Beavers in the Yolla Bolly Mountains?

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Introduction

When the various threads of the historical record and the biology and natural history of the North American beaver are woven together they provide strong circumstantial evidence suggesting that during the boom years of the fur trade, it is likely that some trappers on their yearly expeditions to California traveled into the high country of the Yolla Bolly Mountains in search of beavers.

Personal observations and environmental data indicate that at that time there was adequate habitat in the Yolla Bolly Mountains to support a beaver population. Further, some evidence also suggests that it is possible a small isolated population of beavers may still have been present in the Yolla Bolly Mountains as late as the third decade of the nineteenth century at Cedar Basin on the southwestern facing slopes of the North Yolla Bolly Mountain/Black Rock Mountain at a place appropriately named--Beaver Glade.

The Historical Range of Beavers in California

Beavers had already been trapped to near extinction by the early twentieth century when biologists first addressed the question of their historic range within California. For that reason, much of the biological literature documenting the historical range of beavers within the state is in direct conflict with the historical record. There were a number of factors contributing the beaver's near demise in California. First and foremost was the intensive hunting of fur bearing animals in the late eighteenth century along the California coast by the Russians and Americans. This era was followed in the late 1820s by Hudson's Bay Company (HBC) and American fur trapping brigades who began to visit California annually trapping untold thousands of beavers throughout the state for the next two decades. This era was followed by the continued trapping of the few surviving beavers by more localized small-time subsistence trappers well into the early twentieth century.

All of these events conspired to bring the species to the point of extinction in California. Thus, in little more than a hundred years beavers had been extirpated from so many regions of the state that many early twentieth century biologists and naturalists (see Grinnell et al 1937, Tappe 1942:8) questioned whether the California golden beaver had ever been found in the Sierra Nevada Mountains, the San Francisco Bay Area, or in any coastal or inland region of northwestern California. They essentially concluded that the historical range of beaver in the state had been limited to the Siskiyou and Klamath

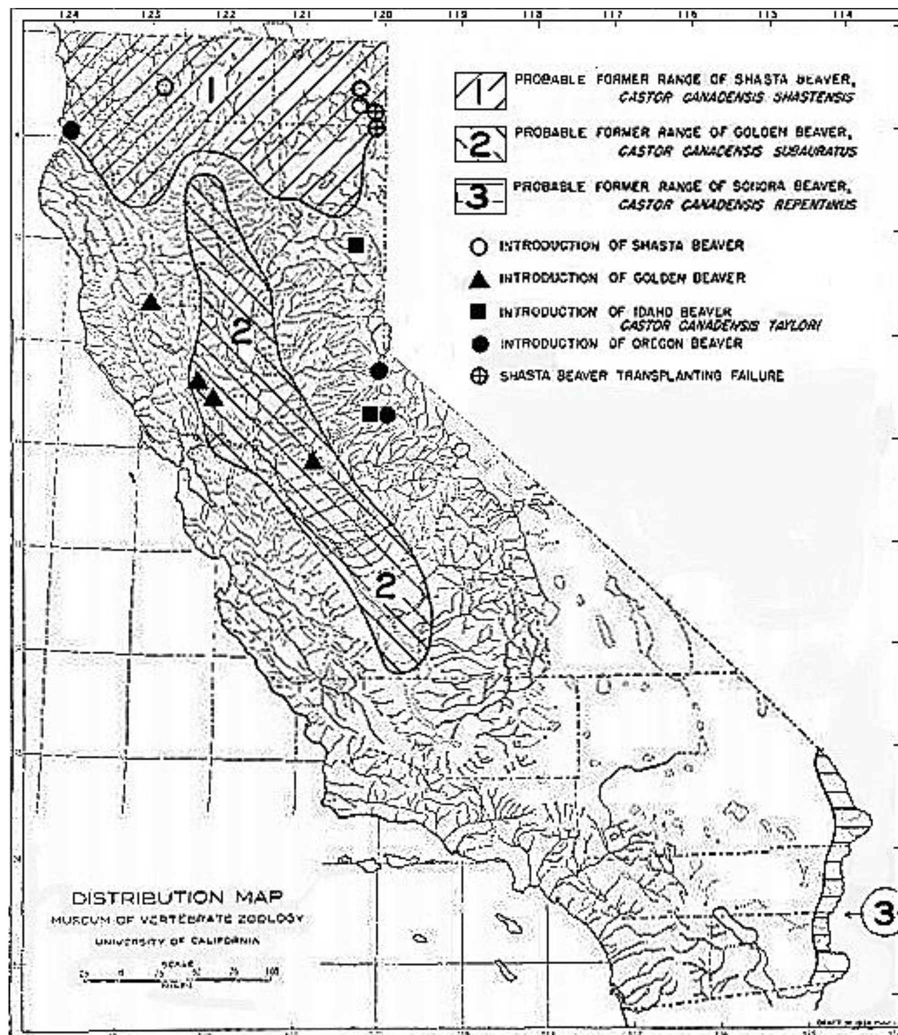
Mountains, the Cascade Range, the California Delta, and the Great Valley region below 1,000' in elevation (Map 1).
Three subspecies of North American beavers have been identified by biologists within the state of California (Tappe 1942:8): Shasta, golden, and Sonora (Table 1).

Table 1

Beaver Subspecies Inhabiting California
(Order: *Rodentia*, Family: *Castoridae*)

1 Castor *canadensis shastensis* Taylor (Shasta beaver),
2 Castor *canadensis snbaumtns* Taylor (golden beaver)
3 Castor *canadensis repentinus* Goldman (Sonora beaver).

Map 1
Beaver Subspecies and their Historic Range in California
(Tappe 1942:8)



Grinnell et al (1937:719), in their study *Fur-Bearing Mammals of California: Their Natural History, Systematic Status and Relations to Man,* after trying to determine the historical range of the beavers in California wrote:

> Curiously, in our State, at the present time, no beavers (save by introduction) live in the high mountains, although here mountain streams and bordering growths of deciduous trees abound, like those which constitute ideal abodes of beaver in Colorado and elsewhere. Indeed, the golden beaver, so far as we know, never existed at an altitude higher than about 1000 feet, and all the existing colonies live below the 300-foot level. The most persistent are near sea level.

Fur Trappers and the "Fur Rush" to California

With Spanish and later, after independence, Mexico's influence and interests in Alta California, ending in the north at about what is today the Clear Lake region, and the Russians (and later the Americans and British) only having an interest hunting and trapping fur bearing animals along the northwestern coast of California, there was little motivation to explore the rough and remote interior North Coast Range Mountains during the early 19th century. An additional impediment to exploration were forests of giant redwood trees (*Sequoia sempervirens)* stretching inland for miles from the fog shrouded north coast making it difficult to reach the Bald Hills lying just to the east. For that reason, prior to 1849 the interior North Coast Ranges, including Mad River country and the Yolla Bolly country, were essentially unknown to Euro-Americans. The Sierra Nevada, a formidable barrier to east-west travel, had been hardly more explored (and never crossed) by the few Spanish expeditions that had traveled to the region (usually in search of Indian "converts" who had escaped from the missions).

The valuable fur of the North American beaver provided the motivation for the early exploration of much of what is now the western United States, including much of interior California. In the early 19th century the demand for the fur of the North American beaver as a fashion item in the eastern United States, Canada, and Europe created an insatiable market. There were fortunes to be made in the fur trade an industry that had for decades provided the impetus for much of the exploration of western Canada and the northern portion of what is today the western United States, first by the French Canadian Voyagers, and, later, by trappers, working independently or for the Hudson's Bay Company.

