

# *Yavapai Gardens*

Master Gardener Newsletter

Feb-March 2020



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Editors Note: There will not be an April-May issue. See "A Slight Pause" on page 7.

## *Turnips*

*by Nora Graf*

Here it is the end of December as I am writing this and I'm already tired of winter. I shouldn't complain, as the December rains added to the total rainfall this year and I ended up a couple of inches over the average.

However, it won't be long until it's time to start our spring gardens. If you aren't sure when to plant, check out this Yavapai County Extension bulletin online that will help you.

<https://cals.arizona.edu/yavapai/publications/yavcobulletins/Yavapai%20County%20Vegetable%20Planting%20Dates.pdf>

One of the forgotten plants of an early spring garden is the much-maligned turnip. The turnip is a member of the Brassica (Mustard) family of plants. Other Brassicas include broccoli, cabbage, Brussel sprouts, cauliflowers and mustards. Turnips are a root vegetable that look similar in shape to a beet. It is the fleshy taproot of the plant that you will be growing but the leaves are edible too. We are most familiar with the white varieties with tops that turn red or green but there are red and pure white varieties also. Not the red of a beet, more like a radish red. There is a yellow turnip, otherwise known as rutabagas, and is a favorite of the Swedes.



The word turnip is a combination of tur- (as in turned/rounded on a lathe) and neep, which comes from the Latin *napus*, the word for plant. It is thought that turnips were domesticated before the 15<sup>th</sup> century BC. Turnips were grown for seed in India and was a common crop in Greek and Roman times. Turnips don't seem to have the rich history of other plants but probably the most interesting part is that turnips were carved out as lanterns for Halloween festivals in Ireland and Scotland. A turnip also appears on the shield of Leonhard von Keutschach, prince-archbishop of Salzburg and the former municipality of Kiikala, Finland had it in their coat-of-arms as Gules, a turnip Or (Or is used in heraldry to mean gold or

yellow).

Turnips were grown for both human and animal consumption. Generally speaking, smaller turnips were eaten by humans while the larger ones which tended to be woody were fed to livestock.

Like most brassicas it is a biennial plant. This means the plant germinates, grows and stores nutrients through the first year and in the second year sends up flowers, sets seeds and then dies.

The best time to grow turnips is the fall and through the winter. Depending on the variety they can be harvested in 3 to 4 months. You can start turnips directly in the ground, either in early spring or in the fall. They prefer full sun but can get by with some partial shade. The seeds need to be planted about one-half inch deep. At three to four inches tall, thin from two to four inches apart. Since the greens are edible you can use the thinned turnip greens in salads, fresh or cooked.

The soil should be loose and a generous amount of compost can be added to the soil, especially if you have a heavy-textured clay soil (which is almost all of us). I grew them in Camp Verde for many years in the native soil which I loosened and added compost to and was very successful. It's best to pick when the roots are small and tender but if they experience some cold weather they may be a bit sweeter than otherwise. Turnips can be eaten raw in salads (they have a crunchy texture), or used in stews, baked or roasted. Larger turnips can be roasted and mashed or used in stews and soups.

Turnips used to be more widely grown in the past than today in part because they store well. They last months in a cool dark place which made them a valuable food source during the winter months when there wasn't a grocery store down the block. Today the refrigerator works fine. Remove the greens and place in the vegetable drawer of your refrigerator and pull them out as needed.

Brassicas are powerhouses nutritionally, having high amounts of Vitamin C, K, manganese and fiber along with a lot of sulfur compounds which are thought to be important to our health also.

Turnips have a number of diseases and pests that are the same for all Brassicas. Problems include flea beetles, mildew, cut worms, some types of aphids, white spot and a variety of other things. If something is affecting your broccoli it can also affect turnips.



## Varieties

**Purple Top White Globe**—it is the familiar turnip in markets, white with a purple top. Probably the easiest variety to find seeds for.

**Scarlet Queen Red Stems**—a lovely red variety, the stems of the leaves also being red.

**Boule D'Or Turnip**—also called “Golden Ball” or “Orange Jelly”. It is a favorite in Europe. It has yellow flesh and is sweet and mild. (In my opinion not very attractive but we're going for flavor here not looks.)

**Hida Beni Red Turnip**—(a number of good turnips come out of Japan) This is a red-skinned turnip with a red and white flesh. Very crisp, good for eating fresh, sweet and mild.

