

Cicindela lengi jordai (Jorda's Tiger Beetle)

No Photo Available

Taxonomy

- **Class:** INSECTA
- **Order:** COLEOPTERA
- **Family:** CARABIDAE
- **Genus:** Cicindela
- **Scientific Name:** Cicindela lengi subsp. jordai
Rotger, 1974
- **Common Name:** Jorda's Tiger Beetle
- **Synonyms:**
- **Taxonomic Name Source:** C. Barry Knisley, Mark S. Romero, Robert E. Acciavatti. 2023. Tiger Beetles of New Mexico: Identification, Biology, and Conservation.

Agency Status

- **NMDGF:**
- **Federal Status:**
- **BLM Sensitive:**
- **USFS:**
- **IUCN Red List:** [Not Evaluated](#)
- **Nature Serve Global:** [T4](#)
- **NHNM State:** S1
- **NM Endemic:** NO

Description

From Tiger Beetles of New Mexico: (C. Barry Knisley, Mark S. Romero, Robert E. Acciavatti. 2023. Tiger Beetles of New Mexico: Identification, Biology, and Conservation.) "The distinctive expanded maculation that covers two-thirds of the elytra and the red dorsal color are usually diagnostic for this subspecies in New Mexico".

Habitat and Ecology

This tiger beetle is generally found in open dry sandy areas especially in sandy washes and canyon bottoms which form most of the known habitat (Knisley et al. 2023). Adults of this subspecies are either solitary or present in extremely low numbers at most sites historically they are known in abundance from several sites however, their numbers there seem to have declined in recent years (Knisley et al. 2023). Adults follow a somewhat typical spring and fall activity pattern being active April to June and then again from August to September with peak numbers occurring in April, May, and September (Pearson et al. 2015, Knisley et al. 2023).

Geographic Range:

This subspecies is known primarily from northwestern New Mexico but ranges across the four corners region into northeastern Arizona, southwestern Colorado, and southeastern Utah (Knisley et al. 2023). New Mexico has by far the most known sites with 34 historical records across nine sites however, several of these sites are now known to be extirpated and almost all recent records come from a single dry sandy wash east of Blanco in San Juan county (Knisley et al. 2023). Currently seven locations are known for this subspecies when either the threat of agricultural development or off highway vehicle use are used. However, it is unknown how much this tiger beetle has been surveyed for in Utah, Arizona, and Colorado and as such seven locations should be considered a lower bound as some populations are likely yet to be discovered.

Conservation Considerations:

Knisley et al. (2023) consider the subspecies to be threatened in New Mexico and several populations are known to have extirpated. Firstly, more research is needed especially on the distribution and current status of populations. Additional surveys at known sites and other promising sites with sandy washes are needed to determine the current extent and status of this tiger beetle (Knisley et al. 2023). Because life histories for tiger beetles are so similar, Knisley and Gwiazdowski 2021 outlined numerous conservation strategies which can be applied to most of the taxa: Long term management and monitoring of population size and distribution is one of, if not the most critical activity for assessing the status of rare or threatened tiger beetle species. Biological studies have been able to determine life history, habitat requirements, population dynamics, threats, and guidance for site protection and key conservation strategies, especially captive rearing, translocation, and habitat parameters for many species, which in turn provide direction on specific conservation goals. Acquisition of currently occupied sites and protection of the habitats within them are the most important strategies for combating habitat loss and deterioration which is the major threat to tiger beetles. Required of these sites would be active, annual, or semiannual management to ensure the coequal goal of maintaining sufficient habitat quality. Among the most significant and accomplishable of these management methods for habitat would be reducing vegetation to create necessary open space that are necessary for foraging, oviposition, and larval development (Knisley and Gwiazdowski 2021). Many known historic sites for common and threatened tiger beetles have been lost or permanently impacted by development or other anthropogenic impacts; thus, captive rearing and translocation have demonstrated to be proven methods which can efficiently create populations for extirpated sites. A lack of unoccupied sites with suitable habitat can be a significant limitation with this approach as supplementing existing populations in decline without concurrent habitat improvement yields a reduced likelihood of success. However, a century of laboratory work in the study of life history, developmental effects, and physiology of tiger beetles, captive rearing has shown remarkable success and standardization, with few modifications on a species by species basis, to reintroduce rare species to extirpated sites as a preferred alternative to using beetles from an existing population because it mitigates developmental mortality and amplifies the breeding potential of individuals taken from the wild. It is important to recognize that translocations to increase population size will only be a temporary solution if the habitat conditions are not suitable. Tiger beetles will rapidly increase their population size to match the carrying capacity of a site, so the key to maintaining or creating a viable population is management to improve habitat quality.

Threats:

Off highway vehicle use in the sandy washes that the subspecies relies on has already caused the extirpation of the population at the type locality and is prevalent throughout much of the four corners region (Knisley et al. 2023). Agricultural development south of Ojo Caliente also caused the extirpation of a well known colony and is a major threat throughout much of the subspecies range (Knisley et al. 2023). The habitats of this subspecies require somewhat regular disturbance otherwise vegetation encroachment can easily choke them out (Knisley et al. 2023). As a result, a lack of disturbance is a major threat to the tiger beetle as well. This can include flooding in the case of washes or prescribed fires and grazing in other places. Intensive grazing may trample burrows and result in tiger beetle mortality; however, light grazing may help maintain these habitats (Montana Natural Heritage Program 2025).

Population:

The exact population and trend are not known for this subspecies. However, several recent surveys have detected only a couple individuals at sites where populations use to be abundant (Knisley et al. 2023). Furthermore, surveys in 2019 and 2021 at the type locality for the subspecies which are the sandy washes four miles north of Aztec in San Juan County NM found that the sandy washes there were all heavily impacted by off highway vehicle activity and no beetles could be found (Knisley et al. 2023). Another population south of Ojo Caliente in New Mexico was resurveyed in 2021

and it was found that agricultural development had eliminated the habitat there (Knisley et al. 2023). With several sites being extirpated and individuals declining in occupied sites there is definitely concern that the population is declining however, more data is needed on the subject.

References:

- [C Barry Knisley and Rodger Gwiazdowski. 2020. Conservation Strategies for Protecting Tiger Beetles and Their Habitats in the United States: Studies With Listed Species \(Coleoptera: Carabidae: Cicindelidae\). Annals of the Entomological Society of America: \(293-301\). https://academic.oup.com/aesa/article/114/3/293/6024548](https://academic.oup.com/aesa/article/114/3/293/6024548)
- [GBIF.org. 2025. GBIF Occurrence Data. https://doi.org/10.15468/dl.6paq6q](https://doi.org/10.15468/dl.6paq6q)
- Pearson, D. L., C. B. Knisley, D. P. Duran, and C. J. Kazilek. 2015. A Field Guide to the Tiger Beetles of the United States and Canada: Identification, Natural History, and Distribution of the Cicindelinae. Oxford University Press.
- [C. Barry Knisley, Mark S. Romero, Robert E. Acciavatti. 2023. Tiger Beetles of New Mexico: Identification, Biology, and Conservation. https://books.google.com/books/about/Tiger_Beetles_of_New_Mexico.html?id=3eW5zwEACAAJ](https://books.google.com/books/about/Tiger_Beetles_of_New_Mexico.html?id=3eW5zwEACAAJ)
- [Montana Natural Heritage Program. 2025. Blowout Tiger Beetle — Cicindela lengi. https://FieldGuide.mt.gov/speciesDetail.aspx?elcode=IICOL023J0](https://FieldGuide.mt.gov/speciesDetail.aspx?elcode=IICOL023J0)

More Information

