# The Leaflet

### Central Coast Chapter CRFG

May 2022 Newsletter by Jenny Weaver & Tom Sheldon

#### **Next CRFG Meeting**

**Where:** Hein Ranch 2255 Woodland Hills Road. Arroyo Grande

**Our Host:** Martin Hein and family.

**When**: Sat. June 11, 2022 at 1:00 PM.

Directions: From the intersection of Woodland Hills and El Campo, continue east down the dirt road to the end. Go through large black gate. Park by the grapes. Park ON the road. Do not pull off the road. It is very sandy and you may get stuck!!

Pismo Beach Pismo Beach Premium Outlets Butterfly Grove 101 -Walmart Arroyo Grande High School Grover Beach Arroyo Grande Fair Oaks Ave Oceano Dunes SVRA Oceano. Oceano Dunes Pole 2 Pacific Dunes Ranch RV Resort 5 Woodland ills Rd, Arroyo. Callender Blacklake Rock Safe S

Please note: Martin says we

can sit on his patio for our meeting and chat. It is in the middle of the orchard He has plenty of tables and chairs because he has hosted weddings there.

**REFRESHMENTS**: Please bring something to share. Bring your own water, preferably in your own container.

Here is a little bit of information from Martin Hein, our host.

Martin is a farm manager from Bakersfield and grows trees and vines in the valley. He is married to Kathryn and has 4 children. He purchased the original property in Arroyo Grande in 2011 (5 acres). He has since added 38 more acres.

The Hein's have avocados, wine grapes and lemons planted now. They are looking to plant something else on about 10 more acres and would be interested in members' feedback or experience with something unique that could be commercially grown.

The property gets cold in winter. This season, a late freeze damaged the avocado bloom, even after frost water and wind machines working.

"It was just another season with its own unique set of problems."

One of Martin's latest projects is interplanting wine grape rows and new blocks of 4 & 8 clones in each block (all on own root and no clones are planted next to each other). There are 2,900 vines per acre! ... with  $3' \times 5'$  spacing.

#### **Announcements**

#### Center for Sustainability (CFS) at Cal Poly

Larry Hollis thought this site would be of interest to our group. There is a place where you can click to see the most recent list of announcements.

https://cfs.calpoly.edu/announcements

This information is from Kayla Rutland, the Executive Director of City Farm SLO (CFS)

City Farm SLO has a **Farm Education Coordinator** paid part-time position open. The job posting can be found here on Indeed:

https://tinyurl.com/2p8eazf5

#### The Great AGventure, Where Kids Explore Agriculture.

By Jenny Weaver and Marv Daniels

On May 13, Marv Daniels and Pat Moudakis volunteered for The Great Agventure South at the Arroyo Grande High School Ag Tech Department. They taught 20 minute apple grafting lessons to five fourth- grade classes throughout the morning. The kids asked great questions and the teachers received the grafted apple tree as a gift. A delicious catered lunch was provided to the volunteers. A total of 420 students attended the event and rotated between many miniagricultural classes. There will be another Great AGventure North event in October at the MidState Fairgrounds. That event is expected to reach 1,400 students.

Volunteers needed! Please check with Marv Daniels. He would like another CRFG volunteer who is comfortable with public speaking who would like to volunteer at the AGventure events. It would involve setting up and teaching several mini classes related to CRFG and agriculture. It doesn't have to be grafting. It could be about different types of fruit that grow in north county or south county. It could be about cross breeding apricots and plums to create Aprium or Pluots. Marv is the contact with The Great AGventure and he would be the liaison between you and the Great Agventure organizers.

Contact Marv Daniels at <a href="marvnpet@aol.com">marvnpet@aol.com</a> for more information.



Marv Daniels teaching grafting at The Great Agventures Arroyo Grande May 13, 2022
Photo by Kimberly C. Bradley, Executive Director
San Luis Obispo County Agricultural Education Committee



Pat Moudakis demonstrates grafting to a class at The Great Agventure May 13, 2022

Photo by Kimberly C. Bradley,

Executive Director San Luis Obispo County Agricultural Education Committee

#### May 14, 2022 CRFG Meeting

#### City Farm, SLO

by Jenny Weaver

Many thanks to our previous co-chair Tucker Schmidt, who stepped in to run the meeting because neither of the current co-chairs (Alisha Taff and Seth McMillan) could attend. We had a good turnout of members who braved the heat and wind.

