President’s Corner

Rich Thoma

Welcome back for another great year of field trips and other natural history activities in WGNSS. Hopefully you’ve had a chance to enjoy your outdoor pursuits and the heat hasn’t slowed you down this summer. Please let me bring you up to date on some the most notable things that have occurred since the June issue of Nature Notes.

Please note that the WGNSS general meetings have moved to a new location. For this fall, WGNSS will meet at the St. Louis County Library, Grand Glaze Branch. Meetings will be either the first Wednesday or Thursday of each month starting at 7:30. Our first meeting of the year will be on Thursday, September 6. George Yatskievych has arranged for Mark Glencoe to speak about Forest Park Owls. See the meeting announcement in this issue of Nature Notes for more details.

Though use of the meeting rooms at Powder Valley are no longer possible, WGNSS would like to thank the Missouri Department of Conservation (MDC) for the many years they have allowed us to use there great facilities.

Last May, WGNSS was asked to participate in a MDC initiative to develop a statewide Grassland Management Strategic Plan. WGNSS was asked to send in our list of the top three to five grassland issues that we would like to see addressed. Over the summer the WGNSS board drafted a letter addressing the issues of most importance to our organization. A copy of this letter can found in this issue of Nature Notes. Other natural history organizations throughout Missouri were also asked to offer their thoughts on grasslands. MDC plans to incorporate as many ideas as possible from around the state into its statewide Grassland Management Strategic Plan. This plan will be submitted for review by all stakeholders this fall.

If, after reading the letter WGNSS submitted, you have additional thoughts, now is the time to bring your ideas to a member of the board.

WGNSS is joining with the St. Louis Audubon Society and other St. Louis natural history organizations in a new initiative called “Bring Conservation Home”. This new initiative is a habitat assistance and certification program for the St. Louis region. As part of the program, trained “habitat advisors” assess residential properties for plant quality (native versus invasive plants), water conservation and wildlife stewardship. The program empowers homeowners to become more conservation oriented as they design and improve their landscapes. As part of the “Bring Conservation Home” program, WGNSS is working at the local level to improve the neighborhoods we live in.

On a somber note, over the summer WGNSS lost one of its very active long time members, Mike Flieg. As many of you know, Mike was unbelievably knowledgeable about birds. If anyone ever had a question about birds, you could go to Mike and he knew the answer. He was the
WGNSS education chair for many years, taking on the responsibility to lead a committee offering scholarships to deserving graduate students in Missouri. Mike also led the efforts to create the Richard A. Anderson Memorial Bird Fountain in the Kennedy Memorial Forest in Forest Park and the Jack Van Benthuysen memorial pond and forest in Tower Grove Park. Mike will be missed by all in WGNSS. A memorial honoring Mike can be found in this issue of Nature Notes.

Be sure to look in this issue of Nature Notes for all of the September activities offered by WGNSS. Late summer blooming flowers offer great field trip opportunities for anyone interested in going on a Monday Botany Group field trip. WGNSS also has several field trips to witness the early fall bird migration. Thursday and Saturday Birding Group trips are taking place throughout September. If you are looking to hear some really great field trip stories, be sure to join the Entomology Group for their Annual Show-and-Tell night. In addition, the Natural History Book Club will be discussing The Immortal Life of Henrietta Lacks at their September meeting. Beyond September, WGNSS is planning to have a natural history photo contest in the spring of 2013. Now is the time to be taking those photos in anticipation of this event. Look to the October issue of Nature Notes for more details. There’s just a whole lot of natural history going on in WGNSS!

**Membership Dues Renewal**

*Paul Brockland*

Now is the time to renew your WGNSS membership. The majority of our memberships expire at the end of August. You can check your membership status in the upper right corner of your address label. If it reads “Exp. 31-08-12” your membership renewal is due now! If it reads “Exp. 31-12-99” you are an Honorary (Life) Member. Some memberships expire at the end of a month other than August; however, we recommend that you renew now anyway so you don’t forget.

It’s easy to renew. Complete the membership application on the last page of this newsletter, write a check payable to “WGNSS” ($15 for Nature Notes by email; $25 for delivery by 1st Class mail), and mail both to:

WGNSS  
P.O. Box 190065  
St. Louis, MO 63119-6065.

Thank you for your continued interest in WGNSS!

**September General Meeting**

*George Yatskievych*

Join us on Thursday, 6 September at 7:30 p.m. for the next general meeting. Please note our new meeting place, the Grand Glaze Branch of the St. Louis County Library, which is just north of Big Bend Road at 1010 Meramec Station Road (immediately east of Highway 141), in Manchester. Our speaker will be Mark Glencoe, who has been observing and documenting the life history and behavior of a pair of owls in forest Park for several years. The title of his program is, “Forest Park Owls: Hiding in Plain Sight.” If you would like to join our speaker for supper at a local restaurant, we will meet in the library parking lot at 5:30 p.m.
April/May Bird Report

David Becher

The trend of a very warm year continued. Many migrant species seemed to arrive earlier than. For migrant insect eating birds in the Saint Louis area this was one of the worst migrations in memory. Other species numbers were more normal and shorebird numbers were outstanding. There was more shorebird habitat than usual in the area in this spring, which undoubtedly helped.

Breeding birds appeared to be fairly normal or even good. Many of the early arriving breeders were already well established by the beginning of the month.

A combination of dull weather which meant no fall-outs, north winds, and spraying for mosquitoes in some parks was probably to blame for the low numbers of many species. Even the very common migrant warblers like Tennessee Warbler seemed to be in very low numbers. Swallow numbers also seemed low. The large flocks normally found at Horseshoe Lake were noticeable by their absence. Reports from other areas suggest that this was a mostly local phenomenon with the birds just avoiding the area.

The usual late migrating and breeding duck species were found in normal numbers along with the usual stragglers. Charlene Malone reported that there was still a female Long-tailed Duck at RMBS on the 8th of April along with several pairs of Hooded Mergansers.

The Thursday group reported a breeding plumage Common Loon on Creve Coeur Lake on April 6th and Charlene Malone reported another on the 8th at RMBS. On the fourteenth three Common Loons of which two were in breeding plumage were found at RMBS and Frank Holmes reported another at Horseshoe Lake in Granite City. Horned Grebes were fairly common as usual. The Malones reported an Eared Grebe on the 21st of April in Ellis Bay. The next day Eric Seaman reported one in the Pipeline Pond area along the Confluence Road. On April 30th, there were three Eared Grebes in amazing breeding plumage in Ellis Bay along with Horned and Pied-billed Grebes. A Western Grebe found by Dan Kassebaum at Carlyle Lake on May 5th was a rather late.

American Bitterns were relatively common this year. Andrew Reago reported one at Pintail Marsh on the 8th of April. It is impossible to know if this was the same bird that was seen by the Saturday group in the same area on the 28th. Another was reported by Rad Widmer on May 1st near Heron Pond.

