



Insects

Katahdin Arctic

Oeneis polixenes katahdin

Priority 1 Species of Greatest Conservation Need (SGCN)

Class: Insects (*Insecta*)

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

Family: Brushfooted Butterflies (*Nymphalidae*)

General comments:

The Katahdin Arctic is a small to medium-sized member of the Brush-footed Butterfly family (Nymphalidae) whose greyish-brown coloration provides perfect camouflage against the lichen-covered granite boulders of its alpine tundra habitat. This butterfly is a subspecies of the Polixenes Arctic, which occurs across the Arctic tundra, and is found nowhere else but the Tablelands of Mount Katahdin. It is listed as state Endangered and is at risk due to its single occurrence, potential illegal collecting, and the vulnerability of its fragile alpine habitat to off-trail hiking and climate change.

Species Conservation Range Maps:

Town Map: [Oeneis polixenes katahdin Towns.pdf](#)

Subwatershed Map: [Oeneis polixenes katahdin HUC12.pdf](#)

SGCN Priority Ranking - Designation Criteria:

Risk of Extirpation:	Maine Status: Endangered	Federal Status: None	IUCN Red List Status: None
Regional Endemic:	<i>Oeneis polixenes katahdin</i> 's global geographic range is at least 90% contained within the area defined by USFWS Region 5, the Canadian Maritime Provinces, and southeastern Quebec (south of the St. Lawrence River).		
High Regional Conservation Priority:	Northeast Regional Synthesis (RSGCN): Responsibility: High, Concern: High NatureServe: Global Rank: T1 State Rank: S1		

Habitat Associations:

Formation: Alpine

Macrogroup: Eastern North American Alpine Tundra

* Primary Habitat	Habitat System: Acadian-Appalachian Alpine Tundra <i>endemic to Mt Katahdin tablelands</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

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Actionable with Difficulty

Low

Low

IUCN Level 1 Threat Other Options

IUCN Level 2 Threat: Other Threat

Severity: Moderate Severity**Actionability:** Highly Actionable**Notes:** lack of comprehensive species assessment, recovery goals/plan, and site specific conservation plan

IUCN Level 2 Threat: Resource Needs

Severity: High Severity**Actionability:** Moderately Actionable**Notes:** MDIFW lacks funding and staff to implement conservation actions for SGCN invertebrates (e.g., surveys and monitoring, research, habitat protection, outreach and education)

IUCN Level 1 Threat Human Intrusions and Disturbance

IUCN Level 2 Threat: Recreational Activities

Severity: Moderate Severity**Actionability:** Moderately Actionable**Notes:** off-trail hiking damage to host plant and habitat

IUCN Level 1 Threat Other Options

IUCN Level 2 Threat: Education & Outreach

Severity: Moderate Severity**Actionability:** Moderately Actionable**Notes:** some threats and challenges can be minimized through enhanced public outreach and advocacy (e.g., illegal collection, off-trail hiking, awareness and appreciation)

IUCN Level 2 Threat: Lack of knowledge

Severity: Moderate Severity**Actionability:** Moderately Actionable**Notes:** slight possibility for other small undetected tundra populations in ME; lack of comprehensive monitoring of population status and trends; further information needed about host plants and life cycle

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IUCN Level 1 Threat Climate Change and Severe Weather

IUCN Level 2 Threat: Habitat Shifting or Alteration

Severity: High Severity

Actionability: Actionable with Difficulty

Notes: tundra habitat is limited and has nowhere to shift if climate change alters or reduces habitat

Species Level Conservation Actions:

Only species specific conservation actions that address high (red) or medium-high (orange) priority threats are summarized here.

Conservation Action	Category	Biological Priority	Type
Prepare a comprehensive species assessment and conservation plan.	Species Management	high	new

Threat(s) Addressed By This Conservation Action

- Other Threat
- Education & Outreach

Conservation Action	Category	Biological Priority	Type
Increase MDIFW staff capacity for survey, research, and conservation of SGCN invertebrates.	Policy	critical	new

Threat(s) Addressed By This Conservation Action

- Resource Needs

Guild Level Conservation Actions:

This Species is currently not attributed to a guild.

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