UPCOMING EVENTS

August 11, Tuesday, Kansas City Chapter monthly meeting: Patrice Dunn 781-8598

August 15, Saturday, Kansas City Chapter Salvage project field trip to Pittsburg-Midway Coal, Bates Co.

August 15, Saturday, Jefferson City Chapter; 8:30 AM Field trip to member Jack Stanford's farm near Brazito. Meet at MDC parking lot.

August 27, Thursday, St. Louis Chapter Meeting. "St. Louis Then and Now" by Ginny Wallace.

September 1, Tuesday, Jefferson City Chapter. Monthly meeting at 7:30 PM - MDC headquarters. Program TBA.

September 2, Wednesday, Springfield Chapter: Buiek St. Forest. Meet at Temple Hall, west loading area, 1:00 PM. Carl Hauser: 887-9711.

September 8, Tuesday, Kansas City Chapter monthly meeting Patrice Dunn, 781-8598.

September 19, Saturday, Jefferson City Chapter. 8:00 AM Day long field trip to several prairies in the Sedalix area.

September 21, Monday, Springfield Chapter: Knabb Nature Center. Meet at Temple Hall, 5:00 PM. Dave Catlin: 881-5102.

September 24, Thursday, St. Louis Chapter monthly meeting: "Southwestern Missouri: Then and Now" by Doug Ladd.

September 26 & 27, Saturday, MoNPS State Board Meeting and field trip to Ted Shanks Wildlife Area. Details inside.

October 3, Saturday, MO Dept. of Conservation's Day on the River. Call your local MDC office for details.

October 6, Tuesday, Jefferson City monthly meeting at MDC headquarters.

October 17, Saturday, Springfield Chapter. Hercules Glade trip. Meet at Temple Hall 9:00 AM. Louise Wiencechowski: 831-4474.

October 17, Saturday, Jefferson City Chapter. Field trip to Pickle Springs Natural Area. St. Genevieve Co.

NEW WILDFLOWER FILM AVAILABLE

The Department of Conservation has produced a new film called Blooming Secrets, which explores the lives of wildflowers native to glades, prairies, and forests. The film looks at the insects and birds that pollinate these plants, and the many ways they are attracted to the flowers.

This 16 minute film replaces Our Springtime Wildflowers, an older movie which is no longer available. It is an excellent film and would make a good program for chapter meetings. It is available on a free-loan basis and comes in 16 mm film, 3/4-inch video and 1/2-inch (VHS) video. To schedule the film, please contact: Film Librarian, Missouri Department of Conservation, P.O. Box 180, Jefferson City, MO 65102.
FALL BOARD MEETING DETAILS

Saturday, September 26 (note date change)

9:30 am  Board meeting, Ted Shanks Wildlife Area Headquarters.
Noon    Lunch (bring one or find a place on your own).
1 pm - 7 Field trip to Prairie Slough Natural Area. Meet at Ted Shanks Wildlife Area Headquarters by 12:30 in case the Board meeting ends early. Be prepared to get wet and muddy.

Sunday, September 27

8:30 am  Field trips to DuPont Upland Forest Natural Area (Pike Co.) and Steyermark Woods Natural History Area (Hannibal). Meet at pullout on the east side of Highway 79 at the DuPont Area, about 18 miles south of Hannibal (see map). Note: will involve hiking steep slopes.

Lodging is available in Hannibal (19 miles north of the Shanks area) at a variety of motels including the King's Inn, Hwy 61 at Market (across from the Holiday Inn), (314) 248-1700. Summer rates are $48.00 single and $50.00 double (rates will probably be somewhat lower by the meeting date).

CHAPTERS – Remember to send your representative to this meeting.

