# Jug Handle

State Natural Reserve



The mission of California State Parks is to provide for the health, inspiration and education of the people of California by helping to preserve the state's extraordinary biological diversity, protecting its most valued natural and cultural resources, and creating opportunities for high-quality outdoor recreation.



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www.parks.ca.gov

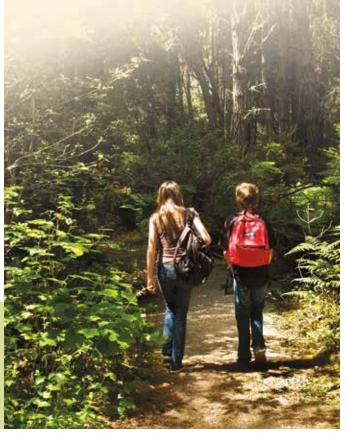


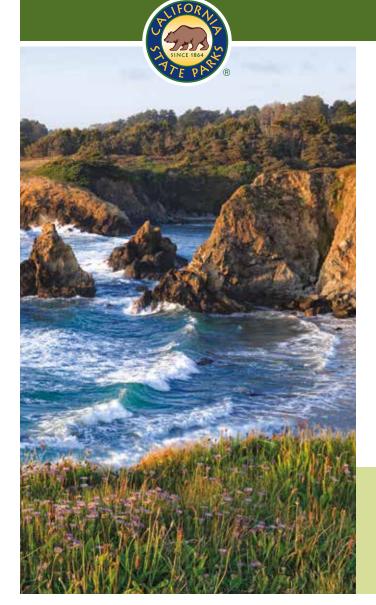
SaveTheRedwoods.org/csp

Jug Handle State Natural Reserve
Adjacent to Hwy. 1, one mile north of Caspar
Caspar, CA 95420
(707) 937-5804

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Jigh bluffs overlook
dramatic, secluded coves
and pristine beaches,
while towering redwoods
beckon trailgoers to
the sanctuary of the
deep forest.





mile north of Caspar along the rugged Mendocino Coast, Jug Handle State Natural Reserve beckons visitors with spectacular ocean views, the solitude of peaceful forests, and a two-and-a-half mile nature trail that explores three of five ancient wave-cut marine terraces. Majestic redwoods mingle with a unique pygmy forest that attracts worldwide visitors. The park enjoys a mild Mediterranean climate with winter rainfall and spring and summer fog that usually burns off by mid-morning. Summer temperatures are in the low 60s and winters range from the 40s to the mid-50s.

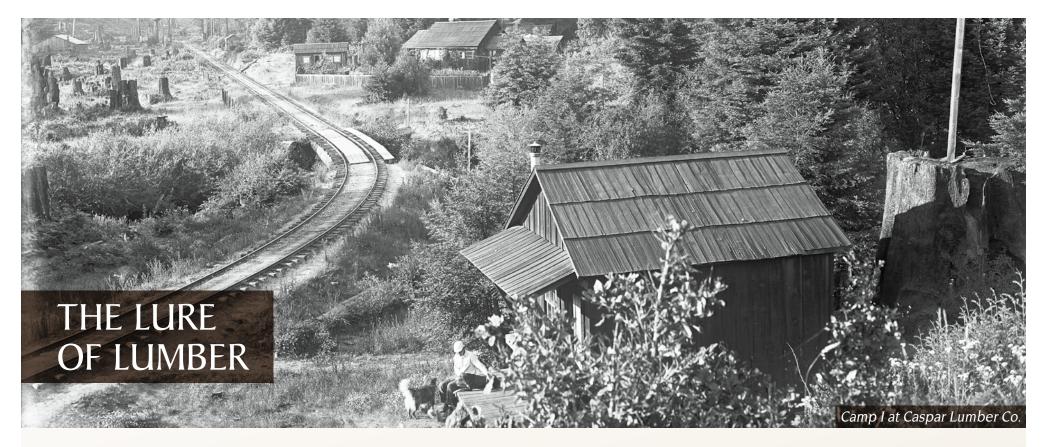
## **PARK HISTORY**

# **Early Inhabitants**

Archaeological evidence shows that the Mitom Pomo date back about 3,000 years on the North Coast. Although the main Mitom villages were located in interior Mendocino County near Willits, the Mitom made periodic visits to the coast to gather food. They hunted large and small game, caught fish and shellfish, and gathered seaweed and various seeds.

