

Petal Pusher

Nov. — Dec. Volume 3 Number 6, 1988

THREE MONTHS WITH DR. STEYERMARK

By Robert H. Mohlenbrock

The return of Dr. Julian A. Steyermark to Missouri during the last week in September provided me with a chance to talk again to my esteemed friend and to reminisce about my first experiences with him over two decades ago.

I had grown up on Steyermark's Spring Flora of Missouri, which I found very useful in adjacent southern Illinois. While I was doing research at the Missouri Botanical Garden from 1954-56, working on my Ph.D. at Washington University, I was constantly reminded of Dr. Steyermark because of his vast collections in the MBG herbarium, because of his prodigious writings, and because of the stories retold about him by Edgar Anderson, Bob Woodson, and others.

Following my Ph.D., I began my professional career in the Department of Botany at Southern Illinois University in January, 1957. It was my great fortune that during the three-month spring quarter in 1958, Julian Steyermark was offered a Visiting Professorship in the Department of Botany at SIU. The impact that those three months had on my professional career cannot be overstated.

Our department at that time was in cramped quarters. I already was sharing a 16 by 8 foot office with Professor John Voigt, the departmental ecologist. Since Dr. Voigt's interests and mine were more closely aligned to Dr. Steyermark's interests, the three of us somehow were crowded into this small office.

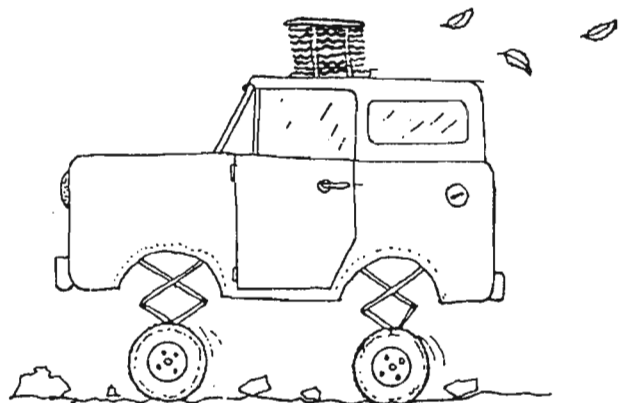
Steyermark and I spent every day and partway into nearly every evening working side by side. He was putting the finishing touches on his Flora of Missouri and I, along with my wife, Beverly, was revising Jones' Flora of Illinois. Often Steyermark would quiz me on some specimen he would be working on or sketching. Many species previously unknown by me were quickly and eagerly learned.

While much of the three months was devoted

to serious botany, Dr. Steyermark would take a little time off now and then to come to our home for dinner. On one occasion he took my wife and me to the local movie theater to see War and Peace. I recall the incident vividly because Julian insisted on picking us up in his vehicle, an International Scout built high to enable him to negotiate Missouri's back roads. The Scout was so high that I had to climb awkwardly. My poor wife stood helplessly at the door until Dr. Steyermark boosted her up into her seat!!

One of my most pleasant recollections was an overnight visit to Steyermark's estate near Barrington, Illinois, north of Chicago. Julian had talked so often about the wildflower preserve he had built that my wife and I were thrilled to be invited to see it. We arrived early one afternoon. Julian guided us over about half of the property, pointing out with great enthusiasm the many species transplanted from the Ozarks. That evening we talked of plants, browsed through his extensive library, and listened to classical music.

We awoke the next morning to the delightful smell of bacon frying. Cora, Julian's wife, had prepared a feast, including the most delicious baked eggs my wife and I had ever eaten. The rest of the morning was spent walking over the remainder



STEYERMARKMOBILE (ca. 1958)

of the grounds before we all began the long drive back to Carbondale.

From mid-March to late April, 1958, Steyermark enthralled me with stories of his experiences. I was particularly excited about his re-discovery in 1957 of the very rare and little known Geocarpon minimum. This species had been found originally in Jasper County in 1913. This remained the only known station until Steyermark had rediscovered it in St. Clair County in 1957. My nagging at Dr. Steyermark to show me Geocarpon paid off. He agreed to take Dr. Voigt and me with him on a three-day excursion to see if we could discover additional stations for this dwarf rarity.

