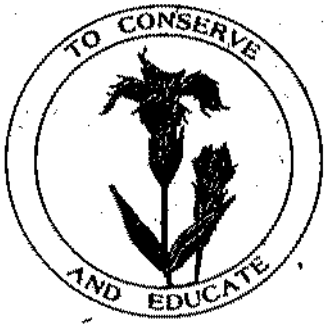
On the Fringe

NATIVE PLANT SOCIETY OF NORTHEASTERN OHIO



Founding Chapter of
THE OHIO NATIVE PLANT SOCIETY

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ON THE FRINGE
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NATIVE PLANT SOCIETY
OF NORTHEASTERN OHIO
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FIRST CLASS

Dated Material - Do Not Delay
ADDRESS CORRECTION REQUESTED

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1998 MEMBERSHIP DUES ARE DUE

Membership dues for 1998 are now due. A Membership Application/Renewal Form can be found in this issue on page 19. Please renewal at the highest level possible and send your check to Native Plant Society President Tom Sampliner at 2651 Kerwick Road, University Heights, Ohio 44118. Please make your check payable to the "Native Plant Society of Northeastern Ohio." Thank you.

1998 PROGRAM SCHEDULE

by Dr. George J. Wilder
Program Committee Chairman

It is advised that all participants bring a brown-bag lunch on all field trips and to all workshops. All please call the trip leader to let him or her know you will be coming. This is very important in case of any last minute changes which participants may need to know about. A trip leader and his/her phone number will be listed for each event. Please feel free to invite guests.

SATURDAY, **APRIL 25**, 10:00 AM TO ABOUT 1:00 PM - WILDFLOWERS OF FURNACE RUN METROPARK (AKRON METROPARK DISTRICT). **Tom Sampliner**, President of our Society, will lead this trip. Within the Metropark, along Furnace Run Creek there exists a lovely wet bottomland rich in wildflowers, including many common species of Spring ephemerals. Likely to be observed are wild ginger (*Asarum canadense*), two-leaved toothwort (*Dentaria diphylla*), cut-leaved toothwort (*Dentaria laciniata*), squirrel-corn (*Dicentra canadensis*), Dutchman's-breeches (*Dicentral cucullaria*), Harbinger of Spring (*Erigenia bulbosa*), common blue phlox (*Phlox divaricata*), all of the common species of *Trillium*, and about six different species of violet (*Viola*). DIRECTIONS: Meet at the main parking lot of the Metropark. In Cuyahoga County, from the intersection of Rt. 21 and Rt. 82 head south on Rt. 21; pass under I-77; immediately turn right on Townsend Road (this entails making an almost 180 degree turn); follow the road for about 1 mile to the Metropark parking lot. Park there. Please

To register telephone Bill at (440) 563-9344.

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PHOTOGRAPHERS BEWARE

by Tom Sampliner

First warning concerns the newest generation of airport security scanner devices. It has been reported these will damage film whether loose, in camera or otherwise unprotected. As a precaution, you are advised to hand check all film and camera bodies loaded with film Do not get talked into putting same on the conveyor or in your luggage. Airport workers keep talking the party line, it won't matter; experts now say otherwise.

It is with regret that I must pass along this warning of unethical conduct and breach of promise by the Canadian Wildflower Society in regard to their annual photo contest. Their entry form promises the return, in tact, and with notification of your result for slides entered in their annual contest. Be advised this is not a reasonalbe expectation from them. Here is my experience. I entered slides in September 1997. When January arrived and I still heard nothing, I began to make calls up north to find out what was going on. I finally heard from the current director of the contest who was apologetic for the extreme delay this year and cordially promised the prompt return of my slides which she recalled as being attractive and one having achieved an award. March arrives and still no slides. I write a letter of inquiry. Still no answer. I now

have my Canadian brother, happens to be a magistrate, now being asked to prod the locals. I doubt I'll ever see the slides or ever receive the courtesy of a response from them.

