Missouri Environment & Garden

Plant Peonies in September by David Trinklein



Peony is one of America's most popular garden perennials. Used both as an attractive garden plant as well as a valuable cut flower, it's spectacular, often fragrant, blooms are a marvel to behold. Its ease-of-care and longevity make it one of our best perennial flowering plants. September is an ideal month for planting or transplanting this regal ornamental.

A member of the plant family Paeoniaceae, peony is named after Paeon. The latter, according to Greek mythology, was the student of Asclepius, god of medicine and healing. Supposedly, Asclepius because

jealous of Paeon and threatened to kill him. Zeus came to Paeon's rescue by turning him into a flower.

Throughout the course of history, few herbaceous ornamental plants have seen a wider and more varied use than peony. Ancients were thought to have used it for flavoring food. In the middle ages it was prized for its medicinal properties and used as a cure for a wide array of maladies including gall stones, epileptic seizures, and jaundice. Artists, especially from the orient, used it as an inspiration and incorporated its image into porcelains, screen prints,

paintings and other works of art. Is it any wonder, then, that the ancient Chinese labeled peony "king of all flowers".

Most peonies planted today are hybrids although species of the genus are native to Asia, southern Europe and western North America. Garden peonies usually are bushy herbaceous perennial plants growing up to three feet in height. Peonies have deeply lobed leaves and extravagant (often fragrant) flowers up to six inches in diameter available in a myriad of colors.

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Plant Peonies in September (continued)

Peonies can be classified by plant growth habit or flower morphology. Most garden peonies are herbaceous in growth habit and die back to the ground each winter. However, there are tree peonies that maintain woody stems throughout the year. They are not really trees but grow into small-to-medium sized shrubs that rarely reach more than four to five feet in height in our climate.

Intersectional (Itoh) peonies are the result of a cross between herbaceous and tree peonies, which for many years was thought to be impossible. Japanese horticulturist Dr. Toichi Itoh was the first person successful in making the cross but never lived to see the fruits of his labor. Originally very expensive, Itoh peonies are now readily available and give peony lovers the opportunity to enjoy lavish flowers (including yellow) produced in abundance on a mounded plants three feet in height and width.

Peony cultivars often are classified according to flower morphology. Single flowers have one row of five or more petals surrounding a cluster of yellow stamens that bear pollen. Japanese flowers have one or more rows of petals surrounding flattened, sterile stamens called "stamenoides". If the stamenoids have been transformed into petal-like structures the term "anemone flowered" is used. Semidouble flowers have several rows of petals surrounding pollen-producing stamens. Double flowers have five or more outer (guard) petals with stamens that totally have been transformed into petal-like structures called "petaloids". The latter makes up the bulk of the flower. If the guard petals are relatively short when compared with the petaloids, the result is called a "bomb" flower

As mentioned above, September is an ideal month to plant or divide peonies. The latter involves lifting the clump with a spading fork. Excess soil should be washed off the roots to reveal reddish color buds or "eyes" (future growing points). The tops, which probably have started to decline, may be trimmed back also. The clump then can be divided with a sharp knife or hatchet. It is preferred to allow at least three eyes per division.

Peonies need plenty of room and should be planted between three and four feet apart in a fertile garden loam and full sun exposure. Excess shade is a key reason peonies fail to flower.

Since peonies tend to be long lived, adequate soil preparation prior to planting is important. Incorporate well-decomposed organic matter 10 to 12 inches deep in the general area and make individual holes wide enough to spread the roots adequately. Incorporate a modest amount of fertilizer high in phosphorus (e.g. 5-10-5 or bonemeal) and mix it well into the soil.

Planting depth is very important for good growth and flowering of peony. Somewhat shallow planting is preferred since flowering is reduced or inhibited if the eyes are set more than two inches below the surface of the soil.

Peonies can often remain undisturbed in the garden for 20 or more years without a decline in flowering. Vigorous flowering plants have been known to exist in one location for well over 50 years. Division should only be done if growth is poor and plants fail to bloom after years of performing well

Fertilize peonies with care. Excessive amounts of fertilizer (especially nitrogen) can lead to poor flowering. If top growth slows and plant vigor declines, apply several tablespoons of a complete fertilizer high in phosphorus and potassium (e.g. 6-24-24) about 6 to 18 inches away from the crown. Fall application is preferred although early spring is satisfactory.

