (d'Azevedo 1956, Jacobsen n.d.d.).

144. šú'gɨlá'ċi (balsam root, *Balsamorhiza sagittata* [Pursh] Nutt.). From 1,400 to 2,600 meters (4,953 to 8,530 feet) elevation, the balsam root is found in open forests and scrub in the high Sierra Neavada and the Great Basin (Hickman 1993:213).

This type of sunflower is found near sagebrush, in the valleys, according to K. d'Azevedo (1955). Jacobsen (n.d.a.) describes it as a smaller sunflower (smaller than šú·gɨl, as the diminutive suffix -á·ċi indicates), with smaller seeds. Train, Henrichs, and Archer (1941:50) note the root of this plant is burned to fumigate a room after an illness. See P9. šú·gɨl ʔá·daš, discussed under Medicine: Fumigant.

159. [t́étɨk]. d'Azevedo (f.n.) describes *déʔtuk* as a term for seeds, which may or may not refer to a particular plant.

162. wálsiʔ. (botanical identification unknown). d'Azevedo (1956) is the only source to list this seed species. He identifies it in his listing of place names. The Little Truckee River is named *wálsiʔ wát́a*, and the settlement *wálsiʔ wát́a máʔlɨm detdéʔyiʔ* is found along this river. The plant is only identified as a seed, presumably growing along the Little Truckee River.

163. wášuʔ. Merriam (1904) elicits the terms *wah-shoo* and *it mush-shoo* for *Sarcobatus*, greasewood, while collecting *wah'-shoo* for *Avenua saliva*, wild oats. Merriam writes that *wah-shoo* means 'always here.' In 1923, Merriam records the term for *A. fatua*, wild oats, as o-wah'-s^{h}oo. Jacobsen (n.d.a.) records *wášuʔ* as a seed species that was eaten, wild rye that sometimes grows six feet high and from which Indians made houses; as a wild plant, not a food; and as buffalo grass seeds, which were gathered annually by women. Siskin (1941:2, 110) records *wážuʔ* as the name

of a seed gathered annually by women, and as buffalo grass seed. Murphey (1959:71) describes *washo* as *Elymus condensatus*, rye grass, and says that the tribe is named for this grass. The terms *wá·šiw* (name of the tribe) and *wášu?* (seed species) are often confused by early researchers (Jacobsen, personal communication, 2003).

In the tale *Skunk and Rat* (Jacobsen n.d.i.), Skunk is walking along *wášu? wáťa* (Buffalo Grass Stream), singing a song about *šúmšu?* (salt grass). *Wášu? wáťa* is the name of a stream flowing from Diamond Valley into Carson River above the Washoe Ranch (d'Azevedo 1956, Jacobsen n.d.d.). *Wášu? wáťa má?lim (or damá?lim)* refers to the joining together of *wášu? wáťa* and the East Carson River (d'Azevedo 1956, Jacobsen f.n.).

165. wayámhu. (botanical identification unknown). One of Jacobsen's consultants (n.d.a.) identified this as a seed species that grows in the valley (Carson), is ground on *démge?* (grinding stone), and is made into a paste, which is subsequently frozen. Other consultants only noted it as a plant species.

Jacobsen (f.n.) records the personal name of *wayámhu dawá·laš.* The term *dawá·laš* translates to 'his bread,' suggesting a possible connection between the seed *wayámhu* and the product (bread?) made from it, although Jacobsen cautions that too much should not be made of a childhood name. Nonetheless, refer to the discussion under Food: Potatoes for the possible borrowing of the term *wá·laš* from a brodiaea or wild potato named *wa·la* in Northern and Southern Sierra Miwok, relating to the starchy qualities of *wá·laš.* Dangberg (1927:428:9), however, records the meaning of *wayámhu* as a 'good bitter herb', which one is cautioned 'you not always to eat'. Bitter herbs are traditionally thought of as leaves of plants, not seeds. Perhaps both leaves and seeds of this plant were useful. The term *wayámhu* is borrowed from Numic, which is "compared to the stem for 'Indian rice grass' (Jacobsen 1978:127, 140).

170. yí·yɨ. This is described as a seed species that was eaten (Jacobsen n.d.b.).

173. ʔmé·ċɨm (wild mustard, *Sisymbrium* spp. or *Descurania* spp.). Like *dáhal*, *ʔmé·ċɨm* is a small seed harvested and ground. It grows like *dáhal*, but the seeds are red and *ʔmé·ċim* ripens before *dáhal*. For consumption, *ʔmé·ċɨm* is prepared just like *dáhal*. One Elder's mother used to say that when the *ʔmé·ċim* is ready, soon the *dáhal* will be, too. The Women think *ʔmé·ċim* is more widely available for harvest than *dáhal*, which is a fire follower. The seeds of *ʔmé·ċɨm* are slightly heavier than those of *dáhal*, making it somewhat easier to harvest, although both seeds are fragile and easily dispersed by the wind. In general, *dáhal* is preferred in flavor to *ʔmé·ċɨm* and the two are mixed in soups so that the strong flavor of *ʔmé·ċim* is not overpowering.

Once the seeds are gathered, they can be stored for at least one year. The seeds are roasted and then ground into flour. The seed flour is added to water and wheat flour to make a soup, which is quite oily. The oils of the seeds are considered to be essential for health.

One Elder observed the quail stripping the *ʔmé·c̓im* branches. She said the quail bite at the bottom of the stalk and then run their mouths along the stem to strip the seeds.

Hudson (1902) observes that a "condiment" was found in the seed of *Sisymbrium canescens*, and Barrett (1916) records that *metsum* was a dark, reddish, very fine round seed, which was ground and used as food. Dangberg (in Jacobsen n.d.c.) records the plant as *Sophia longipedicellata* (?), and lists only its Washoe name. K. d'Azevedo (1955) writes that it is a plant with edible seeds that grew in the valley (Carson) and along the edge of the hills. The plant produced tiny red seeds, and if a sufficient quantity were harvested, they would be stored for winter food. Early spring and summer were the seasons to gather the seeds, which were a highly valued food, so people went to much trouble to harvest the tiny seed. K. d'Azevedo's consultant says this seed is much like *dáhal*. When ground up, the seed formed a paste like peanut butter. It was eaten mixed with water, like a gravy. Another consultant added that the plant was like mustard, with tiny seeds, and it was added to flour more for taste (a condiment).

Jacobsen (n.d.a.) writes that the plant is wild mustard. It has small edible seeds, is similar to *dáhal*, and the red, edible seeds produce an oil which can be used on hair. Murphey lists *Descurania* spp., Jim Hill mustard, for *ʔmé·c̓im*, and notes that "In Nevada, several members of the Mustard family furnish orange colored seeds, which are carefully collected and ground to make gravy, by adding hot water to the meal" (1959:28).

Freed (1966:82) notes that at the Watson Creek camp, the Washoe would harvest *mA'sum*, a seed source (*ʔmé·ċim*, wild mustard). Downs (1966a) notes that "wild mustard seeds" were gathered.

184. *Allenrolfea occidentalis*, pickleweed, is recorded by Stewart (1941:375) as a seed food.

185. *Argopyrum*?, recorded as *Degroprum repens*, crested wheat grass, is recorded by Hudson (1902:240) as a common seed food.

186. *Atriplex*, salt brush, is recorded by Stewart (1941:375, 428) as a seed food.

195. *Carex*, sedge, is recorded as almost unknown around Lake Tahoe, but gathered and used as food in the Carson Valley (Hudson 1902:237, 240).

<u>Food: Stems</u>

24. ċóʔyaʔ (tule, *Scirpus acutus* Bigelow var. *occidentalis* [S. Watson]Beetle). The tule is found in mashes, lakes, and stream banks below 2,500 meters (8,202 feet) throughout California (including both the Great Basin and California floristic provinces that occur within the boundaries of California) (Hickman 1993:1146).

Tule stems were eaten by the Women Elders when they were young; both adults and children would eat the plant whenever they found it in the early spring when the stems were tender and fresh. The stems were peeled, and the bottom part of the stem was eaten raw. Tule was given much less emphasis than cat-tails by the Women Elders, although both can be found in the same habitat and patch.

Common tule is described by Hudson as being material for the newborn's first cradle, a "crudely woven frame of tule without ornament or sex insignia" (1902:237). He also describes the roots being eaten raw, and seeds cooked (1902:240). Stewart identifies tule as a resource (with no other details), but also lists balsa rafts made of tule, propelled by willow poles (1941:375, 380, 381,428). K. d'Azevedo (1955) writes that tules were gathered in the summer around water locations. Topaz Lake is mentioned particularly, where people were said to wade out into the lake and pull up the tules, peel off the outer skin and eat raw the last five or six inches of the stalk, said to be especially tender. W. d'Azevedo records the place name of *ċóʔyaʔ wáťa* (tule stream, creek) for Long Valley Creek, and the group who inhabit the region as *ċóʔyaʔ wáťa detdéʔyiʔ* as 'tule river dwellers,' illustrating the importance of the resource and the linguistic identification of a particular resource zone (1986b:468). Dangberg (1968:103) describes Washoe Lake as *ċóʔyaʔ dáʔaw*, tule lake, as does Jacobsen (n.d.d.). Several place names are associated with *ċóʔyaʔ dáʔaw*: *ċóʔyaʔ dáʔaw bayó·duweʔ detdéʔyiʔ*, "a settlement where the little lake spills over into a stream—by Washoe town"; *ċóʔyaʔ dáʔaw detdéʔyiʔ*, the settlement area of Washo Valley, a "very rich country'; and *ċóʔyaʔ dáʔaw ǩilá·gaʔa*, a settlement south of Franktown (d'Azevedo 1956). Jacobsen (n.d.k.) translates this last term to 'bordering on tule lake', and *c̓óʔyaʔ dáʔaw bayó·duweʔ detdéʔyiʔ* as 'tule lake flowing hence over the summit settlement'.

Jacobsen's consultants describe *c̓óʔyaʔ* as tules, but only the bottom part of the young tules were eaten. They were not saved for later use (Jacobsen n.d.a.), hence not *démlušému*.

88. mahat̓álal or mahɨlt̓álal (cat-tails, *Typha latifolia* L.) This plant is common in marshes and around ponds and lakes below 2,000 meters (6,562 feet) throughout temperate North America (Hickman 1993:1310).

Women Elders tell how the root and the pollen head of the cattail are eaten. The pollen head when green in the spring is harvested; the pollen is raked off the head and eaten (the core of the head is not consumed). Once the pollen head turns brown, it is no good to eat.

The roots are eaten in late summer. Pull up the root, peel the bark off to get at the white inner meat with grains in it. It's eaten raw. It's chewy and good. One Elder's mother told her to chew the sweet white interior and then spit it out once the sweetness is gone.

Hudson (1902) writes an eloquent account of the use of cattail, noting that the seed pod is eaten raw, pollen and all. The center pith, according to him, tastes something like asparagus. The stems, in addition to the pods, are eaten from the roots up to the water's edge. The stems are peeled, revealing a whitish interior and are said to taste something like artichokes. The stems are eaten raw. "The peeled stems are not bad tasting to a half-starved man, and it is said that the young buds taste much like unripe watermelon. Undeveloped seed, pollen, etc. are much eaten" (Hudson 1902:245). The heads of cattails are gathered in great heaps and singed to produce the seeds, which are then milled. The pollen is eaten mixed with water to form a thick dough and spread upon cattail leaves in a pit, covered with leaves and sand, and a fire built over the pit until the interior is well roasted. Hudson says the taste is "sweetishly insipid" (1902:245).

If the pollen is desired, then the cat-tails can be gathered only in the middle of the summer, around July 1, according to Hudson, when the pollen is ready to drop into the seed. At this time, he notes, great quantities of cattails are eaten and mixed with other foods as a sweetening agent. The soups of native seeds are sometimes made quite yellow by the addition of cattails, yielding a taste much preferred by the elder members of the group. The entire head of the plant is eaten when green or before fruition, but to use the pollen as an additive, one must wait until midsummer (Hudson 1902:250).

Merriam identified the plant botanically and linguistically, but offered no comments on use (1904). Train, Henrichs, and Archer (1941:146) say the flowering heads are sometimes eaten to stop diarrhea. Jacobsen records that these "rat-tail tules" have edible stems and roots, and that their "fat tops" were eaten when green. The term *mahát̓alal lóṗo?* refers to the broad part, or "fat tops," of the cat-tail tules. After the plant ripens, the yellow pollen (or "flour") was shaken out and cooked into a soft bar (like a candy bar) (n.d.a.). Murphey (1959) identifies cattail (*Typhus latifolia*) among the Washoe as toiba, erroneously using the Numic term. She also writes that the down of the cattail is used for baby beds (1959:55).

110. ná·bu (prickley pear, *Opuntia* spp.). Merriam (1904) lists *nah'boo* as Opuntia, the small pad cactus, while Dangberg (Jacobsen n.d.c.) lists *nabu, Opuntia* spp. as the prickley pear. Stewart (1941:374) records the 'stems' of cactus eaten and needles burnt off by Washoe. Jacobsen (n.d.b.) lists it only as a plant species. Train, Henrichs, and Archer (1941:107) describe the use of the 'beavertail cactus' (*O. basilaris* Engelm & Bigel) as used medicinally among Shoshone people, noting that the pulp deadens pain and promotes healing of cuts or wounds. They speculate that all members of the genus probably act in this manner. The spines are also rubbed onto warts or moles for removal.

The term *ná·bu* is borrowed from Numic (Jacobsen 1978:127).

120. sabá·samhu (Indian rhubarb, *Darmera peltata* [Torrey] Voss., formerly *Peltiphylus peltata* [Torrey] Engl.). Indian rhurbarb is found along rocky stream banks below 2,000 meters (6,561 feet) in the Sierra Nevada and is uncommon (Hickman 1993:1003).

Contemporary Women Elders enjoy Indian rhubarb and were very happy to find a healthy patch of it that could be easily accessed for harvest. One Elder described how when the stalks turn pink in the early spring before blooming, it's time to harvest rhubarb. The stalks are cut, leaves stripped, and the stems brought home. If the stems are cut after the plant blooms, they are too tough. One family's mother always boiled and served it; another's made a juice from it for drinking or canned it for pies. We visited a patch from which one Elder has long harvested the plants.

K. d'Azevedo's consultant (1955) stated that the plant grows in the mountains in California and that "Woodford people put them up in bottles". The consultant also states that the plant was eaten only in the spring in the old days.

Jacobsen (n.d.a.) records the plant as wild rhubarb, or wild asparagus, which is still eaten by Woodfords Indians. It is found in damp meadows in the spring. The stalks are harvested, and juice or pie fillings are canned.

Freed (1966:81) notes that Washoe gathered Indian rhubarb around Blackwood Creek on the west side of Lake Tahoe, and Downs (1966a) mentions the harvest of Indian rhubarb in a generalized discussion of subsistence.

See also 143. šú·gil, discussed under <u>Food: Seeds</u>.

188. *Cnicus andersoni.* Hudson (1902:240) states tht a stalk food came from this plant, *Chicus andersoni,* but no plant manual consulted lists a genus *Chicus.* *Cnicus* is the former genus name for a thistle. *Cirsium andersonii* (Gray) Petr. [*Cnicus* A. Gray] is found on dry slopes, from 4,000 to 10,500 feet (1,219 to 3,200 meters) in montane coniferous forests in the Sierra Nevada to Nevada (Munz 1959:1279;

Hickman 1993:235). See 62. [hanawɨywɨy] under Other: Unspecified for possible Washoe name of this plant.

Food: Sweetener/Condiment

P1. bámči (sugar from pinyon tree, *Pinus monophylla* Torrey & Frémont, or sugar pine, *P. lambertiana* Douglas). Contemporary fieldwork with consultants focused on specific sugars (i.e., *nanómba*, sugar pine sugar, and *ṫá·gɨm bámči*, sugar from the pine nut tree), but did not initially highlight *bámči* as a stand-alone term. This was a function of fieldwork. During outings, consultants were concerned with native plants and animals in an outdoor, "natural" setting. However, while sitting at the dining table of some consultants, they pointed out the *ʔuŋá·bi* (salt) and *bámči* (sugar) on the table in their ongoing efforts to teach me some Washoe words.

Merriam lists the sugar from the pine nut tree as *tah-gum bahm'tse*, and notes that *bahm'-se* is used to refer to commercial sugar (1923). See other names (*ṫá·gɨm bámči* and *nanómba*) for specific sugars; for example, K. d'Azevedo (1955) records *bámči* but dicusses it as *ṫá·gɨm bámči*. For sugars in general, Stewart notes use of willow-sap sugar, white pine sugar, and pinyon sugar among the Washoe (1941:375), but is the only one to reference willow or white pine sugar in recorded notes.

Jacobsen's consultants (n.d.a.) describe *bámči* as sugar, originally from pine nut trees; other sugars described are *nanómba* (medicine) from the sugar pine and *šigímba* (sugar) from *P. lambertiana*. Jacobsen points out that the application of the Washoe term *bámči* to commercial sugar is unique in that other tribes borrowed the

English or Spanish word for sugar (personal communication, 2002). *Bámčišému* ("real" sugar) also decribes pine nut sugar (Jacobsen personal communication, 2002).

Van Winkle lists 'sugar' or *bámči* as one of the highest retained Washoe lexemes, and food as the domain with the highest average number of retentions among contemporary Washoe who do not "speak, use and understand the [Washoe] language" (Van Winkle 1977:13).

See also 88. mahaťálal or mahiłťálal, use of pollen, under Food: Stems.

See also 89. mahá·waʔ, flavoring, under Material Culture: Tree/Brush.

P8. šigímba. The sugar from the sugar pine tree drops onto the manzanita leaves, and is licked by children, according to Women Elders. When we saw the manzanita bush, it immediately brought forth memories of the 'sugar' for some of the women. See also P3. nanómba, the "sweet" medicine, discussed under Medicine.

Jacobsen (n.d.a.) notes the two terms for the sugar from the sugar pine, and Price (1980) discusses the medicinal use of the sugar, but refers to it as *šigímba*, rather than *nanómba* as most. Jacobsen's distinction appears to be between a medicinal and non-medicinal use, but Price does not use the terms this way. Contemporary women did not specifically name the sugar, but noted its use and pointed out the association between the manzanita plant and sugar pine trees.

See P10. t̓á·gɨm bámči, discussed under Medicine.

P2. Willow sap is described by Stewart 1941 as a sweetener.

Grass, Hay, Clover: Unspecified Use

9. bó·či. (botanical identification unknown). Merriam and Jacobsen both list this plant. Merriam refers to it as another kind of grass (*bo-o-tse*) and as clover (*baw-tse'*) (1904), while Jacoben lists it as a large grass species, "larger than knife grass" (n.d.b.).

71. hóšp̓iʔ. (botanical identification unknown). Merriam (1904) records *os'-pe* and *aws-pe* for hay; and Jacobsen's consultants give the definition of grass hay, hay, wild hay, alfalfa, and wild grass (n.d.b.).

102. memɨp̓ɨliʔ. (botanical identification unknown). Dangberg (Jacobsen n.d.c.) lists *memupuli* as 'tickle grass,' while Jacobsen (n.d.b.) records it as 'bronco grass'. No other information is known.

142. šóʔŋiʔ. (botanical identification unknown). Wild grass (Jacoben n.d.b.). The place name *šóʔŋiʔ wek̓ilé·tiʔ* is described as a ridge about two miles north of Doyle (Jacobsen f.n.) and is translated to 'wild grass pointing down' (Jacobsen n.d.k.). d'Azevedo (1956:78) describes the place as a ridge about four miles west of

the highway of Doyle, where "a high grass grows down the ridge into Honey Lake Valley". The term *šóʔŋiʔ* is borrowed from Numic, where in Shoshoni *soni* means 'mattress', and *sonipɨh* means 'hay, grass; blanket' (Jacobsen 1978:127, 140).

145. šúmšuʔ. (botanical identification unknown). Listed as salt grass (Jacoben n.d.b.), *šúmšuʔ* is described in the tale 'Skunk and Rat' (Jacobsen n.d.i.). Skunk is walking along Buffalo Grass Stream (*wášuʔ wáťa*, a stream flowing from Diamond Valley into the East Carson River at the Washoe Tribal Ranch), singing 'salt grass moving around'.

160. [ťíhuk]. Only Dangberg (Jacobsen n.d.c.) records this term (*dihuk*), which refers to bunch grass. The Washoe word *ťíhuk* means 'dry' (Jacobsen 1964:520), possibly referring to the grass in its dried state. Like other such terms, it may be more descriptive of characteristics than an actual name.

174. ʔmúčim, ʔmóčim. Jacobsen (n.d.b.) lists the description of this plant as wild grass. Of all of the plants featured in place names, *ʔmúčim* has the most place names associated with it: ten locations are identified by this term (Jacobsen n.d.j.), although there is considerable overlap among the terms. Long Valley is named *ʔmóčima*, meaning 'wild grass' (Jacobsen f.n.); *ʔmúčim:* Sierra Valley (Jacobsen f.n., d'Azevedo 1956); *ʔmúčima detdéʔyiʔ*: 'the real northern Washoe lived here in this

wild grass valley' (Jacobsen f.n.); *ʔmúċim bayó·šuweʔ* 'wild grass flowing in hence' (Jacobsen n.d.k.): a habitation area near Beckwith [Beckwourth] or Willow Creek by Beckwourth (d'Azevedo 1956; Jacobsen f.n.); *ʔmúċim bayó·šuweʔ detdéʔyiʔ*: the settlement of *ʔmúċim bayó·šuweʔ* (d'Azevedo 1956); *ʔmúċim dewMúweʔ* 'wild grass meadow' (Jacobsen n.d.k.): Sierra Valley (Jacobsen f.n.); *ʔmúċim wáťa*: middle branch of the Feather River (Jacobsen f.n.) and the delta drainage of the middle fork all the way to where it meets the north fork (d'Azevedo 1956); *ʔmúċim wekMúweʔ, ʔmúċim guwekMúweʔ* 'wild grass meadow' (Jacobsen n.d.k.): Sierra Valley (d'Azevedo 1956; Jacobsen f.n.); *ʔmúċim yagá·dap* 'wild grass spread out' (Jacoben n.d.k.): Sierra Valley (Jacobsen f.n.) or the flat section of the valley (d'Azevedo 1956); *ʔmúċim yagá·dap detdéʔyiʔ*: the settlement around *ʔmúċim yagá·dap* (d'Azevedo 1956); *ʔmúċim ʔíheba, ʔmúċim ʔíheplu*: Sierraville, head of Sierra Valley (d'Azevedo 1956; Jacobsen f.n.); and *ʔmúċim ʔíheplu detdéʔyiʔ*: the settlement near Sierraville (d'Azevedo 1956).

176. ʔóŋaʔ. (botanical identification unknown). Jacobsen's consultants describe this as a plant species, which has a slender green stalk about two feet high; wire grass, or long grass like wire (n.d.b.). Dangberg (1927:406-7) records that minnows were strung on *onga* [*ʔóŋaʔ*] (reed grass). Jacobsen (f.n.) worked with one consultant reviewing Dangberg's 1927 transcriptions and translations, and recorded the translation as 'he began to string chubs on wire grass'.

Material Culture: Basketry and Willow

The willow and basketry category for Washoe women includes quite a few species that Western classification separates out (i.e., redbud and dogwood as willow), but the classification is based on use in basketry, again suggesting an emphasis of function in Washoe ethnobotany.

6. bá·t̓ut. (botanical identification unknown). Jacobsen is the only one to rccord this plant, which is dcscribcd as a willow spccics, with a big trunk, fullcr than *hímu* (willow), used for fuel, and a tree-like willow, but with rough bark (n.d.b.). Although not used for basketry, the description by consultants of this plant as a 'willow' places it in this section.

See also 17. c̓ámduʔ, discussed under Food: Berries.

35. [degúlek] or dewbímɨš ʔitbašáʔ (Western redbud, *Cercis occidentalis* Torrey). Western redbud is found on dry, shrubby slopes and in canyons, ravines, streambanks, chaparral and foothill woodlands up to the yellow-pine belt from 100 to 1,500 meters (328 to 4,921 feet) in the Sierra Nevada (Hickman 1993:606).

Contemporary consultants state that redbud grows in California "like willow," but is red with purple flowers. One of the consultants was told to cut it back to encourage new growth (coppicing, the technique of cutting shoots at the base to encourage growth of new, straight shoots). Redbud is a well-known basketry material and one that Washoe women trade for when basket-weaving groups that include California women assemble. The Women Elders state that they cannot get redbud in their own lands, but must trade for it.

Hudson writes that "Circus [sic] is imported from across the [west] mountains" (1902:235). Barrett collected a sample of this plant, identified as redbud basketry material, and translated the name (*dobimus takpasa*) as meaning "Miwok [sic] Indian scent" (1916). He notes the plant was also called simply *itpasa* [*ʔitbašáʔ*]. Jacobsen translates *dewbímiš ʔitbaša?* to mean 'Maidu decoration.' The first word (*dewbímɨš*) means Maidu, and the second word contains the verb stem *šáʔ*, indicating to paint or decorate, with the prefix *ʔit-*, which indicates an instrument, and the prefix b^e-, which serves to form an indefinite object for the intransitive verb stem (Jacobsen 1964, 1995b).

Merriam (1904) collected the term *tah-goo-lek* [*degúlek*] for redbud, *Cercus [sic] occidentalis*, which translates to 'red long round thing,' an apt description of the basketry threads made from redbud. The g with u-coloring prefix, g^u-, refers to string, thread, rope, even a pipe or roads; the color 'red' is indicated by *íleg*, giving the definition of a red long round thing (Jacobsen personal communication, 2003).

Jacobsen records that *dewbímiš ʔitbašáʔ* is dark red willows, from the Western foothills, which is used for designs on baskets (n.d.b.).

64. hímu (willow, *Salix* spp.).

65. badósaŋiʔ (*Cornus pubescens*; *C. stolonifera*, dogwood)

66. badóšoŋi?, hímu dadóšoŋi?, dá·bak dadósaŋ (*Salix* spp., sunburned willow)

67. daypópoy hímu (*Salix* spp., white willow)

68. hímu máyaw (*Prunus emarginata* or *Sorbus* spp., willow with black berries)

69. ṗušála? ?ithímu (*Salix nuttalli*, pussy willow or gray willow)

70. šu?mé·li? hímu or šu?mé·li? guwedí?iš (*Salix* spp., mountain willow; also *dalá?ak hímu, delgó·gomi?* and *delčálčali?*)

Willow is a highly variable plant, easily hybridizing and difficult to key, with approximately 400 species worldwide (Hickman 1993:990), although Mozingo notes only 300 species (1987:117). Mozingo writes that the coyote willow (*Salix exigua* Nutt.) is the best willow in the Great Basin for basketry, "for its slender, straight, reddish branches—up to several meters in length—are ideally suited to the artisan" (1987:113). There are about twenty species of willow in the Great Basin, all of which grow in moist habitats and most of which are in the mountains. "Unfortunately, separating them into species is, in general, not easy" (Mozingo 1987:117).

S. exigua is a commonly distributed plant, found along streamsides, in marshes and wet ditches below 2,700 meters (8,858 feet) throughout California (including the Sierra Nevada and East of the Sierra Nevada regions, and the Great Basin province). In Table 1, the various names and species of willow as identified by Merriam (1904) are listed. Willow, in general, is classified as *Salix nigra* (not found in Hickman 1993) and *S. geyeriana* (Geyer's willow). Snowshoe willow is *S. lasiolepsis* (arroyo willow) and *S. exigua* (formerly *S. hindsiana*, narrow leaf willow). Mouse willow is

S. nuttalli (also not found in Hickman 1993). Hudson (1902) identifies the common basket willow as "*salix longi argofilia*," which is not listed in Hickman 1993. The harvesting of willow with Women Elders occurred in late fall or very early spring, prior to flowering, so field identification was not obtained.

Contemporary work with willow focuses on its use as material culture. Willow is a plant highly valued by contemporary women, and basketry continues to be a significant artistic and cultural activity for women and, occasionally, for men. None of the Women Elders had male relatives whom they were teaching to weave or working with, and in general, Washoe men have not turned to weaving. At basketry gatherings, however, other tribes have several male weavers.

Starting in the late fall, once the stems have "ripened" (*ʔíˑbik̓aʔ* means 'it's ripe', when used in discussing willow; it can also mean 'ready to eat' when applied to cooking [Jacobsen 1964:520]) or turned red and the leaves have been shed, Women look for new growth willow that is tall and straight without a lot of side branches. Diameter and length of stems depend on the desired use.

One April, we went willow hunting, hoping to gather stems before the sap started running and stems turned green. The Women know spring is not a good time to gather willow, but they needed some and so we were trying to beat the spring thaw. We went south to the Bridgeport area, and tested some sites along the highway. The Women classified this willow as slightly different from the Dresslerville area willow, noting that the Bridgeport area had a more golden colored willow. When the Women tested the stems (they split several stems on site to test their workability), the willow worked well and so each of the Elders gathered a bundle of stems and tied them with unique wraps before loading them in the back of the car. We then went further south to the Lee Vining area, searching for more willow. One Elder commented that high country willow is usually too bushy and knobby to make good basketry material, but "you never know where you're going to find good willow." Actually, the Women usually know where to look, but the variation they find from year to year within known sites means they never know which patch will be productive.

One of the problems with spring gathering of willow is the ticks and ants one encounters. Once the sap starts, the bugs come out. One Elder's mother always told her, that's why you shouldn't gather in the spring. People are intruding on the insect's home. The wood ticks make their home in the willow and they have the right to be there. People should respect that. This particular Elder then plucked a wood tick off of her shirt and advised me to be sure to strip and do a tick search when I got home.

In the June Lake area, we drove past a willow shelter constructed by someone. The Women would not go over to it, but did speculate about its use. One thought it was a ceremonial area, another posited a shade, and a third thought it might be a sweat house frame. The hesitation to approach sites with recognized use is not unusual. One never knows what type of spiritual essence might be associated with the site and so caution is in order. If there is a strong desire to go to the area, a prayer of intervention by a trustworthy elder is offered to mitigate against possible repercussions.

High country willow, in general, is not good. One Elder states that mountain willow is no good; it snaps and breaks when you try to work it. One woman calls it *delgó·gomiʔ,* meaning 'trashy, junky', while another calls it *delc̓álc̓aliʔ,* also meaning 'trashy'.

They contrast mountain willow (also referred to as *daláʔak hímu*) with white willow (*daypópoy*), which has longer, lighter leaves than the green, short leaves of mountain willow (*S. exigua,* the most likely candidate for white willow, is characterized by its long, narrow leaves according to Mozingo 1987:113). With white willow, when bark is scraped off, one can see the white stems, which are used to make thread (*dá·bak*) for baskets. Some weavers are now going to a commercial bamboo-type thread in their baskets, but the Washoe Women Elders highly value the use of *dá·bak* as "it's more like the Old Way."

To make threads, the willow stem is split into three portions, one portion held by each hand and the third held in the weaver's mouth, applying equal pressure as the stem is split. The inner core should be equally distributed among the three stems, so equal pressure is applied. The Women comment that one gets a sore mouth and lips when splitting willow. The inner core is then peeled off the three stems, and then another layer is removed, leaving a thin thread with the skin still on it. Especially good willow will allow the weaver to remove the second inner core easily and in one piece; additionally, good willow makes a distinctive "snapping" sound as it is split. The thread is what is left after the two processes to remove the inner core; the thread is left with the skin (bark) on; threads are coiled and bundled, left to dry. These bundles will last for a long time; in fact, some of the Women comment that most basketry material is easier to work with once it has set awhile. Leaving the bark on the threads prevents discoloration and time makes it easier to pull the bark off. Once weavers are ready to use the thread, they will peel and soak it to make it more pliable. When the bark is peeled off, a shiny side is exposed of the thread, which is the side Women want showing on the basket. Thread is further sized by placing it through some type of sizer, either the lid of a tin can with various hole sizes punched, or some other implement with the same function. This ensures the consistency of the size of the threads. One Elder insists that the covers of pocket watches make the best sizers, while another likes mayonnaise jar lids. Jacobsen (1964:550) identifies the term *ʔitbabá·mat* to describe 'a piece of metal with holes of various sizes punched in it; through which willows are pulled to dress them'. This term and *babá·madéweʔ* (another word for *dá·bak*) both derive from the verb *bámad*, which means 'to cut lengthwise, cut with a tubular opening' (Jacobsen 1964:549-50). The verb *bámad*, one member of a class of bipartite verb stems, comprises the stem *ámad* and the prefix b^{v}-, (Jacobsen 1980).

To make foundation coils for round baskets (called *mímuʔ* 'prepared willow'), one needs to find the big gray willows, occurring in higher country usually along river banks. The Women call this *ṗušálaʔ hímu* (the stems and leaves are gray or mouse colored, hence the name, 'mouse willow'). Many of the parents and grandparents of these women went to Lake Tahoe to find gray willow, especially desirable for three-rod foundation coiled baskets. The Women do not remember their mothers using gray willow for thread; only for foundation coils. One Elder attempted to make threads from the gray willow, but found the thread was very uneven and too thin in spots.

The length of the branches of gray willow is valuable when making larger baskets because one doesn't have to blend in new foundation coils so frequently, giving the basket a more pleasing appearance. The big stems of river willow (white willow) they say are too tough to split and thus not usable for the big baskets. The gray willow is very tough to split, but one can do it, and once split, these stems are fairly flexible, making the weaving process somewhat easier on the hands (sore joints in the hand are a real problem for weavers).

The gray willows are more like trees and have thick, long branches or stems. The stems are woodier than white willow, thicker, and have shorter leaves. These stems are split three ways, just like white willow, but splitting is much more difficult because of the size of the branches. The three parts of the branch are then whittled with a knife to scrape the skin or bark off and to get to the desired thickness. One Elder looks for narrower stems so she doesn't have to whittle as much. The mother of one Elder used to find broken glass to shave the willow when she didn't have a good sharp knife. Broken window panes were especially good for this. The inner core of gray willow is whittled out as well.

With white willow, to make foundation stems for trays, baby baskets, and baby basket hoods, one uses the whole stem of the willow, and whittles off the bark. The size of the stem is harvested selectively to meet the size needs of the basket. For example, if willow is needed for the hood of a baby basket, Women look for the limber tips of long willows, which are much narrower than basal stems. I asked one Elder if cutting the tips wouldn't ruin the patch for next year, as new growth from the cut would be bushy. She replied that the bases of such a tall stand would never be harvested anyway, so cutting the tips did not preclude future use.

New growth or cuts from the juncture of last year's growth are preferred for other types of stems and thread, with size of stem selected depending on use. Stems growing from the ground rather than side branches are selected as the willow is stronger. Some willow is always left, however; a patch is never depleted. Never take all of the willow from one patch: it will deplete the patch and preclude future harvest, plus, one never knows about the quality of all the willow in a patch. The Women test the willow, but still exercise caution in not getting all their material from one locale.

The Women look first along the sides of highways, where the highway crew has mown last year, causing new growth to emerge. It's a balancing act, with the Women trying to get to the willow in the fall after a freeze but before the highway department mows. In 2001, the Women were distressed to see that the highway department had cut late in the spring, rather than fall, meaning no new growth for harvest the following fall. The Women recognize that the first year's growth is good, but by the second year, the willow is too bushy. The willow needs to be cut or burned to ensure good harvest. The Women follow the highway department and return year after year to the same site, in practice observing the benefits of coppicing without explicitly identifying the process. The Washoe Ranch, adjacent to the Dresslerville

Colony, is overgrown with willow and the Women state it needs a good burning to make the willow more usable[11].

When harvesting willow, Women are always careful to test stems within a patch. There is variation among patches and within patches. Some willow get buggy: insects bore holes into the willow, lay their eggs, which hatch and eat the inner core, turning the willow brittle and easily breakable. The Women also want thread willow that does not have big leaf buds—this leaves holes in the thread. Size and spacing of leaf buds is less significant for stems.

One Elder commented that she does not like to use basketry material given to her by other people because she does not know where it has come from. She tells the story of several women going to a distant location to gather willows. That night, one of the women had nightmares of old women scolding her, telling her she had taken their willow. The women prayed together to combat the troublesome spirits. Later, they found out that two elderly women lived in a little house by the willow patch where they had gathered the willows. This confirmed their hesitation to go to unknown areas to gather plants.

Sunburned willow (*badóšoŋiʔ*) is created when the bark is peeled off the white willow thread. The thread is bundled together and put into the sun to turn it a brownish color. The threads are hung on the side of the house, left to "cure." These Elders remember their grandmothers using *badóšoŋiʔ* when they ran out of redbud (the red colored thread obtained from the western side of the Sierra); one tells of a

[11] Recognition of the value of fire is demonstrated, even though Women vehemently deny that Washoe ever started fires for environmental or habitat management.

Washoe weaver who left her thread in the sun and the rain, turning it a light orange color.

Badóšoŋi? is a term used somewhat humorously: *badóšoŋi?* has the prefix *b^e*-, which acts as an indefinitive object receiving some sort of action, forming intransitive verbs from transitive ones or also added to intransitive stems; the prefix *b^e*- also indicates plural, as the action received by the indefinite object implies large numbers of repetition or, when applied to intransitive verb stems, the prefix also indicates "a process carried out by a person upon inanimate objects to bring them to the state described by the underlying stem" (Jacobsen 1964:547). The term *badóšoŋi?* also has the prefix *d^a*- (also in *badópo?*), which means 'fire to burn; by fire or heat' (Jacobsen 1964:547-8), and the stem *ášuŋ,* which means 'red'. Thus the willow threads are sun-burned, much as humans would be from too much time in the sun (Jacobsen, personal communication, 2003). The intransitive verb form (*b^e d^a ášuŋ, badóšoŋ*) means 'to put [split willows] in the sun for reddening', and the derived noun *badóšoŋéwe?* means 'split willows reddened in the sun' (Jacobsen 1964:497-8, 548).

Barrett provides several terms for basketry material, describing a bundle of brown inner wood fiber of willow used as a brown sewing or twining element as *himu totoconi* [*hímu dadóšoŋi?*], "willow sunburn," or *podoconewe* and *potoson* [*badóšoŋéwe?* or *badóšoŋ*], and *agaiyewe* [*?á·gayéwe?*] as a bundle of trimmed willow stems used as basketry material (Barrett 1916). Dangberg, in her recording of three Washoe tales, lists the basket willow [*?á·gayéwe?*] as a tool with which Nentusu [*nénťušu*], the old woman, and a child "flip themselves" to another location

(1927:398-9 and 1968:45). *?á·gayéwe?* uses the stem *?á·ga* meaning 'to peel and dress willows down evenly', and the suffix *-éwe?* turns the verb into a noun, "expressing the physical entity resulting from the action described by the verb"; in this case, the noun *?á·gayéwe?* means 'willows peeled and made uniform' (Jacobsen 1964:497).

Pelesusuyewe [*belesúsuyéwe?*] refers to coiled bundle of willow rods used as a basketry foundation material in both coiling and twining (Barrett 1916). The stem *ísu* means 'to split'; it is reduplicated [*súsu*] and preceded by both the b^e- prefix (transitive noun requires this) and l^e- prefix, indicating action 'by pushing, pressing, wiping' (Jacobsen, personal communication, 2003).

The prefix d^e-, indicating third-person possession, appears to be used in place the prefix b^e- when the term follows another noun, such as *hímu* or *dá·bak*. Barrett (1916) records both *hímu dadóšoŋi?* and *badóšoŋ* to describe sun-burned willow (*Salix* spp.), and Merriam (1904) describes *Salix* willow thread with the red bark left on as *dá·bak dadósaŋ*. Sun-burned willow has the thread removed, so possibly Merriam is referring to the stage of preparation when white willow thread is left with its bark intact to prevent it from discoloring prior to use.

Note that Merriam has used the term *dadósaŋ* and not *dadóšoŋi?*. The stem *ásaŋ* in *badósaŋi?* or *dadósaŋ* means red, as does the stem *ášuŋ* in *badóšoŋi?* or *dadóšoŋi?*; the shades of red to which they refer are unknown, but certainly different (Jacobsen, personal communication, 2003).

Jacobsen (n.d.b.) describes *badósaŋi?* as a willow species with slim, round leaves, which is used for making fishing poles, baskets, fish spears, and fish traps.

Both Merriam (1904) and Murphey (1959) identify *badósaŋi?* as dogwood (*Cornus* spp.) rather than a species of *Salix*, which is the identification of *badóšoŋi?.*

Dogwood does in fact have red stems, but I have found no ethnographic reference to its use in basketry. Merriam (1904) simply lists the term for *Cornus pubescens* as *pot-to-sang-e* or *pot-o-sang-eh* [*badósaŋi?]*, followed by a listing for "red willow" with question marks for botanical identification and *mem'-moo* or *me-moo* [*mímu?* 'prepared willow thread'] as the Washoe name. As noted above, he also lists *Salix* willow thread with the red bark left on as *dá·bak dadósaŋ,* throwing confusion into the distinction between *Salix* and *Cornus.*

Murphey (1959:40) lists a medicinal use for dogwood, noting its inner bark has properties of quinine and that the plant is made into a tea for internal use primarily. This reference is not specific to Washoe, however, but is offered in general. In her dictionary of plant names, she identifies dogwood as *badosanich.* Price (1980:48) also states that dogwood bark tea is used to reduce fevers, and he lists a willow bark tea, used like aspirin.

Other types of willow listed by Jacobsen include *šu?mé·li? hímu,* mountain willow, and *šu?mé·li? guwedí?iš,* a grayish willow species (Jacobsen n.d.b.). The term *šu?mé·li?* means 'snow shoe', and resembles the Miwok word for snow shoe, suggesting a borrowing (Jacobsen 1978:127).

Merriam 1923 also records that *šu?mé·li?* means 'snow shoe', as does tab-ba *goo-mo-koo* [*t̲é·be? gumókgo*], literally meaning 'snow's shoe.' Price (1980:74) is the only source to attribute *shumelli* [*šuʔméˑliʔ*] not only to snow shoes but also to manzanita brush (*Arctostaphylus patula*).

Hímu máyaw, a willow species with black berries, is recorded by Jacobsen (n.d.b.), and Merriam (1904) lists bitter cherry (*P. emarginata*) and mountain ash (*Sorbus* spp.) as *him-mo mi-ah* or *him-o-ma-ko or him-moo mi-yu* [*hímu máyaw]*, both of which are characterized by very dark, almost black, berries. The stem *áyaw* means 'black', thus characterizing the dark berries of this plant. Another name given to mountain ash is *moo-sha-goo* or *moo-sag-oo-cm'-loo* [*mušćgcw ʔćmlu* 'bear food'] (Merriam 1904).