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NATIVE ORCHID PROPAGATION -
You're In A Heap A Trouble Boy

by Tom Sampliner

A couple years ago I was enticed into trying some native orchid propagation. The stimulation were those ads that have been appearing in various native plant society journals. Perhaps you've seen one. They offer various native species for sale or trade. The come flasked in small vials in a sterile medium. For me, the prospect of growing some was overpowering. So much so that I put aside better judgement and ordered the expensive toys.

It was deliciously exciting when several weeks after ordering, neat little corrugated cardboard boxes arrived. Eagerly, like a child on Christmas morning, I began to cut open my prizes. As I encountered each layer of protective container, my excitement mounted. Finally I reached the last layer, a cradle of white styrofoam neatly cradling a small clear vial. Each vial held a small substrate looking like black muck. Embedded in the muck was a tiny orchid bulb; a hybrid Calypso orchid called "Aaron Island" by the Alaskan who created and now sells them.

So this is how one starts, I contemplated. I held each small vial up to the light and turned each round and round gazing with wonder. My imagination quickly took over. I could see

it as clearly as if it were happening now. Gorgeous flowering specimens would be lining each windowsill. Each lightcart would be tightly packed with plants. I would have plenty to trade, give away or exhibit. Not so fast there Tom: here's what really happens.

First the instruction letter warned that sometimes the media becomes dislodged during shipment. This had not occured. Just as well since I planned on keeping each in their respective vials for the forseeable future. In fact, the instructions claim the media should last for up to a year. No mention was made about patience lasting that long.

Obviously, a sealed container does not allow air exchange. Therefore, I was instructed to loosen the cap on each vial and place each in a dust free environment. The first task I could do; the second - well? I have three cats. Despite repeated sweeping and cleaning the place is still always filled with cat hair. Say, a little cat hair should not hurt a pubescent orchid should it? Beside, once the orchid gets a load of these cat hairs it may want to evolve something similar for itself.

Next I was instructed to avoid sharp temperature changes. In theory for most houses, this should not be a problem. Howeve, in recent years, mother nature has had other ideas. In winters, lake effect storms have generated heavy snows that have occasionally caused power outages; so too have ice storms that coat trees and power lines with beautiful but heavy and deadly coatings. In spring and summer there have been electrical storms which again cause power outages. Therefore, temperature control can not be taken for granted. Well, orchids are supposed to be

little tough guys. You know, real macho types, men among men. But the reason for the warning is that temperature fluxuation helps introduce the entry of contamination into the vials; oops, strike two against me.

Now to the medium. It is described as being, "G & B replate flask medium V", a proprietary trade secret. It is so secret that the preparation sheets accompany the letter of instructions. As if I would ltry to follow the prepartion formula. Me, the handyman, ha. I can barely boil water. I was lost from step one wherein the directions call for sterilization of the flasks in either an autoclave or a pressure cooker. Yeah, I keep an autoclave handy in my coat pocket at all times. The pressure cook 'em sterile was possible, but not likely. Hope I never need to reflask.

The next instructions pertain to getting the plants to bloom. Here we go, now I'm excited again. The entire first set of vials quickly became vile in appearance. They became covered with fungus necessitating a complete replacement; the seller obliged gratiously. The instructions clearly said loosten the caps to enable air to exchange. However, at least one vial completely dried out that way. My experience seemed to pose a dilema; risk drying out from too much air or if too humid on come the fungi.

