

Pelochrista blanchardi (Blanchard's Pelochrista Moth)



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Taxonomy

- **Class:** INSECTA
- **Order:** LEPIDOPTERA
- **Family:** TORTRICIDAE
- **Genus:** Pelochrista
- **Scientific Name:** *Pelochrista blanchardi* (Wright, 2012)
- **Common Name:** Blanchard's Pelochrista Moth
- **Synonyms:** *Eucosma blanchardi* Wright, 2012
- **Taxonomic Name Source:** Gilligan, T.M. and D.J. Wright. 2013 [2014]. Revised world catalogue of *Eucopina*, *Eucosma*, *Pelochrista*, and *Phaneta* (Lepidoptera: Tortricidae: Eucosmini). *Zootaxa*, 3746(2):301-337.

Agency Status

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

Description

Pelochrista blanchardi is a small, tortricid moth with sub-rectangular wings. It is off-white in color with mottled brown spots on the forewings, and gray on the hindwings (Wright 2012).

Habitat and Ecology

The habitats and ecology of this species are not well understood. It has been reported from desert canyons and shrublands, often in proximity to washes or riparian areas (Wright 2012). Adults are active late July to mid-October (Wright 2012). Western species in this genus tend to be polyphagous but eastern species are usually specialists. Larvae are internal borers of plants, so caterpillars are hard to find and describe (D. Wagner pers. comm. 2024).

Geographic Range:

This moth is known from the southern deserts of the southwestern United States. It has been recorded in Pima, Cochise, and Santa Cruz Counties in Arizona, Otero and Grant Counties in New Mexico, and Brewster County, Texas (Wright 2012).

Conservation Considerations:

There are no targeted conservation actions for this species. It is found in at least one protected area, White Sands National Park, but this may not mitigate against any threats. Research on distribution, population size and trend, habitats and ecology, and threats is needed to better understand this species.

Threats:

The threats for this species are not well understood. However, threats to sympatric Lepidoptera species, including groundwater drawdown, increased drought due to climate change, and invasive species, are inferred to adversely impact this species as well. For example, occurrences in White Sands National Park, in the Tularosa Basin of New Mexico, may be threatened by extensive groundwater extraction. Hydrologic modeling has shown that increased groundwater pumping in response to increased temperatures and drought conditions will lead to water level decreases up to 1.5 meters. The dune field only exists as a permanent landscape feature because the gypsum sands are held in place at the base by water weight wicked up from the ground, so a decrease in water resources could result in increased sand motility, and therefore instability of the interdune habitats where herbivorous insects live (Bourret, 2015). Groundwater extraction is more heavily utilized in period of drought and increased temperatures. The Southwestern U.S. 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). Droughts are projected to become more prolonged, severe, and common in the region under future climate change scenarios (USGCRP 2018).

This species may also be impacted by invasive species. Chihuahuan Desert grasslands in general have been invaded by several notable non-native grass species, especially buffelgrass (*Cenchrus ciliaris*), fountaingrass (*C. setaceus*), Lehmann's lovegrass (*Eragrostis lehmanniana*), and African lovegrass (*E. echinochloidea*), many of which were planted for use by livestock. Lehmann's lovegrass is the most common exotic species within Carlsbad Caverns, and frequently forms dense monocultures (Reiser *et al.* 2011). Invasion by these grasses has been shown to negatively affect the local invertebrate communities; in one study, for every 100 g/m² of *E. lehmanniana*, a 21% decrease in Lepidoptera and a 14% decrease in overall insect abundance was observed (Litt and Steidl 2010). This loss in biodiversity and abundance may partly be due to the crowding out of native plants required by these herbivores. Nonnative grasses can compete with native species for resources and reduce establishment success of native seedlings (Morales-Romero and Molina-Freaner 2008, Sommers *et al.* 2022).

Population:

The population size and trend are not known for this species, though the species is considered rare (D. Wagner pers. comm. 2024).

References:

- [Wright, D.J.. 2012. Eight New Species of *Eucosma* Hübner \(Tortricidae\) from Western North America. *Journal of the Lepidopterists' Society* 66: \(27-40\). <https://doi.org/10.18473/lepi.v66i1.a3>.](https://doi.org/10.18473/lepi.v66i1.a3)
- [GBIF.org. 2024. GBIF Occurrence Download. 2024. <https://doi.org/10.15468/dl.brfrhw>](https://doi.org/10.15468/dl.brfrhw)
- [Catalogue of Life. 2023. Catalogue of Life. 2023. <https://www.catalogueoflife.org/>](https://www.catalogueoflife.org/)

More Information

