



Nature Notes

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President's Corner

Rich Thoma

At the October WGNSS General Meeting, everyone enjoyed a great presentation from **Maxine Stone**, past president of the Missouri Mycological Society (MOMS). Maxine is the author of the recently published *Missouri's Wild Mushrooms* and was featured in the October issue of the *Missouri Conservationist*. Not only can Maxine identify mushrooms, but she is also well known for her culinary expertise with these fungi. We learned that there are great edible mushrooms in all seasons. Spring starts off with one of the most famous mushrooms of all, the morel. Morels are one of the easiest mushrooms to identify but can be hard to find. Maxine hinted that a good place to look was under dead or dying elm trees in our Ozark forests in late April. Mushroom connoisseurs consider morels great on just about anything. Chanterelles, another highly sought after delicacy, are found in the summer months. Though a common forest mushroom, chanterelles can be difficult to find because they are often found under leaf litter. In the fall, the Hen-of-the-Woods is a popular mushroom to look for. Clusters of this species often grow at the base of oak trees. Some other mushrooms highly sought after include puffballs, oyster mushrooms and comb tooth fungi. All make great additions to a meal. In Maxine's words, all are "*Delicious*". Maxine also pointed out that when out collecting mushrooms, one should be cautious because there

are some that are not good to eat and one that could potentially be deadly. The one mushroom to watch out for is known as the destroying angel. Eating just one of these can kill a person. Anyone going mushroom collecting should become very familiar with what a destroying angel looks like and should leave them alone. This all white mushroom is easy to identify because it has a sac-like cup around the base. When in doubt about a mushroom's identification, it is important to have an expert identify it before turning it in to a meal. Maxine was quick to remind the audience that you can always enjoy a mushroom "*Once*". Maxine let us know that if anyone was unsure of what they had found, she would be willing to help with the identification.

The November General Meeting will be held at the MDC Powder Valley Conservation Nature Center on **Wednesday, November 3 at 7:30 p.m.** Our featured speaker will be **Dr. Paul McKenzie** of the U.S. Fish and Wildlife Service. Best known in Missouri for his work with the endangered Tumbling Creek cave snail, Paul had the opportunity this past summer to assist with the Gulf of Mexico oil spill cleanup efforts. Paul will be speaking to WGNSS on his recent experiences helping with these efforts in Mississippi and Louisiana. This is a chance to hear from someone with first hand experience about the damage the oil spill did to our coastal bayous and beaches. Come to the meeting to find out about all the efforts to protect the coastline while the oil spill was at its worst. Also come to find out what was done to rescue oiled birds and other wildlife and

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the efforts it took to clean them up and return them to the wild. This is a chance to also learn about the future plans to restore oiled habitats in the Gulf region. Recently, the news has been saying that the oil is gone, simply evaporated away. This is a chance for us to learn what Paul McKenzie thinks. See the General Program Meeting Announcement for further details.



November General Program Meeting

George Yatskievych

Please plan to join us on **Wednesday, November 3**, for an interesting and timely program by Dr. Paul McKenzie of the U.S. Fish & Wildlife Service in Columbia, MO. His talk will be entitled: "Biological Perspectives Associated with Working on the Gulf Oil Spill." Last summer, the U.S. Fish & Wildlife Service put out a national call for volunteers among its staff to help with the clean-

up efforts following the disastrous oil spill in the Gulf of Mexico. Paul's presentation will be based on his firsthand experiences as part of the clean-up crews working to save wildlife and minimize the environmental damage to this region. The meeting will begin at **7:30 p.m.** at our usual meeting place, MDC's Powder Valley Conservation Nature Center, off Cragwold Drive west of Geyer Road in Kirkwood. Anyone who would like to accompany our speaker to dinner before the program should meet at 5:30 p.m. in the Powder Valley parking lot.



June Bird Report

Compiled by Jim Ziebol


Introduction: The summer of 2010 would turn out to be the summer of the White Ibis.

Sightings: The Thursday Group chose Columbia Bottom CA as their destination on 6/17 and found 20 to 30 Cattle Egrets there. A White Ibis was found in Monroe County on 6/30 (DK) – the first of many good birds seen there in July and August. On 6/11, Bill Rudden located a White-rumped Sandpiper in Monroe County and on 6/4 he found a Dunlin. Les Jenkins found a Black-necked Stilt for the Thursday Group at Columbia Bottom CA on 6/17 (reported by J. Chain). Several Black Vultures were seen in Monroe County this summer and the first sighting was on 6/18 (B. Rudden). Bill also reported good numbers of Cliff Swallows in Monroe County on 6/14. A singing Willow Flycatcher was a good bird at Columbia Bottom on 6/17 (J. Chain). Another Willow Flycatcher and a Black-billed Cuckoo were seen at B. K. Leach on 6/27 (T. Bormann, D. Rogles). Al Smith found 3 Western Kingbird nests in Bridgeton in June. Another Western Kingbird was seen in East St. Louis on 6/20 (B. Rudden).

A typical day in TGP on 6/3 included 2 young Red-tailed Hawks with strongly marked belly bands and reddish banded tails (like some Western Red-tails), a White-breasted Nuthatch, a Chickadee family, several Great-crested Flycatchers, several Blue-gray Gnatcatchers, a singing Chipping Sparrow, a hatch-year Red-tailed Hawk (band # 194) (a typical Eastern bird), and 2 Cooper’s Hawks at their nest (Chris McClaren, Jim Ziebol).

Chris also reported a Red-eyed Vireo displaying at the Gaddy Bird Garden in the first week of June.

Locations: BCA – Busch Conservation Area; CBCA – Columbia Bottoms Conservation Area; CL – Carlyle Lake; CC Lake – Creve Coeur Lake; CSP – Castlewood State Park; FP – Forest Park; HL – Horseshoe Lake, Granite City; LVT – Lost Valley Trail; SNR – Shaw Nature Reserve; TGP – Tower Grove Park.




July Bird Report

Compiled by Jim Ziebol

Sightings: A White-faced Ibis appeared at Cahokia Mounds on 7/31 (F. Holmes). An adult White Ibis, a really good find in the St. Louis area, was seen on Mitchie Road, Monroe County, on 7/20 (W. George) and 2 post-breeding dispersal individuals were located at Cahokia Mounds by Bill Rudden, also on 7/20. Bill Rudden paid a visit to Monroe County on 7/15 and found a pair of Green-winged Teal. Also on 7/15, Bill found 2 Least Terns at HL and a Black-necked Stilt at Sauget. Two Least Terns were also seen at HL on 7/10 (F. Holmes). Frank observed a male Blue-winged Teal from the HL Causeway on 7/18. A King Rail, with 5 young, was first seen on 7/8 at Clarence Cannon NWR (P. Bauer, A. Smith). A Virginia Rail joined these birds at CCNWR on 7/12, indicating possible breeding activity (Jane Allen). Several birders observed the rail family at close range in July, including Pat Lueders and Yvonne Homeyer. Willets were found at Road B, Monroe County, 7/5, and at Mitchie Road on 7/7 (W. George). Bill Rudden reported Western, Least, and Stilt Sandpipers, plus a Wilson's Phalarope and several Semipalmated Plovers, on 7/21 at Mitchie Road, and he added 6 Black-necked Stilts and a White Ibis there on 7/22. Both Laughing Gull and a Bonaparte's Gull were seen at HL during July (B. Rudden). On 7/31, an adult Bald Eagle was perched on Layton Road at HL and was seen by many members of the NABA butterfly group (JZ). A loud Chat, plus Cliff, Tree, and Bank Swallows, were present at Magnolia Hollow CA on 7/8 (J. Chain, Thursday Group).

