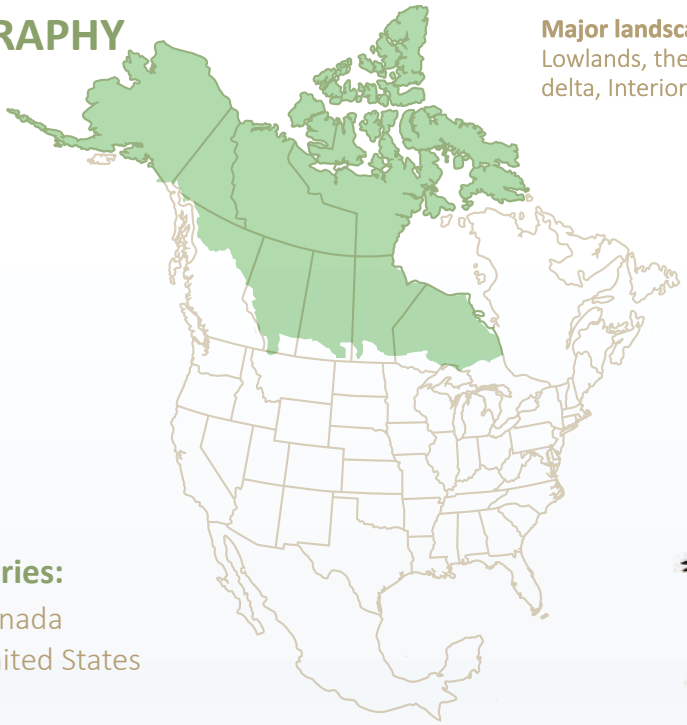
Midcontinent Shorebird
CONSERVATION INITIATIVE

MIDCONTINENT SHOREBIRD CONSERVATION INITIATIVE (MSCI)

FACT SHEET – Arctic and Boreal Planning Unit

GEOGRAPHY



Major landscapes: Canadian Arctic Archipelago, the Hudson–James Bay Lowlands, the Taiga Shield and Taiga Plains, the Mackenzie River basin and delta, Interior Alaskan lowlands, and the Alaskan Arctic Coastal Plain.

Main habitats: Polygonal grounds associated with permafrost, sedge/grass and dwarf-shrub meadows, sparsely vegetated peatlands, glacially formed eskers, bogs, coastlines, muskegs, fens, lakes and river margins.

Other characteristics: Virtually all shorebirds leave this region in the non-breeding season.

Countries:

- Canada
- United States


WhiteRumpedSandpiper
© Alan Kneidel


Lesser Yellowlegs
©Brad Winn


American Golden-Plover
©Shiloh Schulte


Nest American Golden-Plover
©Shiloh Schulte

TARGET / KEY SPECIES

American Golden-Plover, Red Knot, Buff-breasted Sandpiper, White-rumped Sandpiper, Hudsonian Godwit, Lesser Yellowlegs

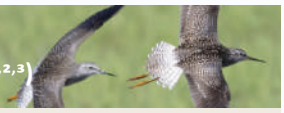
MAIN THREATS

This list reflects the highest-ranked threats identified for this planning unit. However, it does not encompass all threats affecting the unit. For a comprehensive assessment of threats and their relative importance, please refer to pages 24–36 of the MSCI Strategic Framework.

Threat Ranking in the Arctic and Boreal		
Threat	**Impacts**	**Rating**
Climate change	Rapid warming in the Arctic and Boreal regions is altering hydrology, vegetation structure, and the timing of snowmelt, all of which is affecting vegetation and insect phenology that produces mismatch of migratory shorebirds arrival and peak of insect emergence. Increased frequency of extreme weather events, shrub encroachment into tundra, and drying or flooding of wetlands reduce habitat suitability.	**Very High**
Fire management and suppression	Changes in fire regimes, driven by climate warming and management suppression are reshaping Boreal landscapes. More frequent and severe wildfires can destroy habitat and alter wetland complexes, while long-term fire suppression can lead to woody vegetation encroachment, reducing the open habitats required by breeding shorebirds.	**Medium**
Oil, gas and mining	Expanding extractive industries pose localized but significant risks through habitat loss, fragmentation, pollution, and increased human disturbance. Infrastructure such as roads, pipelines, and exploration sites can disrupt breeding areas and hydrological systems in otherwise intact landscapes.	**Low**

PRIORITY STRATEGIES AND MAIN OBJECTIVES

To address the complex and interlinked threats affecting shorebirds and their habitats in the Arctic and Boreal, the MSCI Strategic Framework identifies a set of complementary strategies that operate across scales and sectors. If you are implementing actions in this geography, please consider these indicators to monitor your progress towards achieving your results, and to better understand how you are contributing to implementing the MSCI Strategic Framework.



Examples of objectives and indicators relevant for the Arctic and Boreal (see www.midamericasshorebirds.org for a complete list of objectives and indicators[1,2,3])

Strategy: Motivate governments to increase conservation capacity[1]	
Objectives	**Indicators**
Increase and diversify funding and capacity from governments and agencies for shorebird conservation in the Midcontinent Flyway	Number of partners at different levels providing funding and capacity
Mitigate threats to shorebirds and their habitats by enhancing or adopting new laws, regulations, and policies	Number of laws, regulations, and policies adopted or modified to support shorebird conservation
Strategy: Integrate climate resiliency in conservation planning and implementation[2]	
Develop shorebird habitat models under various climate change scenarios	Number of sites/areas for which habitat models are available
Prioritize conservation of critical sites/areas based on vulnerability to climate change	Number of sites identified as a priority for conservation based on its vulnerability to climate change
Strategy: Build capacity for conservation by raising awareness and boosting education and training[3]	
Implement awareness campaigns to call attention to the importance of conserving shorebirds and the benefits this provides to communities across the hemisphere	Number of participants reached by awareness campaigns who report an increase in knowledge/understanding
Increase capacity of key stakeholders to implement conservation actions that are beneficial to shorebirds	Number of participants who report an improvement in knowledge and/or skills to support shorebird conservation

1. See pages 38 and 41 of the MSCI Strategic Framework for a complete list
2. See pages 57 and 59 of the MSCI Strategic Framework for a complete list
3. See pages 60 and 63 of the MSCI Strategic Framework for a complete list

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MANOMET CONSERVATION SCIENCES
CAFF Conservation of Arctic Flora and Fauna
AMBI Arctic Migratory Birds Initiative
Environment and Climate Change Canada