

ALBANY HILL ACCESS IMPROVEMENTS INSPECTION CHECKLIST

Agency:	City of Albany
Inspection Team:	Brian McCrea Stu Weiss
Facility Representatives:	Robert Gonzales
Date of Inspection:	11/5/2019

A. CONSTRUCTION ELEMENT IMPLEMENTATION

Please provide responses to the information requested in the right column below or in a separate attachment as appropriate.

Item	Response
<ul style="list-style-type: none"> • Tree Protection in place 	10/3
<ul style="list-style-type: none"> • Limits of Work established 	10/3
<ul style="list-style-type: none"> • Trees removed 	10/5 and 10/12
<ul style="list-style-type: none"> • 	
<ul style="list-style-type: none"> • Work Completed to date: • Trees removed, grading, sidewalk installed, • 	Grading complete 10/25 Sidewalk complete 10/31
<ul style="list-style-type: none"> • Work Scheduled <ul style="list-style-type: none"> a. Steps at Taft turnaround b. Steps between Taft and Jackson c. Steps between Jackson and Madison d. Improvements at Taft, Jackson, and Madison e. Install Native Plants 	
<ul style="list-style-type: none"> • Comments: 	0

Inspected by:

Date: _____

Report on monarch butterfly observations 11/5/2018

Stuart B. Weiss, Ph.D.

On November 5, 2019 I visited Albany Hill and met with Robert Gonzales and Margot Cunningham. The primary goal of the visit was to see the construction of the ADA trail, and observe the distribution of monarchs on the site as a whole. I offer the following observations:

1. The trail construction has been executed according to plan. The only trees that were removed were those identified as such, and the remaining trees are fenced off with orange construction fencing and appear healthy.
2. The construction footprint remained north of the summit, as planned. These areas have not been used by clustering monarchs in the recent past, according to observations noted in the Weiss 2018 report and the Weiss 2019 review of construction plans.
3. Temperatures were in the mid to high 70's with light winds from the west, perfect conditions for monarch flight. Monarchs were observed flying and resting from the summit south along the ridgeline almost to the Taft stairs, corresponding to the trees identified as "Ridgetop" in Map 1 of Weiss 2018. As many as 6 butterflies were observed flying at any one time, and they obviously were encountering each other at sufficient frequency to indicate occupancy of the site.
4. Resting butterflies were not readily observable until they took flight, or just after landing. No actual clusters were observed.
5. Swallowtails and buckeye butterflies were also observed flying in the same areas.
6. We also visited the open areas on the mid slope, south of the "SW slope" cluster areas in Map 1. Monarchs were flying in the clearing and north to the forest edge. As many as 6 butterflies were observed at any one time, at encounter rates similar to the Ridgetop. Again, any resting butterflies were not readily observable until they took flight or were observed landing.
7. The wind shelter effect of the trees on the SW Slope was apparent. As windward gaps in the trees were encountered (as along the trail west from the ridgetop), wind speeds notably increased. This shelter effect was observed all along the mid slope and ridgetop.
8. Overall, the monarchs were behaving as expected on a warm November day, freely flying, resting, and flying again in a dispersed manner within the previously observed distribution. Small clusters were likely formed at the end of the day, and an actual count will require observations of where they gather in the afternoon because clusters are very hard to distinguish from foliage without prior knowledge of their location.
9. No rigorous estimate of numbers is possible at this time. Standard estimates will have to wait until the butterflies form observable clusters. But based on experience and the encounter rate, there were likely several dozen monarchs at minimum across the site, probably more. Monarchs are still arriving at overwintering sites during this mild (so far) fall.
10. Butterflies have been arriving at other overwintering sites across California, and exhibiting typical early season behavior during the mild conditions this year. Later that afternoon, I visited Ardenwood Historic Farm and observed similar behavior, congruent with reports from other sites.

11. The construction activity in October does not appear to have significantly affected the monarchs, at this time of year they are free to simply move a short distance south away from the limit of construction. Noise *per se* does not affect monarchs, but smoke (i.e. diesel exhaust) and dust could be problems for clustering butterflies.
12. While it is ideal to avoid construction and tree management activities during the overwintering season (Oct. – Mar.), the major grading and tree removal activities were completed in October 2019 while the first monarchs were just arriving in small numbers.
13. Many types of work on understory vegetation (weeding and planting) necessarily need to be done during the overwintering season when soils are moist. These activities pose little risk of disturbance to clustering or flying monarchs, but care should be taken to avoid any butterflies that may be on the ground in cool cloudy weather. In any case, in 2019, the follow-up plantings in the graded areas and along the new trail will be in the areas seldom or never used by the monarchs for clustering.
14. The one exception to work restrictions is emergency branch or tree removal for arborist-designated hazard trees that pose a direct and immediate threat to people using the ridgetop trails. Such management should be done under close supervision by City staff after consultation with a monarch expert on site.