

NORTHWEST  
ORNAMENTAL  
HORTICULTURAL  
SOCIETY

NEWSLETTER

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Vol. 2 - No. 2

Summer 1975

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ASPENIUM TRICHOMANES

*Asplenium trichomanes*

Sue Olson, Bellevue, Wash.

Would you like to try a rock fern even without a rock garden? Would you like a wee plant that will not be in a slug's tummy come tomorrow? Is the man of the house going bald? The cure for all these is *Asplenium trichomanes*. Called "one of the prettiest", "a gem" and "charming" by the catalogue creators, this little fern is a very adaptable garden subject.

Looking closely we find narrow evergreen fronds up to 8" tall. Once pinnate, the rounded bright green pinnae provide an attractive contrast with the dark brownish-black stipe. The stipes survive the pinnules for as much as three years giving the plant a tufted appearance. If this is offensive, they may be cut off. The sori are arranged in a herringbone pattern typical of the aspleniums.

*Asplenium trichomanes* is frequently found in moist crevices and associates with rock walls. Indeed, I have seen charming plants self sown in moss on a brick wall, had spore collected for me from a marble bridge in Venice and am told it grows on the Rock of Gibraltar. It is often a companion of *A. ruta-muraria* and *Cetarach officinarum*. Lacking a wall the plant readily adapts to regular garden conditions although it helps to bury a chunk of broken concrete under it. With adequate moisture it can take full sun, but is safer planted in light shade. Happily it is quite slug resistant and fully hardy.

A native of the Pacific Northwest, *Asplenium trichomanes* can also be found in the homelands of all the subjects of former Queen Victoria as well as the mountains of Peru and Morocco. It has given rise to some very attractive varieties those most commonly available being *A. trichomanes incisum* with finely cut pinnae and *A. trichomanes cristatum* with delicately crested tips. They all come true from spore and should never be collected.

Two sources report that when the fern is taken from the shade into the sun the fronds vibrate in a perpendicular plane with a motion more rapid than the second hand of a watch. While this should give Cleve Backster (The Secret Life of Plants) something to talk about, I have yet to observe the phenomenon.

Bald? The name *Asplenium trichomanes* comes from the Greek trichoma, a growth of hair, as the plant was once reputed "to restore and stay the shedding of hair." Think of the potential!

Illustration: Mareen S. Kruckeberg



#### NORTHWEST NATIVES FOR BONSAI

Pat Bass, Bellevue, Wash.

There are many northwest natives suitable for Bonsai. The collection, planting, training and development of such Bonsai is especially rewarding. I would like to mention those with which I have had personal experience.

Western hemlock (*Tsuga heterophylla*) - collected near Seaside, Oregon. They were planted in the garden, pruning roots and branches periodically. After about three years they were wired and planted in bonsai pots.

Vine maple (*Acer circinatum*) - collected in woods as seedlings. After two years training in clay pots they were made into a group planting. Vine maple can be successfully defoliated in late May or June, resulting in decreased size of new foliage.

Red alder (*Alnus rubra*) - collected as a seedling at Port Ludlow. It was growing out of a steep bank, resulting in a naturally curved trunk. It was potted immediately in soil dug with it and wired. Alder can also be defoliated, resulting in smaller new leaves.

Alpine fir (*Abies lasiocarpa*) is more satisfactory for Bonsai than Douglas fir (*Pseudotsuga menziesii*) as it has a more sturdy character, is naturally dwarfed and has shorter needles.

Mountain hemlock (*Tsuga mertensiana*) - as with alpine fir, mountain hemlock is more satisfactory than western hemlock as it is stronger growing and its needles are shorter and more densely arranged.

Mountain ash (*Sorbus scopulina*) - collected in a rocky river bed near Index. Mountain ash may also be defoliated.

Hemlock (*Tsuga heterophylla* 'Iron Springs') - One of the special joys of collecting natives is the chance of finding a new form or rare mutation. Jane Blogg had the good fortune of finding a dwarf hemlock with especially short needles. Her "find" is being propagated and has been named *Tsuga heterophylla* 'Iron Springs'.

