Hi all,

We attached a new spreadsheet that indicates county records for the 155 Odonata species known for Oklahoma. Also attached is a map that shows county totals (white = >40, yellow = 35-39, pink <35; we had a red category for counties below 30 species, but no such counties remain!). Remember that the county lists are a work in progress. We do our best to keep up with your records submitted to Odonata Central and directly to us, and we continue to travel around the state for our OK Bio Survey-funded surveys. We also have visited a number of museums around the country to verify specimen records. Our search through thousands of specimens has paid off, with the highlight thus far being the addition of new species to the state list, a Brimstone Clubtail (*Stylurus intricatus*) collected by A. E. Pritchard in August 1932 in Harper County but went unreported. To give you an idea of the work done since late 2008, we attach our original map of the state with the county totals. Note that originally we set a goal of reaching at least 30 species in each county, so the color coding was different then.

This season has already had some major highlights. As you have heard through Vic Fazio, our seasonality expert, many early dates have been extended, some greatly. We have had quite an invasion of Great Pondhawks (*Erythemis vesiculosa*) this year, with large numbers reported in the southeast and many sightings throughout the state as far flung as Garfield, Comanche, Tulsa, Lincoln, and Okmulgee Counties. A number of Regal Darners (*Coryphaeschna ingens*), a species first reported in the state in 2008, have been found in McCurtain. Some especially noteworthy species and locations (many supported by specimens) from our surveys include:

Lyre-tipped Spreadwing (*Lestes ungiculatus*) added to Dewey and Beaver Counties (on the heels of Jason Heinen adding it to Alfalfa County), with dozens in Dewey County in mid-May; Tule Bluet (*Enallagma carunculatum*) added to Beaver and Harper Counties (after Jason added it to Woodward County); Paiute Dancer (*Argia alberta*) added to Garfield, Ellis, and Beaver Counties; Desert Forktail (*Ischnura barberi*) added to Beaver County;

Gilded River Cruiser (Macromia pacifica) added to Beckham County;

Desert Whitetail (*Plathemis subornata*) added to Harper County;

Yellow-sided Skimmer (Libellula flavida) added to Garfield County;

Band-winged Meadowhawk (*Sympetrum semicinctum*) added to Beaver and Beckham Counties (our 2 June specimen extends the early date by a month).

Our observation of two male Eastern Amberwings (*Plathemis tenera*) in Harper County meant that that species became the eighth to be recorded in all 77 Oklahoma counties.

We have two contenders for the most exciting finds in the state. The first contender is the red damsel (*Amphiagrion* sp.), whichever species (or undescribed species—see Abbott 2005) it may be. This species was claimed for Oklahoma on the basis of specimens from Alfalfa, Woodward, Cleveland, and Comanche Counties. R. D. Bird purportedly collected specimens in the 1930s in the last two of these counties, and the specimens are listed in George H. Bick's notes (in the IORI collection, at the University of Florida), but the specimens are supposed to be at OU. As yet they cannot be found, but we have found some instances of mix-ups with Bird's specimens and notes, so we don't know what to think of these records. We have located the specimens for the first two counties, where Bick himself collected

adults in the 1956, and others collected nymphs in Alfalfa County in the mid-1970s. The species had not been seen in Oklahoma since (35+ years!) . . . until Jason, on 9 April, discovered a population at Drummond Flats WMA in Garfield County. Jason since relocated the last known population in Alfalfa County and, remarkably, we found three additional populations in Ellis (Lake Lloyd Vincent), Beaver (Lake Evans Chambers), and Harper (Doby Springs) Counties. We checked Boiling Springs State Park, where Bick collected the species in 1956, but the habitat appears to be gone. As mentioned above, the species of red damsel in Oklahoma is uncertain: it appears to be intermediate to the Western (*A. abbreviatum*) and Eastern (*A. saucium*) Red Damsels. We collected seven specimens (from Garfield, Ellis, Harper, and Beaver Counties) and sent six to John Abbott so he can work on species determination. We will let you know what John concludes.

The second contender for "highlight of the year" is that we discovered a small population of breeding Bleached Skimmers (*Libellula composita*) in Beckham County, near the tiny town of Sweetwater. This record is the second for the state, the first being a vagrant Vic photographed in Texas County in August 2010. Our find was serendipitous and utterly unexpected. While hunting for decent ode habitat, we happened upon a beautiful spring-fed creek teeming with dragonflies. As we stared in wonder from the bridge, pondering how to access the creek, the owner passed by and invited us to survey the area. The spot is part of the Buffalo Creek Lodge, run by Joel Alexander. We encourage anyone going out that way to make arrangements to stay at the lodge (www.buffalocreeklodge.com). After all, this place also had loads of Comanche Skimmers (*L. comanche*), the aforementioned Gilded River Cruiser and Bandwinged Meadowhawk, many of both setwings (our 3 June *Dythemis velox* specimen represents a new early date), as well as Banded (*Celithemis fasciata*) and Halloween (*C. eponina*) Pennants, a Flame Skimmer (*L. saturata*), Desert Firetail (*Telebasis salva*), etc. We had 31 species in perhaps two hours!

My apologies for the long email, but there has just been so much going on this season. This update is just a sampling, so we didn't mean to leave anything out, as everyone has had some great records. On a final note, below is a "top ten" wanted list to fill in gaps in the state. The first five are species needed in one or two counties to get them recorded in all 77 counties:

1) Black Saddlebags (Tramea lacerata) needed in Adair County

- 2) Familiar Bluet (Enallagma civile) needed in Haskell County
- 3) Powdered Dancer (Argia moesta) needed in Pittsburg & Woods Counties
- 4) Double-striped Bluet (Enallagma basidens) needed from Atoka & Pushmataha Counties
- 5) Common Green Darner (Anax junius) is needed from Choctaw & Ottawa Counties
- 6) more populations of Bleached Skimmers (*Libellula composita*)
- 7) more populations of Red Damsels (Amphiagrion)
- 8) re-find Rainbow Bluet (Enallagma antennatum), last seen in 1973

9) re-find Arroyo Bluet (Enallagma praevarum), last seen in 1978

10) find Alkali Bluet (*Enallagma clausum*) in the panhandle (despite the map in John's damselfly book, the species is unknown for the state)

11) get Ottawa, Kingfisher, and Grant Counties out of the pink!

Warm Regards,

Brenda and Michael