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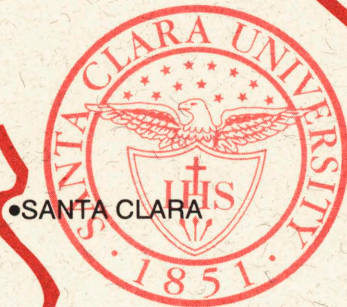
**THE ROOTS OF HEALING:
Ethnomedical Adaptation of the Ohlone Indians**

Nader R. Yasin

Research Manuscript Series, No. 5

1995

on the Cultural
and Natural
History of
Santa Clara



Santa Clara University

PREFACE

**THE ROOTS OF HEALING:
Ethnomedical Adaptation of the Ohlone Indians**

Nader R. Yasin

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**Russell K. Skowronek, Series Editor
Department of Anthropology and Sociology
Santa Clara University
Santa Clara, CA
95053**

(408)554-2794

FOREWORD

As we approach the end of the twentieth century, the pace of life is so hectic that the average person has little time for historical reflection. Even those people who have the luxury of engaging in historical reflection often compartmentalize their studies so narrowly that the important lessons of history are lost. Santa Clara University's "Research Manuscript Series on the Cultural and Natural History of Santa Clara", edited by Dr. Russell Skowronek of the Department of Anthropology and Sociology, counteracts these tendencies by publishing papers which approach the study of history in a holistic manner. Special emphasis is given papers documenting the ways in which changes in the social world and changes in the natural world are interrelated.

Each of the papers in this **Series** makes a notable contribution defining and preserving our cultural heritage. Nader Yasin's study ("The Roots of Healing: Ethnomedical Adaptation of the Ohlone Indians") offers a model of what the series tries to accomplish. For in his study, Mr. Yasin maintains a very clear focus on the important interconnection between the natural environment and cultural adaptation.

The **Research Manuscript Series** is a product of cooperation and exchange involving several friends and members of the Santa Clara University community. Particular thanks go to Father Steve Privett, S.J., Vice President for Academic Affairs; Don Dodson, Associate Vice President for Academic Affairs; George Giacomini, Assistant to the President; Peter Facione, Dean of the College of Arts and Sciences; Julia O'Keefe, University Archivist; and Rebecca Schapp, Director of the de Saisset Museum.

Charles Powers, Chair
Department of Anthropology and Sociology

PREFACE

When I joined the Department of Anthropology and Sociology at Santa Clara University in 1991, I was charged with the responsibility of improving the interpretation of Santa Clara University's pre-contact, mission, and early college-era past through ethnohistorical research and, in turn, museum enhancement. Toward this goal I have had the opportunity to work with number of individuals on- and off-campus who have shared a common vision for interpreting Santa Clara's rich cultural and natural past.

During 1993-1994 Janice Edgerly-Rooks (Biology) and I developed a plan for the "**Transformation of the Santa Clara University Landscape.**" As a result of this collaboration the first outdoor classroom was created in the form of a "natural area" along the redeveloped Alameda. At the same time the **Research Manuscript Series on the Cultural and Natural History of Santa Clara** was born. The first four numbers in this series were written by anthropology students who focused on local cultural ecology.

At Santa Clara University there is a tradition of faculty working closely with students. The Department of Anthropology and Sociology requires a Senior thesis for each of its graduates. During the 1994-95 academic year one senior, Nader Yasin, elected to work with me and continue last year's project entitled, "**Culture and Nature at Santa Clara University.**" His thesis, sought to identify the healing practices and pharmacopoeia of the Ohlone. For ten weeks during the Winter quarter of 1995, Nader and I met to discuss his research. When completed the thesis was read and commented upon by at least two Anthropology faculty. The goal of this was clarity and consistency beyond that of the normal student project. For the exemplary quality of this research, Nader's thesis was awarded an "Honorable Mention" in the 1995 Krassowski Award competition for anthropological research.

During the Spring quarter Nader revised and continued his study, the result of which is presented in this number of the **Research Manuscript Series on the Cultural and Natural History of Santa Clara.** It represents the fruition of hundreds of hours of research and interviews conducted over a twenty week period.

In closing, I would like to extend recognition to a number of individuals not already mentioned in the Foreword for their direct and indirect influence on this paper. They include: Ohlone descendants Rosemary Cambra, Andrew Galvan, Jakki Kehl, Bev Ortiz, Linda Yamane; Prof. George Westermarck, Department of Anthropology and Sociology; Ms. Sandra Chiaramonte, Administrative Assistant for the Department of Anthropology and Sociology for her help in the final formatting of this manuscript; and Ms. Colette Ruffo, University Communications for producing this volume.

Russell K. Skowronek, Ph.D.
Assistant Professor of Anthropology

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In addition to the professors of the Santa Clara Anthropology/Sociology Department, the librarians of the Orradre Library at Santa Clara University were invaluable. Perhaps deserving special attention is Cindy Bradley, Library Specialist of Document Delivery and Interlibrary Loan, whose help in retrieving resource materials from the various libraries throughout the San Francisco Bay Area was commendable if not saintly. Thank you. Furthermore, the author would like to express his gratitude to several other individuals, from the Ohlone community, who were also quite gracious with their time and energy. Andy Galvan was especially valuable to this project. His knowledge of Bay Area history is extraordinary. Thank you. Also, I would like to thank both Bev Ortiz and Linda Yamane. These two individuals possess a great deal of information about Bay Area history as well. Without their interesting insights concerning this research project, this project would have been without much of its appeal. Finally, I would like to thank both family and friends whose support and tolerance made completing this project a memorable experience. Thank you: Mom, Grandma, Lynn and the Siljander family, Jeff Dessayer, Bret Hébért, Dom "the Preacher" Young and Pat "the Old Man" Connoly. Thank you all!

CHAPTER 1

A BEGINNING

Introduction

Western medical specialists attempt to treat pathological phenomena by using synthetic drugs. These synthetic drugs can be costly and time consuming to manufacture, distribute and prescribe. Only recently has the mainstream medical community begun to acknowledge the possible benefits of traditional medicinal curing, much of which utilizes inexpensive organic compounds for treatments. Furthermore, native peoples throughout the world have an extensive knowledge of disease and of disease treatment (Vogel 1970, Densmore 1974, Margolin 1978, Heizer and Elsasser 1980). Relying on centuries of botanical experimentation, native peoples have been able to treat a vast number of medical ailments utilizing floral and faunal species (Vogel 1970, Bocek 1984, Heizer and Elsasser 1980). Some systems of traditional medicine have received much public attention in recent years. Chinese traditional medicine and indigenous peoples' traditional medicine represent two noteworthy examples. Certain medical authorities have made the observation that traditional medicines can offer valuable treatments of certain pathological ailments for which 'western' medicine can do very little (Manning 1981, Liu 1989).

Many pharmaceutical companies have begun ethnobotanical studies on the indigenous peoples of South America, hoping to discover valuable new drugs (Jackson 1989). The 2,000 year old treatments of traditional Chinese medicine and the treatments of South American indigenous peoples may prove to be very valuable to the global community; but many more traditional treatments await proper investigation by the medical community and by ethnobotanists (Rheingold 1989). For example, the medicinal treatments of indigenous peoples of North America may represent a treasure of valuable medical knowledge.

Of the native cultures of North America, those of California have received relatively little attention by medical-ethnobotanists. Some researchers have made the claim that medicinal treatment among the Native Californians was not particularly impressive when compared with that of other native peoples of North America (Heizer and Elsasser 1980: 128). This observation, however, does not fully appreciate the extensive ethnobotanical information available on the Native Californians (Balls 1962, Vogel 1970, Bocek 1984). The Ohlone peoples of the San Francisco and Monterey Bay Areas represent a culture which had an extensive knowledge of healing herbs, roots and barks (Bocek 1984: 220). Ohlone healing was quite capable and it was full of variety.

The Indians of the San Francisco and Monterey Bay Areas knew, for example, how to perform trepanning -- an operation in which a hole was drilled in the uppermost part of

the cranium to relieve pressure caused by brain tumors. They also knew how to set bones by binding an arm or leg into a casing of bark or basketry held in place with leather straps. They could reduce dislocations and induce abortions. They controlled severe bleeding with [compresses. Furthermore, they probably had names for all the major body organs and likely knew something of their functions] (Margolin 1978:132).

This study investigates Ohlone medicinal treatments in the broader sociocultural context of Ohlone health, disease and healing. Like many of the cultures of California, the Ohlone had various methods of resolving issues of pain and of disease. Through both shamanistic-ritual treatments and floral treatments, the Ohlone maintained both their mental and physical health (Margolin 1978, Heizer and Elsasser 1980, Bean 1991). Understanding Ohlone healing may be valuable to pharmaceutical researchers, to the medical community and, ultimately, to those in society who suffer from various pathologies. Furthermore, understanding traditional medicine is important for indigenous peoples in terms of understanding their past.

In the following chapters, I first discuss the geography (Chapter 2) and social organization (Chapter 3) of the Ohlone. It is critical to understand the physical environment in which the Ohlone lived when attempting to understand the ethnomedical relationships which the Ohlone had with their surroundings. Next, I present an overview of the cultural position of the shaman in Ohlone society (Chapter 4), before examining in detail their use of medicinal plants for curing (Chapter 5). Since Ohlone culture was dramatically transformed by its confrontation with the Spanish mission system, I explore both changes and continuity of this period of the latter eighteenth and early nineteenth centuries (Chapter 6). Here, I am particularly concerned with the impact of new disease on the Ohlone and the evidence of persistent healing traditions. Finally, I close by examining the revitalization of Ohlone culture, and healing traditions, through the nineteenth and twentieth centuries to the present (Chapters 7 and 8).

CHAPTER 2

OHLONE NATURAL HISTORY

Geography

The Ohlone territory of central California, from the San Francisco Bay Area in the north to Point Sur in the south and inland to the Diablo Range foothills, represents an area of many diverse ecological habitats (Margolin 1978, see Figure 1). Unfortunately, during the past two hundred years the San Francisco Bay Area and the Monterey Bay Area have been subjected to an extensive urbanization process which has had the effect of marginalizing many of its indigenous plant and animal communities (Margolin 1978). Before the introduction of a plethora of European plant species, the Bay Area was home to a diverse community of flora and fauna (Heizer and Elsasser 1980, Reilly 1994, Schick 1994).

During the pre-contact period, Ohlone territory was characterized by extensive estuaries fed by numerous rivers and streams from which the Ohlone were able to develop a diet with incredible variety (Margolin 1978, Milliken 1991, Reilly 1994). As Kroeber explains, "...the food resources of California were bountiful in their variety rather than in their overwhelming abundance" (1925: 524). Water was everywhere. Milliken notes:

Numerous small streams meander down through the hills to the bay or directly to the ocean. [Most of these waterways] could be easily crossed by wading at most times of the year. To the east of the Bay Area, beyond the Inner Coast Ranges, lie the broad flat valleys of the Sacramento and San Joaquin Rivers, navigable rivers which carry runoff from the distant Sierra Nevadas into the Sacramento-San Joaquin river delta, and on into the San Francisco Bay estuary system (1991:28).

These numerous waterways were home to a variety of species. In addition to supporting vast tule marshes and large stands of pickleweed and cordgrass, the streams, the rivers and the estuaries maintained a sizeable faunal community including both freshwater and saltwater otters, beavers, and thousands upon thousands of wild fowl including herons, sandpipers, curlews and other shore birds (Margolin 1978:9).

