

**OCCURRENCE OF *CICINDELIDIA OCELLATA RECTILATERA*
(CHAUDOIR) (COLEOPTERA: CICINDELIDAE) IN ARKANSAS**

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Cicindelidia ocellata rectilatera (Chaudoir), the Reticulated Tiger Beetle (Erwin & Pearson 2008), is a common tiger beetle in New Mexico and Texas. In their survey of tiger beetles in Arkansas, Louisiana, and Mississippi, Graves & Pearson (1973) recorded the subspecies also from Louisiana, where it has been found rarely at sites near the western border of the state with Texas (Toledo Bend Reservoir near Many in Sabine Parish, and 14 mi. west of Holly Beach in Cameron Parish); however, they did not record the subspecies further to the north or east in Arkansas or Mississippi. Since then, the subspecies has been listed as occurring in the U.S. only in New Mexico, Texas, and Louisiana (Freitag 1999, Pearson et al. 2006, and Erwin & Pearson 2008), although Schmidt (2004) also recorded its occurrence in southwestern Oklahoma.

On 22 September 2012, I observed a small assemblage (~10 individuals) of tiger beetles on sparsely vegetated dry sand/clay exposures adjacent to Mill Creek near AR 387 at White Oak Lake State Park (Nevada Co.) in southwestern Arkansas. At first I presumed the individuals to represent *Cicindela repanda* Dejean, widespread in the eastern U.S. and commonly encountered near almost any body of water. However, I noticed that some of the individuals seemed darker and exhibited reduced maculations compared to that species. In the eastern U.S., *Cicindela duodecimguttata* Dejean is the most commonly encountered species co-occurring with *C. repanda* and differing as mentioned above. Thus, I presumed that these individuals represented that species and photographed several of them *in situ*, including one pair *in copula*.

On 7 October 2012 I posted several of the photos at my website: *Beetles in the Bush* (<http://beetlesinthebush.wordpress.com>). Within hours, Ben Coulter (Pittsburgh, Pennsylvania) left a comment at the website stating

that the beetles actually represented *C. ocellata rectilatera*. In re-examining the photographs, the presence of four, nearly equally spaced spots on each elytron without any trace of a lateral connecting line confirmed this identification (Fig. 1). I then sent the photos to Ronald L. Huber (Bloomington, Minnesota) and David Brzoska (Naples, Florida), both of whom concurred with the identification of *C. ocellata rectilatera* and confirmed that the subspecies was not yet reported from Arkansas.

On 15 October 2012, Rusty Baldwin (Little Rock, Arkansas) left a comment at the website stating that he had photographed this subspecies on 16 June 2012 at El Dorado (Union Co.) in south-central Arkansas. I requested to see his photographs, one of which clearly shows the four, nearly equally spaced spots on each elytron without any lateral connecting line that strongly suggest it represents this subspecies. The beetle was photographed near the water's edge on sandy soil in a spillway at the end of a small pond. It was the only individual seen.

Together, these two sightings represent a significant northeastern extension to the known distributional range of *C. ocellata rectilatera*. White Oak Lake lies 235 km (146 mi) N of Toledo Bend Reservoir near Many, Louisiana and 88 km (54 mi) ENE of the nearest Arkansas/Texas border. El Dorado is not as far north as White Oak Lake, but it lies even further east [128 km (80 mi) E of the Arkansas/Texas border]. The occurrence of *C. ocellata rectilatera* at White Oak Lake must be regarded as a recent phenomenon, as the site is a recorded locality for *Cicindela formosa pigmentosignata* W. Horn and has thus been visited by cicindelophiles repeatedly over the years. This makes it tempting to speculate that climate change is a contributing factor to the recent northeastern occurrences. However, more ephemeral causes such as the unusually high temperatures experienced in the south-central U.S. during the summer of 2012 could also explain the concurrent observation of this subspecies at multiple locations north and east of its normal range.

Precise data for the *C. ocellata rectilatera* individuals cited herein are: Arkansas (**new state record**), Nevada Co., White Oak Lake State Park, Mill Creek at AR 386, N33°41.335' W93°06.994', elev. 239', 22.ix.2012, approx. 10 adults observed on sparsely vegetated dry sand/clay exposures



Figure 1. *Cicindelidia ocellata recitilatera* (Chaudoir), one of several individuals observed 22 September 2012 at White Oak Lake State Park, Nevada Co., Arkansas.



Figure 2. Habitat for *Cicindelia ocellata rectilatera* (Chaudoir) at White Oak Lake State Park, Nevada Co., Arkansas: sparsely vegetated sand/clay exposures along Mill Creek adjacent AR 387.

adjacent Mill Creek (Fig. 2), T. C. MacRae (4 adults photographed, including one pair *in copula*); Union Co., El Dorado, vic. El Dorado High School, N33.20249, W92.691414, 16.vi.2012, one adult observed on moderately vegetated, sandy soil in spillway at east end of small pond, R. Baldwin (single adult photographed). Additional photographs from White Oak Lake State Park, including the mating pair, can be seen at <http://beetlesinthebush.wordpress.com/2012/10/07/just-repanda-er-wait-a-minute/>.

My thanks to Ben Coulter (Pittsburgh, Pennsylvania) for initially recognizing the identity of the beetles in the photographs, to Ronald L. Huber (Bloomington, Minnesota) and David Brzoska (Naples, Florida) for confirming the identity of the species and its status in Arkansas, and to Rusty Baldwin (Little Rock, Arkansas) for contacting me regarding his sighting of *C. ocellata rectilatera* in El Dorado, Arkansas, and for allowing me to include his data in this paper.

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