



**View 1.** Stands of high quality native grasslands along one of several spur ridges on Sign Hill ridge, looking north to San Bruno Mountain. The native grasslands are characterized by a rich diversity of native grasses and forbs.



**View 2.** Another view of high quality native grasslands in the foreground looking northwest, with dense native scrub dominated by poison oak and coyote brush in the middleground, and non-native Monterey pine and other tree plantings along the Sign Hill ridgeline. The non-native tree plantings are spreading into adjacent areas of native grassland and scrub, which are essential habitat for special-status butterfly species on Sign Hill and San Bruno Mountain. Proper management should include removal of non-native, invasive trees, shrubs, and groundcovers where they are compromising highly sensitive grassland and scrub habitats, together with native vegetation restoration.



**View 3.** View to the east along Ridge Trail, with high quality native grasslands and lupine shrub larval host plants for mission blue butterfly. The trail receives a high volume of pedestrian visitor use but there are no interpretive facilities or other controls educating users of the sensitivity of the area. In addition, non-native blue gum, Monterey cypress, and Monterey pine are encroaching into these areas of high quality native grasslands, which should be controlled as part of future park maintenance and native habitat enhancement activities.



**View 4.** View to the east along Sign Hill ridge of a rock outcropping in a stand of high quality native grasslands, in close proximity to the Ridge Trail. Rock outcrops are known to support special-status plant species and larval host plants for at least one butterfly species known from San Bruno Mountain. They're also an attractive feature to park visitors, which can lead to excessive trampling and denuding of vegetative cover. Future management must consider ways to carefully control access to outcrops that support highly sensitive resources to prevent their loss or damage.



**View 5.** View looking east of historic sign, with scattered tufts of native purple needlegrass and native forbs in an area characterized as native grasslands. Routine weed whacking as part of sign maintenance has probably helped retain the native grasslands in these area from competition with non-native annual grasses. But proper management, including the timing and height of weed whacking, as well as disposal of vegetative slash which should preferably be left in place, is necessary to improve the extent of native species cover.



**View 6.** View of debris piles from treated slopes along the base of the historic sign, where current practices appear to involve raking slash rather than leaving it in place which would be more desirable to build up thatch necessary to help control establishment and spread of invasive groundcover species and to improve habitat conditions.



**View 7.** View of high-quality native grasslands looking east on south-facing slopes, dominated by purple needlegrass with lupine shrubs, the larval host plants of the mission blue butterfly known from Sign Hill.



**View 8.** View of short-cutting along the east segment of the Ridge Trail in Sign Hill Park, which has completely stripped away vegetative cover and is contributing to the spread of invasive species like Bermuda buttercup. Redesign of this segment of the Ridge Trail, together with interpretive signage and installation of slash and other barriers, is recommended to improve habitat conditions in what would otherwise be a high quality native grassland habitat.





**View 9.** View looking north towards historic sign showing trampling associated with informal trails through a stand of high-quality native purple needlegrass and coast iris. Scattered planted and volunteer trees are visible in distance, along with invasive pampas grass at the right edge of the photo. Future management should consider options to control trampling from informal trail access through scattered stands of high quality native grasslands on the slopes around the historic sign, accepting the reality that completely restricting access is impossible but by directing foot traffic in a controlled fashion through less sensitive habitat areas would minimize further loss of high quality stands of native grassland. Removal of non-native shrubs like pampas grass, as well as invasive groundcover and tree species is also desirable to retain the grassland habitat values on Sign Hill.



**View 10.** View to the northwest from the southeastern edge of Sign Hill Park showing scattered seedlings of invasive French broom, small clumps of invasive yellow Bermuda buttercup and stands of invasive fennel in an area of native grasslands known to support both mission blue butterfly and callippe silverspot butterfly. Non-native blue gum and Monterey cypress are visible along the horizon line. Future management activities in this area should provide for on-going removal of invasive non-native shrubs and groundcover species, containment of any non-native trees, and ideally replacement of non-native tree species with native grasslands.



**View 11.** View of stand of native coast live oak on south-facing slope of Sign Hill Park looking southwest, with a dense cover of iceplant and Bermuda buttercup spreading into adjacent non-native and remnant native grasslands.



**View 12.** View of natural rock outcrop on Sign Hill Park used for disposal of disposal of landscape debris from adjacent residential development, a practice which should be prohibited as it covers natural groundcover and contributes to the spread of undesirable species, such as the fennel and Bermuda buttercup visible in the photo.



**View 13.** Poor habitat management practices of hillside in private open space lands adjacent to Sign Hill Park, where vegetation is completely stripped from the slopes most likely through routine herbicide application. The current treatment practices have eliminated groundcover and the habitat it provides wildlife, have created a high potential for erosion due to the lack of any vegetative cover, and produced disturbed conditions that favor establishment of highly invasive groundcover species such as Bermuda buttercup visible in the foreground of the photo.



**View 14.** View of dense stand of blue gum along Seubert Trail, with a continuous groundcover of invasive Bermuda buttercup and scattered clumps of native toyon shrubs and sapling invasive blackwood acacia trees. The trees do provide some limited habitat value to a number of adaptive species, including possible roosting and nesting opportunities for great horned owl and other birds. But the stands are overly dense and spreading into the adjacent remnant grassland habitat, and create conditions that favor non-native understory species and high fire fuel loads.



**View 15.** View of overly dense blue gum and dead or dying blackwood acacia along Eucalyptus Loop Trail, with invasive understory of English ivy and other non-native species. Area contains little habitat value for wildlife, contains conditions ideal for further spread of invasive plant species and animal pests, and creates relatively high fire fuel hazards. Future management should include containing any further spread of the non-native trees, shrubs, and groundcovers, selective removal to reduce fire risk and improve habitat conditions, and consideration of eventual removal of most of the non-native cover and restoration of native grasslands, where feasible.



**View 16.** View of dead and dying planted coast redwood along Iris Hill Trail. These and other non-native tree species were planted at too high a density on dry, south-facing slopes ideal for native grasslands, not tree and shrub cover. They now contribute to the spread of non-native, invasive species, which are further compromising the remaining native and non-native grasslands on Sign Hill Park.





**View 17.** View to west along Iris Hill Trail showing non-native pine trees in poor condition spreading into a remaining stand of native purple needlegrass grasslands.



**View 18.** View of another high quality stand of native grasslands on the south-facing slope, which is being shaded out by advancing blue gum, blackwood acacia, Monterey cypress, and Monterey pine tree cover.



**View 19.** View of high quality native grassland in rock outcrop area, with an old slash pile of cut invasive shrub species. Proper management should include routine collection and removal of slash to prevent the area under the pile from losing the desirable cover and eventually creating conditions favored by invasive species.