Mouse willow, *ṗušála? ʔithímu*, is described by Jacobsen (n.d.b.) and Merriam (1904). The prefix *ʔit-* allows the noun 'willow' (*hímu*) to be possessed. The noun *hímu* is part of group of nouns that normally cannot be possessed (land, plants, animals, pine nut territory) and so must use this particular prefix in order to be possessed (Jacobsen 1964:408, 468)

Other plants identified by the English word 'willow' among Jacobsen's consultants include *báˑłut* (unknown plant), *dewbímiš ʔitbašáʔ* (redbud), and *siʔdúmim* (Alder spp.).

Descriptions of Washoe basketry are well-represented in the literature and will not be covered herein (see, for example, Barrett 1917, Cahodas 1979, Fowler and Dawson 1986, and Gigli 1974).

In addition to its use in basketry, willow is as ubiquitous as sagebrush for a steady supply of material culture among the Washoe people. Powers, in 1871, noted that "Along the streams where they can get a supply of willows they construct huts of slender poles planted in the ground and bent over, forming a dome-shaped frame which is thatched" (Fowler and Fowler 1971:20). Hudson notes the use of willow as a native basketry material and also a material for various game pieces; he also contrasts the tough mountain willow found around McKinney at Lake Tahoe, suitable for warp, but unsuitable for weft, with the Carson Valley willow (*S. longi argofilia*-?) (1902:236-7), the common basketry material. Hudson describes a summer arbor madc of willow as "much likc a clam shcll sct upon cdgc," which was madc by sticking the ends of long willow hoops into the ground parallel to one another and made usable for winter by thatching the side exposed to weather (1902:242).

Dangberg's manuscript describes the use of willow to make fish dams and fish blinds, The Washoe tales also list a woven willow net, used to catch minnows and frogs, the latter being an undesirable food item. Briefly mentioned are a carrying basket and a cooking basket (Dangberg 1968:58, 82).

Price (1980) lists several material culture items made from willow: arrows, tule or willow rafts, willow whistles, willow ball and hoop in games, and the use of willow (as thread, poles, and thatching) in construction of the winter house. He (1980:71) lists *bȼlȼshi* (?) as a willow bundle used in a fish drive.

Place names with *hímu* include: *hímu díme?*, a spring among the pine nuts hills, meaning 'willow water' (Jacobesn n.d.k.); *hímu me?lé·k̓il*, a hilly region, about nine miles east of Woodfords, and also, a region in the pine nut range, whose name translates to 'willows washing back and forth' (Jacobsen n.d.k.) (recoded as *himomalaiko* by Riddell 1960); *hímu wáťa*, referring to several streams, including a stream somewhere north of Dresslerville, Galena Creek, a creek in the Pine Nut Hills, and Buckeye Creek east of Dresslerville (*himowáka*, Riddell 1960); and *hímu p̓ečí'š*, an owl species or kingfisher that lives in the willows (Jacobsen n.d.d., n.d.f.). The term *hímu dayóšiw*, 'willow white,' refers to a particular type of quartz (Jacobsen f.n.), and Riddell (1960:83) records *himu dihasho*, "the name for Dog Valley, on the west side of Peavine Mountain. It is named after a white rock." Riddell (1960:82-3) also records *hemogosuhm* twice (his number 5 and 26): the first time no location is given; the second time, he records it as "the south side of Brown's station [?] where creeks come down from the west."

Dogwood is also found in place names: *badósaŋiʔ badá·gal wáťa*, and *badósaŋiʔ badá·gal wáťa ťáŋaliʔ* (d'Azevedo 1956), translated as 'poking willow in the mouth stream' and 'poking willow in the mouth stream dwellers' (Jacobsen n.d.k.). This location is described as a small valley west of Washo Lake where *bóšdiʔ* is gathered (d'Azevedo 1956)..

103. mešewé·gešiʔ (bracken fern, *Pteridium aquilinum* [L.] Kuhn var. *pubescens* L. Underw.) Possibly one highly variable species worldwide, bracken fern is found in pastures, woods, meadows, and hillsides in partial to full sun from sea level to 3,200 meters (10,499 feet) throughout the California floristic province, including the high Sierra Nevada region (Hickman 1993:91). The plant is toxic in quantity to livestock and humans.

Although not a willow, the rhizomes of the bracken fern plant are a valuable source of basketry decoration among the Women Elders. The fern grows in higher elevations in dense stands and harvest is hard work. The Women climb into the middle of the stand and start digging rhizomes, which can be deep or shallow, depending on the success of the location. One Elder noted that the "California Indian Women" always gather their bracken fern on the hillside and that the rhizomes pull out easily. In Washoe land, the fern grows in flat, dense patches and digging is not easy. The best one can do is find a rotting log with soft ground underneath and harvest there. One Elder commented (in September) that the ants were all gone from the rotting log, telling her that it was time to gather bracken fern. We had dug some rhizomes in July, but the Elders pronounced them not ready. The rhizome would not peel, allowing harvest of the inner threads. By August, one Elder harvested some and found them useful, but the others preferred to wait until later to harvest theirs.

The rhizomes are gathered and taken home for intensive processing. Two dark threads are available in each rhizome, but the dark threads are surrounded by sticky, white material. The white threads are no good and must be scraped off to get to the dark threads. If all of the sticky white stuff is not scraped off the dark threads, then the dying process will not be successful.

The dark threads, once cleaned, are buried in dark mud (preferably from a mountain stream) for at least two weeks. One Elder took spring mud home in a cooler to bury her threads; others bury their threads in a site by a spring and one buries hers at her pine nut camp. The Elders are less trusting about burying their threads in a spring site because once when they returned, someone had dug up their roots and taken them. This clearly violated a behavioral norm as the Women were still angry about this several years after it had happened.

Once the threads are dyed a dark black, they are ready to size and use in basketry, just like white willow thread, except the dark is used for design patterns and the white is the background material.

Hudson (1902:237, 241) marks the use of "pteris" for patterns among willow basketry, and notes that it is dyed in either "a small pool of still water" or "damp muck" to color it. Merriam (1904) records the botanical identification and Washoe name of bracken fern. He notes that to refer to the root, add 'e-tow' [*ʔí·dew*] to the term, using the term for the more linear root (versus *á·daš* used for a fleshier root). Barrett (1916) collected samples, Washoe name, and information of the bracken fern root "used as a black element in sewing and basket making." Jacobsen (n.d.b.) lists it as a fern, used for black designs on baskets. The roots are split and left in black mud for several days to color them.

114. pečúmeliʔ (wild rose, *Rosa woodsii* Lindley var. *ultramontana* [S. Watson] Jepson). The wild rose is found in generally moist areas from 800 to 3,400 meters (2,625 to 11,155 feet) throughout the high Sierra Nevada region and the Great Basin province (Hickman 1993:973).

Other Indian people are said to make a tea from the rose hips of the wild rose, but the Washoe have their own tea, *mé·gel*, according to one Elder. The cane of the rose bush can be used as a brace for burden baskets. Thorns are shaved off and it serves as a temporary repair in the field. The branches of pine nut trees can also be used when nothing else is handy to repair baskets.

Early in September, as we were driving, we saw beautiful, brilliant rose hips. This caused one Elder to say that one of her relatives saw rose hips in bear scat once and asked about the use of rose hips. She replied that some make a tea from it, and her husband, who was half-Paiute, said that when the rose hips are ripe, it is a sign that the pine nuts are ready. Another Elder said, "but the rose hips are ready now and it's way too early for pine nuts." The other replied that a friend had been to Reese Valley and found ripe, good, oily pine nuts ready for harvest. Over and over again, these data show that traditional knowledge is fluid and rationalized in a contemporary context, not static and fixed in the past.

Merriam (1904) records the Washoe name and botanical identification of the wild rose, while Train, Henrichs, and Archer note its medicinal use as a tea from either the boiled roots or the inner bark of the stems to cure colds (1941:129). Dangberg (1927:400-1) tells of the 'civet cat,' *pɛtsumaeli* [*pečúmeliʔ*], who tried to feed the Weasel Brothers rose bushes, which are not food. The use of the name of the rose bush for the stinky civet cat is a good example of Washoe humor.

Stewart (1941:402) makes reference to a pipe stem of rose wood. Schubert (1957b) provides a botanical identification based on a specimen, and Murphey (1959:17) writes that among the Washoe, a tea is made from the roots, which is a "pretty rose colored drink."

The place name *pečúmeli? má?lim* describes 'wild rose confluence', but no indication is given of its location (Jacobsen n.d.d.). Riddell (1960:83-4) lists *petsumalidíma* and *pehtsumalidíma* [*pečúmeli? díme?*] as "a spring on the north end of Watih the name for 'Alkali Lake on the Nevada side of the state line, and on the east side of Highway 395']"; and " refers to a spring southeast of the Nevada State Prison…"

See also 132. si?dúmin or sidúmin, discussed under Material Culture: Brush/Tree. This is identified as a type of willow, but one which is not used for basketry (Jacobsen n.d.a.).

See also 146. šu?wétik, discussed under Food: Berries.

Material Culture: Buck Brush

4. balŋáčaŋ (antelope brush, *Purshia tridentata* (Pursh), but possibly also *dúhul*, mountain mahogany, *Cercocarpus intracatus* (DC.), and/or *dáwal*, buckberry, *Shepherdia argentea* (Nutt.). Although not a food source for people, antelope brush (*P. tridentata*) is an important component of the sagebrush zone, a very important browse to deer, antelope, elk, and bighorn sheep (crude protein proportion is as high as 14 per cent in the leaves), and the seeds are an important food source for rodents, ants, and birds (Mozingo 1987:175-82).

My work reinforces the lumping seen in the historic record of antelope brush and mountain mahogany based on their relationship with browsers, specifically deer. Upon viewing a *P. tridentata* plant in bloom, one consultant said she could not remember the name, but perhaps the plant was mountain mahogany (giving the English name, not Washoe); she knew that it was certainly brush for deer and that her mother always referred to it as "woodtick's house." Jacobsen's field notes for the wood tick, *má?kaʒi?*, describe this bug as living either in sagebrush (*dá·bal*) or antelope brush (*balŋáċaŋ*) (Jacobsen f.n.).

Later, when examining a mountain mahogany plant, this consultant positively identified this plant as *dúhul*, mountain mahogany, and stated that when you see *dúhul*, you know you are in deer territory. The deer make their beds under this bush.

When discussing buckberry, *dáwal*, possibly glossed with antelope brush in the historical record, contemporary consultants discussed its sharp thorns as an identifying feature of the plant and also as a warning for harvest techniques, but limited discussions of use to the berry.

There is no contemporary ethnobotanical evidence to link *dáwal* with *balŋáċaŋ* and *dúhul*, but Mozingo's (1987) note of *S. argentea*'s use as deer browse, its common name of buck berry, and its sharp thorns suggest its placement in this glossing. Nevers (1976:6) refers to "buckberry" as *šu?wétik* (service- or june berry, *Amelanchier alnifolia*), adding more confusion as to what exactly buck brush is. One of the challenges of ethnobotanical research using classical ethnography is the elicitation of a common name and/or native name without procuring a botanical specimen; reliance on botanical specimens, however, is also a product of Western classification and presents its own challenges. To think of a plant being identified solely on its morphology can be limiting and may unintentionally preclude traditional knowledge. In non-Western classifications, use or utility as well as morphology may influence groupings (Hunn 1982).

Hudson lists "buck brush" as the material of arrow shafts (1902:247), but he could be referring to mountain mahogany—rather than antelope brush—also sometimes referred to as deer brush or buck brush by Washoe people, because of the habits of deer to be found by this bush. Mozingo notes that mountain mahogany is good winter browse for deer and lists an ethnographic use of mountain mahogany by Great Basin Indian people in construction of bows, as the wood is extremely hard (1987:152). Conversely, Merriam (1923) lists "greasewood" as a hardwood used for the foreshaft of arrows, a term that Mozingo notes is sometimes mistakenly applied to *P. tridentata* (1987:182). True greasewood is *Sarcobatus verniculatus* (black greasewood) and *S. baileyi* (Bailey's greasewood) (Mozingo 1987:80-6). Merriam records the Washoe name and genus identification of antelope bush (*P. tridentata*) in 1904, and in 1923[12], describes *bahl nah-sung* as the bush used for pricking soot (sagebrush charcoal) into the skin for tattoos. Here, Merriam may be referring to *S. argentea*, the buckberry plant that has very sharp thorns; *P. tridentata* does not have sharp thorns.

[12] In the 1923 vocabulary list by Merriam, it does not appear that he collected or identified botanical samples, only linguistic terms; hence it is possible that his *balŋáčaŋ* was referring to a plant other than *P. tridentata*.

Specifically referring to *P. tridentata*, Train, Henrichs, and Archer identify the plant botanically, transcribe its Washoe name, and describe a boiled leaf decoction as a general cure for venereal disease among all tribes, including Washoe; additionally, a physic or emetic could be prepared by boiling the ripe, unground seeds; and, a solution applied topically is useful as an antiseptic for rashes, itches, skin eruptions, scratches, and insect bites (1941:126-7). Schubert (1957a, 1957b) originally identified *balŋáčaŋ* as *Grayia spinosa*, hop sage, but changed the botanical identification to *P. tridentata* based on Train, Henrichs and Archer (1941), as well as Dangberg's description (Jacobsen n.d.c.).

Jacobsen (n.d.b.) lists the common names of bitter brush and buck brush for *balŋáčaŋ*, and his consultants describe it as a plant growing among sagebrush, which blooms with tiny yellow flowers; its *charcoal* (not its thorns) is said to be used for tattoos (emphasis added). Jacobsen (n.d.d.) also records the place-name *balŋáčaŋ wáťa*, identified as the Truckee River by one consultant and as a stream by Stewart by another.

Murphey (1959:45) lists the Washoe name and botanical identification, with a brief listing of it as a medicinal plant, saying that all tribes made a tea from the ripe unground seeds of antelope brush as an emetic.

Montgomery writes that *balŋáčaŋ*, which grows in the valleys is available any time, and is used to induce continued vomiting (*sésmi*, the verb form from the intransitive verb stem *sésm* (Jacobsen 1964:332)], a sickness of vomiting (Montgomery 1965:16, 58). Note that Montgomery uses the verb form *sésmi* ('he/she is vomiting') to characterize the illness, *sésm* (a verb stem). This verb stem is also seen in the name of a plant, *sésmiʔ* (soap root plant, *Chlorogalum pomeridianum*), which induces vomiting.

Price reinforces its use for tattoos by noting that *balnasung* means tattooing (1980:71). The sharp sticker from the "buck brush" plant was used to apply the tattoo (Price 1980:53). Like Merriam (1923), Price's reference may be to *S. argentea*, as Price records the term *dáwal dáʔmaʔ*, the thorn from S. argentea *(dáwal)*. (See also *dá·bal* and *bó·p̓oʔ* for more references to tattoos.)

Place names include *balŋáċaŋ wát̓a*: Truckee River, a stream by Stewart (Jacobsen f.n.), or the main settlement in Upper Carson (Eagle) Valley where the great rabbit drives took place, the creek which used to run through Carson City, (d'Azevedo 1956); and *balŋáċaŋ wát̓a detdéʔyiʔ*: a settlement near *balŋáċaŋ wát̓a* (Truckee River) (Jacobsen f.n.).

53. **dúhul** (curl-leaf mountain mahogany, *Cercocarpus ledifolius* Nutt.). See the entry of *balŋáċaŋ* for contemporary description of *dúhul*. Hudson in 1902 records the use of mountain mahogany for digging sticks, and Merriam (1904) identifies this plant as *Cercocarpus ledifolius*. Dangberg describes a use of dried mahogany boughs to mark Washoe territory from Paiute at the summit of the Pine Nut Range (n.d.). Stewart (1941:376) also records the use of mountain mahogany for digging sticks. Jacobsen's consultants state *dúhul* is mahogany, or alder or dead buck brush, or a tree with hard wood that grows in the mountains and Pine Nut Hills (n.d.b.).

164. [wášu? (or wá·šiw?) ?itmášu] (greasewood, Sarcobatus spp.(?)). *Sarcobatus vermiculatus* (black greasewood) grows in alkaline soils and is recognizable by its "bright, almost luminous green" (Mozingo 1987:80). If sufficient water is available, greasewood will also grow in sagebrush communities. *S. baileyi* (Bailey's greasewood) is smaller and grows in much drier conditions; its color is a dull gray (Mozingo 1987:84). Oxalates accumulate in the leaves of greasewood, decreasing its significance as browse, but "greasewood forms an integral part of a plant community which supports a variety of wildlife, including our ubiquitous jackrabbit as well as other mammals common to the shadscale deserts and alkali flats" (Mozingo 1987:856).

Other than Merriam's recording of greasewood, *wah-shoo it mush-shoo*, little is found in the historical or ethnographic record about 'greasewood', other than its possible grouping with 'buckbrush.' The prefix *?it-* suggests that this term refers to some type of instrument; the meaning of *mášu* is is to 'wash' (Jacobsen, personal communication, 2003). Recall that Merriam (1923) lists "greasewood" as a hardwood used for the foreshaft of arrows, a term that Mozingo notes is sometimes mistakenly applied to *P. tridentata* (1987:182). One of the medicinal uses of *P. tridentata* is a solution [or *wash*] applied topically used as an antiseptic for rashes, itches, skin eruptions, scratches, and insect bites (Train, Heinrichs, and Archer 1941:126-7). Thus, a tenuous connection can be suggested for *wah-shoo it mush shoo* [*wá·šiw ?itmášu*] as the Washoe's wash (a medicinal solution), or another term for *balŋáčaŋ* (*P. tridentata*).

Material Culture: Brush/tree

22. čipápa (desert peach, *Prunus andersonii* A. Gray). Desert peach is found on rocky slopes, flats, shrubland, and coniferous forests from 900 to 2,600 meters (2,953 to 8,530 feet) on the east slope of the Sierra Nevada region and in the Great Basin province (Hickman 1993:970).

Contemporary Washoe women identify the desert peach as a plant that has a fruit that is inedible, but do not list it as a firewood source as some historic sources suggest. These Women prefer pines for firewood. Some species of *Prunus* have toxic fruits due to concentrations of hydrocyanic acid; this knowledge is clearly reflected in the Washoe categorization of *čipápa* fruit as inedible. The Women Elders enjoy the spring blooms of desert peach and explicitly remark on its aesthetic qualities.

Identified as both *Prunus andersonii* and *Ceanothus cordulatas* (Desert peach and snowbrush) by Merriam (1904), we have another instance of Merriam recording more than one brush for a Washoe term. Train, Henrichs, and Archer compound the confusion by recording this plant as *Prunus virginiana* var. *demissa* (*čámdu?*, western chokecherry) (1941:123). Schubert (1957b) identifies the plant botanically as *P. andersonii* based on a specimen, and Jacobsen's work defines it as a brush species with something like small peaches on it (which are not eaten) and used for firewood (n.d.a.), which suggests *P. andersonii.*

In defense of Train, Henrichs, and Archer claiming the western chokecherry as *ċipápa*, one can cite Mozingo who states that "our closely related western chokecherry was used by them [Paiutes] in the same manner" (1987:168). The Paiutes used desert peach and western chokecherry to prepare a tea for the treatment of colds and rheumatism. Physically, the plants look quite different and have different distributions, however, despite belonging to the same genus.

Jacobsen notes that *ċipápa* is a Washoe borrowing from Numic languages to the east (1978:127). Dangberg (notebook No. I in possession of Jacobsen) refers to a place name using *tsi-pa-pa* [*ċipápa*], identifying Gardnerville, but the second part of the place name is not discernable (Jacobsen, personal communication, 2003).

See also 25, dá·bal, discussed under Medicine.

28. dakŊ̣ásaŋ. (botanical identification unknown). Jacobsen is the only source to give this name. His consultants identify it as the yew tree, or another species, perhaps hickory or spruce, which is reddish in color and from which bows were made (n.d.b.). Hudson writes that yew was occasionally used for bows, but that the wood was imported from the western Miwok (1902:246). Murphey records that that bows are made from yew, which is found in the California mountains near Lake Tahoe (1959:51-52).

DakŊásaŋ has the prefix *kŊ-*, meaning 'to face towards; descriptive of the front of the body'; it also has the stem *ásaŋ* in it, meaning red (Jacobsen, personal communication, 2003). Thus, this name describes a tree with a red front (?).

41. dewdíʔiš or má·daš or má·daš dewdíʔiš. Merriam (1904) records *mad-dahsh* or *mah-tashs* to describe *Pinus jeffreyi* (Jeffrey Pine), but Dangberg lists *dɛudic* as pine tree or scrub pine (Jacobsen n.d.c. and Dangberg 1927:429). Jacobsen lists it as tree, which mostly means 'pine tree,' if no other kind is specified (n.d.b.). There was some minor disagreement among consultants of Jacobsen. Two say *dewdíʔiš* means 'pine tree'; another, 'ponderosa pine'; another, 'tree' only; and yet another uses *dewdíʔiš* to precede species name to signify the entire tree, rather than part of tree. This consultant gives the example of *simt̓á·gim guwedíʔiš*, meaning pine tree.

One of the Women Elders named a particular gathering spot *t̓í·yeli dewdiʔiš*, and gave the translation as 'big evergreen'.

Jacobsen (personal communication, 2003) says that the related prefix *wd-* means 'tree, fence-post, rock to stand.' The place name of *má·daš wedíʔiš* refers to Lone Pine Canyon, or a place among the Pine Nut Hills where there is one pine tree (Jacobsen n.d.d.). *dewdíʔiš beyúmeweʔ* refers to an area with a large stand of pine trees along the mountains about 5 miles north of Milford (just north of *máliŋ beyúmeweʔ*, where a large stand of productive oaks is found along the mountain side north of Milford) (d'Azevedo 1956). The place *dewdíʔiš dawdáyaw* is somewhere in the area of Doyle, and means 'standing tree' (d'Azevedo 1956). The place *dewdíʔiš wadáyaw* refers to an individual's house, again in the vicinity of Doyle; the term means 'tree standing darkly' (the stem *áyaw* means 'black'), referring to the shadow cast by a tree (d'Azevedo 1956, Jacobsen f.n.).

43. deybú·buyiʔ. (botanical identification unknown). Listed by Jacobsen, this term refers to a tree species (n.d.b.). Merriam 1904 lists the terms *bu'-pu* and *pŭ-pŭ* for ponderosa pine, and Dangberg lists *bubui* as a scrub pine (Dangberg 1927:428 and Jacobsen n.d.c.).

74. k̓awáʔyaʔ (manzanita, *Arctostaphylus patula* E. Greene). This plant is found in open coniferous forests from 700 to 3,350 meters (2,296 to 10,991 feet) in the high Sierra Nevada, according to Hickman (1993:555). Mozingo writes that the various species of manzanita dominate much of the chaparral vegetation from Canada to Mexico, while in the Great Basin manzanita generally occurs above the sagebrush belt, where "temperatures are cooler and evaporation less" (1987:123). Virtually worthless for livestock, the shrub is an avid fire follower, and if it weren't for fires, manzanita would most likely be replaced "by coniferous or other vegetation" (Mozingo 1987:124).

Contemporary consultants limit their use of manzanita to the sugar from the sugar pine tree, which drops onto manzanita leaves; children are said to be especially fond of picking manzanita leaves in order to lick the sugar from them. The Washoe term was not offered by the Women Elders in discussions of this plant, but they identified it in the field and talked about the sugar.

Merriam (1904) describes the plant as *kah-wi'-ah del-sah'-sa^ng* [*ǩawá?ya? dalsásaŋ* (*ásaŋ* referring to the color 'red') and writes that its berries (E-ya-ye [*?eyéye?*]) are used for "lemonaid. He also defines *kah-wi-ah* [*ǩawá?ya?*] (without the modifier) as buck brush (*Ceanothus velutinus*), and later in his 1923 vocabulary for food and drink defines *kah-wah'-yah* [*ǩawá?ya?*] as 'manzanita berries.'

Cook (1941) refers to manzanita cider drunk by the Washoe Indians. Jacobsen's consultants comment that it is a plant species with red bark (n.d.b.). d'Azevedo lists both the berries [*?eyéye?*] and cider as a resource, and also notes the use of its wood for snow shoes (1986b:475, 477). Nevers describes boughs of manzanita being used for houses (1976:17).

The berries are apparently no longer recognized by contemporary Women Elders and neither is any material culture use.

89. mahá·wa? or ?itmahá·wa? (Incense cedar, *Calocedrus decurrens* [Torrey] Florin, formerly *Libocedrus decurrens* Torrey). This tree is common in mixed-evergreen and yellow-pine forests from 350 to 2,500 meters (1,148 to 8,202 feet) in elevation, throughout California (except its deserts) and western Nevada (Hickman 1993:111).

The Women Elders discuss *mahá·wa?* or *?itmahá·wa?* mostly in relation to acorns. They describe the process of acorn leaching and biscuit preparation, including the use of incense cedar boughs, and they also note the natural association between oak and acorn. When visiting Jackson, California, the Women pointed out the presence of incense cedar trees right by the acorn trees, identifying what they consider to be a natural association and relationship between the two.

Merriam (1904) records both *ik-mah-how'-wah* [*ʔitmahá·waʔ*] (incense cedar) and *pahl-da-si-yah* [*p̓a·lušáyiŋ*] (juniper) as terms for *C. decurrens.* This reflects a general tendency for Washoe people to call juniper 'cedar' as a generic term, but W. d'Azevedo (f.n.) offers a useful distinction: *p̓á·l* is "juniper cedar" whereas *mahá·waʔ* is the "tall cedar" (incense cedar).

Hudson (1902) writes that "cedar" was used to make the fire stick, boat paddles (split cedar) and as a fire drill. Jacobsen notes that the word literally means 'for pouring on' because of the use of incense cedar in leaching acorn (n.d.b.). The prefix *ʔit-* represents the functional use of cedar in acorn preparation: this prefix is instrumentalizing, meaning it marks the instruments used to accomplish the activity described by the noun (Jacobsen 1964:468). Murphey (1959:52) writes that the Washoe used cedar for bows. Montgomery (1965) lists a medicinal use for incense cedar, saying it is used to treat the illness *sésmi*, meaning, 'he is vomiting'.

See 98. máʔkiʔ ʔíyek, discussed under <u>Food: Berries</u>.

116. p̓á·l (western juniper, *Juniperus occidentalis* Hook. var. *occidentalis*; mountain juniper, *J. occidentalis* Hook. var. *australis* (Vasek) A. Holmgren and N.

Holmgren; Utah juniper, *J. osteosperma* [Torrey] Little). From Alpine County west, the distribution is for mountain juniper rather than western or Utah juniper, although the distribution is more clinal than abrupt (Vasek and Thorne 1977:803). Junipers occur in sagebrush shrub and in the pinyon and juniper woodlands from the Great Basin to the Sierra Nevada in low to mid elevations (Hickman 1993:114).

One Woman Elder who spends as much time as possible each year at her pine nut camp notes that juniper boughs were used to build pine nut camps in the past, but now most people use tarps. Other Elders note that juniper is burned to cleanse a house spiritually.

Hudson (1902) noted that bows were made from the Utah juniper and that a "dwarf evergreen" was used for arrows. Merriam (1904) lists both juniper and cedar under this term. Train, Henrichs, and Archer write that the Utah and western juniper branches were used as fumigants after an illness. The fumes from the burnt juniper branches when inhaled were said to clear headaches and colds (1941:93, 95).

Jacobsen (n.d.b.) notes that juniper's name can also be applied to sequoias, manzanita, or cedar. Place names include *ṗá·l* 'Big Trees', a place where Washoe went to gather acorns (Jacobsen n.d.d.), and *ṗá·l wagó·t*, described as ajuniper in a valley running over the summit, a saddle-back (this consultant was not sure if this was a specific place), or as 'Cedar Pass' (Jacobsen n.d.d.).

89. ṗá·l dašáyaŋ or ṗá·lušáyiŋ. Alternate names for *mahá·waʔ* (Jacobsen n.b.d., Merriam 1904).

122. sašáǩa or šašáǩa. (botanical identification unknown). Identified only by Jacobsen (n.d.b.), this plant is described as a brush species, used for fuel, and as an edible root species.

129. simíši or simíši? (tamarack or lodgepole pine, *Pinus contorta* Loudon). The lodgepole pine is found from coastal to subalpine forests below 3,500 meters (11,483 feet) throughout the California floristic province (Hickman 1993:118).

This tree is preferred for pine nut poles (*beyú'gum*) because the branches are very long, but light in weight. They are also narrow enough to wrap your hands around and thus very useful for pine nut harvesting. Once, we picnicked by a stand of tamarack and shared our lunch with some other Washoe people we encountered. One of the Elders kept insisting the man get her a tamarack pole for pine-nutting, but he treated it as a joke and wouldn't get it. She was quite annoyed after he left. The Elders often express frustration that the younger people don't know how to behave properly toward their elders.

The pollen from the tamarack blows onto the surface of bodies of water; it is collected and used medicinally as a laxative. The wood from the tamarack is mixed with pine nut wood to make the best camp and stove fires, according to these Elders.

Merriam (1902) identifies *simíši* as the Murray pine (*Pinus murrayana*), which is now classified as *P. contorta* ssp. *murrayana* (Grev. & Balf.) Critchf., and has a distribution in lodgepole forests, wet meadows, and cold places in mixed conifer forests under 3,500 meters (11,483 feet) throughout the high Sierra Nevada region and the Great Basin province (Hickman 1993:118).

Jacobsen's consultants state only that *simíši* is the lodgepole pine, also known as tamarack (n.d.b.). [Refer to de*whíwi* for discussion of the thunder stick made from tamarack.] The place name *simíši góhat* refers to a streak or growth of tamarack in the middle of Hope Valley, and *simíši ʔlúweʔ* refers to place where Washoe traveled over to California (Jacobsen n.d.d. and f.n.). The place *simíši k̓ilá·gaʔa* is described as 'at the edge of a tamarack grove' (Dangberg 1927, Jacobsen f.n.).

130. simt̓á·gim (sugar pine, *Pinus lambertiana* Douglas*)*. This pine is found in mixed conifer and mixed evergreen forests below 3,200 meters (10,499 feet) in the Sierra Nevada and western Great Basin (Hickman 1993:120).

The Women identify this tree mostly as a backdrop for the elusive *dalbólboliʔ* (medicine), which they previously found under the sugar pines, but they also note that its sugar drops onto the manzanita leaves. As children, they enjoyed licking the sugar from the manzanita leaves.

Merriam (1904) records sim'tah-gum [*simt̓á·gim*] as the sugar pine, and writes its cone as sim'-tah-gum yah-gah [*simt̓á·gim yá·gaʔ*]. Jacobsen (n.d.b.) lists the tree as the sugar pine, but also notes the suggested relationship between *simt̓á·gim* and *t̓á·gim*. Possibly, *sim-* is a noun-deriving prefix, but it is not clear (Jacobsen 1964:471). Interestingly, *simt̓á·gim* and *t̓á·gim* are the two trees that provide *bámči*, saps used as sweeteners and as medicine. Whether or not this linking has anything to do with the apparently similarity between the two names is only conjecture. Stewart (1941) is the only one to list white pine as providing a sugar.

132. si?dúmin or sidúmin (Alder, *Alnus* spp.) The mountain alder (*A. incana* (L.,) Moench ssp. *tenuifolia* (Nutt.) Breitung is found in wet places from 1,200 to 2,400 meters (3,937 to 7,874 feet) in the high Sierra Nevada; white alder, *A. rhombifolia* (Nutt.) is found along permanent streams from 100 to 2,400 meters (328 to 7,874 feet) in the California floristic province.

Merriam (1904) provides the botanical identification and Washoe term. Jacobsen's consultants (n.d.b.) describe the alder as a kind of willow, with flat leaves, but not used for basketry; they also describe it as a tree or brush, or as a dried or burnt tree standing, a snag.

133. song-gab-be. Merriam (1904) gives this name for the chinquapin (*Chrysolepsis* genus). The bush chinquapin, *C. sempervirens* (Kellogg) Hjelmq., is found on rocky slopes, in coniferous forests and chaparral from 700 to 3,300 meters (2,297 to 10,827 feet) throughout the high Sierra Nevada (Hickman 1993:658). No other known plant names refer to chinquapin, with the exception of Merriam's list, which identifies chinquapin as one of the bushes known as *šu?wétik*.

135. šagá'ša?. (botanical identification unknown). Identified only by Jacobsen (n.d.b.), this plant is described as a bean oak, or oak species with long acorns.

Jacobsen identifies this as a loan word from Miwok (1978:127). C. Hart Merriam's botanical identifications are matched with the terms from which *šagá·ša?* is borrowed from the various Miwok regions: Northern Sierra Miwok: *saka·sa*, *Quercus chrysolepsis*, or mountain live oak; Central Southern Miwok: *sá·sa*, *Q. agrifolia*, live oak, and *šak·aša*, potatoes; and Plains Miwok: *sa·sa*, *Q. agrifolia* and *Q wizlizeri*, live oak acorns, live oak (Callahan 1984, 1987; Heizer 1979). The grouping of oak thus includes *máliŋ*, *malŋá·ċi*, *šagá·ša?*, *šené·be?*, *and wíliši?*.

136. šáwa? (white fir, *Abies concolor* [Gordon and Glend.] Lindley). The white fir tree is found in mixed conifer forests and the lower regions of the red fir forest from 900 to 3,100 meters (2,953 to 10,171 feet) in the high Sierra Nevada region (Hickman 1993:116).

Merriam (1904) identifies *saw-wah* or *shaw-wah* as the Sierra fir, a member of the genus *Abies*. Dangberg (Jacobsen n.d.c.) identifies the tree as *A. grandis*, which Schubert (1957b) states is highly unlikely. Train, Henrichs, and Archer (1941:30) list the botanical identification as *A. concolor* Lindl. They describe medical uses associated with the resin, *šáwa? dó?lom*.

The Washoe word *šáwa?* is borrowed from Numic (Jacobsen 1978:127). The place name *šáwa? ?lúwe?* is described as a place above Mountain House (Jacobsen f.n.) or the hills on the lower end of the pine nut range near Topaz (d'Azevedo 1956).

P6. sawaitayo. Barrett (1916) identifies this as something that grows on fir trees and used like talcum powder. The name *šáwaʔ*, white fir, seems to be part of this term.

137. šáwaʔ deyʒúyuyiʔ. Jacobsen (n.d.b.) lists this term for 'red fir'.

138. šáwaʔ mó·baʔ. (botanical identification unknown). Jacobsen (n.d.b.) lists this term for a small plant with sticky thorns; the same consultant later identified the plant as mountain manzanita (*k̓awáʔyaʔ* is the term used for manzanita). The name includes the terms for 'white fir' and 'mat'.

139. šené·beʔ. (botanical identification unknown). Jacobsen (n.d.b.) lists this as a species of oak.

147. tam-mah-ha-lah (Acer glabrum, mountain maple). Only Merriam (1904) provides a Washoe name for the maple tree. This tree is found in moist to fairly dry conditions along mountains, canyons, and rocky slopes. The altitude range is from 1,500 to 2,800 meters (4,921 to 9,186 feet) and is found throughout California and across the central United States (Hickman 1993:126).

149. tow-e-lah-lal-le (Big-leaf maple, *Acer macrophyllum*). Identified by

Merriam (1904), the big leaf maple prefers streambanks and canyons in altitudes lower than 1500 meters (4,921 feet); it is found throughout the California floristic province, except for the Central Valley (Hickman 1993:126).

156. ťáša? (cottonwood, *Populus fremontii* S. Watson ssp. *fremontii*). The cottonwood prefers alluvial bottomlands and streamsides in lower elevations, below 2,000 meters (6,562 feet). Its distribution includes all of California except the Modoc Plateau, and the tree is susceptible to mistletoe (Hickman 1993:990).

Women Elders identify this tree, but offer little other information. Merriam (1904) documents the cottonwood tree, but offers little insight on its use. Harrington visited the Washoe in 1927, and the only plant name he recorded is *ťáša?*, which he describes simply as 'tree' (Jacobsen 1993). Price (1963:98) writes that cottonwood bark was a good material with which to pack wounds, and that the ashes from burned cottonwood bark made a baby powder.

Jacoben's consultants apply the term to cottonwoods and to aspen, as well (n.d.b.). The place names *ťáša? ṗawá·wa* and *ťáša? ?lúwe?* are recorded by Jacobsen (n.d.d.). The first refers to a grove of 'rustling' cottonwood trees about one-half mile northwest of the place of *ǩá·k* (an individual), under Crystal Mountain, and the second refers to a place above Wadsworth where there is a grove of cottonwoods. Riddell (1960:84) records a place name of *t'ashuh' awawa*, meaning 'rustling cottonwood leaves' and says "this place is about two miles south of Harry Wilson's place and is at the bend of the road, and on the south side of Sam Boni's ranch".

157. behéʒiŋ ťáša? or dalá?ak gumťáša? (Quaking aspen, *Populus tremuloides* Michaux). Quaking aspen is found on stream sides, moist openings and slopes in montane and subalpine forests, in woodlands, and sagebrush steppe from 1,800 to 3,000 meters (5,905 to 9,843 feet) in both the High Sierra Nevada region and Great Basin province (Hickman 1993:990)

A contemporary consultant gave *dalá?ak gumťáša?* as the name for aspen tree. The name literally translates to 'mountain cottonwood tree' (Jacobsen, personal communication, April 2003). Aspens are noted as preferred gathering locales for *bóšdi?*, being said to impart a nice flavor and sheltering environment for the wild onion.

Merriam (1904) elicits *ba-ha-zing tah-shah* ([*behéʒiŋ ťáša?],* small cottonwood tree) for aspen (*P. tremuloides*), *tah-shah* [*ťáša?*] for cottonwood (*P. fremontii*), and *tah-sha- del-ses-ki* [ťáša? delsésgi?][13] for balsam poplar (*P. trachycarpa*). Jacobsen records *ťáša?* for cottonwood and quaking aspen (n.d.b.).

158. ťáša? delsésgi? (balsam poplar, *P. trachycarpa*). See the previous discussion. Jacobsen offers the suggestion that *delsésgi?* refers to 'greasy' (personal communication, 2003), thus describing a greasy cottonwood.

168. wíliši?. (botanical identification unknown). Jacobsen (n.d.b.) records this plant, noting it is a 'grease oak,' or oak species. Like *šagá'ša?* (mountain oak or live

[13] Merriam 1904 also lists *po-shah-la-tim-moo* as a name for Balsam poplar (see *hímu* for fuller discussion of *po-shah-la-tim-moo*)

oak), *wíliši?* is a term borrowed from Miwok. Northern Sierra Miwok has the name *wilisɨ* to describe water oak, which is said to grow around creeks in the hills and has a long, bitter acorn.

Merriam identifies this as valley oak, *Quercus lobata* (Callahan 1984, 1987; Merriam 1979).

177. oot-sel. Merriam (1904) records *oot-sel* as the red *Spirea* bush. *ʔú·ċel* is a plausible transcription of the term, but not one either recorded or recognized by Jacobsen.

178. oo-tso' or oot-soo. Merriam (1904) records *oo-tso'* or *oot-soo*, identifying it as *Symphorcarpus*, the snowberry. Riddell (1960:82) records place name No. 8 as *utsudalak* [*ʔú·ċu daláʔak*], "the name for a mountain northeast of Hallelujah Junction. Utsu is a weed that is unbreakable when green". *ʔú·ċu* is a plausible transcription of the term, but not one either recorded or recognized by Jacobsen.

Material Culture: Fiber

54. dumʔbáyċigiʔ, dumbáyċigi, and 172. ʔíċigiʔ. Although I have placed these two terms together, Jacobsen (personal communication, November 2003) believes the two entries should be separated, because of no recognized relationship between the terms except for the stem *-ícig* meaning 'stem' or 'stalk'. Consequently, I have given the two terms individual numbers (54 and 172), but group the discussion.

Merriam, in 1904, identifies *ʔíċigiʔ* as *Apocynum*, Indian hemp, as does Stewart (1941:375, 428) who identifies *Apocynum cannabinum* as dogbane or milkweed (dogbane is a common name for Indian hemp). Hudson in 1902 notes that the best string bast was made from *Apocinum* and that moccasins were occasionally made of woven *Apocinum.* Dangberg (n.d.:21) writes that *itsigi [ʔíċigiʔ]*, the name of a weed, produces a fiber from its inside that is used to make a fish line. Jacobsen's consultants state that *ʔíċigiʔ* is a weed species that looks like small bamboo; the outer bark was used for thread (n.d.b.).

Stewart (1941:375) also says milkweed is another common name for Indian Hemp, although true milkweed is not in dogbane family. Like the closely related milkweeds, Indian hemp produces a milky sap (Graf 1999:97). *Aslepias speciosa* (milkweed) also produced strong fiber used by Native Americans (Storer and Usinger 1963:96). See *mah-ma*^{h}*m'-ke* for a description of milkweed.

Price writes: "Another kind of thread was made from *Apocynum cannabinum,* locally milkweed or Indian hemp. The fine silk-like fibers of this plant were separated, pulled, and twisted between the palm of the hand the [sic] the thigh into a strong twine. It was collected in the fall after the frost came and the outer bark began to fall off. Both the outer and inner bark were used" (1980:51). He defines *dumbaysȼgi* [*dumʔbáyċigiʔ]* as 'plant string fiber' (Price 1980:71)

Siskin identifies*dumbacigiʔ* [*dumʔbáyċigiʔ*] as "cane" (1937), and Jacobsen's consultants describe *dumʔbáyċigiʔ* as wild bamboo, the kind that grows along the highway east of Woodfords; as a weed species, which looks like small bamboo, grows about three feet high and used by the Paiutes for arrows (n.d.b.). The actual references to *dumʔbáyċigiʔ* are significantly less than that of *ʔíċigiʔ*, but descriptions of use are very similar.

Although no specific plant name is given, d'Azevedo (1956) and Jacobsen (f.n.) record that the place name *miʔmáʔay* (two miles north of Doyle) was a rich source of 'wild hemp', which was used for net-making.

90. mah-maʰm'ke (*Asclepias* ssp., milkweed). Merriam (1904) is the only source to provide a Washoe name for the milkweed, and he refers to this species as the broad-leaf *Asclepias*. Hudson (1902) identifies the species *A. speciosa* as the material. The showy milkweed (*A. speciosa* Torr.), which does, in fact, have broader leaves than other species, is found in many habitats, including fields and roadsides, from sea level to 1,900 meters (6,234 feet) throughout the California floristic province and most of North America.

