Journal of the Lepidopterists' Society 62(3), 2008, 174-175

AN OBSERVATION OF CYMAENES TRIPUNCTUS (HESPERIIDAE) IN NORTH-CENTRAL FLORIDA

Cymaenes tripunctus (Herrich-Schäffer) (Fig. 1) is a widely distributed species occurring in southern Florida, the West Indies and southward to Argentina (Pyle 1981; Cech & Tudor 2005). The precise range of *C. tripunctus* in Florida has been difficult to determine due to its secretive habits, as well as confusion and misidentification, in both the field and museum collections, with the similar *Lerodea eufala* (W. H. Edwards) and *Nastra neamathla* (Skinner & R. C. Williams) (Smith *et al.* 1994; Glassberg *et al.* 2000). Long antennae, approximately one-half the length of the forewing, distinguish *C. tripunctus* from other similar-sized dark-colored hesperiid species (Opler & Krizek 1984; Smith *et al.* 1994; Glassberg *et al.* 2000).

Kimball (1965) only reported a few records of *C. tripunctus* from extreme southern Florida and the Florida Keys. In addition, many of the earliest butterfly lists for Florida regarded observations of *C. tripunctus* in the state as dubious or merely representing strays from Cuba (Skinner & Williams 1924; Barnes & Benjamin 1926; McDunnough 1938). Freeman (1942) reported the first verified sightings of *C. tripunctus* from specimens collected as early as 1937 in Miami. The rarity of early *C. tripunctus* records in Florida suggests the species may have only colonized the state in the relatively recent past. Lenczewski (1980) reported *C. tripunctus* as abundant within Everglades National Park. However, Calhoun (1988) encountered *C. tripunctus* in Lee County for first time on 11

December 1983 and suggested the species might be expanding its range northward in the state. Marc C. Minno (pers. comm.) found *C. tripunctus* to be locally common in Broward County in 1982 to 1984. Subsequently, C. tripunctus colonies have been encountered locally in Polk (Lake Kissimmee State Park), Osceola (Kissimmee Prairie Preserve State Park) and Pinellas (Fort Desoto State Park, Boyd Hill Nature Center) counties in association with several larval host plants, indicating further expansion of the species northward (Linda Cooper, Lyn Atherton and Tim Adams, pers. comms.). Robinson et al. (2002) and Minno et al. (2005) identified numerous grass species used by C. tripunctus as larval host plants in Florida including Digitaria ciliaris (Retz.) Koel., Tripsacum dactyloides (L.) L., Urochloa mutica (Forsk.) Nguyen, Paspalum setaceum Michx., Panicum maximum Jacq., and Setaria macrosperma (Scribn. & Merr.) K. Schum. (Poaceae). While available food sources do not appear to be a limiting factor for *C. tripunctus*, the cold winters of northern Florida may prevent the species from colonizing further into the southeastern United States.

On 28 September 2002 we observed and photographed a single *C. tripunctus* at Newnan's Lake in Gainesville, Florida (Alachua County) (Fig. 2). Although *C. tripunctus* is listed for Alachua County on the Butterflies and Moths of North America website (Opler *et al.* 2006) (http://www.butterfliesandmoths. org/species?l=2046) this listing appears to be based on



FIG. 1. *Cymaenes tripunctus* at Newnan's Lake, Gainesville, Florida (Alachua County) on 28 September 2002 (Photo: H. L. Salvato).

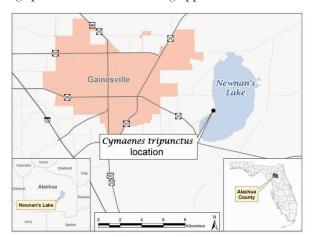


FIG. 2. Location of Newnan's Lake and the *C. tripunctus* observation in Gainesville, Florida (Alachua County).

dubious reports (John V. Calhoun, state records compiler for Florida, pers. comm.). Therefore, to our knowledge this represents the first confirmed observation of *C. tripunctus* in north-central Florida. In the years following our initial observation (2003 to 2007) we returned to Newnan's Lake on several occasions in the late summer and fall to search for *C. tripunctus* but failed to re-encounter the species.

