## **A Long Journey**

⇒ Stop at the quarry located on West Trail.

Look at the large granite boulders in this quarry. These rocks are thought to have traveled over 200 miles (322 kilometers) from the southern tip of the Sierra Nevada Mountains. The San Andreas Fault acts like a conveyor belt, moving the over 145 million years old granitic-based soil to where you are standing today.

The porous sandy granitic soil brought here by the fault helps create chaparral plant communities. Chaparral communities are dense thickets of shrubs found on well drained soil that stay green all year and can tolerate hot dry summers. These hardened, woody shrubs grow very slowly which makes it difficult to restore vegetation on areas previously disturbed.

Look east and you'll notice that you can see Hudner Ranch and the North American Plate again. The rolling hills and adobe soil create different types of recreational opportunities.



## **Popeloutchom**



⇒ Stop at Hector Heights at the top of McCray Road, the tallest point in the park at 2,425 feet.

\*Please note that a portion of McCray Road is on adobe clay soil, which turns extremely slick when wet. This route is not recommended when wet.

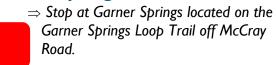
Did you experience the 1989 Loma Prieta Earthquake? (The epicenter for the Loma Prieta Earthquake took place about 30 miles/48 kilometers north west of Hollister Hills, in the Santa Cruz Mountains.) Most people associate the San Andreas Fault with earthquakes, but this fault can be traced to other parts of our lives.

You are standing in the Gabilan Mountains, which run in the north-south direction along Monterey and San Benito Counties. The tallest peak is nearby Fremont Peak, at 3,455 feet (1,053 m) in elevation.

This range exists because of the San Andreas Fault. The pressure between the two tectonic plates uplifted the land to create this mountain range.

The current name is from early Spanish explorers—gavilán meaning hawk (gabilan is an older alternate rendering). Prior to the Spanish, Mexican and American colonization, the name for this area is *Popeloutchom*. The Mutsun people have occupied these lands for 12-14,000 years. Today, the native people of this area are known as Amah Mutsun, and are comprised of the descendants of those who survived missions San Juan Bautista and Santa Cruz.

## **Garner Springs**

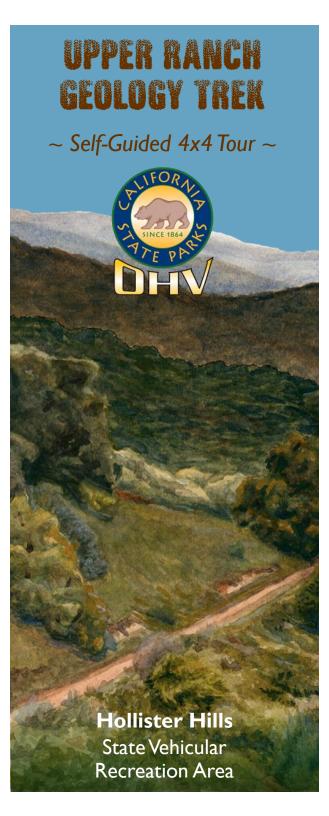


Springs are common along faults. Repeated movements grind the rock along the fault into a fine-grained, broken-up material called "fault gouge". This material holds water which rises from below. Given the right conditions, water may actually bubble up out of the ground when it encounters an underground "reservoir" of fault gouge.

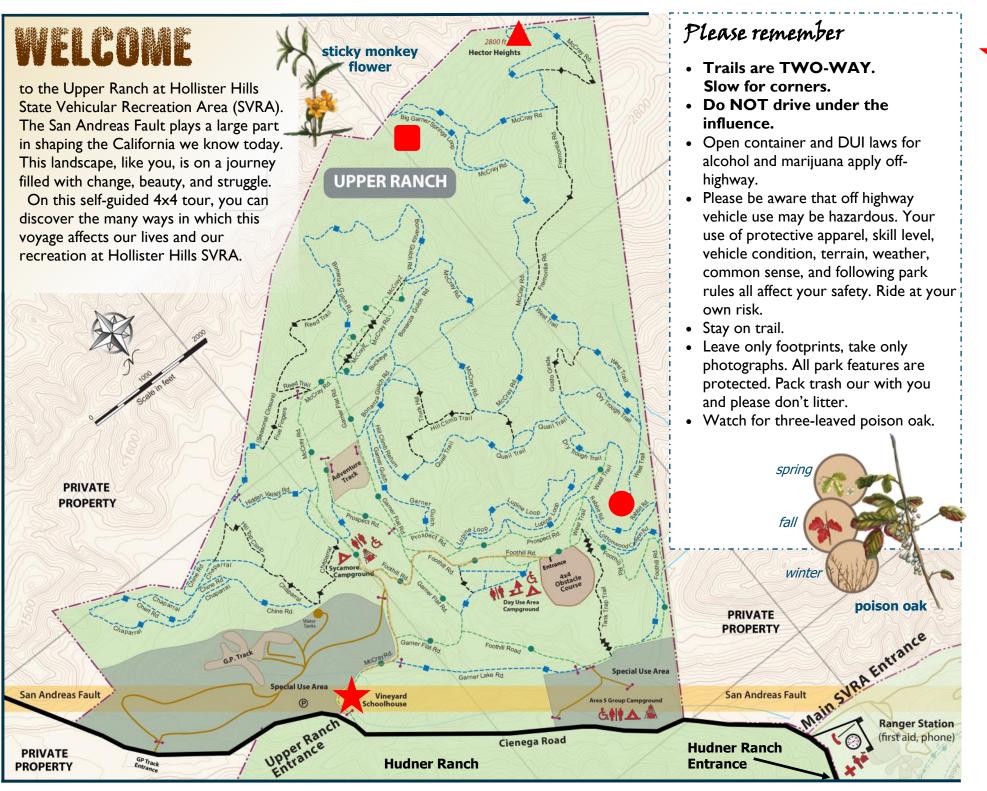




@HollisterHillsSVRA



red tailed hawk



## What is the San Andreas Fault?



⇒ Stop: Vineyard School House / Upper Ranch Entrance

You are stopped over the San Andreas Fault. The earth's crust is made up of immense tectonic plates that fit together like a giant puzzle. A fault is the boundary between plates.

The San Andreas Fault is the margin between the Pacific Tectonic Plate and the North American Tectonic Plate and extends north-south through California, for approximately 800 miles. While you might not be able to see a crack in the ground, the fault divides Hollister Hills SVRA into two distinct landscapes.

The Upper Ranch is on the Pacific Plate, characterized by sandy granitic soil and steep terrain covered in chaparral plants like sage and sticky monkey flower.

Look across Cienega Road, does the topography look different? You are looking at Hudner Ranch, the other 4x4 recreation area at Hollister Hills SVRA (the entrance to Hudner Ranch is about 1.5 miles north on Cienega Road). You are also looking across the fault at the North American Plate which has clay-rich adobe soil with rolling hills covered in grasslands and oak woodlands.

