

One of Santa Cruz County’s most important natural resources is...Sand

For many years, biologists and local residents have acknowledged the rarity and importance of the native plant and animal communities at Quail Hollow. As part of its approved Habitat Conservation Plan, Graniterock has dedicated 110 acres of sandhill habitat surrounding the quarry to the conservation and longterm protection of native species, including four endangered species--Mount Hermon June beetle, Zayante band-winged grasshopper, Ben Lomond spineflower, and Ben Lomond wallflower; and two rare plants Ben Lomond buckwheat, and silverleaf manzanita. Divided into four conservation zones, these areas are home to two of Santa Cruz County’s rarest plant communities--sand parkland and northern maritime chaparral.

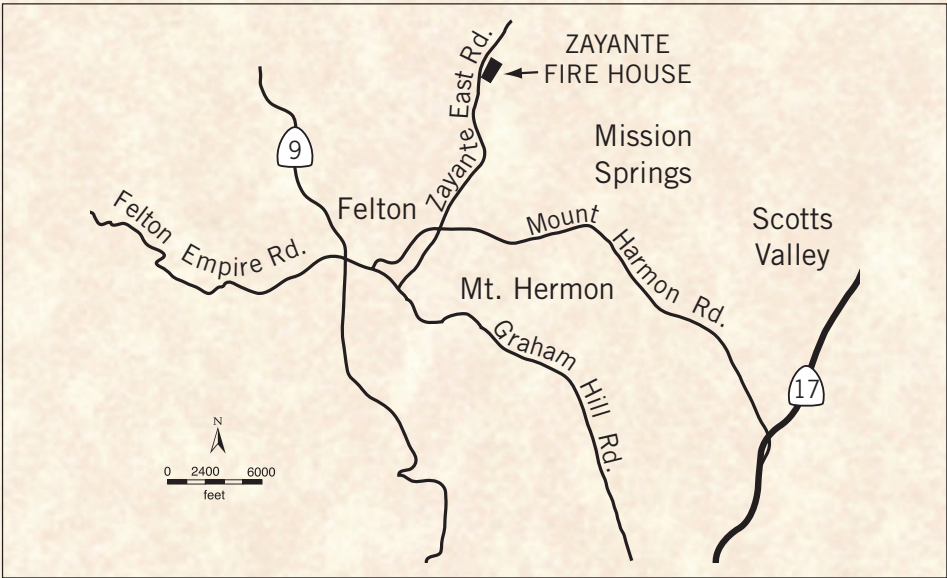


No Trespassing Areas: Quarry and conversation areas

Although Santa Cruz is famous for its beaches, one of the County’s most important stretches of sand lies high up in the Santa Cruz Mountains, in an area known as the Zayante sandhills. Tucked between the communities of Bonny Doon and Scotts Valley, the sandhills are isolated pockets of ancient sand that support an ecologically distinct assortment of plants and animals. Once covering about 6,365 acres, the sandhills are now restricted to approximately 2,500 acres of intact habitat, making it one of the rarest habitats in the state.

Quail Hollow Quarry in Felton contains some of the best remaining examples of Zayante sandhills habitat in the region and is home to four Federal and State endangered species. Graniterock is working with the U.S. Fish and Wildlife Service, California Department of Fish and Wildlife, Santa Cruz County, and community members to protect and manage this unique resource.

Quail Hollow Quarry Location



There are numerous public lands in close proximity to the site where you can enjoy visiting sandhills and other native habitat, including: Quail Hollow Ranch County Park, Highlands County Park, Olympia Watershed Property, and Henry Cowell Redwoods State Park.

For further information, please contact Graniterock at:
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Conservation and Protection of Endangered Species and Habitats at Quail Hollow Quarry

Graniterock has operated the Quail Hollow Quarry since 1997. The quarry is an internationally recognized source of high-quality, fine-grained sand used to make glass containers and glass fiber products. Graniterock is operating under a permit from Santa Cruz County to mine sand deposits for shipment to off-site production facilities. Graniterock is in compliance with both state and county mining regulations, and federal and state environmental laws.



Graniterock has developed a Habitat Conservation Plan and Long Term Management and Maintenance Plan, has established a management fund to provide for the long-term conservation and protection of rare and endangered species and native plant communities at Quail Hollow. Graniterock is committed to combining responsible mining practices with long-term protection and stewardship of the land.

How the community can help?

Help us protect the best remaining sandhills habitat in the world, which is protected within the Quail Hollow Quarry Conservation Area.

Notify Graniterock if you believe someone is trespassing within the Conservation Area: **831-471-3480**

PROTECTED CONSERVATION LANDS

NO TRESPASSING • NO PUBLIC ACCESS
VIOLATORS WILL BE PROSECUTED

The Quail Hollow Quarry Conservation Land is closed to public access for the protection of six endangered and protected species. Use of protected areas causes erosion and degrades their habitat. Please help us protect this by complying with local, state and federal laws that restrict entry.



What makes the sandhills so unique?

The sandhills sit on an ancient sandstone terrace that was uplifted when the Santa Cruz Mountains were formed. The soils that developed here are sandy, erodible, and nutrient poor. Many plants, including redwoods, cannot grow under these conditions. Other plants however, have become uniquely adapted to this harsh environment. Some of these plants, like ponderosa pine (*Pinus ponderosa*), are usually found elsewhere in the state, while others, like Ben Lomond spineflower and Ben Lomond wallflower, are found nowhere else in the world.



