

# Bee Sampling

Date: 8/8/22 Loc: 864 Wallen Time: 2:55 - 3:09 pm ~~2:55 - 3:09 pm~~ Obs: D. Gamazo

Temp: 70°F Wind: 2 mph weath <sup>100%</sup> sunny % in sun 75%

## I. Plants

% cover	Plant spp.	Avg. flower/inf	# inf	Total flower	Note
20%	Salsola vermiculata	0	—	—	
15%	Aeonium	0	—	—	
1%	Anagallis arvensis	1	3	3	
2%	dry grass	—	—	—	
63%	Bare ground	—	—	—	

Note: became 100% in shade during sunny, but warm

## II Bees

### A. Point count (1 min)

Bees	#	Plant	Note
0			

### B. 0-5 min

Bee	#	Plant	Note
0			

### C. 5-10 min

Bee	#	Plant	Note
0			

# Bee Sampling

Date: 8/8/22 Loc: Penta st Parking lot Strip Time: 1:52pm Obs: D. Gamboa

Temp: 70°F Wind: 2-4 mph Weath: <sup>100%</sup> Sunny % in Sun 100%

## I. Plants

% cover	Plant spp.	avg flower/inf	# inf	Total flower	Note
25%	Calandrinia grandiflora	1	20	20	
5%	Aloe	0			
15%	Geranium	0			
3%	Oxycoccus	0			
3%	Geranium dissectum?	1	~60	60 flower	

## II Bees

### A. Point count (1 min)

Bees	#	Plant	Note
Small black hover flies	11	Cal gra	photographed

### B. 0-5 min

Bee	#	Plant	Note
Hover fly green/yellow	1	Cal gra	just flies into tent of plot
Skimmer	1	Cal gra	orange approaches flower does not land
Small black hover fly	1	Cal gra	Could be one of original 3

### C. 5-10 min

Bee	#	Plant	Note
Small black bee?	1	Geranium dissectum	missed!

# Bee Sampling

Date: 8/4/22 Loc: Wyman @ Brown Time: 3:41pm - 3:58pm Obs: D. Gamoso

Temp: 68°F Wind: 3.7-5.0 mph Weath: <sup>100</sup>overcast, "light dry" in Sun 100%.

## I. Plants

% cover	Plant spp.	Avg flower/inf	# infl	Total flower	Note
20%	Red Hot Poker	0			
5%	Acacia melanoxylon	0			
3%	Fragaria chiloensis	0			
70.1%	Dichondra <sup>sp.</sup> <del>sp.</del>	0			
0.1%	Grass	0			
42%	Thunbergia	8			
30%					

70

Note: a little windy at times, but also relatively calm at times

## II Bees

### A. Point count (1 min)

Bees	#	Plant	Notes
0			

### B. 0-5 min

Bee	#	Plant	Notes
0			

### C. 5-10 min

Bee	#	Plant	Notes
0			



# Bee Sampling

Date: 8/4/22 Loc: Simonds@ Ruger Time: 4:58pm - 5:14pm Obs: D. Garrow

Temp: 66°F Wind: 1.7-3.5 mph (feels mostly calm) Weath: 100% high + dry, sun trying to peak through % in Sun 100%

## I. Plants

% cover	Plant spp.	Avg. Flower/plant	# in fl	Total Flower	Note
25%	Agapanthus	0			
5%	Grass patch	0			
10%	Wood chips	0			
10%	Bare ground	0			

## II Bees

### A. Point count (1 min)

Bees	#	Plant	Note
0			

### B. 0-5 min

Bee	#	Plant	Note
0			

### C. 5-10 min

Bee	#	Plant	Note
0			



# Bee Sampling

Date: 8/4/22 Loc: Arquello gate Time: 4:18 pm - 4:41 pm Obs: D. Gamoso

Temp: 68°F Wind: 21.8 mph avg (just up to speed) Weather: 100% Overcast <sup>high + dry</sup> % in Sun 100%

## I. Plants

% cover	Plant spp.	Avg flower/plant	# infl	Total flower	Note
85%	Forstall Agave Agave attenuata	$5 + 6 + 1 + 6 + 9 = 27 \div 5 = 5.4$	106	540 flowers	not obviously open
8%	Grevillea				
77%	Wood chime				

