



Nature Notes

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PRESIDENT'S CORNER – Ann Earley

Summer seemed to go by quickly this year, and the appearance of fall wildflowers and the decreasing hours of daylight remind us that autumn is approaching. Along with fall migration and back-to-school time, the changing seasons bring the start of a new program year for WGNSS.

First Vice President and Program Chair Shawn Clubb has been busy this summer with plans for our upcoming monthly general program meetings. To kick off the fall season, our first **program meeting** will be on **Thursday, September 4** at 7 p.m. at the St. Louis County Library Headquarters on Lindbergh. Our featured speaker will be WGNSS Menke Scholarship recipient Cara Joos. Further details may be found elsewhere in this newsletter. Mark your calendars, and don't miss this opportunity to hear from one of our scholarship recipients! If you have any program ideas (topics or speakers) you would like to recommend for a future general program meeting, please provide those to Shawn.

After a hiatus during the summer months, the WGNSS Board will meet on September 3 at 7 p.m. at Powder Valley. WGNSS members are welcome to attend meetings of the Board. We are always looking for members willing to donate their time and talents to our organization, either by serving on the Board or a committee, or by assisting with a Society activity or event. If you are interested in volunteering, please contact me or one of the other officers or Board members. WGNSS needs your skills and expertise!

I hope that you had a pleasant summer, and that it included some nature activities that you enjoyed. I look forward to seeing you at our first program meeting of the season on September 4.

SEPTEMBER GENERAL MEETING – Shawn Clubb

Cara Joos will be our speaker for the general membership meeting to be held at 7 p.m. Sept. 4 at the headquarters of the St. Louis County Library, 1640 S. Lindbergh Blvd. She will speak about the natural history of Bell's vireos and her study on how this species selects habitats and how habitat influences reproductive success.

DUES RENEWAL

Dues for the 2008-2009 program year are payable by August 31. Mail your renewal check to the Treasurer now and avoid standing in the last-minute line at the postoffice. Call Mike if you have a question.

APRIL BIRD REPORT – Jim Ziebol and Yvonne Homeyer

The Chart of Early Arrival Dates for April has already been published in an earlier Newsletter.

Introduction: There were some very good days for migrating songbirds in April. Several cold fronts caused songbird fallouts. However, shorebirds were sparse in numbers. Eleven inches of rain in March were a precursor to good plant growth, which should have meant more insects, but insect populations were low this summer. (Ed. July, 2008).

Sightings: There were only 3 Common Loons seen this spring in the St. Louis area. Jim Ziebol saw one at HL on 4/7, along with 400+ Double-crested Cormorants. An Eared Grebe was seen at Winfield Dam on 4/7 (D Rogles). On 4/13, as many as 1500 Double-crested Cormorants were found at HL (FH, YH). The Thursday Group found 37 Little Blue Herons in the flooded fields behind Cahokia Mounds on 4/19 (JChain). As many as 65 were present there a few days later (m. ob.). A Green Heron and a Green-winged Teal were seen in FP on 4/9 (CF). Yellow-Crowned Night Herons had built 8 nests in Wilson Park, Granite City, by 4/20 (FH). A *Plegadis* Ibis was present at Cahokia Mounds on 4/13 (BRudden). Dave Rogles observed the following in Lincoln County on 4/7: 1300 Golden Plovers, 420 Pectorals, 65 Lesser Yellowlegs, 20+ Greater, 2 Least Sandpipers, and 65 Great Egrets. On 4/19, 38 Pecs, 8 Lesser Yellowlegs, 4 Greater, and a Solitary Sandpiper were seen along the Levee Roads in Monroe County (JZ). Other sightings of Solitary Sandpipers included 5 at LCCL on 4/25 (P&BJ) and 7 at CB on 4/25 (DRogles). Eleven Greater Yellowlegs were seen at HL on 4/28 (FH). For some unexplainable reason, Terns began landing on the Causeway at HL this year. The first occurrence was on 4/28, when 3 Caspians sat there (P&BJ, FH, JZ). Nine Spotted Sandpipers were counted together by FH at HL on 4/27 – an unusually high number. On 4/29, Paul & Barbara Johnson found Wigeon, Bobwhite, and Grasshopper Sparrow at CB. Several WGNSS members took part in rail surveys at BK Leach, and on 4/5, they reported 5 Sora, 2 Am. Bitterns, and 2 Marsh Wrens (SC, JCowan, DS). A Harrier was observed in FP on 4/5 (CZ). Osprey sightings included 1 at her Lincoln County home (PG), 1 on the Levee Road on 4/19 (JZ), 2 at HL on 4/20 (FH), and 1 at BCA on 4/26 (YH). Bald Eagles were reported at HL on 4/14 (FH) and on 4/13 at Forest 44 (MThelen). A Broad-winged Hawk was seen in Kirkwood on 4/17 (AM). A Swainson's Hawk seen at Tyson on 4/11 is a rare spring occurrence (NB). On 4/5, the Saturday Group encountered a Bald Eagle and a dark morph Red-tailed Hawk at CB (DBecher). The Saturday Group reported a pair of Great Horned Owls at TGP, plus Cattle Egret, Caspian Tern, and Solitary Sandpiper at HL, on 4/12 (DBecher). Mississippi Kites were seen in Kirkwood on 4/29 (AM) and near TGP on 4/30 (Joe Pinell). An active Great Horned owl nest containing 1 young was first discovered at BCA by Dave Anderson, and was seen by the Thursday Group on 4/3 (JChain).

An Olive-sided and a Least Flycatcher were reported at TGP on 4/30 (LV, BB). A brisk movement of Ruby-crowned Kinglets, plus Eastern Towhee, Brown Thrasher, and Sapsuckers, was observed in TGP on 4/14 (JM, JZ). In TGP on 4/17, Jim and Helen