Least Bitterns appeared at Riverlands around the end of April and the Saturday group found four on the 28th along with the American. Bill Rowe had another on the 22nd at Columbia Bottom. They stayed at RMBS into May, but the areas dried out too early for any chance of their nesting.

Frank Holmes reported his first Snowy Egret at Horseshoe Lake on the 8th of April and the first Cattle Egret on the 13th. Chris Kirmaier reported
that the Yellow-crowned Night Herons returned to Forest Park on the 21st. The presence of some immature birds in the park this year suggests that they were successful in breeding last year.

Christian Hagenlocher reported a Sandhill Crane in the Chesterfield Valley on May 14th, but it apparently did not stay overnight.

On April 14th, a day which had a big bird fall-out at RBMS, the Johnsons found 16 White-faced Ibis in Dragonfly Marsh, which eventually showed themselves to other birders brave enough to face the rainy weather. Frank Holmes reported three more from the Horseshoe Lake area on the 21st.

Black Vultures are now usual along the river south of Saint Louis and are continuing to expand northward. A pair was seen with TVs near the World Bird Sanctuary on the 20th of April. Even further north were three reported by Mick Richardson on 4/29 perched on the Daniel Boone Bridge. In Illinois, one was spotted by Connie

Alwood soaring near Horseshoe Lake near Granite City on May 3rd.

The three Broad-winged Hawks seen and heard at Castlewood by Mike Brady on the 8th of April were his earliest record for the park where they are known to nest and seem very early overall. Frank Holmes had three Mississippi Kites and an Osprey on April 15th at Horseshoe Lake in Granite City continuing the trend for early raptor reports. Another Osprey was seen on the 20th by the Johnsons in a plowed field near Little Creve Coeur. On May 5th one was pointed out at RMBSA by Jackie Chain. Unlike Bald Eagles, Ospreys have not apparently recovered their numbers in this area and remain hard to find.

A Red-shouldered Hawk nested in a tree along the Lost Valley Hiking Trail in April and May. Despite the heavy trail traffic, they appear to have been successful in fledging young.

Bill Rudden photographed a Merlin at Columbia Bottom CA on April 14th. A trip led by Bill Rowe on April 29th at Busch/Weldon Springs had two Merlins in different areas, certainly unusual in Saint Louis.

It was a good year for migrant rails in St. Louis, but less so for the nesting species. Bryan Prather found an early Sora on April 2nd at Creve Coeur Lake. Andrew Reago reported an outstanding sighting of a Yellow Rail among the Soras at Little Creve Coeur on April 8th. Soras were common along the dike at the south end for much of the spring until it got too dry. Rad Widmer reported a Virginia Rail in Pintail Marsh on the 22nd of April.
On the 28th of April, the Saturday group found another Virginia Rail in a small pond near Heron Pond along with large numbers of Soras. It hunted in the short grass for food in front of the group and was very cooperative. Yet another report of Virginia Rail was made by Bryan Prather in Pintail Marsh at RMBS on the 30th. King Rails were notable mostly by their absence, but Andrew Reago reported on at B.K. Leach on May 26th. He also had the only Common Gallinule (formerly Moorhen) report on the same visit.

The early shorebird species were already present in large numbers at the beginning of the month, probably encouraged by the warm temperatures and early emergence of their food species.

This spring was probably a record year for numbers of Long-billed Dowitchers in Saint Louis. Three Long-billed Dowitchers were reported among the large numbers of Pectorals, Yellowlegs, Wilson’s Snipes and assorted ducks at Columbia Bottom on April 8th and there were numbers of them there at Heron Pond during the month. There were over 30 at Heron Pond alone on April 28th. By the 30th in the evening David Becher counted over 130, and Tom Crabtree estimated 200 on May 5th. By the 8th of May, Short-billed Dowitchers were starting to replace the Long-bills, but they never seemed to reach such large numbers.

The 14th of April was a rather rainy day. Little did we know how rare that was going to be this year. It certainly caused a major fall-out at RBMS. Shorebirds found by a number of observers included 22 breeding plumage Avocets, five Marbled Godwits, Dunlin, Long-billed Dowitchers, and a Semipalmated Plover. The same day there was a Black-necked Stilt at Columbia Bottom CA. Bill Rudden also photographed at least eight Hudsonian Godwits in flight in Madison County, Illinois that day. April 18th John Solodar reported 8 Black-necked Stilts at the King’s Lake area of B.K. Leach CA. Two were present at Heron Pond on the 28th. The Johnsons reported a Stilt Sandpiper at Heron Pond on the 20th of April. Mick Richardson found a Willet in among the Yellowlegs at Columbia Bottom CA on the 21st. It stayed for several days feeding on the crayfish along with the Yellowlegs. Tom Crabtree reported 10 Willets at RMBS on May 5th among the storms.

Jack McCall reported a Whimbrel at Watershed Park in Madison County, Illinois on the 22nd of April. On the 25th James Hickner found a Marbled...
and two Hudsonian Godwits at Heron Pond, the Hudsonians remained there for over a week. There were still plenty of shorebirds on May 22nd when James Hickner reported three more Hudsonian Godwits on the Ellis Bay mudflats. Josh Uffman started May with a breeding plumage Red-necked Phalarope in Ellis Bay at RMBS on the 1st. Also on May 1st Rad Widmer reported two Wilson’s Phalaropes at Heron Pond.

Mike Grant reported a Ruddy Turnstone at RMBS on May 14th on the mudflats in Ellis Bay and Rad Widmer refound it on the 18th. In the peep department, White-rumped Sandpipers were relatively easy this year at Heron Pond, while Baird’s seemed harder to find, the opposite of the usual situation. Western Sandpipers are rare here in the spring, but Chrissy McClarren reported one from RMBS on May 12th.

There was breeding plumage Franklin’s Gull on the mudflat with the shorebirds by the side of road at RMBS on April 14th. Mark Paradise found a Laughing Gull at RMBS on May 11th and the next day Josh Uffman reported that there were two and on the 14th the count was up to three. Frank Holmes found a late Bonaparte’s Gull at Horseshoe Lake on the 12th of May. Josh Uffman reported eight Forster’s Terns and Caspian Tern at RBMS on the 15th of April. Least Terns returned to the colony barge at RMBS again this year. The first was reported on May 5th by David Becher. Also seen on May 5th was a single Black Tern flying over Ellis Bay. This species appeared to be very scarce in migration this year. The flocks usually seen at RMBS and Horseshoe Lake were absent. Common Terns migrated through around the middle of May as usual and Josh Uffman had 12 flying over Ellis Bay on the 14th.

