



Nature Notes

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President's Corner

Rich Thoma

In 1925, pollution covered St. Louis and much of the city's plant life was dying. To protect its precious orchid collection from the pollution, the Missouri Botanical Garden had to find a home far from the city. Gray Summit, Missouri was chosen and greenhouses were built on the newly acquired land. Today, this land is known as Shaw Nature Reserve and is home to a vast landscape of varied natural habitats and gardens. To commemorate the 85th anniversary of Shaw Nature Reserve in 2010, the garden published "The Missouri Botanical Garden's Shaw Nature Reserve: 85 Years of Natural Wonders" by **Cindy Gilberg** and **Barbara Perry Lawton**. For the March general meeting, WGNSS was very fortunate to have these two authors speak. Barbara Perry Lawton started off the evening talking about the history of Shaw Nature Reserve. We learned that at first, the land was still used as a working farm. Crops and a saw mill were used to pay for support of a small staff. Gradually, things we are familiar with today such as the Pinetum Lake and the main Visitors Center were added. **Edgar Anderson** was one of the most famous people who used the reserve in the 1950's for student field trips. Cindy Gilberg talked mostly about the present activities at Shaw. Biologically, the Reserve is located at the junction of seven biomes; prairies, glade, woodland, bottomland, savannah and wetland. Today, each is

being actively managed to represent the best examples of each type of habitat. Prairie burns, invasive species removal and saving seed are just some examples of the management practices being employed at Shaw. We learned from Cindy Gilberg that all forms of outdoor education have taken on a great importance in recent years. Together, Barbara Perry Lawton and Cindy Gilberg wove a wonderful picture of one of St. Louis' greatest outdoor treasures, Shaw Nature Reserve.

For those following the Patch Burn Grazing (PBG) issue, the Missouri Department of Conservation (MDC) has sent a reply in response to the letter WGNSS sent to MDC director Bob Ziehmer. Replying for MDC, deputy director **Tom Draper**, notes that it is impossible to know all the answers prior to taking action and MDC commonly uses an adaptive approach where new research, experience and circumstances are used to modify management plans. The adaptive approach for PBG by MDC is very similar to the policy for prescribed burns throughout the state. In the letter, we have learned that PBG will **no longer** be expanded to any additional MDC lands and Natural Areas in 2011. We have also learned that PBG will be scaled back on portions of Taberville, Pawnee and Osage Prairie Natural Areas. MDC considers these three sites critical for the recovery of declining grassland birds and PBG is believed to be the best way to improve prairie habitat. Additional oversight of the PBG policy implemented by MDC will be performed by

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April 6 at 7:30. Layne Van Brunt will be speaking about her recent travels to the southern hemisphere. The title of the talk is "Island-hopping in the Southern Ocean". While we were struggling with freezing cold in the northern hemisphere, Layne was enjoying the outdoors in the southern hemisphere's warmest months. Come to learn about the plants, birds and other wildlife in far off places such as the Falkland Islands, South Georgia Island and the ever frozen Antarctic Peninsula.

Also, mark your calendars for the WGNSS spring banquet on May 4. This year the banquet will be at Orlando Gardens on Watson Rd., Webster Groves. **Dr. Peter H. Raven**, President Emeritus from the Missouri Botanical Garden will be our guest speaker for the evening. Dr. Raven is possibly best known for his important work "Coevolution of Insects and Plants," published in the journal *Evolution* in 1964, which he coauthored with Paul R. Ehrlich. In St. Louis, Peter Raven has been the director of the garden for nearly forty years and has made it one of the premier botanical research organizations in the world. Under Dr. Raven's tenure, the Garden has grown to include the Shaw Nature Reserve and the Sophia M. Sachs Butterfly House. On the eve of his retirement, Dr. Raven will speak at the WGNSS banquet about "**How to Conserve Species in a Changing World.**" Join us in this celebration of a life dedicated to biodiversity and conservation. For more information about the banquet, there is a reservation form later in this issue of Nature Notes. Extra reservation forms can also be downloaded from the WGNSS web site

www.WGNSS.org



Upcoming WGNSS General Meetings

The April WGNSS General Program Meeting will be held **Wednesday, April 6**, 7:30 p.m. at Powder Valley Nature Center. Join us as Layne Van Brunt gives a talk titled, "Island-Hopping in the Southern Ocean: The Falklands, South Georgia, and the Antarctic Peninsula." It should be a fascinating program.

Southern Illinois University – Carbondale and Kansas State University on Osage Prairie as part of a larger watershed study. In addition, at the request of partner organizations, MDC is considering a new study on the long term influence of PBG on the prairie plant community. WGNSS very much appreciates the candor expressed by Tom Draper in this reply letter, **Mike Leahy** who first presented us with information about PBG last November and Director **Robert Ziehmer** for listening to WGNSS concerns. The complete letter and additional bullet points can be found under the Patch Burn Grazing tab on the WGNSS web site

www.WGNSS.org

Be sure to come to the WGNSS General Meeting at Powder Valley Nature Center on Wednesday,



February Bird Report

David Becher

February started off just like January, colder than normal and very snowy. Most lakes and large areas of the river were mostly frozen or filled with ice. The lack of open water reduced the number of gulls and waterfowl observed to below normal. In the middle of the month, a strong warm spell, with temperatures into the 70s, melted most of the snow and ice. The weather then returned to a more normal February pattern. With the warmer weather, the early spring migrant began and was a rapid increase in the number of waterfowl at various locations and migrating northward.

Waterfowl

The waterfowl picture in Saint Louis changed radically over the course of the month. At the start with most of the local water frozen duck numbers were low and were mostly typical winter species. After the thaw, duck numbers and variety increased rapidly and large migrating flocks of geese particularly Snow and White-fronted Geese were observed by many people. By the end of the month some winter species were starting to get rather rare.

Trumpeter Swans were present in numbers in the REDA/Columbia Bottoms area with a few Tundra Swans mixed in as usual. The resident Mute Swan pair at Horseshoe Lake was at a small area of open water throughout the month. During the freeze they often stayed in a small area of open water by the north shore where they were easy to observe.

Unusually, the Thursday group had all three white swan species together at Columbia Bottom on the 24th close to the road. At least two Tundra Swans and an immature Mute Swan were associating with a group of Trumpeters. Dave Rogles reported that they were still there on the 26th.

As usual Baldwin Lake in Illinois hosted large numbers of geese including all five of the normally occurring species. On 2/13 the Saint Louis Audubon group reported that they found all of the species except Ross' Goose.

Huge flocks of migrating Snow Geese with the usual sprinkling of Ross' and smaller numbers of White-fronted Geese were reported from many locations in the second half of the month.

