Managing Hydrangeas in the Delaware Valley



By Michael Bowell

OLKS WHO VISIT MY GARDEN in Malvern (Charlestown Twp), Chester County, PA, know that I love and grow several species and cultivars of hydrangea. I enjoy them for their varied colors and forms and often use them as cut flowers and branches for weddings, party work, and vases. We also dry them to use in fall and winter arrangements for our Create A Scene clients, frequently embellishing their faded blossoms with floral paint matching their original colors. At Christmas, we spray some with gold paint for decorating mantles, wreaths, and trees, or as I say, "We grow 'em, guild 'em, and sell them to the govem!"

I am frequenty asked for advice about their care, from pruning to color change, and for the most reliable varieties for the Delaware Valley.

Hydrangeas, at least the four major groups discussed in this article, generally begin their show here in late May when the containerized hydrangeas (all *macrophylla* types that have been protected in cold frames over winter) commence flowering. The oakleaf *(quercifolia)* varieties are

Michael's Tips for Painting

Use floral paint, many colors available at craft stores.

Dip in paint if trying to highlight edges.

Spray outdoors, be sure flower surface is dry

Use multiple colors and layers for a more natural effect, start with green or blue, then softly highlight with cranberry, pink, or burgundy. Experiment!



Hydrangea paniculata 'Limelight' flowering in early August. The green buds open to white and eventually color up to shades of pink, green and burgundy in late summer, persisting well past frost. They are available in both shrub and standard form.

next, followed by the *arborescens* and *macrophylla* types in the garden, and finally the *paniculata* cultivars, which last through October. If you count *Viburnum macrocephalum*¹ (Chinese Snowball Viburnum), which many think of as hydrangea, I have hydrangea-like flowers from April through October, and dried flowers through the winter holiday season and beyond.

Like most locals, my first memories of hydrangea (Hydrangea macro-phylla, aka the mophead hydrangeas,

¹ Be wary of the confusion of common names...hydrangea and viburnum are both deciduous shrubs. The snowball hydrangea (Hydrangea arborescens) belongs to the Hydrangeaceae plant family, while the Chinese snowball viburnum (Viburnum macrocephalum) and the Japanese snowball viburnum (Viburnum plicatum) are in the Adoxaceae (formerly classified in Caprifoliaceae).

native to Japan) were at the Jersey Shore and or as potted flowering plants on Easter and Mother's Day, complete with foiled pots. I remember the drive through Margate City when the hydrangeas were at their July peak in the central traffic islands of the main thoroughfare, and abutting the guesthouses of Ocean City and Cape May, NJ. Like many folks, I also recall hydrangeas planted from those foiled holiday pots growing to great size in our gardens, with their vigorous green growth and sparse flowering, foiling our dreams

of flower-laden shrubs. It made no sense to me at that time, but I learned later that those plants were potted up in the greenhouse and, like the plants we carry over in the cold frames each winter, had already gone through a period of dormancy. They are destined to flower when they break dormancy as the weather warms and the days grow longer.

Many of the cultivars that are used in hothouse production are bred for flower size, style, and color and are not reliably winter hardy in our gardens. Their wood dies to the ground in our winters, which are more severe than the coast and its beaches. Although they recover quickly from their base each spring, the older wood from the previous season is gone, along with all of the current season's flower buds. Even if the winter is mild, a late

cold snap, with temperatures dipping below the mid-20s°F, can kill actively growing woody stems or damage their burgeoning buds. Shy blooming might also be caused by the gardener who tidies up the garden, removing all of the bare (but budded) wood in fall or spring cleanups. Also, the deer love them and they might chew the canes to the point that the buds are destroyed. Again, no flowers are produced.



Hydrangea paniculata standards give a freshness to the late summer garden.

To encourage these types of Hydrangea macrophylla to flower well, you can start by planting hardier varieties (see sidebar) that withstand our winters. Pruning before mid-July, and then not again until after flowering the following season, will ensure that the canes go into the winter as viable, budded wood. Planting them out of the way of the cold and dessicating north and west winds; using antidessicants, such as WILT-PRUF®; covering stems with Reemay[®], burlap, or even sheets in early spring, to protect emerging buds from late freezes; and guarding against deer with sprays or other repellants can all help to give you a good crop of flowers. Since I live on the north side of a hill (plants there are less likely to bud out early) and most of my garden is protected from the west and north winds, that leaves me with just deer and late spring freezes. I use Reemay® to cover plants if the buds have emerged and are growing, and we are expecting freezing

temperatures of about 26°F or less. The 8' deer fence and four dogs deter Bambi. Vigorous, well established plants overwinter better than the newly planted. Varieties such as 'Penny Mac' tend to give some flowers on newer wood and the Endless Summer® brand of hydrangea flowers on old and new wood, especially after they have been established for three or four years. Do be patient with varieties such as End-

less Summer® and 'Big Daddy' as they definitely just get better and better with age.

