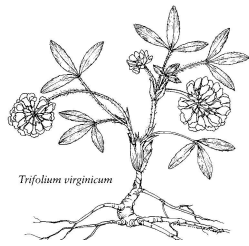


NATIVE



NOTES

Kate's Mountain Clover*

WEST VIRGINIA NATIVE PLANT SOCIETY NEWSLETTER

VOLUME 22:3

WINTER 2014-15

Judy Dumke-Editor: E-mail-dumke@live.marshall.edu Phone 740-894-6859

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❖ ❖ ❖ visit us at www.wvnps.org ❖ ❖ ❖

Fern Workshop University of Charleston

Charleston WV

January 17 2015,

bad weather date January 24 2015

If you have thought about ferns, looked at them, puzzled over them or just want to know more about them join the WVNPS in Charleston for a workshop led by Mark Watson of the University of Charleston. The session will start at 10 A.M. with a scheduled end point by 12:30 P.M. A board meeting will follow.

The sessions will be held in the Clay Tower Building (CTB) room 513, which is the botany lab. If you have any pressed specimens to share, or to ask about, be sure to bring them with as much information as you have on the location and habitat. Even photographs of ferns might be of interest for the session. If you have a hand lens that you favor bring it along as well.

DIRECTIONS

From the North: Travel I-77 South or I-79 South into Charleston. Follow the signs to I-64 West. Take Oakwood Road Exit 58A and follow the signs to Route 61 South (MacCorkle Ave.). Travel approximately 1.5 miles. The campus is on the left.

From the South: Travel I-77 North (West Virginia Turnpike). Go through downtown Charleston (ignore the UC sign at MacCorkle Ave.), to I-64 West. Take Oakwood Road Exit 58A and follow the signs toward Route 61 South-Marmet. Once on Route 61 South (MacCorkle Ave.), travel approximately 1.5 miles. The campus is on the left.

From the East: Travel I-64 West or I-79 South. From I-64, go through downtown Charleston (ignore the UC sign at MacCorkle Ave.), continuing West. Once on Route 61 South (MacCorkle Ave.), travel approximately 1.5 miles. The campus is on the left.

From the West: Travel I-64 East to Charleston. Take the Oakwood Road Exit 58A and follow the signs to Route 61 South-Marmet. Once on Route 61 South (MacCorkle Ave.), travel approximately 1.5 miles. The campus is on the left.

After entering the campus from MacCorkle Avenue turn left at the first intersection (Cherokee Ave.) Proceed to an opening into a parking lot on the right. Park. Clay Tower will be the tallest building on the far side of the lot. Enter, then take the elevator to the fifth floor. ❀

The WV Atlas lists 77 species and hybrids found in 14 genera including:



Azolla caroliniana Willd
Carolina mosquito fern
creative commons photo



Onoclea sensibilis L.
Sensitive fern



Ophioglossum vulgatum L.
Southern adders tongue
creative common photo

Robert H. Mohlenbrock, hosted by the USDA-NRCS PLANT TS

Database / USDA SCS. 1991. Southern wetland flora: Field office guide to plant species.
South National Technical Center, Fort Worth. Photo

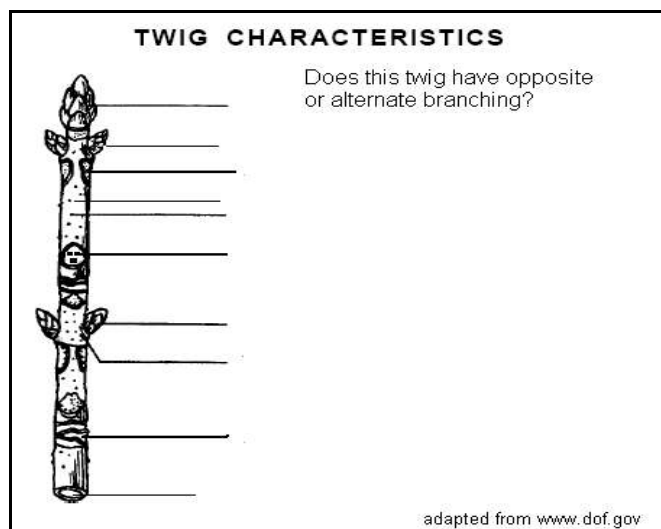
Chapter Field Trips

Tri State Chapter

Winter tree identification Field Trip and workshop to be held Feb 21 starting at 10:30 from the Beechfork visitor's center at the marina. If weather precludes outdoor activities twig id will be held in the visitor's center. Leader Romie Hughart for further information contact him at romie5006@yahoo.com or (304-523-1049)

