



APPENDIX F: HISTORICAL EXCERPTS

A collection of excerpts is presented here, garnered from the records examined and presented in chapter II. All of these, except for three, are first-hand accounts. The exceptions are: Emanuels, *Early California Voyages*, which contains a collection of excerpts garnered from his research; Fredrickson, *Mihilakawna and Makahmo Pomo : The people of Lake Sonoma*, which is an anthropological report; and the Anonymous, *Historical Sketch of Sebastopol; the first white settlement*, which contains information that was not found elsewhere. They were all deemed worthy of inclusion here. Hittel also quotes and summarizes others, but his writing from the vantage point of 1863 qualifies him as a primary source. All of the other works consulted are first-hand works of authorship, and most of them were written prior to 1846. The bibliography of chapter II, serves dual role as the reference list for these entries.

Each excerpt is preceded by the publication in which it appears and by the author, date and location relating to the quote. An example is:

[Frugé 1999 : 139] *Auguste Duhaut-Cilly; Aug 4, 1827; Mission San Francisco Solano (Sonoma)*. “While the young men are letting fly their arrows at beaver or stag ...”

This excerpt is from page 139 of “A Voyage to California, the Sandwich Islands, & Around the World in the Years 1826-1829” published in 1999 and translated-edited by August Frugé. The manuscript’s author is Auguste Duhaut-Cilly who wrote this passage on Aug 4, 1827 while at Mission San Francisco Solano in the present-day town of Sonoma. Frequently, when the location is uncertain, the name of the geographical area—such as the San Francisco Bay Area—is applied; if observations are of a general nature the word “California” is used.

With these marks on authorship, time and locality, the reader can apply prudent usage to the excerpted passages. Together with the historical sketch on early exploration and settlement in the Laguna, it should become clear to the careful investigator just how much credence can safely be placed on each passage. For example, is the observation local to the watershed or descriptive of the county or region at large? Does the area

being described, even if it is outside the watershed, fit the description of what we know about the Laguna? In particular, does the observation need to take into account differences in climate, for example the milder climate of the San Francisco Bay Area or the slightly more extreme climate of the Sacramento–San Joaquin?

Of course each author carries along through their writings the limitations of their experience and training. Thus we might place greater reliability on trained naturalists, geologists, and botanists and a lesser reliability on the layman. In a different way of looking at credibility, we know that some authors write from the freshness of a first hand look while others write from a temper that is forged after years of living in California; both give us something special—the former tends to write about the rare and the extraordinary, the later tends to write more about the mundane. Each author also has a style of expression that suffuses their work: ship logs and overland journals tend to be drier, giving us facts and instructions and these are only occasionally punctuated with emotion; letters of the Padres tend to be flowery in their ecumenical praise and often describe the environment only as it relates to hardship and sustenance; diaries often have the greatest introspection and the best expressions of beauty and wonder.

Another word of caution is relevant regarding the excerpts. There is a clear tendency of the authors to over-emphasize fish and game, including fur bearing animals and wildlife that supply other useful products such as tallow and whale oil. Animals of grace and beauty are also frequent subjects for some authors. Unusual wildlife, and wildlife not found in the part of the world that the visitor is from, is more often commented upon by short-term and first-time visitors, examples are: lion, bobcat, eagle, vulture, and burrowing owl. Pests and nuisances (such as mosquitoes and fleas) receive a place in some author's books but not others, simply because they make life miserable; other authors were specifically on the lookout for pests that have the potential to harm future agricultural and ranching operations. What's missing from nearly all of the authors' accounts are some of the more common species: raccoons, rodents, songbirds, unidentified grasses and forbes, and inedible fruits.

No attempt in this study has been made to examine the influences of the indigenous population on the natural environment. Although we know that the pressures of hunting, trapping, fishing and gathering altered the balance of wildlife, we do not know to what extent. Furthermore, sweeping statements about the employment of fire and other resource management techniques are intriguing but of restricted value.

For our purposes we have considered the pre-contact period, with all its indigenous impacts, to be the target of our principal question, which is: “What did the watershed look like just before the arrival of the first settlers in the 1840s?”

One of the difficulties is that as soon as the observer arrives on the scene, the state of conditions becomes corrupted and we have to ask, “to what extent did this person’s presence change the balance of nature?” Certainly by the time disappointed ‘49ers began returning from the gold-fields to take up the more stable pursuits of ranching and farming, we have reached the end of one era and the beginning of a new one.

Most of the excerpted quotes below are from the period of time before the big changes in the watershed.



ANTELOPE

[Winks 1962 : 31] *Frank Marryat; Aug 1850; Santa Rosa Valley*. “...with here and there a drove of elk or antelopes”

[Winks 1962 : 34] *Frank Marryat; Aug 1850; Carrillo Adobe (Santa Rosa Valley)*. “This plain, our host assured us, abounded with deer, elk, and antelope.”

[Winks 1962 : 37] *Frank Marryat; Aug 1850; Santa Rosa Valley*. “Before long we saw a herd of antelope grazing at some distance, and the Spaniards pulled up and prepared their lassos. The antelope at this time of the year are very fat, and comparatively speaking do not run, or bound rather, fast through the long grass, so that if headed there is a *chance* for an expert horseman to catch one with the “riatta,” and it was with the intention of showing me this possible feat, that our host had made up the party... . Don Raymond [Carrillo] spurred at the headmost bucks, but his lasso fell short; three does brought up the rear; at one of these I fired and wounded it, but it plunged into the thicket with the rest.”

[Winks 1962 : 181] *Frank Marryat; Christmas 1851; San Francisco*. Antelope on the San Francisco restaurants’ bill of fare.

[Nunis 1991 : 52] *John Bidwell; Oct 31, 1841; bottom of the Sierras*. “Hundreds of antelope in view!” “Killed two antelopes and some wild fowls.”

