

The Natural Presidio

National Park Service
U.S. Department of the Interior

Presidio of San Francisco
Golden Gate National Recreation Area



To see a world in a grain of sand,
And a heaven in a wild flower,
Hold infinity in the palm of your hand,
And eternity in an hour

—William Blake

Nature in the City?



Spanish and Mexican era grazing and farming transformed the natural Presidio. Painting by Beechey, 1826



By the early 1900s buildings and forest began to blanket the Presidio. Bob Bowen Collection

The natural history of the Presidio is a story both of change and constancy.

The lands at the Golden Gate were forged over millennia by powerful geological events and shaped by wind and fog. Grasslands, sand dunes, and woodlands were rimmed with saltwater marshes, lakes, and creeks. This environment supported a mosaic of plant communities and diverse wildlife, including grizzly bears and tule elk.

Over time, people shaped the wilds, from the Ohlone Indians who used fire to clear brush, to the successive Spanish, Mexican, and American settlers who established a presidio, or fort, at the bay. The greatest transformation took place in the 19th and 20th centuries as the U.S. Army expanded its military post with roads, batteries and bunkers, homes, and even a planted forest. In fact, the existence of natural areas of the

Presidio owes to its former status as an Army post, which prevented the kind of urbanization seen elsewhere in San Francisco.

Despite sweeping changes to its landscape, rare gems of San Francisco's natural history endure in the Presidio. As the park evolves today to welcome park activities, its remnant wild natural areas are being restored and shared with visitors. This guide describes the conditions that created the Presidio's unique plant and wildlife treasures, and illustrates jewels of the park's natural heritage.



A Surprising Diversity of Life...And A Refuge for Rarities

The Presidio's plant and wildlife diversity is largely a result of natural realities above and below: weather and geology.

San Francisco is known for its unique weather patterns and changeable Mediterranean climate. Temperate wet winters typically occur between November and April. Summer dry spells can last up to seven months, with moisture coming only with cool ocean fog. Coastal hills and valleys create many microclimates. Within an hour on the Presidio, you can walk through sheltered woodlands, moist creek corridors, windy coastal bluffs, and warm dunes. These conditions promote amazing plant diversity.

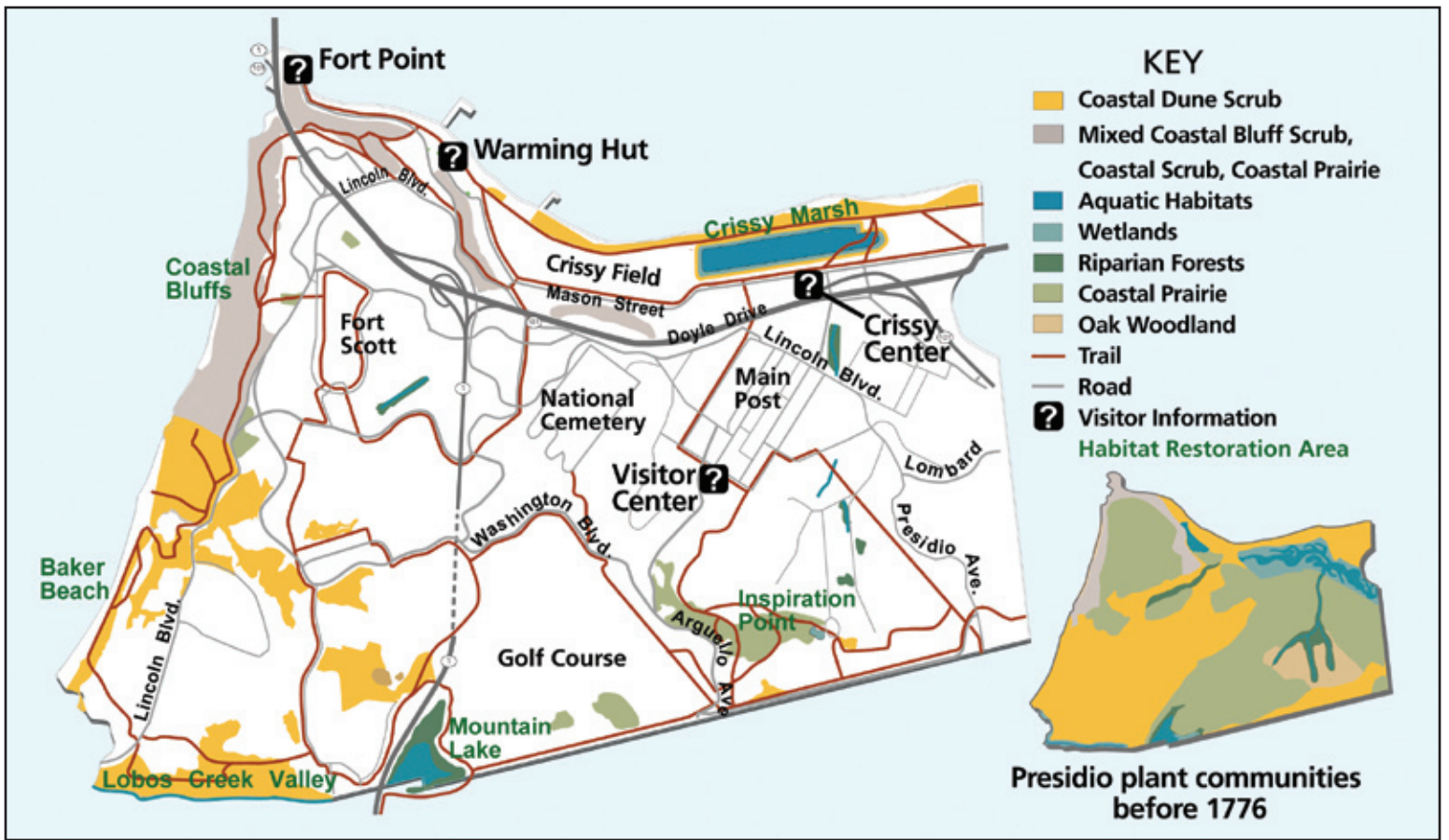
The Presidio's main soil types include serpentine and sand. Serpentinite, California's state rock, is green-gray, smooth, and scaly, evoking images of its namesake. It forms deep below the earth's crust and is pushed