There were few reports of Black-billed Cuckoo, but Josh Uffman and Mark Paradise found one in Tower Grove Park on the 19th of May. A roosted Chuck-will’s-widow in Tower Grove Park was an interesting find by Andrew Reago and Chrissy McClarren although they apparently did not realize what it was until Bill told them. Both Chuck-will’s- Widows and Whip-poor-wills seemed fairly common along Rt. F in Saint Charles County in the early hours of May 13th.

Andrew Reago reported a Great-crested Flycatcher on April 20th in TGP. Tom Borman found an Olive-sided Flycatcher along the Lost Valley Trail at Weldon Springs on May 3rd which would appear to be about the third earliest state record for this
late migrant. Western Kingbirds returned to the Saint Louis area in early May. There now appear to be several large breeding colonies in the area. In May, the Scissor-tailed Flycatchers returned to the same tree in Saint Charles County near Highway 40 where they nested last year. Josh Uffman finally found some of us a calling Yellow-bellied Flycatcher in the Gaddy Garden at TGP on the 26th of May.

Bill Rowe had a Warbling Vireo at Columbia Bottom on April 7th, apparently the second earliest record ever for the state. The next day Bryan Prather reported a White-eyed Vireo singing at Weldon Springs CA. The first Bell's Vireo was reported by Bill Rowe on the Blue Grosbeak Trail on the 29th. Philadelphia Vireos are always late and rather scare migrants. Josh Uffman reported one from TGP on May 19th.

The Malones reported a Marsh Wren at Columbia Bottom on the 21st and they were common along the gravel road and at Riverlands for some time after that, although they were a lot easier to here than to see. At Weldon Springs on the 29th, Bill Rowe found singing Sedge Wrens as well as Marsh Wrens.

Mark Mittleman reported a Wood Thrush among the Hermit Thrushes at TGP on April 15th. On April 29th there was a beautiful Veery near Jack's Pond in Tower Grove Park.

Most of the early breeding warblers; such as Northern Parula, Pine, Yellow-throated; were already on territory at the beginning of the month. Bill Duncan reported the first Blue-winged Warbler on April 3rd. Mike Brady reported

Prothonotary Warblers at Castlewood on April 8th. Tower Grove Park produced a Northern Waterthrush at the bubbler for Mark Mittleman on April 15th. The next day Bryan Prather also had an Ovenbird in the same area. On April 17th Josh Uffman found an American Redstart at Meramec State Park in Franklin County, which is apparently the second earliest state record. Charlene Malone reported a single Cerulean Warbler at Castlewood and two Prairie Warblers at Weldon Springs CA on the 17th. Margy Terpstra had a Hooded Warbler in her yard on the 18th of April. Black-throated Green and Tennessee Warblers were reported on April 19th on the Chubb Trail by Pat Leuders and
Scissor-tailed Flycatcher, US40 and Rt. N. Photo by David Becher.

Bell’s Vireo, Columbia Bottom. Photo by David Becher.

Jackie Chain reported Palm and Nashville Warblers at Tower Grove Park. On the 21st, Mike Brady reported 11 warbler species including Worm-eating and Kentucky Warblers from the Castlewood area. April 29th was one of the best warbler days in TGP this spring with at least 15 species including Chestnut-sided and Magnolia Warblers. The SLAS group also had 15 species at Forest Park adding Golden-winged Warbler to the community list. In addition, Frank Holmes added Blackpoll and Yellow-breasted Chat to the list of species for that day.

Additional warbler species continued to arrive, but numbers remained low. Bob Bailey reported that Bay-breasted and Canada Warblers were among the 10 species present in Forest Park on May 5th. Not really a very good total of species for the date. On May 8th, Chrissy McClarren found a “magic” tree in TGP with a large flock of warblers of twelve species including Bay-breasted and Blackburnian. There were also a fair number of Yellow-rumps which seems odd for the date. Unfortunately the magic did not last past that one day. Mike Brady reported two Mourning Warblers at Castlewood on May 13th.

A Scarlet Tanager that Josh Uffman found on the 17th of April at Meramec State Park tied the earliest state record. Two days later Pat Leuders reported a Summer Tanager on the Chubb Trail.

The Thursday group had a Lincoln’s Sparrow at Columbia Bottom on April 6th and more reported there in following days. Mark Wright reported the first Henslow’s Sparrows when he found at least eight at the Blue Grosbeak Trail at Weldon Springs on April 7th. A Lark Sparrow was found by the Johnsons on April 20th near RBMS. Grasshopper Sparrows were singing at Columbia Bottom on the 28th of April. Bill Rowe found a Clay-colored Sparrow among the other sparrows near the Busch HQ on the 29th. Christian Hagenlocher reported another on the Blue-Grosbeak trail on the second of May.

The Thursday group had a Dickcissel on April 6th, which seems remarkably early for this species. Andrew Reago found a Rose-breasted Grosbeak in TGP on the 20th of April. The only Painted Bunting report for the area was a bird that was apparently seen sitting on the guard rail to the rail of the merge from Watson Road to I-270. Unsurprisingly, it was not relocated.

Bill Rowe reported a singing Western Meadowlark at Columbia Bottom on April 7th. Reports of this species in the area appear to have been low this winter. A Baltimore Oriole in Forest Park on the 16th of April was reported by Chris Ferree. The Malones found a Yellow-headed Blackbird on the road railing near Teal Pond on April 21st and it was reported again on the 23rd, but few people were apparently lucky enough to find it. Bill Rowe reported five Brewer’s Blackbirds at Columbia Bottom CA on April 22nd. Bobolinks were hard to find this year. Two were observed flying over at RMBS by Charlene Malone on the 26th of April. David Becher had one in Saint Charles County on May 5th and Bill Rudden photographed some in Monroe County, Illinois on May 4th. The only report of a large flock was also in Monroe County.
by Pat Lueders on the 10th. She reported a flock of over a hundred that remained for a few days.

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**April Botany Report**

Compiled by George Van Brunt

**April 2, 2012—Cuivre River State Park,** Lincoln County, MO (contributed by Steve Turner).

**Time:** 9:30 a.m.–12:30 p.m.  
**Conditions:** Sunny, 75°–85° F.  
**Participants:** Rex Hill, Martha Hill, Steve Turner, George Van Brunt, Ed Kullman, Gladys Kullman, Fr. Sullivan, Richard Abbott, Larry Morrison, Kathy Thiele, Jerry Castillon, Bruce Schuette, Jack Harris, Pat Harris, Louise Langbein, Burt Noll, John Oliver, Wayne Clark, and Nancy Clark.