The instructions claim that if kept at a constant temperature and given any reasonably length of daylight, flower buds should develop. It would be getting bud open that was tricky. In my case, I couldn't even get to the bud stage. Perhaps the "reasonable" day length was my problem. After all, anyone who knows me

would hardly call me reasonable. With that in mind, how could I possibly select what is reasonable? As for getting a bud to open into full bloom, the instructor forgot to mention to the dummies like me exactly what one does if a plant in vial looked like it was sending up a stalk that could flower. Does one remove the plant from the vial? If so, into what? Perhaps I should have take heart from the experience of my supplier who candidly admitted that he had no success producing blooms from budded plant kept refrigerated for periods of up to six months. However, I became intensely jealous when the instructor told of the great success bringing forth spring blooms from plants kept all winter in a sun room where temperatures held just above freezing. Real nice there guy, supply a rank beginner like me and then gloat over your success. How would I duplicate his overwintering conditions anyway here in Cleveland? Winter length, photoperiods, etc. are all different. How could I keep the constant 30's degrees of Farenheit? I know, I should have captured a couple monarch butterflies and hitched the orchids to them so they could obtain these ideal conditions at their Sierra Madre Mountain overwintering sites. Wonder if that's what he does?

In a letter that accompanied the replacement vials, I had been told that if leaf color changes from green to transparent, that is not necessarily bad. As long as accompanied by formation of a new bulb, you are still on the right track. That would have been handy to know before I assumed all my initial vials had failed.

The concluding portion of the last

communication was a total surprise. This advice had to do with the employment of sterile medium outside the flasks. At some undefined point, the grower is to transfer his plants. Apparently, few if any have success from that point onward. Ha, I was doomed to failure from the start. At any rate, my source has tried growing these hybrids indoors in perlite and using an ebb and flow hydroponic system under lights. Keep in mind no supplier says anything to prosepctive buyers about soiless mix transfers, hydroponics or artificial lights. My supplier claims good plant growth but fully expects to run afoul of failures to produce blooms, as earlier mentioned. If I had known all this at the outset I would not have wasted my money.

I guess this whole experience is like riding down a southern highway, over the speed limit, open containter visible, shoulder length hair flapping in the breeze, loud rock music on the air when a local trooper gives chase and pulls you over. I can just hear it now as he saunters over, "Yore in a heap a trouble now boy." Yeah, I might just as well hand over my license, title, keys, autoclave and anything else. So goes the current state of native orchid propagation.

* * * * *

LOOKING FOR WILDFLOWERS ON THE INTERNET

by Diane Lucas

After a year and a half of exploring the Internet I am convinced it has something for everyone - including the native plant enthusiast. You do need one of the more sophisticated net browsers, such as Netscape or Microsoft's Internet Explorer that lets you view pictures, graphics and text to fully enjoy what can be found. Once you have found and interesting site, it will lead you to others, which in turn lead to even more. But where to start. One site could be the National Wildflower Research Center (http://www.wildflower.org/) with links to other native plant organizations and gardens. Most places let you download pictures and printed text but a few only let you enjoy what is on the screen.

Another starting place might be my favorite search engine, Metacrawler, which calls on the services of six other searchers but only give you the top 10 choices of each. This means you have a good chance of getting the best of the best right away. With this I found one really interesting site with links to a lot of nifty home pages for plant enthusiasts, the Plant Pals Web Ring (http://www.boldweb.com/greenweb/joinweb.htm). The first one on the list this week was a garden featuring palm trees that was created by a couple from Oregon who moved south just to grow these plants. Another great link featured Canadian Rocky Mountain Wildflowers with lots of nifty pictures and plant descriptions.

Then if you like photography, Thomas Kornack (http://www.sccs.swarthmore.edu/~tkorn/wilflowers) has several dozen wildflower pictures

featuring mostly orchids. His links led to Native Orchids of Pennsylvania (http://www.users.fast.net/~ischaef/PA_native_orchids.html) with pictures from many enthusiasts with notes about the flowers.

The New England Wild Flower Society (http://www.ultranet.com/~newsfs/) claims to be the oldest plant conservation organization in the U.S. with programs in education, horticulture, research, habitat preservation and conservation. I didn't know about this society before I started looking at wildflower stuff and plan to give this site more study.

