

NORTHWEST ORNAMENTAL HORTICULTURAL

SOCIETY

NEWSLETTER

May-June · 1974

FERNS

This issue of the newsletter features ferns as a reminder of the upcoming Fern Sale.

Wednesday, June 19th

10:30 AM - 3 PM

Arboretum

<u>Definition of a fern</u>. A member of the order known as Filices: non-flowering, rather primitive perennial plants whose green parts are referred to as fronds and which multiply by spores, not seeds.

The word fern relates back to the Sanskrit word parnam meaning feather. The letter "p" was probably given an "f" sound and by the time it went through the changes from Greek on up through Anglo Saxon it became the word "fern" in Modern English.

USEFUL FERN BOOKS

"Hardy Ferns", by Reginald Kaye, Faber & Faber Ltd, London. Currently the best general reference for outdoor ferns.

"Pacific Northwest Ferns and Their Allies", by Thomas M. C. Taylor, University of Toronto Press. A very comprehensive work on natives from Oregon to Alaska.

"A Field Guide to the Ferns", by Boughton Cobb, Houghton Mifflin. Describes east coast natives many of which are useful here.

"Ferns to Know and Grow", by Gordon Foster, Hawthorne Books Inc. General information primarily on eastern ferns with a section on indoor ferns.

"Handbook on Ferns", Brooklyn Botanic Garden Record, Plants and Gardens. An inexpensive handbook covering many aspects of fern growing.

FOR FURTHER INFORMATION

The American Fern Society c/o Robert G. Stolze The Field Museum Chicago, IL 60605

NOHS Fern Study Group

Los Angeles International Fern Society c/o Wilbur W. Olson 2423 Burritt Avenue Redondo Beach, CA 90278 Advisor: Sue Olsen 747-2998

Glossary of some Botanic terms used:

Fern -- flowerless, seedless plant, having root, stem and leaves and reproducing by spores. Some also reproduce vegetatively.

Frond -- fern leaf, or "blade and stipe."

Blade -- expanded portion of a fern frond, or leaf.

Stipe or -- stalk of frond between rootstock and blade; Petiole same as petiole.

Rachis -- midrib of blade; extension of the petiole, or stipe.

Pinna -- a division of a blade; a leaflet of a pinnate frond (Plural: pinnae).

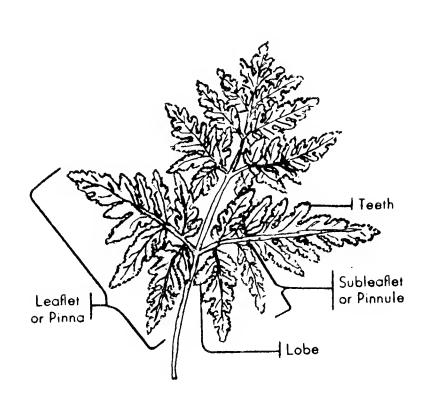
Pinnate -- resembling a feather in having similar parts arranged on opposite sides of the rachis. Blade is cut to the rachis.

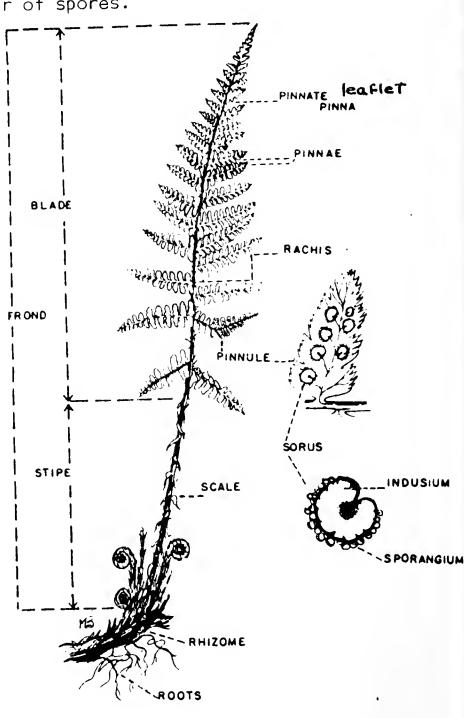
Spore -- tiny cell which may produce a fern.

Sorus -- a "fruit dot" or a cluster of spores.

Sporangia -- spore cases, usually on the underside of the fertile frond.

Indusium -- tissue covering a sorus or spore case.





ABOUT THAT BRACKEN!

However we may look or not look at *pteridium aquilinum* (bracken ferń) today, it is historically credited with some wondrous economic, medicinal and supernatural values.