[Nunis 1991 : 52] *John Bidwell; Oct 31, 1841; Sacramento–San Joaquin Valley*. “These plains are now the province of thousands of elk, antelope, deer, wildhorses, etc.”



- [Nunis 1962 : 84] *Josiah Belden; Nov 4, 1841; California*. “Deer were very plenty, and also antelope and elk, especially round San Joaquin plains.”
- [Hittel 1863 : 123] *California*. “Thousands [of antelope] are killed yearly for market.”
- [Brandes 1970 : 98] *Miguel Costansó; Oct 31, 1769; At the descent of the Sierra of Santa Lucia. Monterey Bay*. “Game abounds much in the interior of the Sierra, above all the antelope and deer.”
- [Browning 1991 : 90] *George H Derby; c1846; Tulare Plains*. Antelope listed as being present.
- [Anonymous 1925] *Secondary source; Sebastopol*. “Enormous quantities of game, large and small were shipped out of the region. Prices are of record on this scale: Good-sized deer or antelope, \$20 ...”
- [Small 1967 : 23] *William Heath Davis; c1839; San Francisco Bay area*. “... This food, together with the game killed by the soldiers, such as elk, deer, antelope—and beef, constituted their whole fair when in the field.”



ELK

- [Polk 1991 : 233] *Sir Francis Drake; June 17 - July 23, 1579; Marin County*. “... The inland we found to be far different from the shore, a goodly country, and fruitful soil, stored with many blessings fit for the use of man: infinite was the company of very large and fat deer [tule elk], which there we saw by thousands, as we supposed, in a herd; besides a multitude of a strange kind of conies [rabbit], by far exceeding them in number. [The World Encompassed, pp79-80]”
- [Elliot 1910] *Francis Petty; 1579; inland from Drakes Bay*. “... we found herds of deer by a thousand in a company, being most large, and fat of body.”
- [Small 1967 : 16] *William Heath Davis; August 9, 1839; Sutter's (Sacramento)*. “As we moved away Captain Sutter gave us a parting salute of nine guns - the first ever fired at that place - which produced a remarkable effect. A large number of deer, elk and other animals on the plains were startled, running to and fro, stopping to listen, their heads raised, full of curiosity and wonder, seemingly attracted and fascinated to the spot ...”
- [Small 1967 : 22] *William Heath Davis; 1840-1843; Mare Island*. “On Mare Island I often saw in the years from ‘40 to ‘43 as many as two or three thousand elk, it being their habit to cross and recross by swimming between the island and the mainland, and I remember one occasion,

- when on the schooner “Isabella”, of sailing through a band of these elk, probably not less than a thousand, which were then crossing from Mare Island to the mainland. It was a grand and exciting scene.”
- [Small 1967 : 41] *William Heath Davis; Winter 1839-40; Sutter’s (Sacramento)*. “The winter of 1839-40 was a severe one in California, an immense quantity of rain falling. It poured down for forty days and nights with but little cessation... . Among the stories he [Sutter] mentioned was one of seeing deer, elk and other animals crowded together in large numbers on every prominence which appeared above the waters, to protect themselves from being carried away by the flood.”
- [Winks 1962 : 31] *Frank Marryat; August 1850; Santa Rosa Valley*. “... here and there a drove of elk or antelopes.”
- [Winks 1962 : 34] *Frank Marryat; August 1850; Carrillo Adobe (Santa Rosa)*. “This plain, our host assured us, abounded with deer, elk, and antelope.”
- [Nunis 1991 : 52] *John Bidwell; October 31, 1841; Sierra foothills*. “Elk tracks thousands!”
- [Nunis 1991 : 53] *John Bidwell; November 4, 1841; Marsh’s rancho (Mt. Diablo)*. “We saw large herds of elk and wild horses grazing upon the plain... “
- [Nunis 1991 : 62] *John Bidwell; 1841; Sacramento Valley*. “These plains are now the province of thousands of elk, antelope, deer, wildhorses, etc.”
- [Nunis 1962 : 45] *Josiah Belden; Nov 4, 1841; Sacramento-San Joaquin valley*. “Crossing the valley at that time, we saw immense herds of wild horses and elk running over the plain, and we had no further trouble about provisions.”
- [Nunis 1962 : 84] *Josiah Belden; c. 1843*. “Deer were very plenty, and also antelope and elk, especially round San Joaquin plains.”
- [Pierce 1979 : 37] *Captain Edward Belcher; Oct 26, 1837; Estrecho Karquines (Carquinez Strait)*. “...also elk and deer, in herds of twenty and thirty... ”
- [Thompson 1896 : 33] *Otto von Kotzebue; Sep 1824; Two Rock*. Mentioned as being present.
- [McCullough 1969] *Otto von Kotzebue; Sep 1824; Overland from San Rafael to Bodega*. “We sometimes also, but less frequently, saw another species of stag, as large as a horse, with the branching antlers; these generally graze the hills, from whence they can see round them on all sides, and appear much more cautious than the small ones.”