Although linguistic documentation is sparse, there is more evidence for ethnographic use. Hudson (1902:238) writes that *A. speciosa* makes an "excellent roping bast" and is gathered in November, and he observes its use both in Carson Valley and around Lake Tahoe. Merriam (1904) offers more terms to consider: *mah-mahm'ke yah-kah* refers to the pod [-- *yá·gaʔ*], which refers to cones in pine trees or pods, as in milkweed. He also elicits the terms *ti'-yah-kah* or *dah-yah'-geh* for the pod [*dayá·gaʔ*], using the third-person possessive prefix *dᵉ*- for this class of nouns, which must show possession (Jacobsen 1964:392). The same term *dah-* or *di-yah-kah* is appied to milkweed silk. Milkweed string is called *di'-yah* or *ti'-yah* (Merriam 1904).

Barrett (1916) writes that the fibers of milkweed are used for string making; he identifies the term for such string as *membilewe*. The suffix *-éweʔ* means resulting from, as we see on the terms for willow threads: *ʔá·gayéweʔ*, *babá·madéweʔ*, and *badóšoŋéweʔ* (Jacobsen 1964:497-8). Further analysis of this term is unclear.

Dangberg (n.d.:1) notes the use of milkweed and wild flax (*Linum lewisii*?) to produce fibers used in men's hairnets.

125. sésmiʔ (soap plant, *Chlorogalum pomeridianum* [DC.] Kunth var. *pomeridianum*). The soap plant is found in open grasslands, chaparral, and woodlands below 1,500 meters (4,921 feet) in the Sierra Nevada foothills region (Hickman 1993:1190).

Some of the Women Elders have the soap plant in their own native gardens, and they recognize that a meal brush (used to gather flour when grinding) was made from it. We did not encounter any in the field and the Women Elders did not offer a native term for the plant.

Hudson (1902) states that the plant was imported into Washoe territory from the west so that it could be used for brushes. Barrett (1916) collected a meal brush, *kumbeit* [(*ʔit*)*gumbéyit*], which is made of the fiber of the soap-root plant and obtained from trade with the people on the west side of the mountains. The verb form is *gumbéyit*, meaning 'to comb', and the instrumentalizing prefix *ʔit-* is added to create the noun. The plant is said not to grow on the east slope. The handle of the brush is made by sticking the fibers of the leaves together with the mucillagenous material of the plant. The bulb is first roasted, which makes it quite mucillagenous and an excellent glue. The brush, once constructed, is used especially for the gathering of straying bits of meal (flour) that shoot out when being ground. The brush is also sometimes used as a hairbrush (Barrett 1916).

Jacobsen (n.d.a.) describes the plant as a soap root; people get sick and vomit if they eat it, and cattle and sheep die when they eat it. One consultant said that people long ago ate the plant, which was roasted in the ground. It is said to grow in the mountains, near water.

Montgomery (1965) lists an illness of vomiting as *sésmi*, meaning 'he is vomiting' (from the verb 'to vomit', *sésm* [Jacobsen 1964:497]). Freed (1966:78, 82) writes that the root *sésmiʔ* was collected at the camp site of *ʔlá·m wáťa* (the southeast side of Lake Tahoe), and also that its seed was collected near Watson Creek. Jacobsen and Freed's consultants argue against a solely western Sierran distribution for the plant, but others support the item as being imported.

Jacobsen (n.d.d.) lists *sésmiʔ* as a place near Calaveras, and d'Azevedo (1956) lists it as a place near 'Murphy's. Jacobsen lists *sésmiʔ ʔlúweʔ* as a place in Dog Valley (f.n.). Riddell (1960:83) lists the place *sesmiht tsihlgonga*, meaning'to dig in' as "the name for the area of the Evan's ranch near Purdy's." A locale with much *sésmiʔ* is *dó·ċaʔ ǩiláʔam*, an area of Sierra Valley near Beckwourth (d'Azevedo 1956).

190. wild flax (*Linum lewisii*?) Dangberg notes the use of wild flax to produce fibers used in men's hairnets, in weaving rabbitskin blankets, and in making fish lines (Dangberg n.d.:1-2).

196. *Juncus*, rush, is recorded by Hudson (1902:240) as "shredded for clouts and used in twine weaves".

<u>Material Culture: Needles.</u>

See 31. dáwal, discussed under <u>Food: Berries</u>.

See 98. máʔkiʔ ʔíyek, discussed under <u>Food: Berries</u>.

See 110. ná·bu, discussed under <u>Foods: Stems</u>.

<u>Material Culture: Other</u>

See 104. cóʔyaʔ, discussed under <u>Food: Stems</u>.

See 88. mahaťálal, discussed under <u>Food: Stems</u>.

104. mípiʔ (*Equicetum arvense* L., common horsetail). This plant is found in moist, disturbed areas below 3,000 meters (9,843 feet) throughout the California floristic province, as well as a wider distribution throughout North America, Europe and Asia (Hickman 1993:95). Murphey (1959) lists *mep* as the Washoe word for horsetail, *E. arvense*. No one else records a Washoe term, and Jacobsen (1995) tentatively suggests *mípiʔ* as the correct transcription (the word means 'your

blanket'). Only Hudson (1902:241) refers to its use, stating that a sandpaper came from *Equicetum*.

See 143. šú·gɨl, discussed under Food: Seeds.

See 163. wášu, discussed under Food: Seeds.

Material Culture: Stems

183. *Andropogon* spp. Powers (1875 in Fowler and Fowler 1971) writes that this plant was the source of 'cane.'

See also 54. dum?báyċigi?, discussed under Material Culture: Fiber.

191. *Philadelphus* spp., wild mock orange. Murphey (1959) writes that the stems were used as arrow wood.

192. *Phragmites* spp., cane. Hudson (1902:244) writes that "arrows were made almost universally of cane, the phragmites phrag." Hickman (1993:1282) identifies Phragmites as the common reed. Both Hudson (1902:251) and Price (1963:98) write that the umbilical cord of a newborn was cut with a sharp knife made from a split cane, or sharp cane blade. See also 182. *Andropogon* spp. and 54. dum?báyċigi? as 'cane'.

Medicine

1. badópoʔ (corn lily, *Veratrum californicum* Durand). Although the common name is sometimes given as skunk cabbage, *V. californicum* is not related to the true skunk cabbage, *Lysichiton americanum* Hultén & St. John (Hickman 1993:1104; Storer and Usinger 1963:73). The alkaloids in *V. californicum* are used medicinally, but the leaves are toxic to livestock and humans (Hickman 1993:1208; Graf 1999:86). The plant is found along stream banks, in moist meadows, and on forest edges from 1,000 to 3,500 meters (3,280 to 11,483 feet) elevation (Hickman 1993:1208).

Contemporary work shows variation in focus on this plant; one consultant, looking at *V. californicum* in the field stated it was not *badópoʔ*, but skunk cabbage. The consultant could not remember the Washoe word for skunk cabbage. Another consultant, unable to go to the field, described the plant as found in moist habitats with white flowers on the end, which looks "like corn." When brought a specimen of V. *californicum*, the Woman Elder thought it might be *badópoʔ*, but would not state for sure whether it was the plant. She described its use, however, saying that the plant is washed and dried in the sun for storage; if put away wet, the plant will spoil. Oil or powder from the roots can be applied to sores. The root can be boiled or baked in hot ashes, ground, and mixed with water to be used as a medicinal paste.

This plant was first recorded by Merriam (1904), who identified the plant botanically, gave its common name, and transcribed the Washoe term. No other notes are offered on its use. Barrett, in 1916, collected two root samples and gives the following description: Specimen no. 18412 [Milwaukee Public Museum], a large root used as a medicine and called *bado'po*, soaked in hot water and drank for stomach ache. Specimen no. 18413 [Milwaukee Public Museum], a medicinal root called *padopa*, the same as 18412 but the informant added the information that it is used as a cure for diarrhea as well as for stomach ache.

Siskin (1937) lists *badópoʔ* as one of a list of most important medicinal plants identified by his consultants. The root is used for stomach trouble, but mostly by women who have menstrual trouble. The root is brewed into a tea, and mixed with sugar from sugar pine to create a light yellow-colored liquid that is drunk warm and is bitter in taste.

Train, Henrichs, and Archer (1941:147-8) give the botanical and common name, and describe its medicinal use. One-half cup of the concentrated solution of the root is an emetic; the mashed raw root, which makes a pulp, is used as a linament when applied briskly; and the dry powdered root can be sprinkled onto sores to promote healing.

Schubert (1957b) gives the botanical identification of *Veratrum californicum* to *badópoʔ*, based on a description of the plant provided by Jacobsen, and lists the common name as either false hellebore or corn lily. K. d'Azevedo (1955) notes that "skunk cabbage" (*badópoʔ*) is regarded as a medicine, not a food, and presents anecdotal evidence of a man who cut his hand while working in a saw mill; in spite of the local physician's treatment, the cut would not heal until *badópoʔ* was administered.

In Jacobsen's field notes, his consultants variously describe *badópoʔ* as 'skunk cabbage', a tall, leafy inedible plant that grows in meadows, the root of which is ground up and rubbed on sores (Jacobsen n.d.a.).

Murphey (1959:46) gives the name *baduppa* for *V. californicum*, and describes a tea from the root of false hellebore used as a Great Basin-wide emetic for treating indigestion as well as poisoning; she also states that a tea from the cured root of *V. californicum* "ensures sterility for life". She notes that it is used for snakebite among the Shoshone, but does not describe this use for Washoe.

Montgomery lists the plant as a medicine, gives its Washoe name, and notes that it grows in the mountains and is best gathered in the fall when mature (1965:57), and Price lists the root as an emetic (1980:48).

The term *badópoʔ* contains the prefix b^{e}- , which functions as the indefinite object of the verb *dápuʔ*, a bipartite verb which contains the stem *ápuʔ*, meaning to be whitened by heat, and the prefix d^{u}- (d with u-coloring), meaning 'fire to burn; by fire or heat' (Jacobsen 1964:299; 548). Thus, *badópoʔ* is a noun (plant name) formed from prefixes and a verb stem, which combine to mean bleached or made white, by the sun or by heat. Interestingly, the process required to prepare *badópoʔ* for medicinal use is described by analysis of its name, *badópoʔ*.

The additional noun *ʔitbadópoʔ* means bleach or Clorox (Jacobsen 1964:548). This noun is formed by addition of the prefix *ʔit-*, which forms a noun from a verb stem and indicates the object that performs the action expressed by the verb (Jacobsen

1964:488). These prefixes occur throughout the Washoe language; only plant names are mentioned in this discussion.

The prefixes b^e- and d^u- are also seen in the plant names *hímu badósaŋiʔ* and *badóšoŋiʔ*; and the prefix *ʔit-* is also seen in the terms *ʔitmahá·waʔ* (see *mahá·waʔ*) and *ʔitgumbéyit* (see *sésmiʔ*). Merriam 1904 also collects the term 'Wah-shoo it mush-shoo' [*wá·šiwʔ ʔitmášu*] for greasewood.

See 4. balŋáčaŋ, discussed under <u>Material Culture: Buck Brush</u>.

5. báŋkuš (Indian tobacco, identified as *Nicotiana attenuata* Torrey or *N. bigelovii* (Torrey) S. Watson by Schubert [1957]). *N. bigelovii* has been reclassified to *N. quadrivalvis* Pursh (Hickman 1993:1072-3). *N. attenuata* is found on open, well-drained soils from 200 to 2,800 meters (656 to 9,186 feet) throughout California (including portions of the Great Basin province, but not on the California coast), and *N. quadrivalvis* is found on open, well drained washes and slopes below 1,500 meters (4,921 feet). It is found in the California floristic province, but said to be uncommon in the East Sierra Nevada and the Desert Mohave regions of the Great Basin province (Hickman 1993:1073).

The single specimen we encountered was along the roadside, in gravelly soil, just above the base of Monitor Pass (summit is approximately 2,500 meters [8,202 feet]). Uses of tobacco are mostly religious, and the shaman's use of native tobacco in the curing ceremony is identified (Garey-Sage 1995). One consultant commented that the plant could only be smoked by Indian Doctors. Another Elder observed that *báŋkuš*, like many other plants, has been crowded out by White people so that it is no longer available. One Elder states that the plant used to be all over the valley (Carson Valley) and she used to pick the tobacco for her father who liked to smoke it, but she never sees it anymore because "nobody uses it, and now it's gone." These statements reinforce the view by Washoe Women Elders that EuroAmerican stewardship excludes native plants and native people; additionally, the second statement points out the interactive nature of Washoe environmental guidance: the plants need the people to continue their health. When Washoe no longer work with the plants, for whatever reason, the plants die.

Both Merriam and Barrett identify *báŋkuš* as wild or native tobacco (1904, 1916), as do Stewart (1941) and Jacobsen (n.d.a.). Schubert (1957b) provides the botanical identification of *Nicotiana attenuata* or *N. bigelovii* based on specimens collected. Downs writes that "tobacco was not grown, nor was any action taken to encourage the growth of wild grasses or other plants" (1963b:142-3). Stewart's 1941 cultural element distribution list also indicates that the Washoe did not burn for tobacco (to encourage its yield), and notes that smoking was conducted for luck prior to hunts (1941:373). He also notes that tobacco was sometimes mixed with the root of *dó·ċaʔ* (Indian balsalm, *Loeptotaenia dissecta* var. *multifida*) and inhaled for colds (1941:402).

Jacobsen records *wá·šiw báŋkuš* as Washoe's tobacco, and *báŋkuš déʔek* as a tobacco pipe, made from soft rock and drilled with deer bone (Jacobsen f.n.).

Handelman (1967) describes a contemporary shaman's use of "smoke" in the curing ceremony, and Downs quotes a woman curer:

> My mother was a curer. She just smoke and talk. You would meet her on the way to town mebbe and say 'I don't feel good' and she'd just sit down and smoke and talk [pray?] a little and then mebbe tell you what was wrong and what you should do.
>
> Along about the first war I got sick and couldn't make no water at all. My mother smoked and then spread ashes all over my belly and talked some and after that I passed a lot of blood and got better [Downs 1961:369].

The same consultant of Downs's tells about dreams in which a spirit offers one shamanistic power, noting that in the dream, one is told where to gather tobacco (1961:369). Tobacco, in general "played an important part in Washo shamanism…In prewhite times the tobacco was a native variety gathered and dried by the shaman. Today Bull Durham appears to have replaced the wild variety as "Indian tobacco" (Downs 1961:371).

Freed and Freed give this example of shamanistic use of tobacco: "Before a war party set out contests between shamans were held because the warriors wanted the shamans with the strongest powers to accompany them. Hank Pete says that the shamans filled their pipes and began to think about each other. They then exchanged pipes and began to smoke. After a few puffs the weaker shaman would start to choke and would fall unconscious…" (1963b:48-9).

Nevers records one of the Washoe myths, telling how Pawetseli [*pe?wéčeli?*], the Older Brother Weasel, is gifted with tobacco from the "Great Creator" and uses it shamanistically to destroy the Black Widow spider, who has killed Younger Brother

Weasel (1976:31). Dangberg records a similar tale, but simply describes spider by the generic term [*ćiˑki*], not specifically identifying the spider as a black widow. She discusses how the sun, upon being threatened with the magical porcupine pets of the moon, loans his tobacco and pipe to *peʔwéćeliʔ* so that he can bring his younger brother back to life (1927:409). At a later point in the travails of the Weasel Brothers, Dangberg describes how the tobacco keeper/owner brings tobacco out for everyone to smoke to divine some knowledge (1927:428-9 and 1968:85).

Price writes, "Smoking tobacco was largely a religious act, sometimes used like a prayer in communing with supernaturals and at other times used in a direct way, such as in blowing smoke on the body of a patient. A person might sit and smoke to try to divine the location of lost articles" (1980:33; see also Downs 1961:371). He also lists the use of tobacco as a stimulant smoke (Price 1980:48).

Jacobsen observes that *báŋkuš* relates to both Numic and Miwok forms. The Northern Paiute compound of *pahmú* and *kusˑí* 'tobacco' and 'ashes' is likely the basis of the Washoe term. The first part of the Northern Paiute compound, however, *pahmú*, is similar to Miwok forms: Northern Sierra Miwok (*paʔmɨ*, 'to smoke'), Southern Sierra Miwok (*paʔm*, 'to smoke tobacco') and Plains Miwok (*paʔmi*, to smoke [people]; to puff) (Jacobsen 1986b:42 and Callahan 1984 and 1987).

7. báʔlew čigú·guš. (botanical identification unknown). Jacobsen (n.d.a.) is the only source to list this plant. His consultants describe it as roots from California that grow in the mud, which are used for various sicknesses. It is made into a tea and

drunk. It is also put into the eyes for soreness. *Tániw čigú·guš*, literally 'Miwok stomach', and *dewbímɨš ʔitbašáʔ*, 'Maidu brush', are other resources named for the surrounding tribes from whom the item is received. (See *dawgálpušeweʔ* for further discussion of *tániw čigú·guš*). Jacobsen (1986b) presents a discussion of Washoe borrowings from surrounding languages, in which "foreign" names for "foreign" resources are incorporated into Washoe. The naming of resources using Washoe terms for the foreign item and tribe demonstrates an additional linguistic method of recognizing imported items. *Báʔlew čigú·guš* has a literal meaning of 'Paiute stomach'.

8. [beʒiyé·ʒiŋ t̓étgiʔ]. (botanical identification unknown). Freed (1966) is the only source to record the plant name *bEziEzInthe?khi*. In his documentation of Washoe habitation sites around Lake Tahoe, at [*šuwéʔtɨk wát̓a*], which he records as *cu'wE'thUkhwO'tha*, Freed lists the medicinal plant of *bEziEzInthe?khi*, "which was used for eye trouble and also for sore throat" (Freed 1966:80).

The translation of this term means 'having little seeds', which suggests a characterization of the plant rather than an actual name.

See 11. bóšdiʔ, discussed under <u>Food: Greens</u>.

21. čilé·bɨlhu (wild onion, *Allium*, species unknown). This plant was only briefly mentioned by one contemporary consultant, who identified it as wild onion.

The plant was mentioned in a conversation about medicinal plants, suggesting a medicinal use. It was identified only as small wild onions by one of the consultants working with Jacobsen (n.d.a.).

The interesting thing about this plant name, however, is its ending. The suffix *-hu* is found on several plants and animals. Jacobsen (1964:40) writes that "It is thought that this suffix may have multiple origins, being in part indigenous and in part due to loan words from Uto-Aztekan languages, that originally ended in -Cu, and that this may partly account for its allomorphy…" Plants whose names end in *-hu* are *silá·ťawhu, sabá·samhu, ċé·gelhu, ċilé·bɨlhu, tuyá·gɨmhu, ʒíwʒiwhu, wayámhu* and perhaps also, *madukwáwLu* and *mugáwLu* (Jacobsen 1964:481). He also writes that it is possible that the suffix *-hu* acts as a diminutive, as "most of the creatures and plants whose names bear this suffix are smallish in size, but not all of them are especially small in relationship to other living beings of the same general type" (1964:478).

25. **dá·bal** (big sagebrush, *Artemesia tridentata* Nutt). Big sagebrush is ubiquitous in the Great Basin, found in dry soils, valleys, and slopes from 300 to 3,000+ meters (984 to 9,842+ feet) in the High Sierra Nevada region and the Great Basin province (Hickman 1993:205).

Contemporary consultants discuss the ceremonial function of sagebrush in the Girl's Puberty Dance, in which sagebrush leaves are used to bathe the young woman and the food used to break her fast is mixed with tender sage leaves (Garey-Sage 1995).

They also tell of an interesting food use. Insect galls commonly form on the sagebrush leaves, and women tell of how they ate the galls as young children. The galls tasted like "marshmallows," and children would just pull the galls off and brush and eat it raw. "We'd eat anything we were so hungry in the spring!"

Referring to the use of sagebrush bark for diapers and women's napkins, one consultant describes how to prepare the bark: get the bark at the base of a large plant, pull it off, and rub it to make it soft. She asked her grandmother, "Wasn't that uncomfortable?" Her grandmother replied, "Sure it was, but what are you going to do?"

Another tells how twine used to be made from sagebrush bark, taking the bark and twisting the strands together with their hands to make it.

The first recorded ethnographic description of sagebrush comes from Stephen Powers, who visited the Washoe people briefly in 1875. He writes:

> On the open desert they pulled and stacked together a quantity of sagebrush, making a circular, hollow heap, which was defended on the windward side with skins and hare-skin blankets. In this wretched enclosure, with a fire in the center, they passed the days and nights, lying around close to the wall to escape the snow which blew over or sifted through…For summer use a slight circle of sagebrush, with shades of cloth or skins hoisted overhead, suffices [Fowler and Fowler 1971:120].

In 1902, Hudson writes that sagebrush bast is used for cloaks, clouts, etc., a sagebrush leaf infusion is used for sore eyes, and that sagebrush bark forms a brush "bound with wampum" used to brush water off puberty girl, then brush thrown into crowd to be scrambled for as its possession ensures luck (Hudson 1902: 236, 241, 252).

In 1904, Merriam records the botanical and linguistic identification of sagebrush, but in his 1923 vocabulary, he offers more ethnographic detail: the plant is used in construction of men's hairnet (*da-bahl esh* [*dá·bal ʔí·š*], 'sagebrush skin')[14], the plant is used as a "napkin," strands of it are used to tie hair braids, its charcoal is the material for tattoos (see *balŋáĉaŋ* for more discussion of tattoos), dry sagebrush is used for scratching, and brush wikiups are made of it. Price (1980:51, 53) adds that leggings and socks (for moccasins) are made from sagebrush; rolled and loosely sewn, sagebrush made a mattress or it could be plaited into a mat and used as a diaper, baby pad and woman's napkin.

Dangberg (n.d.) writes that winter moccasins (made from buckskin) were made large so that bark from sagebrush or cedar could be mashed and wrapped about the foot for a sock; also, two 18-inch sagebrush sticks were rubbed together over holes in a 2-inch hearth in which there is grease to make fire. She also notes that sagebrush was used to line pits for roasting salt, and she records the use of "*dabal* water" to rub the legs of a man with rheumatism.

Lowie (1939) says that corpses were cremated on a pile of sagebrush (cited in Freed and Freed 1963a:32). Train, Henrichs, and Archer write: "This plant, next to *Leptotaenia multifida* [*dó·ĉaʔ*], is the most widely used in the state and is most

[14] Dangberg n.d. says men's hairnets were made of either wild flax or milkweed.

commonly used in treating colds" (1941:44). The usual dose of tea, made from boiled green leaves, is one-half cup several times per day; branches are also burned on top of the stove as a fumigant after an illness; baskets and blankets used in childbirth are held in smoke to fumigate; and the tea is used as general tonic (Train, Henrichs, and Archer 1941:44-5).

In *The Persistence of Aboriginal Ceremonies*, Freed and Freed describe multiple uses of sagebrush. Mothers are bathed with sagebrush leaves dipped in water one month after the birth of their child; the mother then chews a small amount of food mixed with sagebrush and spits it out to break her postpartum fast (Freed and Freed 1963a:27).

Price adds the information that the most common childbirth bed is a pad of braided sagebrush bark (1963:100). The newborn baby is often rubbed with soft sagebrush, which is then thrown eastward, and a sagebrush bark pad is placed in the baby's cradle (Price 1963:100).

At the end of a girl's puberty dance, she is painted with ashes using a brush made of sagebrush; like the mother's fast after parturition, the puberty girl breaks her fast at the end of the ceremony by chewing pine nuts and meat mixed with sagebrush, which is then spit out (Freed and Freed 1963a:29, Price 1963:108). During her menstruation, if the girl's hair is cut, it should be thrown in a stream or buried in a wrapping of sagebrush bark, buried deep in the mud (Price 1963:101). Contemporary dances include a gift giving after the girl's ritual bath; the girl throws to the crowd bunches of sagebrush twigs tied with cloth in which coins are placed (Price 1963:108).

In Washoe mythology, Old Woman and a girl are hiding from *Hanawuiwui* {*Hanawɨywɨy*], a cannibalistic monster, underground, under some sagebrush; although *Hanawɨywɨy* tries to pull up the roots, he cannot because Old Woman has pulled a digging stick through the roots (Price 1980:37). In Dangberg's version, Nentusu [*néntušu*], the old woman, and a boy child hide from the monster (1927:395). Lowie (1963) records a similar version, with the monster trying for two days to pull up the brush (*tá·bal* [*dá·bal*]). Nevers adds that the monster was so outraged that he ran in a large circle, pulling up other sagebrush."Even today, in an area in the midst of the Washo allotments about fifteen miles south of Gardnerville, Nevada, there is a place on the Double Springs Flat where one large sagebrush looms above the rest" (Nevers 1976:34). This place name is *buʔámbuláyʔ*, also recorded as *bámbuláyʔ* or *baʔámbuláʔya*, "where he pulled out brushes" or "where he pulled up sagebrush" (Jacobsen n.d.d.). The prefix *b-* indicates an indefinite object of the verb; the verb stem *á·bɨl* means 'to pull things out of the ground with your hands'; and the suffix *-áyʔ* means 'former' (Jacobsen, personal communication, 2003).

In another myth, the giant *Ololing [ʔólʔol]* breaks his leg and secures it with sagebrush bark, although when he tries to stand, "he fell to pieces" (Dangberg 1927:399 and 1968:47) (demonstrating that sagebrush should not be used when stout wood is called for!). In the same myth, Washoe people are admonished not to eat rabbitbrush, the food of the snowshoe rabbit [*mú·k̓i*], or sagebrush, the food of the jackrabbit [*pélew*] (Dangberg 1927:400-1 and 1968:46, 48).

Fire embers are burned into sagebrush bark to preserve them (Stewart 1941), and after a death, a house can be purified by smoking it with sagebrush (Freed and Freed 1963a:33). Antelope corrals and rope were constructed of sagebrush (Downs 1966a:31 and Price 1980:40).

Jacobsen's consultants indicate that the leaves of sagebrush were cooked to treat colds (n.d.a.). Jacobsen (f.n.) also records the name of a month as *dá·bal dí·be* (sagebrush month). Dangberg (n.d.:61) writes that *dabal dibe [dá·bal dí·be]* is the first month of cold weather, when the seeds are ripe on the sagebrush. Jacobsen (f.n.) also records the general term *ċéhit* for charcoal, but the specific term *dá·bal yéhis* for sagebrush charcoal, suggesting a specific use of sagebrush charcoal (tattooing?).

With such a rich description of sagebrush ethnographically, the limited marking of sagebrush among contemporary Women Elders is surprising. Material culture use is almost entirely lacking but that is not perhaps so surprising considering that, historically, Washoe people rapidly adopted EuroAmerican clothing and cloths (Downs 1966a:79). Loss of medicinal use is somewhat surprising as *dó·ċaʔ* (compared by Train, Henrichs and Archer to sagebrush as a cure-all) maintains its use, and, certainly, sagebrush is still available. Ceremonial use more than anything else seems to have survived, with sagebrush being important in breaking fasts, ritual bathing, and smoking away troublesome spirits.

Jacobsen records the place name of *dá·bal k̓ilá?am*, meaning 'sagebrush pointing out' for a region around the Carson River, about a mile west of the

Cradlebaugh bridge for Highway 395 (n.d.d.), and d'Azevedo (1956) records the name *dá·bal k̓ilá?am detdé?yi?* for the year-round settlement around this region (although other consultants state it was not a year-round settlement, but only used for rabbit drives). d'Azevedo refers to *t'abl wagôt* [*dá·bal wagó·t*], 'sagebrush saddle', referring to the range northeast of Topaz, about 10 miles east of Topaz (f.n.). Both Jacobsen (f.n.) and d'Azevedo (1956) describe *dá·bal dasól?ŋi?* as Mt. Adams, and the settlement area under it is described as *dá·bal dasól?ŋi? ?élmu* (d'Azevedo 1956).

The place name *wé·ċip wa?lóŋa?*, while not referring directly to *dá·bal*, refers to one of the products of sagebrush: leggings or stockings. This place name identifies an area "4 miles south of Hallelujah junction" (d'Azevedo 1956:61). The site is named because it is an area where big sagebrush was available to use the bark for clothing or leggings (d'Azevedo 1956:61, Jacobsen n.d.k., Riddell 1960:84).

26. **dabólboli? or da?ilbólboli?** (eye medicine, botanical identification unknown). Contemporary consultants attempted to find the plant *dabólboli?*, but were not successful. Two consultants had previously found the bulb in Sugar Pine State Park, but as many times as we returned, we never found the plant. Another consultant had found the plant around Fallen Leaf Lake. A similar looking plant (single stalk with white flower) was found in Meek's Bay Meadow, which one Elder identified as *dabólboli?*; another Elder insisted it was not *dabólboli?*, but, in fact, resembled the wild sweet potato which grows in the Pine Nut Hills (previously called *golsísi?* by the Elder, but later referred to as *dé·guš*). The Elder who changed her identification was

concerned that the plant was growing in the wrong environment to be *dabólboliʔ*; the medicine plant grows in dry areas, preferring sandy soils. The plant we found, white brodiaea (*Tritelia hyacinthia*), was in a meadow and much too moist for the plant *dabólboliʔ*, according to this Elder.

As one Elder commented about harvesting medicines, discuss it with two to three other Elders and then "you'll be safe," illustrating the consensual nature of medicinal knowledge among the Washoe Women. The Women Elders never reached a consensus on this plant.

Barrett collected a sample of this tiny, pea-sized bulb during his 1915 trip. Specimen 18418 [Milwaukee Public Museum] is used medicinally according to his notes. Barrett writes the bulbs are ground and then placed as a paste in the eye; a ground powder is also put on any swelling "as an ordinary remedy for such cases" (Barrett 1916).

Siskin (1937) identified *dabólboliʔ ťetg'iʔ* [*ťétgiʔ* is 'having a seed'] as one of the best medicines of the Washoe, a very important plant. It is found in the ground among trees and has a long stalk about one foot high. The root is in the form of a small potato about one inch long and three-fourths inch wide. The root or bulb is found just a few inches beneath the ground, and it is found together with last year's bulb.

The plant is used as a tea for any internal sickness (also for gonorrhea), and can be used to treat external wounds. The bulb is ground into a flour, water is added, and the paste is applied to sores. For sore eyes, the bulb is ground to a flour, then boiled in water and strained. When the liquid is cooled, it is dropped into the eyes and apparently causes no stinging or discomfort.

Jacobsen's consultants say the plant grew around Lake Tahoe and has a round bulb that is used for eye trouble, for sore throats or for putting on cuts. The bulb was boiled and the juice put into the eye, or the bulb was ground up and ingested.

Montgomery records the plant as being used to treat *ʔáṗaṗ* [*ʔáṗap*], a condition of having sores all over (1965:160). A second use for the plant is to treat *ʔugólme* (venereal disease); the plant is said to grow around Lake Tahoe and is best gathered from midsummer on (1965:57). The consultants working with Siskin (1937) identified *dabólboliʔ* as one of the seven or eight most important medicines among the Washoe, and many Elders today lament its loss. It was very frustrating to the one Elder who had found it previously not to be able to find it again, and to her, it again represented the havoc wreaked by EuroAmericans.

In the form *daʔilbólboliʔ*, the prefix *ʔil-* is 'descriptive of the term that follows'; in this instance, *b^{u} álbul*, forming *bolbol* 'spherical', along with ending *-iʔ*. Thus, the word means literally 'round' (Jacobsen 1964:329 and n.d.b.).

29. damok̓ó·k̓o or demuk̓ó·k̓oyiʔ (False Solomon seal, *Smilacina stellata* [L.] Desf.). This plant is a perennial, with "creeping rhizomes" found in moist woodlands, streambanks, and open slopes below 2,400 meters (7,874 feet) in the California floristic province (Hickman 1993:1204).

Contemporary consultants describe the plant as jointed, with knees, a type of medicine used for joint pain. Their elders told them about it, but they have not yet identified it in the field. Like so many of the medicines, processed, dried parts—not fresh plants—were shown to the women, demonstrating the focus on function rather than morphology. One consultant deduced that a plant we had seen around Job's Peak had a knobby, knee-like root and might be *damok̓ó·k̓o*. The plant we had seen was tentatively identified as bistort, *Polygonum historoides,* and thus not *damok̓ó·k̓o*, but the identification by the Elder was not definitive and would only be the first step in a process of identifying medicines (a process involving conferring with other elders, probably smelling it, examining the morphology, and if consensus is reached, possibly tasting it and using it in small amounts). In the same conversation, the Woman remembered her mother adding a flour made from some plant to dried pine nuts to make the nuts taste fresh; after reading an herb guide, the Woman wondered if bistort might be the plant her mother added to dried pine nuts.

Barrett collected a specimen and describes its medicinal use: decoction of root is drunk as a cure for colds and rheumatism; if strained carefully, it can be used as an eyewash (1916).

Siskin (1937) says the plant "looks like false Solomon's seal," and its root can be one foot or more in length. A bunch of roots are bundled together and mashed and boiled to make a warm solution. The resulting tea is drunk warm, tastes not bitter but not sweet, and is used to treat gonorrhea primarily, but also minor stomach aches.

Train, Henrichs, and Archer (1941) provide a botanical identification (*Smilacina stellata*) and also note medicinal uses: to stop bleeding, pulverize roots into a powder and apply to wound. For inflammation of the eye, make an eye wash from the liquid of the mashed, soaked roots (documented for Paiute and Shoshone, not Washoe, but note similarity to Barrett's description). Also, a solution from the root is said to have an antiseptic value when used for blood poisoning and to function as a good tonic (Train, Henrichs, and Archer 1941:139-40).

Jacobsen's consultants say it is a plant that was used for medicine, which has joints in the stalks and was gathered around Lake Tahoe (one consultant) or from the Sierras (another consultant). Montgomery also describes its medicinal properties and suggests a botanical identification (same as the one provided by Train, Henrichs, and Archer 1941). The plant was used in the treatment of *ʔugólme* (veneral disease) and for *ċibéyu* (stomach ache with diarrhea) (Montgomery 1965:16). He notes that the plant grows in the mountains and is best gathered in the fall. He collected specimens at 8,500 feet (2,590 meters) elevation.

Freed (1966:80) records the presence of this medicinal plant (*damukOkoi*) at *cu'wE'thUkhwO'tha* [*šuʔwétɨk wáťa*], the site of a small stream near Chambers Lodge (McKinney Creek according to Nevers 1976).

Literally, the name means 'having joints' (Jacobsen n.d.a.). *Dáʔaw demuǩó·ǩoyiʔ* refers to a lake in Desolation Valley, which Jacobsen translates as possibly 'lake joining', but it is not clear whether this describes a lake joining with some other water source of whether it might describe the shape of the lake (n.d.d.).

32. dawgálpuševe? or daw?igálpuševe?. (botanical identification unknown). Identified by Jacobsen (n.d.a.), Montgomery (1965), and d'Azevedo (f.n.), this plant is known as a medicinal plant growing around Tahoe; one consultant of Jacobsen's also says the plant is from California and its leaves are smoked with tobacco. Montgomery records is a medicine used to treat *húntuš*, a sickness characterized by coughing up blood (tuberculosis); the medicine also treats *maláťaťin* (pain), and is found growing in the mountains (Montgomery 1965:16-17, 57). d'Azevedo (f.n.) states that *taneusegaguš* (Digger's or Miwok stomach) [*tániw čigú·guš*] is a location to gather herbs such as *da*^{u}*igalpušewe* [*daw?igálpušewe?*], also the name of a medicine.

34. dečímeli? or nó·wi (medicine, botanical identification unknown, also a grub worm). The medicine is found only in California and is considered to be good for all illnesses, but especially heart disease. One Elder's mother used to harvest it on the California side of Carson Pass. The dried root was ground into a powder and used on sores. The Elder's mother drank a tea made from it to make her heart pain go away.

Barrett (1916) collected a specimen of the root he identified as *datsimali* [*dečímeli?*], noting that the name derives from the tsimel [*čímel*] for whiskers. He also lists the name *nowi* [*nó·wi*]. The root is described as a stimulant with effects like alcohol. Barrett notes that a cupful of the liquid will produce intoxication, but that the effect will wear off shortly. The liquid is taken to reduce swellings or other internal disabilities. The root can also be ground into a fine powder and applied to cuts and sores to dry them up.

Siskin (1937, 1941:234) also lists both Washoe names and ranks it as among the most important of Washoe medicines. It is said to be a three-leafed plant with dark red flowers that grows in California on the west slope of the Sierra. The plant grows about one-foot high, and the root, when dried, looks like the grub worm '*nóˑwi*,' hence its other common name[15]. The root can be prepared into a tea for stomach problems or the dried powder from the root can be applied externally to sores.

K. d'Azevedo's consultant (1955) states that this medicine came from the Miwok and that "no Washo knows what it looks like." The medicine was used to stop pain. The root could be cut into tiny pieces or ground up and mixed with water. The medicine could be applied to cuts and sores or used for toothache or sore throat. It was sometimes made into a tea for colds. This consultant claimed *nóˑwi* was the best medicine the Washoe ever knew; that it was like penicillin in that it could cure anything.

Montgomery (1965:16) lists *dečímeliʔ* as a medicine used to treat *húntuš* (coughing up blood), *ʔáṗap* (sores all over), *šónǩap* (wet female genital sores),

[15] The grub worm, found in rotting logs, is good fishing bait. One man, an elder when these Elders were young girls and a relative to one of their mothers, would use *nóˑwi* to catch big fish and then bring it to share with the family. Bears like *nóˑwi* almost as much as the Washoe like to use it for bait. The Women think the grub is hard to find now.

ʔugólme (all types of venereal disease), and *c̓ibéyu* (stomach ache and diarrhea). He notes that it grows near Placerville, California, and is available throughout the growing season.

Jacobsen's consultants identify it as *nóʼwi*, an Indian herb growing in California whose roots were used for toothache or sore throat when held in the mouth; it could also be used externally (n.d.a.). The verb stem *ímel* 'descriptive of whiskers, face hair', is turned into a noun by the prefix *ć*-, meaning 'whiskers' (Jacobsen 1964:494). The term is also found for cat fish: *ʔáťabiʔ dec̓ímeliʔ* (whiskered fish) (Jacobsen, n.d.g.).

38. delmúsmusi. (botanical identification unknown). Only Barrett lists this term (1916), describing it as a medicinal plant, saying it is boiled and drunk (leaves presumably) as a remedy for syphilis and also ground into a powder (roots) and applied to "chancres and other syphilitic eruptions."

Merriam (1904) lists the term *ma-moo* (or *mee*)-*se* (it is difficult to read the writing) as Sage herb, (*Artemisia ludoviciana*), but he also lists *ta^{h}ng-al-é-sik* as name for the plant. The words are different enough to make a suggested relationship improbable, but no other word matches either *delmusmusi* or *ma-moo-se*.

39. délšɨm. Siskin (941:93), K. d'Azevedo (1955) and Jacobsen (f.n.) collect this term. Siskin describes it as a medicine for good luck in hunting, etc., as well as the word for sleep. K. d'Azevedo's consultants say it is a medicine obtained from the

Miwok, with which people were put to sleep (see also 107. *mugáwLu* for a medicine to put animals and people to sleep). Jacobsen records that *délšim* means 'sleep', and one of his consultants identifies this also as the name for a California medicine that would put people to sleep (f.n.).

40. [dewdílek or mósaŋ] Merriam (1904) records *mos-sung* and *ta-o-tel-lek* for *Castillija* [sic], red, Indian paint brush, and *Gillia aggregata* for *mósaŋ* . The genus *Castellija* has many, many species throughout the California and Great basin floristic provinces (Hickman 1993:1016-24). The only mention of use is by Train, Henrichs, and Archer (1941:53), who list the use of *C. linariaefolia* Benth. among Shoshone people as an emetic and blood tonic. Graf (1999:264-6) lists at least seven species of *Castellija* that occur through the Tahoe Basin in varying habitats, and notes that all species "are parasites that tap the root systems of neighboring plants to obtain water and nutrients". *C. linariifolia* is found along subalpine ridges in the southeastern Carson range, and is common throughout the west (Graff 1999:264).

Merriam's recording of *ta-o-tel-lek* is more properly transcribed as *dewdílek*, containing the prefix *wd-*, meaning 'long object to stand' and the stem *íleg* indicating the color 'red' (Jacobsen, personal communication, 2003).

The plant name *mósaŋ* is also identified as *Gillia aggregata* by Merriam (1904). *G. aggregata* is not found in Hickman (1993), but Train, Henrichs, and Archer (1941:76-7) record the use of *G. aggregata* (Pursh.) Spreng. among Paiute and

Shoshone people as an emetic, blood tonic, for colds, disinfectant wash, poultice for rheumatism, and as a treament for venereal disease.

46. dílek ċópaliʔ or dílek ċópal (no common name or botanical name known). Identified by only one consultant (in an interview, not field setting), this plant was described as a medicine growing around Heenan Lake, which is south of California Highway 89 along Monitor Pass in Alpine County. Also recorded by Jacobsen (n.d.b.), this vividly named plant is described as a short tule species, a plant with hollow stems and joints every one-half inch. The name means 'duck brains' or 'duck snot,' but in this case probably means 'duck snot' because of the nature of tules to get slimy in standing water. Jacobsen notes that the semantic sharing of brains and snot is also seen in Numic languages (personal communication, 2003). The place name, *dílek ċópal,* refers to Harvey Lake, between Woodfords and Markleeville (Jacobsen n.d.d.). Whether this indicates a resource location is not known, but it is suggested by other examples of place names using botanical names.

47. dímeʔ dé·guš (poisonous water hemlock, *Cicuta douglasii* [DC.] J. Coulther and Rose). Both species of the genus *Cicuta* contain cicutoxin, a "virulent poison" from which many livestock and human deaths have resulted; it is the most "lethally toxic" of native plants (Hickman 1993:142). The plant is found in wet habitats or in water, anywhere below 2,500 meters (8,202 feet), in both the high Sierra Nevada region and the Great Basin province (Hickman 1993:142).

Meaning literally 'water sweet potato' the plant is commonly called either wild parsnip or water hemlock. Long ago, I asked consultants how they differentiate between *dó·ċa?* (another umbel plant[16]) and the deadly water hemlock. They base their identification on difference in habitats of the plants (location), harvest of known patches, and on examination of roots and smell. It never occurred to the consultants to confuse the two plants; they laughed at me and then tried to patiently explain the difference. Another consultant noted that the plant was lethal unless used by an Indian Doctor.