We left Carbondale on May 2, heading in the general direction of Springfield, Missouri. Leaving Cape Girardeau, we stopped briefly at the Bollinger Mill and then headed into the Ozarks. Up and down lettered and double-lettered county highways, past Shortleaf Pine Woods, over clear, rock-bottomed streams we went, Steyermark pointing out species right and left. We made frequent stops, usually after an enthusiastic comment such as "Wait! There's a county record." I tried to absorb all the species as fast as I could, but Steyermark never relented. We screeched to a halt in Bollinger County, pulling off the road next to a steep, wooded cherty slope. Julian asked if any of us had ever seen the little sedge, Scirpus verecundus. We replied in the negative, and off we went down the slope. Scirpus verecundus was not known from Bollinger County, but Julian was optimistic, saying that this slope looked just right for the little plant. In what could not have been more than five minutes, the woods echoed Steyermark's voice: "Whee! Over here. I've found it!" Scrambling over the treacherous chert, Dr. Voigt and I made it to the kneeling botanist who crouched over a four-inch tall tuft of green. I had seen my first Scirpus verecundus, and I was never to forget the habitat. Some fifteen years later, while exploring in Alexander County, Illinois, I camp upon a similar steep, cherty slope. Recalling my earlier experience, I began to comb the woods and was rewarded by making the first discovery of Scirpus verecundus in Illinois.

By late afternoon we had reached Dallas County and were heading along Route 43 when Steyermark observed that the little chickweed on the road shoulder looked peculiar. On closer look, the plant indeed was different from anything we had ever seen. We learned later that the plant was Cerastium pumilum, a new record for Missouri.

We persisted beyond supper and into the duskiness of twilight. By dark, we were still on the road. I began to understand how Steyermark had been able to canvas every square foot of Missouri in thirty years--he never stopped to rest. I saw my first Ozark tarantula, scurrying across the road in the glow of our headlights. Finally we stopped for camp at about 9:30, reeling from the vast amount of information imparted by Dr. Steyermark.

We arose early on May 3, in anticipation of seeing Geocarpon. We had entered Polk County near Graydon Springs when Dr. Steyermark announced that we had arrived at a likely looking spot for Geocarpon. It was a glade on a west-facing sandstone escarpment next to Coates Branch, a tributary of the Little Sac River. We quickly found Isoetes butleri, Talinum parviflorum, and Arenaria patula, species known to be associated

with Geocarpon at its other stations. Then, in a small, moist depression on the glade, we spotted it--dwarf, two inches tall, semi-succulent. At this stage, the plants were wine-purple in color. Once we knew what we were looking for, we began to spot another, and another and yet another. Our discovery marked the third known location for Geocarpon in the world!! On the same glade, I also saw for the first time in my life Selenia aurea, Saxifraga texana, and Collinsia violacea.

Our spirits were buoyed by these discoveries. We hastened into Green County and stopped at a likely looking sandstone glade near Pearl. We noticed Selenia aurea and Saxifraga texana from a distance and, more closely, Isoetes butleri. It surely would be just a matter of time. Sure enough, the wine-purple plants of Geocarpon minimum became evident after we had wandered into an adjacent glade. I don't recall how many specimens there were but I would think there were dozens of them.

As we were hopping over the glade in our couched positions, we happened upon a small plant previously unknown from Missouri. It was Scleranthus annuus, the Awlwort of the Caryophyllaceae.

With our success in finding Geocarpon, we headed into Dade and Cedar counties, stopping at several glades. Much to our consternation, we couldn't find Geocarpon at any of them. By late afternoon, we started back to the east where we had planned to camp at beautiful Alley Springs. Darkness caught us again while still on the rolling hills of the Ozarks. The night scarcely slowed up Dr. Steyermark as he continued to name roadside plants as our headlights struck them. "Andropogon elliottii," he shouted once, as we whizzed by a clump of two-foot tall grasses. Most people have trouble identifying this species in the daylight with the specimen in front of them, but Steyermark's identification was right on the money.

We got to Alley Springs at last. The long eventful day was conducive to good sleeping, and I scarcely noted that I was spending the first night of my life atop a hard, slatted picnic table!!

Next morning we were soon on the road, finding more goodies. About two miles west of Piedmont along Highway 34, we found Cerastium brachypetalum, the third collection of it in Missouri. Near Cape Girardeau, we discovered our second station for Cerastium pumilum. Since the afternoon was young, Dr. Steyermark expressed a desire to go into Perry County to a deep ravine he had had his eyes on for years. The ravine was new collecting ground for Julian, and he took his plant press with him. He is the only botanist I have ever been in the field within the United States who carries his press with him. Most of use use plastic bags or tin cans (vascula), and our semi-wilted specimens are proof of it. Steyermark had custom-made his own press with a hinged back that opens like a giant book. Our visit to the ravine netted nearly a dozen records for Perry County.

We got back to Carbondale early in the evening, finishing a three-day red-letter trip I will never forget.

Reprinted from Missouriensis
Volume I, No. 3, 1979

THE WINTER LANDSCAPE

With the advent of winter in Missouri, anyone interested in botany has to put that interest into hibernation. You can plan for a little winter beauty in your yard and garden to see you through until spring. Many natives and cultivars are available which either have interesting twig shapes or colors, evergreen foliage, bright berries or even winter flowers. Here are a few choices.

