

# Hydrangeas in Newfoundland

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Hydrangeas are among the most popular shrubs for providing fall colour in the garden. For gardeners in Newfoundland we have three species to choose from; *H. arborescens*, *H. paniculata* and in milder areas, *H. macrocephala*. Confusion exists on how these three differ. Some change flower colour depending on the soil pH. Others change colour as the flowers age. Some do both! Let's see if we can clear up the confusion.

Before we get into particulars in regards to species and cultivars, one aspect of their flowers needs to be addressed. Hydrangeas have two types of flowers. The ones often located in the middle of the flower panicle are small and have both male (stamen) and female (stigma) parts. These flowers are the fertile ones which produce the seed. Located on the outer perimeter of the flower cluster are the larger, more conspicuous flowers. These 4 or 5 "petals" are actually an enlarged calyx. These larger "flowers" are sterile and produce neither pollen nor seeds, but act as a lure to bring potential pollinators into closer proximity to the fertile flowers. Since the sterile flowers are what we, as gardeners, find most attractive, plant breeders have selected hydrangea which have a higher than normal number of sterile flowers. In fact, some cultivars have nothing but sterile flowers. These consequently have the largest, most attractive flowers.

I'll start with *H. arborescens*, commonly called the Annabelle Hydrangea. The wild form has a flat-topped head of numerous tiny greenish-white flowers with only scattered sterile flowers; not particularly attractive. However, the cultivar 'Annabelle' has nearly all sterile flowers. Their flowers are produced in a large rounded head, appearing at first greenish, then later creamy white and finally pink-hued. This twiggy shrub blooms in August-September, a little earlier than the other two species. The hardiest of the group, this one will survive zone 3. Plants reach 1.2-1.6m feet but may be severely pruned in spring with little loss of flowers (they flower on new wood). In fact, an annual shearing to 15 cm can be beneficial. The flower colour of this species is unaffected by soil pH. Full sun is best but they will tolerate part shade. Recently there have been several new cultivars selected. 'Incrediball' has huge rounded clusters of all sterile flowers. 'Invincibelle Spirit' has flowers that are deep pink from start to finish. 'Bella Anna' has smaller flower clusters that are also deep pink from start to finish. It is a re-blooming cultivar in long-growing season areas but alas in Newfoundland, have just a single flush of blooms.



'Annabelle' (left) and 'Invincibelle Spirit' (right)

The largest species is *H. paniculata*, commonly called the Peegee Hydrangea. In reality, only the cultivar 'Grandiflora' should be called 'Peegee' but in the trade, it seems all *H. paniculata* are called 'Peegee'. There are well over 30 cultivars of *H. paniculata* but 'Grandiflora' is by far the most popular. This selection produces huge conical flower heads of mostly sterile flowers in September-October. Flowers open greenish-white, then age through cream to pink. This selection can reach over 3 m so demands space and full sun to perform best. They are rated hardy to zone 4. Again, soil pH will not alter the flower colour. 'Pink Diamond' is a newer cultivar who's large



*H. paniculata* 'Unique' (left) and *H. paniculata* 'Grandiflora' (right)

flower heads are a mix of both sterile and fertile flowers, which lend the blooms a more delicate, lacy effect. Blooms also open greenish and age through white (brighter than 'Grandiflora') then to a rich pink. Overall, the flowers are open for over 2 months! "Limelight" is very much like 'Grandiflora' but the flowers retain a greenish-white colour until they later turn pink. "Unique" has a mixture of sterile and fertile flowers imparting a lacy effect to the conical flower truss. It is white aging to light pink. 'Pinky Winky' has large trusses of conical sterile flowers that start off white but as they age, change to pink then deep pink, starting at the bottom of the truss then working its way to the tip. At some stages, the flowers appear bi-colored. 'Vanilla Strawberry' is very similar but is brighter pink. 'Quick Fire' is like 'Unique' in having a mix of sterile and fertile flowers and thus a lacy-effect. It changes from white through pink to deep reddish-pink.



'Limelight' (left) and 'Pinky Winky' (right)

This then brings us to the most spectacular and colourful hydrangea, *H. macrophylla*. This species has flowers that fall into two main groups; the mopheads with large rounded heads of mostly sterile flowers and the lacecaps, with flat-topped flowers whose small inner fertile blossoms are surrounded along the perimeter by large sterile flowers. These hydrangeas commonly grow 1-1.6 m tall and bloom from mid-August through October. They prefer full sun but tolerate shade better than the previous two species. Pruning should be confined to deadheading and this is best done in spring. Unfortunately, these are the least hardy of the three hydrangea mentioned, being rated for zone 5b so only suitable for the mildest areas of the Island.

These are the hydrangea whose flower colours vary depending on the soil pH. Under acidic soil conditions the flowers of most cultivars will be bright blue, while alkaline soil will result in pink flowers. Neutral soils may result in purple flowers or a combination of blue and pink. Generally our local soils are acidic hence these hydrangeas will be mostly blue but if you have a plant whose flowers are not blue enough for your liking, you can add aluminum sulfate to the growing area to acidify the soil. However, do not use this around rhododendrons as it is toxic to them.



'Nikko Blue' (left) and 'Glowing Embers' (right)

'Nikko Blue' is by far the toughest and most popular of the mophead hydrangea. There are over 300 named cultivars of mophead hydrangea! Most have flowers that are affected by soil pH but plant breeders have selected some forms that retain their white, pink, purple or blue colour regardless of soil pH. In recent years have come the 'Endless Summer' series of hydrangea. These have a longer blooming season than the old standard mopheads but locally, with our short growing season, they still have just a single flush of blooms. Among the most recent group are the 'Cityline' hydrangeas. These are dwarf and mostly remain under 1 m. 'Cityline Vienna' is like a dwarf "Nikko Blue" and will vary from pink to blue. 'Cityline Venice' has bright pink flowers that remain that colour regardless to soil pH. 'Cityline Berlin' has pink to blue flowers with a white center while 'Cityline Mars' has pink or blue flowers with a broad white margin.



'Cityline Mars' (left) and 'Cityline Vienna' (right)

The lacecap hydrangea are sometimes classified as being selections of *H. serrata* while others sell them as *H. macrophylla*. I'm sure the plant itself could care less! In the garden, I find these hydrangeas to be more delicate and less imposing. There are also many named cultivars of these and again, some have been selected to retain a single colour regardless to soil pH. 'Blue Bird' and 'Twist and Shout' are the most popular cultivars, both which vary from blue to pink depending on the soil pH. 'Beni Gaku' is a lacecap whose sterile flowers can be a mix of pink, purple and blue on the same truss, depending on the time of season. Among the lacecaps, as the flowers age, the outer sterile flowers often arch downwards, adding yet another wonderful effect in the garden. And if all this is not enough, many of the lacecaps also have spectacular autumn foliage.



'Blue Bird' (left) and 'Beni Gaku' (right)

We grow a number of the cultivars mentioned in this article. You can see them in our Asian Garden and along the Gentle Slope Trail. Drop by August through October to see them for yourself!



A variety of *H. macrophylla* cultivars