



3 September 2013

Dear OK Oders,

As the saying goes. . . better late than never. We cannot believe it has been more than two months since our last update. EEK! But you know how the field season is: go, go, go. As such we have a fair bit to share, so make yourself comfortable.

First, thanks to many of your efforts we have boosted the county lists in northeastern Oklahoma, the corner of the state we are least able to visit readily. Bill Carrell and Jason Bried added a number of key records to long-suffering Craig County, enough so that its list now easily clears 40 species. Bill's Interior Least Clubtail (*Stylogomphus sigmastylus*) was a particularly welcome surprise. Ken Williams and Jim Arterburn made similar contributions to nearby Delaware County, as well as a few others in the northeast. All of these guys have also added records elsewhere in state. We really appreciate this help, so please keep up the great work!

As for our efforts, we've done our usual bouncing around the state in nearly haphazard fashion (but there's always a method to our madness, even if it doesn't look that way at first blush). One of our goals for this year has been to eliminate all sight records, and ideally all literature records, from the county lists. We have been "upgrading" those records by taking photographs (yep, we finally got a camera) and uploading them to Odonata Central or by collecting specimens. If you see a "sight" or "literature" record listed in the spreadsheet (attached) for whatever county you are working, please try to photograph that species or get a specimen.

Now on to the recent highlights. . .

Mid-June saw us back in the Southeast, largely as part of our Bachman's Sparrow surveys, but we were able to confirm, on 15 June, the continued presence of a few Attenuated Bluets (*Enallagma daeckii*) at the beaver dam complex below the main dam at Crooked Branch Lake, Le Flore Co. As you know this species had not been recorded in the state in over 20 years, so it was nice to find a new population. We also discovered two Southern Sprites (*Nehalennia integricollis*) at this location, which added to the small number of counties in which this species has been recorded. A few days later, on 20 June, Michael had a male sprite at Red Slough, McCurtain Co., so the species persists there as well. The day before this last sprite, David Arbour was kind enough to show us around Grassy Slough, McCurtain Co., despite his not feeling well. After he departed for some much-needed recuperation, we found both a Seepage Dancer (*Argia bipunctulata*) and two Yellow-sided Skimmers (*Libellula flavida*) at the "back side" of Grassy Slough, two species we had not collected in the state previously.

We were in Costa Rica at a conference for the last part of June, but when we returned we made our second excursion to Black Mesa, Cimarron Co., of the year. Despite it being Independence Day weekend, temperatures were not blistering hot, and Lake Etling, at Black Mesa State Park, held more water than it has in years. Even so, diversity there was rather low, although we had one big highlight: a female Western Pondhawk (*Erythemis collocata*), which represented only the second



definite record of the species for the state. This individual was typical of a female Western in every way, from the stubby abdomen to the brown patterning on the abdominal segments. Most surprising, though, is that it was the only pondhawk we had in several hours at Black Mesa State Park!

Creeks and rivers in the Black Mesa region were sadly low or unimpressive, so we once again failed to find either an Arroyo Bluet (*Enallagma praevarum*) or Sooty Dancer (*Argia lugens*). As far as we can determine, these two species have been extirpated from the state—but we will hunt for them again later in the month. That said, apart from the pondhawk, our major highlights for this weekend were to the west and east of Black Mesa. To the west, we discovered Colorado’s first record of the Marsh Bluet (*Enallagma ebrium*). Indeed, we discovered a whole population of the species, with >50 individuals at three different locations in the San Luis Valley, Alamosa Co. (see our upcoming article in *Argia*). This discovery marked either a huge range extension or an isolated population far from the core distribution (see the Odonata Central map for the species). To the east, we were stunned to come across a huge number of Bleached Skimmers (*Libellula composita*) at the spring-fed pond below Optima Dam, Texas



