

## *Speranza exonerata* (Barrens Itame)

### Priority 2 Species of Greatest Conservation Need (SGCN)

**Class:** *Insecta* (Insects)  
**Order:** *Lepidoptera* (Butterflies, Skippers, And Moths)  
**Family:** *Geometridae* (Emerald Moths And Allies)

#### General comments:

Clearly restricted to high quality PPSO barrens (DS), which are very rare in ME; only 2 extant EOs, with moderate survey effort by Schweitzer and others; can be numerous where found; historic records from Brower (incorrectly ID as *I. inextricata*) suggest a more northern distribution may be possible, but specimen ID needs verification; no change in status recommended until historic records resolved?

#### Species Conservation Range Maps for Barrens Itame:

Town Map: [Speranza exonerata Towns.pdf](#)  
 Subwatershed Map: [Speranza exonerata HUC12.pdf](#)

#### SGCN Priority Ranking - Designation Criteria:

**Risk of Extirpation: NA**

**State Special Concern or NMFS Species of Concern:**

*Speranza exonerata* is listed as a species of Special Concern in Maine.

**Recent Significant Declines: NA**

**Regional Endemic:**

*Speranza exonerata'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: NA**

**High Climate Change Vulnerability: NA**

**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:

**Historical: NA**

**Culturally Significant: NA**

#### Habitats Assigned to Barrens Itame:

**Formation Name**      **Northeastern Upland Forest**

**Macrogroup Name**      **Central Oak-Pine**

**Habitat System Name:** Northeastern Interior Pine Barrens    **\*\*Primary Habitat\*\***    **Notes:** *where host plant (scrub oak, blueberry?) present*

#### Stressors Assigned to Barrens Itame:

	Moderate Severity	High Severity
Highly Actionable	Medium-High	High
Moderately Actionable	Medium	Medium-High
Actionable with Difficulty	Low	Low

**Stressor Priority Level based on Severity and Actionability**

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#### IUCN Level 1 Threat      Natural Systems Modifications

**IUCN Level 2 Threat:** Fire and Fire Suppression

**Severity:** Severe      **Actionability:** Moderately actionable

**Notes:** Pine barren habitat is fire dependent - fire suppression can alter successional stage and habitat availability over time; fire can cause direct mortality

#### 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 1 Threat      Pollution

**IUCN Level 2 Threat:** Agricultural and Forestry Effluents

**Severity:** Moderate Severity      **Actionability:** Highly actionable

**Notes:** Nontarget species impacts from aerial pesticides; especially control efforts for gypsy moth in southern ME

#### IUCN Level 1 Threat      Residential and Commercial Development

**IUCN Level 2 Threat:** Housing and Urban Areas

**Severity:** Severe      **Actionability:** Moderately actionable

**Notes:** Habitat loss and fragmentation; pine barren habitat is prime land for development in southern ME

#### IUCN Level 1 Threat      Agriculture and Aquaculture

**IUCN Level 2 Threat:** Annual and Perennial Non-timber crops

**Severity:** Moderate Severity      **Actionability:** Moderately actionable

**Notes:** Some barren habitat is being converted to intensive blueberry production

#### IUCN Level 1 Threat      Energy Production and Mining

**IUCN Level 2 Threat:** Mining and Quarrying

**Severity:** Moderate Severity      **Actionability:** Moderately actionable

**Notes:** Habitat loss (e.g., sand and gravel extraction)

#### IUCN Level 1 Threat      Residential and Commercial Development

**IUCN Level 2 Threat:** Commercial and Industrial Areas

**Severity:** Moderate Severity      **Actionability:** Moderately actionable

**Notes:** Habitat loss and fragmentation; pine barren habitat is prime land for development in southern ME

#### IUCN Level 1 Threat      Transportation and Service Corridors

**IUCN Level 2 Threat:** Roads and Railroads

**Severity:** Moderate Severity      **Actionability:** Moderately actionable

**Notes:** Habitat loss and fragmentation; pine barren habitat is prime land for development in southern ME

### Species Level Conservation Actions Assigned to Barrens Itame:

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

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**Conservation Actions Associated with the Dry Barrens Lepidoptera Guild:**

Conservation Action	Category:	Biological Priority:	Type:
Prepare occurrence maps and pesticide spray consultation guidelines for rare Lepidoptera and distribute to strategic partners including Maine Bureau of Pesticides Control.	Species Management	critical	new

**Stressor(s) Addressed By This Conservation Action**

Agricultural and Forestry Effluents

Conservation Action	Category:	Biological Priority:	Type:
Conduct a statewide review of potential high quality barrens habitat that is threatened by succession and identify strategic habitat restoration actions for implementation by key conservation partners.	Habitat Management	critical	new

**Stressor(s) Addressed By This Conservation Action**

Fire and Fire Suppression

**Broad Taxonomic Group Conservation Actions:**

Additional relevant conservation actions for this species are assigned within broader taxonomic groups in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-1.

**Habitat Based Conservation Actions:**

Additional conservation actions that may benefit habitat(s) associated with this species can be found in Maine's 2015 Wildlife Action Plan: Element 4, Table 4-15. 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, stressors, and voluntary conservation actions identified in the Plan complement, but do not replace, existing work programs and priorities by state agencies and partners.*