FROM THE EDITOR'S DESK....

Reports from various areas of the country regarding the new format and contents of News and Views have been most encouraging. Promises of interesting articles are now coming in, and already the Question Box has taken hold. Educational courses in fern study at the Layman's level are becoming more popular each year. For years the Los Angeles International Fern Society has had monthly study sessions and has issued study sheets for members residing in the United States and many foreign countries. Brooklyn Botanic Garden, for the past eight years, has had courses on the various phases of fern study, with some classes registering nearly 100 people. Fern classes are regularly held also at the Fairchild Tropical Garden in Miami. As we go to press, two series, four Fern lessons each, are being held at the New York Botanical Garden are virtually oversubscribed. Thus we see one of Botany's oldest plants has again come to fore.

Particular thanks go to President John Nickels for guiding the Society, and to Dave Lelling who, in addition to being Editor-in-Chief of the Fern Journal, also doubles as News and Views Production Manager.

BOOK WANTED

Goodrich Lowry would like to obtain a copy of Wherry's "The Southern Fern Guide". His address is 1070 West Ferndale Road, Mayata, Minn. 55391

LOS ANGELES FERN EXHIBIT

On July 29 and 30, 1972 the Los Angeles International Fern Society held its 9th Annual Fern and Botanic Plant Show. In spite of the weather, a debilitating heat wave lasting the entire week, this show has been acclaimed the greatest production of their Society.

The four large buildings and central patio of the Annie Morrison Horticultural Center in Brookside Park, Pasadena, were filled with ferns and tropical plants entered in competition and nearly fifty breath-taking garden displays. The American Begonia Society, the National Fuchsia Society and the Bromeliad Society were adequately represented by lavish displays. Five school horticultural classes presented a variety of fine horticultural techniques in competing for the cash prizes offered. The remainder of the exhibits were entered by individuals — all of the displays were strikingly different but beautiful, providing an endless number of garden ideas. A number of exceptionally interesting educational exhibits, popular sales areas, demonstrations and consultations rounded out a tremendous show.

It is interesting to know that profits from these shows go to support horticultural classes, plant societies and conservation groups. Recent gifts include a shade house for the South Coast Botanic Garden, a permanent exhibit for the botany department of the Los Angeles County Museum, and a fern planting at Griffith Park.

THE QUESTION BOX

Esther Mitchell, Washington, D.C., requests information regarding "scale" and its eradication. This parasite is a nuisance to all fern growers and the following answer is through the kindness of Dr. F. P. Pirone, Senior Plant Pathologist, New York Botanical Garden: "Ferns are subject to at least 24 species of scales. The young, crawler stage of most scales can be controlled by spraying with malathion. For this material is toxic to many species of ferns. The alternatives are Sevin (for the crawlers) or Cofloxin for all stages of the insect. If available, a mixture of nicotine sulfate and soapy water will control the scales without harming the ferns."

Mrs. G. Worrell of San Jose, Cal., asks about the number and groups of ferns. The exact number of living ferns throughout the world is difficult to say. However, botanists believe there are about 12,000 species. Dr. E. B. Copeland in his book, "Ferns and Fungi", divides the ferns into 19 families with a total of 300 genera. Regarding your question about maidenhair ferns, there are at least 200 species in the genus Adiantum.

Caroline Ragged of Southport, Pa., asks why the asparagus fern is not listed in Foster's "Ferns to Know and Grow". This plant is not a fern but rather a member of the lily family. Taylor's "Encyclopedia of Gardening" gives full cultural treatment of this plant.

Mrs. L. J. Stone of Eufala, Okla., asks about her Boston fern. All densely leaved Boston ferns tend to get brown in the center as old foliage dies. Carefully trim out all dead growth and runners to restore a tidy appearance and health to your plant. An occasional spraying with slightly warm water and a monthly feeding of fish oil emulsion will be beneficial.

"Pluffy Ruffle fern" is a name used in the trade for one of the bushy cultivars of the Boston fern. Actually, these ferns are mutations of the Florida sword fern - Nephrolepis exaltata.

AMERICAN FERN SOCIETY FORAYS IN WYOMING AND COLORADO

On August 3-5, 1973, the American Fern Society will sponsor a field trip in Wyoming and Colorado. This will be prior to the First International Congress of Systematic and Evolutionary Biology to be held at Boulder, Colorado in August. Write to Dr. Robert D. Bocci, Department of Botany, University of Wyoming, Laramie, Wyoming 82070, prior to June 30 for particulars and reservations.

