



Kate's Mountain Clover

NATIVE

NOTES

THE WEST VIRGINIA NATIVE PLANT SOCIETY

Volume 4, Number 1

April, 1997

LETTER FROM THE EDITOR

The West Virginia Native Plant Society is dedicated to a comprehensive approach toward educating ourselves and the public about all issues related to native plants. Our primary focus is the conservation of the state's native flora.

With increasing pressure from exotic species, suburban development, forestry, agriculture and the increased harvesting of native plants for various uses, it is apparent that there is much to do. Currently, a dedicated group of botanists are working on a five-year+ plan to revise the *Flora of West Virginia*. A lot of work has been done by the Flora Revision Committee to get this project off and running. More help is needed in updating the information about the state's 2500 or so species, including the records in the herbarium at WVU. Anyone interested should contact Donna Ford-Werntz about volunteering at the herbarium, or Bill Grafton if you are interested in field work.

Soon the public will have access to a brochure about invasive plants and a checklist of the most problematic species. One way of combating the alien/exotic plant problem is to encourage folks to plant native species in their yards, gardens and especially along the highways. Currently, there is not a huge diversity of native species available for sale through nurseries and greenhouses at the local level. The number of horticulturists specializing in native plants are even fewer in number. However, increasing public awareness is generating a demand which will lead to new initiatives in the horticultural business.

Many people that I know, myself included, have transplanted common/abundant wild plants from the wild into our yards or gardens. This kind of activity could have a seriously negative impact on the populations of native plants if hundreds

or thousands of people were collecting. Another problem with transplanting from the wild is relocating plants to conditions matching those in which the plants were originally growing.

A good project for the Native Plant Society might be a publication which informs the public on ways to acquire nursery or greenhouse propagated native species. Information on the proper light, soil moisture, shade, soil acidity and other environmental conditions necessary for hundreds of native herbaceous plants could be compiled as well. This booklet could provide a how-to on the appropriate plant propagation techniques and a set of rules on when and where to harvest native plants in certain situations.

It would be helpful to know the thoughts and ideas of our members concerning the many issues relative to native plants. This issue focuses on herbaceous plants and their increasing value as a raw material for other products. Be sure and read the article *A new kind of gold in them hills*, reprinted from *Common Ground*. It discusses an exciting and yet somewhat unsettling relationship between the conservation of natural resources and business. It would be great to receive some comments on this one.

Have a fantastic season in the field! Remember to keep a journal of all your observations; your findings could be a valuable addition to the "in progress" revised Flora.

NEW 1997 WVNPS OFFICERS CONGRATULATIONS!!

President - STEVE MACE
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Treasurer - DONNA FORD-WERNTZ
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Corresponding Secretary - KEITH SEARLS
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MILE-A-MINUTE - YET ANOTHER ESCAPED WEED

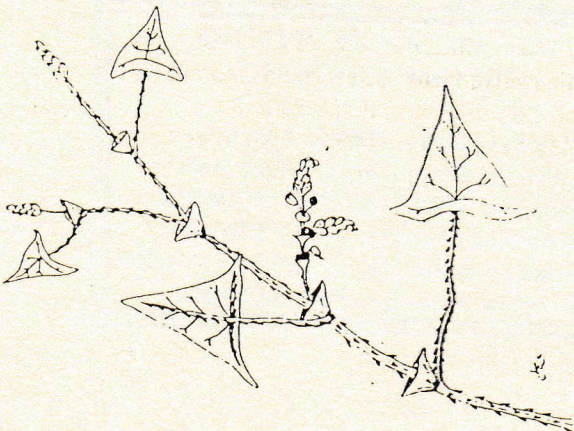
Bill Grafton

Could a plant actually grow a mile in one minute? Only in science fiction movies. But mile-a-minute (*Polygonum perfoliatum*), an exotic introduced from east Asia can grow 20-30 feet per year. Mile-a-minute will hopefully be officially listed as a noxious weed in West Virginia.

