

Whitney Oaks Trails



Whitney Oaks

Community Association

Trail Guide

Credits

Ken and Bea Morrow, along with Earl Brabb (now deceased), created this guide because of their interest in protecting and improving the trails for the enjoyment of all residents of Whitney Oaks.

Earl Brabb's geological descriptions provide a peek at the forces of nature that created this beautiful area that we all call home.

Acknowledgments

The Rocklin Historical Society originally coined the alliteration "Rock, Rails and Ranches" as the theme of the Rocklin History Museum. The help provided by the Rocklin History Museum staff is gratefully acknowledged. <u>www.rocklinhistory.org</u>

Articles written by Gary Day for the Rocklin History Museum expand greatly upon the history provided herein. He and his wife Jean have spent years researching, gathering and cataloguing information and writing articles about Rocklin and the Whitney family's history.

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Recent History

The Whitney Oaks Community Association (WOCA), aside from being one of the largest residential neighborhoods in Rocklin, California, is set within a remarkably beautiful natural setting with a very rich historical connection. That history encompasses the 3 R's, <u>Rocklin's Rocks, Rocklin's Railroad</u> and <u>Rocklin's Ranch</u>.

Rocklin's Rocks: Granite was quarried in Rocklin beginning in the late 1850s and by the mid 1870s beautiful polished granite could be produced. By 1890, when 30 quarries were operating, 2,000 rail car loads were being shipped each year. Sixty quarries existed at one time or another but by 1928 few remained in operation. Rocklin granite was used for the Bank of Italy and the docks at Fort Mason in San Francisco, the Bell Tower at U.C. Berkeley, the Court House in Reno, the Sacramento County Jail, Fort Lewis in Washington, the Naval Station at Pearl Harbor and the Golden Gate Bridge, among many others.

Rocklin's Railroad: Rocklin was an important railroad town as the railroad terminus was pushed ever further eastward. When the railroad became transcontinental in 1869, Rocklin served as a "roundhouse" (a semi-circular structure completed in 1868) and as a fuel depot. The roundhouse served a dual purpose, the maintenance of engines and cars, and the place where extra engines were added to eastbound trains (or subtracted from westbound trains) for the climb over the Sierras. Rocklin's limited space for expansion caused the roundhouse to be moved to Roseville in 1908. As a result of this move, many railway workers moved to Roseville and literally pulled their houses behind them, causing a severe decline of Rocklin. In the early days, railroads were given 20 square miles of land (10 alternate sections on each side) for each mile of track laid to encourage them to extend rail lines into undeveloped areas. The early locomotives had a voracious appetite for wood as fuel. It took 48 cords of wood to power the 3 locomotives (16 cords for each) pulling a train over the Sierra Nevada range (an 82 mile run). A cord is a stack of wood measuring 4x4x8 feet and is the amount that could be transported on a horse or ox-drawn wagon. Many ranchers used their teams and wagons for hauling wood for fuel and for railroad ties where oak was preferred. Although it is known that forests in the vicinity of a rail line were often denuded, it is unclear whether the oak trees in Whitney Oaks were harvested. Although many of our oak trees are guite young, some very majestic trees remain. The fact that the Whitney family began to acquire land in the 1850's and the many streams to be crossed may have prevented extensive logging in Whitney Oaks.

Rocklin's Ranch: Joel Parker Whitney arrived in California in 1852 when he was 17 years old. The sailing ship on which he traveled took 142 days to get from Boston to San Francisco by way of Cape Horn in South America. Four of his five brothers had preceded him to California. He was anxious to try his hand at gold mining even though his brothers tried to stop him. He apparently hiked from Sacramento to Auburn and, as he passed through our foothill area, he fell in love with the land. He spent a few months "gold digging" in El Dorado County but quickly gave up the idea of being a miner and returned to San Francisco. He and his brothers realized that buying and selling equipment to gold crazed miners was much more profitable than digging for the stuff.

He worked as a game hunter for about a year and saved enough money to start a merchandising business. He periodically raced across the U.S. (8 times), either by stagecoach or by way of ships and the Isthmus of Panama, first obtaining goods in Boston, placing them on ships that went around Cape Horn, meeting them in San Francisco and arranging for the sale of the cargo. The risks were enormous, but by the age of 30 (1865) he was extremely wealthy. He sold his Boston businesses and went to Denver to check on his silver mining companies. Money was coming in at such a rate he couldn't bring himself to retire as he had planned.

He became a world traveler, met his wife in England (Lucy Ann Chadwick Whitney) and finally returned to California to buy the land with which he had previously fallen in love. Joel's father and his brothers began acquiring land in the mid 1850s. Joel took active control after his father retired in the early 1870s. He continued to acquire land from the government, the railroads and from the 33 farmers who had homesteaded portions of land he wanted. He went to each of them and asked them to name their price. A few asked too much and were made to wait until they were serious about selling, even though he could have paid a hundred times more than they asked. Placer County records show that the Whitney family made at least 140 land purchases over a period of 31 years (starting in 1857), acquiring title to all of the properties making up the ranch.

Otis Brown owned the site of the Whitney Oaks Golf Course, and he was the only farmer that refused to sell to Whitney. Brown's Valley consisted of 250 acres of land and contained an 80-acre vineyard and a small orchard of 120 fig trees. Otis Brown willed his valley to Joel in 1901 shortly before his death in 1912 at the age of 83, possibly because Joel had helped him obtain irrigation water. The Spring Valley Ranch, with the acquisition of Brown's Valley, contained about 18,400 contiguous acres (29 square miles). The site of the original "Spring Valley" is today being preserved as the "Environmental Learning Center," a 150-acre open area that is just north of Pioneer Way and Pioneer Court in the Springfield development.

It appears that Joel Parker Whitney's early fascination with the beauty of the land was the reason for the family's purchases of the land that became the Spring Valley Ranch. The beauty is undeniable, but the land was not suitable for farming due to its rocky nature. Curiously, in the 1850's much of California was free range, and it was not unusual for ranchers who had herds of cattle or sheep to graze them on any land that was not claimed by others. Joel's father, George, joined his sons in California in 1854 and became aware that demand for mutton and wool in California was increasing. He was also aware that good quality wool could only be obtained from England or Australia. Joel's brother, George Jr., made a trip to Australia in 1856 to purchase Spanish Merino sheep that produced a superior long-staple wool that was in great demand by manufacturers of textiles. He purchased approximately 400 sheep and loaded them on a ship bound for California. The voyage was so arduous that only 120 survived.