- [Browning 1991 : 90] *George H Derby; c1846; Tulare Plains*. Elk listed as being present.
- [Olmstead 1962 : 229-235] *Hutchings; c1860; California*. Engraving of a California Deer (elk) by C. Nahl.
- [Dmytryshyn 1976 : 124] *Kyrill Timofeevich Khlebnikov; 1817-1832; Bodega-Fort Ross*. Elk listed as being present.
- [Essig 1991 : 24] *Otto von Kotzebue; Oct 3, 1824; overland from Sonoma to Bodega Bay*. Wapiti (elk) listed as having been encountered.
- [Wagner 1924] *Sebastian Rodriguez Cermeño; 1595; Marin County*. "... deer walking about, the largest ever found, as could be seen by their antlers."
- [Frugé 1999 : 134] *Auguste Duhaut-Cilly, August 1827; Angel Island*. "From time to time we noticed great numbers of deer, wandering over this inclined pasture, and we watched them run, browse, fling themselves across the hillsides, sometimes so steep that we had difficulty imagining how they could avoid falling."
- [Wilber 1953 : 67] *George Vancouver; Nov 22, 1792; Monterey*. "After dinner we were entertained with the methods practised by the Indians in taking deer, and other animals, by imitating them. They equip themselves in a dress consisting of the head and hide of the creature they mean to take; with this, when properly put on and adjusted, they resort to the place where the game is expected, and there walk about on their hands and feet, counterfeiting all the actions of the animal they are in quest of; these they perform remarkably well, particularly in the watchfulness and manner in which deer feed. By this means they can, nearly to a certainty, get within two or three yards of the deer, when they take an opportunity of its attention being directed to some other object, and discharge their arrows from their secreted bow, which is done in a very stooping attitude; and the first or second seldom fails to be fatal. The whole was so extremely well contrived and executed, that I am convinced a stranger would not easily have discovered the deception."
- [Garate 1995 : 49] *Juan Bautista de Anza; 1776; between Guadalupe and San Francisco*. "It is extremely lacking in building materials and firewood and abounds in deer of eight *cuartas* [6 feet] in height, attributing to the rapid disturbance [of the forest] caused by their enormous antlers. Well, there are some that exceed two *varas* [6 feet] and would be very detrimental to any woodland."
- [Garate 1995 : 153] *Gabriel Moraga; 1778; San Francisco Bay*. "This refreshment of meat having appeared before us and our having been able

to obtain it with such ease, not only revived the troops with a great abundance of food, but also gladdened them in thinking of the abundance of these animals that this country promises to provide. It is certain, Most Excellent Lord, that these deer are of such grand size and their meat is so tasty that there will be no need to desire that of a better breed of animal, either in quantity or quality. The height of their stature, as measured by me, is seven *cuartas* [5 1/4 feet]. The length of the body is two and a half *varas* [7 1/2 feet]. Their antlers are seven *cuartas* tall. Those that we saw with such a promontory rising above their heads, made a very pleasing figure.”

- [Beebe 2001 : 43] *Vizcaíno; Jan 3, 1603; Monterey*. “There was a large riverbank, along which could be found livestock as large as cows, even though they looked like stags. However, their hide was different; it was woolly and dragged on the ground. Each horn was more than three yards long.”
- [Small 1967 : 23] *William Heath Davis; California*. “... This food, together with the game killed by the soldiers, such as elk, deer, antelope—and beef, constituted their whole fair when in the field.”
- [Small 1967 : 134] *William Heath Davis; Sacramento Valley*. “[Daniel] Sill spent a portion of his time in the Sacramento Valley ... [where] he also killed elk for their hides and tallow.”
- [Small 1967 : 152] *William Heath Davis; California*. “Captain [William D.] Phelps was an excellent shot with the rifle, very fond of hunting deer, elk, rabbits, ducks, geese, quail and other birds, and kept his vessels in game while in port... .”
- [Small 1967 : 134] *William Heath Davis; 1840; Sutter’s (Sacramento)*. “He [Sutter] had familiarized himself with the unknown wealth of ... the valleys in elk, deer, bear and other fur-bearing animals. The tallow derived from the elk was an article of commerce in good demand at two dollars the *arroba*.”
- [Small 1967 : 250] *William Heath Davis; Pinole*. Don José Ramón Estudillo, another brother of Mrs. Davis, was fond of the sport of lassoing elk. He once told me that on this identical spot of “San Joaquín” he had seen many of these beasts of the forest grazing with the stock of the Pinole rancho.
- [Winks 1962 : 34] *Frank Marryat; June 1851; Vallejo*. “News was brought one day that a band of elk had been seen near the place, and upon this the whole population turned out. Independantly of the fact that I feared being shot by some of the party, among whom were several boys, armed with rifles, I knew that the Elk *does* were heavy at this season,

and I had no mind to assist in a butchery. The drove was headed about nightfall in marshy ground, and about *eighteen does* were killed. I was sorry to have lost the chance of hitting the slot of these beasts, for the bucks might easily have been secured with care, whereas, approached as they were, whilst drinking in marshy and treacherous ground, the bucks being on the outskirts made for the hills, whilst the poor frightened does became quagmired, and fell an easy prey.”

[Winks 1962 : 181] *Frank Marryat; Christmas 1851; San Francisco*. Elk appear on the menu.

Craig 1970 : 102] *William Robert Garner; Nov 5, 1846; San Joaquin valley*. “Elk, in the San Joaquin valley, are very numerous. The natives go out in the months of March, April and May, and lasso vast numbers of them. They are then very fat. As soon as the elk is caught and killed, they take off the hide and tallow. The former is tanned for shoe leather, and the latter, is brought into the settlement, and used for making soap.”

[Craig 1970 : 102] *William Robert Garner; Dec 9, 1846; Tulares*. “[The Indians] merely separate a few of the fleetest horses, which they keep for the purpose of hunting elk, which abound in the Tulare valley.”

[Hittel 1863 : 122] *California*. “The elk were very abundant in California previous to 1849, and they were frequently seen in large herds; but within the last ten years they have become rare, and before the close of another decade they will be extinct in our state. A few are found in the San Joaquin valley, but the best place for hunting them is in Mendocino county. Several hundred carcasses find their way every year to the San Francisco market. The young fat elk furnishes a very juicy and sweet venison.”

[Wilber 1933 : 92-104] *Alexandre Dumas; July 1850; Santa Rosa prairie*. The author relates a long story about hunting an elk.

[Stewart 1970 : 18] *Joseph B Chiles; Spring 1842; Sutter’s (Sacramento)*. “Their preparations for food was elk meat dried, and pounded in mortises until it was very fine then dropped in boiling lard, or grease, then taken out and pressed, and packed into skins for use, when desired for a meal a small piece was put into a kettle of water with some red pepper and boiled with some pounded wheat.”