Then if you just like to talk about native plants try the Native Plant Forum (http://www.gardenweb.com/forums/natives/) with discussions on bluebonnets vs. deer, invasive plants in state parks, native plant salvaging and gardening, noxious weeds, or food for my Venus Flytrap ets.

Celebrating wildflowers is a catalog of illustrations with drawings by Karl Urban and coloring guide (http://www.fs.fed.us/r6/uma/flowers.htm). You can download these by flower or all of them if you have 15 megabytes of memory and lots of time to burn while they download.

And then the last one I will mention is the Florida Wildflower Showcase (http:/www.flwildflowers.com/) by the Magnolia Chapter of the Native Plant Society which has lots of pictures and interesting notes and information about the flowers. This is only a short article so I can get back to surfing the Internet. Hope to see you there!

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CLEVELAND'S DEGRADING PLANTS

by Brian D. Gilbert

Jim Bissell, Beverly Danielson and Bob Bartolotta of the Cleveland Museum of Natural History have recently sent a more complete listing of "Exotic Plants that Degrade Cleveland Region Ecosystems. This updated list contains more that twice as many plants as last reported in "On the Fringe." Plants in bold face type are considered especially threatening to the Cleveland region ecosystems.

Species	Common Name
Acer platanoides	Norway maple
Aegopodium podagraria	**goutweed**
Ailanthus altissima	tree of heaven
Alliaria petiolata	**garlic mustard**
Alnus glutinosa	**black alder**
Ampelopsis brevipedunculata	porcelain berry
Aralia spinosa	devil's walking stick
Artemisia vulgaris	**mugwort**
Berberis thunbergii	Japanese barberry
Betula pendula	**European white birch**
Bromus inermis	smooth brome
Celastrus orbiculata	**Japanese bittersweet**
Centaurea biebersteinii	knapweed
Centaurea maculosa	spotted knapweed
Chelidonium majus	greater celandine
Cirsium arvense	**Canada thistle**
Cirsium vulgare	bull-thistle
Colutea arborescens	bladder senna
Conium maculatum	poison hemlock
Convolvulus sepium	common bindweed
Coronilla varia	**crown vetch**
Dipsacus laciniatus	cut-leaf teasel
Dipsacus sylvestris	common teasel
Dulchesnea indica	Indian strawberry

Elaeagnus angustifolia	Russian olive
Elaeagnus umbellata	**autumn olive**
Epilobium hirsutum	**hairy willow-herb**
Euonymus alatus	winged spindle-tree
Euonymus fortunei	**fortune's euonymus**
Euphorbia cyparissias	cypress spurge
Exochorda racemosa	pearl-bush
Festuca pratensis	tall fescue
Hedera helix	**English ivy**
Hemerocallis fulva	day lily
Holcus lanatus	velvet grass
Iris pseudoacorus	yellow flag
Ligustrum vulgare	**common privet**
Lonicera x bella	Bell's honeysuckle
Lonicera japonica	**Japanese honeysuckle**
Lonicera maackii	**Amur honeysuckle**
Lonicera morrowii	**Morrow's honeysuckle**
Lonicera tatarica	**Tartarian honeysuckle**
Lythrum salicaria	**purple loosestrife**
Malus sylvestris	crabapple
Melilotus alba	sweet white clover
Morus alba	white mulberry
Myriophyllum spicatum	**Eurasian water-milfoil**
Najas minor	Eutrophic water-nymph
Pachysandra terminalis	**pachysandra**
Pastinaca sativa	wild parsnip
Phalaris arundinacea	**reed canary grass**
Phragmites australis	**giant reed grass**
Polygonatum cuspidatum	**Japanese knotweed**
Populus alba	white poplar
Potamogeton crispus	curly-leaved pondweed
Ranunculus ficaria	**lesser celandine**
Rhamnus cathartica	**common buckthorn**
Rhamnus frangula	**glossy buckthorn**
Robinia pseudoacacia	**black locust**