For plants with interesting shapes, the Corkscrew Willow (*Salix matsudana* 'Tortuosa') wins hands down. The branches spiral and twist on this graceful tree making a unique silhouette against the snow. Any of the "weeping" trees, cherry or crabapple, make an unusual landscaping item especially close to the house. Their compact size, usually not more than 6 ft. tall enhance the landscape design and reward the viewer in spring with their showy floral display.

The needled evergreens add pleasing shapes and color to the yard through the winter. Several, like yews and junipers, have berries which add interest to their use in the landscape not to mention food and cover for wildlife. Broad-leaf evergreens like Azaleas, Rhododendrons, Wintergreen Barberry, Leatherleaf Viburnum and Yucca spp. are woody ornamentals which require little care and are relatively free from insect and disease problems.

Trees and shrubs which retain berries over the winter are not only a source of winter color but also vital to wildlife. American Holly (*Ilex opaca*), the traditional holiday decoration plant, is a good choice for a northern exposure. A Missouri native, the Deciduous Holly (*Ilex decidua*) drops its leaves but retains the handsome red berries it bears. Any type of Hawthorn (*Crataegus* spp.) will give a colorful show of orange berries as will any of the Cotoneaster species. Some of the best bird food sources are Dogwood (*Cornus florida*), European Mountain Ash (*Sorbus aucularia*), Autumn Olive (*Elaeagnus umbellatus*), American Cranberry (*Viburnum americanum*) and Fire Thorn (*Pyracantha coccinea*).

The Siberian Dogwood (*Cornus alba* 'Sibirica') is a shrub overlooked as a landscape plant. Its bark is bright red and, when seen in the snow, provides an appealing display. Other choices in the Dogwood group are *C. sericea*, a darker red shrub, and *C. sericea* 'Flaviramea', a bright yellow version.

There are a couple of plants which flower during the winter. The Christmas Rose (*Helleborus niger*), a member of the Buttercup family and not really a rose, bears large, free-blooming white flowers even in snow. These should be planted in a protected spot near the house out of west or north winds and given summer shade. Mulch and water them deeply during heat and drought. Witch Hazel (*Hamamelis vernalis*) a winter flowering shrub will begin putting out yellow-orange curling flowers on mild days in January and continue blooming through February.

MONPS



Holly
Ilex opaca

HOLIDAY GIFTS THAT LAST ALL YEAR

Stumped about what to give this season? Out on a limb over choosing gifts? Let us plant a few notions!

GIFT MEMBERSHIP IN MONPS -
Mo. Native Plant Society
PO Box 6612
Jefferson City, Mo. 65101

Mo. Dept. of Conservation gift items:

Natural Events Calendar - \$3.50 + tax

Outdoor Missouri Map - free

Woodworking For Wildlife - free

Missouri Hiking Trails - \$2.50

Missouri Ozark Waterways - \$1.50

Field Guide To Missouri Ferns - \$3.50

Wild Edibles of Missouri - \$5.50

A Key To Missouri Trees In Winter - \$1.50

Missouri Orchids - \$4.00

Butterflies and Moths of Missouri - \$13.50

Wildlife area posters and maps - free

Hunting and Fishing Permits - varies

Headquarters

Missouri Department of Conservation
P O Box 180
Jefferson City, Mo. 65102

Kansas City Office

8618 E. 63rd St.
Kansas City, Mo. 64133

St. Louis Office

1221 S. Brentwood Blvd.
St. Louis, Mo. 63117

Springfield Office

2630 North Mayfair
Springfield, Mo. 65803

Missouri Prairie Foundation Coneflower Pin

\$4.00 ea. - MPF Christmas Sales
PO Box 200
Columbia, Mo. 65205

Wildflowers of Arkansas by Carl Hunter

Order from - The Ozark Society Foundation
PO Box 3503
Little Rock, Ar 72203

Growing and Propagating Wildflowers

Harry R. Phillips
North Carolina Botanical Garden
3375 Totten Center
UNC-CH Chapel Hill, NC 27599

Wild Edible Plant of the Prairie

An Ethnobotanical Guide - Kelly Kindscher
University Press of Kansas
329 Carruth
Lawrence, Ks. 66045

Flora of the Great Plains

Great Plains Floral Association
University Press of Kansas
329 Carruth
Lawrence, KS 66045



CHRISTMAS CACTUS
Schlumbergera Bridgesii



EASTER CACTUS
Rhipsalidopsis
Gaertneri

MONPS

KANSAS CITY CHAPTER NEWS

The members of the KC Chapter have been enjoying a number of fine meetings and field trips lately. Even though the Kansas City area is still over 11 inches short on rainfall this year, we've not lacked in interesting excursions.