The Whitney family knew of a General William W. Hollister (think Hollister, California) who eventually owned 150,000 acres (235 square miles) on which he grazed about 80,000 sheep. His herd included Saxony bucks from Vermont, and some of these were acquired and crossbred with Whitney's Australian Merino sheep. This resulted in a breed of sheep with excellent wool and mutton. The ranching operation began in 1856 and may have pre-dated the Whitney's first purchase of land in 1857. The number of sheep on the Spring Valley Ranch eventually grew to about 12,000 and transformed sheep ranching in the Western United States. For many years the ranch shipped as many as 4,000 of this superior breed of sheep to other farmers throughout the West. The Whitney family made a number of purchases of the Australian Merino sheep until the Australian government finally realized that their hold on the wool market was being eroded in the process and passed a law forbidding the export of their prize sheep. But it was too late.

The ranch thrived for many years with herds of sheep and cattle and orchards. Navel oranges weighing 2 pounds and having a circumference of 17 inches won a prize in the 1893 Paris exposition. Joel's daughter, Beryl, appeared on the January 1906 cover of Sunset Magazine holding these amazing orange specimens. For years, wealthy and influential members of California's early history visited the ranch. Joel delighted in taking his guests on evening carriage rides with his prized Clydesdale horses. He constructed a superior (for its day) "8 Mile Road" and 12 granite bridges over streams along its path (one bridge is located in Clover

Valley Park). The ranch employed about 200 ranch-hands and, at one time, up to 1000 Chinese laborers were used to construct roads, fences and other facilities.

Joel Parker Whitney died in 1913, and his wife died in 1926. Around the time of her death, it became difficult to manage the ranch and to turn a profit. The land went through a succession of owners, one of which decided to raze the Whitney's three story, 20-room mansion because he hated paying the \$2,000 tax bill each year. The Whitney mansion, "The Oaks", was constructed in 1885 entirely of redwood (except for the floors). The mansion occupied what is now Knoll Court that is just outside of the Whitney Oaks property. Two palm trees that graced the front of the mansion are still there today, as well as a granite plaque (commissioned by a nearby resident) that bears an etched engraving of the original mansion.

The City of Rocklin was incorporated in 1893 and covered 160 acres (1/4 square miles). It has since grown to 20 square miles. In 1893, many ranches ranging in size from 40 acres to 480 acres surrounded the city. The Whitney ranch began with the 1857 purchase of 320 acres located to the north and west of Rocklin and by 1893 had grown to 29 square miles. The Rocklin City limits never incorporated any portion of the former "Spring Valley Ranch" until quite late in history. Whitney's heirs sold portions of the ranch to other owners during the 1930s, 40s and 50s. Only recently, beginning in the 1960s, did Rocklin begin to annex those former ranch lands. Today the former Whitney ranch constitutes such a large portion of the City of Rocklin that it can, truthfully, be called **Rocklin's Ranch**. The City of Lincoln claims other, very large and similarly beautiful, portions of the ranch. In fact, the dividing line cuts right through Whitney's beloved "8 Mile Drive", leaving half of his granite bridges in Lincoln and the other half in Rocklin. If he were alive today, he might consider that line to be a dagger right through his heart.

American Indian History

A report prepared by Peak & Associates for the owner of a large undeveloped portion of Clover Valley explains in great detail the archaeological background of this area. The following information relies heavily upon that report. (See Bibliography)

Evidence of human occupation of the Spooner Lake site east of Lake Tahoe dates as far back as 7,000 years B.P. (Before the Present). Various tribes called the Washoe (4,000 B.P.) and the Miwok (2,000 B.P.) occupied the local foothills and mountain areas. The Kings Beach area of Lake Tahoe was inhabited starting around 1,000 B.P. until the first Euro-American contact in the 1830's. When the first Europeans arrived, the Native American Indians described themselves as either the Hill or Valley Nisenan (Hill or Valley People). A common language (Penutian) existed within the Central Valley, the San Francisco Bay area and the western Sierra Nevada foothills.

Quoting from the reference cited above: "All the Nisenan depended on activities attuned to the seasonal ripening of plant foods and the seasonal movements and migration of the animals and the runs of fish. With the flooding of the valley in the winter and spring, a great number of animals such as elk, antelope and bears moved to the natural levees along the rivers and up into the lower foothills. Along the foothill margins they joined the resident and migratory deer herds. Huge flocks of waterfowl visited the flooded areas between the rivers and the foothills, coveys of quail gathered in the fall, and pigeons were common in the fall and spring. Steelhead and salmon ran up most of the major streams including Secret Ravine and Auburn Ravine in the fall, winter and spring."

When the Euro-Americans arrived, the Indians had no way to prevent the confiscation of their tribal lands. The Indians suffered an even more horrific tragedy in 1833 when a malaria

epidemic occurred. Some believe that members of a Hudson Bay Fur Trading Party carrying the malaria parasite introduced the disease in 1831. It is estimated that 75% of the Indians died as a result of contracting malaria. The Indians were not the only ones affected by the disease. U.S. Military Posts at Camp Far West and Fort Reading were abandoned in 1849 and 1856, respectively, due to illness. Mining camps and quarry operations were affected. The State Board of Health reported in 1875 that, "Almost everybody living west of Gold Hill is either down with fever, or chills and fever, or more or less affected by the <u>miasmatic poison</u> generated and floating around that locale." The fruit industry that expanded in the 1880s had to rely on Chinese and Japanese laborers because whites either could not or would not suffer the disease. Even J. Parker Whitney suffered the failure of the "English Colony" he established in the Loomis-Newcastle area in 1889 with about 3,000 acres he subdivided for colonists from England. Malaria and a financial depression in 1893 doomed the development. In 1899 it was proven that mosquitoes transmit the malaria parasite. Eradication efforts began in 1910 and resulted in a 45 percent reduction in malaria that year. Continual work resulted in the elimination of the disease. <u>http://www.cdc.gov/malaria/history/ross.htm</u>