This vining member of the smartweed group has triangular leaves and a perfoliate bract below the flowers/fruits. The twining stems and underleaf veins have extremely sharp recurved spines. Plants are easily established along roadsides, railroads and disturbed margins of forest openings beginning in May. By September, when the purple fruits are mature the densely matted vines will completely overtop and crush grass, weeds and bushes.

Marilyn Ortt, WVNPS member, provided the energy to get a Task Force meeting organized through Ohio River Island NW Refuge personnel, Janet Butler and Patti Morrison, to determine the status of mile-a-minute along the Ohio River and establish steps to control or possibly eradicate the weed. Participants at the meeting knew of at least a dozen sites in Wood County, WV and Washington County, Ohio. The plant has also been found in Mineral County, WV as well as eastern PA and MD.

All Native Plant Society members are encouraged to be on the watch for this nasty weed. Report any locations you find along the Ohio River to Janet or Patti at: Ohio River Islands NWR, POB 1811, Parkersburg, WV 26102. Report any other WV locations to Donna Ford-Werntz, West Virginia University, POB 6057, Morgantown, WV 26506-6057.



WALKING GINGERLY THROUGH THE WOODS

Barry Glick

It's a blazing hot summer afternoon and you have decided to go botanizing. Imagine hiking up one of the steepest, rockiest slopes in West Virginia. Your parched throat feels like sandpaper; you reach for your canteen, and...it is empty! So, what do you do, who ya gonna call? How about looking for ginger?

Ginger! You ask with surprise. I'm talking about *Asarum* or *Hexastylis* - our wild ginger. Long known and used by Native Americans for its stimulant effect, members of the genera give a pungent aroma from their firm roots that is reminiscent of the tropical ginger. In fact you can easily substitute it for the culinary ginger in your favorite Thai or Chinese recipe.

Wild gingers are members of the Aristolochiaceae (Birthwort Family). This is a very small family of five genera, most of the species being of tropical origin. The common name of the family seems to be derived from two Greek words, *aristos*, meaning best and *lochia* meaning delivery. Plants of the genus *Aristolochia* were used as medicinal herbs to aid with the labor of childbirth.

There are five species referred to as wild ginger in West Virginia. *Asarum canadense* is most common in moist rich woods in light to dense shade. I have seen leaves as big as your hand under favorable conditions. You have to get down on your hands and knees to see the curious, pendulous flowers which grow underneath the foliage. The flowers are pollinated by ants and other small insects that crawl into the flowers and move the pollen from the open pollen sacs on the anthers to the sticky receptive stigmas.

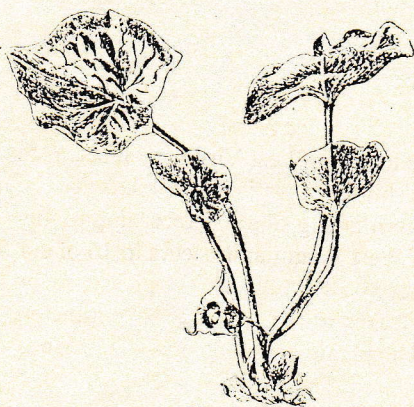
Hexastylis virginica is the only evergreen type that I've found in West Virginia. It seems to favor the higher elevations of Greenbrier County on northern facing slopes. According to the Flora of West Virginia, it occurs in 16 of our 55 counties. You can tell it by the glossy, round to cordate leaves which are four-six centimeters wide. The plant lies flat against the ground, reaching from 8-24 cm in height. The foliage is

silvery mottled, and like snowflakes no two are alike.

Three other members of the genus *Hexastylis* include *H. memmingeri*, *H. heterophyllum* and *H. shuttleworthii*. *Hexastylis memmingeri* is named for Edward Read Memminger and is similar to *H. virginica* but has a more rounded leaf and smaller calyx. *H. heterophyllum* has been found in five western counties. Named for Robert James Shuttleworth, *H. shuttleworthii* is considerably larger than the previous two, and has only 4 known records for the state.

