



Birds

Purple Sandpiper

Calidris maritima

Priority 1 Species of Greatest Conservation Need (SGCN)

Class: Birds (*Aves*)

Order: Plovers, Sandpipers, And Allies (*Charadriiformes*)

Family: Curlews, Dowitchers, Godwits, Knots, Phalaropes, Sandpipers, Snipe,

General comments:

This plump shorebird in the Scolopacidae family winters on rocky coasts, where it feeds on marine invertebrates. Recent surveys suggest a population undergoing steep decline within 10 years. Regional surveys suggest that Maine may support more than a third of the Western Atlantic wintering Purple Sandpiper population – a large responsibility for the state. This species is listed as state Special Concern due to our large regional responsibility and because of the species’ vulnerability to climate change.

Species Conservation Range Maps:

Town Map: [Calidris maritima Towns.pdf](#)

Subwatershed Map: [Calidris maritima HUC12.pdf](#)

SGCN Priority Ranking - Designation Criteria:

<p>Recent Significant Declines:</p>	<p>Purple Sandpiper is currently undergoing steep population declines, which has already led to, or if unchecked is likely to lead to, local extinction and/or range contraction.</p> <p>Notes: Recent surveys suggest population undergoing steep population decline within 10 years. IFW surveys conducted in 2014 suggest population declined by 49% since 2004 (IFW unpublished data). Maine has high responsibility for wintering populat</p>
<p>Regional Endemic:</p>	<p><i>Calidris maritima's</i> 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).</p> <p>Notes: Recent surveys suggest population undergoing steep population decline within 10 years. IFW surveys conducted in 2014 suggest population declined by 49% since 2004 (IFW unpublished data). Maine has high responsibility for wintering populat</p>
<p>High Regional Conservation Priority:</p>	<p>Northeast Regional Synthesis (RSGCN): Responsibility: High, Concern: High</p> <p>United States Birds of Conservation Concern: Bird of Conservation Concern in Bird Conservation Regions 14 and/or 30: Yes</p>

Habitat Associations:



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Formation: Coastal Scrub-Herb

Macrogroup: North American Atlantic Coastal Dune, Grassland & Rocky Headland

* Primary Habitat	Habitat System: Acadian-North Atlantic Rocky Coast <i>roosting</i>
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Formation: Intertidal

Macrogroup: Intertidal Bedrock

* Primary Habitat	Habitat System: High Intertidal <i>feeding</i>
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* Primary Habitat	Habitat System: Low-Intertidal <i>feeding</i>
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* Primary Habitat	Habitat System: Mid-Intertidal <i>feeding</i>
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Macrogroup: Intertidal Mollusc Reefs

Habitat System: Gastropod Reef

Habitat System: Mussel Reef

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

IUCN Level 1 Threat Biological Resource Use

IUCN Level 2 Threat: Fishing and Harvesting of Aquatic Resources

Severity: Moderate Severity **Actionability:** Highly Actionable

Notes: Activities can alter habitat and behavior

IUCN Level 1 Threat Other Options

IUCN Level 2 Threat: Lack of knowledge

Severity: Moderate Severity **Actionability:** Highly Actionable

Notes: Need to determine cause of current population declines in order to reverse current declines.



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IUCN Level 1 Threat Pollution

IUCN Level 2 Threat: Industrial and Military Effluents

Severity: Moderate Severity	Actionability: Moderately Actionable
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Notes: Impacts may be mitigated through oil spill clean up and compensation. Prevention may occur through contingency planning and environmental permit review.

IUCN Level 1 Threat Climate Change and Severe Weather

IUCN Level 2 Threat: Changes in Temperature Regimes

Severity: Moderate Severity	Actionability: Actionable with Difficulty
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Notes: Impacts to intertidal invertebrate prey base may occur due to increasing ocean temperatures.