[Frugé 1999 : 136] *Auguste Duhaut-Cilly; August 4, 1827; Mission San Francisco Solano (Sonoma)*. “I said above that the tallow was deer tallow, and since this term may sound strange, it is well that I describe the manner of procuring it. The hills in this part of California and the plains lying between them support an immense number of deer of

prodigious strength and size. So abundant is the pasturage that by the month of July they have become quite fat and have lost much of their lightness of foot, and it is then that the Californians choose to hunt them. . . . ¶ Once the fat has been taken from the animals, the flesh is abandoned on the hunting ground, and bears, attracted by the scent, come from all sides to feed on it. Often hunters must dispute the terrain with these dangerous beasts, which sometimes lose their lives on the field of battle. ¶ They pointed out to me a youngster of sixteen, who had taken twenty-three deer in one day. Assuming that each one produced three ‘arrobas’ [an arroba is equal to twenty-five pounds] of tallow, this young man had earned for his day’s work one hundred thirty-eight piasters, about seven hundred francs. From the soldiers of this garrison I purchased four thousand francs worth of this product [131 elk], garnered from their hunt.”

[Anonymous 1925] *Secondary source; 1850; Sebastopol*. “To supply fresh meat to San Francisco was the business of many hunters about the bay and its tributaries. . . Enormous quantities of game, large and small were shipped out of the region. Prices are of record on this scale: hind quarter fat elk, \$40. . .

[Fisher 1988 : 28] *Carlos Híjar; 1834; Sonoma County*. “The principal goals of these roundups was the deer, stags and spotted cattle. They killed these animals for the purpose of getting the meat and grease. According to the opinion of the country, one could get twelve *arrobas* of lard from the grease of eight deer.”

[Bricca 1952 : 15] *Paul-Emile Botta; 1827; California*. “I do not know if such a thing also occurs in Europe, but the fact is that in California, deer in the months of June, July, and August become so fat that a man on horseback, if he has a good mount, can easily overtake them in a short run. In these three months the Spanish colonists engage in hunting in order to provide themselves with tallow, which these animals have in great abundance. This tallow is white, solid, of the best quality and very much resembles that of sheep. It is a good revenue for California. On the way to Lima we had aboard more than twenty barrels of this deer tallow. I cannot describe these deer, not having ever seen them except at a distance, but I believe that they are not of the same breed as those of Europe. They are much larger, very much so, if I judge by their antlers, which grow to an extraordinary size.”



PARTRIDGES & QUAIL

- [Winks 1962 : 51] *Frank Marryat; Sep 1850; Russian River Valley*. “We put up several ... covies of partridges, whose parents had never been shot at.”
- [Winks 1962 : 65] *Frank Marryat; Christmas 1850; Russian River Valley*. “...partridges were in abundance, yet were also spared, as we wished them about the place.”
- [Wilber 1933 : 86-87, 145] *Alexandre Dumas; 1850; San Jose and Sonoma*. Mentioned as being present.
- [Frugé 1999 : 60] *Auguste Duhaut-Cilly; Feb 1827; San Francisco to Monterey*. “The country abounds with ... tufted partridges.”
- [Frugé 1999 : 163] *Auguste Duhaut-Cilly; Aug 1827; California*. “They also make fine baskets from reeds, ornamented with mother-of-pearl and partridge crests.”
- [Frugé 1999 : 101] *Auguste Duhaut-Cilly; Apr 1827; Point Loma*. “We stirred up great bevies of quail, a species of crested partridge that I have mentioned elsewhere and that has an excellent flavor.”
- [Margolin 1989 : 64] *Jean François de La Pérouse; 1786; Monterey*. “The coppices and plains are covered with small grey crested partridges, which live in society like those of Europe but in coveys of three or four hundred. They are fat and of excellent taste.”
- [Polk 1991 : 254] *Sebastian Vizcaíno; 1602; Monterey*. Partridges and quail are both mentioned as being present.
- [Cutter 1969 : 113] *Sebastian Vizcaíno; May 23, 1603; Monterey*. “... a great variety of game, such as rabbits, hares, partridges ...”
- [Shipley 1938 : 35] *William C Shipley; c1884; Healdsburg*. Author noted the presence of quail in his very long list of birds of the area.
- [Fredrickson 1984 : 37] *Secondary source; pre-contact era; Lake Sonoma*. “Two kinds of quail were also trapped: valley and mountain... . The top-knots or plumes of male valley quail were also prized by women, who used them to decorate their finer coiled baskets.”
- [Browning 1991 : 90] *George H Derby; c1846-1852; Tulare Plains*. Quail mentioned as being present.
- [Wilber 1953 : 71] *George Vancouver; Dec 9, 1792; Monterey*. “The surrounding country ... overgrown with a naturally impassable thicket of shrubs about four or five feet high, which afforded an excellent cover for ... quails, &c. some of which we saw in passing along the roads cut through it.”



- [Anonymous 1925] *Secondary source; Sebastopol*. “Prices are of record on this scale: ... quail, \$9 [per dozen]”
- [Bricca 1952 : 18] *Paul-Emile Botta; 1827; California*. “The Tchacaca (California Quail) live in the fields on the edges of the forests ...”
- [Small 1967 : 152] *William Heath Davis; San Francisco Bay area*. “Captain [William D.] Phelps was an excellent shot with the rifle, very fond of hunting ... quail and other birds, and kept his vessels in game while in port ...”