Geiss found a Winter Wren and had very good looks at a preening Cooper's Hawk. On 4/25, the Thursday Group visited TGP and observed 3 Winter Wrens, Hermit Thrush, Wood Thrush, and Kentucky Warbler (JChain). At HL, American Pipits were still being seen in April - 2 on 4/23 (SM, JZ), 20 on 4/24 (FH), and 2 on 4/27 (FH). Yellow-throated, White-eyed and Red-eyed Vireos were seen in good numbers during spring migration. Blue-headed Vireos were not as numerous as in previous years. Cerulean Warblers turned up on 4/23 at LVT (J&CM) and on 4/29 at Emmenegger Park (TW). Several agencies, including Partners in Flight and US Fish & Wildlife Service, have stated that as few as 750,000 Golden-winged Warblers remain. However, it was a fairly good year for this migrant in St. Louis. Hooded Warblers were seen at SNR on 4/24 (DH) and 2 in TGP, along with a Purple Finch on 4/30 (LV). Bob Bailey found 3 Prairie Warblers at Valley View Glades on 4/20, and one was seen at HL on 4/27 by the Saturday Group (LB). A Chat was a good find in FP on 4/26 (RK, RW). Chris Ferree found 2 Hooded Warblers, plus Nashville and Black-throated Green, in FP on 4/9. On 4/27, approximately 80 Yellow-rumped and 35 Palm Warblers were seen at HL along the north shore (FH, JZ). Lark Sparrows were observed at CSP on 4/21 (TW), on 4/25 at LCCL (P&BJ), on 4/25 at CB (DRogles), on 4/26 at BCA (YH), and a pair copulating at Katy Access/Weldon Spring on 4/30 (MM). It was a great year for Blue Grosbeak, and sightings included 1 at TGP on 4/23 (JCook), 1 at LCCL on 4/25 (P&BJ), 1 at BCA on 4/26 (YH), 1 in FP on 4/26 (RW), 1 at BCA on 4/27 (ML), 1 at FP on 4/28 (CA, CK), 2 at HL on 4/28 (Cathy Spahn), 1 at CB on 4/29 (P&BJ), and 1 in FP on 5/1 (MM). Over 50 Indigo Buntings were seen at Tyson on 4/25 (NB). On 4/17, Sherry McCowan found 2 Blue-gray Gnatcatchers and a Lincoln Sparrow in FP. Several flocks of 30 or more Chipping Sparrows were seen in the St. Louis area during April (m. ob.). Vesper Sparrow sightings included 4 on Schoolhouse Road on 4/6 (FH), 1 in FP on 4/7 (SM), and 10+ at HL on 4/13 (YH, JZ). That same day, Yvonne Homeyer ran into a group of Tennessee birders at HL on their way home from Prairie Chicken viewing in Illinois; the leader David Trentley had been on her El Cielo, Mexico birding trip in February. Yvonne and Jim were able to show the group several Eurasian Tree Sparrows, lifers for some of these visitors. Clay-colored Sparrow and Blue Grosbeak were seen at the Blue Grosbeak Trail on 4/26 (CA, CK). The Saturday Group, led by David Becher, found Bobolinks near the Borrow Pit, HL, and Willet and Long-billed Dowitcher at CB, on 4/26. Shawn Clubb reported Pine Siskin and Red-breasted Nuthatch at BCA on 4/21. Two Cooper's Hawks, 2 Winter Wrens, a Brown Creeper, 15 Hermit Thrush, 10 Phoebes, and 5 Song Sparrows were seen in TGP on 4/6 (JCook, JZ). On 4/9, Barbara and Marty Dietrich reported Phoebe, Hermit Thrush, Brown Thrasher, and Ruby-crowned Kinglet in TGP. Marc Lund found 19 species of warblers at BCA, plus Osprey, Dickcissel and Purple Finch, on 4/30. A Worm-eating Warbler, Black-throated Green, and Yellow-throated Vireo were seen at Matson Hill County Park on 4/29 (P&BJ).

A typical day on 4/13 in FP included a pair of Blue-winged Teal, 2 Turkey Vultures, 2 Kingfishers, and 7 Snowy Egrets (CZ). A typical day at Little Lost Creek Conservation Area in Warren County on 4/6 included 2 Ruby-crowned Kinglets, 2 Yellow-rumps, 1 Yellow-throated Warbler, 3 Black-and-white Warblers, 2 Louisiana Waterthrush, 2 Field Sparrows, and 2 Juncos. A typical day in FP on 4/2 included many

Tree Swallows, a few Purple Martins, 6 Shovelers, 4 Blue-winged Teal, Snowy and Great Egrets, and 22 Rusty Blackbirds (CF).

Back Yard, Hybrid & Other Birds: Jane Allen's Spotted Towhee was last seen on 4/6. On 4/16, Sherry McCowan reported 2 Chipping Sparrows and a Brown Thrasher at her Soulard home. Margy Terpstra: a pair of Pine Siskins, a Hairy Woodpecker, and a Phoebe on 4/19; on 4/26, Red-breasted Nuthatch and a Ruby-throated Hummingbird; on 4/27, Vesper Sparrow and Worm-eating Warbler – two very unusual backyard birds. Mark Paradise saw a Clay-colored Sparrow from 4/25 to 4/28; earlier he saw a pair of Purple Finch; and a pair of Red-breasted Nuthatches stayed at his home all winter. On 4/20, Paul Neuhoff had two Purple Finches at his Webster Groves home. Paul Bauer reported a Red-breasted Nuthatch on 4/19 and a Rose-breasted Grosbeak on 4/27 at his Florissant home.

Leucistic birds: Mallard, Canada Goose, Ruddy Duck, Horseshoe Lake (FH); Bobwhite, Horseshoe Lake (JZ); Mallard, Columbia Bottoms (B Rowe). Partial albino Eurasian Collared Doves: Granite City (FH), St. Louis City (JZ).

Contributors: Connie Alwood, Bob Bailey, Loy Barber, Nick Barber, David Becher, Tom Bormann, Mike Brady, Jackie Chain, Dick Coles, Jack Cowan, Shawn Clubb, Jean Cook, Joe Eades, Dave Faintich, Chris Ferree, Pat Garner, Wally George, Sue Gustafson, Don Hays, Frank Holmes, Yvonne Homeyer, Les Jenkins, Paul & Barbara Johnson, Dan Kassebaum, Chris Kirmaier, Randy Korotev, Pat Lueders, Marc Lund, Charlene & Jim Malone, Anne McCormack, Sherry McCowan, Mark Mittleman, Dave Pierce, Mark Paradise, Bob & Nancy Pryde, David Rabenau, Margie Richardson, Mick Richardson, Dave Rogles, Bill Rowe, Bill Rudden, David Scheu, Bruce Schuette, Eric Schuette, Margy Terpstra, Mike Thelen, Josh Uffman, Lorie Vitt, Steve Vogel, Michael John Voss, Tina Weyman, Rad Widmer, Clarence Zacher, Jim Ziebol.

Abbreviations: BCA, Busch Conservation Area; CC, Clarence Cannon NWR; CL, Carlyle Lake; CSP, Castlewood State Park; CB, Columbia Bottoms; FP, Forest Park; HL, Horseshoe Lake; LP, Lafayette Park; LCCL, Little Creve Coeur Lake; MBG, Missouri Botanical Garden; MTC, Marais Temps Clair; RMBS, Riverlands Migratory Bird Sanctuary; SNR, Shaw Nature Reserve; TGP, Tower Grove Park.

MAY BIRD REPORT – Jim Ziebol and Yvonne Homeyer

Introduction: A regrettable omission from the January bird report is also this reporter's choice for backyard bird of the year. For a short period of time in January, Anne & Jeff Craver had an adult female Goshawk visit their backyard in Clayton. The bird, in first-adult plumage, easily dispatched a tree squirrel and a rock pigeon, and very willingly posed for several photographs.

Sightings: Bill Rudden spotted a Common Loom from the causeway at HL on 5/15. An American Bittern, 2 Least Bitterns and a Ruddy Turnstone were reported from Riverlands on 5/24 (CM, JU). On 5/8, an apparent Sandhill Crane was seen in flight at Sauget Marsh