Although we observed no signs of reproduction during our 2002 observation, several host plants for *C. tripunctus*, including *P. maximum*, *P. setaceum*, *Saccharum* spp. and other grass species, occur within the vicinity of Newnan's Lake. Therefore *C. tripunctus* may have established a small temporary population at Newnan's Lake during or prior to the 2002 observation. Further studies are needed to determine if *C. tripunctus* continues to occur at Newnan's Lake. In addition, the status and distribution of *C. tripunctus* should be monitored at the periphery of the species known range to identify any other localized populations.

Acknowledgements

We thank Lyn Atherton, Buck and Linda Cooper, Marc C. Minno and Tim Adams for sharing their notes on field observations of *C. tripunctus* and its hostplants at various locations in central and southern Florida. We thank John V. Calhoun for assistance in determining historical locations for *C. tripunctus* at the northern edge of the species range in Florida, as well as for his assistance and enthusiasm in helping us to obtain numerous papers, including many older publications, on the species. We thank J. V. Calhoun, B. Scholtens and M. C. Minno for comments that helped to improve the manuscript. We also thank Barry Wood for preparing Figure 2.

LITERATURE CITED

- BARNES, W. & F. H BENJAMIN. 1926. Checklist of the diurnal Lepidoptera of boreal America. Bull. So. Cal. Acad. Sci. 25: 3–27.
- CALHOUN, J. V. 1988. A partial list of the butterflies and skippers of Lee County, Florida. So. Lepid. News. 10: 25–28.
- CECH, C. & G. TUDOR. 2005. Butterflies of the east coast, an observers guide. Princeton University Press, Princeton, N.Y. 345 pp.

- FREEMAN, H. A. 1942. Notes on some North American Hesperiidae with the description of a new race of Polites verna (Edwards) (Lepidoptera, Rhopalocera). Entomol. News. 35: 103–106.
- GLASSBERG, J., M.C. MINNO & J. V. CALHOUN. 2000. Butterflies through binoculars: Florida. Oxford University Press, New York, NY. 242 pp.
- KIMBALL, C. P. 1965. The Lepidoptera of Florida, an annotated checklist. Arthropods of Florida and Neighboring Land Areas. Vol. 1. Gainesville: Div. Plant Indus., Fla. Dept. Agric. 363 pp, 26 pl.
- LENCZEWSKI, B. 1980. Butterflies of Everglades National Park. Homestead: S. Fla. Res. Ctr.Rep. T-588, Natl. Park Serv., Everglades Natl. Park. 110 pp.
- MCDUNNOUGH, J. H. 1938. Check list of the Lepidoptera of Canada and the United States of America. Part 1, Macrolepidoptera. Mem. So. Cal. Acad. Sci.1: 1–275.
- MINNO, M. C. & T. C. EMMEL. 1993. Butterflies of the Florida Keys. Scientific Publishers, Gainesville, Florida. 168 pp.
- _____, J. F. BUTLER & D. W. HALL. 2005. Florida butterfly caterpillars and their hostplants. University Press of Florida, Gainesville. 341
- OPLER, P. A. & G. O. KRIZEK. 1984. Butterflies est of the Great Plains. Johns Hopkins University Press, Baltimore. 294 pp.
- ., H. PAVULAAN, R. E. STANFORD & M. POGUE (COORDINATORS). 2006. Butterflies and moths of North America. Bozeman, MT: Mountain Prairie Information Node. http://www.butterfliesandmoths.org/ (Version 01302008).
- PYLE, R. M. 1981. The Audubon Society field guide to North American butterflies. Alfred. A. Knopf, New York. 916 pp.
- ROBINSON, G. S., P.R. ACKERY, I. J. KITCHING, G. W. BECCALONI & L. M. HERNANDEZ. 2002. Hostplants of the moth and butterfly caterpillars of America north of Mexico. Memoirs of the American Entomological Institute. 69: 1–824.
- SKINNER, H. & R. C. WILLIAMS. 1924. On the male genitalia of the Hesperiidae of North America, Paper III. Trans. Am. Entomol. Soc. 50: 129–153.
- SMITH, D. S., L. D. MILLER & J. Y. MILLER. 1994. The Butterflies of the West Indies and South Florida. Oxford University Press, New York. 264 pp.

MARK H. SALVATO & HOLLY L. SALVATO, 1765 17th Avenue SW, Vero Beach, Florida 32962, USA; email: anaea_99@yahoo.com

Received for publication 30 Jaunary 2008, revised and accepted 12 September 2008.