

Growning Happy Hydrangeas

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Hydrangeas are medium to large sized, deciduous woody shrubs that flower from summer to fall depending on the variety. They look great planted individually or in groups, among azaleas and rhododendrons or in perennial beds. Their large showy blooms vary in size, shape and color. Once established they are easy to grow and maintain. There are, however, several important things to learn about hydrangeas to keep them happy.

Types of Hydrangea

The blossoms of hydrangeas are actually clusters of the flower head types known as an inflorescence.



These flower heads comprise two types of flowers: small fertile flowers and larger, showier sterile flowers.

These appear differently on each variety of hydrangea. There are about 23 known varieties, five of which are grown widely in the United States. *H. macrophylla* is commonly known as bigleaf, garden or florist's hydrangea.

H. quercifolia is known as oak leaf hydrangea, and *H. paniculata* is commonly known as a panicle hydrangea – 'PeeGee' is a popular cultivar. *H. arborescens* is commonly called smooth hydrangea, and *H. anomala* is a climbing hydrangea.

H. macrophylla (which includes the smaller subspecies *H. serrata* or mountain hydrangea) is native to Japan. This variety is hardy to USDA Zone 6. The leaves are large, thick and glossy, and the flowers range from white to pink, blue and purple. They bloom in early summer and have two types of bloom. The first type is the Mopheads with large, showy rounded blossoms; they have few small interior

fertile flowers and many large sterile flowers making up the inflorescence. 'Nikko Blue' and 'Alpenglow' are two examples. The second type of bloom is the Lacecap, which has a group of fertile flowers in the middle and larger sterile flowers on the edges; 'Blue Wave' is a favorite along the coast. *H. macrophylla* bloom on old wood.

H. quercifolia, whose large leaves look like those of an oak tree, is native to North



America, hardy to Zone 5, and can reach 6 to 8 feet in height and width. It thrives in drier soil conditions and does not like wet feet. Its large, creamy colored cone-shaped

flower heads mature to rose pink as they age. It blooms on old wood. Good varieties are 'Alice' and 'Snow Queen.' A 1999 dwarf introduction called 'Little Honey,' which has golden yellow summer leaves that turn reddish-brown in the fall, and produces 6-inch long flower clusters on a 4x4 foot shrub, is a particularly good choice for the smaller garden. *H. paniculata* is native to Asia and thrives in a wide range of soil types. They are the most cold tolerant of the hydrangeas, up to Zone 3, and can reach 8 to 10 feet tall. Their large panicles of showy blossoms last through the summer and turn pink in the fall. One cultivar called 'Limelight' has chartreuse flowers that slowly change from mauve pink to burgundy in the fall. The best known *H. paniculata* is PeeGee. This hydrangea gets its nickname from its botanical name, *H. paniculata* 'Grandiflora' (PG). This type blooms on new wood.

H. arborescens is native to North America, is drought tolerant and hardy to Zone 3. This variety can grow to 10 feet but generally grows from 3 to 6 feet tall. Its hairy, thin leaves are heart shaped. The flowers can be Mophead or Lacecap in form. 'Annabelle' is a very popular variety with upright arching stems carrying a very large white flower. *H. arborescens* bloom on new wood.

Planting Hydrangeas

Growing hydrangeas is not difficult. Plant hydrangeas in early summer or late autumn, ideally in a space where they can achieve and maintain their maximum size without much pruning. Plant in sun to part shade; however, planting too deeply in the shade will keep the plant from blooming, especially in Zones 5 and 6.

Dig a hole three times as wide and at the same depth as the plant was growing in its container. Make sure your plant has been watered well and the roots are white and not intertwined. (Remove all burlap and wire if planting balled and burlapped plants.) Fill your hole halfway with water and let it drain to settle the soil before planting. Back fill with the original soil you dug and amend with organic matter only if you need to promote better drainage. Water deeply.

Fertilize hydrangeas once or twice in the season with a balanced 10-10-10 fertilizer. Do not fertilize after August as this may promote new growth that may freeze before the plant can reach winter dormancy.