(MJ, VL). Six Marbled Godwits, 5 Willets, 2 Long-billed Dowitchers, 40 Greater Yellowlegs, and 25 Lesser Yellowlegs were the highlights at Voelkerding Wetland Preserve on 5/26 (DH). The following day, a Baird's Sandpiper was present there (JZ, YH). Sue Gustafson and John Solodar observed 2 Black-necked Stilts at CBCA on 5/23. A Snowy Plover, found at Riverlands on 5/24, was a very good bird (CA, CK, JE). Also on 5/24, Joe Eades saw a Whimbrel at Riverlands, and later in the same day, Peter Keyel found 2 Whimbrels at CBCA. David Rogles observed 11 species of shorebirds at CBCA on 5/4, including 3 Dunlin, a Baird's Sandpiper, a Western Sandpiper, 3 Stilt Sandpipers, and 3 Wilson's Phalaropes. The next day, Jack Cowan found 3 Baird's Sandpipers, 1 Least Sandpiper, 6 Semipalmated Plovers, and a Grasshopper Sparrow at CBCA. May 4th was a good day for shorebirds at HL, with sightings of 8 Spotted Sandpipers, 6 Least Sandpipers, a Solitary Sandpiper, 2 Lesser Yellowlegs, 4 Killdeer, and 8 Semipalmated Plovers (FH, JZ). On 5/26, Josh Uffman reported the following at Riverlands: 12 Semipalmated Plovers, 2 Black-bellied Plovers, 2 White-rumped Sandpipers, 16 Semipalmated Sandpipers, a Short-billed Dowitcher, and a Wilson's Phalarope. On 5/12, Sherry McCowan located 2 Common Moorhens at HL. For some unexplainable reason, terns began to land on the Causeway at HL for the first time in anybody's historical memory, and on 5/8, Frank Holmes photographed 4 Caspian, 6 Forster's, and also observed 3 Franklin's Gulls. Other tern sightings included 4 Common and 6 Forster's at HL on 5/9 (JZ), Common, Forster's, Caspian and a Black Tern on the Causeway at HL on 5/21 (FH), and 15 Black Terns were seen at CBCA on 5/26 (J&CM). The Thursday Group had a good day at Frank Holten SP on 5/1, where they encountered Laughing Gull, Caspian Tern, and Forster's Tern (JChain, LJ). Ten Franklin's Gulls were seen at CBCA on 5/24 (BRowe), and Bill also reported a Laughing Gull at Riverlands on 5/26. Nine Laughing Gulls, by far an all-time high count for the St. Louis area, were seen at Riverlands on 5/26 (J&CM, DRogles).

Barbara Estill spotted 2 migrating Bald Eagles over Kirkwood on 5/1. On 5/3, a White-tailed Kite was seen at CBCA by Dick Coles and others. Mississippi Kite sightings included a copulating pair in Des Peres on 5/2 (BE), a single bird in Des Peres on 5/12 (MRichardson), 2 in Brentwood on 5/21 (YH), and a flock of 12, apparently migrating, on 5/25 in Jefferson County (MP). Two Barred Owls with 3 young were seen in Emmenegger Park on 5/9 (D&MAM). Randy Korotev observed 8 Nighthawks in TGP on 5/10. On 5/10, Black-billed Cuckoos were seen at HL (FH) and in TGP (PL), and on 5/18, Frank Holmes saw one at Olin Nature Preserve and Mark Peters reported one in Jefferson County. A White-winged Dove, possibly the first for the immediate St. Louis area, was photographed at the Mo. Botanical Garden on 5/22 (FL). Western Kingbird sightings included 1 on 5/6 at River's Edge, Madison County, IL (FH), 1 on 5/8 at HL (JZ), 2 on 5/9 at HL (CA, CK), and another single bird at HL on 5/16 (FH). An Olive-sided Flycatcher was found at CBCA on 5/23 (SG, JS). Another Olive-sided, plus 15 Acadian and 3 Alder Flycatchers, were present at LVT on 5/26 (MT). On 5/11, 2 Ruby-crowned Kinglets and a Winter Wren were observed in TGP (YH, RW). A Veery was a good find in TGP on 5/13 (LV, CA, AK). A Bell's Vireo seen in TGP on 5/13 is a very good bird for a large city park (SM). On 5/5, Dave Haenni reported Philadelphia Vireo and Red-breasted Nuthatch in TGP. Pat Lueders reported 14 warbler species at CSP on 5/5, including 2 Blackburnian, plus a Philadelphia Vireo. On 5/29, the Thursday Group found a Prothonotary Warbler on the road to the dam at Riverlands and a Mississippi Kite at CBCA (JChain). Mick Richardson observed 2 Kentucky Warblers and a male

Mourning Warbler in TGP on 5/6. A very unusual spring male Black-throated Blue Warbler was seen in TGP on 5/7 (SC, PL, et al.). The next day, 5/8, Shawn Clubb found a Canada Warbler and an Olive-sided Flycatcher at TGP. A Bay-breasted, a male Wilson's, and about 20 Chestnut-sided Warblers were found in FP on 5/13 (CA). A Chat, a somewhat unusual bird for a city park, and a very late Louisiana Waterthrush, were found in TGP on 5/8 (DS). On 5/14, Judy Lamotte reported Blackburnian, Bay-breasted and a Yellow-bellied Flycatcher in TGP. May 18th was a good day to find Connecticut Warbler. Three different reports came from Emmenegger Park (SG, DCorbett, Saturday Group), and at Dardenne Creek, BCA, Jim Ziebol observed 1 Connecticut, 1 Mourning, and 1 Kentucky. May was a good month for Hooded Warblers, with sightings at HL on 5/16 (FH), at Wilson Park on 5/19 (FH), and Forest 44 on 5/26 (BB). On 5/6, Shawn Clubb reported 10 warbler species in FP and 9 warbler species at TGP, including Blackpoll and a Mourning. A visit to the Olin Nature Preserve on 5/18 produced 12 warbler species, including a Canada and a Mourning (FH). At least 10 Lark Sparrows were seen on the Katy Trail near Dutzow (YH, JZ). A Clay-colored Sparrow was seen in Creve Coeur on 5/5 (DBecher) and in TGP on 5/2 (JH, m.ob.). May 6th was a very late date for Harris's Sparrow, which was seen at Blue Grosbeak Trail (CA, CK). Bobolinks were sparsely reported this year; 4 were seen at CBCA on 5/4 (J&CM). A Painted Bunting returned to East St. Louis on 5/7 (KM); there were no sightings at the Katy Trail location. On 5/10, David Becher reported a Yellow-headed Blackbird at CBCA. Pat Lueders and the SLAS reported 16 warbler species at SNR on 5/22. On 5/24, Mike Thelen observed the following at LVT: Yellow-billed Cuckoo, Mourning Warbler, 5 Wood Thrush, 6 Summer Tanager, 1 Scarlet Tanager, and 2 Blue Grosbeak. Paul & Barbara Johnson also visited LVT on 5/11 and reported 17 species of warblers, 15 Swainson's Thrush, 19 Wood Thrush, 29 Blue-gray Gnatcatchers, 13 White-eyed Vireos, 15 N. Parulas, 10 Kentucky, and 11 Chats. Lost Valley Trail is one of the best birding spots in the St. Louis area.

A typical day at HL on 5/18 included Common Moorhen, Golden-winged, Magnolia, Tennessee, Chestnut-sided, Black-throated Green, Blackpoll, Redstart, Yellow-breasted Chat, and Bald Eagle (FH). A typical day at Riverlands on 5/23 included a female Lesser Scaup, 12 Semipalmated Sandpipers, 2 Least, and 5 Spotted Sandpipers, 4 Dunlin, Herring, 5 Franklin's, and several Ring-billed Gulls, a Forster's Tern, and 2 Black-necked Stilts (Lincoln Shields) (JChain, JU).

