

NATIVE

Kate's Mountain Clover

NOTES

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WEST VIRGINIA NATIVE PLANT SOCIETY

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Letter From President Emily Grafton:

Here we go again, crossing the threshold of another year, ushered in on the coattails of Christmas celebrations. As my son, nieces and nephews have crossed that great divide into adulthood, I find myself less involved with Christmas. So, I sit here pondering the state of our environment, most particularly the threats to our native ecosystems, instead of baking and wrapping presents.

Throughout the past few years, the news has been bleak – every other email related to invasive plants, with a sprinkling of global warming, acid rain, dying forests, and deer ravaging the forest understory. In the biological field, it would appear that an overwhelming majority of new jobs for botanists is for managing and killing populations of invasive plants. Forget the plant press and microscope you are more likely to head out into the field armed with a cocktail of poisons, a machete, backpack sprayer, goggles and face mask.

For the next two years, I have agreed to help lead the West Virginia Native Plant Society as President. How do I best serve this wonderfully diverse group of people who love plants and the natural world? How do we strike a balance between spending our time enjoying the beauty of the botanical realm (which is what we initially signed up for) and working to implement changes necessary to halt the spread and reduce the numbers of invasive plants and restoring our damaged ecosystems?

It is my desire to work as proactively as Steve Mace who works harder than anyone, maintaining membership files and the communication network of the society. I should also recognize Bill Grafton for producing the newsletter and Helen Gibbons for keeping the minutes. Our immediate past president, Lynn Wagner motivated us to work positively towards meeting the environmental challenges we face today; she created a web page, helped organize a symposium and more.

Instead of feeling overwhelmed by the threats to our native flora from invasive species, habitat destruction and the consequences of ecosystems out of balance, I will encourage us to complete at least one project per year that could make a difference in rectifying one problem, somewhere. Some ideas up for action and already in the works are listed below. Read them over to see if something appeals to you.

- For example, some folks in the Berkeley Springs wish to produce a flyer on purple loosestrife. Great idea and let us take this further. Let's produce enough to send to every garden shop and nursery in the state. Let's get this plant off the market!
- In Monongalia County, we have a funded project to establish a native plant butterfly meadow along the Caperton Rail Trail. The project includes placement of an educational kiosk and interpretive signs to educate people about the ecological and economical values of native plants.
- Native plant garden in South Charleston spearheaded by Mary Sansom & Lois Kuhl.
- Ongoing project to rid the priceless Canaan Valley State Park wetlands of the yellow iris that threatens the integrity of the ecosystem.

• A native plant celebration and swap day in the spring

The above topics are but a few. If there is some project that you wish to spearhead and would like WVNPS support then let someone on the Board of Directors know. I would like to have a Board meeting February 19 or 26 to establish a schedule for the year.

EMAILS NEEDED, AGAIN

One year ago it was announced that we would send future Native Notes and other correspondence by email to all who preferred that method. This should save \$500-800 per year on postage. The savings would be spent on various projects. It was noted that if you still preferred a printed version of Native Notes, we will mail those to you.

After one issue in early 2004, Lynn Wagner's computer lost the list serve of emails during an electrical storm. Thus, we must start over.

Action: Will those who prefer the email version of Native Notes contact Mike Breiding at mike@mbreiding.us Those who prefer printed Native Notes by regular postage need to do nothing. Your Native Notes will continue to me mailed through the US Post Office.

Mike Breiding has agreed to establish a new website (www.wvnps.org) and operate the list serve.

Send your NAME AND EMAIL ADDRESS to Mike at mike@mbreiding.us

BOTANICAL BONANZAS OF WEST VIRGINIA (bogs, balds, and beaver ponds to barresn bedrock, and bluffs)

Gauley River Gorge

Gauley River is located in south central West Virginia with headwaters on the WV Scenic Highway where Cranberry Glades is a botanical wonder and joins the New River at Gauley Bridge to form the Kanawha River. Cities such as Summersville, Cowen, Rainelle, and Richwood are located on the watershed. The headwaters include the Williams, Cranberry, Cherry and Meadow Rivers.

This report covers the small portion of Gauley River from Summersville Reservoir Dam to Gauley Bridge. This section is a 34-mile canyon that drops about 30 feet per mile and forms the boundary between Fayette and Nicholas Counties for approximately 25 miles of this distance.