I grow a few of the Asian species of *Hexastylis* in my garden. One of these, *H. splendens* has beautiful silvery marking on huge arrow-shaped leaves. In Japan, people fanatically collect members of both the genus *Hexastylis* and *Asarum*. One of my Japanese trading partners recently sent me two books, each with over 400 color photos of cultivated *Asarums* and *Hexastylis*.

Asarum canadense makes a really terrific ground cover plant in high shade places. If conditions are favorable, they spread quickly and vigorously. I use them under trees and in the front of taller plants. In cultivation they usually get to be eight or twelve inches tall. Plants can be divided in the early spring by cutting through the thick rhizome which grows very close to the top of the ground. You can also collect the seeds which ripen from mid-late summer. Sow the seeds on the surface of four inch pots and cover with a layer of granite grit. Place the pots outside for the winter and the seeds will germinate the following spring.



WILD GINGER — *Asarum canadense*

The key to successful gardening with native plants is to replicate the growing conditions found in their natural habitat. I hope everyone will be able to enjoy the “gingers” both in the wild and in their gardens this year.

Barry Glick has written several articles for this and other gardening publications. When he is not in the woods exploring for new plants, he's out in Cyberspace where he edits the popular internet gardening magazine THE CYBER-PLANTSMAN at

<http://www.gardenweb.com/cyberplt/>. Barry can be reached at 304/497-3163, FAX-4972698 or by Email at barryg@slip.net.

WEST VIRGINIA HERB ASSOCIATION HAS MUCH TO OFFER

If you have a specific interest in herb gardening, organic gardening, making sachets from herbs, herbal medicines and edible herbs then you may be interested in the West Virginia Herb Association (WVHA). This organization sponsors several workshops and field trips throughout the year. Every year in the fall, WVHA holds a conference at Jackson's Mills for two or three days. The weekend offers a potpourri of programs, workshops and field trips exploring the spectrum of crafting things with herbs.

Though the primary focus of the organization is to promote and share knowledge about the various ways people can use herbs, there is an emphasis on wise use and care for the environment. WVHA is a large, active organization which supports several ongoing projects. A small group within the organization is working on drawing up a program that could be used in schools or by anyone interested in starting to garden with native plants and plants that attract butterflies and birds. This exciting project is one which members of the West Virginia Native Plant Society could embrace and lend a hand to. Contact Frank Porter at 614/247-4565 if you are interested in this project or would like more information about the association.

BACK TO THE "HERBS"

Emily Grafton

The subject of herbal medicine is hot! hot! hot! Recent figures indicate that the herb industry has topped 300 billion dollars. There is hardly a magazine cover at the super market checkout that doesn't carry a headline like *Heal Thyself*, *New Wonder Herb* or a recent one, *The PMS Herb*. Many of these publications list plants with medicinal properties, which are native or naturalized in West Virginia.

With spring nearly upon us and that imminent cloak of greenery about to envelope the mountains and valleys, many of us are already planning and nurturing our annual herb gardens. However, along with this resurgence of plant growth and plant growers, there may be an increasing number of plant harvesters. With the use of herbs skyrocketing from the traditional cottage industry or home use to a mega-buck bonanza there is yet another potential threat to native plants.

In this article, I would like to explore some of the beneficial aspects to the use of herbs for healing and how this back-to-nature trend may affect our native flora. To lend some authenticity to this material, I interviewed a practicing herbalist named Linda Christen. Much of the information which follows is derived from our conversation.

First, some basic facts about herbal remedies and native plants. There are about 50 species of West Virginia's native plants that are currently included in herbal medicines sold throughout the world. If you include the naturalized plants, the list is closer to 100. During the past century and a half, nearly 300 native and naturalized plants were included in herbals and in the pharmacists pantry.

