



# Natural Heritage & Endangered Species Program

Massachusetts Division of Fisheries & Wildlife

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## Ostrich Fern Borer *Papaipema* sp. 2 near *pterisii*

State Status: **Special Concern**

Federal Status: **None**

**Description:** Not formally described in published scientific literature, the Ostrich Fern Borer is a noctuid moth with bright, orange-yellow forewings overlaid with darker, brownish-orange, sometimes with pink shading towards the outer wing margins. Some individuals are a lighter, more faded yellowish-orange, or a darker, more brownish-orange. The reniform spot is large and white with an orange center; the orbicular spot is white, with two identical, merged spots immediately below. The hind wings are a uniform pinkish-tan. Wingspan is 32-36 mm. The larva has an orange to orangish-brown head and prothorax, and a nondescript, cream-colored body with small black spots and spiracles; it grows to a length of ~35 mm.

**Habitat:** The Ostrich Fern Borer inhabits mature floodplain forest and wooded swamps with Ostrich Fern (*Matteuccia struthiopteris*).

**Life History:** In Massachusetts, Ostrich Fern Borer moths fly from late August through late September. Eggs overwinter, and larvae hatch in spring. The larvae bore into and feed on the stems and roots of Ostrich Fern (*Matteuccia struthiopteris*), becoming fully grown and pupating by August.

**Geographic Range:** The Ostrich Fern Borer is currently known from six towns in Massachusetts, in Berkshire and western Hampshire and Hampden Counties. Massachusetts populations are at the eastern edge of a relatively small range that extends north to Vermont, south to Pennsylvania, and west to Wisconsin (NatureServe 2012).



*Papaipema* sp. 2 near *pterisii* • Specimen from MA: Berkshire Co., Sheffield, larva collected 25 Jul 2009 by M.W. Nelson, adult emerged 6 Sep 2009

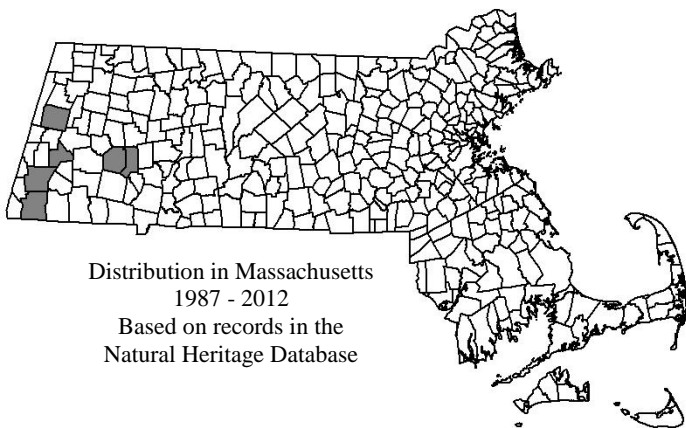
### Adult Flight Period in Massachusetts

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

**Status and Threats:** The Ostrich Fern Borer is threatened by habitat loss and hydrologic alteration that disrupts the flooding regime in its habitat. This species prefers mature floodplain forest with Ostrich Fern in a shaded to partially shaded microhabitat, so timber harvest may be a threat. Other potential threats include invasion by exotic plants, insecticide spraying, and light pollution.

### Literature Cited

NatureServe. 2012. NatureServe Explorer: an online encyclopedia of life. Version 7.1. NatureServe, Arlington, Virginia. <http://www.natureserve.org/explorer/>.



Updated December 2012

M.W. Nelson

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