


HYDRANGEAS AND THEIR CARE

Thanks to Texas Aggie Website and a Parker County Master Gardener (who loves and grows hydrangeas) for the information in this article.

 **Tip: from PC Master Gardener:** Though not easy to grow in Parker County, the results to me are worth the trouble.

TYPES

The cultivars of *Hydrangea macrophylla* are divided into two groups:

- The "hortensias" have sterile flowers in solid masses, which are often so heavy they cause the stem to bend.
- The "lacecaps" have a center of fertile, relatively non-showy flowers and an outer ring of showy, sterile flowers, which together form a pinwheel effect.

Hortensias:

- All Summer Beauty, 3-4 feet tall with flower heads produced on current season growth, unlike other bigleaf hydrangeas.
- Carmen, 4 feet tall with large pink flower heads.
- Nikko Blue, 4-6 feet tall with rich blue flower heads (in acid soil).
- Blue Prince
- Compacta, supposedly more compact than Nikko Blue with darker green leaves.

Lacecaps:

- Blue Wave, 6-7 feet tall with lacecap flowers.
- Coerulea, perfect flowers a deep blue and ray flowers blue or white.

Several lacecaps feature silver-variegated foliage:
Quadricolor, Silver Variegated Mariesii, and Variegata.



Oakleaf Hydrangea (*Hydrangea quercifolia*): This deciduous shrub grows to 6 feet tall and has deeply lobed, oak like, 8-inch leaves, which turn bronze in fall. The white flowers turn pinkish then a tan/cream color as they age.

Snow Queenâ has large white flower clusters.
Snowflake has a double-flowered appearance.
Harmony is a low-growing shrub, 3 feet tall and 6 feet wide, with spectacular 12-inch cones of sterile flowers.

Climbing Hydrangea (*Hydrangea anomala*): This is a deciduous vine, which climbs high by clinging aerial rootlets. Leaves are roundish, 2-4 inches long. The white flower clusters are 6-10 inches wide in lacecap effect. Old plants have a peeling (exfoliating), cinnamon-colored bark that adds to winter interest.

Smooth or Snowhill Hydrangea (*Hydrangea arborescens*): This is a 5-foot-tall deciduous shrub with oval, grayish green, 4-8 inch leaves. Flowers are dull white and bloom late June through September.

Annabelle produces enormous (to 1 foot) globular clusters of sterile white flowers on a plant about 4 feet tall.

Grandiflora has 6-inch clusters on a similarly sized plant.

Peegee Hydrangea (*Hydrangea paniculata*): This is a 10-15-foot shrub or up to 25-foot tree. Leaves are 5 inches long and turn bronze in fall. Flowers are mainly fertile, in 10-15-inch clusters, white slowly fading to pink in the fall. Peegee hydrangeas are tolerant of city conditions. Tardiva flowers later, in August and September. Praecox grows 10-15 feet tall and flowers in June.

Hydrangea serrata is a small (to 5 feet tall) deciduous shrub similar to *H. macrophylla* but smaller, with smaller leaves and smaller flowers.

Blue Billow is only 3 feet tall.

You may have difficulty locating all the varieties in your local nurseries but plant what is available and ask if they could carry the other varieties.

WHEN TO PLANT

The optimum time to plant an established hydrangea is early summer or late fall. If planting in early summer, you will need to water the plant often to help establish the roots. Water the plant less often and for longer periods of time, as opposed to short bursts of water that may evaporate before it reaches the roots. However, don't overwater the plant and let the roots sit in soggy soil; this will cause root rot and your plant will die.

Planting a newly-rooted cutting in late fall is a bit risky, depending on the severity of the winter. Planted against a foundation and heavily mulched, the plant will most likely survive.

PRUNING

When pruning hydrangeas, it is important to know that mophead, or snowball; hydrangeas do not ever have to be pruned back, unless they are very old. Removing dead stems is the only pruning that must be done for the health of the plant, and these can be removed at any time. Dead blooms can also be removed at any time. If you have a very old or very large hydrangea, and you must prune it, use one of the following methods.

Use Method 1 if you have

- mophead or lacecap hydrangeas,
- or if you have oakleaf hydrangeas (leaves shaped like oak leaves).

