

Stein-Hale Nature Trail

1. Willow-Riparian Habitat

This special habitat is dominated by *Arroyo willow trees*. The word 'riparian' means: *taking place along or near a stream*. The presence of willow trees indicates that a stream is nearby. Willow trees were an important part of daily life for the Tongva Indians who lived in this area. The bark, branches and leaves were utilized in basketry, dwellings and for medicinal uses. Today the willows offer shade and habitat for many birds, mammals and insects that live here.

2. Poison Oak "Leaves of three... let them be!"

Poison oak is easily spotted throughout the wild areas of the Peninsula. Although useful to the Tongva peoples, today many see it as a nuisance. Birds and other animals are immune to the toxins and the berries are an important food source. Horses and dogs can easily brush up against it carrying the toxins on their fur and transferring it to humans petting them.

Identify poison oak before you begin a hike at the Nature Center which has photographs on display. In spring and summer the distinctive three shiny, oak-shaped leaves are typically found growing along the trail edges and streambeds. Its autumn colors are bright orange and red, and in the winter it drops all foliage exposing smooth tan twigs. Keeping on the trail is the best way to avoid contact.

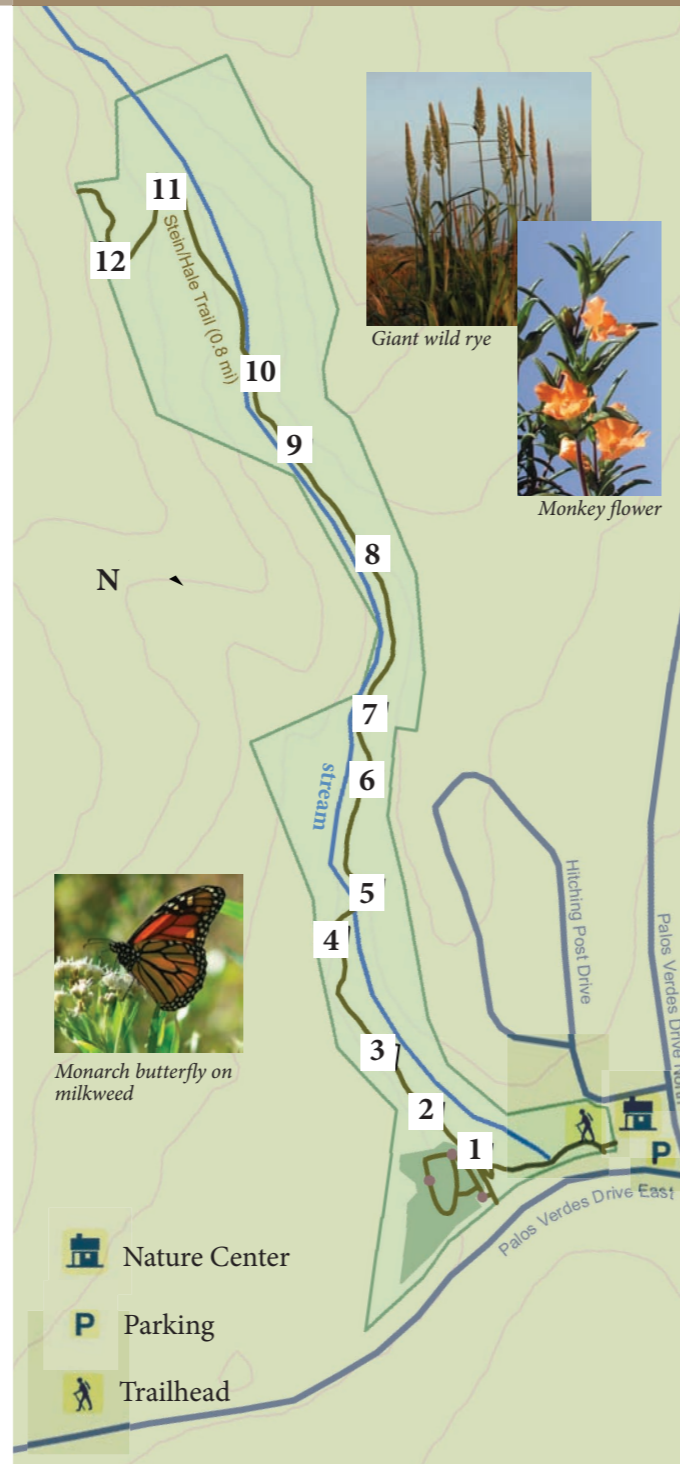
3. Bird Observation Deck

Water is life, and the riparian habitat is an oasis for both migratory and non-migratory species. Look and listen for these migratory birds: *orioles, yellow-rumped warbler, western tanager, phainopepla, black-headed grosbeak*.

