# The Poca hontas Chapter of the Virginia Native Plant Society December 2009

**December Meeting** 

Thursday December 3, 2009 at 7:00 PM at the Education and Library

Complex of the Lewis Ginter Botanical Garden in Classroom 2 We will have a small Christmas party at the meeting. Bring some food to share if you can. The room is available at 6:30

## This Month's Presentation will be:

"Virginia Wildflowers: Diverse in Form, Unified in Function - pollination strategies for plants"

### by J. Christopher Ludwig

**NOTE:** Due to Garden Fest at LGBG please come in through the main entrance and enter the Education Library Complex building from the garden entrance. That way, we won't be bumping into private party people.

This month's presentation will describe how wildflowers, regardless of their form, are designed to enable pollination. The strategies vary from casting pollen to the wind to elaborate flower design for pollination by bat, bird, or insect. Other aspects of plant reproduction will be discussed.

Chris Ludwig has been with the Division of Natural Heritage within the Virginia Department of Conservation and Recreation since 1988. For his first 10 years with the Division, he served as the Staff Botanist, traversing the state in search of rare plants and significant conservation sites. Since 1998, he has served as the Chief Biologist, directing a team of botanists, zoologists, and ecologists in their quest to identify all of the rare species populations and significant natural communities in Virginia. In 2001 he co-founded the Flora of Virginia Foundation, formed to produce the first modern manual to the vascular Flora of Virginia.

Chris' wide range of interests in biology is reflected in his other professional experiences. In addition to work with Virginia Natural Heritage, Chris worked as an ornithologist with the U.S. Fish and Wildlife Service, a butterfly surveyor for Maryland Natural Heritage, a data technician in the bird skeleton collection at the Smithsonian Institution, and as an Ecologist for The Nature Conservancy.

Chris, wife Jolie, and daughters Jane and Rachel live on ten woodland acres in far western Hanover County.

### **EVENTS**

Tucker
rizon.net

Welcome New Members

Virginia Pelling, Richmond

Jeanne Hammer, Richmond

### Minutes for the regular meeting of the Pocahontas Chapter, VNPS: Nov. 5, 2009

The meeting was opened by the President, Ernest Wilson.

**Announcements:** There was a Virginia blue bell planting event at the Pony Pasture of the James River Park on Oct. 31. Two of our members participated. Ernest Wilson contributed half the cost of the bulbs.

Alan Davis of Richmond donated a wildflower presentation (slides and transcript) that was presented to various organizations by his now deceased in-laws. We plan to put it in Power Point form and present it to the members at some future date. We will keep it available for use by the members. Thank you Alan Davis!

Francis Melton brought in cuttings from her jade plant to share with anyone who wanted some.

#### Field Trips and Upcoming Events:

November 10 at 10:00 Butterfly garden work day at James River Park HQ. Be prepared to weed and mulch.

November 11, 2009 at 11:00 am at the First United Unitarian Church, Ernest Wilson will give a presentation about his trip to Peru

November 14, 10:00 Pocahontas State Park. Meet at the Entrance on Beach Road -- led by Ernest Wilson. The walk will last 2-3 hours and is fairly flat terrain. If the weather is questionable, contact Ernest at 502-6346.

December 4, 2009 the Chesapeake Conservation Landscape Council's "Turning a New Leaf" Conference will be held at George Washington University. Interested persons should go to their website at http://www.chesapeakelandscape.org/2009leaf.htm

