

NATIVE



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NOTES

THE WEST VIRGINIA NATIVE PLANT SOCIETY

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HATS OFF! TO: DNA BIOLOGY CLUB - WVNPS SIGN-MAKING PROJECT

by: Mark Chatfield

A WVNPS Project initiated by John Northeimer, the staff of Watoga State Park and Delta Nu Alpha (biology club of West Virginia State College), is starting to bear fruit. The objective of the project is to establish permanent signs along the trails in the Arboretum at Watoga State Park. The text on the signs would interpret the natural history of the arboretum and also identify various woody species.

Students in the DNA Biology Club, directed by Mark Chatfield, Assistant Professor of Biology at WV State College have established a darkroom & lab for the production of aluminum signs. The club has earned over \$700 to purchase supplies to produce the signs locally from computer text and line artwork.

The process used is called Metalphoto, and involves photosensitive anodized aluminum plates that will accept any line or halftone image that can be photographed. The sign images are black on silver or black on gold. These colors are stable to sunlight and weather. In fact, outdoor signs of this type often last over 20 years. The signs can be as large as 12 x 20 inches or cut to suit the application.

The DNA Club intends to maintain the sign lab for future generations of West Virginia State College students to use in community service projects, and also as a means to earn some

money for the clubs activities. If you have a need for signs or know of an organization that does, please contact Mark Chatfield at 304/766-3110.

When the project is completed we will let you know. In fact WVNPS/DNA club "open trail" may be in order to celebrate and share the accomplishment.

MEEHANIA CORDATA

By: Barry Glick



When Thomas Meehan, a Philadelphia botanist, died in 1901, I'm sure he went to the big forest in the sky feeling proud that Nathaniel Lord Britton (1859-1934) named a genus of plants in his honor. I'd also bet that he didn't know how wonderful his namesake plant was.

Charles and Martha Oliver are proprietors of the Primrose path Nursery in Scottdale PA and dear friends of mine. After reading a description in their catalog, and hearing them extol the virtues about how charming this little plant was, I asked them to bring me a plant on their next visit. I had to wait a year, because they were sold out just before receiving my request. I intimated that if they did not bring me a plant on their next fall visit, they might find themselves sleeping in my barn.

Tiarella, Heuchera and Heucherella are the main focus of the Oliver's breeding work. So, we planned a day of Tiarella hunting in Wolfpen Hollow, a hauntingly mysterious woodland area near my farm. We'd just descended a summit into the foggy creek bottom when I heard Charles laughing hysterically behind me on the

trail. I turned to see what he found so amusing, and saw him pointing to the ground. There, all around him, the ground was covered with Meehan's Mint. *cont. next pg.*

**GETTING STARTED IN
FLOWERING PLANT ID -
WORKSHOP I
June 15, 1996 9:00 AM - 5:00 PM**

P.J. Harmon, Botanist with the WV Natural Heritage Program will use slides, overheads, microscopes, and field exploration to provide a beginner's look into flowering plant identification. The focus of the workshop will be basic terminology, plant families, and what to look for when identifying vascular plants. Various WVNPS volunteers will assist in teaching the workshop.

What to bring: Wear field clothing suitable for walking. Bring your lunch and enough liquids for four hours of exploration. A hand lens is required. Camera, binoculars, notebook, raincoat and field guides may also be helpful.

Location and Directions: Division of Natural Resources, Elkins Operations Center, Ward Road, Elkins, WV, 26241. From I-79 at the Weston Exit, travel east on US Route 33 to Elkins; then south on US Routes 219/250 two miles from the intersection with US Route 33 (at McDonnell's and the statue of Pocahontas), to intersection with Ward Road (opposite Wal-Mart), then right on Ward Road 1.25 miles to DNR on right.
Limit: 20 people

Information: Call P.J. at 304/637-0245 or 304/6366823

**WORKSHOP II
September 21, 1996
Time: 9:00 AM - 5:00 PM**

This workshop will be held as part of the Annual WVNPS Meeting. P.J. Harmon will instruct this workshop as well, using the same materials and procedures as mentioned above. Follow the same instructions as above for what to bring. P.J. will be using the text *Plant Families* by James Payne Smith (Mad River Press). You may purchase this text from P.J., at a cost of \$16.95 plus shipping, if you place your order by August 20. P.J. says "it's the best book on plant family characteristics, complete with illustrated glossary -I highly recommend it." However, this text is not required for participation.

Limit: 20 people

**WVU HERBARIUM
PROJECT OPPORTUNITIES**

A lot has been happening with the WVU Herbarium in Morgantown, since Donna Ford came on board as herbarium curator. Several new projects have been initiated in addition to the regular herbarium duties including specimen

ID, tours, plant and slide loans, and specimen exchanges.