Note: a little windy, but see wasp + HB nearby visit RAPT

## II Bees

### A. Point count (1 min)

Bees	#	Plant	Note
0			

### B. 0-5 min

Bee	#	Plant	Note
0			

### C. 5-10 min

Bee	#	Plant	Note
0			





# Bee Sampling

Date: 8/2/22 Loc: 1221 Upton Time: 11:44 - 12:00 Obs: D. Gamosa

Temp: 71°F Wind: 3-5 mph Weath: 50% cover high, thin clouds  
% in sun 100%

## I. Plants

Ndr: kinda windy throughout survey

% cover	Plant spp.	avg flower/inf	# infl	Total flower	Note
5%	Rose	1	4	4	
1%	Hydrocotyle radicata	1	9	9	
10%	Anagallis arvensis	1	3	3	
10%	Pseudognapthium radissimum	10	3	30	
0.5%	Dichondra	0	-	-	
1%	grass	0	-	-	
93%	Bare dirt	0	-	-	

## II Bees

### A. Point count (1 min)

Bees	#	Plant	Note
0			

### B. 0-5 min

Bee	#	Plant	Note
0			

### C. 5-10 min

Bee	#	Plant	Note
0			



# Bee Sampling

Date: 8/2/22 Loc: 1418c w/ Ashington Time: 15:59 - 16:15 Obs: D. Carrasco

Temp: 67° Wind: 1.5-2.5 mph (feels calm) Weather: 10% clouds, mostly sunny, 100% in sun

## I. Plants

% cover	Plant spp.	Avg Flower/inf	# inf	Total Flower	Note
15%	Geonion King	0	8	50000	
15%	Geonion (yellow)	0	8	50000	
1%	Grass				
1%	Pseudogonolobum	6+14+8+6+6=8	18	8 x 18 = 144	Flower
68%	Bart ground				

## II Bees

### A. Point count (1 min)

Bees	#	Plant	Note

### B. 0-5 min

Bee	#	Plant	Note

### C. 5-10 min

Bee	#	Plant	Note



# Bee Sampling

Date: 8/2/22 Loc: W. Crissy Lendrum Lincoln Time: 12:22 pm - 1:10 pm Obs: D. Gamosa

high, thin clouds

Temp: 71°F Wind: 2 mph Weath: 70% cloud % in Sun 100% sun

## I. Plants

% cover	Plant spp.	Avg Flower/plant	# infl	Total flower	Note
15%	Gloe	0	—	—	
25%	Calendula grandiflora	1	7	7	
20%	wood chips	—			
40%	Bare ground	—			

During point count: observed at least 2 Halictus - looking bees, & possible Cassin's, + a small "long-horned" (not sure, but the long antennae on Cal gran

## II Bees

### A. Point count (1 min)

Bees	#	Plant	Note
dark small metallic bees	III	Cal gran	in flower

### B. 5 min

#### Bee

#

Plant

Note

Small "long horn"	1	Cal gran	captured

### C. 5-10 min

#### Bee

#

Plant

Note

Small	1	Cal gran	captured

Small dark  
sweet-bee-like  
bees  
missed  
4!



# Bee Sampling

Date: 8/1/22 Loc: 1245 B Storey Time: 16:29

Temp: 69° wind: 4-5 mph weath: Overcast, high dry shade/sun: 100% obs 2 Comm

## I. Flower Abun

cover	Plant spp:	# infl	# avg flower/infl	Total Flower/spp
20%	Blue Agapanthus	13	$3+9+8+4+6$ 5 =	$6.4 \text{ flower/infl} \times 13 = 83.2 \text{ flower}$
5	(pink) Fuschia	50	1	50 flower
3%	"Thimbleberry-like plant w/ cream flowers"	2	1	2 flower
15%	Bare ground	-		
5% <sup>6</sup>	Wood chip	-		
12%	Purple-flower plant			

## II Bees

### A. Point count: (1 min)

Bees	assoc plant spp	Notes
Bees spp		

### B. Bee netting

0-5 min	Bee spp	plant spp	Notes
	Bumblebee	N/A	flower to out of area before could catch
5-10 min	Bee spp	plant spp	Notes
			no visit flower