Throughout the world, where it is indeed endemic, parts of it have been roasted, pounded, boiled, brewed in ale and otherwise prepared as food. My search yields no gourmet recipes, however. It appears that at best it can be made palatable.

Medicinally it was reputed to cure sores of all sorts as well as nose bleeds and was especially recommended as a bath "to restore the strength of the sinews." Prescription: one basket chopped fern per 84 gallons of hot water.

The most elaborate folklore associated with the bracken concerns the power of its "seed" to bestow the gift of invisibility. Long before scientists discovered the reproductive cycle of the tern, they were faced with this peculiar order of plants that had no flower, no seed and yet was obviously capable of reproducing itself. Logic combined with legend supposed that the fern produced an invisible seed which while useful for multiplying the fern was especially treasured for the magical powers given to anyone who possessed the seed. Great rituals and one assumes not a few capers evolved in pursuit of the seed. While varying from region to region the predominating belief required that the seed be caught precisely at midnight on Midsummer Night's Eve. This pursuit lasted well into the 19th century although it had been outlawed as early as 1612 by the French as a form of witchcraft. While Shakespeare apparently believed, he allowed for at least one skeptic in Chamberlain of Henry IV who remarked to Gadshill, "You are more indebted to the night than to fern-seed for walking invisible."

Bracken which when dry is indeed highly flammable was burned annually in many parts of the British Isles, its alkaline residue being used for soap and glassmaking. This burning of the fern, western Washingtonians take note, was also supposed to bring on rain, a matter taken so seriously that Pembroke wrote to the High Sheriff of Staffordshire prior to a planned visit by King Charles I specifically asking that they refrain from the burning so that the King could enjoy fair weather during his stay.

Finally, while this just briefly touches upon the wonderful or awesome aspects of bracken, I do think it should be known that sleeping on a bed of bracken will keep the fleas away!

Sue Olsen, Bellevue, Washington

STAGHORN FERNS

The genus *Platycerium*, commonly called Staghorn or Elkhorn ferns, may be considered to be among the most distinctive and most beautiful of ferns. There are seventeen species and many cultivars of garden origin and they range from tropical Africa, Asia, Australia, to South America. Their respective sizes range from the 12 inch *P. madagascariense* to *P. Wilhelminae-Reginae* which can be over 6 feet in diameter. All are epiphitic.

The Staghorn ferns are distinguished by their dichotomously forked fertile fronds which bear sporangia at the extremeties of the fronds on the under side. The fertile fronds appear to grow from the shield fronds which are green when young, then turn brown at maturity. These shield fronds must be left attached to the plant to prevent rot of the crown of fertile fronds. In their native habitats, Staghorn ferns grow in trees and occasionally on rocks, on which the shield fronds grow flat against the support and function to collect organic material behind them which decays to nourish the roots.

In cultivation, *Platyceriums* can be grown in pots, wire baskets, mounted on rough sawn cedar or redwood lumber, or in the fork of a tree branch, being sure to allow for several years growth. A good potting mix to use consists of 1 part leaf mold, 1 part planter mix, and 2 parts shredded bark (a coarse grade of orchid bark) or a coarse grade of peat moss. The plants should be soaked thoroughly after planting and then not watered again until they start to droop and then a regular schedule of watering should be maintained. Fertilizing can be done at 2 month intervals, alternating between weak solutions of several organic fertilizers like Spoonit, blood meal, fish, and some commercial dry forms; watering well after each application.

With the exception of P. bifurcatum and many of its forms which can be grown outdoors in a shady position during the summer, Staghorns are greenhouse plants and should be grown between 60 and 85 degrees with high humidity and good air circulation. All must be given winter protection. Height and lots of space should be allowed to grow specimen plants.

Propagation is generally done by means of spores which may take up to two years to germinate, or by removal and potting up of offshoots. *Platyceriums* are slow growers, but their individuality and beauty make them well worth the effort.

Dale Greer, Issaquah, Washington

FAVORITE FERNS:

Pityrogramma triangularis var. pallida (Syn. Gymnogramma triangularis). I hope I shall be forgiven for choosing a fern virtually impossible to obtain, obstinately persnickety to grow once you do obtain it. But favorite is favorite, and mine is the silverback fern, Pityrogramma triangularis var. pallida (Syn. Gymnogramma triangularis), from central California. It is an elegant beauty, a variety of the ubiquitous gold-back fern Pityrogramma triangularis found from southern British Columbia to southern California. Both are horrendous to tame and indeed we manage them here only as pot plants bone dry in winter, hardly less so at other times of year.