Directions From I-64 go south on US 152 (exit 8) to Lavalette follow signs to the Marina.

To prepare for this trip see if you can match the terms to the lines on the drawing. The characteristics with a * can be found on the diagram.



Alternative vs Opposite Branching

Terminal vs. Lateral buds*

Leam scar*

Bud scale scar*

Vascular bundle scar*

Imbricate bud scales*

Valvate bud scales

Clustered buds

False terminal (or pseudoterminal) bud

Pith*

Chambered pith

Hollow pith

Stipule scar

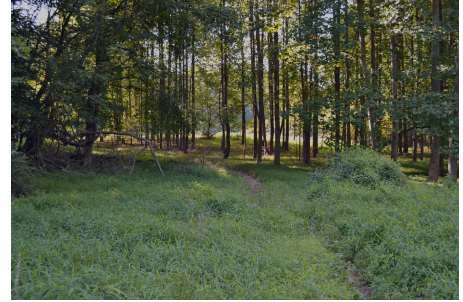
Naked bud

Lenticel*

Node vs. Internode*

Watch for this Grass

As far as is known at this time Wavyleaf Basketgrass (*Oplismenus hirtellus* ssp. *undulatifolius* (Ard.) U. Scholt has not been found in West Virginia, however it has been found in Maryland and Virginia, close to the Eastern Panhandle. This plant is a strong candidate to be our next unwelcome Asian grass. Where it has been found, it has covered the forest floor and formed large colonies. As you can see in the photograph to the right, it is capable of covering large areas of the forest floor to the exclusion of other vegetation. It is not only found on the margins of forested land but also in the interior.



This plant originated in southern Europe and southeast Asia, first being found in the US in Maryland in 1996 in Baltimore County. Since that time it has spread rapidly throughout adjacent Maryland and Virginia. It may be found associated with Japanese (Asiatic, Nepalese) Stilt Grass as the habitat is similar.



A perennial which spreads both by long stolons and by rooting at the lower stem nodes as well as by seeds which have long sticky awns which will adhere to both animal fur and to clothing it is capable of rapid expansion. If you are in an infected area from mid-September to late October check for seeds that might be transported on you and your dog or horse. The deep green leaves are flat, with wavy transversely located ripples which can easily be seen or felt. The leaves are ca. ½ inch wide and 1 ½ to 4 inches long. Short hairs will be found on the leaf sheaths and stems.

This plant is a subspecies of *O. hirtellus*, two other subspecies, spp. *fasiciculatus* and *setarius* are found in the southeastern US but are not found in West Virginia. Should there be any doubt, check the hairs, the native subspecies have few, if any hairs, while ssp. *undulatifolius* has many small hairs. This plant might also be confused with the native Deer-tongue panic grass (*Dicanthelium cladestinum*) which may be distinguished by the habit; *Dicanthelium* is an erect plant and *Oplismenus* is spreading. In our area another invasive grass, Japanese Stiltgrass *Microstegium vimineum* might be found in a mixed population with wavyleaf basket grass, it may be distinguished by the flat leaves with a pale, slightly off center midrib as well as hairless internodes. The annual Hairy Joint Grass, *Arthraxon hispidus*, is a potentially confusing grass, the hairs on this grass are much longer than those on wavyleaf basketgrass, the awns are shorter than the body of the grain in the hairy joint grass and much longer in the wavyleaf basket grass.