A guided bird walk is available on the 1st Saturday of every month at 9 am. Beginners welcome.

4. Non-Native Plants

Between the viewing deck and the bridge you will see a variety of non-native plants that came from areas with similar climates and growing conditions as the Peninsula. The Conservancy makes every effort to remove non-natives as they often out-compete the na-



tives and bring insects or other predators into the area that upsets the habitat. Our Mediterranean-type climate is found in California, Chile, South Africa, Australia and the Mediterranean. Plant species from all these areas can be found here, including: *eucalyptus, Brazilian pepper tree, Italian fennel & thistle, Mexican fan palm, Algerian ivy, and ice plant*.

5. Quarter-Mile Bridge

The wet area uphill from the trail is a year-round seep. On the bank is *giant wild rye*, a very tall grass that seeks damp soils. Stop at the bridge to enjoy the view up and down the stream. George F Canyon is the major drainage channel for the north side of the Palos Verdes Peninsula. It is fed by several springs throughout the year. Here the stream appears to have an orange tinge. It is not the water, but the streambed that is orange. The soil and rocks trap naturally occurring iron from the surrounding geology in the form of an iron bacterium, not pollution but a natural iron oxide.

6. Animal Tracks & Scat

Most mammals here are nocturnal so keep an observant eye for signs of animal life. Animals leave their signature everywhere they move in the form of tracks, scat (poop), scratches on bark, feathers, hair, or maybe even bones left over from a meal! Look for nests, dens, burrows and other trail signs left by native animals, birds, reptiles, amphibians and insects.

7. Geology Stop

The Palos Verdes Peninsula was once a channel island before becoming part of the Peninsula, and has many features similar to those on Catalina Island. The very hard bluish gray, reddish purple, or greenish rocks exposed in the stream bed and trail are *Catalina schist*. This 150 million-year-old metamorphic rock is the oldest found on the Peninsula, and forms the base of the whole Los Angeles basin but is only found exposed here at George F Canyon.

8. Coastal Sage Scrub Community

A slightly different landscape appears as you round the bend here. Gone are most of the stream-hugging wil-

lows, due in part to elevation of the landscape. Now low shrubs and plants that are drought-tolerant dominate. The abundance of sage and other resinous plants fill the air with distinctive smells. You have entered the coastal sage scrub plant community. This habitat is declining rapidly in California due to increasing development of land. Some typical plants found here are: *lemonadeberry, black sage, bladderpod, buckwheat, California sagebrush*.

9. Half-Mile Bench

Sit in the shade of a *Catalina cherry tree* and quietly observe the plants, birds, butterflies and dragonflies that inhabit the canyon. Many of the benches and trailside fencing is generously provided by work from local Eagle Scouts and Girl Scouts earning their Leadership Awards. Ask the staff about bringing your scout troop for a guided tour and badgework.

10. Duenes' Ford

Here you are crossing the stream again. Heavy rains once made this impassable, but this bridge now makes crossing easy to do year-round. The trail ascends the south side of the canyon with an 1/8 mile moderate climb. To your left you see *snowberry, California fuschia and wild gooseberry*.

11. Raptor Viewing Bench

Watch for the *raptors* and other bird species soaring on wind currents rising above the steep canyon cliffs. A raptor is a bird of prey and they hunt here because of the abundance of *lizards, mice, voles, gophers, rats and shrews*. Some of the more common raptors include: *red-tailed hawk, Cooper's hawk, great horned owl, and American kestrel*.

12. Elderberry Lookout

Sit in the shade of the old *elderberry tree* and look how far you've come: nearly 400 ft in elevation and a mile from the Nature Center! On a clear day you can view the city to the mountains. The edible berries of the elderberry tree were used by the Tongva people as a food source, but here we must leave all edible plants for birds and other wildlife. Also look for *toyon* (a bush with red berries), *sticky monkey flower* (a shrub with yellow flowers), fast moving *western fence lizards* and high-soaring *red-tailed hawks*.