IUCN Level 2 Threat: Habitat Shifting or Alteration

Severity: High Severity	Actionability: Actionable with Difficulty
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Notes: Habitat loss from sea level rise may be mitigated by conservation of upland areas that will allow for intertidal areas to migrate inland. Impacts to intertidal invertebrate prey base may occur from ocean acidification.

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
Continue to work with the Maine Department of Marine Resources to coordinate macroalgae harvest in important wintering sites and determine the level of impact on wintering birds	Habitat Management	critical	on-going

Threat(s) Addressed By This Conservation Action

■ Fishing and Harvesting of Aquatic Resources

Conservation Action	Category	Biological Priority	Type
Continue annual long term monitoring plan to determine if the Purple Sandpiper population is in severe decline. Combine annual survey with a coastwide survey to be conducted every 5 years.	Survey and Monitoring	critical	on-going

Threat(s) Addressed By This Conservation Action

■ Lack of knowledge



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Conservation Actions Associated with the Shorebirds Guild:

Conservation Action	Category	Biological Priority	Type
Identify and map priority feeding and roosting areas including offshore habitats, and implement protection initiatives. Enter data in MDIFW ETSC database.	Survey and Monitoring	high	on-going

Threat(s) Addressed By This Conservation Action

- Commercial and Industrial Areas
- Tourism and Recreational Areas
- Housing and Urban Areas
- Industrial and Military Effluents
- Lack of knowledge

Conservation Action	Category	Biological Priority	Type
Place symbolic stake and twine fencing around important beach roosting areas with signage to identify roosting areas.	Species Management	high	new

Threat(s) Addressed By This Conservation Action

- Tourism and Recreational Areas
- Recreational Activities

Conservation Action	Category	Biological Priority	Type
Work with the partners to conduct research to determine the impact of macroalgae harvest on marine birds.	Research	high	on-going

Threat(s) Addressed By This Conservation Action

- Fishing and Harvesting of Aquatic Resources

Conservation Action	Category	Biological Priority	Type
Provide outreach to pet owners, beachgoers, kayakers, beach managers, and landowners to raise public awareness on shorebirds and on the impacts of disturbance to nesting, feeding, and roosting areas from recreational activities in coastal areas.	Public Outreach	high	on-going

Threat(s) Addressed By This Conservation Action

- Recreational Activities

Conservation Action	Category	Biological Priority	Type
Use voluntary agreements, conservation easements, conservation tax abatements and incentives to protect important habitats.	Habitat Management	moderate	new

Threat(s) Addressed By This Conservation Action

- Commercial and Industrial Areas
- Housing and Urban Areas
- Recreational Activities
- Work and Other Activities



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Conservation Action	Category	Biological Priority	Type
To determine population status continue monitoring program for SGCN shorebird species at high priority migration sites coastwide. Continue to coordinate with ISS, PRISM, Atlantic Flyway ESMP programs.	Survey and Monitoring	high	on-going

Threat(s) Addressed By This Conservation Action

- Lack of knowledge

Conservation Action	Category	Biological Priority	Type
Identify prey resources in significant staging areas to determine potential limiting factors and optimal management techniques to promote these resources.	Research	high	on-going

Threat(s) Addressed By This Conservation Action

- Lack of knowledge

Conservation Action	Category	Biological Priority	Type
Determine length of stay at stopover areas, site fidelity, local movements and premigration condition to determine if coastal habitats are meeting shorebird requirements for successful migration.	Research	high	on-going

Threat(s) Addressed By This Conservation Action

- Lack of knowledge

Conservation Action	Category	Biological Priority	Type
Determine limiting factors for SGCN shorebird species on breeding, migratory, or wintering areas.	Research	moderate	new

Threat(s) Addressed By This Conservation Action

- Lack of knowledge

Conservation Action	Category	Biological Priority	Type
Conduct longterm monitoring of ecosystem-wide impacts of cutting algae to determine potential impacts to shorebird habitats and invertebrate prey.	Research	high	on-going

Threat(s) Addressed By This Conservation Action

- Fishing and Harvesting of Aquatic Resources

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:



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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