At Quail Hollow, sandhills conservation centers around two sensitive plant communities. Northern maritime chaparral covers the lower slopes of the ridges, and is home to the rare silverleaf manzanita (*Arctostaphylos silvicola*). Rarer still is sand parkland, found along the ridgetops. With its carpet of diminutive native plants and sparse overstory of ponderosa pines, sand parkland stands in sharp contrast to the County's dense redwood forests. With less than 300 acres remaining in the world, sand parkland represents one of Santa Cruz County's rarest habitats.



Mount Hermon June beetle

Polyphylla barbata

The Mount Hermon June beetle is a 1/2-inch long, striped beetle covered with scattered brown hairs. It spends most of its 2-3 year life underground. Males emerge in June and fly close to the ground in search of females. Female June beetles do not fly, but remain in their underground burrows. Newly-hatched larvae tunnel from the burrows to feed on plant roots.



Status: Federal endangered species

Range: Restricted to the Zayante sandhills in Santa Cruz County

Zayante band-winged grasshopper

Trimerotropis infantilis

The Zayante band-winged grasshopper is a 1/2-inch long, gray to brown grasshopper with yellow, banded hindwings and pale blue hindlegs. Adult grasshoppers take flight between late May and early August, often moving no more than a few feet. Zayante band-winged grasshoppers prefer open, sunny areas and require bare, loose soil to lay their eggs.



Status: Federal endangered species

Range: Restricted to the Zayante sandhills in Santa Cruz County

Ben Lomond spineflower

Chorizanthe pungens var. hartwegiana

The Ben Lomond spineflower is a prostrate annual in the buckwheat family. It has small pink to purple flowering heads that are clustered on stalks. Plants germinate in the fall and flower in April and May. They set seed shortly after and die by June. Ben Lomond spineflower requires sandy, open areas for germination and growth.



Status: Federal endangered species, California Rate Plant Rank (CRPR) 1B

Range: Restricted to the Zayante sandhills in Santa Cruz County

Ben Lomond wallflower

Erysimum teretifolium

The Ben Lomond wallflower is a short-lived perennial in the mustard family. Its distinct yellow flowers do not appear until after its first or second year. As a seedling, it forms a basal rosette of leaves that die back with the growth of its flowering stalk. Ben Lomond wallflower requires open, sunny areas for germination and growth.



Status: Federal and state endangered species, California Rate Plant Rank (CRPR) 1B

Range: Restricted to the Zayante sandhills in Santa Cruz County

Silverleaf manzantia

Arctostaphylos silvicola

The Silverleaf manzantia is a woody shrub with red, deciduous bark and silvery leaves. The fruits resemble little apples. This long-lived, perennial shrub flowers in the late fall and early winter. This species only occurs in the Zayante.

Status: California Rate Plant Rank (CRPR) 1B

Range: Restricted to the Zayante sandhills in Santa Cruz County

Ben Lomond buckwheat

Eriogonum nudum var. decurrens

The Ben Lomond buckwheat is a perennial herb. It produces dense heads of small white flowers on the end of tall flower stalks. This perennial plant

germinates in the late fall and require 2-3 years to mature and only occurs in the Zayante sandhills in areas of sand parkland and sand chaparral.

Status: California Rare Plant Rank (CRPR) 1B

Range: Restricted to the Zayante sandhills in Santa Cruz County

Conservation Management and Reclamation

Graniterock developed a Long-Term Management and Maintenance Plan (LTMMMP) to conserve the special-status species and unique natural communities within the Quail Hollow Quarry Conservation Area. The comprehensive plan identifies management, monitoring, and outreach, that Graniterock completes with the help of a Preserve Manager (Jodi McGraw Consulting). It includes an Enhancement Plan, which identifies measures to restore important habitat for the endangered insects and plants that was degraded by unauthorized recreational use.

In addition, Graniterock is implementing a Reclamation Plan that includes steps to stabilize slopes and revegetate areas of the property that were disturbed by mining. Revegetation is a long-term process that involves propagation, planting, seeding, erosion control, weeding, and monitoring activities, all of which are negatively impacted by trespass.

Due to these negative impacts to the sensitive habitat and also safety issues, Quail Hollow Quarry's Conservation and Reclamation areas are closed to recreation and other unauthorized use.

Protecting the habitat

The Quail Hollow Quarry is private property and trespassing is strictly prohibited. The designated Conservation Areas are closed to unsupervised access including recreation. Graniterock fenced and signed the outer perimeter of the site to preclude public access in compliance with the Habitat Conservation Plan (HCP). The fencing, signage, and unauthorized use is regularly monitored as part of the long-term management of the area.

Unauthorized use, including hiking and other trespass, damages the sensitive habitat by trampling the three endangered plants and the host (food) plants for the two endangered insects. Recreational use also causes gullies to form on steep slopes.

The rare and endangered species in the Quail Hollow Quarry Conservation Area are protected by state and federal regulations. Pursuant to section 11(a) and (b) of the Endangered Species Act, any person who knowingly violates section 9 of the Act or any permit, certificate, or regulation related to section 9, may be subject to civil penalties of up to \$25,000 for each violation or criminal penalties up to \$50,000 and/or imprisonment of up to one year.