The group of 19 botanists assembled at the Cuivre River Visitor's Center parking lot in weather more characteristic of early summer than early spring. This remarkable weather represented a continuation of the recent trend, now of several months' duration, which has brought extraordinarily warm early spring temperatures following an exceptionally mild winter. We were met by Bruce Schuette, the park naturalist, who has for many years taken a very proactive role in closely monitoring the park's floristic quality. Bruce showed us a chart which he recently compiled listing the earliest bloom dates of many of the park's plant species. Highlighted in orange on his list were at least 18 species, this year found blooming in March, which have never before in his >30 years of monitoring been found blooming so early. These 18 species included pussytoes, Ohio buckeye, swamp buttercup, pale violet, violet wood sorrel, tansy mustard, false mermaid, 3-lobed violet, paw paw, dwarf larkspur, flowering dogwood, wild geranium, spring avens, coral root, Virginia spiderwort, wild strawberry, shooting star and yellow pimpernel. This has been a truly extraordinary spring for the region's flora, and we are interested and a bit anxious to see how the season will progress.

We first drove to an area near Frenchman's Bluff on the western side of the park, parking at a spot where Cheatham Road makes a 90 degree turn to the west. From there we hiked on a trail eastward and northward, eventually arriving at the bottomland defined by Sugar Creek. Our route therefore encompassed multiple habitat types, including mesic upland wood, wooded slope, and bottomland forest. The early part of the walk, through disturbed areas formerly used as a camp, was appropriately characterized by common, weedy, or mildly invasive species such as _Rhamnus cathartica_ (common buckthorn), _Microthlaspi perforiatum_ (penny cress), _Stellaria media_ (common chickweed), _Lamium purpureum_ (dead nettle), _Capsella bursa-pastoris_ (shepherd's purse), _Viola sororia_ (common violet), _Phlox divaricata_ (blue phlox, and including one albino specimen), _Geum vernum_ (spring avens), _Barbara vulgaris_ (yellow rocket), _Lepidium campestre_ (field pepper grass), _Ranunculus abortivus_ (small-flowered crowfoot), and _R. micranthus_ (hairy small-flowered crowfoot).

As we continued down the slope toward the bottomland, more conservative species began to make an appearance. _Claytonia virginica_ (spring beauty), though on the downside of its season, was still very well represented. Numerous specimens of a yellow-flowered _Apiaceae_ species were observed in the early stages of blossoming, prompting much discussion about whether these belonged to the genus _Zizia_ or to _Thaspium_. The question remained unresolved. A classical character used to differentiate the two is the length of the pedicel underling the central floret of each umbellet (>1 mm in _Thaspium_ and <0.5 mm, or absent, in _Zizia_, according to Vol. II of Yatskievych's revision of Steyermark's _Flora of Missouri_). However, this determination is considered to be difficult to apply confidently, particularly in the field.

Other species seen blooming along the slope included _Triosteum sp._ (probably _aurantiacum_, horse gentian), _Boechera shortii_ (rock cress), _Mertensia virginica_ (bluebells), _Uvularia grandiflora_ (large bellwort), _Lithospermum canescens_ (orange puccoon), _Oxalis violacea_ (violet wood sorrel), _Thalictrum thalictroides_ (rue anemone), and _Asarum canadense_ (wild ginger). Woody species dotted here and there along the slope included _Staphylea trifolia_ (bladdernut) and _Aesculus glabra_ (Ohio buckeye), and as we moved into the bottomland, _Asimina trioboa_ (paw paw). All three of these species were in bloom with the unusual flowers characteristic of
A persistent rumor holds that the paw paw flower is pollinated by carrion flies and therefore ought to smell like rotting meat, but to this author, the odor, while unusual, is not particularly unpleasant. Yatskievych's treatment of the species compares the aroma to that of fermenting grapes.

Continuing into the bottomland, we observed the shiny yellow flowers of *Ranunculus hispidus* (hispid buttercup), the yellow and white flowers of *Viola pubescens* (yellow violet) and *Viola striata* (pale violet), respectively, the delicate blue corollas and white anthers of *Polemonium reptans* (Jacob's ladder), a small population of *Dicentra canadensis* (squirrel corn) with its flowers resembling hanging trousers, the lacy leaves and tiny white flowers of *Chaerophyllum procumbens* (wild chervil), and colonies of white-flowered *Isopyrum biternatum* (false rue anemone). In addition to these blooming plants, we were also able to identify several additional species currently in vegetative stages, including *Arnoglossum reniforme* (great Indian plantain), *Hydrophyllum virginianum* and *Hydrophyllum canadense* (two species of waterleaf), *Cardamine concatenata* (toothwort), and *Lilium michiganense* (Michigan lily). The last, in addition to having a characteristic cluster typically of five leaves, also shows a characteristic pattern of teeth at the leaf margin. The thin, translucent, and papery appearance of these tiny teeth, usually observable only with magnification, is diagnostic for the species. Nonflowering plants observed in the bottomland area included *Adiantum pedatum* (maidenhair fern) and *Asplenium platyneuron* (ebony spleenwort).

Finally, after we returned to the cars, we drove to a different area, also a bottomland, near the south end of Cheatham Road. Here we found an abundant population of *Floerkea proserpinacoides* (false mermaid). This diminutive member of the Limnanthaceae family sports minute flowers which give new meaning to the term "inconspicuous." The plant was photographed and voucher specimens collected as part of the TROPICO photo documentation project. A few other plants observed in this area included *Delphinium tricorne* (dwarf larkspur), *Ellisia nyctelea* (Aunt Lucy), and *Arisaema dracontium* (green dragon, not yet in bloom).

April 9, 2012—Matson Hill, Hays County Park, St. Charles County, MO (contributed by George Van Brunt).

The WGNSS botanists met on a mild, sunny, spring morning at the Matson Katy Trail Access Parking Lot. We were here at the invitation of the Missouri Master Naturalist Confluence Chapter which is working in conjunction with the St. Charles County Parks and Recreation Department on a project to improve the habitat of property acquired from the Curlee family in 2003. This property, approximately 200 acres, was part of the Boone family complex and includes the Daniel Boone Hays family stone house. Daniel Boone Hays was the grandson of the famous explorer Daniel Boone and his wife Rebecca; his mother was Susannah Boone Hays, third child of Daniel and Rebecca. Our contribution to this project was a botanical survey of a wooded section of trail on the property. Rob Merriman, Bob Lee, and Bob Coffing, representatives of the Missouri Master Naturalist Confluence Chapter, led Fr. Sullivan, Wayne Clark, Nancy Clark, Jeannie Moe, Jack
Harris, Pat Harris, Steve Turner, Ruth TenBrink, Jeanne Clauson, Burt Noll, Louise Langbein, John Oliver, Jerry Castillon, and George Van Brunt on a tour of the project area.

First, we drove to the Daniel Boone Hays home and were entertained by Bob Coffing giving a short explanation of the history of the place. The stone home was built by slave labor in the late 1820's or early 1830's, perhaps as late as 1836. St. Charles County Parks and Recreation Department plans to restore at least the outside of the home to an approximation of its original look. Next to the home is the Missouri Department of Conservation State Champion black walnut (*Juglans nigra*), designated in 2010.