**Hinona Kabu Turnip**—This is a thin variety (one to two inches long, although the picture shows them quite a bit longer) with a purple top and white below. It has a mild flavor and can be pickled, eaten raw or cooked.

**Tokinashi Turnip**—if you are looking for a quick grower, this white turnip matures in 50 days. It is listed as one of the traditional cultural vegetables of Japan.

Rutabagas aren't as attractive as turnips, straight out of the ground. They look a bit rough and ragged.

Champion Purple Top rutabaga—looks color-wise like a turnip but it has a rougher looking exterior. It has a yellow interior with a mild but sweet flavor.

Navone Yellow Cabbage Turnip—This is also known as the Swedish turnip. Has a sweet taste and golden-yellow flesh.

These varieties were selected from Johnny's Seed Catalog and Baker Creek RareSeeds catalog just to give you an idea of what's available. Every seed catalog has turnip seeds but usually they only offer the purple top white globe and maybe one or two others. You might have to do some searching. Look around though and find something interesting. Cornell University has a long list of varieties. If you find a variety you are interested in, search for the variety. If you just search for turnip seeds your choices will be pretty limited.

[http://vegvariety.cce.cornell.edu/main/showVarieties.php?searchCriteria=turnip&searchIn=1&crop\\_id=0&sortBy=overallrating&order=DESC](http://vegvariety.cce.cornell.edu/main/showVarieties.php?searchCriteria=turnip&searchIn=1&crop_id=0&sortBy=overallrating&order=DESC)

# Rainbow Acres

By Laurie Cameron



The Sedona Area Gardening Club recently visited Rainbow Acres, a community for persons with developmental disabilities. We were shown their greenhouses as well as an outdoor gardening area that they are starting to set up.

Rainbow Acres has two greenhouses that they use to raise fruits and vegetables for consumption by the facility. All labor is provided by "ranchers", residents at the facility who volunteer for this activity. They are very enthusiastic about their work. They are supervised by recently hired Rodolfo



Morales, Horticulture Educator. The program has been so successful that Rainbow Acres is looking at selling their surplus at local farmers markets.

Sadly, the greenhouses have taken a beating in the past few years due to microbursts. A microburst is a localized column of sinking air (downdraft) within a thunderstorm and is usually less than or equal to 2.5 miles in diameter that can behave like a tornado. Since the construction of the two greenhouses, a micro burst has struck not once, but twice. The glass coverings were ripped off the frames and thrown as far away as the residences, perhaps a hundred yards or more.

Now, one of the greenhouses is covered in

plexiglass and the other is screened. The greenhouse that is covered with screen was being used at the time of our visit to propagate winter vegetables such



as lettuce, kale, arugula, spinach, beets, etc. The screening provides protection from the sun but allows for plenty of air circulation so that the seedlings don't overheat. Once the temperatures start to fall, they will transplant the seedlings into the plexiglass-covered greenhouse for the winter.

Neither greenhouse requires heating or cooling systems. In the past they had a greenhouse with a state-of-the-art temperature control system. Dr. Morales told us that it was costing them up to eight thousand dollars a month.

In addition to the green houses, they are developing an outdoor gardening area. This area is enclosed with a fence lined at ground level with sheet metal. The fence is also sunk three feet below the ground to prohibit gophers. And while this is keeping the gophers out, at the time of construction it also kept them in. So, they had to trap and release those caught on the inside. Meanwhile, the soil is being amended with compost and manure from their livestock production. In addition, they will be interplanting with nitrogen-fixing plants.



# Citrus Trees

by Nora Graf



First thing you need to know if you get dwarf citrus trees is that you will have to move them inside every winter. That covers the biggest issue you need to know before taking home a citrus tree. They grow well in containers, even in Yavapai County. If you have the strength, will be able to move them twice a year and have space for them to winter, you can grow citrus.

You can find dwarf citrus trees in nurseries in the Phoenix area. I don't know of any local nursery that carries them but you can certainly check. There are citrus trees available mail-order but I don't know of any that will ship to Arizona. There is a reason for that. It is possible to bring in a disease or insect that could cause problems for both home and commercial growers. In particular the Asian Citrus Psyllid is a serious pest that carries a bacteria that causes Citrus Greening Disease. There is no cure and entire orchards have been destroyed because of it. Please respect that and take the time to purchase from a nursery in Arizona where the trees have been certified to be free of disease.