Hudson records the use of the wild parsnip root as a poison, attributed to administration by the doctor or shaman (1902:240, 248). Dangberg states that wild parsnip could be rubbed onto the lower legs to deter snakes (n.d.:28), and Downs writes that a pulp from the root was used to treat snake bites, as well as being eaten by shamans to demonstrate their power (1961:371). Siskin (1937) places *díme? dé·guš* on his most important medicines list, noting that shamans can administer this plant safely. He writes that this was one of only two herbs used by shamans in supernatural healing; the other is tobacco (1941:73-4). The wild parsnip, *díme? dé·guš*, is administered by the shaman as treatment; he takes a small piece of the dried root, about one inch in diameter and very hard, 'talks' to it, chews it, and then gives it to the patient to swallow. The taste is bitter. The root is poisonous to all but the shaman.

---

[16] a particular type of flower cluster found in the *Apiaceae* family or carrot family of plants, to which both *dó·ċa?* and *díme? dé·guš* belong.

The use of *díme? dé·guš* is also recorded as a method for suicide (Freed and Freed 1963b:50, Price 1963:112). Freed and Freed write that the poison is ingested, but "acts slowly and gives plenty of time to save the victim. The Washo force an emetic down the person's throat and he vomits up the poison" (1963b:50), but Tilford (1997:214) describes a frighteningly fast action of this poisonous plant. Price (1980:43) also writes that a testimonial of power for a shaman was to eat poisonous parsnips without being killed.

Jacobsen's consultants give similar information. This poisonous wild parsnip is used by shamans, either eaten by the shaman or rubbed onto their patients. The plant is more deadly that *kogidésmi?* (death camas, *Zigadenus venenosus* var. *venenosus*). It grows along ditches, is similar in appearance to *ċigí·debi?* (water parsnips) and was sometimes used medicinally (cooked and rubbed onto body for rheumatism). The plant is also used to poison arrows when boiled with red ants (Jacobsen n.d.a.).

Montgomery records the use of *díme? dé·guš* as a medicine, noting that the root is used as a poultice to treat *?umbá·baw* (swelling) (1965:16). Montgomery notes that only *báŋkuš* and *díme? dé·guš* were used as medicines by the Indian doctors; other medicines were applied by herbalists or family members with medicinal knowledge to treat problems more mundane than those treated by the Indian doctors.

This highly toxic plant should never be gathered by amateurs: "as little as one-quarter teaspoon of the root may cause death in adult within fifteen minutes" (Tilford 1997:214). A folk expression or rhyme used to help in field identification by specialists (the plant can be confused with other useful umbel plants, such as *Angelica brewerii* and *Osmorrhiza occidentalis*) is "leaf vein to the tip, all is hip. Leaf vein to the cut, pain in the gut" (Tilford 1997:214).

51. díťeš ʔémlu. (botanical identification unknown). Jacobsen (n.d.a.) and Montgomery (1965) record this plant. Jacobsen writes that it is a peppermint plant species, which is chewed with wild onion. Another consultant says it is small brush species, used to treat colds and that it grows among sagebrush south of Dresslerville.

Montgomery records its use to treat *dímek* (coughing and colds) and notes that it grows in the valley and is available any time (1965:16, 57).

The name *díťeš ʔémlu* means 'prairie dog food' (Jacobsen n.d.a.).

52. dóˑċaʔ (Indian balsam, *Lomatium dissectum* var. *multifidum* [Torrey and A. Gray] Mathias and Constance [*Leptotaenia* is the subgenus]). Lomatiums are characterized as a perennial with a taproot or "deep-seated tuber." This yellow-flowered lomatium is found on wooded or brushy slopes, often in coniferous forests from 600 to 3,000 meters (1,968 to 9,842 feet) in both the high Sierra Nevada region and the Great Basin province (Hickman 1993:153).

The plant *dóˑċaʔ* is probably the most well-known of the Washoe medicinal plants and is still highly valued as a treatment for respiratory problems by contemporary Women. The Women would only harvest the plant from a known location, told to them by other Elders. One Elder, who was interviewed only once, looked at *dó'ca?* after it had been dug and expressed hesitation over its identification as well as that of *badópo?* (corn lily), suggesting that the lack of habitat recognition compromised identification. It was in reference to this plant and *badópo?* that this Elder stated that medicines should be identified by a group of two to three elders, so that "you'll be safe." When plants are harvested by women themselves in a known location, there is less hesitance and more confidence in use of the plant.

Dó'ċa? is dug late in the fall, after the tops have died down. Digging prior to that makes for extremely difficult work; we dug the plant in August and later in October. In August, digging was very dusty, sweaty work; by October, the plant practically pulled out of the ground. One Elder commented, "*dó'ċa?* is saying, 'It's time to dig me up!'"

We had seen plants that looked like *dó'ċa?* in other locations, but the Women Elders were hesitant to harvest it. When we came across the plant in a location identified by another Elder, the Women showed no hesitation in harvesting the plant, suggesting both consensual knowledge and permission to harvest the plant. Medicines are tricky plants, according to the Elders. One has to know what they are doing. One Elder stated that you shouldn't "mess around" with medicinal plants; what you do might not be proper. Not stated but implied were ill consequences from improper behavior. Another commented that there is a right way and a wrong way to approach medicinal plants; only people with an understanding of the plant and the proper way to harvest should ever approach medicines. Harvesting and handling the plant require understanding the value and power of the plant as well as procedural matters; take only what you need and always replace part of the plant back in the ground. Other elders state you can put coins in the ground to replace value when harvesting medicinals.

In one memorable field trip, we were looking for *dó'ċaʔ* in a location described to one Elder by a relative who had subsequently passed away. On the side of the road stood a deer, calmly gazing at us as we drove in the opposite direction from which the deer was facing. One of the Elders told me to stop and turn the car around. I did, and we saw the deer calmly walking toward the top of a hill. The Elder told me to pull over, which I did. We stepped out of the car and practically tripped over a large patch of *dó'ċaʔ*. The Elders had me dig a plant, and then they closely examined the root. One of the Elders then said, "We need to pray." She gave a prayer in Washoe, holding the plant in her hand and tapping it repeatedly while praying. After we finished harvesting some roots, the Elder who had prayed told me, "She (the deceased relative) was with us; she directed us." Another replied, "I felt a shadow, a presence." "Yes, she was here," replied the other. I asked about the deer: "That was her spirit," replied the Elder.

This, more clearly than any other field experience, emphasizes the importance of spiritual and familial connection with medicines in known environments. The deceased elder was the spiritual leader of her family and she safely led her family to a medicinal site.

Preparation of the harvested *dó'ċaʔ* involves drying the plant, either in the sun, or by slicing it into cross sections, stringing it with a needle and thread with cross sections separated so that they do not touch, and hanging it in a utility room or outside, covered with a pillow case, in the shade. When the root is dried, it is boiled in water to make a tonic. The root is quite oily, so oil will rise to the surface of the water. One Elder commented that the oil could be used as a linament for sore muscles or even applied to open wounds. In general, the tea is drunk for respiratory ailments and is said to taste terrible!

The Elders believe the efficacy of native plants is much greater and somehow more soothing to the body than synthetic, Western medicines. Like other native plants, however, medicines are generally seen as declining because of EuroAmerican crowding and polluting of the landscape and the exclusion of Washoe people and their ability to care for the plants.

A vivid example of violating the norms of harvesting medicines occurred when we visited the same *dó·ċaʔ* patch later in November. All of the plants were gone and the Women Elders were horrified. Someone had come to the patch and stripped it of the plants. The Elders were upset and angry that someone would be so greedy as to take all of the plants and disturb the site so profoundly. How could the site regenerate when it had been stripped? And how would this person use the medicine? It was an immense loss.

Dangberg (n.d.) describes *dotsa* as a salve applied to the cut umbilicus of an infant. Siskin (1937) records the use of *dó·ċaʔ* among the Washoe, describing it as a medicine taken for flu. Its roots are boiled, and the resulting tea has a bitter tatste. Stewart also records Indian balsam among the Washoe, identifiying it botanically as

Leptotaenia multifida Nutt. (1941:375, 429). Train, Henrichs, and Archer, also in 1941, write of *dosa* or *doza as L. multifida* Nutt. and state that it is the best known medicinal plant in Nevada. The oily sap from the sliced fresh root is carefully gathered and used on cuts and sores. Formerly, the fresh root was ground to a pulp and put on the severed umbilical cord of newborns (Train, Henrichs, and Archer 1941:97).

In 1955, K. d'Azevedo records that the root is used medicinally. Her consultant states that the root grows as big as her hand and is very oily. It used to grow all over the valley, but "White man knows about it now, no more. They dig up the plant, no more seeds fall, then no more. I went up to the Lake last year to find some, but none there." Her consultant thought it was now available commercially from the drug store as a cough medicine since white people had found out about it (1955). Schubert (1957b) identifies the plant as *Leptotaenia dissecta* (Nutt.) var. *multifida* Jepson, based on a specimen. Jacobsen (n.d.a.) records information from his consultants that this is an herb used for cold medicine; a plant used as a cold and flu medicine the root of which was peeled and the stalk sliced and boiled to make a tea. The concoction was drunk or applied externally to sore places; it could also be used as a soak for rheumatic pain. It grows in the hills south of Carson City.

Murphey (1959:67) records the name and same botanical identification as Schubert (1957b). Price notes the use of a salve of *dó'ċaʔ* both for treating an infant's cut umbilicus and for massaging the mother after delivery (1963:98-9).

Montgomery (1965:10) records that the Washoe say *dó·ċaʔ* gave them immunity against the Spanish Flu of 1918. The root medicine is used to treat *dímek*, a coughing cold, but also for treating *húntuš [húnt̓uš]*, which is coughing up blood, like tuberculosis, and for *malat̓at̓in*, pains.

Paiute and Shoshone people also use the plant and have a similar name for it; in fact, *dó·ċaʔ* is a borrowing from the Numic languages to the east of Washoe (Jacobsen 1966:128 and 1978:127). The place name *dó·ċaʔ k̓iláʔamʔ* identifies a section of Sierra Valley around Beckwourth (d'Azevedo 1956, Jacobsen f.n.). Much *sésmiʔ* is said to be found here. The place of *dó·ċaʔ k̓ilé·tiʔ* is identified as Beckwourth (Jacobsen f.n.) or the Beckwourth area (d'Azevedo 1956).

55. dú·niʔ. The common name of the plant is golden brodiaea, and its botanical identification is provided by Schubert (1957b) based on a description of the plant. She identifies the plant as *Brodiaea ixiodes* (Ait. F.)Wats. var. *lugens* Jepson, but questioned whether the plant was a medicine or food; current classification is <u>possibly</u> *Triteleia ixioides* (S. Watson) E. Greene, found on the edges of coastal coniferous and mixed forests in sandy soils up to 3,000 meters (9,843 feet) in the Sierra Nevada <u>*or*</u> *T. montana* Hoover with a distribution in open montane coniferous forests, from 1,200 to 3,000 meters (3,937 to 9,843 feet), throughout the north and central high Sierra Nevada mountains (Hickman 1993:1208). These suggestions are based on similarity in name and appropriate-sounding habitats only.

Barrett (1916) collected samples of this medicine, and described Specimen 18407 [Milwaukee Public Museum] as "small corms as nearly as may be judged from their dried condition, called duni or tuni. These are soaked in hot water and the decoction is drunk by women to accelerate the flow of blood at time of menstruation an during change of life."

Specimen 18408 is the "same as 18407 as nearly as may be judged from the dried product. The Indian name is the same as given to 18407, but the use given by the informant in this instance was quite different. It is said to be ground and applied in pulverized form to any swelled part or the corms may be soaked and the decoction drunk or they may be chewed and eaten directly evidently as a stimulant, as the informant said that they could be used by a man who was shot to revive him and give him strength. This informant also said that the plant from which this comes is the mountain plant with very fine leaves" (Barrett 1916).

Jacobsen (n.d.b.) collected the name and information that *dú·ni?* is a small plant with small yellow flowers and edible roots. It is gathered around Lake Tahoe and used for medicine. If one had sore eyes, *dú·ni?* was cooked and put in the eyes.

The term *dú·ni?* is a loanword from several of the Miwok languages to the west, and descriptions of the plant include wild celery, potatoes, and wild root (Jacobsen 1978:128, 139). The use of *dú·ni?* for gunshot wounds overlaps with that of *gumbáli?lé·we mú·čuk*, a medicine specifically for gunshot wounds (*gumbáli?* meaning 'shooting each other', and *mú·čuk* meaning 'medicine').

57. géwe ?ámɨl. (botanical identification unknown). Described only by Jacobsen (n.d.a.), this is listed as a medicinal herb that grows in mountains and sticks up above the ground similarly to cultivated onions. The part above ground is sometimes eaten, but it is not a main food (*démlušému*). Another consultant describes it as wild onion, similar to *bóšdi?*, and growing in dry places. It literally means 'what coyote gathers', with the verb stem *ámɨl* meaning 'picking something off a tree, like an apple or a berry' (Jacobsen, personal communication, 2003).

60. gumbáli? múˑċuk or gumbáli?léˑwe múˑċuk (botanical identification unknown). This medicinal plant is especially useful for wounds; the word *gumbáli?* means 'shooting each other'; *léˑwe* means 'for'; and *múˑċuk* means 'medicine' (*múˑċuk* is a borrowing from the Numic language, Jacobsen 1986:110), thus the term translates to 'medicine for shooting each other.' The plant was identified by several Elders as extremely valuable, but we had never had any luck in finding it. We went to a known location several times, where one of the Elder's mother had harvested the plant. Unfortunately, the site is a cattle camp and the Elders believe the cattle have tromped out the plant. The Elder had seen the dried root and had even smoked it as a child when her mother administered it for a headache, but she had never seen the flowering plant. She had her mother's description of the flowering plant and known location, but we were not able to find it.

Siskin (1937) says this medicine was obtained from the Miwok Indians, either bought or traded for. It was an important item to have on war parties. The root was boiled to make a tea. K. d'Azevedo's consultant (1955) identifies the medicine as 'medicine for inside when you get shot'. She says the medicine is almost impossible to get anymore. In the past, Washoe would get the medicine from the Miwok, during a big celebration the Washoe would occasionally have with them, where many items could be traded: rabbit skin blankets, deer hides, beads, *gumbáli? mú·ċuk*, and the right to gather acorns.

Jacobsen (n.d.a.) writes that it is a root species, a powerful medicine, from which tea was made and drunk. The medicine was bought from the Miwoks, but grows around Lake Tahoe.

See 65. **badósaŋi?**, discussed under Material Culture: Basketry.

61. **hamúmul dap̓á·p̓ɨli?, dahamúmul dap̓á·p̓ɨl(i?), or dawhumómoli? dawp̓á·p̓ɨli?**. Train, Henrichs, and Archer (1941) is the only source to identify this plant as *Angelica brewerii.* Other sources providing botanical identification list this plant as *Sphenosciadium capitellatum* Grey var. *scabrum* Jepson (Montgomery 1965, Schubert (1957b)). *S. capetallatum* are commonly known as swamp white heads or rangers buttons and are found in wet meadows, streamsides, or lakeshores, from 900 to 3,000 meters (2,953 to 9843 feet). The plant is toxic to livetock, but rarely eaten by them (Hickman 1993:165).

Barrett (1916) notes this plant is used as a remedy for colds, being either made into a decoction and drunk or smoked as a cure for stuffiness in the head. Train, Henrichs, and Archer (1941:34) write that the plant is used for a bronchitis remedy or as a remedy for influenza. The root is dried and scraped, then the pieces are soaked—not boiled—in hot water. The solution is given a few teaspoonfuls at a time, twice per day, for two weeks in treating bronchitis. For influenza, the tea from the root is taken frequently and "to improve flavor," the concoction can be mixed with the root of *Leptotaenia multifida* (*dóˑċaʔ*). Contemporary informants say *dóˑċaʔ* tastes terrible, so one can only imagine how awful *hamúmul daṗáˑṗiliʔ* must be! Small pieces of the dried root can also be chewed for sore throats or coughs.

Consultants of Jacobsen (n.d.a.) describe the plant as a root used for cold medicine with bushy flowers, or as a plant with small round white flowers, the roots of which were used as medicine for headache, cold (made into a tea) or stomach ache and grows nears springs. One consultant said the plant grows on Dixie Mountain.

Montgomery (1965:16) notes that it is used to treat *dímek* (coughing, cold). The name literally translates to 'having bushy flowers' per Jacobsen. The stem *álʔmul* (as seen in *mólmol* ['to boil', borrowed from Maidu]) is similar (but not the same) to the words elicited for rangers buttons: *hamúmul daṗáˑṗiliʔ, dahamúmul daṗáˑṗil (iʔ),* or *dawhumómoliʔ dawṗáˑṗiliʔ.* This hints at a descriptive attribute of ranger buttons more so than angelica as the correctly identified plant (the small round flowers of *S. capetallatum* versus the flat-topped umbels of *A. brewerii*).

63. héli?. (botanical identification unknown). Only Jacobsen (1978 and 1986b) records this plant name. It is identified simply as a medicinal plant. The term is shared with Miwok branches: Plains Miwok refers to a mushroom (Jacobsen, personal communication, 2003, extracted from Callahan 1984); Southern Sierra Miwok *hel'i* refers to 'fungus, edible, lare, grows under pine needles on oak leaves' (Jacobsen 1978:139; taken from Broadbent 1964).

72. kogidésmi? (death camas, *Zigodenas venenosus* S. Watson var. *venenosus*). The death camas is found in moist meadows and dry rocky hillsides below 2,600 meters (8,530 feet) throughout the Sierra Nevada region. It is a common associate of sagebrush through the sagebrush shrub habitat (Taylor 1992:80). All species of this genus should be considered highly toxic to livestock (to whom it is generally unpalatable) and to humans, because of its alkaloids, which are strongest in the bulb. This genus caused serious illness to some members of the Lewis and Clark expedition (Hickman 1993:1211)

Death camas is a known lethal plant and the Women Elders were taught not to dig for plants in areas where *kogidésmi?* is found. One Elder said the preferred habitat is in the hills, while another said, "No, it's by the water," again demonstrating the ongoing negotiation of traditional knowledge, which is a feature of oral knowledge (Castellano 2000). It also demonstrates the wide range of this plant's habitat and the tendency of Elders to return to known locations for plants rather than identify the plant out of its known context.

Merriam (1904) recorded the plant and noted a medicinal use, saying the plant was used to treat rheumatism. Train, Henrichs, and Archer write that the bulb of death camas is used by all three tribes of the Great Basin, in which the raw bulb is crushed to make a wet dressing or poultice for rheumatism, sprains, lameness, neuralgia, toothache, or any type of swelling (1941:149). Murphey writes that a tea prepared from the bulb was used as an emetic among tribes of the Great Basin (1959:45).

Jacobsen's consultants all describe it as a poisonous plant, a deadly poison. One suggested it was wild parsnips, while another thought the seeds of the plant looked like those of *kókšiʔ*, and a third said the plant looked like wild onions.

The parallel with *kókšiʔ* is interesting. Both *kókšiʔ* and *kogidésmi* are borrowings into Washoe from a Numic form and the Northern Paiute language, respectively (Jacobsen 1978:124). The first part of *kogidésmiʔ* relates to *kó·gi*, the Northern Paiute name for sego lily (*kókšiʔ* in Washoe) (Jacobsen 1978:124; 1986b:41). The ending *-désmiʔ* has no parallel in Numic (*pasógobɨ* is 'death camas' in Northern Paiute), but contains an older stem *ísm*, possibly relating it to *sésmiʔ* (from verb stem *sesm* 'to vomit'), the soap root plant which causes vomiting when ingested. It seems appropriate to relate the two because of the illness of vomiting caused by ingesting the poisonous *kogidésmiʔ* (Jacobsen 1978:134; 1986b:41).

76. k̓ómho (cow parsnip, *Heracleum lanatum* Michaux). Cow parsnip is found in moist places, either wooded or open, at elevations below 2,600 meters (8,530

feet) in both the California and Great Basin floristic provinces (Hickman 1993:148).

This plant was identified as a probable medicine by Women Elders, but other than that, there was little interest expressed in this plant.

Siskin (1937) identifies the root as a medicine, and also notes that hunters would bathe with the root in order to ensure good luck for the upcoming hunt. Train, Henrichs, and Archer describe use by the Shoshone and Washoe to treat toothaches by inserting a piece of the raw root into the cavity to stop pain; they also suggest that among the Washoe a decoction made from the root could be taken for diarrhea (one-half cup is the recommended dosage) (1941:85). Murphey (1959:23) misidentifies (at least for the Washoe) the plant as Indian rhubarb. Montgomery (1965:16-7) notes that the plant is used to treat *dímek* (coughing, cold) and *malaťáťin* (pains). Jacobsen (n.d.b.) writes that the plant has white flowers and its root was used to make cold medicine; the stem can be eaten when young and tender. Price (1980:48) also records the use of cow parsnip as a painkiller for toothaches.

Dangberg (1927:408-9) makes interesting mention of the plant being used in the 'weed stick game', and further, a man, "always being sick" is instructed by his older brother to rub the weed on his knee as he passes by. The tale continues with more mentions of the plant, but the meaning is unclear. Lowie (1963:23) refers to the plant as *k'amho yawályala* 'wild parsnip', probably incorrectly as he is the only source to identify the plant as 'wild parsnip' rather than cow parsnip. Lowie also mistakenly applies the entire phrase *k'amho yawályala* to the plant, when, in fact, the phrase means 'he's spinning cow parsnip on his feet while lying on his back'. This phrase is repeated throughout a tale transcribed by Jacobsen (f.n.) and is seen in Lowie's recording.

Jacobsen (1964:576) presents an intriguing sentence: *k̓ómho t̓íʔyaʔa, bayópšapgišuweʔlelaʔ, gaʔlóʔpayami*, which means 'the Cow Parsnip Children went away briefly waving their bushy hair after him; they caught him'. What this refers to is not clear.

78. lókgo yáyʔ (pepperwod tree, or California bay, *Umbellularia californica*). This evergreen shrub or tree is very aromatic, and is common in canyons, valleys, and chapparal below 1,600 meters (5,249 feet). It is found in the Sierra Nevada foothills and the leaf oils may produce toxic effects in some people (Hickman 1993:734).

Jacobsen (n.d.a.) identifies this as a California plant with leaves used for medicine, which was made into a tea and drunk. It was also ground up and smoked, used to cure colds. Another consultant identified the plant as dried leaves from California that look like bay leaves; if one had a cold a tea was made from them and drunk. The leaves were also crushed and smoked.

Siskin (1937) writes that this plant is the exception to the rule of using the roots in herbal medicines. He says the 'bay leaves' are shaped like willow, have a peppermint smell when crushed, and are smoked with tobacco to cure colds. The name comes from Miwok, according to Siskin; *lók̓iʔ* being the name of the tree bush from which the leaves are taken (*yáyʔ* means 'leaves').

Jacobsen traced the borrowing to Southern Sierra Miwok *lok'ot'i-?*, the pepperwood tree (Broadbent 1964). The common name for pepperwood reinforces the resemblance between the leaves of this medicine and bay leaves. Thus it appears that the medicine *lókgo yáy?* comes from the California bay or pepperwood tree, *U. californica.*

See also 88. mahaťálal or mahɨlťálal, discussed under Food: Stems.

See also 89. mahá·wa? or ?itmahá·wa?, discussed under Material Culture: Brush/Tree.

93. ma-moo- (or mee-) se (Artemisia ludoviciana, sage herb). Merriam (1904) provided this botanical and linguistic identification. *A. ludoviciana* Nutt., silver wormwood, is found in generally dry, sandy to rocky soils below 3,500 meters (11,483 feet) throughout the Sierra Nevada and the Great Basin.. Murphey (1959) notes several medicinal uses of 'wormwood' (*Artemisia heterophylla* and *A. gnaphalodes*) among other Great Basin tribes. The leaves were steeped and applied topically to reduce a fever, to treat rheumatism, to give a steam bath, and as a tea and steambath for young women "approaching maturity" (Murphey 1959:40, 43, 46). Train, Henrichs, and Archer (1941) identify *?ó'gal ?émlu* (No. 174) as *A. vulgaris* var. *gnaphalodes* as a medicine, but the treatment is somewhat different (tea taken or applied for heachaches and colds) than that described by Murphey (1959). Merriam

(1904) gives no indication of use. He does give another name for the plant: ta^{h}ngal-e'-sik [*dáŋal ʔíčik* 'house stick'].

100. mé·gel (Indian tea, *Ephedra viridis* Cov. or *E. nevadensis* S. Watson). *E. nevadensis* is found in creosote-bush scrub, and Joshua-tree woodlands below 1100 meters in the southern Sierra Nevada and the range east of Sierra Nevada. *E. viridis* occurs among sagebrush scrub, creosote-bush scrub, and pinyon and juniper woodlands from 900 to 2,300 meters (2,953 to 7,546 feet) in the Great Basin province (Hickman 1993:115).

These plants are made into a cleansing tea. Small pieces of the branches are broken up and put into water to boil. The resulting tea is strained and ready to be drunk. It should be taken regularly for good health and is especially good for the bladder.

One Elder cautions to harvest the highest branches so that coyote and dog urine is avoided. When encountering a large stand of some slightly different looking *mé·gel* around June Lakes, the Women commented that it must be "Paiute tea." This was a cause for much good-natured laughing. The plants in question had an orange cast to its branches and looked "odd" to the Women. Another Elder (not on the June Lake trip) had stated previously that when her family wanted a different type of *mé·gel*, they would go to Bridgeport to gather it.

An Elder observed that the best place to gather *mé·gel* is under pine nut trees; this location gives the tea a better medicinal quality. Another Elder then offered the preferred harvesting location of his family, demonstrating again the consensual nature of traditional knowledge and the focus on returning to known locations taught to one by their Elders.

Merriam (1904) records *E. viridis* as *mé·gel*, and Barrett (1916) has a sample (No. 18426 [Milwaukee Public Museum]) of this "peculiar desert low plant called megar or megel." Barrett notes that the plant is used to make a beverage, the same as "whites use tea" (1916). Dangberg (Jacobsen n.d.c.) lists *maegɛl* as Mormon tea, or *E. nevadensis,* and Siskin (1937) records the Washoe name and identifies it as Indian tea. Train, Henrichs, and Archer (1941:68) observe that the tea is taken for delayed or difficult menstruation. K. d'Azevedo (1955) lists *mé·gel* as a tea, one that was never stored because it ws available all the time. Schubert (1957b) provides a botanical identification of *E. nevadensis* based on a specimen, and Jacobsen (n.d.a.) describes the plant as Indian tea, the leafless stems of which were boiled to make a tea, good for colds.

The place name of *mé·gel daláʔak,* 'Indian tea mountain', refers to "Dog-skin Mountain," southwest of the Virginia Mountains and southeast of Doyle, California (d'Azevedo 1956, Jacobsen n.d.d.).

106. mú·č̓uk ʔá·daš (*Apium* spp.-? *Ligusticum grayii* J. Coulter and Rose-?). *L. grayii*, Gray's lovage, is found in the wet soil of subalpine meadows and coniferous forests from 1,400 to 3,300 meters (4,593 to 10,827 feet) throughout the high Sierra Nevada region (Hickman 1993:150. *A. graveolens* L., wild celery, is found in wet

places, generally below 1,000 meters (3,281 feet) throughout California (Hickman 1993:141).

We dug this plant because the Elder who wanted it dug thought it was a medicine. She took it home, pondered it, and finally pronounced it was *mú·c̓uk ʔá·daš*. The plant we dug was tentatively identified as Gray's lovage. The Elder said that the plant would get much larger in the fall (we dug in early summer) and the root would turn yellow. The Elder took more root home after she had considered and decided it was *mú·c̓uk ʔá·daš*.

Jacobsen (n.d.b.) describes the plant as coming from the Sierras and having a root used medicinally; in fact, the plant name literally means 'medicine root'. The plant name uses 'fleshy' root ending (*á·daš* versus *í·dew*).

Murphey (1959:23, 29, 45) records that the plant is wild celery (*Apium* spp.), listing uses of wild celery as a spring green, the seeds as a seasoning, and a tea from it for emesis (none specifically noted for Washoe; all described generally).

107. mugáwLu. (botanical identification unknown). Hudson (1902:247) makes mention of herbs being tossed into a fire to charm the deer to a hunter, which sounds familiar to other descriptions of *mugáwLu*. Dangberg (n.d.:25) describes a powerful medicine obtained from the "Diggers to S. (Miwok?)" which is used to put animals to sleep so that they can be successfully hunted; the medicine is so powerful that it is kept "to east of camp so west wind will blow away the poison". The medicine was used once in a battle against the Paiutes, and it stupefied the Paiutes, ensuring a

victory for the Washoe. Dangberg (1927:412-3) lists a place name as *mogauLu*, so presumably she collected the name for this medicine, although it is not identified in her manuscript.

Jacobsen (n.d.b.) is the first to record the name *mugáwLu* as a plant species that was taken along for deer hunting to give the hunters luck; it was also used for luck in games. Freed and Freed (1963b:53) describe the medicine, *mugálu*, which is dreamt of by the shaman to determine its location. He washes and prays prior to collecting the root; once he has it, he shares pieces of it with family and friends. The hunter puts a small piece of the root in fresh deer tracks and begins to trail the deer. When he catches up to the deer, it is sleeping.

Freed (1966:80) lists the camp location of *mugaulu'wO'tha* [*mugáwLu wáťa*], "a small stream about one and one-half miles to two miles sound of Meeks Bay." Nevers (1976:7) also records this place name. The Washoe apparently collected *mugáwLu* at cu'wE'thUkhwO'tha [*šu?wétɨk wáťa*], a camp site on a small stream near Chambers Lodge. The plant *mugáwLu* was found in this area, and "the Washo believed that the root of this plant had a magical efficacy in deer hunting when used in the proper manner—it put the deer to sleep. Only shamans collected this plant" (Freed 1966:80-1).

Jacobsen (n.d.d.) lists *mugáwLu* as Rubicon Point. He also records the alternative form, *mam?gáwLu*, which is used in the place name *mam?gáwLu waťa*, defined as Lonely Gulch Creek (n.d.d.). See also *délšim*, another medicine known to put people to sleep.

P3. nanómba or nonómba (sugar from sugar pine tree, *Pinus lambertiana* Douglas). The sugar pine is found in mixed conifer and mixed evergreen forests below 3,200 meters (10,499 feeet) throughout the Sierra Nevada and western Great Basin (Hickman 1993:120).

The sugar from the sugar pine is used medicinally and is especially good for menstrual cramps. Clumps of it found on the tree would be taken and eaten, a small amount at a time. It is gathered in the fall and stored for use throughout the year.

Siskin (1937) says the sugar is obtained from the burnt out hollow of a tree and is the only "sweet" medicine the Washoe have. *Nanómba* is also boiled with *badópo?* to make a tea for "women's trouble.' After the tea is drunk, the woman's stomach is kneaded by a skilled older woman. Siskin notes that some also take it for stomach trouble, and it has a laxative effect.

K. d'Azevedo (1955) writes that the sugar is gathered in the fall, around November, the same time that acorns are gathered. Her consultant states that "They [trees] grow over in California, a little below the acorn trees at Big Trees." People would look for burned places in trees because more sugar would run out there. Women in childbirth were given the sugar dissolved in hot water to drink as it was thought to speed the passing of the afterbirth. It was also taken as a tea for menstrual pain and for intestinal upset, both constipation and diarrhea.

Jacobsen lists the use similarly, noting it was used especially as a medicine for women postpartum or for difficulties with menstruation (n.d.a.). He also notes it could be used to treat diarrhea. Schubert (1957b) provides botanical identification based on a description.

Freed and Freed (1963a) say a tea from the leaves of the sugar pine is used during the girl's puberty dance. Price (1963:99) writes that a woman after child birth is given a warm drink of water and the sugar from the sugar pine to keep her from getting cold. During the girl's puberty dance, the fasting girl is given a drink of warm water and sugar from the sugar pine to help her stay strong (Price 1963:102).

Montgomery (1965:16, 42) says the sugar is used to treat *dímek* (coughing, colds) and for "blood troubles" of women.

See also P5. pollen, simíši, discussed under <u>Material Culture: Brush/Tree</u>.

112. pah-da-lo-yi (?) (mint, *Mentha canadensis* L.). Multiple species of Menta are found in moist areas throughout the California floristic province and the Great Basin. *M. canadensis*, as identified by Train, Henrichs, and Archer (1941) is not listed in Hickman 1993.

The Women Elders offered no native term for this plant, but did observe that mint is good medicine for the treatment of insect bites. One Elder, as a young child, was bitten by a spider, and her mother treated the bite by rubbing mint on it. It cured the bite. The itch from other bites is mitigated by the application of mint. A tea is also made from the mint and is good for headaches.

Hudson (1902) observes that several species of mint were used to treat stomach upsets and that a mild tea was used to treat colds; also, the root could be chewed to treat colds. Barrett (1916) collected samples and wrote that the plant, currently used as a beverage, had no Washoe name because it was an introduced plant. Train, Henrichs, and Archer (1941:104) record the name *pah-da-lo-yi* (*M. canadensis* L.) and note that it is used in the treatment of stomachaches, colic in babies, indigestion, and diarrhea. A tea is made from the tops usually, but sometimes the roots or leaves will be used. The dosage is one-half cup of strong tea to stop diarrhea.

113. paw-pa (*Tetradymia* spp.). This term is recorded only by Merriam (1904). Train, Henrichs, and Archer (1941:144) describe the use of three species of *Tetradymia* among Shoshone people. The dried leaves were make into a solution and were taken either as a physic or as a treatment for venereal disease. The solution was also used to treat colds, relieve stomachache, treat pneumonia, treat diarrhea, and to reduce swelling. They list no specific use among the Washoe. Jacobsen suggests a similarity between Merriam's transcription of paw-pa to the Washoe *bó·ṗoʔ* 'rabbitbrush', but the genus identification offered by Merriam is different than that of rabbitbrush (see *bó·ṗoʔ* discussed under the heading Food: Other). This would not be the first time, however, that Merriam elicits a different genus identification than other sources.

See also 114. pečúmeli?, discussed under Material Culture: Basketry.

118. p̓ó?lo p̓ísew (*Salvia dorrii* [Kellogg] Abrams., and *S. dorrii carnosa* [E. Green] Abrams renamed *S.dorrii* var. *incana* (A. Gray) J.L. Strachan, Desert Ramona) *S. dorrii*, a low, spreading shrub or mat is found in dry, mostly rocky places from 1,000 to 4,000 meters (3,281 to 13,123 feet) in the Great Basin (Hickman 1993:728). *S. dorrii* var. *incana*, fleshy sage, is found in solty to rocky soils from 300 to 1,050 meters (984 to 3,445 feet) in the northwest Cascade Range and into Washington and Idaho (Hickman 1993:728). Obviously, *S. dorrii* var. *incana* does not seem a likely candidate for *p̓ó?lo p̓ísew*.

This is a medicinal plant found by the Elders on Johnson Lane. Its leaves are shaped like rat's ears and it has pretty purple blossoms. It is used to induce vomiting or to pull down a fever. To treat a cold, the leaves are boiled and made into a tea. One Elder described the appearance and use, but couldn't remember the name; another then supplied the name.

Train, Henrichs, and Archer (1941:136) write that this plant is highly esteemed as a remedy for a cold. The leaves, or leaves and stems, are boiled to make a tea, to be taken as one-half cup per day, or the dried leaves can be crushed and smoked in a pipe to clear congested nasal passages.

Jacobsen (n.d.a.) lists this as a plant with sagebrush-like leaves. A tea was made from it to treat colds, and the name literally means 'rat ears'. Place names include *p̓ó?lo p̓ísew*, a hill among the pine nut range, fairly close to the West Walker river, where the Washoe went to hunt deer, and *ṗóʔlo ṗísew daláʔak*, a range east of Eagle Peak, also called *ṗáša ṗísew daláʔak* (Jacobsen n.d.d.).

119. ṗušálaʔ ʔáṗɨl. (botanical identification unknown). Siskin (1937) describes this plant simply as a medicine, noting it is named either 'rat tail' or 'mouse tail'. Jacobsen (n.d.b.) describes it as a plant that looks like a mouse tail and grows in Hope Valley. The name means literally 'mouse tail'. Note also the name of *ṗušálaʔ* in *ṗušálaʔ ʔithímu*, 'mouse willow'.

See also 128. silá·ťawhuŋáŋa, discussed under <u>Food: Roots/Bulbs</u>.

134. šagá·du or šagá·duʔ. (thistle poppy or California poppy, *Argemone hisbada, A. platycerus, Eschscholtzia mexicana*). Merriam (1904) elicits the term *sah-ge-dah* for the thistle poppy and lists the genus as *Argemone*. Dangberg (n.d.c.) lists *tsagida* as the California poppy, *Eschscholtzia mexicana*. Hudson (1902:240) earlier listed the seeds of *A. hisbada* as a condiment, and the leaves as useful in treating cuts. Train, Henrichs, and Archer (1941:38) list the prickly poppy, *A. platycerus*, as a medicinal plant used among the Washoe; the ripe seeds were ground into an oily paste to make a salve for burns and cuts.

Dangberg's *tsagida* 'California poppy' is only related tenuously to *šagá·du or šagá·duʔ* 'thistle poppy', based on the descriptions of both being 'poppy'. The plants are in different genera (*Argemone* and *Eschscholzia*), but the same family Papaveraceae.

P7. šáwaʔ dóʔlom. The resin of the white fir, *šáwaʔ*, is attested to as an effective treatment by Siskin (1937), Train, Henrich, and Archer (1941), Montgomery (1965), Jacobsen (n.d.b.), and Garey-Sage (f.n.).

In addition to describing the medicinal uses of the pitch, one of the Women Elders heard a bird and commented, "That's the bird that eats sap from the *šáwaʔ* (white fir) tree." The pitch or sap from the *šáwaʔ* tree is *dóʔlom* and it is used as a medicine, to treat wounds. Blisters form on the trees and people poke the blister with something sharp and then push the sap out to use. The Elder provided no identification of the bird, responding only to the auditory clue.

Siskin (1937) lists it as one of the important medicines, and Train, Henrichs, and Archer (1941) misidentify *A. concolor* as *mahá·waʔ* (incense cedar), but also list *šáwaʔ* as a name for the white fir. They note that the soft resin of the bark is eaten to cure tuberculosis, taken a teaspoonful per day or a little each day until cured. A tea made from the bark is useful for treating tuberculosis (1941:30).

Jacobsen (n.d.a.) writes that the syrup which comes from the bumps on a small fir tree is used as cough medicine. The syrup or pitch is drunk or chewed.

Montgomery (1965) lists the pitch as treatment for *ʔáṗap* (sores all over), for veneral diseases, or to treat *ċibíċuk* (constipation).

140. šidímbaʔ or šidímba (False Solomon's Seal, *Smilacina stellata*). Barrett (1916) records *citimba* as a medicinal root. Siskin (1937) describes *sidimba* as a root that grows in a swamp, with seed-like bulbs under the spreading root (like *daʔilbólboliʔ t̓étgiʔ*); he writes that the seed-like bulbs are scaly and rough. Jacobsen (n.d.b.) lists it as a California root, the seeds of which were used for medicine on sores. Murphey (1959:72) records S. stellata as *add-at-a-pel*, possibly some reference to a flower (*dap̓á·p̓ɨl*). Montgomery (1965) lists the medicinal application as the treatment of *ʔáp̓ap*, sores all over.

151. tosho mozick [mú·c̓uk]. Murphey (1959:152) is the only source to list this term, which she botanically defines as *Dalea* spp., Desert Beauty. Other than this, no information is available. The word for medicine, *mú·c̓uk*, is a borrowing from Numic (Jacobsen 1978:127), but the meaning or source of *tosho* is not apparent.

152. tuyá·gɨmhu, duyá·gimhu (western peony, *Paeonia brownii*). Found in open, dry pine forest and scrub, the peony prefers altitudes from 200 to 3,000 meters (656 to 9,842 feet) and is distributed throughout the northern and central Sierra Nevada (Hickman 1993:810).

Hudson (1902) observed that the roots of *P. brownii* were used as medicines for sores and such. Dangberg (n.d.) lists its use as a 'stun' agent for fish: a pole is rubbed with the root of *dujagumhu* and it causes the fish to stop. The root is said to grow along the hills in Carson Valley. Train, Henrichs, and Archer (1941:110-1) note the use of *doo-yah-gum-hoo* for intestinal treatment and for tuberculosis; a decoction from the root is also applied topically to treat headaches. Murphey (1959) records the names *doo yah gum hoo* and *tue ago nemo* (?) for *P. brownii.*

Jacobsen (n.d.b.) describes the plant as having white flowers and growing along the road.

154. ťá·ba ʔémlu (meadow rue, *Thalictrum fendleri* A. Gray). Meadow rue prefers moist, open to shaded places in woodlands and forests at elevations less than 3,200 meters (10,499 feet) and is found in both the Great Basin and California floristic province (Hickman 1993:930).

Siskin (1937), Train, Henrichs, and Archer (1941), and Murphey (1959) document this plant. It is used medicinally; a decoction from the root is made into a tea given for colds (Train, Henrichs, and Archer 1941:145).

Jacobsen's consultants (n.d.a.) describe it as a plant that looks like water parsnips, but from which a tea was made to be drunk for colds. The name means 'grizzly bear food'.

P10. ťá·gɨm bámčʼi (sugar from *P. monophylla*). Contemporary Women Elders mention *ťá·gɨm bámčʼi*, but offer little detail other than noting it as another sugar. Train, Henrichs, and Archer (1941:117) note that the resin of pine nuts was as important as *dó·čʼaʔ* in treating colds; the pine resin was swallowed whole as "pills" or made into a tea from boiled needles or wood (it was also used to treat venereal disease). K. d'Azevedo (1955) collects the information that *tagam bamtsi*, pine nut tree sugar, is gathered in the fall from the pine nut trees. The sap forms in balls on the needles and is eaten; it is not stored. Montgomery says it is used to treat coughing and cold (1965:16).

P13. Pine bark. The bark from a pitchy pine tree is used medicinally. One Elder's mother would use an axe to chip the bark off the tree until she reached the clean, white inner layer. She would take this inner layer and grind it very fine to be used to heal infections on sores.

167. wémšiʔ (yarrow, *Achillea millefolium* L.) Yarrow is found in many habitats, circumboreally (Hickman 1993:189).

The Elder most interested in the plant books had long been looking at yarrow, saying it was an important plant. When we had the book available, she asked me to look it up and tell her the name. When I said 'yarrow,' she nodded in recognition and identified it as a Washoe medical plant. She did not offer any more information.

