



*Shenandoah Chapter*  
*Virginia Native Plant Society*  
**Shenandoah Chapter**  
**Virginia Native Plant Society**  
*January 2011*  
**January 2011**

**Mission Statement:**

We are a conservation organization dedicated to conserve Virginia's native plants and their ecosystems through education, advocacy and activities that promote appreciation, stewardship and appropriate use.

**Next Meeting: January 13, 2011**

Program: Kim Sandum, Executive Director of Community Alliance for Preservation will discuss "Hydrofracking and other threats to Rockingham County's natural heritage."

Time: 7:30

Place: Blue Ridge Community College Plecker 125C

Community Alliance for Preservation (CAP) works with the public, elected leaders and local and state government agencies to enhance Rockingham County's rural character, urban spaces and natural and cultural resources. CAP strives to achieve these goals by providing timely and accurate information to foster good public policy in transportation and land use planning and land conservation.

Marcellus shale is present along the western Virginia border counties, including Rockingham and Augusta. These shale deposits are of great interest to energy companies as natural gas can be extracted through the process known as hydrofracking. The process uses a 99.5% water and sand mixture plus 0.5% of other materials. The large volume of water (millions of gallons per well), the composition of the 'other' materials and potential for groundwater contamination makes hydrofracking a controversial process.

The George Washington National Forest is going through the Forest Planning process now. The Forest Plan will determine how natural resources, including Marcellus shale deposits, will be handled for the next 15 years or more. The GWNF is the primary source for quality drinking water used by local towns and cities in Rockingham and Augusta counties.

Water and energy sources are important issues for all of us. We invite you come and hear Kim Sandum give us some important information about a process that will have a large impact on quality of life in the Valley for many years to come.

**Calendar of events 2011**

- ❖ January 30, Winter Tree Id Walk, 1pm Deep Run Ponds (see article below)
- ❖ March 5, VNPS annual Workshop, Richmond, VA Topic to be announced
- ❖ March 26, 8:30 am – 3:00 pm 25th Annual Lahr Native Plant Symposium and Plant Sale. Symposium will be held at the Beltsville Agricultural Research Center. Speakers: Allan Armitage, Cole Burrell, Scott LaFleur, Sylvan Kaufman, Carole Ottesen, and Jeremy West
- ❖ Registration information will be available February 1, 2011 at [www.usna.usda.gov](http://www.usna.usda.gov)
- ❖ April 9, Blacks Run Cleanup, Harrisonburg
- ❖ April 16, Earth Day Staunton
- ❖ September 16-18, VNPS Annual meeting Prince William Wildflower Society (Manassas) is sponsoring the event

**Winter Tree Identification Walk Sunday Jan 30, 1PM**

Deep Run Ponds Natural Heritage Preserve, Ore Bank Road, Rockingham County. Contact Chris Bowlen 540-289-6801 or [bowlenchris@comcast.net](mailto:bowlenchris@comcast.net)

Deep Run Ponds is a 668 acre preserve in eastern Rockingham County. This Preserve is noted for the 8 sinkhole ponds two of which support globally rare sneezeweed. At this time of year, it is a great place to learn tree identification as there are a large variety of trees in the Preserve.

This will be a 2+ mile loop depending on the group interest. Off trail excursions are possible to enhance the variety of species identified. The trail does not have any significant elevation gains but is not well maintained. Oak and Pine species will be the primary focus. Bad weather will cancel this outing so please check with group leader before the hike.

### **Reference Guide for Gardeners and Landscapers**

*Native Woody Landscape and Restoration Plants of the Eastern United States* by Michael Dorn is a newly published reference guide. Create woodland gardens, restore stream banks or wetlands, stabilize shorelines, construct buffers, enhance habitat, and more. Dorn's 246 color photographs show beautifully, the physical characteristics of each plant. Reference charts help you locate specific plants for particular purposes.

Dorn's new book describes the physical characteristics like size, shape, flowers, and leaf color, of each plant. Ideal soil conditions, light exposure, and pruning times are shared in an easy to use reference every student, landscaper, or gardener will keep by their side. The types of wildlife the plants benefit (butterfly, songbird, turkey, deer, etc.) are also discussed.

*Native Woody Landscape and Restoration Plants of the Eastern United States* sells for \$29.95, and can be purchased from Michael Dorn. The contact number for ordering, or to see a sample copy to determine if you want to order is 864-324-4040.

Purchase online at: [www.nativeplantbook.com](http://www.nativeplantbook.com) in both book and Kindle formats. Published by Shore Publications, [www.ohiopyle.info](http://www.ohiopyle.info); [shorepublications@yahoo.com](mailto:shorepublications@yahoo.com).