The fur trade had two classifications for the pelts purchased from the trappers: fancy or staple. Fancy furs--mink, fox, otter--were in demand for their beauty and luster and were usually made into garments or some type of robe or coat. Beaver fur was classified as a staple fur. Staple furs have a double coating of hair with long, stiff, smooth hairs called "guard hairs" that protect the shorter, softer hair, called "wool," growing next to the skin. Once the barbs at the ends of the hair are open, the wool can be compressed into a solid piece of material called "felt." Beaver fur was considered the most valuable of all furs, and

therefore beaver were usually the preferred animals to hunt and trap. Beaver hats and caps became so valuable that Michael Schaubs, an avocational historian who has researched the North American fur trade, wrote:

> ... they were willed by fathers to eldest sons. In France, beaver hats gained such status that generous trade-ins were allowed for worn models on new purchases. The used hats were sold in Spain, then trimmed of the most worn parts for resale in Portugal, and finally they were traded for ivory in Africa. The fur of the beaver was so precious for hat making that the sand from the floor in the warehouses where the pelts were stored was sifted to salvage every last hair [Michael Schaubs; *MountainMan* Website].

After the Lewis and Clark Expedition (1805-1806) traveled through the unexplored interior regions of what is now the northwestern United States and reached the mouth of the Columbia River and the Pacific Ocean, it was another two decades before Euro-Americans began to further explore the far west and finally crossed inland from the east into California. Hunters, trappers, and fur traders were the first to explore and map much of the Sierra Nevada and the northern regions of inland California. Beginning over two decades before the Gold Rush, numerous expeditions led by "Mountain Men" like Jedediah Smith, Michel Laframboise, Ewing Young, and Kit Carson made annual visits to what was to become the state of California, trapping beaver and other fur-bearing animals throughout much of the Great Valley, the Klamath/Siskiyou Mountains, and the Sierra Nevada as far south as the Kern River basin.

The impetus for this push into unexplored territory in the mid 1820s was due to the fact that the trappers had already "trapped out" beavers in vast regions further to the east in the United States and Canada. The oldest and most active fur trading company in North America was the Hudson's Bay Company (HBC). Chartered in 1670, the British-owned company dominated trade in western Canada and what was to become the Oregon Territory well into the early nineteenth century. In 1821, the Hudson's Bay Company and their only competitor in the far northwest--the North West Company-- merged. The company established Fort Vancouver in the winter of 1824-25, resulting in British dominance of the fur trade throughout the Columbia River basin and the interior regions of southern Oregon, eventually extending, by the early 1830s, into California. The establishment of Fort Vancouver and trapping expeditions to California and Oregon by the Hudson's Bay Company also played out at a larger geopolitical level in the conflict and competition at various times among the Russians, Spanish, Mexicans, Americans, and British all with interests over the ultimate fate and control of California and the Pacific Northwest.

During the first two decades of the nineteenth century, the American fur trade was largely dormant due to economic factors, including a lack of markets where trappers could sell their furs and the political turmoil resulting from the War of 1812. As a result, there was little economic motivation for individuals to travel overland to California and explore a dangerous and unknown region full of bands of "hostile" Indians and claimed by the Spanish. In 1822, John Jacob Astor founded the American Fur Company in St. Louis. Also, in

1822, William Henry Ashley advertised for "one hundred young men to ascend the Missouri River to its source, there to be employed for one, two or three years." This marked the beginning of the Rocky Mountain Fur Company. The company was the first American company to establish the "free trapper system," sometimes referred to as a "Mountain Rendezvous" system.

Eighteen Rendezvous were held between 1825 and 1840. These annual encampments, were located in what was to become the states of Utah and Wyoming; for example, at Bear Lake (Sweet Lake) in 1827 and 1828 and at various locations along the Green River from 1833-1840. Here the Mountain Men could sell their beaver pelts to the fur companies who would then transport them back east to St. Louis for sale. The trappers preferred this system since they did not have to travel hundreds of miles to the east to sell their furs and, it provided both an opportunity to socialize and to exchange information yearly with other trappers working in various regions across the western United States. Although there was no alcohol at the first Rendezvous, that "oversight would be corrected and generous supplies of rum/and or whiskey were present at all subsequent Rendezvous" (Michael Schaubs; Mountain Man Website 2012) .

Both Astor's American Fur Company and the Rocky Mountain Fur Company were very successful and made huge fortunes in the fur trade. By 1834, after less than a decade, and along with the already rapidly declining beaver populations in the mountainous west due to over-trapping, there also began a steady decline in the value of beaver pelts as tastes in fashion changed with silk hats coming into style. By the early 1840s, with the steep decline in prices, the stiff competition between these two companies ended with the American Fur Company's collapse. With a declining market and with beavers nearly trapped out, the yearly expeditions to California ended.

The First Overland Expedition to California: Jedediah Smith 1826-1828

As Hubert Howe Bancroft noted in his voluminous history of California, it was not until 1826 that an overland route to California from the eastern United States was even attempted. In a flourish of dramatic prose Bancroft wrote:

> For forty years California had been visited with increasing frequency by foreigners, that is by men whose blood was neither Indian nor Spanish. England, the United States, Russia, and France... All had come from the south, or west, or north by the broad highway of the Pacific Ocean bounding the territory on the west and leading to within a few miles of the most inland Spanish establishments. The inland boundary--an arc whose extremities touch the coast at San Diego and at 42' (degree sign), an arc for the most part of *Sierra Nevadas* so far as could be seen...had never yet been crossed by man of foreign race nor trod...by other than aboriginal feet. (Bancroft 1886:XX:151) [Unedited from the original.]

In 1826, Jedediah Smith, in search of new and unexplored regions to trap beavers, led the first overland expedition to California from the continental United States. Smith kept a journal of his travels (Smith MS) and his two expeditions to California are well documented in the historical literature. In August, Smith and fifteen men left the Rendezvous in Willow Valley (Cache Valley) east of the Great Salt Lake and headed southwest through unknown territory, traveling down the Virgin River to the Colorado River and eventually crossing the Mojave desert to the San Bernardino Mountains. They arrived at the San Gabriel Mission (Los Angeles) on November 26, 1826, where they were received with hospitality by the Franciscan Padre. The Mexican Governor, José María Echeandía, however, viewed them with suspicion as either invaders or spies. He refused to believe that they had crossed nearly 1,000 miles of desert to reach California simply to trap beavers. Their arrival fed the increasing fears of Mexican officials that the true motive of Americans entering California overland from the east was directly related to westward expansionism and the geopolitical aspirations of the United States.

After being held under what amounted to house arrest for about two months, Smith and his men were finally released and headed north, crossing the San Bernardino Mountains and trapping beavers as they worked their way through the San Joaquin Valley to the Stanislaus River. As they traveled north, they hoped to eventually follow the "Rio Buenaventura " (Sacramento River) east to its headwaters that Smith thought might be near the Great Salt Lake or find a mountain pass to the east leading over the snow-covered Sierra Nevada to the 1827 Rendezvous. By late May they had accumulated a considerable quantity of beaver pelts but had not been able to cross the Sierra Nevada and head east. With the rendezvous less than two months away. Smith decided to leave most of his men in camp (along with the cache of furs) on the Stanislaus River. Smith and two men finally (after initially having to turn around and reprovision due to the deep snow) managed to cross the high Sierra somewhere in the vicinity of Ebbets Pass and continued east across the Great Basin. Exhausted, nearing starvation, and given up for dead they finally reached the Rendezvous at Willow Valley on June 27.

Smith Returns to California 1827-1828

Despite being detained and held for nearly two months by the Mexican government on his first trip to California and ordered not to return, Smith still needed to recover the cache of furs at their camp on the Stanislaus River and to meet up with his men who had spent the summer trapping while they awaited his return. Only days after returning to Utah from California, Smith and a newly organized brigade of eighteen mountain men again set off for California on July, 13, 1827 (Smith MS). Given the difficulties of Smith's travel across the Great Basin on his return trip to the Rendezvous, he again headed south to the headwaters of the Virgin River and retraced his earlier route to California. Unlike their peaceful first encounter with the Mojave Indians, when the brigade reached the Colorado River this time, they were attacked while in the vulnerable position of ferrying their horses and supplies across the river. During the attack nine men were killed and most of their horses and equipment were lost.