Merriam (1904) identified it, noting it was a medicine, as did Schubert (1957b), based on Train, Henrichs, and Archer's work (1941), which lists three different plants as *wémšiʔ*: yarrow, (*Achillea lanulosa), Gilia congesta,* and elephant heads (*Pedicularis attolens*). Murphey (1959) adds further confusion by identifying it as ball-headed sandwort (*Arenaria congesta*). Jacobsen identifies it only as an edible plant, eaten long ago (n.d.b.).

175. ʔóˑgal ʔémlu (sagebrush, western mugwort, *Artemisia vulgaris* var. *gnaphalodes*; *Artemisia gnaphalodes* Nutt.). *Artemisia ludoviciana* Nutt. ssp. *ludoviciana* is the current name for this plant, per the USDA Natural Resources Conservation Service Plants Database. *A. ludoviciana* (also known as silver wormwood) is found on rocky soils, shrubland, and coniferous forests below 2,600 meters (8,530 feet) throughout the Sierra Nevada and Great Basin (Hickman 1993:204).

Barrett (1916) collected a specimen (No. 18420, Milwaukee Public Museum, incorrectly identified as *talbolboli* on catalog sheet) of *ogal emlu*, which he said is made into a decoction and drunk as a means of clearing away afterbirth. Train, Henrichs, and Archer (1941:175) record the medicinal use of this plant, saying a decoction from boiled leaves is used as a internal treatment for severe colds, head colds, coughs, and headaches; the solution is also used as a cooling, aromatic wash for headaches. *Auga-lem-lu* is also incorrectly identified by Train, Henrichs, and Archer (1941:50) as *Balsamorrhiza hirsuta* Nutt., but they correctly suggest its use: "There was one unconfirmed report that the root decoction could be taken for female complaints".

179. ʔúčuliʔ Máˑdut (Sierra Sweet Cicely, *Osmorhiza occidentalis* Torrey). *O. occidentalis* is a perennial plant easily identified by its licorice scent. It is found in coniferous forest and oak woodlands from 350 to 3,100 meters (1,148 to 10,171 feet)

in northern and central portions of the high Sierra Nevada region (Hickman 1993:158).

This plant is identified by Women Elders by its strong licorice or anise smell and by its association with *dóˑċaʔ*. One Elder took it home to her husband and had him chew it; his tongue became numb. This confirmed the Elders' belief that the medicine is used for sore throats because of its numbing action. Like *dóˑċaʔ*, it is harvested in the fall for its root.

Train, Henrichs, and Archer (1941:109) identify the plant linguistically and botanically. They report that the plant is used much like *dóˑċaʔ*, and that Indians all over the state take the tea for stomach troubles. Jacobsen (n.d.a.) writes that it is a small plant with lots of roots. A tea was made from it for colds, and the plant is said to grows on swampy rocks, only on Dixie Mountain. The name means, literally, 'chipmunk tongue'.

189. *Datura meledoides*, stremonium or Jimson weed. Hudson (1902) writes that he heard of a man who was incapacitated and resting by a fire, probably from the effects of 'stremonium.' Murphey (1959) identifies stremonium as Jimson weed, *Datura meledoides*. Reclassified as *D. wrightii* Regel, this plant is founding sandy or gravelly open areas below 2,200 meters (7,218 feet) in the central and southern Sierra Nevada foothills (west of the crest) and in southern California (Hickman 1993:1070). This is the only reference I have seen to Jimson weed among the Washoe.

193. *Potentilla gracilis* var. *fastigiata*, graceful cinquefoil (Graf 1999:248), is identified by Hudson (1902:238) as sometimes used for an infusion for a weak stomach or to bathe sore eyes. Women Elders kept asking about the plant, saying it looked like a medicine. When we started using the plant book to identify unknown plants, the Women were happy to have a name associated with the plant (although no Washoe name was forthcoming).

Medicine: Charms

See also 107. mugáwLu, discussed under Medicine, which is described both as a charm and a powerful medicine.

148. tániw čigú·guš. (botanical identification unknown). This was an herb used as a good luck charm among hand-game players (Jacobsen n.d.a.). The term means literally 'Miwok stomach'. As a place name, it describes a grayish rock about nine to eleven miles southwest of Dardanelles (Jacobsen n.d.d.). The place name of *tániw wáťa* refers to the Tuolomne River (Jacobsen n.d.d.).

P12. ʔeyéyeʔ. These are the berries from manzanita (*ƙawáʔyaʔ*, discussed under Material Culture: Brush/Tree). Price (1963:113) writes that "one way to get a deceased person out of your mind and to stop hearing his voice was to hang a pendant of manzanita berries from the lobe of the ear. The berries were tied with sinew through a hole made in the lobe." Merriam (1904) describes *a-ye'h-ye'h* as dwarf mountain manzanita, *A. nevahdenses.*

Jacobsen notes that this term is borrowed from both Miwok. Forms in both Northern Sierra and Plains Miwok attest to the relationship and both refer to manzanita berries. The Northern Sierra Miwok term also describes a cider made from the berries (Jacobsen, personal communication, 2003, extracted from Callahan 1984, 1987).

Medicine: Fumigants.

See also 25. dá·bal, discussed under Medicine.

See also 116. p̓á·l, discussed under Material Culture: brush/tree.

P9. šú·gi̵l ʔá·daš. The roots of *šú·gil* (*šú·gil ʔá·daš*) are burned during thunder storms. Shavings from the dried root are put on the wood stove to drive thunder away. Also, the root of the sunflower was burned if thunderstorms were coming close while a woman was having a baby (Jacobsen f.n.).

Other: inedible berries

109. mušé·gew ʔémlu (possibly *Sorbus* spp., mountain ash).

This plant is said to be poisonous; one Elder ate some of the berries as a child, confusing the berries with those of *č̓ámdu?* (both a dark, deep red) and her mother immediately made her spit them out. The plant was only identified in conversation; we never identified any in the field.

Merriam (1904) recorded mountain ash (Sorbus spp.) as *mušé'gew ʔémlu*, but also said mountain ash was *hímu máyaw*. Jacobsen listed it as a bear-food berry, similar to chokecherry, but not eaten by people. He also writes that the black berries on *hímu máyaw* are known as *mušé'gew ʔémlu*, which literally means 'wild animal, or bear, food' and is apparently applied to several inedible berries (Jacobsen n.d.b.).

<u>Other: Intoxicant.</u>

83. madadáyaw. (botanical identification unknown). K. d'Azevedo (1955) records these as berries. Her consultant gives this narrative: "my grandmother told me one time they gathered all those berries…they grow high on bushes, and got a lotta pretty berries…they cook them up…they make everybody funny like…they go crazy…they act like drunk men…then they don't do that no more…that was before my time."

The word contains the stem *áyaw*, meaning black.

115. puʔyéwliʔ (*Allium validum* S. Watson, swamp onion). This onion is common in wet meadows from 1,200 to 3,400 meters (3,937 to 11,155 feet) throughout the high Sierra Nevada and into Nevada (Hickman 1993:1179). Schubert (1957b) provides the botanical identification, based on a specimen of the plant. Siskin (1937) says this plant is a food, a garlic plant with purple flowers. Jacobsen

(n.d.a.) records that this was a plant, something like an onion, that grew in the mud. Indians used this plant as an intoxicant. If too much was consumed, people 'went out of their heads' (Jacobsen n.d.a.). Dangberg (notebook No. I in Jacobsen's possession) refers to a place name identified by *pu-jɛ-u-li* with an unidentifiable second term, referring to an area near Tallac (Jacobsen, personal communication, 2003).

Other: Lupine

12. budaci [budá·ši]. (lupine). Dangberg (Jacobsen n.d.c.) is the only one to record *budaci* as a term for lupine. No other information is found on its use or identification. Other lupines or lupine-like plants identified are *wadákšaʔ*, *ʒíwʒiwhu*, and *délem damʔlá·k̓ɨm* (see respective entries).

171. ʒíwʒiwhu. This plant is described as being something like a lupine with blue and white flowers. No other information is found on its use. The same term is used to describe a blue-black woodpecker (Jacobsen f.n.).

Other: Unspecified

13. buwí·či. This plant is recorded by Jacobsen (f.n.) only and is described as a weed, a plant species, by only one consultant.

30. dáṗap. Jacobsen's work is the only source for this term. Consultants describe it as poison oak, or as a tree that grows in California with fruit that looks like wild pears but is so hard that one can't bite it (n.d.b.).

The plant name comes from the stem *áṗab*. The same stem is seen in *ʔáṗap*, which Montgomery (1965) records as a sickness of sores all over.

The term *dáṗap* not only names a plant, but also is defined as sores or scabs (Jacobsen f.n.). If the plant is indeed poison oak, it could result in scabs or sores for the victims, and thus the name of the plant reflects the symptoms caused by it. This pattern is also seen in the plant name *délšɨm*, which means 'sleep' and also describes the plant that causes this state.

62. [hanawɨywɨy]. Only Dangberg (Jacobsen n.d.c.) records this plant name and offers a botanical identification: *Carduus* spp., perhaps *C. edule*, commonly known as thistle. *C. edule* is not indicated in Hickman (1993) or the USDA Plants database; rather *Cirsium edule* Nutt. is the edible thistle, but the distribution is not shown to be in either California or Nevada (USDA Plants database). (see *Cirsium andersonii* listed under Foods: Stem; perhaps this is the plant Dangberg referred to).

79. mačáʔyaʔ Identified simply as moss (Jacobsen n.d.b.), no other information is available. Price (1980:48) mentions the use of moss to stem blood flow, but no further identification is offered.

94. mawʔgáǩit or mawʔgáǩidiʔ. Only Jacobsen (n.d.b.) lists these terms, defining them as a plant species that stings. The stinging nettle (*Urtica dioica* L.) is suggested by this description, but nothing has been found to link this species with the Washoe name. Another Washoe plant name, *yáǩiŋ*, also refers to an unknown plant that stings if you touch it (Jacobsen n.d.b.).

95. mayʔlólo. Only Jacobsen records this term (n.d.b.), which refers to water-moss. Women Elders describe the use of algae to wrap joints for alleviation of pain, but algae is not identified by a Washoe name. Mention of medicinal use of algae among the Women Elders led to a discussion about how algae has increased around the shores of Lake Tahoe, compared to when the Women were younger. The Women believe this is an indication of poor health for the Lake and representative of the poor quality of EuroAmerican stewardship, a persistent theme in their conversations.

The description of the plant m*ayʔlólo* as watermoss seems to descriptively match algae, but no botanical or ethnographic information serves to link the two definitively.

108. mušé·gew mó·baʔ. Only Jacobsen (n.d.b.) records this plant name. It is described as a small plant species, whose literal meaning is 'wild animal, or bear, mat.' The term *mušé·gew* can refer to many dangerous animals, but it is often used as a substitute term for 'bear.' Jacobsen (n.d.b.) notes a similarity to *šáwaʔ mó·baʔ*.

131. sí·su máyap. (botanical identification unknown). This name was collected by Merriam (1904), who identified *sis-soo-mi-yep* as the crucifer 2-pod (?). The name translates to 'bird claw' (Jacobsen, personal communication, 2003).

153. ťá·ba mó·ba? (mahala mat, *Ceanothus prostrates* Benth.) North and central Sierra Nevada and Western Nevada host the mahala mat. It prefers open flats in coniferous forests from 900 to 2,300 meters (2,953 to 7,546 feet) (Hickman 1993:937).

Only Merriam lists this term (1904). The term means 'grizzly bear carpet or mat'.

169. yáǩiŋ. (botanical identification unknown). This term is described as the name for a plant that stings if you touch it (Jacobsen n.d.b.). Like *maw?gáǩit*, also described as a plant that stings, the association between nettles and *yáǩiŋ* is suggested by similar descriptions. The word *yákiŋ* literally means 'to sting', repeating the pattern shown by *dáṗap* and *délšɨm*.

<u>Other: Unspecified, Flower?</u>

42. dewhíwi (thunder). Contemporary consultants identify the thunder flower (*Delphinium* spp.), but offer no explanation for its identification nor did they provide a Washoe name; it is identified as a wild flower and recognition of the plant leads to discussions about thunder.

Regarding thunder itself, the women tell stories of how terrifying the thunder is at Lake Tahoe. There are several taboos associated with thunder: one should not be cooking outdoors during a thunder storm; if one is having her period, she should hide from the storm; and one should never point at lightning or a rainbow or else the finger will become crooked. The mother of one consultant was drying meat outside during a storm when lightning hit a tree; it terrified the mother so badly that she ran and hid under a blanket in her shed until the storm was over.

One is supposed to burn *šú·gɨl ʔá·daš* (sunflower root) to drive the thunder away (see Medicine: Fumigant)

Two plants are listed by Jacobsen (n.d.b.): one, *dewhíwi dap̓á·p̓ɨl* or *dewhíwi p̓á·p̓ɨl*, meaning thunder flower, and another, *dewhíwi yáyʔ*, defined as a poisonous plant with a few leaves sticking up from the ground, and a single stalk with a blue flower.

The thunder flower is identified by Dangberg (Jacobsen n.d.c.) as the larkspur (*Delphinium andersonii* A. Gray). Contemporary consultants identified Nuttall's larkspur (*D. nuttallianum* Walp.) as thunder flower (identification based on description and habitat; plant was not formally botanically identified). Graf notes that all species of *Delphinium* are highly toxic (1999:234).

Hudson (1902) collected a "thunder stick," an implement made of tamarack or lodgepole pine. The thunder stick is used "when praying for rain" (Hudson 1902:250). The sound it makes is symbolic of thunder and helps to call the rain. There is no linguistic transcription for thunder stick that I am aware of, so it is unknown whether or not *dewhíwi* is used in the name of the implement.

Price writes that "for a society that did not have agriculture, the Washo seem inordinately concerned with the weather. They had magic to help make it rain, such as soaking a pinecone in water. Sometimes people could stop a storm by smoking and talking to it" (1980:34). The fear of thunder certainly falls under this rubric, although the association between the delphinium and thunder is not clear[17]. Dangberg discusses the association between thunder and Old Woman, Nentusu [*néntušu*], who created the Washoe. After her work is completed, Nentusu goes to the south, where thunder always comes from. Thunder is associated with life, in that the myth states "all that there is comes from there, all tht grows, all that lives comes from there (south, where thunder comes from) (Dangberg 1968:37).

Contemporary Women Elders do not seem to have this same association for thunder, and I am left wondering how the delphinium plays into all of this.

48. díme? p̓á·p̓ɨl. (botanical identification unknown). One consultant says they are "small green things that float on water and make one sick"; the name translates literally to 'water flower' (Jacobsen n.d.a.). The condition of *díme? ?áyawi?* is the

[17] Downs (1966b:46) has also suggested that the Washoe did not deliberately use fire to encourage re-growth of grasses or desired plants because of the terrible efficiency of natural wildfires caused by lightning in their territory. d'Azevedo adds the observation that denial of burning is also associated with the negative connotations of 'wild' fire expressed by the surrounding ranchers (d'Azevedo, personal communication. Dangberg (n.d.) however, writes of the deliberate setting of deer fires to aid in hunting, so there is ethnographic evidence of deliberate burning, at least for hunting.

swelling caused by swallowing these growths (*díme? ṗá·ṗil*); girls were told not to swallow them because they would swell up as though pregnant (Jacobsen f.n.).

49. díme? ʔitṗá·ṗɨl or díme? daṗá·ṗɨl. (botanical identification unknown). Listed only by Jacobsen (n.d.b.), these are known as water lilies. The term *díme? daṗá·ṗɨl* translates to 'water's flower', and the prefix *da-* shows kinship possession (as in his brother, for example), implying an intimacy with the water (Jacobsen, personal communication, 2003).

56. géwe múkuš (snow plant, *Sarcodes sanguinea* Torrey). This plant has no recorded medicinal, nutritional, or utilitarian use. It is, however, the source of great humor. Peeking through the snow or pine needles, it presents as a bright red plant. Called 'coyote penis' in Washoe, this plant is guaranteed to cause peals of laughter and teasing among the Women Elders. It is identified by Jacobsen's consultants as snow plant (n.d.b.). Siskin (1937) records the only ethnographic reference I have seen to the plant, relating it to a coyote story, in which coyote wraps the plant in a basket to make it appear as a baby. Coyote dresses himself up as a woman, with the baby, in order to visit several women, whom he wants to seduce.

59. gó·ťa? máǩaw. (botanical identification unknown). Literally 'frog necklace,' this plant is a flower species that looks something like snowdrops. Little puffballs hang from the stem, per Jacobsen's consultants (n.d.b.).

117. ṗísew madá·bi? or ṗísew gumadá·bi? (*Eriogonum* spp.?). *E. umbellatum* Torrey, sulphur flower, is found abundantly in dry, open and often rocky places from 200 to 3.700 meters (656 to 12,139 feet) throughout most of the west and species are numerous (Hickman 1993:860-83).

Merriam 1904 lists *pas-sow-go-mat-tah-be* [*ṗísew gumadá·bi?*] as possibly *Eriogonum umbellatum*. Dangberg (Jacobsen n.d.c.) lists *biseomadabi*, which Jacobsen tentatively identifies as *E. andinum*, the umbrella plant, and offers the possible translation: 'having earrings'. The word for abalone shell is *má·dap*, and another possible translation is 'having an ear ornament or ear shell' (Jacobsen, personal communication, 2003).

Chapter 5
Washoe Ways: Ethnobotany and Identity

The Washoe people have long lived in their aboriginal territory. Archaeological and linguistic investigators debate the actual chronology of tenure, but the identification the Washoe people have with their homeland is not dependent upon such dates. Myths and origin stories, place names, family histories, and the distinctiveness of their language and cultural patterns all imbue Washoe people with a timeless sense of self linked to Washoe lands. And for as long as the Washoe have been, they have lived the foraging life, that of hunters and gatherers and fisherfolk.

This way of life, hunting and gathering, has intrigued and attracted attention from missionaries, explorers, colonialists, and anthropologists for more than five hundred years around the world, and changes to cultures have been documented almost as long. Early theories on culture change suggested that colonized cultures would simply melt into the larger, hegemonic powers, but in many instances this has not happened. Many cultures once predicted for extinction have resisted the onslaught of assimilating influences and have adapted to contemporary conditions, continuing to define and mark themselves as distinct cultures.

The Washoe Indian Tribe of California and Nevada exemplifies such dynamic persistence. A small foraging tribe with territory that utilized portions of both the

Great Basin and the eastern Sierra Nevada mountains, the Washoe were relatively undisturbed by the westward expansion of EuroAmericans until 1847, when emigration began to increase significantly. By the time of the California Gold Rush in 1849, the period of siege and disruption by EuroAmericans of Washoe lands began in earnest. The Comstock Gold Rush of Nevada in late 1858 cemented the changes (Price 1980:10-11). Within one generation, the way of life of the Washoe was irrevocably altered. From a people who lived a life "amid plenty," the Washoe became interlopers into their own territory (Downs 1963a:119).

A vivid example of this attitude by EuroAmericans toward Washoe people is the fishing of Lake Tahoe. The Washoe people sustainably fished Lake Tahoe for thousands of years, but in 1859, a commercial fishery was established on Lake Tahoe, leading to a rapid depletion of the fishery. Scott (1957:443) notes that "by 1862 Burke and Company were using a half-mile seine to take tons of Tahoe trout daily from the waters of Boundary Bay". As fish decreased in amounts, the exclusion of Washoe to their traditional resource increased. In 1868, "A Washo was shot by a homesteader for setting a fish trap on a creek leading into Lake Tahoe" (Scott 1957:64). By the 1880s, the Washoe were threatened with exclusion from spearing and netting trout in the streams around Tahoe (and were, in fact, prevented from fishing for a time [d'Azevedo personal communication]); in response, "The Indians threatened retaliation and apparently won their point" (Scott 1957:156). By 1891, the Washoe were blamed for destroying fishing at Lake Tahoe, with apparently no recognition of the causal relationship between commercial fishing and declining fish populations (Price 1980:13).

Never awarded land in the form of a reservation, the Washoe remained on their ancestral land as tenants, squatters, and day laborers (Downs 1963a:121, 123). This ranching era is the time when many of the contemporary consultants were very small children or not even yet born, but it is the lifestyle of their grandparents and parents. Downs writes that "property lines, railroads and lumber flumes interrupted the migration trails of the Washo, upsetting the traditional band - land relationship. Although gathering and hunting continued, it appears to have lost its quality of organizing Washo life" (1963a:123). By this, Downs is referring to the changing economic and social patterns of the Washoe. No longer full-time foragers, the Washo replaced their dependence on Artemisian or sagebrush scrub zones (preferred habitats of ranchers) with a greater reliance on Sierran zones and "by utilization of white settlements as a food source" (Downs 1963a:122-3). Most contemporary consultants identify the ranching family their parents and grandparents worked for, and they describe traditional subsistence activities conducted by their families, which fit around ranching or highway work schedules for fathers and domestic work by mothers and grandmothers. Those who did not have long-standing relationships with ranching families were more reliant on traditional resources, and descendants of those families are recognized as having greater traditional knowledge.

The anticipated outcome of the Dawes Severalty Act of 1887 was significant land awards for the Washoe, but "the allotment parcels were limited to the waterless and sometimes barren sections undesirable to Whites" (d'Azevedo 1986b:495). Even those lands, although undesirable, were further eroded by continuing timbering and grazing activities conducted by EuroAmericans (Nevers 1976:62-6).

By the early 1900s, the Washoe finally received minimal land from the U.S. Government, and today approximately three-quarters of the 1500+ tribal enrollees live on one of the various "colonies, " small acreage settlements: Carson Indian Colony, Dresslerville Colony, Reno-Sparks Colony, or Woodfords Colony. Financial compensation for loss of Washoe lands did not occur until 1971, with the Washoe being awarded a mere fraction of the claim they sought (d'Azevedo 1986b:496). The Washoe were paid five million dollars for some of the "richest and most desirable locations in the American West" (d'Azevedo 1986b:496). In fact, the entire area of Lake Tahoe was not truly included in calculations; only the surface area of the lake was considered in the claims case (d'Azevedo, personal communication, 2003).

Today, the Washoe people—in spite of, or because of, these disturbances to their foraging lifeway—remain convinced of and committed to the value of their traditional resources and life ways. d'Azevedo writes that "In the past, degrees of fluency in speaking Washoe—involving knowledge of ritual procedures, myths, legends, and the Old Way of life—were primary criteria for determining 'Washoeness'. However, since the early twentieth century all Washoe children have learned English from early childhood, and the use of Washoe has steadily declined" (1986b:497). Downs (1966a:109) wrote nearly forty years ago that "primarily, Washo identity is maintained by reference to the past." In some ways, this is still true today. Those with the most knowledge about traditional patterns are the Elders of the tribe, who are fluent speakers of Washoe and who are the guardians or keepers of this valuable knowledge. Rather than decreasing in importance, the Old Way seems to be still highly significant, if not increasingly so, for identity. If young Washoe cannot speak Washoe, they can certainly refer to their elders, their aunts or grandmothers, who do speak the language and who have taught them the *real* way. As this particular generation of Elders passes, new markers will emerge, but for now, the Old Way is still powerful.

Given that a true subsistence-based lifestyle has been precluded for more than 150 years, the continued importance of subsistence knowledge proclaims its power as a marker of identity, or even a *protector* of identity, as suggested by Elabor-Idemudia (2000) in a study of cultural identity among African tribal peoples. Concomitant with knowledge is always a value and belief system that governs the use of such knowledge.

Washoe Ethnobotany: The Changing Nature of Traditional Knowledge

The writing down of traditional knowledge is problematic for many aboriginal societies. Oral knowledge is constantly challenged by the "collective analysis and judgment of a community," making it dynamic and subject to validation or consensus (Castellano 2000:31). Traditional or oral knowledge is flexible and adaptable, transforming in response to changing environmental conditions or adaptive strategies. Practitioners share, discuss, negotiate, and refine knowledge. Written knowledge, in contrast, does not have that same flexibility. When traditional knowledge is written down, it becomes fixed in time (static), not subject to validation or refinement, and it becomes the voice of 'authority' (hegemonic), not subject to consensus or sharing. Both of these traits are antithetical to traditional oral knowledge. This tension is demonstrated by the Washoe Women Elders, who agreed to have their words written down, but were careful to state that they could only talk about what they knew and what their families taught them. Not stated but implicit was that they did not assume to speak for everyone.

Within the last 100 years, the period for which records are available for plant resources, the number of plants identified by Washoe women (traditional knowledge) has decreased, reflecting the social and physical exclusion of Washoe people from traditional harvesting areas, as well as the influx of commercial foods, forced schedules of schooling and wage work, and availability of western medicine. The belief or value system, not amenable to historical comparisons or counting of number of entries, is still strongly voiced by contemporary Women Elders and is consistent with earlier ethnographic information. Comparing the plants identified by the group of Women Elders with the available historical and ethnographic information shows a significant decrease in the inventory of indigenous knowledge (37 per cent overall retention), but also a significant retention considering the multiple variables that act against the use of traditional knowledge (Table 2).

Table 2: Retained Plants by Category

Category	Plants Compiled from Historic Record	Contemporary Plants	% retained, contemporary to historic
Food[17]	93	33	35
Berries	13	8	62
Greens	9	4	44
Mushrooms	3	1	33
Nuts	4	3	75
Other	3	2	66
Roots/bulbs	22	5	23
Seeds	27	2	7
Stems	6	4	66
Sweet/ Condiment	6	4	66
Grass, Hay, Clover	7	0	0
Material Culture	71	30	43
Basketry	14	10	71
Buck Brush	4	2	50
Brush/Tree	33	15	45
Fiber	6	2	33
Needles	3	0	0

[17] These categories reflect multiples uses by plants and will not match total number of plants.

Other	7	1	14
Stems	4	0	0
Medicines	56	25	45
Medicine: Charms	3	0	0
Medicine: Fumigants	3	3	100
Other	21	4	19
Inedible berries	1	1	100
Intoxicant	2	0	0
Lupine	2	0	0
Unspecified	10	1	10
Unspecified-flower?	6	2	33
Total	254	95	37

Of the 196 plants and 13 plant products[18] identified historically and ethnographically, 73 plants and 9 products are identified by the Women Elders. When comparing contemporary plant information with historically identified resources, there is some overlap of use (some plants can be used for food, material culture, or medicine or any combination thereof), and some plants are listed more than once in Table 2.

---

[18] Product names were collected incidentally, and all have names separate from the plant from which they come. Products include resins, pollen, bark, root, seed, and berry. There was no systematic attempt to collect product names, so these names are only included for informational purposes, but not analyzed as a category.

Price, commenting on his own experience with the Washoe in the early 1960s, observed that "about one hundred species of plants were used in some way as food, medicine, fiber, or construction" (1980:47); this compares with the 73 plants known today.

The rates of retention presented in Table 2 can only be used in a very generalized sense, however, because contemporary knowledge is compared against a historical base that spans from 1902 through the 1950s and is probably not complete. The plant information presented by various researchers varies considerably over time and not in a linear manner: Jacobsen's field work of the mid 1950s elicited 147 plant names; Merriam's work of 1904 elicited 69 plant names. This discrepancy suggests that the knowledge base was significantly more substantial than what Merriam recorded, which makes any true historical comparison problematic. Additionally, Merriam (1904) and others collected 41 terms not recorded by Jacobsen, so the historical record of the early 1900s must have been significantly greater than that of the 1950s. Changes in lifestyle and access to the landscape from the second half of the 1800s through the 1950s would suggest a decreasing knowledge base through time, but the fact that Jacobsen records far more plant entries than Merriam is indicative of Jacobsen's thoroughness rather than of an increasing knowledge base from the early 1900s to the 1950s. The dates of documentation by various researchers for the individual plants are identified in Table 1, in the Appendix, giving some perspective to how long the plant has been in the 'record'.

The reduction in plant inventory seen among contemporary Women Elders is not unexpected. Radical changes in the landscape and lifestyle of the Washoe have created multiple layers of exclusions from the gathering environment for many generations of Washoe women. Wage economy, compulsory education, settlement on colonies, and private property boundaries all combine to exclude the Washoe from their traditional lands, in what Hensel describes as a "postcolonial" setting (1996:4). Additionally, the method of elicitation used for this research may have precluded some knowledge. Consultants were not directly questioned about plant names, and less time was spent in marsh, desert environments, and sagebrush scrub environments compared with Sierran environments, which likely influenced information.

Medicines, like all of the categories, decrease in total count over time, but not as significantly as might be expected based on the total numbers presented herein (a 45 per cent retention rate). Medicinal knowledge is protected because of the power of the medicinal plants, so these plants may be significantly under-represented in the historical record (and even the contemporary record), making any comparisons herein skewed. Additionally, medicinal plants are perceived by the Washoe Women Elders to be particularly sensitive to changes in environmental pressures, and it is their belief that many of the medicinal plants are no longer available. Once, when searching for a particular medicine, one Elder took us to a patch where her mother used to harvest. The area was adjacent to a stream that bordered a cattle camp. Although we searched the whole area, we could not find the plant, which confirmed to the Elders that cattle, invading grass, and human disruption had destroyed the plant's ability to endure.

Montgomery examined models of illness among the Washoe in 1965, and wrote that for minor illnesses, some traditional medicines are still used. Exclusions from the countryside, however, in the way of "No Trespassing" signs, and the changing configuration of areas (due to roads, private property, fences, etc.) combine with the aging condition of the elders to "signal the close of their use of Washo medicines" (1965:38). He does observe that "there are some things such as rapidly healing cuts or quelling internal pains for which *dó·ċaʔ* and *deċímeliʔ* have no match" (1965:38). Nonetheless, the availability of western medicine has worked to minimize traditional Washoe healing patterns.

This assessment is accurate as reflected by consultants for this work. Visits to the clinic, to local practitioners, and to hospitals are the first line of defense when illness threatens. The symbolic and cultural values of traditional medicines, however, are still significant. Anecdotal evidence of the efficacy of traditional medicines is presented, and the Elders believe that their illnesses are more a result of modern life than true disease. Diabetes, for example, is an illness that they say they never had in the past; it is a product of the changes to life introduced by EuroAmericans. Women tell of how their mothers and grandmothers were cured by traditional medicines, but the Women Elders believe they are precluded from their medicines by lack of accessibility to known sites and the disappearing populations of plants. The directed searches for *gumbáliʔ mú·ċuk* and *dó·ċaʔ*, Indian balsam, (from known family sites) demonstrate their continued importance to the Women Elders. Practical knowledge of *dećímeliʔ* has been lost (or not represented among this group of Elders) since the time of Montgomery's work. (Elders know of the medicine, but not where to find it or how to recognize it.) Plants obtained from neighboring tribes are no longer part of the contemporary repertoire (*gumbáliʔ múˑćuk, báʔlew ćigúˑguš, dawʔigálpušeweʔ, tániw ćigúˑguš*). Medicinal knowledge of common shrubs is changing: sagebrush, antelope brush, and western mugwort are not presented as medicines, although the historical record describes extensive medical use of these plants. Mountain plants such as corn lily, *dabólboliʔ, dúˑniʔ* (golden brodiaea), cow parsnip, false Solomon seal, angelica, meadow rue, and cinquefoil are no longer identified. Other mountain and valley plants continue to be recognized, with no obvious pattern for the variation. Siskin in 1937 presented a list of eighteen medicines; all of these are still recognized today or botanically identified historically, with the exception of *dabólboliʔ* and *dećímeliʔ/nóˑwi*.

Montgomery makes the point emphasized over and over again by results from this research: medicinal knowledge results "almost entirely from first-hand experience on the part of the informant. The usages that were known resulted from experience in actual treatment. Likewise, knowledge of locations was due entirely to visits to the spot previously. This knowledge had generally been passed through the informants' families, and thus the variations were those between bodies of 'family knowledge'" (Montgomery 1965:18). The fact that consultants usually only knew of one location for medicines confirmed the familial basis of medicinal knowledge;

despite the wide distribution of plants, families went to known locales (Montgomery 1965:18).

Freed and Freed (1963b) discuss the loss of specialists among the Washoe, leading to a loss of ceremonies; those ceremonies that persist tend to be ones that do not require a specialist, such as the girls' puberty dance and birth and death ceremonies. War dances, pine nut dance, and curing ceremonies were conducted by specialists and hence have not survived. The loss of the shaman as a specialized role among the Washoe has been well explored by Handelman, who worked with the 'last known' shaman (Handelman 1967a, 1967b, 1972). The specialist or shaman, however, was not an herbalist, but a spiritual guide who protected individuals from various witchings, soul losses, and hauntings. Herbalists were another class of curers and were often women, usually from a "doctor family", who would 'talk' or 'pray' in addition to offering cures for less soulful ailments (Downs 1961:369). This cultural pattern has continued, with grandmothers or Women Elders dispensing medicine and wisdom, along with the 'talking' or 'praying.'

Thus, as Elders pass away, important family knowledge is lost. If young people do not have time to spend with their Elders to learn, then knowledge suffers. For the generation of Women Elders who were the consultants for this work, there has surely been a decrease in medicinal knowledge from the generation of 1965.

Nonetheless, 45 per cent of all medicinal plants named in the historical record are still recognized and discussed. This generation, however, believes they are among the last to have had the opportunity to learn from their Elders. Medicinal knowledge in its full traditional expression has changed; symbolic knowledge remains, often applied practically, and the role of Women Elders as spiritual protectors of their families continues.

Two other categories of medicine include charms and fumigants. All three of the charms are missing in this body of research: one is related to hunting, one is related to gaming, and one to expelling a bothersome spirit. The nature of field work would not have particularly elicited these terms, and Women would not be familiar with, or if they were, willing to discuss hunting charms. Fumigants, on the other hand, are all retained, and supported by the still active practice of 'smoking' a house to purify or cleanse it.

For foods, retention is measured at 36 per cent, less than that of medicines, surprisingly. For foods, subcategories of berries, greens, mushrooms, nuts, other, roots/bulbs, seeds, stems, and sweetener/condiments are presented. Among the hardest hit of the plants were the seeds (26 of the 93 historical food resources are seeds). By 1860, farming, ranching, and logging had already changed the landscape, with grazing cattle, horses, and hogs depleting the grass seeds (Price 1980:12, Scott 1957). Despite these changes, even as late as 1902, the territory of the Carson Valley Washoe was still noted for its wealth of seed resources, as Hudson indicated when he visited the region in 1902. His description of the wealth of seeds, presented in Chapter 3, bears repeating:

> This valley is far richer in seed foods than any yet seen in California and was doubtless capable of supporting with its game a far denser population of aborigines than any I have yet seen...The Washoes entirely possess the Carson Basin to Walker River on the south and on

> the west to the range just beyond Tahoe…a veritable paradise for these people, even more desirable than the Tulare country, for malaria is unknown here [Hudson 1902:241-2].

Nonetheless, by 2003, seeds are the least marked category of food, with only two seed species actively harvested (*dáhal* and *ʔmé·c̓im*), yielding a retention rate of eight per cent. Not only decreasing availability and limited access account for this: the introduction of commercial flour made it much more convenient to use wheat flour than to harvest and grind various seeds. Downs (1963a:123), in an analysis of differential responses by Paiute and Washoe people to contact with EuroAmericans, has suggested that once grazing began to exclude Indian peoples from the Artemisian zone (sagebrush scrub zone), Washoe turned to the other zones available to them for resource utilization. Given that the sagebrush scrub is the predominant seed zone, this would confirm an early shift away from seed exploitation. The reduced recognition of shrub plants for medicines supports this as well.

Berries show a 62 per cent rate of retention. Eight of thirteen berries identified are still recognized and used by the Women Elders. Ease of access to the berries (roadsides) and EuroAmerican indifference to berries as a significant resource are two factors supporting the higher rate of retention. Seeds, the least retained, and berries, the highest retained, exist in different environments. Berries do well along roadsides, with birds and bears as primary competitors for harvest, compared with seeds, which need to exist in large quantities to make harvest productive; Washoe people were in direct competition with livestock, ranchers, and developers for this environmental zone.

Greens have a 44 per cent rate of retention (four of nine), whereas roots/bulbs have a rate of 23 per cent (five of twenty-two). Nuts have a 75 per cent rate of retention (three of four), but the three nuts still harvested, pine nuts and two types of acorn, are much more significant economically than the nut no longer recognized or harvested (California hazelnut). Pine nut allotments and trade with western-slope neighbors aid in harvest of acorns, unlike the medicines from western-slope neighbors, which are lost. Categories of stems, sweets/condiments, mushrooms, and other (chewing gum and sagebrush galls) all contain only a few plants, and retentions may appear disproportionately high because of the small size of the set.

In general, traditional food plants compete against the ease of grocery stores, convenience markets, and restaurants to provide meals. The Elders were concerned at one of their family picnics (gathering of extended families, usually held annually) because everyone brought store-bought food. Only the Elders still attempt to bring traditional foods. The Elders stress the health benefits of traditional food, but often younger people say they do not have the time (or skill) to gather and prepare wild plants for traditional foods.

The category of grass/hay/clover has an amazing retention rate of zero. Grasses were ignored by the Women, but by me, as well. This and some of the other subsets poorly represented in Table 2 would benefit from explicit questioning about these resources.

Material culture plants have a rate of retention of 42 per cent, with 30 of 71 plants still recognized. For the subset of basketry/willow, ten of fourteen plants are identified, yielding a 71 per cent rate of retention. The economic and artistic recognition of Washoe basketry in the early part of the twentieth century has much to do with this retention (Cahodas 1979). During this critical period in Washoe history, when changing economic patterns altered subsistence knowledge, basketry materials survived mostly intact in the knowledge base because of its increasing economic significance (versus the decreasing value of traditional subsistence activities) and recognition by EuroAmericans of its cultural and artistic value. Washoe women were not competing with any known EuroAmerican role, and in fact, filled a niche among EuroAmerican patrons for a representative art form to represent the Arts and Crafts period out west. Additionally, basketry plants of willow, serviceberries, wild rose, and bracken fern prefer roadsides and thus are easily accessed and not on private property (much like the berry plants). These are external factors in the retention of basketry; internal factors are harder to ascertain. Washoe women find great comfort and constancy in their basketwork. Washoe basketry is among the finest, and this is a source of celebration for Washoe women. For the Women Elders and their daughters, nieces, and granddaughters, basketry is the bridge across generations. To begin making baskets is a natural and inevitable course for most women. It is what they do.

Plants glossed as 'buck brush' are placed into their own subset, with only four members, two of which are still discussed in relation to the habits of deer. Categories of fiber, needles, other, and stems contain only a few plants, and retention rates are quite low. The subcategory of fiber plants points out the difference in men's knowledge versus women's. Men made cordage, and so Women do not emphasize these plants in their knowledge base. Women talk generally about Indian hemp (dogbane), but do not harvest it or identify it when encountered. Milkweed was only mentioned by one consultant who remembered her father making cordage from that and from sagebrush. Only Dangberg (n.d.) lists wild flax, and no historical source records a Washoe name or botanical identification for the plant.

Plants in the subset of stems are described as sources for arrows, and thus, like fiber, would not be marked by women. The subset of needles has an obvious replacement with commercial needles available, leading to their lack of retention. The subset of other includes sandpaper, leaves for roasting, cat-tail down for diapers, products (from white fir and cottonwood trees) for talcum powder and/or baby powder, and tule and grass in house construction. Only the use of *šú·gil* leaves to roast small animals is still described.

The category of brush/trees is fairly large, containing thirty-three plants, fifteen of which are recognized. This yields a 44 per cent retention rate. Plants were included in this category when some use was mentioned for them separate from food or medicinal use, or when the trees/shrubs were identified, even without a specific use. The term for pine tree, *dewdíʔiš*, for example, was used when one of the Elders light-heartedly gave a place name to a gathering spot she particularly liked.

The last category, that of 'other,' deals with the odds and ends: inedible berries, plants known as intoxicants, two plants identified as 'lupines', and plants whose use was unspecified, or unspecified but seemed to refer to the blossoms in some way, either descriptively or explicitly. The category of inedible berries, with one entry, had 100 per cent retention. With so many berries still harvested, it makes great sense to know which berries one should not be eating!

In addition to changes in the numbers of plants recognized during the last one hundred years, a linguistic change is suggested for the use of the category *-šému*, marking real or stored foods. The practice of storage among hunter-gatherers is not unusual, especially in climates with a significant winter, but the linguistic marking of stored resources as "real" food suggests a recognition of the need for winter food. No true winter starvation or severe "hungry times" are suggested for Washoe people prior to EuroAmerican disruption of traditional lifestyle (W. d'Azevedo 1986b:472), but winter was not necessarily a time of abundance either. "Seldom actually starving, but equally seldom able to relax in the search for food, the Washo survived because of their ability to adjust to conditions" (Downs 1966a:37). Reinforcing the period of hunger is Downs's earlier comment that "The year began for the Washo in hunger … and the weeks before spring were a time of near starvation" (1966a:13), and Dangberg's observation that December was called "*ťanu deyulii,*" [*ťánu deyúliyiʔ*] meaning 'somebody dies' (n.d.:61).

One consultant, who worked with many ethnographers, told John Price about winter starvation:

> There were starvation (biša baša) [*bišá·bašaʔ*] times, particularly in the late winter, when the household would hide its food, even from the relatives. Hank Pete said he heard of starving people who would tear apart their rabbit skin robes to chew the fat off the hides. It is said that people could go for ten to fifteen days without eating. Women would give their portions to the men and children because it was believed the

> women could go longer without eating. A different inventory of foods was used that would never be eaten in ordinary times [Price 1980:62].

The term *bišá·baša?* is the plural form of *bišá·pu?i*, meaning 'he's hungry'. The stem is *ápu?*, signifying the color 'white', suggesting that individuals lose their coloring, fade away, when starving. The use of the plural term indicates a larger issue: many people are dying or starving (Jacobsen, personal communication, 2003).

The only other reference to starvation foods for the Washoe that I have found is one by Hudson, who writes that crickets were a common source of food during famines (1902:247). Stewart (1941:373) records that crickets were not eaten, which is not a direct contradiction of Hudson, as starvation foods are considered outside the normal range of foods for many people. Price (1980:48) records that crickets were eaten. Merriam (1904) records the name of crickets, as does Jacobsen (n.d.h.): *ťá·gɨm ?áši* or *ťá·gɨm ťáši?*, meaning literally 'sings pine nuts to sleep', but neither makes any reference to crickets as a food source. K. d'Azevedo (1955), who was specifically eliciting foods, does not record crickets as a food source.