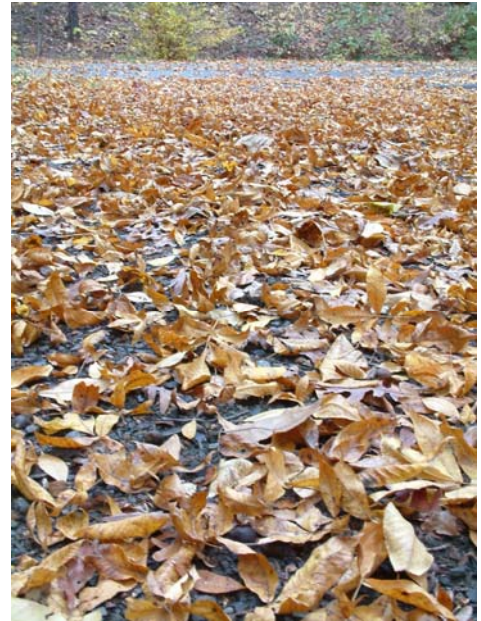
If you have announcements, articles or reviews for the newsletter (no matter how short), or if you'd like to receive your newsletter via email please contact Elaine Smith [antigone16@comcast.net](mailto:antigone16@comcast.net)

**FALL NOTEBOOK: October 24, 2009 Manassas**

**“Understory”**

Thousands of leaves came down in last night’s warm rain, as I discovered when walking the dog this morning. The last third of our long, winding driveway was thickly littered with dark golden hickory leaves.

The soft murmur of the rain all night long was punctuated every so often by the sharp crack! pop! of acorns ricocheting off the roof and skylights – noise enough to rouse one for a groggy second or two. Just a few weeks ago, though, I pretty much jumped every time an acorn rattled down. Late acorns – those coming down now – are fewer, but sound heavier – more serious projectiles. In any case, it is good to see acorns again after last year’s dearth of them. The squirrels seem happier too, as they have not raided the ornamental corn hanging on the door as they did last year.



Dogwoods have turned intensely red and are holding on to leaves for now despite the rain; Ironwood (*Carpinus caroliniana*) leaves have turned lemony yellow in one delicate instance, and another specimen in deeper shade has leaves of a muted orangish-red. In terms of fall color (and perhaps in every way), *C. caroliniana* to my mind is superior to its closely related cousin, Hop hornbeam (*Ostrya virginiana*), the latter not having much in the way of fall color, turning instead dull green and spotty – definitely not its best season, anyway. *C. caroliniana* is among our most beautiful understory trees: its smooth, muscular, fluted bark alone is worth the effort of getting one if you

don’t have one already growing naturally. Along with its bluish grey trunk and sinewy limbs white-splotched like a fawn’s back, Ironwood’s graceful habit all year round is reason #2 to cultivate and embrace this tree. Fountain shaped, its airy and delicate leaf in the summer creates a sun dappled shade umbrella (“A shade cool, but not dark,” according to Donald Culross Peattie). In fall, the gentle chimes of its pale golden yellow or soft reddish-orange leaves strike a lovely chord in the landscape, especially when backdropped by dark hollies or evergreens.

A member of the Birch family, *Betulaceae*, Ironwood seldom grows beyond 30-50 feet (a height of 15-20 feet is more common) and is quite tolerant of shade, as its understory status suggests. I find it very effective as an “edge” tree, and easily can imagine it intermingled with taller trees in a mixed allee, drooping gracefully over the edge of a structure, patio, or, as in my case, embracing the driveway and simultaneously drawing the eye into the landscape. The beauty of the tree extends to other seasons as well: Rick Darke claims that Ironwood “is among the best small trees with four-season interest in the woodland landscape...[as its] horizontal layering in the branch tracery continues as a delight through winter snows.” In spring, the leaves emerge a fresh chartreuse; summer foliage is dark green, accompanied by pendent fruit clusters.



Some common names for *Carpinus caroliniana* are more or less self-explanatory: Ironwood, because of the incredible density and strength of the wood (49 pounds per cubic foot, dry weight, it was used for machine gears or tool handles in the Colonial era, as well as for dishes and bowls, as it did not crack); Blue beech or Water beech from its leaves' similarity to American beech leaves, the color of its trunk, and its habitat; Musclewood, from the sinewy multiple trunks; American hornbeam, from a combining of "horn = toughness" and "beam = tree" (from the German *baum*).