Although farmers who homesteaded land in the area (160 acres) resisted Indian occupation of their land, J. Parker Whitney, with his vast land holdings, was sympathetic to them. He belonged to the Northern California Indian Association that purchased land for various tribes. Whitney and "Captain John", a major Indian Chief from Auburn, had a long-term relationship. The tribe used the ranch for the collection of clover and acorns and to engage in large grasshopper drives for several weeks each spring. During these visits Whitney and the tribe exchanged gifts until Captain John's death around 1890. Each week, when the tribe was on the ranch, the Chief would meet with Whitney and ask for one dollar to purchase powder and balls to kill "wild cats" (mountain lions?). Whitney always enjoyed this ritual, but he was never really sure what his money was being used for since the Chief always displayed the same old ragged fur to prove "new kills." Whitney may have been amused by Captain John's inability to understand how small each dollar was compared to his many millions of dollars. He could afford to be generous, and he was.

The Existing Trails

Threaded throughout the Whitney Oaks and Springfield development are several miles of trails that provide excellent views of the foothills, the grasslands, the Golf Course and the beautiful oak-studded hillsides. The trails meander through about 215 acres of the Common Area that is maintained by WOCA. A total of 1877 homes are within the 1063 acres that comprises WOCA and Springfield (a Sub-Association of WOCA). Of the total homes, 868 are within Springfield. A separately owned Golf Course covers 175 acres of the total.

There are currently about 3-1/4 miles of trails that have a walking surface that is either asphalt or decomposed granite. Some sections of the trails are very steep and require that those who use the trails be sure-footed and exercise caution on the steep portions. In the future some of the steep sections might be eliminated and replaced with more moderate grades that will permit a larger number of people to enjoy the experience of walking the trails. That improvement, if made, could result in increasing the length of the trails to approximately 4 miles.

Please Remember

Our trails are for the enjoyment of all residents. No unauthorized motor vehicles are permitted on the trails. Users are required to remain on the trails, and children are not allowed anywhere within the common area to play, climb trees or construct tree houses. Dog owners are required to clean up after their pets, which are permitted on the trails only if leashed. Dog owners are advised that rattlesnakes are especially dangerous to them. It is instinctive for dogs, whether leashed or not, to walk right up to a rattlesnake and sniff it, and suffer a potentially life threatening bite. Treating any victim, whether a dog or a person, is very expensive. Doctors have reported that 50 percent of snakebite victims they treat are young males who have been drinking and, unbelievably, tried to pick up a rattlesnake to impress friends!

Trail Names and Their Locations

<u>No.</u>	Trail Name	Location	<u>Length (ft)</u>
1	Black Oak	Black Oak Dr to Whitney Oaks Dr	3,574
2	Sunset	Whitney Oaks Dr to Abby Rd	568
3	Granite	Abby Rd to Black Oak Dr	2,721
4	Majestic Oaks	Park Dr to paved trail below Black Oak Dr	1,055
5	Foothills	Whitney Oaks Dr to Black Oak Dr (paved) 👞	763
6	Wildlife	Clubhouse Dr to Park Dr (paved)	1,638
7	Turkey Hill	Clubhouse Dr to Cody Ct (paved)	890
8	Clarke Dominguez	Park Dr to Crest Dr (paved)	5,108
9	Sierra Nevada	Clarke Dominguez Trail to Scenic Dr (paved)	<u>900</u>
		(Note: one mile is 5,280 feet)	Total <u>17,217</u>

General Geology of the Whitney Oaks Area

The rounded boulders beneath most of the homes in the Springfield area derived from lava that flowed from the Carson City, Nevada area during the Miocene and Pliocene Epochs, roughly 4 to 10 million years ago. Streams eroded this lava, and chunks of it were transformed into rounded rocks as they moved downhill to this area and deposited in alluvial fans. The fans have since been eroded into the relatively flat hilltops upon which the Springfield development is built and the intervening beautiful valley containing the Whitney Oaks golf course. Geologists labeled the boulders and the lava from which they are derived the **Mehrten Formation**. In this area, its thickness varies from 10 to 25 feet. The relationship of a given geologic unit to the others is shown in **Figure 1**.

Beneath the Mehrten Formation is a layer of sandstone and interbeds of mudstone and possibly tuff called the **Valley Spring Formation** that is 30 to 50 feet thick. These rocks were probably deposited as stream channel and lake deposits during the Miocene and Oligocene Epochs some 20 to 30 million years ago.

Granite is exposed at the base of the hill and in many areas of the golf course. This granite formed during the Cretaceous or Jurassic Periods between 130 and 150 million years ago.

Earthquakes and Landslides

The Rocklin area has had small earthquakes at least since 1975, but none were felt or reported by residents. Three historical earthquakes have been felt - on February 23, 1885, April 21, 1892 and May 30, 1908. The 1908 event was felt over an area of 10,000 square kilometers and had an estimated magnitude of 4.0 on the Richter scale. The larger earthquakes typically occur along the Foothills Fault System that extends from Oroville to Auburn. Smaller earthquakes are related to iso-static uplift of the granite that occurs after (sometimes long after) the removal of the overburden by the erosion process. http://en.wikipedia.org/wiki/lsostasy

Some small and shallow landslides occur in Whitney Oaks when heavy rains saturate soil on hillsides. No damage to homes or other structures has occurred as a result of these relatively small slope failures. There are a number of springs within the Whitney Oaks Open Space that were identified in the Soil Reports for the developmkent. These springs served as a source of water for the sheep and as irrigation for the Spring Valley Ranch. These springs were later supplemented and eventually replaced by extensive flumes (outside of Whitney Oaks) some of which are in use today.

Geological Features Visible From Trails

(Refer to maps on pages 13 & 14; rotated images are on pages 25 & 26)

Black Oak Trail (#1)



The Black Oak Trail extends from Whitney Oaks Drive to Black Oak Drive. On the north side of the entrance near Whitney Oaks Drive and at **point 1**, the mudstone and sandstone of the Valley Springs Formation form a conspicuous outcrop with nearly horizontal beds shown by the layering in the rock. The rock is predominately sandstone above and mudstone below.