There is so much work to be done organizing, updating and researching the herbarium and the state's flora that one person can not do it all. Donna has identified several projects which may be of interest to professional and amateur botanists to participate in. Some of these are listed below:

West Virginia Flora Atlas:

research distribution of plant species based on herbarium specimens

West Virginia Flora Revision: research systematics of a plant family, review monographic literature, annotate specimens compile geographic data.

**WVNPS ANNUAL
MEETING**
when
September 21-23, 1996
where
KANAWHA STATE FOREST
(field trips, workshops, short meeting)
Sponsored by Kanawha Chapter

..... *Meehania cordata*, continued from page 2

Talk about getting caught not “practicing what your preach.” Me, who in all of my lectures on native plants makes a point of telling people to “look in your own back yard!” After I recovered from my initial embarrassment, we explored the area a little more. We found, slumbering in the deep shade of the entire west facing slope, a veritable carpet of dark, almost glossy green, cordate (heart-shaped, hence the specific epithet *cordata*) leaves vining over rocks and decaying tree limbs.

I took some cuttings, not knowing whether they would root so late in the season but I had a gut feeling of optimism. Sure enough they rooted in a matter of weeks.

The following spring, I checked in on the population and found that the new growth was thick and lovely. In June, I went back to observe the flowers and found a sea of lilac, pink and lavender trumpet-like blooms at the tips of the stems. They reminded me very much of *Scutellaria*, another member of the mint family and close relative of *Meehania*.

In my garden, now having many plants from the rooted cuttings that I overwintered under a dark bench in a poly tunnel, (another testament to the virtues of *Meehania cordata* is how deep a shade it thrives in) I proceeded to plant them under a small grove of Lilacs and Viburnums. They responded to the rich humus that had accumulated under these older shrubs and almost immediately started to wind their way around on the ground.

Taxonomically speaking, *Meehania cordata* is a member of the Lamiaceae (Labiatae) family. In North America, *Meehania cordata*, is a monotypic (single) species in the genus. It's reported range is from southwestern PA to TN.

Its heart leaves are on the small side, averaging one to one and a half inches wide at the petiole and are about one inch long. I suspect that it is hardy to zone 4, maybe even zone 3.

I know of at least one other *Meehania* species in cultivation, that being *Meehania urticifolia*, *Meehania cordata*'s Asian cousin. It can be found growing through the woods of the mountain forests in the Honshu area of Japan. The specific epithet *urticifolia* refers to the nettle-like foliage.

It is also very easy to propagate from stem cuttings and by division.



Meehania cordata is one of the best plants I can think of for those dark and foreboding corners of the garden where there isn't enough light for most other plants. Even if it didn't have the added benefit of those really bright colorful flowers, I would recommend it as very useful groundcover.

Contact Barry Glick -
Sunshine Farm &
Garden - Route 5-
Renick - WV 24966 -

304/497-3163 - Email - barry@slip.net, for more information about native plant propagation and gardening.

AN AQUATIC LICHEN? - YES!

Hydrotheria venosa is a foliose aquatic lichen with Nostoc as a photobiont (photobiont is the algal component.) Nostoc is a cyanobacterium; this means, the small plant fixes atmospheric nitrogen. Endemic to the North American continent, disjunct populations are known from the Pacific Northwest and the Appalachian Mountains. According to Forest Service research, the species has been significantly reduced in the Appalachians, and there are only about 25 known sites of *Hydrotheria venosa* in

the Pacific Northwest. Due to these circumstances, it has been identified as a species of concern by the US Forest Service.

The species is believed to be important because it may be a contributor to the nitrogen budget of streams, and it may provide cover for aquatic macroinvertebrates. However, not much is known about the habitat requirements of *Hydrotheria venosa*, yet it is uncommon to rare throughout its range. A few recent studies have shed some light, and provided a basis for further investigations.

A study was conducted in the H.J. Andrews Experimental Forest in Oregon to identify how several environmental factors might influence the growth of this species. The investigator, William J. Daly, studied the effects of canopy cover, forest age, light requirements and substrate.

Selected streams in the H.J. Andrews Forest, in the Cascade Range of western Oregon, were examined 50 meters above and 50 meters below roads crossing these streams. Information was recorded on canopy type, percent visible light, age of forest, relative abundance of *Hydrotheria venosa*, substrate type (rock or organic.)

The primary factors which were found to limit the growth of *H.venosa* were stream gradient and current velocity. No plants were found growing on a stream gradient greater than 20%. *Hydrotheria* was also absent from relatively level streams that had rapidly flowing water.