The linguistic and ethnographic marking of *démlušému*, stored winter food, adds evidence that winter could be, or was, a period of marked stress and need. Although true starvation may have been a direct result of EuroAmerican disruption, as W. d'Azevedo posits (1986b:472), or winter fishing may have been available as Downs suggests (1966a:16), nonetheless, food shortages were real threats. Food supplies collapse periodically, infirmities reduce mobility, winters last longer than anticipated, or any number of unanticipated events may happen, leading to cultural and linguistic markings for dealing with such food shortage crises. Washoe Women Elders remark of their own childhood and how hungry they would be by spring. The availability of commercial foods clashed with the seasonal nature of employment for many Washoe men, making winter a time of reduced or nonexistent income even during the contemporary period.

More uses of the *-šému* category are suggested by the work primarily of William H. Jacobsen, Jr. in his field notes, but also by George Montgomery (1965), Warren L. d'Azevedo (1986b, f.n.), and Strong and Van Winkle (1996). The expanded definition suggests a prototypical aspect to *-šému*, which has also been briefly noted by Strong and Van Winkle (1996:568). One consultant of Jacobsen's identified rattlesnake as *máʔkiʔšému*, the "real" snake with rattlers that kills people. The same consultant defined bull snake as *máʔkiʔ ʔawahó·ṗi*, water snake as *máʔkiʔ múšgulhu*, and bird snake as *máʔkiʔ sí·su*, with *máʔkiʔ* standing as a cover term for all snakes (Jacobsen f.n.). Merriam (1904) records "any snake" as *mah-ke* [*máʔkiʔ*] and rattlesnake as *mahk-ke sam-moo* [*máʔkiʔšému*], with a note that *sham-moo* [*-šému*] means "real." These vocabulary items were elicited from Sierra Valley Washoe. Consultants of Merriam's from other areas (Lake Tahoe, Carson Valley, and Reno) did not make this distinction. Interestingly, for the Lake Tahoe people, snake and water snake were given the same term: *mus-kah-lah* [*múšgulhu*] both for water snake and snake in general. Rattlesnake was *mah-hah-ke* [*máʔkiʔ*]. This snake-naming pattern is reinforced by another of Jacobsen's consultants (f.n.).

When contemporary consultants were asked about *máʔkiʔšému*, they did not recognize this term as referring specifically to rattlesnakes and identified *máʔkiʔ* as meaning rattlesnake. Contemporary consultants were teenagers or young women when Jacobsen worked with his consultants, and were not born when Merriam traveled through the region. The consultant to Jacobsen who provided the *máʔkiʔšému* term was elderly in the 1950s, and was a young adult during Merriam's field period, so it is at least plausible that Jacobsen's consultant could be referring to an older linguistic category, one that contemporary consultants would not commonly use. Nonetheless, Jacobsen points out the critique that the consultant with whom he worked was responding to questions posed in English and may have been responding to English categories rather than Washoe ones; that is, the emphasis marked by using *-šému* in the identification of animals or other nouns may have been a function of elicitation (Jacobsen, personal communication, 2003).

Interestingly, the consultant of Jacobsen who used the term *máʔkiʔšému* was a contemporary of the consultant K. d'Azevedo worked with who identified "real food": one was born in 1882 and one in 1885 (Freed and Freed 1963), suggesting perhaps an older time period for the full expression of the *-šému* category referring to food.

Other instances of *-šému* include *wáťašému*, the Carson River, a resource of particular importance for the Washoe people, and *wáťašému* also referring to the Sacramento and San Joaquin Rivers (d'Azevedo forthcoming); the *háŋaleltiʔšému*, or 'real southerners' of Antelope and Little Antelope Valleys, a regionally suggested subgroup of the Washoe people contrasted with any Washoe group living south of one's location (*háŋaleltiʔ*) (d'Azevedo forthcoming); *damómʔliʔšému*, a 'real' Indian doctor, contrasted with those who were lay curers (Montgomery 1965); *p̓ušálaʔšému*, the white-bellied mouse; *ʔát̓abišému*, 'real trout'; *géwešémuyé·s*, meaning 'not real' coyote, referring to a coyote of mixed species heritage (Jacobsen f.n.) and *gíw wá·šiwšému k̓eʔé·si*, meaning 'they're not really Washoe' (Strong and Van Winkle 1996:559). Interestingly, there are fewer examples with plants, and both refer to plant products: *bámc̓išému*, sugar from the pine nut tree (also known as *t̓á·gimbámc̓i*, but once *bámc̓i* became applied to commercial sugar, *bámc̓išému* began to identify the original pine nut sugar [Jacobsen, personal communication, 2003]), and *máʔakšému*, pine or 'real' wood (Jacobsen f.n.).

Contrasted with the category of *-šému* is that of *-ŋáŋaʔ* (Jacobsen 1964:559). This category has the meaning of 'pretend' or 'false', and it is seen on *silá·t̓awhuŋáŋa*, the false tiger lily or medicinal columbine. There are other instances of *-ŋáŋaʔ* (*dáʔawŋáŋa*, Mud Lake [Jacobsen n.d.d.] and *ŋáwŋaŋáŋa*, a doll or pretend child [Jacobsen f.n.]), but no other uses with plants.

Most of the uses of *-šému* listed herein were elicited from elderly consultants from the 1950s through the 1970s (Jacobsen and K. d'Azevedo 1955, Montgomery 1965, Nevers 1976 and Strong and Van Winkle 1996 [based on earlier field work]). This linguistic category shows increasingly limited contemporary evidence of usage, with only *wát̓ašému* offered by contemporary consultants (although the Women were not asked explicitly for instances of *-šému)*. It must be stressed that the research for this dissertation was not linguistic and this category presented itself only after field work was done. Research conducted in the future might reveal more depth to the -*šému* category, although the language of the Washoe is threatened, like so many, by the domination of English in Washoe life.

In addition to identifying foods as 'real', the historical data also suggest at least one other instance of identifying foods. This is practice similar to that Fowler discusses among Northern Paiute people of naming local groups for a particular resource; for example, onion-eaters, *moadikaʔa* (1982:121). She suggests that this food-naming practice not only served to identify particular resources, but also provided information for people who desired "to shift economic loci" (1982:121). To those desiring or needing a shift in resources, the food-names signaled "what the local groups had most to share," and may have worked to distribute economic harvesting across a broader landscape, reducing stress to local zones (1982:127). For the Washoe, two examples of this trend are seen. The Carson Valley Washoe sometimes called the 'mountain' Washoe *bóšdiʔ ťémʔluʔ* 'onion-eaters' (d'Azevedo forthcoming), and the Washoe similarly referred to the Paiute people around Mono lake as *mečibá·bašiʔ ťémʔluʔ,* the 'kutsavi eaters' (Jacobsen 1966:128). This was a limited occurrence, however, and may merely reflect the Paiute pattern described above.

The more typical pattern in Washoe for associating people with resources or places adds the term 'dwellers' or 'settlement' to a named region; sometimes that region is identified by its plant resources, but not always and not even predominantly.

Of the 472 place names indexed by Jacobsen (n.d.j.), 85 include names of plants. Group names ('dwellers') and place names do not appear to be separate in function; rather a place name is noted as having a settlement or group of people attached to the area by *detdéʔyiʔ*, meaning 'dweller' or 'settlement'.

The pattern of identifying 'dwellers' of a named region and/or place is illustrated by *ċóʔyaʔ dáʔaw detdéʔyiʔ* 'tule lake dwellers'. The term for 'dweller' [*d^{e}* + *ʔit* + *d* +*éʔ* + *yiʔ*] contains the nominalizing prefix *d^{e}*-, the instrumentalizing prefix *ʔit-* (which loses *ʔi*), the insertion of *d*, which is meaningless but required grammaticaly, the stem *éʔ*, meaning 'to be'; and the ending *-yiʔ*, meaning 'characterized by' (Jacobsen, personal communication, 2003).

Some examples of this pattern include *ʔuŋá·biya detdéʔyiʔ* ('salt-place dwellers', Antelope Valley area), *ʔušéwi wáťa detdéʔyiʔ* ('rabbit-drive river dwellers', Clear Creek and Eagle Valley area), *ċóʔyaʔ dáʔaw detdéʔyiʔ* ('tule lake dwellers', Washoe Valley area), *ʔáʔwaku wáťa detdéʔyiʔ* ('fish [tahoe sucker] river dwellers', Lower Truckee River area, including the Truckee Meadows), ʔáťabiʔ wáťa detdéʔyiʔ ('fish river dwellers', Upper Truckee River area), *ʔmúċim detdéʔyiʔ* ('grass-place dwellers', Sierra Valley area), *ċóʔyaʔ wáťa* detdéʔyiʔ ('tule river dwellers', Long Valley Creek area), and *dísem dáʔaw detdéʔyiʔ* ('[seepweed?]-lake dwellers', Honey Lake area) (W. d'Azevedo 1986b:468).

Although these linguistic trends relating to foods and places for food are no longer overtly expressed (at least in this research), and a definite reduction in the recognition and use of plant species is demonstrated, Washoe Women Elders continue to find ways to get to the plants and to harvest their cultural foods, medicines, and material culture resources, reflecting a contemporary strategy of harvesting as well as marking identity. Ethnobotanical data, in addition to demonstrating change over time, can also be examined to study the ways in which contemporary cultural identity is expressed among Washoe Women Elders.

Traditional Knowledge and Women's Identity

The original hypothesis for this research was that traditional knowledge, based on subsistence, is essential to Washoe Women Elders' identity. Changes in the quantity of plant information available to contemporary Women Elders do not decrease the value of traditional knowledge. As Hensel (1996) comments for the Yup'ik people, subsistence knowledge gets more important when sociocultural and economic environments change, not less. Subsistence knowledge becomes important as a marker of identity.

Emphasizing a particular feature of identity as somehow "critical" is at odds with currents theories of identity and/or ethnicity. As discussed in Chapter 2, many contemporary scholars follow Barth's 1969 model of ethnicity, which sees boundaries as more important than cultural content in terms of organizing identity. Problems with this approach are that identities become suspect of counterfeiting traits for gain (Roosen's 1989 study of the Huron is a good example of this). Further, if identities are constructed (as claimed by Barth and others), then membership in the constructed culture is technically wide open for anyone. Jackson (2002) demonstrated this when the urban Anishinaabe people of her study clashed with some recently self-proclaimed Indians at an organizational meeting. There must be some basis for "real" membership. For Jackson (2002), Spicer (1975), and Geertz (1973), the basis is a historical reality or continuity.

Simply proclaiming that cultures are real and somehow inherent does not solve the problem either. Merculieff (1994) tells how native people are "frozen" in the past and denied economic and political opportunity because the new way is not 'true' or 'real.' Similarly, biological claims of inherent identity are dangerous. Strong and Van Winkle (1996) write about problems of "blood quantum" among Washoe and other Indian people, in which historical or cultural identity is at odds with biological identity, a basis often established by non-tribal people.

Identity is best viewed from a more moderate stance, in which identity is adaptive and changing, but based on a shared historical past. This is the approach I have taken in looking at cultural identity among this group of Women Elders and is the one modeled by Hensel (1996), although not explicitly stated as such.

The first feature of identity marked by the Washoe Women Elders is what they state as threats to their way of life, things that challenge their identity. The Women Elders explicitly discuss what they see as the threats to their way of life. Foremost among those threats is the lack of access to the land. Everywhere they go, they see "No Trespassing" signs. Locations where they previously harvested are now posted, in ways that suggest the Women Elders are the target of the signs. Older ranches were more willing to allow Indian people to harvest plants, according to the Women

Elders. Newer people buying the ranches, or heirs, aren't always as friendly to the Women Elders. Additionally, the aggressive development of Carson Valley, Lake Tahoe, and surrounding areas removes more resources.

On public lands, grazing animals sometimes contaminate water and plants, so that Women Elders will not and cannot harvest that location. Or the location of public lands makes it difficult for the Women Elders to get there. Roadside access is very important as their bodies age; the Women Elders need younger people to drive them to the more remote locations and help them with difficult terrain, but jobs and school make it difficult for young people to get away to help the Elders.

When the Women Elders are able to go plant hunting, often they find a known patch that is no longer healthy or productive. The degrading environment is perceived by the Women Elders to be a direct result of the poor stewardship by EuroAmericans. The Elders *mourn* the loss of the plants. Plants need the Washoe people, according to the Elders. When Washoe people do not use the plants, caring for them by conservative harvesting and spiritually acknowledging the plants' gifts, then the plants die out.

Elders state a generalized sense of disappearing native plants linked to their inability to harvest the plants and the subsequent poor stewardship by Euro-Americans. It is Indian people's duty to care for all of the land, including water, plants, and animals. It is their heritage. One Elder commented that the Native Plant Garden in Dresslerville should be a lesson to future generations. The Native Plant Garden was established at the Senior Center in order that traditional and native plants would be available for elders to enjoy and to teach younger people. The Elder who stated that the garden should be a lesson remarked that in the past, the Washoe had all of their lands and resources; now all they have is this little garden, a "plant reservation" (Garey-Sage 1997).

Despite these obstacles, the Women Elders are tenacious and continue to find ways to get out and care for their native plants. They have great stamina and fortitude when it comes to digging a stubborn plant or harvesting a thorny berry. The physical demands of harvesting traditional foods are tiring, but revitalizing. The limited opportunities to harvest native plants are framed as essential, life-affirming experiences and are contrasted with the decreasing availability of such activity for Washoe people, a situation viewed as threatening and damaging to Washoe life.

Concomitant with their traditional subsistence knowledge is use of the Washoe language for these Women Elders. Prayers and harvest are seen as more proper when conducted in Washoe. The opportunity to gather plants with other Washoe women, and to joke and gossip in their first language, is always considered a special blessing. For many of the Women Elders, their children do not speak Washoe, the younger tribal members do not speak Washoe, and they never hear Washoe on the radio or television. The language is in danger of being lost, and the Elders know this. When they have a chance to get out together, to search for plants, they feel reassured to hear the Washoe words again. Without daily use of the language, however, even they are forgetting some of the names for plants, places, and other resources. This worries the Women Elders, because they are the last generation to have grown up speaking

Washoe at home. There is a language revitalization effort at work on the Colony, but thus far the Women Elders have been hesitant to participate in the efforts. Possibly, this is because of the institutional nature of a school-based language program, which is so different from their own experiences learning and using their first language.

The loss of language, loss of plants, loss of plant-harvesting environments and opportunities, and the degrading health of the land worry the Women Elders greatly. They explicitly discuss their fears for the future of the younger Washoe. How will the young people learn what it is to be Washoe, when so much that is Washoe has been and is still being slowly exterminated by outside influences? For this generation of Women, being Washoe has always included knowing the resources of the land, caring for the land in a respectful and prayerful manner, speaking to divine forces and to one another in their native tongue, and recognizing the differences between the Indian way and the White way. It is certainly different for younger Washoe people, who will find their own path to Washoe identity, but the Women Elders turn to the past for their definition of Washoe. It is a significant point, however, made by Elabor-Idemudio (2000) that such reference to tradition is not just sentimental, but is also a powerful galvanizing force in resisting onslaughts to cultural identity.

This generation of Elders is passing, however, and the Women Elders see a way of life disappearing. Some Elders pass away, taking their knowledge with them, not willing to leave it unprotected. The Women Elders ask, "What will happen when we're all gone?" This fear for the future is one reason the Women Elders agreed to have their knowledge recorded and made available. They want the younger Washoe to be able to learn about their heritage, if not directly, then at least indirectly. The writing down of traditional knowledge is a compromise, however; knowledge is best transmitted person to person, family to family.

Authentication of Knowledge

It is the personal connection to knowledge that ensures its trustworthiness, that turns knowledge into wisdom. When the Women Elders speak of what they know, they normally preface the statement with "Mama used to tell us…" or "Dad would do this…" or "Grandma would gather here…". A specific relative is cited, demonstrating a known pathway of information. This serves two functions. First, it authenticates the information. Oral knowledge is subject to consensus, as Castellano discusses (2000); providing a family tree helps others to assess the reliability of the information and authenticates the elder's ability to speak to the matter. Second, it demonstrates that the elders are telling only what they know, not presuming to speak for all Washoe people. Such a presumption clashes with the behavioral norms for the Elders. They teach their own family and they respect that other elders do the same. Often the preface is heard, "I don't know how others did it…" or "I don't know about that…", which is either followed by information given from their own family history or a quiet declining to provide information. Elders will not contradict another or presume to know more than another, so if one is speaking, others will tend to fall silent. The exception is when information is given within a familial context, in which case relatives will reinforce and renegotiate meanings. Another typical response is the evasive "I don't know" (pitched in a slightly higher tone and spoken slowly), which translates to "I'm not going to discuss that." The Elders are much too polite to state explicitly that they will not answer a question. Such refusal usually means that the information is too sensitive to be shared in an open forum.

Providing familial context of knowledge is the preferred method of dissemination. Generalized knowledge (information not given any context) is usually subject to suspicion and attributed with various motives that the Elders do not respect. In fact, there is a general trend to distrust any type of communal or staged event that is separated from the familial context. Such knowledge cannot be authenticated, and that sometimes translates to distrust of those who represent that information. This becomes a critical feature in identity; is an authenticating experience or genealogy available to support claims of authority? Jackson (2002) witnessed this among the Anishinaabe people, who felt cornered into presenting their own authentication in the face of recently self-proclaimed Indians. The resounding statement of Jackson's study, "Our elders lived it!" is a powerful testament to such authentication. For the Washoe Women Elders, their elders lived it and they have lived it. This serves to authenticate identity and to situate knowledge.

This authentication of information has its parallels in resource management as well. The Women Elders want their plants in a native habitat, not in an artificial setting. They want to go out to the plant's home environment to gather it. One Elder commented that she is always uncomfortable when someone gives her plants and she does not know where the plants come from. Families have traditional locations they go to for harvesting and this provides the authenticating context for the plants as well. In Chapter 4, I told the story of several Women going to a distant location to gather willows and of the unforeseen and unpleasant consequences of that trip, which reinforced the need for a known location for gathering plants.

The harvest of known patches authenticates a plant from an emic perspective. From an etic perspective, multiple purposes are served. Families spread out their harvesting, reducing stress on patches (Fowler 1982 discusses this strategy among Northern Paiute groups), and the efficacy of a plant is known. Unknown plants or patches can be potentially dangerous (unrecognized plants could be poisonous, for example, or have been subject to contamination), of poor quality, or nonefficacious in the case of medicines.

Such a strategy does not preclude discovery of new patches, however; when new patches were discovered in our rounds, the Women would investigate the plants by looking at the location (stream side, grass area, under the aspens, and so forth). A prayer was usually offered (of thanks and to counteract any potentially threatening power left by previous inhabitants), and then the Women would feel their leaves, maybe pinch a leaf and smell it, and discuss the plant until a consensus was reached about the resource. If it were a root plant, then the plant would be dug and the root smelled, perhaps cut open, and examined. The majority of the time, however, was spent in known plant locations.

The prevalence of known patches should not be surprising. Outsiders sometimes tend to view the landscape as *terra incognita*, failing to recognize the intimate knowledge many traditional people have of their environments. Hensel describes an experience in which he was preparing to "explore" some territory unknown to him in Alaska. The man with whom he was discussing the trip quietly identified the area as one where his brother was buried. For Hensel, it was a powerful moment. "I had a moment of self-awareness that almost took my breath away. I had been seeing the land in my mind as 'wilderness.' Suddenly I saw that my vision was part of Manifest Destiny, that in another sense my fantasized 'expedition' to that spot made no more sense than mounting an expedition to explore the living room" (Hensel 1996:50). Too often, wilderness is a creation of EuroAmerican view, failing to recognize the presence of aboriginal people and their associations with the land. Australian Aborigines, who have lived tens of thousands of years in 'country' find European notions of 'conservation' and 'wilderness' to mean exclusion (Birckhead and Smith 1992:1).

> The areas that urban Australians see as remote wilderness have been home to Australian Aborigines for many generations, and continue to be so. As Ros Sultan, Aboriginal liaison officer for the Australian conservation Foundation argues: 'For the Aboriginal people of Australia, any definition of wilderness is problematic. We do not think in terms of wilderness, we think in terms of 'country,' particular landscapes within which people have played an integral part for over 60,000 years' [Sultan 1991:1 in Head 1992].

The Women Elders also inhabit an intimately known environment. Wherever we drove, landmarks, residences, memories, place names, histories of previous harvests, bear-encounters, funny anecdotes, or particular features were pointed out by the Women Elders. Place names and myths illuminate Washoe intimacy with the landscape, and illustrate cognitive and linguistic maps of the environment. Communication with the plants, through prayer, proper harvest, and respectful acknowledgment (sometimes a gift is left in exchange for the harvest), is also essential for continued well-being of plants and people.

In such a known environment, the areas where others harvest is also known or marked by signs. Respect for others' patches involves recognizing signs of harvesting activity. Those with whom the Elders have friendships might tell them of a known location; by telling them about the patch, the others are in essence inviting the Elders to go to the patch. If a patch is encountered that shows signs of recent harvest or has harvest implements still in place, then the Women Elders leave that patch. For example, we came across a pine nut grove that still had the *beyú'gum* (harvest pole) propped in the trees. The Women Elders immediately recognized the area as someone else's preferred spot. In the old days, they said, people used to always leave their *beyú'gum* in the trees from year to year. Now, people cannot do that because the poles will be gone before people return. Or, once when searching for willow, we passed a good-looking patch on the side of the road, but the Women Elders immediately noticed the tell-tale piles of willow leaves on the ground. When women cut willow, they strip the leaves prior to taking the stalks home. It leaves a pile of willow leaves on the ground. The Women Elders pointed out the pile and commented, "Oh, so-and-so must have been here." The patch is then left alone. This again serves two purposes: it respects the area used by another, and it reduces stress on the patch. The Washoe ethic stresses continually that a resource is never used exhaustively. "My mother always told me, leave some for the birds." "Mama always said leave some for the bears." With willow, the reasoning is given that one should not take too many willows from a known site until the harvested willows have been worked. The willow could prove to be buggy or brittle and a waste of time and labor. This reinforces the non-exhaustive harvesting philosophy of the Women Elders. In fact, exhaustive harvesting when encountered in a known patch is severely criticized. Upon a return visit to a medicinal location, two Elders reacted with anger when they saw that someone had recently been to the spot and harvested all of the plants. The Women were insulted and angered, and strongly chastised the individual they suspected of stripping the patch.

The above discussion illustrates authenticating behaviors used to demonstrate individual, gender, or family identity in an intratribal context. For this group of Women Elders, negotiation of tribal identity is not an apparent issue. All are tribally enrolled, appear Indian, live on the Colony, speak the native language, teach and participate in traditional cultural activities, and represent the tribe to the outside world. Differences are clearly elucidated by the Women Elders between themselves and neighboring tribes, especially Paiute people. Like Hensel's work among the Yup'ik, the issue is not are you Washoe, but how Washoe are you? For Hensel, even non-natives could assume native-like identities in subsistence talk, but among the Washoe Women Elders, this is strictly an intratribal negotiation of identity.

For the next generation, however, tribal identity is an issue, at least to the Women Elders. Their definition of Washoe is predicated upon traditional knowledge and beliefs, authenticated by family experience. The curriculum for the Washoe children ethnographically and historically was ethnobiology; parents and grandparents passed on their knowledge to children through practice—not direct teaching. The elders were the ones with the most expertise and experience about environmental resources, and thus held valuable knowledge. Young people are supposed to watch their elders at work, and then at some point, demonstrate their own mastery, usually at a later point in life, when they are becoming the elders. Ideally, there would have been a lifetime of observation and then, when the time is right, the younger person takes up the mantel and performs the work.

With all of the social and economic changes that have occurred during their lives, the same authenticating experiences witnessed by the Elders are sometimes not available to the younger women. When opportunities and time are not available for this type of learning, how can "authentic" knowledge be gained?

Revealed Knowledge

Several experiences with the Women Elders point to an inherited or revealed knowledge pattern, effectively providing those who did not have the opportunity to learn from elders directly to learn in another manner. Early in my work with the Women Elders, a woman described how she had butchered a deer. She had never done it before, and she wasn't even sure she knew how to do it. When her son would bring deer home, it was already cleaned, and then he and her nephews would butcher the deer, so she had witnessed the butchering but never attempted it. One day, the boys brought a deer home, but didn't have time to clean it, so they left the deer in the basement and went to school.

> So I said, 'Oh, I can do it.' So you know what I did? After that I washed it out and I said, "I can skin it, too, because I know how." So you skin it like you do the rabbit. You start with the hind legs; slit it up and then you just pull it apart and work around the legs and then you go around and around and get it…pull it all, the skin from side to side, like this. The thing was open. And I did the whole thing. And then I even cut it up and stopped once in awhile to rest and then go back down and do it again. I had it all cut up and cleaned and when my son come home, he went down there and he was going to do it, I guess. 'Where's that deer?' And I said, 'Guess where it is.' He looked around and looked around and I had it stashed away already. I cleaned and wrapped up and put it in the icebox what I could. And I had some of it down, all wrapped, and he saw it. And he said, 'Well, who did the skinning and who cleaned the deer for you?' He said, 'You can't do nothing.' And I said, 'Believe it or not, I did.' And he thought it over. He thought I was telling him a story. 'Did you know you could do that?' And I said, 'No.' It goes to show when you have to do something you can do it [transcript from 6/14/93 interview].

Years ago, when this interview was recorded, it seemed an example of the character of this particular woman, as she was an especially determined and tenacious individual. Subsequent incidents suggest something else is also represented.

This same woman used to speak of a spiritual gift being given to her once her mother passed on; she felt she inherited the role (Garey-Sage 1995). Another Woman tells of taking up weaving after her mother passed away. Others talk of making pine nut soup or acorn biscuits for the first time. One Woman stresses that the elders never would tell you how to do things; you were supposed to just watch and learn. They would even get annoyed if you asked for directions. Yet, when the time came, the Woman was able to make her soup and her biscuits. And once, when searching unproductively for medicinal plants, we were guided by what the Women considered to be the spirit of a deceased relative.

Castellano terms such information "revealed knowledge," which acts in concert with oral traditions (myths, songs, rituals) and empirical knowledge, all components of traditional knowledge (2000:23-4). She uses the term to refer to knowledge gained through dreams, visions, and intuitions "that are understood to be spiritual in origin" (2000:24). The term "revealed knowledge" appeals to me. The above-described incidents had already convinced me of some sort of inherited knowledge, but Castellano's term is much more poetic. Hensel describes the same phenomena among Yup'ik women, although he describes it as "growing into" subsistence roles (1996:63).

> My mom when she started doing her fish, she started when she was pretty old, like I wasn't even living at home any more when she started cutting and smoking, she did it after her mom died. She learned how to do it. Our grandma had provided all the smoked fish for us. And you probably know from talking to people, that the younger people, if you can be considered young when we're forty, are not really allowed, as long as there's somebody older… in the family. The older people are the ones who are in a position to cut the fish. Somebody else can fish and get them, but the actual cutting and drying and processing is only done by certain people in the family. My mom said she tried to help my grandma as my grandma grew older, but my grandma always said, "You're gonna butcher the fish, you're gonna butcher them, you're gonna mess them up" [Hensel 1996:61-62].

Hensel's "growing into" subsistence roles suggests that age roles and duties are protected, and one doesn't move into the next role until it is left vacant. Such functional explanation could be said to apply to the Washoe examples of taking up weaving or becoming the one who prays. This functional description does not, however, capture the spiritual element that Women Elders feel, the connection to their past and their ancestors, nor does it capture the spiritual experience described by Hensel's consultants. The above-described conversations about cutting fish continue with the comment that after this woman's grandmother died, her mother began cutting the fish, "and she said it was as if her mom's hand was on her hand" helping her to make the cuts (Hensel 1996:62). The same woman goes on to state that many of her friends have had the same experience, of being able to do things they didn't know they could do, and of sometimes feeling someone else's guiding presence.

This revealed knowledge also serves another function: it works to bestow authenticity to the younger generation. As the Elders lived it, so they can pass it on to younger members, transferring knowledge, skill, authority, and identity. This phenomenon clashes, however, with the ethnographic descriptions of Washoe spirituality in which ghosts were feared as a cause of illness. Spirits of the dead were exhorted to leave the living alone (Freed and Freed 1963a:32). Property was burned, sometimes houses abandoned, and the names of the deceased were never spoken. These proscriptions have changed over time. It is too expensive to burn houses, so they are normally 'smoked' or purified after a death. Names of the dead are spoken, and cemeteries are visited. The transformation of ghosts from harmful to helpful has also accompanied these changes among some people, although Mrs. Jackson often said you could never tell what the spirits wanted and so had to be careful; the unsuspecting could find themselves in harm's way without proper spiritual intercession (Garey-Sage 1995).

The use of revealed knowledge is an adaptation by Women Elders, among Washoe and possibly Yup'ik, to contemporary conditions that preclude traditional learning opportunities. These instances, however, describe women. Do men have the same experiences? Initially, I suspected that Women were the more visible 'keepers of knowledge' among Washoe elders; that some gender bias existed which allowed Women to retain a more traditional cultural identity than men. This research question was not fully explored during field work, however, because of the constraints and directions of research mentioned in Chapter 2. Nonetheless, a few preliminary observations can be presented.

Gender and Identity

The role of Women Elders in a contemporary context appears to be more visible than that of men's, but not enough evidence exists to address this question conclusively. The Women Elders are more often called upon to represent the Tribe publicly, to offer prayer in public forums, or to teach or organize cultural activities. There are men elders, as well, who participate in these roles, but their numbers are somewhat reduced compared with the Women Elders. Nothing suggests that women's knowledge is preferred to men's, it just appears that women's knowledge is more represented.

Men Elders are just as important as keepers and teachers of men's knowledge, but that aspect of traditional Washoe knowledge was not explored in this study. Rabbit drives, deer hunting, and fishing are still highly valued traditional activities.

Rabbit bosses are still recognized. Men as well as women participate in pine-nutting. Many of the well-known consultants for the work conducted in the 1950s and 1960s by Jacobsen, W. d'Azevedo, Freed and Freed, and Downs were men. The last recognized shaman of the recent period was a man. The Women Elders speak just as much of their fathers as their mothers, and the few male elders I spoke with all valued and stressed their heritage. Thus there is nothing explicit to suggest a preference for Women's knowledge as a function of cultural identity.

Nonetheless, Freed and Freed (1963a) wrote that of the five aboriginal ceremonies still practiced, only three appear destined to survive. The two ceremonies requiring a specialist (the shaman's curing rite and the pine nut dance) were not given a hopeful prognosis, whereas ceremonies for the girl's puberty dance, birth, and death require no specialist and survive more or less intact. The one difference pointed out by the Freeds in these enduring ceremonies is the "complete abandonment of the traditional male observances" (1963a:37). The Freeds suggest that the loss of specialists equates to a loss of marked men's roles, as men were for the most part the specialists in Washoe society (Freed and Freed1963a:38). Ceremonies for hunting, pine nuts, and curing all required a male specialist (although there were some women shamans, Freed and Freed state that the majority were men).

Men's roles are said to be more affected by contemporary conditions. Traditional women's work, housework and childcare, are still important, but men's roles, hunting, fishing, and defense, are less prominent. Because of the differences in the continuance of traditional roles, the Freeds comment that women are better adjusted to modern conditions than are men. Women stay at home more often, among known relatives, performing their traditional roles, whereas "men have of necessity taken to wage work. As a result the overwhelming power and authority of the larger society impinge more on men than on women and seem to have had the effect of undermining male self-confidence" (Freed and Freed 1963a:38).

Downs (1963a:123) writes that with the changes brought to the Washoe economy during the ranching period, women became the focus of social organization as they were able to earn money as housekeepers, kitchen help, laundry maids, and such while remaining with their families. Men, in turn, were forced to leave the family to earn money in seasonal employment, such as farm labor, lumbering, wood chopping, construction, and traditional hunting and fishing.

These are certainly intriguing observances by the Freeds and Downs, but not enough data were collected on men's roles in particular to pursue this matter. The one observation noted is that men appear to be migrating into traditional women's roles. A few men now accompany their spouses and join in plant gathering and cultural food preparation. Others have begun to take up weaving, a traditional woman's role. This may suggest that women's activities are given more public recognition and compete less with EuroAmerican patterns than traditional men's roles. Hunting and fishing now require licenses, and these activities are in competition with many non-Indian males. The domains of women, such as plant gathering and basket weaving, cooking of traditional meals, praying for the family, and teaching, do not compete with EuroAmerican patterns and are not costly to pursue. Downs suggests something similar, when he comments that during the ranching period men were not restrained from hunting because the ranchers perceived the animals to be competitors with domestic grazers and were glad to be rid of them (1963a:123). Future research focused specifically on men's roles would be a valuable addition to studies of Washoe cultural identity.

Conclusion

In conversation, the Washoe Women Elders speak of the Old Ones who have gone before them, taking much of the knowledge that they assumed would always be there. The Elders who remember and lived the ways of their grandparents and parents—the Old Way, the Indian Way—struggle to keep that knowledge alive in a world mined with private property boundaries, speeding automobiles, and aging bodies. These Women Elders mourn the loss of Washoe knowledge and words; they speak amongst themselves to hear and shape the old sounds again. They talk about the foods their mothers gathered, the game their fathers brought home, and the medicine their grandmothers dispensed. When they judge it appropriate, they tell how the Washoe people think about and treat the world, the land, and the water; but often they feel they speak to a deaf world consumed by greed.

Washoe traditional knowledge is life-affirming and essential, so say the Women. This knowledge is their most valuable possession, and these Elders share that resource judiciously, shaping knowledge into wisdom. Knowledge has its own power, and that power must be used well. When knowledge is used poorly, silent disapproval echoes loudly and dangerous consequences lurk.

Within this dissertation is the lifetime of knowledge and experience, sometimes through several generations, of Women Elders who have agreed to share their knowledge so that it could be written down. They know the world is changing—has already changed—and that their young people will not be able to quietly absorb the knowledge demonstrated by elders, as was done for them. The Women Elders believe it is critical that the younger people know what it means to be Washoe, and that means knowing the Old Ways. But once written, the knowledge becomes removed from the judicious dispensation of the elders, and that is not something these Elders take lightly. Their knowledge, their wisdom, is shared because of their concern for the continued Washoe identity of the younger people. Other Washoe people of different age and different perspectives may construe their identity in different ways, but the Women Elders continue to mark their identity in terms of subsistence knowledge and its accompanying suite of beliefs and behaviors.

Traditional knowledge of Washoe plants has decreased over time, in concert with decreased access to traditional patterns of subsistence predicated by the overwhelming influx of EuroAmericans into Washoe lands. Each generation of elders has an increasingly distant relationship with a subsistence economy. Nonetheless, traditional knowledge remains highly marked as a feature of cultural identity among a group of Women Elders. Traditional knowledge and its accompanying ethic are espoused by Women Elders, and the Elders participate in many activities designed to teach and preserve cultural knowledge. As the Elders of their families, they model Washoe traditional values and offer learning opportunities to those who will take the time. The family environment is considered to be the best for teaching, but Women Elders will participate in wider community-based activities if they feel it is appropriate.

In particular, Women Elders identify the annual harvest of such plants as pine nuts, acorns, berries, onions, watercress, willow, brackenfern, and Indian balsam as important activities for their families or for the community. The depth of knowledge many of the Elders possess for these items supports their significance. Behavioral norms are reinforced by Elders' wisdom, sometimes offered indirectly through prayer or story, and sometimes stated directly. Norms are also reinforced by the censure of breaches. Such censure is almost always indirect (a prayer asking forgiveness for improper behavior, or refusal to discuss knowledge with someone) or very rarely direct, such as the explicit statements made about a failed pine nut harvest being linked to an improperly conducted pine nut dance.

Traditional knowledge serves to mark Elder identity, family identity, and gender identity within the tribe. For the group of Women Elders, tribal identity does not need to be negotiated, as the Women Elders represent all of the traditional features of "Indian": they speak their native language, they look Indian, they have Washoe family histories of long tenure in the area, they are tribally enrolled, they teach and organize cultural activities, and they publicly represent the tribe to the outside world. For these Women Elders, identity is linked to the land-based activities and values of the Old Way of the Washoe, which are seen as essential and life-affirming. At least one author suggests the vital nature of traditional knowledge and community in arming native people against dominating outside cultural forces (Elabor-Idemudia 2000), lending support to the

Elders' belief that traditional knowledge, taught the traditional way by Elders working with younger people to harvest plants, is essential for Washoe identity.

Traditional knowledge must be authenticated to be trusted. By invoking family connections to knowledge, Women authenticate their knowledge in an oral tradition, they limit claims to any sort of hegemonic knowledge, and they reinforce their connection with Washoe lands and life. Through the path of revealed knowledge, Women Elders also prepare themselves and the next generation of elders for authenticating experiences.

Identity for future Washoe Elders will most likely include many of these traditional elements as well as the words and beliefs of their elders, if not in fact the actual experiences. As modern Anishinaabe comment, "Our elders lived it!" (Jackson 2002). For many younger Washoe, they may not be able to "live it" in the same way the present generation of Elders have, but many traditional features of Washoe culture are still in practice. Basketry continues to be an important feature of Washoe identity, artistic expression, and economic gain for many Washoe women, both elder and non-elder. Elder Women host basket-weaving classes for the younger people and participate in basket-weaving groups both locally, regionally, and nationally. Pine-nutting is still a Washoe (and Great Basin) activity of marked importance, both symbolically and economically. Rabbit drives are organized, especially before the Annual Culture Dinner, where traditional foods such as pine nut soup, acorn biscuit, and rabbit and deer meat, are served. Language classes and an immersion school are available. Girls' dances are held, and birth and death potlucks are organized. Fishing and hunting are activities people enjoy and pursue whenever they can. An annual Washoe festival is held, and pan-Indian as well as Washoe elements are displayed. Tribal projects and anthropological projects continue to document Washoe living, with many younger Washoe learning to negotiate government and university systems so that they can actively protect their culture.

Not all Washoe people participate in all these activities, of course. And the traditional activities themselves are more symbolic, often an annual event rather than the day-to-day experiences of the older Washoe. This worries the Elders, but the persistence and ingenuity of traditional culture is much more resilient than once predicted by anthropologists, or perhaps even by the Elders. The next generation of Elders will surely have their own part to play in the history of the Washoe people, forging both predictable and unpredictable paths into the future.

References

Annual Report of the Commissioner of Indian Affairs 1866. Washington: Government Printing Office. In Nevada Historical Society Papers, Lake Tahoe - 1883. A. H. Hawley, 1913-1916. Cited in Price 1980.

Bancroft Library. dynaweb.oac.cdlib.org:80/dynaweb/ead/berkeley/bancroft/m80_18_cubanc. Accessed August 2003.

Barbour, Michael G., and Jack Major, eds. 1977. *Terrestrial Vegetation of California.* New York: John Wiley & Sons.

Barrett, Samuel A. 1916. [*Catalog of Washo Collection*]. The Public Museum of Milwaukee.

——. 1917. The Washo Indians. *Bulletin of the Public Museum of the City of Milwaukee* 2(1):1-52.

——. 1963. Preface. In d'Azevedo, ed., 1963, pp. v-vi.

Barth, Fredrik, ed. 1969. *Ethnic Groups and Boundaries: The Social Organization of Culture Difference.* Boston: Little, Brown and Company.

Birckhead, Jim, Terry deLacy, and Laurajane Smith, eds. 1992. *Aboriginal Involvement in Parks and Protected Areas.* Canberra: Aboriginal Studies Press.

Birckhead, Jim, and Laurajane Smith. 1992. Introduction: Conservation and Country—A Reassessment. In Birckhead, deLacy, and Smith, eds., 1992.

Blu, Karen I. 1980. *The Lumbee Problem: The Making of An American Indian People.* Cambridge: Cambridge University Press.

Blurton-Jones, Nicholas, and Melvin J. Konner. 1989. !Kung Knowledge of Animal Behavior. In Johannes, ed., 1989.

Broadbent, Sylvia M. 1964. *The Southern Sierra Miwok Language.* University of California Publications in Linguistics 38.

Burch, Jr., Ernest S. 1994. The Future of Hunter-Gatherer Research. In Burch and Ellanna, eds., 1994, pp. 441-55.

Burch, Jr., Ernest S., and Linda J. Ellanna, eds. 1994. *Key Issues in Hunter Gatherer Research.* A University College London Series, edited by Barbara Bender, John Gledhill and Bruce Kapierer. Oxford: Berg.

Cahodas, Marvin. 1979. *Degikup: Washoe Fancy Basketry 1895 - 1935.* Vancouver, British Columbia: The Fine Arts Gallery of the University of British Columbia.

Callahan, Catherine A. 1984. *Plains Miwok Dictionary.* University of California Publications in Linguistics 105.

——.1987. *Northern Sierra Miwok Dictionary.* University of California Publications in Linguistics 110.

Camp, Charles L., ed. 1960. *James Clyman, Frontiersman.* Portland, Oregon: Champoeg Press.

Cartwright, Willena D. 1953. A Washo Girl's Puberty Ceremony. In *Proceedings of the 30th International Congress of Americanists, Cambridge, 1952*, pp. 136-42. London: Royal Anthropological Institute.

Castellano, Marlene Brant. 2000. Updating Aboriginal Traditions of Knowledge. In Dei, Hall, and Rosenberg, eds., 2000, pp. 21-36.

Churchill, Ward. 1992. *Fantasies of the Master Race: Literature, Cinema and the Colonization of American Indians*, edited by M. Annette Jaimes. Monroe, Maine: Common Courage Press.

Cook, Sherbourne F. 1941. The Mechanism and Extent of Dietary Adaptations Among Certain Groups of California and Nevada Indians. *Ibero-Ameicana* 18:1-59.

Cotton, C. N. 1996. *Ethnobotany: Principles and Applications.* New York: John Wiley & Sons.

Dangberg, Grace M. n.d. *Ethnographic Field Notes on the Washoe Indians Collected by Grace Dangberg, Minden, Nevada. Typed by John A. Price, Department of Anthropology, University of Utah.* Copy in Collected Papers of Warren L. d'Azevedo. Special Collections, Getchell Library, University of Nevada, Reno.

———. n.d.a. [Notebook No. I]. In possession of William H. Jacobsen, Jr.

———. 1927. Washoe Texts. *University of California Publications in American Archaeology and Ethnology* 22(3):391-443.

———. 1968. *Washo Tales: Three Original Washo Indian Legends.* Nevada State Museum Occasional Papers No. 1. Carson City, Nevada.

d'Azevedo, Kathleen. 1955. *[Field Notes on Washoe Foods].* Unpublished manuscript in possession of K. d'Azevedo.

d'Azevedo, Warren L. [1952-1955, 1963-1984]. [*Field notes on work among the Washoe of Nevada and California*]. In possession of W. d'Azevedo.