Backyard Birds: Anne McCormack had 2 first sightings in Kirkwood – an Orchard Oriole on 5/1 and a Yellow-throated Vireo on 5/8. Good yard birds for Sherry McCowan in Soulard were a Nighthawk on 5/11 and a Towhee on 5/17. Sherry also observed several dead sparrows, apparently killed and eaten by Grackles. A really good backyard bird, seen in Hillsboro by Steve Vogel, was a male Black-headed Grosbeak on 5/9. Margy Terpstra saw 51 species by noon on 5/6, included 12 species of warblers, Pine Siskin, Broad-winged Hawk, and a Ruby-crowned Kinglet. On 5/11, 2 Pine Siskins were still present in Margy's yard. Other good birds included Orange-crowed Warbler and Lincoln's Sparrow on 5/9, a Yellow-bellied Flycatcher splash-bathing on 5/18, a Canada Warbler on 5/20, and on 5/22, Mourning, Kentucky, Wilson's, Black-billed Cuckoo and Broad-winged Hawk.

Contributors: Connie Alwood, Bob Bailey, David Becher, Jackie Chain, Shawn Clubb, Dick Coles, Doug Corbett, Jack Cowan, Joe Eades, Barbara Estill, Sue Gustafson, Dave Haenni, Don Hays, Jim Hickner, Frank Holmes, Yvonne Homeyer, Les Jenkins, Margaret Johnson, Paul & Barbara Johnson, Peter Keyel, Ann Kirkpatrick, Chris Kirmaier, Randy Korotev, Francisco Leal, Vivian Liddell, Pat Lueders, Jim & Charlene Malone, David and Mary Anne Marjama, Sherry McCowan, Keith McMullen, Mark Peters, Marjorie Richardson, Mick Richardson, David Rogles, Bill Rowe, Bill Rudden, David Scheu, John Solodar, Mike Thelen, Josh Uffman, Lorrie Vitt, Rad Widmer, Jim Ziebol.

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

BOTANY FIELD REPORTS – George Van Brunt

May 5, 2008 Botany Field Trip

Sixteen botanist-malacologists met at LaBarque Creek Conservation Area in Jefferson County on a sunny and mild spring morning. Nels Holmberg and Ron Oesch, with the help of many volunteers, have been surveying the snail population of the 13 square mile LaBarque Creek watershed. The malacology group had already met 5 times this spring to collect land snails from different parts of the watershed when the WGNSS botany group joined them for the 6th meeting. We walked upstream, along and in LaBarque Creek, from the Conservation Area parking lot. We also made a few side excursions to higher terrain from the creek bed; the topography in this area is steep. Periodically, we took time from botanizing to lie down and search through leaf litter for snail shells. Live snails are not necessary as the empty shell is sufficient to identify the species.

During our exploration, we found that *Polemonium reptans* (Jacob's ladder) and its close relative *Phlox divaricata* (wild sweet William) were widespread along the stream bank and narrow bottomland adjacent to the stream. Also flowering in the lowland area were *Rhamnus lanceolata* (lanceleaf buckthorn), *Ranunculus septentrionalis* (marsh buttercup), *Cardamine bulbosa* (spring cress), *Saxifraga pensylvanica* (Forbes' saxifrage), *Phacelia purshii* (Miami mist), *Ranunculus harveyi* (Harvey's buttercup), *Galium aparine* (cleavers), *Uvularia grandiflora* (bellwort), *Viola striata* (striped violet), *Claytonia virginica* (spring beauty), *Enemion biternatum* (lowland rue anemone), *Trillium recurvatum* (purple trillium), and *Podophyllum peltatum* (mayapple). *Galium aparine* is a member of the coffee family, Rubiaceae. The stems of this plant are long (up to 6 feet) and sprawling. Six to eight simple leaves are arranged in a whorl around each node. The flowers are small with 4 white petals. The stems and leaves are covered with fine hairs with tiny hooks that cause the plant to stick to clothing like velcro. The fruits are also covered with these hairs forming a burr that sticks to an animal's fur for transport away from the parent plant. This tendency to stick like velcro has given this plant common names like cleavers, stickywilly, stickyweed, and catchweed.

One of our excursions away from the creek took us to a sandstone outcrop high on a hill. There we found *Huperzia lucidula* (shining clubmoss), *Lycopodium dendroideum* (round-branched ground pine), *Erigeron pulchellus* (Robin's plantain), *Pedicularis canadensis* (common lousewort), and *Luzula bulbosa* (bulbous wood rush).

May 12, 2008 Botany Field Trip

Twelve botanists met on a sunny, mild day at Valley View Glades Natural Area in Jefferson County. We walked the Valley View Trail which, at times, led us through glade and forest. Both habitats were abloom with many species.

On the glades, we found *Minuartia patula* (sandwort), *Phlox pilosa* (downy phlox), *Viola pedata* (bird's foot violet), *Astragalus canadensis* (Canada milk vetch), *Hypoxis hirsuta* (yellow star grass), *Dodecatheon meadia* (shooting star), *Clematis fremontii* (Fremont's leather flower), *Baptisia australis* (blue wild indigo), *Lithospermum canescens* (orange puccoon), *Zizia aurea* (golden Alexanders), *Pedicularis canadensis* (lousewort), *Eleocharis compressa* (flat-stemmed spike rush), *Sisyrinchium campestre* (blue-eyed grass), *Aquilegia canadensis* (columbine), *Packera plattensis* (prairie ragwort), and *Comandra umbellata* (rock toadflax). *Pediomelum esculentum* (prairie turnip) was almost ready to bloom. Both the red and yellow forms of *Castilleja coccinea* (Indian paintbrush) were in bloom. *Castilleja coccinea* is a hemiparasite like *Comandra umbellata*. Both species photosynthesize and also obtain some nutrients by parasitizing the roots of other nearby plants. The petals of Indian paintbrush flowers are yellow and are surrounded by large, showy sepals and bracts which may be red or yellow in color. The form with the red sepals and bracts is called *Castilleja coccinea* forma *coccinea*, while the form with yellow sepals and bracts is called *Castilleja coccinea* f. *lutescens*. The genus name, *Castilleja*, is in honor of Domingo Castillejo, 1744-1793, a Spanish botanist and professor at Cadiz. The species name, *coccinea*, comes from the Greek word *κοκκίνοσ* meaning scarlet. The Latin word, *coccinus*, was borrowed from the Greeks. *Lutescens* means yellow. On a herpetological note, John Oliver identified *Acris crepitans* ssp. *blanchardi* (Blanchard's cricket frog) and a *Heterodon platirhinos* (eastern hog-nosed snake). The snake did not play dead for us, but did puff up some when Jack Harris was photographing it.

In the forested area, plants in bloom included *Cynoglossum virginianum* (wild comfrey), *Smilax ecirrhata* (carrion flower), *Erigeron pulchellus* (Robin's plantain), *Silene virginica* (firepink), *Thalictrum thalictroides* (rue anemone), *Camassia scilloides* (wild hyacinth), *Delphinium tricorne* (dwarf larkspur), *Geranium maculatum* (wild geranium), *Hybanthus concolor* (green violet), and *Oxalis violacea* (violet wood sorrel). *Smilax ecirrhata* is a native midwestern species whose range extends as far east as central Ohio, as far north as Lake Superior, as far west as the border between Iowa and Nebraska, and as far south as southern Arkansas. This annual *Smilax* has no prickles and few, if any, tendrils as indicated by its specific epithet, *ecirrhata*, which means "without tendrils". We saw one inflorescence, an umbel, with small green flowers. The inflorescence was difficult to spot since it arose from the axil of one of the lower stem bracts and was hidden by the upper leaves. The flowers are supposed to smell like rotting meat hence the common name, carrion flower, but the odor lasts only a couple of days and is very faint to the human nose. None of us got down on our hands and knees and stuck his nose close enough to smell the odor.

