



JULY-AUGUST

Volume 3 Number 3, 1988

May + June

UPCOMING EVENTS

- July 12th, Tuesday, 7:30 Kansas City
Regular meeting at the 291
Extension office. Contact
Linda Ellis for info. 472-
0227
- July 16th, Saturday, 3:30 PM Jeff-
erson City- 2nd Annual
Potluck Picnic at the
Wallace Ranchette. Call
Ginny Wallace for info.
- July 17th, Sunday, 10:00AM Spring-
field - Picnic, swimming
and business meeting. Meet
at the west loading dock at
SMSU Campus. Call Louise
Wienckowski for info. 869-
8074.
- July 30-31 Eastern Native Plant
Alliance Meeting. Ashville
N. Carolina. Contact Kay
Yatskievich if you are in-
terested in attending to
represent MONPS - 314-776
8501.

ANNUAL SYSTEMATICS SYMPOSIUM

The Missouri Botanical Gardens Annual Systematics Symposium will be held Oct. 7-8, 1988 in St. Louis. This year's topic will be "Conserving Biological Diversity". For information and registration materials, contact Dr. Gerrit Davidse, Missouri Botanical Gardens, PO Box 299, St. Louis, Mo. 63166. Registration is limited to 400.

OBSERVATIONS NEEDED
by Merv Wallace

Crown vetch is an exotic legume that is frequently planted along highway rights-of-way and on other steep slopes. It has been and continues to be recommended for bank stabilization. It is fairly slow to establish, but once established continues to grow and spread. Crown vetch is recognized as a seriously invasive weed in Illinois where it has become established in remnant prairies. I have watched a patch I planted several years ago (before I knew better) spread further and further into the adjacent woods, and I'm having trouble keeping it out of my roadside flower bed.

Recently, I was checking out a small creek in Boone County where I found crown vetch growing on every gravel bar as well as on the stream banks. Crown vetch usually grows in full sun but here it was growing in partially shaded areas. I was 1 to 2 miles downstream from where the creek crosses Highway 63, and it is likely the crown vetch occupied every gravel bar from the highway to where I was and beyond.

The use of crown vetch must be stopped. In order to convince the powers that be, however, we need to document situations like the one I found where it has escaped. If you have seen or do see these situations, please let me know. Likely places to check are where streams cross highways, or where prairies are adjacent to where crown vetch has been planted. Please send information about these sites to Merv Wallace, 9815 Pleasant Hill Rd., Rt. 2, Box 373, Jefferson City, MO 65109.

ANNUAL AWARDS PRESENTED

The MoNPS annual awards were presented at the Society's annual meeting June 4. This year's recipients were Dr. Alice Nightingale, Mrs. Frank Lowry, and Joanna Turner.

Dr. Alice Nightingale received the Erna R. Elsendrath Memorial Education Award. She is a retired Professor of Botany from School of the Ozarks, Point Lookout, MO. Dr. Alice has inspired many, many students during her tenure at S of O, and continues to do so long after her retirement. She established a herbarium at the school, and authored The Compositae of the White River Ozarks Area which was published in 1984. Dr. Alice is a charter MoNPS member. Congratulations Dr. Alice!

The Stewardship award was presented to Mrs. Frank Lowry, owner of Lowry marsh. This important community was recognized by Greg Gremaud during a Department of Conservation Natural Features Inventory in northwest Missouri. It is essentially undisturbed and is the most significant marsh in northwest Missouri. Mrs. Lowry has preserved the Marsh in memory of her husband.

Joanna Turner is the recipient of this year's Research award. For the past several years Joanna has worked diligently in the library of the Missouri Botanical Garden researching nomenclatural changes for plants covered in the Flora of Missouri. She has been working with George Yatskievych on the revision of the Flora since he began that project last August. In addition, Joanna has been an active MoNPS member since the beginning, serving a term as Secretary and also serving terms on the Board.

Congratulations to all three recipients for your contributions to Missouri botany.

WORKS IN PROGRESS

The Aquatic and Wetland Vascular Plants of the Northern Great Plains, by Gary E. Larson, to be published by the US Forest Service.



