How to bee a citizen scientist- 101

Thank you for participating in BYOBEEZ Summer Citizen Scientist Program. This quick reference guide will guide you through the process of maintaining your veggie garden and collecting important data that will help protect our native pollinators!

Our goal in BYOBEEZ is to promote education, outreach and conservation efforts that focus on native bees. Native bees are key members of our urban ecosystem but often go un-noticed or even worse, get a bad reputation. We hope that by being involved with BYOBEEZ you will learn a little more about the neat biodiversity hidden in your backyard! Now on to the science:

By now, your veggie garden is installed and ready to go. You and 39 other citizens of the fox cities have the same veggie garden layout! The data you report will tell us all about the bees in your backyard and the veggies they are pollinating.

Maintaining your garden and collecting veggie data:

DO's

- Weed your garden frequently
- Water your garden at least 2-3 times a week. If a dry/hot spell hits, BYOBEEZ will send a reminder for additional watering dates.
- Hand remove any pests that are damaging your plants (e.g. slugs, beetles, grubs) but remember to add a note on your data entry for that week
- Take pictures of your veggies or bees and share them on our social media using the hashtag #BYOBEEZ
- Tend to your other gardens as you normally would
- Keep us posted of your travel dates so a B-team member can collect data for you
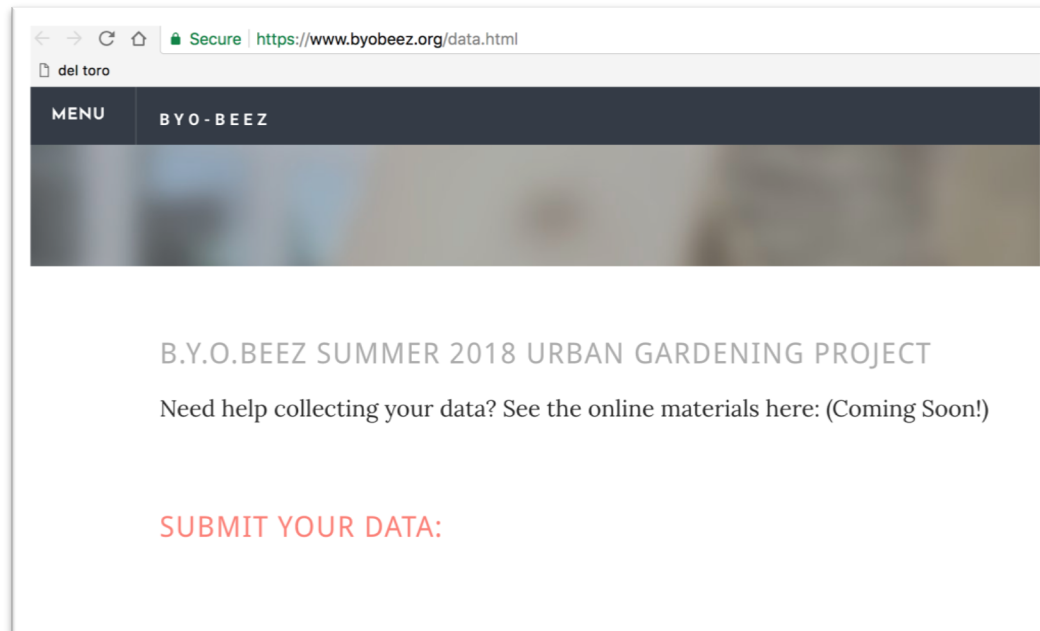
DONT's

- Fertilize or apply pesticides to your BYOBEEZ garden
- Excessively water your garden
- Plant other veggies in the BYOBEEZ garden bed but feel free to plant your other gardens as you normally would

How to access the data entry portal:

Simply visit us at www.BYOBEEZ.org/data and click on the "Submit your data" link:
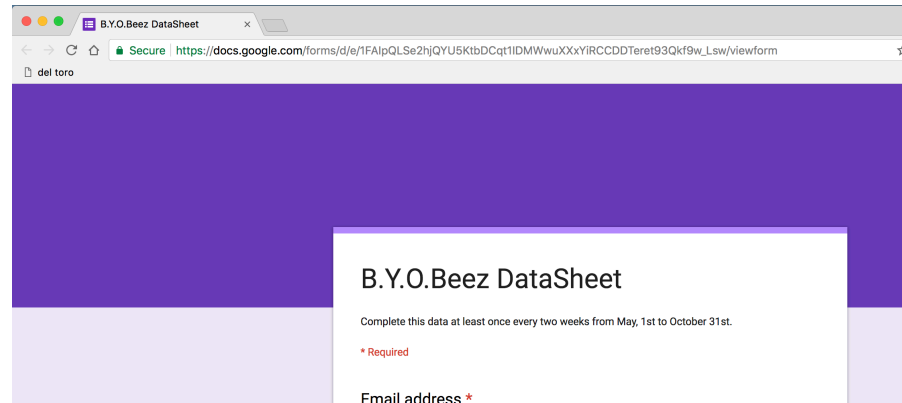

You can also get to the data entry sheet by following this link: LINK TO DATA ENTRY SHEET!

https://goo.gl/forms/5zf9ZbxPsUVV5znq2

Simply follow the questionnaire and enter as much data as you can. If you run into any problems or have questions or concerns email send us a Facebook message us or give us a call and we will get back to you as soon as possible.