Peonies are relative pest free and rarely require the application of pesticides. Bud blight (Botrytis cinerea) is the most troublesome disease and often occurs during cool, wet springs. Strict sanitation including removal of spent plant debris along with proper plant spacing to increase air circulation can help. Fungicides labeled for the control of botrytis can be effective preventatives.

Contrary to popular belief, ants are not necessary for peony flowers to open. Ants are usually present on peony buds because of the sweet exudates produced by the buds and do not help (or hinder) the flower in any way.

To prepare a newly transplanted peony for its first winter it is wise to apply mulch to the base of the plant to prevent heaving damage during periods of alternate freezing and thawing of the soil. Avoid using manure as a mulch unless it is well-decomposed. After establishment, peonies are considered quite hardy and need little winter care.

There are many cultivars of peonies available to the gardening public. Some are new; others are long-time favorites. In a day-and-age where we often think that "newer is better" it is interesting to note that 'Festiva Maxima' still is one of the most popular white-flowered peonies on the market. This "old timer" was introduced into the gardening world way back in 1851.

It's Go Time for Fall Recovery on Lawns By Lee Miller

Mild temperatures have been screaming "GO!" to tall fescue and Kentucky bluegrass for much of the month of August, well ahead of the revered mid-September date for aerification, fertilization, and overseeding. Average two-inch soil temperatures are hovering around the mid to 70s for much of the state, and we are down to 13 hours of daylight to keep things cool.

These cool temperatures of fall provide the best time for building a lawn. The stress and disease potential of the summer is in the rearview mirror instead of the windshield, and even troublesome weeds are either ready to kick the bucket (summer annuals) or are pulling in the reins to make it through the winter. At the same time, cool season grasses are kicking it back into gear, wiping the sweat of their brow after a long workout, and are ready to put on some muscle. Our job is to put food on their plate and give them room to grow. Below are a few bullet points of ways to get a healthy lawn going for next spring. If you use a professional service for lawn care, make sure to discuss with them the routine care needs (particularly irrigation) that will be necessary to ensure success of their efforts.

- The first and most crucially important question is "Do you know the size of your lawn?" If not, you shouldn't be a DIYer when it comes to fertilization, seeding, or chemical applications. A new tool, the Missouri Lawn Fertilizer calculator http://agebb.missouri. edu/fertcalc/, requires this information and provides a link to a map application that can assist in determining your lawn area.
- Fertilization If nothing else, fertilize the lawn in the next few weeks to put on that "muscle mass" and start competing. Fall is the best time to fertilize because there is much less danger of sparking troublesome warm weather diseases such as brown patch and Pythium blight. On established lawns, plan for at least 1 lb N/1000 sq ft, and for newer lawns a bit more. (again see the Missouri Lawn Fertilizer Calculator mentioned above). Quick release forms such as urea will serve the purpose, but perhaps split into two applications for a steadier feed (and remember to water it in). If overseeding a lawn or renovating (i.e. starting from scratch), a balanced starter fertilizer may be needed. Conduct a soil test prior to renovating to determine plant needs - http://soilplantlab.missouri.edu. After fertilization (and mowing), use a leaf blower to get fertilizer & material off impervious surfaces such as driveways and gutters and back on your lawn. Our lakes, streams, and waterways will be most appreciative of this method of pollution reduction.
- Weed Control Fall is the best time for long term control of most perennial broadleaves with herbicides since the plants are pulling in nutrients for storage rather than pushing out new growth. We need to strategize, however, the best timing for doing this, particularly if we plan to overseed. If seeding this fall, spot applications of glyphosate may work best for a small area since reseeding can be done just a few days after. If going after broadleaves with a 3-way type herbicide or triclopyr, it may be best to seed now, assess the establishment of the stand, and apply in mid to late October or wait until next spring. Check the label of your intended product carefully to determine potential impact on seeding efforts, and follow that plan.
- Aerification If letting seed fly, aerification is a great practice
 to prepare the site. Aerification also will help produce pathways
 for water and nutrients to flow down to the rootzone, and does a
 good job of opening up the canopy to enable some good seed soil
 contact. A power rake, core or spike aerifier (from most to least
 effective) should be used over the area prior to seeding.