Access is limited. A rough boulder strewn "fisherman's trail" provides access for hardy folks below Summersville Dam where about 2 miles of riverbank can be explored. Carnifex Ferry State Park has 2 access points. The best is the old road that lead to the ferry crossing near the mouth of Meadow River. There is also a trail down Pierson Hollow that leads to the riverbank. The Pierson Hollow Trail travels through a spectacular virgin forest of hemlock, tulip poplar and white oak. The area along Gauley River at the bottom is especially good for wildflowers in autumn.

The river can also be accessed from a whitewater rafting road east of Peters Creek in Nicholas County or by walking the final 2 miles of railroad to the mouth of Peters Creek. Birdsfoot violet and goat's rue are easy to find in the floodplain of sand and rounded river rocks at the mouth of Peters Creek. The only access from Fayette County is a whitewater rafting road near the community of Ramsey (Richmond Chapel road). This road is sometimes gated and locked.

The final access is at Swiss where access is along the railroad and short riverbank trails. Walking on railroads is dangerous and illegal, so keep to the riverbanks or hillsides.

The canyons of Gauley and lower Meadow Rivers form the Gauley River National Recreation Area and is operated by the National Park Service from their Glen Jean Headquarters. Gauley is To-ke-be-lo-ke in Shawnee Indian language and means "falling creek".

Spectacular water falls are present on virtually every creek that tumbles from the plateau over the famous Nuttall Sandstone rock layer into the gorge. A Civil War battle was fought at Carnifex Ferry amid magnificent scenery, but our goal is botany.

Common plants found on the floodplain and areas near the river are:

rees

Hemlock River birch
Sweetgum Sycamore
American holly Persimmon
Eastern redcedar Silverbell

Shrubs

Brookside alder Buffalonut
Shrubby Yellowroot Spicebush
Witch-hazel Ninebark
Black chokeberry Pasture rose
Shrubby St. John's-wort Winterberry
Smooth honeysuckle Silky cornel
Mountain laurel Great laurel
Purple laurel Wild raisin
Buttonbush Fringetree

Spring Wildflowers

Golden Alexanders
Common lousewort
Robin's plantain
Thymeleaf bluets
Sweet white violet*
Plumelily
Wake robin
Ginseng
Strawlily
Solomon's seal

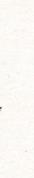
Foamflower * Birdsfoot violet



VIOLA pedata

Bird-foot Violet







TRAUTVETTERIA caroliniensis
Tasselrue

*These 2 plants often have a vining form in late summer and autumn.

Autumn Wildflowers

Tall meadowrue Virginia yellow flax Yellow stargrass Tasselrue Flowering spurge Wild potato vine Partridgeberry Blue curls

Fall phlox Lance-leaved Loosestife Cardinal-flower Tall goldenrod Cowbane Hairy thoroughwort Golden aster Basil balm Goat's rue Small white aster Panicled aster White wood aster Thin-leaved sunflower Wavy-leaf aster Stiff aster Smooth aster Small yellow crownbeard Yellow sneezeweed

Grasses & Ferns

Royal fern Big bluestem Indian grass Switch grass

Note: These warm season grasses form several "prairie" communities on the river scour zone. Royal fern is also very common in the scour zone.

Walking fern, Mountain spleenwort, and Pinnatifid spleenwort can frequently be found on cliffs and boulders on the canyon hillsides.

Rare plants

Virginia spiraea Barbara's buttons Shrubby yellowroot Rough blazing star Senecio paupercaulus Appalachian violet Sweet pepperbush Highbush blueberry Allegheny vine Purple 3-awn grass Plumegrass Coreopsis pubescens Smokehole bergamot Wild oats (Uniola) Fern-lear Phacelia Tasselrue Basil Balm Riverbank goldenrod Racemed milkwort

Smokehole bergamot Dragonhead var. granulosum

Sand cherry, Frostweed (Helianthemum propinquum), and Bicknell's Frostweed (Helianthemum bicknellii) are 3 plants with their only WV sites located on Gauley River.

Silverbell trees, Virginia bluebells and Kenilworth Ivy have been found along the lower Gauley between Belva and Gauley Bridge.

The lower Gauley River is a botanical bonanza and very scenic area. Go when the river levels are low and definitely be on the watch for copperheads in autumn as they rest on the black river rocks. Otherwise it is a botanist's paradise.

TRIBUTE TO LYNN WAGNER

The Board of Trustees passed a resolution to recognize the leadership, determination and accomplishments of Lynn Wagner as President of WVNPS during 2003 and 2004. Lynn had previously helped organize the Eastern Panhandle Chapter and lead it to success on many field trips, conferences, and invasive plant control projects.