Use Method 2 if you have

- paniculatas (Pee Gees) or
- ‘Annabelle’ hydrangeas. Both of these bloom white.
- If you have an ever-blooming hydrangea such as Endless Summer, Blushing Bride, or All Summer Beauty, you can prune it at any time, since these varieties regenerate bloom buds.

Method 1:

This method is for hydrangea types that bloom on old wood.

‘**Old wood**’ are stems that have been on the hydrangea since the summer before current season. This group of hydrangeas produce flower buds on stems between August and October for the following summer’s blooms. If the stems are pruned in the fall, winter, or spring, the bloom buds will be removed and there will be little or no bloom the next year. Prune these hydrangeas only in summer **before** August to be safe. If you feel you have missed the opportunity, only cut stems back to just below the flower where you see the next set of buds forming. After the plants are at least 5 years old, about 1/3 of the living stems can be removed down to the ground each summer. This will revitalize the plant. All dead stems should be removed from hydrangeas every year.



Method 2:

This method is for hydrangea arborescens (Annabelle types) and paniculata (Pee Gee/ Limelight types). These hydrangeas bloom on new wood.

‘**New wood**’ means stems that develop on the plant during current season.

‘Annabelle’ types can be pruned anytime except in the spring when they are flowering. They can be pruned hard in the fall and still bloom beautifully the next spring. Drastic pruning, however, may not allow stems to increase in size, and they may need staking to hold up the flower heads.

Paniculatas, such as Pee Gee and Limelight types, can be pruned anytime except during the summer, when they are in bloom. However, it is not always necessary to prune them every year. Paniculata hydrangeas are the only hydrangeas that can be pruned into tree-form. If these are pruned or cut close to the ground, they will grow back as a shrub unless training and pruning is started again from the new shoots.

FERTILIZING HYDRANGEAS

Hydrangeas grow best if they are fertilized once or twice in the summer. Although some authorities recommend special fertilizer mixes to get the maximum results, hydrangeas do amazingly well with a more relaxed approach.

Either **chemical fertilizers** or **organic matter** can be used successfully. Since an organic method of applying manure and/or compost around the roots, produces excellent results and also improves the condition of the soil, this would be an excellent first line of attack. Organic additions to the soil can also be combined with a shot of chemical fertilizer for maximum effect.

If **chemical fertilizers** are used, applying a **slow-release**, balanced fertilizer once a year is probably the simplest solution. There are many slow-release fertilizers on the market. If you can find a fertilizer formulated for shrubs and trees, this fertilizer would work well on hydrangeas. If slow release granules are used, the granules **MUST** be covered with soil for the fertilizer to release properly.

However, slow-release is certainly not the only way to fertilize hydrangeas. A less expensive fast release fertilizer such as a **10-10-10 will work just as well** if applied twice during the summer. If you are looking for a fertilizing routine tailored to your specific conditions, a **soil sample** should be taken and the fertilizer and trace elements matched to the needs of your soil.

Don't fertilize after August. Fall is the time for hydrangeas to begin preparing for dormancy. Fertilizing at this time may stimulate new growth that will be too tender to withstand the winter. In Parker County, a late May application and another in July would be about right.

The **amount** of chemical fertilizer used per plant will vary with the size of the plant and its root system. (Use less fertilizer for hydrangeas in a container.) *Over-fertilization can be much more detrimental than under-fertilization.* "**Fertilizer burn**" can occur when too much fertilizer is applied, resulting in a drying out of the roots and damage or even death of the hydrangea. It is much better to err on the side of too little fertilizer than too much. When roots are burned, the first sign is often scorched looking leaves. If over-fertilization is severe, the plant may just wilt and die.

If you are a beginner at growing plants, it may be helpful to know that a very small plant which is planted in the ground will take about 1/8-1/4 cup of fertilizer. When fertilizing hydrangeas in pots, be careful to apply a fertilizer that will not burn the roots (such as a slow release or a liquid fertilizer). A very large shrub in the ground will take 2-3 cups spread around the drip line of the branches (not next to the trunk). This is a very loose estimate, so please read the directions on the fertilizer before applying it.

If a **liquid fertilizer** is used, it should be applied every month for both plants in pots and in the ground.

Never fertilize a plant with a chemical fertilizer if the plant looks sick or wilted. If a plant is struggling due to a disease or root problems, the fertilizer will only add stress to its life. Try to cure the problem before adding fertilizer.