The Mitom lifestyle changed drastically with the influx of American settlers in the early 1850s. Logging camps displaced villages at the mouths of rivers and streams, and the Mitom lost their land—and often their lives—to settlers' violence and fatal epidemics. Some Mitom Pomo found work as farm and lumber workers, escaping the fate of most North Coast Native Americans, who were forced onto the Mendocino Indian Reservation.





In 1850 the San Francisco-bound brig *Frolic* sank off Point Cabrillo. Although salvagers were unable to recover the valuable cargo, they noticed luxuriant stands of redwood nearby and discovered a new treasure for the taking—redwood lumber. Two years later, a sawmill was built near the mouth of Big River off Mendocino Bay. Men arrived to fell the trees and work in the mill, wives and families soon followed, and the influx of American loggers to Mendocino began.

William H. Kelley and William T. Rundle bought 5,000 acres of forest land in the Caspar Creek basin in 1860 and founded the Caspar Lumber Company. They built a second sawmill at the mouth of Caspar Creek. Jacob Green Jackson was taken on as a partner; by 1864, he had taken over the lumber company. Jackson bought more timberland along Jug Handle Creek. Under his leadership, Caspar Lumber Company became one of the most successful logging enterprises on the Mendocino coast.

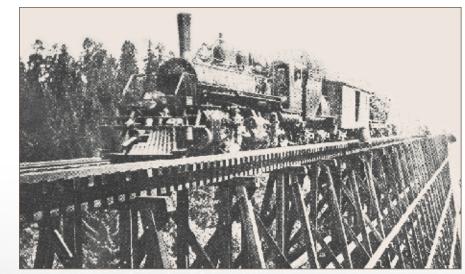
As the demand for lumber increased, Jackson bought his first schooner to transport lumber from the mill to the San Francisco Bay area. He built a mule-and-horse-powered tramway between the mill at Caspar and Jug Handle Creeks in 1874. The tramway was later converted into a standard-gauge railroad that became the Caspar Creek Railroad (later the Caspar and Hare Railroad). A 160-foot-high wooden trestle was built over Jug Handle Creek in 1884.

Redwood logging continued in the area through the 1880s, but Jug Handle Creek was logged off by 1890—leaving an eroded, environmentally devastated landscape. The Caspar Lumber Company bought more than 6,000 acres of new timberland along the South Fork of the Noyo River in 1901-1902. The railway trestle collapsed in the 1906 San Francisco Earthquake, but it was soon rebuilt and remained in operation until 1945. The trestle was dismantled after the railroad was abandoned in favor of truck transport.

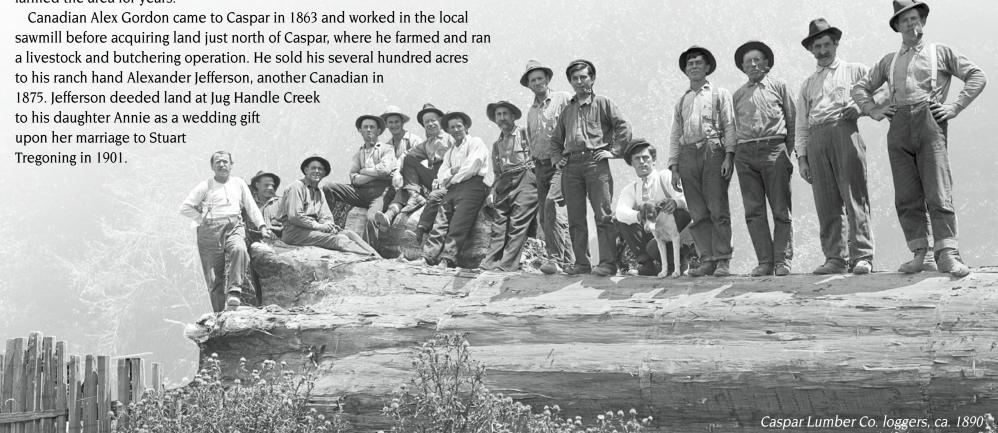
The State of California bought nearly 50,000 acres of forested land from the Caspar Lumber Company in 1947. This land became the Jackson Demonstration State Forest, a "working" forest—using more environmentally friendly harvesting practices during lumber production and renewing the forest by planting seeds or young trees. The Jackson Demonstration State Forest, adjacent to Jug Handle, provides public recreation opportunities, fish and wildlife habitat, and watershed protection. Self-paced trail guides inform visitors about the ecology, history, and management of the forest. For trail guide information, call CalFire at (707) 964-5674.

