



19 September 2014

Dear OK Oders,

We bet you never thought that your car breaking down could be a good thing. It is doubtful that thought crossed Bill Carrell's mind until last week Tuesday when, after not being able to get his car started, he was stranded at his campsite in Black Mesa State Park . . . only to find a new state record! He spotted an immature male Striped Meadowhawk (*Sympetrum pallipes*), grabbed his camera, fired a shot, and then watched his state record fly away. We can just imagine his disappointment when he realized that the autofocus on his camera locked onto a leaf rather than the critter he wanted to photograph. Not one to give up, Bill hunted for the ode in hopes of getting a good photo. Fortunately he managed to re-find his guy, and snapped a beautiful shot (right). Although this species is named for its striped thorax, one cannot always see the pale stripes well. In any case, we (including Bill) had predicted this species to show in the state, so we are wholeheartedly pleased that Bill found one, especially given his extra hard fieldwork this year. Way to go, Bill!



Bill's record was #167 to the state list. Oklahoma is now tied with Michigan as the 11th highest state list in the US!! You may be wondering, "What about species #166?" Well, that is a species we thought Bill found earlier this year, but it turned out not to be the case. If you remember a few updates ago we spoke of a river cruiser (*Macromia*) that Bill submitted to Odonata Central (OC 424965) that at first blush struck us as an Allegheny River Cruiser (*M. alleghaniensis*), yet after we reviewed additional photos of that individual we ruled out the possibility. Recently we have reviewed all *Macromia* records for the state as it has become increasingly clear to us that field identification is an under-appreciated problem (see below). As part of that Brenda was going through OC records, and she spotted a river cruiser that wasn't what it was submitted and confirmed as. The male river cruiser turned out to be an Allegheny (OC 376227; photo left)! Good ol' Berlin Heck smacked his truck into this guy along a road northeast of Broken



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Bow, near the Mountain Fork River, McCurtain County, on 20 June 2012. At the time of submission of the record, *Macromia alleghaniensis* was not even on anyone's radar for Oklahoma. Until recently it was thought that there were only three species in the state: Swift (*M. illinoensis*), Royal (*M. taeniolata*), and Gilded (*M. pacifica*) River Cruisers. Both of the *Macromia* species added recently to Oklahoma, the Bronzed River Cruiser (*M. annulata*) and the Allegheny River Cruiser, have the hearts of their normal ranges rather far from Oklahoma. The Bronzed was definitely a surprise when it turned up in Oklahoma but unlike that species, the Allegheny has a disjunct population more-or-less just across the Oklahoma state border from Le Flore and McCurtain Counties. The Arkansas population has been documented for the tri-county region of Garland, Montgomery, and Scott Counties, a mere 50 miles (80 km) from the Oklahoma locality, a stone's throw, so to speak, for a large dragonfly. So, we now know that Allegheny and Bronzed River Cruisers occur on either side of the state, so keep an eye out for them. And as a final note on *Macromia* . . . we have opted to treat all sight records, including our own, as indeterminate if these records would have represented a new species for a county. The problem lies in (1) extreme variation in the Swift River Cruiser (with apparent records of both subspecies for the state, the colorful *M. i. georgina* being the common and expected one but with two records of apparent *M. i. illinoensis*, including Bill's mentioned above); (2) the "*wabashensis*" problem (a critter Williamson described as a species in 1909 but now treated by Needham et al. 2014 as an extreme yellow color morph of the Royal River Cruiser; there are at least two records for Oklahoma); and (3) an inability to note key features, even in most photos, of the vertex, the second abdominal segment, etc. as these fast-flying buggers hurtle by us. As a result of our review you will note some changes to the county totals. Because we are still considering the identification of some records, the county totals likely will continue to fluctuate until we have worked through some identification issues. Thanks for your patience during this process.

And finally, two announcements. Jim Arterburn is looking for records of Neon Skimmer (*Libellula croceipennis*) for the Tulsa area. If you have any records, please contact Jim (or Brenda, and she can forward the info to Jim). And definitely do not forget about BioBlitz! coming up on 3–4 October at the Black Kettle National Grasslands and Washita Battlefield National Historic Site. BioBlitz! itself will start on Friday at 4:00 pm and will end at 4:00 pm on Saturday, but there are activities into Saturday night, and we encourage you to stay out in the area on Sunday to enjoy a visit to the central west/northwest of Oklahoma. For more information on BioBlitz! see the website (<http://www.biosurvey.ou.edu/bioblitz/BioBlitzCurrent.html>). Roger Mills County has a list of 48 species, so a concerted effort could well put it to 50 or beyond. We hope to see you there!!

All the best,

Brenda and Michael