Next, we walked across a large field that had been cleared of most vegetation, down to the bare soil in many areas. This old farm/pasture field was overgrown with native and exotic woody species and the Master Naturalists cleared it as a first step in establishing a prairie habitat. We found some species that normally would be growing in the forest such as *Botrychium virginianum* (rattlesnake fern), *Hydrastis canadensis* (golden seal), *Phacelia purshii* (Miami mist), and *Podophyllum peltatum* (mayapple).

Finally, we reached the site of our plant survey, the forested trail. The trail was about a mile long, some sections more open and glade-like than others. We identified 95 species, some blooming, many others not. Blooming species that we found included *Phlox divaricata* (wild sweet William), *Orobanchus uniflora* (one-flowered broomrape), *Oxalis violacea* (violet wood sorrel), *Claytonia virginica* (spring beauty), *Nothoscordum bivalve* (false garlic), *Viola sororia* (common violet), *Triosteum aurantiacum* var. *illinoense* (Illinois horse gentian), *Delphinium tricorne* (dwarf larkspur), *Camassia scilloides* (wild hyacinth), *Hybanthus conoebor* (green violet), *Euphorbia commutata* (wood spurge), *Asclepias quadrifolia* (whorled milkweed)(flower buds), *Ornithogalum umbellatum* (Star of Bethlehem), and *Viola palmata* (three-lobe violet). Other notable species not in bloom were *Ribes aromatica* (fragrant sumac)(fruit), *Pycnanthemum tenuifolium* (slender mountain mint), *Cynoglossum virginianum* (wild comfrey), *Ribes missouriense* (Missouri gooseberry), *Boechera latifolia* (smooth rock cress)(fruit), *Ptelea trifoliata* (wafer ash), *Zanthoxylum americanum* (common pricklyash), *Arisaema dracontium* (green dragon), *Sanguinaria canadensis* (bloodroot), *Sideroxylon lanuginosum* (woolly buckthorn), *Matelea decipiens* (climbing milkweed), *Trillium recurvatum* (purple trillium), *Galium aparine* (cleavers), *Galium circaeaeas* (wild licorice), *Galium concinnum* (shining bedstraw), *Passiflora lutea* var. *glabriflora* (small passion-flower), *Dioscorea quaternata* (wild yam), *Polygonatum biflorum* (Solomon’s seal), and *Botrychium virginianum* (rattlesnake fern).

*Zanthoxylum americanum* (sometimes spelled *Xanthoxylum*) (common pricklyash) is a shrub/small tree that can grow to a height of about 30 feet. This dioecious species is native to the eastern half of the United States and Canada but is more common in the north than in the south, where it is rare. The genus name derives from the Greek ξάνθος (xanthos) meaning yellow and ξυλόν (xylon) meaning wood; some species of the genus have yellow heartwood. The leaves are pinnately compound with 5 to 11 leaflets.
Zanthoxylum americanum (common pricklyash). Tree (top), leaf (middle), and twig with stipule-like prickles (bottom). Photos by George Van Brunt.

If someone grasps a branch of common pricklyash, he/she will get a sharp reminder to leave the plant alone. Many plants have stiff, sharp-pointed structures commonly called "spines" or "thorns". Although their effect on skin is the same, botanically speaking, such structures are not all alike. Thorns are modified branches, spines are modified leaves or stipules, and prickles are epidermal outgrowths. George Yatskievych refers to the oppositely paired "spines" of Zanthoxylum americanum as stipule-like prickles. A stipule is normally a leaf-like structure found at the base of a leaf petiole. Many of the paired prickles of Zanthoxylum americanum are associated with leaf bases like stipules, but they are not exclusively associated with leaf bases, evidence that they are not spines.

Zanthoxylum americanum, a member of the citrus family (Rutaceae), has aromatic leaves, bark, and berries that have traditionally been used medicinally for many different ailments including rheumatism, typhoid fever, indigestion, and sore throat. The bark has been chewed for toothaches giving rise to another common name, toothache tree. The plants we saw were only about 6 feet tall and were not flowering or fruiting.

April 16, 2012—Salt Lick Point Trail, Land and Water Reserve, Monroe County, IL.

April 23, 2012—Darvin’s Woods (private), Iron County, MO (contributed by John Oliver)

Time: 10:00 a.m.–12:30 p.m.
Participants: Fr. Sullivan, George Van Brunt, Scott George, Rex Hill, Martha Hill, Jack Harris, Pat Harris, Steve Turner, Ruth TenBrink, Richard Abbott, Burt Noll, Jeanne Clauson, George Yatskievych, John Oliver, Peggy LaFarth, Wayne Clark, and Nancy Clark.

Missouri is richly blessed with areas which are managed and protected by its various state, federal, and non-governmental agencies and which are open to the public for our enjoyment. These public lands are the venues for most of our field trips. However, we have also visited many private preserves where enlightened landowners preserve and protect valuable bits of Missouri’s natural heritage. These owners are gracious enough to invite us to visit and we, in turn, provide a record of the species observed and what, if any, changes we encounter over the course of several visits. The Webster Groves Nature Study Society values its relationship with these landowners and our members always strive to be respectful of their rights and privacy.

Just over a year ago, friend of WGNSS, Scott George, invited us to visit a beautiful piece of property in Iron County which has been dubbed “Darvin’s Woods” after the first name of its...
The owner, who lives in the Washington DC area, Scott has been acting as caretaker of the property, and has managed some restoration and improvement efforts there. The approximately 90-acre tract is bounded on the north side by National Forest, and includes a ¾ mile stretch of Crane Pond Creek about a mile downstream from the Crane Lake Conservation Area and several high quality terrestrial natural communities in the St. François Mountains Section of the Ozark Natural Division. These natural communities include; pine/oak igneous woodland, igneous glade/talus, perennial stream, riverine wetlands, gravel wash, and bottomland forest. Floral components associated with its higher quality habitats include Cypripedium calceolus var. pubescens (large yellow lady’s slipper orchid) and Triadenum walteri (greater marsh St John’s wort). The old grist-mill dam is in poor condition but still impounds water, creating a wetland fringe and a small swimming hole. Several marsh St. Johns wort pollinators were identified here in 2010. Juniperus virginiana (eastern red cedar) has invaded some areas, and restoration of igneous glades began in 2010 with cedar cutting and prescribed burns. There is a locked gate on the dirt road leading to the property from the east and a spur trail from the Marble Creek section of the Ozark Trail that reaches the northwest corner of the property.

The property is at the contact of the Precambrian islands, which are acidic igneous rock (including Crane Pond rhyolite and large amounts of the uncommon Tile Red rhyolite) and the surrounding Cambrian seas (basic dolomite). The large hills (knobs) represent the islands and the bottomland areas represent the seas. One of the igneous/dolomite contacts is drawn through the historical cabin. This contact represents a 500 million year discontinuity.