At **point 2**, the light gray color of weathered mudstone is quite evident. Not evident but exposed when the houses to the south were under construction, is Valley Springs

sandstone resting on granite. The granite forms the base of the hill here and throughout the Golf Course and other valleys in Whitney Oaks.

The sandstone of the Valley Springs Formation has mudstone inter-beds at **point 3**. The sandstone is probably a stream deposit, and the mudstones might be backwater deposits from lagoons or oxbow lakes where deposition was very slow and quiet. http://en.wikipedia.org/wiki/Oxbow lake

Granite is exposed at **point 4**. The granite is much higher on the slope here than on the Golf Course or connected valleys at a lower elevation. It probably was a knob of more resistant rock that protruded above the valley floor when the Valley Springs Formation was deposited.

A contact between the Mehrten Formation at the upper part of the hill and the well-bedded sandstones and mudstones of the Valley Springs Formation underneath the boulders is exposed at **point 5**. The contact is exposed here and for a short distance along the trail. If you place your hand on the contact, about 10 million years of geologic time is missing. No sedimentation may have taken place in this area during that period, or the sediments could have been eroded and removed by the time the Mehrten Formation was deposited. You would have to travel to the San Francisco region to find rocks of that missing time period.

A distinctive light-colored boulder in the Mehrten Formation is rare in the Whitney Oaks area but is common in most areas where volcanism has taken place. This rock is a rhyolite in contrast to the dark-colored andesite and basalt that form nearly all of the boulders.

At **point 6** near Black Oak Drive, rounded cobbles of volcanic rocks typical of the Mehrten Formation are common on the east side of the trail.

Sunset Trail (#2)

The Sunset Trail joins Whitney Oaks Drive and Abby Road. Granite is exposed at the entrance to the trail and as big boulders and towers of resistant rock on the golf course behind the houses on the west side of Whitney Oaks Drive.

About 100 feet up this very steep trail, horizontal beds of the Valley Springs Sandstone and interbeds of a very light gray weathered mudstone are exposed. The sandstone here is cross-bedded. At the top of the hill at **point 7**, just below a house, the basalt and andesite boulders of the Mehrten Formation are well exposed.

Granite Trail (#3)

At Abby Road, the Sunset Trail ends and the beginning of the Granite Trail is located topographically lower along Abby Road. Valley Springs sandstone and mudstone are exposed at a few places along the trail to **point 8** where a stairway with 45 steps leads downward and across a gully to **point 9** where granite is exposed. A few tens of feet above the granite, along the trail, and up to the junction with the Foothills Trail, sandstone and mudstone of the Valley Springs Formation are exposed.

Majestic Oaks Trail (#4)



Majestic Oaks Trail branches eastward from the Foothills Trail and continues to Park Drive. There are a few small exposures of the Valley Springs Formation sandstone until about 400 feet from Park Drive where granite is exposed. Also near Park Drive, is a huge granite boulder sheltered by a lovely Oak tree. In the Rocklin History Museum, this same boulder appears in a photo of a chicken ranch that once occupied the area around Pleasant Valley Creek. At this trail's juncture with Park Drive, one can see a lovely open area that is north of the homes along Park. This 150-acre area is named the "Environmental Learning Center" and

possesses a spring. This plot of land is the original site of Joel Parker Whitney's "Spring Valley Ranch."

Foothills Trail (#5)



The Foothills Trail extends eastward from Whitney Oaks Drive along the valley and then up to Black Oak Drive. The large group of granite boulders at the entrance to this trail is the most impressive to be found in Whitney Oaks. East of the granite, a small exposure of sandstone of the Valley Springs Formation is located at **point 10**.

The Foothills Trail branches south and goes up the hill toward Black Oak Drive at **point 11**. The Sandstone and mudstone of the Valley Springs Formation in this area are overlain by a boulder

conglomerate of the Mehrten Formation that is quite unusual. Some of the conglomerate has 2-foot boulders that contain a variety of volcanic rock types that were apparently picked up as this volcanic debris flow headed downhill and enlarged in size by picking up different materials. These deposits are called lahars or volcanic debris flows. One of the boulders has what appears to be a bone about 3 inches long, cream colored, and perhaps 1/4 inch thick. One can envision a sabre-tooth tiger getting flattened by the boulder as it rolled downhill and contributing one of his bones for future scientists to study. A little further uphill is a 3 feet thick bed of the same kind of rock.

Wildlife Trail (#6)

This trail begins across from the Gables entrance to Springfield and extends to Clubhouse Drive. A short distance from Park Drive, large boulders and outcrops of granite are conspicuous on the golf course to the west. At **point 12**, where the trail is very steep, rounded cobbles and boulders of lava from the Mehrten formation crop out on the east side of the trail. At least some and probably most of these boulders are displaced downhill by recent gravity movement. The Valley Springs sandstone and mudstone that sit on the granite cannot be seen because the slopes are covered with alluvium.



Turkey Hill Trail (#7)

This trail connects Cody Court with the golf course clubhouse. About 300 feet from the entrance at Cody Court, **point 13**, rounded boulders of lava from the Mehrten Formation have rolled down from the top of the hill and are strewn along the path. At **point 14**, near the junction with the Wildlife trail, the Valley Springs Sandstone is well cemented, and forms a hard bed about 10 feet long.

Clarke Dominguez Trail (#8)

This trail is named in honor of Clarke Dominguez (a lifetime educator) who served Rocklin as a Planning Commissioner, as a City Council member and as Mayor for three terms. During the period of his service, the city acquired 180 acres of parkland and open space and opened 8 new parks.

A few hundred feet downhill from the entrance to this trail at Crest Drive, at **point 15**, a contact is exposed showing the Valley Springs sandstone in the bottom of a gulley that goes under the trail and the Mehrten Formation cobble conglomerate sitting on top of it. Exposed contacts like this are fairly rare in geologic field investigations because most are covered with soil and alluvium.