May 19, 2008 Botany Field Trip

The WGNSS botanists met on a mild and partly cloudy morning at St. Francois State Park in St. Francois County. We parked at the Mooner's Hollow Trailhead and immediately began identifying plants around the parking lot. One notable plant was *Cirsium muticum* (fen thistle). Although it is widely scattered in eastern North America, this species has been reported from only 7 Missouri counties in the Ozarks and along the eastern Ozark border. It grows in areas where water is seeping from limestone, such as a fen. Unlike most other thistles, *Cirsium muticum* is not spiny on its involucre bracts.

We started walking on the Mooner's Hollow Trail and after about 50 feet turned to the right and set off through the forest following a tributary of Coonville Creek. After about one quarter mile, the 13 botanists came to a large glade. We found many plants blooming in both the forest and on the glade.

Flowering forest plants included *Silene virginica* (firepink), *Polemonium reptans* (Jacob's ladder), *Packera aurea* (golden ragwort), *Geranium maculatum* (wild geranium), *Arisaema dracontium* (green dragon), *Viola striata* (striped violet), *Cardamine bulbosa* (spring cress), *Valerianella radiata* (corn salad), *Phacelia purshii* (Miami mist), *Delphinium tricorne* (dwarf larkspur), and *Cynoglossum virginianum* (wild comfrey). Also flowering in the forest near the glade were *Triosteum illinoense* (Illinois horse gentian) and *Frasera caroliniensis* (American columbo).

American columbo, a member of the gentian family, is a monocarpic perennial herb that produces a rosette of 3 to 25 large oblong deciduous leaves close to the ground. Monocarpic plants are those which flower once and then die; this term can be applied to annuals, biennials, and perennials. When *Frasera caroliniensis* flowers, it sends up a thick fleshy stem that may be more than 10 feet tall. About every foot, this impressive stem grows a whorl of 4 leaves. The inflorescences, which consist of cymes with long peduncles, or flower stalks, arise from the axils of all the leaves. A cyme is a branched inflorescence in which the terminal bud flowers first, stopping further elongation of the peduncle. The result is a flower stalk with a large number of flowers that bloom from top to bottom over a period of time. The flowering stem may persist for a year after the plant dies. The seeds remain dormant until they have hydrated and undergone embryological development at about 40°F; development will not occur at higher temperatures or without water. If the seeds are shed in the same year they are produced, they will undergo development in the late fall and winter and will germinate the following spring. If the seeds remain on the plant over the winter and then are shed, they will not germinate for another year. This developmental feature spreads out seed germination over a 2 year period. No one knows how old an American columbo plant has to be to flower, but it probably is in the range of 7 to 15 years. Also, no one knows what cues cause a plant to flower although there is a tendency to synchronous flowering; a number of plants will flower simultaneously. There is a sense that American columbo's flowering and germinating pattern is an evolutionary strategy, but no one is quite sure what problem(s) the strategy is solving. The genus name of American columbo originally was *Frasera*, but the species subsequently was incorporated into the larger genus *Swertia* by many authors. Now, the original name *Frasera* is being used again although there is some controversy and the "final" name may yet be *Swertia*.

The glade plants we found in bloom included *Phlox pilosa* (downy phlox), *Tradescantia virginica* (early spiderwort), *Krigia biflora* (false dandelion), *Castilleja coccinea* (Indian paintbrush), *Packera plattensis* (prairie ragwort), *Coreopsis lanceolata* (tickseed coreopsis), *Hedyotis longifolia* (long-leaved bluets), *Aquilegia canadensis* (columbine), *Monarda bradburiana* (horsemint), *Glandularia canadensis* (rose verbena), *Comandra umbellata* (bastard toadflax), *Oxalis violacea* (violet wood sorrel), *Hypoxis hirsuta* (yellow star grass), *Dodecatheon meadia* (shooting star), *Salvia lyrata* (lyre-leaved sage), *Penstemon pallidus* (pale beard-tongue), *Minuartia michauxii* (rock sandwort), *Minuartia patula* (sandwort), *Scutellaria leonardii* (small skullcap), and *Lithospermum canescens* (orange puccoon).

May 26, 2008 Botany Field Trip

Four botanists met at Meramec State Park after a night of heavy rain and a threat for more of

the same all morning. Fortunately, the rain held off during the trip. Our goal was to see *Cypripedium parviflorum* var. *pubescens* (yellow lady's slipper) in bloom and we achieved our goal. These plants were numerous and growing alongside the road in some places. Lady's slippers are a monophyletic (all descended from the same ancestral species) subfamily (Cypripedioidea) which includes 5 genera. In most orchids, a single stamen is fused to a pistil to form a column. In ancestral orchids and in lady's slippers, there are 2 fertile stamens fused to the pistil. The flowers of lady's slippers are structured so that when insects enter the inflated slipper-like labellum, they must crawl past the column to get out. The column is structured so that the insect first brushes against the stigma, leaving any pollen that it may already be carrying and then against the anthers, picking up a new load of pollen. Most flowering plants shed their pollen grains singly (monads) but some, like orchids, shed pollen in tetrads. Most orchids package their tetrads in pollinia, waxy masses of many tetrads. This facilitates pollen transport and makes for efficient fertilization of the many ovules. *Cypripedium*, however, does not package its pollen in pollinia.

June 2, 2008 Botany Field Trip

Seven botanists met at the Weldon spring access to the Katy Trail on a partly cloudy, warm morning. We walked about 2 miles east on the trail and returned the same way. Native plants in flower included *Erigeron annuus* (daisy fleabane), *Toxicodendron radicans* (poison ivy), *Erigeron philadelphicus* (Philadelphia fleabane), *Menispermum canadense* (moonseed), *Arisaema dracontium* (green dragon), *Allium canadense* (wild onion), *Vitis aestivalis* (summer grape), *Ampelopsis cordata* (raccoon grape), *Tradescantia ohioensis* (Ohio spiderwort), *Geranium carolinianum* (wild cranesbill), *Lepidium virginicum* (common pepper grass), and *Monarda bradburiana* (horsemint). Introduced plants in flower were *Geranium dissectum* (purple cranesbill), *Sonchus asper* (spiny sow thistle), *Verbascum blattaria* (moth mullein), *Medicago lupulina* (black medic), *Conium maculatum* (poison hemlock), *Rosa multiflora* (multiflora rose), and *Arenaria serpyllifolia* (thyme-leaved sandwort).

Many mulberry trees of two species were in fruit. *Morus alba* (white mulberry), a native of China, has been naturalized in Europe for many centuries. White mulberry was introduced into North America during the colonial period for use in growing silkworms and currently can be found growing wild in nearly every state and several Canadian provinces. *Morus rubra* (red mulberry) is native to the eastern half of North America. The two species can, and do, hybridize. White mulberry is so named because of the color of its buds, not the color of its fruit. The ripe fruit can vary in color from white, to lavender, to black. We see mostly dark-fruited *Morus alba* in Missouri, but we found some white-fruited trees on our walk. Several botanists partook of the ripe, juicy white fruits of *Morus alba* which we found to be sweet. Red mulberry produces fruits which are very deep red to black. They, too, are sweet but also have a tartness to their taste. A mulberry is not a berry but a multiple fruit formed from many flowers closely located on an axis. Each individual fruit in the mulberry is a drupe, a fleshy fruit with a hard pit containing a single seed. The drupes grow together to form the multiple fruit we call a mulberry.