City Farm SLO is a 501(c)(3) non-profit organization tasked with maintaining the Calle Joaquin Agricultural Reserve. The 19 acres property is leased from the city of San Luis Obispo. The City Farm uses 4 acres and rents out the rest of the land. Part of City Farm SLO's job is to educate and engage the community in sustainable farming practices. They certainly educated and engaged us on the  $14^{th}$ .

Shane Lovell, Farm Manager, was an energetic and passionate speaker. He pointed out some of the main features of the farm while we were standing under the large pergola. He said the main clients are the school system, the Food Bank, and a couple of local restaurants. He also said they sell directly to consumers on Harvestly.co, which can be found at this link:

https://harvestly.co/vendors/city-farm-slo (note: it's .co not .com)



Shane Lovell (center) and CRFG members at City Farm

Shane told us about how composting is done on the farm. We started at the worm bin. All the lush leftover greens from the farm go into the top and worm poop comes out the bottom! Shane is an expert because he used to work at Black Diamond VermiCompost in Paso Robles. He also explained the 3-bin compost system and the bioreactor. Most of these byproducts were used to make "teas" or infusions for the plants.



CRFG members



From left to right: The worm bin with open lid, 3 compost bins and bioreactor (black cover).



The underside of the worm bin. The "castings" (worm poop) is scraped off from here and distributed throughout the farm

In the next picture, Shane points out the most established beds for growing vegetables. He said it's been about three years since they have been tilled. The plan is to never have to till again. Now that crops are established, they will cut down the old crop, leave the roots in the ground, and then broadfork, which helps aerate



The vegetable and flower beds.

the soil and allows water to get deeper. The native soil on the farm is heavy clay, so they've been building up organic matter on top of it. Large deliveries of Cal Poly compost were used to improve the very hard clay soil.

Weeds such as black mustard and oxtongue are a problem at City Farm. Some previous crops also keep coming back. Black mustard, native to Eurasia, grows profusely and produces allelopathic chemicals that prevent germination of native plants. So while the yellow flowers may be pretty, they are harmful to native plants. Volunteer crews work to keep the weeds down.

City Farm also grows flowers. They are not just for looks. The flowers are meant to attract beneficial insects. The adults of several "good bugs" (Syrphids aka Hover Flies or Flower Flies and Lacewings) feed on the flowers' pollen and nectar but they lay their eggs on the vegetable crops to devour pests like aphids and whiteflies.

Sometimes the pests win! Shane tried growing eggplants but they ended up being a magnet for pests, so he decided not to grow them!

One of my favorite spots was the Food Forest shown in the next picture. There were 2 wide beds that were jam packed with flowers, vegetables and fruit trees. Grapes grew on a tall deer fence and there were many types of deciduous fruit trees. One was a M111 (apple root stock) that was waiting for several different types of apples to be grafted onto it. The understory was mainly beautiful purple Iris and orange Calendula. The calendula leaves and petals are edible. Calendula is used in coloring cheese and in skin lotions. Shane said you only have to plant

it once! Shane plans to add some macadamia trees for the upper story growth. One problem with the food forest concept is that the plant growth is so dense that it is hard to see or trap gophers. It is a "gopher refuge" according to Shane.

There was one bronze-leaved tree that David Maislen identified as a Spice Zee Nectaplum tree. He said it's one of the best tasting fruits you can grow!

https://www.isons.com/shop/specialty-fruits/hybrid-fruit-trees/spice-zee-nectaplum-tree/



The Food Forest



Permaculture orchard

One important lesson explained by Shane is that olive trees are evergreen and do not like having all their branches and leaves cut off!! The tree he showed us was looking pretty barren, but it still had some green branches and may come back to life. In my own experience, I have seen enormous mature olive trees that were cut back so they could be transplanted and they eventually regrew.

There are several sheep in the field. It's easy to get the sheep back to their shed at night. One is halter trained so Shane leads that one back to the shed with one hand and carries a bowl of grain with the other hand. All the other sheep follow as sheep tend to do. Shane said one of the sheep is named Tucker, which gave the group a big laugh as we all turned to look at our former co-chair Tucker. For the record, tucker means food in Australian slang.

The "high tunnel" or "long house" contained a variety of plants that benefitted from the defuse light produced by the opaque plastic covering. There were tomatoes, cucumbers, peppers, and some enormous beets. Crop locations were rotated so that tomatoes or other crops get planted in a new row where they weren't grown the year before. The tunnel's metal structure was used to hang string to support the



Tucker hearing about the sheep named Tucker

early growth of tomato vines. Shane explained that as the vine grows, the string is lengthened so that the long vines can eventually be dropped near the ground where they coil up near the plant.