After fending off a second attack the outlook for the survivors was grim. They had no horses, one man was badly wounded, they had no food or even a container to carry water, and they had to cross through over 100 miles of desert (generally following the Interstate 15 corridor west to Soda Lake and Route 66 along the Mojave River to the San Bernardino Mountains). Despite these difficulties, Smith and his men made it to the San Bernardino Valley and San Gabriel where the mission again provided them with horses and supplies. They then headed north towards the Sierra Nevada, reaching their camp on the Stanislaus River on September 18, just two days before the men were to break camp and depart (Smith MS).

Smith and his men were again desperate, needing horses and supplies in order to move the entire party and their cache of furs, and he was once more forced to travel into Mexican territory for help. Smith and three of his men traveled west to San Jose to obtain supplies and horses. Smith and his companions were detained there by the Mexican government. After about two weeks they were sent under guard to Monterey. While his men were left in Monterey, Smith was eventually taken to San Diego via ship to await his fate. Following some vacillation by Mexican officials on exactly what to do with their prisoners--including sending the men and the problem of what to do with them off to Mexico by ship, in late December, Smith and his men were released and were told to leave Mexican territory the same way they entered it.

Smith still believed, however, that the headwaters of what he called the Buenaventura (Sacramento) River might lead back east towards his destination--the Great Salt Lake. For that reason, after their release and the securing of horses and supplies, Smith and his men met up with the rest of the brigade and, in short order, they were again trapping beaver. The brigade moved north, generally paralleling and trapping along the sloughs of the San Joaquin and Sacramento Rivers and along the lower reaches of the rivers and creeks flowing west from their headwaters in the Sierra Nevada (the entire northern crest of the Sierra was known as Mt. Joseph to Smith (Burr Wall Map 1839)). Smith made the following entries in his daily journal as they traveled north trapping beavers:

> 4th [Jan] Some of my men were out hunting for Beaver sign and as the water was high the weather rainy and the banks of the river Low I thought it advisable to build some Skin Canoes which would assist us in trapping and in crossing streams in our course.
>
> 7th [Jan] Some of my men are engaged in hunting Elk for the sake of the skins to make canoes and a few were trapping but I could not do much at trapping for I had but 47 traps. 9 men were attending the traps and the rest of the party not hunting were taking care of the [300] horses and camp keeping....
>
> 11th & 12th [Jan] Good Weather. I had at that time taken 45 Beaver.

13th [Jan] N Westerly 4 Miles and encamp on a creek which was dry when I was in the country the last summer but now had plenty of water. ...Some of the Ponds have Beaver along their flaggy banks and three of my men who trap by land succeed [ed] in taking some of them. My number of Beaver had increased to 61... (Smith MS). [Unedited from the original]

Smith and his men continued to trap beavers throughout the late winter of 1827 and early spring of 1828 and made their way up the eastern side of the Sacramento Valley while time driving a herd of 300 head of horses (there are numerous accounts in his journal of horses drowning, wondering off and never being found, being killed by Indians, falling off cliffs, and being attacked by grizzlies). By the end of March, the brigade was near the present day town of Chico. Smith, writing in his journal dated March 28, 1828, provides the first documented sighting of the Yolla Bolly Mountains by Euro-Americans:

28th March 7 Miles W N W and encamp on the Buenaventura. In the course of the day I crossed two muddy Slous [sloughs] of the River. The Buenaventura at that place was about 200 yards wide Deep and forcible current. Its general course South and its banks fringed with timber principally Cotton wood and Sycamore and when the banks were somewhat higher Oak. Far off to the north very high Peaks of the Mountain were seen covered with snow [Mt. Shasta]. The valley at that place was apparently about 50 Miles in width. The Mountain [crest of the Yolla Bollys] to the west on towards the coast not high but rugged and some snow. On the East the Mountain [Mt. Joseph/Sierra Nevada] was high timbered and its upper region covered with snow. In the course of the day I saw some Elk and the trappers killed two they were in good order. There was not much Beaver sign about the river its banks were too sandy, But a short distance back were Lakes and ponds in which were found some Beaver(Smith MS. 1827-1828). (Unedited from the original.]

Smith, paralleling the "Buenaventura River," continued north trapping beavers still believing (and hoping) that the river would eventually turn east and lead back towards his destination, the Great Salt Lake. At the head of the Sacramento Valley, where the Sacramento River emerges from a narrow canyon, Smith determined that the way along the river would be impassable for his herd of 300 horses. The brigade headed back south to about the present day location of Red Bluff. There, Smith (from a high point) observed a break in the hills to the northwest. He decided to take this route hoping that it would eventually circle north towards the Columbia River basin, where they could then follow the Columbia River east to Utah Territory (they of course had no idea how far north that actually was).

Smith recorded the following entry for April 11, 1828 ,when they crossed to the west over the Sacramento River:

The Canoe being finished I crossed my things over in it and swam the horses. All got over safe with the exception of a colt which was drowned. The

> trappers found setting for a few traps. 12 Beaver taken (Smith MS).
> [Unedited from the original.]

After crossing the Sacramento River near the mouth of Blue Tent Creek ,they headed northwest and followed a trending ridge to the north of Dry Creek (just to the north of what is today Highway CA36). Two days later, on April 13, Smith noted in his journal that the Indians who came to their encampment that day already had in their possession trade beads from the Hudson Bay Company.

> ...I encamped about 12 O Clock to dry my things which were wet by the last rain and stretch some Beaver skins which I had on hand. One of the Indians which came to me had some **wampum and Beads. They were procured as I supposed from some trapping party of the Hudsons Bay Company** which came in that direction from their establishment on the Columbia (Smith MS. 1827-1828) . [Unedited from the original. Emphasis added.]

Smith and his men, traveling with great difficulty packing two years worth of fur pelts and driving 300 head of horses through unexplored and unknown country, made their way down Hayfork Creek, passing through Hayfork Valley to Hyampom before hitting the South Fork of the Trinity. They then continued paralleling the river north to its confluence with the main Trinity River. After passing through Hoopa Valley and crossing the Klamath River ten miles below Weitchpec, they eventually reached the Pacific Ocean on June 8, 1828, several miles to the north of the mouth of the Klamath River (Smith MS., Raphael and House 2007:57). [See Raphael and House 2007 for an in-depth overview of Smith's journey through northern Humboldt County to the Pacific Ocean.]

After finally reaching the Pacific, they continued north along the coast into Oregon. Near the mouth of the Umpqua River their encampment was attacked by Indians (after a confrontation with the local Indian tribe). The attack killed fourteen men, including Harrison Rogers. Only Smith and three others who had not been in camp at the time survived. The survivors decided to seek help from the Hudson's Bay Company and the British at Fort Vancouver. They headed north, and by August 8 all the survivors had arrived at Fort Vancouver. Smith, along with a brigade of men from Fort Vancouver returned to the site of the massacre. They buried eleven bodies, the four other men were never found. They recovered most of the furs and, most amazingly, the journals of both Smith and Rogers. They then returned to Fort Vancouver, where they spent the winter. [Some historians hypothesize that Smith may have agreed to stay out of the Snake River country in exchange for the British "hospitality."]

In 1830, after selling his furs and making a profit of $17,000, a substantial fortune at the time, Smith returned to St. Louis. He bought a house for himself and his brothers and purchased two slaves to take care of the property. In the spring of 1831, a rich man at the age of 32, Smith organized a pack train along with David Jackson and William Sublette and again headed west to Santa Fe. During their trip west, the men became desperate for water. Some members of the party, including Smith, spread out in search of water. Smith

never returned and the brigade finally continued on to Santa Fe. Later, it was learned that Smith, while searching for water, was killed by a Comanche hunting party.