Pityrogramma is a densely tufted fern, about 5-10 inches high, with pinnate leaves on a dark brown glossy stem, the fronds deep green above, white with a waxy powder below. If it is kept dry, the entire plant exudes this silveriness like some miniature ornamentation of the Age of Elegance. The fronds are pentagonal in shape, partly or twice pinnate; the two basal pinnae are large and deeply lobed. The black sori are almost invisible because of the powder. There is no indusium.

In nature I understand it inhabits xerotic rock crevices. In summer it goes dormant because of the lack of moisture and shrivels up to a brown nothing. It is not wise to treat the plant this way in cultivation from the point of view of either aesthetics or the health of the plant. It needs water in summer, not much, but enough to keep it green --- I should say silver.

Last year we collected spore from our plant and seasoned fern growers have germinated them and will hopefully keep them going. Growing such a temperamental beauty is always problematical so one would be reluctant to offer too much dogma: err on the side of drought; avoid too much frost - even though this is a mountain plant it is still California; give it a gritty, open, compost; cherish and love, for there are few such beauties (to my mind) in the entire plant kingdom.

Bob Woodward, North Vancouver, B.C., Canada

Polystichum setiferum is my choice, largely from practical considerations, but it is also high on my list of ferns for beauty and variety. Recent winters have generated a greater appreciation for cold hardiness in ferns, and most varieties seem to be nearly as hardy as our native species. General adaptability is good also, with the most common forms being as easy to grow as P. munitum. Light to medium shade, reasonable drainage, and some nourishment to get established are the main demands.

There are dozens of varieties in existence, and there have been hundreds. The number has been reduced by grouping similar forms and by actual losses during the war years in England, the primary source in the wild and in cultivation. My own experience involves only about nine forms, most of them not identified, unfortunately.

P. setiferum congestum, and its crested form var. grandiceps are compact varieties, 10-12 inches in height, which are good ferns for the rock garden. These are not as hardy as the larger varieties and about half of them in my gardens were killed during the past winter.

The most common form available in the nursery trade, var. 'proliferum', is very adaptable and can be readily propagated by the plantlets which form along the rachis. It has somehow picked up the erroneous name 'Alaska fern' which is misleading because it has no connection with Alaska. Another nomenclatural problem involves confusion between P. setiferum and P. aculeatum. As far as I know, all the more commonly available varieties are in the former. Though these two species are genetically distinct, with different chromosome numbers, they are so similar in description that I doubt if most of us could differentiate between them.

James Baggett, Corvallis, Oregon

Adiantum pedatum "Carl English's Form". This might not be the proper designation for my favorite fern but it tells exactly what plant I mean; no other five-finger maidenhair is anything like it. In shade this reduced version of the common and widespread A. pedatum is lush and "fluffy" in the proper manner, with all the delight of the type in telescoped-fashion - total stem length is much reduced as are the internode distances so that each of the leaflets is partially overlapped by, and partially in turn, overlaps adjacent ones (in a way called "imbricate"); in the sunshine the size of leaflets is also much reduced and the color is more "bluish" (glaucous). Thus it may seem to be "different" according to where and how it grows, from 3 or 4 to 8 or so inches in height and slowly (or quite quickly, when in a rich moist soil) forming clumps of a kind of beauty that is so "ferny".

The story goes that Carl English brought this from an island offshore in the Strait of Juan de Fuca and propagated it by vegetative division and by spores. It remains quite fixed in its unique, reduced way and certainly is to be considered one of the choicest of ferns for gardens, and of course, especially for small gardens.

Roy Davidson, Bellevue, Washington

Asplenium trichomanes (Maidenhair Spleenwort) is one of my favorite ferns because of its exquisite beauty and ease of culture. A small rock garden fern, its dainty evergreen fronds 5-8 inches, are seen best surrounded by a foil of moss. An adaptable fern, I also use it in containers where it can be seen close-up and make a perfect companion for the very dwarf flowering plants. It is a native of our Pacific Northwest usually found on rocks in moist conditions. Give it much shade and never let its roots dry out. Another good way to grow it is tucked between two rocks.

Elizabeth Martorano, Kirkland, Washington

Dryopteris erythrosora, one of my favorite ferns, is most distinctive and striking with its wide shining dark green fronds. The young new fronds are reddish copper until they mature, while the indusia protecting the sori is red. It is hardy here at 400 feet in the foothills of the Cascade Mountains and remains evergreen through the winter. As it is one of the most decorative ferns for our gardens, it is fortunate that it can be easily propagated from spores.

Polystichum lonchitis, the Holly-fern, native of North America and Great Britain, is usually found in the mountains on rocky slopes in protected crevices among the rocks. There are several narrow ascending glossy fronds with the many pinnae closely crowded on the stems. It is a difficult plant to transplant when collected in the wild, so it is better to raise it from spores. When grown in gritty humus it makes a most pleasing plant for the garden.

