



Dear OK Oders,

Some things are out of date almost as soon as they are produced. Such is the case for field guides. Such is the case for our Oklahoma Odonata Project updates. And such is the case for the article about the first state record of the Thornbush Dasher

(*Micrathyria hagenii*) for Oklahoma (Smith-Patten & Hoagland 2015) that was just published in *Argia*, the news journal of the Dragonfly Society of the Americas\*. The article also provided details on other out-of-range records of the species in the US. But almost as soon as the article was submitted for publication, new records surfaced. One, in New Mexico, came on 5 September at Rattlesnake Springs, Eddy County (1 male, found by Bill Flynt, II, OC436297). That record was the first for New Mexico.

Then, on 13 September, Michael found Oklahoma's second state record at a small pond at Great Plains State Park in Kiowa County. He saw a minimum of one male and one female. The male is now in the Smith-Patten/Patten Collection (SP1793; also on Odonata Central as record #436455). We revisited the pond on 18 September. After much effort, we located a single old female, which Brenda photographed (OC436913), albeit poorly—although her photos are arguably better than Michael's of the male! That female was the only Thornbush Dasher we saw that day. Probably, as we write this, more Thornbush Dashers are being found, and as soon as we send this off to you, those records will be reported. Despite never feeling like we can keep up-to-date, we can say that we are keeping our fingers crossed that we will find an established population at Great Plains State Park, and maybe elsewhere, next year.

Just as Brenda was sending out the last project update on 8 August, Michael was in the OK panhandle collecting new records. We reported last time that the Pale-faced Clubskimmer made an appearance in the state again this year. We now realize that the 3 June record was not a one-off. Instead, the species has shown itself a handful of times this year. Michael had three males (1specimen, SP1742) and one female (1 pair) at the 3 June spot on the Cimarron River near Kenton, Cimarron County, on 8 August. Then Bill Carrell saw one male there on 7 September. Michael also found the species at Major County Wildlife Management Area (WMA) on 15 August, when he photographed a single female (OC435075). On a return visit on 29 August he found six males (2 in hand, 2 specimens, SP1770, SP1771). And, on 22 August Brenda photographed a lone female in Murray County (OC435768).

Sooty Dancers (*Argia lugens*) have also been spotted this year on the Cimarron River in Cimarron County. Michael nabbed a male (SP1743; OC434752) on 8 August, and Bill saw six males (OC436524) on 7

September, which extended the seasonal late date for the species in Oklahoma by four days (previously set by Bill, OC410018). And, the Western Pondhawk (*Erythemis collocata*) also made a couple of appearances (1 female, 7 Aug, vic. Kenton, Cimarron River, Cimarron Co., and 1 male and 1 female [SP1744] on 8 Aug, 12 km N of Goodwell, Beaver River, Texas Co., a county first).

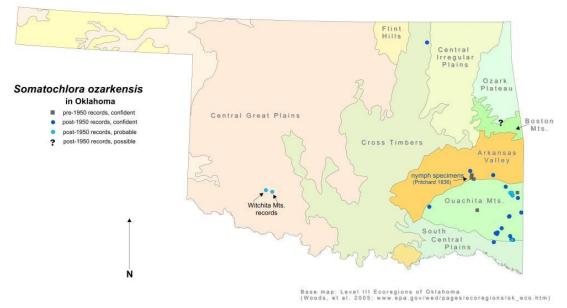
While on his early September trip to the panhandle, Bill had a stunning record of Dusky Dancer (*Argia translata*) on the Cimarron River north of Black Mesa State Park (OC436525, 7 Sept, photo to right). This record is quite a ways out of the species' range as we know it in Oklahoma. Good spotting, Bill!



Other records of note include Great Spreadwing (Archilestes grandis) in Major County, well outside the species' normal range in the state (15 August, SP1752), and a new county record (19 Sept, SP1796) of the species in Blaine County at American Horse Lake (re-opened and a great place to look for bugs!). Michael found a small

population of Smoky Rubyspot (*Hetaerina titia*) on Polecat Creek within Heyburn WMA. Recall that we consider the Smoky Rubyspot to be a species of conservation concern in the state because it appears to have declined in recent decades. Finding the species this year at a couple of new locales (reported last update in Bryan Co.) is heartening. Also of note is finding Fawn Darner (*Boyeria vinosa*) in Dewey County (1 male and 2 females, 1 female as SP1749; also OC435072), which is the northwestern most record of the species in Oklahoma.

