

***Cicindis horni* Bruch (Coleoptera: Carabidae, Cicindini): The Fairy Shrimp Hunting Beetle, its way of life on the Salinas Grandes of Argentina**

TERRY L. ERWIN¹ & VALERIA ASCHERO²

¹Department of Entomology, National Museum of Natural History, Smithsonian Institution, Washington,
DC 20560

²Laboratorio de Investigaciones Ecológicas de Las Yungas - Universidad Nacional de Tucumán, Argentina

Abstract

Discovery of a large population of the rare and poorly known carabid beetle *Cicindis horni* Bruch on the Salinas Grandes of Córdoba Province, Argentina provided an opportunity to record aspects of its behavior and life history, and to test several hypotheses previously made about it way of life. This highly unusual species was known in the literature from the description of only two museum specimens and its phylogenetic relationships ambiguous. Adults spend the night in search of food or mates swimming on the water surface of alkaline water bodies. Mid-tibial natatorial setae, tarsal setal fringes, ventral vestiture, and genal/pronotal planing surfaces plus decumbent and very sharply pointed mandibles are specific adaptations that permit adults of this species to behave as swimming superspecialist predators. Therefore, there have been four independent invasions of the aquatic habitat by adephagan Coleoptera. Populations of *C. horni* Bruch are probably limited by the extent of the great salt flats of Argentina (550,000 hectares) located in north-central Argentina and are further limited edaphically within the overall geographic range.

Key words: Cicindini, *Cicindis horni*, Argentina, Salinas Grandes, adult beetle behavior, semi-aquatic carabid beetle, anostracan fairy shrimp, *Thamnocephalus* sp., The Fairy Shrimp Hunting Beetle

Resumen

El descubrimiento de una gran población del raro y poco conocido carábido *Cicindis horni* Bruch en las Salinas Grandes de la provincia de Córdoba, Argentina, permitió registrar aspectos de su comportamiento e historia natural y evaluar diferentes hipótesis anteriormente propuestas sobre sus hábitos de vida. Esta rara especie, de la cual hasta el presente solo se habían descrito únicamente dos especímenes en la bibliografía y sus relaciones filogenéticas se desconocen, presenta características marcadamente inusuales entre los carápidos. Los adultos transcurren la noche en busca de ali-