The California "Fur Rush"

Given the success in trapping beavers by the two Smith expeditions, it was clear that there was indeed a vast inland wilderness in California that was rich in fur bearing animals--especially beavers. Subsequent to Smith's arrival at Fort Vancouver, in the summer of 1828, and over the next decade, there were numerous trapping expeditions to California organized by the Hudson's Bay Company. Traveling south from Fort Vancouver on what were to become known as the Siskiyou Trail and the McLeod Trail, HBC fur trapping brigades moved into the Sacramento Valley and trapped for beavers as far south as the Kern River basin, some brigades spending part of the year at French Camp on the San Joaquin River. They also were successful in trapping beavers in the San Francisco Bay region.

Americans also began to visit the state annually, working directly for one of the two American fur companies or working independently and selling their furs at the annual Rendezvous in the Salt Lake region. Bryant (1916:100) summarizes the visits by trapping expeditions to California during the 1830s, the peak years of the industry:

> Smith's heavy catch of furs revealed...the rich possibilities of the Sacramento and San Joaquin valleys and opened the way for the exploration of the district by the Hudson's Bay Company. In the summer of 1828, McLeod was sent south [from Fort Vancouver] along Smith's trail for that season's hunt. He trapped the mountain streams with excellent success...the following year the district was entrusted to McKay...
>
> ... the next season Peter Keene *Ogden* was transferred to this field, and under his energetic management the Great Valley was thoroughly explored and developed. For ten years (1829-1838) a Hudson's Bay Company brigade made its annual traverse, south in the autumn and north in the spring between Fort Vancouver and French Camp--the post on the San Joaquin...
>
> American trappers were not slow to avail themselves of the new hunting grounds revealed by Smith, Pattie, and Walker, and year by year larger parties appeared in the Great Valley.

Despite the large number of beavers encountered in California by the first trappers to enter the region, it took little more than two decades to drive the animal to near extinction throughout much of its original range. The near-total decimation of beaver populations in California and Oregon during this era was not only a result of "over-trapping," but the extirpation of beaver populations from entire regions of what are now portions of Oregon and northern California was also part of a conscious and strategic act on the part of the

British for geopolitical reasons. This effort was related to furthering their territorial ambitions in the region while discouraging those of the United States. Their goal was to "trap-out" entire beaver populations throughout what are now the present day states of California and Oregon in order to remove the principal motivation for Americans to enter the region. This effort was undertaken so that Americans, as trapper Peter Keene Ogden wrote, would "have no inducement to proceed thither," (in Scaglione 1949:118). Moreover, there was a strong financial motivation by the Hudson's Bay Company to follow the same strategy in order to monopolize the fur trade.

The more direct causes of the extirpation of beavers from much of their original range--especially the higher mountainous regions, however, was not only due to over-trapping and the deadly efficiency of the new steel-jaw traps that trappers began to use in the mid 1830s, but it was also due to the fact that beavers trapped at higher elevations were more valuable for their fur. Also, it was much easier to "trap-out" entire beaver populations in the higher mountainous regions where beaver dams were easily located and trapping was extremely effective since the trapper only needed to set a steel-jawed trap and then pull a stick or two from the dam in order to be successful.

Competition in the fur trade was so intense between the Americans, British, and Russians along the entire Pacific coast that by 1827 in an expedition to Johnstone Strait in British Columbia, Hudson's Bay hunters returned to Fort Vancouver "with only a few skins, as the coast had been scoured by the Americans" (Doyce 1968:34). By the late 1820s, after only a few decades, otters and the fur seals were nearly extinct along the California coast. It is not unreasonable, therefore, to make the argument, given the rapid and complete extirpation of sea otters and fur seals from throughout nearly their entire historical range, that beavers inhabiting any coastal regions of northwestern California, the San Francisco Bay Area, or the Sierra Nevada Mountains could have met the same fate.

By the early 1830s, trapping expeditions to the Sacramento and San Joaquin Valleys, the Delta, the San Francisco Bay Area, and the mountainous regions of inland California, were already reporting that beaver were becoming difficult to find (Bryant 1916:101). Thus, by the late 1830s, after little more than a decade, trappers had already "trapped out" many if not most of the drainages within the state. For example, Michel Laframboise led Hudson's Bay trapping expeditions into the Sacramento Valley almost every year for nearly a decade. A chronicler of the 1841-1842 expedition recorded that the Laframboise Party " made out poorly" (Allen 1997:106) on their trip to California. John Allen, a historian, who chronicled the fur trade and the various trapping expeditions to California wrote that:

> In twenty years, the Hudson's Bay Company had converted much of the Pacific slope south of the Columbia into a fur wasteland. When the furs were gone, the company had little reason to continue activities in Oregon and California, and it abandoned most of its facilities in the region even before the area became American territory in 1848 (Allen 1997:106).

Another major factor that contributed to ending the annual fur trapping expeditions to California was due to changing fashion tastes and a resulting decline in the profitability of trapping. In the early 1830's, beaver pelts were worth almost $6/lb in Philadelphia; by 1843 the price was under $3/lb. As a result of the steep decline in both beaver populations and the value of their fur, by the early 1840s, trapping expeditions to the Sacramento Valley ended and the Hudson's Bay Company abandoned its operations at Fort Vancouver in 1846, two years prior to Oregon becoming an American territory.

Once beavers were essentially "trapped-out" and with the decline in prices for beaver pelts, it was also no longer economically feasible for American trappers, and they too had no further interest in California and Oregon. Some of the men from these early overland expeditions remained in California to become successful and wealthy residents with some like John (Juan) Warner becoming Mexican citizens. Others like Ewing Young, who became a prosperous citizen of the Willamette Valley, settled in Oregon after it became an American Territory in 1848.

Although the annual trapping expeditions to California had ended years before the gold rush of 1849, unregulated trapping of beavers continued into the early twentieth century. By that time beavers were facing their near-total extinction within the entire state. Donald Tappe, who authored a study on the precipitous decline of beaver populations in California, concluded:

> Despite the fact that its specialized habits make the beaver more subject to extermination than most mammals when heavily trapped, no special effort was made to protect it in California prior to 1911. Indiscriminate trapping had caused such a decrease in the beaver population that its extermination was threatened at this time. Having been made aware of this danger, the State Legislature in 1911 enacted a law providing for the complete protection of this mammal. A rapid increase in the beaver population followed, especially in the delta area. (Tappe 1942:11-12)

Historical Range of Beavers in California

The historical record, provides evidence that suggests the historical range of beaver populations in California extended into at least some regions of the Sierra Nevada Mountains, much of the San Francisco Bay region, and quite possibly some coastal or inland regions of the North Coast Ranges. In 1863, John Hittel wrote that:

> ... American beavers (Castor canadensis) were once very abundant in all the large streams of California, and it was chiefly for their sake that the first American trappers entered the country some thirty-five or forty-years ago. They are still found today in nearly all parts of the state, and even numerous, it may be said, in some of the sloughs near the junction of the Sacramento and San Joaquin Rivers. They rarely build dams in California, but live in

> burrows in the banks...Their skins, which once commanded very high prices, have lost much of their value since the adoption of silk for making hats (Hittell 1863 :125).

Evidence of Beavers in the North Coast Region

As noted earlier, many naturalists researching the subject in the early twentieth century were skeptical that the historical range of the beaver extended into the coastal streams of northern California or inland regions of the North Coast Ranges. The ethnographic record related to the historical range of beavers in northwestern California suggests, however, that the animal was found within the territory of at least some of the Indian tribes inhabiting the coastal region. For example, the Yurok (whose territory encompassed the lower Klamath River) traded beaver pelts with the Smith brigade when they passed through their territory near the Pacific coast in 1828 (Smith MS. 1828). Also, the Southern Pomo, who inhabited the lower half of the Russian River, had a word for beaver-- *ṱ'ek:e* (a Southern Pomo Legend *The Trials of a Young Hawk*, contains a passage about two beavers living in an earth lodge) (Luthin 2002:318).