Co., on 8 July. By “huge” we mean 18 males! We collected one, as well as one of three male Marl Pennants (*Macrodiplax balteata*) we saw and the county’s first Banded Pennant (*Celithemis fasciata*). The Bleached Skimmer and Marl Pennant madness did not end that day. On the next, we discovered a small population of Marl Pennants at Artesian Beach Park in Gage, Ellis Co., a county first (so, too, were the oodles of Desert Forktails, *Ischnura barberi*), and later that day, in the same county, we had a mated pair (blurry photo to the left) and a lone male Bleached Skimmer along Red Bluff Creek, ~13 km southwest of Arnett. The skimmers marked only the third and fourth time the species had been recorded in Oklahoma, after a male Vic Fazio photographed at the same pond at Optima Dam in August 2011 and the four males and one

female, including a tandem pair, we had near Sweetwater, Beckham Co., in June 2012. That same day, we were just as stunned to find two Gilded River Cruisers (*Macromia pacifica*) at Lake Lloyd Vincent, Ellis Co., one of which we managed to collect. This record is well to the northwest of any prior record for the state.

The following weekend found us back in the southeast, where our big highlight, on 13 July, was to discover a new population of the Ozark Emerald (*Somatochlora ozarkensis*), this one along a narrow creek in Atoka Wildlife Management Area, Atoka Co. (a county first, naturally). That same day we had another Atlantic Bluet (*Enallagma doubledayi*), following one in late April, at the adjacent Atoka Public Hunting Area and confirmed the continued population at nearby McGee Creek W.M.A., where we had some 75 individuals, including six tandem pairs,



Little blue blurs are approximately 75 Atlantic Bluets and 100 Azure Bluets at the McGee Creek WMA pond, 13 July 2013.

at the same pond (34.42361N, 95.90626W) where we discovered this species in the state in September 2012. There were also about 100 Azure Bluets (*Enallagma aspersum*) at the pond.

The remainder of July saw us in the southwestern and south-central parts of the state. In the former, Vic gave us a nice tour around Fort Sill on the 22nd. Throughout this region we noted a sharp incursion of Four-spotted Pennants (*Brachymesia gravida*): we added the species to Custer, Beckham, and Caddo Counties and upgraded our sight record from Harmon Co. This region also had what has become the expected slew of Marl Pennants, enough so that we added the species to Harmon Co. and upgraded Vic's sight record from Greer Co. (Much, much more unexpected was the female Marl Pennant we collected in McClain Co. on 9 August.) Another species that has had a "good year" in the southwestern and south-central portions of the state is the Four-striped Leaf-tail (*Phyllogomphoides stigmatus*). We have recorded the species in eleven counties, of which it was new for Carter, McClain, Cleveland, Ellis, Beckham, Roger Mills, Carter, and, remarkably, Okfuskee. In this last county we also added the Cyrano Darner (*Nasiaeschna pentacantha*), for which we obtained a nice male specimen.

August found us slowing down a bit, hitting only 26 counties between the base of the panhandle to the southeastern corner (thanks to David for touring us around Red Slough yesterday) as compared to the 32 Oklahoma, one Missouri, and four Colorado counties hit in July. Not too much of note for the month other than 50+ county records, a lot of "upgrades," and a late date (2 September) for Regal Darner (*Coryaeschna ingens*).

And the final field note: Powdered Dancer (*Argia moesta*) became the 11th species to be recorded in all 77 counties!



As a last highlight we cannot fail to mention our trip to the massive Odonata collection at the University of Michigan (UMMZ), a trip that coincided with an ornithology conference in Chicago. We went through the whole collection as best we could to inventory all of the Oklahoma specimens. We located some 550 specimens taken in the state, some as early as 1907 (left; these were taken by the first people to really collect in the state, EB Williamson and his assistant, Frank Collins).

Five specimens proved to represent new county records: a Blue-tipped Dancer (*Argia tibialis*) for Cherokee, Lyre-tipped Spreadwing (*Lestes unguiculatus*) and Azure Bluet (*Enallagma aspersum*) for Ottawa, Sulphur-tipped Clubtail (*Gomphus militaris*) for Rogers, and, much to our delight, Western Red Damsel (*Amphiagrion abbreviatum*) for Major. These goodies aside, it was terrific to see firsthand the state's only Twilight Darner (*Gynacantha nervosa*; collected in September 1935; right), a record unlikely to be repeated anytime soon, as well as some of painfully few extant specimens the Shadow Darner (*Aeshna umbrosa*; see below) we have found for the state.



