***Cicindela scutellaris* at Sand Prairie Conservation Area. Populations in southern Missouri represent intergrades between the northern subspecies *C. s. lecontei* and the southern subspecies *C. s. unicolor*. Photo by Ted C. MacRae.**

a consortium of churches. Part of the land owned by this consortium is a small sand prairie remnant that is managed by the Missouri Department of Conservation. Compared to Sand Prairie, the Baptist Church Camp site is more mature and diverse. At the time of our visit, the grasses were longer, prickly pear cactus was everywhere one stepped, and there was less exposed sand. The wolf spider burrows and race runners were still abundant. Ted expected to see more of the tiger beetle he was looking for as he had always seen more at this site than at Sand Prairie, but today he saw none at Baptist Church Camp.

I found a large patch of earth stars and photographed a few. I also photographed a wolf spider burrow opening that was well adorned with small sticks stacked like Lincoln Logs.

Not as many plants were blooming here as at Sand Prairie, but it was evident by the large amount of prickly pear cactus that this site had not been burned recently.

We continued on south to Holly Ridge Conservation Area near Dexter in Stoddard County. We hiked the trail to find a small sand prairie remnant that Ted had found during a previous visit. This small area was about an acre in size. We did not see any tiger beetles, but we did see our regular residents the burrowing wolf spider and race runners. We found an interesting ant nest of red ants, a few of which I was able to photograph (far les than I saw). And as always when one is out in nature pursuing one interest, we always find the unexpected and serendipitous. We found a beautiful speckled king snake, which

***Lithospermum caroliniense* at Charleston Church Camp. Photo by Ted C. MacRae.**

Speckled king snake at Holly Ridge Conservation Area. Photo by Ted C. MacRae.

we photographed, and photographed, and photographed, to fill all the wished for and missed insect photos of the day.

Agrilus fuscipennis on Persimmon

Ted C. MacRae[1]

Agrilus fuscipennis may not be the largest or the prettiest member of the genus occurring in Missouri (that honor is reserved for *Agrilus concinnus*, or "hibiscus jewel beetle"—MacRae 2004). Nevertheless, it comes pretty darned close! Add to that the fact that it is among our most seldom encountered jewel beetles, and you can understand how excited I was to see this species on my sheet after beating a small persimmon

[1] Originally posted June 16, 2013 at the author's website: http://beetlesinthebush.wordpress.com. All photos by the author.

(*Diospyros virginiana*) tree last weekend at Hercules Glades Wilderness in the White River Hills of extreme southwestern Missouri. In fact, I have only collected this species three times previously—all single specimens beaten from persimmon, and all back in the 1980s!

Jewel beetles are unquestionably popular among insect collectors, due no doubt in large part to their vivid, metallic colors. I think the family, however, would be even more popular were it not for the genus *Agrilus*. Fully one in five species of jewel beetles belongs to this genus, which at nearly 3,000 described species and counting (Bellamy 2008) is perhaps the largest genus in the entire animal kingdom. As might be expected, such hyperdiversity has resulted in taxonomic quagmire, with species limits difficult to define and many hardly distinguishable except by examination of male genitalia (MacRae 2003). Additionally, in contrast to the rest of the family which is generally recognized as containing some of the most spectacularly beautiful beetles in the world, the most species of *Agrilus* are small, usually less than 8 mm in length and often as small as only 4–5 mm, and also lack the vivid colors (at least, to the naked eye) for which the rest of the family is so noted.

Agrilus fuscipennis is one of several species that buck this general *Agrilus* theme. While not forming a discrete taxonomic group within the genus, they are all unified by the following characteristics: 1) relatively large for the genus (*A. fuscipennis* measures 12–14 mm length), 2) vivid red pronotum and black elytra, and 3) mine the lower trunks, crown and main roots of living rather than dead host plants. For *A. fuscipennis* the larval host is persimmon, and other similar species include *A. vittaticollis* on serviceberry (*Amelanchier*) and *A. concinnus* on wild hibiscus (*Hibiscus*). These other species also are not very commonly encountered, at least in my experience, perhaps partly because they are not as easily reared from their hosts as species that develop as larvae in dead wood (the latter can be easily reared by retrieving infested wood from the field and placing in containers to trap emerging adults).

In the interest of full disclosure, these photos were taken in the studio after returning home. Although the persimmon branch is real, the "blue sky" is actually just a colored index card. I prefer to photograph insects in the field, especially with insects such as tiger beetles where it is desirable to include elements of the insect's natural habitat in the photograph. However, I don't have a problem with studio photography if field photographs prove too difficult or time-consuming or present too high a risk of escape by a prize specimen. My normal protocol for the latter is to place the first individual in a vial and continue to search for another that I will then try to photograph in the field. If that doesn't work then I still have the first individual as a backup for studio photographs. In the case of this beetle, I found it on the very first clump of persimmon that I beat but never saw another despite beating persimmon for the rest of the afternoon (just like the three I found separately back in the 80s)! I have plans to photograph *A. concinnus* later this summer on its *Hibiscus* host plant in southeastern Missouri—hopefully I will succeed in getting true field photographs of that species.

REFERENCES:

Bellamy, C. L. 2008. World catalogue and bibliography of the jewel beetles (Coleoptera: Buprestoidea), Volume 4: Agrilinae: Agrilina through Trachyini. *Pensoft Series Faunistica* 79:1–722.

MacRae, T. C. 1991. The Buprestidae (Coleoptera) of Missouri. *Insecta Mundi* 5(2):101–126.

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Saint Louis Zoo Lecture

Sandra Faneuff

Fueling the Future: Sustainable BioFuels Using Missouri's River Floodplains. Speaker: Shibu Jose, PhD is the Harold E. Garrett Endowed Chair Professor and Director of the Center for Agroforestry at the University of Missouri, Columbia. The seminar is co-sponsored by The Academy of Science-St. Louis and the Saint Louis Zoo. October 2 2013, 7:30–9 p.m. in The Living World/North Entrance. Admission is free. No reservations needed. More information: www.stlzoo.org/education or (314) 646-4544.

Group Activity/Walk Schedules

BOTANY GROUP

Chair—George Van Brunt

Monday Botany Walks, Leader—Fr. James Sullivan; now in his **45th year**! The WGNSS Botany Group visits many of the same locations as the Bird group: Busch Conservation Area, Shaw Nature Reserve, 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

The Entomology Group meets September through May on the 3rd Monday of each month at the Butterfly House in Faust Park, 15193 Olive Blvd., Chesterfield. For more information and directions contact Jane Walker at (314) 965-6522 or Phil Koenig at (636) 281-1313. All members are welcome! Upcoming meetings:

- **Monday, October 21, 7:00 p.m.** The Entomology Group will learn about attracting insects to our backyards. Jane Walker has been very successful at this and will share her secrets with us.

NATURE BOOK CLUB

Chair—Lisa Nansteel

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

- **October 8**. *Stand Up That Mountain*, by Jay Erskine Leutze
- **November 12**. *The Social Conquest of Earth*, by E. O. Wilson

ORNITHOLOGY GROUP

Chair—David Becher

Saturday Bird Walks, Leader—David Becher. All trips meet at Des Peres Park on the east side of Ballas Road just north of Manchester Road at 8:00 a.m. Please contact David at (314) 576-1146 or DavidBecher@msn.com if you have questions.

Thursday Bird Walks, Leader—Jackie Chain. All trips meet at Des Peres Park on the east side of Ballas Road just north of Manchester Road at 8:00 a,m. Please contact Jackie at (314) 644-5998 or jacquelync1@charter.net if you have questions. Changes will be posted on MOBIRDS.