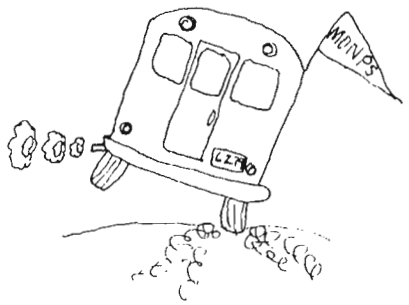
MISSOURIENSIS

The Journal of the Native Plant Society of Missouri

VOL. I NO. I SUMMER, 1979

IN THIS ISSUE...



We're rolling!

WE ARE OFFICIAL!!!

After several meetings effectively mid-wived by state officials, the Native Plant Society of Missouri was officially born on June 2, at a meeting called by Dr. Jim Wilson, Endangered Species Coordinator of the Missouri Department of Conservation. This first organizational meeting was held in Fulton, and attended by about 60 interested people, from many parts of the state.

Prior to this meeting, an Ad Hoc Steering Committee had met in Jefferson City on March 30, to draft Bylaws which were circulated among persons on a mailing list of potential members of the embryonic Society, in a Newsletter sent out in April. Copies of this Newsletter can still be had from Dr. Wilson, on request. At the June 2 meeting, the proposed Bylaws were accepted, with the following corrections:

Article VI, Sec. 5, pg. 5 was changed to read "presence of 6 voting members."

Article VII, Sec. 3, pg. 5 was rewritten to clarify procedures of nomination.

After the Bylaws had been approved (with these slight changes), 2 resolutions were introduced as possible amendments to same: the 1st, that there be seated on the Board of Directors, either as a voting or an ex-officio member, a representative of the Missouri Botanical Garden; the 2nd, that the same representation be give to a member of the Natural History Section of the Department of Conservation. Both resolutions were accepted, but with the proviso that the amendments be made ONLY after careful consideration by the elected members of the Board of Directors of the Society.

The members of the Board were elected from a slate of nominees published, with the proposed Bylaws, in the Newsletter sent out in April, except for one member who was nominated from the floor, at the June 2 meeting. For all of those on the original slate, short biographies were also furnished in the April Newsletter, and are available from Dr. Wilson. The duly elected officers and members of the Board of Directors are as follows:

President	Jon Hawker
Vice President	Edgar Denison
Secretary	Paul Nelson
Treasurer	James H. Wilson
Editor	Erna R. Eisendrath
Directors:	
(3 years)	John Karel
	Robert Mohlenbrock
(2 years)	Melvin Conrad
	Mary Wiese
(1 year)	Arthur Christ
	Kenneth Olson

A FEW WORDS OF GRATITUDE...

We of the plant society owe a special debt of thanks to the Department of Conservation for its sponsorship of our group. We are especially indebted to Jim Henry Wilson, and to John Wylie for their interest, assistance and support in nurturing the initial sensitive growth stages of the society. Without their devotion and enthusiasm, we would never have been able to begin such a viable organization in so short a time. The people of Missouri thank these two gentlemen: they recognized the need, felt by botanists and all other lovers of our flora, for just such a state-wide effort as that expressed tersely in Article I of the Bylaws.

We reprint Article I below; if you agree with what <u>it</u> expresses, you will join <u>us</u> in expressing gratitude to Jim and John; and you will rally to support of MONPS* immediately.

> The purpose of the Native Plant Society of Missouri is to promote the preservation, conservation and study of the wild plants and vegetation of Missouri, the education of the public to the value of the native flora and its habitat, and the publication of related material.

*Sorry; it does sound ominous when spoken, but our title forms this acronym, and I guess we're stuck with it! (Ed.)

A NEIGHBOR SPEAKS UP...

The guest speaker at our meeting in June elaborated most interestingly on these stated purposes. Dr. Robert H. Mohlenbrock, Chairman of the Botany Department at Southern Illinois University in Carbondale, recently elected President of the Southern Appalachian Botanical Club, and now a member of the Board of Directors of MONPS, lectured on "Native Plants and Their Preservation," posing three questions, to each of which he gave answers that were directly to the point, and often amusingly phrased.