Cackling Geese were reported on a number of occasions. On the 19th the Saturday group reported a few Cackling Geese in a flock of Canada Geese on Walker Island. A single bird with a group of White-fronted Geese near Prairie du Rocher on the 27th gave an interesting comparison. It was noticeably smaller than the White-fronted Geese.

Remarkably Tom Borman and Dave Rogles reported finding 37 Ross' Geese in a flock of about 700 Snow Geese near Old Monroe. This may be the record for a single location in this area.

The usual winter ducks, Ruddy, Common Merganser, Common Goldeneye, Greater Scaup and Canvasback were found wherever there was open water throughout the month.

The Thursday group reported one of the few American Widgeon sightings of the first part of the month at Horseshoe Lake on 2/10.

Northern Shovelers were scarcer than usual for most of the month. The Audubon group trip to Baldwin Lake found one on 2/13 and the Saturday group reported them at Horseshoe on 2/19. They also had a few lingering Greater Scaup close to shore and a single Redhead at the Sand Prairie Road boat launch.

On the 11th Connie Alwood reported an adult male White-winged Scoter in the spillway at Melvin Price Dam. It was refound by a Saint Louis Audubon Society group on the 19th along the rock jetty that extends upriver from the dam. It has been frequenting that area through the end of the month. Adult plumaged Scoters are very rare in the Saint Louis area (or anywhere else in the Mid-West away from the Great Lakes) so this is a very good find.

Frank Holmes reported the first Red-breasted Mergansers from Horseshoe Lake on the 14th and Josh Uffman had a flock at Riverlands on the 20th.

There were Wood Ducks near Prairie du Rocher on the 27th and Frank Holmes reported one from Horseshoe Lake on the 28th.

On 2/10 the Thursday birding group had a covey of Bobwhite in the vicinity of the Barrow Pits at Horseshoe Lake in Granite City, Illinois. There were also several Turkeys feeding on the shoulder of I-70 in the vicinity of Rt-111 so close to the road that one almost became Turkey hash.

The usual small flock of Horned and Pied-billed Grebes was at Baldwin Lake and was seen by the Audubon group on 2/13. By 2/17 they were being seen at REDA and Horseshoe Lake in Granite City, Illinois as well.

Although there had been a few American White Pelicans around the spillway area at REDA for some time, the first big flocks were reported 2/13 by David Becher. By the end of the month hundreds of birds were on the river at various locations and at Horseshoe Lake.

The only Double-crested Cormorant report was from Horseshoe Lake where Frank Holmes had one on the 21st. He also reported a Black-crowned Night-Heron from Horseshoe on the 27th.

There were two Sharp-shinned Hawk reports one by Bryan Prather on the 4th at Babblers State Park and the other by the Thursday group on the 10th at Columbia Bottom.

There were a large number of Northern Harriers at Columbia Bottoms at the beginning of the month observed by those looking for the Short-eared Owl including multiple males. By the end of the month the number had dropped noticeably presumably because they had begun to move north.

The Peregrine Falcons at Riverlands were reported a number of times. Charlene Malone had the pair perched together on the Clarke Bridge on the 26th. On the 27th David Becher observed one perched on the bluffs at the quarry area near Prairie du Rocher. There appear to be many possible nesting sites in the area. Archie Keiper reported a Merlin from Mitchie Rd. on the 27th.

Dick Coles reported a single Sandhill Crane seen in flight on the 22nd accompanying a flock of Snow Geese. Carl Dauback reported two on the 26th in a field near Prairie du Rocher.

The first Killdeer report appeared to be the 5th from Castlewood State Park by Jim Malone. By the 17th the Thursday group had numbers of them migrating in Saint Charles County.



Greater Black-Backed Gull. Photo by Bill Rudden 2/2/2011.

There were no unusual early shorebird reports this month. Wilson's Snipe reports were scarce. David Becher had a flock near REDA on the 13th. The first Woodcock reports appear to have been the 16th at Lost Valley by Bryan Prather and the 19th at Busch by Dave Rogles.

Gull numbers tended to be relatively low this month, but there were some good sightings. Numbers at REDA were disappointing even after the thaw when the supply of dead fish would have been expected to be attractive. There were a fairly large number of gulls near Horseshoe Lake throughout the month, but except for the major exception noted below, nothing unusual.

On the second of February Bill Rudden photographed a first cycle Greater Black-backed Gull in the Mississippi below the Melvin Price Dam (see picture below). Unfortunately, the bird was never refound in the river. Dan Kassebaum reported a first cycle bird at Carlyle Lake the next day, so it is possible that it had moved there.

The next day Bill Rudden found an even more uncommon bird; a Mew Gull in a field near Hartford. He apparently saw it again there on the fifth. It was verbally reported that it was seen by someone the next day at the barrow pits near Horseshoe Lake, but there were no further confirmed sightings.

The first cycle Glaucous Gull continued to be seen throughout the month at. There were a few Thayer's Gulls reports at REDA as well notably for example by that Saturday group on 2/19.

The Thursday group reported the Eurasian Collared Doves at Portage de Sioux on the 17th.

Reports of migratory owls other than Short-eared were noticeably missing this year. There have

been no reports of Long-eared or Saw-whet Owls in the Saint Louis area this winter. It has been many years since none have been reported to overwinter in the area.

On the 3rd Connie Alwood reported a Short-eared Owl sitting out at about 4:00 at Columbia Bottoms near the fork in the road. The bird was seen in the late afternoon in this area for several days by various observers. On the 12th the Saint Louis Audubon group had 3 at dusk at Peabody River King near St. Albans, Illinois. The best count was probably the 8 seen at B.K. Leech by Tom Borman and Dave Rogles on the 26th.

Bryan Prather reported finding Barred Owls on the 4th at Babler State Park. More unusually, Margy Terpstra had the one that lives near her house sitting on her mailbox on the 16th.

According to Margy, its presence is not appreciated by the local pair of Red-shouldered Hawks.

On the 19th the Saturday group saw one of the Tower Grove Park Great Horned Owls sitting in a pine across from the stables.

Mike Brady reported that a red morph Screech Owl has been perching in the cedars across from the office this winter.

Kingfisher reports were limited to Jim Malone at Castlewood on the 5th, Bryan Prather at Lost Valley on the 16th and the Thursday group near REDA on the 17th.

Jim Malone reported two Fish Crows from Castlewood State Park on the 5th.

Wally George reported an unseasonal Brown Thrasher from Cedar Hill on the 5th and even more out of season was a Gray Catbird seen by Jim Ziebold on the 11th.

