

Woody Florals for Income and Conservation

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Woody florals (also known as woody cut stems) are tree and shrub species that can be grown, harvested, and sold to the floral industry or used in home arrangements for their colorful or unique stems, berries, buds, and/or flowers. Woody florals are good candidates for agroforestry plantings and home landscaping because of their high value in the floral industry and ability to protect water, air, and soil quality. Agroforestry is the intensive and intentional integration of trees and/or shrubs with crops and/or livestock and includes practices such as riparian buffers, windbreaks, and fencerows (for more information on agroforestry visit <http://nac.unl.edu/>).



Woody florals can add significant value to agroforestry plantings, make unique additions to home landscaping, or provide production opportunities on small or large scales. As an example, a demonstration at the Catawba Sustainability Center in Catawba, Virginia was planted in an old hay field near a creek (for more information visit <http://www.vtrc.vt.edu/catawba/>). The planting includes multiple woody floral species and was strategically placed to extend an agroforestry riparian buffer.

Woody florals are typically managed using a coppice system, which is a technique where certain tree or shrub species are purposely cut to encourage sprouting (Figure 1). In a coppice system, plants are allowed to grow for about 2 to 5 years at which point the stems are cut and sold. After being cut, new stems sprout and are allowed to regrow for 2 to 3 years when they can be cut and sold again.

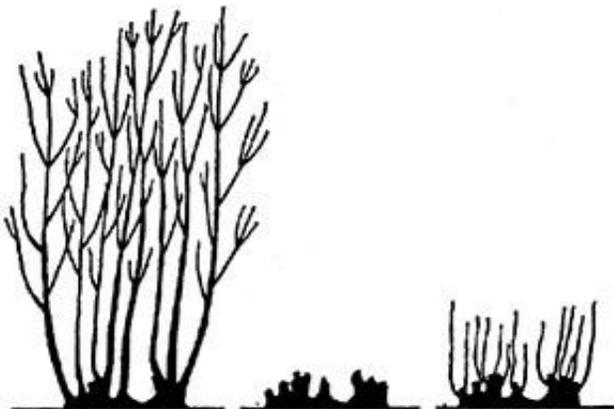


Figure 1. Woody florals are managed as coppiced trees and shrubs. The stems are cut every 2-3 years and grow back.



Figure 2. Woody florals can be grown in rows with 4 to 6 feet between plant and enough space for mowing equipment between rows.

Spacing and design of woody floral systems often depends on the landscape and type of production, but a commonly used spacing is 4 to 6 feet within rows (Figure 2). Spacing between rows is influenced by the size of equipment needed to manage the grass or ground cover between stems. For example, rows at the Catawba Sustainability Center were spaced 14 feet apart to allow easy access for a tow-behind mower. A push mower may not require as much space. Weed control also is important with many techniques available, such as weed mats with 2-4 inches of mulch about 3 to 4 feet in width.

When choosing woody florals to grow and sell, it is important to grow those that are widely used in the floral industry. Choosing an appropriate cultivar of commonly used species is just as important because it can increase consistency in the final product. Particular colors, forms, and sizes are very important in the floral industry and can be better achieved if established cultivars are grown. Some examples of species used in the floral industry are briefly described and can be seen in the photos. There are many other species commonly used. See [Woody Cut Stems for Growers and Florists](#) (Greer and Dole 2009) and [A grower's guide to producing woody floral stems](#) (Meyer and others 2007) for a more complete list of potential species and cultivars along with planting, maintenance and harvesting details.



Red chokeberry (*Aronia arbutifolia*) is native to the U.S. and grown for the red berries harvested in the winter.

Red and yellow twig dogwood (*Cornus sericea*) is a native shrub that has deep red or bright yellow twigs.

Sweet shrub (*Calycanthus americana*) is native to the U.S and grown for its wine-colored flowers. Another variety produces white flowers.



Hydrangea (*Hydrangea* sp.) is a well-known shrub that produces large clusters of flowers in many colors.

Pussy willow (*Salix discolor*) is native to the U.S. and produced and sold for the fussy catkins along its stem.

Viburnum (*Viburnum* spp.) is native and grown for its small clusters of white flowers and its red or black berries.

American beautyberry (*Callicarpa* spp.) is native and produces unique purple berries that grow along the stem.

Acknowledgements

The authors would like to thank the National Agroforestry Center and Catawba Sustainability Center.

References

- Gold, M., and H. Garrett. 2009. Agroforestry nomenclature, concepts, and practices. Pages 1-23. In: Garrett, H. (ed). *North American agroforestry: An integrated science and practice*. American Society of Agronomy: Madison.
- Greer, L., and J.M. Dole. 2009. *Woody cut stems for growers and florists*. Portland, OR: Timber Press.
- Meyer, C.M., Josiah, S.J., Pabst, T. and B. Erdkamp. 2007. A grower's guide to producing woody floral stems. *Nebraska Forest Service (NFS01-2007)*. nfs.unl.edu/documents/SpecialtyForest/growersguideweb2007.pdf
- Photo References**
- Chokeberry has bright berries that follow its crimson foliage (Photograph). Retrieved December 20, 2011, from: <http://gardensenses.blogspot.com/2010/12/fall-fruit.html>
- Casey at Loft and Cottage (Photographer). (2010). Calycanthus raulstonii Hartlage Wine [Photograph], Retrieved December 20, 2011 from: <http://loftandcottage.blogspot.com/2010/07/what-to-plant-next.html>
- Bussell, G. (Photographer). (2008) [Untitled photo of american beautyberry]. Retrieved December 20, 2011 from: <http://www.southernliving.com/home-garden/gardens/september-2008-around-garden-00400000034187/>
- Lee, N. (Photographer). Yellow Twig Dogwood [Photograph]. Retrieved December, 20, 2011 from: <http://kerryg.hubpages.com/hub/Adding-Winter-Interest-to-Your-Garden>
- Ms. T (Photographer). Winterberry [Photograph], Retrieved December 20, 2011 from: <http://kerryg.hubpages.com/hub/Adding-Winter-Interest-to-Your-Garden>
2011. Limelight Hydrangeas [Photograph]. Retrieved December 20, 2011 from: <http://www.thegreenflamingo.net/blog/?p=73>
2008. Viburnum opulus 'Roseum' [Photograph] Retrieved December 20, 2011 from: <http://www.garten.cz/a/cz/3741-viburnum-opulus-roseum-kalina-obecna/>
- Salix discolor - Pussy willow catkins [Photograph], Retrieved December 20, 2011 from: <http://www.gapphotos.com/imagedetails.asp?image-no=54884>
- Haylis, M. Hydrangea paniculata 'Limelight' [Photograph]. Retrieved December 20, 2011 from: <http://www.about-garden.com/se/en/fotoa-Hydrangea+paniculata/>
- Coppicing [Drawing]. Retrieved December 20, 2011 from: <http://www.greenlivingcentre.org.uk/iwg/spring-wood.htm>
- Nebraska Woody Florals. Growing our stems [Photograph]. Retrieved July 14, 2012 from: <http://nebraskawoodyflorals.com/wp/in-the-field/growing-our-stems/>
- Winter's Wow. Cardinal red twig dogwood tips. Retrieved July 14, 2012 from: http://www.winterswow.com/mm5/merchant.mvc?Screen=PROD&Store_Code=ww&Product_Code=DF-CardTwig&Category_Code=DrFloral-Twigs-Pods-Cones