

This document was compiled by the Regional Assessment of Offshore Wind Development Secretariat. It includes excerpts from the submission:

Offshore Wind Regional Assessment Requests for Advice: Product Descriptions and Context for Interpretation

Provided by Environment and Climate Change Canada – Canadian Wildlife Service to the Committees for the Regional Assessment of Offshore Wind Development in Nova Scotia and Regional Assessment of Offshore Wind Development in Newfoundland and Labrador

November 30, 2023

The full submission was provided to the Committee in confidence, as per the Committee's [Confidentiality Procedures](#).

The document also includes additional products submitted by ECCC in August 2024.

2.1.1.1 Bank Swallow – Critical Habitat

Product Objective

This map indicates the locations of CH for Bank Swallow (*Riparia riparia*), listed as Threatened under Schedule 1 of SARA. The Bank Swallow is a small insectivorous songbird with brown upperparts, white underparts, and a distinctive dark breast band. This species excavates nest burrows in natural and artificial sites with vertical banks, including riverbanks, lake and ocean bluffs, aggregate pits, road cuts, and stockpiles of soil. Bank Swallows are colonial, often nesting in sandy banks created through coastal erosion; therefore, potentially in close proximity to the marine environment during the breeding season. Bank Swallow - Critical Habitat.

The following data sources were used to produce the map:

- ECCC. 2022. Recovery Strategy for the Bank Swallow (*Riparia riparia*) in Canada.
- ECCC. 2019. Description of Residence for Bank Swallow (*Riparia riparia*) in Canada.

Methodology

This product includes a 10 km buffer around shorelines designated as Bank Swallow CH in the Recovery Strategy for the Bank Swallow (*Riparia riparia*) in Canada (ECCC 2022a). The buffer is a conservative estimate of the distance required for swallows to reach flight altitudes higher than anticipated heights of turbine rotor swept zones (25-300 m). Critical Habitat is identified in the recovery strategy and includes nesting and foraging habitat. To designate CH for the recovery strategy, nesting colonies of Bank Swallow were identified, and a shoreline/coastline buffer was applied around the colony (100 m + the spatial uncertainty of the nesting record). Critical Habitat was then defined as areas meeting biophysical attributes (as listed in the recovery document) within 500 m of those shorelines/coastlines (ECCC 2022a).

Context and Interpretation

Spatial distribution: Includes Bank Swallow CH in Eastern Canada (Nova Scotia, Newfoundland and Labrador, New Brunswick, Prince Edward Island, and Quebec). There is little chance of offshore wind energy developments directly intersecting Bank Swallow CH. However, part of this industrial footprint includes landfall of cables and associated transmission infrastructure, which could impact Bank Swallow CH.

Temporal distribution: The breeding season for Bank Swallow in Canada (or, the possible period occupancy of the burrow) typically ranges from May to late August (ECCC 2019).

Assumptions and Caveats

- Critical Habitat for Bank Swallow only includes nesting and foraging habitats; other important habitats are not identified (e.g., roosting sites).
- Unidentified swallows have been observed foraging around offshore wind turbines ~43km offshore. These observations were collected using video systems, and flight

heights were estimated to range from 23 m to 127.4 m above sea level (Willmott et al. 2023). Therefore, Bank Swallow may forage and interact with wind turbines beyond the 500 m buffer around colonies.

- Additional data has been requested from owners of the Bank Swallow Connectivity Project (Motus) to complement this product. Once provided to ECCC-CWS-ATL an updated product will be provided to the Committees.

2.1.1.2 Horned Grebe – Critical Habitat

Product Objective

This map indicates the locations of CH for Horned Grebe (*Podiceps auritus*), listed as Endangered under Schedule 1 of SARA (ECCC 2013). The Horned Grebe is a small duck-like waterbird with distinctive tufts of showy feathers behind the eye during summer breeding. Winter plumage is black and white, characterized by a black crown and white cheeks. Horned Grebe generally nest in freshwater and occasionally brackish water in areas that contain nest material, concealment, and protection for chicks. Horned Grebe - Critical Habitat.

The following data source was used to produce the map:

- ECCC. 2013. Recovery Strategy for the Horned Grebe (*Podiceps auritus*), Magdalen Islands Population, in Canada.