CONIE, RABBIT & HARE

- [Polk 1991 : 233] *Sir Francis Drake; Jun 17 - 23, 1579; Marin County*. “... a multitude of a strange kind of conies [hare] ...”
- [Elliot 1910] *Francis Petty; 1579; inland from Drakes Bay*. “We found the whole country to be a warren of a strange kind of coneys; their bodies in bigness as be the Barbary coneys, their heads as the heads of ours, the feet of a *want* [mole] and the tail of a rat, being of great length. Under her chin is on either side a bag, into the which she gathereth her meat, when she hath filled her belly abroad.”
- [Polk 1991 : 254] *Sebastian Vizcaíno; Dec 16, 1602; Monterey*. Mentions “much wild game” including hare and rabbits.
- [Frugé 1999 : 60] *Auguste Duhaut-Cilly; Feb 1827; between San Francisco and Monterey*. “The country abounds with hares, rabbits, ...”
- [Frugé 1999 : 88] *Auguste Duhaut-Cilly; Apr 1827; San Pedro*. “We shot several rabbits ...”
- [Frugé 1999 : 101] *Auguste Duhaut-Cilly; Apr 1827; Point Loma*. “The abundance of game there is such that I speak of it with some reluctance, fearing that the reader who can make comparisons may accuse me of exaggeration. ¶ The truth is not always believable. ¶ But I will not draw back before the truth. Hardly had we put foot on shore when all sides, to the right and to the left, we stirred up great be vies of quail, a species of crested partidge that I have mentioned elsewhere and that has an excellent flavor. Hares and rabbits moved in bands across the fragrant and flowering fields that carpeted the slope of the hill. In the midst of such great numbers there was no need for a hunting dog. A hare that in France would cost the hunter and his pursuing pack several hours of toils and fatigue requires here only a little silence and care. Moving step by step through heather and bushes, we never went thirty meters without seeing the chance to kill one of these animals, and several times it happened that we killed two with one shot. The

- mere difficulty of choosing a victim can be troublesome. In the end such easy sport became tedious, and some of us made it more difficult by shooting single balls.”
- [Wilber 1953 : 34] *George Vancouver; Nov 20, 1792; between San Francisco and Santa Clara*. “Our riding was attended with some inconvenience, on account of the fox earths, and burrows of rabbits, squirrels, rats, and other animals”
- [Wilber 1953 : 71] *George Vancouver; Dec 9, 1792; Monterey*. “... overgrown with a naturally impassable thicket of shrubs about four or five feet high, which afforded an excellent cover for deer, foxes, hares, rabbits ...”
- [Dmytryshyn 1976 : 124] *Kyrill Timofeevich Khlebnikov; 1817–1832; Bodega*. Mentioned as being among the most important quadrupeds of the area.
- [Thompson 1896 : ii-v] *Peter Corney; c1814–1817; Fort Ross–Bodega*. Description of firing the area to flush out rabbits.
- [Browning 1991 : 90] *George H Derby; c1846; Tulare Plains*. Hare and rabbit both listed as present.
- [Cutter 1969 : 113] *Sebastian Vizcaíno; May 23, 1603; Monterey*. “... a great variety of game, such as rabbits, hares, partridges ...”
- [Nunis 1964 : 44] *Faxon Dean Atherton; April 5, 1837; San Francisco*. “Shot a rabbit ...”
- [Shipley 1938 : 92] *William C Shipley; c1878; Healdsburg*. Cottontail rabbit mentioned as being offered for sale at the butcher.
- [Margolin 1989 : 64] *Jean François de La Pérouse, 1786; Monterey*. “Hares, rabbits, and deer are extremely common.”
- [Small 1967 : 152] *William Heath Davis; c1841; California*. Hunted by Captain William D. Phelps.
- [Winks 1962 : 38] *Frank Marryat; Aug 1850; Sonoma County*. “Hares were in abundance close to the house ...”
- [Winks 1962 : 51] *Frank Marryat; Sep 1850; Sonoma County*. “We put up several hares ...”
- [Frugé 1999 : 160] *Auguste Duhaut-Cilly; Aug 1827; California*. “[The missionaries] don’t care for game, although they could easily procure hare or deer ...”
- [Frugé 1999 : 139] *Auguste Duhaut-Cilly; Aug 4, 1827; Mission San Francisco Solano (Sonoma)*. “... the women wear only a cloak made of rabbit skin twisted into strips and sewn together. This garment is very warm but, being quite thick, it serves as a haven for a prodigious number of those parasitic insects so disgusting to us. For them, on the contrary,

this becomes a kind of portable farmyard where, during moments of leisure, each may select his favorite viands. While the young men are letting fly their arrows at beaver or stag, their sweethearts are engaged in another kind of hunt. The succulent results of this are presented on a mussel shell to those who return, quite as a dandy may proffer a bon-bon of mints to his lady.”

[Bricca 1952 : 6] *Paul-Emile Botta; 1827; Mission San Francisco Solano (Sonoma)*. “Necessity has forced them to fashion ... many rabbit-skin or duck-feather quilts, which are useful for protection against the colds.”

[Elliot 1910] *Francis Petty; 1579; inland from Drakes Bay*. “The people eat their bodies, and make great account of their skins, for their king’s coat was made of them.”



WATERFOWL, DUCKS & GEESE

[Farquhar 1930 : 214] *William H Brewer; Oct 28, 1861; Suscol five miles from Napa*. “Myriads of wild geese flew over our camp, as they have for several days, their numbers incredible. At this season of the year they come from the north to winter in this state. They congregate on the plains, and at times hundreds of acres will be literally covered with them.”

[Farquhar 1930 : 220] *William H Brewer; Nov 1, 1861; Yountville*. “We had gone but a short distance when we came upon a large flock of geese, several hundred feeding in a stubble field close by the road. They are very sagacious, always keeping several on watch while feeding, and never allowing a man to approach on foot.”

[Farquhar 1930 : 220] *William H Brewer; Nov 3, 1862; Tomales Bay*. “The bay is pretty, and the number of waterfowl surpassed belief - gulls, duck, pelicans, etc., in myriads.”