In 1787, Russian ships carrying Aleut hunters began to make annual voyages to the northern coast of California hunting for fur-bearing animals, primarily seals and otters. Russians working out of Fort Ross recorded taking beaver along the coast north of Fort Ross beginning in the late 18th Century, and one expedition explored the lower 50 miles of the Russian River in 1809 in search of beavers. In 1806, Captain Jonathan Winship an American, working for the Russians captaining the O'cain "discovered" Humboldt Bay while hunting for beavers, as well as, trading for furs with local Indian tribes along the north coast. This was one of the numerous hunting expeditions to the north coast of California sponsored by the Russians for about two decades. American ships sailing from New England also began to find it profitable to hunt and trade for furs visiting the north coast region of California almost yearly during this era.

Bancroft (1801-1821:94) recorded that in 1809, the American ship, the Albatross captained by Winship, during its travels along the north coast, stopped and visited the Russian settlement of Fort Ross in August of 1809. By October the ship was loaded with furs, and Bancroft writes:

> On the 2nd of October, taking on board all hunters, except Brown with seven Kanakas [a derogatory word for native Hawaiians], the Albatross sailed for the Islands so loaded with furs that some water-casks had to be broke up and hemp cables carried on deck. (Bancroft vol. (1801-1824:94).
>
> [The American ships in the fur trade usually sailed to and from Cape Horn via the Sandwich Islands (Hawaii) where they often hired native islanders for their expeditions to California.]

There were fortunes to be made in the fur industry and Bancroft estimated the value of the furs listed on the Albatross' manifest at Canton prices was $157,397 (Bancroft 1801-1821:94). The Albatross listed the following cargo:

fur seal skins	74,526	
sea otter	581	(they may have already been becoming scarce)
beaver	**248**	
raccoon	21	
wildcat (bobcat)	6	
land otter [?river otter]	153	
badger	4	
fox	5	
mink	58	
skunk	1	
muskrat	11	
mole skins	137	

Some historical accounts also suggest that beavers were found in the Humboldt Bay region. After gold was discovered in the Trinity Mountains, in the spring of 1850, several towns were established on Humboldt Bay in order to provide the mines with needed supplies. In April of 1850, the Laura Virginia was the first ship to enter the bay since the Albatross in 1809. The bay was named at that time to honor the great German geographer and naturalist Alexander Von Humboldt. A crew member of the Laura Virginia described the surrounding countryside as they entered Humboldt Bay:

> The land is the most beautiful I ever saw--large hills sloping down to the water, and beautiful plateaus. The red wood, cedar, spruce, hemlock, oak and alder abound....but what exceeds all I ever saw is the quantity of game and fish. Elk, deer, black bear, and grizzly bear, **beaver**, otter, geese, ducks curlews, snipe, robin, partridge are without number... (Hoopes 1971:20). [From the original. Emphasis added.]

Jedediah Smith, in his travels to the Pacific Ocean from the Sacramento Valley noted the presence of "beaver sign" near the Klamath River within a few miles of the coast on June 5, 1828, just three days before he finally reached the Pacific Ocean at a point somewhere to the south of the mouth of Wilson Creek and north of the mouth of the Klamath River. Smith wrote in his journal for June 5, 1828 that:

> This situation was verry unpleasant because while my men were suffering from hunger and in a country where there was verry little game they were laying in camp and apparently without the power of supplying their wants the only alternative being patient endurance with a prospect ahead not verry flattering for although near the Ocean yet our intended route appeared

> equally rough with that over which we had passed. In the vicinity I saw some **Beaver sign** but the tide setting up interfered with the design of trapping (Smith MS June 5, 1828). [Unedited from the original. Emphasis added.]

Harrison Rogers recorded in his journal that he saw "beaver sign" on May 10, 1828, after crossing the South Fork of the Trinity River and camping near Campbell Creek (Dale 1918:238). A few days later, on May 16, they traded with the Yurok for a few beaver skins, and Rogers wrote in his journal:

> We cannot find out what these Inds. call themselves; the most of them have wampum and pieces of knives. Some have arrow points of iron; they also have some few beaver and otter skins. Mr Smith purchases all of the beaver fur he can from them (Smith MS. 1828). [Unedited from the original.]

The historical record, however, is not unanimous on the subject of beaver ever having been found along the Pacific coast in California. On the by-then annual trip south to California from Fort Vancouver by a Hudson's Bay brigade in 1829, Alexander McLeod reported that: "[t]he Country to the northward of Bodega is said to be rich in Beaver and no encouragement given to the Indians to hunt" (<u>in</u> Noyce 1968 :34). Four years later, however, an HBC Brigade to California led by John Work, made its way north from the mouth of the Russian River to just north of Westport without seeing any beavers (Maloney 1943:102). [See Keter 2013 for an in-depth overview of Work's route though northern Mendocino County.]

In his travel up the Mendocino Coast in 1833, Work recorded in his daily journal that there was a total absence of beavers in north coast streams and specifically mentioned the Gualala and Ten Mile Rivers as streams that appeared to have been good beaver habitat (Maloney 1945:47). On Friday, May 10, after traveling inland from the coast, Work encamped on the South Fork of the Eel River somewhere to the south of Leggett (Keter 2013:20) and wrote in his journal:

> Fine weather, continued our route 9 miles N.N.E. & **encamped on a pretty large river**. The road very rugged and in places difficult. The river where we are encamped appears remarkably well adapted for beaver yet there is not the least appearance of any ever have been in it (Maloney 1943:50). [Emphasis added. In the original.}

Although Work visited the north coast towards the end of the rainy season, he advanced a theory (probably correct) that the absence of beavers might be due to the fact that coastal streams "take their water not far off in the first range of Mountains and that there is [probably] little or no water in them during the dry season" (Maloney 1945:47). Biologists are faced with precisely that same situation today and have been unsuccessful on in attempting to establish beaver populations in that part of the state (Hensley 1946:89).

There is scant evidence for beaver inhabiting the interior Coast Ranges of northwestern California. There are, however, a few references to beavers spread across the historical literature of that period. In 1833, shortly after the combined Work and Laframboise Brigades had passed through the Russian River region, well-known *Californio* Mariano Vallejo traveled west to visit the Russian settlement at Fort Ross. In a report of his trip to the mouth of the Russian River, Vallejo wrote that he passed through Petaluma and headed north and west along the western side of the Santa Rosa Plain, passing by the Laguna de Santa Rosa, "which forms in its basin great tulare lakes teaming with beaver. One can find here, as well as in other places, some vestiges [left by] the foreigners who hunted these animals" (in Farris and Bebee 2000:6). [From the original. Emphasis added.]

The *Sacramento Daily Union* (Volume 45 page 3, Number 6879, 21 April 1873), in 1873, noted that "[a]bout Lake County there are wood duck, panthers, lynxes, foxes, coons, wild cats, **beavers**, otters and mink, besides other game" (emphasis added). In 1881 the same newspaper noted that in the lower Russian River region "Beaver are being trapped near Healdsburg" (*Sacramento Daily Union* Volume 13, Number 5 page 1, 26 February 1881).

Given the conflicting historical data, it is not possible to definitively document the presence of beavers along the northern California coast. There is, however, some evidence to suggest that there may have been some small and isolated populations of beavers possibly, in the region near the mouth of the Klamath River (as mentioned in Smith's journal), the Humboldt Bay region, or in the lower and upper Russian River drainage. Further, there is at least some evidence provided by Vallejo and news accounts from that era that beavers may have inhabited some regions of inland California north of San Francisco.

Beavers in the San Francisco Bay Area

Unlike the mixed historical record on the presence of beavers along the northern California coast during the early historical era, a much better case can be made for their presence in the San Francisco Bay area as late as the early nineteenth century.

Although early twentieth century naturalists were doubtful that the California golden beaver had been found in the San Francisco Bay region to the west of about the Carquinez Strait, evidence of their presence in the Bay Area during the prehistoric period was documented by Max Uhle in his report on excavations undertaken at the Emeryville Shell Mound (Uhle 1907:18). Further, during the boom years of the fur trade, there were numerous expeditions by the HBC brigades to trap beavers in the San Francisco Bay area. Alexander R. McLeod reported on the progress of the first Hudson's Bay Company fur brigade sent to California in 1829, "Beaver is become an article of traffic on the Coast as at the Mission of St. Joseph [San José] alone upwards of Fifteen hundred Beaver Skins were collected from the natives at a trifling value and sold to Ships at 3 Dollars" (Nunis 1968:34). Thomas McKay, working for the HBC, reported that in one year the company took 4,000

beaver skins on the shores of San Francisco Bay. At the time, these pelts sold for $2.50 a pound or about $4 each (Nunis 1968:34).

