

# Sharon Reeve Discussions

She mentioned that the master gardener program has a Virtual Spring Seminar Mar 20 – 28. The 2021 Seminar includes 13 classes and 3 workshops. \$35 is the fee. For more information go to UCCE Master Gardener Program @ [mastergardenerSD.org](http://mastergardenerSD.org);

[help@mastergardenerSD.org](mailto:help@mastergardenerSD.org) – email them with questions and you will receive answers.  
858-822-6910

We are rich in biodiversity here in San Diego. There are 4000 Bee species in the US. CA has 1500 species. We are the most biodiverse county in the nation. Our biodiversity actually increases. Honeybees build hives and are good pollinators. Native Bees & Honeybees are dying because of what is called Colony Collapse Disorder

## What is causing the collapse?

It is pest related. She presented a chart which showed a timeline of increased pesticides and the corresponding arrival of honeybee hives becoming empty.

Another problem we have is that Bees are trucked around the US for pollination. Different seasons and crops are forcing us now to ship the bees around the country to serve as pollinators.

The Almond crops need all honeybees to pollinate the trees. This is a huge industry.

75% of all flowering plants require pollination.

One in 3 foods require pollination.

## What are the causes of the Bee population to be on the decline?

Pesticides  
Virus & Disease  
Rise of pesticides and declination of honey

Neonicotinoid Pesticides  
These pesticides persistent after years of use.  
It kills bees.  
It only takes a very low dose of exposure PPB  
Effects are cumulative  
Impairs or kills other organisms for which it was not intended for.

When Neonicotinoids are used the plant becomes toxic. Even the drinking water on the plants leaf is toxic.

There is still hope for our bee population! Garden without pesticides.

## Pollinating

Our native bees are good pollinators

- More efficient
- Active early in the day & in rain
- Males also pollinate
- Fly very fast

Bumble bees can pollinate by vibrating to a frequency of C, opening up the tube of pollen, and releasing the pollen from the tube.

Other Pollinators are Flies or hummingbirds

Don't be afraid of bees. They don't want to sting you. They are curious and may fly around you if you smell sweet.

How do you know if it is a bee or not? The eyes are on the side of their heads whereas a fly or other insect the eyes are in the front.

Sharon presented us with several slides of different bees. Please see the video for the details.

## How can you help?

Plant 1 meter square of plants, they like large groups of plants. They won't come and pollinate if there isn't enough to attract them.

Be a messy gardener

Provide water and bare earth

Garden organically

Best flowers to plant that are most attractive to native bees are White, Blue, or Yellow.

Plant some of the following plants to have attractive pollen.

1. *Arctostaphylos pungens*
2. *Lupinus* species – plant annuals they reseed
3. *Cercis occidentalis* – tree
4. *Salvia* Dara's Choice – for small bees
5. *Ceanothus* "Dark Star" – Tree
6. *Ceanothus* Ray Hartman – Tree; finicky, bet to start in the fall & ease off water in the summer.
7. *Hesperoyucca Whipplei* – dies soon after flowering, the carpenter bees lay their eggs in the stock.
8. *Frangula Californica*
9. *Bombus* – coastal daisy

10. Calliandra Californica – marine blue butterfly loves this plant
11. Verbena Lilacina
12. Phacelia Californica
13. Heteromeles Arbutifolia
14. Ronneya Coulteri – needs space, a white cloud, shorter big flowers
15. Diadasia Species
16. Leucophyllum Frutescens
17. Grindelia Stricta variety platyphylla – ground color w/ summer blooms
18. Chilopsis Linearis “Bubba” – Tree, large flowers without seeds
19. Palo Verde Desert Museum – Tree, needs water twice a year, needs very dry & hot weather
20. Malosma Laurina – small flowers bees love
21. Vitex Agnus -Castus
22. All buckwheats are pretty
23. Eriogonum Giganteum

## Where to get and how to plant?

Natives Now Socal - <http://nativesnowsocal.blogspot.com/>

Buy plants with no neonicotinoids.

Places who do not use neonicotinoids:

1. Monrovia Nursery
2. Las Pilitas Nursery
3. Annies Annuals
4. Gourmet Grown

Attached is a more in-depth look at nurseries that don't use neonicotinoids and those who do. Also included is a list of products not to buy. Note: it is in jpg format.

Buy plants from Esty, they are small growers who will usually answer questions.

Leave wild spaces in your landscape.

## What else can you do?

Write to the EPA to ban neonicotinoids. Tell them that we want it banned.

Leave wild spaces

Plant flowers in large spots

Leave water out for them too

## Questions

Q – I planted a lot of natives after November last year and they died. How much water do they need?

A – When the weather starts to cool in Sept/Oct you can water every couple of days. Water less when you start to see growth. When the roots have started to grow it is a sign that water can be cut back. 1<sup>st</sup> heat of summer they may need some water then you don't need to water.

Q – Do natives do well in clay soil?

A – Plant natives high, an inch out of soil, and mulch them. They need some water to get going. Some natives like clay soil. Milkweed does well in clay soil. Milkweed is hard to grow? Plant in the fall, water them more than other natives. Grow them in pots, more convenient to water.

Q – Propagating native plants. Have you been able to with Manzanitas?

A – No I haven't propagated Manzanitas. There is a book out there that describes this process.

Q – Do you know the common brands of neonicotinoids?

A – Bayer has a large list of them. I will send a list. Any pesticide that mentions it is systemic, lasting a long time.

Q – Can bees go to the fountain or does it need to be still for them to benefit from the water?

A – They need to be able to wade in the water like on a rock & it should be in full sun.

Just because it is labeled as Organic, it may still be toxic to bees. These are toxic to bees:

- Spinosad Spray
- Neem oil

If you are using neem oil use it late in the day, in the morning it should be ok for the bees.

I do not use pesticides. I spray aphids off my milkweed.

When aphids are present, the garden is communicating. Lady bugs will show up to eat them. Then they become aphid mummies.

When is a good time to plant? When it is cool. I am planting tomorrow. Watering Natives, water when it's cool, not in a hot day.

**Nurseries that don't use Neonicotinoid Pesticides\***

1. Moosa Creek
2. Native West
3. Las Pilitas
4. Monterey Bay (except Phormiums)
5. Native Sons
6. Monrovia
7. Xera Plants
8. Iseli Nursery
9. Terra Nova
10. Flowers by the Sea
11. Gourmet Grown
12. Forest Farm
13. Proven Winners - Direct from their nursery only
14. Heirloom Roses
15. Dancing Oaks
16. El Toro Plants (Walter Andersen's Nursery)
17. Bluestone Perennials
18. Joy Creek Nursery
19. Digging Dog
20. High Country Gardens

\*Home Depot and Lowe's are supposed to mark all plants that are treated, but I don't believe they do.

**Nurseries that use Neonicotinoid Pesticides**

1. San Marcos Growers

Don't buy or apply products that contain:

Imidacloprid  
Acetamiprid  
Clothianidin  
Dinotefuran  
Nithiazine  
Thiacloprid  
Thiamethoxam

Products that contain neonicotinoid pesticides contain the word "systemic" or they will say something like "once a year."

Bayer Advanced Products  
Ferti-lome Systemic  
Ortho Bug B Gon Year-Long products (most Ortho products too)  
Knockout Ready-To-Us Grub Killer  
Hi-Yield Stemic Insect Spray

Caption