UNIVERSITY OF KANSAS (KANU) HERBARIUM

The University of Kansas Herbarium was established in 1873, but its holdings have increased nearly seven-fold since the mid-1960s under the guidance of the present director, Dr. Ronald McGregor. KANU is an important resource for the study of the Great Plains flora and served as the primary source of data for the recently published Flora of the Great Plains (1986). The Herbarium is housed in its own building of 7000 square feet and contains more than 325,000 specimens of vascular plants, 7000 mosses, 7500 fungi, as well as extensive seed and paleobotanical collections. Facilities in the Herbarium building include a fully-equipped wet lab for electrophoretic and chemosystematic studies, a photographic darkroom, and germination and growth chambers. Associated facilities include a greenhouse and experimental gardens. Current herbarium staff includes a director, curator, secretary, graduate student assistant, and several undergraduate assistants. KANU is one of the Systematic Museums of the University and is closely associated with the Kansas Biological Survey and the Department of Botany.

from the Flora of North America Newsletter



ELECTION RESULTS

Election results were announced at the recent annual meeting. Joanna Turner and Louise Wienckowski were elected to three year terms ending in 1991.

PUBLICATIONS - RECENT

from Flora of North America Newsletter

Guide to the Vascular Flora of Illinois, rev. ed., by R. H. Mohlenbrock (1986)

The Illustrated Flora of Illinois: Flowering Plants: Smartweeds to Hazlenuts (1987)

Both published by Southern Illinois University Press, PO Box 3697, Carbondale, IL 62602

WELCOME TO NEW MEMBERS

Graydon & Anna Mae Ballard, St. Louis
Helen Belshir, St. Louis
Donna Belshe, Warrensburg
Dale & Jill Bergerhofer, Pleasant Hill
Greg & Barbara Carson, Jefferson City
Carla & David Dods, Weatherby Lake
Laura Georgi, Columbia
Eddie Graven, Kansas City
Cerise Harris, Kansas City
Jane Helbig, Hazelwood
Ann Henning, Kearney
Peter Hoell, Eureka
Natalia Howard, Independence
Karen Joyce, St. Charles
Suzanne Kent, Kansas City
Steve Klenc, Jefferson City
Richard Novy, Raytown
Richard Savage, Jefferson City
Ruth Scott, Baldwin City, KS
Florence Sly, Belleville, IL
Kay Stewart, Hartsburg
Missy Tucker, Kansas City
Virginia Van Voorst, Raymore
C. Robert & Margaret Wells, Kirkwood

HEALTH AND SAFETY

The other day I visited my doctor for a minor checkup. She noticed multiple bruises and abrasions, right next to the mosquito bites and poison ivy, and asked how I got to be in such condition. I explained field trips and assured her this was my normal spring through fall appearance. She grabbed my body and stuck a nasty needle into it. And lectured me on health and safety. It sounded good so I'll pass it along.

- Get your tetanus vaccination. We do poke a lot of holes in our bodies and that shot you had in seventh grade won't last forever.
- Carry some first aid supplies with you; if nothing else, a few bandaids.
- Keep preventative items in whatever luggage you take or in your vehicle - sun screen, bug spray, sunburn treatment, extra socks, etc.
- Review those first aid techniques you learned a long time ago.

We haven't had a serious accident on a field trip. So let's prepare ourselves for the possibility and then enjoy the field.

--Sue Hollis



APRIL FIELD TRIP TO ROARING RIVER

Field trips scheduled in connection with the spring board meeting began the morning of April 23rd in Roaring River State Park with Ken McCarty leading a trek over the steep terrain of Devil's Kitchen Trail. The trail is only 1.5 miles long but has a surprising diversity of plant communities because of the underlying rocks: dolomite at the bottom, then shale and limestone, and chert at the top. These formations were exposed by erosion from the White River drainage system, and the "kitchen" was formed by the wearing away of shale underneath massive blocks of limestone. The following is a list of some of the plants we saw:

Joanna Turner

Delphinium tricorne	Woodsia obtusa
Rhamnus lanceolata	Smilacina racemosa
R. caroliniana	Quercus prinoides
Aesculus glabra	Q. rubra
A. pavia	Q. stellata
Asarum canadensis	Q. alba
Anemone thalictroides	Coreopsis palmata
Osmorhiza longistylis	Sisyrinchium campestre
Polemonium reptans	Ulmus alata
Dodecatheon meadia	Cunila origanoides
Botrychium dissectum	Tilia americana
Sanguinaria canadensis	Fraxinus quadrangulata
Dentaria laciniata	Lindera benzoin
Podophyllum peltatum	Acer saccharum
Phlox divaricata	A. negundo
P. pilosa	Staphylea trifolia
Tradescantia ozarkana	Sedum sp.
Cercis canadensis	Viola sororia
Ostrya virginiana	V. pedata
Trillium viride	Oxalis violacea
Amelanchier arborea	Baptisia leucophaea
Uvularia grandiflora	Arisaema triphyllum
Cacalia mühlenbergii	A. dracontium
Ranunculus hispidus	Vaccinium vacillans
Symphoricarpos orbiculatus	V. stamineum
Asimina triloba	V. arboreum
Geum vernum	Verbena canadensis
Geranium maculatum	Astragalus mexicanus
Camassia scilloides	Juniperus virginiana
Amsonia tabernaemontana	Andropogon scoparius
Lithospermum canescens	Nothoscordum bivalve
Cornus florida	Corallorhiza wisteriana
Viburnum rufidulum	

