

SCIENTIFIC NOTE

Range extension into South Dakota for *Cicindela pulchra* (Coleoptera: Carabidae)

The beautiful tiger beetle, *Cicindela pulchra* Say, is a large (Pearson and Stemberger 1980) metallic purplish-red tiger beetle (Pearson *et al.* 2006). According to Bousquet and Larochele (1993) and Pearson *et al.* (2006), this species is found in the southwestern United States from New Mexico to extreme southern Wyoming, and as far north as southern Nebraska (Meserve 1936). This species is known to prefer the desert saltbush flats of the Southwest (Pearson *et al.* 2006) as well as eroded grasslands (Knisley 1984), a habitat typically found lower in valleys (Pearson and Stemberger 1980).

Based on a tip from geologists at the Wheaton College Science Station in Rapid City, SD, who had noticed large purple beetles running around a field site of exposed Pierre Shale, we examined the site in Pennington County in the Cheyenne River valley near Wasta, SD (44° 04.225'N, 102°27.849'W, elev. 2,460 ft). The Pierre Shale geological formation is a soft, dark gray, friable and fissile material of clay-rich, weathered volcanic ash (Paterson and Kirchner, 1996). This site was located near both Buffalo Gap National Grasslands and Badlands National Park, approximately 250 miles north of the Nebraska records reported by Meserve (1936).

We have collected at least eight different specimens of *C. pulchra* representing both males and females from this site on 12 June 2000, 2 July 2001, and again on 20 June 2008. The adult beetles were very active, exhibiting quick flights and runs, often hiding in clumps of grasses scattered across the eroded surface of the cut. Given the widespread nature of the eroded grassland habitat in southwestern South Dakota and outcrops of Pierre Shale surrounding the Black Hills, we expect this species may be more broadly distributed in this area than at this single site.

We thank both Foster Purrington and Matt Brust for verifying our identifications of *C. pulchra*. We also thank Steve Moshier and Jeff Greenberg of the Wheaton College Science Station for assistance in identifying the geological formation. Specimens are deposited in the insect research collection in the Hoslett Museum of Natural History, Luther College, the teaching collection at the Wheaton College Science Station, and with the University of Nebraska-Lincoln.

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