Note: For the non-expert in the Art of Bonsai, defoliation in order to reduce leaf size is done in the following manner: Pinch off leaf leaving petiole (leaf stalk) attached to branch. When the new leaf appears in the leaf axil (junction of the old petiole and branch) it will be reduced in size and in time the old petiole will drop off.



#### ASPHALT TO TREES or RAGS TO RICHES

JoAnn Mack, Seattle, Wash.

The heavy black asphalt, stained with remnants of skinned knees, crumbled slowly beneath the deftly swung pick-axes of parents and community friends. They came together to participate in a vision - an impossible dream of transforming the University Heights Elementary School playground into an esthetically pleasing, safe and creative dot in the universe.

A certain Mrs. Allen, with awesome credentials, was suggested as a possible resource. She came forward to offer her expertise, locating native trees and shrubs for a planned mini-arboretum area, where little city children could see and learn about the natural inhabitants of our woodland settings.

My husband Bob and I, inexperienced and ignorant, but plant-lovers nevertheless, reached for help and support as we attempted to design an informal course for the children - a time for them to learn about plant life, propagation and transplanting. With Sallie Allen we found ourselves in the midst of plenty - ideas, native plants to see, hold, examine and take home, knowledge galore, a love of children and someone to fill in the gaps where our knowledge was limited. Three classes of children, little mites to big sixth graders, bloomed in the spring.

Rich brown earth and vivid greens merged with the cement dust and sounds of chain saws as work inched forward through the labors of a lonely few. Smiling, shiny-eyed children with their arms elbow-deep in mud stood back to admire their handiwork. They carried the names of "their" plants, little first graders amazingly able to call each other by botanical names and traipsing through the Arboretum to find their ancient grandparents. Little David, who hears no sounds, ran excitedly from clump to clump of *Gaultheria shallon*, signing his name over and over to me. Each child put together a notebook of pressed plant samples, writing and printing the botanical as well as the

common names. The joy of creation and of sustaining life suffused the groups, each child eager to learn and participate in a here and now earthy experience.

There are eager children, empty spaces and enormous planting boxes, as well as interested parents and teachers who need a helping hand. What seems simple to the knowledgeable and experienced, presents itself as an overwhelming task to those of us who feel inadequate. I can visualize a school program of Gardeners in Residence, experts from the community who assist with or design small classes for the children. The last of my six children leaves University Heights this year and yet my desire to sustain this hesitant beginning is very strong. I think too of an after school club where the children can learn and experiment alongside enthusiastic plant lovers and become more involved in loving care of the mini-arboretum.

If you have ideas and two or twenty hours to share next fall, please call. We need you. 524-7212



#### TRILLIUM OVATUM

Lynn Fuglvog, Issaquah, Wash.

One of the first signs of spring as April begins is the white, lily-like flower of our native *Trillium ovatum*. They bloom for a good month before turning rosy as they fade. Almost any garden has room for trilliums. If you have only sunny, open spaces, an environment can be created for them by planting a few deciduous trees like birch and dogwood. Ferns make excellent companion plants, and they combine well with azaleas and rhododendrons.

Our native *Trillium ovatum* seems in the wild to prefer a north or east slope in the deep leaf mold under big leaf maples (*Acer macrophyllum*). This provides them with good drainage and protection from the sun during warm weather. Grown in the garden they will seed themselves generously and multiply rapidly, if given a light mulch of leaf mold or rotted sawdust.

The first year seedlings are tiny. inch high lily-of-the-valley-like, leaves and it is not until the third year they take on the typical triple leaves. It will take another two or three years for the first bloom. Fall is the best time to plant rhizomes---three to six inches deep, depending on size. In my garden the leaf mold seems to be enough nourishment but if you feel your trilliums need feeding, a liquid bulb fertilizer may be used.

Trilliums are extremely pest free and slugs, mice and rodents show no interest in them as they do so many other early flowering plants.



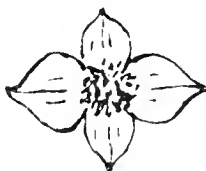
## ERIGERON AUREUS AND E. COMPOSITUS

Altha Miller, Issaquah, Wash.