[Farquhar 1930 : 495] *William H Brewer; Nov 14, 1863; Crescent City*. “Myriads of ducks and geese and other waterfowl swarmed, and some white pelicans enlightened the scene. These waterfowl, especially ducks, are very abundant. I saw a hunter, an Indian, coming in town with a horse loaded with them. He must have had a hundred. They cost only \$1.50 per dozen, and I luxuriated on wild ducks all the time I stayed there.”

[Winks 1962 : 63] *Frank Marryat; Christmas 1850; Sonoma County*. “...an easy walk would bring me to a marsh, and a few shots from my double-barrelled gun would secure as many wild-ducks as we required ...”

- [Winks 1962 : 63] *Frank Marryat; Christmas 1850; Sonoma County*. “The wild fowl now came over in heavy flights and settled in our vicinity. These geese were in incredible numbers; white and grey geese and brandt. Of ducks we had several varieties, many of them quite unknown to me, and I regret that I failed, for want of materials, in my endeavours to preserve specimens of them. ¶ Herons and curlew were plentiful, and very tender, jack-snipe in great abundance, but I never disturbed them, for I am a bad snipe shot ...”
- [Frugé 1999 : 60] *Auguste Duhaut-Cilly; Feb 1827; Yerba Buena (San Francisco)*. “During our stay at Yerba Buena we spent most of our considerable leisure time hunting... The country abounds with hares, rabbits, and tufted partridges, and especially an astonishing variety of ducks and sea birds. All this for one table.”
- [Frugé 1999 : 61] *Auguste Duhaut-Cilly; Feb 1827; Rancho San Bruno*. “Dis-mounting beside one of these ponds and tethering our horses, we went off, each in his own direction, to shoot ducks of several kinds and the wild geese that we found everywhere in great numbers. Some of us also shot a species of heron, here called *grulla*, considered a delicacy by the inhabitants. ¶ After three hours of spreading terror and death among the not very wild hosts of air and water, we returned to the place where we had left our horses...”
- [Frugé 1999 : 65] *Auguste Duhaut-Cilly; Feb 1827; Rancho San Bruno*. “And one might envy the sweet life of the red duck, ambling peacefully under the galleries of verdure, or that of the white heron that here finds easy and abundant food.”
- [Frugé 1999 : 133] *Auguste Duhaut-Cilly; Jul 1827; San Francisco Bay*. The author reveals the etymology of Alcatrazes Island as being Spanish meaning “Pelicans’ Island”.
- [Polk 1991 : 254] *Sebastian Vizcaíno; 1602; California*. “This place is very pleasant, for it has a large valley surrounded by lagoons in which are many fish, duck, and heron, and a grove with hares and deer.”
- [Polk 1991 : 254] *Sebastian Vizcaíno; 1602; Monterey*. “... many game birds, such as geese, partridges, quail, crane, ducks, ...”
- [Dmytryshyn 1976 : 124] *Kyrill Timofeevich Khlebnikov; 1817-1832; Bodega-Fort Ross*. “Ducks, numerous various kinds of woodcocks and geese come down from the north to spend the winter; there are also swans, cranes, herons, many grey and white pelicans, sea gulls, sea ducks, urils, albatross and loons.”
- [Small 1967 : 57] *William Heath Davis; c1846; Yerba Buena (San Francisco)*. “My favorite spot for shooting was the top of the hill overlooking the

village of Yerba Buena. The ducks would appear in flocks, darkening the air, and so great was their number that it required no skill to kill them on the wing. As they fell to the ground they often burst open, being so fat and heavy. After I had discharged the two barrels I would be surrounded with dead and wounded birds, and the flock would wheel about to share the fate of the first victims. I hastened to reload so as to take them on the wing again, and the stupid birds would fall to the ground as thick as hailstones.”

- [Small 1967 : 152] *William Heath Davis; San Francisco Bay area*. “Captain [William D.] Phelps was an excellent shot with the rifle, very fond of hunting ... ducks, geese, quail and other birds, and kept his vessels in game while in port... .”
- [Craig 1970 : 102] *William Robert Garner; Nov 5, 1846; Monterey*. “Between the months of October and March, geese, ducks, curlew, &c., are to be seen in immense flocks, feeding on the plains, or darkening the air with their numbers.”
- [Nunis 1991 : 62] *John Bidwell; 1842; Sacramento-Napa-Sonoma*. “These [tule marshes] are the haunts of incalculable thousands of wild geese, ducks, brandts, cranes, pelicans, etc., etc.”
- [Browning 1991 : 90] *George H Derby; c1846-1852; Tulare Plains*. “Every beast and bird of the chase and hunt are to be found in abundance on the Tulares... . swan, geese, brant, and over twenty different description of ducks also cover the plains and waters in countless myriads, from the first of October until the first of April, besides millions of grocus [sand hill crane], plover, snipe and quail.”
- [Wilber 1933 : 135] *Alexandre Dumas; 1850; Delta area*. “These [islands] are covered with tule, a growth indigenous to all low and humid regions of this country. To devotees of waterfowl this is a veritable collector’s paradise, for these lagoons swarm with duck, cormorant, stork, kingfishers, and magpies of every kind & description.”
- [Shipley 1938 : 92] *William C Shipley; c1878; Healdsburg*. Mentions quail, wild geese and ducks available at the local butcher.
- [Margolin 1989 : 64] *La Pérouse, Jean François de La Pérouse; 1786; Monterey*. “In the ponds and on the seacoast are found the duck, the grey and white pelican with yellow tufts, different species of gulls, cormorants, curlews, ring plovers, small water hens, and herons.”
- [Fredrickson 1984 : 33] *Secondary source; pre-contact; Lake Sonoma*. “Mallard ducks were also taken; the male prized for its beautiful green feathers used in making fine feather baskets.”