And definitely of note is an older record that came to light recently. Mark Ferguson, formally of Oklahoma but now a Natural Heritage biologist in Vermont, submitted a record on behalf of his daughter Molly, of a male Ozark Emerald (*Somatochlora ozarkensis*; OC435703) from, of all places, Osage County! There is an unconfirmed literature record of the species from the county, but we have largely dismissed it given the description of the record as being from "a stock tank," which is not at all the habitat expected of the species.



But we now have documentation of the species in the county. As you can see from the map (left), the Osage County record, being so far to the north of other OK records and in a completely different ecoregion from what we would expect the species, is certainly of note...as well as quite puzzling. That said, Ozark Emerald in

Oklahoma is a bit of an enigma anyway. Its name would suggest that it ought to be well documented in the Ozark Plateau of Oklahoma; however, it has not yet been found there for certain. Brenda spotted a putative female ovipositing on Hasting's Hollow Creek, Cookson WMA, Cherokee County, earlier this year, but she was not able to get a photo or a specimen, so the species remains undocumented for the ecoregion. The vast majority of the records in the state have been in the Ouachita Highlands (within the ecoregions of the Ouachita Mts. and the Arkansas Valley) in the southeastern part of Oklahoma. Two records outside of that region are from Comanche County, both submitted by Vic Fazio. We cannot conclusively rule out Texas Emerald (*Somatochlora margarita*) for those records so we have labeled them as possible records of Ozark Emerald. It would not be surprising for Comanche County given the many out-of-range records for a variety of species that the county has pulled in, but for now we are erring on the side of caution.

This year's search for this elusive species had its ups and downs. On 29 June, we found a female Ozark Emerald ovipositing on Fourche Maline Creek again at Robber's Cave WMA, Latimer County. Michael found a swarm of approximately 25 individuals feeding along a Forest Service road 10 km NE of Broken Bow on 24 July. He captured a dozen individuals (2 males and 10 females in hand, one female kept as SP1726)! The only other confirmed record for the year was on 10 August. While on a tour with David Arbour, Steven Easley photographed a male (OC435326) at "The Narrows" on the Mountain Fork River (9 km S of Smithville), McCurtain County. They may also have had a mating pair, but unfortunately the photo was not conclusive. On the downside, we did not refind the species on Crooked Branch Creek in Well Hollow, Ouachita National Forest, Le Flore County, where we had it on 5 July 2014. And we yet again did not refind the species on Breadtown Creek at Atoka WMA. We found two males and three females (including one ovipositing) there

on 13 July 2013, but we have not seen the species there again. This year the creek was heavily scoured by flooding, which may account for the omission. It may also be that the larvae have yet to mature, given that Emerald larvae can take years before they are ready to emerge as adults. We will continue to keep an eye out for the Ozark Emerald as we hope that you will. Please let us know of (and document) any encounters you have with Ozark Emeralds, especially if you find them outside of the Ouachita Highlands.

And on an almost final note, we took over updating the seasonality chart for Oklahoma Odonata. Vic Fazio had been providing updates for many years but since he has departed the state he was kind enough to turn those duties over to us. So, please find attached an updated version. If you find any records that extend the dates listed on the chart, please let us know.

And finally, an update on county species totals. Dewey, Major, Woods, and Canadian each hit at least 50 species. There are now only four counties below 50! (Please go to Kingfisher, Noble, Grant, and Pawnee and up those county lists!)

All the best,

## Brenda and Michael

Brenda D. Smith-Patten & Michael A. Patten

PS Attached is a flyer for the Oklahoma Department of Wildlife Conservation's Monarch Watch that will be held at Hackberry Flats 3–10 October. And don't forget about BioBlitz! on 2–3 October at Osage Hills State Park.

PSS Also attached is an updated spreadsheet of county lists and their documentation.

\*Join the <u>Dragonfly Society of the Americas</u> today!