to the surface along faults. Though serpentine soils are poor in nutrients and high in toxic metals, the endangered Presidio clarkia and Raven's manzanita, among others, have adapted and thrive. Sand dunes that are dry, nutrient poor, and ever-shifting with the wind are home to rare species such as the San Francisco lessingia and dune gilia that have adapted to survive in these conditions.



Presidio clarkia (left) lives only on serpentine soils and San Francisco lessingia (right) requires dunes.

Above left to right:
The Presidio hosts a rich array of insects including the West Coast Lady, the western fence lizard and other reptiles, over 200 species of birds like the colorful Wilson's warbler and the locally rare gray fox.



Use this map to explore the natural areas of the Presidio. Designated as part of a United Nations International Biosphere Reserve, it holds an incredible diversity of life. The park's 1,000 acres of open space shelter 300 native wildflowers, trees, and other plants growing in 14 distinct native plant communities. In fact, 15 of the Presidio's plant species are designated as rare, threatened, or endangered.

A Surprising Diversity...
(Continued)

Because animals rely on plants for food or shelter, plant diversity supports an abundance of wildlife. The Presidio is home to more than 350 species of birds, mammals, reptiles, amphibians, insects, and fish. Visitors can encounter coyotes, red-tailed hawks, California slender salamanders, and banana slugs. California quail and gray fox, which now face disappearance from the city, can also be found here.



A New Chapter: Restoring a Living Sanctuary

In 1994, the Presidio became a national park site. Its lands are being transformed to welcome visitors, residents, and employees and to share the story of the Presidio's natural and historic past. As part of this effort, habitats from Mountain Lake to Crissy Field are being restored by the Presidio Trust, the National Park Service, and the Golden Gate National Parks Conservancy. These efforts are supported by dedicated community volunteers. The wildlife and native plant communities at home in the Presidio today are testament to the resilience of the natural world—evidence that there is a place for nature in cities. Wildflowers bloom almost year-round. Oak woodlands, where Ohlone peoples collected acorns, continue to bear fruit each fall. To experience the Presidio's living natural history yourself, take a stroll through moody, fog-drenched woodlands, careful not to step on banana slugs hiding in the leaf litter. Or walk barefoot on Baker Beach and feel the sand shift beneath you. A red-tailed hawk soars above as a lizard darts away from your approach. In these moments it is not difficult to imagine the Presidio as it once was.



The Presidio provides sanctuary to both nature and urban dwellers.

Above left to right: Within the small area of the Presidio, you can experience the windswept coastal bluffs, Crissy Field's colorful dune scrub, rare serpentine prairie plants at Inspiration Point, or restored riparian habitat at Mountain Lake.

Would you like to help participate in the natural history of the Presidio?

Learn how to join a Presidio restoration project by contacting Presidio Park Stewards at (415) 561-3034 x3445 or the Presidio Native Plant Nursery at (415) 561-4830.

For more information visit:
www.nps.gov/prsf/ and www.presidio.gov