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August Bird Report

Compiled by Jim Ziebol

Sightings: An amazing 9 White Ibises, including 2 adults, were found in Monroe County on 8/6 (W. George). Frank Holmes reported 4 Moorhens and a Coot at HL on 8/30. By late August, Shovelers and both Teal were seen at Two Rivers NWR (M. Thelen) and at Mitchie Road (B. Rudden). On 8/23, 2 Avocets were found on the river side of the Levee at Mitchie Road (J. Ziebol). Jim Hickner also located 6 Avocets at Firma Road on 8/14. David Becher counted 19 Black-necked Stilts at Mitchie Road on 8/16 and by 8/21, at least 25 Stilts were present there (J. Cowan). Black-bellied Plovers were reported in Calhoun County on 8/29 (M. Thelen) and at Mitchie Road on 8/31 (B. Rudden). Marbled Godwit sightings included 1 at Mitchie Road on 8/13 (W. George) and 1 at Mitchie Road on 8/20 (L. Vitt). A Red-necked Phalarope was spinning in the water at Mitchie Road on 8/15 (B. Rudden). Bryan Prather also saw a Red-necked Phalarope at Two Rivers NWR on 8/30. Several Baird's Sandpipers were reported at Mitchie Road, including a sighting on 8/26 by the Thursday Group (J. Chain). An Upland Sandpiper was reported at the Emerald View Turf Farm, Monroe County, on 8/6 (B. Rudden). Buff-breasted Sandpiper sightings included 2 at Firma Road on 8/7 (Jim Hickner) and several at the turf farm in Monroe County on 8/22 and 8/30 (B. Rudden). On 8/25, 10 Forster's and a Caspian Tern were seen at HL (B. Rudden). At Mitchie Road on 8/21, 5 species of terns were present – Caspian, Forster's, Common, Least, and Black – along with 10 species of shorebirds (Bob Kleiger, Kent Lannert, Jack Cowan, Loy Barber). Mississippi Kite sightings included 1 at TGP on 8/26 (J. Chain, Thursday Group), 1 at the Emerald View Turf Farm on 8/26 (J. Chain, Thursday Group),

and 2 at Two Rivers NWR on 8/27 (B. Prather). Seven Mississippi Kites were soaring together at Clarence Cannon NWR on 8/25 (C. Alwood). Ospreys were seen at Riverlands on 8/5 (C. Alwood), at HL on 8/24 (F. Holmes), at Two Rivers NWR on 8/27 (B. Prather), and at Riverlands on 8/29 (M. Thelen). An adult Bald Eagle and a juvenile Bald Eagle were seen at HL on 8/24 (F. Holmes). An adult tundra Peregrine Falcon was observed for several minutes at the Emerald View Turf Farm in Monroe County on 8/21 (J. Ziebol, S. Gustafson, Y. Homeyer).

An Olive-sided Flycatcher was found in TGP on 8/23 (B. Rudden). Connie Alwood located 2 Sedge Wrens at Riverlands on 8/10. Early migrating fall warblers were first detected on 8/18 in TGP (Chris McClaren). This was followed on 8/20 by sightings of Least Flycatcher, Canada Warbler, and N. Parula in TGP (C. McClaren). On 8/26, Chris located a mixed species foraging flock which included Golden-winged Warbler, Blackburnian, and Bay-breasted Warbler. This is an extremely early date for Bay-breasted. On 8/27, Jim Ziebol visited the Jack Van Benthuisen Pond in TGP and found a Blackburnian and 2 Bay-breasted Warblers. Also on 8/27 at the Gaddy Bird Garden, Jim observed 2 Mourning Warblers. On 8/26, Rich Koetecke reported 22 species of warblers at Busch CA, including Mourning, Golden-winged, and 2 Blackpolls.

Backyard Birds: Connie Alwood had both Barred and Great Horned Owls at his Ferguson home and he reported that the Great Horned Owl was making an unusual barking call, one he had not heard before.

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August Botany Report

Compiled by George Van Brunt

August 2, 2010 – Shaw Nature Reserve, Franklin County, MO (contributed by Nels Holmberg).

A group of 14 gathered at Shaw Nature Reserve for a hot and humid hike. Although missing Fr. Sullivan, our group did gain at least one person following the appearance of our group on Channel 5 News the previous Friday.

As always, Shaw Nature Reserve provided a wide array of flowering plants. We started in the prairie planting behind the Bascom House, which had been burned during the winter and as expected was lush. Flowering plants noted included *Chamaecrista fasciculata* (partridge pea), *Liatris pycnostachya* (blazing star), *Rudbeckia laciniata* (goldenglow), *Strophostyles helvola* (wild bean), *Vernonia missurica* (Missouri ironweed).

In the shade of the wildflower garden we noted *Aruncus dioicus* (goat's beard), *Blephilia hirsuta* (wood mint), *Campanula americana* (tall bellflower), *Eupatorium purpureum* (Ozark Joe-pye-weed), *Hydrangea arborescens* (wild hydrangea), *Phlox paniculata* (perennial phlox) and *Persicaria virginiana* (Virginia knotweed). Two flowers found were late bloomers left over from spring: *Tradescantia obiensis* (Ohio spiderwort), and *Stylophorum diphyllum* (celandine poppy).

Around the ponds we found *Alisma subcordatum* (water plantain), *Asclepias incarnata* (swamp milkweed), *Hibiscus lasiocarpus* (rose mallow hibiscus), *Lobelia siphilitica* (blue lobelia), *Lythrum alatum* (winged loosestrife), and *Conoclinium coelestinum* (wild ageratum, mistflower).

With Phil Koenig joining us, several butterflies were noted: a *Phoebis sennae eubule* (Cloudless Sulphur), *Phyciodes t. tharos* (Pearl Crescent), *Junonia coenia* (Buckeye), *Limenitis arthemis astyanax* (Red-spotted Purple), and *Enodia anthedon* (Pearly Eye).

In the rock pond was an impressive specimen of *Thalia dealbata* (Thalia) in flower. Thalia is the only genus of its family, Marantaceae (prayer plant family), native to the United States. Up to 520



Thalia dealbata. Photo by George Van Brunt .



Thalia dealbata – foliage (l); flowers (r). Photos by George Van Brunt.

species of Marantaceae are found in the lowland tropical forests of Asia, Africa and the Americas. In Missouri, it is found in the southeastern counties clustered just above the bootheel, growing in water. It is not common and is state listed as S2. The family has an ‘explosive’ pollination mechanism. A bee sticking its head into the flower hits a trigger which causes the stigma to slap the pollen covered insect, thus picking up

pollen. The bee is also dusted with pollen which sits in a cup just below the stigma. Isn’t nature clever!