The Valley Springs Formation with interbeds of sandstone and mudstone is exposed at intervals along the Clarke Dominguez trail from **points 16 to 21**. Many of the sandstone beds are cross-bedded, meaning that one set of layers is truncated by another set. Cross-bedding is common in fossil sand dune deposits where the wind has blown slightly different material ahead and on top of the underlying set. Most cross-bedding formed from dunes, however, is in sets that are several feet high. The fossil sand dunes in Zion National Park are one spectacular example. The beds here, however, are in sets only a few inches high. These are most common in stream or river deposits where water moves a sand set forward and on top of the underlying set. Interbeds of mudstone that weather light gray are suggestive of a lagoon, oxbow lake, or slack water area formed when the stream moved laterally from one area to another.

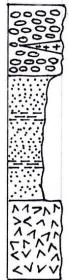
At **point 21**, looking directly west toward the school on the other side of Park Drive, granite forms a prominent outcrop of hard rock sticking out of the ground. Granite forms the bottom of this entire valley in the vicinity of the golf course. The Valley Springs and Mehrten Formations sit upon the granite like a stack of cards. The valley has been excavated by stream erosion, and the Valley Springs and Mehrten Formations have been removed and dumped into the creeks and streams that feed the American River and eventually the ocean.

Sierra Nevada Trail (#9)

This short and paved trail leads from Scenic Drive down the hill to where it meets the Clarke Dominguez Trail. At the beginning of the trail near Scenic Drive, **point 22** on the map, rounded boulders of the Mehrten Formation are on both sides of the trail and especially beneath the houses on the left (north) side of the trail.

Sandstone within the Valley Springs Formation is exposed on the north side of the trail at **point 23**. No fossils have yet been found in these rocks, leading to speculation that they are non-marine.

Geologic Strata On Whitney Oaks Trails



Mehrten Formation

Mostly rounded boulders and cobbles of volcanic rocks (basalt and andesite) brought by streams from the Carson City area. Includes lahars (jumbled volcanic debris flows) and possibly tuff in a few places. Thickness 10 to 25 feet. Age: Pliocene and Miocene Epochs, 4 to 10 million years ago.

Valley Springs Formation

Cross-bedded sandstone and interbeds of mudstone and tuff that weather light gray. Non-marine stream and lake deposits and volcanic ash. Thickness 30 to 50 feet. Age: Miocene and Oligocene Epochs, 20 to 30 million years ago.

<u>Granite</u>

Light colored quartz diorite intruded into the crust of the earth from 130 to 142 million years ago during the Cretaceous or Jurassic Periods. The age is obtained by measuring the amount of radioactive argon that has formed since the rock cooled.

Figure 1 - Rock Layers in the Whitney Oaks area.



Whitney Oaks Trails (Northern)

Whitney Oaks Trails (Southern)



Animals in Whitney Oaks

Rattlesnake

Those who walk the trails in Whitney Oaks are required (by the CC&Rs) to remain on the trail. This is for the protection of both the natural environment and the users of the trails. West Coast Diamond Back Rattlesnakes are very prevalent in the area. Their prey consists largely of voles, lizards and small birds. They spend the winter months in communal dens. They can grow to be 4 feet long. They have large, dark brown, diamond shaped markings on their back and have a wide head that is solid brown on top. You should be aware that they are active both during the day and at night. They are usually shy and will try to avoid humans if possible. However, if it is disturbed, it will hold its ground and will aggressively rattle its tail as a warning. If you hear this rattle, the snake is warning you not to come any closer. If you ignore their warning, you may wind up with a snakebite that is expensive to treat. For more information see https://en.wikipedia.org/wiki/Rattlesnake

Kingsnake

This reptile is named King for the reason that it is able to kill rattlesnakes and other snakes by constriction. If you have this snake in your neighborhood (they have been observed in WOCA), you should be proud and protective of it. It has a distinctive chocolate brown color with circular bands, every 2 to 3 inches that are light brown, white, cream or yellow. It has immunity from the venom of other snakes and grows to 6 feet in length and has a lifespan of up to 24 years. They are often kept as pets.

http://en.wikipedia.org/wiki/Lampropeltis getula californiae

Mule Deer

Mule deer are prevalent in Whitney Oaks. They migrate to higher elevations during the summer months and return for the lush vegetation during the fall, winter and spring. Although they normally do not pose any threat to us, you should be aware that they are dangerous when they feel threatened. Several accounts appear in the news each year of people who have been gored by a buck that was caught off guard or became cornered in a side yard. You should always check to see that you do not accidentally surprise a deer in a confined area. They are very fast and strong. They can sometimes be seen making a very graceful leap (from a standing position) over a 5-foot tall fence. Coyotes love to dine on newborn fawns. http://en.wikipedia.org/wiki/odocoileus hemionus californicus

Coyote

The howling and yapping of coyotes tends to bring a chill to one's spine, but it is a sign of a healthy ecosystem. If they are present, you can be sure that voles, turkeys, rabbits, squirrels and deer are around also. Flocks of grown turkeys have been observed suddenly descending from trees and chasing coyotes when they decide they don't appreciate their hanging around. www.dfg.ca.gov/keepmewild/coyote.html

Vole

You may not believe it, but the vole is probably the single most important animal in Whitney Oaks. It is the prey for hawks, rattlesnakes, coyotes and owls. Although it is tempting, considering the damage they do to gardens, to try to eliminate this rodent, it should be treated as the source of food for many other animals we have in Whitney Oaks. Without them, our

observation of other wildlife would be greatly diminished. They live in open, grassy areas, and the neat, concave paths chewed in your lawn are proof of their existence.

Other Scary, Creepy, Crawly & Hopping Animals

We assume that "Captain John" took care of mountain lions a long time ago. Although rarely seen today in this area, mountain lions are likely to be present wherever there is a population of deer, http://en.wikipedia.org/wiki/mountain lion Bobcats and foxes are also probably rare in our populated areas. The gray squirrel is a joy to behold with their bushy tails and disconcerting when it chooses to crawl up and down your stucco walls with exceptional ease because of its articulated ankles. Skunks, when encountered, should not be annoved! Cottontail rabbits and jackrabbits are often seen in open fields. Gopher snakes, garter snakes and king snakes are harmless and even beneficial in keeping the rodent population in check. Western fence lizards and newts (salamanders) are prevalent in some areas. And who can ignore the frogs (or even sleep with the window open) in the pond areas around the golf course.