During October, Debbie Brink, Naturalist at Burr Oak Woods presented a program on fruit and seeds at our regular monthly meeting. We're accustomed to relating a certain fruit or nut type to a plant that the actual seed is overlooked. A follow up trip to Burr Oak the following weekend coincided with "A Day In The Woods", an event held by MDC that thoroughly covers all aspects of woodland ecology and the wildlife therein. Burr Oak had just dedicated their new Bethany Falls trail which winds for three miles through the wooded natural area and prairie.

Later in the month, Mike Laird, KC vice president, lead a trip through Bluff Woods in Buchanan Co. October 30, Linda Ellis met members of MONPS from Columbia and Ron Papsdorf from Wallace St. Park (Clinton Co.) with an eager crew of volunteers from the Sierra Club for another prairie plant salvage on Pittsburg-Midway Coal Co. property. We were directed to a new piece of prairie this time. Several pounds of warm season grass seed was collected along with perennial root stock for establishment of a new prairie habitat at Wallace. Columbia chapter members chose plants for a prairie restoration on the Univeristy of Missouri campus at Columbia. If you've ever tried to dig up a compass plant, you can easily see how prairie perennials can survive the mid-west heat and drought. The tap roots are as big around as your arm and go down to China.

Our November meeting featured Greg Hoss, Assistant District Forester at Burr Oak Woods who gave us a fine program on winter tree identification. He brought copies of "A Key To Missouri Trees In Winter" (Klomps-Dennison) and specimens for us to work over. Thanks again to Greg for his help.

We won't have a meeting in December due to Holiday Hysteria but will resume our regular schedule in January. Happy Holidays to all from the Kansas City Chapter.

CORRECTION

Due to circumstances beyond our control, the September-October issue of Pctal Pusher was wrongly labled November- December.

Additionally, please see the correct dates for submission of newsletter material on the last page.

The Editors

OFFICERS

President
Douglas Ladd
The Nature Conservancy
2800 S Brentwood
St Louis MO 63144
314-968-1105

Vice-President
Karen Haller
618 Spring Meadow Drive
Ballwin MO 63011
314-227-5693

Secretary
Lynda Richards
HCR 35
Box 263
Rolla MO 65401
314-364-4501

Treasurer
Mervin Wallace
Route 2 Box 373
Jefferson City MO 65109

Immediate Past President
David Castaner
Department of Biology
Central Missouri State U
Warrensburg MO 64093

Appointed Advisor
Paul Nelson
Missouri Department of
Natural Resources
PO Box 176
Jefferson City MO 65102
314-751-2479

Jefferson City
Mr. Herb Domke
RR 2 Box 364
New Bloomfield MO 65063

Columbia
Bill Clark -
3906 Grace Ellen Dr.
Columbia MO 65202

MEMBERS OF THE BOARD

Patrick Delozier
8817 Everett
Kansas City MO 64138
816-7656326

Wallace R Weber
Department of Biology
Southwest Missouri State U
Springfield MO 65804-0095
417-816-5883

Linda S Ellis
911 W 48th St #105
Kansas City MO 64112
816-561-7732

Bill Summers
PO Box 6975
St. Louis, MO 63123
314-843-2399

Joanna Turner
166 N. Brentwood
St. Louis, Mo. 63105
314-727-9029

Louise Wienckowski
1423 N. Summit
Springfield, Mo. 65802
417-865-9903

MONPS NEWSLETTER (PETAL PUSHER)
CO-EDITORS

Linda S Ellis

Sue Hollis

CHAPTER REPRESENTATIVES
ALSO MEMBERS OF THE BOARD

Kansas City
Sue Hollis
3311 Gillham Rd
Kansas City MO 64109
816-561-9419

St. Louis
Dotty Epstein
1017 Winwood Dr
St Louis MO 63124

MISSOURIENSIS EDITOR

Paul L. Redfearn Jr
Department of Biology
Southwest Missouri State U
Springfield MO 65804-0095

MISSOURIENSIS EDITORIAL
COMMITTEE

David Castaner
Douglas Ladd
Nancy Morin

APPOINTED COMMITTEE
CHAIRMEN

Field Trip
Ken McCarty
Dept of Natural Resources
PO Box 176
Jefferson City, MO 65102
314-751-2479

Membership
Virginia Wallace
Missouri Department of
Conservation
PO Box 180
Jefferson City MO 65102
314-751-4115, ext 198

Missouri Flora Atlas
Wallace Weber

Kirksville
Dr Mel Conrad
Department of Biology
Northeast Missouri State U
Kirksville MO 63501

Springfield
Carol Fuller
PO Box 194
Boliver MO 65613

NOTICE: The following is the schedule for
submission to the newsletter. Material
received after the deadline may not be
included.

Jan-Feb

Jan 1