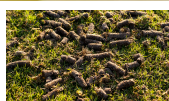


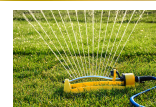
Colorado Master Gardener's Garden Gate

The Newsletter of Adams & Broomfield Master Gardeners

September 2023



Best Lawn Practices for September and October Cassey Anderson, Horticultural Specialist, Adams County



I know lawn care and maintenance is not an exciting topic but fall lawn care can set you up for the following year of success. Let's look at four of the key components to managing your lawn for fall.

Aeration – the majority of the Colorado Front Range has clay soils which have their benefits (water retention, good nutrient holding and availability) but there are drawbacks as well. A major drawback can include the small pore size of the soil making it prone to a phenomenon called compaction. This is when the pores in a healthy, happy soil are removed through pressure (from walking, machinery, rainfall etc.). One way to combat compaction is through aeration. You can DIY or hire it out but be sure to water 24 hours in advance and make swiss cheese out of your lawn, you want a plug pulled every 2".

Overseeding – is your lawn older than 5-7 years? It may be time to give it a "refresh". Seed breeders are always developing new and improved strains. Buy some seed from a reputable local retailer and overseed into your aeration holes. Make sure new seed stays moist daily until you see germination, and then keep it moist if hot. Some good local seed companies include: Pawnee Buttes, Granite Seed, Arkansas Valley, and Sharpe Brothers.

Fertilization? – Generally, September is a month you can take a break from fertilizing your lawn, unless you have plans that will interrupt your most important fertilization of the season, in October to November. Apply 1-1.5 pounds of Nitrogen per 1,000 square feet. This fertilizer will set your lawn up for happy and healthy growth in the following year.

Irrigation – September sees many hot summer-like days. Be sure to let your lawn dry out some, aim to water no more than 2-3 times a week. Water deeply, aim for about 1" each time you irrigate. If you don't know how long it takes to put down 1" of water you can do a "catch can" test with tuna or Tupperware containers.

Harvesting

Annie Costakis, CMG Coordinator, Broomfield County

Do you have questions about when to harvest your veggies, and what to do with them all? We have you covered! This [50 minute, free webinar hosted by our very own Cassey Anderson](#) can support you in deciding the best time to harvest each type of vegetable in your garden. If you're short on time, check out our [When to Harvest Vegetables Fact Sheet](#). After harvesting and enjoying your fill of fresh veggies, you have several options for next steps. With [proper storage](#), many fruits and vegetables can be kept long after the harvesting season. [Canning](#) is a rewarding and even more long-term option for storing your produce.

We also encourage you to consider donating the surplus fruits and vegetables from your garden. Our [Grow & Give program](#) offers guidance and support for the process of donation, including resources for [finding local donation sites near you](#). If you're interested in joining our statewide effort to address food insecurity in Colorado, [register for Grow & Give now!](#)



This Issue

Best Lawn Practices
Harvesting
Page 1

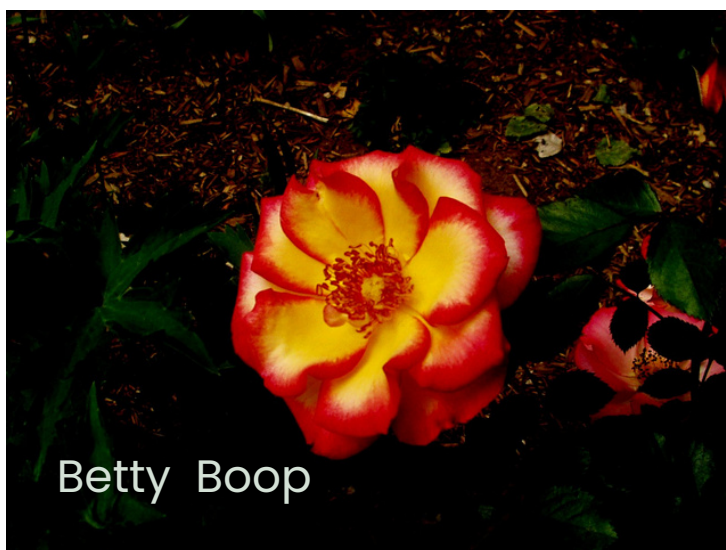
World of Roses
Page 2

The Science of Gardening
Page 3

Harvesting Your Garden
Page 4

Native Plants
Plant of the Season
Page 5

Newsletter Staff
Contact Information
Page 6



Roses are introduced into dormancy gradually. The last application of feed should be on or around August 15th. The Denver Rose Society recommends extending this period of time to August 30th depending upon the heat index. Fertilizing in heat is not recommended. Deadheading is stopped by the 15th of September, allowing rose hips to form. Depending upon the heat index, watering should be reduced in September. Deep watering prior to the first hard freeze is recommended by the Denver Rose Society.