ABOUT THE AREAS

Prairie Slough Natural Area is a 406-acre portion of Prairie Slough Wildlife Area, featuring wet and wet-mesic bottomland forest, shrub swamps and backwater sloughs. Shellbark hickory and pin oak dominate the wet-mesic bottomland forest, while bur oak, pecan, sycamore, persimmon and hackberry are also present. This area is home to the rare rose turtlehead, Chelone obliqua var. speciosa which may be in bloom when we visit. The wet bottomland forest includes pin oak, cottonwood, pecan, silver maple and other tree species. Buttonbush and Ward’s willow grow in the shrub swamp. Prairie slough itself is permanent water and was a chute of the Mississippi River at the turn of the century. Sixty-one species of fish have been recorded from the Mississippi in the general vicinity, and most of these are permanent or seasonal inhabitants of Prairie Slough. All in all, Prairie Slough Natural Area is one of the best examples of an unaltered wetland complex in the Big Rivers Natural Division.

DuPont Upland Forest Natural Area is a mixed, upland hardwood forest and small limestone glade along the Mississippi River, with a rich spring flora and spectacular fall color. Basswood, northern red, white and chinquapin oak, and sugar maple are common overstory trees. Steep limestone bluffs dominate the northern part of the Natural Area. Far below are the cove hardwoods (cove refers to the mainhollow’s deep indentation into the hills). In addition to the trees listed above, the cove is
home to jack-in-the-pulpit, wild ginger, bloodroot and Christmas and maidenhair ferns under an under-story of pawpaws and bladderworts. In addition to the plants, we may see some of the red-tailed and Cooper's hawks and many species of ducks which migrate down the Mississippi River Valley.

Steyermark Woods Natural History Area is located within the city limits of Hannibal. This area contains about 600 feet of the Bay de Charles Bluff, a steep bluff with limestone ledges and talus slopes facing the Bay de Charles of the Mississippi River. The bluff slope is forested with a mixture of sugar maple, basswood, blue ash, walnut, Kentucky coffee-tree and northern red oak with an understory that includes pawpaw, bladdernut and ironwood. The area was purchased in 1979 from MoNPS member Jean Etreling, and was dedicated in a ceremony attended by Dr. Steyermark in September of that year.

**JEFFERSON CITY CHAPTER NEWS**

The JC Chapter has been having a quiet summer after a busy spring. Many of our members attended Prairie Day at Paint Brush Prairie near Sedalia. Our July meeting is a picnic/field trip to Merv and Ginny Wallace's, and our August 15 field trip will be to member Jack Stanford's farm south of Jefferson City. We are planning longer trips for September and October. We will study fall prairie flora on a trip to prairies in the Sedalia area on Sept. 19 (or 26). On October 17 we will travel to Ste. Genevieve County to hike the trail at Pickle Springs Natural Area. Our regular monthly meetings will resume in September. We meet the first Tuesday of each month at the Department of Conservation Headquarters at 7:30 PM. We welcome and encourage all MoNPS members to visit us. For more specific meeting or field trip times or details call Merv Wallace at (314) 496-3492.

**ST. LOUIS CHAPTER NEWS**

Summer continues for the St. Louis Chapter with an excellent growing year for many species. The regular July meeting featured Father James Sullivan talking about "Interesting Interactions Between Missouri Plants and Missouri Insects". Father Sullivan is a perfect example of how one interest in the natural world can easily lead into another. The follow-up field trip for this program will be a walk at Meramec State Park on Saturday, August 1 starting at the Fisher cave parking area.

The meeting on August 27 will have Ginny Wallace telling us about "The St. Louis Area: Then And Now". It's easy for built-up Metropolitan areas to forget they were once wild, too.

Doug Ladd follows up on this interesting idea for the Sept. 24 program with a talk entitled, "Southwestern Missouri, Then and Now". Doug heads the St. Louis office of The Nature Conservancy and is our chapter's president-elect.