Altha Miller, Issaquah, Washington

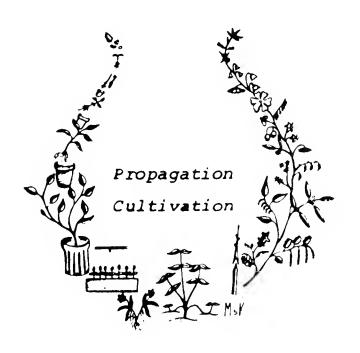
Blechnum penna marina. As an avid gardener I am especially interested in the wee bits of plants suitable for either sunny or shady parts of the rock garden (or at least plants of rock garden stature). If the truth were known I think that every member of the genus Pellaea is my favorite. However since the pellaeas come predominently from hot limestone crevices, they are extremely difficult to cultivate in our northwest gardens.

For this reason a gem from the high mountains of New Zealand, *Blechnum penna marina* comes to mind as a completely satisfactory easy going fern for many areas of the garden whether you're an alpine specialist or not. This truly is one of my favorite dwarf ferns.

Roughly speaking *Blechnum penna marina* looks much like a pocket edition of our native deer fern *B. spicant*. The sterile fronds form neat little rosettes close to the ground; the more exposure and the poorer the soil the shorter the frond $(1\frac{1}{2}-2)$ inches long). The fertile fronds are somewhat longer and grow straight upward. When we first became acquainted with this little jewel of the southern hemisphere, we were doubtful about its hardiness. However after nearly 15 years experience of growing it without winter protection we have learned that it will withstand whatever our Pacific Northwest climate has to offer, even prolonged 8^{OF} with and without snow protection.

The plant spreads by stolons forming new little rosettes as it creeps about. During the winter some of the fronds brown off but in spring the new growth is a delightful pinkish copper. When grown in the shade the plant is larger in all its parts. It can successfully be used as a ground cover beneath medium to large rhododendrons where the foliage textures afford a pleasing combination.

Sallie D. Allen, Seattle, Washington



PROPAGATING FERNS FROM SPORE:

Ferns come readily from spore under fluorescent lights. The light unit should be located about eighteen inches above the propagating medium, and should be operated about twelve or fourteen hours per day. If fluorescent lights are not available the container may be set in strong light, but not in direct sunlight.

Any transparent container may be used but the transparent plastic shoe boxes seem to be the most practical. Each box will hold eight or ten small flower pots. Any well drained potting soil may be used in the bottom of the pots, and then covered with half an inch of peat

moss and sand, broken up clay pots, or most any other sterile mixture. When using sterile mixtures as the propagating medium, there does not seem to be any advantage in sterilizing the material. Do not plant spore directly into a soil mixture, as algae will grow and smother the young sporlings.

The spore which is very minute, should be planted, sparingly, on the moist surface of the medium. Place a $\frac{1}{4}$ inch of water, no more, in the box and then cover with a transparent lid or saran wrap. This cover can remain on the box until the sporlings are ready to transplant.

Spore ripens from late spring through to late fall depending on the genera. The sporangia (spore receptacle) will generally be shiny and dark when the spore is ripe. If the sporangia is dull tan, the spore has probably been disbursed. The fertile frond may be cut and placed in an envelope, and after a few days you will find a fine dust in the bottom of the envelope. This is the spore.

Neill Hall, Seattle, Washington

CULTURE:

Although most ferns prefer moist soils with plenty of humus and some shade, there are many that prefer sun and dry conditions. However all ferns grown in gardens respond to some feeding. I give mine a half strength solution of liquid fish fertilizer which noticeably improves their appearance and well being. Two feedings, six weeks apart in the early spring while they are in active growth seems to be sufficient. All fertilizers should be kept off the fronds and the crown of the ferns.

Altha Miller, Issaquah, Washington

GARDEN TOURS

WEDNESDAY, MAY 15th

10 AM - 6 PM

Washington Park and Broadmoor

Tour a group of seven interesting and delightful gardens within walking distance of each other. Be sure to come and bring your friends and neighbors. A shuttle will be provided for those who desire it. Located on public transportation ... Madison Street Bus #11. Tickets available from Ann Ormsby, 833 34th East, Seattle 98112. Tickets also available at each home on the tour. Price: \$3.00

\$2.00 for students and members

BROADMOOR

Mr. and Mrs. Loren E. Baldwin
1830 Broadmoor Drive East
A greenhouse and vegetable garden
are components of this well planned
beautifully situated garden.