———. 1956. *Washo Place Names.* Manuscript on file, Anthropology Department, University of Nevada, Reno. Also in possession of d'Azevedo.

———. 1986a. Introduction. In d'Azevedo, ed., 1986, pp. 1-14.

———. 1986b. Washoe. In d'Azevedo, ed., 1986, pp. 466-98.

———. 1992. *To Fish or Cut Bait: Missing the Boat to Washoe.* Paper presented at the 22nd Great Basin Anthropological Conference, Reno, Nevada.

———. 1993. *The Washoe People in the Twentieth Century.* Paper presented at the Third Annual Wa She Shu Edeh Festive of Native American Arts, July 30, 1993, at the Tallac Historic Site, Lake Tahoe, California.

———. Forthcoming. *The Washoe.*

d'Azevedo, Warren L., ed. 1963. *The Washo Indians of California and Nevada.* University of Utah Anthropological Papers No. 67. Salt Lake City.

———. 1986. *Handbook of North American Indians*, Volume 11: Great Basin. Washington, D.C.: Smithsonian Institution Press.

d'Azevedo, Warren L., Wilbur A. Davis, Don D. Fowler, and Wayne Suttles, eds. 1966. *The Current Status of Anthropological Research in the Great Basin: 1964.* Desert Research Institute Technical Report Series S-H, Social Sciences and Humanities Publications No. 1. Reno, Nevada.

Dei, George J. Sefa, Budd L. Hall, and Dorothy Goldin Rosenberg, eds. 2000. *Indigenous Knowledges in Global Contexts: Multiple Readings of Our World.* Toronto: University of Toronto Press.

De Vos, George A., and Lola Romanucci-Ross, eds. 1975. *Ethnic Identity: Cultural Continuities and Change*. 3d ed. Walnut Creek, California: Alta Mira Press.

Downs, James F. 1961.Washo Religion. *University of California Anthropological Records* 16(9):365-86.

——. 1963a. Differential Response to White Contact: Paiute and Washoe. In d'Azevedo, ed., 1963, pp. 115-37.

——. 1963b. Washo Response to Animal Husbandry. In d'Azevedo, ed., 1963, pp. 138-152.

——. 1966a. *The Two Worlds of the Washo.* Case Studies in Cultural Anthropology, edited by George and Louise Spindler. New York: Holt, Rinehart and Winston.

——. 1966b. The Significance of Environmental Manipulation in Great Basin Cultural Development. In d'Azevedo *et al.*, eds., 1966, pp. 39-56.

Elabor-Idemudia, Patience. 2000. The Retention of Knowledge of Folkways as a Basis for Resistance. In Dei, Hall, and Rosenberg, eds., 2000, pp. 102-119.

Eller, Jack David. 1999. *From Culture to Ethnicity to Conflict: An Anthropological Perspective on International Ethnic Conflict.* Ann Arbor: University of Michigan Press.

Field Museum of Natural History. www.fmnh.org/research_collections/photography/collections.htm. Accessed August 2003.

Fitzgerald, Thomas K. 1993. *Metaphors of Identity: A Culture-Communication Dialogue.* Albany: State University of New York Press.

Ford, Richard I. 1978. Ethnobotany: Historical Diversity and Synthesis. In *The Nature and Status of Ethnobotany*, edited by R. I. Ford. Museum of Anthropology Anthropological Papers No. 67. Ann Arbor: University of Michigan Press.

Fowler, Catherine S. 1982. Food-Named Groups Among Northern Paiute in Northern America's Great Basin: An Ecological Interpretation. In Williams and Hunn, eds., 1982, pp. 113-30.

———. 1986. Subsistence. In d'Azevedo, ed., 1986, pp. 64-97.

Fowler, Catherine S. and Lawrence E. Dawson. 1986. Ethnographic Basketry. In d'Azevedo, ed., 1986, pp. 705-37.

Fowler, Catherine S. and Sven Liljeblad. 1986. Northern Paiute. In d'Azevedo, ed., 1986, pp. 435-65.

Fowler, Don. D., and Catherine S. Fowler, eds. 1971. Stephen Powers' "The Life and Culture of the Washo and Paiutes." *Ethnohistory* 17(3-4):117-49.

Freed, Stanley A. 1960. Changing Washo Kinship. *University of California Anthropological Records* 14(6):349-418.

——. 1966. Washoe Habitation Sites in the Lake Tahoe Area. In *Notes on Western Nevada Archaeology and Ethnology*. Reports of the University of California Archaeological Survey, No. 66, pp. 73-83. Berkeley.

Freed, Stanley A. and Ruth S. Freed. 1963a. The Persistence of Aboriginal Ceremonies among the Washo Indians. In d'Azevedo, ed., 1963, pp. 25-40.

———. 1963b. A Configuration of Aboriginal Washo Culture. In d'Azevedo, ed., 1963, pp.41-56.

Freeland, L. S., and Sylvia M. Broadbent. 1960. *Central Sierra Miwok Dictionary with Texts*. University of California Publications in Linguistics 23.

Garey-Sage, Darla. 1995. *The Life History of a Contemporary Washoe Woman.* Master's thesis. Department of Anthropology, University of Nevada, Reno.

——. [1997-2003]. Field notes on work among Washoe. In possession of Garey Sage.

——. 1997. *The Washoe Garden*. Unpublished manuscript in possession of Garey Sage.

Geertz, Clifford. 1973. *The Interpretation of Cultures*. New York: Basic Books.

Gigli, Jane Greene. 1974. Dat So La Lee, Queen of the Washo Basketmakers. In *Collected Papers on Aboriginal Basketry*, edited by Donald R. Touhy and Doris L. Rendall. The Nevada State Museum Anthropological Papers No. 16. Carson City, Nevada. Originally published in 1967, under author name Jane Hickson, Nevada State Museum, Popular Series, No. 3, pp. 1-27.

Glazer, Nathan, and Daniel P. Moynihan. 1970. *Beyond the Melting Pot: The Negroes, Puerto Ricans, Jews, Italians, and Irish of New York City.* Cambridge: The M.I.T. Press and Harvard University Press.

Graf, Michael. 1999. *Plants of the Tahoe Basin: Flowering Plants, Trees, and Ferns.* Sacramento, California: California Native Plant Society Press

Handelman, Don. 1967a. The Development of a Washo Shaman. *Ethnology* 6(4):444 -61.

———. 1967b. Transcultural Shamanic Healing: A Washo Example. *Ethnos* 32(1 -4):149-66. Stockholm.

———. 1972. Aspects of the Moral Compact of a Washo Shaman. *Anthropological Quarterly* 45(2):84-101.

Hanes, Ted L. 1977. Chaparral. In Barbour and Major, eds., 1977, pp. 417-70.

Head, Lesley. 1992. Australian Aborigines and a Changing Environment: Views of the Past and Implications for the Future. In Birckhead, deLacy, and Smith, eds., 1992.

Hensel, Chase. 1996. *Telling Our Selves: Ethnicity and Discourse in Southwestern Alaska.* Oxford Studies in Anthropological Linguistics, edited by William Bright, No. 5. New York: Oxford University Press.

Henshaw, Henry W. 1883. *Washoe. Vocabulary in Powell's schedule, November 1883. Carson City, Nevada.* Unpublished manuscript No. 963-a in National Anthropological Archives, Smithsonian Institution, Washington, D.C.

Hickman, James C., ed. 1993. *The Jepson Manual: Higher Plants of California.* Berkeley: University of California Press.

Holland, V. L., and David J. Kiel. 1995. *California Vegetation.* Dubuque: Kendall/Hunt Publishing Company.

Howald, Ann. 2000. Plant Communities. In Smith, ed., 2000.

Hudson, John W. 1902. [*Field notes on the Washoe]*. Unpublished manuscript and collections catalog in Field Museum of Natural History, Chicago. Copy in Collected Papers of Warren L. d'Azevedo, Special Collections, Getchell Library, University of Nevada, Reno.

Hunn, Eugene. 1982. The Utilitarian Factor in Folk Classification. *American Anthropologist* 84(4):830-47.

Jack, Jennifer. 1978. *Analysis of the Resources Used by the Washo Indians.* Unpublished manuscript in Department of Anthropology, University of Nevada, Reno.

Jackson, Deborah Davis. 2002. *Our Elders Lived It: American Indian Identity in the City*. Dekalb: Northern Illinois University Press.

Jacobsen, William H., Jr. [1955-1966]. Field notes.

——. n.d.a. *Plants Used as Foods, Medicines, or Poisons by the Washo Indians.* Unpublished manuscript in possession of Jacobsen.

——. n.d.b. *Washo Words for Trees and Other Plants.* Unpublished manuscript in possession of Jacobsen.

——. n.d.c. *Plant Names Copied from Ms. Material of Grace Dangberg.* Unpublished manuscript in possession of Jacobsen.

——. n.d.d. *Washo Place Names.* Unpublished manuscript in possession of Jacobsen.

——. n.d.e. *Animals Used as Foods by the Washo Indians.* Unpublished manuscript in possession of Jacobsen.

——. n.d.f. *Washo [Words for] Birds.* Unpublished manuscript in possession of Jacobsen.

——. n.d.g. [Washo] *Words for Kinds of Fish.* Unpublished manuscript in possession of Jacobsen.

——. n.d.h. *Washo Insects.* Unpublished manuscript in possession of Jacobsen.

——. n.d.i. *Skunk and Rat.* [Transcription and Translation of Washoe Tale]. Unpublished manuscript in possession of Jacobsen.

——. n.d.j *Washo Place Name Index.* Unpublished manuscript in possession of Jacobsen.

——. n.d.k. *Washo Place Names Glossed.* Unpublished manuscript in possession of Jacobsen.

——. 1964. *A Grammar of the Washo Language.* Ph.D. Dissertation in linguistics, University of California, Berkeley. Ann Arbor, Mich.: University Microfilms.

——. 1966. Washo Linguistic Studies. In d'Azevedo *et al.*, eds., 1966, pp. 113-36.

——. 1978. Washo Internal Diversity and External Relations. In *Selected Papers from the 14th Great Basin Anthropological Conference*, edited by Donald R. Tuohy, pp. 115-47. Ballena Press Publications in Archaeology, Ethnology and History No. 11. Ballena Press, Socorro, New Mexico.

——. 1980. Washo Bipartite Verb Stems. In *American Indian and Indoeuropean Studies: Papers in Honor of Madison S. Beeler*, edited by Kathryn Klar, Margaret Langdon, and Shirley Silver, pp. 85-99. Trends in Linguistics, Studies and Monographs, 16. Mouton, The Hague.

——. 1986a. Washoe Language. In d'Azevedo, ed., 1986, pp. 107-12.

——. 1986b. Washo Linguistic Prehistory. In *Papers from the 1983, 1984, and 1985 Hokan-Penutian Languages Conference,* edited by James E. Redden, pp. 33 58. Occasional Papers on Linguistics No. 13. Department of Linguistics, Southern Illinois University, Carbondale.

——. 1993. *Harrington's Encounter with Washo.* Unpublished handout in possession of Jacobsen.

——. 1995a. Letter with List of Washo Plant Names to John Amato, November 6. In possession of Jacobsen.

——. 1995b. *Inventory of Washo Lexical Prefixes.* Presented at Hokan Penutian Workshop, University of New Mexico, Albuquerque, July. In possession of Jacobsen.

——. 1996. *Beginning Washo.* Nevada State Museum Occasional Papers No. 5. Carson City, Nevada.

——. 2002. *Washo Borrowings from Spanish.* Presented at 50th Anniversary Celebration of the Survey of California and Other Indian Languages, University of California, Berkeley, June. In possession of Jacobsen.

Johannes, Robert E. 1989. Introduction. In Johannes, ed., 1989.

——, ed. *Traditional Ecological Knowledge: A Collection of Essays.* Gland, Switzerland: IUCN

Johnson, Martha. 1992. Research on Traditional Environmental Knowledge, Its Development and Its Role. In Johnson, ed., 1992.

——, ed. 1992. *Lore: Capturing Traditional Environmental Knowledge.* Ottawa: International Development Research Centre.

Johnson, Martha, and Robert A. Ruttan. 1992. Traditional Environmental Knowledge of the Dené: A Pilot Project. In Johnson, ed., 1992.

Lee, Richard B. 1969. Eating Christmas in the Kalahari. *Natural History* 78 (10):14 22; 60-64.

——. 1992. Art, Science, or Politics? The Crisis in Hunter-Gatherer Studies. *American Anthropologist* 94(1):31-54.

Lindstrom, Susan. 1992. *Great Basin Fisherfolk: Optimal diet breadth modeling for Truckee River aboriginal subsistence fishery.* Ph.D. Dissertation in anthropology, University of California, Davis. Ann Arbor, Mich.: University Microfilms.

Lowie, Robert H. 1939. Ethnographic Notes on the Washo. *University of California Publications in American Archaeology and Ethnology* 36(5):301-52.

——. 1963. Washo Texts. *Anthropological Linguistics* 5(7):1-30.

Mabberley, D. J. 1990. *The Plant-Book: A Portable Dictionary of the Higher Plants.* New York: Cambridge University Press.

Martin, Gary. 1995. *Ethnobotany: A Methods Manual.* New York: Chapman & Hall.

Merculieff, Ilarion (Larry). 1994. Western Society's Linear Systems and Aboriginal Cultures: The Need for Two-Way Exchanges for the Sake of Survival. In Burch and Ellanna, eds., 1994, pp. 405-15.

Merriam, Clinton Hart. 1904. *Field Check Lists, Pacific Coast Region: Wah-shoo, 1903, 1904, 1935.* U. S. Department of Agriculture Biological Survey. Washington: Government Printing Office. Unpublished manuscript in Department of Anthropology, University of California, Berkeley. Copy in Collected Papers of Warren L. d'Azevedo, Special Collections, Getchell Library, University of Nevada, Reno.

———. 1923. *Vocabularies of North American Indians, Wahshoo.* Unpublished manuscript in Department of Anthropology, University of California, Berkeley. Copy in Collected Papers of Warren L. d'Azevedo, Special Collections, Getchell Library, University of Nevada, Reno.

———. 1979. *Indian Names for Plants and Animals Among Californian and Other Western North American Tribes.* Assembled and Annotated by Robert F. Heizer. Ballena Press Publications in Archaeology, Ethnology and History No. 14. Ballena Press, Socorro, New Mexico.

Montgomery, George E. 1965. *Field Notes and Report on Washoe Health and Disease.* National Science Foundation Graduate Field Training Project, June 7 to September 7, 1965. University of Nevada Ethnographic Archives, Special Collections, Getchell Library, University of Nevada, Reno.

Mozingo, Hugh N. 1987. *Shrubs of the Great Basin: A Natural History.* Max C. Fleischmann Series in Great Basin Natural History. Reno: University of Nevada Press.

Munz, Philip A. 1959. *A California Flora.* Berkeley: University of California Press.

Murphey, Edith Van Allen. 1959. *Indian Uses of Native Plants.* Palm Desert, California: Desert Printers.

Nagel, Joane. 1996. *American Indian Ethnic Renewal: Red Power and the Resurgence of Identity and Culture.* New York: Oxford University Press.

Nevers, Jo Ann. 1976. *Wa She Shu: A Washo Tribal History.* Reno: Inter-Tribal Council of Nevada.

Online conversion chart. www.onlineconversion.com/length_common.htm. Accessed August 2003.

Price, John A. 1963. Some Aspects of Washo Life Cycle. In d'Azevedo, ed., 1963, pp. 96-114.

——. 1980. *The Washo Indians: History, Life Cycle, Religion, Technology, Economy and Modern Life.* Nevada State Museum Occasional Papers No. 4. Carson City, Nevada.

Reed, Flo and Byron F. Stetler. 1962. *Uses of Native Plants by Nevada Indians.* Illustrated by Ella Hanks. Carson City, Nevada: Nevada State Department of Education.

Riddell, Francis A. 1960. *Honey Lake Paiute Ethnography.* Nevada State Museum Anthropological Papers No. 4. Carson City, Nevada.

Roosens, Eugene E. 1989. *Creating Ethnicity: The Process of Ethnogenesis.* Frontiers of Anthropology. Newbury Park, California: Sage Publications.

Rucks, Meredith M. 1995. *The Social Context and Cultural Meaning of Ground Stone Milling among Washoe Women.* Master's thesis. Department of Anthropology, University of Nevada, Reno.

——. 2001. Ethnographic Element. In *Summer in the Sierras: 6,000 Years of Occupation of Bagley Valley*, pp. 6.1-6.34. Summit Envirosolutions, Inc., Carson City, Nevada.

Rundel, Phillip W., David J. Parsons, and Donald T. Gordon. 1977. Montane and Subalpine Vegetation of the Sierra Nevada and Cascade Ranges. In Barbour and Major, eds., 1977, pp.559-600.

Schrire, Carmel. 1984. *Past and Present in Hunter-Gatherer Studies.* Orlando, Florida: Academic Press.

Schubert, Juanita. 1957a. Letter to Jacobsen. In possession of William H. Jacobsen, Jr.

——. 1957b. Botanical Identification of Plants Used by Washo Indians. Unpublished manuscript in possession of William H. Jacobsen, Jr.

Scott, Edward B. 1957. *The Saga of Lake Tahoe: A Complete Documentation of Lake Tahoe's Development over the Last One Hundred Years.* Sierra-Tahoe Publishing, Crystal Bay, Lake Tahoe, Nevada.

Siskin, Edgar. 1937. [*Field Notes on the Washo*]. Special Collections, Getchell Library, University of Nevada, Reno.

——. 1938. Washo Territory. *American Anthropologist* 40(4):626-7.

——. 1941. The Impact of the Peyote Cult Upon Shamanism Among the Washo Indians. Ph.D. Dissertation in Anthropology, Yale University, New Haven, Connecticut.

——. 1983. *Washo Shamans and Peyotists: Religious Conflict in an American Indian Tribe.* Salt Lake City: University of Utah Press.

Smith, Genny. 2000. Introduction. In Smith, ed., 2000.

——, ed. 2000. *Sierra East: Edge of the Great Basin.* California Natural History Guides, 60. Berkeley: University of California Press.

Sollors, Werner. 1986. *Beyond Ethnicity: Consent and Descent in American Culture.* New York: Oxford University Press.

Spicer, Edward H. 1975. *The Yaquis: A Persistent Identity System.* Unpublished paper presented at the American Anthropological Association Meeting, November. Cited in Spicer 1988.

——. 1988. *People of Pascua,* edited by Kathleen M. Sands and Rosamond B. Spicer. Tucson: University of Arizona Press. This volume was published posthumously.

Stewart, Omer C. 1941. Cultural Element Distributions, XIV: Northern Paiute. *University of California Anthropological Records* 4(3):361-446. Berkeley.

——. 1944. Washo-Northern Paiute Peyotism: A Study in Acculturation. *University of California Publications in American Archaeology and Ethnology* 40(3):63-136.

Storer, Tracy I., and Robert L. Usinger. 1963. *Sierra Nevada Natural History.* Berkeley: University of California Press.

Strong, Pauline Turner, and Barrik Van Winkle. 1996. "Indian Blood": Reflections on the Reckoning and Refiguring of Native North American Identity. *Cultural Anthropology* 11(4):547-76.

Taylor, Ronald J. 1992. *Sagebrush Country: A Wildflower Sanctuary.* Missoula, Montana: Mountain Press Publishing.

Thompson, Thomas H., and Albert A. West. 1881. *History of Nevada.* Oakland, California: Thompson-West.

Tilford, Gregory L. 1997. *Edible and Medicinal Plants of the West.* Missoula, Montana: Mountain Press Publishing Co.

Train, Percy, James R. Henrichs, and W. Andrew Archer. 1941. Medicinal Uses of Plants by Indian Tribes of Nevada. *Contributions Toward a Flora of Nevada 45.* A series prepared through the cooperation of the National Arboretum and the Plant Introduction Section of the Crops Research Division under the Agriculture Research Service of the U.S. Department of Agriculture, Plant Industry Station, Beltsville, Maryland.

USDA, NRCS. 2002. The PLANTS Database, Version 3.5 (http://plants.usda.gov). National Plant Data Center, Baton Rouge, LA 70874-4490 USA.

Van Winkle, Barrik. 1977. *Lexical Retention Among English-Speaking Washo.* Unpublished Master's Professional Paper, Department of Anthropology, University of Nevada, Reno.

Vasek, Frank C., and Robert F. Thorne. 1977. Transmontane Coniferous Vegetation. In Barbour and Major, eds., 1977, pp. 797-834.

Wall, C. Leon. 1952. History of Indian Education in Nevada from 1861 to 1951. Master's thesis, Department of Education, University of Nevada, Reno.

Washoe Tribe Resource Policy Program. 2002-2003. Interviews.

Weber, Steven A. 1986. The Development of a Society: An Introduction to the Special Issue. *Journal of Ethnobiology* 6(1):iii-vi.

Williams, Nancy M., and Eugene S. Hunn. 1992. *Resource Managers: North American and Australian Hunter-Gatherers.* AAAS Selected Symposium No. 67. Boulder, Colorado: Westview Press.

Wilmsen, Edwin. 1983. The Ecology of Illusion: Anthropological Foraging in the Kalahari. *Reviews in Anthropology* 10(1):9-20.

Woodburn, James. 1982. Egalitarian Societies. *Man* 17:431-51.

Young, James A., Raymond A. Evans, and Jack Major. 1977. Sagebrush Steppe. In Barbour and Major, eds., 1977, pp. 763-98.

Table 1. Washoe Plant Resources

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
1	badópoʔ	Med	*Veratrum californicum*, Merriam 1904, Murphey 1959; *Veratrum californicum*, Train *et al.*, 1941, Schubert 1957b	False hellebore, corn lily, skunk cabbage	pot-o-po, pot-ŭp-po, Merriam 1904; bado'po, Barrett 1916; badɔpɔʔ, Siskin 1937; bah-do-po, Train *et al.* 1941; baduppa, Murphey 1959	Barrett 1916, Siskin 1937, Train *et al.* 1941, K. d'Azevedo 1955, Jacobsen n.d.a., Murphey 1959, Mont-gomery 1965, Price 1980, Garey-Sage f.n.
2	bá·duʔ	Food/ MC	*Vaccinium*, Merriam 1904; *Sambucus glauca*, *S. velutina*, Schubert 1957b	Huckleberry, elderberry	bah'doo' , Merriam 1904; badu, Dangberg in Jacobsen n.d.c.; doo-bah'-do, Merriam 1923	Hudson 1902, Dangberg n.d., [18] 1927, 1968; Jacobsen n.d.a., n.d.c. ,[19] K. d'Azevedo 1955, Price 1963, 1980;

---

[18] Dangberg's field notes from 1918-1922 are typed into manuscript form by John A. Price; the references are to this manuscript, which has no date noted (n.d.).

[19] Information cited Jacobsen n.d.c. is taken from a list compiled by William H. Jacobsen, Jr., in which Dangberg's recording of plant names and botanical identification from her field notes are listed and compared with Jacobsen's transcriptions.

347

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
						Freed and Freed 1963a, Nevers 1976, W. d'Azevedo 1986b, Garey-Sage f.n.
3	bá·le?, bá·la?, ba·li?	Food		Barley or native plant, sweet root		K. d'Azevedo 1955, Jacobsen n.d.a., W. d'-Azevedo 1956
4	balŋáčaŋ	MC/ Med	Purshia (*Kunzia*), Merriam 1904; *Purshia tridentata*, Dangberg in Jacobsen n.d.c., Train *et al.* 1941, Schubert 1957b	Antelope brush, bitter brush, buck brush	Pal-nah'-tsung, pal-nah'-tsa, Merriam 1904; bangatsang, Dangberg in Jacobsen n.d.c., bal-nat-san, Train *et al.* 1941	Hudson 1902, Merriam 1923, Train *et al.* 1941, Jacobsen n.d.b., n.d.c., n.d.d., f.n., W. d'Azevedo 1956, Murphey 1959, Montgomery 1965, Price 1980, Garey-Sage f.n.
P1	bámči See hímu, simťá·gɨm, and ťá·gɨm	Food		Sugar, here referring to commercial; see other entries for plant sugars	bahm'se, white man's sugar, Merriam 1923	Merriam 1923, Stewart 1941, K. d'Azevedo 1955, Jacobsen n.d.a., Van Winkle 1977 , Garey-Sage f.n.

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
5	báŋkuš, wá·šiw báŋkuš	Med	*Nicotiana attenuata*, Stewart 1941; *Nicotiana attenuata*, *N. bigelovii*, Schubert 1957b	Wild tobacco, Merriam 1904; native tobacco, Barrett 1916; Indian or Coyote tobacco, Schubert 1957b	bahng'-kus, Merriam 1904; bankus or pankus, Barrett 1916; bankush, Price 1980	Dangberg n.d., 1927, 1968; Siskin 1937, Stewart 1941; Jacobsen n.d.a., Downs 1961, 1963b, 1966a; Handelman 1967, Nevers 1976, Price 1980, W. d'Azevedo 1986b, Garey-Sage f.n.
6	bá·ťut	MC		willow species		Jacobsen n.d.b.
7	báʔlew čigú·guš	Med		Root from California		Jacobsen n.d.a.
8	beʒiyé·ʒiŋ ťétgiʔ	Med			bEziEzInthEʔkhi, Freed 1966	Freed 1966
9	bó·či	Grass		Large grass species, Jacobsen n.d.b.; grass, clover, Merriam 1904	Bo-o-tse, grass, baw-tse', clover, Merriam 1904	Jacobsen n.d.b.

349

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
10	bó·p̓o?	Food/ MC	*Chrysothamnus occidentalis*, Merriam 1904; *C. viscidiflorus*, Schubert 1957b; *C. nauseousus*, Stewart 1941, Murphey 1959	Rabbitbrush, Merriam 1904; sticky-leaf rabbitbrush, Schubert 1957b; Goldenrod, grease brush, Jacobsen n.d.a.; gray rabbit brush, Murphey 1959	paw'-paw; baw buh, Merriam 1904; bobo, Dangberg in Jacobsen n.d.c., baw-buh, Murphey 1959	Merriam 1904, Stewart 1941, Jacobsen n.d.a., n.d.c., n.d.d., f.n., W. d'Azevedo1956, Murphey 1959, Riddell 1960, Reed and Stetler 1962, Downs 1966a, Nevers 1976, Dangberg 1927, 1968, Garey-Sage f.n.
11	bóšdi?	Food/ Med	*Cellium* sp., Dangberg in Jacobsen n.d.c.[20] *Allium campanulatem*, Rucks 2001	Wild onion	Bosti, Dangberg in Jacobsen n.d.c.; bostick, Murphey 1959	K. d'Azevdo 1955, Jacobsen n.d.a, n.d.c., Downs 1966a[21], W. d'Azevedo, forthcoming, Garey-Sage f.n.
12	[budá·ši]	Other		Lupine	Budaci, Dangberg in Jacobsen n.d.c.	

[20] Schubert 1957b corrects this to *Allium*.
[21] Downs 1966a lists wild onions generically, which could refer to any one of the several species of onions.

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
13	buwí·či	Other				Jacobsen n.d.b.
14	búyeʔ	Food	*Allium platycaule*, Rucks 2001	Wild onion, wild garlic, Jacobsen 1958; like garlic, K. d'Azevedo 1955		K. d'Azevedo 1955, Jacobsen n.d.a., n.d.d., n.d.j., Garey-Sage f.n.
15		Food	*Camassia*	Camas, suggested by Stewart 1941		Stewart 1941, Camp 1960, d'Azevedo 1986b,
16	čáhaʔ	Food	*Cellium anceps*, Dangberg in Jacobsen n.d.c.; *Allium anceps*, Schubert 1957b	Wild garlic	Tsaha, Dangberg in Jacobsen n.d.c.	Dangberg n.d., Jacobsen n.d.a., n.d.c.
17	čámduʔ	Food/ MC	*Cerasus demissa*, Merriam 1904; *Prunus emocginota* [sic; *emarginata*], Dangberg in Jacobsen n.d.c.; *Prunus demissa*, Schubert 1957b; *Prunus* spp., Murphey 1959	Western chokecherry	tsa^{h}m-du, sam-to, Merriam 1904; tsamdu, Dangberg in Jacobsen n.d. c.; tsamchit, Murphey 1959	Dangberg n.d.a., K. d'Azevedo 1955, Jacobsen n.d.a., n.d.c., Downs 1966a, W. d'Azevedo 1986b, Garey-Sage f.n.
18	čawásiʔ or sawasiʔ	Food	*Basamorrhiza incana*, Dangberg n.d.	Balsam root	Tsawasii, Dangberg in Jacobsen n.d.c	

351

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
19	čé·gelhu	Food	*Cellium parvum*, Dangberg in Jacobsen n.d.c.; *Allium tribracteatum* var. *parvum*, Schubert 1957b	Wild onion	Tsegalhu, Dangberg in Jacobsen n.d.c.	K. d'Azevedo 1955, Jacobsen n.d.a., n.d.c., Garey-sage f.n.
20	čigí·debiʔ or čigíʔdebiʔ	Food	*Sium cicutaefolium*, Schubert 1957b	Water parsnip		Hudson 1902, Jacobsen n.d.a.
21	čilé·bɨlhu	Med		Small wild onions		Jacobsen n.d.a.
22	čipápa	MC	*Prunus andersonii*, Merriam 1904, Schubert 1957b; *Ceanothus cordulatas*, Merriam 1904; *P. virginiana* var. *demissa*, Train *et al.* 1941	Paiute peach, desert peach; snow brush; chokecherry	Che-pa^{h}w'-pah, tse-paw'-paw', Merriam 1904; tsā-pop-pah, tsee-pah'-pah, Merriam 1904; si-pa-pa, Train *et al.* 1941	Train *et al.* 1941, Jacobsen n.d.a., Garey-Sage f.n.
23	čišó·liʔ	Food	*Agoseris heterophylla (?)*, Dangberg in Jacobsen n.d.c.; *Montia perfoliata* var. *depressa*, Schubert 1957b	Goat chicory, Dangberg in Jacobsen n.d.c.; Wild lettuce, miner's lettuce, Indian lettuce	Tsicoli, Dangberg in Jacobsen n.d.c.	K. d'Azevedo 1955, Jacobsen n.d.a.,Downs 1966a,W. d'Az-evedo 1986b

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
24	čóʔyaʔ	Food/ MC	*Scirpus lacustris*, Merriam 1904; *S. americanus*, Stewart 1941; *S. acutus*, Schubert 1957b	tule	Saw'-a-yah, or too-yu, Merriam 1904; soya, Dangberg in Jacobsen n.d.c.	Hudson 1902, Stewart 1941, K. d'Azevedo 1955, Jacobsen n.d.a., n.d.c., n.d.d., n.d.k.,Downs 1966a, Dangberg 1968, W. d'Azevedo 1956, 1968b, Garey-Sage f.n.
25	dá·bal	Med/ MC/ Food	*Artemisia tridentata*, Merriam 1904, Train *et al.* 1941, Schubert 1957b, Murphey 1959	sagebrush	Dahl-bal, tah'-bal, tah'-bul, Merriam 1904; da-bel, tah-bul, Train *et al.* 1941; dabel, Murphey 1959; dabal, Price 1980	Hudson 1902, Dangberg n.d., 1927, 1968; Merriam 1923, Train *et al.* 1941, Jacobsen n.d.a., Freed and Freed 1963a, Price 1963, 1980; Powers in Fowler and Fowler 1971, Nevers 1976, W. d'Azevedo 1986b, Garey-Sage f.n.
26	dabólboliʔ or daʔilbolboliʔ	Med			talbolboli, Barrett 1916; dailbɔlbɔli'	Barrett 1916, Siskin 1937, Jacobsen

353

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
					ťéťgiʔ, Siskin 1937; daʔilbólboli, daʔilbolboli ťétǩi [ťétgiʔ], Montgomery 1965	n.d.b., Montgomery 1965, Garey-Sage f.n.
27	dáhal	Food	*Mentzelia albicaulis,* Stewart 1941; *M. congesta*, Schubert 1957b	Stink[?]weed, Barrett 1916; blazing star, Stewart 1941; sand seed, Jacobsen n.d.a.; pigweed seed, Freed 1966	dah'hl, dah-ha^{h}l, Merriam 1904; tahal, Barrett 1916	Merriam 1904, Dangberg 1927, 1968; Siskin 1937, Stewart 1941, K. d'Azevedo 1955, Jacobsen n.d.a., Downs 1963b, Freed 1966, Nevers 1976, Garey-Sage f.n.
28	dakŊásaŋ	MC		Yew tree, hickory, spruce		Hudson 1902, Jacobsen n.d.b., Murphey 1959

354

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
29	damok̓ó·k̓o or demuk̓ó·k̓oyiʔ	Med	*Smilacina stellata*, Train *et al.* 1941, Montgomery 1965	Plant with joints in stalk; looks like false Solomon's Seal, Siskin 1937	tamugokoya, Barrett 1916; damuk̓ɔ́k̓ɔyiʔ, Siskin 1937, dama-go-go-yes; she-gimba, Train *et al.* 1941; damukólkolyi, Montgomery 1965; damukOkoi, Freed 1966	Barrett 1916, Siskin 1937, Train *et al.* 1941, Jacobsen n.da., n.d.b., Mont-gomery 1965, Freed 1966, Garey-Sage f.n.
30	dáp̓ap	Other		Poison oak		Jacobsen n.d.b.
31	dáwal	Food	*Shepherdia argentea*, Schubert 1957b	Buckberry, buffalo berry		Hudson 1902, Jacobsen n.d.a., Downs 1966a, Nevers 1976, W. d'Azevedo 1986b, Garey-Sage f.n.
	[dáwal dáʔmaʔ]			Buck brush plant thorn	dauwatl dama, Price 1980	
32	dawʔigálpušewʔ or dawgálpušeweʔ	Med		Medicinal plant	dawgálpušewi, Montgomery 1965	Jacobsen n.d.a., d'Azevedo f.n., Montgomery 1965
33	debíʔleʔ or deʔebíʔleʔ	Food		leafy plant or cooked and		Jacobsen n.d.a.

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
				dried bú·yeʔ or meat		
34	dečímeli (also nó·wi)	Med			datsimali or nowi, Barrett 1916; nɔwi or dɛcímɛli, Siskin 1937; dečímeli, Montgomery 1965	Barrett 1916, Siskin 1937, Jacobsen n.d.a., K. d'Azevedo 1955, Montgomery 1965, Garey-Sage f.n.
35	[degúlek] (also dewbímiš ʔitbašáʔ)	MC	*Cercus occidentalis*, Merriam 1904	redbud	tah-goo'-lek, tag-goo-let, tag-goo-lek, Merriam 1904, dobimus takpasa, itpasa, Barrett 1916	Hudson 1902, Barrett 1916, Jacobsen n.d.b., Garey-Sage f.n.
36	dé·guš	Food	*Perideridia bolanderi*, Rucks 2001	wild sweet potato	deguc, Barrett 1916	Barrett 1916, Stewart 1941, K. d'Azevedo 1955, Jacobsen n.d.a., Downs 1966a, Nevers 1976, Jack 1978, d'Azevedo 1986b, Rucks 2001, Garey-Sage f.n.

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
37	délem dam?lá·k̇ɨm or delem dam?lá·k̇ɨmi?	Food	*Lupinus* spp. Merriam 1904, Murphey 1959	Herb lupine, silver lupine, flower species	tel-lem-tum-lah-kum, tel-lem-tum-lah-komme, Merriam 1904; dellem, Murphey 1959	Merriam 1904, Jacobsen n.d.b., Murphey 1959
38	delmúsmusi?	Med			delmúsmusi, Barrett 1916	Barrett 1916
39	délšɨm	Med		medicine	délšɨm	K. d'Azevedo 1955, Jacobsen f.n.
35	dewbímɨš ?itbašá?	MC	*Cercus occidentalis*, Merriam 1904	Red bud, dark red willows	Tah-goo-lek, tag-goo-let, tag-goo-lek, Merriam 1904; dobimus takpasa, itpasa, Barrett 1916	Hudson 1902, Barrett 1916, Jacobsen n.d.b., Garey-Sage f.n.
40	dewdílek (also mósaŋ)	Med	*Castillija*, red, Merriam 1904	Paint brush	Tä-o-tel-lek or mos-sung, Merriam 1904	
41	dewdí?iš or má·daš or má·daš dewdí?iš	MC	*Pinus jeffreyi*, Merriam 1904	Tree or pine tree Jeffrey pine, Merriam 1904; pine tree or ponderosa pine, Jacobsen 1958	dɛudic, Dangberg in Jacobsen n.d.c.;	Merriam 1904, Jacobsen n.d.b., n.d.c., Garey-sage, f.n.
					Mah-dahsh, mah-	

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran- scriptions, Documentation	Ethnographic Documentation
					ta^{h}sh, and mahd-das yah"-gah = cone	
42	dewhíwi daṗá·ṗɨl or dewhíwi ṗá·ṗɨl	Other	*Delphinium andersanii*, Dangerg in Jacobsen n.d.c.	Larkspur, Dangberg in Jacobsen n.d.c., Thunder flowers, Jacobsen n.d.b.	dɛuhiwi, Dangberg in Jacobsen n.d.c.	Jacobsen n.d.b., n.d.c., Garey-Sage f.n.
	dewhíwi yáyʔ	Other		Thunder leaf		Jacobsen n.d.b.
43	deybú·buyiʔ	MC	*Pinus ponderosa*, Merriam 1904	Ponderosa pine	bú-pu, pŭ-pŭ, Merriam 1904	Jacobsen n.d.b.
			Scrub pine	Bubui, Dangberg in Jacobsen n.d.c.		
44	[deʔilélegiʔ ťétgiʔ]	Food		Red berry	d¢ell¢gi d¢tki, Price 1980	
45	dí·ge, dí·geʔ	Food	*Cogswellia nevadensis*, Dangberg in Jacobsen n.d.c.	Biscuit root or cous, Dangberg in Jacobsen n.d.c., Wild root, Jacobsen n.d.a.	diigɛ, Dangberg in Jacobsen n.d.c.	Jacobsen n.d.a., n.d.c.

358

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
46	dílek ċópaliʔ, dílek ċópal	Med		Short tule		Jacobsen n.d.b.
47	dímeʔ dé·guš	Med	*Cicuta douglasii*, Schubert 1957b	Wild parsnip, western water hemlock	Dimɛdegos, Dangberg in Jacobsen n.d.c, dimɛ' dɛ́·guš, Siskin 1937	Hudson 1902, Dangberg n.d., Siskin 1937, Jacobsen n.d.a., n.d.c., Downs 1961, Freed and Freed 1963a, Price 1963, Mont-gomery 1965, Garey-Sage f.n.
48	dímeʔ ṗá·ṗɨl	Other		Small green things that float on water		Jacobsen n.d.a.
49	dímeʔ ʔitṗá·ṗɨl, dímeʔ daṗá·ṗɨl	Other		Water lilies		Jacobsen n.d.b.
50	dísem	Food	*Sueda depressa*, Jack 1978[22]	Seed plant, seepweed	de̱sem, W. d'Azevedo 1956, dihsuhm, Riddell 1960	K. d'Azevedo 1955, Jacobsen n.d.a., n.d.d., W. d'Azevedo 1956, 1986b

[22] Stewart 1941 notes that *Sueda* was not found in Washo territory.

359

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
51	díťeš ʔémlu	Med		Peppermint plant		Jacobsen n.d.a., Montgomery 1965
52	dó·čaʔ	Med	*Leptotaenia dissecta* var. *multifida*, Train *et al.* 1941, Stewart 1941, Schubert 1957b, Murphey 1959, Montgomery 1965	Indian balsam	taw'-sah, Merriam 1904; dotsa, Dangberg n.d., dɔčaʔ, Siskin 1937, dosa, doza, Train *et al.* 1941, doza, Murphey 1959	Merriam 1904, Dangberg n.d., Siskin 1937, Stewart 1941, Train *et al.* 1941, K. d'Azevedo 1955, Jacobsen n.d.a., n.d.c.,1966; Montgomery 1965, Price 1963; Price 1980; W. d'Azevedo 1986b, Garey-Sage f.n.
53	dúhul	MC	*Cercocarpus ledifolius*, Merriam 1904; *Cercocarpus*, Dangberg in Jacobsen n.d.c.	Mountain mahogany	du'-hul, tŭ-hŭl, Merriam 1904; duhul, Dangberg in Jacobsen n.d.c.	Hudson 1902, Dangberg n.d., Jacobsen n.d.b., n.d.c., Stewart 1941, Garey-Sage f.n.

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
54	dumʔbáyċɨgiʔ, dumbáyċɨgiʔ, see also 172, ʔíċigiʔ	MC	*Apocynium*, Merriam 1904; *A. cannabinum*, Stewart 1941	Wild bamboo, Indian hemp, cane	dumbácigiʔ, Siskin 1937; dumbays¢gi, Price 1980	Hudson 1902, Dangberg n.d., Siskin 1937, Stewart 1941, Jacobsen n.d.b., Price 1980, Garey-Sage f.n.
55	dú·niʔ	Med	*Brodiaea ixioides* var. *lugens*, Schubert 1957b	Golden brodiaea	Duni, tuni, Barrett 1916	Barrett 1916, Jacobsen n.d.a.
56	géwe múkuš	Other		Snow plant		Siskin 1937, Jacobsen 1958, Garey-Sage f.n.
57	géwe ʔámɨl	Med/ Food		Herb, similar to onions		Jacobsen n.d.a.
58	golsísiʔ, gusísiʔ	Food	*Brodiaea hyacinthina ?, Rucks 2001*	Wild potato	Kosisi, Dangberg in Jacobsen n.d.c.	Downs 1966a[23], K. d'Azevedo 1955, Jacobsen n.d.a., n.d.c., Garey-Sage f.n.
59	gó·ťaʔ máťaw	Other		Flower species		Jacobsen n.d.b.
60	gumbáliʔlé·we mú·ċuk or	Med		Root medicine	Gumbálli lèwɛ múcuk, Siskin 1937	Siskin 1937, K. d'Azevedo 1955,

[23] Downs 1966a lists wild potatoes, which could be one of several types listed.