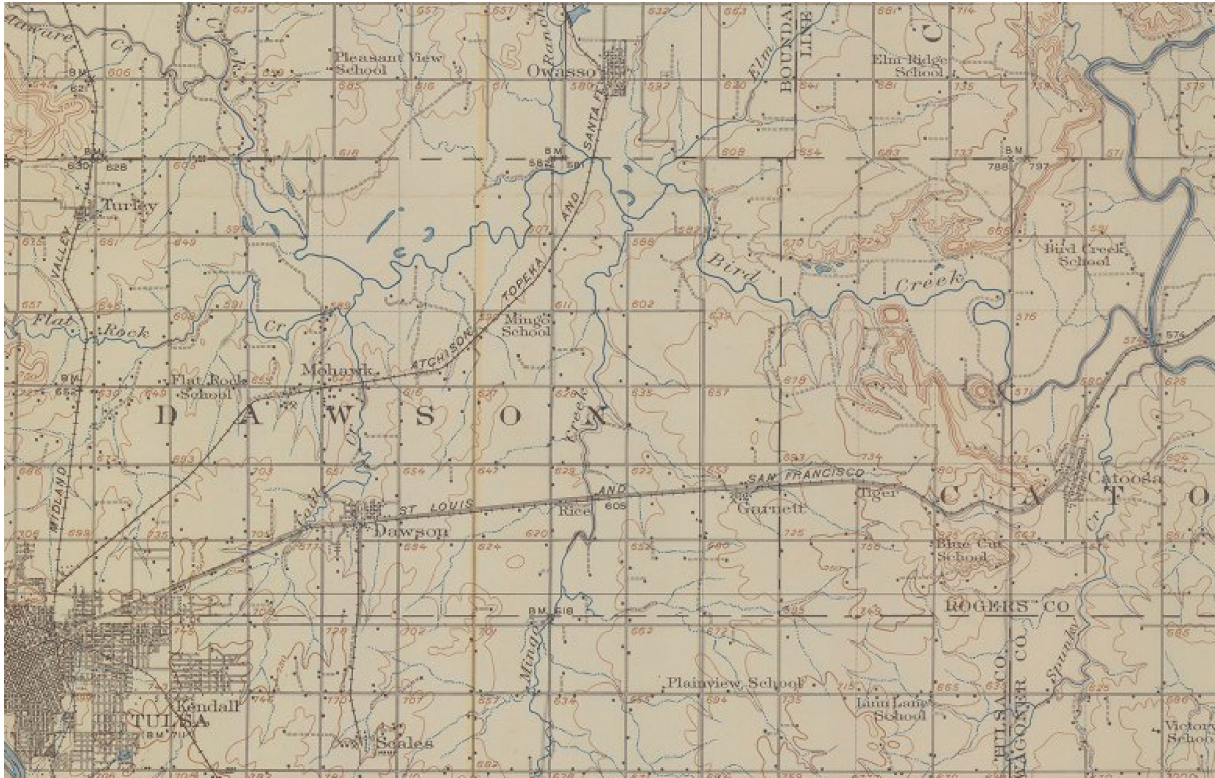
As is sometimes the case with museum work, not everything went well. We came away from the inventory thinking we had found specimens for seven literature records for Custer County, which has been a really difficult county to work given the lack of accessible water sources there. But something kept eating at us about those records, so when we got home we took a closer look at the

localities—"7 mi east of Weatherford" and "15 mi east of Weatherford." Both of these localities, despite the specimen envelopes (see example to left) indicating they were in Custer County, are actually in Caddo County. The real unfortunate thing is that these data were given to Ralph D. Bird and so these records were published in his 1932 paper titled, *Dragonflies of Oklahoma*. This mistake has been carried forward since. Finding these errors also brought, albeit