Dr. and Mrs. Jackson K. Holloway 1840 Broadmoor Drive East An interesting collectors garden lovingly maintained by the owner.

Mr. and Mrs. Clarence Ambrose, Jr. 1644 Windermere Drive East
A country colonial overlooks a sweeping garden designed by Robert Chittock.

Mr. and Mrs. George Van Waters
1571 Parkside Drive East
An expansive two-tiered garden with
a view through the trees to the
Arboretum.

WASHINGTON PARK

Mr. and Mrs. W. Kirby Holmes 1002 36th Avenue East A charming compact garden for in-city living hidden behind a brick wall.

Mr. and Mrs. Richard Fuller
3801 East Prospect Street
A sweeping lake view completes this elegant sophisticated garden.

Mr. and Mrs. George V. Powell 900 39th Avenue East A Japanese surprise hidden from view of the casual passer-by.

CALENDAR OF EVENTS - MAY-JUNE

- May 15th NOHS Garden Tours at Washington Park and Broadmoor.
- Aberdeen. Annual show sponsored by the American Rhododendron Society, Grays Harbor Chapter. Place: Salvation Army Building, Second and G Streets. Hours: Noon to 8 PM. Free. Cut trusses and plants will be shown. A plant sale will also be held.
- May 18-19th Olympia, Washington. Annual show presented by the American Rhododendron Society, Olympia Chapter. Place: Tumwater Falls Park, off Interstate Highway 5. Hours: 10 AM to 8 PM Saturday; 10 AM to 6 PM Sunday. Free.
- May 18-19th Plant Swap. Flag Plaza Pavilion, Seattle Center. Bring a plant you know something about, and trade it with someone. There will also be displays, plants for sale, gardening demonstrations, and information booths.
- May 22nd Science Theatre at 7:30 PM. Open meeting of the Fuchsia Society on the problems of growing fuchsias.
- May 25-26th Iris Show sponsored by the Pierce County Iris Society in cooperation with the American Iris Society. Place: Point Defiance Park, The Pagoda. Hours: 2 to 7 PM Saturday; 10 AM to 6 PM Sunday. Free.

June 19th - NOHS Fern Sale at the Arboretum; 10:30 AM to 3 PM.

<u>Native Vegetation</u> - Spring wildflowers at Washington Park, Anacortes. About the second week of May, a walk on the path around the rocky cliffs of Washington Park will let you view masses of spring wildflowers -- Camas, Violets, Shooting Stars (*Dodecatheon*), Chocolate Lilies (*Fritillaria*), etc. The people of Anacortes have managed to preserve this showplace of these fast disappearing wildflowers in their native habitat.

For other events of horticultural interest, consult the Friday Garden section of the Post-Intelligencer. It gives an excellent weekly calendar of events and activities of specialized horticultural groups.

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Competition *** Prizes - The NOHS is looking for an emblem to identify our news-letter, stationery, etc. If you have an idea for a name and/or an appropriate sketch - here's your chance to get involved and compete for a prize plant to be awarded at the Bring and Buy Plant Sale in July. Awards will go to the three best ideas and to the top three sketches. Send yours to Sallie Allen, 18540 - 26th Avenue N.W., Seattle, 98155. The members of the Board will judge the entries. You should put your name and address on back of your entries. DEADLINE: JUNE 1st. This is a "members only" competition.

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A reminder to be potting your plants for the Bring and Buy Plant Sale to be held July 17th, 10 AM at the home of Mrs. Thomas O'Brube. This is a members only event.