Her positive leadership is greatly appreciated by all Board members. She was determined to get the Society involved in more projects, and has been successful in this endeavor. We now support the SNIP program in the Eastern Panhandle, the WVU and Marshall Herbaria, a native plant garden in South Charleston, a DNR Invasive Plant List brochure, and other projects.

Lynn, we all appreciate your hard work and look forward to many more years of "native plant" contributions in the Eastern Panhandle and West Virginia!!

Goat's Rue

KANAWHA VALLEY CHAPTER OFFICERS FOR 2005

Steve Mace – President Lois Kuhl – Secretary Mary Sansom – Vice President Carolyn Welcker – Treasurer

PERSONAL NOTES

Suzy Sanders graduated from WVU with her PhD after 3 years of studying goldenseal. Emily Grafton has completed an interpretative guide for the Dept. of Natural Resources for Green Bottom Wildlife Management Area and interpretation signs for the Wildlife Center at French Creek.

Gayle Foulds is President of the Sleepy Creek Watershed Association in Berkeley and Morgan Counties. They are making progress on the 90,000 acre watershed in land use inventory and management. They will likely tackle some of the invasive exotic plant problems. Perhaps WVNPS can help! Several members of this group have also been involved in eradicating a population of purple loosestrife along Warm Spring Run that flows through Berkeley Springs. Brian MacDonald has also been quite involved in that eradication effort.

I hope many of you saw the article written by Lawrence Beckerle, in the Sunday, Nov. 14th Gazette-Mail titled, "Green Fire: Non-native Plants are Destructive but Unchecked". Members Julian Martin and Lawrence Beckerle both ran for political office. Neither was successful, but they have my respect for making a difference.

FIELD NOTES

Sam Norris found Lily-leaved Twayblade and Autumn Coralroot near the picnic area in Tygart Lake State Park during a Master Naturalist Weekend, Oct. 1-3. A group of us also found Nodding Ladies' Tresses in the road ditch near the lodge and considerable Puttyroot and Amur Corktree (nasty invasive) along Dogwood Trail in the park. Bill Grafton, Peter Schoenfeld, and Bob Smith (Alaska classmate), and Jonathan Jessup (Premier photographer (check out website at Jonathan Jessup.com) tackled North Fork Mountain on a rainy and foggy day on Oct. 29th. Our mission was to find White Spruce which was reported by the famous botanist Per Axel Rydberg. We did not find white spruce but we had a fantastic day in the fog. We did see three-toothed cinquefoil, Michaux's saxifrage, silvery nailwort, Carex polymprpha, and the unique dwarf pine forest that grows on top of North Fork Mountain.

RED SPRUCE RESTORATION

Longtime member, Dave Saville, of WVNPS and The Highlands Conservancy has promoted restoration of balsam fir over the past decade. He now feels a similar effort is needed with red spruce. This topic highlighted the annual meeting of The Highlands Conservancy recently held in Richwood.

Red spruce forests occupied around 500,000 acres in West Virginia's high mountains prior to the Civil War era. After timbering, forest fires and attempts to convert forests to pastures, only 50,000 acres of spruce remains today (1/10 of the original). Vast areas of Dolly Sods, Canaan Valley, Dobbin Slashings, Beaver Creek, Spruce Knob, and other high elevations could be restored to red spruce.

Dave and others have collected cones for seed and have the ability to grow these into seedlings at various nurseries. Then will come the moment of truth. Can landowners be

located who will let their properties be planted to red spruce. Can we find volunteers who will help with the planting?? You will hear more art a later date. Stay tuned!!

TREES AND SHRUBS SUITABLE AS LARVAL HOST PLANTS Written by: Emily Grafton

A positive antidote for reducing the spread of exotic invasive species could be to increase the spread of native plants. Increasing the diversity of native plants in the landscape also provides habitat for wildlife, from those at the bottom of a food chain (bees, mice, caterpillars) to those at the top (owls, bear, weasels). Exotic invasive plants and animals are less likely to spread where healthy natural communities are well established.

Below is a list of native woody species known to serve as larval hosts for a large number of native butterfly and moth species. These plants also provide food for several thousand species of bees, butterflies, wasps, ants, beetles aphids and other insect groups. Scientists have determined that most insects feed only on a limited range of plants during any life stage. And, since most animals depend on insects for food or on small animals that eat insects, it behooves us to ensure the protection and to increase the establishment of our native flora.

Native plants and the ecosystems they support are threatened from a multitude of directions. And as the plants go, so go the wildlife they support. People love butterflies, and there seems to be fewer of them about these days. Without their larval host plants, all the pretty nectar gardens in the world will not bring them home. Planting larval host plants in our front yards or along a boulevard can be the seed that sprouts a new community of wildlife within a few years. Hopefully, this little chart will provide some ideas for your spring plantings. Herbaceous larval host plants will follow in the next issue.