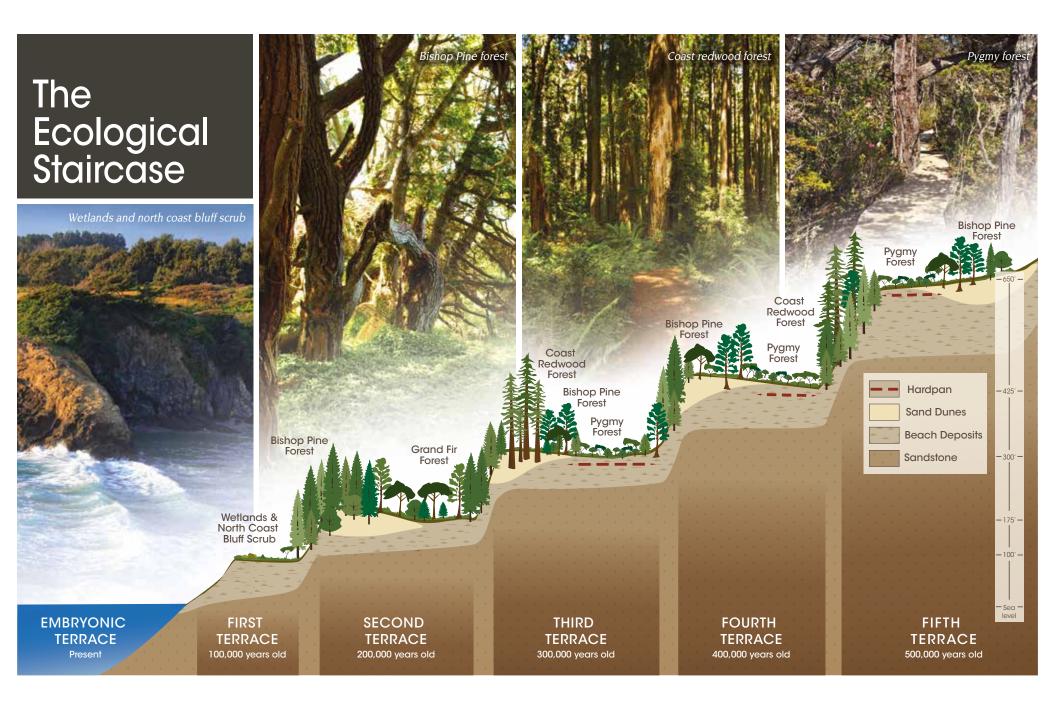
## **EUROPEAN AND AMERICAN SETTLERS**

The first European settler in the area was Siegfried Caspar, a German trapper who lived and worked near what would later become known as Caspar Creek. Although Caspar left when civilization arrived in the 1860s, his offspring farmed the area for years.



Caspar Lumber Co. locomotive on Jug Handle Creek trestle





# Five Elevated Marine Terraces

along Jug Handle Creek form an ecological staircase—ancient wave-cut steps formed by the movement of glaciers, the sea, and plate tectonics. Beginning more than half a million years ago during the Pleistocene Epoch (11,000–1.1 million years ago) when the glaciers retreated, sea level rose more rapidly than the land. As the pounding waves rose onto the land, they shaped an underwater terrace honed by cobbles rubbing against bedrock. Over time, the North American tectonic plate pushing against the Pacific plate elevated the terrace. When glaciers advanced, the waves slowly receded as the sea level fell, and deposits of gravel and sand were spread across the emerging terrace by the retreating waves. As time passed, more new terraces were created where older ones once existed. Each distinct terrace was uplifted from sea level about 100,000 years before the one below it. The terraces continue their inevitable rise at the rate of an inch per century.

FIRST TERRACE The youngest, lowest terrace is a broad bluff overlooking the ocean covered by a mosaic of wetlands and north coast bluff scrub. This terrace is blanketed with non-native grasses, such as velvet grass—the result of past livestock grazing. Visitors may spot black-tailed deer munching on native Pacific reed grasses while meadowlarks fly overhead. Pocket gophers burrow beneath Mendocino Coast paint brush, California poppies, and other native wildflowers each spring.

**SECOND TERRACE** Inland and upward on the second terrace, visitors are enveloped in a shady grand fir forest. Gorgeous pink blooms cluster on the ends of rhododendron branches, and vivid sword fern, redwood sorrel, and thimbleberry carpet the woodland area. Banana slugs inch along the forest floor, and woodpeckers and yellow-bellied sapsuckers drum in the trees above.