After thoroughly cleaning the area around the rose of leaves and other debris, put a layer of mulch 3 to 4 inches deep and 2 to 3 feet out from and around the rose. Where the rose has been incorrectly planted and the graft or crown is above ground, mound mulch or soil around the rose to a height of 6 to 10 inches. If using soil, the Denver Rose Society recommends taking soil from another part of the garden.

Tie together the canes of roses that might be damaged by wind or heavy snow. Although most rosarians, including those of the Rose Squad, don't recommend pruning in fall, cutting down roses to a safe height that are in jeopardy of breakage is perfectly acceptable.

When a rose is pruned, it is instructed to grow. Since fall is not the time for growth in the rose, any new growth (basal break) at the bud unions or the base of the rose should be snapped off.

Many rosarians, your author is not one of them, believe in settling roses for the winter as late in fall as possible. For my part, I have mine winterized by the end of September. I will say here what I say to rosarians and other people that I teach: it is your garden. You decide. If waiting until mid-October, weather permitting, is best for you, then wait. If you have many roses, as I do, and are well ready to end the season by October 1st act accordingly.

Roses, like all shrubs, require fall and winter watering when conditions are dry. The Denver Rose Society recommends watering when the temperature is above freezing, in the morning and at least once per month – depending upon the weather. This is not inconsistent with the CSU fact sheet 7.211

<https://extension.colostate.edu/topic-areas/yard-garden/fall-and-winter-watering-7-211/>



The Science of Gardening

Cover up! It's getting cold out there: Cover crops on the Front Range

Kristin Moore, Ph.D.



It may feel like we're in the prime of harvest season, but on the Front Range, cold temperatures are often upon us with indecent haste. That means that now is the time to start thinking about how you want to overwinter your garden. Rather than letting your garden go dormant over winter, utilizing a cover crop can be a low maintenance way to improve your soil for future crops. On the Front Range mid-September is the ideal time to plant cover crops, and they should be in the ground no later than mid-October.

A cover crop is defined as a high number of plants, usually mixes of grasses and/or legumes that can improve the soil quality. There are multiple reasons to use a cover crop including reducing soil erosion, improving soil structure, and increasing nitrogen content in the soil. Limiting erosion and improving soil structure can be achieved with pretty much any cover crop. However, if increasing the nitrogen content of your soil is your goal, there are some important factors that must be taken into consideration.

Nitrogen (N) makes up approximately 78% of the atmosphere and is an essential nutrient for all plant species. However, unlike carbon, plants cannot take nitrogen out of the air meaning they must absorb it through their roots. Thus, on the surface, planting additional crops in your gardening beds may seem counterproductive in that they will actually scavenge the remaining nitrogen from the soil as they grow. This, effect, however, is one of the benefits of cover crops. When nitrogen is immobilized the cover crop it cannot drain or leach out of the soil via precipitation, which would generally occur after rains and snow melt.

The next challenge is how to return nitrogen back to your soil at the appropriate time to enhance future crops. A quick internet search will tell you to plant legumes as a cover crop, which can form symbioses with microbes that "fix" nitrogen meaning they can take nitrogen out of the air and bring it into the soil. In reality, this system is a bit more complex. Legumes, like most plants actually scavenge nitrogen from the soil before fixing additional nitrogen from the air. Currently, there is very little data available regarding the amount of nitrogen that is fixed when legumes are used as a cover crop. Most of what we know about rates of nitrogen incorporation is based on well-established perennial legumes, not single season crops. This doesn't mean that legumes are a bad choice for cover crops, just that they are not necessarily the answer for increasing nitrogen in the soil.

The productive way to return nitrogen to your soil is by tilling in a cover crop that is still in a vegetative state. Turning in crops that have died or gone to seed can negatively impact your soil. However, common cover crops including rye and hairy vetch (a legume) can survive Colorado winters. Tilling in crops approximately a month before you plan to start planting will enable the plant material to decompose releasing nitrogen in a usable form. This month of down time is essential as the decomposition process will lower the oxygen content in your soil making it hard to germinate new plants.