The "high tunnel" or "long house"

Shane pointed out a bed of dichondra in the long house that seemed to be a happy place for large gatherings of pill (roly-poly) "bugs". Normally, pill bugs don't eat plants, but in this place, they could not resist eating the greens, so Shane put down a layer of Diatomaceous Earth (DE) around the stems. DE is a dust containing silica (silicon dioxide) that is abrasive and causes insects and roly-polies to dry out. If you decide to use it to get rid of your own pests, be aware that it is an irritant to your lungs, skin and eyes. Wear a mask when applying it! I've included some sites at the end of this article where you can get more info.

Editor's note: Pill "bugs" are often associated with insects and are referred to as "bugs," but they actually belong to the subphylum Crustacea.



Diatomaceous Earth around cucumber plant stem.



Three Amigas! From left to right Rebecca (newcomer), Heather & Ann May 14, 2022 Photo by Jenny

One of the new attendees I met was Rebecca. She was a CRFG member in southern California and she told me she has "met her people"! She also volunteers for Gleaners and other non profits. She was attending with her friends Heather and Ann.

# WORM FARM

Continuous Flow-Through Vermicompost System

### Description

This compost system cultivates red worms to harvest their biological waste product known as worm castings or vermicompost. Food for the worms is added to the top of the bed, and the vermicompost is harvested from the bottom. The worms gather mostly at the top where the food is, so they aren't removed with the harvest. This process allows for continuous harvests of biologically-rich compost without disturbing the worms or their environment.

Vermicompost is one of the best fertilizers found in the natural world. It is rich with nutrients that plants can use directly for growth, but the major benefits come from the diverse communities of microbes that it contains. The vermicompost that this system produces has a vast community of organisms that all work together to build healthy soil and promote the work together to build healthy soil is thriving, the health of our crops. When the soil is thriving, the plants in that soil will thrive without additional inputs. Adding vermicompost to our garden regulary will adding vermicompost to our garden regulary will ensure that the system stays vital and productive.

#### Care Instructions

Feed the worms food scraps, newspaper, and a mix of yard waste. Make sure all material is shredded as small as possible, for fastest digestion by the worms.

DO NOT feed worms meat, dairy, oils, citrus, onions, canned sauces, peanut butter, or any processed foods. Also be careful to not add thick layers of grass clippings, as it will make soil too hot for worms.

Check moisture level 2 to 3 times per week and water to keep moist as needed. Moisture level should be about 70% moisture. A 70% moisture level feels like wet soil that sticks to your hand, but does not drip extra water when pressed between palms.



# BUILD HERE

1st Step in our 3-Step Composting System

#### Description

This compost pile is in the works and all new material to be composted should be added here. Please add fresh material such as garden waste, food scraps, chicken manure, lawn clippings and tree leaves. Most foods can go into the compost pile in small amounts, but it's best not to put a lot of meat, dairy, or oils.

Once this pile reaches as high as the container will allow and the composition process has started, it should be flipped into the next bay to rest.

#### Care Instructions

Add green waste and other organic materials to be composted here.

Avoid adding large amounts of dirt or soil.

Small branches can be added if they are chopped to 3-4 inch pieces.

Check moisture level 3 to 4 times per month and water to keep moist as needed. It should be moist, but not dripping wet. Moisture level should be about 50-70% moisture.





# READY TO USE

Final Step in our 3-Step Composting System

## Description

This compost pile is completed and ready to use on the garden. The organic matter that was added has broken down into humus, and it can be added to the soil to provide nutrients to the plants and the soil.

Compost is a great natural soil amendment that promotes soil health and plant health, and it's made completely from items that would normally be plant byproducts, food scraps, and other wasteritems, allows us to reduce the amount of waste that we create while also reducing our need to purchase closed-loop system allows us to be more efficient and reduces our environmental footprint.

## Care Instructions

Don't allow compost to completely dry out in this phase. If it goes completely dry, it will still be good compost, but it may be difficult to rehydrate.

Don't add any un-composted material to this pile.