**Habitat:** Native to most of eastern U.S., Ironwood ranges from Nova Scotia to Minnesota and south to Florida and Texas, occurring typically in moist woods and on floodplains or as understory in bottomland mixed hardwood forests. Hardy to Zone 3, it is most likely flood tolerant. It has been found in mountains high as 900 feet (Great Smoky Mountains), but more frequently is found at altitudes of 490 ft or lower. Present in a variety of hardwood forest types, including White Oak-Black Oak-Northern Red Oak, it is associated throughout much of its range with flowering dogwood (*Cornus florida*), eastern hophornbeam (*Ostrya virginiana*), witch hazel (*Hamamelis virginiana*), the serviceberries (*Amelanchier* spp.), and speckled alder (*Alnus rugosa*). Shrub species associated with Ironwood throughout its range include spicebush (*Lindera bezoin*), arrowwood (*Viburnum dentatum*), mapleleaf viburnum (*Viburnum acerifolium*), and winterberry (*Ilex verticillata*), among others. Ironwood is an important food of gray squirrels in southern bottom-land hardwoods and its seeds, buds, or catkins are eaten by a number of songbirds, ruffed grouse, ring-necked pheasants, bobwhite, turkey, and others. Beaver use it heavily because of its availability in their habitat.

**Culture:** Slow growing and said to be difficult to transplant, but incredibly hardy and not limited to understory status. Dirr points to its successful use as a decorative tree in a Georgia shopping mall and its ability to withstand pruning to serve as a hedge or screen—a more formal element—as used in the William Paca Gardens in Annapolis, probably in lieu of European hornbeam, which is often used for formal hedges and screens (Dumbarton Oaks). I have been to the Paca Gardens but do not remember the use of Ironwood, may be worth a trip to look again. University of Connecticut horticulture Web site ([www.hort.uconn.edu](http://www.hort.uconn.edu)) shows it in use as a landscape tree in an enclosed, raised bed next to a college building.

**Propagation:** Seed, moist stratification; not easily propagated by cuttings. Species is *monoecious*, with male and female catkins borne separately on the same tree and appearing in the spring with the leaves. Fruit is an ovoid, ribbed, long nutlet, which matures in one season, changing from green to light greenish brown or brown on maturity.

**Cultivars and Availability:** Dirr lists two cultivars, "Palisade" and "Pyramidalis" but neither seem to have much if any advantage over the species for Fall color and general beauty of form. Since it is not easy to propagate, it may be a challenge to locate a native tree nursery that sells *C. caroliniana*; a good place to start is the VNPS native nursery list, at [www.vnps.org/growing.html](http://www.vnps.org/growing.html). A quick Google search also revealed some tree nurseries in Pennsylvania listing Ironwood for sale. —Deanna LaValle High

**Photographs:** Deanna High, October 24, 2009, Manassas, Va.

**References:** Audubon Society Field Guide to North American Trees, Eastern Region, Alfred A. Knopf, 1980; Donald Culross Peattie, *A Natural History of Trees of Eastern and Central North America*, Houghton Mifflin Company, 1991 ed. (first published 1948); Rick Darke, *The American Woodland Garden: Capturing the Spirit of the Deciduous Forest*, Timber Press, 2002; Michael A. Dirr, *Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation, and Uses*, 5<sup>th</sup> ed, Stipes Publishing LLC, 1998; *Silvics of North America*, U.S. Department of Agriculture, Forest Service Agriculture Handbook 654, vol. 2, accessed at [www.na.fs.fed.us](http://www.na.fs.fed.us); University of Connecticut Plant Database, accessed at [www.hort.uconn.edu](http://www.hort.uconn.edu).

Reprinted with permission of author.



### Under the Understory: Fall Color

Abundant and delightfully common, Mapleleaf viburnum (*Viburnum acerifolium*) is nevertheless a real show-off in autumn. Even very young, low saplings turn red, orange, and yellow, so from ankle to chest – depending on size and age of the thicket – it’s possible to wade in a woodland sea of color in October and November. Some MVs in my woods offer a curious, spotty green look, as if the chlorophyll has been sucked out of the leaves, but even this variation is interestingly pretty. More often, however, the maple-like leaves turn various shades of pale or dark dusty reddish pink, lightening the lower story of the woodland landscape. When its prominent blue-black berries are still around – and the beauty of it is that they do hang on for a long while – the combination with the colorful leaves is especially appealing. If you



don’t have any Mapleleaf viburnum, plan to get some at next year’s PWWs Plant Sale, because they are also wonderful in spring, blooming in May with fluffy white flowers. Understated but not dull, a big running clump of them – perhaps underplanted with ferns – is a great way to add care-free, year-round beauty to a shady corner.