Hydrangea macrophylla (Bigleaf Hydrangea) comes in white and also in shades from rich pink to purples, mauves, and blues. The colored forms can be altered by soil pH and aluminum levels in the soil. The whites mostly turn to greens or age to soft pinks and greens and can only be changed with floral paint directly sprayed onto the blossoms. We have many times

embellished fading blooms in the garden with floral paint, especially for garden parties, just as we do with the fading blooms of giant alliums in late June or the white flowers of *Viburnum macrocephalum*, which make for early 'hydrangea-like' pink or blue flowers in April and May, well before the mopheads bloom. Lacecap hydrangeas can be treated in the same manner to adjust color with pH and aluminum levels.

For pink hydrangeas, maintain the pH at 6.0 to 6.2. Raising the pH to about 6.5 produces the most pink but avoid raising pH above 6.5 because iron deficiency can be a problem. Fertilizers relatively high in phosphorus (the middle number) help to produce stronger pinks.

Blue hydrangeas require a pH under 6.0, the bluest at 5.2 to 5.5. Best fertilizers include aluminum sulfate to raise the level of aluminum and lower the pH. Adding organic matter also lowers the pH. Fertilizers relatively high in potassium (last number in



Hydrangea Magical® Ruby Red

Michael's Personal Favorites

Hydrangea macrophylla—blue to pink flowers, pH dependent, salt tolerant.

'Penny Mac'—blue to pink flowers, reliable, medium-sized flowers, reblooming.

Endless Summer®—medium flowers, extremely reliable, reblooming.

'Big Daddy'—large flowers, reliable bloomer, long lasting.

'Lemon Daddy'—tends to pink, medium flowers, chartreuse foliage.

'Nikko Blue'—medium flowers, reliable. 'Tokyo Delight'—blue and white lacecap.

Hydrangea arborescens—mostly green buds to white flowers, aging to green, salt tolerant.

'Annabelle'—old favorite, reliable, colonizer, excellent for drying.

Incrediball[®]—large upright flowers, excellent for drying.

Invincibelle[®] Spirit—pink flowers, rebloomer.

Hydrangea quercifolia—excellent in shade, great for drying, fall color, exfoliating cinnamon bark. I like the species more than most of the selections, widespreading and open habit.

Hydrangea paniculata—mostly whites fading to green with pink touches, sun intensifies color.

'Tardiva'—large and open growing, shade tolerant, excellent for drying.

'Limelight'—lime green aging to white, then pink, reliable.

'Phantom'—huge flowers, ivory to white Quick Fire®—earlier bloomer, white aging to deep pink.

First Editions[®] Vanilla Strawberry[™]—huge flowers, white to rose to bright rose.

Hydrangea petiolaris—climbing (clinging) woody vine to 6o' in my woodlands, white lacy flowers.

Hydrangea aspera Villosa Group—tall shrub to small tree, lavender and white lacecap flowers, best in shade and protected areas. Native to Himalayas.

fertilizer ratio) and low in phosphorus are recommended.

I have naturally occurring acidic

soil and a woodland setting. I rarely fertilize, but I do use ample compost and pine straw as mulch. Compost helps in maintaining soil moisture and leads to vibrant. vigorous plants. Irrigation during prolonged drought also keeps hydran-



Hydrangea arborescens faithfully flowers for the Fourth of July. This is a lacecap type that has both sterile and fertile flowers. It suckers freely from its base.

geas looking fresh. Part shade, especially afternoon shade, helps to maintain color and avoid scorching during hot, dry weather. Garden selections of *H. macrophylla* have been made for overall plant size, flower size, and, of course, color. Forms vary from the partially fertile lacecap types to fully sterile, giant flowers.

Basically, all hydrangeas are happy in part shade, especially the mopheads and oakleaf types. *Hydrangea arborescens* and *H. paniculata* types can tolerate shade but are flower-producing machines when given ample amounts of sun and soil moisture. All other hydrangeas including *H. paniculata* (native to Asia) and its many cultivars, and *H. arborescens* and

Hydrangea paniculata Magical Candle™

H. quercifolia (both native to North America) have traditionally been white or shades of green, frequently

with pink and burgundy highlights that intensify with the age of the flowers. The newest varieties include pinks and burgundies.