First, why should one be interested in native plants? We all know answers to this, but Mohlenbrock admitted that some of them are very personal: such, for instance, as his own "life list" which is undoubtedly very long, and each addition to which gives him a great thrill. Even the commonest plants can be extremely interesting when one first comes to know them, but it is, of course, the rarities which are most exciting to find. Though such finds have not earned Mohlenbrock a Nobel Prize, he confesses that they do give him "goose bumps"; and, he went on to emphasize, information about such plants can be a great importance in the compilation of state, county, or even overall information about the distribution of plants.

The preservation of natural areas can also bring enormous satisfaction, especially if the area itself has been first so designated by oneself; this is still quite possible to do, as many parts of our state have not yet been intensively studied by botanists.

Finally, Mohlenbrock spoke of the joy of sharing information about botanical finds, but admitted that, at times, the joy is preceded by less positive emotions...as, for instance, when some of his own work requires redoing because of botanical finds by others. (A case in point is the discovery of a plant (see pg. 7 below) alive and well in Missouri, despite the fact that our state was not included in Mohlenbrock's description of its distribution.)

Second, how can the individual contribute to an organization such as MONPS? Mohlenbrock emphasized that one need NOT be a professional to make such contribution, and gave several suggestions as to how any of us could undertake a botanically useful project: the study of the life history of a single species of plant could, for instance, be very helpful in decision making about whether the plant is either rare or endangered; listing all the plants in a given area could be useful in future environmental studies; exploration for areas hitherto not known to be of botanical interest could give obvious rewards; donating time and energy to satisfy the endless requests for lectures, slide-shows, or leading field trips would yield satisfaction to oneself, and educate people hungry for such information. In any such undertaking, Mohlenbrock strongly emphasized that one should aim high! The seemingly impossible (such as his undertaking to publish a complete Flora of Illinois) often becomes possible if one keeps shooting at it.....

Third, what can an organization such as MONPS do as a group? One answer was self-education as a group, by organizing state-wide field trips, or becoming better acquainted with people who share our interests; another answer was that we could be extremely influential in lobbying at the state, or even the federal level, for issues directly or indirectly related to conservation. And, finally, Mohlenbrock strongly emphasized the need for a means of communication, not only among our own membership, but among professionals and/or amateurs in Missouri and near-by states; many of the older botanical publications have become "uppity" about publishing material that could be of great interest. This, of course, is where we hope that "Missouriensis" will play a role.

...SO DOES THE PRESIDENT

Immediately upon hearing of the results of the June 2 election, I rushed to my Amy Vanderbilt to see just what a newly elected President of a newly formed native plant society should say in a newly created newsletter. She was no help whatsoever. I can only hope my supporters have not suffered from total overestimation of my abilities.

We have an opportunity to begin any number of extremely vital and long overdue activities involving the plants of Missouri. The scope of these activities should necessarily be broad to reflect the broad backgrounds and interests of the many people we hope to see active in the society. The strength of this society will result from the high interest and enthusiasm of a wide diversity of contributors. If one ecological theory holds water, our group has the potential for high productivity and high stability as a result of this diversity.

I think that diverse organizations frequently become splintered into smaller special interest groups, each marching to its own drummer. The more diverse the organization, the more small groups may result. This is not necessarily undesirable and it ultimately may lead to a greater number of tasks being accomplished with a greater degree of expertise. At this stage in the evolution of the Missouri Native Plant Society, however, I think it imperative to clearly establish a few main goals and to move together to accomplish these. We need to establish a sense of group consciousness and a strong society identity during these formative years. As our society grows and matures it will become more appropriate and we will be better able to attack a wider range of issues.