As always, regular chapter meetings are held the fourth Thursday of the month at McMillan Hall on the Washington University campus. Coffee and cookies are served at 7:00 PM, and the program begins at 7:30. November and December are our vacation months. We welcome interested persons.
MINUTES FROM THE ANNUAL MEETING
JUNE 20, 1987

The meeting was called to order by President David Castaner at 6:40 PM at the Lobb Arch Motel Steak House, Cherokee Pass. He began the meeting by thanking Ken McCarty for his fine job in organizing the meeting and field trips. He then announced the following recipients of this year's MOWES awards: Erna R. Eisendrath Memorial Education Award, Virginia K. Wallace; The Missouri Native Plant Society Research Award, Paul W. Nelson; the Plant Stewardship Award, Craig Mackey; and the Julian A. Stayermark Award John Vyle. Castaner announced that Springfield now has an official MOWES chapter, and Wally Weber reported on their new organization. Homer Janssen and Bill Summers, presidents of the Kansas City and St. Louis chapters were there to report briefly on their activities. No spokesmen for the Columbia or Kirkville chapters were present.

Minutes from the meeting of December 6, 1986 were approved as read. The April 11, 1987 meeting consisted only of a field trip to Holly Ridge Natural Area, Crowley's Ridge, with no business meeting on which to report.

Merv Wallace presented the following operational statement for 12/5/86 to 6/18/87: Balance on hand 12/5/86, $5,666.57. Total income (from dues and interest on checking account), $2,257.44; Chapter Seed money, $200.00, meeting refreshments $13.81; dues returned to chapters, $117.00; Grant awards, $140.00; Conservation Federation Missouri dues, $341.00; postage, $177.60; post office box rent, $22.00. Total disbursements, $3,274.85. Balance on hand 6/18/87, $4,370.22.

W. Weber, chairman of the Missouri Flora Atlas Committee, announced that things have been going slowly because of the transfer of data from the Apple computer to a main frame IBM computer, which should speed things up in the future. He hopes to resume publication of new records in the next issue of Missouri Flora. He also hopes to meet the goal of completing an atlas in the next year or two. Castaner requested he set up a meeting of the committee to discuss questions raised at the last meeting.

G. Wallace, Membership Chairman, reported that complete bylaws of the society will be published in the next newsletter. She also requested any members not receiving the newsletter or journal to contact her. This is due to the individual's forgetting either to pay dues or to send a change-of-address notification. Current membership numbers around 400. We now have 6 chapters and Wallace said there is interest in starting one in Cape Girardeau. She requested continued page 5
minded chapters of the need to send a report to the newsletter for the Society. Members often travel to other areas if they have not yet joined their local chapters might be interested. She reminded chapters that they must send a treasurer's report to the state treasurer at the end of each year, as this is required to maintain the Society's tax-free status. Also, archival material such as newsletters and business correspondence should be sent annually to Sue Taylor at the Missouri Botanical Garden.

Ken McCarty, Field Trip Chairman, thanked Wanda and Rod Doolen for their efforts in preparing for and leading the outstanding field trips to Johnson's Shut-Ins State Park, Mill Stream Gardens, and the Castor River Shut-ins. Amison State Forest.

G. Wallace reported that the Awards and Grants Committee, suggesting that this committee be expanded and perhaps combined with the nominating committee. Three grant applications have been received from D. R. Farrar to search for the newly described *Botrychium campestre*; from Linda Ellis for floristic studies in Paddy Creek Wilderness area and in Stone Co., near Tablerock Lake; and for funds for a study of the genus *Sisyrinchium*, which were subsequently returned when the applicant moved out of state.

G. Wallace also announced the recent election results in Nominating Committee. Chairman Sherry Morgan's absence: Doug Ladd was elected President; Kenton Olsen Vice-President; Lynda Richards, Secretary; and Merwin Wallace was re-elected treasurer. Linda Ellis and Bill Summers were elected to the Board of Directors, terms expiring June 1990.

L. Ellis discussed the sample brochure which had been submitted to the Brochure Committee consisting of Ellis, Patrice Dunn, and Sylvia Hein. W. Weber suggested the official MONPS logo might be added to the brochure, and Jim Wilson proposed a window decal be made up from the logo of one of Ellis' drawings. Any comments on the brochure should be sent to Ellis by July 11, and the committee can then make any changes they feel necessary and proceed to get it printed.