On a final note, we saw more blooming poison ivy than we have ever seen, good news for birds, bad news for people.

June 9, 2008 Botany Field Trip

Six botanists made the trip to St. Joe State Park in St. Francois County despite the forecast for heavy rain. It turned out to be partly cloudy to cloudy with about 15 minutes of sprinkles. We walked south on the Harris Branch Trail, an old railroad bed from lead mining days in the area

that is now the park. One of our reasons for botanizing St. Joe State Park was to find *Spigelia marilandica* (Indian pink) in bloom and find it we did. We located about 15 to 20 plants at the edge of a clearing near the trailhead. This 1 to 2 foot tall herbaceous perennial has trumpet shaped flowers that are crimson on the outside and canary yellow on the inside. The one to two inch long corolla tube flares at the top forming 5 yellow petals. The effect is striking, appearing as a yellow star atop a crimson column. *Spigelia* produces an alkaloid called spigeline and is in the same family as *Strychnos*, which produces strychnine. The fibrous roots of this plant were used by Native Americans as a remedy for intestinal worm infestations. Spigeline, like strychnine, can be fatal if enough is consumed. Eating this plant is not recommended. The flowers are very attractive to hummingbirds and *Spigelia marilandica* has been voted one of the top 10 Hummingbird plants by **Operation Rubythroat** <http://www.rubythroat.org/> (when you go to this website, a hummingbird follows your cursor as you move it over the screen). *Spigelia marilandica* was named by Linnaeus in honor of Adrian van der Spiegel, 1578-1625, Flemish professor of anatomy at Padua, Italy and author of *Isagoges in rem Herbarium* on botany.

Other blooming plants included three dioecious species, those that have separate male and female plants. These were *Diospyros virginiana* (persimmon), *Dioscorea villosa* (wild yam), and *Thalictrum revolutum* (waxy meadow rue). We found only male waxy meadow rue, but we found both sexes of persimmon and wild yam. *Silene csereii* (glaucous campion), a wide spread northern North American species, was growing along the side of the trail. This species has only been reported from 6 counties in Missouri, St. Louis, St. Francois, St. Genevieve, Grundy, Livingston, and Jackson; Missouri is at the southern edge of its range. We found a patch of *Ceanothus americanus* (New Jersey tea), a member of the same family as *Frangula caroliniana* (Carolina buckthorn), which we also found in flower.

Other blooming species of note included *Calamintha arkansana* (low calamint), *Ruellia pedunculata* (wild petunia), *Heuchera americana* (tall alumroot), *Gillenia stipulata* (Indian physic), *Matelea decipiens* (climbing milkweed), *Echinacea pallida* (pale coneflower), *Asclepias viridis* (green-flowered milkweed), *Asclepias viridiflora* (green milkweed), *Thaspium barbinode* (hairy meadow parsnip), *Coreopsis palmata* (finger coreopsis), *Scutellaria leonardii* (small skullcap), and *Phlox pilosa* (downy phlox).

June 16, 2008 Botany Field Trip

Thirteen botanists met at Shaw Nature Reserve in Franklin County on a mild, very late spring day. The sky was cloudy at 9:30am and by the end of our walk at 12:30pm there wasn't a cloud in the sky. We botanized on parts of the Wildflower Trail, Goddard River Trail, and Wetland Trail, exploring glade, forest, prairie, and wetland habitats.

On the glade, we saw enormous numbers of *Echinacea simulata* (glade coneflower) covering many acres. There were equally large numbers of *Penstemon digitalis* (beard tongue) on the prairie. No one remembered seeing these species in such huge numbers before and we attributed their abundance to the exceptionally wet spring in this area.

Other glade plants in bloom included *Anemone virginiana* (tall anemone), *Oenothera macrocarpa* (Missouri evening primrose), *Delphinium carolinianum* (wild blue larkspur), *Erigeron strigosus* (daisy fleabane), *Linum sulcatum* (wild flax), *Coreopsis lanceolata* (tickseed coreopsis), *Asclepias viridiflora* (green milkweed), *Orbexilum pedunculatum* (Sampson's snakeroot), *Asclepias purpurascens* (purple milkweed), *Mimosa nuttallii* (sensitive briar), *Parthenium integrifolium* (wild quinine), *Ratibida pinnata* (gray-headed coneflower), *Fimbristylis puberula* (hairy fimbry), *Hypericum sphaerocarpum* (round-fruited St. John's wort),

Ruellia humilis (wild petunia), and *Phlox pilosa* (downy phlox).

Forest plants in bloom included *Ruellia strepens* (smooth ruellia), *Verbesina helianthoides* (yellow crownbeard), *Tradescantia ohiensis* (Ohio spiderwort), *Erigeron annuus* (daisy fleabane), *Blephilia ciliata* (Ohio horsemint), *Boechera canadensis* (sicklepod), *Frangula caroliniana* (Carolina buckthorn), and *Aquilegia canadensis* (columbine).

In the wetland area, we identified *Rudbeckia hirta* (black-eyed Susan), *Verbascum blattaria* (moth mullein), *Phlox maculata* (wild sweet William), *Asclepias syriaca* (common milkweed), and *Ceanothus americanus* (New Jersey tea).

Traditionally, individual authors have proposed classification systems for the flowering plants. In the last 10 years, two Angiosperm Phylogeny Groups (APG) were established to recommend changes to the classification of angiosperms. Researchers felt that such committees were necessary because of the increasing amount of molecular data accompanied by an increasing number of proposals for classification revision. Two consensus papers were published as a result of the committee work, one in 1998 and the other in 2003, known respectively as APG I and APG II. Contributions to the committee work were worldwide with principal contributors to APG II representing the Royal Swedish Academy of Sciences, Uppsala University (Sweden), Royal Botanic Gardens at Kew (United Kingdom), University of Maryland, University of Florida, and the Missouri Botanical Garden. One recommendation of APG II, is that the family Asclepiadaceae (milkweed family) should now be treated as the subfamily Asclepiadoideae in the family Apocynaceae (dogbane family). It has long been realized that there is a close affinity between Asclepiadaceae and Apocynaceae and more recent scientific papers follow the APG II recommendation.

