

NEMOPHILA

Meeting and Field Guide

CALIFORNIA BOTANICAL SOCIETY

MAR. 24, 1921

NUMBER 13

The purpose of the Society is to promote the botanical study and investigation of California plants, to diffuse knowledge concerning them, and by lectures, field-trips, exhibitions and publications to deepen interest in the native flora amongst the people of California.

FIELD TRIPS AND MEETINGS.

Wednesday, March 30. Exhibition of Native Flowers, Hunt's Grove, St. Helena. Take 8:00 a. m. S. P. train from San Francisco. Members may also take boat to Vallejo from San Francisco, thence by electric car leaving Vallejo 9:18 a. m. Luncheon will be served on the grounds by the hostess, Mrs. Clara A. Hunt. Members of the Society are especially requested to come from 1 to 4 o'clock. Boxes of plants for the exhibit should be addressed to Box 102, St. Helena.

Sunday, May 1. Sutro Forest. Meet at Ferry Building, San Francisco, 1:00 p. m., at entrance to upstairs waiting room. Study of *Polypodium Scouleri*. Leader, Mrs. Carlotta Case Hall.

Saturday - Sunday, May 14 - 15. Mt. Diablo Country Club. South base Mt. Diablo. Leave Oakland, 40th and Shafter, Saturday 1:30 or 4:30 p. m., Sunday 8:30 a. m. Change cars at Saranap for Diablo Station. Bring sleeping bag and food for entire trip. Leaders, Misses Rinehart and Scouvert.

Saturday - Monday, May 28 - 30. Annual Camping Trip. Take 7:45 a. m. California Northwestern train from San Francisco to Ukiah on Saturday, May 28. Meals will be provided at The Terraces (Mr. Carl Purdy's garden) by the Society's Commissary. Those members desiring to go will be mailed a special circular by the Chairman of the Camping Trip Committee, Mr. George B. Furniss, 375 Staten Avenue, Oakland.

"THE GATHERING PLACE IS LANRICK MEAD."

In case of change of time in timetables take train nearest scheduled date whether before or after. Members should carefully observe the wishes of the Leader in charge. Gates should always be closed after one. The picking of flowers should be strictly limited or for botanical purposes. Members should see to it that their invited friends do not plunder the fields and cañons and pick hundreds of flowers of a single species. Bear in mind the conservation rules.

SELMA BRANCH.

The schedule of trips would have gone to you sooner but unfortunately for business I had at the meeting some stinging nettle which kept claiming attention more than the work in hand, since some of the members discovered the spring action of the stamens and the scattering of pollen. All our members are so interested in the botany of plants that it is a task to drag them away for business details. I wish Dr. Jepson that you could be an observer at our Thursday meetings. You would be gratified with the earnest enthusiasm. Our meetings consist of discussions and of work in classification, the members getting right down to details with the lenses and tools. Surely my dining-room table could never be spread with more interesting feasts. The members must almost be driven home!—H. P. Kelley, Mar. 3, 1921.

PERSONAL NEWS.

Dr. F. C. Newcombe, Professor of Botany in the University of Michigan, is spending the winter at Stanford University.

Dr. Helen Gilkey, Assistant Professor of Botany in the Oregon State College, has been working at the University of California Herbarium during the last fortnight.

Professor Higginbottom, Director of the Gwalier Agricultural Institution, Central India, recently delivered an address before the University Agriculture Club on the agriculture of India. The region described by Professor Higginbottom is of immense interest to botanists as well as agriculturists, because of the varied and numerous indigenous species found there; the species being eleven times as numerous in Central India as in the most favored portion of the United States.

Professor J. W. Gilmore, head of the Division of Agronomy of the College of Agriculture, University of California, has been appointed Exchange Professor to the University of Chile. This appointment is in recognition of a varied experience. He was once connected with Cornell University; he helped establish an institution in the province of Hupeh, China, for promoting modern agricultural methods; he had experience with the fiber industries in the Philippines; later he was President of the College of Hawaii. Professor Gilmore will carry to Chile a selected stock of cereals to be planted upon his arrival and harvested before his departure.

AMENDMENTS TO THE CONSTITUTION.

The following amendments were presented to and voted by the Society at the regular meeting of March 12.

No. 1. The officers of the Society shall be a President, First Vice-President, Second Vice-President, Secretary and Treasurer.

No. 2. The Council shall consist of the five officers.

