After a wet garden season, many dismayed gardeners are wondering if they have time to replant many of the garden plants that didn’t fare so well in the soggy soils.

The answer is yes, many of the vegetables can be replanted. Late summer is an excellent time to grow many vegetable crops. From the beginning of August until our first average frost date, we have approximately 75 - 80 frost free growing days left. With most vegetables, it is important to look for varieties with shorter growing times that will fit the time constraints. Take a look at the varieties you are currently growing. Do they fit? If not, you might consider changing varieties.

Gardeners can re-plant the cole crops this time of year. Cole crop include broccoli, cabbage, cauliflower, brussels sprouts and kohlrabi. These need to be planted by mid-August. I recommend planting these plants by transplants rather than by seed, if possible and if you can find them.

Some of the warm season vegetables that are already planted will keep on producing until frost like tomatoes, beans, squash and cucumbers. Of course, cucumber, beans, and summer squash can all be replanted. Tomato plants would be a challenge to get a harvest if replanted unless one could move them indoors when frosts and freezes threatened.

Leafy greens and root crops can be planted just like in the early spring. Lettuce, spinach, mustard greens, turnips, carrots, beets and radishes are great for planting in fall. These plants can be seeded through the month of August.

If soil temperatures are too warm, some of the leafy greens such as lettuce can be slow to germinate. It helps to shade the soil and keep it slightly moist to improve germination. Greens can be planted at two week intervals to extend the harvest time well into the colder months. It can also be started in containers to get a jump start and ensure germination.

One thing to keep in mind is that you want warm season crops to mature before frost. One easy way to calculate your planting date would be to take the average first frost date, count backwards the number of days it takes the crop to mature, and then add a little extra for harvest time. Our average first frost date in Southeast Missouri is around October 15th. There have been years where our first frost was a month later! In that case, the harvest can really be extended.
Many gardeners can push their garden harvest well into the late fall and early winter months by using frost blankets and low tunnels. These structures provide protection from frost and freezing temperatures by keeping the plants 3 to 7 degrees warmer than the average outdoor air temperature (depending on protection used). These methods are simple over-wintering methods that are relatively inexpensive.

The big challenge will be insect pressure on emerging seedlings during warm summer days. If you choose to re-plant cucumber or summer squash plants, scout for cucumber beetles and squash bugs and attempt to control them. If you plant cole crops (cabbage, broccoli, etc.), scout for caterpillars and treat accordingly. Once temperatures start to cool, the insect pressures will slow up but scouting will still be important.

Save the Date! 20th Annual Missouri Master Gardener Conference

This year’s event features choices for everyone, so gather your friends and make plans soon for 2015 Harvest in the Heartland, sponsored by Audrain County and the Heart of Missouri Master Gardeners.

Full time registration includes: MU campus tours, reception, Saturday all day tours w/entry costs plus transportation, or 2 advanced training sessions, a featured speaker and banquet, Sunday selection of 12 workshops w/3 time slots or 3 hours of advanced training, plus a sit down lunch.

Check out the conference website at: http://www.momga.org/2015-master-gardener-conference/
August Gardening Calendar
By Donna Aufdenberg, MU Horticulture Specialist

Vegetables
- Vegetable plants should be planted by August 15th to be able to have a fall harvest before the first killing freeze. Broccoli, cabbage, cauliflower, lettuce, carrots, turnips—all can be planted again.
- Compost or till under residues from harvested crops.
- Consider planting a cover crop. A cover crop adds organic material when it is incorporated in spring. Winter cover crops can be planted as early as August 1, but should not be planted any later than November 1.

Fruits
- Prop up branches of fruit trees that are threatening to break under the weight of a heavy crop.
- Continue to spray ripening fruits to prevent brown rot fungus.
- This is a critical time for Strawberries. The more favorable the growing conditions are now, the bigger the berries are in spring. Remember to cultivate and fertilize them. Water during dry periods.
- Harvest cantaloupes when the melons pull easily from the stem; watermelons when there is a hollow sound when thumped and the skin loses its shine; honeydews when the blossom end is slightly soft or springy.
- To determine if an apple is ready to pick, hold it up and give it a twist. If it resists, let it ripen a few more days.

Lawn
- Apply insecticides this month for grub control on where there is damage occurring by their activity.
- Zoysia lawns can receive their final fertilizer application.
- Start thinking about and planning lawn renovation for September. Have a soil test to determine its fertility needs. Research turf varieties that are most suitable for your area.
- Turfgrass will signal a need for water, giving a purple hue or becoming brown cast and lying flat after being walked on.

Ornamentals
- Annuals may appear leggy and worn now. These can be cut back hard and fertilized to produce a new flush of bloom.
- Roses should receive no further nitrogen fertilizer after August 15th.
- Mulched shrubs may not develop mature stem tissue where they touch the mulch. Harden stems so they can withstand early frost damage, by removing about 2 to 3 inches of the mulch from the base of the stems in mid-August.
- Avoid fertilizing Shade and ornamental trees until after September to keep them from putting on new growth that will not harden before freezing temperatures in fall and winter.