A huge beet growing in the long house featuring Rebecca's helping hand

#### References:

The National Pesticide Information Center has a lot of facts about DE:

http://npic.orst.edu/factsheets/degen.html

#### Wikipedia:

https://en.wikipedia.org/wiki/Diatomaceous earth



Owl House (occupied with new chicks)

Read more at Gardening Know How: Uses For
Diatomaceous Earth – Diatomaceous Earth For Insect Control
<a href="https://www.gardeningknowhow.com/plant-problems/pests/pesticides/diatomaceous-earth-insect-control.htm">https://www.gardeningknowhow.com/plant-problems/pests/pesticides/diatomaceous-earth-insect-control.htm</a>

Here's an except from Gardening Know How with this important warning:

"It is extremely important to purchase only the "Food Grade" diatomaceous earth and NOT the diatomaceous earth that is and has been used for swimming pool filters for years. The diatomaceous earth used in swimming pool filters goes through a different process that changes its makeup to include a higher content of free silica. Even when applying the food grade diatomaceous earth, it is of the utmost importance to wear a dust mask so as not to inhale too much of the diatomaceous earth dust, as the dust can irritate the mucous membranes in your nose and mouth. Once the dust settles, though, it will not pose a problem to you or your pets."

#### **Orchard Update**

By Dara Manker April 21, 22

We have a new addition to the CRFG Demonstration Orchard: a six-year-old Toka plum tree, donated by Richard Schmidt.

The *Prunus salicina* is also called the "bubblegum plum" or "candy plum" because the fruit is extremely sweet, and tastes and smells like bubblegum! The skin is reddish-bronze and the flesh of the plum is an apricot-color. The fruits ripen in August - September. The Toka plum was introduced in 1911 and is a cross between American plum and the fragrant apricot of China.

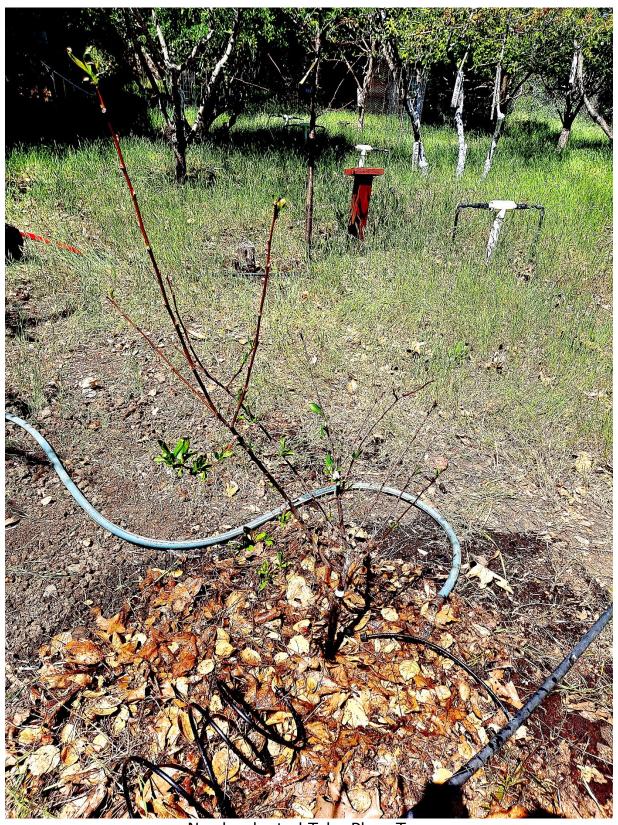
Only one Toka plum is required because it self-pollinates. Tons of pollen is produced that gives a heavy harvest and also pollinates other plum trees.

Creamy white flowers bloom in spring making a beautiful display. The green foliage turns burgundy-purple in the autumn. Toka plum has a vase-shaped form and medium growth rate. Any soil type is fine for this tree. It likes full sun to part shade, well-drained soil, and medium moisture.

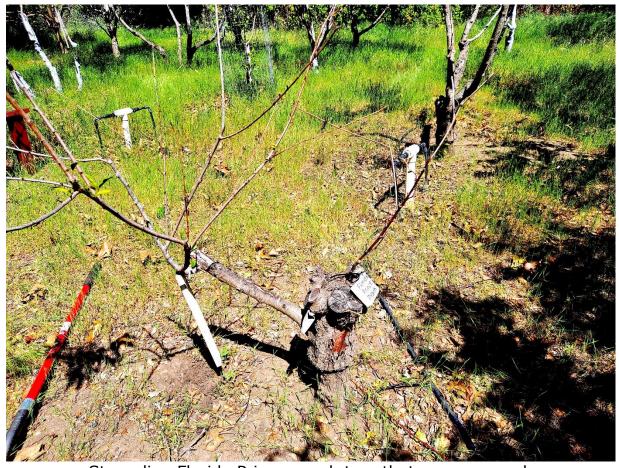
The above information comes from University of Minnesota website: <a href="https://trees.umn.edu/toka-plum-prunus-salicina-toka">https://trees.umn.edu/toka-plum-prunus-salicina-toka</a>

We planted this tree in row 7 of the orchard. It replaces a Florida Prince Peach that had been struggling, as you can see from the picture. The orchard still has another Florida Prince peach tree that is right next to it. That Florida Prince Peach should do fine and still bear fruit as it is self-pollinating.