August 9, 2010 – Missouri Botanical Garden St. Louis, Missouri (contributed by Wayne Clark).

It was a hot (in the 90's), clear day when 11 botanists, Jack Harris, Pat Harris, John Oliver, George Van Brunt, Wayne Clark, Nancy Clark, Nancy Morrison, Larry Morrison, Bridget Schaefer, John Schaefer (baby), and Louise Langbein assembled in the Ridgway building for a morning of botanizing. The attraction of the day was the Henry Shaw Cactus Society Show and Sale. Before going to the show, we ventured outside before it got really hot. We took a right turn and stopped at the first planter and noted *Rhododendron* 'Conlec' (Autumn Royalty) in flower. We moved on past the Tram Station and in the direction of the Climatron. Along the way was *Onoclea sensibilis* (sensitive fern). Some of the plants growing in the garden by the Climatron were *Chamaecyparis obtusa* 'Stephen Weissenberger' (Hinoki cypress), *Phlox carolina* (thick-leaf phlox), *Coreopsis* 'Sunray' (tickseed), and *Hibiscus syriacus* 'Helene' (rose of Sharon). There was the smell of skunk in the area. With the help of a large explanatory sign we located *Phuopsis stylosa* (skunk plant), a mat-like ground cover. Next we wandered over to the dry stream bed garden. Some of the plants we found there were *Leitneria floridana* (corkwood), *Hibiscus mescheutos* 'Disco Belle White' (rose mallow), *Boltonia decurrens* (decurrent false aster) found in central US. A rare plant growing there is *Solidago shortii* (Short's goldenrod) that grows in small groups in only four square miles of the Blue Licks region of Kentucky. Upon leaving the dry stream garden we went around *Acer campestre* (hedge maple). We "went around" this large sprawling tree because the ends of the lower branches were touching the ground. The tree is as wide as it is tall (see photo). It is native to Europe, Near East, and Africa. Nearby is the Missouri State Champion Tree *Sapindus drummondii* (western soapberry)¹. It is the largest individual tree of this species in Missouri. It grows primarily along limestone bluffs in the Southwestern part of the state.

¹ Editor's note – the USDA Plants Database now lists this as a variety of *Sapindus saponaria*, with the nominate variety (wingleaf soapberry) occurring in the southeastern U.S.



Acer campestre (hedge maple). Photo by Wayne Clark.



A few of the columnar cacti on display (l); *Ferocactus rectispinus* (r). Photos by Wayne Clark.



The Missouri State Champion Tree *Sapindus drummondii* (western soapberry). Photo by Wayne Clark.

By this time the temperature was rising to a quite uncomfortable level so most of us headed for the shade of the woodland garden. We entered by a back way and encountered a sprinkler. We timed our passage to avoid getting wet. Some of the



A few of the succulents on display. Photo by Wayne Clark.

plants noted were *Chelone glabra* (white turtlehead), *Lobelia cardinalis* (cardinal flower) *Dryopteris sichotensis* (wood fern), a native of China, *Thelypteris palustris* (marsh fern), and *Osmunda cinnamomea* (cinnamon fern). There were several species of *Arisaema* in one area, *A. consanguineum* (arisaema), native of the Eastern Himalayas to northern Thailand and central China, *A. ringens* (arisaema) from Japan, Korea, and China, and *A. dracontium* from eastern North America, although this writer saw an *Arisaema* in China along the walkway to Confucius' tomb that looked very much like it. There are about 100 species in China. Near the *Arisaema* were *Dryopteris goldiana* (Goldie's fern) and *Podophyllum* 'Spotty Dottie' (May apple), a mottled leaf variety. By this time the heat was getting to be unbearable so we headed for the air conditioned comfort of the Ridgway building and the Cactus Show. The cacti and succulents on display are plants grown by members of the Cactus Society. More than half of the succulents on display were

not cacti. All cacti are succulents but not all succulents are cacti. Plants and other entries are divided into 165 Classes grouped into eight Sections. Examples of Sections are Decorative, Collections, Groups of Specimen Cacti, Succulents other than Cacti, Educational Displays, and Junior Division. Judging took place on Saturday morning and the show opened at noon. There were two major vendors that had cacti and succulents for sale along with members' sale plants.

August 16, 2010 – Cuivre River State Park, Lincoln County, MO (contributed by Jeannie Moe).

The Botanists in attendance included: Burt Noll, Wayne Clark, Nancy Clark, Maggie Hover, Jack Harris, Phil Koenig, Fr. Sullivan, John Oliver, Bob Coffing, Rex Hill, Martha Hill, Paula Orr, Steve Turner, George Van Brunt, Jeannie Moe, and Ann Schuette.

It was a beautiful day for a botany walk. It was cool and breezy, which is not typical of the weather in Missouri in August. It reminded of my trip to the mountains in Flagstaff, Arizona in early August.

We walked a trail that followed the edge of Lincoln Lake. Plants in bloom included *Heliopsis helianthoides* (ox-eye sunflower), *Asclepias incarnata* (swamp milkweed), *Chamaecrista fasciculata* (partridge pea), *Coreopsis tripteris* (tall coreopsis), *Trifolium pratense* (red clover), *Rudbeckia triloba* (brown-eyed Susan), *Silphium perfoliatum* (cup plant), *Pycnanthemum pilosum* (hairy mountain mint), *Commelina communis* (common dayflower), *Agalinis tenuifolia* (common gerardia), *Echinacea purpurea* (purple coneflower), *Euphorbia corollata* (flowering spurge), *Ratibida pinnata* (gray head prairie coneflower), *Andropogon gerardii* (big bluestem), *Astragalus canadensis* (rattleweed) (in fruit also), *Ruellia humilis* (wild petunia), and *Rudbeckia subtomentosa* (sweet coneflower). The *Zizia aurea* (golden Alexanders) were in fruit. Father Sullivan explained that *Rudbeckia subtomentosa* (sweet coneflower) has deep roots to reach the water table. The plant doesn't wilt when there isn't much rain. George Van Brunt spotted the one orchid on the trail, *Spiranthes lacera*. This species of *Spiranthes* has a green throat. After George pointed out this orchid, four more flowering stems were spotted along the trail. *Amphicarpaea bracteata* (hog peanut)

was blooming and growing on *Solidago altissima* (late goldenrod). We came across several patches of blooming *Liatris scariosa* (blazing star) and *Cirsium discolor* (field thistle) which had attracted many pollinators including honeybees, clearwing moths, *Junonia coenia* (Buckeye), *Papilio glaucus* (Tiger Swallowtail), *P. t. troilus* (Spicebush Swallowtail), *Battus p. philenor* (Pipevine Swallowtail), *Cupido c. comyntas* (Eastern-tailed Blue), *Phyciodes t. tharos* (Pearl Crescent), *Abaeis nicippe* (Sleepy Orange), *Pyrisitia l. lisa* (Little Yellow Sulfur), and *Danaus p. plexippus* (Monarch). Phil Koenig reported additional butterflies including *Ancyloxypha numitor* (Least Skipper), *Poanes zabulon* (Zabulon Skipper), *Phoebis senna eubule* (Cloudless Sulfur), *Limenitis arthemis astyanax* (Red-spotted Purple), and *Hemaris thysbe* (hummingbird clearwing moth). Two species of dragonflies, *Libellula luctosa* (Widow Skimmer) and *L. hydia* (Common White-tail), were perching on the plants near the butterflies. Perhaps they were hunting pollinators. On the walk, we came across *Aureolaria grandiflora* (yellow false foxglove), the host plant for *Euphydryas phaeton ozarkae* (Ozark Baltimore Checkerspot). On the way back, Nancy Clark and I noticed *Symphytotrichum patens* (purple daisy), *Lactuca floridana* (Florida lettuce), and *Monarda fistulosa* (wild bergamot) in bloom.