Cedar Apple Rust Effecting Ornamental Pears
According to Missouri Department of Conservation, the wet weather last spring means cedar apple rust and other related “cedar rust” diseases are prevalent. These rusts alternate between junipers (eastern red cedar, etc.) and certain varieties of apple, hawthorn, serviceberry and related trees. This year we are also seeing significant rust infection on some cultivars of ornamental pear, causing yellow to orange lesions on the leaves. Leaves with lots of lesions are turning black and falling from trees leading to confusion with fire blight and other diseases.
Due to the frequent rains, disease pressure has been very high in lawns. Brown patch of tall fescue has caused severe blighting on home lawns in some urban areas. A related disease on zoysiagrass, large patch, is still actively causing decline in St. Louis in early July, whereas in most years, large patch activity steeply declines in early or mid June. Fungicides bought over the counter are ineffective, particularly when applied curatively. Frequent, costly fungicide applications have been applied to high amenity lawns for disease control. On many regular or low maintenance lawns, reseeding of tall fescue this fall will be necessary, and weed control will be more difficult due to reduced stand density.

Yellow nutsedge is a prevalent, troublesome weed species that commonly infests turfgrass areas during the summer months in Missouri. Nutsedge also grows well in saturated, wet soils, and has been a prominent weed issue this year. The weed is difficult to control, as rhizomes and nutlets are underground and simply pulling the plants often results in fast regrowth. Also, no pre-emergent herbicide is available to control this weed. Control relies on the use of specialized post-emergent herbicides (i.e. halosulfuron, sulfentrazone, bentazon) that may require addition of a non-ionic surfactant and may require more than one application for control. Also, these herbicides may impact reseeding efforts in the fall, so its important to read and adhere to the label carefully before using.

Most home lawns in Missouri (~85-90%) are comprised of cool-season turfgrass species, mostly tall fescue. Cool temperatures and frequent rains have caused significant foliar growth of these species. On the surface all may seem fine, but a lush foliage without a sustaining root system has significant caveats.

- If any sustained period of drought and heat does follow this wet weather pattern, many home lawns may not have the root development necessary to keep up with the transpiration needs of the plant. Tall fescue has a good adaptive mechanism to go into drought dormancy when this occurs, but losses of Kentucky bluegrass, fine fescues, or perennial ryegrass stands may occur quickly.

- Homeowners and lawn care operators alike are required to mow in the brief instances when the sun does shine. Oftentimes the underlying soil is still saturated, and the equipment and traffic may cause considerable compaction. Aerification practices in the fall will be necessary to remediate. Additionally, mowing is not being conducted as frequently as necessary, resulting in unsightly clippings that if left on the turf surface provide a ripe environment for disease issues.

Profitability of lawn care companies, particularly full-service operations, may increase due to this weather. Many pre-emergent herbicides applied for weed control will break down with the continued rainfall, meaning post-emergent products may be applied. Fungicide applications for disease control are also near or at a record high.
NOON
1st Thursday each month

August 6 - Landscaping
September 3 - Lawn Maintenance,
October 1 - Composting

GARDEN LUNCH N LEARN
The Butler County Extension Center will offer garden education during lunch the first Thursday of the month August to October.

Lunch and Materials: $10.00

222 North Broadway, Poplar Bluff, MO
Seating is limited. Please register by the Monday before lunch so we can have lunch ready.
Call 573-686-8064.
www.extension.missouri.edu/Butler
Soil health may be the most important thing to consider when looking at plant health but a close second would be the health of a plant’s root system. If roots are not healthy and actively growing, dyeing and replenishing then the plant cannot sustain the canopy or green tissue above ground.

The roots of the plant absorb water and nutrients from soil. If the roots are missing or rotten, then they are unable to perform this task for plants.

In contrast, if leaves drop from a tree, the reserve storage in a healthy root system can regenerate those leaves and keep the plant growing. It is easy to see when a plant loses its leaves but not so easy to see when it loses roots.

When a new plant is placed in a landscape it is babied and nurtured with water and nutrition for a time until the root system becomes established. Once the root system has taken hold then the plant is officially a permanent part of the landscape. This may not take as long for perennials (maybe one growing season) as it does for trees (2 to 8 years).

If a root system is damaged then this same type of care needs to be taken to ensure the plant will survive and once again establish itself in the landscape. Again, it can be hard to realize that a root system has been damaged because it is not visible.

In 2015, there has been record rainfall in Missouri meaning the soil stayed wet and did not get a chance to dry out. This is a poor environment for healthy root growth of any plant. It is a good environment for fungal root rots to form which attack roots causing them to die and decompose.