The Arizona Department of Agriculture has a web page for more information. <https://agriculture.az.gov/plantsproduce/what-we-grow/citrus> Their recommendations include:

- \*Buy citrus locally (for us that probably means Phoenix)

- \*Buy citrus plants from a reputable nursery

- \*Share citrus with friends, family and neighbors locally (vs. buying uncertified fruit from out of state)

- \*Fertilize trees and watch for signs and symptoms of psyllid infestations or citrus greening

Containers must have drainage holes to help prevent root rot but can be plastic, terra cotta or wood. Cover the drainage holes with fiberglass screen. Using packing peanuts or rocks at the bottom does not work to improve drainage. I would suggest plastic containers as weight will be a consideration when the tree needs to be moved. Just like with any container plant it's best to not plant it in something overly large, just keep moving it up to bigger sizes as the tree grows. This makes controlling the amount of moisture easier. Eventually it will need a pot that is 24-28 inches but that should hold the tree for 5 to 10 years. When you repot the tree have a good look at the roots (in fact you should check the roots before you even buy it.) Watch out for roots that curl around the trunk or are packed tightly in the container. You want a root system that is spreading out with no roots wrapping around. The soil you choose should drain well—vermiculite, perlite and compost can improve drainage. If the soil mix is heavy and holds too much moisture, the addition of natural bark chips well-mixed in can improve drainage. Make sure the graft union is above the soil line, just like planting in the ground. Remove any green shoots that emerge below the graft union.

Citrus trees need lots of sunshine, heat and light which is why the commercial growers are found in Arizona, California and Florida. Once you are safe from freezing temperature, move them to an area with full sun. In lower elevations you might need some protection from the sun in the hottest part of the summer. Trees can be damaged by the heat but it isn't such a problem up here. Keep this in mind for the winter also. It needs lots of sun year-round. If you are worried about sun scald, use some shade





cloth to protect them during the hottest part of the day or an old-time remedy is to paint the trunks white. Not sure of the science of that, but people have been painting

It's difficult to see, but can often be found close to the trunk or limbs of the tree. The psyllid likes to feed on new growth and can be seen around the young offshoots in the spring and fall. Once infected with citrus greening, the new growth of a tree will turn a light green. The fruit will grow in odd shapes and stay green and the fruit will be bitter.

Aphids—these are pretty common, use natural controls like ladybugs and lacewings if you can. Also, just washing the aphids off with water will work well if the tree isn't too big.

Scale—in the Phoenix area this is also pretty common. They are generally red-brown in color and found on the fruit. Ladybugs can help control them, but if the infestation is bad you'll have to try other methods including removing the branch.

Citrus Peelminer—these are found in central Arizona. It is the larva of a small gray moth. They burrow under the skin of the fruit and tunnel into the pulp inside. Apparently, they are especially fond of grapefruit and navel oranges.

Wooly whiteflies—Whiteflies feed on the sap of the tree. Symptoms are wilted leaves.

Thrips—you can't really escape thrips in Arizona. They are everywhere. In fact, they are the biggest threat to citrus trees in Arizona. One type of thrips feeds on blossoms. Another likes the new leaves and small early fruit.

There are a number of types of dwarf citrus you can try. They include - Australian Finger Limes, Buddha's hand Lemon, Kaffir (Thai) lime, Kumquat Fukushu, Limequat, Mandarinqua, Mexican Key Lime, Owari Satsuma Mandarin, Meyer Lemons and Variegated Calamondin Orange.

Jeff Schalaus has a [Backyard Gardner](https://cals.arizona.edu/yavapai/anr/hort/byg/archive/growingcitrusincontainers.html) column about growing citrus in Yavapai County with much more information than I have included here. <https://cals.arizona.edu/yavapai/anr/hort/byg/archive/growingcitrusincontainers.html>

trunks white for years in Arizona.

Watering correctly is crucial for any container plant. Citrus need deep but less frequent watering. The soil should be dry to about 6 inches deep before watering again. Don't just whisk the hose over the top. Make sure the pot is thoroughly watered. Most of the roots will be toward the bottom of the pot. If the leaves are wilting you need to water. The leaves should perk up. If not, you may have waited too long. If the leaves are yellowing and cup-shaped you are giving it too much water. If salt crusts form, especially if you see leaves with brown edges you need to leach the soil out with several deep watering's one after the other

Fertilizing is recommended three times a year, most information I found say February, May and September. Do not over-fertilize!! Plant gets leggy with too much fertilizer. Citrus may need extra iron and zinc.