Should you find populations of this plant please report it to: cmsandeno@fs.fed.us The report sightings tab on www.phcwpma.org is not currently active, thus Cynthia Sandeno is the appropriate recipient for reports.

Photos courtesy of Dr. Vanessa /B. Beauchamp, Department of Biology Townsend State University, Md.

Now Where Did That Go ???

Recently looking up a plant I could find no Hydrophyllaceae, the family had been subsumed into the Boraginaceae, most of the familiar members of the Scrophulariaceae are now found in the Plantaginaceae. All of us are familiar with the changes in the genus formerly know as *Aster*, changes as hard to remember as to pronounce. Such is the state of plant taxonomy as the advent of molecular studies, more powerful computers and microscopes, as well as wider access to old publications, had led to massive changes in the 50-100 year old classification systems that we have been using. This is not really surprising, it has happened before, and probably will again. Other fields have found newer that instruments and computational tools have vastly changed their understanding of how they interpret the world. We know that taxonomy is the result of the desire to have order and to recognize patterns, whether they are there are not. Many of these changes are driven by the hope of having a classification system that more nearly reflects the evolutionary history of plants. At times it makes keeping up challenging and annoying, even more so when the change reverts to a name you tried hard to forget because of a prior change.



Romie Hughart has been following this in a basal plant group, *Magnoliales*. Some of what he found is located on page 10 of the e-mail version and on the newsletter on the web site. While most genera in this order are found in warmer and tropical areas, a few members do occur in our area.

These include: *Asimina triloba* (L.) Dunal (Paw Paw), *Liriodendron tulipifera* L. (Tulip Tree), *Magnolia acuminata* (L.)L. (Cucumber Tree), *M. fraseri* Walt. Fraser or Mountain Magnolia, and *M. tripetala* (L.) L. (Umbrella Magnolia).



As an example of the current changes I am using a small genus from Strausbaugh and Core-- *Cacalia*. Three species and one excluded name were included. In current treatments there are no plants listed in that genus.

Two of the species: *C. atriplicifolia* L. and *C. muhlenbergii* (Sch.Bip) Fern., were moved to *Arnoglossum* becoming *Arnoglossum atriplicifolium* H. E. Robins (Pale Indian Plantain) and *A. Muehlenbergii* (Sch. Bip) H. E. Robins (Great Indian Plantain) *C. suaveolens* L. (Sweet Indian Plantain) was placed in *Hasteola* becoming *H. suaveolens* (L.) Pojark.. *C. reniforme* resurfaced as a valid species, *A. reniforme* (Hooker) H. E. Robins.

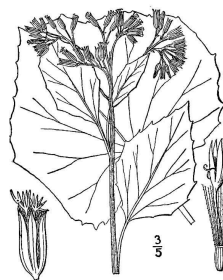
As if that is not enough those species in *Arnoglossum* were once in the genus *Mesadenia* and those in *Hasteola* were in *Synosma*.

What is the keying difference in FNA? *Arnoglossum* has 5-8 phyllaries and 4-8 florets while *Hasteola* has 7-21 phyllaries and 10-80+ florets.



Pale Indian Plantain

19 current counties locations
21 old counties locations



Great Indian Plantain

3 current counties locations
7 old counties locations



Sweet Indian Plantain

7 current counties locations
7 old counties locations

Status threatened

For purposes of clarity and consistency most usage in *Native Notes* will confirm to that found in Harmon, Ford-Werntz and Grafton 2006 *Checklist and Atlas of The Vascular Flora of West Virginia* ❖

Unless other wise noted illustrations are from: Britton, N.L., and A. Brown. 1913. An illustrated flora of the northern United States, Canada and the British Possessions. 3 vols. Charles Scribner's Sons, New York. Courtesy of Kentucky Native Plant Society. Scanned by Omnitek Inc.

An Eventful Weekend

The ten plus members of the WVNPS who attended the field trips September 6-7 2014 in southern West Virginia were greeted with blue skies and pleasant weather, even though storms blessed much of the rest of the state. There were two trips: on the 6th the group visited Brush Creek Falls Preserve (information on this trip will be found in the e-mailed version and on the web but not in the mailed version if you wish a copy you may download the material from the web) and visited Sandstone Falls on the 7th.