Thank you, Richard Schmidt, for donating this tree to the orchard. Can't wait to taste the fruit!



Newly-planted Toka Plum Tree Photo by Dara

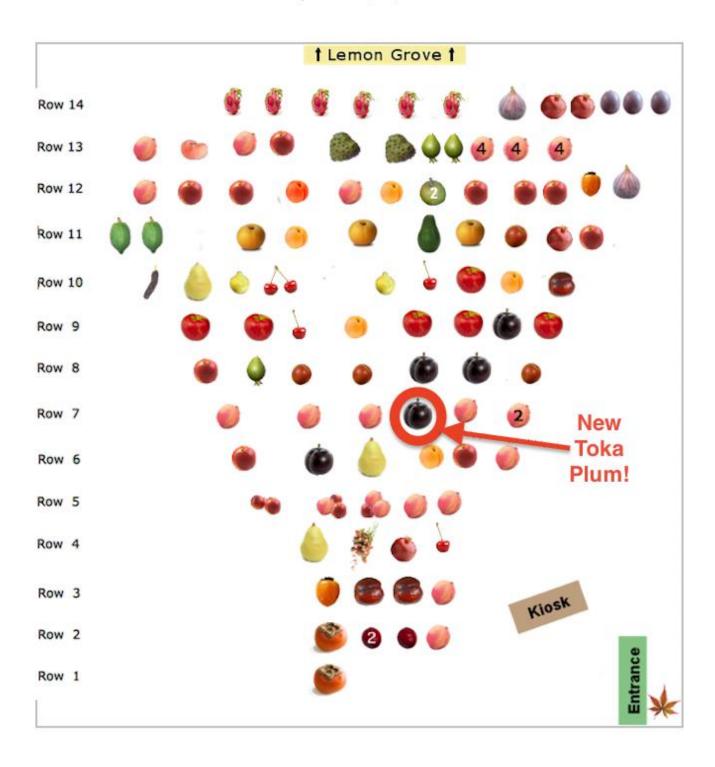


Struggling Florida Prince peach tree that was removed.

Photo by Dara

# **Orchard Map**

Updated 4/19/2022



#### What's in Season

#### WHY GROW A MULBERRY TREE?

By Robert and Carol Scott May 14th, 2022

Mulberry trees are high harvest, fast growing and low maintenance. Besides annual pruning they do not require much care. Growing mulberries is like growing blackberries, but on a tree.

Mulberries are in the Moraceae family. These are the different species:

White Mulberry

Black Mulberry

American Red Mulberry

Japanese and Korean Mulberry

Himalayan Mulberry

Morus alba

M. nigra

M. rubra

M. australis

M. laevigata

There are also hybrids between *M. alba* and *M. rubra* (example Illinois Everbearing)

They grow best in full sun or light shade, tolerate sandy soil, and depending on the species they are cold hardy from -25 degrees to 25 degrees. The white species is the most cold hardy, black species least, depending on clone in both cases. They are messy trees, so do not plant by decks or sidewalks. Once established they are very drought tolerant.

You can graft in winter when dormant, before sap flows, otherwise the sap can interfere with graft success. I avoid this problem by having a spray bottle with water to spray graft cuts before wrapping.

Cuttings also work on many varieties; some species can be more difficult to start from cuttings.

We grow the following varieties: Black Persian, Illinois Everbearing, Tehama, Florida Giant, Beautiful Day, Japanese (smaller leaves and fruit for Bonzai), Sweet Lilac, Pakistan White, Pakistan Red-Purple, Noir de Spain (similar to Black Persian) and Hunza Black.

Carol likes the 'Sweet Lilac' best but for me I like the Black Persian and White Pakistan. We mostly eat out of hand. Sometimes we pick a bunch to put in smoothies. One time Carol did make a pie out of Black Persian which was delicious. Carol's not a fan. She says Black Persian mulberry has a 'musky' taste.