The first American Pipit report this month appears to have been on the 22nd by Dick Coles on the Confluence Road.

Sparrow numbers appear to still be low, but the trend of more than the normal number of Fox Sparrow sightings noted in January still continued. The Thursday group saw the one at the feeders at Columbia Bottom on 2/10 and the Saturday group had several in TGP on 2/19. Archie Keiper reported a Vesper Sparrow from Monroe Co. (Illinois) near Kidd Lake on the 27th.

On 2/17 the Thursday birding group reported five blackbird species in Saint Charles County (Red-winged, Brewer's and Rusty blackbirds and Common and Great-tailed Grackles.

Pine Siskins were remarkably scarce with the only report coming from Wally George who had up to 17 among the other birds at his feeders in Cedar Hill in Jefferson County on February 6th after the big snow storm. He also reported a dozen Purple Finches which appears to be the high count for anyone in the area.



January Botany Report

Compiled by George Van Brunt

January 3, 2011 – Lower Meramec County Park, St. Louis County, MO (contributed by George Van Brunt).

Nine winter botanists (Fr. Sullivan, Burt Noll, Wayne Clark, Nancy Clark, Jeannie Moe, Jack Harris, Sylvia Hosler, John Oliver, and George Van Brunt) met on a cloudless morning for the first field trip of the new year. The temperature was in the 30°F s and the wind was very light. We botanized the 2 mile long trail (shown in green on the map photo), from star to star (see map). Before starting, we ferried 2 cars to the parking lot near I-55 for our return to the parking lot near Missouri Bottom Road.

The trail closely follows the Meramec River and passes through bottomland forest. On this January day, most of the greenery was provided by exotic species including *Stellaria media* (common chickweed), *Lamium purpureum* (deadnettle), *Euonymus alatus* (wintercreeper), and *Lonicera japonica* (Japanese honeysuckle). Most native plants were either dormant or senescent, some with fruits remaining from the previous growing season. Fr. Sullivan's first test of the day was a senescent *Scutellaria lateriflora* (mad-dog skullcap). This is a late-blooming *Scutellaria*, blooming in August during the dog-days of summer, hence the name "mad-dog". This species prefers bottomland floodplains. We found 2 fruits that birds had overlooked on a female *Ilex decidua* (deciduous holly). This species is dioecious, having male and female flowers on separate plants. Bottomland



Park map at trailhead. Photo by George Van Brunt.

loving trees included *Acer saccharinum* (silver maple), *Celtis occidentalis* (hackberry), *Platanus occidentalis* (sycamore), *Acer negundo* (box elder), and *Quercus palustris* (pin oak). Recent DNA studies have resulted in the reclassification of *Acer* spp. from Aceraceae (maple family) to Sapindaceae (soapberry family) and *Celtis* spp. from Ulmaceae (elm family) to Cannabaceae (hemp and hops family). We identified senescent *Lobelia inflata* (Indian tobacco), *Solanum carolinense* (horse nettle) with fruit, *Dioscorea villosa* (wild yam) female with fruit, and *Dasistoma macrophylla* (mullein foxglove) along the trail. Many species of the Scrophulariaceae (snap-dragon family) have been reclassified into other families. *Dasistoma macrophylla* is now considered to be a member of the Orobanchaceae (broomrape family). Grasses that we identified were *Andropogon virginicus* (broom sedge) and *Chasmanthium latifolium* (inland oats). Other plants we saw were *Smilax tammoides* (bristly greenbrier) in fruit, *Fraxinus pennsylvanica* (green ash), *Campsis radicans* (trumpet creeper) in fruit, *Quercus imbricaria* (shingle oak), and *Symphoricarpos orbiculatus* (coral-berry) in fruit.

Near the end of our walk we found a *Quercus macrocarpa* (bur oak or mossy-cup oak) tree beneath which were a number of broken acorn caps. *Quercus macrocarpa* is a midwestern oak which ranges into southern Canada, farther north than any other New World oak. Bur oak has the largest



Quercus macrocarpa
(bur oak or mossy-cup oak)



Quercus macrocarpa
(bur oak or mossy-cup oak)

Quercus lyrata
(overcup oak)



Quercus stellata
(post oak)



Quercus lyrata
(overcup oak)

Photos by George Van Brunt.

acorn of all North American oaks, about 1.5 inches diameter and 1.5–2 inches long, consisting of a scaly cap with a hairy fringe and a nut about half covered by the cap (see photos). The species epithet, *macrocarpa*, is Greek for "large fruit". Squirrels particularly favor bur oak acorns and, along with blue jays, help disperse the acorns from

the parent plant. Bur oak grows best in rich bottomland soils but will grow on upland sites as well.

The large size of bur oak acorns is somewhat puzzling. In general, large seeds give their seedlings an advantage when they are in stiff competition for nutrients and light. Large seeds, however, mean that fewer seeds can be produced each year and this results in a limit on reproductive potential; there is a tendency for plant species to produce greater numbers of smaller seeds. Some oaks such as *Quercus stellata* (post oak) and *Quercus palustris* (pin oak) produce numerous small acorns. The production of such large acorns by *Quercus macrocarpa* is poorly understood. The evolutionary ecology of seed size is an area of active research.

On January 18, 2010, we confirmed the presence of *Quercus lyrata* (overcup oak) in Lower Meramec County Park. The site was a semi-permanent wet area on the trail (orange trail on the map photo) north of Meramec Bottom Road. *Quercus lyrata* is found mostly in the bootheel region of Missouri, but its range extends northward along the Mississippi River and the lower Meramec River. We conducted a cursory search for overcup oak in the area south of Meramec Bottom Road on our walk today but were unable to find any evidence of this species. A more thorough search may reveal other stands of overcup oak in the park. Most oaks have tough acorn cups, but overcup has its cup made of thinner material, and its cup encloses most of the nut (see photo).

At the end of our walk, we found *Clematis terniflora* (virgin's bower), an introduced Asian member of the Ranunculaceae (buttercup family). The plant is a vine and this specimen was heavily laden with fruit. The fruit is an aggregate of achenes with each achene retaining a plumose style. An achene is a small dry fruit that does not split open (indehiscent) and which contains a single seed. The feathery styles in this species aid in dispersal by wind. In the accompanying photos of the fruit, aggregates of achenes may be observed as well as individual achenes (flattened brown ovals) with the attached plumose style (white feathery structures).



Clematis terniflora fruit. Photos by George Van Brunt (top) and John Oliver (bottom).

January 10, 2011 – Route 66 State Park, St. Louis County, MO (contributed by Jeannie A. Moe).