*Erigeron aureus* and *E. compositus*, members of the vast *Compositae* family, are favorites for the sunny rock garden and trough, having a very neat and pleasing habit of growth and attractive flowers. They both require full sun and sharp drainage to perform well.

*Erigeron aureus* with its bright yellow to golden flowers is more abundant at higher elevations. It can be found in the Cascade Mountains of Washington and north to Alberta and southern British Columbia. It can be seen growing in pumice screes above 7,000 feet on Mount Rainier. The flower stem varies in length from two to twelve inches and usually carries a solitary many-rayed flower. The leaves are basal and rounded to obovate with long petioles. Grown in full sun they will provide bloom through most of the summer.

*Erigeron compositus* has several varieties. Dr. L. Clark reports varieties *compositus*, *trifidus* and *discoideus*. While Dr. C. L. Hitchcock gives *compositus*, *discoideus* (*trifidus*) and *glabratus* as our native varieties. This species has a wide range from Greenland to Alaska and south to northern California and in the Rocky Mountains. They prefer rocky or sandy locations and may be found near sea level to high elevations. We found beautiful plants approaching Bear Tooth Pass close to 10,000 feet in Wyoming. These small perennial plants are most attractive with their leaves almost completely basal and usually finely dissected. The leaves among the several varieties are one to four times ternate and smooth to densely wooly. The numerous flower stems range from two to eight inches in height, each carrying a many-rayed single flower of white, pink or blue. However, in some of the varieties the rays are absent. It is easy to propagate from fresh seed which is probably the best way to grow it successfully. Purchased from a nursery or at the NOHS Plant Sale, it can easily be transferred from a pot into the garden with no troubles.



FROM THE ERICACEAE NOTEBOOK

NORTHWEST PHYLLODOCE

Sallie D. Allen, Seattle, Wash.

Have you ever seen a mountain meadow in the Northwest in late July or August when the native heather is at its peak of perfection, with drifts of rosy pink, creamy yellow or white? You cannot help but be captivated by their charm and can appreciate why they are highly prized "collector's plants" among alpine enthusiasts in this country and abroad. Strictly speaking there are no true heather native to North America. Our native heather, *Phyllodoce* and *Cassiope*, sometimes referred to as "mountain heaths" or "false heather", are near relatives in the *Ericaceae* family and closely resemble *Calluna vulgaris* and *Erica* the true heather of Europe and South Africa.

There are about seven known species of *Phyllodoce* (the number depending upon which authority you wish to consult, as there is a difference of opinion), all native to the alpine or sub-alpine zones of the Northern Hemisphere. The habit of growth and the needle-like evergreen foliage of all species are quite similar, though distinguishable, but can easily be identified by the flower shape, size and color. The inflorescence in all species but one (*P. breweri*) may be described as sub-umbellate where each flower stalk arises from the terminal leaf axils forming a cluster of flowers. When the flower fades and seed capsules begin to enlarge, the terminal leaves brown, persist indefinitely and should be pinched out.

The pink mountain heather, *Phyllodoce empetriflora*, is perhaps the best known and most frequently seen of the two species that occur in Washington. Its range is from Alaska to northern California, eastward to the northern Rockies in the U. S. and western Alberta. It is an upright or spreading shrub with branches from 4 - 16" long. In its native habitat it can be seen covering vast areas of mountain slopes or wet sub-alpine meadows. Each branch tip displays a cluster or rose-red, campanulate flowers in April or May in the garden, July or August in the alpine mountain springtime. You will note color variations from light pink to deep rose-purple and from plant to plant the size of the flower differs as does the habit of growth. A pure white form has been reported although I have never seen it or had the opportunity to grow it.



*P. empetriflora*

Often intermixed with *Phyllodoce empetriflora* and ranging to slightly higher elevations may be found the yellow mountain heath, *P. glanduliflora*, similar in habit and size. Its sub-umbels of urn-shaped flowers vary from a good clear cream to a soft greenish yellow. The cream or almost white forms are the most attractive as they contrast effectively with the prominent green calyx, the lobes of which are long and pointed, extending about  $\frac{1}{2}$  or more the length of the corolla. This is an exceedingly interesting plant in all its parts to view under a magnifying glass, opening the door to another dimension of appreciation; the intricate detail is truly beautiful.