The Ohlone were intimately familiar with the various resources of their territory. As Milliken explains, "[The Ohlone] made their living by harvesting the animal and plant resources of their local districts, areas seldom larger than ten miles from edge to edge" (1991: 31). The exploitation of riverine resources and of marine resources was essential with fishing being particularly important to Ohlone life (Levy 1978:491; Schick 1994:31). In fact, through the use of "spears, seine nets, dip nets, basketry traps, fish poisons, and hooks," the Ohlone were able to secure a significant amount of protein (Schick 1994:32). Because of an adaptation involving scheduling and seasonality, by which the Ohlone would exploit the plant and the animal

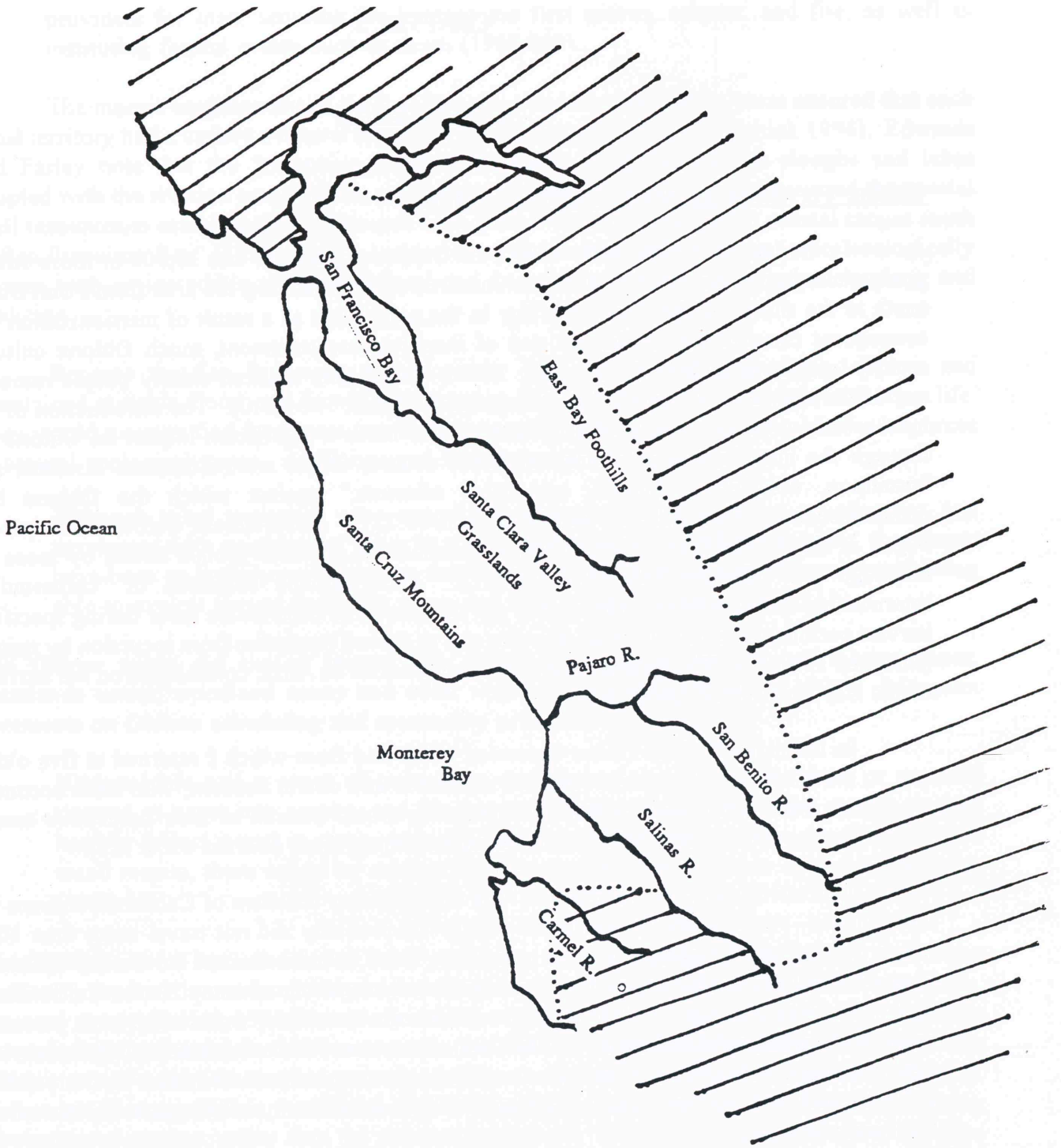
resources of a particular area with seasonal occurrence, the Ohlone became intimately familiar with their local environment. Margolin observes that "[their] intimate knowledge of animals [and of plants] did not lead to conquest, nor did their familiarity breed contempt...[the] powerful, graceful animal life of the Bay Area not only filled their world, but it filled their minds as well" (1978:12).

All members of Ohlone society were very familiar with their local environment because of their practice of hunting and of gathering (Milliken 1991). The riverine and the marine ecological niches were not the only significant sources of floral and of faunal resources for the Ohlone. The inland valley grasslands and savannahs held an "almost unimaginable richness and variety" (Margolin 1978:7). Women would harvest a surprising number of food stuffs including nuts, fruits and bulbs while the men would supplement these food stuffs with wild game including elk, deer, rabbits and "pronghorn antelopes, in herds of one or two hundred, or even more" (Margolin 1978:7). The grasslands were used to provide important sources of carbohydrates in the form of seeds (Milliken 1991:31; Blume 1994). During the 1780s, Father Francisco Palóu made the comment that the "Indians of this locality [the San Francisco and Monterey Bay Areas] live on the grass seeds of the fields" (Milliken 1991: 31). Furthermore, the various oak trees throughout the valley were a plentiful source of acorns and these provided the Ohlone with a further source of carbohydrates. Of the five species of oak trees readily available through direct gathering or trade in the Santa Clara Valley and surrounding area, the Ohlone traditionally preferred those that were local and were plentiful (Levy 1978: 491; Margolin 1978: 41; see also Schick 1994).

The Ohlone people's extensive use of hundreds of animal and plant species was not solely for consumption and for material technology, but for healing purposes as well (Balls 1962, Weber 1978, Margolin 1978, Heizer and Elsasser 1980, Bean 1991). Margolin explains:

[Ohlone] used herbs, barks, and roots in a variety of ways. They steamed and inhaled them in the sweat-house, smoked them like tobacco, rubbed them into the skin, put them into their nostrils like snuff, plastered them onto their foreheads, drank them as teas, and applied them as poultices to wounds. They used among other herbs, angelica, balsam root, poppy root, yerba santa, rose hips, yerba buena, wormwood, willow bark (aspirin was originally derived from willows), and many members of the mint family--herbs that have long been extolled by many of our own herbalists as safe and effective cures for a large variety of ailments (1978: 132).

Bocek adds that of "the 157 plants recorded by Harrington, 63 were collected for food, 101 for medicinal preparations and 48 were used in other ways as raw materials" (Bocek 1984: 240). The research of the ethnobotanist John Peabody Harrington (1884-1961) during the 1920s and 1930s indicates that more than 60% of the available plant species may have been utilized by the Ohlone for curative purposes (Bocek 1984: 240).



Map showing the extent of Ohlone territory (unshaded area) during the late 1700s.

CHAPTER 3

THE OHLONE

Ohlone Territoriality and Social Organization

In the late 1600s and early 1700s, the Ohlone population was 10,000 or more with small groups, numbering no more than several hundred each, inhabiting the area from Point Sur in the south to the shores of San Francisco Bay in the north; but as a result of missionization and the consequent introduction of disease and of inappropriate treatment, much Ohlone culture was rapidly lost (Levy 1978). By the early 1900s, "fewer than a dozen elderly people remembered any of the eight Costanoan [Ohlone] languages" (Bocek 1984:240). The introduction of disease by the early explorers and by the mission fathers made a significant impact on Ohlone culture through the horrific loss of aboriginal life it caused; these were European diseases, such as "smallpox, measles, diphtheria, and other ailments," against which the Ohlone had no immunological defense (Heizer and Elsasser 1980:227). Nevertheless, before sustained contact began in the 1770s, the Ohlone lived in autonomous political groups bound by loose ties of marriage and of trade (Margolin 1978:1). These groups consisted of "communities of intermarried families that co-operated to put on dances, to co-ordinate labor during specific short harvest periods, to resolve internal disputes and to defend territories from incursion by neighbors" (Milliken 1991:58). The Spanish explorer, Juan Bautista de Anza, commented on the territoriality of the Bay Area native peoples saying:

In the district which I have examined today and from which I returned at five o'clock in the afternoon, I have encountered numerous and docile heathen, who have accompanied me with great pleasure but without going a step outside of their respective territories, because of the enmity which is common among them (Bolton 1931:129).

This territoriality was a result of "the extraordinary localism of California Indians in pre-white times. An ordinary person in his whole life probably did not travel more than 10 or 15 miles away from the spot where he was born, lived, would die and be buried" (Heizer and Elsasser 1980:203). Heizer and Elsasser note that the localism of many Native Californians had certain benefits, for example, "the lack of experience with a wider world made each person's own environs familiar, safe, and secure" (1980:204). Because of Ohlone localism, individuals became very knowledgeable about the local plant and animal communities within their territory (Margolin 1978, Heizer and Elsasser 1980, Milliken 1991). As Heizer and Elsasser explain about the California Indians:

Indians not only lived in nature but saw themselves as an integral part of it. In native belief, animals had an intelligence equal to man's, as well as human qualities and emotions; and in many mythologies, animals were said to have occupied the earth before man and to have gotten the world ready for humans. The animals were often seen as

providers for man, securing for humans the first acorns, salmon, and fire, as well as instituting fearful events such as death (1980:209).

The mosaic environment of the San Francisco and Monterey Bay Areas ensured that each tribal territory had a variety a natural resources available (Margolin 1978, Schick 1994). Edwards and Farley note that the "extensive marsh distribution along the various sloughs and lakes coupled with the riverine associations, grasslands, and oak distribution complemented the coastal shell resources to establish a food resource base greater than average for the coastal ranges south of San Francisco Bay" (1974:5). The territories of the various Ohlone groups were ecologically diverse with an incredible amount of floral and faunal life available for food, technology and medicine.

Because the San Francisco and Monterey Bay Areas were ecologically diverse and maintained sizeable floral and faunal communities, the Ohlone practiced a semi-sedentary life. They would move to find food resources in the process of which they would exploit the resources of several ecological zones. As Heizer and Elsasser note:

Although tribal territories were carved out by occasional aggression, adjudication, and agreement with neighboring tribes in a process that may have taken centuries, there must have been an underlying awareness that there were great advantages in owning and being able to exploit two or more life zones and their varied products (1980:112).

The Ohlone tribes did exploit several 'life zones,' including riverine zones, marine zones, grasslands zones, woodland zones and other vegetation habitats (Milliken 1991). Margolin comments on Ohlone scheduling and seasonality practices:

[Ohlone] life was a series of treks from one harvest to another. As food or material ripened or came into season--and the season was often quite brief-- the people worked hard to collect it and in some ways dry, smoke, or otherwise preserve it. Then, after a small respite, there would be another harvest, another event, another episode in the year (1978:52).

Therefore, seasonal occurrences of food resources, such as berries, seeds, acorns and other products, resulted in seasonal migrations from semi-permanent villages to more temporary, seasonal camps (Schick 1994:28; see also Milliken 1991). The Ohlone familiarity with valuable uses of plants and animals was exact as was the Ohlone understanding of their territory. The Ohlone would establish temporary camps within its territory exclusively (Milliken 1991:37). Heizer and Elsasser explain that Native Californians had an exacting way to define borders using "drainages of streams, rather than the streams themselves. Watershed ridges, therefore, were the usual boundary lines, and ordinarily both banks of a watercourse belonged to the same people" (Heizer and Elsasser 1980:7).

While the movement of campsites from place to place would tend to maximize the effectiveness of appropriating resources, the Ohlone maintained a central village site from which

they would trek to the more seasonal campsites (Margolin 1978:53). Ohlone gathering of food resources was of primary importance to the health of the community by providing necessary carbohydrates, fats and proteins; nevertheless, non-food resources for shelter, for transportation and for medicine were also of importance (Kroeber 1925:468). Milliken notes that the Ohlone would move campsites for a number of reasons including for "harvest considerations, changing firewood supplies, deaths, and strategic warfare concerns" (1991:37).

Margolin suggests that during times of hunting and of gathering it would not be uncommon for men and women to "carry medicine bundles within their baskets or nets" (1978:53). Gathering of medicinal herbs, barks, roots and other medicinally valuable resources was likely a common activity because of the familiarity that the Ohlone people had with the use of hundreds of plant species (Margolin 1978, Heizer and Elsasser 1980, Bocek 1984). Herbal medicinal treatments were the treatments for common ailments such as headaches, stomachaches, sore throats or other complaints and thus were common knowledge to the community (Margolin 1978, Bean 1991). Bean explains that "common folklore medicine [was] available to anyone--the treatment of usual maladies by simple techniques of therapy [including] herbs..." (1991: 727).

Leadership in Ohlone Society

Access to the resources of the natural world and of those resources obtainable through trade was not completely egalitarian (Margolin 1978:103). Early Spanish explorers mention that among the native peoples of the Bay Area there were individuals who were tribal leaders; the early explorers called these leaders by the title *capitán* (Milliken 1991:59). Father Fages' accounts explain that the Ohlone chief "collects everyday in his village the tributes which the Indians pay him in seeds, fruits, game, and fish" (Priestley 1937:74). While those like Father Fages seem to have considered the "capitáns" of the Bay Area to be quite powerful, other documentation seems to indicate a less powerful role of the *capitán* (Milliken 1991:60-61). Nevertheless, Milliken notes that most evidence seems to suggest that these tribal leaders did have considerable influence (1991:60). Heizer and Elsasser explain that "[chiefs,] who had no real power in most of Native California beyond that of offering good advice in a persuasive manner, helped to keep life moving along with a minimum of friction" (1980:209).

