-NM 88003 NOV 4 NATIVE PLANT SOCIETY OF M.M. 2016 Valle Rio Santa Fe, New Mexico 87501 info

November Newsletter

NATIVE PLANT SOCIETY OF NEW MEXICO

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Native Bulb-forming Wildflowers

When you are busy planting tulips and daffodils in your garden in fall, do you ever wish you could plant some of our native New Mexico bulbs? Unfortunately, you won't find them on the racks in the nurseries and they have been largely overlooked by the Dutch hybridizers. But the wildflowers that grow from bulbs in this state are some of the most beautiful species.

Most of the bulbous wildflowers are members of the Lily family and are often high-altitude plants. Here are some to look for next spring and summer on your mountain hikes. Perhaps someday an enterprising soul will learn to propagate them so we can include them in our gardens.



WESTERN WOOD LILY

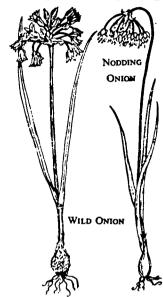
Easily the most impressive is the Western Wood lily, Lilium phila-, delphicum var. andinum, with a four-inch diameter orange flower and deep purple anthers. It grows about 18 inches tall and is found in moist areas in aspen-fir forests, usually in the shade, and blooms early July.

Less grandiose is the sand-lily, not a true lily, but botanically <u>Leucocrinum montanum</u>. It is a low

SANDLILY

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growing, April or May-blooming species, with white flowers about an inch across, and is usually found in open areas at altitudes between 3500 and 8000 feet.



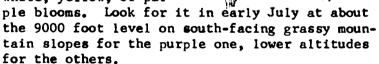
MARIPOSA-LILY

There are several wild onions, whose bulbs have the characteristic onion or garlic odor. Allium cernuum, also called nodding onion, ranges all over the United States, and can be found at various altitudes in the Rockies. It is easily distinguished from Allium geyeri, for the latter plant has an upright flower head in contrast to the nodding flower head of A. cernuum. Allium geyeri is also a plant of higher altitudes, lower growing, with deeper pink flowers. Like most onions, they thrive in pretty impossible soils.

Wand-lily, Zigadenus elegans, blooms in midsummer with a flowering stalk that has many white, elegantly patterned flowers. It can be found in moist mountain meadows, and is common on both the Santa Fe and Los Alamos ski slopes.

Erythronium grandiflorum, also called dogtooth violet, has a bright, yellow, nodding flower with turned-back petals, and blooms at high altitudes along the edges of receding snowbanks, sometimes in July. Cultivated versions of this plant are offered by catalogs.

Mariposas are also bulbous members of the lily family. Our most common one is <u>Calochortus</u> gunnisonii, with either white, yellow, or pur-



Finally, though Bailey describes <u>Calypso</u> <u>bulbosa</u> as having a "corm-like" underground stem, the botanist who named it obviously thought "bulbosa" was a good description for this delicately beautiful native orchid. It blooms mid-June to late June in heavily wooded aspen forests and is often hidden by the foliage of the dwarf <u>Vaccinium</u> which also grows in these areas.

FAIRY SLIPPER

Last Month's Meeting

Gussie and Skinny Schooley dazzled a small meeting of very fortunate NFS members October 15 with a program on the natural history of the area around Montezuma, New Mexico.

Slides of outstanding technical and artistic quality illustrated not only the flora but selected animal life and geologic features as well. Mrs. Schooley had prepared a thoughtful narrative which gave the audience a clear picture of the life zones of the region and also left them with a desire to explore the region themselves.

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The Schooleys are artists, and each slide showed their eye for design and beauty. Close-ups of minute flowers made them appear as horticultural prizes; an Io moth's green and russet wings filled the screen; a silvery grey owl winked into the camera Lichens, caterpillars, and, of course, many of New Mexico's native plants looking their best comprised the variety of slides.

The Native Plant Society could certainly host the Schooleys again, and hopefully more people could see their work and meet this artist-naturalist team.

The financial plight of the NPS Newsletter fund was discussed. Selling advertising space for products and services which would be of interest to the members was proposed and the idea met with no objections.

This Month's Meeting

Mr. George Kelly will speak Thursday, November 10 at 7:30 pm at St. John's College, Camino De Cruz Blanca, Santa Fe.

Mr. Kelly resides in Colorado and has many years of experience in gardening and landscaping with the plants native to our region. He has written books about gardening in the Rockies and is knowlegable of propagation techniques for native plants. His topic will be "Using Native Shrubs in Landscaping". There will be color slides and, of course, refreshments. Please come, learn, and enjoy.

The meeting will be held in Laboratory 118. The laboratory building is the large building to the left of the circle drive as you enter the campus of St. John's.

Augustus Fendler

Of the many men who have contributed to botany in New Mexico and whose names are commemorated in the names of our native plants, men such as Emory, Bigelow, Engelmann, and Cockerell, Augustus Fendler in particular is associated with Santa Fe. He lived in Santa Fe less than a year, collecting mainly from the beginning of April to the beginning of August 1847. Although he collected for only four months, his preserved collection (with beautifully written out collection records) numbers over a thousand species and currently resides in the Gray Herbarium at Harvard University.