*P. glanduliflora*

The geographic distribution of *Phyllodoce glanduliflora* is the Yukon, Alaska, British Columbia, the Cascades in Washington to Oregon and in the Rockies from western Alberta to Wyoming. The largest flower form I have ever seen was in the Ketchikan area of southeastern Alaska. Where the two species come together in nature, *P. empetriflora* and *P. glanduliflora* hybridize naturally and freely, producing plants displaying varying qualities intermediate between the two. An attractive hybrid was raised in England and named *P. x intermedia* 'Fred Stoker'. The flowers are pink, somewhat puckered and rotund-urceolate in shape, reminiscent of miniature Japanese lanterns.

Under no circumstance should flowering size plants of *Phyllodoce* be collected, as obviously it has taken many years to reach that point and they would not survive the shock of transplanting. This may seem an unnecessary remark when our thoughts and emotions are turned toward conservation in recent



years. However, I have seen what were formerly magnificent heather meadows, pock marked with craters two and three feet in diameter, where enormous plants had been removed. Even tiny seedlings, if you can find them, will not guarantee you a rewarding plant, as there is great variation in the wild and you may or may not have one that will flower well. There is a way you can make a careful selection, not damage the parent plant and leave it for the enjoyment for those who follow you. In other words you can eat your cake and have it too, even if on an extended camping trip.

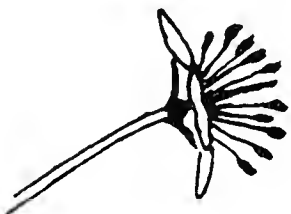
Select a free flowering plant with attractive large, clear colored flowers and of good foliage and habit. Take 1½ - 2½" cuttings of unflowered branches if possible; only enough that you can handle easily. Keep in plastic bag until you return to camp. Use a can or styrofoam picnic cup, making drainage holes at the base, covering the first half inch with small stones. Fill almost to the top with gritty soil found at the edge of lake or stream. Prepare cuttings by removing foliage about one half their length by pulling needles back toward uncut end, pinch out growth tip (or inflorescence) and insert in the can or cup just to where the foliage begins. Rooting hormone is unnecessary. Place in the shade and water frequently enough to keep damp.

Upon returning home, place container in a shaded spot in the garden where the cuttings can remain damp until they have rooted and begun to branch. They thrive in the same peaty or woody, well drained soil in which dwarf Rhododendrons grow, the more sun the better they flower, however they cannot dry out. It takes time and patience to have them reach flowering size but you will be rightly rewarded for your efforts. Ungainly branches on mature *Phyllodoce* plants can be pruned back, promoting healthy new growth from the base of the plant.

Other *Phyllodoce* species and varieties in brief: Heights indicated are from 10 - 15 year old plants in my garden.



*P. aleutica* - Aleutians, Kamtchatka, Northern Japan. Flowers soft yellow, rotund-urceolate in shape. Plant stiffly upright to 12".



*P. breweri* - restricted in nature to the Sierras of California from Mt. Lassen to Mt. Dana. Distinctive saucer shaped, rose colored flowers with prominent maroon tipped stamens. Plant spreading to upright to 12".



*P. caerulea* - almost circumpolar in distribution. Flowers ovate-urceolate, rose purple. Plant spreading or upright 5 - 10"



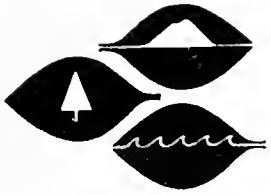
*P. nipponica* - Northern Japan. Large white campanulate flowers. Upright 6 - 8".

- P. nipponica* var. *amabilis* - Japan. Smaller campanulate flowers, white tinged pink. Upright 12"
- P. nipponica* var. *oblong-ovata* (*P. tsugifolia*) - Japan. Similar to the preceding but smaller flowers. 7".
- P. alpina* - Japan, very rare and restricted to several mountain tops on Honshu. Said to be 2½ - 5½" high, flowers purplish-blue, ovoid-urceolate in shape. It is sometimes listed as a species in its own right, a variety of *P. nipponica* and by some botanists as a hybrid between *P. nipponica* and *P. aleutica*. I have not seen a plant or had any experience with it, however, sufficient questions come to mind to warrant further research, if a plant could be obtained.

