## Hydrangea Winter Pruning and Propagation

By David Doggett for the Alabama Hydrangea Society

Experts advise pruning your panicle and smooth hydrangeas in late winter / early spring. There are two distinct methods of pruning recommended for these shrubs. Pruning in mid to late February before the leaf buds break dormancy is an ideal time that permits you to use the pruned stem material for propagating new hydrangeas.

**Panicle Hydrangeas** (*Hydrangea paniculata*) like 'Limelight', 'Tardiva', 'Grandiflora', and 'Vanilla Strawberry' benefit from an annual hard pruning. Pruning stimulates growth and these vigorous growers can easily put on new 4' stems in one growing season. This hydrangea species blooms on new growth and young, vigorous stems produce the largest blooms. Annual pruning helps keep these shrubs to a manageable 6-8' size with blooms at eye-level instead of well over one's head. Without pruning, over time they can reach 12-15' and become unattractively lanky.

In Michael A. Dirr's book *Hydrangeas for American Gardens*, he writes this about pruning panicle hydrangeas: "Do not massacre the plant by reducing it to stubs. Attempt to develop an architectural framework." How do you develop an architectural framework? The first year give your panicle hydrangea a hard pruning to about 12-18" tall; two to three stems will grow from each cut stem (see below). In year two, come up one or two nodes from the original cut and prune the shrub a little taller. Again, two to three new branches will develop from the second year pruning. The third year, repeat the process and prune the shrub a bit taller still. Blooms will occur on the stem tips of new growth, so the more stems you develop using this method the more blooms you will have. Plus you will create a fuller, less lanky, more attractive form to your shrub. In addition to the hard pruning of the main stems as described, remove any spindly weaker growth that is unlikely to produce or support a bloom. Once leaves begin to show, it's time to fertilize panicle hydrangeas (usually around late March).

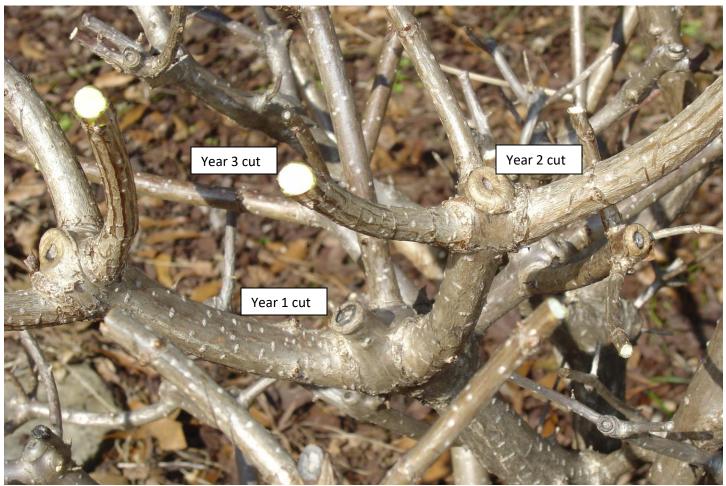


Fig. 1. Developing an "architectural framework" over several years' pruning of a 'Limelight' panicle hydrangea.

**Smooth Hydrangeas** (*Hydrangea arborescens*) like 'Annabelle', 'Incrediball', 'Hayes Starburst', and 'Bella Anna' also bloom on new growth and mid to late February is the ideal time to prune them prior to leaf buds breaking dormancy. The stems of smooth hydrangeas don't branch the way panicle hydrangeas do and so a different pruning method is necessary. These plants over time produce many thin straight stems each coming up independently from the crown of the shrub (see below). These stems can all be cut to the ground annually and new stems will grow and produce the largest blooms. However, a common complaint about smooth hydrangeas is the tendency of these weak stems to break under the weight of their large blooms. You may want to find a way to support these stems.

If you are willing to compromise a bit on bloom size, there is another way to prune smooth hydrangeas that will reduce the stem breakage problem. It is often recommended that you prune the old stems (cutting just above a pair of leaf buds) to a height of 6" to 12". The blooms will appear on new growth, but this 6" to 12" base of old woody growth provides a somewhat stronger support for the weight of the blooms. When shortening the old stems, also remove any weak, wimpy, or dead stems. Once leaves begin to appear toward late March, a light application of fertilizer can be applied.



Fig. 2. 'Annabelle' smooth hydrangea pruned to approximately 12" (cutting just above leaf buds) and weak growth removed.

## Hardwood Propagation of Panicle and Smooth Hydrangeas

Here is a simple way to turn your pruned stems into new plants. The stems you removed in pruning panicle and smooth hydrangeas can be used to root and propagate clones of your original hydrangea through a process known as "hardwood propagation" or taking "hardwood cuttings." This propagation method involves taking dormant plant material in late winter and preparing it to develop new roots when the stem breaks dormancy in the spring. The same dormant cutting method works similarly for both panicle and smooth hydrangeas.

It's best to prepare your cuttings soon after you prune the parent plant so that the cuttings are "fresh." Remove any remaining bloom from the stem tip, cutting just above the first pair of leaf buds. Cut sections of stem approximately 6" long and cut the bottom of each cutting just <u>below</u> a pair of leaf buds. Cut the top of the stem straight across and the base of the stem at an angle to remind you which end is inserted into the potting mix. If the original pruned stem is long enough, you may be able to get two or more 6" cuttings from it. Just remember to cut the top of each cutting just <u>above</u> a pair of leaf nodes and the bottom just <u>below</u> leaf buds. Next, use your fingernail to scrape away some of the woody bark from the bottom ½" of your cutting so as to expose some green cambium tissue from which the roots will grow.

Dip the bottom of each cutting in water, then into rooting hormone powder, and then insert about 1" deep around the outside of a pot containing wet, fresh potting soil. Space the cuttings about 1" apart. Leave the pot outside in a shady place, keep the soil moist, cover the pot with a plastic crate or wire mesh to prevent animals from disturbing the cuttings, and by late March you should see some new leaf formation suggesting that roots are growing as well. After about 4-5 months you can carefully separate and pot up each individual plant, trying very carefully not to disturb the delicate roots in the process. Keep these shade-loving hydrangea cuttings in a protected, shady place and wait until the following year to apply fertilizer.



Fig. 3. Hardwood cuttings of panicle hydrangeas breaking dormancy 5 weeks after prep. The green plastic crate was placed over the pot to protect cuttings from being disturbed by squirrels and chipmunks.