SUMMIT VALLEY - AN OWNER'S MANUAL

A.K.A. Van Norden Meadow

The Origins

In the beginning, jungles and crocodiles

Fifty million years ago there was no Sierra. There was no Summit Valley. There were jungles and crocodiles in the tropics of Nevada and Nevada had not yet been named. North America met the Pacific Ocean in what is now eastern California. Our Sierra, Summit Valley and Van Norden Meadow, sat under the sea.

The Pacific Ocean sits atop the Pacific Tectonic Plate which is continually in motion. It slid under the Continental Plate in a process called subduction. That subduction melted the crust forming an immense granitic batholith of melted rock sixty square miles in size.

Volcanism

As the great batholith formed it floated on the earth's mantel and rose and solidified. That rising and the volcanic activity that came with it formed the foundation of today's Sierra mountain range.

Fifteen to thirty million years ago what would become the Sierra and Summit Valley was covered with volcanic material up to a thousand feet thick.

Uplift

About five million years ago a new round of subduction began. The resulting pressure pushed up the great granite batholith with its covering of volcanic material.

As the mountains rose rain from the natural weather patterns fell and over eons eroded river channels into the sediments and volcanic rock that sat atop the batholith. The rains and erosion gave form to the new Sierra, our Sierra. Summit Valley, Van Norden Meadow, began to form as the South Yuba River cut into it from the summits of the surrounding peaks.

After millions of years the Sierra range was almost complete but there was still one more episode which would form the range and the meadow into what we see today. As the Sierra rose precipitation turned to snow. Each year some snow would not melt. More snow fell compressing the snow that was there. Eventually glaciers formed thousands of feet thick. The South Yuba glacier was 25 miles long.

The glaciers' great weight, grinding downhill, scoured peaks of the rock overlaying the batholith and carved glacial valleys, river channels, and basins. The flowing glaciers followed the existing river channels. Summit Valley, the source of the Yuba River on Donner Summit, is one such valley.

The large granite rocks scattered over Summit Valley and into which the Native American ground mortars, are called glacial erratics. They were deposited by the glaciers. Some poetically inclined observers have said their white forms look like sheep grazing in the meadow. Use your

With the end of the sequence of ice ages the final geologic form of the Sierra was in place but there was no life. The Summit Valley was barren. Lichen and moss arrived, covering and breaking down the rock, and depositing organic materials. Eventually top soil formed and was colonized by a succession of plants. The forests and meadows of today sit atop the volcanic conglomerate and the great Sierra

Summit Valley was ready for the arrival of man.



T.C. Wohlbruck ca. 1925 Lake Van Norden full



We Made It!

"When we struck the main ridge of the mountains, every heart was filled with terror at the awful site [sic]." William Tustin 1846

The Sierra were a "formidable and apparently impassable barrier...."

from What I Saw in California 1846

DONNER PASS & TRUCKEE

LINCOLN HWY

original Dutch Flat Wagon Rd.

ca. 1862

We arrived at the main difficulty from here to the summit is one mile it is as steep as the roof of a house. Joseph Hackney, 1849

For months emigrants had been traveling across the continent to California. The Sierra was the final barrier, but also the most difficult. They were exhausted after the Nevada desert and now they were faced with a wall of granite. The three passes at Donner Summit are the lowest of the emigrant passes but still they were hard and steep and rocky.

Imagine the joy and relief when the emigrants crested the ridge and could look down on the grass and water of Summit Valley. They'd beaten the snows and they could rest - for a short time. It was October and they still had to prepare for winter.

CASTLE CREEK

YUBA RIVER

site old cabin ca. 1870

peninsula w/grinding rocks

It was all downhill to California now.

OLD HWY 40

SODA SPRINGS

The First Visitors

Native Americans occupied Summit Valley in summers for thousands of years. They came to escape the Nevada heat and to trade with California Indians. The evidence of their presence is in many places.

Dozens of mortars (below) dot the valley, each ground over centuries into the Sierra granite. There are also metates (large grinding areas on flat surfaces), cupules (small depressions made possibly for mystical activities), and petroglyphs. There are thousands of basalt flakes left over from the fashioning of atlatl and spear heads.

The Martis culture (2000 B.C or earlier to 600 A.D.) lived all around the valley for thousands of years grinding seeds and hunting. The Kings Beach culture (A.D. 1000-1850) was a fishing culture and occupied only a small portion much later.

As you explore these sites imagine the time it must have taken with only the daily grinding during

summers, to develop the mortars in the rock. Imagine the groups of women and girls passing on one generation's wisdom to another in the same places, summer after summer, century after century. Why are some mortars in groups and others sit alone?

Imagine the men and boys knapping the basalt rock, carried to the valley from miles away. Life lessons were imparted and learned summer after summer, generation after generation. the detritus of the knapping, the basalt flakes, grew in number until they littered the ground.







Northern Sierra Partnership









Area/Beacon Hill)

Alfred A. Hart ca. 1867 - Summit Valley from Lava Bluffs (today Soda Springs Ski

A Busy Place

site Lytton House hotel (ca 1866)

sheep pens and good access point

The coming of the European Americans changed the face of Summit Valley. The first wagon trains to reach California with wagons came through Summit Valley, where they rested after the ordeal of crossing the Pass.

Not long after, white people began to settle in the valley along the old emigrant route. An 1861 map shows "Cook's Cabin" right where Castle Creek joins the Yuba River. Then came the transcontinental railroad and with it the Dutch Flat Donner Lake Wagon Rd. (blue line on the map). Then came lumbering, dairy, cattle and sheep, some orchards, ice harvesting, and more settlers. A few hotels sat along the Dutch Flat Rd. and the railroad and a few cabins dotted the valley.

Then came the first transcontinental highway, the first transcontinental telephone line, and the first transcontinental air route with its beacons on the peaks along the

The South Yuba River was dammed, first in the late 1860's and then with Van Norden Dam in 1890, and the meadow became a large lake.

A Few GPS coordinates

(SUMMIT VALLEY)

C: 39,18.772,-120,21.253 (1.5 miles from Soda Springs Rd.) F: 39 18 725 120 21 673 G: 39 18 783 120 22 384 H: 39 18 990 120 22 587 Red Line: 39,18.640,-120,21.668 E 39,18.673,-120,21.485 C 39,18.772,-120,21.253 I 39, 19.150,-120,22.345



Carleton Watkins ca. 1867 wagons crossing a bridge over Castle Creek on the Dutch Flat Donner Lake Wagon Rd. on the valley floor. Castle Peak is in the background. Until the railroad was finished the wagon road was a major freight route