The Sandstone Falls area visited is in Raleigh County along the New River. The biotic community is described as both Appalachian Flat Rock or as eastern red cedar, Virginia pine flat rock woodland. The group was greeted by Layne Strickler who talked about the community and the problems that it faced. The plant community includes several rare species, Virginia spiraea (*Spiraea virginiana*) which is a federally listed threatened species as well as Pretty sedge (*Carex woodii*), star tickseed (a.k.a. hairy tickseed (*Coreopsis pubescens var. robusta*), downy milk pea (*Galactia volubilis*) and several other state listed threatened species. The 23 acre special area around the boardwalk is classified as a G1, globally rare community. Soils are dry (xeric) and acid.

Invasive plants and insects are of concern in this special place. Invasive stonecrop is hand removed, Japanese honeysuckle and tree of heaven are treated chemically. Other serious plant invaders are Japanese or Bohemian knotweed, and Autumn Olive. Emerald ash borers were found in 2009 an insecticide treatment has begun on ca. 500 trees. Hemlock wooly adelgid treatment was started in 2006. Control was greatly aided by the cold 2013-14 winter which resulted a 90% death rate but left a cold resistant population. A biological control from Idaho is expected to be effective, when available.

A big Thank you to Layne Strickler for her presentation and to Betsy Reeder and Judi White for recording the plants and information for both trips is most warranted.

Sandstone Falls Field Trip

Key to the list ! The record is old (based on 2006 data, new records are likely to have been recorded)

Bold County record *Italics* non native * invasive

<i>Maclura pomifera</i> !	Osage orange	Cephalanthus occidentalis	Buttonbush
<i>Carya cordiformis</i> !	Bitternut hickory	Lysimachia ciliata !	Fringed loosestrife
<i>Commelina communis</i> *	Asiatic dayflower	Saururus cernuus	Lizard's tail
<i>Juniperus virginiana</i>	Red cedar	Conoclinium coelestinum	Mistflower
<i>Sedum acre</i>	Stonecrop	Gaura biennis !	Gaura
<i>Polymnia canadensis</i>	Small-flowered leaf cup	Arnoglossum atripicifolium !	Pale Indian plantain
<i>Polygonum scandens</i> !	Climbing false buckwheat	Hypericum prolificum	Shrubby St. Johnswort
<i>Ulmus americana</i> !	American elm	Vernonia gigantea !	Tall ironweed
<i>Bidens bipinnata</i> !	Spanish needles	Apios americana !	Ground nut
<i>Quercus stellata</i>	Post oak	Verbena urticifolia	White vervain
<i>Pseudognaphalium</i> sp. ?	Cudweed	Helenium autumnale	Yellow sneezeweed
<i>Houstonia longifolia</i> !	Long-leaved summer bluets	Hypericum punctatum !	Dotted St. Johnswort
<i>Symphotrichum patens</i>	Late purple aster	Ptelea trifoliata !	Hop-tree
<i>Hypericum gentianoides</i>	Orange grass	Staphylea trifolia	Bladdernut
<i>Lobelia inflata</i>	Indian tobacco	Justicia americana !	Water willow
<i>Rhus copallinum</i> !	Winged sumac	Sassafras albidum	Sassafras
<i>Solanum carolinense</i> !	Horse nettle	Zanthoxylum americanum	Toothache tree
<i>Lespedeza virginica</i>	Virginia bush clover	Campsis radicans !	Trumpet Creeper
<i>Chioanthus virginicus</i> !	Fringe tree	Dirca palustris	Leatherbark, Leatherwood
<i>Viburnum prunifolium</i> !	Blackhaw	Eragrostris spectabilis	Lovegrass
<i>Prunus americana</i> !	Wild plum	<i>Arctium minus</i> *	Burdock
<i>Erechtites hieraciifolia</i> !	Pilewort, burnweed	<i>Polygonum persicaria</i> ! *	Lady's thumb
<i>Microstegium vimineum</i> *	Japanese stiltgrass	<i>Polygonum caespitosum</i> *	Asiatic water pepper
<i>Viburnum recognitum</i>	Smooth arrowwood	Acalypha rhomboidea !	Three-seeded Mercury
<i>Diospyros virginiana</i>	Persimmon	Halesia tetraptera	Mountain Silverbell
<i>Asimina triloba</i>	Pawpaw	Eupatorium serotinum	Late flowering thoroughwort
<i>Elephantopus carolinianus</i> !	Elephant's foot		