Additionally, when a soil stays wet there is less air available for plants to take up. Roots need oxygen which is normally located in the air pockets within the soil.

How many plants in your yard now have a reduced percentage of root mass compared to this time last year?

Even if the root mass of a plant is only 30% smaller than it was in January, the plant still has the same green tissue above ground to support. This may cause shock to a plant system as it must support a 100% canopy with fewer roots.

Now that heat has arrived and rainfall has diminished you will see leaves that yellow, droop or curl. This is most likely due to the lack of developed roots supporting the canopy or green growth.

Plants that are in low lying areas of the yard may be in more stress than those planted on berms.

Treat your plants as if you just placed them in the ground. Give them water more often than you might if necessary and water early in the morning, before the heat of the day bares down.

Hopefully, some tender care now will result in living plants next spring.

Above: Healthy roots on the right vs. rhizoctonia root rot on the left. — Kathy Schneebeld

Below: Healthy roots on the right vs. black root rot on the left. — Leonor Leandro, Gloria Abad, Frank J. Louws
Upcoming Events

The following Master Gardener meetings are held each month. All are welcome to attend. Please contact the local extension office to confirm location if you did not attend the previous meeting.

Parkland MGs - 1st Monday at 6:30pm, Horticulture Classroom at Mineral Area College, Farmington, MO
Poplar Bluff MGs - 1st Tuesday at 6:00pm at Holy Cross Episcopal Church in Poplar Bluff, MO (Do not meet in January)
Ste. Genevieve MGs - 2nd Thursday, at 6:30pm, Ste. Genevieve County Extension Center
Cape Girardeau MGs - 3rd Thursday at 7:00pm, Cape County Extension Center
Perry MGs - 4th Monday at 6:30pm, Perry County Extension Center
Jackson Beekeepers - 4th Tuesday @ 7:00pm, First Presbyterian Church, 206 E Washington, Jackson, MO
SEMO Honey Producers - 2nd Thursday @ 6:30pm, Church of Christ, Poplar Bluff, MO (Do not meet in December or January)
Parkland Beekeepers - 3rd Tuesday @7:00pm, North College Center, Mineral Area College, Park Hills, MO
South Central MO Beekeepers - 1st Friday, Howell Electric Coop, West Plains, MO

Wednesdays, August 5 to August 19 - Master Gardener Core Training; Shawnee Park Center in Cape Girardeau, MO 6-9pm. Call 573-238-2420 to register.

First Thursdays, August to October - Lunch N Learn series at noon. Topics include Landscaping, Lawn maintenance and Composting. MUST Pre-register at 573-686-8064. Cost $10.00

Thursdays, August 20 to November 19 - Master Gardener Core Training; Webster University, 1103 Kingshighway in Rolla, MO 6-9pm. Call 573-458-6260 to register.

Mondays, August 24 to November 9 - Master Gardener Core Training; North College Center at Mineral Area College, Park Hills, MO 6-9pm. Call 573-883-3548 to register.

Wednesday, October 7 - Wild Edibles with Steve Bost. 9am-12pm at Cave Springs in Hunter, MO. Bring walking shoes and a chair. Register at 573-686-8064 to get directions.

If you have a horticultural related event for the calendar call 573-686-8064 or email it to Denklers@missouri.edu.

The First National Protecting Pollinators in Ornamental Landscapes Conference

The First National Conference on Protecting Pollinators in the Ornamental Landscape will take place October 13 and 14, 2015 at the Kanuga Conference Center in Hendersonville, NC. Hosted by Michigan State University and North Carolina State University, this conference is intended for extension educators, academic and industry researchers, growers, and representatives of related industries interested in or involved with ornamental plant production or maintenance.

Sessions will include research presentations and discussions on topics such as: Function of urban pollinators, threats to pollinators, impacts of neonicotinoids and other pesticides, pollinator-safe products and strategies, and educating the public about pollinators. For more information, visit www.ornamentalpollinators.org and look for more details to come!

Interested in beekeeping. Follow the Missouri State Beekeepers Association at scientificbeekeeping.com or on Facebook to connect with knowledgeable groups.

MASTER GARDENER TRAINING

August 24 to November 9, 2015
North College Center, Mineral Area College, Park Hill, MO
$165
Contact Katie Kammler for more information kammlerk@missouri.edu 573-883-3548
Editor’s Corner

We welcome and encourage Master Gardener groups and individuals to submit items to the newsletter. We encourage the submission of any news such as upcoming volunteer opportunities, community events related to gardening, warm wishes or congratulations to fellow gardeners. We also encourage Master Gardeners sharing experiences and writing articles on timely topics.

All entries into the group news sections must be received by 4:30 on the 15th of each month for the following months news.

Email news to: kammlerk@missouri.edu, denklers@missouri.edu, or aufdenbergd@missouri.edu

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