At this point, I believe that our two greatest tasks will be the establishment of a system for determining the status of the plants of Missouri and the education of the citizens of Missouri as to the importance of the results of that systematic analysis. There are many other activities in which we can become involved in the near future, but I believe these tasks interest virtually all the members and provide a focal point for the society's period of development.

Suggested activities for the society have included the following:

1. Research in early publications that include material about the local flora.

2. Research in modern publications that include material about plants native to the state, or "imports."

3. Surveys of areas in which various members live; this could be readily related with Steyermark's Flora, with the objective of bringing it up to date.

4. Complete listings of the flora in public areas such as State or County parks; publication of such listings in conjunction with warnings against digging or picking plants could serve our educational institutions, as well as our own purposes.

5. The Society might consider photographic contests, as a way of recording local flora.

6. The "natural history" of given plants, and their ecological roles could be studied to great advantage.

7. Particularly in urban centers, a valuable 2-headed project would be the education of the public in the edibility of "weeds" which were probably introduced to this continent as food...i.e. Portulaca oleracea, Chenopodium alba, etc. As things now stand, the public gripes when governmental agencies don't destroy such "weeds",...

We actively solicit other ideas from all interested parties.

I hope to be able to help the Missouri Native Plant Society grow and become a vital cooperative union of all people interested in Missouri plants from whatever point of view. I feel honored to have been thrust into this position and will work to warrant the trust placed in me.

Jon L. Hawker, President

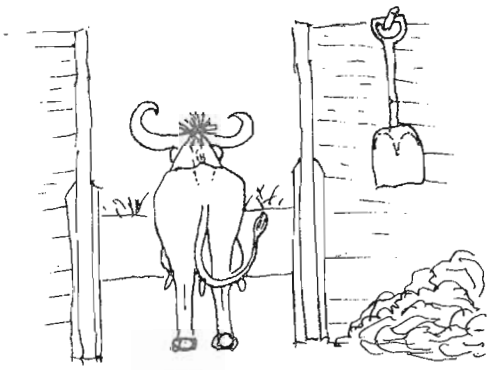
* * * * * * *

AN OPENING CHALLENGE ...

Our Vice President, Edgar Denison, also has something to say, in the following article, in which he challenges us to answer the question

WHERE DO THEY GROW?

Our newborn Society is about to undertake a super-job of the magnitude of cleaning the Augean stables, accomplished by one, Mr. Hercules (of glade fame!) who "cleaned" the deposits of 3,000 head of cattle, which had not been removed in 30 years. Our job is nicer and more esthetic, but we will have to labour, while Hercules (in the days before environmental impact statements!) had only to divert a river through the stables....This job of ours may be called AN INVENTORY OF THE PLANTS OF MISSOURI.



Let's all dig in!

An inventory is necessary because we simply do not have the knowledge which is needed to evaluate the status of our flora; although Steyermark's monumental Flora of Missouri includes just about every plant to be found growing in the state, without the aid of man, nonetheless, the author goes no farther than to represent the presence of a given species by a dot on the county maps of distribution. We are given no information about the quantitative presence of the plant. Was there one specimen, or were there hundreds?

Furthermore, Dr. Julian Steyermark depended not only upon his own field experience, but also upon various herbaria, in which many of the specimens had been collected 100 or even more years ago. Are the plants still there? The situation is of course exaggerated in St. Louis County, now pretty well paved over, its railroad rights-of-way well sprayed with herbicides....but such vast changes are not reflected in the great Flora that has been the botanical bible for Missourians in the last several decades.

Yes, we did once have Orchis spectabilis growing near Creve Coeur Lake.....

and Iris virginica could once be found in luxuriant abundance, where Interstate 44 now crosses low areas in the vicinity of Valley Park.

.....

But that was "once upon a time," and is no more. The Flora of Missouri took many years to compile, and it is safe to say that the data is at least 30 years old, 30 years during which many changes have occurred in the state, resulting in vast changes in the distribution of its vegetation.