Pruning Hydrangeas

The type of hydrangea determines how it should be pruned. As noted above, hydrangeas either bloom on new or old wood. *H. macrophylla*, *H. serrata* and *H. quercifolia* types rarely need to be pruned. These types bloom on “old wood” meaning on stems that have been on the shrub since the previous summer. Remove dead stems at the base and deadhead the blooms. The buds on these types of hydrangeas form on the stems from August to October. Pruning in the fall, winter or spring will remove the next summer’s blooms. These types of hydrangeas can be deadheaded right after blooming in July with a long stem, or later with a short stem (above the first set of leaves) to prevent cutting off next year’s buds. They can also be thinned once they are several years old to rejuvenate the plant by removing thin, spindly stems at the base, letting in more light and promoting larger blooms on the remaining stems.

H. paniculata and *H. arborescens* bloom on new wood. These shrubs can be pruned at any time of the year except when they are preparing to bloom in summer. They do not have to be pruned

every year. However, once established, they can be pruned to the ground [coppiced] every year to encourage vigorous new growth or they can be pruned one-third to one-half the plant’s height to form a tidier bush with smaller flowers. (An exception to this is the tree forms which will revert to a shrub if coppiced.) Deadhead spent flowers at any time.

Varying Plant Color

Plant color is a fascinating aspect of hydrangeas. No other plant can so readily change its flower color by altering soil acidity. The ability of a plant to take up (or not take up) aluminum from the soil is what determines its color. White hydrangeas cannot change their color, since they have no pigment. All hydrangeas grow best in a soil that is slightly acidic, pH 5.5 to 6.5. For a hydrangea to be pink it must *not* take up aluminum. At a higher, more alkaline pH of 6.0 to 6.5, the plant has difficulty taking up aluminum which naturally occurs in the soil. Lime can be added to the soil around hydrangea plants to increase the soil pH. (At a pH higher than 6.5 the plant will not be able to take up other nutrients and will suffer iron deficiency.) If you want pink blooms, add bone meal to the soil when the hydrangea is first planted. In the spring as the leaf buds begin to appear, add a fertilizer that is high in phosphorous (e.g., 10-3-10) which ties up the aluminum in the soil. Hydrangeas planted near cement sidewalks or foundations have an easier time turning pink because the soil near these structures is more alkaline. For strong pinks it is best to plant in containers or pots where the alkalinity can be more easily adjusted.

To make a hydrangea turn blue to purple, help them take up more aluminum. This can be done by lowering the soil pH to 5.2 to 5.5 by adding organic matter such as used coffee grounds or chopped fruit peels, or by adding aluminum sulfate (9 ounces per square yard) or by using fertilizers low in phosphate (e.g., 15-0-15). Watering the plants with rainwater instead of tap water will help also, because rainwater contains less lime than hard tap water.

Pests and Diseases

Hydrangea shrubs are relatively disease and pest free. Several types of fungal leaf spot and powdery mildew can appear on plants during times of high humidity. Mites can appear during hot, dry spells. Aphids on new growth can be controlled with insecticidal spray and decrease as growth matures. Oakleaf hydrangeas are susceptible to root rot where drainage is poor and Japanese beetles appear to be drawn to them. Smooth-leafed hydrangeas are somewhat prone to rust. If the pH of the soil is too high the plant can suffer from iron chlorosis. As with all other plants, slugs, snails, deer, too much sun, too little water and late frosts can also affect hydrangeas.

With patience, knowledge and a little TLC, hydrangeas can energize and bring pleasure to the garden for years. Keep an eye out for the newer, remontant (re-blooming) varieties such as *H.* 'Endless Summer' to add even more garden delight.

Sources: www.hydrangeashydrangeas.com

www.usna.usda.gov/Gardens/faqs/hydrangeafaq2.html

Church, Glyn; "Complete Hydrangeas"; Firefly Books Ltd. , Canada. Copyright 2007.

Carson, Janet; "Pruning Hydrangeas"; Fine Gardening Magazine, Taunton Press. May-June 2007.