For an organic approach, many gardeners use commercial manure on the soil around hydrangeas. Commercial manure or compost can be applied yearly around the base of the hydrangea. As with chemical fertilizers, do not apply it right next to the trunk or stems emerging from the ground.

Other Information about Hydrangeas and Fertilizer


Fertilizing a healthy hydrangea will **not** cause it to bloom. If a hydrangea will not bloom year after year, there is a problem unrelated to the fertilizer. There are several reasons why hydrangeas won't bloom, but a lack of fertilizer is not one of them. This is unfortunate since we would all like a simple solution to the common problem of hydrangeas failing to bloom.

Fertilizer will **not** change the color of the blooms. It's possible that extra ingredients added to fertilizers might change the color, but the fertilizer itself doesn't have this power.

When leaves on a plant turn yellow **WITH** green veins (as in the image, which is from the Texas A & M Aggie site), regular fertilizer will not improve the color. This condition usually means the plant needs iron. Yellow leaves and green veins are often the result of iron chlorosis. This is the result of either an iron deficiency or iron unavailable for plant uptake.



Liquid iron is inexpensive and can easily be poured or sprayed on the plant. (Any brand will do) The results are often quite dramatic.

 **Tip: from PC Master Gardener:** Do not get iron additive on surfaces you do not want to stain because it can turn that surface a rusty color.

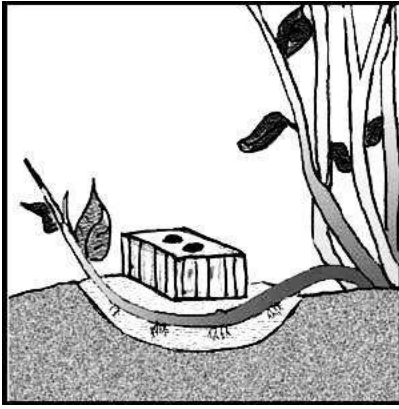
PROPAGATING HYDRANGEAS

April-August:

Should be done April-August. The best cuttings are from the ends of non-flowering shoots with two or three pairs of leaves. It is best to root them in sand in a shaded area.

ROOTING CUTTINGS--MADE EASY

1. Take a cutting from a branch of hydrangea shrub about 5-6" long. Most experts say the cutting will work best if taken from a branch that did not flower this year.
2. Remove lower leaves of the bottom two leaf nodes.



3. Cut largest leaves down to about half their size
4. Dip cuttings in rooting hormone (this is entirely optional) and insert into damp vermiculite, coarse sand or other sterile medium.
5. Water pot well and allow it to drain. Make sure soil is moist but not soggy. Cover cuttings and pot with plastic. Try to keep plastic from touching leaves by adding stakes

Tips:

- Place cuttings in bright light. **NEVER PLACE NEW CUTTINGS IN THE SUN.** They will cook in the plastic. And even if they are not in plastic, they should be placed in a bright shady area.
- Do not water again until top of soil begins to feel slightly dry. Overwatering will cause cuttings to rot.
- Expect cuttings to begin to form roots in 2-3 weeks depending on temperature (faster in warm weather) and humidity. Some cuttings root in as little as one week. If a tug on the cutting resists the pull, it is rooting.

NOTE on overwintering cuttings: Getting cuttings through the first winter without a greenhouse is hardest part of starting new hydrangeas from cuttings. Start new cuttings early in summer to give them the best chance for surviving winter. While some people manage to take cuttings through winter indoors, in general, this does not work well. Hydrangeas do best if grown outdoors. Here are two suggestions for getting cuttings through winter:

(1) Sink pots of cuttings into the ground and cover well with lightweight mulch, and

(2) put smaller pots of cuttings next to a foundation and cover them with large clay pots for the winter.

GROUND LAYERING

This is a very easy method

To ground layer, select a branch close to the ground (or several).

Remove the leaves for about 5-6 inches at the spot where the branch touches the ground and scrape a **little** of the bark off the underside of the branch in this area. Make sure at least one leaf node will be under ground. The leaf node is where a leaf comes out of the branch and most roots will form

Do not cut the branch off the mother plant. Dig a little trench about 2 inches deep and lower the branch into it and cover generously with soil (potting soil would be nice but is entirely optional

Put a brick or stone on the buried area so that it will stay under the soil. This also helps to hold the moisture around the branch. Keep it watered occasionally. When roots form, the branch can be removed from the mother plant, potted up and treated like a mature cutting or when the new branch, which is attached to the mother plant, is well-rooted, cut it off the mother plant **but leave it in the ground without disturbing it** for a few more weeks, so it can become accustomed to growing on its own. Then transplant it. It will stay much healthier and be better able to thrive without the mother plant.