The Pocahontas Chapter of the Virginia Native Plant Society serves the counties of: Charles City, Chesterfield, Goochland, Hanover, Henrico, King William, New Kent, Powhatan and the cities of Ashland, Hopewell, Petersburg, and Richmond. It meets the first Thursday of September	<b>Welcome:</b> This month's new members are Virginia Pelling and Jeanne Hammer, both of Richmond. There were 4 guests and nearly 30 attended the meeting. They were welcomed, encouraged to return for future meetings and to participate in any field trips or events.
through April at 7:00 PM in the Education and Library	Teta Kane's Presentation: "Tales of the Dragon"
Complex of the Lewis Ginter Botanical Garden, unless otherwise stated. <b>Chapter Officers</b>	Ernest introduced Teta, a long time friend of and activist for the Dragon Run. She leads kayak trips and has photographed the Dragon Run and its inhabitants,
PresidentErnest Wilson (804) 502-6346ernest_3@msn.com Vice PresidentOpen	from all angles, heights, in every season any time of day or night.
SecretaryOpen	She located the Dragon Run for us by map, by highways and by air. With a watershed of only 1200 people and approximately 35 miles in length, (only
	about 7-9 miles between Saluda and Mascot are navigable) it is easy to understand the remoteness and
	(FODR) keep the navigable part open and offer kayak trips from the beginning of April through the beginning of May. Working in conjunction with the Nature Conservancy the FODR now owns over 600 acres (9 parcels of property) along the Dragon Run. Teta speculated with us about the source of the name "Dragon Run": she gave us the information about

kayak trips, emphasizing most importantly "safety"; and all the time kept flashing pictures of the beauty and uniqueness of the Dragon and its dwellers. There were shots of enormous bald cypresses as one would expect and feather foil, which is rare except for Dragon Run. There were pictures of plants, mammals, invertebrates, fish, reptiles, amphibians and insects (the dragon fly to be sure). It was a pictorial voyage into a different time and place.

After the presentation, Teta answered questions and gave out brochures and a CD about the Dragon and the Friends of Dragon Run.

The meeting was adjourned and 8:45.

Respectfully submitted, DSP

#### Winter Plants Skunk Cabbage

Skunk Cabbage (*Symphocarpus foetidus*) is the only native plant that regularly blooms in mid-winter regardless of the temperature. We are at the southern end of its distribution which extends north into Canada. Skunk Cabbage is a perennial herb that has contractile roots that contract growing down into the soil. These roots pull the stems of Skunk Cabbage deeper into the wet mucky substrates found in wet forests, swamps and along streams. Eventually the entire stem is below surface level. After several years of being pulled further into the soil it is nearly impossible to dig up.

The unusual flower has been known to melt its way through snow. The flower is at a higher temperature than the surroundings and so regularly

attracts the few insects which are active in the winter. It also gives out a **Above:** Skunk Cabbage in scent which attracts carrion feeding insects which are its pollinators. The bloom also showing the flowers carry on an unusual type of cellular respiration which is cyanide rhizomes exposed due to resistant as well as the usual kind of cellular respiration which produces the erosion.

energy necessary for keeping the flower alive. The cyanide resistant form of **Below:** A close up of the cellular respiration produces the conspicuous amount of heat given off by flower.



**Above:** Skunk Cabbage leaves in spring.

the flower.

Skunk cabbage is not the only plant that produces conspicuous heat. Many members of the Arum family to which Skunk Cabbage belongs do also, even some tropical species. Most of these use the heat to volatilize their insect attracting perfumes. Most of these perfumes stink to our noses but insects have more sensitive "noses" and readily are attracted by their foul or fruity odors.

The flower of skunk cabbage while not attractive to our eyes is quite unusual when compared with more familiar flowers. The brown or redish leaf-like



covering conceals a ball of fused flowers. It makes an excellent shelter for insects coming in from the cold. In our area this plant is



not common but further north it is often found along streams and swamps and marshes.

It requires a lot of moisture to maintain the large leaves which appear after the plant ceases blooming. The leaves persist till June when they die back to the underground rhizome. The leaves are only present when the tree canopy has not fully

closed and hence receive lots of light. Soon after the closing of the canopy the leaves die back. In this it is like other spring



Ernest Wilson

ephemerals. The plant is not visible until well into the fall when the fruits appear just as the flower buds begin to swell.

The rhizomes which are often enormous can be eaten if allowed to dry out before eating. They contain lots of poisonous and sharp raphid crystals of calcium oxalate. The young leaves also could be eaten if one ignores their foul smell. They also must be dried before eating. The bad odor of the leaves is the reason why the plant was given the name skunk cabbage.

The related Western Skunk Cabbage (*Lysichiton americanus*), shown at the left, has leaves which superficially resemble the leaves of our eastern one, but it has differently shaped yellow flowers. Hence it is placed in a different genus, Lysichiton. It is found in the Pacific states

as well as north Asia and in a few places in Europe.

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