- [Pierce 1979 : 37] *Captain Edward Belcher; Oct 26, 1837; Estrecho Karquines (Carquinez Strait)*. “Ducks and geese were noticed in great numbers”
- [Anonymous 1925] *Secondary source; Sebastopol*. “To supply fresh meat to San Francisco was the business of many hunters about the bay and its tributaries... . Prices are of record on this scale: ... ducks, \$12 per dozen.”
- [Draper 1993 : 3] *Secondary source; Cotati marsh*. “[Waldo] Rohnert devised a system of ditches to drain the fields where Cotati youths had hunted ducks in the past.”
- [Pennoyer 1938 : 177] *Frank Leslie; Sep 30, 1882; Colusa County*. “In this land of superlatives the ‘native son,’ quickly adjusts himself to extremes of calamities, vagaries of Dame Nature, and pests. When the skies darkened with wild geese in Colusa County, and crops suffered, the farmers organized and fought for days with powder, shot, and western blasphemy.” Accompanying illustration.
- [Hittel 1863 : 137] *California*. The sandhill crane ... spend the winters in our valleys, and in the spring migrate to the Klamath Lakes and farther north, where they spend their summers and breed. Subsisting upon vegetable food exclusively, they are themselves good to eat, and are frequently seen in the San Francisco market.



TULE

- [Farquhar 1930 : 219] *William Brewer; Nov 1, 1861; Yountville*. “The swamps bordering all the rivers, bays, or lakes, are covered with a tall rush, ten or twelve feet high, called “tule” (tú-lee), which dries up where it joins arable land.”
- [Nunis 1991 : 62] *John Bidwell; Jan 8, 1842; Napa-Marin-Sonoma counties*. “Tule marshes. Tule is a name given by Spaniards to a kind of bulrush. They grow very large, sometimes an inch in diameter, and occupy large portions of the valley of the Sacramento; they are called marshes, because they grow on the lowest ground and are covered in the rainy season with water, which continues till evaporated by heat of summer. These are the haunts of incalculable thousands of wild geese, ducks, brandts, cranes, pelicans, etc., etc.”
- [LeBaron 1989] *Captain James McDonald; Aug 1896; Spring Lake, Sonoma County*. “The tule that surrounds the spring is supposed to be growing in a natural rock basin of over an acre in size.”
- [Beebe 1996 : 86] *Antonio María Osio; c1825; Alta California*. “... a person who committed either a trivial or an atrocious crime and wanted to

- avoid punishment could simply flee to the tule grove or *rancheria* of his birth without having to worry about being pursued there.”
- [Hittell 1885 : 496] *June 25, 1823; Petaluma to Sonoma*. “The next day Sanchez, Altimira and their party crossed over the lower or southern part of the ridge of mountains eastward of Petaluma, saw and examined several elevated grassy valleys and tule-bordered lagoons giving promise to abundant pastures, and descended into a beautiful, oak-covered, and vine-bearing valley called by the Indians Sonoma.”
- [Frugé 1999 : 161] *Auguste Duhaut-Cilly; Aug 1827; Tulares*. “To avoid danger from the expeditions that have been sent against them unjustly the Indians usually choose to place their villages on firm ground surrounded by those marshes known to the Spaniards as “tulares” on account of the great quantity of reeds [tules] growing in them. There the California riders cannot go on their horses. “
- [Cutter 1995 : 263] *Mariano Payeras; June 2, 1820; California*. Another description of Indians running away from the missions to the tulares.
- [Hewitt 1877 : 9] *José María Amador; c1819; Mission San Francisco Solano (Sonoma)*. “... the rest [of the Indians] escaped into a great stand of tules.”
- [Shipley 1938 : 35] *William Shipley; c1817; Healdsburg*. “It was lots of fun to wander carefree, far and wide, intently scanning every bush, tree, clump of grass, or tule patch ...”
- [Finley 1937 : 59] *Secondary source; June 1837*. “Yolo means ‘people of the tules’”
- [Browning 1991 : 91] *James H Carson; 1850; California*. “The Surveyor General, estimates the swamp lands of the State at 2,622,400 acres.”
- [Browning 1991 : 91] *James H Carson; 1850; California*. “By an act of Congress, approved Sept. 28th, 1850, all the swamp land or overflow lands in California were donated to the State; provided that the proceeds of said lands, whether from the sale or by direct appropriation in kind, shall be applied *exclusively*, as far as necessary, to the purpose of reclaiming said lands by the means of levees and drains.”
- [Bricca 1952 : 6] *Paolo Emilio Botta; 1827; Mission San Francisco Solano (Sonoma)*. “In the interior they sustain themselves on the game and fish that they catch in the lakes and swamps, with which, according to what is told, their land is very well provided.”
- [Wilber 1933 : 135] *Alexandre Dumas; July 1850*. “At the fork of the Sacramento and the San Joaquin lie a dozen low, wooded islands characterized by impassable marshy areas. These are covered with tule, a growth indigenous to all low and humid regions of this country. To

devotees of waterfowl this is a veritable collector's paradise, for these lagoons swarm with duck, cormorant, stork, kingfishers, and magpies of every kind & description."

[Brandes 1970 : 98] *Miguel Costansó; Oct 31, 1769; At the descent of the Sierra of Santa Lucia*. "They come down at times and go forth to fish on little rafts of cattail rushes..."

[Frugé 1999 : 161] *Auguste Duhaut-Cilly; 1827; California*. "The boats they use for traversing the water or for fishing are surely the worst in the world, each made of two bundles of reeds eight feet long and tied together by cross-pieces of wood. This kind of raft, called a "balsa" in the country ..."

[Beebe 2001 : 207] *Francisco Palóu; 1776; Monterey to Mission Dolores*. "... so fearful were they of the others that they made tule rafts and all moved to the shore opposite the *presidio* ..."

[Small 1967 : 16] *William Heath Davis; Aug 9, 1839; below Sutter's (Sacramento)*. "They came off to our anchorage in large numbers in canoes made of *tules*."