WELCOME NEW MEMBERS

WEEGOINE NEW MEMBERS		
Dorothy E. Angst, 2905 NW Esplanade, Seattle, WA 98117	783-5116	
Willis W. Collins, 17816 Wayne Avenue N, Seattle, WA 98133	546-3828	
Beatrice Fletcher, 3002 W Lake Sammamish Pkwy NE, Redmond, WA 98052	885-1607	
Sharon E. Herrmann, 2830 46th W, Seattle, WA 98199	284-3041	
Mrs. James C. Hill (Kaye), 16446 Maplewilde SW, Seattle, WA 98166	243-4731	
Mrs. W. L. Hodgson (S. Zephyrina), 2905 NW Esplanade, Seattle, WA 98117	783-5116	
John W. Johnson, 703 Sumner Avenue, Sumner, WA 98390	863-9589	
Mrs. Evan S. McCord, The Highlands, Seattle, WA 98177	362-0813	
Mr. & Mrs. Luis Rivera (Pat), 3009 44th Ave W, Seattle, WA 98199	283-7793	
Mrs. Leonard Roberson (Francis), 1539 NE 103rd, Seattle, WA 98125	522-5860	
Mr. Ernest Steinbach, 1551 N 120th, Seattle, WA 98133	364-0500	
Roberta A. Wightman, 905 Olympic Way W, Seattle, WA 98109	282-8905	
Mrs. Lois M. Williams, 8460 Benotho Pl, Mercer Island, WA 98040		
Mr. & Mrs. George Willoughby Jr. (Colleen), 9005 NE 37th Pl, Bellevue, WA 98004	454 - 3427	
Mrs. William Wilton (Peggy), 1717 Parkside E, Seattle, WA 98112	323-6322	
<u>PLEASE NOTE</u> : This list will contain every month those names not on the 1974 membership list. This monthly list plus address changes will enable you to keep your membership list up to date. Please send to Mrs. Stephen Herron, 442 Upland Rd., Bellevue, WA 98004 all address corrections, changes and additions.		
ADDRESS CHANGES: Mrs. James Buzard, 1018 NW 179th PI, Seattle, WA 98177 Mrs. B. Strahl Caverly (Bernice), 2109 38th E, Seattle, WA 98112 Mrs. Harold Fuglvog, 10324 240th PI SE, Issaquah, WA 98027 Mrs. William Steele, Box 10657, Bainbridge Island, WA 98110	546-6674 324-2569 392-7604	

MEMBERSHIP APPLICATION THE NORTHWEST ORNAMENTAL HORTICULTURAL SOCIETY INC.

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		□ Group M	embership Minimum \$ 10.00		

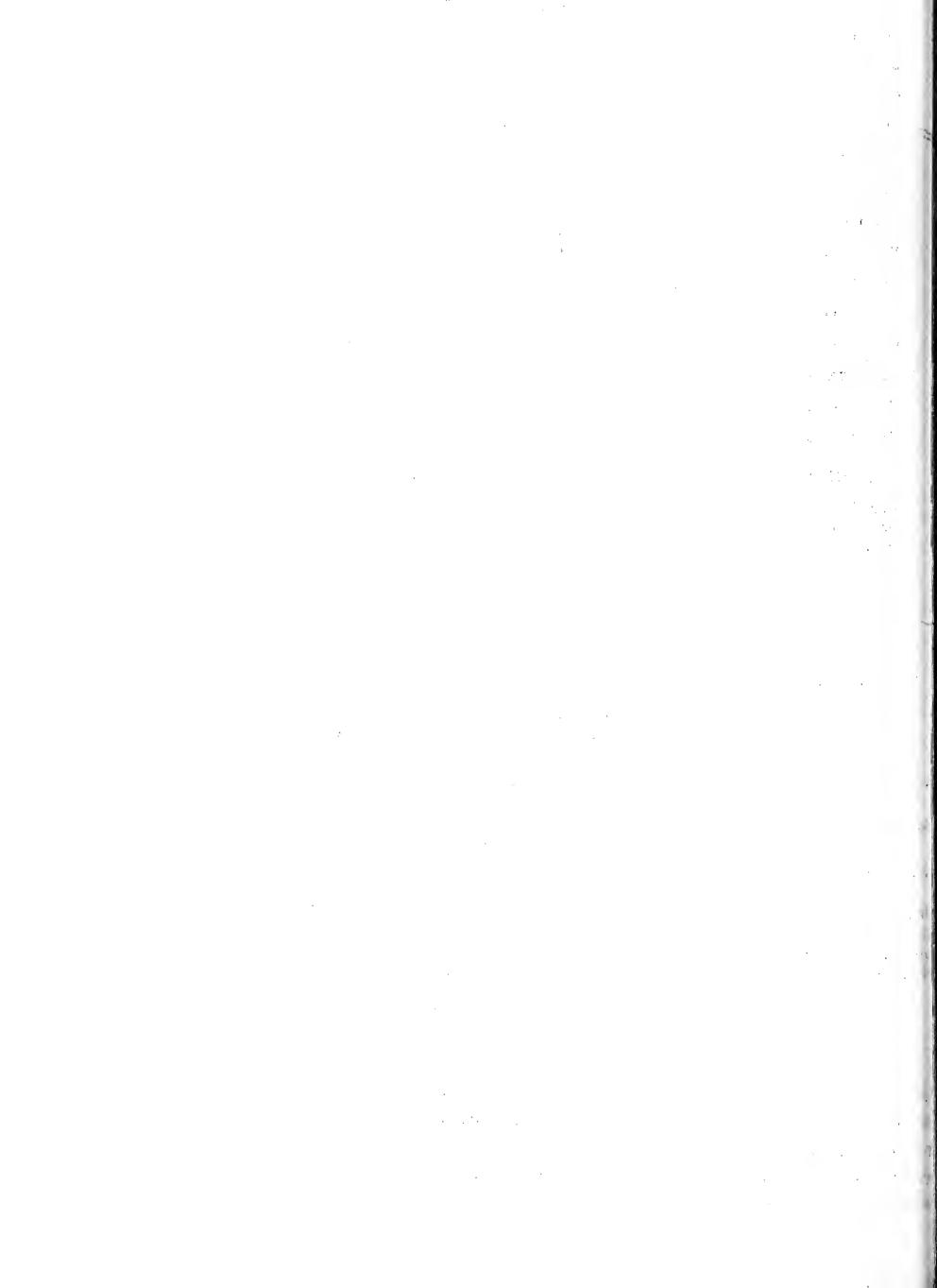
ease make checks payable to THE NORTHWEST ORNAMENTAL HORTICULTURAL SOCIETY INC. emorials will be added to the Library Fund unless otherwise specified.

