



BEE REPORT

Dolores Pollinator Boulevard

Introduction

By the spring of 2017, the two medians along Dolores Street between Market and 14th Street had been transformed from dry, neglected grassy patches into colorful, flowering pollinator gardens. The next step was finding the answer to the question: were they successful pollinator gardens?

We enlisted the help of bee researcher Jaime Pawelek, who conducted surveys in April, June, and August of that year. The surveys involved collecting insects at the two planted medians, as well as one unplanted median that functioned as a control. Median 1 had been planted in 2016 and was already established, while Median 2 had been planted right before the surveys were conducted. The report documented the flowers in bloom and the types of bees and other pollinators visiting those flowers. The insect sampling consisted of two methods: net collecting and pan trapping.

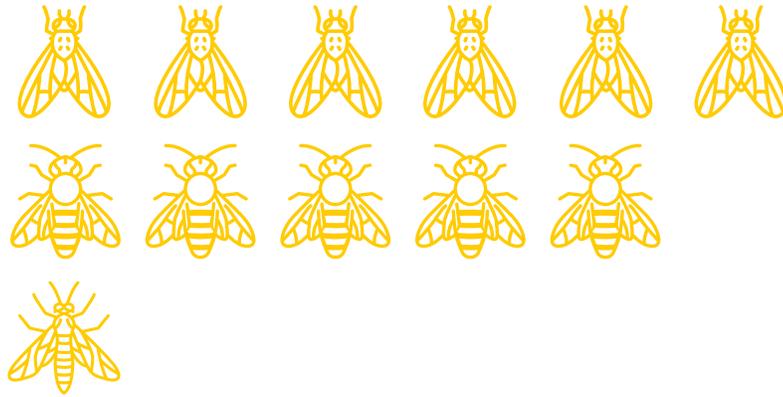
The findings were promising, showing that many types of pollinators, including a dozen different species of bees, frequented the newly planted medians. It was noticeably significant in contrast to the unplanted median, which attracted far fewer pollinators and was much less aesthetically pleasing.

The Pollinator Boulevard is still relatively new and currently only encompasses two medians, but the data shows that it already is providing much-needed habitat. And with time and more efforts to expand in both size and floral diversity, Dolores Street has the potential to be an even better home for pollinators in the city.

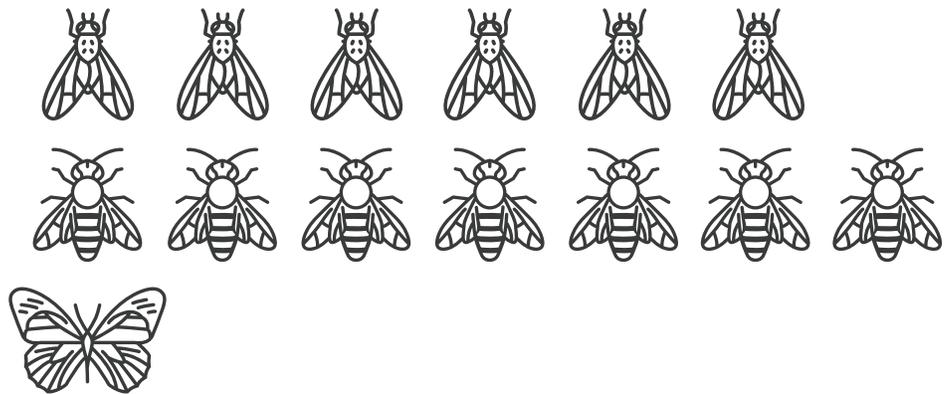


Number of Insects Collected at Each Median

MEDIAN 1



MEDIAN 2



MEDIAN 3



Insects were collected using pan traps or collected directly from flowers.

Key: 1 icon = 1 insect.

The Pollinators



49%

FLIES

26 individuals collected from 10 species



45%

BEES

24 individuals collected from 11 species



4%

BUTTERFLIES

2 individuals collected from 2 species



2%

WASPS

1 individual collected from 1 species

FIERY SKIPPER
Hylephila phyleus



LEAFCUTTER BEE
Megachile perihirta



CABBAGE WHITE
Pieris rapae



SWEAT BEE
Halictus tripartitus



YELLOW-FACED BUMBLEBEES
Bombus vosnesenskii



HONEY BEES
Apis mellifera



The Plants

47 **PLANT TYPES**

observed to be flowering in Medians 1 and 2 during surveys

18 **PLANT FAMILIES**

including pollinator favorites Asteraceae and Lamiaceae

9 **NATIVE SPECIES**

CLEVELAND SAGE
Salvia clevelandii



MARGARITA BOP
Penstemon heterophyllus



SEASIDE DAISY
Erigeron glaucus



COYOTE MINT
Monardella villosa



**TANSY-LEAFED
PHACELIA**
Phacelia tanacetifolia



CALIFORNIA POPPY
Eschscholzia californica



BRANDEGEE SAGE
Salvia brandegeei



YARROW
Achillea millefolium

Most Attractive Plants In Each Survey

SPRING



Median 1

- + Wild Radish
- + Rock Purslane
- + California Poppy
- + Spanish Lavender
- + Tansy Phacelia

SUMMER



Median 2

- + German Sage
- + Tansy Phacelia
- + Lupine
- + California Poppy
- + Penstemon
- + Seaside Daisy

AUTUMN



Median 2

- + German Sage
- + Rock Purslane
- + Cosmos
- + Bachelor's Buttons
- + Seaside Daisy

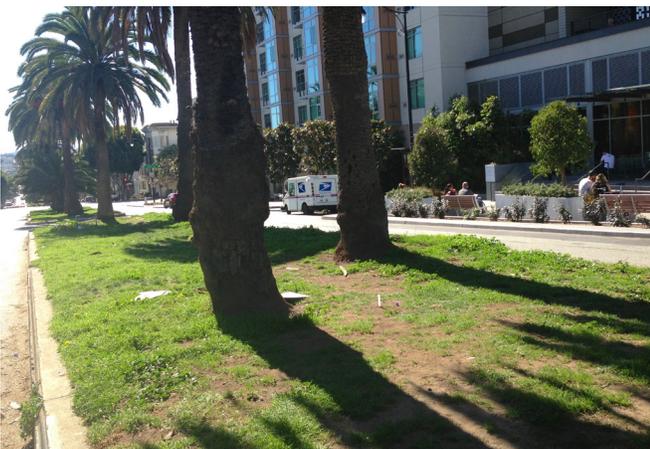
Median 3 was unplanted and used as a control. A few wild dandelions were observed.

In Summary



- + Most attractive plant families for native bees were Asteraceae (cosmos and dandelions), which provides both nectar and pollen, and Lamiaceae (mint and lavender), which provides mostly nectar.
- + Both medians were still quite young when the surveys were conducted and need time to fully establish and grow.
- + However, many plants were flowering, even in Median #2, which had been planted right before the survey.
- + In the spring, blooming plants were most abundant in Median #1. In the summer and fall, Median #2 had more flowers and bee activity while Median #1 blooming had decreased.

BEFORE



AFTER



Looking Forward



- + Plant more late summer and fall blooming plants like goldenrod, buckwheats, and coyote bush.
- + Include more native plants, especially those in the Asteracea and Lamiaceae families.
- + Group several of the same plant type in large patches to attract pollinators
- + Set aside areas of bare soil for ground-nesting bees.
- + In time, the Pollinator Boulevard can become an even more flourishing home for bees and other pollinators. Overall results are promising!