Brush Creek Falls

This Mercer County Nature Conservancy preserve was visited by about 10 members of the WVNPS on Saturday September 6, 2014. They were rewarded by finding many state listed species, some of which were quite rare. After the visit Judi White found that Canby's Mountain Lover is now in the nursery trade. Although the catalogue stated that it is disease and insect resistant it is being attacked by euonymous scale in wild populations, it is possible that the transfer occurred in a nursery or garden someplace.

d (based on 2006 data, new records are likely to have been recorded)

Bold County record *Italics* non native * invasive Green state status

Mitchella repens	Partridgeberry		
Prenanthes trifoliolata	Lion's foot	Chelone glabra !	Turtlehead
Eurybia divaricatus !	White woodland aster	Asplenium platyneuron	Ebony spleenwort
Lactuca canadensis	Canadian lettuce	Aplectrum hyemale	Puttyroot (seed stalk, new leaf)
Hydrangea arborescens !	Wild hydrangea	Dioscorea villosa	Wild yam
Polystichum acrostichoides !	Christmas fern	Galearis spectabilis	Showy orchis
Byzania	Liverwort	Campanula divaricata	Southern bellflower
	Coral fungus	Heuchera villosa	Hairy alum root
Dryopteris marginalis	Marginal shield fern	Asplenium rhizophyllum	Walking fern
Dryopteris intermedia	Intermediate shield fern	Taxus canadensis <u>threatened</u>	American yew (with fruit)
Aristolochia macrophylla	Pipevine	Hepatica nobilis	Hepatica
Solidago flexicaulis	Broad-leaf goldenrod	Prosartes langlinosa	Fairybells
Symphyotrichum racemosum	Small white aster	Euonymus americana	Strawberry bush
Crataegus sp.	Hawthorn	Magnolia acuminata !	Cucumber tree
Botrychium dissectum !	Cutleaf grape fern	Ageratina altissima !	White snakeroot
Amelanchier sp.	Serviceberry	Heuchera americana !	Alum root (dried stalk, blooms early)
Oxydendrum arboreum !	Sourwood	Toxicodendron radicans !	Poison ivy
Acer pensylvanicum	Striped maple	Boehmeria cylindrica	False nettle
Lindera benzoin !	Spicebush	Elymus hystrix!	Bottlebrush grass
Goodyera pubescens	Downy rattlesnake plantain	Lysimachia quadrifolia !	Whorled loosestrife
Solidago caesia	Wreath goldenrod	Waldsteinia fragarioides	Barren strawberry
<i>Perilla frutescens</i>	Beefsteak Plant	Lonicera canadensis <u>threatened</u>	Native fly honeysuckle
<i>Agrimonia eupatoria</i> (state record?)	Church Steeples	Actaea pachypodea	Doll's eyes
Sambucus racemosa	Red elderberry	Aralia spinosa !	Devil's walking stick
Lobelia siphilitica	Great Blue lobelia	Symphyotrichum undulatum	Wavy-leaf aster
Symphyotrichum prenanthoides	Crooked-stem aster	Carex plantaginea	Plantain sedge
Actaea racemosa	Black cohosh	Ceanothus americanus !	New Jersey tea (fruit)
Thalictrum pubescens	Tall meadow rue	Hypericum prolificum	Shrubby St. Johnswort
Polygonatum biflorum	Great Solomon's seal	Carpinus caroliniana	Muscle tree
Rudbeckia laciniata	Tall coneflower	Huperzia lucidula	Shining club moss
Apios americana !	Groundnut	Allium oxyphilum <u>threatened</u>	Nodding wild onion
Phyrma leptostachya	Lopseed	Desmodium canescens	Hoary tick trefoil
Ostrya virginiana	Hop hornbeam	Lespedeza virginica	Virginia lespeza
Anemone virginiana !	Thimbleweed	Tridens flavus	Purpletop
Helianthus divaricata	Woodland sunflower	Paxistima canbyi <u>threatened</u>	Canby's mountain-lover
Physocarpus opulifolius	Ninebark	Galium pilosum !	Hairy bedstraw
Aquilegia canadensis	Wild columbine (leaves)	Phlox subulata	Moss phlox
Corylus americana	Hazelnut	Rosa carolina	Pasture rose (hips)
Dioscorea quaternata	Wild yam	Hexastylis heterophylla	Heartleaf
Maianthemum racemosum	False Solomon's seal	Viburnum prunifolium !	Black haw
Solidago bicolor !	Silverrod	Osmunda cinnamomea	Cinnamon fern
Betula lenta	Black or sweet birch	Acer pensylvanicum	Striped maple
Polygonatum pubescens	Downy Solomon's seal	Polypodium virginianum	Common polypody
Botrychium virginianum	Rattlesnake fern	Betula alleghaniensis	Yellow birch
Ambrosia artemisiifolia !	Ragweed	Aralia racemosa !	American spikenard
Vitis aestivalis !	Summer grape	Acer spicatum	Mountain maple
Hieracium paniculatum	Panicled hawkweed	Acer pensylvanicum	Moosewood
<u>Thuja occidentalis</u> <u>threatened</u>	White cedar Arbor-vitae	Acer saccharum	Sugar maple
Solidago nemoralis	Old field goldenrod	Aralia nudicaulis	Wild Sarsaparilla
Lactuca biennis !	Tall blue lettuce	Ostrya virginiana	Ironwood
Cryptotaenia canadensis	Honewort	Ribes hirtellum <u>threatened</u>	Bristly gooseberry

