

Rhaphiomidas painteri (Painter's Mydas Fly)



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Taxonomy

- **Class:** INSECTA
- **Order:** DIPTERA
- **Family:** MYDIDAE
- **Genus:** Rhaphiomidas
- **Scientific Name:** *Rhaphiomidas painteri* Cazier, 1941
- **Common Name:** Painter's Mydas Fly
- **Synonyms:**
- **Taxonomic Name Source:** Poole, R. W., and P. Gentili (eds.). 1996. *Nomina Insecta Nearctica: a checklist of the insects of North America. Volume 3* (Diptera, Lepidoptera, Siphonaptera). Entomological Information Services, Rockville, MD.

Agency Status

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

Description

Rhaphiomidas painteri is a medium-large (20 mm), black and yellow/orange species of mydas fly with dense yellow and white hairs across the thorax and abdomen, and a very long proboscis (Cazier 1941, Van Dam 2010).

Habitat and Ecology

The habitats and ecology of this species are not well understood. So far, it has been recorded in the Chihuahuan Desert ecoregion, in habitats including creosote shrublands (Cazier 1985). The immature development of flies in the genus *Rhaphiomidas* are associated with sandy habitats and females have been observed laying eggs directly into soft, sandy ground. Adults are primarily found in the sparse plant communities near sand dunes, and on sandy riparian shores. They are strong, fast flyers that evade capture easily. Their habitat is subject to extreme heat conditions and these flies are often found perching in the shade above the level of the ground during the hottest parts of the day

(Cazier 1985). Adults of this species are active in September (Cazier 1985). This species is a nectivorous floral visitor and has been collected from flowers of *Funastrum heterophyllum* (climbing milkweed), *Ipomopsis longiflora* (flaxflowered gilia), *Dithyrea wislizeni* (spectacle pod), *Lepidium montanum* (mountain pepperweed), and the agricultural crop *Medicago sativa* (alfalfa) (Cazier 1985).

Geographic Range:

This species has a very small range and is only known from Dona Ana County, New Mexico, and El Paso County, Texas in the Rio Grande River Valley close to Interstate Highway 25, in the United States (Cazier 1985). Since 1985, only one collection has been made (GBIF.org 2024).

The extent of occurrence (EOO) and area of occupancy (AOO) could be as low as 509 km² and 48 km², respectively, based on the known occurrences of the species. Many species of flies are understudied, so it is possible the species is more widespread than currently known. However, species in this genus are typically dune or sand habitat specialists, and these habitats are not abundant or widespread in the region. Therefore, the EOO and AOO are not likely much higher than reported. Five to ten locations are considered for this species.

Conservation Considerations:

There are no conservation measures in place for this species. Research on current distribution, population size and trend, habitats and ecology, as well as threats is needed to better understand the species.

Threats:

Threats to this species are not well understood, as it is understudied. The sandy habitats this species relies on may be increasingly threatened. As average annual drought and heat conditions in the southwest increase in duration and variability, sand that makes up dune ecosystems becomes significantly more mobile, threatening loss of habitat (Bogle *et al.* 2015). Droughts are projected to become more prolonged, severe, and common in the region under future climate change scenarios (USGCRP 2018). This may impact availability of suitable oviposition sites for this species. In addition, many of the historical collection sites for this species are in urban or agricultural areas which may have changed substantially since the species was recorded more than twenty years ago.

Population:

The population size and trend are not known for this species. One report describes the species as “reasonably abundant” within its range at the time (Cazier 1985). However, the species has only been recorded once in the last 39 years, indicating that it may now be rare.

References:

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- Cazier, M.A.. 1941. A generic review of the family Apioceratidae with a revision of the North American species (Diptera-Brachycera). *American Midland Naturalist* 25: (589-631).
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History 182: (181-263).

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More Information