Illustrations: Sallie D. Allen







## N. O. H. S. EVENTS AND NEWS

Newsletter Name: We would like an original name for the Northwest Ornamental Horticultural Society Newsletter. There was so much enthusiasm in the members competition to design a logo that the assistance of the membership is again being sought. Put on your thinking cap ... come up with an appropriate original title ... and ... you may be the possessor of a rare, choice, desirable plant. Mail all entries to the Editor, 18540 26th Avenue N.E., Seattle, WA 98155.



Study Groups: The following are reports from some of our very active Study Groups:

### NORTHWEST NATIVES

Barbara Baker

The N.W. Natives Study Group has grown by leaps and bounds, and we are now endeavoring to divide into two groups. Last month we held an organizational meeting and decided to attempt the study groups on our own. Jean Witt feels she has us well started, but will try to accompany us on our field trips. She deserves a well earned rest. Our project for this year will be identifying and photographing native trees and shrubs for the Arboretum files. Jean has given us a list of the ones that are needed and it should be fun and interesting.

The first trip was taken on Monday, May 19, to Goat Rock in the Deception Pass area, and we plan on having three more during the summer months.

### BOTANICAL DRAWING

Mareen Kruckeberg

The four members of the class had all had previous art experience, so the class soon changed from a teacher-student relationship to one of discussion and helpful criticism.

After an initial introduction by the teacher of techniques to show accuracy of the subjects drawn, we turned to criticisms (and admiration) of each others efforts. These proved very helpful, and inspired us to try some assignments where everyone did 5 different drawings of a leaf or flower so we would all have a similar subject for our discussions. This proved both profitable and enjoyable.

For the first time in 20 years there are Scientific Drawing courses offered at the University for those that would like to go further in this field.

## FERN STUDY GROUP

Sue Olsen

The Fern Study Group activities in the last year have ranged from book to field, emphasizing various approaches to fern growing and fern knowledge.

Dr. Arthur Kruckeberg led an excellent excursion into the Teanaway area which exposed the group to a tremendous variety of ferns as well as an in-depth study of the inter-relationship between local geology and plant life.

Fall featured tours of the gardens of Mrs. Horace Raphael to see outstanding examples of ferns grown as bonsai and Mrs. Harry Olsen's to review propagation methods.

During the winter the group keyed native and foreign ferns. They also potted ferns in preparation for the fern sale (known as practical experience).

Highlighting spring pursuits, the group traveled to the wildflower show in Glide, Oregon and visited the extensive plant collection of Jim Baggett's garden at Corvallis.

Members of the group served as hosts and hostesses at Roy Davidson's for the garden tour and are now preparing to assist at the annual fern sale at the Arboretum on June 11th.

## N O H S ALPINE STUDY GROUP

Altha Miller

The group was formed in 1973, meeting twice monthly. However when gas shortages occurred we decided to meet once each month on the second Friday.

We began by studying lewisias in the *Portulacaceae* family. The monograph "The Genus *Lewisia*" by Roy Elliott was used as our textbook. A field trip was made to the Bob Putnam's garden to see the various lewisias in bloom as they probably have the most complete collection in this area. On a tour to Roy Davidson's he presented each member with a seedling of *L. nevadensis*. One of our members grew *L. cotyledon* 'Howellii' from seed and shared plants with the other members. In July a trip to the Wenatchee Mountains was led by Steven Doonan who showed us how to make successful cuttings of *L. tweedyi*.

The next subjects were the genera *Penstemon* and *Synthyris* in the *Scrophulariaceae* family.

In studying *Synthyris*, we used as our authority Roy Davidson's comprehensive article on *Synthyris* from the January, 1972, American Rock Garden Society Bulletin. *Synthyris missurica*, var. *stellata* was raised from seed and distributed to each member and plants were also taken to the NOHS Plant Sale in October, 1974.