Beginning in the late 1820s and for over a decade, Michel Laframboise, who was known as "the king" or "captain" of the California Trail, led HBC brigades south from Fort Vancouver into California to trap beavers (Holmes 1967:82 , Maloney 1943:104) . In 1828, on their trip south from Fort Vancouver into Mexican California in search of beavers, Laframboise, leading a brigade of HBC trappers, travelled from the "Bonaventura River" (Sacramento River) to the San Francisco Bay region, visiting the missions of San José, Sonoma, and San Rafael. He recorded that "the Bay of San Francisco abounds in beaver" and that he "made his best hunt in the vicinity of the missions" (Maloney 1943:12). [See Keter 2013 for more on Laframboise's travels in northwestern California.]

In the spring of 1833 the combined Laframboise and Work Brigades traveled together passing along the north shore of San Francisco Bay on their way to the mouth of the Russian river and their journey up the coast. They spent some time in the area near the mission at Sonoma and were successful at trapping beavers in Napa and Sonoma Creeks and possibly at some other locations (Work MS). In the 1840's, American explorer and trapper Kit Carson was granted rights to trap beaver on Alameda Creek where they "abounded...from the mouth of its canyon to the broad delta on the bay" (Pamphlet: The Centennial History of Newark. Newark Days Bi-Centennial Committee).

Beavers in the Sierra Nevada

Although data on the historic range of beavers within the state of California is not definitive, many studies on this subject, as noted earlier, have concluded that historically beavers were not thought to inhabit the Sierra Nevada above 1,000 feet ' in elevation. Based on the historical record, however, a strong case can be made for their presence.

For nearly two decades on their yearly expeditions to California, historical records document numerous trapping brigades traveling up the rivers flowing out of the Sierra into the high country in pursuit of beavers. For example, in 1832, a brigade led by Ewing Young that included John Warner and Moses Carson (Kit Carson's brother) headed east up the Kings River. The brigade:

> ...trapped that river up to and some distance into the mountains and then passed on the San Joaquin River, trapped that river down to canoe navigation in the foothills, where a canoe was made, and three men were detached from the party to trap that river by means of the canoe. The main body continued on northwesterly until they struck a tributary of the main San Joaquin, now called the Fresno River, which they trapped down through the foothills to the

plains, where it was discovered that the river had already been trapped (Warner 1909:187).

It is clear that the Young Brigade traveled a significant distance into the high Sierra trapping beavers (and quite possibly other fur-bearing animals). It is likely, given Warner's account and the topography of region, that the brigade traveled up the North Fork of the Kings River, crossing into the South Fork San Joaquin River basin near Martha Lake (11,000 feet in elevation) and then followed the South Fork back to the central valley.

In 1906 Frank Stephens, after completing field work studying the former range of the North American beaver in California, wrote that at that time "in most parts of California the presence of beavers is only made known by the stumps of the trees and saplings that they have cut (Stephens 1906:97). Donald Tappe (1942), in an effort to determine the original range of beavers in the Sierra Nevada, talked to a number of individuals who could remember seeing beavers in various creeks and rivers in the Sierra Nevada well into the late 19th century. For example, he talked to one individual who had personally seen beavers on the upper part of the Carson River until as late as 1892, when they were finally trapped out.

Beavers inhabiting the lower courses of rivers in the Central Valley and Delta regions had plenty of deep water to provide food and shelter and they did not have to build dams. Therefore, there was much less "beaver sign," making it more difficult to locate the animals and find suitable places for trappers to set their traps. At higher elevations , however, it was not only necessary for beavers to impound streams and build dams in order to create deep water habitat, they also needed the proper vegetation for dam building materials. Generally, soft woods like willow (*Salix* spp.), cottonwood (*Populus* spp.) and aspen trees (*Populus tremiloides*) growing along perennial creeks and or rivers or near ponds, or lakes were preferred beaver habitat. Therefore, in the mountainous regions, the existence of beaver dams or other "beaver sign," made the beaver's presence known even from a distance.

It was, however, not only the intensive trapping that decimated beaver populations in the mountainous regions, but the fact that the practice continued unregulated and unabated throughout the state well into the early twentieth century. For example, in the Sierra Nevada small-time trapping operations--usually an individual setting out a few traps--continued into the first decade of the twentieth century. By the time the state finally passed legislation prohibiting the trapping of beavers, their numbers had became so reduced that the animal was threatened with extinction with only few golden beavers surviving in the Delta region. After the law was passed, beaver populations increased so rapidly in the Delta that it had to be amended in 1917 to allow for the trapping of beavers where they were doing damage to irrigation works and levies.

Some researchers have hypothesized that beavers were trapped out of the Sierra before any records were kept (McIntyre 1948). In 1916, biologist Harold Bryant (1916:96) in an article in *California Fish and Game* wrote: "The beaver of our mountain districts has been

entirely exterminated and there are but a few hundred survivors to be found along the Sacramento, Colorado and San Joaquin Rivers." Bryant concluded that:

> From 1800 to 1812 a number of American ships annually visited the California coast, trading cloth, muskets, and other material for skins. The toll taken of such valuable fur-bearers as the fur seal, sea otter, and **beaver** led to their practical extermination. The fur trade in this state began to decline in about 1820 but the Hudson's Bay Company kept up their trade until 1840. **Since that time the procuring of fur has been limited to trappers in the mountain districts** (Bryant (1916:106). [Emphasis added.]

As noted earlier, it had been easier to "trap-out" beavers in the more mountainous regions of the state than in the Delta and Central Valley, where plenty of deep water provided food and adequate habitat for shelter along river banks and natural levies than in the mountains where trappers simply removed a few sticks from the beaver dam and set a trap to catch them when they came to make repairs. Thus, unregulated trapping in the mountainous regions of the state would have had a much more devastating effect on beaver populations than in the Delta and Sacramento/San Joaquin River regions. There was also a clear economic motivation for trapping beaver at high altitudes because the pelts of beaver trapped in colder, mountainous regions produce a thicker and more valuable fur (referred to as "wool") than beavers inhabiting lower altitude regions.

Researchers have found that place names containing the word "beaver" are suggestive of an earlier and wider distribution within California (Tappe 1916) . Use of the word "beaver" as a place name can be found for many locations in the Sierra Nevada where no beavers have ever been recorded by biologists. For example, at higher elevations, there is a Beaver Creek in Calaveras County at 7,400 feet and a Beaver Meadow at 7,421feet in Alpine County.

More recently, beavers have been reintroduced into some regions of the Sierra Nevada and they are thriving. For example, near Lake Tahoe at the head if the Truckee River drainage a release program was implemented from 1934 to 1949 (Bier and Barrett 1989:233). Researchers noted in a 1987 study (Bier and Barrett 1987) that as a result of that reintroduction effort there were again healthy populations of beavers on the upper and lower reaches of the Truckee River with about 3.5 beavers per kilometer of river. [For a discussion of beavers moving into the Big Creek drainage in Yosemite National Park near Wawona at about 5,000feet in elevation, see McIntyre 1948).

Did Trappers visit the Yolla Bolly Mountains?

During the boom years of the fur trade it is likely that some of the fur trappers working in the Sacramento Valley would have explored the high elevation region of the Yolla Bolly

Mountains. In addition to searching for beavers to trap, another motivation for exploring the region at that time is due to the fact that the true fir forests of Yolla Bolly country are above 5,000 feet in elevation. This high altitude region with its white fir (*Abies concolor*) and red fir (*Abies magnifica*) forests is ideal habitat for fisher, marten, and other fur bearing species that are still known to inhabit the region.