The owner is interested in ecological restoration and conservation easements. WGNSS has been informed that assistance in planning burns and compiling flora/fauna lists is greatly appreciated.

Our hike began in the area of the old cabin and led us along the north edge of Crane Pond Creek. We eventually crossed the creek in the meandering wetland area and returned to the old dam. This last bit of the hike was exciting because it meant crossing the “spillway” created by the broken portion of the dam. A misstep here would be
disastrous. Fortunately, with a little help from our friends, all of us returned safely to the north side of the creek with nothing more serious than wet feet to show for the adventure. Along the way we observed many conservative species, a number of which are not common in the St. Louis area. The opportunity to see *Dirca palustris* (eastern leatherwood) in fruit, *Cardamine bulbosa* (bulbous bittercress) in flower, and multiple species of *Galium* and *Krigia* growing in close enough proximity for easy comparison, made for an entertaining and educational outing. As on our other trips this year, we continued to note an early bloom time for many species.

This property is scenic and richly varied in its habitats, with both acidic and alkaline substrates, dry upland glades and bottomland wetter areas, as well as the creek itself providing suitable locations for many different species of plants. We hope to visit again at several different times of the year to continue adding to the plant list. Many thanks to Scott George for the invitation and for providing information and illustrations for this report.

Darvin’s Woods grist mill dam on Crane Pond Creek, May 2005. Photo by Marty Connally.

Lunch at Darvin’s Woods “base camp” – L to R: Jeanne Clauson, Scott George, Pat Harris, Peggy Lafarth (partially visible behind Pat), Rex Hill, Jack Harris, Father James Sullivan, Martha Hill, Ruth TenBrink, Burt Noll, Nancy Clark (behind Burt), and Wayne Clark. Photo by John Oliver.


*Rhododendron prinophyllum* (early azalea). (Photo by Jack Harris.)

*Cypripedium calceolus* (large yellow lady’s slipper orchid). Photo by Jack Harris.
April 30, 2012—Joe Mathews Property, Warren County, MO (contributed by Nels Holmberg).

A group of 12 gathered on a moist morning for a hike on the Joe Mathews property. Joe Mathews has placed a conservation easement on 452 acres of his property with the Ozark Regional Land Trust. The easement will preserve some of the remarkable rural beauty of Missouri in an area that is undergoing increasing development. The ORLT monitors the designated properties to ensure that the land under conservation easement is in compliance with the agreement. ORLT gets their

Cypripedium calceolus (yellow lady slipper). Photo by Jack Harris.

Packera glabella (big ragwort). Photo by Pat Harris.

Dirca palustris (leatherwood), leaves and fruits. Photo by Pat Harris.

Maianthemum racemosum (false Solomon's seal), leaves and inflorescence. Photo by Jack Harris.

walteri (greater marsh St. Johnswort), Triodanis perfoliata (Venus' looking glass), Vaccinium arboresum (farkleberry), Vaccinium pallidum (low-bush blueberry), Vaccinium stamineum (deerberry), Valerianella radiata (beaked cornsalad), Vicia caroliniana (Carolina vetch), Viola sororia (common blue violet), Vitis rupestris (sand grape).

sage), Sanguinaria canadensis (bloodroot), Silene virginica (fire pink), Smilax bona-nox (saw greenbrier), Smilax glauca (cat greenbrier), Smilax hispida (bristly greenbrier), Thalictrum thalictroides (rue anemone), Thaspium barbinode (hairyjoint meadow parsnip), Thaspium trifoliatum (purple meadow parsnip), Thellopteris palustris (eastern marsh fern), Tradescantia longipes (wild crocus), Triadenum
funding from various private donors and
government entities.

This property has a long history with WGNSS
when owned by Burrell and Ruby Pickering. The
group often hiked there, noting many prairie plants
along the trails through the woods.

In attendance today were Fr. Sullivan, Wayne
Clark, Nancy Clark, George Van Brunt, Ted
Heisel, Steve Turner, Ruth TenBrink, Nels
Holmberg, Jeannie Moe, Jack Harris, Pat Harris,
and Burt Noll.

We were joined on this visit by ORLT director
Ted Heisel, and our goal was start a plant list for
the property. A list of 126 vascular plants and 19
bryophytes was compiled. The most exciting find
was a large population of Cypripedium calceolus
(yellow lady slipper), in flower, spreading around a
north facing wooded hillside above a pond created
from an old clay pit. Also very showy, but a plant
common in wet areas was Packera glabella (big
ragwort). At the other end of the scale
was Callitriche terrestris (terrestrial starwort), which is so
small it is seldom noted. Some of the most notable
plants were Arisaema dracontium (green dragon),
Asclepias quadrifolia (four-leaved milkweed), Carex
squarrosa (squarrose sedge), Dirca palustris (leather
wood), Maianthemum racemosum (false Solomon's
seal), and Orbexilum pedunculatum (Sampson's
snakeroot). Four ferns were also noted: Asplenium
platyneuron (ebony spleenwort), Botrychium
virginianum (rattlesnake fern), Ophioglossum vulgatum
(adder's-tongue fern), Woodsia obtusa (common
woodsia).

This was a nice starter list, and additional visits in
other seasons should generate a list 3 or 4 times
this size.

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**May Entomology Group Meeting:**

**Spring Outing to Madison County**

*Jane Walker*

On May 19, the Entomology Group went on
spring outing to property owned by Gayle Picker,
mother of WGNSS member Jennifer Picker.
Attendees included Rich Thoma, Phil Koenig, Jane
Walker, Abby and Ryan Fairbanks, Jen Picker, and
Francis Lloyd. Stephen Penn joined us later in the
afternoon. We started our trip by meeting at the
commuter lot on I-55 and the Kimswick exit.
Traveling south on Hwy 67 our group managed to
miss our intended rendezvous at Cherokee Pass,
but managed to regroup at a small general store in
Zion, Missouri. Roxanne Magnus from Southeast
Missouri State drove up from Cape Girardeau and
miraculously met us in Zion. Continuing on, we
turned off the main highway onto a twisty, windy
county road and then onto a road/driveway that
challenged the nerves of most of our group as we
negotiated ruts and boulders in low-slung cars to
get to our destination. We stopped and parked
around an unfinished house foundation in a grassy
opening in the forest.

The Picker place is in southwest Madison county
and includes steep sided slopes of second growth
oak-hickory forest, open fields, and is bordered by
the St. Francis River. A small spring located twenty
feet upslope of the “driveway” spills out of a
spring box down the hillside and is piped under
the road to the spring branch on the other side.
The spring branch follows alongside the road, now
a grassy path, until it enters the St. Francis River.
Small remnant patches of cane grow along the
banks of the spring branch. Phil Koenig crossed
the creek to take a closer look at the cane, an
important food plant for the Southern Pearly Eye
butterfly and the Cobweb Roadside skipper.