What, then, do we need? We ask our members, professional and amateur, to report to the editor of "Missouriensis" whatever they find and believe to be other than quite common. This is a broad request, and needs interpretation. Residents of a given area may not realize that a plant that seems common to them may be quite unknown in other parts of the state. Sambucus pubens f. pubens (commonly known as the "Red-berried Elder," although its fruits do not have a secure monopoly on this color) is a case in point. It is a plant found generally in the area around Hannibal, but not in other parts of Missouri; if this, or other plants, is reported as uncommon, when this is not necessarily true, no harm has been done; it is better to take the chance of erring in this direction, than to miss reporting what may well be a rare find!

Sambucus pubens f. pubens

Listed below are the details that would be valuable in such a report:

1. Botanical name
2. Locality
3. Approximate number of specimens observed
4. Habitat (open woods, ravine bottom, north-facing slope, in full sun, in running water, geological formation, etc. etc.)
5. Date of observation
6. Plant in flower, fruit, etc.
7. Plants associated with specimen reported
8. Person who identified the species (if other than the reporter)
9. Has reporter observed plant in area in previous years?

10. Ph factor of the soil (for those who have meters; if you are not one of them, DON'T WORRY. This can easily be checked at a later date)
11. Photographic record (preferably a transparency, but again DON'T WORRY if you cannot furnish a slide; but a print, preferably in color, should then be supplied if this is at all possible)
12. Any other pertinent information

We hope to supply regular forms for such reports in the near future; in the meantime, if you have made a find, or finds, don't hesitate to send the information, informally, to the editor (Erna R. Eisendrath, Biology Department, Washington University, St. Louis, 63130). A collection of such data over the years will enable us to establish a plant inventory for the state, updating Steyermark's work, and immeasurably helping the people who are interested in perfecting their lists of rare and/or endangered species, so that such plants can be given adequate protection. YOUR HELP IS ESSENTIAL, IF WE ARE TO SUCCEED. (Editor's note: the long list of details we would like to have about your plant finds DOES NOT include collecting the plant; our worthy Vice President obviously feels that any member of the Society would realize that this is a fundamental "no, no." We...in the editorial sense...would be most unhappy and uncomfortable if this appeal resulted in the receipt of actual plant specimens. PLEASE bear this in mind!)

* * *

...AND SOME QUICK RESPONSES

FRENCHES SHOOTING STAR
(Dodecatheon frenchii) revealed in Missouri
by Paul Nelson

The season is late spring, the month May, year 1979, behind us a laborious walk into a wild territory little visited by man. Before us a grand harmonious view of oak-pine forest broken by a sheer seemingly invincible fortress of cliff, chasm, and canyons of sandstone obscured by a most pleasing and successfully recovered forest. After several moments of sharing impressions, Greg Iffrig and I descended, with care, gentler slopes to explore these deep canyons, unaware of a great botanical discovery only imagined to have been contemplated by Steyermark himself.

There are those, I'm sure, that passed it by unaware. One may have noticed its most strange habitat requirements. A shooting star among luxuriant stands of cinnamon fern, hay-scented fern, and lady fern, in all instances most restricted to the very lowest of sandstone ledges and shelves kept moist, humid, and cool in the darkness of north-facing overhangs, often even pendulant from some fissure beneath a most darkened headhigh overhang, its small drooping oval to heart-shaped petioled leaves recurved toward reflected light on a south exposure of sandstone bluff, or the amber clear waters of a deep plunge pool. Even more remarkably, as I have seen it in Illinois, this delicate shooting star prospered on the most irreplaceable of finely textured sand having accumulated at each bluffs base by centuries of sifting and falling from the sandstone bluffs and ledges above. At such time and on this warm spring day, in an instant of thoughtfully searching my mindful index of our states flora, I accepted and voicefully celebrated the discovery of Frenches Shooting Star. Among these serene canyons, such celebration was known far and beyond.