THANK YOU

To: W. VA. Native Plant Society

FROM: Dr. Katharine Gregg of West Virginia Wesleyan wrote to thank WVNPS for the 2014 contribution to the herbarium fund. In the past the donations have provided for the purchase of a reflective vest to be used for collecting safely, and to purchase a copy of the new *Flora of Virginia*. This year the money will go to purchasing genus folders because the current ones are too full. The need for additional folders demonstrates that this is indeed an active herbarium with ongoing collecting and research. On page 8 you will find a link to the 6600 specimens that have been digitized. There are images of the sheet with label data below.

From: W. VA Native Plant Society

TO: Kevin Campbell, whose term expired in 2014, for his service on the board. Kevin arranged the field trips which we all enjoyed and learned so much from. He has indicated that he will continue to be active in the organization sharing his knowledge of West Virginia and its special botanical places. He has been helping botanists yet unborn as the leading contributor to the herbarium at WVU for several years.

TO: Chris Gatens for accepting an invitation to return to the board as a director. He will be serving for three years. Congratulations Chris.

We Mourn

2014 saw the loss of two members, or former members, who were very important to the botany and natural areas of West Virginia.

Dr. Charles Baer Jr., known to most of us just as Charlie, died February 3rd in Morgantown. Charlie started in Ohio where he obtained a bachelor and master degrees at Ohio State University, followed by a PhD from the University of Maryland. During his research he discovered the love of his life, West Virginia. He joined the faculty of the biology department at West Virginia University as an ecologist. During his professional life he mentored masters and PhD students, conducted research which resulted in publications, and did all the things professors do. But his most remarkable contribution was identifying natural areas of the state (and even beyond, under contract to the National Park Service) that were worthy of protection and then becoming active in seeing that they were preserved. He was a founding member of The Nature Conservancy in West Virginia and served on the board for many years, including as president. He was instrumental in the preservation of TNC's first preserve, Cranesville Swamp on the Maryland Border. It had been a site for many of his class field trips and he wanted future students to be able to see tamarack growing naturally in West Virginia. But he did not stop there-- Dolly Sods, Greenland Gap, Cathedral State Park, Coopers Rock, and so many more special and botanically important places received his attention.