Many of the plants that are no longer used in medicinal preparations have been found to have a negligible effect or have some side effects which are unacceptable by conventional medical approaches. However, many of the plants no longer available in pharmacies are still utilized by certified, trained herbalists. These plants are used when necessary with the same care and accuracy that a medical doctor applies when

diagnosing his/her patients. More physicians in this country are including herbal remedies in their treatment of patients every day. And more physicians are referring their patients to qualified herbalists.

So, why are we making this turn back to herbal medicine? For one thing, some herbal medicines produce healing effects that are not available in synthetic drugs. The combined effect of the chemical makeup of some herbs produces effects which do not occur in any synthetic product. One example is blue cohosh (*Caullophyllum thalictroides*), see Native Notes, (April, 1995). Also, the cost of herbal medicines is significantly less than that of pharmaceutical preparations. Remember, a majority of all pharmaceutical medications were derived from plants. My guess is that for nearly every chemical in nearly every pharmaceutical drug, a "chemical blueprint" exists somewhere in nature.

On the downside, herbs are chemical factories with variable levels of production and consistency. They respond not to an electrical switch but to the uncontrollable variations in genetics and environmental influences. Some herbs are dangerous and produce toxic side effects in combination with other herbs and medications. Consequently, you should no more go out and self prescribe herbal treatments any more than you should help yourself to the bottles in a pharmacy.



There is a vast amount of knowledge about the preparation, dosages and healing properties of herbs accumulated from centuries of trial and error, and from about 100 years of laboratory analysis. There are a few folks, like Linda who are highly knowledgeable and trained to know when and how much of what herb should be used to treat certain ailments. The most dedicated herbalists, like Linda grow most of their own plants.

Linda is a Registered Herbal Practitioner who has studied with the foremost herbalists in the United States, including Rosemary Gladstar. My physician in Morgantown referred me to Linda when I wanted to give *Echinacea purpurea* to my son. Echinacea has been demonstrated clinically to help boost our immune system, helping our bodies to fight off colds and in Daniel's case bronchitis.

Linda's knowledge of, and commitment to herbal healing is compelling. She is of that genre of healers who attempt to heal the whole person; she looks at both mind and body before educating her clients. Her approach to healing embraces the spiritual nature of people and the plants she uses to heal people with. There is a calm reserve about her knowledge and beliefs.

Linda expressed a concern over the potential negative impact to native vegetation from individuals and commercial enterprises which are harvesting plants from the environment. She said that "herbalists around the country are aware of the impact that the herb industry is having on native plants." In the past, herbalists favored "wild-crafted plants," that is plants occurring naturally as opposed to cultivated. Linda is a member of an organization called *United Plant Savers*, dedicated to the preservation and cultivation of medicinal herbs. Apparently, members of this organization are encouraging all herbalists to begin utilizing only cultivated plants.

There is an increasing amount of responsible information concerning herbal medications appearing in women's and health magazines. Experts like Dr. James Duke and Dr. Varro Tyler are writing articles which appear in magazines and newspapers. They consistently urge readers to consult with their physician or a trained herbalist before taking herbal

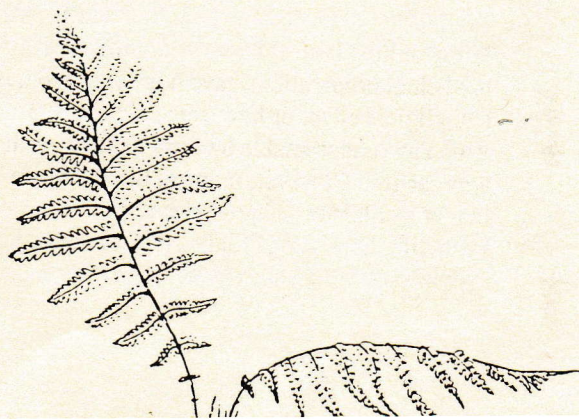
medications. With an equal amount of sensational advertising and hype surrounding this subject, it is reassuring to see highly knowledgeable people involved in educating "the masses." However, this trend may only increase the demand for and use of herbal products, and a consequent demand for raw material.