In sharing this experience, I hesitate to reveal a most definitive account of its precise location. Its habitat I consider most precious and pristine; its environmental requirements precise; and most importantly, its worth as a species new to Missouri a most substantially regarded scientific resource in a well molded naturally undisturbed setting yet sliced and exploited by progress. However, its numbers, its associates, its distributional status, and validity to location are recorded for the scientific record and publication. To those of us dedicated to preserve this greatest of genetic strongholds for Dodecatheon frenchii, I ask in your inquiry to be most cautious and conserving in revealing and viewing this most sensitive of places.

The reasons are familiar to all of us. Most of the other localities for this geographically and ecologically restricted species in Illinois, Indiana, and Arkansas are of degraded condition. At best its status can be considered tenuous. The soft, delicate, deep sands at the canyon bluffs base, have been long packed hard by intensive visitation. Many plants are fewer - or gone. Even a careless few, unknowingly, could deal considerable, irreversible damage to Missouri's most treasured refuge for Frenches shooting star.

* * * *

On June 5 and 6 of this year, John Wylie (Natural History Officer of the Missouri Department of Conservation) and his colleagues Richard Thom (Natural Areas Coordinator), Ginny Klomps (Botanist), and I visited the chert Osage glades of Newton County, at Joplin. Although extremely dry for late spring and early summer, quite a profusion of bloom was evident. Nuttall's Sedum (Sedum nuttallianum) and the species of the same genus commonly called Widow's Cross (S. pulchellum) were exceedingly abundant, as was the Fame Flower, Talinum calycinum. Other plants of wider distribution and blooming everywhere in the area included the Prickly Pear (Opuntia compress), Tickseed (Coreopsis lanceolata), the Venus' Looking Glass, Specularia leptocarpa.

Sedum nuttallianum S. pulchellum

The truly unusual find of the trip was a population of Barbara's Buttons (Marshallia caespitosa), completing its peak of bloom on one of the glades.

After visiting a number of sites, it was determined that two or three offered unique habitats in good condition, and worthy of possible inclusion in the Natural Areas System. Contacts and negotiations with property owners are to commence in order (hopefully) to preserve forever these one-of-a-kind natural communities.

Jon Hawker

Marshallia caespitosa

Although our actual membership is as yet quite small (and we strongly urge all to join and PARTICIPATE) a survey of our potential membership taken directly from the initial mailing list shows fairly wide representation across the state. We realize that this represents a very incomplete view, but until membership rolls expand, it is all we have on which to base our initial planning. We hope that all of you will not only contact people you think might be interested in the society's aims, but will please send us names and addresses so that we can contact them through Missouriensis.

Since you are already on our mailing list we know that you want to see our native plants and the environments in which they live preserved: BUT at last counting fewer than 60 of you interested citizens had sent in their dues! We cannot assemble and distribute information and important news about findings in the state without a budget for printing and mailing. Please help us along. We have the opportunity to produce a truly valuable commodity-- knowledge about our state flora. Join us. Regular dues, established in Article IV of the Bylaws, are $5 per year, but, needless to say, larger amounts will be more than welcome! Please fill out the form below.....and mail it as soon as possible to our Treasurer, Jim Henry Wilson, Missouri Department of Conservation, P.O. Box 180, Jefferson City, Missouri 65102.

WHERE ARE YOU???

Missouri Native Plant Society

Membership Form

Name _____

Address _____

City _____ State _____ Zip _____

Enclosed is my contribution to the welfare of Missouri plants in the amount of_____

We are sure you know of other people who would also be interested in the goals and aims of the society. We would like to see that they also receive the Missouriensis. Please list their names and addresses on a separate sheet and mail to the same address....this will help all of us interested in getting MONPS off to a good start in life!

ABOUT THIS ISSUE...