Marilyn Wilking Ortt of Marietta, Ohio died May 25, 2014. Marilyn was a dedicated field botanist who enjoyed the pleasures of Dolly Sods and Canaan Valley throughout her life, frequently visiting with her family. During her jaunts to West Virginia and the Parkersburg area she contributed to our knowledge of the plant communities. Involvement was the mark of her life in the Marietta community. She was the driving force behind the Friends of the Lower Muskingum River and the Marietta Natural History Society, both of which were active in preserving the significant biological communities in the area including: Kroger Wetlands, Kris-Mar Woods, Tefft Woods, Boord Preserve and Ladd Natural Bridge. But preservation of land was not her only involvement. Marilyn also headed the Marietta Tree Commission where she was a force to be reckoned with, spearheaded the Marietta Area Recycling Center and the Household Hazardous Waste Day, (I remember her telling me about the first one where she found a very dangerous old chemistry set in her attic and was able to discard it at the Waste Day.) I'll miss her companionship in the field and extensive knowledge of the plants of Ohio and West Virginia.

Judy Dumke

News of the West Virginia Native Plant Society

Highlights of the September 6, 2014 Annual Meeting

- ! The meeting was held at the Pipestem State Park Headquarters patio, Summers County WV
- ! 5 Board members and 7 members attended
- ! The society remains in sound fiscal condition.
- ! Membership dues were reported as continuing to come in more slowly than usual. New members are being added to the membership list.
- ! The Kanawha Valley chapter still has no officers.
- ! The Eastern Panhandle chapter status was updated by Rodney Dever, who has assumed leadership of the chapter.
- ! Steve Mace reported that 712 people had posted to the WVNPS Facebook page.
- ! The membership brochure on the website will be updated or referenced.
- ! Donations to the West Virginia University and West Virginia Wesleyan herbariums were authorized. A donation to Marshall University was tabled pending information on the funding distribution at the University.
- ! Schedules and locations for future events were discussed
- ! The election of officers was held resulting in the list to be found on the sidebar to the right. ❀

Welcome to New Members

Rosemary Aures	Morgantown WV
Karen Field-Smith	Sharpsburg MD
Mark Frantz	Morgantown WV
Crystal Krause	Elkins WV
Molly McClennen	Milton WV
Lorraine Miller	Ashland KY
Frank Slider	Morgantown WV
Nathan Tauger	Mullens WV
Todd & Melissa Waggy	Lewisburg WV

DUES FOR 2015

On page 8 you will find the dues form. Dues for 2015 are now due. Please remember to indicate any affiliation with local chapters, as well as indicating your preference for Native Notes delivery ❀

West Virginia Native Plant Society Officers

President -Steve Mace
sdmace@frontiernet.net
(304)-674-5522

Past President- Romie Hughart
romie5006@yahoo.com
(304)-523-1049

Vice President- Emily Grafton
egrafton@gmail.com

Corresponding Secretary-
Helen Gibbins
Gibbins@frontier.com
(304)-736-3287

Recording Secretary-Dan Stevenson
d Stevenson101@gmail.com
(304)-633-0800

Treasurer - Judi White
Judiwhite@suddenlink.net
304-863-8352

Directors

Donna Ford-Werntz (1 year term)
dford2@wvu.edu
(304)-293-0794

Chris Gatens (3 year term)
(304)-458-2533
cmgatens@frontier.com

Pete Rykert (2 year term)
eagle26241@yahoo.com

Tri State Chapter-Romie Hughart
See above

Kanawha Valley & Eastern
Panhandle -Steve Mace see above

Editor_ Judith Dumke
dumke@live.marshall.edu

Events of Interest

January 10 Ohio Moss and Lichen workshop of beginning moss identification 9:30-4? Museum of Biological Diversity Columbus, Ohio
<http://www.ohiomosslichen.org>