Ohlone groups would generally consist of several villages each, with the smaller villages being little more than an extended family in which "the headman was simply the head of the family," and with the larger villages being headed by a more prominent leader who did not necessarily have kinship ties to his people (Margolin 1978:105). While the Ohlone would travel throughout the year from site to site in search of seasonal foods, occupying camp sites seasonally, "[they] frequently traveled from [reserve] village locations to obtain food resources, and then traveled back to the [main] villages" (King 1974: 78). The main villages were places of ceremonial and of trading significance, from which the Ohlone made their seasonal migrations to harvest and collect various foods (Margolin 1978:105). At these main villages, the chief would engage in trade with neighboring tribes through which he would acquire resources that might not be readily available in his locale. This conception of sociopolitical power is consistent

with an early Spanish account written in 1775 by Father Fages which notes that "[besides] their chiefs of villages, they have in every district another one who commands four or five subordinate villages together, the village chiefs being his subordinates" (Priestley 1937:73).

While trading, negotiating and mediating were responsibilities of the chief, these were not his only responsibilities. The chief was an individual who was given great wealth from his community in hopes that he would maintain the natural balance in the world (Margolin 1978: 103). As Margolin explains:

The goal of the chief was not to lead at all, certainly not to innovate, but rather to maintain the ancient (and static) balances--the balances within the triblet, between the triblet and its neighbors, and between the triblet and its gods. The chief was expected to keep these ancient balances so that life would stay very much the same as it had been since time immemorial. To maintain the balances demanded great wealth, and the people did their best to make their chief wealthy (1978:103).

In return for the gifts of the community, which would include game, seeds and other natural resources, the chief was expected to hold community ceremonies at his own expense that sought to ensure the continuance of nature (Margolin 1978:104).

CHAPTER 4

OHLONE SHAMANISM

Ohlone Concept of Power in the Universe

The Ohlone understood nature to reflect a dynamic interaction between animals, plants and humans (Bean 1991). "Each form of plant and animal life had a soul, or spirit, rather like that of man's, so that there was believed to be a sharing of intelligence and feeling where each had a role to play" (Heizer and Elsasser 1980:210). Ohlone beliefs, in the form of stories and mythologies, often had the purpose of explaining the natural world and its origin (Margolin 1978). For Native Californians, natural phenomena often had underlying supernatural causes (Bean 1991:727). As Heizer and Elsasser further explain:

All over California rituals of supplication, appreciation, and condolence were made in connection with hunting or plant-food gathering, an acknowledgement by man of the crucial help he had received. These feelings were given tacit expression in rituals...(1980:211).

Ritual and ceremony would aim at supporting the well-being of the natural world and the health of the community (Margolin 1978, Bean 1991).

The people of the Bay Area, like many Native Californians, understood power as a force that was "arranged in various degrees" (Bean 1991:727). While some individuals within Ohlone society were thought to possess the power to shape-change into powerful creatures like the grizzly bear, others were thought not to have the power necessary to hunt game effectively (Margolin 1978). Bean interprets the Native Californian belief in power as a hierarchical structure with higher forms of life having access to greater degrees of power (1991: 727-729). The Ohlone embraced the belief that everything in the material world had some degree of supernatural power with which it was associated (Margolin 1978, Heizer and Elsasser 1980, Bean 1991). As Margolin elaborates:

[The] world of common objects, far from being lifeless and powerless, was in and of itself superbly, anarchistically alive. Not only could ordinary things draw considerable power from the spirit world, but they had an aliveness and power of their own. Everything did: people, animals, plants, bows, arrows, cradles, pestles, baskets, springs, trails, boats, trees, feathers, natural objects and manufactured objects as well. Everything was alive, everything had character, power, and magic, and consequently everything had to be dealt with properly (1978: 141).

By maintaining the balance of power within the community and within the local environment, the Ohlone would attempt to ensure the continuation of the community and the preservation of

the world's natural resources such as the deer, the elk, the grass seeds and the acorns (Margolin 1978, Heizer and Elsasser 1980, Bean 1991). Ceremonies and ritual dances were vital for this maintenance of power within the Ohlone community and those who had the greatest amount of power were most responsible for its maintenance (Margolin 1978, Bean 1991, Milliken 1991). There were those in Ohlone society, like the chiefs and the shamans, who were most responsible for the welfare of the people (Margolin 1978). While the chief would ensure the political stability of the community, maintain relationships between different Ohlone communities and redistribute wealth at various ceremonies and dances, the shamans were responsible for keeping the community in physical and in mental health (Margolin 1978, Bean 1991).

Shamanism and Healing Power

On the whole, much of Ohlone medicine was undoubtedly beneficial; but the Indians understood illness and healing in a totally different way than we do. Minor complaints such as stomach aches, cramps, or sprains were accepted as a normal part of life, and they were treated with herbs. Major illnesses, however, were caused by magic: an enemy--a person or more rarely a spirit--"shot" the disease into one's body by magical means. Minor illness could be handled by ordinary people, for almost everyone had at least some power. When it came to a serious illness, however, an ordinary person could be crushed and killed by the magic at work. This was a job for someone who had devoted most of a lifetime to understanding and dealing with magic, someone who had much experience and many potent helpers. This was a job for the extraordinary, often frightening figure of the shaman (Margolin 1978:133).

Being either male or female, the shaman was often an older member of the tribe who was taught to use supernatural power for a number of purposes including curing the sick (Margolin 1978, Bean 1991, Milliken 1991). The shamanistic healers were retainers of a tremendous amount of medicinal knowledge (Vogel 1970, Margolin 1978, Bean 1991). The Ohlone shaman was an individual who through luck, skill or 'power,' came under the tutelage of an older shaman from whom he or she would learn about shamanistic practices (Margolin 1978). The shamans were thought to be able to manipulate magical powers for good purposes (i.e., healing and appeasing spirits) or for evil purposes (i.e., causing sickness) (Margolin 1978, Bean 1991). They could treat serious illness and they could perform the ceremonial dances, chants and songs that could protect the Ohlone community; and the Ohlone were quite fearful that their community was at danger from the magical powers of enemies and of strangers (Margolin 1978). Evil magical powers could induce disease or could cause death according to Ohlone beliefs. These beliefs and practices were noted by Franciscan padres in 1814. At Mission Santa Clara de Asís, Catalá and Viader made the observation that:

By using certain herbs, roots and feathers and other items, they believe they can free themselves from their enemies and from illnesses. They practice witchcraft by means of

herbs, thorns and other enchantments by means of which they attempt to injure others and obtain revenge (Geiger and Meighan 1976:50-51).

The shamanistic doctors were mystical individuals who because of certain requisite abilities began a life devoted to the pursuit of supernatural power. Because of their ceremonial and ritual understanding and medicinal knowledge, they were respected among their people (Bean 1991, Milliken 1991). During times of trouble, when the acorn harvest was poor, when the deer would not come or when someone became seriously ill, the people would turn to the shaman (Margolin 1978). While every person had some degree of power, the shaman had knowledge of the most esoteric and extraordinary kind (Bean 1991:727). Ordinary people could treat mundane illness, but it took an individual of incredible power to heal someone with a serious illness. In fact, an Ohlone individual without power would think it foolish to try to heal someone who was extremely ill; without the power to effectively combat the evil magic at work, a person could be seriously hurt attempting a cure (Margolin 1978: 133). Bean explains that:

..the cause was treated by the class most competent to deal with it. Since a natural cause was often coterminously explained in relation to supernatural causes, patients would seek knowledge of cause and treatment beginning at the lower levels of power and power possessors and uses and ascend to higher and more specialized forms of diagnosis and treatment if lower-level forms did not adequately solve problems. Thus, from commonly known attempts at curing, they might have gone through increasingly higher levels to diviners, diagnosticians, lower-level shamans, and higher-level shamans (1991:728).

Ordinary people would try to maintain their relationship with supernatural powers in order to prevent sickness and disease (Margolin 1978: 140, Bean 1991, Milliken 1991). As Margolin states: "Keeping on the good side of power was a causal and continual occupation, a habit more than anything else" (1978: 140). Yet for the shaman, maintaining a strong relationship with power was much more than a casual pursuit: Shamans sought power. They would fast, pray, dream and journey into the woods to locate and to harness the powers of the supernatural world (Margolin 1978, Bean 1991).

Because the shaman had both the responsibility for curing his or her community and for causing disease in the communities of an enemy, the shaman occupied a socially ambiguous role (Bean 1991). The community members were somewhat suspicious of the powers of the shaman, fearing that those powers could be put to evil use (Margolin 1978:139). Bean explains that:

Because they had knowledge of witchcraft, poisoning, and the evil of others, they were in a somewhat dangerous [position]. When conditions (medical-behavioral-sociological) became acutely unstable within their community, they were likely to be accused, sometimes placed on trial (where they often confessed and relieved the harm they had caused), deprofessionalized by their fellow shamans, or slain (1991: 731).

Regardless of the fear many Ohlone had regarding a powerful shaman, the benefits from a shaman overshadowed their reservations. Shamans were an integral part of Ohlone life and they were fundamental participants in Ohlone healing practices.

Disease Causation and the Shaman

In Ohlone society, disease causation was understood in terms of supernatural phenomena (Margolin 1978, Bean 1991, Milliken 1991). For the Ohlone, sickness was the result of an enemy's magic, of an evil shaman, of a jealous lover or of "an object or place whose dignity had been offended" (Milliken 1991:53). Margolin explains that illness causation was often conceptualized as something being "shot" into a person (1978:133). While relatives, friends and trading partners were familiar and safe acquaintances, strangers were suspect and could be dangerous. Heizer and Elsasser write that "the appearance of strangers was automatically viewed with apprehension" (1980:204). The extreme localism of the Ohlone, which made them so knowledgeable regarding their environmental resources, had the result of creating a collective feeling that they were safe from the harm of others while inside their territory. Traveling to other tribal lands was done only infrequently for purposes of trade or warfare (Milliken 1991). "Strangers who spoke an unfamiliar language were to be avoided... because they were different and not known. If they were not aiming at some mischief, then why did they not stay at home among their own people" (Heizer and Elsasser 1980:204). At times an Ohlone might not be safe from the power of enemy shamans regardless of whether he or she was in his or her own territory or not. As Margolin notes:

So powerful were the shamans that many of them could poison an enemy fifty miles away, and later that night send an owl to fly across the enemy's path and literally frighten him to death (1978:140).

Milliken explains that through their techniques, shamans sought to instigate the Ohlone healing process whereby they would "[turn] poison back against a sorcerer or [remove disease causing] objects intruding into the body" (1991:54). It was both the responsibility of the shamans to treat serious ailments and to protect their people from the diseases caused by others.

Roles of Ritual, of Dance and of Ceremony in Shamanistic Healing

[In] those cases where there was no apparent natural cause for an illness, herbal remedies were given along with psychic (ritual) healing therapy, as well as with treatments such as massage, heat, bed rest, surgery and the like. The theme which ran through either type of curing, supernatural or natural, was, however, one which stressed the restoration of harmony or balance in nature, in interhuman relationships, and in human-supernatural relationships...[this] general principal is found throughout all of California (Bean 1991:730).

The shaman sought to alleviate the discomfort of the patient through a number of techniques including rituals, chants, dances, songs and ceremonies (Margolin 1978:123-133). Many indigenous cultures of California held the belief that certain illnesses were the result of disease-causing objects such as worms, insects, snakes or other creatures which had entered the body (often through magic) (Vogel 1970:13; Margolin 1978:123-133; Milliken 1991:54). Using a sucking tube made of wood or of bone, the shaman would attempt to suck out the disease-causing object. Sucking out infectious objects was a common practice in many healing arts of Native Californians and the Ohlone were not an exception (Margolin 1978:130).

In addition to 'sucking-out' disease, dancing was an integral part of Ohlone culture and the Ohlone had dances for all occasions including religious dances, harvest dances and healing dances (Margolin 1978:150-151; Milliken 1991:54). Dancing was a means by which the Ohlone could reestablish the balances in the natural world and in so doing they could ensure the food crops, prevent community hardships and cure disease (Margolin 1978: 153; Milliken 1991:54). The shamans had access to the ritualistic knowledge to properly perform the diagnosis and curing dances. Milliken notes that shamans used dances and songs to "affect the healing process" (1991:54). In Ohlone culture, the dancing shamans were of great importance in the diagnosis of disease and at times these shamans would work in conjunction with curing shamans (Margolin 1978:129-130). Margolin speculates that the dancing shamans might dance for hours at a time, working themselves into a stupor-like trance, during which time the shamans would gain an understanding of their patient's illness; perhaps after this exhausting dance, the shaman would explain his or her understanding of the illness to a curing shaman who would then initiate various therapies in hopes of combating the disease (1978:127-132). At times, singing and or chanting would accompany the shamanistic dancing practices. Within some indigenous cultures of California there were singing shamans. As Bean notes:

This shaman, usually a male, cured by the power of his songs, obtained from supernatural beings, but was also able to effect cures through "laying on of hands" and the removal of disease-causing objects. He acquired [this power] during visions or dreams...(1991:732).