We drove to a second location in an attempt to observe the composite, *Hasteola suaveolens* (sweet Indian plantain) in bloom. Walking out to Sugar Creek, we noticed the leaves of *Smilax tamnoides* (catbrier), and *Pilea pumila* (clearweed). Flowers included *Tradescantia subaspera* (wide-leaved spiderwort), *Persicaria virginiana* (Virginia knotweed), *Campanula americana* (tall bell flower), *Phlox paniculata* (garden phlox), *Rudbeckia laciniata* (golden glow), and *Sicyos angulatus* (bur cucumber). We also noticed *Solidago ulmifolia* (elm-leaved goldenrod) and *S. gigantea* (giant goldenrod). Butterflies included Cloudless Sulfur and Hackberry Butterfly. We walked right by the sweet Indian plantain because everything near the creek had been flattened by recent flash flooding. We did find it on the way back, but its flower buds had not yet opened.

August 23, 2010 – Don Robinson Property, Jefferson County, MO (contributed by John Oliver).

On a late August morning that might have been unpleasantly warm, but wasn't, 17 botanists visited, by invitation, a favorite spot in Jefferson County – a lovely piece of private property owned by Don Robinson. In attendance were Fr. James Sullivan, George Van Brunt, Larry Morrison, Bob Coffing, Jack Harris, Pat Harris, Steve Turner, Ruth TenBrink, Kathy Thiele, Nels Holmberg, Wayne Clark, Nancy Clark, Bill Summers, Jeannie Moe, Burt Noll, Louise Langbein, and John Oliver.

Don Robinson made a very good living producing and marketing a household cleaner, and then made more developing subdivisions, but unlike some self-made businessmen, he never felt the need to surround himself with material items like fancy cars, preferring rustic real estate to other possessions. Instead, Don surrounded himself with friends, and his beautiful, remote property became a gathering place and haven for this extended “family.” In 1964 he purchased 320 acres near Cedar Hill in Jefferson County for \$21,250 and in the years since has more than doubled the area of that original purchase by acquiring adjacent property as it became available. His land, now the size of New York's Central Park, lies in the southern section of the LaBarque Creek Watershed, an area which has attracted a coalition of groups interested in protecting its rich and fragile ecosystem. Don's land contains dripping springs, canyons in the unique St. Peter's Sandstone, rare plants and animals, beautiful vistas, and blessedly few human “improvements.” And that's the way he wishes it to remain. On his death, the entire 843 acres, along with a trust fund to help maintain it, will be donated to the Missouri Department of Natural Resources for the purpose of creating a new State Park to be known as Don Robinson State Park. He was very specific about the use of his first name, because as he said, “There are a lot of Robinsons, but there's only one me.” Missourians will then continue to benefit from the stewardship of a remarkable man of a very special bit of real estate.

We had come to continue our plant survey of locations in the LaBarque Creek watershed, hoping to add a species or two to the master list, and in particular to look for signs of *Bartonia virginica*

(Virginia screw-stem) of the Gentianaceae family, known from only one other location in Missouri. On this particular day, we were unable to find any of them, but the plant should be looked for again in the LaBarque Creek drainage area as it is rather inconspicuous and would be easy to miss. Plenty of late summer blooms were in evidence, however, and we noted *Spiranthes tuberosa* (little ladies' tresses), *Trichostema dichotomum* (blue curls), *Hypericum gentianoides* (pineweed), *Hieracium gronovii* (beaked hawkweed), *Desmodium glutinosum* (sticky tick clover), *Euphorbia corollata* (flowering spurge), *Euphorbia dentata* (toothed spurge), *Hypericum gymnanthum* (clasping-leaved St. John's-wort), *Solidago ulmifolia* (elm-leaved goldenrod), *Asclepias verticillata* (horsetail milkweed), *Cirsium altissimum* (tall thistle), *Lobelia spicata* (spiked lobelia), *Lobelia inflata* (Indian tobacco), *Brickellia eupatorioides* (false boneset), *Dalea purpurea* (purple prairie clover), *Rudbeckia missouriensis* (Missouri coneflower), *Bouteloua curtipendula* (sideoats grama), *Bidens frondosa* (beggar ticks), *Elephantopus carolinianus* (elephant's foot), *Prenanthes altissima* (tall white lettuce), *Lespedeza hirta* (hairy bush clover), *Monotropa uniflora* (Indian pipe), *Cunila origanoides* (dittany), *Mimulus alatus* (sharpwing monkey flower), *Polygala sanguinea* (field milkwort), *Solidago nemoralis* (old-field or gray goldenrod), *Erechtites hieracifolia* (fireweed), *Chamaecrista nictitans* (sensitive partridge pea), *Chamaecrista fasciculata* (showy partridge pea), *Croton willdenowii* (common rushfoil), *Conyza canadensis* (horse weed), *Eupatorium altissimum* (tall thoroughwort), *Eupatorium serotinum* (late boneset), *Pseudognaphalium obtusifolium* (fragrant cudweed), and *Allium stellatum* (wild onion), all in flower.

Of course, the trained eye can identify many plants without the presence of flowers. Ferns, like *Polystichum acrostichoides* (Christmas fern) lack true flowers, and others were simply not in bloom at the time of our visit. *Senna marilandica* (wild senna), *Rhus aromatica* (fragrant sumac), *Opuntia humifusa* (prickly pear), *Tephrosia virginiana* (goat's rue), *Dalea candida* (white prairie clover), and *Pycnanthemum tenuifolium* (slender mountain mint), were all in fruit. Some non-flowering features, such as distinctive leaf shape and arrangement or type of involucre bracts on buds made it possible to recognize plants like *Hypericum hypericoides* (St. Andrew's cross), *Galium circaeazens* (wild licorice), *Symphotrichum anomalum* (manyray aster), *S. patens*

(spreading aster), *Ilex decidua* (possum haw), and *Linum sulcatum* (grooved flax). Another easily identified plant in evidence was *Pinus echinata* (short-leaf pine), Missouri's only native pine. Here, in the Labarque Creek watershed, it reaches its northern limit in the state.