The next meeting will be held on Sept. 19 in the vicinity of Ted Shanks Wildlife Area and Du Pont Forest Natural Area, assuming the hunting season will not conflict. The December meeting will be held December 5th at 10:00 AM in Columbia or Jefferson City. The conference room in the Fish and Wildlife office in Columbia was suggested as a possible site.

W. Weber asked what happened to the remaining MONPS patches, and B. Summers thought Dottie Epstein of the St. Louis chapter had them and agreed to find out. Patrick Jordan suggested a letter of appreciation be sent to Sherry Morgan thanking her for all she has done for the Society and a motion to do so was passed by acclamation. Delozier also asked members to watch for running buffalo clover (*Trifolium stoloniferum*), a rare plant which has been reported historically in Missouri. Delozier was asked to write something up for the newsletter so members will know when and what to look for.

Jim H. Wilson announced that George Yatskievych has been hired to work on the revision or update of what will be called *Steyermark's Flora of Missouri.* He will start at the Missouri Botanical Garden on August 15th and will be working directly under Wilson and also reporting to Nancy Morin. He does not want to be isolated from the Society, and any input from members will be welcome. This is not a competitive project with the atlas but rather is a complementary one. Sue Hollis has raised the problem of getting chapter schedules into the newsletter since it is published only in alternate months, and some groups don't plan that far ahead. N. Morin suggested a form be provided to make reporting this information easier. It was also suggested that local groups could call the editors at the Society's expense in order to meet the deadline. Karen Haller expressed thanks to the editors, Ellis and Hollis, for all their hard work and effort in turning out the newsletter, which has an important cohesive effect on the Society.

Dave Costner reflected on his term as president, saying he never felt he had done enough, but Ginny Wallace pointed out that the Society had grown more during his two-year term than at any time since its beginning, and no one could have given more. She thanked him on behalf of the Society for his fine leadership, and new President Doug Ladd said he will try to follow in his footsteps.

Meeting was adjourned at 8:40 PM.

Respectfully submitted,

Joanna Turner
Secretary

Note: Because of limited space in the newsletter, the minutes have been condensed. Complete minutes are available on request.
1987 MNPS AWARDS

The Erna R. Elsendrath Memorial Educational Award is presented to an individual who through teaching, writing, or other form, has significantly conveyed an appreciation and knowledge of Missouri's native flora. This is one of the primary goals of the Missouri Native Plant Society, and this year's recipient of the award has been active in furthering this goal since the society was founded. She has written numerous educational articles for the Native Plant Society journal and newsletter, the Missouri Conservationist, and the Missouri Prairie Journal. In addition, she has co-authored "A Key to Missouri Trees in Winter" and authored booklets on spring wildflower identification courses and has presented educational programs and led botany field trips all over the state. She has been a mainstay of the Native Plant Society at the state level and plays an important role in the formation of local chapters. On top of all this she has somehow found the time and energy to be of invaluable aid to the Missouri Prairie Foundation and the state Garden Clubs. She has succeeded in reaching large numbers of the public and in passing on her enthusiasm for and knowledge of our state flora, and we are happy to present this award to Virginia K. Wallace.

The Missouri Native Plant Society Research Award is presented to an individual who has made a significant contribution to furthering the knowledge of Missouri flora. The award is given this year to the author of the recent publication The Terrestrial Natural Communities of Missouri. This carefully researched and well-written book is an important tool for communication among botanists and other researchers concerned with protecting natural areas, not only in Missouri but in other states as well. By presenting a standardized terminology for describing natural communities he has made consistency possible among workers and students who are interested in understanding and protecting our natural heritage. No one reading the book can fail to have an increased appreciation for the amazing diversity to be found in Missouri. In addition, this recipient previously compiled a significant floristic study of Johnson's Shut-Ins State Park and co-authored a detailed and valuable study of Missouri glades which was published in Missouriensis. We are happy to present this award to Paul W. Nelson.