We members of NPS need to keep alert and informed about this growing trend. I received four calls in the past six months from people wanting information about medicinal herbs. One call was from a woman in southern West Virginia who wanted to know what herbs might help her husband who was suffering from a serious ailment. Whoa! Though I embrace the use of herbal medicines, prescribing is definitely out of my league. Keeping an eye out for the trends affecting West Virginia's wild plants is something I feel more qualified to do.

Addressing the subject of herbal medicines opens many "cans of worms." For example, Echinacea is considered to be a pest by biologists in West Virginia. Yet, many folks are growing it. It is a beneficial plant health wise, and one that could be grown and harvested by many people.

Should there be guidelines for maintaining exotics like this one in the garden? Or should it be completely banned along with Kudzu and mile-a-minute? Whatever we decide to do, or not do will probably not change the current health movement, nor should it.

The use of herbal medicines to heal our ailments and to boost our health is a good thing. The love of plants, our physical and spiritual connection with them goes deep into our very existence. Let's just be sure we don't "love them to death."



FIELD TRIPS AND WORKSHOPS

**YOU MUST CALL THE LEADERS AND LET
THEM KNOW IF YOU WILL BE
ATTENDING.!**

GLADE CREEK OF NEW RIVER - **April 19, 1997.** Join Peter Heus, operator of Enchanter's Garden, a native plant nursery, for a walk along an old logging rail road beside Glade Creek. Peter says this place has a fantastic array of spring wildflowers, including Fraser's sedge.

Meet Peter at **10:00 AM at Little Beaver State Park** in the parking lot for the main building near the dam. Wear good hiking shoes for this moderate walk along the old railroad grade. Bring your lunch and plenty to drink. **Call Peter at 304/466-3154.**

OPEKISKA - **April 27, 1997.** Join Bill Grafton for a walk along a section of the rail trail between Morgantown and Fairmont. Bill has found a lot of interesting plants along the section south from the Opekiska Lock and Dam.

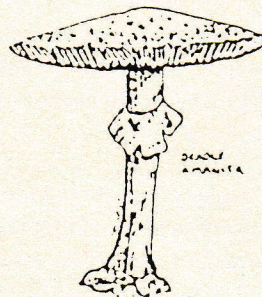
Meet Bill at 12:45 PM in the open field beside the Monongahela River. To reach this site take Rt. 73 between Morgantown and Fairmont to Opekiska Road. Follow Opekiska Road to where it ends at the big field beside the river. Bring a snack and plenty of liquids. We will hike and explore for plants until about 4:00 or 5:00, or until folks need to get back. **Call Bill at 304/292-0229.**

MOSS WORKSHOP - **May 17, 1997.** Join Sue Studlar, adjunct biology professor at WVU, in the field and lab for a close look at the "forests of lilliput", the miniature realm of mosses. We will meet at Chestnut Ridge Regional Park at the park headquarters at 9:30 AM. From there we will carpool to the nearby Lick Run Trail. We will go off the trail to investigate moss and lichen covered boulders, island oases in a sea of leaf litter. You will see an amazing variety of small plants (mosses, liverworts, lichens) each in its own little niche. At about 12:30 PM we will break for lunch, eating at nearby picnic tables. At about 2:00 PM, we will assemble in room 358, Brooks hall, to look at specimens

seen in the field with microscopes. Accurate identification of mosses requires use of a microscope, as does full appreciation of their beauty - intricate details best seen at 30-400X magnification. The lab will last from 2:30 PM to 4:30 PM. Unless there is a severe storm we will go on the field trip, rain or shine. We may reverse the lab and field trip if the weather looks bad for the morning. Dress appropriately for going off the trail, and the weather. Bring a hand lens or magnifier if you have one. Hope to see you there! Take the Coopers Rock exit off I-68 and cross back over the freeway to the stop sign if you are heading East from Morgantown. Turn right and then go about one mile to turn left at the sign for Chestnut Ridge Park; follow this road to its end. **Call Sue at 304/598-3221.**

SHAVER'S FORK - **July 26, 1997.** Join Bill and Emily Grafton for an exploration of the riverbank habitat along the magnificent Shaver's Fork. We will alternate between the riverbank and the woodlands adjacent to the old railroad grade. Wear sturdy walking shoes, bring a lunch and lots of water. Depending on how many plants we see, and take time to study, we will walk approximately three miles along the river - one way.

