

Monomorium dine (an ant)

No Photo Available

Taxonomy

- **Class:** INSECTA
- **Order:** Hymenoptera
- **Family:** Formicidae
- **Genus:** Monomorium
- **Scientific Name:** Monomorium dine Cover & Rabeling, 2025
- **Common Name:** an ant
- **Synonyms:**
- **Taxonomic Name Source:** Cover, Stefan P., Rabeling, Christian (2025): Monomorium dine sp. nov. (Hymenoptera, Formicidae): a new inquiline social parasite ant species from North America. ZooKeys 1243: 159-172, DOI: 10.3897/zookeys.1243.145744

Agency Status

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

Description

Habitat and Ecology

This ant is known from Ponderosa pine forests on Beautiful Mountain within the Navajo Nation, New Mexico (Cover and Rabeling 2025). A queen was collected from underneath a rock, living amongst an unknown Monomorium ant colony (Cover and Rabeling 2025). This ant is thought to be parasitic and relies on workers from the ant colony it exists within, it is thought that this species creates no workers of its own (Cover and Rabeling 2025). The diet of this ant is unknown, but other Monomorium ants are known to be scavengers, opportunistically feeding on honeydew, nectar, and other insects (Gathalkar and Sen 2018). The sole collection record is from July 11th, the full scope of this ant's activity is unknown. Males are undescribed but are thought to live close to queens (Cover and Rabeling 2025). More research is needed on the ecology of this species.

Geographic Range:

The full scope of this ant's range is unknown. The species is known from one location (Cover and Rabeling 2025). The only location is within Beautiful Mountain in the Navajo Nation, New Mexico (Cover and Rabeling 2025). More research is needed into the range of this species.

Conservation Considerations:

There are no known active range-wide conservation actions in place for this ant. More research is needed into the ecology and range of this species.

Threats:

This ant's range includes the Southwestern United States, which saw its driest 22-year period from 2000 to 2021 since at least 800 CE (the time period used in previous climatic reconstructions) (Williams et al. 2022) and droughts are projected to become more prolonged, severe, and common in the region under future climate change scenarios (USGCRP 2018). Drought conditions over the last few years have severely limited food and resources (Hughes 2020) and environmental stochasticity, especially variation in plant quantity, quality, and phenology in other insect groups (Ehrlich and Murphy 1987). As this ant relies on other ant colonies or habitats, any insect declines will affect this species. Another threat facing this ant is catastrophic fire or lack of fire. The impacts of fire on this species may depend on the intensity and size of the fire, as well as seasonal timing (USFWS et al. 2004). With population numbers in small areas one fire, controlled or wild, could wipe out a large percentage of this species (Moretti et al. 2008). On the other hand, with no fire this habitat may grow senescent or be succeeded which will also drive the taxa towards potential extinction (Moretti et al. 2008). The impacts of land use on fire intensity and spread may also be consequential. Many insects respond to climate change by moving to higher elevations or latitudes however, this is not an option for this taxa where there are no higher elevation habitats to shift to and as a result just a small amount of warming could push this taxa into thin air driving it to extinction as seen in many butterflies (Forister et al. 2010, Holland 2010, Rödder et al. 2021, Forister et al. 2023). This species is reliant on other ant colonies for habitat and food (Cover and Rabeling 2025). However, most free-living Monomorium ant species do not require conservation actions, with most being widespread and treated as pests (Hoffman et al. 2016).

Population:

The population size and trend are not known for this species. Determination of population size and monitoring of population trends is necessary to ensure the population is stable.

References:

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More Information