Evidence presented here suggests that following the Pleistocene and until sometime in the not too distant past it is possible that a small isolated population of beavers may have been present in the Yolla Bolly Mountains in the headwaters region of the South Fork Trinity River on the southwestern slopes of North Yolla Bolly Mountain/Black Rock Mountain region at Beaver Glade in Cedar Basin and perhaps elsewhere in the immediate area, possibly as late as the beginning of the historic period. Although it cannot yet be determined if beavers were present in the Yolla Bolly Mountains in the early nineteenth century, it appears that adequate habitat existed to support a small population of beaver in the region at that time.

Beaver Habitat in the Yolla Bolly Mountains

The trees listed below that are found in the interior of North Coast Range generally provide the preferred building materials for the construction of beaver dams.

Black Cottonwood - *Populus trichocarpa*

Black cottonwood sporadically appears at higher elevations near streams, springs, and lakes sometimes overlapping with aspen. It is uncommon in the North Coast Ranges with isolated stands growing in the upper Van Duzen and Mad River drainages. (Griffin and Critchfield 1972:Map 63)

Fremont cottonwood - *Populus fremontii*

Fremont cottonwood stands are uncommon in the Klamath Mountains and North Coast Ranges although some stands can be found on the upper Trinity and Eel River drainages.

Aspen - (*Populus tremiloides*)

Aspen trees are only found at one location in the North Coast Range at Beaver Glade. Griffin and Critchfield (1972: Map 63) noted that:

Aspen is not common in the Klamath Ranges. Little (1971) shows only one locality west of the Sacramento River drainage; and Jepson (1923) knew of only one locality, Canyon Creek in Trinity County. Actually, aspen is scattered in a number of remote places in this region including the Trinity Alps, Russian Peak,

and the Marble Mountains. The southern extreme in the Klamath Ranges seems to be in Cedar Basin, just south of North Yolla Bolly Mountain.

Today, one can still hike sections of the old Humboldt Trail (Keter 1997: HTMR 27) leading from Mad River and Yolla Bolly country east into the Sacramento Valley. The trail crosses the southwestern facing slopes of North Yolla Bolly Peak and Black Rock Mountain at about 6,200 feet in elevation. At Cedar Basin the trail passes through Beaver Glade (Images 1-2).

Image 1
Aspen tree Beaver Glade Yolla Bolly Mountains
(T. Keter 1985)

Image 2
The Humboldt Trail passes through an aspen grove at Beaver Glade view to NE.
(Note the invasion of conifers into the grove of aspen trees)
(T. Keter 1985)

The reader is referred to *Environmental History and Cultural Ecology of the North Fork Eel River Basin, California* (Keter 1995) for a complete discussion of paleoclimatic data for the Yolla Bolly region. The following section summarized from the book (1995:57-58) discusses why aspen trees are found in the Yolla Bolly Mountains.

> ...during the late Pleistocene and early Holocene, the climate of northwestern California was cooler and wetter than today. Evidence supporting this conclusion includes the documentation of glaciation during this period on South and North Yolla Bolly Mountains, Anthony Peak and other locations in the North Coast Ranges......
>
> ...During the mid-Holocene, the North Coast Ranges experienced a change to a warmer and possibly drier climate than that of today. This period, called the xerothermic period, lasted from about 8,500 to 3,000 years ago.
>
> ...Taylor (1976:307) notes that it is likely some Great Basin plant species extended their ranges into the mountains of the North Coast Ranges during the xerothermic period (or quite possibly earlier xeric periods), probably entering the area from the volcanic plateaus of northeastern California. An example in this area of a disjunct Great Basin species is western juniper (*Juniperus occidetalis*). Remnant stands of these trees are found in the Yolla Bolly Mountains....(Griffin and Critchfield 1972:Map 32)

..These are the only documented occurrences of western juniper in the Coast Ranges. The closest area where this species grows today is in Scotts Valley west of Yreka (Griffin and Critchfield 1972:21)...

...Further evidence for the extension of Great Basin species in to the Coast Ranges includes a single grove of aspen which still survives in the vicinity of North Yolla Bolly Mountain (Griffin and Critchfield 1972:32). Another tree species, the fox-tail pine (*Pinus balfouriana*) has disjunct populations found in scattered remnant stands in the Yolla Bolly and Klamath Mountains and in the southern Sierra near Mount Whitney and portions of the upper Kings River and Kern River drainages (Griffin and Critchfield 1972:25, personal observation).

Thus, it appears that potentially suitable beaver habitat was present at Beaver Glade although it may have been steadily in decline for centuries. In effect, the aspen grove found in the Yolla Bollys and the local "vestige" ecosystem of Beaver Glade are evidence of what is termed "vegetation inertia," i.e. the tendency for vegetation associations (and ecosystems) continuing to strive for homeostasis over time despite changing environmental conditions. It is quite possible, therefore, that an isolated remnant beaver population survived in the Yolla Bolly Mountains into the early nineteenth century from the Pleistocene despite, the fluctuations and changes in climate.

Given the potential beaver habitat and high altitude environment of the Yolla Bolly Mountains and given the goal of Hudson Bay's trappers to extirpate beaver from entire watersheds, it would not be surprising if a small and isolated beaver population could have been trapped out of the entire region in a visit or two. At this time, however, it cannot be discounted that beavers once inhabited the region but became extinct prior to the historic era due to loss of sufficient habitat resulting in an inability to maintain a healthy genetically diverse population.

"Beaver Sign" and the High Yolla Bolly Country

Another motivation for trappers visiting the Yolla Bolly region in search of beavers is related to the fact that beavers taken at higher altitudes in the mountains produced a thicker fur that was highly sought after due to its higher value. In 1829, for example, the McKay Brigade traveled as far south as the San Francisco Bay region where they trapped over 4,000 beaver. But, as Bryant(1916:100) writes: "the fur was inferior in quality to that of the mountain beaver and brought only $2 a pound."

Although beavers were the most sought after and valuable animal to be trapped on these expeditions, the trappers also pursued and there was a demand for the furs of fishers, martens, and wolverines, all indigenous to the Yolla Bolly Mountains. For example, on the 1832 trapping expedition to California Michel Laframboise working out of Fort Vancouver recorded that during the year he trapped 755 large beavers, 84 small beavers, and 152

"other skins" (Web site: Hugo Emigrant Trails Committee Hugo Neighborhood Association & Historical Society 2012) . Given the fact that from a distance the Yolla Bolly Mountains appeared to not only have potential habitat for beaver (i.e. "beaver sign"), but potential habitat for other fur bearing animals as well, it is quite possible, that trappers worked their way up some of the larger creeks (Dry Creek/Beegum Creek, Thomes Creek, and Cottonwood Creek) flowing east into the Sacramento Valley from the high peaks region of the Yolla Bollys. Also, as noted earlier, the geopolitical goal of the British working out of Fort Vancouver was to discourage Americans from entering the region by creating a "fur wasteland" in northern California. Therefore, another incentive for Hudson's Bay trappers to explore the Yolla Bollys at that time was to insure there were no fur-bearing animals in the region.

Another thread of evidence supporting the presence of beavers in the Yolla Bollys in the early nineteenth century and perhaps when and why the locality got its name, is due to the fact that the Humboldt Trail passes through Beaver Glade. It was the earliest trail in this entire region to be used during the historic era. The trail provided direct access to the Yolla Bolly/Mad River country from the Sacramento Valley. Given its strategic location, the trail clearly dates to the prehistoric era (Keter 1997: HTMR 27).

It appears this trail was used as early as 1851 by Joe Russ, Barry Adams, and Slaughter Robinson to drive cattle from the Sacramento Valley to Humboldt County (personal communication Max Rowley). After passing through Beaver Glade on the southern slope of North Yolla Bolly Mountain, the trail headed west. It crossed the South Fork Trinity River and passed through Penny Glades to the Kelsey Peaks region. From here it dropped down to Three Forks on the Mad River (Keter 1997). At this point a trail followed the relatively broad valley of the Mad River northwest to connect with the Eel River-Weaverville Trail at the foot of Eight Mile Ridge. Here they headed west over Showers Pass to the Eel River Valley.