Time: 11:30 to 2:00 PM.

Conditions: Cold

Temperature: lower 20's.

Participants: Fr. Sullivan, Burt Noll, Paul Corley, Jack Harris, Pat Harris, Kathy Thiele, George Van Brunt, John Oliver, Wayne Clark, Nancy Clark, and Jeanne Clauson.

The botany group didn't stick to our normal routine. We reversed the order of a walk and then lunch. We assembled at Joe Boccardi's Restaurant in Eureka, MO at 11:30 for lunch. At 1:30, we drove to Route 66 State Park and went on a short botany walk. As expected, the number of plants in bloom was zero. Plants in fruit were observed of several species including *Euonymus hederaceus* (wintercreeper), *Staphylea trifolia* (American bladdernut), *Elephantopus carolinianus* (elephant's foot), *Juglans nigra* (black walnut), *Cercis canadensis* (redbud), *Ruellia strepens* (wild petunia), and *Hibiscus lasiocarpus* (rose mallow). We looked at the leaves and fruit of *Euonymus hederaceus* (winter creeper). The plant is always green in winter. The vegetative part of the vine was running along the ground and up the trees. The plant never fruits unless it is climbing up a tree or something else vertical. There was an abundance of fruit in the trees. The fruits looked like a miniature bittersweet (*Celastrus sp.*) fruits which makes sense since they are both in the same family, the Celastraceae. The papery seed capsule of *Staphylea trifolia* (American bladdernut) has a three-lobed inflated egg shape making it look bladder-like. Popping open the seed pods, we observed the black seeds inside. We also looked at the fruit of the *Elephantopus carolinianus* (elephant's foot). The fruits of *Juglans nigra* (black walnut) littered the ground. Some of the *Cercis canadensis* (redbud) trees were loaded down with fruit. Father Sullivan identified the winter stem and fruit of *Ruellia strepens* (wild petunia). We found a *Hibiscus sp.* in fruit. The capsule was hairy and the fruits were round black and smooth. When I returned home and looked it up, these characteristics made it *Hibiscus lasiocarpus* (rose mallow) since *Hibiscus laevis* has hairy seeds and smooth capsules. There was no fruit on the *Ilex opaca* (American holly) an introduced species. The group speculated that this winter has been cold and the birds must have eaten the fruit.

John Oliver explained that the fruits of the *Quercus palustris* (pin oak) have a more toasted color than the (Schumard's oak) which is more blonde. John also pointed out that the acorns of the pin oak are small. When the botany group was at the Weldon



Hibiscus lasiocarpus fruits. Photo by Nancy Clark.

Spring Site a few weeks ago, studying acorns, Father Sullivan pointed out that the acorns of the pin oak look like French berets. We admired the branched thorns on the trunk of *Gleditsia triacanthos* (honey locust) tree. We identified the *Fraxinus pennsylvanica* (green ash) in winter bud. Father Sullivan pointed out that it has a narrow bud as opposed to the *Fraxinus americana* (white ash) which has a fatter bud. The black fuzzy buds of the *Diospyros virginiana* (persimmon) were observed including that the terminal bud is offset on the end of the twig. We found the leaf of a *Quercus bicolor* (swamp white oak) and looked at the diagnostic feature which is the white ventral side of the leaf. The white ventral side in contrast to the green dorsal side of the leaf is why the species name is bicolor.

January 17, 2011 – Winter weather caused a cancellation of our field trip.

January 24, 2011 – Weldon Spring Interpretive Center, Weldon Spring, MO (contributed by Jack H. Harris).

Time: 09:30 - 11:30 am (+/-).

Conditions: Mostly cloudy, Temp: 25° - 30° F., wind: calm.

Participants: Rev. Jim Sullivan, Wayne Clark, Nancy Clark, Jack Harris, Jeannie Moe, Burt Noll, John Oliver, Steve Turner, Ruth TenBrink, and Kathy Thiele.

This weekly field trip plan was adapted to the cold, unpredictable winter weather pattern. On short notice, Jeannie Moe made arrangements for the WGNSS-Botany Group to use the Mydler Meeting Room for indoor activities at the Interpretive



Indoors (L>R): Burt Noll, Nancy Clark, Rev Jim Sullivan, Jeannie Moe, Wayne Clark, Jack Harris, Kathy Thiele, and John Oliver. Photo by Steve Turner.

Center, Weldon Spring Site, St. Charles County, MO. Outdoors activities were to be considered weather permitting.

In the Meeting Room, the laptop computer and digital projector were fired up and Jack Harris started off with a ‘think warm’ theme by presenting a brief array of tropical plant images from Florida. The images were of various epiphytic native orchid flowers and a few of *Vanilla phaeantha* (vanilla), a non-commercial species. Then Jeannie Moe presented images of several plants, e.g., *Epilobium coloratum* (purple-leaved willow herb), and various scenic vistas at the Interpretive Center. Following those were images by Nancy Clark that she had taken during the Botany Group’s recent visit to Route-66 State Park, two weeks earlier.

Peeking outside, it was observed that the worst of the threatened severe weather had not materialized and a brief excursion followed, notwithstanding the 3 - 4 inches of snow that remained on the grounds. A short stroll through the adjacent native plant garden was led by Jeannie Moe (Interpretive Center Horticulturalist). The group engaged a winter botany ID exercise by trying to identify species based upon those parts of the plants that protruded through the snow cover. Since that activity seemed to be of interest, several members continued on to make a short loop through the nearby reconstructed prairie area. The sharp cold air soon enhanced the appetites of various members and several proceeded to the usual local gourmet restaurant for a warm lunch.



Outdoors: View of the Garden Area at the Interpretive Center, Weldon Spring Site. A cool day for field botany. Photo by Jeannie Moe.

Many thanks to the Interpretive Center for the use of the Mydler Meeting Room and to Jeannie Moe for making the arrangements.

January 31, 2011 – Winter weather caused a cancellation of our field trip.



Backyard Birding

Steve and Corinne Vogel



Pileated woodpecker. Photo by Steve Vogel.

Want to make backyard birding more fun and less of a chore? It’s all about how you log your sightings. The key is to do weekly lists, not daily lists.

My wife Corinne and I started keeping backyard bird lists in the 1980’s. For years we weren’t very consistent in compiling the daily lists. We were either gone, too busy, forgot, or just felt it was too much of a chore. Then in the late 90’s we started

keeping the weekly lists. We log only those birds that we positively see or hear on or adjacent to our heavily wooded property.