# Bee Sampling

Date: 8/1/22 Loc: Jose's Sheridan Time: 1538-1619 obs: D. Gamoso  
 Temp: 69°F wind: 1-2 mph weath: overcast, high dry shade/sun: 100%  
 mossy

## I. Flower Abun

cover	Plant spp:	# infl	# avg flower/infl	Total Flower/cpp
25%	Grevillea	230	$\frac{8+12+6+13}{5} = 9.4 \text{ flower/infl}$	$9.4 \text{ flower/infl} \times 230 \text{ infl} = 2,162 \text{ flowers}$
5%	New Zealand Flax	Ø	Ø	—
5%	Gloe	Ø	Ø	replaced
2%	Yellow "hot poker"	Ø	Ø	replaced
0.5%	Euphorbia peplus	10	1	10 tiny
10%	Stork plant	Ø	—	—
50.0%	Wood chips	—	—	—

## II Bees

### A. Point count: (1 min)

Bees	plant spp	Notes
Bees spp		
Ø		

### B. Bee netting

0-5 min

Bee spp  
 Large Black yellow wasp

plant spp  
 Grevillea

Notes  
 did missad

5-10 min

Bee spp  
 Likely same wasp

plant spp  
 Grevillea

Notes  
 Captured in photo

# Bee Sampling

Date: 8/1/22 Loc: Tides (Tory) Time: 1431-1525  
 Temp: 65° wind: 0 weath: overcast, shade/sun: 100%  
 muggy, humidity 78%

## I. Flower Abun

Cover	Plant spp:	# infl	# aveg flwr / infl	Total Flower/cpp
25%	Salvia rosmarinus	300	1	300 flowers
25%	Lavender	100	$\frac{7+8+25+2+1}{5} = 9.6$ flwr / infl	$9.6 \times 100 \text{ infl} = 960 \text{ flowers}$
50%	Bare ground	—	—	—

## II Bees

Note: no HB's + small bees using  
 Buckwheat ~ 20m away

### A. Point count: (1min)

Bees	Bees spp	assoc plant spp	Notes
	HB 1	Sal ros	Gather blue pollen

### B. Bee netting

0-5 min

Bee spp

HB 1

HB 1

Bee spp HB 1

HB 1

HB 1

HB 1

HB 1

plant spp

Sal ros

Sal ros

Sal ros

Sal ros

Sal ros

Sal ros

Sal ros

Notes

missed 1st attempt  
 caught 2nd time

Notes

5-10 min  
 so- 5 HB's on Salvia  
 - 1 unknown small, dark  
 bee on Rosemary  
 (missed!)

small black  
 unknown bee

# Bee Sampling

Date: 7/26/22 Loc: Storey @ Appleton Time: 1322

Temp: 64°F wind: 2.5 mph weath: 80% cover high + dry  
veg = dry shade (sun): 100%

## I. Flower Abun

cover	Plant spp:	# infl	# aveg flwr / infl	Total Flower/cpp
22%	Salvia rosmarinus	3	1	3
38%	oak leaf duff	—	—	—
40%	Bare ground	—	—	—

## II Bees

### A. Point count: (1 min)

Bees	assoc plant spp	Notes
Bees spp		

### B. Bee netting

0-5 min

Bee spp

plant spp

Notes

5-10 min

Bee spp

plant spp

Notes

Black "wasp"

1

on ground

- dragging in a dead spider!  
- phobs on Nat

# Bee Sampling

Date: \_\_\_\_\_ Loc: \_\_\_\_\_ Time: \_\_\_\_\_

Temp: \_\_\_\_\_ wind: \_\_\_\_\_ weath: \_\_\_\_\_ shade/sun: \_\_\_\_\_

## I. Flower Abun

Plant spp:      # infl      # aveg flwr /  
# infl

Total Flower/cpp


## II Bees

### A. Point count: (1min)

Bees

Bees spp

assoc plant spp

Notes


### B. Bee netting

0-5 min

Bee spp

plant spp

Notes

5-10min

Bee spp

plant spp

Notes

# Bee Sampling

Date: 7/26/22 Loc: Pac Heights Time: 11:59/12:02

(Broadway @ Lyon)