There will be an American Fern Society Field Trip just prior to the meetings of the AIBS at Amherst, Massachusetts, June 17-22, 1973. Since several areas of central New England are very rich in ferns, this trip promises to be rewarding to anyone interested in seeing the ferns of northeastern North America. For further information, contact Mr. David S. Harrington, Gray Herbarium of Harvard University, 22 Divinity Ave. Cambridge, Mass. 02138, prior to May 15.
THE A.F.S. FERN SPORE EXCHANGE

The current list of fern spores, together with the supplemental list, covers over 540 species and varieties. These were contributed by over sixty universities, botanical gardens, and individuals of most of the major countries of the world.

Many species, new to cultivation in the United States, have been introduced from Japan, India, New Zealand, Australia, and the continent of Africa. In recent years, species have been contributed from such little-known islands as Lord Howe, Rotan, Reunion, and the various islands that ring the shores of New Zealand.

Quite a number of species from Japan are proving hardy to the Seattle, Washington area. Two of these are *Polysetchium adriaticum*, which has spectacular, dark, green ferns marked with chartreuse bands at the center of the fronds, and *Cryptopteris cryptogramma* var. *prolifica*, which has the young fronds colored rosy red. The indusia retain the red coloration until the spores are ripe and ready to be dispersed. Variety *prolifica* sets little plantlets along the midrib, and to date this variety has remained quite dwarf.

The A.F.S. Spore Exchange supplies spores for research and for the expansion of botanical collections of universities, botanical gardens, and private individuals, whether amateur or professional botanists. In regard to contributions, please submit as much data as possible, especially where material is collected from natural habitats.

Spores of Eastern United States ferns are particularly desired. An attempt is made to stock current spores of as many species as possible. This involves replacing old spores with a fresh stock each year.

About 350 institutions and individuals participate in the Exchange. It functions throughout the year, with spores being sent as soon as possible after the request is received. A special effort should be made to get spores to the Exchange by October of each year for incorporation in the various lists that are issued.

I wish to thank all the participants in the Exchange, as it is not possible to write individual notes of thanks. Management of the Exchange is nearly a full time project. Will members please advise me if they no longer wish the spore list, in order that we may cut down on unnecessary postage.

Nettie D. Hall
Director of the Spore Exchange

SUSTAINING MEMBERS

The following is a list of the American Fern Society's Sustaining Members. These people annually elect to send in $10.00 or more in payment of their dues instead of the minimum $5.00 payment required, even though they receive no more benefits than regular members. The Society wishes to sincerely thank our Sustaining Members for their generosity, for they are doing more than their share in helping to keep the Society operating despite rising expenses.

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WHERE FERN GUIDES TO BE REPRINTED

Guide to Eastern Ferns, a distinctive book for the amateur in the mid-Atlantic states, published at my own expense in the 1930's, proved to be so popular that it went through three reprints and repaid its initial cost. Twenty years later I proceeded to prepare an expanded work, covering all the northeastern and midland states, and adjacent Canada. Doubleday & Company expressed an interest in including this in their Field Guides series, but I was at a loss to get suitable illustrations prepared.

Then by good fortune there came into my office at the University of Pennsylvania one day James C. W. Chen, a student recently arrived from Taibon (Formosa), to inquire if I could give him any part-time employment which would help pay his expenses. I inquired if he was familiar with ferns, and it turned out that he had hunted these plants throughout his native island. He was immediately engaged, and the Fern Guide was duly published on April 7, 1961.

The American Fern Society having insufficient income to publish promptly all the manuscript coming in for its Journal, I had the royalties from this book turned over to them. At first it sold well, but after 10 years the sales dwindled to the point that the publishers decided to allow it to go out of print.

Hunting new co-authors who are familiar with various regions adds life to this guide. The American Fern Society's Fern Guide committee will be glad to hear from anyone interested in preparing, or revising, the Fern Guide for a region.

With the idea of correcting these errors and bringing the nomenclature into more generally accepted form, I went ahead with my project. James Chen was busy with the preparation of his doctoral thesis, but was able to enlist the aid of his brother, Keith C. Y. Chen, who had come to study at Ohio State University, and the needed illustrations were soon forthcoming. The resulting Southern Fern Guide was duly published by Doubleday & Co. on October 2, 1964.

Unfortunately about the same time a photo-reprint of Small, errors and all, was issued, widely advertised and abnormally sold. On the other hand my book was little advertised and its very existence was unknown in many southern bookstores, so sold but poorly, and likewise went out of print in the 1970's.

