



Natural Heritage & Endangered Species Program

Massachusetts Division of Fisheries & Wildlife

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Chain Dot Geometer

Cingilia catenaria

State Status: **Special Concern**

Federal Status: None

Description: The Chain Dot Geometer has white wings with antemedial, postmedial, and terminal “chains” (lines) of black dots and black discal spots; there are bright yellow patches on the head and the thorax at the base of the wings; the body is otherwise white. Wingspan is 30-40 mm. The larva is a bright yellow inchworm, the spiracles surrounded by white and flanked with black patches, 25-30 mm long when fully grown (McGuffin 1987).

Habitat: The Chain Dot Geometer inhabits coastal plain shrublands, including sandplain grasslands and heathlands, dunes, bluffs, and maritime shrublands, occasionally also open pitch pine/scrub oak barrens.

Life History: Adult moths fly in September and early October, with the peak flight in late September. Eggs overwinter and hatch in the spring. Larvae feed from late June through August on a variety of shrubs, with a preference for huckleberry (*Gaylussacia*), blueberry (*Vaccinium*), and bayberry (*Myrica*).

Range: The Chain Dot Geometer is found from Nova Scotia south to New Jersey, west to Manitoba and Colorado. Formerly more common and widely distributed in Massachusetts, this species is now restricted to coastal locations in the southeast part of the state.



Photo by M.W. Nelson

Adult Flight Period in Massachusetts

Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec

Threats

- Habitat loss
- Fire suppression
- Invasion by exotic plants
- Introduced generalist parasitoids
- Insecticide spraying
- Off-road vehicles
- Light pollution

References

McGuffin, W.C. 1987. Guide to the Geometridae of Canada (Lepidoptera), II. Subfamily Ennominae, Vol. 4. *Memoirs of the Entomological Society of Canada*, No. 138.

