

Hawk Hill & Battery Construction 129

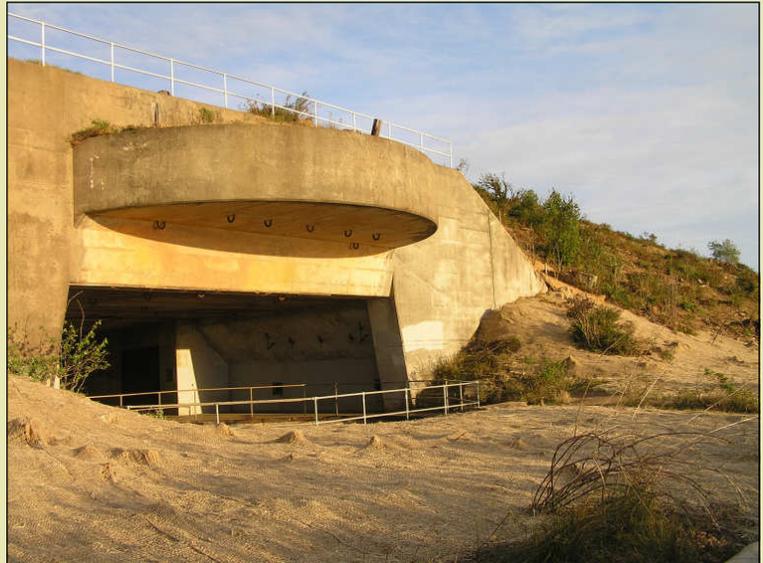
Restoration and Trail Improvement Project
Golden Gate National Recreation Area



What's Happening at Hawk Hill?

About 93 acres of habitat for endangered mission blue butterflies must be restored in the southern Marin Headlands to compensate for impacts from road and trail construction that are a part of Project Headlands.

The National Park Service and the U.S. Fish and Wildlife Service considered numerous possible habitat compensation projects. Each project was ranked based on its likelihood of success, ability to sustain restored habitat, proximity to existing butterfly habitat, and benefits to other native plants and animals. Based on these criteria, removing non-native invasive vegetation—including the Monterey cypress and pine trees at Hawk Hill—and replanting native vegetation was the best option. Tree removal was completed in January, 2012.



Historic casemate at Battery Construction 129

Tree removal will also restore historic views and protect the historic battery construction from damage.

Future Hawk Hill improvements will focus on cultural resources and visitor amenities:

Cultural Rehabilitation- Aging structures will be stabilized so that they can be explored and enjoyed.

Recreation- The restored site will provide increased educational and volunteer opportunities. Improved gathering and seating areas, restrooms, and interpretive programs will make visiting more comfortable and enjoyable.

Safety- New guard rails and curbs, improved signage and fencing, asphalt resurfacing, and replacement of decaying wooden steps will make the site safer.

Accessibility- Trail realignment and the addition of a trail that meets Draft Accessibility Guidelines for Outdoor Developed Areas (AGODA) standards will accommodate a broader range of park users.

Preservation- Stabilizing the historic gun battery from World War II and the Nike Missile Radar features from the Cold War will preserve these important historic features and allow for greater public access and enjoyment.



Contractors installing erosion controls

Why Here?

The majority of mission blue butterflies in the area have been found in coastal prairie and scrub habitat adjacent to Hawk Hill, but there is also good mission blue habitat to the south. The trees on Hawk Hill were an insurmountable barrier for these small butterflies, preventing them from following natural shifts in the distribution of their host plants across these two areas.



A mission blue butterfly on lupine

The trees that were on Hawk Hill were not native and were not planted intentionally; it is said that they came in mixed with soil brought by the military. After the Army left, the trees were allowed to mature and spread down the formerly grassy slopes. Many of these trees were beginning to show the effects of pitch canker and bark beetles. Other sites near Hawk Hill where trees have been removed in the past—and where native vegetation was planted after tree removal—now support healthy butterfly habitat.

Why Now?

In order to satisfy compensation requirements, and to provide adequate habitat for mission blue butterflies throughout the coastal corridor, most restoration must begin before road and trail construction is complete. Habitat restoration and weed control started on about 77 acres in 2007 with the removal of weeds such as pampas grass. The remaining habitat compensation work must be done at the same time as the road and trail construction.

What About Other Native Species?

Removing invasive plants not only helps the endangered mission blue butterfly, it also benefits native coastal scrub and grassland habitats and all the species that rely on them. The National Park Service and its partners conducted bird surveys before the trees were removed and worked outside of nesting and migration seasons to minimize negative effects on wildlife.

It is possible that some migrant birds may no longer stop atop Hawk Hill now that the trees are gone. But birds have been successfully migrating along these coastal ridges for tens of thousands of years, and the trees have only been there since the 1970s. Other nearby open spaces with similar Monterey pine habitat are available to both birds and birdwatchers. The planting of native coastal scrub and prairie grass vegetation will benefit a wide range of native plant and animal species.



Native scrub and grassland habitat in the Marin Headlands

For more information about the project, visit <http://www.parksconservancy.org/our-work/trails-forever/accomplishments/hawk-hill.html>, e-mail trailsforever@parksconservancy.org, or call (415) 561-3054.