In a world full of mysterious powers and of mischievous spirits, the shamans had the responsibility of maintaining the supernatural forces of the world in a semi-static equilibrium. They were to protect their community from supernatural harm, from evil witchcraft and from various types of magic. To maintain the health of their community, the shamans would employ techniques such as ritual 'sucking' of disease objects out from the bodies of the sick, diagnostic and curative dancing and chanting or singing (Margolin 1978:123-133). While many of the benefits from the shamanistic practices may have been psychosomatic, the bio-physiologic-medical value of some shamanistic healing techniques also contributed to maintaining Ohlone health.

CHAPTER 5

OHLONE HEALING AND PLANTS

Ohlone Medicinal Folklore

The Ohlone were adept naturalists with a superior understanding of their environment. Scheduling their cyclical movements within their territory, the Ohlone would move from food source to food source. Ohlone life was a mobile life. Thus, the Ohlone would procure food supplies, technological supplies and medicinal supplies from various locations throughout the year. The bountiful natural resources of the San Francisco Bay Area and the Monterey Bay Area, including resources from riverine, marine, savanna, coastal and woodland environments, made it possible for the Ohlone to not only maintain a more than adequate material culture, but also, with their familiarity of a number of floral species, to collect herbs that had significant medicinal value.

Because plant and animal procurement was a group activity, every Ohlone came to develop an ability to recognize medicinally valuable plant species. During food gathering or animal hunting, Margolin speculates that the Ohlone would have been careful not to overlook valuable medicinal plants. Margolin writes:

Thus we can picture an Ohlone family on one of its 'infinite little migrations.' They number perhaps a dozen people...[The] older children carry small baskets full of seeds, acorns, and dried meats and fish. The men have quivers of bows and arrows under their arms; over their shoulders are slung carrying nets filled with skins, knives, fire-making tools, beads, cordage, and perhaps ceremonial regalia. Some of the men and women also carry medicine bundles hidden within their baskets or nets (1978: 53).

The Ohlone people had a much different understanding of curing. Plants were not valuable to the Ohlone because of their chemical or biological properties; plants were valuable medicinally if they had curative 'powers.' Vogel explains:

...Indian food and medicine are spiritually and mythologically linked...the plant parts used for food were sometimes not the same as those used for medicine. It seems, however, that if the Indians held that spiritual power resided in the whole plant, it was only reasonable that the edible parts be used for food and for internal remedies and that the inedible parts be used for external remedies or for charms and ceremonial purposes (Vogel 1976: 135).

For the Ohlone people, common ailments and minor physical complaints were dealt with using floral treatments. These were treatments with which the bulk of Ohlone society was familiar.

Headaches, cramps, stomachaches and other minor illnesses were common occurrences in Ohlone life. Margolin explains:

[The Ohlone] understood illness and healing in a totally different way than we do. Minor complaints such as stomach aches, cramps, or sprains were accepted as a normal part of life, and they were treated with herbs...[minor illnesses] could be handled by ordinary people, for almost everyone had at least some power (1978:133).

Bean also comments on folk medicine within Native American cultures.

There was a common folk medicine available to anyone--the treatment of usual maladies by simple techniques of therapy ranging from the use of herbs, sweating, massage, and bed rest to magical forms (for example, in songs and formulas) privately and/or commonly owned (Bean 1991:727).

For the Ohlone, a plant cure was not effective because of its anti-viral or anti-bacterial properties--a plant was effective because of its inherent power (Bean 1991:727). Heizer and Elsasser explain that "[not] all herbal cures were effective. Some had magical connections, which may have had psychotherapeutic value only" (1980:129). Thus, the Ohlone understood minor illness and disease as magical phenomena which were often treatable with the proper healing herbs and medicinal plants. While not all of these remedies were effective at combating disease, it is arguable that many of these remedies were no less effective than many of the European cures of the 1770s (Vogel 1970:11).

Medicinal Plants of the Grassland Communities

The San Francisco and Monterey Bay Areas represent a mosaic environment from which the Ohlone developed an extensive collection of floral-medicinal treatments. There were a variety of plants which were quite valuable to Ohlone curing practices (see Appendix A). These plant species came from among several different habitats including the grassland plant communities, the woodland and chaparral plant communities, and the riverine-wetland plant communities (Chestnut 1974, Margolin 1978, Reilly 1994, Blume 1994, Schick 1994). While all of the various plant communities were important to Ohlone medicine, perhaps the grasslands were most important. The many medicinal grassland species included silver sage, black sage, wild cucumber, red grass, chía, toloache, tobacco, amole, immortal, flor de agosto and barba de chivo (see Appendix A).

Black sage is found in chaparral and in grassland areas where it can grow to over six feet in height (Geggatt 1988). The Ohlone would gather the small seeds and then grind the seeds into a meal, soak the seeds to produce a tea or chew the fresh leaves "for infections of the mouth and throat" (Geggatt 1988). The black sage plant was also an Ohlone remedy for asthma, cuts, sores, wounds, earache, rheumatism and urinary tract ailments (Bocek 1984:247-255). Wild cucumber

was also used to treat cuts and sores. It had roots that "produced a detergent lather [and seeds that were] made into a paste for pimples [and] skin sores" (Bocek 1984:251).

While black sage and wild cucumber were quite useful, chía "was one of the most widely known of the native plants used by the Indians of the West Coast" (Balls 1962:23). It grows in dry open places below 4,000 feet. Balls explains:

The small, slippery, gray-brown seeds were gathered in very great quantities by the Indians, who harvested the dry seeds from this and many other annuals and grasses by bending the heads of the plants over a rather flat, tightly woven basket and beating the seed into it with a basketwork fan or paddle (1962:24).

Bocek explains that chía seeds, as a result of their glutinous properties, were an important remedy for eye irritation (Bocek 1984: 253; Balls 1962:25). In addition, the seeds were mixed with water and taken to reduce fever (Bocek 1984:253; Balls 1962:25).

Another commonly used grassland plant was *Asclepias eriocarpa*, also known as immortal. Chestnut writes about the habitat of immortal explaining:

The broadly inflated pod contains a large number of feathery-tailed seeds which are widely distributed by the wind. It grows profusely along roadsides and in low, dry, or wet ground; sometimes, as in valleys, claiming large areas to the extent of from 60 to 90 per cent of the bulk of the vegetation. It is common throughout the interior of Mendocino County. During the summer and autumn when the grass has been burned up by drought this milkweed is conspicuous, both for its size and for the abundance of its large, soft, flaccid, and hoary-pubescent leaves (1974:379).

Immortal was an important Ohlone remedy for asthma and for colds. Leaves of the immortal plant were collected and then they were dried. Inhaling the smoke from the burning leaves was thought to relieve asthma and chest complaints; for relief from colds, the plant could be "used in a decoction and salve" (Bocek 1984:252).

Another plant used for chest ailments was barba de chivo. This plant exists as a conspicuous vine that at times will wind its way up trees. While barbo de chivo is found in woodland plant communities, it is also found in the grassland plant communities as well (Chestnut 1974:347). Bocek explains that "compresses of foliage [were used by the Ohlone] for chest pain" (Bocek 1984:248). Barbo de chivo displays white flowers during the summer months of July and August and it has leaves with "an acrid, peppery taste" (Chestnut 1974:247). While discussing the curing practices of the Mendocino County native peoples, Chestnut explains that the leaves and stems of barba de chivo were "chewed for the purpose of curing colds and sore throat" (Chestnut 1974:247).

Several other important medicinal plant species of the dry, grassland-mesa environment of the inner Santa Clara Valley include jimson weed, amole, and tobacco (Balls 1962). Jimson weed, also known by the Spanish name toloache, "grows in the dry waste places over much of

southern California and up into the lower Sacramento valley" (Balls 1962: 66). Toloache was used in Ohlone herbal medicine for a number of ailments including respiratory problems, chest pain and boils. Bocek explains:

Leaves [were] dried and smoked [then] used both as [a] purgative and as a hallucinogen; visions were believed to reflect one's future. Seeds when mixed with tobacco and smoked were used as aphrodisiacs; leaves were ground into a salve used to treat boils, and were also heated and used in compresses for chest pain or respiratory problems (1984:253).

Among other native peoples of California there is record of toloache being ground and then bound "on bruises and swellings" (Balls 1962: 67). Perhaps the Ohlone had similar uses.

While discussing the native peoples of California, Balls describes the use of both amole and tobacco as pain killers (1962:72, 84). Using the ethnobotanical field notes of J.P. Harrington, Bocek concludes that the Ohlone likely used the amole stem to produce a wash useful for reducing dandruff (1984:255). Furthermore, Bocek writes that the Ohlone used tobacco smoke, blown into the ear, to relieve earache (1984:253). Amole, commonly known as Indian soap or soap root, "grows plentifully on rocky banks and hills [throughout the San Francisco Bay Area]...[the root] contains the poisonous substance sapotoxin...in considerable quantity" (Chestnut 1974:319). Given the analgesic properties of amole, perhaps the Ohlone used amole as a pain killer as well as for dandruff problems. Balls writes that among certain Native Californian peoples "the roasted bulbs were used as poultices for sores, and the fresh crushed bulb was rubbed on the body to cure rheumatic pains and cramps" (Balls 1962:72). It may be possible that the Ohlone had similar uses.

Other medicinal plants species of the grassland communities include flor de agosto and red grass (see Appendix A). Flor de agosto (*Grindelia sp.*) is a perennial species growing two to three feet high (Chestnut 1974: 394). Chestnut describes its use among the native peoples of Mendocino County:

The leaves have a rather agreeable taste, very much like that of ordinary store tea, but perhaps a little more bitter...A decoction of the whole plant is valued as a blood purifier, to open the bowels, and to cure colds and colic, especially in children. The leaves are chewed in the fresh state, and are also used as a substitute for tea (1974:394).

The use of flor de agosto among the Ohlone may have been similar to its use among the Coast Miwok of Mendocino County. Bocek describes the Ohlone use of flor de agosto for treating dermatitis and for treating boils or wounds (Bocek 1984:254). Generally the leaves or other parts of this plant were used to make a decoction (Bocek 1984:254). While the leaves of flor de agosto were used to make only a decoction, the leaves of red grass were made into both decoctions to be taken internally and into compresses to be applied to rheumatic pains (Bocek 1984:254). Like other medicinal plants of the grassland plant communities, flor de agosto and red grass both had specific uses in Ohlone curative practices. While the grassland community was valuable in providing many medicinal plant species, the hillside-woodland plant communities were valuable providers of floral medicines as well.

Medicinal Plants of the Hillside-Woodland and Chaparral Communities

The woodland and chaparral plant communities were ecologically diverse with an abundant supply of medicinally valuable floral species. Schick explains that the woodland plant community "supplied indigenous peoples with an unmeasurable amount of food and non-food resources" (Schick 1994:14). Discussing the oak woodland community, Margolin writes:

Live oaks spread throughout the Bay Area, towering valley oaks occupied the inland valleys, small groves of black oaks dotted the hills, and extensive stands of tanbark oaks covered the Santa Cruz Mountains. Each triblet knew the location of the oak groves around them, and the oak trees' stages of development had a central place in the Ohlone mind. In the spring the people rejoiced at the bud-thickening and the leaf-burst of the deciduous oaks. Later they celebrated the appearance of the tiny cascades of pale oak flowers. As the summer progressed, the sight of the gradually ripening, shiny, green nuts filled them with joy and security. Throughout the year, the people responded to the stately rhythm of the oaks with the greatest awareness and involvement (1978:41).

Yerba santa, laurel, viper and manzanita were all woodland-chaparral-community plant species which were valuable to Ohlone healing practices (Bocek 1984:247-255). Often the inland valleys had both woodland-chaparral plant species as well as grassland plant species living a vicarious co-existence. Schick writes of the "interdependence...of these communities" (1994:18). Thus, many of the grassland medicinal species could also be found among the woodland-hillside and chaparral plant communities.

