



GPS Expedition-  
LEVEL TWO

# QUAIL HILL TRAILHEAD IRVINE

**\*\*READ THROUGH THIS ENTIRE QUEST BEFORE BEGINNING THE ADVENTURE.\*\***

**Notes:**

- This trail is accessible by parking at the Quail Hill Community Center and following the dirt trail that is behind the building. If you are facing the Community Center, The trail begins on the right side of the community center and loops to the "Backyard" of the community center and then continues on. When the trail forks, stay to the right and keep going UPHILL.
- Please do not pick or pull any plants. If you wish to make medicine from a plant, you may gather some seeds or buy the plant at a Native Plant Nursery.
- This is NOT the same trail as "Quail hill Trail Loop" so please do not mix those 2 up.



You will need to use google maps to find your coordinates.

Quail Trill ADDRESS: 39 Shady Canyon Dr, Irvine, CA 92603

# Level 2 QUEST FOCUS:

- How leaf shapes help plants conserve water
- Plant Identification Skills- level 2
- Orienteering skills
- Snail Studies
- Ethnobotany (plant uses)
- Beginning Birding

**1. Take a picture** of yourself or team member next to the trailhead sign holding this sheet of paper. You will need to upload this picture as part of the submission process to proceed to the next level. (OR for a bonus Energy Life point, you could post it as an Instagram story and tag @artandwilderness\_institute)

**2.** You will not be able to leave this trail until you spot a CA Quail (It is called Quail Hill for a reason), a Road Runner, or a Towhee. Once you spot it, take a picture of it. Answer these observations:

Name of BIRD: \_\_\_\_\_

2a. Where on the trail did you see the bird? (up on the hill or down below?)

\_\_\_\_\_

2b. What plants did you notice the bird was hanging out in?

\_\_\_\_\_

2c. If you noticed the bird up on the hill, did you also see the same bird down where you started the hike or vice versa? \_\_\_\_\_