361

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
	gumbáliʔ múˑċuk					Jacobsen n.d.a., Montgomery 1965, Garey-Sage f.n.
61	hamúmul daṗáˑṗiliʔ, dahamúmul daṗáˑṗil(iʔ), dawhúmómoliʔ dawṗáˑṗiliʔ	Med	*Angelica brewerii*, Train *et al.* 1941, *Sphenosciadium capitellum* var. *scabrum*, Schubert 1957b, Montgomery 1965		tahamuldubabuli, tamumulubabuli, Barrett 1916; dahumɔmɔl daṗápili, Siskin 1937; dah-hah-mo-mo dah-o-pah-phu-le, Train *et al.* 1941; dahumólmol dapápoli, Montgomery 1965	Barrett 1916, Siskin 1937, Train *et al.* 1941, Jacobsen n.d.a., Montgomery 1965, Price 1980
62	hanawɨywɨy (see 188. C. andersonii)	Other	*Carduus* spp., perhaps *C. edule*, Dangberg n.d.; C. andersonii, Hudson 1902?	thistle	Hanawiwi, Dangberg n.d. ; Hudson 1902?	
63	héliʔ	Med				Jacobsen n.d.b.
64	hímu	MC	*Salix* spp., Murphey 1959	willow	himmo, Murphey 1959; himo, Price 1980	Hudson 1902, Jacobsen 1958, Murphey 1959, Garey-Sage f.n.
			Salix nigra, Merriam 1904	willow	him-mo', Merriam 1904	

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
			Salix geyeriana, Merriam 1904	willow	him-moo, Merriam 1904	
65	badósaŋiʔ	MC/ Med	*Cornus pubescens*, Merriam 1904; *Cornus stolonifera*, Murphey 1959	Dogwood; naturally reddish willow species	Pŏt-to-sang-e, pŏt-o-sang-eh, Merriam 1904; badosanich, Murphey 1959	Jacobsen n.d.b., Murphey 1959, Garey-Sage f.n.
66	hímu dadóšoŋiʔ or badóšoŋeweʔ, badóšoŋ	MC		Willow sunburn	himu totoconi, Barrett 1916, also called podoconewe, potoson	Barrett 1916, Garey-Sage f.n.
67	daṗóyṗoy hímu	MC		White willow	dayṗóṗoy hímu, Garey-Sage f.n.	
68	hímu máyaw (see also mušé·gew ʔemlu)	MC		Willow with black berries		Jacobsen n.d.b.
			Cerasus emarginata, or *Sorbus* spp., Merriam 1904	Bird cherry or mountain ash	Him-mo-mi-ah, him-o-ma-ko, Merriam 1904 or moo-sag-oo-em-lu [mušegew ʔemlu])	Merriam 1904
69	ṗušálaʔ ʔithímu	MC		Pussy willow, gray willow	ṗušálaʔ hímu, Garey-Sage f.n.	Jacobsen n.d.b., Garey-Sage f.n.

363

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
			Salix nuttali, Merriam 1904		soo-ma-le, po-sal-lah-tim'-mo, soo-ma-lik, Merriam 1904	
70	šuʔmé·liʔ hímu or šuʔmé·liʔ guwedíʔiš	MC		Mountain willow, grayish willow		Jacobsen n.d.b.
				Snowshoes or manzanita brush	shumelli, Price 1980	
				mountain willow	daláʔak hímu, literally “mountain willow”, Garey-Sage f.n.	Garey-Sage f.n.
				trash willow, mountain willow	delgógomiʔ, Garey-Sage f.n.	Garey-Sage f.n.
				junk willow	delčálčaliʔ, Garey-Sage f.n.	Garey-Sage f.n.
			Salix lasiolepsis, Merriam 1904		Soo-mah'-le, wit-te-soo-mah-le Merriam 1904	
			Salix hindsiana, Merriam 1904		him-moo, soo-ma-leh Merriam 1904	

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
P2	bámči-?	Food		Sugar from willow		Stewart 1941
	dá·bak, dá·bak dadósaŋ	Man--ufactured	*Salix* strands for baskets = string or twine	White willow thead	tah-buk, dah-buk, Merriam 1904; with red bark, tah-buk tah-do-sing, Merriam 1904; dá·bak, Garey-Sage f.n.	
	mímuʔ	Manufactured		Red willows	mem'-moo, me-moo, Merriam 1904; mimu, Barrett 1916	Merriam 1904, Barrett 1916
				Rods for baskets from gray willow	mímu, Garey-Sage f.n.	Garey-Sage f.n.
	belesúsuyéweʔ	Manufactured		Coiled bundle of willow rods used as a basketry foundation material in both coiling and twining	pelesusuyewe Barrett 1916	Barrett 1916
	ʔá·gayéweʔ	Manufactured		Bundle of trimmed willow stems used as a	Agaiyewe, Barrett 1916; agayewe, Dangberg 1927	Barrett 1916, Dangbrg 1927

365

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
				basketry material; prepared basket thread, Dangberg 1927		
71	hóšp̓iʔ	Grass		Grass, any; hay	ōs'-pe, aws-pe, Merriam 1904	Jacobsen n.d.b.
72	kogidésmiʔ, gogidésmiʔ	Med	*Zygadenus*, Danberg n.d.; *Zygadenus paniculatus*, Train *et al.* 1941, Murphey 1959; *Z. venenosus*, Schubert 1957b	Death camas	Ko-ke-des-ne, Merriam 1904; gogiidesmii, Dangberg in Jacobsen n.d.c.; koh-gah-des-ma, Train *et al.* 1941; kogidesme, Murphey 1959	Merriam 1904, Train *et al.* 1941, Jacobsen n.d.a., Murphey 1959, Garey-Sage f.n.
73	kókšiʔ	Food	*Brodiaea spp.*, *Calochortus spp.*, Merriam 1904; *Calochortus*, Dangberg in Jacobsen n.d.c.; *C. nuttallii*, Schubert 1957b, Murphey 1959	Sego lily, mariposa lily	Kawk-se (*Brodiaea*, 5 pod), kōk'-se (*Calochortus*), Merriam 1904; koksi, Dangberg in Jacobsen n.d.c. ; kokse, Murphey 1959	K. d'Azevedo 1955, Jacobsen n.d.a., Murphey 1959, Garey-Sage f.n.
74	k̓awáʔyaʔ	MC/ food	*Arctostaphylos patula*, *Ceanothus velutinus*,	Manzanita, buck brush	Kah-wi'-ah del-sah'-sa^{h}ŋ, kah-wi-ah,	Merriam 1904, Jacobsen n.d.b.,

366

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
			Merriam 1904		Merriam 1904; kah-wah'-yeh, Merriam 1923	Cook 1941, Nevers 1976, W. d'Azevedo 1986b, Garey-Sage f.n.
75	ǩilá·čim	Food		Kind of berry	K!ilat̓sim, Freed 1966	Freed 1966
76	ǩómho	Med	*Heracleum lanatum*, Train *et al.* 1941, Schubert 1957b, Montgomery 1965	Weed, Dangberg in Jacobsen n.d.c.; Cow parsnip; Indian rhubarb, Murphey 1959	g'omho, Dangberg in Jacobsen n.d.c,; komhɔ, Siskin 1937; Comb-ho, Train *et al.* 1941; k' mhoyawaúlyala, Lowie 1963	Dangerg 1927, Siskin 1937, Train *et al.* 1941, Jacobsen n.d.b., Montgomery 1965; Price 1980
77	lagamda	Food	*Fritillaria atropurpurea*, Dangberg in Jacobsen n.d.c.		Lagamda, Dangberg in Jacobsen n.d.c.	
78	lókgo yáyʔ	Med	*Umbellularia californica?*	California bay or pepperwood tree; "bay leaves," Siskin 1937; medicinal plant	Loǩɔʔyaʔ, Siskin 1937	Siskin 1937, Jacobsen n.d.a.
79	mačáʔyaʔ	Other		moss		Jacobsen n.d.b.

367

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
80	mac̓ilólo, mec̓ilólo	Food		Mushrooms; kind of grass seed, Freed 1966	Mah-tse-lo'-lo, Merriam 1923, motsilolo, Dangberg in Jacobsen n.d.c., matsilolo, Freed 1966	K. d'Azevedo 1955, Jacobsen n.d.a., Freed 1966, W. d'Azevedo f.n., Garey-Sage f.n.
81	ťá·gɨm mac̓ilólo	Food		Pine nut mushrooms		K. d'Azevedo 1955
82	ťáša? mac̓ilólo	Food		Cottonwood mushrooms		K. d'Azevedo 1955
83	madadáyaw	Other		berries	madadáyaw	K. d'Azevedo 1955
84	madukpápa, medukpápa	Food		Plant with seeds		Jacobsen n.d.b.
85	madukwáwLu, medukwáwLu	Food	*Helianthus annus*, Merriam 1904, Schubert 1957b	Wild or common sunflower	Mo-do-kwah-loo, tow-pop'p'l [dawp̓á·p̓ɨl], Merriam 1904	Stewart 1941, K. d'Azevedo 1955, Downs 1966a, Jacobsen n.d.a.
86	magólolo?, maŋólolo?	Food	*Prunus subcordata*, Schubert 1957b	Sierra plum, wild plum		Jacobsen n.d.a.
87	mahá·k̓u	Food		sunflower		Jacobsen n.d.b.

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
88	mahaťálal, mahiłťálal	Food/ MC/ Med	*Typha latifolia,* Merriam 1904, Train *et al.* 1941, Schubert 1957b, Murphey 1959	rat-tail tules, cat-tail tules, cat-tails	Mah-hălt-ăl'-lol-le, mah'-haht-al'-lol-le, mah-tahl'-al-le, Merriam 1904; mahalt'alal, Dangberg in Jacobsen n.d.c.; mah-ha-tahl-lahl, Train *et al.* 1941; toiba (*sic*), Murphey 1959	Hudson 1902, Downs 1966a, Train *et al.* 1941, Jacobsen n.d.a., Murphey 1959, Garey-Sage f.n.
89	mahá·waʔ, ʔitmahá·waʔ	Food/ Med/ MC	*Libocedrus decurrens,* Merriam 1904, Schubert 1957b	Incense cedar	ik-mah-how'-wah, pahl'-dă-si-yăh (see ṗá·l), Merriam 1904	Hudson 1902, Merriam 1904, W. d'Azevedo f,n,, Jacobsen n.d.b., Murphey 1959, Montgomery 1965, Garey-Sage f.n.
90	mah-ma^{h}m'-ke	MC	*Asclepias*	Broadleaf milkweed	Mah-ma^{h}m'-ke, Merriam 1904; String of milkweed = membilewe, Barrett 1916	Hudson 1902, Merriam 1904, Barrett 1916, Dangberg n.d., Garey-Sage f.n.

369

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
91	máliŋ	Food	*Quercus kelloggii* (formerly *Q. californica)*, Merriam 1904, *Q.* spp., Schubert 1957b	Black oak, acorns	mah'-ling, mah-lung, Merriam 1904; malung, Dangberg n.d.; malung, Price 1980	Hudson 1902, Merriam 1904, Barrett 1916, Stewart 1941, K. d'Azevedo 1955, Jacobsen n.d.a., n.d.d., , W. d'Azevedo 1956, 1986b, Garey-Sage f.n.
92	malŋá·ċi	Food	*Quercus vaccinigolia*, Merriam 1904	Mountain chapparal oak, Merriam 1904; mountain black oak, Jacobsen n.d.b.; white oak acorns, Freed 1966	Mal-ang-ot-tse, mel'ng-ah-tse, Merriam 1904; malŋatsi, Freed 1966	Jacobsen n.d.b., Freed 1966
93	ma-mee-se or ma-moo-se	Med	*Artemesia ludoviciana*, Merriam 1904	Sage herb	Mă-mee'-se or mă-moo'-se (?); also ta^{h}ng-al-e'-sik, Merriam 1904	Merriam 1904
94	maw?gák̓it, maw?gák̓idi?	Other		Plant that stings (nettles?)		Jacobsen n.d.b.
95	may?lólo			watermoss		Jacobsen n.d.b.

370

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
		Med		algae		Garey-Sage f.n.
96	máʔal	Food		Wild plant with potatoes size of marbles	Dangberg 1927, maal (cat-tails)	Dangberg 1927, Jacobsen n.d.a.
97	maʔálaŋiʔ	Food	*Rubus parviflorus, Fragaria virginiana,* Merriam 1904, *F. virginiana* var. *platypetala, F/ californica,* Schubert 1957b	Thimbleberry, strawberries, raspberries	Mah-ah'-lang-e, ma-ah'-la^{h}ng, Merriam 1904; ma-ah'-lang et'-took, Merriam 1904	Jacobsen n.d.a., Downs 1966a, Nevers 1976, W. d'Azevedo 1986b, , Garey-Sage f.n.
98	máʔkiʔ ʔíyek	Food/ MC	*Grossularia velutina,* Dangberg in Jacobsen n.d.c., *Ribes velutinum,* Schubert 1957b	Wild gooseberry	Makiiɛk, Dangberg in Jacobsen n.d.c.	Downs 1966a[24], Jacobsen n.d.b., Garey-Sage f.n.
99	maʔsáǩa/masáǩa	Food		Plant with small edible roots	maʔsakha, Freed 1966	K. d'Azevedo 1955, Jacobsen n.d.a., Freed 1966

[24] Downs 1966a lists gooseberries, which could be one of several species.

371

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
100	mé·gel	Med	*Ephedra viridis,* Merriam 1904, *E. nevadensis,* Dangberg in Jacobsen n.d.c., Schubert 1957b	Mormon tea, Indian tea	mah'-a-gel', ma-a-ga-, ma'-gel, Merriam 1904; megar or megel, Barrett 1916; maegɛl, Dangberg in Jacobsen n.d.c.; mɛ·gɛl, Siskin 1937; mag-gel or mah-gah, Train *et al.* 1941	Barrett 1916, Siskin 1937, Train et *al.* 1941, K. d'Azevedo 1955, Jacobsen n.d.a., Garey-Sage f.n.
101	memí·dewiʔ	Food	*Chenopodium album,* Hudson 1902, Merriam 1904	Pigweed, lamb's quarters, ragweed	Mam-me-tä-we, Merriam 1904	Hudson 1902, Merriam 1904
				roots	memídewiʔ, W. d'Azevedo f.n.	W. d'Azevedo f.n.
102	memiɨpɨliʔ	Grass		Bronco grass, tickle grass	Memupuli, Dangberg in Jacobsen n.d.c.	Jacobsen n.d.b.

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
103	mešewé·geši?	MC	*Pteridium aquilinum*, Merriam 1904	Bracken fern	Mes-sah-wag'-ah-se, Merriam 1904; mecowegaci or mecewegasi, Barrett 1916	Hudson 1902, Merriam 1904, Barrett 1916, Jacobsen n.d.b., Garey-Sage f.n.
104	mípi? [25]	MC	*Equicetum arvense*, Murphey 1959	Horsetail, joint grass	mep, Murphey 1959	Hudson 1902, Murphey 1959
105	mó·dop[26]	Food	*Rumex crispus*, Murphey 1959	dock	Modup, Murphey 1959	Hudson 1902, Murphey 1959
40	mósaŋ (also dewdílek)	Med	*Castillija*, red, and *Gillia aggregata*, Merriam 1904		Mos-sung, also ta-o-tel-lek, Merriam 1904	Merriam 1904
106	mú·čuk ʔá·daš	Med	*Apium* spp., Murphey 1959	Root plant, Jacobsen 1958; wild celery, Murphey 1959	Mo-zook addas, Murphey 1959	Jacobsen n.d.b., Murphey 1959, Garey-Sage f.n.
107	mugáwLu	Med		Root plant	Mugaulu, Dangberg in Jacobsen n.d.d.	Dangberg n.d., Jacobsen n.d.b.; Freed and Freed 1963b, Freed 1966

[25] Jacobsen (1995a) does not list mipi? as a term for horse-tail, but he provides this tentative transcription for the Native Garden project.
[26] Jacobsen (1995a) does not list mó·dop as a term, but he provides the tentative transcription for the Native Garden Project.

373

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
108	mušé·gew mó·baʔ	Other		Small plant		Jacobsen n.d.b.
109	mušé·gew ʔémlu	Other	*Sorbus* spp., Merriam 1904	Mountain ash, Merriam 1904; black berries on hímu máyaw; Jacobsen n.d.b.	Moo-shā'-goo, moo-sag-oo-em'-loo, also him'-moo mi'-ya, Merriam 1904	Jacobsen n.d.b., Garey-Sage f.n.
110	ná·bu	Food	*Opuntia*, Merriam 1904, Dangberg n.d.	Small pad cactus, prickley pear	nah'boo, Merriam 1904; nabu, Dangberg in Jacobsen n.d.c.	Stewart 1941, Jacobsen n.d.b.,
111	nanhólwa	Food	*Ribes aureum*, Schubert 1957b, *Ribes petiolare*, Murphey 1959	Golden currant, Black currant	Nan-hol-wa, Murphey 1959	Jacobsen n.d.a., Murphey 1959, Garey-Sage f.n.
P3	nanómba, nonómba	Med	*Pinus lambertiana*, Schubert 1957b	Sugar pine	Nanɔmba, Siskin 1937; nanomba, Price 1980	Siskin 1937, Jacobsen n.d.a., K. d'Azevedo 1955, Montgomery 1965, Garey-Sage f.n.
34	nó·wi (also dečímeli?)	Med		Indian herb growing in California; also the name of grub worm	nɔwi, Siskin 1937	Siskin 1937, K. d'Azevedo 1955, Jacobsen 1958, Garey-Sage f.n.

374

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
112	pah-do-lo-yi	Med	*Mentha canadensis*, Train *et al.* 1941		Pah-do-lo-yi, Train *et al.* 1941	Hudson 1902, Barrett 1916, Train *et al.* 1941, Garey-Sage f.n.
113	paw-pă	Med	*Tetradymia*, Merriam 1904		Paw-pă, Merriam 1904	
114	pećúmeliʔ	MC/ Med	*Rosa woodsii*, Train *et al.* 1941, *R. californica* var. *ultramontana*, Schubert 1957b; *R.* spp., Murphey 1959	Wild rose	Pat-'tsoo'-mel-le, tă'l-sik Merriam 1904; pɛtsumaeli, Dangberg in Jacobsen n.d.c.; pet-su-mah-le, Train *et al.* 1941; pat sur malle, Murphey 1959	Dangberg 1927, Train *et al.* 1941, Jacobsen n.d.a., n.d.d., Murphey 1959, Riddell 1960, Garey-Sage f.n.
115	puʔyéwliʔ	Other/ Food	*Allium validum*, Schubert 1957b	Swamp onion	ṗuyɛuliʔ, Siskin 1937	Siskin 1937, Jacobsen n.d.a.
116	ṗá·l	MC/ Med	*Juniperus*, Merriam 1904, *J. utahensis*, Dangberg in Jacoben n.d.c. ; *J. californica* var. *utahensis*, Schubert 1957b	Juniper, real cedar, sequoia, manzanita,	pah'l, tah-peh'-ahl, Merriam 1904; bal, p'al, Dangberg in Jacobsen n.d.c., puh-ahl, Train *et al.* 1941, paah, Murphey 1959	Hudson 1902, Train *et al.* 1941, W. d'Azevedo f.n., Jacobsen n.d.b., Garey-Sage f.n.
89	ṗá·l dašáyaŋ, ṗá·l dašáyiŋ, ṗaʔlušáyiŋ (also ʔitmahá·waʔ)	MC		Incense cedar, cedar, same as ʔitmahá·waʔ Red Fir?	Pahl'-dă-si-yăh or ik-mah-how'-wah, Merriam 1904;	Jacobsen n.d.b.

375

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
117	ṗísew madá·biʔ or ṗísew gumadá·biʔ	Other	*Eriogonum umbellatum?* Merriam 1904; *E. andinum?* Schubert 1957b	Umbrella plant	Biseomadabi, Dangberg in Jacobsen n.d.c., Pas-sow-go-mat-tah-be, Merriam 1904	Dangberg in Jacobsen n.d.c., Merriam 1904
118	ṗóʔlo ṗísew	Med	*Salvia carnosa*, Train *et al.* 1941, *S. dorrii*, Schubert 1957b	Desert Ramona		Train *et al.* 1941, Jacobsen n.d.a., Garey-Sage f.n.
119	ṗušálaʔ ʔáṗɨl	Med		Plant	ṗušalaʔ apil, Siskin 1937	Siskin 1937, Jacobsen n.d.b.
120	sabá·samhu	Food	*Peltiphylum peltatum*, Schubert 1957b	Wild rhubard, wild asparagus		K. d'Azevedo 1955, Jacobsen n.d.a., Freed 1966, Downs 1966a, Garey-Sage f.n.
P4	sá·bu or mahalťalal ʔétɨk	Food	Seeds from *Typha latifolia*, Schubert 1957b	Seeds from cattail		Jacobsen n.d.a., n.d.d., W. d'Azevedo 1956
121	[sámsaʔ]	Food	*Orozopsis hymenoides*, Murphey 1959	Sand grass, Indian rice grass	Sam sut, Murphey 1959	Downs 1966a[27], Stewart 1941, Murphey 1959
122	sašáǩa, šašáǩa	Food/ MC		Edible root, brush		Jacobsen n.d.b.

[27] Downs 1966a lists wild grass seeds, which could be one of several species.

376

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
123	sáʔaš	Food	*Thalesia purpurea,* Dangberg in Jacobsen n.d.c.	Cancer root; same as sék̓eš, ċék̓eš per Jacobsen n.d.b.	Tsaac, Dangberg in Jacobsen n.d.c.	Jacobsen n.d.b.
124	sék̓eš, ċék̓eš	Food	*Lewisia rediviva,* Dangberg in Jacobsen n.d.c., Schubert 1957b	Bitter root	Tsɛgɛc, Dangberg in Jacobsen n.d.c.; sɛkɛc, Dangberg 1927; sɛk̓ɛc, Jacobsen f.n.	Dangberg 1927, Jacobsen n.d.a., f.n., n.d.d., Schubert 1957b, W. d'Azevedo 1956
	watsɛkɛc			Lily	Watsɛkɛc, Dangberg in Jacobsen n.d. c., (Schubert 1957b thinks these two terms may be related)	
125	sésmiʔ; [ʔitgumbéyɨt]	Food/ MC	*Chlorogalum pomeridianum*, Schubert 1957b	Soap plant, amole, root	Meal brush from soap plant called kumbeit, Barrett 1916; it-koom-ba'-yut, Merriam 1923; sesme, Freed 1966; itgumbyut, seed processing brush, Price 1980	Hudson 1902, Barrett 1916, Jacobsen n.d.a. Freed 1966, Garey-Sage f.n.

377

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
126	séwɨt yá·gɨl	Food	*Ribes roezlii*, Schubert 1957b	porcupine berry, Merriam 1904, gooseberry, Schubert 1957b,	Se-wut-yah'-gah, Merriam 1904	K. d'Azevedo 1955, Jacobsen n.d.a., Freed 1966, Garey-Sage f.n.
127	silá·ťawhu	Food	*Lilium parvum*, Schubert 1957b, Murphey 1959	Tiger lily, Schubert 1957b, Murphey 1959, Jacobsen n.d.a.	see lat aho, Murphey 1959	Jacobsen n.d.a., Garey-Sage f.n.
128	silá·ťawhuŋáŋa	Med	*Aquilegia*, Merriam 1904	Columbine, Merriam 1904;	Sil-lat-tă-hung-ah-ah, Merriam 1904	Garey-Sage f.n.
129	simíši or simíši?	MC	*Pinus murrayana*, Merriam 1904; (*Pinus contorta* ssp. *murrayana* = lodgepole pine,)	Murray pine, Merriam 1904;Lodge pole pine, tamarack,	Sim-ish'-e, sim-mish'-e, Merriam 1904; tsimici, Dangberg in Jacobsen n.d.c.	Hudson 1902, Cartwright 1953, Jacobsen n.d.b., Garey-Sage f.n.
P5	pollen	Med	*P. contorta*	Pollen from lodgole pine		Garey-Sage f.n.
130	simťá·gɨm	MC	*Pinus lambertiana*, Merriam 1904	Sugar pine	Sim'-tah-gum, Merriam 1904	Merriam 1904, Jacobsen n.d.b.
131	sí·su máyap	Other		Crucifer 2-pod	Sis-soo-mi-yep, Merriam 1904	

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
132	siʔdúmim, sidúmim	MC	*Alnus spp.*, Merriam 1904	Alder, Merriam 1904; Willow, greased willow, Jacobsen 1958	Sit-too'-mim, sit-toom"-mim, sit-doo'-mum, Merriam 1904	Jacobsen n.d.b.
133	song-gab-be	MC		Chinquapin	Merriam 1904	
134	šagá·du, šagá·duʔ	Med	*Argemone hisbada*, Merriam 1904; *A. platycerus*, Train et al. 1941	Thistle poppy, Merriam 1904; Plant species w/ edible roots, small pine nut species, Jacobsen n.d.a.	Sah'-ge-dah, Merriam 1904 same as tsagida by Dangberg in Jacobsen n.d.c.-?	Hudson 1902, Train *et al.* 1941, Jacobsen n.d.a.
	sá·gida	?	*Eschscholtzia mexicana*, Dangberg n.d.	California poppy	Tsagida, Dangberg in Jacobsen n.d.c.	
135	šagá·šaʔ	MC		Bean oak, oak with long acorns		Jacobsen n.d.b.
136	šáwaʔ	MC	*Abies*, Merriam 1904, *A. grandis*, Dangberg in Jacobsen n.d.c.,[28] *A. concolor*, Train *et al.* 1941, Schubert 1957b	Sierra fir, Merriam 1904; white fir, Schubert 1957b; fir,	Saw-wah, shaw-wah, Merriam 1904; tsawa, sawa, Dangberg in Jacobsen n.d.c.;	Train *et al.* 1941, Jacobsen n.d.b., Garey-Sage f.n.

[28] Schubert (1957a) in her letter dated April 16, 1957 comments that the distribution of *A. grandis* makes it highly unlikely that this species is correctly identified.

379

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
				Jacobsen n.d.b.	shaw-wa-eh, also mah-hah-wa, Train et al. 1941 (see mahá·waʔ)	
P6	sawataiyo	MC		Grows on fir trees	Sawataiyo, Barrett 1916	Barrett 1916
137	šáwaʔ deyʒúyuyiʔ	MC		Red fir		Jacobsen n.d.b.
P7	šáwaʔ dóʔlom	Med	*Abies concolor*, pitch, Schubert 1957b	Pitch from šáwaʔ	šawaʔ dɔlɔm, Siskin 1937	Siskin 1937, Jacobsen n.d.a., Schubert 1957b, Montgomery 1965, Garey-Sage f.n.
138	šáwaʔ mó·baʔ	MC		Mountain manzanita		Jacobsen n.d.b.
139	šené·beʔ	MC		Oak species		Jacobsen n.d.b.
140	šidímbaʔ, šidímba	Med	*Smilacina stellata*, Schubert 1957b, Murphey 1959	Star flower, false Solomon seal, Schubert 1957b	Citimba, Barrett 1916; sidimba, Siskin 1937; add-at-a-pel, Murphey 1959 (-ṗá·ṗil = flower)	Barrett 1916, Siskin 1937, Jacobsen n.d.b., Murphey 1959, Montgomery 1965
P8	šigímba	Food	Sugar from *Pinus lambertiana*	Sugar from sugar pine	Shigimba, Price 1980	Jacobsen n.d.a., Price 1980, Garey-Sage f.n.

380

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
141	šɨlǩa, sɨlǩa, šɨlǩaʔ	Food		Wild lettuce		Jacobsen n.d.a.
142	šóʔŋiʔ	Grass		Wild grass		Jacobsen f.n., n.d.b., n.d.k., W. d'Azevedo 1956
143	šú·gil	Food/ MC	*Wyethia,* Merriam 1904; *W. mollis,* Dangberg in Jacobsen n.d.c.; Train *et al.* 1941, Stewart 1941, Schubert 1957b; *W. ovata,* Stewart 1941	sunflower	Shoo-gil, Merriam 1904; cugil, Dangberg in Jacobsen n.d.c.; shu-gil, Train *et al.* 1941	Hudson 1902, Merriam 1904, Dangberg n.d.. 1927, 1968, Stewart 1941, K. d'Azevedo 1955, Jacobsen n.d.a., n.d.d., W. d'Azeedo 1956, Price 1963, Freed 1966, Downs 1966a[29], Garey-Sage f.n.

[29] Downs 1966a lists wild sunflowers, which could be one of several species.

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
144	šú·gilá·ċi	Food	*Balsamorhiza,* Merriam 1904, Dangberg in Jacobsen n.d.c.; *B. sagittata,* Train *et al.* 1941, Schubert 1957b, Murphey 1959	Balsam root, arrow leaf, sunflower	Soo-ge-lats'-se, Merriam 1904; cugillatsi, Dangberg in Jacobsen n.d.c.; shugil-artus, sugilatse, Train *et al.* 1941, sugilatse, Murphey 1959	Merriam 1904, Train *et al.* 1941, K. d'Azevedo, 1955, Jacobsen n.d.a., Murphey 1959, Freed 1966
P9	šú·gil ʔá·daš	Med: Fumi-gant		Root of sunflower		Jacobsen f.n., Price 1980, Garey-Sage f.n.
145	šúmšuʔ	Grass		Salt grass		Jacobsen n.d.b., Downs 1966a
146	šuʔwétɨk	Food/ MC	*Amelanchier, Rhamnus californica, Rubus vitifolius, Castanopsis,* (chinquapin is *Chrysolepsis,* Hickman 1993:657), Merriam 1904; *Rubus,* Merriam 1923; *A. alnifolia,* Schubert 1957b	Service berry, coffee berry, blackberry, chinquapin, Merriam 1904; service berry, Schubert 1957b; june or wild black berry, Jacobsen n.d.a.	Soo-wet'-tuk, soo-et-tik (service-berry), shŭ-wet'-tuk (black berry), soo-wet-tuk (coffee berry), soo-et-tuk or song-gab-be (chinquapin), Merriam 1904; shoo-we-tuk, Merriam 1923	Hudson 1902, Dangberg nd.a., 1927, 1968; K. d'Azevedo 1955, W. d'Azevedo 1956, Jacobsen n.d.a., n.d.d., Freed 1966, Nevers 1976, Garey-Sage f.n.

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
93	ťáŋal ʔícik (also ma-moo-se)		*Artemesia ludoviciana*, Merriam 1904	Sage herb	ta^{h}ng-al-e'-sik, ma-moo'-se, Merriam 1904	
147	tam-mah-ho-lah	MC	*Acer glabrum*, Merriam 1904	Mountain maple	Tam-mah-ho-lah, Merriam 1904	
148	tániw čigú·guš	Med		Herb		Jacobsen n.d.a., W. d'Azevedo f.n.
149	tow'-e-lah'-lal-le	MC	*Acer macrophyllum*, Merriam 1904	maple	Tow'-e-lah'-lal-le	
150	tó·ni, tó·niʔ, tú·niʔ	Food	*Corylus californica*, Merriam 1904; *C rostrata* var. *californica*, Schubert 1957b	California hazel	Merriam's transcription is not legible	Jacobsen n.d.a.
151	tosho mozick	Med	*Dalea* spp.	Desert beauty	Tosho mozick, Murphey 1959	
152	tuyá·gimhu	Med	*Paeonia brownii*, Dangberg in Jacobsen n.d.c., Train *et al.* 1941, Schubert 1957b, Murphey 1959	Western peony	duya´gumhu, Dangberg in Jacobsen n.d.c., doo-yah-gum-hoo, Train *et al.* 1941; doo yah gum hu, tue- ago nemo, Murphey 1959	Dangberg n.d., Hudson 1902, Train *et al.* 1941, Jacobsen n.d.b., Murphey 1959
153	ťá·ba mó·ba	MC	*Cenaothus prostrates*, Merriam 1904	Squaw carpet	Tap-pă-mo-bă (bear carpet) Merriam 1904	

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
154	ťá·ba ʔémlu	Med	*Thalictrum fendleri*, Train *et al*. 1941, Schubert 1957b, Murphey 1959	Bear food, Meadow rue	Ťaba ʔemlu Siskin 1937; Taba emlu, Train *et al*. 1941; taba emul, Murphey 1959	Siskin 1937, Jacobsen n.d.a.
155	ťá·gim	Food/ MC	*Pinus monophylla*, Merriam 1904, Train *et al*. 1941; *P. cembroides* var. *monophylla*, Schubert 1957b	Pine nuts	tah'-gum, Merriam 1904; tagum, Barrett 1916; t'agum, Dangberg in Jacobsen n.d.c.; ah-gum, wah-pee, Train *et al*. 1941; tagum, Price 1980	Hudson 1902, Barrett 1916, Dangberg 1927, 1968, Stewart 1941, Train *et al*. 1941, K. d'Azevedo 1955, Jacobsen n.d.a., n.d.d., W. d'Azevedo 1956, 1986b, Freed and Freed 1963a, Nevers 1976, Price 1963, 1980, Garey-Sage f.n.
P10	ťá·gim bámči	Food/ Med	Sugar from *Pinus monophyllus* (ťá·gim bámči)	Pine nut tree sugar		Train *et al*. 1941, K. d'Azevedo 1955, Jacobsen n.d.a., Montgomery1965, Garey-Sage f.n.

384

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
156	ťášaʔ	MC	*Populus fremontii*, Merriam 1904	Cottonwood, Merriam 1904; Cottonwood or aspen, Jacobsen n.d.b.	Tah-shah', tah-sah; cottonwood; das-sap-bab'-bl or tow-bab'l = cotton from cottonwood, Merriam 1904, (-ṗá·ṗɨl = flower); t'aca, Dangberg in Jacobsen n.d.c.	Merriam 1904, Dangberg n.d., Jacobsen n.d.b., Price 1963
P11	bark	MC		Cottonwood bark		Price 1980
157	behé·ʒiŋ ťášaʔ	MC	*Populus tremuloides*, Merriam 1904	aspen	Ba-hā-zing tah-shah, Merriam 1904 (behé·ʒiŋ = small)	Merriam 1904,
	daláʔak gumťášaʔ			aspen	daláʔak gumťášaʔ, "mountain cottonwood"	Garey-Sage f.n.
158	ťášaʔ delsésgiʔ or ṗušálaʔ ʔithímu	MC	*Populus trachycarpa*, Merriam 1904	Balsam poplar	Tah'-shah-del ses'-ke or po-shah-lă-tim-moo, Merriam 1904 (ṗušálaʔ ʔithímu)	Merriam 1904, Jacobsen n.d.b.
	ťášaʔ daṗá·ṗɨl			Cotton from cottonwood	Merriam 1904	
159	ťéťik	Food		seeds	déʔtuk, W. d'Azevedo f.n.	W. d'Azevedo f.n.

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
160	ťíhuk	Grass		Bunch grass	dihuk [ťíhuk =dry], Dangberg in Jacobsen n.d.c.	
161	wadákša?	Food	*Lupinus polyphylus*, Rucks 2001	Wild spinach, big lupine		K. d'Azevedo 1955, Jacobsen n.d.a., Downs 1966a, Rucks 2001, Garey-Sage f.n.
162	wálsi?	Food		seed		W. d'Azevedo 1956
163	wášu?	Food/ MC	*Avena saliva*, Merriam 1904; *Elymus condensatus*, Murphey 1959	Wild oats, wild rye, buffalo grass seed	Wah'-shoo ("always here,") Merriam 1904; wážu?, Siskin 1941; washo, Murphey 1959	Siskin 1941, Jacobsen n.d.a., n.d.d., n.d.i., W. d'Azevedo 1956, Murphey 1959
			Avena fatua, Merriam 1923	Wild oats	o-wah'-s^{h}oo, Merriam 1923	Merriam 1923
164	wášu? (wá·šiw) ?itmúšu	MC	*Sarcobatus*, Merriam 1904	greasewood	Wah-shoo it mush-shoo, Merriam 1904	
165	wayámhu	Food		Seed species, bitter herb		Dangberg 1927, Jacobsen n.d.a., f.n.

386

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
166	wehené·ne, wehiné·ne, dewehené·ne	Food	*Lygodesmia spinosa,* Merriam 1904, Train *et al.* 1941, Schubert 1957b; *Stephanomeria spinosa*, Murphey 1959	Skeleton weed, gum plant	Wah-hen-nā-ne, wā-he-nă-na, Merriam 1904; wa-ha-nane, Train *et al.* 1941; wahanane, Murphey 1959	Merriam 1904, Train *et al.* 1941, Stewart 1941, Jacobsen n.d.a., Murphey 1959, Garey-Sage f.n.
			Stephanomeria exigua, Murphey 1959	Desert star	Waaha nane, Murphey 1959	
167	wémši?	Med	*Achillea,* Merriam 1904; *A. lanulosa,* Train *et al.* 1941, *A. millefolium var. lanulosa,* Schubert 1957b	Common yarrow	Wem-se, Merriam 1904; wem-see, Train *et al.* 1941	Hudson 1902, Merriam 1904, Train *et al.* 1941, Jacobsen n.d.b., Garey-Sage f.n.
			Gilia congesta, Train *et al.* 1941, Schubert 1957b	gilia	Wem-see, Train *et al.* 1941	Train *et al.* 1941, Price 1980
			Pedicularis attolens, Train *et al.* 1941; *P. groenlandica,* Schubert 1957b	Elephant heads	Wem-she, Train *et al.* 1941	
			Arenaria congesta, Murphey 1959	ballhead sandwort	wemsee, Murphey 1959	
168	wíliši?	MC		Grease oak		Jacobsen n.d.b.
169	yák̓iŋ	Other		Plant that stings		Jacobsen n.d.b.
170	yí·yɨ	Food		Seed species		Jacobsen n.d.b.

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic transcriptions, Documentation	Ethnographic Documentation
171	ʒíwʒwhu	Other		lupine		Jacobsen f.n.
P12	ʔeyéyeʔ	Food/ Med: Charm	*Arctostaphylus nevahdensis*, Merriam 1904; *A. patula*, Schubert 1957b	Dwarf mountain manzanita, Green manzanita	a-ye'h-ye'h, Merriam 1904	Jacobsen n.d.a. Price 1963
172	ʔíčigiʔ	MC	*Apocynum*, Merriam 1904	Indian hemp	ĕ'-tse-ge, it'-se-ge, e-se'ke, Merriam 1904; itsigi, Dangberg n.d.,	Dangberg n.d., Jacobsen n.d.b.
173	ʔmé·čim	Food	*Sisymbrium canescens*, , *Sophia longipedicellata*, Dangberg in Jacobsen n.d.c., *Sisymbrium incisum* var. *hartwegianum*, Schubert 1957b, *Descurania* spp., Murphey 1959	Wild mustard, seed	metsum, Barrett 1916; maetsum, Dangberg in Jacobsen n.d.c., mAʔsum, Freed 1966	Hudson 1902, Barrett 1916, K. d'Azevedo 1955, Jacobsen n.d.a., Murphey 1959, Freed 1966, Downs 1966a, Garey-Sage f.n.
174	ʔmúčim, ʔmóčim	Grass		Wild grass		Jacobsen n.d.b., f.n., n.d.j., W. d'Azevedo 1956

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran- scriptions, Documentation	Ethnographic Documentation
175	ʔó·gal ʔémlu	Med	*Artemisia gnaphalodes, Balsamorhiza hisuta,* Train *et al.* 1941, *A. vulgaris* var. *gnaphalodes,* Schubert 1957b	Sagebrush, western mugwort, Schubert 1957b	Auga-lem-lu, Train *et al.* 1941	Train *et al.* 1941, Jacobsen n.d.a.
176	ʔóŋaʔ	Grass		Wire grass		Dangberg 1927, Jacobsen n.d.b., f.n.
177	[ʔu·ċil]	Other	*Spirea,* red, Merriam 1904		oot'-sel, Merriam 1904	
178	[ʔú·ċo, ʔú·ċu]	Other	*Symphorcarpus,* Merriam 1904	snowberry	oo-tso', oot-soo, Merriam 1904; utsu, Riddell 1960	Riddell 1960
179	ʔúċuliʔ Má·dut	Med	*Osmorrhiza occidentalis,* Train *et al.* 1941, Schubert 1957b	Sweet cicely	oo-chu-lee mah-too, Train *et al.* 1941	Train *et al.* 1941, Jacobsen n.d.a., Garey-Sage f.n.
180	ʔulihólaʔ	Food		Mountain gooseberries		Jacobsen n.d.b.
181	ʔuliMóŋil or ʔulikMóŋil	Cover term		Plant in general, or something that's planted; domesticated plant	wu-lik-mon-il, Henshaw, 1883; tiuliwamo^{n}il, my plants, Lowie 1963	Henshaw 1883, Lowie 1963, Jacobsen f.n., Garey-Sage f.n.

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
182	ʔulipánċa	Food	*Rorippa curvisiliqua*, Stewart 1941, *R. curvisiliqua*, *R. sinuata*, *Barbarea vulgaris*, Schubert 1957b	Western yellow cress, winter		Stewart 1941, Jacobsen n.d.a., f.n., K. d'Azevedo 1955, W. d'Azevedo 1956, Downs 1966a, Garey-Sage f.n.
183		MC	*Andropogon*, *Powers 1875*	cane		Powers in Fowler and Fowler 1971
184		Food	*Allenrolfea occidentalis*, Stewart 1941	pickleweed		Stewart 1941
185		Food	*Argopyrum (?)*—recorded as *Degropyrum repens*, Hudson 1902	Crested wheat grass		Hudson 1902
186		Food	*Atriplex*, Stewart 1941	saltbrush		Stewart 1941, Downs 1966a,
187		Food	*Brodiaea capitata* or *cyperus rotunda*, Stewart 1941	Nut grass		Stewart 1941
188	No. 62 [hanawiywiy]?	Food	*Cnicus andersoni, (?)* Hudson 1902	Thistle; Dangberg n.d.?		Hudson 1902
189		Med	*Datura meledoides*, Murphey 1959	Stremonium Jimson weed		Hudson 1902
190		MC	*Linum lewisii?*	Wild flax, blue flax		Dangberg n.d.

No.	Washoe Name	Use	Botanical Name, Documentation	Common Name	Linguistic tran-scriptions, Documentation	Ethnographic Documentation
191		MC	*Philadephus* spp.	Wild Mock orange		Murphey 1959
192		MC	*Phragmites*,	cane		Murphey 1959
P13	Pine bark	Med	*Pinus*	Pine bark		Garey-Sage f.n.
193		Med	*Potentilla gracilis* var. *fastigiata*, Hudson 1902	Graceful cinquefoil		Hudson 1902 Garey-Sage f.n.
194		Food	*Yucca (?)*, Hudson 1902			Hudson 1902
195		Food		Carex, sedge		Hudson 1902
196		MC		Juncus, rush		Hudson 1902