The year 1847 was a dangerous time to live in Santa Fe. Fendler had been allowed to cross the country with troops joining the Army of the West, the army commanded by Gen. Stephen Kearney which, just two months earlier, had conquered Santa Fe. This army, which had been eager for engagement, had met the Mexican forces in the canyon between Pecos and Santa Fe. In spite of the strategic location of the Mexican forces and the fact that they were 7000 strong while Kearney had only two thousand men, the Mexican army had dispersed. No blood was spilled. But in the months that followed there were cruel rebellions and butcheries of the American soldiers and merchants by the Mexicans and Pueblo Indians. Hostilities were very prolonged, but who ever gives over his land easily? Perhaps due to all this Fendler never collected more than a few miles from Santa Fe. His richest collecting was along the Santa Fe River and he was never able to travel up to see the magnificent high mountain flora which he so hoped he could collect.

Fendler was a German born in East Prussia. At twenty-three he left Germany and came to the United States. He went to St. Louis, made lamps for a while, then moved to New Orleans and then to Texas where he was eligible for a headright of 320 acres of land but was unable to select it since he had no rifle and therefore could not travel with the surveyors. He then went to Illinois and became a school teacher. Wishing to be a hermit, he lived on a small uninhabited island. It was later, when he returned to Germany, that he became interested in plant collecting; Ernst Meyer inspired him to try to earn a living by collecting herbarium specimens. After returning to St. Louis, Fendler took collections to Engelmann who recommended him to Asa Gray. At that time eastern botanists were eager to have material from Santa Fe and Gray arranged with the Sec. of War for Fendler to join the troops going west.

In 1849 Asa Gray published Plantae Fendlerianae Novi-Mexicanae. Gray wanted Fendler to return a second time to Santa Fe. He had always wanted Fendler to "ravish" (as he put it) the high mountains near Santa Fe.

But Fendler had not been compensated at all. The advances sent by Gray barely allowed Fendler to cover his debts and there was no compensation for his time and work. Fendler wrote to Gray to explain why he could not go back: "not the dangers nor the risk of life, health, and property; not the many hardships and privations which are inseparably connected with such an undertaking are deterring me from entering upon it again; on the contrary these botanical excursions were enough to make me passionately fond of herbarizing."

When Fendler started out on another expedition it was to Mormon City (it was called so then), and the Great Salt Lake region, in 1849. A flood ruined his drying papers along with many of his supplies and he had to wait for an opportunity to return to St. Louis. And in St. Louis the Great Fire had destroyed all Fendler's belongings - including his journals.

In 1883 Fendler died at seventy years old. In his later years he had become interested in physics and had published a small book entitled Mechanics of the Universe.

Asa Gray, in his bibliographical notes, wrote the following of Fendler: he "was a quick keen observer and an admirable collector. He had much literary taste...He was excessively diffident and shy, but courteous and most amiable, gentle, and delicately refined. Many species of his own discovery commemorate his name, as also a well-marked genus, a Saxifragaceous shrub, which is winning its way into ornamental cultivation." This was Fendlera rupicola. Elsewhere Gray wrote of the genus Fendlera: "It is the most interesting of North American genera, between Deutzia and Philadelphus. .."

<u>Fendlera rupicola</u> is not uncommon on rocky hillsides, 4-7000 feet. The large white showy flowers tinged with purple bloom March to June and are fragrant.

Many other plants commemorate Fendler in their specific names, among them are:

Cheilanthes fendleri
Pellaea fendleri
Berberis fendleri
Echinocereus fendleri
Cymopteris fendleri

Lip Fern
Zigzag Cliffbrake
Colorado Barbarry
a cactus

a cactus Chimaya

Euphorbia fendleri (Chamaescyce fendleri)

Rosa fendleri

Cyperus fendlerianus Aristida fendleriana Flat sedge Fendler's three awn

The Randall Davey Botanical Garden: A Progress Report



The Randall Davey Botanical Garden will be maintained as an area for ecological research, education and the quiet enjoyment of nature's beauty. The use of this garden as a community resource will be especially important in this era of concern regarding the exploitation of our environment and the ecological relation-

ships involved. The location of the Randall Davey Estate provides an unusually diverse landscape for an area of its relatively small size, 130 acres. This natural diversity of environment will provide us with a variety of plant communities to ob-

serve and study.

Missy and David Deardorff have embarked on the first phase of our Master Plan for the Garden - the vegetative analysis. We couldn't have found two more knowledgeable or delightful people to work with. Another project for November will be the improvement of a lovely trail that winds behind the main house, up onto the open meadow, then drops down into the Randall Davey Canyon. James Meem came up with this great idea! His helpmate on this project will be Jennifer Owings Dewey. Jennifer has just recently completed a set of drawings of the estate. They are lovely and certainly give one a true feeling for the land.



THANK YOU DEAR FRIENDS

We appreciate your generous expression of support!!

The Native Plant Society of New Mexico, your contribution as a result; of the plant sale was most helpful in getting this project "off the drawing board and into the ground".

MANY THANKS!!

J. Burch Ault
Joan Buresch
Virginia Grey
Mrs. James Lake
James Meem
Harvey Mudd
David Padwa
Dr. Michel Pijon
The committee for the Preservation of the Randall Davey Estate
Anonymous Donor

James B. Alley, law firm of Mitchell, Alley and Rubin, Santa Fe. We are deeply indebted for legal advice and services.

Mrs. Kate Holt Cullum, who has undertaken to contribute this magnificent piece of land in memory of her late brother-in-law, Randall Davey. It is a most generous and public spitited gift.

YOU CAN HELP

We are entirely dependent upon private contributions. The garden will grow and provide its services because of your support. All contributions are tax deductible.

Noreen C. Poitras Melissa Savage Randall Davey Estate Upper Canyon Road Santa Fe, New Mexico 983-6637