Negotiations are now under way to have both of my Fern Guides photo-reprinted, the outcome of which will be duly announced in this newsletter. — Edgar T. Wherry

MORTON MEMORIAL ISSUE OF THE JOURNAL

As was mentioned in the last issue of News and Views, a special memorial issue of the FERN JOURNAL is being planned for later this year. We have had warm response to our request for donations to help defray the great cost of this enlarged issue. It will probably be the September issue and will run nearly 100 pages. We hope more members will want to express their respect for Mr. Morton through a contribution to this memorial issue. Contributions can be sent to our Treasurer: Mr. Robert G. Stolz, Dept. of Botany, Field Museum of Natural History, Chicago, Illinois 60605.

Contrary to our previous notice, contributors will not be listed in the issue, but their gifts will certainly be appreciated.
FROM THE PRESIDENT’S DESK...

On January 27 the New York Area chapter of the AFS held its first meeting in recent years at the New York Botanical Garden. Thirty-three people attended, coming from many parts of New Jersey, New York, Connecticut, Pennsylvania and Rhode Island. We discussed our diverse fern interests and some of the activities we would like to pursue. Our next meeting will be held at the Garden Saturday, March 3 to discuss the fundamental structure and life history of ferns and perhaps some of the fern allies. Anyone wishing more details can contact me.

Regional groups are being organized in the Upper Ohio Valley (contact Mr. Carl F. Chuey, Dept. of Biology, Youngstown State University, Youngstown, Ohio 44502) and in the Pacific Northwest (contact Dr. Frank A. Lang, Dept. of Biology, Southern Oregon College, Ashland, Oregon 97520). More news of their activities will be reported in future issues of News and Views. These meetings are well received and do much to fulfill our need for greater communication. We hope groups can be organized soon in other parts of the country. Anyone wishing to start a group, covering any size area, is invited to contact me for assistance and suggestions.

In a recent trip that took me through Miami, I had the great pleasure of being invited to a meeting of the South Florida Fern Society's board of directors. Their society's activities are exciting and imaginative, and we discussed ways in which our two organizations might cooperate in the future. The meeting was held at the home of Mrs. Ruth Radcliff, who has a fern nursery and the best cared for living fern collection I have seen anywhere. I am grateful to my overnight host, Mr. Milford Peden, for his hospitality and for sharing his ideas and information concerning fern cultivation.—John T. Mickel

A NEW USE FOR FERNS

Researchers in the Department of Pharmacognosy at the University of Mississippi are studying extracts from Polypodium polypterus, an epiphyte on the southern trees. The leaves are believed to contain a chemical which will slow down the heart beat and allow it to return to normal without any side effects. In experiments with rats, the heart beat is slowed down about 50 per cent. According to the newspaper account, from the above is extracted, the original work on this fern started in Brazil. Should the fern drug be effective, it will be necessary to synthesize the chemical because the fern in question grows slowly and it would not seem to be ecologically sound to strip all of the ferns off of the trees and thus exterminate it over wide areas.

Irving W. Knobloch

AMERICAN FERN JOURNAL NEWS

The new, enlarged format of the JOURNAL has been well received, both by contributors and by readers. Because of simplifications in format, we have been able to reduce some of the printing costs, although the overall cost of producing the JOURNAL is still a concern.

At the Council Meeting in Minneapolis, Dr. John T. Mickel was appointed to the editorial board to replace the late Mr. Conrad V. Predmore. Dr. Mickel's interests are taxonomic, phyllogenetic, and paleobotanical.

Dr. Kella M. Tryon, Jr. asked to be relieved of his editorial duties at the close of 1972. He has served with distinction since 1961. Dr. Tryon has made the excellent suggestion that his replacement be a morphologist or anatologist, which will help to broaden the capabilities of the editorial board. — David B. Lehtinger

FERN COURSE AT LAKE ITASCA

Prof. W. H. Wagner, Jr., of the University of Michigan, will be teaching a special topics course titled "Biology of the Ferns" at the University of Minnesota Forestry and Biological Station at Lake Itasca, in northern Minnesota. The course will be given from July 22 to August 25. The evolution, classification, morphology, and ecology of the ferns and fern allies will be studied, both in the field and in the laboratory. Field emphasis will be on exploration for rare and hybrid taxa and on investigation of life cycles. The course is limited to 20 students and is offered for 5 credits. Additional information may be had from Prof. David K. Parmelee, Field Biology Program, 349 James Ford Bell Museum of Natural History, University of Minnesota, Minneapolis, MN 55455

REPORT OF THE JUDGE OF ELECTIONS

The results of balloting for Secretary of the American Fern Society are as follows:

Richard L. Hauke 157
Dean F. Whittier 2
Robert M. Lloyd 1

I therefore, declare Richard L. Hauke, Secretary.

