



Insects

Frigga Fritillary

Boloria frigga saga

Priority 1 Species of Greatest Conservation Need (SGCN)

Class: Insects (*Insecta*)

Order: Butterflies, Skippers, And Moths (*Lepidoptera*)

Family: Brushfooted Butterflies (*Nymphalidae*)

General comments:

The Frigga Fritillary is a medium-sized, orange and black patterned butterfly in the Brush-footed family (Nymphalidae). The species is known from only one peatland in northern Maine and may have very few or no other populations here, given its subboreal geographic range. Listed as state Endangered, this fritillary is vulnerable to climate warming and stochastic disturbances such as wildfire, disease, parasitism, and drought.

Species Conservation Range Maps:

Town Map: [Boloria frigga saga Towns.pdf](#)

Subwatershed Map: [Boloria frigga saga_HUC12.pdf](#)

SGCN Priority Ranking - Designation Criteria:

Risk of Extirpation:	Maine Status: Endangered	Federal Status: None	IUCN Red List Status: None
High Regional Conservation Priority:	NatureServe: Global Rank: T5 State Rank: S1		

Habitat Associations:

Formation: Peatland

Macrogroup: North American Boreal & Subboreal Bog & Acidic Fen

	Habitat System: North American Boreal & Subboreal Bog & Acidic Fen Macrogroup - Unknown Habitat System <i>where host plant (Salix pedicellaris or Betula pumila) present</i>
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Threats

Threat Priority Level based on Severity and Actionability		Moderate Severity	High Severity
	Highly Actionable	Medium-High	High
	Moderately Actionable	Medium	Medium-High
	Actionable with Difficulty	Low	Low

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IUCN Level 1 Threat Other Options

IUCN Level 2 Threat: Lack of knowledge

Severity: Moderate Severity

Actionability: Highly Actionable

Notes: Lack of comprehensive survey effort and monitoring to identify additional occurrences and status/trends of individual populations

IUCN Level 2 Threat: Resource Needs

Severity: High Severity

Actionability: Moderately Actionable

Notes: Greater IFW staff capacity for invertebrate conservation

IUCN Level 1 Threat Biological Resource Use

IUCN Level 2 Threat: Hunting and Collecting Terrestrial Animals

Severity: Moderate Severity

Actionability: Moderately Actionable

Notes: Potential pressure by rare butterfly collectors; population level impacts likely negligible unless collecting is intense

IUCN Level 2 Threat: Logging and Wood Harvesting

Severity: Moderate Severity

Actionability: Moderately Actionable

Notes: riparian buffer integrity and hydrology

IUCN Level 1 Threat Other Options

IUCN Level 2 Threat: Education & Outreach

Severity: Moderate Severity

Actionability: Moderately Actionable

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IUCN Level 1 Threat Other Options

IUCN Level 2 Threat: Other Threat

Severity: Moderate Severity

Actionability: Moderately Actionable

Notes: Pesticide spraying and potential aerial drift (e.g. Spruce Budworm control)

IUCN Level 1 Threat Climate Change and Severe Weather

IUCN Level 2 Threat: Changes in Precipitation and Hydrological Regimes

Severity: High Severity

Actionability: Actionable with Difficulty

Notes: Climate change is a threat to northern peatlands

Species Level Conservation Actions:

None. Only species specific conservation actions that address high (red) or medium-high (orange) priority threats are summarized here.

Conservation Actions Associated with the Peatland Lepidoptera Guild:

Conservation Action	Category	Biological Priority	Type
Complete a statewide butterfly atlas and use it to increase public and partner awareness of the state's Lepidoptera and their conservation challenges	Research	high	on-going

Threat(s) Addressed By This Conservation Action

- Education & Outreach
- Lack of knowledge

Conservation Action	Category	Biological Priority	Type
MDIFW needs greater staff capacity for survey and conservation of SGCN invertebrates	Policy	critical	new

Threat(s) Addressed By This Conservation Action

- Education & Outreach
- Lack of knowledge
- Resource Needs

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Conservation Action	Category	Biological Priority	Type
Communication with Maine Forest Service and Bureau of Pest Control are necessary to prevent unintended mortality from aerial pesticide spraying (e.g., for spruce budworm)	Policy	moderate	new

Threat(s) Addressed By This Conservation Action

- Other Threat

Conservation Action	Category	Biological Priority	Type
Complete forestry Best Management Practices for distribution to cooperative landowners and forest management interests.	Species Management	high	new

Threat(s) Addressed By This Conservation Action

- Other Threat
- Roads and Railroads
- Logging and Wood Harvesting

Broad Taxonomic Group Conservation Actions:

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's Wildlife Action Plan: Element 4.

Habitat Based Conservation Actions:

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's Wildlife Action Plan: Element 4. Click on the Habitat Grouping of interest to launch a habitat based report summarizing relevant conservation actions and associated SGCN.

The Wildlife Action Plan was developed through a lengthy participatory process with state agencies, targeted conservation partners, and the general public. The Plan is non-regulatory. The species, threats, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work