At the June 2 meeting it was voted to give a name to what has been called the "Newsletter" in previous communications about MONPS; and it was agreed to adopt the Latinized version of our state's name, as it is found in specific epithets. After perusing Steyermark's index we find 4 different spellings, applied to 15 plants in 11 plant families. Fortunately one such spelling is by far the most common: "missouriensis" is or has been used in conjunction with species of Arabis, Aster, Heuchera, Oenothera, Physalis, Rudbeckia, Salix, Solidago and Viola. (Today, however, the epithet is no longer valid in the case of Aster, now A. ontarionis, or Salix, now S. eriocephala.)

The suffix "ensis" is legitimatized in Stearn's Botanical Latin as the proper nominative singular adjectival suffix, applied to either masculine or feminine nouns, and denoting either origin (i.e. "hortensis", of gardens) or place (i.e. "kewensis," from the Royal Botanic Gardens at Kew). Obviously this was the form of the adjective for us to use as the title of our publication; but you may be interested in knowing the other forms of "Missouri" used in the names of other plants.

The similar spelling, missouriense, is legitimatized by Stearn as the nominative singular adjectival suffix applied to neuter nouns. Today we have a Chenopodium and a Ribes missouriense, as well as a form of Vaccinium vacillans spelled in the same way. We have here an interesting project for someone to pursue: why did Aellen, Nuttall and Ash, respectively, choose this form of the adjective in the plants so named?

Bailey chose a 3rd form, naming a species of the confusing Bramble complex Rubus missouricus, grammatically correct, as this, too, is a proper nominative singular adjectival suffix relating to a noun with this masculine ending. It is also interesting to learn from Steyermark, who gives us the common name of the plant as Prickly Groundberry, that it is known only from Missouri!

The 4th form is again botanically and grammatically correct, as the suffix ends in the same way as do the generic names of Euphorbia and Vernonia; but Rafinesque, who named both species, used the form missurica!

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This issue of Missouriensis is brought to you through the efforts of its contributors and its zealous editor, Erna Eisendrath. We hope that what still appears to be a newsletter at this point, will grow (thanks to contributions about Missouri flora, research, floral lists, etc. from you, the membership) into a full-fledged, but not "uppity", journal of the sort Dr. Mohlenbrock spoke of as badly needed. Hence the name "Journal" in the title. The style of the title and illustrations are obviously subject to change, and we urge your input on what you'd like your journal to look like. The Rhus radicans and Echinacea paradoxa represent extremes. We may even be able to rotate species with a "missouriensis" epithet through the title page. We're very flexible at this point.

* * * * * * * *

M E E T I N G

There will be a meeting of the Board of Directors at Montauk State Park on Saturday, September 1, at 10:30 a.m. The meeting is open to all.

AND ABOUT OUR FUTURE

Missouriensis is nothing and will be nothing without written contributions from the people of the State of Missouri. Any information about the plants which you can share is not only greatly appreciated but highly encouraged. As is obvious from our present contents, these need not be scholarly, thesis-type articles. Lists of plants in areas you have visited, observations of life histories, data on rare or unusual plants are all vitally important and increase our knowledge and awareness. Share these experiences with all of us; and consider this a very serious CALL FOR PAPERS. The Bylaws include nothing about the number of times a year MONPS' publication should appear; but it won't appear at all unless YOU take sufficient interest in its fulfilling the role that Dr. Mohlenbrock described as one of the major contributions an organization such as ours could make.

* *

As noted above, the next Board meeting will be held at Montauk State Park on Saturday, September 1, at 10:30 a.m. As described in the latest "blurb" of the Department of Natural Resources, there is a meeting room that is ideal for conventions and retreats, so we hope the meeting will be so well attended as to resemble a convention (or retreat?) of plant lovers; do come yourself, and bring the rest of the family as well.....Montauk has 42 picnic sites, 147 "basic" camping sites and 63 that are "improved", with electricity, laundry and even facilities that are accessible by wheelchair! There are also 25 cabins and 16 motel units, with a dining room accessible to wheelchairs!