Harvesting Your Garden

Harvest Time
Kim Poland

As fall approaches, we face a bittersweet moment in the garden – harvest time. Our hard work and dedication throughout the year are about to pay off, but it also means saying goodbye to the joys of digging in the soil. Nevertheless, it's an exciting season with plenty of rewards.

Timing is crucial when harvesting fall and winter squash. Picking them too early results in less firm flesh and reduced flavor. Hubbard and Golden Acorn varieties are exceptions. Mature squash has dried flesh with natural sugars for better storage. Store them in a cool place, leaving an inch of stem. Use the thumbnail test to check for ripeness – if it doesn't dent easily, it's ready. Color is also an indicator. PlantTalk 1849 has more information on harvesting squash.

You might notice green tomatoes still on the vine. They'll ripen with September's cooler temperatures, as red pigments develop below 85 degrees. To expedite ripening, reduce watering, and prune small green tomatoes and blossoms. If frost threatens, bring them indoors, clip a bit of the stem, and store between 55 and 70 degrees. No need for light during ripening. Plant Talk 1844 has information on this.
<https://planttalk.colostate.edu/topics/vegetables/1832-harvesting-ripening-tomatoes/>

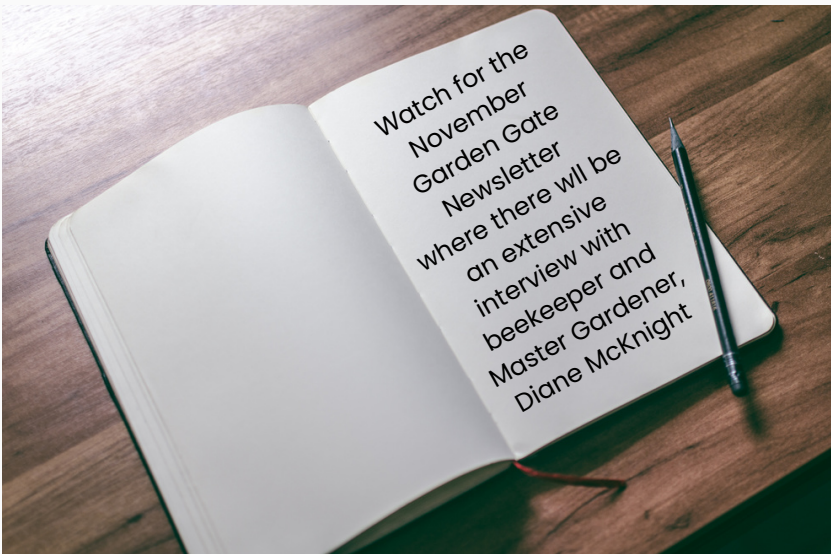
Root vegetables can be harvested small or at maturity, but avoid waiting too long, as they can become woody. Some can even be left in the ground for winter. Leafy greens should be picked while firm; oversized ones develop tough fibers.

Sweet corn is ready when the silk turns brown, and the husk remains green. Test the kernels – they should produce a milky substance when you press them. When the Raccoons eat mine is when I know mine was ready one day before.

Lastly, don't forget about peppers and eggplants. They're not frost-tolerant, so keep an eye on the weather as October approaches. Their flavor isn't linked to maturity, so you can enjoy them earlier. Preserving your harvest offers delicious rewards too. Herbs can be easily dried by cutting and rinsing them, then laying them on a paper towel. You can also use a dehydrator or oven, detailed in CSU Fact Sheet 9.335
<https://extension.colostate.edu/topic-areas/nutrition-food-safety-health/herbs-preserving-and-using-9-335/>. Proper storage is key for fruits and vegetables, with temperature, humidity, and ventilation playing critical roles. CSU Fact Sheet 7.601 provides valuable information on this topic. <https://extension.colostate.edu/topic-areas/yard-garden/storage-of-home-grown-vegetables-7-601/>

In this season of transition, we bid farewell to the garden's daily demands but welcome the abundance it provides. With proper timing and care, you can savor the flavors of your hard work throughout the coming months.

Please consider reaching out to CSU's Grow and Give program with any extra harvest.
<https://growgive.extension.colostate.edu/>



Plant of the Season

Agastache by Ruth Vazquez

Wonderful, wispy Agastache gently waves in the wind, its lightly fragrant mint smell attracting both humans and pollinators. Hummingbirds, Hummingbird Moths, bees of many kinds hover and come to drink its nectar. It was named the “2019 Herb of the Year” by the International Herb Association.