Ways to contact us:
Email: atwbyobeez.@gmail.com
Facebook: https://www.facebook.com/Appletonpollinatorproject
Text: 915-252-5274
Call: 920-832-7213

How often should I enter data?

The minimum requirement is that you enter data at least once every two weeks. With more data available, we will be able to paint a more complete picture about the bees in your backyard. Data should be collected every two weeks and no more than once per week. The calendar below indicates the dates that you should be collecting bee, flower and fruit set data.

BYOBEEZ prizes will be awarded to those who contribute data on a weekly basis!

May

S	M	T	W	Th	F	S
		1	2	3	4	
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	

June

S	M	T	W	Th	F	S
						1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30						

July

S	M	T	W	Th	F	S
	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	31			

August

S	M	T	W	Th	F	S
					1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

September

S	M	T	W	Th	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30					

October

S	M	T	W	Th	F	S
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31		

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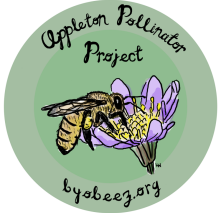
Planting Week

**Collect Flower Count data any day this week.**

Collect bee data any day this week

Fruit set data can be collected and entered as you harvest your veggies.

Counting Flowers:

At least once every two weeks, visit your garden and count the flowers on every plant. The datasheet below will help you keep track of the number of flowers on each plant. A good idea is to start from the bottom of the plant and count the flowers as you go towards the top. It is also a fun activity to do with your kiddos, friends or neighbors, have them double check your counts!

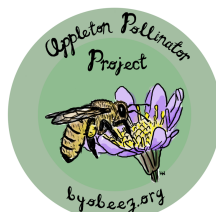| Plant	Covered- No Bees	Uncovered- Lots of bees
CA Wonder Chili		
PEAS		
BEANS		
EGGPLANT		
Anaheim Chili		
Caballero Peppers		
Cherry Tomato		
Hungarian Pepper		
Maskato Tomato		
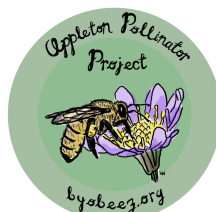
Collecting Bees:

Remember to collect bees at least once every two weeks.

1. Attach a red, blue, white and yellow bowl to the plywood board that was provided using the Velcro on their underside.
2. Fill each bowl with about 200 ml or one cup of soapy water. Just a few of drops of soap per 2 cups of water will do the trick.
3. Place your bowls on the Garden Stake in your garden early in the morning (before 8 a.m.).
4. Collect your bowls at sunset.
5. Get rid of the soapy water immediately and collect all the bugs in your bow by using the strainer provided.
6. Transfer the bugs you collected into a 50 ml vial and fill it with 25 ml of Ethanol (provided). Make sure to keep the samples from each bowl in separate vials. 1 vial for the blue bowl, 1 vial for the red bowl, 1 vial for the white bowl, one vial for the yellow bowl.
7. Label the samples by dropping a label provided into each vial and writing the date on the backside of the label (e.g. YELLOW- 5/22/19 for May 22 2018' yellow bowl)
8. The Blue Vane Trap should be set up in a nearby post or tree. Filled with 200 ml of soapy water and allowed to collect bees for 72 hours. Repeat procedure in steps 6 and 7 to sort and store the insects you collected.
9. Let us know when you are ready for us to collect your samples, simply leave them by your door in a Ziploc bag. If you need more ethanol, also leave your squirt bottle and a B-team member will refill it.

Weighing your veggies:

Success! Your veggies are starting to come in!

1. As your vegies are ready to harvest, pick them carefully.
2. Record which plant they come from.
3. Count the number of veggies collected
4. Weigh them using the scale provided using grams as the units (g)
5. Use the datasheet below to help you keep track of your data.
6. Enter your data using the data portal (see above).

Plant	Covered No Bees		Uncovered- Lots of Bees	
	Count (number harvested)	Weight (in grams)	Count (number harvested)	Weight (in grams)

CA Wonder Chili	Peas	Beans
Eggplant	Anaheim Chili Peppers	Caballero Peppers
Cherry Tomato	Hungarian Pepper	Maskato Tomato
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