H. venosa was found on organic substrates very rarely. It was more likely to be found on rocks of various sizes which were tightly adhered to the stream floor.

Although exact measurements were not taken for the amount of light reaching the study plots, the nearly equal occurrence of *Hydrotheria venosa* under low to heavy canopy conditions would indicate that the amount of light is not a major factor in its survival. It was also found that the age of individual forest stands was not a significant factor.

With its ability to fix nitrogen, and so much tolerance for various forest conditions, why is it so scarce in its native range? As a result of his

investigations into the habitat requirements of *Hydrotheria venosa*, Daly suggested transplant studies as a means to gather more information about the life history of this unusual lichen. Due to the fact that so little is actually known about the distribution of this lichen, it is difficult to determine if it is indeed rare, or existing within its range of habitat requirements not yet identified.

A lot of investigating needs to be done to determine how and where this species exists in the Appalachian Mountains, and to the causes of its reported decline there. Apparently, this species is not listed in Sheldon's list of lichens referred to in the January issue of Native Notes, unless it was listed under a different scientific name.

Organizing a search effort for this interesting plant may be a worthwhile project for WVNPS. A fact sheet with illustrations, and other identifying information may be useful for distribution to our membership and all botanical researchers in the state. A formal scientific investigation into its presence in West Virginia's streams may be a more ambitious, yet logical long-term approach. Anyone with more information, and/or interest on *Hydrotherium venosa* please send informaton to editor, address on back of newsletter.

TIBBS RUN FIELD TRIP
Wednesday, June 26, 6:00PM
Contact: Bill Grafton

Tibbs Run is a lovely natural area owned by the city of Morgantown, WV. Before the turn of the century, a reservoir was created on the stream to provide the city with water. The reservoir has not been used as a water supply for over forty years.

At any rate, some folks on the utility board would like to timber the area. Local environmentalists, naturalists and botanists are trying to halt the timbering and see that the property becomes a protected natural area.

Meet at the Brookhaven roadside park on the north side of route 7, east of the I-68 interchange, for a hike into Tibbs Run.

Bryophyte internship: curate the mosses, liverworts, and lichens; repacket collections, update nomenclature, sort and file specimens

Portulacaceae of Chile: study the south American Cistanthe and related species, investigate morphological and cytological features, write family treatment for the flora of Chile.

Slide project: sort and organize collections, identify and label specimens, create database of holdings.

Map project: inventory and catalogue the map collection, organize and file in flat sheet or hanging storage, create database of holdings.

There are several more projects related to the herbarium which might be of interest to you. For more information or an application, please contact Donna Ford at Brooks Hall at 304/293-5201 x2549.

NEWLY ELECTED WVNPS OFFICERS

PRESIDENT - LIBBY CHATFIELD
VICE PRESIDENT - STEVE MACE
RECORDING SECRETARY - GAY BROWN
CORRESPONDING SECRETARY - JOHN NORTHEIMER
TREASURER - DONNA FORD
DIRECTOR-AT-LARGE - P.J. HARMON

LETTER FROM EDITOR

This newsletter comes about a month later than originally planned. The field trip committee ran into some difficulty planning field trips. The editor must confess that some competing interests deterred her efforts as well.

Apparently, the WVNPS field trips organized last year were poorly attended. One reason may be the large number of field trips traditionally sponsored by other organizations, and a greater interest in local field trips. It was also difficult to find people interested in leading field trips.

Workshops, on the other hand, seem to be well attended. This kind of program may be more what the membership is wanting. *If you have an idea for a field trip or workshop*, please send a note to one of the board members. There are many knowledgeable and talented folks in West Virginia who could be persuaded to prepare a workshop or lead a field trip, if it was requested of them..

Deadline to submit articles for the NEXT NEWSLETTER: JULY 30.

WVNPS BOARD MEETING

A board meeting will be held on **Saturday, June 22, 1996** at the **Western Steer Steakhouse in Flatwoods, WV**, just off I-79. Meeting will begin at **10:00 AM**. This location seems to be as central a location as is physically possible in the rambling state of West Virginia.

In addition to routine business, the formation of local chapters will be a major item of business. Another important issue is "ethical, native plant-transplanting." Some say there is no such thing. What are your thoughts on this critical issue? All members are welcome and encouraged to attend.

NEW AND OLD CHAPTERS ALIVE AND WELL!

The two year old Kanawha chapter has been very busy with field trips, workshops and other activities. Steve Mace reports that a newly formed Tri State Chapter, based in Huntington, has eleven members and is waiting official approval from the board to move ahead.

Anyone interested in joining either of these chapters please contact Steve Mace at 304/882-2450. Write: PO Box 122, New Haven, WV, 25265-0122.