And we were successful in adding new plants to the list for the Robinson tract. In all, we found 10 new species: *Cirsium arvense* (Canada thistle) – in flower, *Cuphea viscosissima* (clammy cuphea) – in flower, *Fraxinus quadrangulata* (blue ash), *Heliotropium tenellum* (pasture heliotrope) – in flower, *Hypericum drummondii* (nits and lice) – in flower, *Kummerowia stipulacea* (Korean clover) – in flower and apparently uncollected from Jefferson County, *K. striata* (Japanese clover) – in flower, *Setaria glauca* (yellow foxtail), *Monotropa hypopithys* (pinesap) – in flower, and *Frullania brittoniae* (a leafy liverwort) which is uncommon, and usually found south of here. My thanks to group member and bryologist extraordinaire Nels Holmberg for this information.

Many thanks also to Don Robinson for the invitation to visit and for his vision and generosity in planning the donation of his beautiful property for use as a state park. This gift is certainly one of the two largest private donations to the state park system. In the 1930's, the estate of Edmund Babler donated a slightly larger parcel in Wildwood, Missouri which became Babler State Park. But don't put Don in second place just yet. He has his eye on some adjoining land he'd still like to add to the gift, and his determination and business acumen are definitely a match for his philanthropy – and, after all, there's only one Don Robinson.

August 30, 2010 – Marais Temps Claire Conservation Area, St. Charles County, MO
(contributed by George Van Brunt).

Eight hardy botanists were not scared off by rain. Larry Morrison, Fr. Sullivan, Wayne Clark, Nancy Clark Jeannie Moe, Louise Langbein, John Oliver, and George Van Brunt met at Marais Temps Clair Conservation Area in St. Charles County. The rain was heavy between 9:00 and 9:30 a.m. when we were assembling, so we sat in our cars until 9:30 a.m. when we were scheduled to begin our walk. Coincidentally, the heavy rain changed to a light rain. The light rain persisted until about 10:15 a.m. when it stopped altogether. We were interrupted

by a brief shower only near the end of our walk. It was a mild morning but could have been much warmer were it not for the clouds and rain.

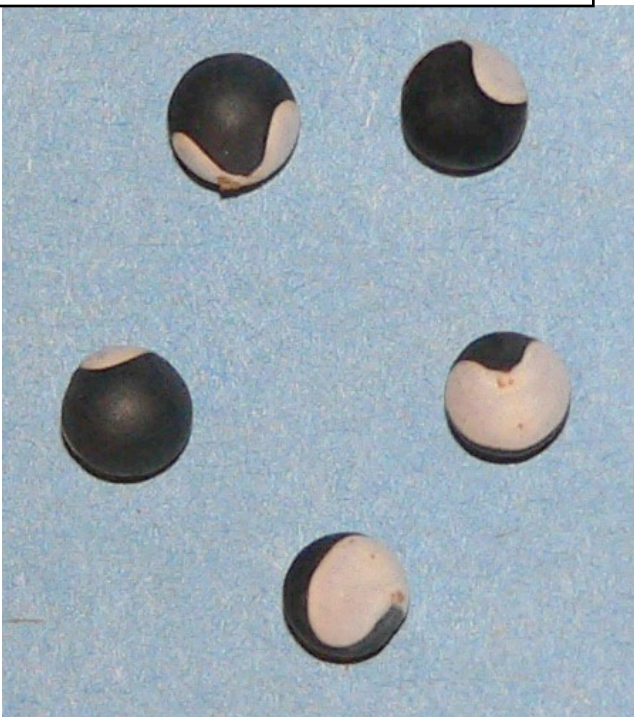
Marais Temps Claire is a 917 acre conservation area that is an old oxbow of the Missouri River and is part of an extensive marsh that once ranged from St. Charles to Alton. This area has been used for centuries by migrating waterfowl for resting and feeding. Today there are ten areas of Marais Temps Claire that are periodically subject to controlled flooding, but sometimes natural flooding occurs as well. As expected, we found many water-loving species blooming here. Among them were *Hibiscus lasiocarpus* (rose mallow), *Cephalanthus occidentalis* (buttonbush), *Ipomoea hederacea* (ivy-leaved morning-glory), *I. lacunosa* (whitestar), *Persicaria amphibia* var. *emersa* (water smartweed), *Asclepias incarnata* (swamp milkweed), *Typha angustifolia* (narrow-leaved cat-tail), *Penthorum sedoides* (ditch stonecrop), and *Persicaria pennsylvanica* (pink smartweed). We also found many *Cardiospermum halicacabum* (balloon vine) plants that were blooming and fruiting, usually both on the same plant. This member of the family Sapindaceae was introduced from tropical America including Mexico where its common name is farolitos (little lanterns). The fruit is an inflated papery capsule with three chambers, each containing a single seed. The capsule looks much like the fruit of *Physalis* spp. The species name, *halicacabum*, is the ancient Roman name for *Physalis alkekengi* (bladder cherry). We had a brief discussion about how the capsule might function in moving the seeds away from the parent plant. John Oliver suggested that the "balloons" might float away from the parent plant during periodic flooding. One on-line source suggested that that the capsules could be blown a short distance when falling from the parent and then be blown further along the ground, but also stated that there was not much in the literature about this question. In any case, the capsule is dehiscent, meaning that it eventually splits along the seams joining its three parts and releases the seeds. The seed is roughly spherical, about 5 mm diameter, and has a black seed coat with a heart-shaped white area. The genus name, *Cardiospermum*, means "heart seed". The white part of the seed coat is the residue of a nonfunctional aril which abscised (broke off) during maturation (thanks to George Yatskievych for providing this information).



Cardiospermum halicacabum – biternate leaf (l); flower (r).
Photos by George Van Brunt (2006).



Cardiospermum halicacabum – fruit closed (l); fruit apically opened to show the three chambers and arrangement of the seeds (r). Photos by George Van Brunt (2006) (l) and [http://commons.wikimedia.org/wiki/Commons:Valued_image_candidates/Cardiospermum_halicacabum_\(Balloonvine\)](http://commons.wikimedia.org/wiki/Commons:Valued_image_candidates/Cardiospermum_halicacabum_(Balloonvine)) (r).



Cardiospermum halicacabum seeds. Photo by George Van Brunt.

Large numbers of blooming *Ambrosia trifida* (giant ragweed), yellow with pollen, lined our path. Pollen grains carry protein molecules in their walls that play various roles in the pollen-stigma

interaction. Pollen grains are dehydrated when shed, which makes them lighter and more easily transported. When a pollen grain lands on the stigma (female receptive part of a flower), the grain hydrates with fluid from the stigma. When it does this, the interaction proteins diffuse onto and into the stigma. Some of these proteins play a role in attachment and recognition in an interaction that is akin to a lock and key. The correct interaction proteins cause a pollen tube to grow down the style to the ovary where fertilization takes place. The incorrect interaction proteins cause pollen tube growth to stop before it reaches the ovary, preventing fertilization. When airborne pollen grains are breathed into a person's nose and throat, the grains make contact with moist mucus membranes. The pollen grain does what it normally does; it hydrates and its interaction proteins diffuse into the surrounding tissue. Some of these interaction proteins are highly immunogenic, provoking the formation of IgE antibodies. If these proteins are ever contacted again, they set off an immune reaction that leads to inflammation of the tissue surrounding the proteins. Some species seem to provoke a more robust reaction than others, and *Ambrosia* spp. are among the worst for causing nasal allergy. Fortunately for us, the rain cleaned the air and washed all the loose pollen off the anthers.

