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A NEW RECORD FOR *CICINDELA SCABROSA* (COLEOPTERA: CARABIDAE: *CICINDELINAE*) FROM HARDEE COUNTY, FLORIDA

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The Florida Scrub Tiger Beetle *Cicindela scabrosa* Schaupp, a species precinctive to Florida, has not previously been recorded from Hardee County, Florida. *Cicindela scabrosa* is known from Alachua, Brevard, Broward, Dade, Highlands, Indian River, Levy, Orange, Polk, Putman, St. Johns, Taylor, and Volusia counties (Peck & Thomas, 1998). *Cicindela scabrosa*, once considered a variety of *Cicindela abdominalis* Fabricius, was raised to species rank by Choate (1984). The 2 species are generally similar in appearance, but may be separated (Choate 1984) by the presence in *C. scabrosa* of white apical lunule markings with small medial white marks and heavily punctured elytra, flattened white hairs on the underside of the abdomen and numerous conspicuous white hairs on sides of the pronotum (Fig. 1).

Cicindela scabrosa was first recorded in Hardee County in 2004 at Paynes Creek Historic State Park located in Bowling Green, FL. Paynes Creek Historic State Park is a 410-acre state park of historic significance that first opened to the public in 1981. The park contains several distinct natural plant communities, including small, isolated patches of scrub, scrubby flatwoods, and pine flatwoods. The park's resource management

goals involve the use of prescribed fire in 3- to 5-year intervals and annual treatment plans to reduce the occurrence of invasive exotic plant species. The park maintains a system of foot trails, fire lanes, and services roads that meander throughout the park providing general access and assist with resource management needs.

These access routes serve as ideal sites to monitor and record the presence of tiger beetle species in the park. In May 2004, monthly monitoring surveys were initiated to establish the occurrence and range of tiger beetle species within the park boundaries. The park's current *Cicindela* fauna includes 5 species (Table 1). *Cicindela scabrosa* is restricted to a single sandy trail through scrubby flatwoods and pine flatwoods habitat. A summer species, *C. scabrosa* is active May-Sep, and shares its range with *C. hirtilabris* and *C. punctulata*. Voucher specimens of *C. scabrosa* are at Paynes Creek Historic State Park.

SUMMARY

Cicindela scabrosa is reported here for the first time at Paynes Creek Historic State Park. Efforts have been initiated to minimize distur-



Fig. 1. Pinned specimen of *Cicindela scabrosa* Schaupp showing characteristic white apical lunule markings and white hairs on pronotum and abdomen (note arrows).

TABLE 1. CICINDELA SPECIES FOUND IN PAYNES CREEK PARK AND THEIR HABITAT.

| <i>Cicindela</i> Species from Paynes Creek | Habitat preference in park |
|--|--------------------------------|
| <i>Cicindela hirtilabris</i> LeConte | Scrub and Scrubby Flatwoods |
| <i>Cicindela punctulata</i> Olivier | On trails of most habitats |
| <i>Cicindela scabrosa</i> Schaupp | Scrubby Flatwoods |
| <i>Cicindela scutellaris unicolor</i> Dejean | Scrub and Scrubby Flatwoods |
| <i>Cicindela trifasciata ascendens</i> LeConte | Mud flats near river and creek |

bance in the area where *C. scabrosa* populations occur. Fire lanes and foot trails adjacent to current *C. scabrosa* habitat will be managed with the goal of making them suitable for *C. scabrosa*. According to Deyrup & Franz (1994), *C. scabrosa* populations are mostly small and isolated throughout its range. This seems consistent with the present distribution of *C. scabrosa* in Paynes Creek Historic State Park. Observations during 2008 revealed the presence of *C. scabrosa* in the park, in which the population range remains isolated to 1 area of the park.

REFERENCES CITED

- CHOATE, P. M., JR. 2003. Tiger Beetles: A Field Guide and Identification Manual for Florida and Eastern U.S. University Press of Florida, Gainesville, FL. pp. 91-92.
- CHOATE, P. M., JR. 1984. A new species of *Cicindela* Linnaeus (Coleoptera: Cicindelidae) from Florida, and elevation of *C. abdominalis scabrosa* Schaupp to species level. Entomol. News 95: 73-82.
- DEYRUP, MARK, AND FRANZ, R. 1994. Rare and Endangered Biota of Florida. University Press of Florida, Gainesville, FL. pp. 366-368.
- PECK, S. B., AND THOMAS, M. C. 1998. A Distributional Checklist of the Beetles (Coleoptera) of Florida. Arthropods of Florida and Neighboring Land Areas. Volume 16. Florida Dept. Agric. and Consumer Services, Div. Plant Industry, Gainesville. viii + 180 pp.