There are a number of sections of the original Humboldt Trail still in existence on both Six Rivers and the Shasta-Trinity National Forests and most of the original Humboldt Trail (9W36) can still be hiked within the boundaries of the Middle Eel Yolla Bolly Wilderness Area including the section of trail passing through the grove of aspen trees at Beaver Glade (Keter 1997:HTMR:27).

Topographical Evidence for the Presence of Beavers in the Yolla Bolly

In 1994, I was contacted by a Forest Service employee who had worked on the Mendocino National Forest for over twenty years. After a presentation to Forest Service employees on the environment of the Yolla Bolly Mountains and the presence of aspen trees at Beaver Glade, I received an email message from an employee who worked on the Upper Lake Ranger District on March 24, 1994, regarding the possible presence of beavers in the Yolla Bollys. He wrote:

> I talked with a geologist that has worked in many other areas, and when discussing the topography of the Yolla Bolly area, he stated that it sure looked like the area has been influenced by beaver ponding in the past. Indicators are gradient, changes in stream directions, and points along the channel where possible dams were. Also, there are name places and streams etc with "beaver" names, a possible indication that these critters were here at one time. The introduction of domestic cattle [and sheep] into the area would have reduced the willow and alder etc sprouts the beaver would have fed on. [personal communication Arnold James.]

Also, suggestive of the presence of beavers in the general Yolla Bolly region is George Foster's ethnographic study of the Yuki whose territory included much of the high Yolla Bolly Country. In his publication, *A Summary of Yuki Culture* (1944), Foster recorded that among the Yuki "Beavers and dogs were not killed" (Foster 1944:163).

Place Names in the Yolla Bollys

I have not found how Beaver Glade got its name. Simply the occurrence of aspen trees--the only aspen grove in the North Coast Ranges--is suggestive of beaver habitat and may simply have been enough of a reason (Images 2-3). As noted earlier, however, place names containing the word beaver in them that are found today in the Sierra Nevada suggest their presence in the region at an earlier time. In the high country of the Yolla Bolly (6,000 feet to 8,000 feet) in addition to Beaver Meadows at Cedar Basin, there is also a Beaver Creek in the region. It flows into the Middle Fork Eel River just to the west of Forest Service Road 1N02 (Indian Dick Road), where it crosses the creek below another meadow named Beaver Glade. One of Beaver Creek's tributaries, Smokehouse Creek, has its headwaters on the southwest facing slopes of Hammerhorn Peak (7,567 feet) in the high peaks region of the South Yolla Bollys.

Fur Trappers in the Yolla Bolly Mountains?

The crest of the high Yolla Bolly Mountains, snow-covered for much of the year, is clearly visible from much of the Sacramento Valley. For that reason, it is likely that some of the early Spanish expeditions entering the Sacramento Valley, like the Argüello Expedition in 1821, whatever their route, saw the high peaks of the Yolla Bolly Mountains (Mt Linn 8,092' and North Yolla Bolly Peak 7,868') from a distance.

As noted earlier, Smith wrote in his journal that after crossing the Sacramento (Bonaventura) River on April 11, 1828, the brigade traveled along the northwest trending ridge above and to the north of Dry Creek towards Platina. It is likely that they were the first Euro-Americans to view up- close the snow covered Yolla Bolly Mountains (Smith MS. 1828). Their route lies about 10 to 12 air miles to the north of the Yolla Bollys and would have provided clear views of the snow-covered north facing slopes of North Yolla Bolly Peak and Black Rock Mountain (Image 3) (Smith MS.).

Image 3
Potential Beaver Habitat
Snow covered North Yolla Bolly Mountain (L) and Black Rock Peak (R) viewed to the south from the ridge north of Platina on Smith's route to the coast (Google Street View)

On April 17, they crossed over the divide into the South Fork Trinity River basin in the vicinity of present day Wildwood. Smith notes in his journal that he could see the Yolla Bolly Mountains to the south and, most likely, the Trinity Alps to the north:

> W N W 10 Miles and then N W 6 Miles. At 1/2 Miles from camp I crossed a creek 15 yards wide running East. From that place the ascent of the Mountain for 10 Miles was in some places quite steep and timbered with Oak & Pine. Then crossing the ridge of the Mountain where there was some snow and high peaks on the right and left... (Smith MS. 1828). [Unedited from the original.]

Subsequent to Smith's travels to California, there were numerous trapping expeditions to the Sacramento Valley over the next decade. It is likely that these "Mountain Men" who had blazed trails for hundreds of miles across the unexplored western half of the North American continent in search of beaver would have pursued beaver wherever they might find them or think they might find them. For that reason, by the early 1840s, it is probable that nearly every stream, creek, or river within the northern portion of California with any

"beaver sign" or with any potential to trap other fur-bearing animals would have been at least explored if not actually trapped.

The Michel Laframboise Brigade

Some circumstantial evidence suggests that an HBC Brigade lead by Michel Laframboise may have passed through the general vicinity of the Yolla Bolly country and perhaps even through the high peaks region in May of 1833.

During the spring of 1833, the two HBC Brigades lead by John Work and Laframboise were traveling together along the coast and through the interior of what is now northern Mendocino County in search of beavers (for an in-depth overview of their route through northern Mendocino County, see Keter 2013). Laframboise did not keep a record of his travels; however, during their time traveling together Work, who kept a daily journal (Maloney 1943), wrote that on Monday, May 13,the two brigades separated near Mail Ridge in northern Mendocino County with Work heading back south via the Eel River and Russian River to Clear Lake and the Sacramento Valley (Keter 2013:25-32).

Work wrote in his journal for May 14, that from his encampment Laframboise: "...will have to take to the E. or the N.E. & cross a mountain on which there is some snow, beyond this mountain it is expected he will fall upon Smith's road & a better country (Maloney 1943:52) [From the original.]. Given the time of year, it likely that the only remaining snow-capped mountains in the view-shed of the Mail Ridge region in this vicinity (probably somewhere within a few miles of Bell Springs) would have been the crest of the North Yolla Bolly Mountains (Black Rock and North Yolla Bolly Peaks and the South Yolla Bolly Mountains (Mount Linn, Solomon, and Hammerhorn Peaks) about 35 air miles to the northeast. [It is possible in a very heavy snow year that some portions of South Fork Mountain (for example near Horse Mountain near its southern end) may have had some snow remaining.]

It is important to make clear, however, that the route of the Laframboise Brigade back to Fort Vancouver from northern Humboldt County has not been established definitively due to a lack of any historical documentation except for the somewhat confusing entries in John Works Journal for May 12-14. A possible though less likely alternative--given the conflicting information contained in Work's journal entries--is that at some point before reaching the Yolla Bolly Mountains the Laframboise Brigade turned to the north and west making their way to the Pacific Ocean then traveling north along the California and Oregon Coast back to Fort Vancouver.

Update

The following information comes from friend and former Forest Service employee Floyd Barney who was born on a homestead in the 1930s near Hulls Valley in the North Fork Eel River Watershed--located just to the west of the high peaks region of the Yolla Bolly Mountains. In a book published in 1997; *Families: A Pictorial History of Round Valley 1864 to 1938* Barney along with Eric Bauer (Bauer and Barney 1997: 153-154) provided significant new information--quoted in its entirety below--related to the existence of beaver in the Yolla Bolly Mountains during the historic period.

> <u>Beaver Creek</u>
>
> Walter James, an old time hunter and trapper in this locality, is said to have caught beaver along what is now known as Beaver Creek in the late 1860s and early 1870s and there was a local belief that he did so. William and James Foster--uncles of Walter, who lives in Barney Meadows--said that during the 1870s they found remains of beaver dams and stumps of beaver-cut trees along the creek.

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