Mr. Mackoy and his family have owned this property since the 1950's and were aware of the importance of these plants and the need to protect them. Due to their management the land was never disturbed other than by mowing and periodic burns. We are grateful to Mr. Mackoy and his family for their careful stewardship of this rare orchid.

The Julian A. Steyermak Award, the Missouri Native Plant Society's highest award, is presented to an individual who has made outstanding contributions to any or all aspects of Missouri botany. This year's award is made to a person who, although not a botanist by training, has made many significant contributions to the study and preservation of the Missouri flora.

In the early 1970's this individual helped to form the Missouri Natural Areas System, which protects a variety of natural communities throughout the state, including rare and relict plant locations. In 1977 he became chief of the newly created Natural History Section of the Missouri Conservation Department, and here are a few from among the many contributions he has made in that position: he commissioned the Missouri Botanical Garden herbaria survey for rare plants; he was a catalyst for the formation of the Missouri Native Plant Society; he supervised the purchase of areas specifically for protection of rare plants, such as the Pond Berry and the Prairie White Fringed Orchid; he supported the formation of the Heritage Program, which collects data information on rare and endangered plants, animals, and natural communities in Missouri; he saw the need for and hired the first botanist for the Conservation Department, and he encouraged and supported legislation to protect endangered plants.

There are many other examples which show the far reaching influence this individual has had on botany in our state, and we all have reason to be grateful to him. We are especially happy that this award was personally presented to John E. Wylie during his retirement dinner on June 28th by Dr. Julian A. Steyerman, the man in whose honor the award is named.

MONPS ANNUAL MEETING

JOHNSON SHUT-INS TRIP

Wanda Doolen, MONPS member and naturalist with the Department of Natural Resources, led the morning field trip to the East Fork Wild area in Johnson Shut-Ins State Park. She was assisted by geologist Blane Huemann, a seasonal park naturalist. Wanda pointed out the natural diversity of the communities found at the Shut-ins and then led the group for over three hours through many of the communities she had described.

continued page 7
Our first excitement was a close look at a 3 ft. copperhead. Next came leatherwood (Birca palustris) and a large population of Sedum ternatum, an attractive groundcover even when not in flower.

At the first overlook on the Shut-ins trail, Blane explained that "Shut-ins" is a regional ozark term used to describe a narrow, canyon-like gorge formed where a stream channel has been confined by the ancient volcanic bedrock which resists erosion more than the overlying sedimentary rocks. The east fork of the Black River, which carved the Johnson's Shut-ins, drops 60 ft. in it's one mile length. Above and below the Shut-ins wide flood plains are formed.

Interesting plants seen on the rocks there and in the gravel wash community included maidenhair spleenwort (Asplenium trichomanes), button bush (Cephalanthus occidentalis), alder, vernal witch hazel, and winged elm (the state champion Ulmus alata with a circumference of 14 feet is found in the park). The dry, Mesicagneous forest above the trail displayed flowering Maypops (Passiflora lutea), Starry campion (Silene stellata) and Featherbills (Stenanthium grahamii) in bud. A very different plant community was found in the chert and dolomite forests where we saw Enchanted's Nightshade (Circeae quadrifulicata).

Angelica venosa and golden seal (Hydrastis canadensis) in fruit and the leaves of several Twayblades (Liparis lilifolia). Our trek ended on a large dolomite glade which was strongly scented by calamint (Satureja arkanasa). We were all grateful to have had such an interesting field trip through a scenic, botanically rich area.

Joanna Turner

FIELD TRIP TO CASTOR RIVER SHUT-INS
IN THE AMIDON STATE FOREST
TRIP LEADER: ROD DOOLEN
BY PAT GRACE

The Castor River Shut-ins are also called Hahn's Mill Shut-ins. They are located 8 miles east of Fredericktown Mo., and are in Madison Co. I can be reached by taking Hwy 72 east to Hwy J, then south on Hwy W. Take left turns thereafter to the access area. The location is on Sec. 10 of the Higdon 7.5 quadrangle map.