January 24 Shirley Schweiger Winter Walk Kanawha State Forest Charleston, WV 2:00 PM from swimming pool
<http://www.kanawhastateforest.com/events.html>

February 14 Winter Tree Identification Cacapon State Resort Park, Berkely Springs, WV.
www.cacaponresort.com/events.htm

March 27 Ohio Botanical Symposium, Villa Milano Columbus, Ohio 8-4
<http://naturepreserves.ohiodnr.gov/stay-informed/2015-ohio-botanical-symposium> ❖

Resources

Marshall University Herbarium
www.gillespielab.weebly.com/herbarium

West Virginia Wesleyan University Herbarium
www.cdm16111.contentdm.oclc.org/cdm/landing_page/colletion/p15135coll5

West Virginia University Herbarium
www.biology.wvu.edu/facilities/herbarium

Hunt Botanical Library
www.huntbotanical.org (New address and content)



For addresses in black copy and paste in address box

2015 WVNPS MEMBERSHIP RENEWAL OR INITIATION

Name(s) _____

CATEGORIES

Address _____

Chapter affiliations (please circle)

Life \$200

Regular 12

Student 8

Tri-State Chapter 6

Kanawha Valley 0

Eastern Panhandle 0

E-Mail _____

I prefer to receive the Native Notes by mail _____ e-mail _____

You must be a member of the statewide WVNPS in order to be a member of a local chapter.

Please make the check payable to West Virginia Native Plant Society;

Include local chapter dues, if pertinent. Dues are for one calendar year.

Send dues to:

Judi White
WVNPS Treasurer
148 Wellesley Dr.
Washington WV 26181

Magnoliales, A Primitive Plant order

Romie Hughart

The APG 111 system (angiosperm phylogeny group 111 system) of plant classification in the third version of a modern, mostly molecular-based system of plant taxonomy. Under this system the Magnoliales are no longer classified with the eudicots, formerly the dicotyledons. The APG recognizes a clade within the angiosperms for the Magnoliids. This clade includes most of the basal groups of the angiosperms. A clade defined as a group of plants with a common ancestor and all of its descendants.

All of the Magnoliales produce monosulcate pollen, with a single pore set in a differently oriented groove called the sulcus. Monosulcate pollen may also be found in gymnosperms and monocots.

The Magnoliales display trimerous flowers, a characteristic of most monocots. In some species the flowers are not distinctly differentiated into sepals and petals. They are the same color and are known as tepals. As in the woody eudicots, the vascular tissue of the Magnoliales is arranged in concentric rings. This enables the eudicots to increase in size. The monocots have a distinctive arrangement of vascular tissue known as an atactostele in which the vascular tissue is scattered rather than arranged in concentric rings.



Asimina triloba

USDA-NRCS PLANTS Database / USDA NRCS. Wetland flora: Field office illustrated guide to plant species. USDA Natural Resources Conservation Service

Three families of the order Magnoliales can be found in the tri-state area:

a.) **Annonaceae** - *Asimina triloba* (L.) Dunal (paw paw)
Flowers are maroon with three sepals and six petals.

b) **Liriodendraceae** - *Liriodendron tulipifera* L.(tulip poplar)

Once listed under Magnoliaceae, due to fossil evidence, Liriodendraceae is now a distinct family.

Flowers have three outer sepals and six inner petals. Stamens and pistils are arranged spirally around a central spike or gynaecium.



Liriodendron tulipifera

Robert H. Mohlenbrock, hosted by the USDA-NRCS PLANTS Database / USDA NRCS. 1995. Northeast wetland flora: Field office guide to plant species. Northeast National Technical Center, Chester

c) **Magnoliaceae**

Flowers have three sepals and six to many petals.

Stamens and pistils are arranged in spirals on a conical receptacle.

Local species include:

1. *Magnolia acuminata* (L.) L.(cucumber tree)
2. *M. fraseri* Walt.(Fraser magnolia)
3. *M. tripetala* (L.) L. (umbrella magnolia).

This article was researched through Wikipedia, the free encyclopedia and an article from the *Am. J. Of Botany* 2013: 100(8).