June 23, 2008 Botany Field Trip Contributed by Jeannie Moe

Mallard Lake at Creve Coeur Park

Participants: Jeannie A. Moe, Gladys & Ed Kuhlman, Wayne & Nancy Clark

PLANTS: *Carduus nutans* Nodding Thistle (FL & FR), *Torilis japonica* Japanese Hedgeparsley (FL), *Daucus carota* Queen Anne's Lace (FL), *Rumex crispus* Curly Doc, *Vicia sp.* Purple Vetch (Introduced), *Cichorium intybus* Chickory, *Sorghum halepense* Johnson Grass, *Trifolium sp.* Hop Clover (FL & FR), *Medicago lupulina* Black Medic (FL & FR), *Melilotus officinale* Yellow Sweet Clover (FL), *Convolvulus arvensis* Field Bindweed (FL), *Melilotus alba* White Sweet Clover (FL), *Erigeron annuus* Daisy Fleabane (FL), *Rudbeckia hirta* Black-eyed Susan (FL), *Trifolium pratense* Red Clover (FL), *Trifolium repens* White Clover (FL), *Verbascum thapsus* Common Mullein, *Hemerocallis fulva* Orange Day Lily (FL), *Sonchus asper* (FL), *Lotus corniculatus* Bird's foot trefoil (FL), *Lonicera japonica* Japanese Honeysuckle (FL), *Lonicera maackii* Bush Honeysuckle (FR), *Ambrosia artemisiifolia* Ragweed (small one) (LF), *Humulus japonicus* Hops (LF), *Verbascum blattaria* Moth Mullein (Orange and white flowers) (FL), *Taraxacum officinale* Dandelion (FL), *Cirsium vulgare* (LF), *Ampelopsis cordata* Raccoon Grape, *Cornus drummondii* (FL), *Packera glabella* Butterweed (FL), *Impatiens capensis* Orange Jewelweed (FL), *Impatiens pallida* Yellow Jewelweed (FL), *Lindera benzoin* Spicebush (FR), *Rubus sp.* Raspberry (FR), *Pilea pumila* Clearweed (LF), *Hydrangea arborescens* Wild Hydrangea (FL), *Menispermum canadense* Moonseed Vine (LF), *Conyza canadensis* Horseweed (LF), *Polygonum pennsylvanicum* Common Smartweed (FL), *Hydrophyllum sp.* Waterleaf (all the flowers dropped, only sepals left), *Asarum canadense* Wild Ginger (LF), *Geranium maculatum* Wild Geranium (LF), *Tragopogon pratensis* Goat's Beard, and *Saururus cernuus* (lizard's tail).

June 30, 2008 Botany Field Trip Contributed by Pat Harris

Twelve botanists met, on a spring-like day, at Victoria Glade to walk on The Nature Conservancy property. Walking out onto the glade from the trail, we were greeted with a hillside covered with *Echinacea simulata* (glade coneflower). Although they were not in prime condition, from a distance it was a beautiful sight. There were still a few scattered *Oenothera macrocarpa* (Missouri primrose) in bloom. The *Hypericum sphaerocarpum* (round-fruited St. John's-wort) was in better bloom than I've ever seen it.

We identified 4 different milkweeds in bloom: *Asclepias viridiflora* (green milkweed), *Asclepias verticillata* (whorled milkweed), *Asclepias viridis* (green-flowered milkweed) and *Asclepias tuberosa* (butterfly weed). Most of the green-flowered milkweed had already produced pods. Only one or two were still in bloom.

Dalea purpurea (purple prairie clover), was scattered about, but Father Sullivan was hoping to also find some *Dalea candida* (white prairie clover), so he could show us how to tell them apart without flowers. We finally found one small patch. The leaves and other parts of the white prairie clover are larger than those of the purple prairie clover.

Just before we found the white prairie clover, Father Sullivan had flushed a pair of Common Nighthawks, *Chordeiles minor*. They kept flying around loudly protesting our presence. We didn't pay too much attention to them until the male dove at us with a deep, loud whoosh of his wings. We decided we needed to move away from their territory.

Some other plants that we saw in bloom were: a single *Clematis fremontii* (Fremont's leather flower); a low growing, early blooming *Silphium terebinthinaceum* (prairie dock); *Ratibida pinnata*, (grayhead prairie coneflower); *Coreopsis palmata*, (finger coreopsis); the tiny *Leucospora multifida*, (conobea); *Psoralidium tenuiflorum*, (scurfy pea); *Ruellia humilis*, (wild petunia), and *Pycnanthemum tenuifolium*, (slender mountain mint). The later was being worked over by a Juniper hairstreak butterfly.

HISTORIAN'S CORNER – Jim Adams

Darwin's Captain

The name of Robert FitzRoy (1805-1865), captain of HMS *Beagle* (1831-36), will be forever linked with that of his famous passenger, Charles Darwin. His life story also included service as governor of New Zealand. But he is best remembered for his groundbreaking accomplishments in meteorological science. A sense of dismay over his accomplishments failed to satisfy his high expectations, and he committed suicide in 1865 at the age of sixty. As the inventor of the new science of weather forecasting, he helped save the lives of countless fellow mariners. (*FitzRoy*, by John and Mary Gribben, Yale University Press, 2003).

ARTICLES BY MEMBERS

1 Clubb, Shawn – Zoo Prepares for Next Evolution, Unveils 25 year Strategic Plan, *Mid-County Journal*, June 11, 2008.

2. Clubb, Shawn – Plan Bee: Scientists Studying Bees as Honeybees Decline. *Mid-County Journal*, July 9, 2008.

SPRING 2008 ENTOMOLOGY SPEAKERS – Rich Thoma

The entomology group had a great series of speakers in the spring of 2008. All the speakers in the spring of 2008 were active WGNSS members and considered experts in their respective fields. Presentations at the meetings covered a wide range of topics from discussions about endangered species, how to photograph insects and how best to preserve and display the insects in one's collection. A short review of the spring 2008 presentation follows:

Phil Koenig, lifetime member of WGNSS, started the year with a talk about his 2007 butterfly collecting expedition to the prairies of western and northern Missouri. Phil graciously opened his home for this entomological event. Prior to the talk, the WGNSS entomology group was able to spend time looking through Phil's world class butterfly collection. This was an added treat for all. During his talk, Phil talked about his continuing effort to locate populations of butterflies that are on the Missouri Department of Conservation "Species of Concern" checklist. 2007 was the third year that Phil has traveled to western Missouri in search of prairie butterflies. During the 2007 trip, Phil visited over a dozen sites including State Parks, Conservation and Nature Conservancy Lands. One species of particular interest was the Ottoe Skipper (*Hesperia ottoe*).

This butterfly has only been found on high quality, undisturbed prairies in Missouri. Unfortunately, there are no recent reports of this butterfly in Missouri and it is thought to be either extinct or highly endangered in Missouri. The Conservation Department has upgraded this species status to S1. One particular goal of the 2007 trip was to look at sites where the Ottoe Skipper has been found in the past. Phil found all of these sites highly degraded. One site is now a cattle pasture. Any prairie vegetation has either been eaten or trampled by cows. Another site was an old cemetery. In past years Ottoe Skippers were found on the overgrown prairie vegetation on this site. Today, the cemetery is well manicured and the prairie plants are gone. No Ottoe Skippers were found at these sites or anywhere else on this trip. One other butterfly Phil has luck finding is the Regal Fritillary (*Speyeria idalia*). This butterfly is on the "Species of Concern" checklist as one requiring natural prairie. Phil described several sites from the 2007 trip where Regal Fritillaries were found.

Mike Arduser, Natural History Biologist for the Missouri Department of Conservation and longtime WGNSS member talked at the March meeting about the Missouri Natural Heritage program. With a lot of volunteer help, the Conservation Department has amassed a vast database of species localities and abundance. Four employees are dedicated to collecting and entering data into the database. Mike emphasized that there are not enough Conservation Department people to collect all the needed information, in particular about the small organisms like insects. Volunteers are desperately needed to help find and record the occurrence and abundance of insects and other invertebrates. Data is currently being stored in a national database, "NatureServe". Mike emphasized that the primary data being collected is for organisms on Missouri's "Species of Concern" checklist. Common species are not tracked at this time. In addition, this database is used to track high quality natural communities. One specific example of a community the Conservation Department is actively trying to protect is LaBarque Creek in Jefferson County. LaBarque Creek is one of the few remaining relatively undisturbed karst topography regions within a short drive of St. Louis. Almost nothing is known of the invertebrate community at LaBarque Creek. In his talk, Mike discussed what the data will be used for. The primary uses include, environmental review, planning and land management, surveys and monitoring, species status assessments, range maps and predictive modeling. If enough data is collected, informed decisions can be made on how best to protect Missouri's natural history.