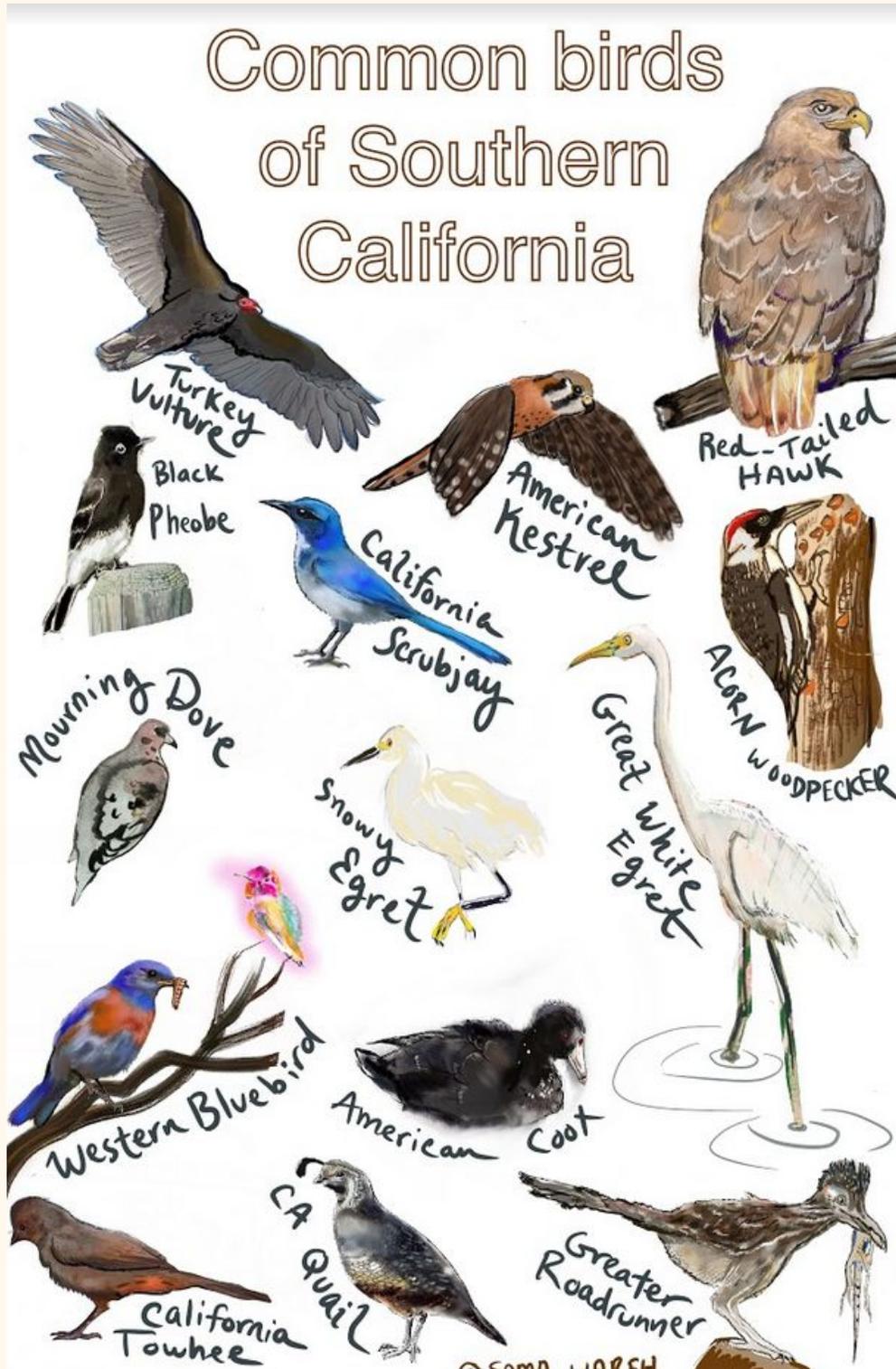
Why or Why not? \_\_\_\_\_

\_\_\_\_\_



**ENERGY POINTS BONUS OPPORTUNITY:** Buried under a rock in front of a "married" Mule Fat and Coyote Brush at approximately GPS coordinate 33.6465590, -117.7789092 is a laminated trading Card. You will need to walk past a little gate to find

it. Please take a quick peek at the card and hide it back in the exact same spot. Make sure nobody is looking when you find it and hide it again! Find the species on the trail and take a picture of it. Make sure some of the trail is visible in the picture. This is worth 1 energy point which you can use at a harder level to pass on a question.



**3. MATCH THE GPS COORDINATE TO THE PLANT/location.** There will be one extra than needed.

GPS COORDINATE	Match the Plant/Location to the GPS
a . 33.647540, -117.779303	<b>Black Sage</b>
b . 33.642713, -117.779491	<b>CA Sycamore Tree</b>
c . 33.641115, -117.778413	<b>Elderberry</b>
d . 33.636265, -117.777541	<b>Oak Tree</b>
e . 33.636227, -117.775376	<b>Lemonade Berry</b>

**FOOTBRIDGE**

**NOTE:** Please type in the coordinates 2 times to verify that it is correct. Sometimes, in this area, GPS will try to send you to the neighborhood. If the coordinate does not look like it's on the trail, it is not correct! Also, letter "E" is the furthest coordinate from you. After you find that, please enjoy your hike back and focus on what's around you. Listen for bird sounds. Enjoy the trail.

## 4. LEAF SHAPES and LEAF STUDIES:

MATCH THE PLANT TO THE WAY IT HELPS THE PLANT CONSERVE WATER.

LOOK AT THE LEAF SHAPE OF THE PLANT TO BE ABLE TO DO THIS CORRECTLY.

(One Adaptation may correlate to 2 different plants)

Lemonade Berry

Its slightly folded leaves help create shade and keep it from transpiring (Sweating out it's leaves)

Black Sage

The thick leathery leaves help trap the moisture from leaving the plant.

CA Sycamore Tree

Elderberry

The fuzzy leaves act as hair protection so it doesn't get a sunburn!

## 5. Plant Uses

MATCH THE FACT TO THE CORRECT PLANT. You only need to complete 6 of these. YOU MAY HAVE TO DO A BIT OF RESEARCH together or access our RESOURCES page:

- |  |                           |
|--|---------------------------|
| A) This plant will help stop bleeding and acts as pain relief.   | 1. California Everlasting |
| b) This plant is great for soaking feet for pain relief and bees love this!  | 2. Lemonade Berry         |
| c) This plant is not only extremely fragrant but also extremely Anti-Viral. IT is perhaps one of the only anti-viral plants in the area.                 | 3. Black Sage             |
| D) The pollinated flowers off of this small bush turn red after the bee has visited.   | 4. CA SAGEBRUSH           |
| e) This is medicine. The flowers are yellow, the leaves are folded. ONLY the yellow flowers and the ripe berries are medicinal. The rest is toxic.       | 5. CA BUCKWHEAT           |
| f) Soak these berries in water for a nice refreshing cup of lemonade!  | 6. Milky Oat Tops         |
| g) This plant is used to make wheat.   | 7. Deerweed               |
| H) This plant is super bitter but great for a sore throat!   | 8. Blue Elderberry        |
| I) This plant helps strengthen brain neurons   | 9. Horehound              |
| J) Hummingbirds love the fuzz off of this one! The wood was used to carve bowls.   | 10. CA Sycamore           |
| K) This plant is one rabbits love to hide in. When it has seeds in late fall, it looks like a Coyote's tail. Also used by Chumash for Poison Oak remedy. | 11. Coyote brush          |



## 7. The Quail Audio Hunt



The biggest battle of finding animals on the trails is identifying their sound or certain clues that tell you when to look and where to look. They are silent and stealthy. To gain the advantage while hiking, it's time to get good at listening.

**A-qeee-koh, Ku-kayy-koh, A-qeeee-koh**

That is the sound of a CA Quail. If you watched the video and listened to the audio on Quail, you should be able to recognize their distinct call, which is frequently heard along this trail.

Have your Microphone on your phone ready to capture the sound of a Quail on this trail. You will need to upload the sound to beat this level. Once you hear one call, they usually will repeat it for a while so be patient.

ONce you see one quail cross the trail... Wait and stand still... You are usually bound to see more quails running across. They stay in family groups.