Temp: 69°F wind: 3mph weath: Sunny! shade/sun: 100%

Humidity: 77%

(50% partial clouds)

## I. Flower Abun

Plant spp: # infl # avg flwr / infl Total Flower/cpr

30%	Tea tree	①	—	senesced seed
15%	Annual grass (dead)	—	—	—
40%	Pine needle diff	—	—	—
15%	Bare ground	—	—	—

## II Bees

### A. Point count: (1min)

Bees	#	assoc plant spp	Notes
1 Black house fly		diff	

### B. Bee netting

0-5 min

Bee spp

①

plant spp

Notes

5-10 min

Bee spp

fly 1

plant spp

fly diff fly through

Notes

photographed on iNat

# Bee Sampling

Date: 7/26/22 Loc: "Strawberry Island" Time: 12:55-13:15  
 (Schotfield + Park)  
 Temp: 64°F Wind: Aveg 2.5 mph (1-4 mph) Weath: 100% overcast "hish & dry"  
 Shade/Sun: 100 w/ sun peeking out

## I. Flower Abun

% cover	Plant spp:	# infl	# avg flwr/infl	Total Flower/cpp
90%	<i>Fragaria chiloensis</i>	Ø	Ø	no flower
9%	wood chips			
1%	grass			

Note: see small metallic sun-metal bee foraging on *Sonchus asperiflorus* 6" outside plot

## II Bees

### A. Point count: (1 min)

Bees	assoc plant spp	Notes
Bees spp		
Ø		

### B. Bee netting

0-5 min

Bee spp  
Ø

plant spp

Notes

5-10 min

Bee spp  
Ø

plant spp

Notes

Saw a tiny bee flying around flowers low just as I was leaving

# Bee Sampling

Date: 7/25/22 Loc: Bldg 41 parking Lot edge Time: 1508-1550

Temp: 64°F wind: 2.0 mph weath: 80% overcast, "high + dry" clouds shade/sun: 100% sun

## I. Flower Abun

% cover	Plant spp:	# infl	# avg flwr/ infl	Total Flower/spp
20%	Oreonium	0	-	0 senesced
5%	Aloe	0	-	-
1%	Geranium sp	15	1	15
9%	Calandrinia grandiflora	28	1	28 counted only open flowers
3%	Agave <del>velutrinaria</del> (Octopus agave)	0	-	-
60%	Woodchips	-	-	-

## II Bees

### A. Point count: (1 min)

Note: saw what looked like a Halictus in a Cal gra, but missed it

Bees	#	assoc plant spp	Notes
fly	1	Cal gra	

### B. Bee setting

0-5 min

Bee spp #  
fly 111

plant spp  
Cal gra

Notes  
in flower

5-10 min

Bee spp #  
Honeybee 1

plant spp  
Cal gra

Notes  
checking out flower

# Bee Sampling

Date: 7/25/22 Loc: 864 A wallen Time: 16:00-16:15

Temp: 65°F wind: 0 mph weath: 75% overcast, light dry shade/sun: 90% SUN

## I. Flower Abun

Plant spp:	# infl	# avg flwr/ # infl	Total Flower/cpp
20% <u>Aconium</u>	<u>0</u>	<u>—</u>	<u>—</u> <u>Senesced</u>
15% <u>Salvia rosmarinus</u>	<u>0</u>	<u>—</u>	<u>—</u>
3% <u>annual grass</u>	<u>0</u>	<u>—</u>	<u>—</u>
62% <u>BARE ground</u>	<u>—</u>	<u>—</u>	<u>—</u>

## II Bees

### A. Point count: (1 min)

Bees Bees spp	assoc plant spp	Notes
<u>0</u>		

### B. Bee netting

0-5 min	<u>Bee spp</u>	<u>plant spp</u>	<u>Notes</u>
	<u>0</u>	<u>—</u>	<u>—</u>
5-10 min	<u>Bee spp</u>	<u>plant spp</u>	<u>Notes</u>
	<u>0</u>	<u>—</u>	<u>—</u>



