



*Shenandoah Chapter*  
*Virginia Native Plant Society*  
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**October 2010**

**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: **Thursday Oct 14, 2010 Shenandoah Mountain: History, Culture & Ecology.**

Lynn Cameron will give a presentation based on her research, video and website on Shenandoah Mountain entitled: Shenandoah Mountain: History, Culture & Ecology. 7:30 Blue Ridge Community College, Weyers Cave Campus, Plecker Center Room 126C.

Shenandoah Mountain is an area that is special to many of us for a variety of reasons from hiking, botanizing, hunting and biking to list only a few. Looking to the west from the Valley in Rockingham and Augusta counties, it is Shenandoah Mountain that tells you there has been an ice storm, the trees are starting to turn or that there might be a thunderstorm soon. Lynn Cameron has been hiking the mountains in this area for the past 29 years. She is a member of the **Virginia Wilderness Committee (VWC), an organization that has worked since 1969** to protect suitable public land in Virginia as Wilderness Areas within the National Wilderness Preservation System.

Back in January 2009, Carol Lena Miller, the Wilderness Coordinator for VWC, spoke to us about the Shenandoah Mountain Proposal and Friends of Shenandoah Mountain. The Shenandoah Mountain Proposal recommends a National Scenic Area for a large portion of Shenandoah Mountain between Rt. 250 and Rt. 33 in Augusta, Rockingham, and Highland Counties, with pockets of Wilderness in Bald Ridge, Lynn Hollow, Little River, and Skidmore Fork. The proposal also recommends Wilderness for Laurel Fork, and a National Scenic Area for Kelley Mountain. The list of businesses, churches and organizations (local, state and national) endorsing support for the Proposal has been growing steadily. VNPS has endorsed the Proposal. For more specific details, visit the website: <http://www.friendsofshenandoahmountain.org>

Lynn Cameron worked as Psychology Librarian at James Madison University Libraries until retiring earlier this year. From 2009-10, she took a half-time leave during the academic year to research and document the information that forms the basis of her presentation. She has video recorded primary sources that give a more complete picture of Shenandoah Mountain as it was in the past and how it has changed to be what it is today. If you have any interest in the mountains or local history, you won't want to miss this meeting.

**Calendar of Events:**

- ❖ October 5, 6:30-8:30 PM Augusta Government Center. Forest Plan Revision Workshop. The George Washington National Draft Forest Plan is planned to be released Jan 2011 followed by a 90 day review and comment period. This Workshop is an update about the alternatives being considered for the Plan. For more info go to <http://www.fs.fed.us/r8/gwj>

- ❖ October 9-10, 10-4:30 The State Arboretum, Winchester VA, presents **ArborFest Trees are the Answer**. Fall festival and Plant sale. <http://www.virginia.edu/blandy/blandynew/FEST2010.html>
- ❖ October 19, 4:30 JMU Campus Harrisonburg Shenandoah Chapter Board Meeting. Meeting is open to all members. Please share your ideas and talents. Call Chris Bowlen for more information 540-289-6801.

## GRASSES

### A Most Unappreciated Family of Flowering Plants

*By Marion Lobstein*

*Professor of Biology, Northern Virginia Community College*



The grass family (*Poaceae* or *Graminae*) is one of the largest flowering plant families with over 10,000 species in over 600 genera worldwide. In terms of economic importance as human food crop species, it is the most important flowering plant family. In Virginia, we have almost 270 species in over 80 genera, with just under 150 of these species in 50 genera found in Northern Virginia. Recognizing grasses as flowering plants is not very obvious to most people. Once you understand grass flower structure, however, grasses are a really interesting and beautiful family to recognize and enjoy.

The other two families that are often confused with grasses are the sedges (*Cyperaceae*) and rushes (*Juncaceae*). The sedges generally have triangular edges (sedges have edges) and rushes are round with solid pith in the stem. Grasses have round stems, but the stems are hollow between the points of the leaves attaching. In grasses, unlike rushes, the leaf base forms a sheath surrounding the stem before the blade of the leaf expands into the structure easily recognizable as a leaf. The stem of a grass plant that forms the flowers is called a **culm**. Roots of grass plants are fibrous, with particular species being either annuals or perennials.

Grasses are herbaceous except for the bamboos, the only woody members of this family.

The flowers of grasses are wind pollinated and therefore do not have petals or sepals. The basic flower has three stamens and an ovary with two styles that can be quite showy. At the base of the ovary are two small structures called the **lodicules** that are modified **perianth** (combined petal and sepal) tissue. There are also other modifications that make grass flowers a bit different. Enclosing each flower is a pair of modified leaves or bracts called the **lemma** and **palea** (the lemma is closer to the flower than the palea). This combination of a flower enclosed by the lemma and palea is called a **floret**. The florets are further arranged in structures called **spikelets**. A spikelet consists of one or more florets with two modified leaves called the first and second **glumes** beneath the floret or florets. The spikelets are then arranged in inflorescences of spikes, or racemes, or panicles. Once you can visualize these modified structures of spikelets and florets, identifying the grasses becomes possible.

Additionally, the veins in the lemmas and glumes may be elongated to form bristle-like structures called **awns**, which are important in identification. The fruit of grasses is the **caryopsis** or **grain**. Many taxonomists divide grass genera into tribes. The *Flora of West Virginia* has good diagrams of the structure of grasses and good identification keys to tribes, genera, and species of grasses. It places grasses into eleven tribes with a separate identification key to these tribes, then another key to the genera within each tribe, and then each genus will have a key to species. *Grasses: An Identification Guide*, by Lauren Brown, is another good book with which to begin to enjoy the grasses.

The grasses, as mentioned before, are the most important family economically to humans, with major grain crops such as corn, wheat, rice, barley, rye, oats, sorghum, and millet. Countless other animals rely on grasses for their food sources. Bamboo is used as building material in many parts of the world. More and more grasses are being used for ornamental purposes. Of course, we are all familiar with the use of grasses for lawns.

Our native grasses are especially beautiful in the late summer and fall. Deep Cut and other sites in Manassas National Battlefield Park are particularly good sites for Indian grass (*Sorghastrum nutans*) and the little blue stem (*Andropogon scoparius* [editor's note: syn. *Schizachyrium scoparium*]) in the fall. (*This article by Marion Lobstein first appeared in the Jan-Feb 1996 edition of Wild News*).

If you have announcements, articles or reviews for the newsletter (no matter how short), please contact Elaine Smith [antigone16@comcast.net](mailto:antigone16@comcast.net)