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...
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 Geocarporn minimum. This species had been found originally in Jasper County in 1913. It was the only known station until Steyermark had rediscovered it in St. Clair County in 1957. My nagging at Dr. Steyermark to show me Geocarporn paid off. He agreed to take Dr. Voigt and me 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: "Wheel Over here. I've found it!" Scrambling over the trecherous 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 darkness 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.

The next morning, on May 3, we scoured the ozark country in anticipation of seeing Geocarporn. We had entered Polk County near Graydon Springs when Dr. Steyermark announced that we had arrived at a likely looking spot for Geocarporn. 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, Juncus parviflorum, and Arenaria patula, species known to be associated with Geocarporn 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 Geocarporn 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 Greene County and stopped at a likely looking sandstone glade near Pearl. We noticed Selenia aurea and Saxifraga texana a distance and, more closely, Isoetes butleri. It surely would be just a matter of time. Sure enough, the wine-purple plants of Geocarporn 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 coughed positions, we happened upon a small plant previously unknown from Missouri. It was Scleranthus annuus, the Awiwort of the Caryophyllaceae.

With our success in finding Geocarporn, we headed into Dade and Cedar counties, stopping at several glades. Much to our consternation, we couldn't find Geocarporn 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 eliottii," 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 (vassula), 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 returned to Carbondale early in the evening, finishing a three-day red-letter trip I will never forget.

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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 aucuparia), Autumn Olive (Eleagnus umbellata), 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.

**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**
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PO Box 6612
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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 Pappadof from Wallace St. Park (Clintion Co.) with an eager crew of volunteers to the Sierra Club for another prairie plant salvage on Pittsburgh-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 University 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 midwest 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" (Klomp-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 Factual Pusher was wrongly labeled November - December.

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

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

Jan-Feb Jan 1