Meet at 10:30 AM near the juncture of US Route 250 and Shaver's Fork. We will meet and park along the Forest Service road which turns left off of Rt. 250 about 200 feet east of Shaver's Fork, (if you are traveling west on Rt. 250 then the road would be on your right). **Call 304/292-0229 (h), or 304/293-4797 x2493 (w), for more information and to register.**



**THE FOLLOWING ARTICLE IS
REPRINTED
FROM COMMON GROUND
(CONSERVATION
NEWS FROM THE CONSERVATION
FUND)**

"A new kind of gold in them hills: A 270acre biodiversity preserve near Ithaca, NY, acquired in December by the Finger Lakes Land Trust, is *the first temperate zone preserve dedicated to "bioprospecting."* The land trust bought the property with the guidance and encouragement of Thomas Eisner, a Cornell biology professor who calls himself a "chemical prospector." Six years ago Eisner brokered an agreement between the pharmaceutical company Merck and the National Institute for Biodiversity in Costa Rica. Merck provided money for conservation and research in return for rights to explore rainforests for medical drugs. The idea of a preserve near Cornell surfaced when a grad student identified a fungus collected nearby as a raw form of the antirejection drug cyclosporin. Already Schering-Plough Corp. has expressed interest in funding research at the upstate New York preserve and (potentially) in providing royalties for conservation, which would be a first in the U.S. Schering-Plough's interest in understandable. Medicinal sales from natural products generate a cool \$100 billion annually. The growth potential-and conservation opportunities - are enormous as scientists comb the planet for new medicines, agricultural products, attractants and repellents."

DUES DATE!!

If you are unsure about when your dues are due, please check the mailing label on your newsletter. Your dues are paid through the date to the right of your name.

1997 WVNPS OFFICERS

The following people have agreed to serve the WVNPS for the next year. Please let them hear from you and know what you want to happen with the Native Plant Society.

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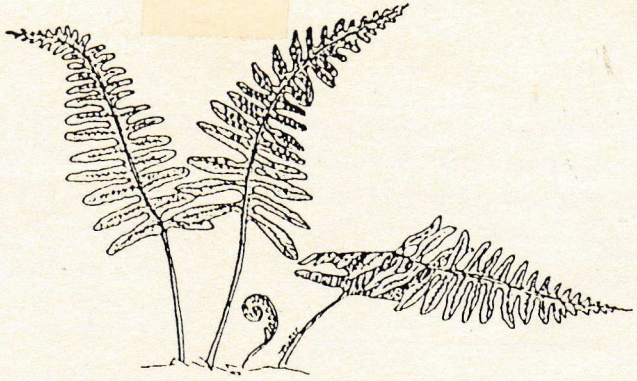
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COMMON POLYPODY FERN

**MEMBERSHIP REGISTRATION
COUPON**

Please sign me up as a member of WVNPS!

Name(s) _____

Phone: (h) _____

Address _____

(w) _____

Membership Dues:

Individual: \$8 (new members only: Jan 1-Mar 31, \$8. Apr 1-June 30, \$6. Jul. 1-Sep 30, \$4. Oct 31-Dec 31, \$2.)

Family: \$12 (new members only: Jan-Mar 31, \$12. Apr 1-June 30, \$9. Jul 1-Sep 30, \$6. Oct 31-Dec 31 \$3.)

Student \$5 Life: 200

Preferred Chapter. _____

I wish to make an additional contribution to the WVNPS in the amount of _____.

This is a gift membership. Please include a card with my name as donor: _____

WVNPS
Corresponding Secretary
PO Box 2755
Elkins, WV 26241



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