The many cultivars of *Hydrangea quercifolia*

(Oakleaf Hydrangea), like *H. macro-phylla*, flower on old wood only in late

May through June, their flowers aging gracefully and lasting until fall. They are reliably winter hardy but are deer bait, lessening the amount of spring flowers. Oakleaf hydrangea also fall

prey to mistimed pruning and should not be pruned after July I in our area. There are many selections of oakleaf hydrangea, most notably for flower size, shape, and stance. Flower colors

Michael's Tips for Cutting

Sharp shears, early morning or evening, plunge directly into water as you cut.

Wilting flowers can be revived with a fresh cut under water.

Mopheads should have most foliage removed to retain moisture.

Plunging in boiling water for 30 seconds can revive freshly recut stems—although I have rarely needed to resort to this.

range from clear whites overall aging to pinks and burgundies. Overall plant size, summer foliage color, and fall color are also variable and worth noting.

Both Hydrangea arborescens (cultivar 'Annabelle' is an old time favorite, recently upstaged by the large and less floppy Incrediball®) and Hydrangea paniculata flower on new wood and thus can be pruned in autumn or spring. Hydrangea paniculata 'Grandiflora' (Pee Gee Hydrangea) sports fully sterile snowball-type flowers that can be quite floppy due to the size of its inflorescences. Pinching helps to produce a more upright flowering on shorter branches. H. p. 'Tardiva' has both sterile and fertile flowers that are lighter in weight and therefore less floppy. We pinch H. paniculata varie-

> ties to encourage branching, but stop by July 4 to ensure a good late summer show. Most of the exciting new cultivars are coming from this last group of hydrangeas, notably bred

for their flower size, color, and form, to market in the cut flower trade. Since they are fully winter hardy and flower reliably, these are the plants to search out in your local nurseries.

Some more recent varieties include First Editions® Vanilla Strawberry[™], Quick Fire[®], and Bloomtastic!™ Fire and Ice, all starting as white and maturing to shades of rose, deep pink, and burgundy reds. 'Phantom' progresses from white to creamy whites and yellow. Hold your breath for newly introduced Hydrangea paniculata Magical Candle™ from the breeding program of Peter Kolster of Boskoop, Holland. Peter, a third generation nurseryman, has been breeding woody ornamentals for the European cut flower trade that include Hypericum spp., Ilex verticillata (Winterberry



Hydrangea paniculata Magical Candle™, mature color



Hydrangea Magical Sunfields®, early



Hydrangea Magical Sunfields®, late

Holly), and *Symphoricarpos* spp. (Snowberry), all berried branches used in flower bouquets. Kolster's company has also been breeding *Hydrangea macrophylla* in brilliant colors and with flowers of such great substance that they can last for many months in pristine condition. Next up for us from Kolster is a phenomenol remontant (reblooming) *H. macrophylla* variety, an incredible improvement over Endless Summer®, that is a blooming ma-





chine with wonderful substance, which seems to be in flower from June to a hard freeze. *Hydrangea* Everlasting™ Revolution, the leader of this new race of plants offered under the Everlasting™ brand, has been introduced in the US by Plants Nouveau, specialists in seeking out new plants for the US market.

Stay tuned to hydrangeas and keep those spray paints ready!



Michael Bowell, a New Jersey native and Rutgers graduate ('78), gardens with his partner Simple and four dogs on a wooded hillside in Chester County, PA. He started his garden business, Create a Scene, in 1986. Michael enjoys writing about his own gardening experiences from orchids to container gardens, and regularly presents to garden clubs, arboreta, etc. He is an accredited American Orchid Society judge and specializes in epiphytic plants.

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An excellent source of information for hydrangeas and their care is at www.hydrangeashydrangeas.com.

Editor's Note: For a full-color version of this article, go to the HPS/MAG web site, www.hardyplant.org.



Brilliant color & a compact rebloomer, for garden or containers—
Hydrangea
Everlasting™
Revolution is an upcoming
Kolster
introduction to watch for.



Hydrangea macrophylla 'Hokomarevo' Everlasting™ Revolution PP#22260



Hydrangea quercifolia blooms creamy white in late May through June before coloring to greens & pinks. The dried flowers remain for the season and are accented by burgundy fall color.

Michael's Gotta Have It Next

Selling at retail starting in 2014 and 2015: Hydrangea macrophylla from the Everlasting™ Series.

Coral, Amethyst—both can be treated to be blue or pink.

Garnet, Harmony, Jade, Noblesse and Ocean—all remontant varieties.

Revolution—a compact, everblooming machine with 'everlasting' flowers