Flying Animals (Birds)

Turkey

Wild turkeys have adapted well to the open areas of Whitney Oaks and appear to be here throughout the year. The largest reported sighting of turkeys is 72 in one flock (as of 2007). You may think that turkeys are slow, plodding and ungainly, but that is not the case. Turkeys are able to take flight and do so in a formation similar to that of geese. They are extremely graceful when flying. The flights that have been observed may be occurring between adjacent valleys as the food supply diminishes in the summer. They roost in trees at night to protect against Coyotes. Since geese honk when in flight, we leave you with this guestion, "Do turkeys gobble when flying?" We honestly do not know. www.dfg.ca.gov/keepmewild/turkey.html

Turkey Vulture

Although not the most beautiful to look at up close, these very graceful birds can soar for hours with only a gentle breeze and are considered by some to be a spectacular sighting. In Whitney Oaks, you see them flying everywhere for hours each day. Their mere presence is proof that a very vibrant and healthy animal population exists within our community. They clean up what would otherwise be the smelly messes of dead animals.

Red-tailed & Red-shouldered Hawks

These beautiful raptors are most commonly observed in flight. They feed upon voles, other smaller birds, snakes (including rattlers), rabbits, squirrels and other small animals. Their keen evesight enables them to readily distinguish very small movements within the general landscape. The manner of taking another bird, such as a dove, is a lesson in efficiency. Immediately after capture, the hawk will take its prey to the ground and extract a number of feathers from one wing. If its prey then gets loose, it can only fly in circles. The hawk then places a claw around the prey's neck and strangles it. Then it lifts off with the meal in tow. They referred are sometimes to as "chicken hawks" to justify their elimination. http://en.wikipedia.org/wiki/red tailed hawk;

White-tailed Kite

A sighting of this predator is a treat. It is smaller than the Redtailed Hawk and feeds mostly on rodents. It uses a technique of observing potential prey that is distinctive. By use of its wings and tail it is able to remain in a stationary, hovering position that is often directly above a potential meal. It is possessed of a very light colored, almost white, breast. <u>http://en.wikipedia.org/wiki/White-tailed Kite</u>

American Kestrel

This very small and colorful falcon is sometimes referred to as the sparrow hawk. It prefers a good breeze to be able to use the hover technique when searching for prey. http://en.wikipedia.org/wiki/American Kestrel

Great Horned Owl

If you hear the "Who, Who, Who" cry in the night, it is most likely the Great Horned Owl. Owls have a unique capability of almost completely inaudible flight. This attribute accounts for their ease of capture of the vole that is its major prey. http://en.wikipedia.org/wiki/Great horned owl

California Quail



The quail is the California State Bird. The male quail has a distinctive trait: a single feather, which makes a forward curving spiral, sticks vertically out of the top of its head. The life span of the quail is only about 18 months. Within this small span of time, they must hatch from an egg that is only about three fourths of an inch in diameter, grow to maturity, mate and raise a new generation. The hatchlings begin to walk almost immediately, and it is not unusual to see a parade of 9 to 11, which are only about 2 inches tall, following their mother in a single file. If you see the mother quail and her brood, you can be certain that the father is close by, usually perched on a fence, and on the lookout for danger. <u>http://en.wikipedia.org/wiki/California_Quail</u>

Acorn Woodpecker

This colorful bird appears to be decked out in a Tuxedo with its black feathers accented by white patches on its wings and breast. A neat red head patch complements the tux. It often perches in the top of an oak tree and darts 15 to 20 feet outward to nab a flying insect before returning. Pecking holes in dead trees to stash acorns is a seasonal part time job beginning in early October. The acorn is its primary source of food, and its population declines significantly when the supply is limited. <u>http://en.wikipedia.org/wiki/Acorn Woodpecker</u>

Hummingbird

The predominant hummingbird in this area is the Anna's hummingbird. It is resident along the Pacific seaboard and is the only one to winter in North America. It is one of the first birds to nest, sometimes in late December. Its wings beat at the rate of 12-90 times per second, and it

can hover and fly in any direction except upside down. If you see one making high speed plunges and then rapid vertical ascents, it is a male during the mating season. They can live as long as 8 years. <u>http://en.wikipedia.org/wiki/Hummingbird</u>

If you put out a feeder, a solution of 1 part sugar to 4 parts water brought to a boil and simmered for 2 minutes will satisfy them immensely and provide you with many delightful hours observing their activities.

Mourning Dove

The sad cooing of this bird gives it its name. Its diet consists almost entirely of seeds. This member of the pigeon family can nest any time of the year since its young are fed a "pigeon's milk" secretion from its throat. <u>http://en.wikipedia.org/wiki/Mourning_Dove</u>

Killdeer

This shorebird sometimes lives inland and can be seen in the Boulder Ridge Park located at the highest point along Park Drive. It lays its camouflaged eggs on the ground and will perform an incredible act to protect the eggs if discovered and threatened. It will flop around on the ground pretending to have a badly injured wing, to divert the attention of a predator from finding the eggs, all accompanied by loud shrieks. <u>http://en.wikipedia.org/wiki/Killdeer %28bird%29</u>

California Thrasher

This bird's distinguishing characteristic is the 1-1/2 to 2 inch downward curving beak that it uses to thrash about in areas containing grubs and other insects. If you see your bark littering your walkways or patios, it is probable that a Thrasher or a California or Rufous-Sided Towhee has visited your garden. The Towhees do their thrashing by jumping slightly off the ground and scratching with their feet in a very rapid manner.

http://en.wikipedia.org/wiki/California Thrasher; http://en.wikipedia.org/wiki/California Towhee; http://en.wikipedia.org/wiki/Rufous-sided Towhee

Migratory Birds

Whitney Oaks and the entire Sacramento valley is on the Pacific Flyway that is the migration route of many birds between their winter grounds in the south and their nesting grounds in the north. Some come from as far as Alaska and travel as far south as Mexico. It is not uncommon to see Pheasants, Egrets, Herons, Northern Flickers, Black Phoebes, Dark-eyed Juncos, Finches, Western Tanagers, California Towhees, Rufous-sided Towhees, Robins, Steller's Jays and Western Scrub Jays, Western Bluebirds, Geese, Ducks, Ravens, Crows, Swallows, California Gnatcatchers, White Crowned Sparrows, Starlings and many others.