Want to know more about Mulberries? Check out "Fruit Facts" at CRFG.org. <a href="https://crfg.org/wiki/fruit/mulberry/">https://crfg.org/wiki/fruit/mulberry/</a>



One of Robert and Carol's many mulberry trees Photo by Robert



Fruit on Jenny's tree that was started from a cutting from a CRFG scion exchange



Tasty fruit fresh snack off the tree

Editor's note: To learn more about Mulberries, check out Wikipedia: https://en.wikipedia.org/wiki/Morus (plant)

A local, certified organic tree nursery in Paso Robles currently has Pakistan White Mulberry trees for sale! If you want one, hurry, last shipping date is June first.

https://www.treesofantiquity.com/products/pakistan-white-mulberry

#### **SPOTLIGHT ON MEMBERS**

By Tom Sheldon

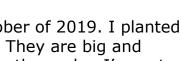
#### **Conversation with Russée Parvin**

December 2021

Russée Parvin stood up at the December meeting to alert us about a potential issue with white grubs. Here is a transcript of a conversation I had with him.

**Tom**: I would like to hear more about the grubs, but tell me about your orchard and what you've been doing.

**Russée**: I've been a horticulturalist for 50 years. That my profession. I'm a landscape contractor. I



Russée Parvin

moved to Righetti Ranch over on Tank Farm Road in October of 2019. I planted about 30 fruit trees including sapotes about 2 years ago. They are big and healthy except for the ones that have passed away due to the grubs. I've got a good rich clay soil.

**Tom**: What else did you plant?

**Russée**: I've got about five varieties of peach and five varieties of apricot. I even have a white apricot. And I have figs. I moved a lot of my trees from my Stoneridge house over to my new house. I dug them up. A sapote is one of the hardest trees to dig up, by the way. They have roots that are about 25 feet long and they go deep. So picture this little tree and roots going way out there and over there (Russée pointing waaay out). So I had to cut the roots. But they are growing well at the new location.

**Tom**: So you had a landscape business. You've had a lot of experience with making things grow.

**Russée**: Yeah, I've had a lot of experience. But you've got to update yourself like doctors have to go to refresher courses. I talked to a nurseryman recently and I asked him whether he thought I should be shouldering my plants. He said, no that's gone out. They no longer shoulder plants, even if they are root-bound, because it irritates the roots too much and gives them more problems than being root-bound. I went to Cal Poly in the 60s and Dr. Brown, one of the smartest horticulturalist in the world, taught us about shouldering.

Tom: Not now?

**Russée**: Things change in the horticulture field. I used to push the roots down or put them in water and divide the roots out and try to guide them, but no longer. It would nice to have a young graduate from Cal Poly horticulture to talk to us every so often.

**Tom**: That's a good idea. We will follow up on that. So tell me about the grubs.

**Russée**: Well, I lost five cherry trees last year and I couldn't figure out why. Then I noticed some of my peach trees looked like they were losing their leaves. I started digging around and I discovered the grubs. Lots of them. Then I went over to my cherry trees that died and there they were. So I started researching it.

Tom: What did you find out?

**Russée**: I found the best thing to do was to clear out the bark and leaves so that the birds can come in and eat the grubs. So I opened up the ground for the birds. Then I ordered beneficial nematodes from Peaceful Valley Farm Supply.

Editor's Note: Search for "beneficial nematodes" online to get more information about these microscopic worms. Some results you'll see are "nematodes for grubs." The online home for Peaceful Valley Farm Supply is <a href="https://www.groworganic.com/">https://www.groworganic.com/</a>

**Russée**: When I Googled beneficial nematodes, I found out there are two types of beneficial nematodes—the ones that stay in one place and the ones that migrate to cover a larger area. So I got the migrating ones. I also put some things around my trees to attract the birds. I want to bring those guys in to clean up. Hay and seeds work to attract them. I didn't want to use poison because I want to keep the earthworms.

**Tom**: What clued you in to the infestation?

**Russée**: When I saw the trees declining, I kept watering and feeding them but it didn't seem to do any good. But I wasn't doing anything in the ground. I'm a horticulturalist. I'm used to relating to a plant by its top growth. This top growth

tells me whether it's dry or needs fertilizer. Then I found out in my research that plants can look dry if there is an infestation of white grubs in the soil.

**Tom**: So you started digging around?

**Russée**: I did all the right things when I planted the trees, but I think my compost attracted those beetles. My neighbors all have bark and it's a beetle habitat. There are tract homes out there, so every yard has bark. I saw the beetle early on, but I'm not one to kill bugs. I figure they have a place. I did wonder what the beetles ate. I thought all beetles were good.

**Tom**: I think this story needs a follow-up. The group will be interested in finding out about the success of your migrating nematodes.