DISEASES AND INSECTS OF HYDRANGEAS

While hydrangeas in landscape settings are relatively pest free, under certain growing conditions some diseases and insects can become problems. For the bigleaf hydrangea, the major disease problem is powdery mildew (see image at right).

It is most common on plants growing in extreme shade and under high humidity conditions.

Powdery mildew infested leaves are covered with a light gray powdery-looking substance.

Purple splotches may also appear. Powdery mildew rarely kills plants, but is unattractive.

Powdery mildew may occur on other hydrangea species, but is most severe on bigleaf (*Hydrangea macrophylla*) hydrangea.



There are several fungal leaf spot organisms that attack *hydrangea*. Leaves develop brown to gray lesions surrounded by purple halos (see image at left). These leaf spots are most common in late summer and early fall, and seem to be more common among plants grown in sunny locations. Again, plants are rarely killed, but severe infestation can be very unattractive. All the cultivated species of *hydrangea* are susceptible to one or more of these leaf spots.

Oakleaf hydrangeas are susceptible to root rots. The most common is Armillaria root rot. Infested plants will appear wilted, but will not recover when watered and will eventually die. Planting hydrangeas on poorly drained soils will increase incidence of root rots and should be avoided.

Hydrangeas may be susceptible to rust, which will appear on the back side of leaves as small, orange spots (see image at right). Rubbing the back of the leaves will release an orange dust which contains spores of the fungus. The disease is usually seen near the end of the growing season and rarely kills plants.



Japanese beetles will feed on oakleaf hydrangea, but are rarely a problem on the other species. Japanese beetles can be controlled by spraying or dusting with the insecticide Sevin, but the problem is rarely severe enough on hydrangeas to merit the use of an insecticide.

Aphids can be a problem on the new growth of all hydrangeas, but can be easily controlled by washing, using an insecticidal soap or an insecticide spray. The presence of ants crawling on plant leaves is often an indicator of an aphid problem. The ants feed on the sticky honeydew



(excrement) left by the aphids. If you see ants on the leaves of your hydrangeas, turn the youngest leaves on the plant over and look for small green insects. As leaves become tougher during the growing season, aphid problems usually diminish. Mites can cause problems on hydrangeas. Mites are too small to see with the naked eye, but mite infestation can cause distorted growth, mainly seen in new shoots (see image at left). Webbing between leaves will also be noticed with spider mites. Mite problems are usually worse during hot, dry weather. Adequate watering of plants during hot weather is the best preventative against mite problems. A miticide can be used as a chemical control.

MOST FREQUENTLY ASKED QUESTION ABOUT HYDRANGEAS:

Why do my hydrangeas not bloom?

It can be because of the species of hydrangea you have planted. Some of them grow flowers off new wood and some of them will grow flowers off old wood. If your hydrangea won't flower, then you need to figure out what variety you planted.

Hydrangeas that flower off new wood usually are not a problem. There are other types of hydrangea, however, and they might have problems.

The most common hydrangea purchased is the bigleaf (mop head) hydrangea. This particular species of hydrangea are called *hydrangea macrophylla* and they have blue or pink flowers. Since these hydrangeas bloom on old wood, this may create a problem. If the old wood dies back to the ground in a cold winter, your hydrangea won't bloom when it grows back the following year. This is because it's growing new wood and the new wood doesn't produce flowers on this particular variety.

Another problem when your hydrangea won't flower is that you may have pruned it the year before too far back. A lot of times if these particular hydrangea are pruned in early summer or late winter, you will have few if any flowers on your hydrangea. This is because, if they are over pruned in summer, they tend to die back farther than they normally would and you will end up having to wait a year for hydrangea blossoms. If you are having problems because your hydrangea won't bloom, it is best to avoid pruning them anytime but early spring when you can see where the dead wood is and will not accidentally over prune.

Also, make sure the hydrangea is hardy for your cold/heat zones. Florist hydrangeas may not survive our winters and may need to be brought indoors during cold weather.