[Wilber 1953 : 11] *George Vancouver; Nov 15, 1792; San Francisco Bay*. "[These] were the only Indian vessels we had met with, and were without exception the most rude and sorry contrivances for embarkation I had ever beheld. The length of them was about ten feet, the breadth about three or four; they were constructed of rushes and dried grass of a long broad leaf, made up into rolls the length of the canoe, the thickest in the middle, and regularly tapering to a point at each end. These are so disposed, that on their ends being secured and lashed together the vessel is formed, which being broadest in the middle, and coming to a point at each extremity, goes with either end foremost. These rolls are laid and fastened so close together, that in calm weather and smooth water I believe them to be tolerably dry, but they appeared to be very ill calculated to contend with wind and waves ..."

[Sherman 1990 : 96] *William Tecumseh Sherman; c1849; Carquinez Strait*. "Getting up, I discovered that he had converted a *tule-bolsa* into a sailboat, and was sailing for the gold-mines ... This *bolsa* was nothing but a bundle of *tule*, or bullrush, bound together with grass-ropes in the shape of a cigar, about ten feet long and about two feet through the butt. With these the California Indians cross streams of considerable size."



WILD OATS

- [Wilber 1953 : 39] *George Vancouver; Nov 20, 1792; San Francisco to Santa Clara*. “I was much surprised to find that neither barley nor oats were cultivated; on enquiry I was given to understand, that as the superior kinds of grain could be plentifully obtained with the same labour that the inferior ones would require, they had some time ago declined the cultivation of them.”
- [Thwaites 1966 : 284] *Timothy Flint; June 20, 1829; overland from San Francisco to Bodega*. Mentions the presence of wild oats.
- [Essig 1991 : 9] *Khlebnikof; 1833; Russian ranches*. “In 1833 wild oats made its appearance in many fields in such abundance as to smother the wheat and the only means to suppress it was to pasture cattle on the fields for several years, thus depriving the settlement of valuable land necessary for the production of the amount of breadstuffs required.”
- [Gibson 1969 : 208] *Ferdinand Petrovich Wrangel; April 10, 1834*. Russian ranches. “On other plowland wild oats grow in such abundance that they smother wheat, and the sole method used to eradicate them is leaving them for trampling by cattle for two or three years ...”
- [Nunis 1964 : 20] *Faxon Dean Atherton; June 25, 1836; Mission Santa Ines*. “[The Indians] are now out among the hills in immense numbers gathering wild oats of which there is great quantities growing all over the country.”
- [Nunis 1991 : 55] *John Bidwell; Jan 8, 1842; California*. “Here are also innumerable quantities of wild oats, which I am told grow nearly all over California, and grow as thick as they can stand, producing oats on an excellent quality; but as neither cattle nor horses are ever fed here, they are never harvested.”
- [Nunis 1991 : 69] *John Bidwell; Jan 8, 1842; California*. “Wild oats in some places ripen the last of May.”
- [Stewart 1970 : 17] *Joseph B Chiles; Spring 1842*. “The next morning they passed through Vaca Valley, where Mr. Chiles says he witnessed the most beautiful scene of his life in a large stretch of plain covered with wild oats about six inches high which seemed to grow as though planted by a skillful hand.”
- [Sherman 1990 : 63] *William Tecumseh Sherman; c1840; Salinas Valley*. “As soon as the fall rains set in, the young oats would sprout up, and myriads of ducks, brandt, and geese, made their appearance.”

- [Winks 1962 : 24] *Frank Marryat; July 1850; Benicia*. “Immense quantities of grasshoppers are to be found in the vicinity of Benicia at this season; as you walk through the wild oats ...”
- [Winks 1962 : 24] *Frank Marryat; August 1850; Santa Rosa*. “... Don Raymond’s main object in mounting us was that we should at once appreciate the beauty and extent of the Santa Rosa Ranche... it was a pleasant gallop over the wild oats, in a pure air, and through a lovely country.”
- [Winks 1962 : III] *Frank Marryat; June 1851; Valejo*. “Wheat and oats grow to the height of eight and ten feet, and are very prolific in the ear.”
- [Empáran 1968 : 8] *M G Vallejo; Sonoma County*. Mentions wild oats.
- [Hittel 1863 : 129] *Dr Newberry; Sacramento valley*. “As I sometimes recall the characteristic scenery of California, those interminable stretches of waving grain, with here and there, between the rounded hills, orchard-like clumps of oak, a scene so solitary and yet so home-like, *over these oat-covered plains and slopes*, golden yellow in the sunshine, always floats the shadow of the vulture.”
- [Hittel 1863 : 177] *California*. “The indigenous wild oat of California is never cultivated; for, although it produces large and tall stalks, they do not contain so much weight or bear so much grain as the domesticated oat.”
- [Hansen 1962] *Hansen, Harvey, J. and Jeanne Thurlow Miller*. “Wild Oats in Eden: Sonoma County in the 19th Century” Santa Rosa : 1962. The title of this book is itself the most interesting comment by the author.

*MORE EXCERPTS*

The period of California's history prior to 1849 is well documented by travelers, explorers and settlers. The occurrence and distribution of plant and animal life has been gleaned from these records by the author, but they are too numerous to include here. They have been categorized under the following headings:

Antelope	Park
Bay laurel	Partridges and quail
Bear	Pine nuts
Berries	Prairie
Bobcat	Rabbit
Buckeye	Rabbit skins
Canoes	Redwood
Coyote	Ringtail
Cracks	Riparian
Eagle	Salmon
Elk	Santa Rosa Plain
Elk tallow	Scorpion
Fertility	Skunk
Fleas	Snake
Fox	Soap
Grape	Softwood trees
Grass	Sturgeon
Grasshopper	Tules
Hazelnut	Turkey
Lion	Underground
Madrone	Vulture and condor
Mud and dust	Walnut
Mustard	Wasps
Oats	Waterfowl
Otter and Beaver	Wolf

A separate publication of these excerpts would make a fine addition to the body of knowledge about early California flora and fauna.