Some other notable species in bloom included *Helianthus tuberosus* (Jerusalem artichoke), *Euphorbia dentata* (toothed spurge), *Solidago altissima* (tall goldenrod), *Chamaecrista fasciculata* (partridge pea), *Oenothera biennis* (common evening primrose), *O. filiformis* (formerly *Gaura longiflora*) (long-flowered beeblossum), *Desmodium illinoense* (Illinois tick clover), *Cirsium discolor* (field thistle), *Phyla lanceolata* (fog fruit), *Helianthus annuus* (common sunflower), *Strophostyles helvola* (wild bean), *Polygonum scandens* (climbing false buckwheat), *Stachys pilosa* (hairy hedgenettle), *Cynanchum laeve* (climbing milkweed), *Eclipta prostrata* (yerba de tao), *Iva annua* (marsh elder), and *Sida spinosa* (prickly sida).

Further Notes from West Texas

Fr. James Sullivan

Fallugia paradoxa

Limpia Creek bottomland has a distinctive bush. They call it *Fallugia paradoxa* (Apache plume). I am not sure what the describer considered paradoxical. But the bush has definitely been paradoxical to me.

When I saw the white petals, many anthers, reduced but lobed leaves, and seeds with feathery tails, I thought of *Clematis virginiana*, and I was also thinking that this could be a desert-adapted *Clematis*, or something closely related in the Ranunculaceae. But in fact, it belongs to the Rosaceae! That is my paradox!

Polygala obscura

It was a very tiny flower. But it looked like a *Polygala*. And it had light blue sepals. It was new to me, but I left it alone, because it might be rare. It did not show up in my Texas wildflower books – except for one. There it was: *Polygala obscura*, the velvetseed milkwort.

I found it five times during my brief visits to Davis Mountains State Park. It grew among the rocks on steep slopes. One plant was growing from the gravelly edge of Highway 118. George Van Brunt learned that it occurs in the mountains of southern New Mexico and Arizona, and we think also south of the border in the highlands of Mexico. George Yatskievych showed me specimens in the herbarium of the Missouri Botanical Garden, where we found one that he had collected years ago.

That flower was tiny, and blue, and not showy, but it was a major theme of my West Texas visit.

Jeeppers Creepers, where'd ya get those multilayered retinae?

Ted C. MacRae¹



A few weeks ago I was fortunate to get a chance to blast down to the White River Hills in extreme southwestern Missouri. *Cicindela obsoleta vulturina* (prairie tiger beetle) was my quarry – I had made arrangements to meet up with fellow cicindelophile Steve Spomer (principal author of *Tiger Beetles of South Dakota & Nebraska*, Spomer et al. 2008) and show him a few of the better sites I had found for this species. We would have good success due to gorgeous fall weather and perfect timing, and the next day I would be fortunate to extend its known distribution further north and east. Still, the beetles are not early risers, and I found myself that second morning with some time on my hands while waiting for these sleepy-heads to arise from their slumber and begin their foraging activities. As I trolled the thinly soiled dolomite exposures of a new site I had identified the previous day, a spot of red jerking erratically through the sparse vegetation caught my eye, and looking closer I was delighted to see this small but brilliantly colored jumping spider (family Salticidae) trying to evade my gaze.

Jumping spiders are perhaps the most diverse of all spider families, but it is their extraordinary visual capabilities and complex predatory and courtship behaviors that they are best known for.

¹ Reprinted from an article posted October 5, 2010 on the author's website: <http://beetlesinthebush.wordpress.com>
All photos by the author.



Popular as research subjects, to the rest of us they are simply endearing little animals. Some of the largest and most colorful jumping spiders belong to the genus *Phidippus*, which is also one of the most diverse genera in the family and boasts some 60 species in the continental United States (Edwards 2004). The genus is characterized by details of the eye placement and carapace shape (Richman 1978) but can often be recognized by their relatively large size, numerous erect hairs, and conspicuous iridescent chelicerae just below the front eyes. The species can be quite difficult to identify, especially the females, but I feel reasonably confident that this individual is a male of the widespread species *P. apacheanus*.

I wasn't always so confident – browsing images on [BugGuide](#) left me confused after finding images of *P. apacheanus* and *P. cardinalis* males that looked almost identical. However, further digging reveals *P. apacheanus* is characteristically a more intense red, while *P. cardinalis* is orangeier with lighter bristles which may appear silvery.

Also, *P. cardinalis* often displays markings on the abdomen – generally a light line running around the anterior part of the abdomen and sometimes tiny light spots on the dorsum – that are absent in *P. apacheanus*. (This begs the question as to whether some of the BugGuide photos may be misidentified?) Another *Phidippus* species that might be confused with *P. apacheanus* is *P. clarus*; however, that species has a black cephalothorax and bright abdominal markings. According to [Herschel Raney](#), *P. apacheanus* is most often seen in fall.

This was a very difficult subject to photograph.

He refused to come out in the open, preferring to duck and peek from behind whatever vegetation



he could find. Realizing that my desire to photograph him without any manipulation would be a lesson in futility, I used my finger to prod him towards and onto a small, flat, lichen-encrusted rock, where he would look at me with ever-increasing alarm and try to flee at the approach of the camera. Lots of failed shots were discarded in the field before I finally got a few I thought I could live with (which, I think, are decided improvements over [my first jumping spider](#) photos). As I zoomed in for the close-ups, I saw for the first time the shimmering of his multilayered retinæ moving in the depths of his primary medial eyes. The retina is the darkest part of the eye, thus, when the eye is at its darkest the spider is looking straight at you!

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[Spomer, S. M., M. L. Brust, D. C. Backlund and S. Weins. 2008.](#) *Tiger Beetles of South Dakota & Nebraska*. University of Nebraska, Department of Entomology, Lincoln, 60 pp.



Are we loving our prairies/glades/woodlands to death?

Ted C. MacRae¹

I had such high hopes for [last weekend's collecting trip](#) – late May is boom time for insects across Missouri, we have had good moisture this spring, and I would be visiting some high-quality natural communities that I had not visited for a long time. My stated goals (the jewel beetles, *Agrilus impexus* and *A. frosti*) were long shots – I knew that and would have been fine coming home without those species (which I did) had the collecting been otherwise productive (which it was not). Still, I've been doing this for a long time now, and I've learned to draw on my accumulated experience when things don't go as planned to give myself the best shot at turning a bad collecting trip into a decent one when things don't go as planned. The itinerary with which I start is rarely the one that I actually follow, and this past weekend was a good example of such.