Pictured here in solitary splendor, is the variety ‘Fall Fiesta’ from High Country Gardens. Planted in the fall of 2022, this is its first year and already is in flush growth and beauty! It began blooming in late June and will continue to grace the garden late into fall.

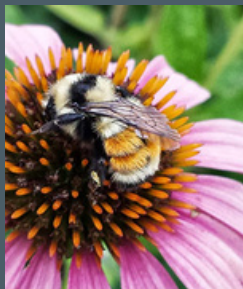
Native to our southwest, Agastache’s delicate blossoms on pliable yet strong slender stems, are found in warm tones ranging from oranges thru deep pinks (sometimes called red, but to my eye is more accurately called deep pink.) However, a variety with broader leaves, stronger, more upright square stems with blue toned flowers is also listed by some universities as Agastache, Hyssop, or Anise Hyssop. In all, there are more than 20 cultivars of Agastache, most of which are native to North America. Agastache foeniculum is in the mint family (Lamiaceae), and considered hardy in zones 3-8, depending on the cultivar.

Both the slender leaf variety with warm tone blossoms and the broader leaf more upright variety with blue tone blossoms, have a mild minty, anise flavor and have been known to be used as a tea for digestive upsets. Leaves and blossoms can also be used as accents in salads or as a garnish, or picked after flowers are just past full bloom (oil content in leaves is highest) and used as potpourri. Along with a Korean Mint, Agastache rugosa, these plants have been used in herbal remedies for centuries in both North America and Asia.

Like so many plants of the Plains, Agastache does not need or even like to be fertilized. But it insists on being well-drained and in a sunny location. In Section 6 of our Adams County Xeric Demonstration Garden, you can experience the scented glory of a mass planting. Go, sit, inhale the minty fragrance, be still, wait, and soon you’ll see hummingbirds coming to the feast.

Hyssopus officinalis, often called Hyssop, is also in the mint or Lamiaceae family, but is native to Southern Europe, the Middle East, and the region surrounding the Caspian Sea. It, too, is used as a healing herb but is also used in perfumes. It is said to have become naturalized here in North America. To look at a photo, I cannot tell the difference between this blue flower, strong stemmed upright plant from Europe and the one hailed as native to North America. I will tell you this, whatever its origin, the blue blossom Hyssop in our Xeric Gardens sends out thousands of seeds for small plants to come up. We have found it hard to control, once established. This does depend on amount of water given, however.

<https://www.britannica.com/plant/hyssop> <https://plants.ces.ncsu.edu/plants/hyssopus-officinalis/>



Bumble Bee



Leafcutter Bee



Honey Bee

Native Insects

Native Bees of Colorado Rebecca Fitzpatrick

There are over 950 species of bees that call Colorado home, and 946 of them are native. Colorado claims 5th place in the United States for most diverse bee population. The most famous non-native bee is the honey bee. Honey bees are generalists and can pollinate a large variety of plants. However, our native plants, fruits and veggies prefer the native pollinators with whom they evolved. For example, native squash bees only pollinate native squash family plants.

Our native bees come in many colors, shapes, sizes, and hairiness, varying greatly. You can find black, brown, grey, blue, green, red, orange and yellow natives smaller than ¼ inch up to over an inch in size, completely bald or fuzzy, round or oblong. Only 12 % of native bees are social bees, meaning they live in colonies with a hierarchical social structure, including a queen. Of our natives, about 70% are solitary bees, including leafcutters, mason, mining, plasterer, masked, digger, resin and some sweat bees. The females build nests, create chambers filled with pollen and nectar, and lay eggs in each cell. Solitary bees make it through the winter as larva. The previous season’s adults will die after freezing temperatures arrive. The remaining 18% are parasitic bees, some replacing the queen and laying their own eggs (social parasites) or slipping into a solitary nest (cleptoparasitic) and laying eggs whose larva feed on the stored food. Most native bees are ground dwellers or live in wood like hollow rose canes or beetle wood burrows. Carpenter bees will excavate their own tunnels. Solitary bees then add nesting materials and food for their offspring and seal up the tunnel entrance. The materials used in the construction of these chambers tell us what kind of bee they are. Leafcutter bees cut round leaf pieces with their mandibles and build a cell using several leaves. Mason bees are tube nesters and construct their homes with mud.

Despite declining populations of both native and non-native bees, there are things we can all do to help. Plant natives, construct bee-friendly habitats for mason and other bees and limit your use of bee-sensitive pesticides.

Newsletter Staff



Contact Information

