



Insects

Short-tailed Swallowtail

Papilio brevicauda gaspeensis

Priority 2 Species of Greatest Conservation Need (SGCN)

Class: Insects (*Insecta*)

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

Family: Swallowtail And Birdwing Butterflies (*Papilionidae*)



General comments:

The Short-tailed Swallowtail is a colorful butterfly in the family Papilionidae with black wings and yellow spots. Until recently, it was thought to be a Canadian Maritime endemic. In Maine, it is now known from only one streamside meadow in northern Aroostook County. Its extreme rarity puts it at inherent risk of natural and anthropogenic perturbations to its habitat.

Species Conservation Range Maps:

Town Map: [Papilio brevicauda gaspeensis_Towns.pdf](#)

Subwatershed Map: [Papilio brevicauda gaspeensis_HUC12.pdf](#)

SGCN Priority Ranking - Designation Criteria:

State Special Concern:	Short-tailed Swallowtail is listed as a species of Special Concern in Maine.
Understudied Rare Taxa:	Recently documented or poorly surveyed rare species for which risk of extirpation is potentially high (e.g. few known occurrences) but insufficient data exist to conclusively assess distribution and status. *criteria only qualifies for Priority 3 level SGCN*
	Notes:

Professional Discretion:

Current criteria ranked *Papilio brevicauda gaspeensis* as SGCN priority 3, however, species should be SGCN priority 2 based on professional discretion.

Justification: Only one (larval) record but likely undersurveyed; S1S2

Habitat Associations:

Formation: Freshwater Marsh

Macrogroup: Eastern North American Marsh, Wet Meadow & Shrubland

Habitat System: Laurentian-Acadian Wet Meadow-Shrub Swamp
riparian meadows and stream margins with abundant cow parsnip (larval food plant)

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: High Severity

Actionability: Moderately Actionable

Notes: our knowledge of the distribution and status of this species is very low

IUCN Level 2 Threat: Other Threat

Severity: Moderate Severity

Actionability: Highly Actionable

Notes: pesticide spraying for spruce budworm

IUCN Level 2 Threat: Resource Needs

Severity: High Severity

Actionability: Moderately Actionable

Notes: more invertebrate staff capacity needed

IUCN Level 1 Threat Climate Change and Severe Weather

IUCN Level 2 Threat: Habitat Shifting or Alteration

Severity: Moderate Severity

Actionability: Moderately Actionable

Notes: ecological succession is a threat for occurrences associated with beaver impoundments

IUCN Level 1 Threat Other Options

IUCN Level 2 Threat: Education & Outreach

Severity: Moderate Severity

Actionability: Moderately Actionable

Notes: greater awareness by landowners and conservation partners would be helpful

Species Level Conservation Actions:

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

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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

- Lack of knowledge
- Education & Outreach

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

Threat(s) Addressed By This Conservation Action

- Resource Needs

Conservation Action	Category	Biological Priority	Type
Proactive 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	on-going

Threat(s) Addressed By This Conservation Action

- Other Threat

Conservation Action	Category	Biological Priority	Type
More populations are likely to be detected with directed survey effort	Survey and Monitoring	moderate	on-going

Threat(s) Addressed By This Conservation Action

- Lack of knowledge

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