Loc: Parking lot stage bottom parking lot below bridge

6/21/22

Time: 1506

wind speed: 1.1 mph

weather sunny 80°F

Plant spp. present: Calandrinia grandiflora (0.75 m<sup>2</sup>) 35 fls

- Geonium (1 m<sup>2</sup>) (all removed)

- Aloe (0.1 m<sup>2</sup>) 25 flowers

Start time

Sample end

End time

Wind speed

See sampling notes

Other visitors: - heavy wood chips between plants

Notes:

Loc: Cannonball Bldg (8 Area - Shendary

Date: 6/21/22

Time: 1517

wind speed 1.1 mph

weather sunny 80°F

temp 80°F

Plant spp present:

Agave 0.7 m<sup>2</sup>

Aloe 0.1 m<sup>2</sup>

BAP1 0.5 m<sup>2</sup>

Gal chil

Anagallis 0.7 m<sup>2</sup>

# flowers  
(0 flowers)

0

0

0

2007

7

Bare ground

wood chips

85% bare ground

Loc: Lendrum Ct (main site)

6/21/22

plant spp:

weather: 90°F

wind 1.1 mph

Sunny

- try to get representative plant spp  
- only count white brick wall

7/19/82 Bee Sampling  
 Arroyo gate 11:33 am -

High recent but  
 60°F  
 wind 1-3 mph  
 (avg 1.5)  
 16% sun

I. Flower Abon

SPP	% cover	# infl	# flower/infl	Total Plot
Agave	20%	0	-	-
Grevillea	3%	1	10	10 flower
Medicago polymorpha	1	30	7 + 8 + 3 + 3 + 3	5.2 in flower $\times 2 = 182$
Euphorbia repens				30 flower
Cistus "white flower"				
Word				

- transferred

Point Count = 0

Bee	Plant
0-5	0 -
5-10	0 -

Ab... ..

... ..

11

...

...

# Bee Sampling

Date: 7/21/22 Loc: Simonds @ Ruger Time: 15:35-15:55

Temp: 62°F wind: <sup>avg 1.5 mph</sup> 1-4.7 mph (range) weather: High, dry, overcast 100%  
 → not windy during actual survey shade/sun: 100% sun  
 w/ sun trying to peak through

## I. Flower Abun

<sup>1 cover</sup>	Plant spp:	# infl	# avg flower/ infl	Total Flower/spp
3%	Annual grass <del>Avena</del> <u>barbata</u>	Ø		
5%	Agapanthus <del>Africanus</del> <sup>158</sup>	Ø		
10%	Chasmanthe	Ø		
30%	Bare ground	Ø		
53%	thin wood chips	Ø		

## II Bees

### A. Point count: (1 min)

Bees	assoc plant spp	Notes
Bees spp		
Ø		
↓		

### B. Bee netting

0-5 min	Bee spp	plant spp	Notes
	Ø		
15-10 min	Bee spp	plant spp	Notes
	Ø		

# Bee Sampling

Date: \_\_\_\_\_ Loc: \_\_\_\_\_ Time: \_\_\_\_\_

Temp: \_\_\_\_\_ wind: \_\_\_\_\_ weath: \_\_\_\_\_ shade/sun: \_\_\_\_\_

## I. Flower Abun

Plant spp:	# infl	# avg flwr/ # infl	Total Flower/spp

## II Bees

### A. Point count: (1min)

Bees Bee spp	assoc plant spp	Notes

### B. Bee netting

0-5 min      Bee spp      plant spp      Notes

5-10 min      Bee spp      plant spp      Notes

# Bee Sampling

Date: 7/18/22 Loc: Wyman @ Brown Time: 15:25-15:51

ideas: (min "point count" count) Temp: 105°F wind: 3-5 mph weath: 56% high clouds shade/sun: 100% sun

Semin sample not HB in BH Flower Abun

Flower open or closed? / cover	Plant spp:	# infl	# avg flwr / # infl	Total Flower/spp	notes
5%	Acacia melanoxylon	0			5' tall sapling
5%	Fragaria chiloensis	0			
"Knifefish"	"Red-hot Poker" Ornamental (good clumpy basal lvs (photo on eye not	0			gone to seed
10%	(Bare ground)				
1%	Dichondra sp.	0			

## II Bees

A. Point count: (1 min) = 0 bees

Bees	assoc plant spp	Notes
Bees spp		
Unknown flying insect	Acacia (leaf)	missed!