Eriodictyon californicum, also known as yerba santa, grows to about 4,000 feet on arid mountain slopes (Balls 1962:63). The inland valley foothills of the San Francisco and Monterey Bay Areas provide a dry, arid microenvironment which during Ohlone times would have been quite hospitable to the growth of yerba santa. Chestnut explains:

The well-known yerba santa (holy herb) of California, a dark-green, resinous shrub, 5 to 7 feet high, [is] synonymously called *E. glutinosum*. It grows profusely on dry, bushy hillsides throughout Mendocino County, and is known under the names mountain balm, wild balsam, gum leaves, tar weed, and, although incorrectly, "sumac." No plant is more highly valued as a medicine by all the tribes of Mendocino County (1974:381).

Yerba santa had many medicinal uses among the Native peoples of California. Balls explains:

The thick, sticky leaves, either fresh or dried, were boiled to make a bitter tea, taken as a cure for coughs, colds, sore throat, catarrh, and asthma, also for tuberculosis and rheumatism. It was thought to be a blood purifier and was taken frequently, in a weaker form, in place of regular tea. A liniment was used as a wash to reduce fever. The fresh leaves, pounded into a poultice, were bound on the sores of both men and animals. A

very strong solution from the boiled leaves eased sore and fatigued limbs. The young leaves and stems were used as a hot compress to cure rheumatism (1962:64).

Whereas Balls explains the general uses of yerba santa among the Native Californians, Bocek explains the use of yerba santa among the Ohlone of the Monterey peninsula.

[Yerba santa] leaves [were] heated and stuck to [the] forehead for headache, [they were] also chewed or smoked to relieve asthma [and] a decoction [was] used for asthma, and for rheumatism, tuberculosis and to purify the blood. Also [it was] produced [as] a tea used as an eyewash, and to treat new colds (1984:253).

The yerba santa species was valuable not only to the Ohlone but also to the Spanish explorers, missionaries and settlers (Balls 1962:63).

The California Bay-tree, often called the laurel, was also valuable to the Ohlone peoples. The laurel grows on shady hillsides and is common in the San Francisco and in the Monterey Bay Areas (Geggatt 1988:7). Bocek explains that the leaves were "stuck on [the] forehead for headache [and a] decoction [was] used as a wash to treat poison oak dermatitis" (1984:249). Geggatt further explains:

The aromatic leaves, made into a tea, were used to cure headache and stomach ailments. A leaf inserted into the nostrils or leaves worn under a hat were believed to cure headaches. A hot bath or steam bath with bay leaves was used to treat rheumatism (1988:7).

The laurel had hygienic uses as well. "The leaves also were used as an insecticide and fumigant against fleas and lice" (Geggatt 1988:7).

Like yerba santa, yerba de la víbora also known as viper, grows in the Bay Area foothills often among stands of laurel and stands of oak (Chestnut 1974:372). Chestnut describes viper as:

A small erect annual 1/2 to 2 feet high, which has very finely dissected leaves and white flowers and looks very much like the ordinary cultivated carrot, but has no edible fleshy root. It grows in considerable abundance on dry hillsides, but it is not used for any other purpose than that of a talisman in gambling [among the Coast Miwok] (1974: 372).

Whereas the Coast Miwok may not have used viper for medicinal purposes, the Ohlone seem to have used a decoction of the plant for snakebite, itching, fever and the early symptoms of a cold (Bocek 1984: 251).

Within the chaparral plant community, manzanita is a notable plant species that was used by the Ohlone for curative purposes. Chestnut explains that "[it] was used very extensively by the Indians [of the San Francisco Bay Area] when the Spanish priests first settled the country, and from the latter it received the name 'manzanita,' which means 'little apple,' and was suggested by the shape of the fruit" (1974:375). Manzanita often occupies "wide areas on dry, barren

ridges, often to the entire exclusion of other vegetation, and in masses so thick that they are impenetrable to man" (Chestnut 1974: 375). Bocek explains that certain parts of the manzanita plant were used to produce a decoction with which the Ohlone would treat bladder ailments (1984:252). Chestnut writes:

[Some non-Ohlone] Indians make a tea of the leaves to cure severe colds, but they are commonly regarded as too strong for internal use...[others] boil the leaves [until] the extract is yellowish red and then use it as a cleansing wash for the body and head--in the latter case to stop some kinds of headache (1974: 376-377).

While J.P. Harrington and Barbara Bocek record manzanita as an Ohlone cure for bladder ailments, it is conceivable that the Ohlone had other medicinal uses for this plant as well. The grassland, woodland and chaparral plant communities were all valuable to Ohlone medicine. These communities were able to provide Ohlone shamans and ordinary tribal people with floral treatments for ailments ranging from headache to bladder distress (see Appendix A); in addition to these plant communities, the riverine-wetland plant communities were also valuable sources of floral medicines (Reilly 1994).

Medicinal Plants of the Riverine-Wetland Plant Communities

Within the riverine-wetland plant communities there were a significant number of plant species that had uses in Ohlone healing practices (Reilly 1994). During the 1770s, the wetland habitat within the Ohlone territory was extensive. Margolin writes:

In the days of the Ohlone, the water table was closer to the surface, and indeed the first settlers who dug wells here regularly struck clear, fresh water within a few feet...Water was virtually everywhere, especially where the land was flat...In the days before channelizations, all the major rivers...spread out each winter and spring to form wide, marshy valleys (1978:8).

Several of the noteworthy species which exist in this watery habitat include blood root and *Trillium chloropetalum*. The wide distribution of moist habitats within Ohlone territory led to the proliferation of these plant species. Thus, Ohlone peoples would have been able to frequently gather these medicinal resources.

Eriogonum latifolium, also known as blood root or sour grass, grows on "hillsides and along open streams" (Chestnut 1974:345). The Ohlone would prepare the root, stem and leaves as a decoction to be taken internally for colds and coughs (Bocek 1984:249). Chestnut discusses the medicinal use of blood root among the Coast Miwok of Mendocino:

[The white woolly plant's] leaves, stem, and the woody root are very considerably used in the form of a decoction for pain in the stomach, for headache, and for female complaints. The root is especially good for these purposes and may be used over and over again. A decoction of the root is also used [among the Coast Miwok of Mendocino County]for sore eyes (1974:345).

Blood root grows about two feet tall and displays "inconspicuous flowers...arranged in a small capitate cluster" at the end of the stem (Chestnut 1974:345).

Trillium Chloropetalum grows in moist habitats where there is protection from direct sunlight (Chestnut 1974:329). The Ohlone used this species for chest pain, applying various parts of the plant as hot compresses to the area of chest discomfort (Bocek 1984:255). The use of *Trillium* as an external remedy is consistent with the ethnobotanical writings of Chestnut who describes the plant as "so intensely bitter that the [Coast Miwok] use [it] internally only as a last resort" (1974: 329). Whereas Bocek, relying on the ethnographic studies of J.P. Harrington, writes of the use of *Trillium* for treating only chest pain, Chestnut describes its medicinal use among the Wailakis and Yukis as more varied. Chestnut explains:

The exact application could not be ascertained, but the Wailakis and Yukis drink a decoction of it apparently for the purpose of preventing deep and lasting sleep. They describe it as good for "any kind of sick." Both the bruised leaves and crushed root are used as a poultice for boils (1974:329).

Although there is no evidence that the Ohlone had uses of *Trillium* similar to the Wailakis and Yukis, it is appropriate to speculate that *Trillium* could have been used for more than chest pain. Regardless of the specific medicinal uses of *Trillium*, the Ohlone found several riverine species quite valuable to their healing arts.

CHAPTER 6

MISSION LIFE AND THE OHLONE

Health and Disease at the Missions

The establishment of the mission system within the San Francisco and Monterey Bay Areas had a disastrous effect on Ohlone health (Cook 1976, Margolin 1978, Heizer and Elsasser 1980, Bocek 1984). The introduction of European diseases including mumps, smallpox, measles, influenza and syphilis reduced the pre-contact Ohlone population of some 10,000 to fewer than 2,000 by 1830 (Margolin 1978: 163; Bocek 1984:240). Cook describes the epidemics among the Native Californians as "one sweeping epidemic after another, each segment of the population undergoing in turn a cycle of devastating pestilence followed by gradual immunization and recovery" (1976:13). These European diseases were pathogens against which the Ohlone had no acquired immunity and, consequently, to which the Ohlone were particularly vulnerable. Furthermore, the aggregation of the Ohlone within the missions created an environment highly conducive to the spread of infectious disease (Cook 1976).

The atrocious living conditions at the missions contributed to the spread of contagious pathogens. Otto von Kotzebue, a Russian explorer visiting Mission Santa Clara in 1824, wrote:

We were struck by the appearance of a large, quadrangular building, which, having no windows on the outside, and only one carefully secured door, resembled a prison for state criminals. It proves to be the residence appropriated by the monks, the severe guardians of chastity, to the young unmarried Indian women, whom they keep under their particular superintendence, making their time useful to the community by spinning, weaving, and similar occupations. These dungeons are opened two or three times a day, but only to allow the prisoners to pass to and from the church. I have occasionally seen the poor girls rushing out eagerly to breathe the fresh air, and driven immediately into the church like a flock of sheep, by an old ragged Spaniard armed with a stick. After mass, they are in the same manner hurried back into their prisons (von Kotzebue 1830:15).

Such favorable conditions for the spread of disease were not present in the less populated areas outside the mission communities. By 1786 at Mission San Carlos Borromeo, disease had already had a violent impact on native life; a physician of the La Pérouse expedition described numerous ailments and symptoms among the native peoples at this mission:

Sore throats, catarrhs, pleurisies, and peripneumonies, are the ordinary diseases of the winter season...when these diseases have attained a certain degree of violence, they commonly degenerate, through this improper treatment, into chronic disorders; and they who have survived their effects under the development of their first character do not fail to end their days shortly in phthisis, or pulmonic consumption. Ephemeral and intermittent fevers, and dyspepsia, are chiefly remarkable in spring and autumn...The diseases most general in summer are fevers of various kinds, putrid, petechial, inflammatory, and bilious, together with the dysentery...the patient rarely has the strength to resist them (Milliken 1991:154).

In addition to the atrocious living conditions of the neophytes within the missions, food shortages were frequent and this "scarcity no doubt made the Indians more susceptible to disease" (Cook 1976:30; Heizer and Elsasser 1980:227). Furthermore, the neophyte-diet was much different from his or her aboriginal diet (Cook 1976:30). While the Ohlone diet before the mission period was characterized by a varied menu consisting of a variety of floral and faunal species, the diet of the neophyte was a monotonous diet of agricultural staples such as wheat, corn and beans (Cook 1976). In 1786, La Pérouse described the living conditions of the neophytes as resembling those of slaves:

We declare with pain that the resemblance [to slave colonies in Santo Domingo] is so exact that we saw both the men and the women loaded with irons, while others had a log of wood on their legs; and even the noise of the lash might have assailed our ears as that mode of punishment is equally admitted, although it is employed with little severity...(Margolin 1989: 81).

The consequence of insufficient immunity to Euro-diseases, of overcrowding of living spaces and of inadequate diet was the ubiquitous presence of disease at the missions (Cook 1976).

Mission Life and Ohlone Acculturation

The cumulative effects of the diseases and of the harsh realities of mission life had the result of destroying much of traditional Ohlone culture (Forbes 1969, Cook 1976, Margolin 1978, Heizer and Elsasser 1980, Milliken 1991). Margolin notes:

[Damage] to Ohlone life was irrevocable. Basketmaking and other basic crafts were neglected and lost. As different triblets and cultures mixed together, rituals and dances became muddled, and native languages were dropped in favor of the more generally understood Spanish or, in some cases, the language of the dominant Indian group at the mission. As triblet after triblet was decimated by disease and death, the networks of support and sharing disintegrated. Confidence in the permanence and validity of the old ways was destroyed, and hopelessness took its place (1978:164).

As diseases began to disrupt traditional Ohlone lifeways and aboriginal practices, some Ohlone undoubtedly lost faith in the worthiness of Ohlone culture. Milliken explains:

The Indian person who chose to convert to Christianity was acknowledging cultural fear and doubt about the future and hoping for some healing power through identification with the powerful invaders. At the missions, they sought the familiar within the alien. Just as they had relied on proper ritual conduct and respect for spirits in their own lands under the direction of knowledgeable elders, in the mission communities they placed themselves in the confident hands of the Franciscan missionaries (1991:331).