Generally citrus trees don't need much pruning. Remove any sprouts from below the graft union. Do not prune extensively or you might be pruning off new flower buds and growth buds. Citrus are kind of shaggy looking trees and having a good layer of branches with lots of leaves helps shade the sensitive bark. Please don't turn them into poodles or boxes. Since citrus can bloom almost any time of year, the more you don't prune maybe the more fruit you end up with.

If your tree is outside you can protect it from an unexpected frost by covering it with a sheet or something similar. No plastic. One night of temps below 32°F will kill them. Move to their inside quarters when temperatures at night start hitting 40°F and wait to move them outside in the spring when nighttime temperatures rise above 40.

### **Pests & Diseases**

Psyllids—The psyllid is no bigger than the head of a pin and can be seen singularly or in groups.



# Meet A Master Gardener—Kristin Lobay

By Linda Guy



Kris Lobay joined the Master Garden program in 2014 to learn more about her most challenging, imaginative, and certainly her favorite personal garden to date, her current home of six years located on Lynx Creek against the Prescott National Forest in unincorporated Yavapai County. This beautiful one-acre parcel is a section of an old 1800's

homestead whose owners were cousins of the renowned Sharlot Hall. Remains of a heritage fruit orchard are present in Kris's and neighboring landscapes, though sadly many are in decline. She and her partner augment the native ponderosas, pinyons and junipers with trees selected to



commemorate Christmas, the birth of grandchildren and occasionally her birthday, just because!

Like so many of us, wildlife is her biggest challenge. The front yard features a well-conceived fenced area with a number of raised beds and containers for vegetables, herbs and flowers. A large front viewing deck ties this cultivated area into the house. Beyond this enclosure, Kris has planted smaller areas using the ample local granite for borders. She focuses on native species, plants for pollinators and herbs known to withstand four-legged

incursions, including her cat Uno (#1 Barn Cat). The couple's garden art (Steve is a design engineer and machinist) lend whimsy and interest to the yards, the walls of their workshops and in various outside alcoves designed for relaxing in a soothing hot tub or around the grill.



Kris fell in love with the look and texture of wood, and began classes on woodworking and furniture making at Yavapai College three years ago. Her initial project, a coffee table, won first prize in the Student Art Show and she has been unstoppable since. Kris' furniture graces her lovely home, and cutting boards, jewelry boxes and other pieces are featured at the Mountain Artists Guild in Prescott. She built an inventive custom cabinet resembling a bird to house another passion - her collection of antique pie bird vents. A dying branch of her heritage apple tree has been preserved in a carved twin kitchen service.

One could hardly call Kris retired: she loves to cook for family, friends and neighbors in need when illness, recovery from surgery or a new arrival upends their daily lives. She is on the MGA social



committee, helping stock the refreshment table at our Prescott meetings. Other areas of involvement have included rose pruning at Sharlot Hall Museum, Monsoon Madness events, fruit tree pruning at local schools and lending a hand in the gardens at the Heritage Park Zoological Sanctuary. Kris' "do-it-all" presence is a very welcome addition to the MGA.



## A Slight Pause

You are probably familiar with the idea of “everything happens at once.” You can go for months leading a quiet life, nothing special going on and then the roof falls in, metaphorically speaking. In my case the roof isn’t falling in but I am going to get it replaced and along with that quite a number of things are going on in my life including being on the road a bit more than usual. To get to the point there will not be a April-May issue this year. I am just swamped with various things until mid-April and I will not have time to do the newsletter. The next newsletter will be the June/July issue. Kind of looking forward to the break. The last time I missed an issue I think the agent was Deborah Young. A very long time ago.  
Nora Graf



### 2020 Newsletter Deadline Schedule

The newsletter comes out every two months. Please note the deadlines.

Publish	Date	Deadline
Feb-Mar	Feb 1	Articles Jan 5, announcements Jan 25
April-May	April 1	Articles March 5, announcements Mar 25
June-July	June 1	Articles May 5, announcements May 25
Aug-Sept	Aug 1	Articles July 5, announcements July 25
Oct-Nov	Oct 1	Articles Sept 5, announcements Sept 25
Dec-Jan	Dec 1	Articles Nov 5, announcements Nov 25

From the Editor: Send or email articles to the address below. Email is preferred. Please see schedule for deadlines.

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## MG NEWSLETTER



## *Next Meetings*

Feb 19, Prescott: Eric Moore, How to  
Plant a Garden to Attract Birds

March 18, Camp Verde, TBA

April 15, Prescott, Mark Sinclair, All  
About the Weather

May 20, Class Welcome, Location TBA