mounts above \$2.50 are tax deductible.

yable yearly in month of application — notice will be sent.

ailing Address: Northwest Ornamental Horticultural Society Inc.
University of Washington Arboreta
Seattle, Washington 98195

Telephone: 543-8800



NORTHWEST ORNAMENTAL HORTICULTURAL SOCIETY

FERN SALE

Wednesday, June 19 10:30 A.M. Arboretum Office Area PRELIMINARY PLANT LIST

ADIANTUM PEDATUM - maidenhair fern; deciduous native; graceful woodlander; shade ADIANTUM PEDATUM DWARF FORM - charming miniature of above to 6" ADIANTUM VENUSTUM - lacy evergreen in shade; carpet forming 12"; can take sun ASPIDOTIS DENSA - (cheilanthes siliquosa) low evergreen; roots want cool rocky run ASPLENIUM FONTANUM - one of the finest small evergreens for shady rock garden ASPLENIUM PLATYNEURON - evergreen 12"; half sun silouette against rock or wall ASPLENIUM THUNBERGII VAR. INCISUM - evergreen to 10"; shade and slug bait ASPLENIUM TRICHOMANES - adaptable evergreen; sut - part shade; slug resistant ATHYRIUM DISTENTIFOLIUM - deciduous dwarf mountain lady fern; moisture shade ATHYRIUM FILIX FEMINA - lady fern; deciduous; very adaptable; give space ATHYRIUM ISEANUM PICTUM - painted fern; deciduous; shade; delicately colored BLECHNUM PENNA-MARINA - ground covering russet evergreen; sun or shade; choice BLECHNUM SPICANT - deer fern; native evergreen 2'; light shade; woods BOTRYCHIUM VIRGINIANUM - rattlesnake fern; deciduous; must have shade moisture CAMPTOSORUS RHIZOPHYLLUS - walking fern; difficult evergreen; shade; slug bait CETERACH OFFICINARUM - rusty backed evergreen; small; sun light shade; rocks CHEILANTHES EATONII - blue fronds; must have good drainage and winter protection; sun CHEILANTHES GRACILLIMA - erect small evergreen; hardy native for sunny rock garden CHEILANTHES TENUIFOLIA - evergreen to 10"; not reliably hardy; sun light shade CRYPTOGRAMMA CRISPA - parsley fern; sub evergreen; sun rocks with cool root run CYSTOPTERIS BULBIFERA - deciduous 12"; red stemmed; colonizes in woods CYSTOPTERIS FRAGILIS - deciduous 8"; dainty; cut old fronds for second growth; shade DRYOPTERIS ARGUTA - tall native evergreen to 2'; shady woodlands DRYOPTERIS AUSTRIACA - sub-evergreen; tall broad native; cool moist woods DRYOPTERIS ERYTHROSORA - striking evergreen; tall; rosy new growth; shade DRYOPTERIS FILIX-MAS - subevergreen; male fern; strong growing; shade DRYOPTERIS FILIX-MAS CRISPA CRISTATUM - dense growing to 15"; crested DRYOPTERIS FRAGRANS - tufted low evergreen; sun part shade; rock garden DRYOPTERIS MARGINALIS - evergreen to 2'; shade or semi shade; woodlands DRYOPTERIS SPINULOSA - evergreen to 2'; easy growing in moist woodland shade GYMNOCARPIUM DRYOPTERIS - oak fern; deciduous 6"; cheery woodland colonizer LYGODIUM PALMATUM - climbing fern - partly evergreen; peaty moist shade OSMUNDA CINNAMOMEA - cinnamon fern - deciduous; vigorous to 4'; shade OSMUNDA CLAYTONIA - interrupted fern; deciduous; to 3'; unusual looking; shade OSMUNDA REGALIS - royal fern; deciduous 30"; reddish new growth; moist shade ONOCLEA SENSIBILIS - sensitive fern; deciduous to 18"; moist sun or shade PELLAEA GLABELLA - evergreen; blue leaf; to 8"; sun rock gardens; keep crown dry PHYLLITIS SCOLOPENDRIUM - Hart's tongue fern; evergreen lance like frond; part shade PHYLLITIS SCOLOPENDRIUM CRESTED - heavily tassled at tips; same conditions