A member of the honeysuckle family (*Caprifoliaceae*), Mapleleaf viburnum (sometimes called dogmackie or dockmackie), develops large, open colonies in the wild and is well adapted to shade, and especially important for us in Prince William, it flourishes even in *dry* shade. The fall colors range from creamy pink, salmon rose, red, grayish pink to “grape-juice” purple (Dirr). It roots well from cuttings taken in June-July, is cold-hardy to Zone 4, and bears creamy white flat-top clusters of flowers in May. Rick Darke claims that when it is sited in shade, it is loose and open, but planted in full sun, it will become full and bushy. I have not yet tried planting it in sun, but may use it in a sunnier spot that I am

“planting up” with native trees and shrubs. –Deanna LaValle High

**Photographs:** Summer leaves with berries, Albert F.W. Vick, NPIN Image 2701, accessed at [www.wildflower.org](http://www.wildflower.org); Autumn leaf, [Emmett I. Judziewicz](http://www.emmett.org), University of Wisconsin-Stevens Point and Madison, accessed at <http://wisplants.uwsp.edu>

**References:** Michael A. Dirr, *Manual of Woody Landscape Plants: Their Identification, Ornamental Characteristics, Culture, Propagation, and Uses*, 5<sup>th</sup> ed, Stipes Publishing LLC, 1998; Rick Darke, *The American Woodland Garden: Capturing the Spirit of the Deciduous Forest*, Timber Press, 2002

### MORE NATIVE TREES and SHRUBS BEAUTIFUL in FALL

**Just a few more of my favorites – all native to Virginia and most native to PWC – What are yours?**

**Dogwood (*Cornus florida*).** Variable, but always beautiful, dogwoods account for much of the vivid fall color in Virginia, where sugar maples are not naturally abundant.

**Hickories (*Carya spp.*)** Pignut hickory and Mockernut hickory both have beautiful habits, tobacco-golden leaves which light up the woods. Grown with native hollies (*Ilex opaca*) as a backdrop, they are unparalleled in autumn beauty.

**American Beech (*Fagus grandiflora*)** Even the smaller trees have a full head of tawny-golden leaves swirling down from the crown. The color starts as a pale gold and deepens with the season. Yes, you need a large space for American beech, but it’s worth making room for it if you can.

**Sourwood (*Oxydendrum arboreum*)** another relatively rare Virginia native beautiful at all times of year, but especially in fall, when it turns a brilliant red. Its pendent habit, vibrant leaves, and white racemes combine spectacularly in the fall – a traffic stopper.

**Sugar Maple (*Acer saccharum*)** Not common in PWC, but who could leave it out? *The Digital Atlas of the Virginia Flora* says that it is “common in the mountains in rich cove forests, dry-mesic and dry calcareous forests and woodlands, and northern hardwood forests at higher elevations. In the Piedmont, [it is] uncommon and more restricted to fertile river-fronting slopes and sheltered ravines.”

**Sweet gum (*Liquidambar styraciflua*)**



A tree I grew up with in the deep south and dearly love, although some people do not like the gumballs. (They are fun for kids, however, plus the leaf stems are tasty to suck on.) Sweet gum's starry shaped leaves and lovely habit make the gumballs worth suffering. Fall color is usually spectacular, with green-gold, gold, red and orange variations. There is no more beautiful leaf on the ground in the Fall. Sweet gum is a very unfussy tree, easy to climb and easy to love.

**Oakleaf hydrangea (*Hydrangea quercifolia*)** has wonderful color variation, with dark red, green, purplish red and gold leaves. The size of the leaves along with the dried blooms from summer make a stunning combination, either in masses or as a single specimen. They also look wonderful indoors in a large vase if you can bear to cut them. I prefer to allow mine to sprawl mostly uncut as they provide horizontal texture in the winter landscape and catch the snow in a nice way.

**Sweetspire (*Itea virginica*)** Great at any time of year, but in the fall, its leaves reliably turn deep red and green and droop gracefully over a path. Good in groups and very easy to grow either in deep or partial shade.

**Sweetshrub (*Calycanthus floridus*)** There are many cultivars, but even the species has lemony gold leaves, highlighted by the cinnamon bark, loose habit, and dark seed pods that hang on for a long while. Plus all parts of *Calycanthus* are fragrant. Crushing a leaf or stem under the nose can provide a quick fall/winter pick-me-up.

--Deanna LaValle High

Photograph: Albert F.W. Vick, Lady Bird Johnson Wildflower Center Image Gallery, NPIN image ID 124. Accessed at [www.wildflower.org](http://www.wildflower.org)  
Reprinted with permission of author.