In April, Chris Brown gave a talk about his secondary passion, photography (his primary passion being tiger beetles)*. Chris has become well known for being able to take some spectacular pictures of insects in their natural surroundings. In 2005, several tiger beetle photos taken by Chris were published in the Missouri Conservationist magazine. Chris' passion for insect photography was evident in this evening's talk. He photographs insects to capture their beauty, tell stories and to learn as much as he can about the animals he studies. Chris prefers to photograph the insects out in nature. Staged photographs tend to be washed out and the insects are not positioned correctly. Photos of living insects against natural backgrounds produce true color and behavior. Chris uses a Canon EOS-1 digital (8.2 megapixel) camera. He uses a 100mm Macro lens for the close up pictures of the small insects. With this equipment he still has to get within 4 inches of the insect to get a picture. One of the advantages of digital photography is that you can take lots of photos, review the images at a later time and only keep the best. The cost of film developing has been eliminated. Archiving has also been simplified. Photos are now stored on a computer. Chris emphasized that it is critical to backup all files. He recommended that files should be stored in at least 3 locations to prevent loss. Other organizations including The Missouri Nature and Environmental Photographers (MONEPS) have expressed an interest in hearing Chris give the talk to their organizations.

Our final talk for the spring 2008 season was a group discussion on how to preserve insects. Phil Koenig, Joe Fortier and Richard Thoma, each made short presentations on specific aspects of insect preservation. Rich started off by providing a

hand out that gives a brief synopsis of how to preserve insects by Borror, DeLong and Tripplehorn (authors of the classic college entomology text). This led to an extensive discussion on the best ways to preserve soft bodied insects. We discovered that everyone in attendance had their own favorite method for liquid preservation. Phil talked about the many things he has tried to properly preserve butterfly and moth (Lepidoptera) larvae. Essentially Lepidoptera larvae are tubular. Plant material in the gut makes up most of a larvae's body. Gut contents can lead to complications in liquid storage. Alcohol must be changed multiple times before a caterpillar is properly preserved. Phil has also tried freeze drying caterpillars. This works very well for the larger caterpillars and those with hairy bodies. Joe Fortier finished off the night by leading the discussion of how best to preserve the smallest insects. There are many insects and other invertebrates that are so small, they are easily missed. They cannot be pinned nor is storage in an alcohol vial feasible. Preserving and storing them on glass slides is the method of choice and allows for the use of a microscope to these tiny insects. Joe gave everyone the chance to see a number of insects under a microscope.

In addition to the entomology meetings, George Diehl and other members of WGNSS participated in the Forest Park BioBlitz on May 30-31 and the Edwardsville Watershed Nature Center BioBlitz (June 13-14). WGNSS contributed to a greater understanding of the insect community at each of these events.

Entomology talks during the fall of 2008 look to be just as exciting. Our first group meeting will be the traditional "Show and Tell" night. Everyone that comes to the meeting is encouraged to bring insects they have collected over the summer and anything else insect related that others may enjoy. If you have a new interest in insects, this is a chance to learn about something out of the ordinary. If you have a photo of an insect and would like to know what it is, now is your chance. September's meeting will have many experts who can help you to identify that insect you found on one of the summer's field trips you took. All are welcome.

*Chris may beg to differ on which passion is more important!

Webster Groves Nature Study Society
 Founded 1920

GROUP ACTIVITY/WALK SCHEDULES
 August 2008 Update

Date Meeting Place Time Leader

ORNITHOLOGY – SATURDAY BIRD WALKS – David Becher (314-576-1146)
(If destination not given, it's "Where the Birds Are". Always bring lunch.)

<u>Date</u>	<u>Meeting Place</u>	<u>Time</u>	<u>Leader</u>
Aug. 30	Des Peres Park	8 AM	Becher
Sept. 6	Des Peres Park	8 AM	Becher
Sept. 13	Tower Grove Park Gaddy Bird Garden	8 AM	Becher
Sept. 20	Des Peres Park (Ballas Rd. just north of Manchester)	8 AM	Becher
Sept. 27	Tower Grove Park	8 AM	Becher
Oct. 4	Des Peres Park	8 AM	Becher
Oct. 11	Riverlands (Teal Pond Pkg. Lot)	8 AM	Becher
(From I-270 north go north on Rte. 367 toward Alton. Cross Missouri River Bridge. Turn right into Riverlands at gasoline station just before bridge over Mississippi)			
Oct. 18	Des Peres Park	8 AM	Becher
Oct. 25	Riverlands (Teal Pond Pkg. Lot)	8 AM	Becher
Nov. 1	Des Peres Park	8 AM	Becher
Nov. 8	Riverlands (Teal Pond Pkg. Lot)	8 AM	Becher
Nov. 15	Des Peres Park	8 AM	Becher
Nov. 22	Riverlands (Teal Pond Pkg. Lot)	8 AM	Becher
Nov. 29	Des Peres Park	8 AM	Becher
Dec. 6	Riverlands (Teal Pond Parking Lot)	8 AM	Becher
Dec. 13	Des Peres Park	8 AM	Becher

**ORNITHOLOGY – THURSDAY BIRD WALKS – Jackie Chain –
 Leader (314-644-5998)**

A change for fall/winter trips. The Thursday group will meet at 8:30 AM at Des Peres Park for fall/winter trips beginning with the Sept. 4th trip..

On birding days my cell phone will be turned on at 314-497-1628. Possible changes will be advised as necessary. Ou

For additional bird walks, see next page

ORNITHOLOGY - ADDITIONAL BIRD WALKS – Jim Ziebol (314-781-7372)

(New birders are **cautioned** to dress for the weather. Bring binoculars if you have them.)

Date	Meeting Place	Time	Leader
Sept. 14	Gaddy Bird Garden Tower Grove Park	8 AM	Bob Bailey
Sept. 27	Mark Peters" Prairie*	9:15 AM	

*Take Hwy 21 south to "Old Hwy 21 Meramec Hwys" exit (first exit after Hwy 141) Turn C** on Lions Den Rd. Proceed 1.1 mi. and turn R on gravel road. There's a small bridge, four mail boxes and a private property sign.

**Unable to contact Jim or Mark to clarify before going to printer. Call Jim if you need help. (JFA)

BOTANY WALKS – Jeannie Moe – Co-Chair , Co-Leader (636-946-9802)

**George Yatskievych – Co-Chair (314-577-9522) – Work Phone
Leader – Fr. James Sullivan (starting his 42nd yr. in January, 2008)**

Botany walks are on Monday. The Botany group visits many of the same locations as the Bird and Butterfly Groups: 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 Botany Group E-mails from Jack Harris (jahar@mac.com) or 314-368-0655 and receive an E-mail every Sunday, sometimes earlier, about the next Monday's trip.

ENTOMOLOGY GROUP ACTIVITIES – Rich Thoma, Chair (314-965-6744)

Sunday, September 28, 2008 at 7 PM - "Insect Show and Tell Night". Come and hear stories about insect collecting trips over the summer. This is an opportunity to show everyone all those insects and insect related items that have been added to your collection. A computer and projector will be available for you to show those powerpoint slides of the insects you saw. Experts will be present to help you with insect identification. We will be meeting in conference room 142, Biology Department, MacElwane Hall on the campus of St. Louis University. For directions to this event, feel free to contact Richard Thoma (314-965-6744) thomarkas4@sbcglobal.net.