We left the Longhorn Motel south of Fredericktown and got to the shut-ins before 9 AM. The distance is 15.6 miles over paved and good gravel roads, and while driving you can feel the drop in elevation nearing the shut-ins. We parked and walked down a bed-rock path into the wood. Along the way we saw paw-paw and sugar maple trees, moonseed and bloodroot. The path opens onto the upper shut-ins. We turned right and looked east into the morning sun down a beautiful, misty, rocky canyon. The rock is salmon-pink granite and according to the topographical map for the area, the height of the canyon rocks varies from 60 to 100 feet. The stream width is much narrower than Johnson's shut-ins for comparison. The stream flows east, makes a right angle bend, and then flows south.

Some of our group went immediately downstream picking their way over the rocks while others stayed to splash in the pools and to check the plants near by. We stayed until almost noon and before we left, Jim H. Wilson found a collared lizard and persuaded it to stay on one rock until we all had a chance to see and photograph it. A partial list of plants reported for the morning follows:

Ozorhiza Claytoni - Wooly Sweet Cicely
Carex lurida - a sedge
Asplenium platyneuron - Ebony Spleenwort
Penstemon
Houstonia
Dryopteris marginalis - Shield Fern
Talinum - Rock pink
Coreopsis lanceolata
Hypericum gentianoides - pine weed
Crotonopsis elliptica - Rushfoil
Polygala sanguinea - milkwort
Coreopsis pubescens - Star Tickseed
Cephalanthus occidentalis - Buttonbush
Hamamelis - Witch Hazel
Ludwigia alternifolia - seedbox

Field trip to St. Francois State Park
June 21, 1987

Those of us heading for St. Louis decided to stop at St. Francois State Park. At the northern boundary is a calcareous wet meadow where many interesting plants have been found. On this afternoon we found the following:

Castilleja coccinea - Yellow Paint Brush
Cacalia tuberosa - Indian Plantain
Physostegia virginiana - Obediant Plant
Yucca Smilliana - Spanish Bayonet
Liatris pycnostachya
Satureja arkanasa - Calamint
Hypericum - st. John's Wort
Calapogon tuberosa - Grass Pink
Filipendula rubra - Queen of the Prairie
Cypripedium Calceolus - Lady Slipper
Spiranthes lucida - Ladies Tresses
Liparis Lillifolia - Large Twayblade
Plantago cordata - Heartleaf Plantain
Missouri Mycological Society

Missouri has a new wild plant club; the Missouri Mycological Society. Mycology is the study of fungi; it is more dignified to be a "mycological society" than to be a "mushroom club".

The club was first announced in the Missouri Conservationist for Oct. 1986. There are now 40 members, mostly in the St. Louis area. Dr. Kenton Olson, from the School of the Ozarks, is our only professional botanist. However, there are members with decades of amateur collecting behind them -- as well as beginners.

The club twice tried to have a morel foray last spring. However, it was either too cold or too dry and few people found morels. Apparently, some in the St. Louis area had better luck than out-staters. Most Missourians don't need an organized club to look for morels anyhow; they are generally popular and easily recognized. Many Missourians also eat false morels (Helvella spp) although mushroom books usually warn against doing so.

Far fewer Missourians know about the mushrooms that may appear after summer and fall rains. Because summer rains are so localized and dependable, the MMS does not intend to schedule summer forays. Fall rains are more reliable.

For the club's first fall, seven forays are tentatively scheduled. Three will be in the St. Louis area, one north of Columbia, one near Warsaw, one near Rolla, and one in Southwestern Missouri. Some forays will have "dry weather dates". If the weather has been too dry, the foray will be postponed until the following week. Forays are scheduled from Aug. 22d through Oct. 24th. While Dr. Olson is scheduled to lead two forays, all the rest will be led by experienced amateurs.