My first stop was [Ha Ha Tonka State Park](#), one of Missouri's premier parks, boasting high-quality chert, dolomite, and sandstone savanna interspersed with dolomite glades. It is on these glades and savannas that I hoped to find *Agrilus impexus*, or failing that at least collect a nice diversity of other jewel beetles on the oaks and hickories of the savannas and surrounding woodlands. However, it was with some reservation that I even came here after being told by my colleague at the Department of Natural Resources just 2 days before my trip that 75% of the park's grasslands and woodlands had been burned within the past two years. For an insect collector, this is never good news – in all my years of collecting insects, my experience in relatively recently-burned habitats has been consistent: collecting sucks! I decided, however, to visit Ha Ha Tonka anyway because of the quality of the natural communities it contains, thinking perhaps I might be able to find pockets of unburned habitat supporting good insect populations. This was not



Devils Promenade, Ha Ha Tonka State Park.

to be. I beat oak after oak in the savannas and woodlands – nothing! I swept little bluestem and Indian grass in the glades – nothing! The foliage was lush and green and the savanna and glade landscapes highly diverse – given the time of season the place should have been teeming with insect life, yet it almost seemed sterile. Were it not for a few *Chrysobothris quadriimpressa* jewel beetle adults that I found attracted to a recently wind-thrown black oak tree, I would not have seen any insects here at all. It appeared my fears about park-wide depression of insect populations had been realized. However, not one to waste a visit I decided to explore some of Ha Ha Tonka's fascinating geological features. Ha Ha Tonka contains one of Missouri's best examples of karst geology, with complex structures formed from the collapse of a major cave system. The Devil's Promenade is one of the more spectacular examples of such, its horseshoe-shaped cliff representing the former interior walls of a now-collapsed cave. As dusk approached, the day's poor insect collecting caused me to abandon my plans to stay here and blacklight for nocturnal beetles. Instead, I decided to break from the itinerary, drive further west and explore Lichen Glade Natural Area in the morning before heading to the Penn-Sylvania Prairie BioBlitz later that afternoon.

[Lichen Glade Natural Area](#) is a small area owned by The Nature Conservancy that boasts a high-quality sandstone glade surrounded by post oak/black jack oak forest. My first visit to the area more than 20 years ago was during May, and it was one of the most productive collecting trips I've had with a number of *Agrilus* spp. (including *A. frosti*) beaten from post oak (*Quercus stellata*) along

¹ Reprinted from an article posted June 4, 2010 on the author's website: <http://beetlesinthebush.wordpress.com>. All photos by the author.



Sandstone glade community, Lichen Glade Natural Area.

the woodland edge. I didn't visit again until fall of 2002, when Chris Brown, Rich Thoma and I found claybank tiger beetles (*Cicindela limbalis*) sunning on the exposed sandstone outcrops, and I made one more visit the following May to beat more insects off of post oak. The Lichen Glade that I returned to this past weekend was a very different place from when I last visited – the surrounding woodlands had been extensively opened (I would guess within the past few years based on the size of the post oak resprouts), and fire had been used throughout the area.

Anticipation turned to frustration when no amount of beating of the woodland vegetation and sweeping of the glade vegetation turned up beetles in any appreciable numbers (or any insects for that matter) and two hours worth of effort yielded not a single buprestid beetle!

With resignation, I headed on over to Pennsylvania Prairie, where during the introduction to the BioBlitz I learned that nearly half of the 160-acre prairie was burned last December and all of it had been burned within the past few years. I knew what I was going to find – nothing! Okay, I shouldn't say nothing, as there actually were some beetles present. However, the numbers and diversity were low, with all of the species encountered representing common, widespread species. Moreover, it was not just beetles – all of the invertebrate group leaders (which included experts on snails, ants, butterflies, and bees) reported low overall abundance and diversity in their groups of interest. Only the vascular plants – the metric by which the value of prescribed burning is always assessed – showed high diversity, with 300 species of mostly native prairie plants recorded for the site. It was a fun event,

with probably ~75 attendees and a delicious pot luck dinner that evening; however, it would have been more enjoyable had there actually been a nice diversity of insects present to document for the preserve.

My comments may make it seem that I am against the use of prescribed burning. This is not true - I understand the critical role that fire as a management technique plays in restoring and maintaining examples of Missouri's historically fire-mediated landscape. Without fire and other processes to mimic natural disturbance factors, most of Missouri's historical grasslands and open woodlands suffer relentless encroachment by woody vegetation. However, the modern landscape is very different from the historical landscape, where fires of unpredictable scale, intensity, and frequency operated within a vastly larger scale to create a shifting mosaic of natural communities in various stages of ecological succession. Such processes cannot be recreated on today's severely fragmented landscape, where the precious few remaining tracts of native habitat are relatively to extremely small and more often than not separated from each other by vast expanses of homogeneous and "inhospitable" habitat (e.g., agricultural, urbanized, or severely degraded lands).

It is in that context that I have great concerns about how aggressively fire has been used in recent years on our state's natural areas and the impact this is having on insect populations – specialist and generalist alike. Fire proponents will point to published studies that show little to no effect by the use of fire for managing small, isolated remnants on specialist insects (see review in Henderson 2010). However, there are an equal number of studies that suggest such concerns are well-founded (see review in Panzer 2002). A consistent limitation in all of the studies that have been conducted is the lack of very large and long un-burned remnants. Prescribed burning has been adopted so rapidly and pervasively that there just aren't any significant un-burned remnants left to properly include as controls in such studies. As a result, the insect fauna present at a given site at the start of such a study is already skewed towards those species that successfully recolonized the area post-burn. At a minimum, the data to this point are inconclusive, and certainly the potential for impacts has not been given the consideration it warrants in designing fire-management plans for

our own state's prairies and glades. Furthermore, as rapidly and aggressively as fire has been adopted on our few, small, widely disjunct remnants, the opportunity for proper investigation of those potential effects may be gone. A particularly egregious example of the lack of consideration being given to prairie invertebrates in designing fire management plans is shown in [these photos](#) of Iowa's Sylvan Runkel State Preserve before and after a late May burn and the impact of that burn on a resident population of Nevada buck moths (*Hemileuca nevadensis*).

Here in Missouri, as in Iowa, it's a problem of scale – the landscape is too fragmented and remnants too disjunct to manage based strictly on floristic response. Populations of generalist insect species will recover, and even specialist species may be able to overcome such management practices if they are widely distributed and sufficiently mobile. But what about conservative species with low vagility, such as the swift tiger beetle (*Cylindera celeripes*) and our disjunct population of the frosted dromo tiger beetle (*Dromochorus pruinina*), flightless species restricted in Missouri to the few tiny remnants of loess hilltop prairie in northwestern Missouri and a single 2.5-mile stretch of roadside habitat in west-central Missouri? Until directly relevant data, gathered here in Missouri, are forthcoming to suggest otherwise, I believe the most judicious use of fire possible should be practiced in restoring and maintaining our grasslands and woodlands. In-season burns may have been a part of the historical landscape, but their use today has great potential to result in local extirpations and should be used only after the most careful consideration. Leaving un-burned refugia within remnant habitats to accelerate recovery would also be prudent – yet many land managers disregard this practice because of its logistical difficulties. This is especially true in small parcels, yet it is precisely these remnants that have the most to gain from their use (or lose from not doing so!). In the historical landscape, every burn was a patch burn – no matter what its size, there were always adjacent or proximal unburned habitats from which recolonization could occur. Elk and bison, too, were integral components of the presettlement prairie landscape – their roaming caused intermittent, localized disturbances that were likely not only crucial to the tiger beetles that I study but

may also have contributed to vegetational diversity through patch succession. Techniques that mimic these natural disturbance factors include mowing, haying, and managed grazing. They can be utilized to mimic those disturbances as well as delay woody encroachment, and their use in land management should be considered for their ecological value rather than deprioritized because of their relatively greater complexity and cost to implement. Mechanical removal and selective use of herbicides offer additional tools for addressing woody encroachment while minimizing potential impacts to insect populations. An effective management program that considers all of the flora and fauna of a remnant may not be possible unless all of these management tools are utilized, or at least properly considered. As my good friend James Trager said in a recent email (quoting Andrew Williams), habitat restoration "cannot rest on any single management practice, nor practicing it too extensively."