Plant Name	Habitat Requirements	Butterfly/Moth Species
Alder / Alnus spp.	Riparian corridors	Orange harvester butterfly; Rusty tussock moth; Luna
Aspen / Populus spp.	Widely varying sites; establishes after wildfires	Viceroy; Canadian tiger swallowtail; dusky wing
Birch / Betula spp.	Moist soils	Canadian tiger swallowtail
Black Cherry / Prunus serotina	Variable; Does best on moist rich soils	Eastern tiger swallowtail; Red- spotted purple; spring azure; Coral hairstreak
Buttonbush / Cephalanthus occidentalis	Hydric soils; riparian corridors	Moths – Luna, Prometheus, Polyphemus & Wood nymph
Cranberry / Vaccinium spp.	Sphagnum bogs	Bog copper
Downy Arrowwood / Viburnum dentatum	Moist upland soils	Spring azure; moths
Dutchman's pipevine / Aristolochia macrophylla	Moist rich woods; prefers deep shade & mature trees	Pipevine swallowtail
Elderberry / Sambucus spp.	Moist woods & thickets; partial sun	Elder shoot borer moth
Elm / Ulmus spp.	Variable – Am. Elm; Slippery elm moist rich limestone soils	Mourning cloak; Question mark; Comma
Flowering Dogwood / Cornus florida	Moist hardwood forests; prefers shade to partial shade	Spring azure
Greenbrier / Smilax spp.	Variable; prefers dry oak woods	Harvester
Green ash / Fraxinus	Swamp; riparian corridor	Tiger swallowtail; Hickory

pennsylvanica		hairstreak; Cecropia moth;
Hackberry / Celtis occidentalis	Prefers limestone outcrops	Hackberry emperor; Question mark; Mourning cloak
Hawthorn / Crataegus spp.	Rocky upland soils; old fields	Harvester
Hercule'sclub / Aralia spinosa	Dry rocky uplands	Great purple hairstreak; Giant swallowtail
Hickory / Carya spp.	Variable, moist and dry woodlands, edges of fields	Banded hairstreak; Hickory hairstreak
Hop tree / Ptelea trifoliata	Moist rocky soils	Eastern tiger swallowtail; Giant swallowtail
Hornbeam, American / Carpinus caroliniana	Moist rich soils of ravines and streambanks	Red spotted purple; moths
Locust / Robinia pseudoacacia	Moist, fertile soils	Silver spotted skipper
Mistletoe / Phoradendron flavescens	Parasitic on many herbaceous trees, i.e. hickory, locust, elm	Great purple hairstreak
New Jersey tea / Ceanothus	Dry, rocky open woodlands	Banded hairstreak; Striped
americanus		hairstreak; spring azure
Oak / Quercus spp.	Variable	Banded hairstreak;
Pawpaw /Asimina triloba	Moist rich deep soils	Zebra swallowtail
Redbud / Cercis Canadensis	Moist limestone influenced soils of shady ravines	Nectar source for the Silvery blue
Red Cedar / Juniperus virginiana	Dry limestone influenced soils	Juniper hairstreak
Sassafras / Sassafras	Variable although prefers	Spicebush swallowtail;
albidum	rich, moist soils	Spicebush silkmoth
Serviceberry / Amelanchiar spp.	Variable	Striped hairstreak; White admiral
Spicebush / Lindera benzoin	Moist rocky slopes	Spicebush swallowtail; Eastern tiger swallowtail
Spirea / Spirea alba	Wetlands although will occupy slightly dry sites	Spring azure
Silky dogwood / Cornus amomum	Wetlands Wetlands	Spring azure
Swamp rose / Rosa palustris	Wetlands	Striped hairstreak
Toothache tree / Xanthoxylum americanum	Moist rocky soils of uplands	Giant swallowtail
Willow / Salix spp.	Riparian corridors	Mourning cloak; Viceroy
Winterberry / Ilex verticillata	Rocky, acid upland soils	Striped hairstreak
Witch hazel / Hamamelis virginiana	Moist rocky soils	Harvester
Yellow Birch / Betula allegheniensis	Cool, shaded ravines, upland soils of high mountains	Mourning cloak; Dreamy duskywing; White admiral; Compton tortoiseshell; Io
Yellow poplar <i>Liriodendron</i> tulipifera	Preferably rich, well-drained soils	Eastern tiger swallowtail; Canadian tiger swallowtail