## B. Bee netting

0-5 min

Bee spp

plant spp

Notes

1 Unknown flying insect

Acacia (leaf)

missed!

5-10 min

Bee spp

plant spp

Notes

0

# Bee Sampling

Date: 7/19/22 Loc: Arguello gate Time: 11:30am - 12:00pm

Temp: ~60°F wind: 1-3 mph (avg 1.5 mph) weath: High overcast sun trying to peek out, dry veg shade/sun: 100% open

## I. Flower Abun

% cover	Plant spp:	# infl	# avg flower / infl	Total Flower/cpp
20% <sup>double check in Carlos</sup>	Agave	2 <del>infl</del>	—	—
3%	Grevillea		10	10
<1%	Medicago polymorpha	30	$\frac{7+8+3+3+3}{5} = 5.2$	$5.2 \times 30 = 182$
<1%	Euphorbia peplus			30 flowers
<1%	White-flowered cistus			
	75% <sup>W. cistus</sup>			

## II Bees

A. Point count: (1 min) =  $\emptyset$

Bees	assoc plant spp	Notes
Bees spp		
$\emptyset$		

## B. Bee netting

0-5 min	Bee spp	plant spp	Notes
	$\emptyset$		
5-10 min	Bee spp	plant spp	Notes
	$\emptyset$		

7/5/22 Bee Sampling

Loc: 1418 C Washington (Fruityard) time 1451-

weather: overcast 90% cover, wind: 0 mph, temp: 68°F; 100% in sun  
70°

Plot coverage: 80% sand, 20% veg

Flower Abun.	Plant spp	# flower/inf	# infl	Total flower/spp
	Aeonium (yellow flower)			19
	<del>"stonecrop"</del> (photo by J. Lee)			6
	Aeonium Kiwi			
	Aeonium ciliatum			1
	Gnaphalium flavum			10

Bees	Spp	sex	0-5 min	5-10 min	on what plant
	Bombus var?		1	0	on "stonecrop" Aeonium Kiwi
	(no under belly stripe, yellow face)				

Notes: 1 BB - var visited stonecrop (during initial assessment)

7/5/22 Loc Genl Ken/Torrey (Tides) Lavender Rosemary time: 1603 - 1840  
weather: sunny, 15% cover, feels like 68°F wind 5 mph, 100% in sun

Plot coverage 40% plants, 60% bare

Flower abun.	Plant spp	# flower/inf	# infl	total flower/spp
	Salvia rosmarinus	4+5+5+5+5	5	50
	Pseudognaphalium luteoalbum	~8 each	30	240
	Lavandula sp.	4+5+5+5+0	5	3.8 infl x 140 infl = 532 flower

Bee	0-5 min	5-10 min	visit
		Apis mellifera (3)	- missed, Rosemary
			- Lavandula

Notes: 50 bees 1 on Rosemary (Megachilidae) →

# Bee Sampling

W. Crissy

Date 7/4/2022

Loc: Island (Lendrum & Lincoln)

Time: 1422 - 1641

weather: ~68°F

wind 1 mph

shade/sun: 99% in sun

90% sunny

Flower abun	spp	# infl	# flower/infl	Total flower/spp
	Calandrinia gigantea	6	1	6 (all closed)
	CA Poppy	24	1	24 (20 open)

Bees	spp	0-5 min	5-10 min
		0	0

Notes: No bees observed during initial site observation of VCC  
ground cover ~ 25% plants, 75% bare ground

7/4/22

Loc: Taylor @ Sheridan

Time: 1657 - 1722

weather ~ 68°F

wind ~ 1.2 mph

100% sunny

100% sun

90% clear

Bees	0-5 min	5-10 min
	0	0

Flower abun	spp	# infl	# flower/infl	Total flower/spp
	Grevillea	6+9+3+2+3	5	253 open (only averaged open infl w/ open flowers)
	Euphorbia peplus			~200 flowers
	Geranium			3 flowers

Note: 50% cover plants, 50% wood chips

1 hummingbird Anna

1 yellow/black wasp

other plants: Play, Aloe, in vicinity (red caplet) yellow butterfly iris