Plants in Whitney Oaks

Native Trees

If there is one thing that residents should cherish in Whitney Oaks, it is the **Oaks.** The Blue Oak is the prevalent species. Identification of a given tree, by looking at the leaf shape and characteristics, is sometimes difficult because of the hybridization (crossbreeding) that occurs within groups of trees. It is not completely understood how Oak trees (as far away as both sides of the valley) are able to synchronize their production of large quantities of acorns in

various years. This characteristic is called "masting". A mature Blue Oak can produce as many as 100,000 acorns in a mast (high yield) year. Year 2007 was a mast year and the trails were literally covered with acorns that begin to drop in early October. Deer, mice, pigs, jays and woodpeckers eat acorns. Indians did also, but they had to leach the tannic acid from the nut. Some spectacular examples of grinding mortars where the nuts were cracked and ground prior to the leaching can be found in the Pleasant Valley Creek Park a small distance West of the entrance to the Foothills Trail. If you visit this park, try to locate the deepest mortar and imagine how long it took to create this hole (100, 200, 1000 years?). These native oaks thrive in the natural environment of our Common Area slopes. Oaks do not tolerate artificial watering (especially in the summer) which results in root rot and their eventual death. For more information check out <u>http://www.hastingsreserve.org</u> and see if you can determine why pigs were mentioned above. Hint: Search for Oak Woodlands and locate the fascinating article by Walter Koenig and Jean Knops that was published in American Scientist.

Black Oak

Native Indians preferred the Black Oak for its better quality acorns.

Interior Live Oak

The Interior Live Oak is one of the few Oaks that are not deciduous. It is very drought tolerant and has stiff leaves with prickly edges. The leaves are generally not lobed.





The Blue Oak has bluish-tinged leaves from which it takes its name. It is a deciduous tree with roundly lobed leaves. It is very drought tolerant and is slow growing. It often has a rounded crown and reaches a height of 20 to 30 feet. www.californiaoaks.org

Valley Oak

This tree takes its name from the deep indentations (valleys) that characterize the leaves. It is deciduous.

Gray (Digger) Pines

This tree thrives in dry and hot environments. The needles of this tree appear in groups of three and are stiff and slender and appear to be wispy and diffuse when viewed from a distance. The tree derives its name from the gray tint of the needles caused by low levels of chlorophyll (which is green). The name "Digger Pine" is a derogatory term used by early settlers who labeled Indians in the area as "Digger Indians" because they would use the massive cones of this pine to dig and uncover the corms (bulbs) of the Blue Dicks plant that

are edible. Indians also valued this tree for its cones that contain large seeds with a high fat content. The trunks of these trees are often crooked and forked, have little tendency to grow straight and tall and rarely exceed 60 feet. Although not able to be seen from the trails, two mature Gray Pines are located near the pond at the North end of the Golf Course. http://en.wikipedia.org/wiki/Gray Pine

Western Buckeye

As early as spring, this tree is one of the first to turn brown and loose its leaves. The buckeye fruit is deep brown, smooth to the touch and highly polished. It resembles a chestnut. Deer often rise up on their hind legs to nibble its leaves. It presents an odd spectacle at times because it retains the nut for a long time after it has lost its leaves.

Other Native Trees

Although not present along the trail system, Willows and Cottonwoods are present along the riparian corridors that surround the Pleasant Valley Creek Park near the intersection of Whitney Oaks Drive and Whitney Oaks Parkway.

Other Plants

Grasses

Grasses have a number of unique characteristics. About 70 percent of the plant is underground and it grows from the base that permits it to be grazed by animals and mowed by humans. Grasses are drought and fire resistant because much of the food that it needs is stored in the root and the seeds have a protective coating. Few of the original native grasses are present here in Whitney Oaks because extensive grazing by sheep and cattle occurred on the property.

Clover

Red Clover is a native plant that was a food source for the American Indians. It is present in Whitney Oaks sometimes in clumps as large as 2 feet high. The flowers are reddish and rounded, and it blooms in the period from April to October.

Thistles

The Yellow Star Thistle is a native plant and is abundant. It has very sharp spines and grows to about 3 feet tall. It appears to be a favorite food source for small Goldfinches. It is very invasive and blooms from May through October.

Blue Dicks



Blue Dicks can be seen in the spring on some of the slopes along the Majestic Oaks Trail and the Black Oak Trail near Whitney Oaks Drive. This plant, in addition to having a lovely blue flower, has a corm (an underground stem) that is edible. This corm provided an important source of starch in the diets of Native American Indians who used digging sticks, consisting of the cone of the Gray "Digger" Pine to uncover the corm. An elemental form of agriculture was created when they realized that leaving some of the stems in place caused them to re-grow and increase in number. By digging for the root, the Indians were tilling the soil

which improved the growing environment. Various tribes and/or families maintained these gathering sites to which they returned each year.

Grasshopper Gathering

Considering the other Indian-related information included in this guide, it would be a shame not to mention another food source used by the Indians. Joel Parker Whitney allowed Captain John's tribe to use his land each year for the gathering of grasshoppers. Before the use of pesticides, grasshoppers were in abundance and devoured large quantities of grasses. Indians used them as an additional food source, and the gathering process is instructive in that it demonstrates the resourcefulness of the Indians.

Prior to the actual gathering, a hole (pit) about 5 feet deep and 5 feet in diameter would be excavated. The pit would be partially filled with water. The entire tribe would encircle a large area and, using brush or tree branches, would drive the grasshoppers into the open pit causing them to drown. A large fire would be built around a pile of rocks that had been gathered together. The rocks would be heated by the fire and, when hot enough, would be rolled into the pit causing the grasshoppers to be cooked. They would then be gathered in animal skin pouches for later consumption.

