



**Natural Heritage
& Endangered Species
Program**

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Massachusetts Division of Fisheries & Wildlife

**Bog Elfin
*Callophrys lanoraieensis***

State Status: **Threatened**
Federal Status: **None**

DESCRIPTION: The Bog Elfin (*Callophrys lanoraieensis*) is a small lycaenid butterfly with a wingspan of 22-24 mm (Opler 1998). Like most gossamer-wings, the Bog Elfin rests with wings folded above its back. The upper side of the wings, hidden in this position, are uniform dark brown in color. The underside of the wings are patterned with a patchwork of tan, pinkish-tan, rusty brown, black, and white. Overall, the Bog Elfin is similar in wing pattern to the Pine Elfin (*Callophrys niphon*), although it is noticeably smaller and darker. As compared to the Pine Elfin, the underside of the hind wing of the Bog Elfin tends to have more whitish-gray “frosting” at the wing margin, a more prominent black dot proximal to the frosted margin, and a black, relatively wide, smoothly curved, and continuous line proximal to the black dot (as opposed to the narrower, jagged, and broken line of the Pine Elfin).

HABITAT: The Bog Elfin inhabits black spruce swamps and associated shrub swamps and bogs.

LIFE HISTORY: In Massachusetts, adult Bog Elfin butterflies fly in May and early June. Eggs hatch soon after they are laid, and the larvae feed on new growth of black spruce (*Picea mariana*), pupating by late June or



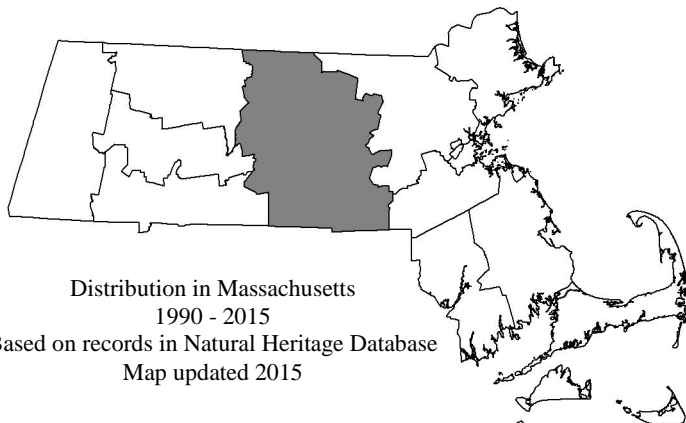
Callophrys lanoraieensis ▪ MA: Worcester Co. ▪ 13 May 2009 ▪ Photo by M.W. Nelson

Adult Flight Period in Massachusetts

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

early July. Pupae overwinter.

GEOGRAPHIC RANGE: Massachusetts is at the southern edge of the range of the Bog Elfin, which extends north through Maine to Nova Scotia and New Brunswick, and west to southern Ontario and New York (Layberry et al. 1998). Within this relatively small range, the Bog Elfin is spottily distributed, except in Maine and adjacent New Brunswick, where large tracts of habitat support locally abundant populations. In Massachusetts,



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Massachusetts Division of Fisheries & Wildlife

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the Bog Elfin is only known from northern Worcester County.

STATUS AND THREATS: The Bog Elfin is threatened by habitat loss and hydrologic alteration that disrupts the natural seasonal flooding of its habitat. Other potential threats include invasion by exotic plants, introduced generalist parasitoids, aerial insecticide spraying, clear-cut timber harvest, and global warming.

Literature Cited

- Layberry, R.A., P.W. Hall, and J.D. Lafontaine. 1998. *The Butterflies of Canada*. University of Toronto Press, Toronto, Ontario, Canada. 280 pp.
- Opler, P.A. 1998. *A Field Guide to Eastern Butterflies*. Peterson Field Guide Series. Houghton Mifflin, Boston, Massachusetts. 486 pp.

Authored by M.W. Nelson, NHESP Invertebrate Zoologist, May 2015

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