*Penstemon* was the next subject studied concentrating mostly on native and garden worthy species. 'Flora of the Pacific Northwest' by C. L. Hitchcock

and A. Cronquist was used as our authority for our native species. A field trip to the Cabin Creek area was made in June, 1974, where we made cuttings of various species of *Penstemon*. A few cuttings of *P. davidsonii*, var. *menziesii* were taken by the steel bridge.

We are now beginning a study of the *Primulaceae* family which has many fascinating species suitable for the rock garden and trough gardens. *Androsces* will be our first subject.

Our group furnished hostesses at the Bob Putnam garden for the NOHS Garden Tour, May 8th, where we thoroughly enjoyed the day surrounded by congenial people and a remarkable collection of choice alpine plants.

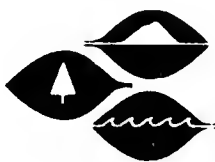
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We will be hearing about the activities of the Twigs, Rhododendron and Ericaceae Study Groups in the next Newsletter. For those interested in any of these or other special interest, please call Barbara Baker - 284-0447.

The House Plant Study Group is in the process of organization, with Nancy Hewitt as leader. Please call her at 725-1909 if interested in indoor plants.



Chairman Needed: A donations chairman is needed for the NOHS Annual Fall Plant Sale. Call our Plant Sales Chairman, Dorothy Brauss, 885-1109. This is your opportunity to contribute toward the University of Washington Arboretum Program.



WELCOME NEW MEMBERS

ARBORETUM Unit #75	1800 Broadmoor Dr E, Seattle 98112	323-6322
BEEBE, Mrs. Dan (Norma)	3203 84th Ave SE, Mercer Isl 98040	232-1611
COE, Mrs. Frantz (Betty)	3701 E Valley, Seattle 98112	322-0183
CORNING, Edgart	23115 7th Ave, Bothell 98011	486-6869
DALBY, Janet	3220 99th NE, Bellevue 98004	454-3447
DAVIDSON, Mrs. Harry (Ann)	8723 NE 4th, Bellevue 98004	454-3792
FRINK, Margaret	1520 38th E, Seattle 98112	323-3362
GIBSON, Margaret	4100 133rd SE, Bellevue 98006	746-2469
HAYAKAWA, Margedant	PO Box 100, Mill Valley, CA 94941	415-388-4776
HIROMATSU, Miho	8820 NE 15th Pl, Bellevue 98004	454-2808
JOHNSON, Cleatis	6024 197th Ave E, Sumner 98390	
LEE, Mrs. Rhoady	3639 Hunts Pt Rd, Bellevue 98004	454-3261
LEWIS, Charles A.	Morton Arboretum, Lisle, IL 60532	312-968-0074
MAJORS, Mr. Marshall	Rt 8 Box 8541, Bainbridge IS1 98110	842-4557
NORDSTROM, Mrs. John (Sally)	9037 NE 40th Pl, Bellevue 98004	454-6118
RITLAND, Mrs. Harold (Mavis)	5433 116th Ave SE, Bellevue 98006	746-5481

ROGERS, Mrs. Ken (Diana)	8846 39th SE, Seattle 98136	937-5592
SAVAGE, Mrs. Herbert F. (Alice)	10504 SE 16th, Bellevue 98004	
THOMPSON, Mrs. Stephen E. (Helen)	2542 SW Hillcrest Dr, Portland, OR 97201	
WARING, Irmgard C.	2023 E 24th Ave, Seattle 98112	322-7210
WISE, Mrs. Kenneth G. (Mary Jo)	3054 36th SW, Seattle 98126	935-8896
WOZNIAK, Janet	15404 20th SW, Seattle 98166	242-3009



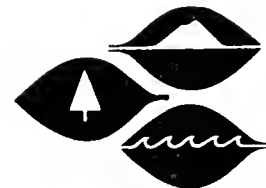
YEARBOOK CHANGES

PLEASE MAKE A NOTE OF THESE CHANGES IN YOUR YEARBOOK:

BLACK, Marvin		546-4258
BROWN, Carol H.	Box 10155, Bainbridge Isl 98110	842-2093
McVAY, Mrs. John P.	1262 Parkside Dr E, Seattle 98112	327-7642



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