-10-

POLYSTICHOM ACROSTICHOTOES " Christinas rein; arching evergreen z , acaptacre POLYSTICHUM ANDERSONII - evergreen native; tall reliable woodland specimen POLYSTICHUM LONCHITIS - stiff upright evergreen native; wants cool shady rocks POLYSTICHUM MOHRIOIDES (lemmoni) - upright evergreen 6"; rocks; sun or part shade POLYSTICHUM MUNITUM - sword fern; evergreen native 30"; woodland naturalizer POLYSTICHUM RICHARDII - evergreen; handsome forest green; shade; winter protection POLYSTICHUM SETIFERUM - many varieties; aristocratic evergreens; shade POLYSTICHUM SETOSUM (discretum) - glistening evergreen; striking shade lover PTERETIS STRUTHIOPTERIS - ostrich fern; deciduous to 4'; plumy; moist shade THELYPTERIS HEXAGONOPTERA - beech fern; apple green woodlander; deciduous THELYPTERIS NEVADENSIS - deciduous native; to 24"; refreshing in damp woods WOODSIA OREGANA - bright green native to 12"; dry rocky crevices THERE WILL BE A FEW OF THE FOLLOWING: ASPLENIUM PINNATIFIDUM; DRYOPTERIS DILITATA GRANDICEPS; DRYOPTERIS ERYTHROSORA VAR. CYSTOLEPIDOTA; DRYOPTERIS FORMOSANA; DRYOPTERIS SIEBOLDII; POLYSTICHOPSIS SIMPLICIOR; POLYSTICHUM SCOPULINUM; POLYSTICHUM SETIFERUM CONGESTUM; WOODSIA OBTUSA

This year's indoor fern selection is more than five times larger than last year's both in quantity and variety and includes the following:

ADIANTUM - maidenhair; light and feathery; selection includes BELLUM; CAUDATUM; CAPILLUS-VENERIS; HISPIDULUM; RUBRUM; RADDIANUM VARS; FRITZ LUTHII; GRANDICEPS; GRACILLIMUM; LADY GENEVA

ASPLENIUM BULBIFERA - mother fern; reliable interesting; babies grow on fronds

ASPLENIUM FLABELLIFOLIUM - necklace fern; delicate flat tip rooting

ASPLENIUM NIDUS - bird's nest fern; bright yellow green undivided fronds; choice

ASPARAGUS PLUMOSA - not a fern but feathery and easy going; fern-like

BLECHNUM FLUVIATILE - large attractive N.Z. specimen; rare

CYRTOMIUM FALCATUM - Japanese holly fern; bold dependable spreading

CYRTOMIUM FALCATUM ROCHFORDIANUM CRESTED - similar to above with crested tips

DAVALLIA SPECIES - several varieties; rabbit's foot fern; dark green; furry rhizome

NEPHROLEPIS - several excellent varieties including FLUFFY RUFFLES; CURLY BOSTON;

ROOSEVELT; WHITMANII

PELLAEA - deep green handsome and easy; varieties: FALCATA; MACROPHYLLA; HASTATA; ROTUNDIFOLIA; VIRIDIS

PITYROGRAMMA SPECIES - new growth dusted yellow; rare and choice

PLATYCERIUM - staghorn fern; large unusual; look well mounted on porous wood

POLYPODIUM AUREUM - tall specimens with bluish foliage; spreads by creeping rhizome

POLYSTICHUM TSUS SINENSE - apple green adaptable indoor fern; can be hardy

PTERIS - old favorites; many varieties including: CRETICA; CRETICA C.V. ALBOLINEATA;

CRETICA CRESTED; ENSIFORMIS C.V. VICTORIAE; TREMULA

RUMOHRA ADIANTIFORMIS - leather fern; broad heavy fronds; useful in flower arrangements

SELAGINELLA - flat growing fern relative; excellent terrarium ground cover

TECTARIA CIRCUTARIA - another button fern; popular and easy

Because of the extremely limited set up time, it will be impossible to take pre-orders.

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