Unfortunately, the accounts of disease and of disease treatment at the missions of the San Francisco and Monterey Bay Areas indicate the ineffectiveness of mission medicine to relieve the fears and the doubts that many Ohlone had regarding the health of their community (Cook 1976). The inadequacy of the mission-medical facilities accentuated the effects of disease within the mission system. In Spanish California from 1776 until 1825, there was only one qualified physician (Cook 1976:33). Heizer and Elsasser explain that "[medical] knowledge was so deficient that nothing, literally, could be done to cure the sick" (1980:227). Not only was mission medicine inadequate, but much of European medicine, during the 1700s and 1800s, was incapable of treating disease properly (Burke 1977, Lanning 1985). The majority of the Ohlone were likely dissatisfied with mission life and a melancholy came to characterize many of them. Louis Choris, an 1816 visitor to Mission Dolores in San Francisco, wrote:

I have never seen one laugh. I have never seen one look one in the face. They look as though they were interested in nothing (Margolin 1978:164).

Yet, despite the loss of some aspects of aboriginal life, despite the attempts by the missionaries to suppress Ohlone religious and curing practices, and despite the ambiguous feelings certain Ohlone had regarding traditional practices, there was an underground maintenance of many traditional practices among the neophytes (Forbes 1969:30; Vogel 1970:32; Margolin 1978:164). Allusions to these secret practices are evident in the following account from Mission Santa Cruz, written by Father Manríquez and Father Escudé in 1814:

[They] hold at times secret, nocturnal dances *always avoiding detection by the fathers*...In their midst they raise a long stick crowned by a bundle of tobacco leaves or branches of trees or some other plant. At the base of this they place their food and even their colored beads...When all the men are together the old man whom they respect as their teacher or soothsayer goes forth to listen to and to receive the orders from the devil (Geiger and Meighan 1976:50; my italics).

Furthermore, Pérouse made the observation that the Ohlone of the Monterey Bay Area maintained aspects of traditional culture. Pérouse wrote in 1786 that "[the] converted Indians have preserved all [their] ancient customs..." (Margolin 1989:92).

Maintenance of Ohlone Healing Practices at the Missions

While various accounts indicate the possible maintenance of certain native healing and shamanistic practices among the neophytes of the Bay Area missions, there do not exist accounts which provide extensive information about these practices (Vogel 1970:76). The Franciscan missionaries sought to create a population of pious "heathen" who would devote themselves to the tenets of Christian doctrine and belief; the missionaries sought to convert the Ohlone from gentiles to *gente de razón* (*people of reason*) (Forbes 1969:30). The Spanish missionaries were often brutal in their attempts to destroy native Ohlone culture. Forbes explains:

Within the missions, the Franciscans and their soldier escorts exercised complete control over the neophytes (as the converts were called), this control even extending to regulation of sexual behavior, splitting off children from parents (e.g., locking up all unmarried girls above the age of seven in a "nunnery" each night and the males in another building), forbidding native marriage and divorce practices, and, of course, attempting to suppress all aspects of Indian religion and curing practice [Indian doctors or curers were flogged whenever apprehended] (1969:30).

As a consequence of the Franciscan attitudes towards Ohlone culture, few Franciscan writings explain details of traditional native healing among the neophytes. Mission padres did not approve of Ohlone curing practices. This contempt for native healing is evident in the following account from Mission Santa Clara written in 1814 by Father Catalá and Father Viader:

One method these deceivers [shamans] use is to scarify the flesh with a sharp stone and extract blood by sucking. They employ the charm which they have well hidden in their mouth, and which is a thorn, pebble or little tufts of feathers or some other items. By these means they convince their patients of their powers... (Geiger and Meighan 1976:78).

Vogel explains the attitude of many missionaries towards Native American healers:

The hostility of the Christian missionaries to the medicine men is revealed in many of their accounts. Thus, all of the principal forces of European erosion of Indian society have been brought to bear in the assault against the medicine man. To the extent that his influence was weakened, [European] influence was able to penetrate (1970:32).

Consequently, there is insufficient information to adequately examine the use of traditional Ohlone medicine within the missions. Nevertheless, some information about traditional healing practices after missionization is known (Geiger and Meighan 1976:77-80).

The maintenance of traditional Ohlone practices and the references to the use of particular native plants for medicinal purposes by certain Spanish missionaries seem to indicate that the use of some traditional curing practices survived missionization. Although the Spanish missionaries were persistent in their admonitions against traditional Ohlone shamanism, it is unlikely that the majority of the Ohlone neophytes would have abandoned their traditional healing practices or their relationship with their shaman curers given the devastating effects of the Euro-diseases and given the ineffectiveness of mission medicine to treat these diseases (Forbes 1969:30; Vogel 1970:32; Cook 1976:33-34; Margolin 1978:164). While Milliken suggests the initial impetus for some Ohlone conversions to Christianity may have been an attempt to obtain healing power through identification with the Spanish missionaries, the fugitivism of the 1780s through the 1800s seems to indicate the dissatisfaction many Ohlone had with the mission system (Forbes 1969:30-37; Milliken 1991:331). Fugitivism, as well as other means of resistance, characterized the Ohlone reaction to the mission period (1769-1834). For example, Forbes explains:

Runaways became so numerous in the early 1800's that large sweeps were made on occasion by troops through the Central Valley looking for them, while smaller squads of soldiers were always out. In 1818 a Franciscan reported that the refugees and gentiles had set up "a republic of hell and a diabolical union of apostates" in the tulare marshes of the San Joaquin Valley (1969:35).

Other occurrences of resistance include attempts at poisoning or murdering the Franciscan priests (e.g., Guest 1985, Hoover 1989, Phillips 1993). In 1812, Father Quintanna at Mission Santa Cruz was murdered by several neophytes (Forbes 1969:34). Furthermore, Forbes explains:

Religious resistance was also offered to the invaders. In general, the natives did their best to secretly preserve their ancient religion in the missions,...It seems clear that the missionized Indians seldom if ever became completely Christianized, partly because new gentiles were constantly being brought in. Many pre-Spanish religious beliefs were retained by the coastal Indians, albeit in a garbled form, after the missions had been abolished (Forbes 1969:35-36).

The close association of religion with medicine and the association of the shaman with healing suggest that those activities which sought to resist Christianity would likely tend to preserve important Ohlone religious-medical knowledge as well. In 1814 Father Abella and Father Sainz de Lucio of Mission Dolores in San Francisco wrote:

There are many, however, even the majority, who return from the countryside where they have been with the pagans, such as their parents, who hold on to old practices (Geiger and Meighan 1976:51).

It is likely that many of the neophytes attempted to treat their illnesses with traditional medicines after realizing the lack of adequate treatment available from European medical-

mission facilities. In 1814, Father Abella and Father Sainz de Lucio made the observation that "[the] dominant disease among them is syphilis but it is quite hidden and from it arises a great number of illnesses [some of which cause] sores" (Geiger and Meighan 1976:79). These diseases and other prominent Euro-introduced diseases (e.g., measles, small pox and influenza) produced recognizable symptoms among those Ohlone afflicted with them. It seems logical that those traditional curers still practicing during the mission period would have utilized aboriginal treatments to combat the symptoms of these diseases. For example, the treponemal bacteria which cause syphilis often produce characteristic syphilitic lesions of the epidermis. Ohlone medicine could have utilized a number of floral species to treat sores and lesions including species such as black sage, red grass, wild cucumber, rose, rosemary, nettle, violets and balsam (see appendix A).

In a letter from Father Luís Gil y Taboada at Mission San Gabriel to Governor Pablo Vicente de Solá, written in 1818, Father Taboada writes:

He speaks of a syphilitic Indian and says that, in his opinion, one of the reasons why [the Indians] are practically all dying of this terrible malady is that the missions lack all medicines and there is no other physician than the Providence of God (Cook 1976:27).

The inability of mission priests to offer treatment as a result of inadequate medical knowledge and supplies may have inclined *many* Ohlone neophytes to seek traditional treatments. In 1814, Father Abella and Father Sainz de Lucio described the use of aboriginal medicine among the neophytes at Mission San Francisco:

They [the neophytes] chiefly use Yerba Buena. They do not employ bloodletting except when they suffer from some inflammation when it is at the point of suppuration. When not, as when they have a head-ache or some internal pain, they scarify with a pointed stone and suck the blood (Geiger and Meighan 1976:79).

Harrington's work among the Rumsen and the Mutsen of the Monterey Bay Area during the 1920s and 1930s indicated that yerba buena was made into a strong decoction used for pinworms and toothache (Bocek 1984: 253). Nevertheless, the neophytes at San Francisco may have had other uses for this floral species. In 1814, Father Durán and Father Fortuny also made an observation about the use of traditional medicinal cures among the natives in the vicinity of the San José Mission:

They do not employ nor do they know of bloodletting, laxatives nor emetics. When their illness causes pain in a definite area, their principal remedy is to scarify it with sharp stones and to suck or extract blood from that area (Geiger and Meighan 1976:79).

Finally, Father Felipe Arroyo de la Cuesta of the San Juan Bautista Mission made similar observations at Mission San Francisco and at Mission San José:

[Once] in a while they are cured by means of herbs and roots which experience has taught them to be of value. There are among the Indians many healers and wizards who obtain many beads for curing others, but at other times, they get nothing. They have deceived the greater number of their people. They cure by chanting and by gestures and shouts they attempt to effect their superstitious cures. They succeed only in the case of bleeding with a sharp stone and by sucking the blood (Geiger and Meighan 1976:78).

These accounts, written by missionaries in 1814, seem to indicate the maintenance of traditional medicinal practices within the San Francisco and Monterey Bay Areas. Although the missionaries were diametrically in opposition to many traditional Ohlone practices, these missionaries made references to curing techniques among the indigenous population that appear to be consistent with traditional shamanistic healing practices. While the missionaries do not make many specific references to herbal treatments, it seems appropriate to conjecture that if traditional healing by means of chanting and by means of sucking was occurring then traditional healing by the less dramatic use of floral cures may have been occurring as well.

CHAPTER 7

THE OHLONE AFTER SECULARIZATION

Bay Area Ohlone Communities After Secularization

On August 9, 1834, Governor José Figueroa issued the *Reglamento Provisional*, which initiated the secularization of the Californian missions (Parkman 1992:168). While the neophyte response to secularization varied from mission to mission, Phillips characterizes the response as "manifesting the kind of psychological disorientation that often accompanies decolonization" (Phillips 1993:266). An 1834 account, from Mission San Luis Rey, describes the neophyte response there:

These Indians will do absolutely no work nor obey my orders. In consequence, though the season for sowing the wheat is at hand, and the necessary plows have been prepared, I must suffer the pain of being obliged to suspend work for want of hands. The men have mistaken the voice of reason and even of authority which orders the work, for they declare they are a free nation. In order to enjoy their obstinacy better, they have fled from their houses...Nothing would suit them, nothing would change their ideas, neither the well-being which must result for their good behavior, nor the privations which they suffer in their wanderings. All with one voice would shout. "We are free! We do not want to obey! We do not want to work!" (Phillips 1993: 267).

While the Mexican Republic continued to enact legislation which closed the missions and which sought to divide mission lands among the ex-neophytes, the lands of Mission San José and Mission Santa Clara came into the possession of local families of Spanish-Mexican descent (Field et. al. 1992:424).

Some of the ex-neophytes of the Bay Area missions sought employment as *vaqueros* (cowboys) on the new *rancheria* estates, while others left these estates to seek refuge in the more remote areas of the Bay Area (Field et. al. 1992:424). The establishment of Native Californian settlements, between Mission San José in the south and San Leandro in the north (near the modern cities of Pleasanton and Sunol), had the result of creating large communities consisting of Ohlone, Miwok, Yokut and other indigenous groups. "At least a thousand former mission Indians lived in the vicinity of Mission San José in the early 1840s, and it is likely that more Indians came to the area from the Mission Santa Clara region" (Field et. al. 1992:424). The stability of these early Native Californian communities was only temporary.

With the 1846 military invasion of California by the United States, the Anglo-immigration of 1849 and the consequent 1850 declaration of statehood, Native Californians had to confront

often belligerent Anglo-American settlers (Cook 1970: 30; Field et. al. 1992: 424). Many of these settlers had nothing but contempt for the Native Californians. The Anglo-American immigrations of the late-1840s and 1850s were disastrous for the indigenous peoples of the Bay Area (Parkman 1992: 179). Cook notes:

The intensity of their attack upon the natives was amplified manyfold when the massive immigration of 1849 broadcast a host of new pathogens, with an accompaniment of universal bad sanitation, water pollution, and complete lack of social control. The ravages of disease, nevertheless, could probably have been tolerated without permanent and fatal consequences had the Indian not been subjected to a bitter interracial conflict with the Anglo-American, during the course of which he barely escaped extinction (1970:30).