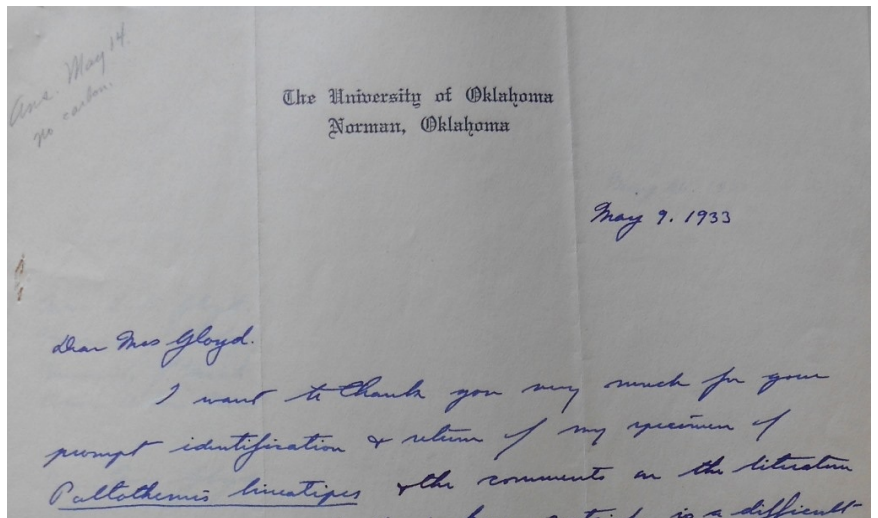
temporarily, the county list to below 40. We felt obligated to go to Custer County on 25 August to up the list again, which now has a bit of a buffer in case this sort of thing happens again. It is certainly worth mentioning that one of the species we added was Smoky Rubyspot (*Hetaerina titia*). This is a species that we fear is becoming very rare in the state. Historically, it was recorded in decent numbers, but we, despite intensive surveys throughout the state, had not seen the species for two years. Vic has also mentioned that he no longer sees them at Fort Sill, where they were once somewhat common.

Two other interesting historical notes came from our UMMZ visit. First, we found a few specimens that indicated they were collected in Rogers County, but we knew those towns were in Tulsa County. It turns out that the pre-1940s USGS topographic quadrangles, which these collectors were using, made it look as if Rogers County was well to the west of where it currently is. We have not had time to really research this to determine if the borders actually changed, but it is easy to see why the collectors labeled their specimens as being from Rogers County (see map below).



USGS Claremore, Okla. (1914) 1:125,000 quadrangle, confusingly indicating that Rogers and Tulsa Counties had different borders than currently.

Second, we read some correspondence between RD Bird and UMMZ from 1933 (sample to right), in which there is mention of a female Red Rock Skimmer (*Paltotheris lineatipes*) from the state that we knew nothing of. We have only been able to track down two specimens of the species, one adult from Murray County from 1968 and one nymph from Johnston County from 1976. The possibility of a third specimen, makes one wonder if there actually is (or was) a population of Red Rock Skimmers hiding in the Arbuckles or maybe even the Wichitas.



With our inventory of the Michigan collection we now have data from almost all of the major and minor collections likely to hold Oklahoma specimens. There remain a number of published records for which we have been unable to locate specimens—these are “literature” records in the spreadsheet—and in some instances we know the specimens are no more. But a few nag at us. Where, for instance, is the state’s only Chalky Spreadwing (*Lestes sigma*)? George Bick published this record in 1978, and the specimen ID was determined by Leonora K. “Dolly” Gloyd—the namesake for Leonora’s Dancer (*Argia leonorae*)—so we’ve no doubt it is correct, but an extant specimen would be nice. Where is the Cinnamon Shadowdragon (*Neurocordulia virginiensis*) reported by A. Earl Pritchard in the 1930s? This is the only record for the state. And where are the *Amphiagron* (red damsel) specimens Bick & Bick (1957) or Ralph Bird (1932) published from Cleveland and Comanche Counties? This species no longer occurs anywhere near these counties, so extant specimens would be nice to see and compare to those from current populations.

Until next time. . .

Happy oding,

Brenda and Michael

PS—Remember that this is the time of year we start to get small red meadowhawks, so keep your eye out for any incursions of **RuWhiChe** [ru-WEE-chee] **meadowhawks** (i.e., Ruby, White-faced, and Cherry-faced Meadowhawks or *Sympetrum rubicundulum*, *S. obtrusum*, and *S. internum*, respectively). Also keep in mind that these buggers often cannot be identified from photos.