This side of the riverbank had steep banks of
sandy soil. Phil collected an Interior Least Clubtail
dragonfly (Stylgomphus sigmastylus) along the top of
the riverbank. Jen and Jane found a place where
the bank was less steep near a riffle in the river
where we could scoot down the bank and wade
across the river to a large gravel bar. Francis had
jumped down the bank earlier and already crossed
the river to the same gravel bar. The gravel bar was
covered with flowering Water Willow (Justica
americana) and covered with bees and butterflies.
Ryan found a dead Ozark Clubtail dragonfly
(Gomphus ozarkensis) and Abby found the exuvia,
the shed skin from an emerging dragonfly. Jane
collected a, as yet unidentified, bee. Jen collected a
Dragon Hunter dragonfly (Hagenius brevistylus) that
had a damaged wing.

We ate lunch back by the house foundation. Here
we found a large eyed elater click beetle (Alaus

*Battus philenor* (Pipevine Swallowtail) caterpillar on pipevine. Photo by Phil Koenig.

*Haploa contigua* (*The Neighbor*). Photo by Phil Koenig.

*a* *oculatus*, a beautiful black beetle with a silver head and thorax and two large eyes on the top of the thorax. Overhead, we could hear a Yellow Throated Vireo, Indigo Buntings, and a Yellow Billed Cuckoo. After lunch we decided to explore a cave on the Picker property. Jen said she had not had a chance to really explore the cave and had not gone much further than just inside the entrance. She said the cave was numbered, but unnamed and unmapped. The neighbor said he thought the cave went all the way to the town of Saco, three to four miles away. He and Jen both said that the stream in the cave had blind cavefish in it.

Knowing that exploring the cave was a possibility, Abby came prepared to spelunk. She brought her hardhat, kneepads, ball of string, and flashlights. The initial going was relatively easy. We saw a lot of cave popcorn and soda straws, but the cave was dry for the most part. Abby said the lack of formations and smoothness of the walls indicated that at one time the cave tube was filled with water. The mud covered popcorn probably formed as the water receded from the cave. We saw quite a number of cave salamanders, which everyone
photographed. We also saw at least two or three bats, cave crickets, mosquitoes and lots of an unknown fly that clung to the walls. Several of our group (Abby, Ryan, Francis, and Jen) ventured further into the cave, doing a twenty-foot belly crawl and coming up in a cavern where they came upon a shallow stream of water. They saw a large example of floe stone in this cavern. After getting this far, they turned around and came back. Outside of the cave, Stephen collected a large Buprestid (wood boring beetle) and Ryan collected the same beetle where we parked our cars.

As the afternoon was slipped away, we thanked Jennifer and decided to call the day ended and head home. We had a great day of bugs, birds, amphibians, and caving—a real naturalist’s outing.

Bo Koster’s Lasting Legacy

Anne McCormack

This spring, WGNSS received a generous bequest from the estate of the late Joseph “Bo” Koster. Bo had been a member of WGNSS for many years. As a teenager, he joined WGNSS birding groups on weekends. Jean Cook remembers him fondly as a handsome, quiet young man, and an energetic birder. As an adult, he often jogged from his work place in the Central West End (Washington U’s Department of Cell Biology and Physiology) to bird in Forest Park’s Kennedy Woods. He had recently purchased a birding scope to enable him to study shorebirds—a group that’s notoriously challenging to identify.

I didn’t get a chance to know him, though I did meet Bo at least once. On the evening of New Year’s Eve, 2005, he was among a jubilant group of birders enjoying great views of a Townsend’s Solitaire—a thrush of the western mountains, and a first record in eastern Missouri. The crowd included Bo, Rad Widmer, Mike Flieg, a number of birders from Columbia, MO, and myself.

Rad describes him as an energetic birder with a great ear for recognizing bird songs. Bo birded Costa Rica, Africa and Peru, as well as chasing birds within the 75 mile-radius of the St. Louis Arch. Besides Kennedy Woods, another of his local favorite birding areas was Shaw Nature Reserve. His interest in nature went beyond birds as well. He was particularly interested in habitat restoration & trail construction. Rad told me that the last time he spoke with him, Bo was excited about seeing the Sandhill Crane found on Howell Island in December 2009.

Bo was a St. Louisan, and completed his PhD at Washington University. His passions were sports, rock concerts, birds, and medicine. He was a runner, a volunteer soccer coach, and a nationally known researcher in the field of diabetes research. His efforts have already improved the lives of an untold number of people. Now with his bequest to WGNSS, he leaves a legacy that will enrich the lives of many by promoting the study of nature.

For more information about Bo and links to 43 articles he published in scientific journals, explore the links at http://www.diigo.com/user/naturenut/koster.

Thanks to the following people who helped with this article: Jackie Chain, Jean Cook, and Rad Widmer.

Michael Flieg—In Memorium

Richard Thoma

All in WGNSS are saddened by the news of Michael Flieg’s passing in July 2012. Bird’s were Mike Flieg’s passion both professionally as well as in everyday life. Professionally, Mike worked for the St. Louis Zoo for many years primarily in the bird house. He is noted as being the first to hatch and raise ostriches at the zoo. Another achievement was to be the first to bring Adele Penguins from Antarctica and have these birds on display at the zoo. A second expedition to Antarctica brought back Emperor Penguins. He also learned to rear endangered Nene Geese and took part in reintroduction efforts on the Hawaiian Islands. In addition to his birding husbandry skills, Mike Flieg was a trained ornithologist. Mike was known as an authority on anything there was to know about birds including taxonomy and bird behavior. He authored (or coauthored) three books, “A photographic guide to birds of southern Florida: including the Everglades, the Keys, Sanibel and Captiva Islands”; “A photographic guide to birds of the West Indies”; and “A
photographic guide to birds of Jamaica and the West Indies”. Mike was an avid birder within WGNSS. With over 50 years of active birding, Mike's life list is estimated at over 6000 birds from around the world. Several members recalled that Mike was extremely excited about organizing birding trips to far off lands in search of exotic birds. Some of the trips WGNSS members recall included searching for grouse in Canada, birding in Florida and on the Rio Grande in extreme southern Texas. If one needed advice on where to find a particular bird, Mike could be counted on to know exactly where and when to go.

Within WGNSS Mike was responsible for leading the efforts to create the Richard A. Anderson Memorial Bird Fountain in the Kennedy Memorial Forest in Forest Park. He also led the efforts to create the Jack Van Benthuysen memorial pond and forest in Tower Grove Park. Both projects used Mike’s particular skills in outdoor landscaping. In addition to birding, Mike was very devoted to education. Within WGNSS, Mike was the Education Committee Chair for many years. Through his committee’s efforts, multiple graduate students in Missouri received much needed scholarship money to be able to complete their research projects. We in WGNSS will miss Mike Flieg.