The long term goal is to have at least one late summer/fall foray in each part of the state; this first year the southeast and northwestern corners are being left out. However, people in northwestern Missouri may find it convenient to attend forays sponsored by the Kaw Valley club, most of whose members are in the Lawrence, KS area.

The first year's dues were set at $15.00 for a regular member and $3.00 for a poverty member. However, you don't have to be a member to go on a foray. Any interested person can come. For some, the main interest is in the beauty of mushrooms; for others, the flavors are more important. Every edible mushroom tastes a little different.

The summer newsletter will include the fall schedule. For a copy, please send your name, address and a postage stamp to:

Philip D. Roos, sec'y-treas,
Mycological Society
517 E. Capitol #2
Jefferson City MD 65101.

Maximum Help Sought For "G. Minimum"

By Robert L. Koenig
Post-Dispatch Washington Bureau
From St Louis Post-Dispatch 6/9/87

It sprouts on sandstone outcrops in secluded sites in Missouri and Arkansas, and it doesn't even have a common name.

But the tiny Geocarpus minimum is one of several rare species of flora and fauna that may end up in a suit between an environmental group and the US government.

Perhaps it is not in quite the same league as the Toadflax cress, the Running Buffalo clover or the Blowout penstemon plants that are on the list of endangered species prepared by the Environmental Defense Fund.

But Geocarpus minimum is Missouri's only representative on the list of 17 rare plants and animals that the environmental group says it's willing to go to court to protect.

The Washington-based group warned the US Fish and Wildlife Service late last month that it will file suit unless G. minimum and the other rare plants and animals are added to the federal endangered species list within two months.

The interior Department has consistently delayed adding species to the federal list following pressure from developers whose projects may be potentially affected," charged environmental lawyer Michael Bean in a letter to Interior Secretary Donald Hodel.

Bean contends that the Interior Department has failed to make timely decisions on protecting rare species such as G. minimum by acting within the time frame set by Congress to consider nominated flora and fauna for placement on the list.

David Klinger, a spokesman for the Fish and Wildlife Service, acknowledged that the agency was behind in making its decision on G. minimum -- the decision was due April 10 -- and the other 16 species. But he said he expects action soon -- in the case of G. minimum, at least.

"We're going to go ahead and list it as a threatened species," Klinger said. He expects G. minimum to appear in the Federal Register as an officially endangered plant within weeks. If so, G. minimum will join 157 plants and 799 animals on the list.

That will come as good news to the Missouri Department of Conservation, which has supported G. minimum's nomination to the federal list and added the plant to Missouri's own list of 400 rare and endangered plants.

One of G. minimum's admirers is Don Kurz, a natural history specialist for the state conservation department who has spotted the inch-tall succulent plant on sandstone outcrops. The plant has been observed at 13 continued page; 8
sites in southwestern Missouri and at
three sites in Arkansas.

"You have to get down on your hands and
knees to identify it," said Kurz, who says
G. minimum sprouts tiny yellow-green
flowers in April. He said the plant's
main enemy appears to be grazing cattle
that trample on the stones and surrounding
soil.

G. minimum was first described in 1914, and
it has been a potential candidate for the
endangered species list for a decade. But it
was not formally proposed for the list
until last year.

Klinger says the delays in processing the
G. minimum and other nominations have been
purely administrative. "I'm not aware of
any big controversy there," Klinger said.

Once G. minimum is placed on the federal
list, anyone who destroys the plant on fed-
eral land would be subject to criminal
penalties of up to one year in jail and a
$20,000 fine.

But that isn't a far-fetched possibility
in the case of G. minimum, because two of
the sites where the plant has been found in
Missouri are on land owned by the Army
Corps of Engineers.

As for G. minimum plants growing outside of
federal land, they had better beware.
"On private land, it's pretty much 'any-
thing goes' for endangered plants," Klinger
said.

"If you shoot a bald eagle or another
endangered animal anywhere, you will be
prosecuted," he said. "But with endan-
ergized plants, the test is whether it's
growing on private or federal land."