MONPS

ROARING RIVER GLADE

Part of the morning was spent exploring Roaring River Glade, which sits high above the river and opens on spectacular views of the deeply dissected Roaring River Hills. Having been burned this winter, this glade was positively bursting with fresh spring growth. Highlights included several species with southwestern affinities such as ashe's juniper (Juniper ashe's), supple-jack vine (Berchemia scandens), trelease's larkspur (Delphinium treleasei), buck brush (Andrachne phyllanthoides), and american aloe (Agave virginica). Young growth of the endemic yellow coneflower (Echinacea paradoxa) abounded, and the blue false indigo (Baptisia australis) was just beginning to flower.

Ken McCarty

Plants identified included:

Botrychium virginianum	Cercis canadensis
Ophioglossum engelmannii	Oxalis violacea
Notholaena dealbata	Andrachne phyllanthoides
Juniperus ashei	Rhus aromatica
Juniperus virginiana	Ilex decidua
Andropogon scoparius	Berchemia scandens
Danthonia spicata	Hypericum sphaerocarpum
Allium mutabile	Viola pedata
Camassia scilloides	Viola triloba
Nothoscordum bivalve	Opuntia compressa
Smilax bona-nox	Oenothera missouriensis
Agave virginica	Apocynum cannabinum
Hypoxis hirsuta	Lithospermum canescens
Sisyrinchium campestre	Verbena canadensis
Comandra richardsoniana	Castilleja coccinea
Arenaria patula	Ruellia humilis
Anemone thalictroides	Cacalia tuberosa
Delphinium treleasei	Coreopsis lanceolata
Sedum pulchellum	Echinacea pallida
Baptisia australis	Silphium laciniatum
	Silphium terebinthinaceum

PINEY WILDERNESS

Saturday afternoon, we drove to Piney Wilderness, one of the six designated wilderness areas in Missouri. Piney is very pristine, no camp grounds or tourist attractions. The only development is an abandoned forest tower, one major hiking/riding trail and a couple of old foundations.

The Piney Wilderness area was so designated because of a contained water shed, that is to say, all rainfall eventually joins to flow into Tablerock Lake south of Cape Fair. The complex of high quality glades, oak/hickory forests and deep shaded ravines makes an incredibly rugged terrain. The topographic map of the area resembles a lace pattern.

Piney is known for its population of Collared Lizards. One individual was quite cooperative and allowed photographers close enough for some good shots. We were all interested to find a few yellow paintbrush growing on the steep sides of the first glade complex.

Linda Ellis

PLANT LIST FROM PINEY WILDERNESS

Ailanthus altissima	Phlox pilosa
Rhus radicans	Petalostemum purpurea
Echinacea purpurea	Viola pedata
Antennaria plantaginifolia	Andropogon scoparius
Myosotis virginica?	Castanea ozarkensis
Helianthus hirsuta	Delphinium Treleasei
Rhus aromatica	Camassia scilloides
Vaccinium stamineum	Coreopsis palmata
V. arborea	Cynoglossum sp.
Rosa carolina	Castilleja coccinea f. coccinea
Lonicera flava	C. coccinea f. lutescens
Sassafras albidum	Arenaria patula
Frunus serotina	Rudbeckia sp.
Quercus marilandica	Oenothera missouriensis
Crataegus sp.	oxalis violata
Aster patens	Erigeron sp.
A. anomalus	Anemone thalictroides
Rhus glabra	Trillium viride
Lespedeza capitata	Uvularia grandiflora
Asclepias quadrifolia	Opuntia compressa
Ranunculus Harveyi	Ruellia humilis
Specularia sp.	Silphium laciniatum
Zizia sp.	Tradescantia Ernestiana?
Silphium terebinthinaceum	Fragaria sp.
Ranunculus sp.	Asplenium rosiliens
Geranium maculatum	A. platyneuron
Ostrya virginiana	Notholeana dealbata
Cercis canadensis	Cheilanthes feei
Juniperus virginiana	Pelleae glabella
Buck brush	Cystopteris bulbifera
Celtis tenuifolia	Botrychium virginianum
Satureja sp.?	Woodsia obtusa
Sedum pulchellum	Nothoscordum bivalve
Ophioglossum sp.	Dodecatheon amethystinum
Rudbeckia missouriensis	Baptisia australis
	Verbena canadensis
	Lithospermum canescens

Following the evening board meeting park naturalist Merle Rogers presented a program on the natural history and geology of Roaring River State Park. He told the group many interesting facts about the park, including its history, natural areas, geological features, and diverse flora, including Juniperus ashei and the rare Tradescantia ozarkana. He also showed slides, and the setting was idyllic, in a beautiful outdoor amphitheater.