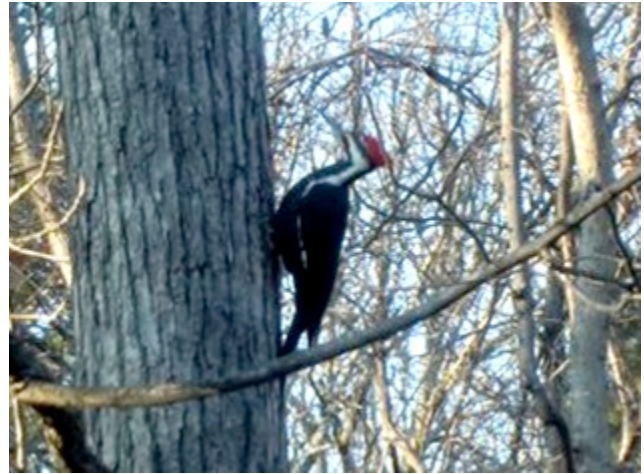
We use 9 1/2 x 6 3/4" spiral notebooks and log each week's sightings on a single page. Every Sunday morning we start a new list that ends at midnight on the following Saturday. We also jot the date we first observe an arriving or migrating fall or spring bird. By referencing previous year's notes, we know when to expect new migrants arriving or passing through. We have many spiral notebooks completely full of records. It's become somewhat of a game for us to see how many species we can log for a given week. Our record is 83 different species during the 2nd week of May in 2005.

There's always a little extra room on the weekly pages to note unusual events such as extreme cold or snow fall. Interesting unique events are sometimes noted too: "The deer romped at the turkey to shoo them away from the cracked-corn on the ground.... A red-fox unsuccessfully lunged from behind a large stump trying to nab a young turkey.... Screech owls fledged 5 kids May 17.... Yellow-rumped warblers eating suet & white millet daily.... Pileated Woodpecker feeding two young.... Coopers Hawk ate all the peanut butter laced corn-meal." Sometimes special or personal family events are added as well.

We've learned over the years how to keep unwanted varmints off the feeders and what's the best food to use. Our choices are white millet, black sunflower seed, niger seed, cracked corn, suet cakes, and sometimes peanut butter laced corn meal. Our home-made **BigBoy** feeder works the best. It has a large feeding tray under it and the unit holds up to 85 lbs of black sunflower seed... enough to last for months when we are away.

Over the years, our efforts have rewarded us with many unusual birds that have stayed days or weeks. Here's just a few.... Hermit Thrush, Brown Thrasher, Oven Bird, Rose-breasted Grosbeaks, Orioles, Pine-siskins, Red-breasted Nuthatch, Swamp Sparrow, Fox Sparrows, Tree Sparrows, Brown Creepers, and six species of Woodpeckers.

Our notebooks are full of special memories as well as birding records. Some day the grand-kids



Pileated woodpecker. Photo by Steve Vogel.

hopefully will enjoy thumbing (and chuckling) through the pages. Backyard birding is not a chore for us! Join the fun and start your weekly backyard bird lists today! Can you beat our record of 83 different species for a single week? Go for it!



A Review of the Crossley ID Guide

Anne McCormack¹



I got my copy of [The Crossley ID Guide: Eastern Birds](#) in mid-February. I wrote about it in [my blog](#) as did lots of well-known bloggers and experts, which I have linked to below. I'm not qualified to debate whether the photo for the 1st-winter Glaucous-winged Gull is adequately differentiates it from the 1st-winter Thayer's Gull. However, if the target audience for this book is the average birder who

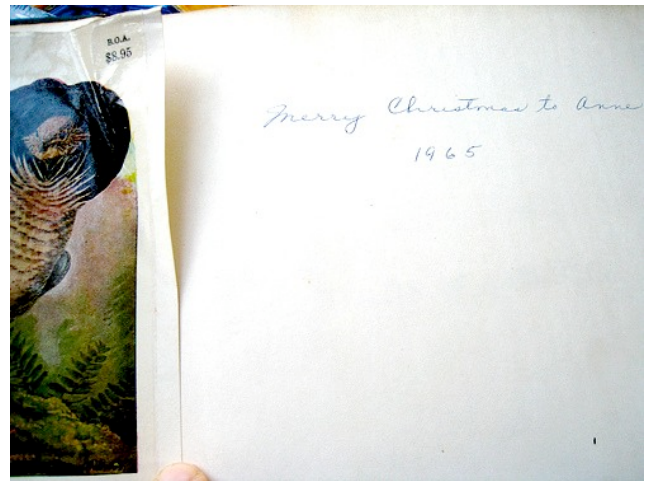
¹ Photos by the author.

gets out into the field when the demands of work and family allow; an average birder who'd like to improve her birding skills, then I'm eminently qualified. A better question might be, given that there are already a half-dozen excellent field guides to birds of the US, is this new book useful to me? I answer, enthusiastically, yes!

You're not gonna get this book into the pocket of your birding vest—it's bigger than [The Joy of Cooking](#). I own only one bird book that larger and heavier than *The Crossley ID Guide*: the reprint of the 1917 [Birds of America](#) I got for Christmas in 1965. Edited by [T. Gilbert Pearson](#) with color plates by Louis Agassiz Fuertes, its dust jacket proclaims in all caps, "This is the perfect, permanent bird book for all ages." Did the publisher mean it was perfect for a 14-year old as well as a 41-year old? Stone Age as well as Bronze Age? Industrial as well as Digital?

Like [Fuertes](#) published paintings in *Birds of America*, Richard Crossley's plates are large, showing the species shown in its typical habitat. Crossley is not a painter however; his color plates are composite photos. Numerous photos of the bird are set against a background of the typical habitat. In the foreground of the composition appear a few close-up photos of the bird, each in a different plumage. In many plates, the middle ground displays several images of the bird in flight. In the distance are proportionally small images of the same species. Crossley's purpose is to pack as much identification information about the species into one scene as he can; how it may appear in flight, at rest from the side, viewed from the front when feeding, in the distance where streaks seem to blend into a wash of color.

At first I found these scenes a bit like a [backlot](#) studio shot in an old movie—I was distracted by the background. The more I looked at the page however, the more the images appeared 3-dimensional. Crossley is not trying to depict field marks. He asks the reader to look over the complete image, focusing first on this bird, then that, putting those photos of variable plumages and postures into context. In Japanese films, the director often gives the audience a wider shot than we're used to with Hollywood movies; the viewer, not the director, decides what to look at within the frame. Crossley's approach is more [Kurosawa](#) than [Corman](#).