The Native Californian response was one of accommodation and resistance (Hurtado 1988:7). Communities in the East Bay hills became centers in which missionized Native Californians sought to maintain their identity as human beings. Discriminatory American legislation had the consequence of delegitimizing the validity of Spanish-Mexican land titles for the *ranchería* estates and consequently many of these estates became the possessions of Anglo-settlers who likely expelled Indian *vaqueros* from their lands (Field et. al. 1992:425). As American laws began to bar Native Californians from participating in the communities of the Anglo-settlers (e.g., Indians could not vote, give testimony in court or file law suits), some Native Californians began to engage in various revitalization movements (Hurtado 1988; Field et. al. 1992: 425; Parkman 1992: 168-177; see also Heizer and Elsasser 1980).

Bay Area Revitalization Movements between 1860 and 1904

By the early 1860s, Native Californian communities began to coalesce throughout the area of Pleasanton in the East Bay hills (Parkman 1992: 182). Field et. al. note:

[For] reasons that are still not completely clear, many, if not most, of the remaining Indian people from Mission San José, perhaps many from Mission Santa Clara, and others, gathered at a new refuge called Alisal, i.e., Alder Grove, *ranchería* [located] just south of the town of Pleasanton... (1992:425).

While similar communities, predominantly Ohlone, developed in Monterey and San Juan Bautista, the Alisal *ranchería* was the most prominent community of Ohlone descendants existing from the 1860s until the early 1900s (Margolin 1978:166; Field et. al. 1992:425). At the Alisal *ranchería*, the Ohlone leaders, elders and shamans expressed their "collective reactions to the many stresses associated with the acculturation process" (Parkman 1992:181). The *ranchería* communities between Sunol and Pleasanton were composed of not only Ohlone but of Plains Miwok, North Valley Yokuts, Patwins and Coast Miwok as well (Margolin 1978:166). These communities were nuclei for revitalization movements which sought to recreate traditional aspects of Native Californian life. Traditional dances were danced, sweat houses were used and

traditional healing arts were practiced (Margolin 1978: 167; Parkman 1992: 181; Field, et. al. 1992:425).

For example, during the 1870s, the Ghost Dance became important at the Alisal *rancheria* as well. This dance originated in Nevada where a Paiute prophet taught that certain dances could free the Indian people from domination by the *white people*. The Ghost Dance became combined with the Kuksu Dance, the World Renewal Ceremonies and other important Ohlone rites and rituals (Field et. al., 1992:426). The Ghost Dance movement was an important social phenomenon which helped to revitalize the Ohlone people's appreciation of their identity as Indian people. Field et. al. explain:

The fluorescence [of the Ghost Dance] at Alisal demonstrates the depth and conviction of indigenous identity and culture in the East Bay near the end of the nineteenth century (1992: 426).

While the Ghost Dance was not a traditional Ohlone dance, the integration of this dance with other Ohlone practices serves as an example of how the Ohlone people, during the late 1800s, were able to retain significant aspects of their traditional life while still adapting to the changing historical circumstances.

Another good example of this comes with the adaptation of the traditional *hiweyi* and *lole* dances of the Chochenyo Ohlone (i.e., the original inhabitants of the eastern San Francisco Bay Area) which seem to have been important to the Pleasanton communities (Gifford 1927: 230; Levy 1978:490; Parkman 1992:163-183). The *hiweyi* and *lole* dances "formed a pair, the men dancing the [*hiweyi*] and the women dancing the [*lole*]" (Parkman 1992:181). The *hiweyi* was an important dance of certain curing ceremonies in the East Bay hills (Gifford 1926:402). An Ohlone medicine man, known as Tciplitcu (also written 'Chiplichu'), from Pleasanton, is known to have introduced the *hiweyi* to the Central Miwok while living among this group as an "Indian revitalization missionary" of the Ghost Dance during the early 1870s (Parkman 1992: 169). The informant, Tom Williams, was present at a *hiweyi* dance of Tciplitcu occurring at Knights Ferry. Tom Williams described this performance of the *hiweyi* in detail:

Chiplichu wore a feather boa called *hichli*, which passed across the back of his neck and was drawn back under his arms from the front, the two ends being joined behind to form a tail. He carried a cocoon rattle, called a *wasilni*, in each hand, and a third cocoon rattle was fastened in his hair. He wore a wreath on his head, made of stems and leaves of mugwort (*Artemisia vulgaris*) twisted together, and his hair was held firmly by a net. Four bunches of split crow feathers attached to sticks completed his headdress. Each of these feather ornaments was about two feet long and tied with deer sinew. They were thrust in his hair, one sticking out in front, another in back, and one on each side. The cocoon rattle which he wore on his head was fastened at the back, with the rattles up. A tule mat, said to be six inches thick, with armholes, was worn very much like a skirt and reached the knees. It was held by a string around the neck, tied in front. Under the mat, Chiplichu wore a piece of deerskin about his middle. He was not decorated with

paint...As he danced, he held a cocoon rattle upright in each hand. He held the rattles away from him about the level of his breast and swung them together from side to side. While the ceremony was going on, the people were supposed not to smoke...(Parkman 1992:170).

While the ceremonial performance of the *hiweyi* dance by Tciplitcu may not reflect the subtle nuances of this traditional Ohlone dance, it does reflect the importance of shaman healing dances during the 1870s. Nevertheless, the ritual dress and objects do demonstrate an adherence to traditional elements of Ohlone life. Parkman explains that the *Chochenyo* Ohlone "[hiweyi] doctor was able to cure all kinds of diseases" (1992:181).

The mention of the genus *Artemisia*, in the Williams account of Tciplitcu's *hiweyi* dance, is significant. The genus *Artemisia* consists of several species including *Artemisia californica* (Silver sage), *Artemisia douglasiana* (Black sage) and *Artemisia dranunculus* (Anis). These species had traditional curative value among the Rumsen and Mutsen Ohlone peoples (Bocek 1984; see Appendix A). While Tom Williams describes the *Artemisia* species as serving an ornamental-ceremonial function, the Rumsen and Mutsen often used the *Artemisia* species as a cure for such maladies as urinary problems, asthma and rheumatism (Bocek 1984: 254; see Appendix A). The presence of this species seems to suggest the maintenance of plant use, possibly for healing purposes, during the 1870s in the Pleasanton communities.

The Alisal *ranchería* (known as the Verona Band after the construction of the Verona railroad station nearby) gradually became less important for many Native Californians. Field et. al. explain:

A slow decline in the community [of Alisal *ranchería*] in the late nineteenth century, however, is apparent in light of later events. Pressures of assimilation, an increasingly large number of white Americans settling in surrounding towns and farmlands and taking over the old *Californio* ranchos, the precarious economics of seasonal ranch work, and some out-migration, all contributed to the waning of the indigenous revival at Alisal (1992:426).

The last tribal dance of the Pleasanton community was held in 1897 and the last full-blooded Ohlone chief died in El Molino (also known as Verona Station) around 1901 (Galvan 1968:12; Parkman 1992:182). By 1904, there were approximately fifty people living in each of the communities of Alisal and El Molino (Parkman 1992:182). While the revitalization movement of the late-nineteenth century waned during the early twentieth-century, Ohlone descendants continued to value their culture, and consequently, information about Ohlone healing practices was maintained by certain Ohlone descendants.

J.P. Harrington's Ethnobotanical Research Among the Ohlone

Henry Alvarez, a Muwekma elder, remembers that his mother, Dolores Marine, once spoke about the linguist J.P. Harrington. Henry Alvarez recalls: "I can remember that there was a man who came around. Heh, my mom didn't like him because he used to talk too much. She knew him, but she never liked him because he talked too much...asked too many questions" (Field et. al. 1992: 428). J.P. Harrington did extensive fieldwork among the Rumsen and Mutsen Ohlone peoples during the 1920s and 1930s, directing the collection of hundreds of plant specimens (Bocek 1984: 240). Of the 157 plant species represented in the Harrington collection, 101 species had medicinal uses among the Mutsen and Rumsen (Bocek 1984: 240). While Harrington's material does indicate that the Mutsen and Rumsen were using certain non-indigenous plant species for medicinal purposes, his work is valuable in recognizing the continuity of healing practices among Ohlone descendants through time and the Ohlone ability to adapt to a changing socio-cultural-physical environment.

The Harrington collection reflects the fact that beginning in 1769 and continuing through the eighteenth century, there was a significant introduction of non-indigenous plant species which have since become established in the Californian flora (Robbins 1940, Bocek 1984). The uses of plant species for medicinal purposes, among Harrington's Mutsen and Rumsen informants, represent both traditional beliefs as well as non-traditional beliefs (Bocek 1984). By the 1920s, many of the Ohlone were becoming assimilated into California's Mexican-American community (Bocek 1984, Field et. al. 1992). Consequently, their identity with the Mexican-American community reflects itself in the Harrington collection as "Mexican beliefs about diet, disease and plant use had clearly been acquired by Harrington's informants" (Bocek 1984:243).

Harrington's collection contains a number of introduced plant species including *Solanum nigrum* (Nightshade), *Achillea millefolium* (Yerba de la muela), *Ruta chalapensis* (Rue), *Plantago major* (Plantain), *Marrubium vulgare* (White Horehound), *Melissa officinalis* (Balm) and *Rumex crispus* (Dock) (Bocek 1984). Garriga mentions all of these introduced species as having medicinal value among the Spanish-Mexican-Indian communities of California during the late 1800s (Weber 1978). While the uses of these plants, as reported by Harrington's informants, do not always coincide with the uses that Garriga reported among the generic Spanish-Mexican-Indian communities, there do exist some similarities. For example, Harrington recorded that Nightshade leaves could be heated and then applied to boils while Garriga wrote that Nightshade leaves could be made into a poultice to be put on an external malady (Weber 1978:27; Bocek 1984:253). Furthermore, Harrington described the use of Yerba de la muela leaves for toothache while Garriga described the use of these leaves for dental problems as well (Weber 1978: 40; Bocek 1984: 254). Yet, while Harrington recorded that his Rumsen and Mutsen informants used the Yerba de la muela leaves as a poultice-like application within the mouth, Garriga described the use of these leaves as a tea as well as a directly applied medicine (Weber 1978:40; Bocek 1984:254). Evidently, Harrington's informants did have access to certain beliefs about healing

which derive from beliefs held by the Spanish-Mexican-Indian community (Weber 1978; Bocek 1984). Therefore, while Harrington's research does indicate that many indigenous plant species were being used by his Rumsen and Mutsen informants (see Chapter 6), these uses do not necessarily represent aboriginal uses (Bocek 1984).

The Ohlone Today

The Ohlone people are not solely a people of history. In fact, there are many Ohlone descendants still present throughout the San Francisco and Monterey Bay Areas. These Ohlone people believe that their culture is valuable. Consequently, many Ohlone are participants in the contemporary Ohlone revitalization movement (Field et. al. 1992). This movement reaffirms that the Ohlone people are still alive today and that the Ohlone culture exists as something which is both unique and special.

At the turn of the century, Alfred Kroeber, often referred to as the *Father of California Indian Anthropology*, wrote:

The [Ohlone] group is extinct so far as all practical purposes are concerned. A few scattered individuals survive, whose parents were attached to the missions San José, San Juan Bautista and San Carlos; but they are of mixed tribal ancestry and live almost lost among other Indians or obscure Mexicans (1925:464).

While Alfred Kroeber would later reverse his position concerning the Ohlone people, his statement did continue to affect the views of anthropologists, historians, educators, politicians and the general public for decades (Field et. al., 1992). While Kroeber's misinformed statement was damaging to those disenfranchised Ohlone descendants of the 1920s and 1930s, many local Ohlone descendants did not accept his assertion.

In 1991, due to the efforts of Ohlone descendants and other indigenous peoples, an Ohlone organization, called the Muwekma Costanoan/Ohlone Tribe, became established in the Bay Area. This organization exists as a testament to Ohlone "survival and persistence into the late twentieth century" (Field et. al. 1992:413). While Ohlone people living today do not participate in the traditional hunting and gathering lifestyle of their ancestors, many participate in various traditional activities which affirm their identity as Ohlone people. In fact, the Ohlone Tribe sponsors many such activities.

I had the opportunity to discuss Ohlone ethnohistory with Andy Galvan, a member of the Ohlone Tribe. He is an incredibly knowledgeable person who is fluent with much Ohlone history. When asked about Ohlone medicinal practices, he affirms that many Ohlone descendants are familiar with certain traditional practices; yet, Mr. Galvan explains that much of this familiarity comes from examining the works of both historians and ethnohistorians. While Mr. Galvan admits that there does exist some continuity of oral history, the works of J.P. Harrington,

Randall Milliken and others have become invaluable to many Ohlone people who wish to become better acquainted with their past and with their ethnic identity. When asked about how the Ohlone use medicinal plants today, Mr. Galvan explained:

The Ohlone are a practical people. I know, for example, that the bark of the willow tree can substitute as aspirin when prepared properly...but when I get a headache, I go the bathroom cabinet to get aspirin (Andy Galvan Personal Communication May 14, 1995).