FIELD TRIP TO BUZZARD'S BLUFF

The last field trip during the April 23-24, 1988 MONPS weekend was to Buzzard's Bluff in St. Clair, Co. Our group left Roaring River State Park in Barry Co. at 8 a.m. Sunday April 24 and met Wallace Weber in Springfield. Weber was substituting for Paul Redfearn who had organized the trip but was unable to come.

From Springfield we drove 50+ miles north to the town of Collins at Highways 13 and 54. We turned west on Hwy 54 to Hwy V. Then left or west again on Route 2 through partially wooded and open farm land. At a widened clearing we parked in preparation for a walk in oak-hickory woods to Buzzard's Bluff or Buzzard's Roost in some references. After walking 1/2 hour and identifying plants in the woods we could see clearings through the trees in the west. Some climbed the back part of the bluff which was wooded, Sue Hollis and I chose to explore a narrow sandstone ledge below the sheer vertical cliff of the Bluff above. When we joined the group a short time later we found the features at the top of the bluff which make the area so unique.

On top is a long narrow bare sandstone ledge overlooking the Sac River far below. At varying widths from the edge starts the vegetation of stunted pygmy blackjack oaks, with some northern red oak, and a few black oaks. We did a double-take at first seeing the trees - thinking we were walking along a row of shrubs. But at closer look we were in the company of short, waist-high mature, full grown trees - little pet trees, little bonsais! Among the trees are mosses, lichens, farkleberry, blueberry and cedars. After exploring and identifying for a time some of us left for our trip home, happy to have made the trip.

MONPS

Wally Weber gave us printed reference material which explains the phenomenon of the pygmy forest - an abstract dated 1980 by the Ecological Society of America. The two authors of the abstract, Peter Reich and Thomas Hinckley explain, as the paper is titled, water relations, soil fertility, and plant nutrient composition of a pygmy oak system. What happens on the bluff of Buzzard's Bluff is weather extremes of hot and cold, very little water, very shallow soil, very little soil nutrients and the presence of toxic aluminum. The little forest manages to stay alive - period.

by Pat Grace

Footnote: Refer to Paul Nelson's excellent book "The Terrestrial Natural Communities of Missouri", pages 117 and 118 for photo and text of this site.

BUZZARD'S BLUFF

Steve Klenc

Achillea millefolium
Petalostemum villosum
Talinum teretifolium
Andropogon scoparius
Corydalis aurea?
Collinsia verna
Viola kitaibelliana
Drigla virginica
Crucifera aurea var. silenea
Spergularia canadensis
Rhus aromatica
Baptisia leucophaea
Oxalis violacea
Aster patens
Potentilla simplex

Podophyllum peltatum
Antennaria neglecta
Viola pedata var. bicolor
Amelanchier arborea
Hypericum perforatum
Asclepias quadrifolia
Viola triloba
Cheilanthes lanosa
Cystopteris bulbifera
Asplenium platyneuron
Woodsia obtusa
Commandera richardsonii
Arenaria patula
Dodecatheon Meadia
Isoetes butleri
Saxifragia texana

WANTED

I would like to obtain seeds of:

Ipomea coccinea - red morning glory
Echium vulgare - viper's bugloss

If you happen upon seeds of either of these plants, I would really appreciate receiving them.

Sue Hollis

Flora of Missouri, by Steyermark. This book is out of print but was used as a textbook at Columbia and Springfield, possibly other places. Copies may surface now and then in garage sales, used book stores, etc. If you find one, please buy it and let us know. There are several people who need it.

Sue Hollis

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2800 S Brentwood
St Louis MO 63144
314-968-1105

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618 Spring Meadow Drive
Ballwin MO 63011
314-227-5693

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Missouri Department of
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Jefferson City MO 65102
314-751-2479

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Kansas City MO 64138
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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 6075
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

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Kansas City MO 64109
816-561-9419

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1017 Winwood Dr
St Louis MO 63124

MISSOURIENSIS EDITOR

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Department of Biology
Southwest Missouri State U
Springfield MO 65804-0095

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Missouri Department of
Natural Resources
PO Box 176
Jefferson city MO 65102
314-751-2429

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

Missouri Flora Atlas
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Department of Biology
Northeast Missouri State U
Kirksville MO 63501

Springfield
Carol Fuller
PO Box 194
Boliver MO 65613