It will take me a long time to go through this book, but I'll use one plate as an example of the role this book can play in your birding toolbox. When I first moved to Kirkwood in the 80s, I occasionally saw what I called "the mystery bird." Its wings were swept back like a gull, but the tail wasn't the right shape for a gull. Sometimes I'd see a distant bird with a leading edge so straight that it appeared to be headless. Its flight was so effortless and acrobatic; I thought it might be a falcon. All of these are shown in the [tiny distance shots on page 239](#).

The fact that I can point you toward that page whether you own the book or not is another feature of this birding guide that [Peterson](#) and [Pearson](#) never dreamed of; it's [interactive](#). I can try to soak it all the images on the printed page, but if I need more information, I can find it with a click on the website. The web version has labels, comments, and questions not included in the book. Of course, you can "like" it, make comments, or leave questions for the author on [Facebook](#) too. [Adjusted for inflation](#), at \$8.95, *Birds of America* was roughly 3 times the Amazon price of *The Crossley ID Guide*!

Here are links to some other reviews of this book:

- [10,000 Birds](#)
- [ABA Blog](#)
- [Audubon Magazine](#)
- [The Bird Booker Report](#)
- [The Bird Chaser](#) and [second post](#)
- [The Birder's Library](#)
- [Birdzilla.com](#)
- [Cyberthrush](#)
- [Monarch's Nature Blog](#)
- [Sapsucker Woods](#) (gift shop of Cornell U)
- [What Bird](#) Forum

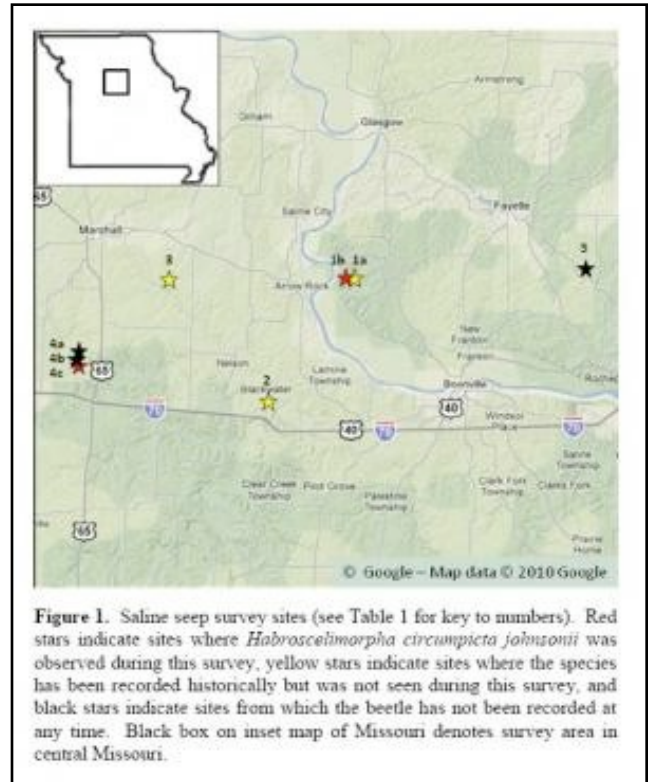


Is Missouri's disjunct population of Johnson's tiger beetle extirpated?

Ted C. MacRae¹

The December 2010 issue of the journal **CICINDELA** came out a little over a week ago. Leading off inside is the first in a series of papers that I, along with colleagues Chris Brown and Kent Fothergill, have prepared detailing our work with several species of tiger beetles in Missouri of potential conservation interest. At the start of our surveys, Missouri's tiger beetle fauna was already fairly well characterized, at least qualitatively, due to the efforts of heavy hitters Ron Huber and Dave Brzoska, who for many years lived in nearby eastern Kansas. Despite their attentions, however, questions lingered regarding the precise distribution and status of several species of restricted geographical occurrence within the state, and our surveys over the past 10 years have sought to resolve these questions and, if necessary, recommend conservation efforts to secure the long-term survival of these species within the state.

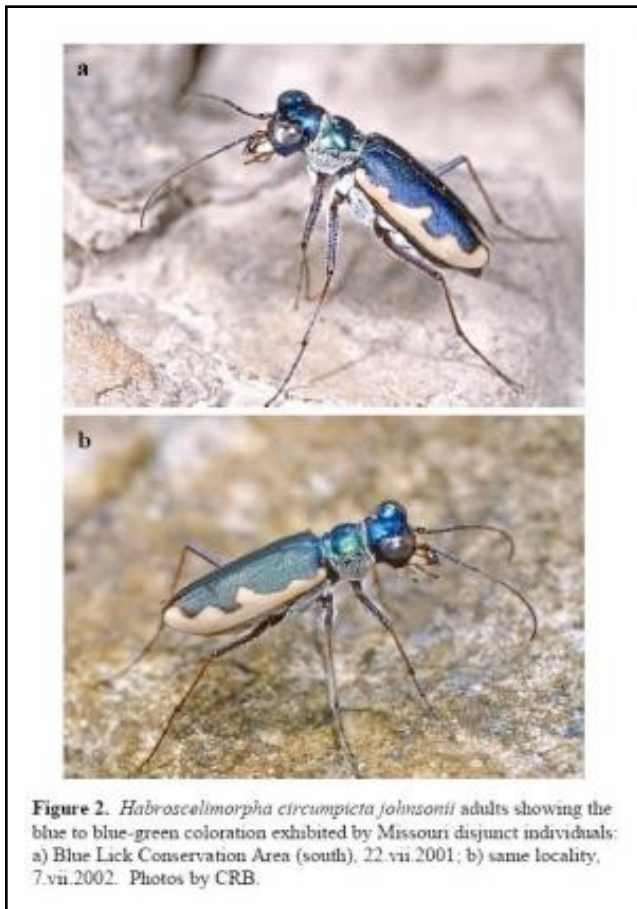
One of these species of interest is *Habroscelimorpha circumpecta johnsonii* (Johnson's tiger beetle). This subspecies is widely distributed in inland areas of the central and south-central United States, where it is associated exclusively with barren areas surrounding saline seeps. Despite the broad occurrence of the main population, the Missouri population of this subspecies has long been of particular interest for several reasons: 1) its widely disjunct isolation, occurring several hundred miles east of the nearest populations in central Kansas, 2) its strict association with the highly restricted saline seeps of central Missouri (Fig. 1), and 3) the exclusive blue-green coloration of the adults (Fig. 2) that contrasts with the varying proportions of reddish and/or dark morphs, in addition to blue-green morphs, found in other populations. The highly disjunct and isolated occurrence of this population and its unique coloration have been considered by some workers as grounds for separate subspecific status. Another restricted, disjunct population of this species in North



Dakota has already been accorded subspecific status – *H. circumpecta pembina*.