No. 3. The article regarding dues to be changed from the Constitution to the By-Laws.

Verbal changes in other sections to conform to the amendments were authorized. The Council recommends that the membership ratify the above action. Send your vote on a postal card to Miss A. E. Ehlers, 2741 Prince Street, Berkeley.

THE ANNUAL DINNER.

(Concluded from last issue)

The Toastmaster then introduced Mr. Parish.

"I will tell you something," said Mr. Parish, "of the country where I have resided for many years—Southern California. We are always known for our loyalty to the state, but that characteristic is very strongly developed in Southern California. We think that is about all there is of California. I will tell you why I think the place I lived in, San Bernardino, has superior advantages from the botanical point of view—because there is accessible such a very great variety of floral regions. From my old home one has about him something like the valley of Sacramento in the general character of the flora. You can start from there and in less than half a day you come to a fine coniferous forest. Next day if you wish you can take your auto and drive down to the sea coast and there you have a great variety of marshes and salt pools. If you have a little more time you can see the insular flora on Catalina. It is very interesting to see the difference in growth due to the environment.

Now we come home again and the next day we can go out on the Mojave desert which is very high—three to four thousand feet. The vegetation is peculiar. We see the Joshua tree which is very grotesque and the various sorts of cactus and many other peculiar plants. So you could keep on for two or three days, getting continually into new floral regions. Or you could go out on the Colorado desert which is low—five hundred feet altitude. Here are palms and many other kinds of vegetation. Keep on that day and you will get down to the Mexican border where the vegetation is very peculiar."

The Toastmaster finally called upon Dr. Abrams.

"I looked forward to today and tonight with a great deal of pleasure," said Dr. Abrams, "and up to this present moment I have enjoyed myself thoroughly. I have been in Southern California, too, and I am tempted to tell you one of my experiences there. I never expect to have another such view as from the summit of the San Bernardino Mountains. From the top of this range, a little over eleven thousand feet, we were able to see, on a day in July, the Southern Sierras very clearly. We could see the Providence Mountains and also ranges in Arizona. We could see Table Mountain in Lower California, and Catalina Island. In other words we could see the whole of Southern California.

"I wish to tell you of one of the things we are especially interested in at Stanford. Senator Stanford began an arboretum as a part of his home grounds. It

occupies about 200 acres. In addition we have at the back of the campus a range of hills where we have an oak forest and a few redwoods. This ridge we have set aside as a natural history reserve. I would also like to say that in our arboretum we are proposing to grow especially plants from regions something like California, such as Chile and the Mediterranean. We hope eventually to have a fairly good representation of our native vegetation there."

After the dinner the party adjourned to the large reception room where the time was given to social converse and to entertainment by the members.

THE AYARS OAK.

A very large individual of the valley oak, *Quercus lobata*, stands on the Old Kentucky Ranch, 12 miles west of Paso Robles. The owner is Maurice B. Ayars. The tree has recently been measured by several persons and the measurements sent me by Mr. H. A. Greene. Of the measurements, I take the most conservative:

Circumference at ground, 41 ft. 1 in.

Circumference 4 ft. above the ground, 28 ft. 3 in.

Diameter of crown, 132 ft.

Height of tree, 110 ft.

Nothing was reported about the health of the tree or condition of the trunk bark, but in all probability it is an unusual specimen and well worth visiting by any one interested in the large oaks of California.—W. L. Jepson.

DEVELOPMENT OF THE GOLD-BACK FERN.

Diminutive specimens of this species (*Pitrogramma triangularis*) are of frequent occurrence in favorable localities, often on the face of rocks or in crevices of rock masses. These facts clearly indicate that its natural propagation and dissemination is effected through the germination of spores scattered by the wind from mature plants, yet no account of the prothallia seems to have been recorded.

No difficulty was experienced in finding an abundance of the prothallia during February of the present season. They were found on very damp soil and bits of rotted wood and assumed a shallow cup-like form due to the division of the prothallia into two ear-like lobes which curve upward slightly. The young plants always arose from the under surface and the first leaves were protruded through the base of the sinues separating the two lobes. Antheridia were found sparingly but no archeogonia and most of the young plants seemed to have developed vegetatively, illustrating the well-known phenomenon of apogamy. The first two leaves were usually three- and four-lobed and resembled the pinnae of species of *Adiantum* but the succeeding ones assumed the characteristic deltoid form of the mature state.—W. C. Blasdale.