Rosa canina	dog rose
Rosa eglanteria	sweetbrier
Rosa multiflora	multiflora rose
Salix fragilis	brittle willow
Salis purpurea	basket willow
Saponaria officinalis	bouncing bet
Sonchus arvensis	sow thistle
Sorghum bicolor	shattercane
Sorghum halepense	Johnsongrass
Typha angustifolia	narrow-leaved cattail
Typha x glauca	hybrid cattail
Ulmus pumila	Siberian elm
Verbascum thapsus	flannel-leaved mullein
Verbascum opulus	cranberry bush
Viburnum opulus	European high-bush cranberry
Vinca minor	myrtle

Just how do these plants degrade ecosystems? Primarily, they destroy habitat thereby ultimately reduce biodiversity. Without the natural control mechanisms they spread and often become monocultures of alien plants completely chocking out native plants. Sometimes the roots of the invaders will completely prevent natives from growing in the same area which may result in bare ground which results in erosion which results in stream siltation which results in decreases in fish and mussel population which results in...well, you get the picture.

A recent estimate placed habitat loss in the U.S. at about 4,600 acres **per day** in just national forests, national wildlife refuges and national parks. The annual monetary loss in the U.S. has been estimated at about $ 4.5 billion dollars **per year**. One alien plant in the western U.S. was found to have moved 6 of 21 native plants into "rare" status.

How did these invaders get here? Most alien plants arrived here mostly by accident in grain and seed shipments from Europe and Asia. But some have been quite intentionally introduced. Some by the very immigrants that brought part of their homeland with them, but many have been introduced by governmental agencies such as the U.S. Soil and Conservation Service or the Ohio Department of Transportation. In fact, both of these agencies are recommending the use of invasive aliens.

How can these degrader be controlled? The two most common methods for controlling the advance of the non-native exotics are (1) hand pulling and (2) herbiciding. The first can be very costly especially if the invaders have been allowed to gain a foot hold. The second can be very effective but has some opposition from chemo-phobic environmentalists. Both are most effective if used early before the invaders have really established themselves.

A third control measure is to legislate against the unwanted plants. However there are problems with this approach. Some plants have friends in high places. Attempts to outlaw purple loosestrife in Ohio were undercut by an exemption advocated by the nursery lobby for a hybrid cultivar on the grounds that it was sterile. The result is that these hybrids are now successfully crossing with wild plants. Sometimes you find that two government agencies are actually working at cross purpose to each other. The Ohio Department of Natural Resources discourages the use of crown vetch while the Ohio Department of Transporation continues to use it.

A fourth control mechanism is the

introduction of natural control agents for the invading plant. Insects are commonly sought who will eat only the invader. This has some obvious risks and takes a fair amount of careful research to ensure that you are not compounding the problem with the introduction of a different kind of invading alien.

How serious is this problem? In September of 1993, the Office of Technology Assessment issued a 391-page report entitled "Harmful Non-Indigenous Species in the United States." It predicted that if we stay our current course "By the mid-21st century, biological invasions (will) become one of the most prominent ecological issues on the earth..."

What can you do? Learn how to identify these degraders. Don't purchase them for your gardens. Educate you neighbors and friends about the problems associated with using these non-natives. If you find them for sale at nurseries, talk to the nursery owner about the dangers of these plants. Talk with your law makers about the need to have the different arms of government working together on this problem and to use native plants wherever possible on public projects. Join a conservation group that works on this problem. The Nature Conservancy will sometimes use volunteers to control invasive non-natives. Join them and lend a hand.

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MEMBERSHIP APPLICATION/RENEWAL

Annual Dues and Membership Category - Check One

( ) Active $10.00 ( ) Sustaining $25.00
( ) Family $15.00 ( ) Patron $50.00
( ) Life Membership $500.00

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Thomas A Sampliner, President
Native Plant Society of Northeastern Ohio
2651 Kerwick Road
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