Despite its restricted occurrence in Missouri, a long history of collection records exist for the subspecies. Numerous specimens are housed in the Enns Entomology Museum in Columbia, Missouri, with a majority of these coming from a single location (Boone's Lick Historic Site) and dating back as early as 1954. In more recent years (1985-1992), Ron Huber and Dave Brzoska found significant numbers of beetles at two additional locations near Boone's Lick. Despite these numerous records, the subspecies was listed as a "Species of Conservation Concern" by the **Missouri Natural Heritage Program** with a status of "S2S3" (vulnerable or imperiled) due to the rarity of its required saline seep habitats in Missouri. Unfortunately, this alone did not appear to be sufficient protection for the species, as my own observations beginning in the mid-1990s suggested that populations of the beetle had declined significantly from their historical levels. Concomitant with these apparent declines was the observation that the sites supporting these beetles had themselves suffered severe degradation that reduced their apparent suitability as habitat for the beetle. As a result of these observations, Chris and I initiated comprehensive surveys during the 2001

¹ Reprinted from an article posted February 21, 2011 at the author's website <http://beetlesinthebush.wordpress.com>



field season to assess the conservation status of the Missouri population and identify potential new sites. Our first order of business was to petition a status change to “S1” (critically imperiled), and for the next three years we regularly visited the historical sites throughout the presumed adult activity period, noting occurrence of adults and recording their numbers and the circumstances of their habitat associations. Included in these surveys also were two new sites identified using the Missouri Natural Heritage Database.

The results were not good – during the 3-year survey, only a single beetle was observed at the historical location of Boone’s Lick, and none were observed at the two other locations discovered by Ron Huber and Dave Brzoska. More significantly, all three sites had suffered severe degradation due to vegetational encroachment, cattle trampling, or other anthropogenic disturbance. Moreover, of the two potential new sites identified, only one of these (Blue Lick Conservation Area) was found to support a small population of the beetle. Three apparently suitable saline seeps exist at this latter site; however, beetles were observed at only one of them. During the final year of the survey,



prolonged flooding occurred at this site (frustratingly, a result of earth-moving operations by site personnel), which was followed in subsequent years by significant vegetational encroachment (Fig. 3). No beetles were observed at this site during the final year of the survey, nor has the species been seen there in multiple visits to the site in the years since.

Is the Missouri disjunct population of Johnson’s tiger beetle extirpated? There is little reason to be optimistic. What is clear is that the beetle is now below detectable limits, and with the loss of suitable habitat at all sites known to have supported the beetle in the past and little chance that new, high-quality sites will be identified, prospects for an unaided comeback are dim. The saline seep habitats at the three historic sites appear to have suffered irreparable degradation and offer little restoration potential to the degree required to support viable beetle populations; however, there are still two saline seeps at Blue Lick that do offer at least a semblance of suitable habitat. It is imperative that these last remaining examples of Missouri’s critically imperiled saline seeps habitats receive the highest priority for protection if the beetle (should it still exist) is to have any chance of surviving in Missouri.

Johnson's tiger beetle is only one of several tiger beetle species whose presence in Missouri appears to be in jeopardy (others being *Dromochorus pruinina* – loamy ground tiger beetle, and *Cylindera celeripes* – swift tiger beetle). I end this post with our closing admonition in the paper:

The loss of this beautiful and distinctive beetle from Missouri's native fauna would represent a significant and tragic loss to this state's natural heritage. We urge the Missouri Department of Conservation, the Missouri Department of Natural Resources, and other conservation organizations within the state to identify and allocate the resources needed to develop and implement a recovery plan for the species in Missouri.

REFERENCE:

Brown, C. R. and T. C. MacRae. 2011. Assessment of the conservation status of *Habroscelimorpha circumpecta johnsonii* (Fitch) in Missouri *CICINDELA* 42(4) (2010):77-90.

Postscript. On a happier note, I am pleased to be joining the editorial staff for *CICINDELA*. While my role as layout editor is more functional than academic, I am nevertheless thrilled with the chance to “rub shoulders” with the likes of Managing Editor Ron Huber and long-time cicindelid experts Robert Graves and Richard Freitag. I hope my contributions to the journal's production on the computer end of things will be favorably received by its readership.

Shaw Nature Reserve Requests Help from Experienced Birders

*James C. Trager*¹

Shaw Nature Reserve is in the process of applying for USFWS moneys for songbird habitat improvement (mainly through invasive shrub removal). We are seeking volunteers from among the experience birders of St. Louis Audubon Soc. and Webster Groves Nature Study Soc. to conduct point count surveys in the proposed treatment area

¹ Biologist – Naturalist, Shaw Nature Reserve.

at Shaw. Since the birding season is upon us, it would be great to get some baseline data as soon as possible before beginning the honeysuckle removal treatment. Basically, the technique is to record all birds seen or heard in a spot for 10 minutes, then move on to the next spot that is >250m away. Protocols will be provided to those interested in helping with this study. An abstract of the study being performed can be found at <http://www.jstor.org/stable/4493689>. If you are interested in helping with this study, please contact James Trager, Shaw Nature Reserve, at James.Trager@mobot.org or the following address:

James C. Trager, Ph.D.
Biologist – Naturalist
Shaw Nature Reserve
P.O. Box 38
Gray Summit MO 63039
636-451-3512 ext. 6002

Great River and Clarence Cannon National Wildlife Refuges Launch Facebook Page

*Carolyn Gregory*²

Great River and Clarence Cannon National Wildlife Refuges recently became one of over 500 million users of Facebook, the online social networking website. Each week, updates are posted on various refuge topics, along with pictures taken from the refuge units. The goal is to reach out to people that may be unfamiliar with the refuges and encourage them to visit, whether they reside in the local area, across the United States, or around the world.

Refuge Manager Jason Wilson states, “We hope that when folks visit our Facebook page, it makes them want to come out to the refuges for a visit. The pictures and videos that we post on there are great, but in no way do they replace the experience that one can get from viewing the wildlife we have in person.”

² Administrative Technician, Great River NWR / Clarence Cannon NWR

To find the refuges on Facebook, search for Great River National Wildlife Refuge and Clarence Cannon National Wildlife Refuges. The refuge staff hopes many visitors will “Like” what the refuge has to offer!

Clarence Cannon NWR is located in Pike County, Missouri, approximately one mile east of Annada, along Highway 79 between Elsberry and Clarksville. It is one of over 550 national wildlife refuges. The National Wildlife Refuge System, managed by the U.S. Fish and Wildlife Service, is the world's premier system of public lands and waters set aside to conserve America's fish, wildlife and plants. For more information, please call the refuge at (573) 847-2333.