The amendment to the Constitution, to increase the number of honorary memberships to ten, was voted on as follows:

For: 151  Against: 8

I, therefore, declare the amendment to the Constitution of the American Fern Society approved by the membership and now in force.

It is also my privilege to declare Mme. M. L. Tardieu-Bolet elected to Honorary Membership in the American Fern Society.

For: 159  Against: 1

Dean F. Whittier
Judge of Elections

XII INTERNATIONAL BOTANICAL CONGRESS

Leningrad, U.S.S.R. will be the site of the XII International Botanical Congress, to be held June 23-30, 1975. The Congress will be divided between organized half-day symposia and half-day contributed paper sessions. Nomenclature sessions will take place on June 20-23, immediately before the opening of the Congress. A tentative schedule of scientific field trips has been planned for the immediate pre-Congress and post-Congress periods, in order to acquaint visiting botanists with the interesting and unique floristic features of the U.S.S.R. Persons wishing more information about the Congress should write to:

Dr. N. S. Shigirev, Scientific Secretary XII International Botanical Congress
2, Prof. Popov Street
Leningrad 197022, U.S.S.R.
Fungi on Ferns

Mycologists have in the past identified a number of species of fungi growing on ferns and fern allies. The only systematic treatment to my knowledge is that on species of Selaginella by Farr and Horner (Fungi on Selaginolla, New. Had., 15:219-283) a few years ago. In examining ferns from southern Mexico I found small, black, club-shaped fungus fruiting bodies on all my specimens of Grammitis semihirta. Dr. Clark Rogerson of the New York Botanical Garden identified it as Microspermum mexonicum, described from a specimen of Grammitis Indicans from Panama. A further search showed it to be on virtually all specimens of G. Indicans and G. anfractuosa from Mexico, Central America, West Indies, and northern South America. It is also usual on G. semihirta and G. taxifolia ranging from Mexico to Bolivia. The presence of fungi can be used as a key character to distinguish large specimens of G. anfractuosa or G. Indicans from G. rigens.

Unfortunately, fungi are found on ferns only by chance and are found largely by pteridologists surveying large numbers of specimens. We would like to study those fungi more extensively and would appreciate it if anyone finding fungus fruiting bodies on ferns would send us specimens. — John T. Mickel, New York Botanical Garden, Bronx, N.Y. 10458

Way, Way Back Ago

Way way back ago there were dinosaurs and alligators and elephants too. There were table tooth tigers and other dangerous things and there were ferns. There were big ferns and little ferns and some ferns were as big as trees. And many many years went past and man found rocks and bones on the rocks and now we still have ferns. — Paul Mickel, age 7.

New Members

Walter C. Alpaugh
Mrs. John C. Barry
Josephine G. Beach
Mrs. John W. Becker
Dr. G. Benl, Botanische Staatsammlung, Mengingerstrasse 67, 8 Munich 19, Germany
Mrs. Sidney J. Bernstein
10583
Mrs. Herman F. Brown
Thomas B. Cox
Leah Culberg
Alice Cunningham

Robert D'Amбросio
Thomas J. Delendick
Mrs. Margaret Delouch
David A. Dillow
Mrs. Roy Durst
Mrs. Howard Elzer
Dr. Charles Favier
Dr. J. J. Ferguson, Jr.
Harold Finch−este
George F. Fischer
Mrs. Eric Flunker
Harold Freeman
Mr. W. A. Freeman
Mrs. Robert Freymueller
Wilbur L. Graves
Mrs. James A. Green, Jr.
Dr. Wm. S. Harris
Ralph J. Hartman
Mrs. Frank Kinsey
Mrs. R. Kinsey, Jr.
Mrs. Hugo Logemann
Mr. E. J. Long.
Mr. Craig Masching
Howard E. Norback
Mrs. Harry C. Olson, Jr.
Stanley R. Orman
Carolyn D. Ratcliffe
Catherine R. Reynolds
John S. Samuels, III
Dr. Sidney S. Schroeder
Mrs. Jacob Sherman
Dr. G. I. Skelley
William Arthur Sledge, Dept. Plant Sciences, The University,
Leeds LS2 9JT, England
Robert Sobe
Mrs. Kathryn Sylvestre
William S. Wood
Mrs. John G. Weixel
Ed Wells,
Mrs. G. G. Wihan