Group Activity/Walk Schedules

BOTANY GROUP
Chair—George Van Brunt

➢ Monday Botany Walks, Leader—Fr. James Sullivan; now in his 45th year! The WGNSS Botany Group visits many of the same locations as the Bird group: Busch Conservation Area, Shaw Nature Preserve, the Missouri Botanical Garden, Babler State Park and Cuivre River State Park. Learning plants will help you learn butterfly host plants. Sign up for WGNSS Botany Group emails from Jack Harris by contacting him at jabari@mac.com or (314) 368-0655 and receive an email no later than Sunday about the following Monday’s trip.

ENTOMOLOGY GROUP
Co-Chairs—Phil Koenig and Jane Walker

Monthly meetings are held September through May and normally occur on the third Monday of the month.

➢ Monday, September 17, 7:00 p.m. The Entomology Group will start off the fall season with its annual “Show-and-Tell”. All WGNSS members are welcome. Butterfly House (Faust Park), 15193 Olive Blvd., Chesterfield.

➢ Monday, October 22, 7:00 p.m. This month the Entomology Group will gather to share a good laugh with Insect and Arthropod humor. Bring some of your favorite examples of insect and or arthropod humor. Butterfly House (Faust Park), 15193 Olive Blvd., Chesterfield.

NATURE BOOK CLUB
Chair—Lisa Nansteel

The Nature Book Club is a group of naturalists who meet once a month to discuss a book chosen for its general interest from botany to zoology. The group meets at the Evangelical United Church of Christ in Webster Groves on the second Tuesday of the month from 1:30-3:00 p.m. For more information and directions contact Lisa Nansteel at (636) 391-4898. All are welcome—especially newcomers!! Upcoming books:


ORNITHOLOGY GROUP
Chair—David Becher

➢ Saturday Bird Walks, Leader—David Becher. All trips begin at 8:00 a.m. at Des Peres City Park parking lot (Dallas Road just north of Manchester Rd. and east of West County Mall) and continue through lunch. Everyone is welcome. The leader reserves the right to change the schedule if necessary. Contact David at (314) 576-1146 or DavidBecher@msn.com if you have questions.

➢ Thursday Bird Walks, Leader—Jackie Chain. All trips begin at 8:30 a.m. at Des Peres City Park. Contact Jackie at (314) 644-5998 or chainjac@sbcglobal.net if you have questions. If there is a change in meeting time or place, we will advise by posting on MOBIRDS.
For general information about WGNSS activities, contact Membership Chairman Joe Whittington at whittex@aol.com or (314) 645-3272.

Editor's Corner

Ted C. MacRae

**NATURE NOTES BY EMAIL**

*Nature Notes* is available by regular post or email; however, there are significant advantages to receiving it by the latter method. These include elimination of printing and mailing costs (reducing not only the cost of your subscription, but also decreasing its environmental impact) and the ability to view *Nature Notes* in full color. Embedded hyperlinks allow instant navigation to email addresses and websites. Of course, you can always print your electronic copy of *Nature Notes* if you wish (please use recycled paper and print on both sides). *Nature Notes* by email is sent as a PDF, which can be opened using Adobe Reader (download free at [http://get.adobe.com/reader/](http://get.adobe.com/reader/)). Contact Joe Whittington, Assistant Treasurer, at whittex@aol.com to convert your subscription.

**CALL FOR SUBMISSIONS**

We welcome announcements of nature related events in the St. Louis area, notices of publications, and original nature oriented articles. Suggested topics include field trip accounts, information about local natural areas, interesting nature sightings, or reviews of nature related books. Articles reprinted from other sources must obtain permission from copyright holders.

Send submissions to ted.c.macrac@monsanto.com. Limit text formatting to bold for emphasis and italics for scientific names. Avoid tabs, extra spaces, multiple hard returns, underlining, etc. (these will be removed during final formatting). Photographs will be included on a space-available basis. Contributions are welcome from all—remember, this is your newsletter!
Regional Private Land Services Supervisor - Kyle Reno
Missouri Department of Conservation
701 James McCarthy Drive
St. Joseph, MO 64507

Mr. Reno:

The Webster Groves Nature Study Society (WGNSS) is pleased to be able to provide input to the Missouri Department of Conservation (MDC) as it develops a strategic vision for grassland and prairie management in Missouri. Below is a list of the top three issues WGNSS would like to see addressed in this plan:

1. Because tall-grass prairies, sand prairies, loess hills, glades and other grasslands are considered some of the most endangered habitats in Missouri, WGNSS believes that the number one long term goal should be the expansion of lands set aside and preserved. This may be achieved through land acquisitions or with cooperation from private land owners. Emphasis should be placed on the creation of larger high quality habitats because they are less likely to be affected by an outside disturbance and will hold a greater diversity of species. Priority should be given to preservation of grasslands adjacent to current high quality grassland habitats and creating corridors between grasslands. Smaller, unplowed fragments should not be overlooked as these may be used as anchor points/species refugia for future expansions in the overall grassland strategic vision.

2. WGNSS believes that restoration of degraded habitats should also be high on the list of long term goals. Of the grasslands that are presently preserved, significant portions are considered to contain degraded habitat. It is very important that all grasslands be evaluated and a plan should be put into place where necessary, to improve and restore habitat quality at each site. Priority of restoration is as follows: (1) protection of original unplowed fragments, (2) restoration of slightly degraded grasslands, and (3) reconstruction of highly degraded areas. An example grassland habitat restoration success story that may be emulated is found at Shaw Nature Reserve in Franklin County where glades have been restored and farmland is being converted into tall grass prairie.

3. Increasing grassland specific species diversity is also desired. In addition to plants, reintroduction of animals is also an important component of habitat restoration. WGNSS recognizes that other than the megafauna animals (birds and mammals), very little is known about which species were present on a native grassland. Species surveys of as many taxa as possible will help understand the present species diversity and provide insight for those missing grassland species. Where possible, reintroductions should be part of management plan to return to those conditions that were believed present before the arrival of European culture.

WGNSS does recognize that the citizens of Missouri have asked MDC and other land managers to perform a very difficult task. Each grassland/prairie/glade is a very dynamic habitat that is not easily managed, especially when so little remains. We in WGNSS feel that Natural Areas should be given preferential treatment as the best examples of grassland/prairie/glade habitats. Extra attention should be made on these sites to ensure that the habitats continue to represent the best Missouri has to offer. If new management techniques are being considered, we feel they should be conducted on larger tracts of grasslands of lesser quality than designated Natural Areas. Whenever new management techniques are instituted, we hope that the protocol includes evaluation and assessment of the management tool and its effect on both the floral and faunal grassland community.

On behalf of all in WGNSS, we thank you for allowing us to take part in the grassland management strategic plan being developed by MDC.

Sincerely,

[Signature]

Richard S. Thoma - WGNSS President
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