TNC Spring 2011 Conservation Speaker Series

Reader Quiz

Steve Vogel sent these photos of a hawk sitting on his driveway – can you guess the species? Answer on page 17.



The Nature Conservancy has announced their **Spring 2011 Conservation Speaker Series**. Mark your calendars – all talks are free & open to the public and are held at Schlafly Bottleworks in Maplewood.

Tuesday, April 12; 7 p.m.

Genetically Modified Agriculture and the Environment – Barbara Schaal, Evolutionary Biologist, Washington University, St. Louis.

Tuesday, May 24; 7 p.m.

Natural History, Human Culture, and Conservation in Missouri – Doug Ladd, Director of Conservation Science, The Nature Conservancy in Missouri.



St. Louis Zoo Lecture Series

The St. Louis Zoo presents two lecture series, *Science Seminar Series* and *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.

Tuesday, March 22; 7:30 – 9 p.m.

Orangutan Conservation Research in Malaysia – Harjinder Kler, Hutan. Hutan, a French grassroots non-profit organization, was founded in 1996 to develop and implement innovative and creative solutions to conserve the orangutan populations of Sabah, Malaysia. Together with the Sabah Wildlife Department, Hutan established the Kinabatangan Orangutan Conservation Project (KOCP), employing upwards of 40 local community members. With their research it is now known that orangutans can live and thrive in secondary forest (that has been previously logged or disturbed) rather than solely in primary unlogged or disturbed forest. KOCP has received financial support from the Saint Louis Zoo.

For more information call (314) 646-4650.

Tuesday, March 29; 7:30 – 9 p.m.

Patch-Burn Grazing: Is it Right for Missouri's Remaining High Quality Prairies? – Paul Nelson, Ecology and Land Management Planner, United States Forest Service. Paul Nelson talks about the implementation of patch-burn grazing (a rotational system alternating grazers such as bison or cattle and the use of prescribed fire) on tall grass prairies within Missouri, some of the last remaining fragments of a once dominant ecosystem, and discusses some of the successes and dangers associated with this management practice. This program is presented as a joint venture between the Saint Louis Zoo, Forest Park Forever, and the Missouri Native Plant Society.

For more information call (314) 646-4544.

Wednesday, April 6; 7:30 – 9 p.m.

Squeaks and Scents: The Neurobiology of Animal Social Communication – Timothy E. Holy, Ph.D., 2009 Outstanding St. Louis Scientist Innovation Award recipient, Academy of Science- St. Louis; Associate Professor of Anatomy and Neurobiology, Washington University School of Medicine. Dr. Timothy Holy gives us the inside scoop on the neurobiology of animal social communication among mice: chemical signals, often called pheromones, and “courtship songs” sung at frequencies too high to be detected by humans.



Group Activity/Walk Schedules

BOTANY GROUP

Chair – George Van Brunt

Monday Botany Walks (Leader – Fr. James Sullivan; now in his **44th year** as Botany Walk Leader!). 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 following Monday's trip.

ENTOMOLOGY GROUP

Co-Chairs – Phil Koenig and Jane Walker

Monday, March 21; 7 – 9 p.m.

Phil Koenig will be our speaker for the March Entomology Group meeting. His talk is titled “Preliminary Investigation of *Calephelis muticum* (Swamp Metalmark) in Missouri.” The meeting will be held at the Butterfly House.

NATURE BOOK CLUB

Chair – Lisa Nansteel

The Nature Book Club is a group of naturalists who meet once a month to discuss a book chosen for its general interest from botany to zoology. The group meets at members' homes on the second Tuesday of the month from 1:30 – 3 p.m. For meeting locations and directions contact Pat Brock Diener at (314) 962-8665 or Lisa Nansteel at (636) 391-4898. All are welcome – especially newcomers! Upcoming books:

- April 12 – *Dark Banquet*, by Bill Schutt.
- May 10 – *Sexy Orchids Make Lousy Lovers* by M. Crump
- June 14 – *Bayou Farewell* by J. Tidwell
- July 12 – *Summer World* by Bernd Heinrich
- August 9 – *Eearth: Making Life on a Tough Planet* by Bill McKibben

- September 13 – *Bringing Nature Home* by Douglas Tallamy

ORNITHOLOGY GROUP

Chair – David Becher

Saturday Bird Walks (Leader – David Becher). April and May walks begin at **8 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. If you have questions, contact David at (314) 576-1146 or DavidBecher@msn.com

- April 2 – Des Peres City Park, Ballas Rd. just north of Manchester Rd.
- April 9 – Des Peres City Park, Ballas Rd. just north of Manchester Rd.
- April 16 – Des Peres City Park, Ballas Rd. just north of Manchester Rd.
- April 23 – Tower Grove Park, Gaddy Garden
- April 30 – Tower Grove Park, Gaddy Garden
- May 7 – Tower Grove Park, Gaddy Garden
- May 14 – Big Day or NAMC
- May 21 – Des Peres City Park, Ballas Rd. just north of Manchester Rd.
- May 28 – Des Peres City Park, Ballas Rd. just north of Manchester Rd.

Thursday Bird Walks (Leader – Jackie Chain). All walks are at Des Peres Park at **8:30 a.m.**, return is usually by 3:30 p.m. (you may leave at your convenience). Meet in the parking lot on the east side of Ballas Rd. just north of Manchester Rd. 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

For general information about WGNSS activities, 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!



-
- ♦ Answer to Reader's Quiz: Cooper's Hawk



Spring Banquet Reservation Form



Peter H. Raven, Ph.D.
Guest of Honor

WGNSS Annual
Spring Banquet
Wednesday, May 4

at Orlando Gardens, 8352 Watson Rd. in General
Grant Shopping Center, Webster Groves

The social hour will begin at 5:30 pm. Mingle with other members and meet featured speaker Dr. Peter Raven, President Emeritus at the Missouri Botanical Garden, presenting "How to Conserve Species in a Changing World" At the banquet, the 2011 Lifetime Achievement Award will be announced and we will be honoring this year's WGNSS scholarship winners.

Please make your reservation using the form printed below by April 20 and mail with a check made out to WGNSS for \$28 per person. Your check will confirm your reservation.

Refund policy: A full refund of your banquet ticket cost of \$28 will be given if requested before April 18. After April 18, no refunds can be made. Send payment to:

Jane Deschu
1431 Tahoe Valley Court
Ballwin, MO 63021

Spring Banquet reservations for _____ persons @ \$28 per person=\$ _____

Name _____

Address _____

phone _____ email _____ (optional)

Vegetarian meal request _____