Another Ohlone descendent, with whom I had a conversation, was Linda Yamane. She too is quite knowledgeable about Ohlone history. She reaffirmed Andy Galvan's observation that the Ohlone people of today do not treat disease with herbal medicines. Nevertheless, Mrs. Yamane explained: "Many Ohlone do have knowledge of their past and of healing plants" (Linda Yamane Personal Communication May 24, 1995).

While the Ohlone descendants of today do not rely on herbal cures to treat disease and pathology, they understand that knowledge of their past is important and valuable. The Ohlone revitalization movement of the 1990s represents a vibrant and powerful assertion, by the Ohlone people, that the indigenous peoples of the Bay Area are alive and that they deserve recognition. The efforts of numerous Ohlone descendants, including Andy Galvan and Linda Yamane, ensure that the Ohlone community will continue to preserve its cultural knowledge and will continue to make that knowledge accessible to both scholars and the public alike.

CHAPTER 8

A NEW BEGINNING

Conclusion

The duration of the Spanish mission system in the San Francisco and Monterey Bay Areas lasted from 1770 (the founding of Mission San Carlos at Monterey) until 1834 (the secularization of the mission system in California) and the damage to Ohlone life was irrevocable (Margolin 1978: 164). During the period of missionization in California "81,000 Indians were baptized in the missions and 60,600 deaths were recorded...[these deaths were the result of] European diseases, such as smallpox, measles, diphtheria, and other ailments, [against] which the Indians had no natural immunity" (Heizer and Elsasser 1980: 226-227). As European diseases began to decimate the Ohlone population, the Ohlone people began to abandon faith in their traditional healing practices. "The [Ohlone] person who chose to convert to Christianity was acknowledging cultural fear and doubt about the future and hoping for some healing power through identification with the powerful invaders" (Milliken 1991: 331). By the 1830s, the Ohlone population was fewer than 2,000; nevertheless, some Ohlone people continued to remember the medicinal uses of important plant species (Bocek 1984: 240). The research of the ethnobotanist J.P. Harrington during the 1920s and 1930s resulted in the collection of important ethnobotanical information from Ohlone informants (see Bocek 1984). "Of the 157 plants recorded by Harrington ...101 [had uses in] medicinal preparations" (Bocek 1984:240).

The Ohlone had a well developed understanding of health, disease and disease treatment. Relying on a number of floral medicines, the Ohlone were able to maintain the health of their community (Margolin 1978: 132, Bocek 1984 247-255, see Appendix A). Through the work of various researchers including Margolin, Milliken and Bocek, the Ohlone use of environmental resources is becoming better understood. As the modern medical community begins to search for new and better drugs, the ethnobotanical research of Harrington, Bocek and others may begin to become meaningful to the bulk of modern society. Nevertheless, understanding Ohlone history and identity is important for both Ohlone and non-Ohlone alike. For the Ohlone, the ethnobotanical research demonstrates the sophisticated medicinal knowledge possessed by their ancestors. This knowledge, as with their other understandings of their environment, enabled them to live in balance and harmony with the world around them for millennia. For the non-Ohlone, it is important to recognize and appreciate the uniqueness which exists in the world. The indigenous people of California, like many indigenous people throughout the world, have had a turbulent history. Understanding and appreciating these histories is an important part of learning to appreciate and understand the people with whom we all must live.

APPENDIX A

Note: This appendix is based on Barbara Bocek's research (see References Cited under Bocek 1984). The species' name is given its scientific name (non-bold print in italics) then within parentheses is given its Spanish name (bold print no italics) then its English common name (bold print in italics).

asthma

Artemisia californica (**Romerillo; Silver sage**)
Artemisia douglasiana (**Estafiate; Black sage**)
Asclepias eriocarpa (**Inmortal**)
Eriodictyon californicum (**Yerba santa, palo santa**)

arthritis

Ambrosia psilostachya (**Hambre**)

bladder ailments

Arctostaphylos spp. (**Manzanita; Bear berry**)
Equisetum laevigatum (**Cañutillo, cañutito; fir**)
Mimulus aurantiacus (**Chupadero**)

boils

Baccharis douglasii (**Renegada**)
Datura meteloides (**Toloache; Devil's apple**)
Grindelia camporum (**Flor de agosto**)
Scrophularia californica (**Campamocha, yerba de la chuparrosa**)

burns

Nevarretia atractyloides (**Sesaña**)
Solidago californica (**Oreja de liebre; Chicle**)

chest pain

Clematis ligusticifolia (**Barba de chivo**)
Datura meteloides (**Toloache; Devil's apple**)
Trillium chloropetalum

chills

Sisyrinchium bellum (**Biyela**)
Torreya californica (**Nuez moscada**)

colds

Artemisia californica (**Romerillo; Silver sage**)
Asclepias eriocarpa (**Inmortal**)
Eriodictyon californicum (**Yerba santa, palo santa**)
Eriogonum latifolium (**Tibinagua; Blood root**)
Daucus pusillus (**Yerba de la víbora; Viper**)
Gnaphalium californicum (**Gordo lobo; Great mullein**)
Helenium puberulum (**Rosilla**)
Rosa californica (**Mamauco, mamacua, rosa; rose**)
Salix lasiolepis (**Sauz de la oja finita**)
Sambucus caerulea (**Sauco; Elder Tree**)
Trichostema lanceolatum (**Romero, yerba del aigre; Rosemary**)

colic

Artemisia dranunculus (**Yerbaníz; Anis**)

constipation

Paeonia brownii (**Pionia**)
Rhamnus californica (**Yerba del oso**)
Vicia gigantea (**Garavancillo, chicharillo**)

congestion

Limonium californicum (**Yerba del jaraso; Aster**)

cough

Artemisia californica (Romerillo; *Silver sage*)
Eriogonum latifolium (Tibinagua; *Blood root*)
Lotus scoparius (Tatamaque)
Orthocarpus sp.
Salvia mellifera (*Salvia*; *Sage*)

cuts/sores/wounds

Angelica sp. (Chuchupate; *Parsley*)
Artemisia douglasiana (Estafiate; *Black sage*)
Castilleja affinis (Clavel del campo)
Eriodictyon californicum (Yerba santa, palo santa)
Euphorbia maculata (Golondrina)
Galium spp. (Yerba del pujo; *Red grass*)
Grindelia camporum (Flor de agosto)
Lonicera spp. (Moronel, Linnoceá subspicata)
Marah macrocarpus (Chilicote; *Wild cucumber*)
Rosa californica (Mamauco, mamacua, rosa; *rose*)
Scrophularia californica (Campamocha, yerba de la chuparrosa)
Sedum sp. (Siempreviva)
Senecio douglasii (Yerba del pasmo; *Ribbon wood*)
Solidago californica (Oreja de liebre; *Chicle*)
Stachys bullata (Borraja; *Borage*)
Trichostema lanceolatum (Romero, yerba del aigre; *Rosemary*)
Urtica (*Ortiga*; *Nettle*)
Viola sp. (Violeta, gallito; *Violets*)
Zauschneria californica (Balsamillo; *Balsam*)

dandruff

Chlorogalum pomeridianum (Amole; *Indian soap*)

dermatitis

Grindelia camporum (Flor de agosto)
Rhamnus californica (Yerba del oso)
Umbellularia californica (Laurel; *Bay-tree*)

diarrhea

Quercus spp. (Roble; White oaks)
Rubis vitifolius (Mora, zarsamora)

dysentery

Artemisia dranunculus (Yerbaníz; Anis)
Eremocarpus setigerus (Yerba del pescado)
Galium spp. (Yerba del pujo)
Rubis vitifolius (Mora, zarsamora)

earache

Artemisia douglasiana (Estafiate; Black sage)
Nicotiana bigelovii (Tobaco; Tobacco)
Salvia mellifera (Salvia; Sage)
Stachys bullata (Borraja; Borage)

eye ailments

Salvia columbariae (Chía)
Scrophularia californica (Campamocha, yerba de la chuparrosa)

fever

Cornus californica (Iris)
Daucus pusillus (Yerba de la víbora; Viper)
Pellaea mucronata (Calahuala; Purple cliff broken fern)
Phacelia californica (Tabardillo; Thoroughwart)
Psoralea orbicularis (Cule, culén)
Rosa californica (Mamauco, mamacua, rosa; rose)
Salix spp. (Sauz)
Salvia columbariae (Chía)
Sedum sp. (Siempreviva)
Verbena lasiostachys (Verbena)

hair loss

Baccharis glutinosa (Guatamote)

headache

Angelica sp. (**Chuchupate; Parsley**)
Eriodictyon californicum (**Yerba santa, palo santa**)
Torreya californica (**Nuez moscada**)
Umbellularia californica (**Laurel; Bay-tree**)

heart disorders

Salvia mellifera (**Salvia; Sage**)

hemorrhoids

Aesculus californica (**Berraco; Buckeye**)

indigestion

Paeonia brownii (**Pionia**)

internal injuries

Lathyrus vestitus

itching

Daucus pusillus (**Yerba de la víbora; Viper**)

kidney ailments

Baccharis douglasii (**Renegada**)
Disporum hookeri
Mimulus aurantiacus (**Chupadero**)
Rosa californica (**Mamauco, mamacua, rosa; rose**)
Senecio douglasii (**Yerba del pasmo; Ribbon wood**)

lice

Eschscholtzia californica (**Amapolla**)

menstrual cramps

Anemopsis californica (**Yerba del manso; Swamp root**)

numbness

Chenopodium californicum (**Jamatáy, raiz de lavar; soap root**)

pain

Adiantum jordanii (**Culantrillo; Maidenhair**)

Anemopsis californica (**Yerba del manso; swamp root**)

Juniperus californica (**Pina, pino**)

Trichostema lanceolatum (**Romero, yerba del aigre; Rosemary**)

Urtica spp. (**Ortiga; Nettle**)

paralysis

Salvia mellifera (**Salvia; Sage**)

pneumonia

Monardella villosa (**Poléo; Penny royal**)

Paeonia brownii (**Pionia; Peonia**)

respiratory ailments

Datura meteloides (**Toloache; Devil's apple**)

Monardella villosa (**Poléo; Penny royal**)

Wyethia angustifolia (**Camer**)

rheumatism

Artemisia californica (Romerillo; *Silver sage*)
Artemisia douglasiana (Estafiate; *Black sage*)
Cupressus macrocarpa (Cipres)
Eriodictyon californicum (Yerba santa, palo santa)
Galium spp. (Yerba del pujo; *Red grass*)
Opuntia sp. (Nopal; tuna; *prickly pear*)
Pinus sabiniana (Piñon)
Rosa californica (Mamauco, mamacua, rosa; *rose*)

snakebite

Daucus pusillus (Yerba de la víbora; *Viper*)

sore throats

Datisca glomerata (Raiz colorada)
Rosa californica (Mamauco, mamacua, rosa; *rose*)
Salvia mellifera (Salvia; *Sage*)
Sedum sp. (Siempreviva)
Stachys bullata (Borraja; *Borage*)

stomach ailments

Adiantum jordanii (Culantrillo; *Maidenhair*)
Adiantum pedatum (Pata de gallina)
Angelica sp. (Chuchupate; *Parsley*)
Gnaphalium californicum (Gordo lobo; *Great mullein*)
Paeonia brownii (Pionia)
Sisyrinchium bellum (Biyela)
Stachys bullata (Borraja; *Borage*)
Trichostema lanceolatum (Romero, yerba del aigre)
Verbena lasiostachys (Verbena)

swelling

Lonicera spp. (Moronel; *Linnaea subspicata*)
Scrophularia californica (Campamocha, yerba de la chuparrosa)

toothache/teeth ailments

Aesculus californica (**Berraco; Buckeye**)
Artemisia californica (**Romerillo; Silver sage**)
Lithocarpus densiflorus (**Cascalote**)
Quercus spp. (**Roble; White oaks**)
Satureja douglasii (**Yerba buena; Mint**)
Stachys bullata (**Borraja; Borage**)

tuberculosis

Eriodictyon californicum (**Yerba santa, palo santa**)

urinary tract ailments

Artemisia douglasiana (**Estafiate; Black sage**)
Artemisia dranunculus (**Yerbaniz; Anis**)
Eriogonum fasciculatum (**Patita de venado**)
Limonium californicum (**Yerba del jaraso; Aster**)
Rumex crispus (**Lengua de vaca; Dock**)
Zauschneria californica (**Balsamillo; Balsam**)

venereal disease

Limonium californicum (**Yerba del jaraso; Aster**)

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