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[Henderson, R. A. 2010.](#) Influence of Patch Size, Isolation, and Fire History on Hopper (Homoptera: Auchenorrhyncha) Communities of Eight Wisconsin Prairie Remnants. Wisconsin Department of Natural Resources, Research Report 189, 22 pp.

[Panzer, R. 2002.](#) Compatibility of prescribed burning with the conservation of insects in small, isolated prairie reserves. *Conservation Biology*, 16(5):1296-1307.



St. Louis Zoo Lecture Series

*Jim Jordan*¹

The St. Louis Zoo presents the lecture series: *Conservation Conversations*, co-sponsored by the Academy of Science –St. Louis. Programs are held in the Living World, with free parking available in the North parking lot. These lectures are **FREE** and open to the general public, no reservations required. Visit www.stlzoo.org or call (314) 646-4544 for more information.

¹ Curator of Education, Saint Louis Zoo.

CONSERVATION CONVERSATIONS

Creepy Crawly Conservation

Tuesday, November 23, 7:30 p.m.

Jennifer Hopwood, Midwest Pollinator Outreach Coordinator, Xerces Society.

SCIENCE SEMINAR SERIES

Irrational Scientific Ideas: A Science Café

Wednesday, November 3, 7:30 – 9 p.m.

Hal Harris, Ph.D., Associate Professor of Chemistry and Education, University of Missouri – St. Louis

Note: Lecture to be held at the Zoo's River Camp near the Zoo south entrance. Free parking is available in the North parking lot.

CONSERVATION FORUM

In addition to the above lecture series, the *Whitney and Anna Harris Conservation Forum* – a public forum partnership of the Academy of Science – St. Louis, the University of Missouri – St. Louis Whitney R. Harris World Ecology Center, the St. Louis Zoo, and the Missouri Botanical Garden – will host the following event in November. This event is FREE and open to all, but advance registration is required. Call (313) 516-5219 for more information or to register.

Global Climate Change: Environmental Impacts, Human Society, and Policy

Wednesday, November 10, 6 – 9 p.m.



The Nature Conservancy: Fall 2010 Conservation Speaker Series

*Anna Babcock*¹


The Nature Conservancy is hosting a speaker series at **Schlafly Bottleworks** in Maplewood starting in September. All lectures are free and open to the public, with topics ranging from the oil spill in the Gulf to ethnobiology in China.

¹ Philanthropy Assistant, The Nature Conservancy in Missouri.

Khawa Karpo: Conservation in a Tibetan Landscape

Tuesday, November 16, 7:00 p.m.

Join us as Jan Salick, Curator of Ethnobotany at the Missouri Botanical Garden, and Bob Moseley, the Conservancy's Director of Conservation Science in Illinois, share their research from their recent study at Khawa Karpo, a mountain in the Eastern Himalayas that is known for its incredible biodiversity and is considered sacred throughout Tibet.



Group Activity/Walk Schedules

ORNITHOLOGY GROUP

David Becher, Chair – (314) 576-1146

Saturday Bird Walks

David Becher, Leader – (314) 576-1146

All trips begin at 8:00 a.m. and normally go through early afternoon, so bring lunch if you wish to stay out. Everyone is welcome. The leader reserves the right to change the schedule if necessary. Walks are at Des Peres Park through December except on the following dates:

Sep 25	Teal Pond Riverlands
Oct 9	Teal Pond Riverlands
Oct 16	HQ Columbia Bottom

Thursday Bird Walks

Jackie Chain, Leader – (314) 644-5998

Jackie Chain will be leading Thursday birding trips from Des Peres Park parking lot (east side of Ballas Rd. just north of Manchester Rd.). Meeting time is 8:30 a.m., and return is usually by 3:30 p.m. (but you may leave at your convenience). Bring lunch, beverage, binoculars and if you have one a scope/tripod. If you have questions, contact Jackie at (314) 644-5998 or chainjac@sbcglobal.net

Note: There will be no scheduled walk on Thanksgiving Day.

BOTANY GROUP

George Van Brunt, Chair – (314) 993-2725

Botany Walks

Fr. James Sullivan, Leader

(now in his 44th year as Botany Walk Leader!)

Botany walks are every Monday. 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 jahar@mac.com or (314) 368-0655 and receive an email no later than Sunday about the next Monday's trip.

ENTOMOLOGY GROUP

Phil Koenig, Co-Chair – (314) 281-1313

Jane Walker, Co-Chair – (314) 965-6522

Upcoming Meetings

Sunday, October 24, 7:00 p.m. Anne McCormack will be speaking about our WGNSS Flickr site, a system for sharing natural history pictures at the City Museum 701 N. 15th St., St. Louis. Parking is available in the North 16th and Delmar lot. For directions, visit the museum website <http://www.citymuseum.org/home.asp> or call (314) 231-2489.

The November meeting is still TBD. Date and meeting place will be announced in next month's *Nature Notes*.

For general information about WGNSS, contact Membership Chairman Paul Brockland at pbrockland@sbcglobal.net or (314) 961-4661.

Editor's Corner

Ted C. MacRae

NATURE NOTES BY EMAIL

Nature Notes is available not only by regular post, but also by email. Not only does this save paper and reduce mailing costs, it allows viewing of the newsletter and the included photos **in full color**. Embedded hyperlinks also allow instant navigation to email addresses and websites. Of course, you can always print your electronic copy of *Nature Notes* if you wish (if you do, please be sure to use both sides of the paper ☺). The electronic newsletter is sent as a PDF, which can be opened using Adobe Reader (free download available at <http://get.adobe.com/reader/>). Send your name and email address to the Assistant Treasurer at whittex@aol.com to receive *Nature Notes* by email.

CALL FOR SUBMISSIONS

We welcome all announcements of WGNSS or other nature related events in the St. Louis area, notices of published articles – especially those authored by members, and original nature oriented articles. Suggested topics include accounts of field trips you have taken, information about local natural areas, interesting nature sightings, or reviews of nature related books. Reprinting of articles from other sources requires permission from the copyright holder. Previous *Nature Notes* issues are a good source of ideas – copies of recent issues can be provided upon request.

Please direct all submissions by email to the Editor at ted.c.macrae@monsanto.com. Limit text formatting to bold for emphasis and italics for scientific names. Additional formatting (e.g., use of tabs and extra spaces, multiple hard returns, underlining, etc.) should be avoided, since it must be removed by the Editor during final formatting. Photographs are encouraged and will be published on a space-available basis. Contributions are welcome from all but especially encouraged from members – remember; this is your newsletter!