Bibliography

Barry-Schweyer, Carmel & Alvarez, Alycia S., *IMAGES of America: ROCKLIN,* Arcadia Publishing, Charleston SC, Chicago IL, Portsmouth NH, San Francisco CA, 2005, (available from the Rocklin History Museum)

Davis, Leonard M., *ROCKLIN: PAST, PRESENT, FUTURE*, Rocklin Historical Society, Rocklin, California, 2004 (available from the Rocklin History Museum)

Hinckle, Warren, *J. Parker Whitney, Frontier Conservationist & Versatile Man of the West*, Argonaut Press, San Francisco, California, 1993 (available from the Rocklin History Museum)

Miller, Richard A., *Fortune Built by Gun: The Joel Parker Whitney Story*, The Mansion Publishing Co., Walnut Grove, California, 1969 (available in Rocklin's Public Library)

Peak & Associates, Inc., *A Determination Of Eligibility and Effect On Cultural Resources Within The Clover Valley Lakes Project Area*, El Dorado Hills, CA, 2002 (may be available from the City of Rocklin - Part of the Environmental Impact Report)

Rocklin Historical Society, *ECHO IN SPRING VALLEY*, A History of Sunset, California, 1994 (available from the Rocklin History Museum)

Whitney, J. Parker, *Reminiscences of a Sportsman*, Forest and Stream Publishing Co., New York, 1906 (available from Google Books as a free download. 467 pages)

Whitney Oaks (Northern Portion)



Photo dated 2007

Whitney Oaks (Southern Portion)

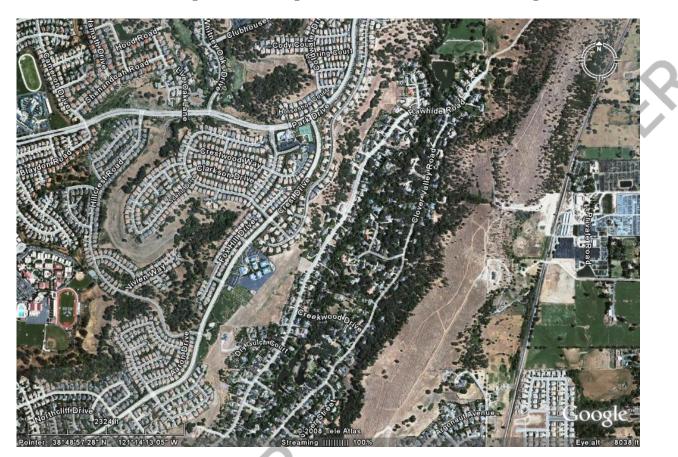


Photo dated 2007

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Whitney Oaks Trails (Northern)



Whitney Oaks Trails (Southern)

Whitney Oaks (Northern Portion)

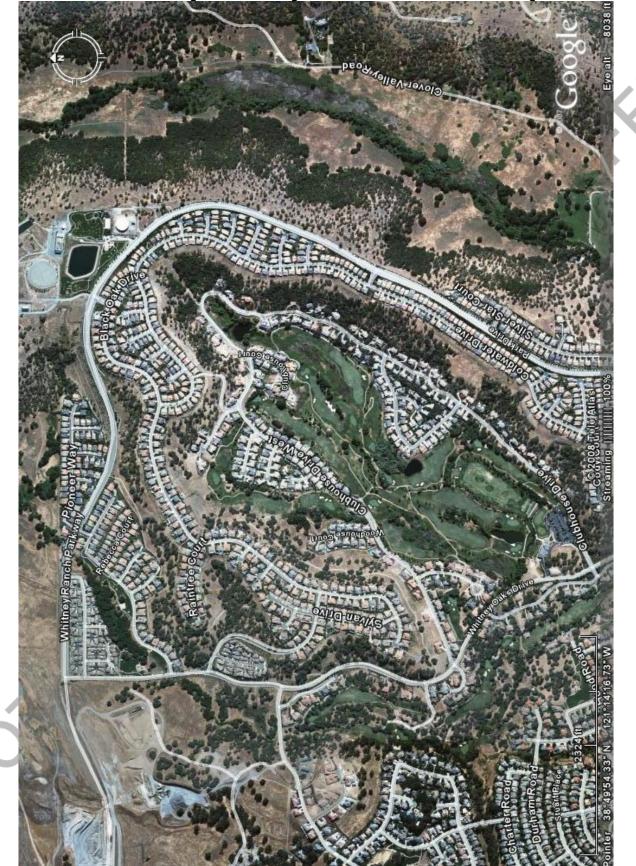


Photo dated 2007

Whitney Oaks (Southern Portion)

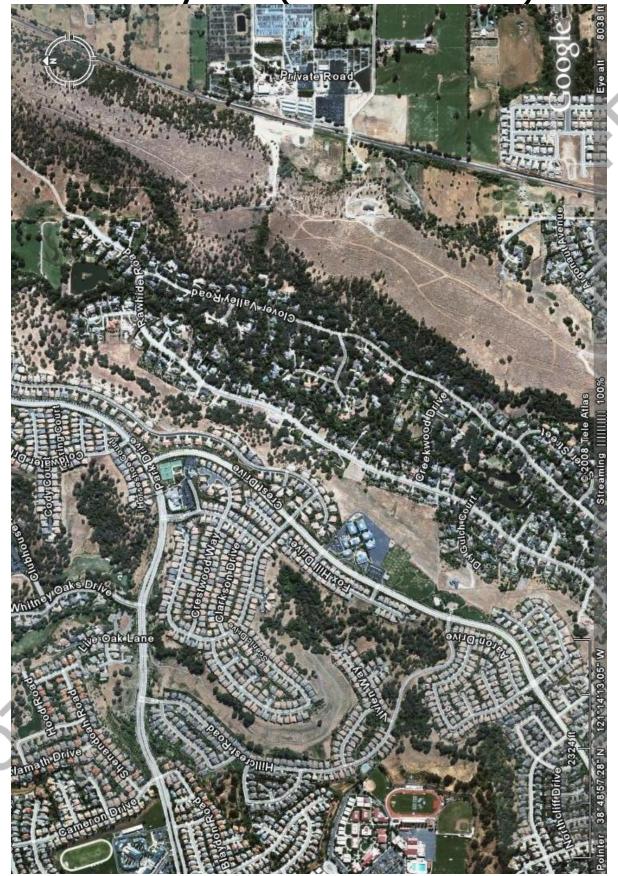


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