THIRD TERRACE Unique pygmy forests of miniature trees are found on the next three terraces. The third terrace features Bolander pine, dwarf manzanita, and pygmy cypress. In this tangle of small trees and shrubs, including the aromatic Labrador tea, hikers may glimpse black-tailed jackrabbits and, occasionally, bobcats. The trail ends at the third terrace. (Part of the third terrace as well as the fourth and fifth terraces are in Jackson Demonstration State Forest.)

**FOURTH TERRACE** Snakes slither through California sedge while wrentits trill overhead and deer mice dart among the wax myrtle and Fort Bragg manzanita. Colorful coast lilies and swamp harebells are also found on this mossy terrace.

FIFTH TERRACE More than 500,000 years old, this terrace is 650 feet above sea level. Centuries of rain have leached nutrients from the soil, causing decades-old cypresses and Bolander pines to stop growing at two-and-a-half-feet tall. A sphagnum bog—layers of peat in standing water—is home to the carnivorous "flypaper" plant, sundew, that traps insects on its sticky leaves and absorbs them.

In general, each terrace forms a unique habitat for specific plants and animals, and hikers will see a wide variety of trees and vegetation—including Sitka spruce, red alder, and western hemlock—as they advance along the first three steps of the ecological staircase.

#### NATURAL HISTORY

# The Pygmy Forest

Dr. Hans Jenny, a world-renowned soil scientist and U.C. Berkeley professor, began studying the soils of Mendocino's rare and fragile pygmy forest in 1936.

Pygmy forests occur due to unique soil conditions that inhibit growth of plants. Prolonged leaching of minerals and poor drainage cause shrubs and trees to be stunted by an acidic soil. This harsh, almost vinegary soil covers an iron hardpan resistant to roots and water. Since the soil never dries out beneath the surface, only plants that can tolerate low oxygen levels and an acidic environment—such as Bolander pine, dwarf manzanita, and pygmy cypress—can survive.

During the 1950s, Jenny began a conservation campaign to protect the area he called the Northern Hemisphere's "best-preserved ecological showplace of coastal landscape evolution."

Primarily through Jenny's and the California State Division of Forestry's efforts, a 250-acre pygmy forest reserve was established within Jackson Demonstration State Forest in 1962. The reserve preserves the upper three terraces of the ecological staircase.

The pygmy forest was designated a registered National Natural Landmark by the National Park Service in 1969. This honor recognizes and encourages the conservation of sites with the best remaining example of specific biological or geological resources.

#### Wildlife

Sea lions sun themselves on the rocks, and migrating gray whales can be spotted off the Mendocino coast from mid-December to early April. Black oystercatchers and other shore birds forage on the beach while gulls, osprey, and American kestrels fly overhead.

Coho salmon and steelhead make their home in the creek. Nature-lovers will often hear the rat-a-tat of a hairy woodpecker punctuating the silence of the quiet woods.

A variety of wildlife can be found on the different steps of the ecological staircase—ranging from gray foxes, badgers, and coyotes to California quail, northern harriers, and northern pygmy-owls.

To protect wildlife and vegetation, the reserve's single trail is for hiking only. No horses or cycles are permitted.

# ACCESSIBLE FEATURES 🕹

A portable restroom next to the parking lot is accessible. A small accessible picnic area lies at the beginning of the trail, beyond the parking lot.

Accessibility is continually improving. For updates, visit http://access.parks.ca.gov.



### PLEASE REMEMBER

- Stay back from the cliff edges. They are unstable and can crumble underfoot.
- Never turn your back on the ocean. Large unexpected waves can sweep you out to sea during ALL seasons and ocean conditions. Lifeguards are not available.
- Stay on the designated trail to avoid ticks and poison oak.
- All features of the park are protected by state law and may not be disturbed.
- Dogs on a leash no more than six feet long are allowed in the park west of Highway 1. Except for service animals, dogs are not permitted within park boundaries east of Highway 1.
- No camping is allowed. The park is for day use only (sunrise to sunset).

#### **NEARBY STATE PARKS**

- Russian Gulch State Park
   2 miles north of Mendocino on Hwy. 1
   (707) 937-5804
- Mendocino Headlands State Park Highway 1, Mendocino 95460 (707) 937-5804
- Van Damme State Park
   3 miles south of Mendocino on Hwy. 1
   (707) 937-5804

This park receives support in part from a nonprofit organization.
For more information, contact:
Mendocino Area Parks Association
P.O. Box 1387, Mendocino, CA 95460
(707) 937-4700

http://mendoparks.org/