And what will the family do while you are attending the meeting? The Park (over 1,000 acres of it!) surrounds 7 clear, cold springs that belch forth 40 MILLION gallons a day of the clear, cold water that forms the headwaters of the Current River. We don't dare say more for fear that you won't spend any of your time at our meeting! ....But we'll try to make it short, and interesting enough that you'll be glad you came, and will still have time left over for hiking, fishing....or just relaxing. Montauk is 21 miles southwest of Salem, on Missouri 119, in Dent County. See you there!

WANTED

INFORMATION ON THE FOLLOWING

	FAMILY	SPECIES	COMMON NAME	COMMENTS AND FLOWERING TIME
	Brassicaceae	*Draba aprica*	Whitlow grass	Woodland valley. May 1.
*	*Brassicaceae*	*Lesquerella filiformis*	bladder-pod	Glades. April-May.
	Caryophyllaceae	*Geocarpon minimum*	none	Sandstone glades in damp spots. April-May.
	Fagaceae	*Castanea ozarkensis*	Ozark chinquapin	Chestnut blight. May-July.
*	*Orchidaceae*	*Isotria medeoloides*	small whorled pogonia	May be extirpated. May.
*	*Poaceae*	*Calamagrostis insperata*	Reed bent grass	On bluff on Indian Creek near Holy Cliff. June-August.
	Saxifragaceae	*Heuchera missouriensis*	alum root	Limestone bluffs. Halls Bluff, 4 miles south Kime. July-August.
	Asclepiadaceae	*Asclepias meadii*	fragrant milkweed	Prairies and glades. May-June.
*	*Asteraceae*	*Boltonia asteroides var. decurrens*	false starwort	Wet sites. July-October.
*	*Ericaceae*	*Vaccinium vacillans var. missouriense*	black huckleberry	Fruits ripen June-July.
*	*Fabaceae*	*Amorpha brachycarpa*	none	Limestone glades. May-August.
	Lauraceae	*Lindera melissifolia*	pond berry	In water and wet sites. Steyermark lists as *Lindera melissaefolium*. Late March-early April.
*	*Liliaceae*	*Trillium pusillum var. ozarkanum*	Ozark wake robin	Late April.
*	*Malvaceae*	*Callirhoe papaver var. bushii*	Bush's poppy mallow	May-August.
*	*Orchidaceae*	*Cypripedium candidum*	Small white lady-slipper	Late April-early June.
*	*Orchidaceae*	*Habenaria flava v. flava and v. herbiola*	pale green orchid	Late May-September.
*	*Orchidaceae*	*Habenaria leucophaea*	prairie white fringed orchid	Swales in prairies. June 10-July.
	Orchidaceae	*Habenaria peramoena*	purple fringeless orchid	Low, wet woods. Late June-August.

	FAMILY	SPECIES	COMMON NAME	COMMENTS AND FLOWERING TIME
*	*Poaceae*	*Muhlenbergia schreberi var. curtisetosa*	muhly grass	July-November.
*	*Poaceae*	*Sporabolus neglectus var. ozarkanus*	bald grass	Glades. August-November.
*	*Ranunculaceae*	*Delphinium treleasei*	Trelease's larkspur	Glades. May-June.
*	*Rosaceae*	*Neviusia alabamensis*	snow wreath	April.
*	*Rosaceae*	*Rubus missouricus*	prickly groundberry	April-June.
	Scrophulariaceae	*Penstemon cobaea var. purpureus*	purple beard-tongue	Glades. May-June.
	Saxifragaceae	*Sullivantia renifolia*	None	North facing bluffs of limestone or sandstone and along streams. Rare and scattered. May-June.

* * * * * * * * * * * *

These plants are on the Smithsonian threatened and endangered list. Those with an asterisk are ones on which we have not had much information for many years (in some cases since Steyermark!). If you have any information on these plants please let us know. Info should include location (legal description is best), estimated population size, habitat description, and associates, if known. The more we know about these the more successful our efforts for protection will be!

Ginny Klomps, Botanist
Natural History Section