After power-raking seeding, and fertilizing. Note the leaf blower used to get fertilizer, seed, and plant material off the street/driveway and back into lawn!



Example of thatch removal after power-raking (or verticutting) lawn prior to seeding.

- Seeding If weeds continually produce seeds to establish into bare areas year after year, why don't we also seed in the same way? We have the distinct advantage of being able to seed tall fescue and Kentucky bluegrass, and to build density we should use it. Fall is the best time for seeding, and to do it effectively follow this pattern. Mow low (only time I'll recommend) aerify seed lightly rake in fertilize irrigate.
- Irrigation Irrigation used to establish tall fescue seed in the fall is perhaps more appropriate than supplemental irrigation used throughout the summer to keep tall fescue green. Unfortunately, the only part of the early September weather pattern that doesn't seem to be cooperating with seeding is the lack of rainfall. Hopefully some rainfall will return in mid-September, but don't rely exclusively on it and provide supplemental irrigation. This irrigation will need to be light and frequent, opposite of irrigation practices on an established lawn. In the words of my recently retired colleague, Dr. Brad Fresenburg "keep the soil dark after seeding, but don't make it shiny".

For more information on maintenance of tall fescue and Kentucky bluegrass lawns, see:

http://extension.missouri.edu/p/g6705

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October Gardening Calendar

Ornamentals

Weeks 1-4

- Continue watering, especially evergreens if soils are dry.
- Nuts or seeds of woody plants usually require exposure to 3 months cold before sprouting. This may be provided by outdoor planting in fall or "stratifying" in an unsealed bag of damp peat moss placed in the refrigerator.
- Container grown and B & B trees and shrubs can be planted. Loosen
 the soil in an area 2 times the diameter of the root ball before planting.
 Mulch well after watering.
- Plant spring bulbs among hostas, ferns, daylilies or ground covers. As
 these plants grow in the spring they will hide the dying bulb foliage.

Weeks 1-2

- For best bloom later this winter, Christmas cactus, potted azaleas and kalanchoe may be left outdoors until night temperatures drop to about 40 degrees Fahrenheit.
- Spring bulbs for forcing can be potted up now and stored in a cool, frost-free place until it is time to bring indoors, usually 12 to 15 weeks.

Weeks 2-3

 Cannas and dahlias can be dug when frost nips their foliage. Allow the plants to dry under cover in an airy, frost-free place before storage.

Weeks 3-4

• Transplant deciduous trees once they have dropped their leaves.

Week 4

- Plant tulips now.
- Trees may be fertilized now. This is best done following soil test guidelines.

Lawns

Weeks 1-2

• Seeding should be finished by October 15.

Weeks 2-3

 Broadleaf herbicides can be applied now to control cool-season weeds such as chickweed and dandelion.

Weeks 3-4

- Continue mowing lawns until growth stops.
- Keep leaves raked off lawns to prevent smothering grass.
- Now is a good time to apply lime if soil tests indicate the need.

Week 4

• Winterize lawn mowers before storage.

Vegetables

Weeks 1-4

- Sow cover crops such as winter rye after crops are harvested.
- Gourds should be harvested when their shells become hard or when their color changes from green to brown.
- A few degrees of frost protection may be gained by covering tender plants with sheets or light-weight fabric row covers.
- Continue harvesting tender crops before frost.
- The average first frost usually arrives about October 15-20.

Weeks 1-2

 Harvest winter squash and pumpkins before frost. For best storage quality, leave an inch or two of stem on each fruit.

Weeks 1-2

• Dig sweet potatoes before a bad freeze.

Fruits

Weeks 1-4

 Store apples in a cool basement in old plastic sacks that have been perforated for good air circulation.

Weeks 2-3

Persimmons start to ripen, especially after frost.

Weeks 3-4

 Monitor fruit plantings for mouse activity and take steps for their control if present.

Week 1

Fall color season begins.

Week 3

• Begin peak fall color in maples, hickories and oaks.

Week 4

- Place wire guards around trunks of young fruit trees for protection against mice and rabbits.
- End of peak fall color.

Gardening Calendar supplied by the staff of the William T. Kemper Center for Home Gardening located at the Missouri Botanical Garden in St. Louis, Missouri. (www.GardeningHelp.org)