Methodology

This product includes a 10 km buffer around ponds designated as Horned Grebe CH in the Recovery Strategy for the Horned Grebe (*Podiceps auratus*), Magdalen Islands Population, in Canada (ECCC 2013). The buffer is a conservative estimate of the distance required for birds to reach flight altitudes higher than anticipated heights of turbine rotor swept zones (25-300 m). Critical Habitat is defined in the recovery strategy and includes a total of 52 nesting and foraging ponds (ECCC 2013).

Context and Interpretation

Spatial distribution: Includes Horned Grebe CH in Eastern Canada (Nova Scotia, Newfoundland and Labrador, New Brunswick, Prince Edward Island, and Quebec), which is limited to the Magdalen Islands, Quebec. There is little chance of offshore wind energy developments directly intersecting Horned Grebe CH. However, part of this industrial footprint includes landfall of cables which could impact Horned Grebe CH if sited on the Magdalen Islands.

Temporal distribution: The breeding season for Horned Grebe in Canada (or, the possible period occupancy of nests) typically ranges from May to early August (ECCC 2013).

Assumptions and Caveats

- Critical Habitat for Horned Grebe only includes nesting and foraging habitats in the Magdalen Islands; other important habitats are not identified (e.g., non-breeding sites).
- Horned Grebe are known to overwinter along the coast of Nova Scotia, and the Bay of Fundy (Stedman 2020). However, the exact wintering grounds of the Magdalen Islands Population are unknown but are assumed to be along the Atlantic coast (ECCC 2013).

2.1.1.3 Roseate Tern – Important Areas

Product Objective

This map indicates important areas for Roseate Tern (*Sterna dougallii*), listed as Endangered under Schedule 1 of SARA. Roseate Terns are a medium-sized, pale coloured seabird with a long, forked white tail. During breeding, adults are almost entirely white, except for a black cap and a black bill that becomes red near the base. In North America, two populations of Roseate Tern breed on the Atlantic coast in distinct locations. The northeastern population extends from the Magdalen Islands, in the Gulf of St. Lawrence, south to New York. The second population breeds from Florida and the Bahamas to the Lesser Antilles. The Canadian population of Roseate Terns breeds almost exclusively on a few islands off the Atlantic coast of Nova Scotia, although small numbers of birds also breed on islands in Quebec and New Brunswick. Roseate Tern - Important Areas. The US Bureau of Ocean Energy Management (BOEM) conducted a study of Roseate Tern (VHF tracking) in US Atlantic waters (Loring et al. 2019). Roseate Terns had peak potential exposure to offshore wind during the postbreeding dispersal period (mid-July through late September). They primarily moved during morning hours and during fair weather conditions (high atmospheric pressure) and flew below 25 m above sea level (Loring et al. 2019).

The following data source was used to produce the map:

- ECCC. 2016. Atlantic Colonial Waterbird Database (ACWD: ECCC-CWS-ATL).

Methodology

Roseate Tern colonies that have been active since 2000 (per recommendation from ECCC-CWS-ATL species experts) were identified and plotted. Buffers informed by VHF (Rock et al. 2007) and GPS tracking (Pratte et al. 2021) were applied to each colony. Additionally, GPS has been deployed on Common Terns (*Sterna hirundo*) on Country Island (n = 26 individuals and 147 tracking days, Nagy-MacArthur, unpublished). The maximum foraging range for Common Terns was 50 km and they did not forage farther than 20 km from land. Considering foraging ranges from the VHF and GPS data, polygons around each Roseate Tern colony were created by extending 50 km on either side of the colony along the coast, and 20 km offshore.

Context and Interpretation

Spatial distribution: Includes important areas for Roseate Tern in Eastern Canada (Nova Scotia, Newfoundland and Labrador, New Brunswick, Prince Edward Island, and Quebec) based on breeding locations.

Temporal distribution: Applies to breeding season while Roseate Terns are present at colonies, and while staging as they prepare to leave the region.

Assumptions and Caveats

- Data were developed using colonies active since 2000. Historical colony information is available, upon request.
- Common Tern was used as surrogate to identify maximum foraging ranges.
- Data does not include movement areas through the offshore environment.

2.2.2.1 Ipswich Sparrow – Important Fall Migration

Product Objective

These maps indicate potentially important areas for adult and juvenile Ipswich Sparrow (*Passerculus sandwichensis princeps*), listed at Special Concern under Schedule 1 of SARA, during fall migration. This species has greyish-brown upper parts streaked with white, black and buff; a distinctive yellow stripe over and in front of the eye (which is very faint in the autumn and winter); whitish under parts streaked with greyish- brown; and a dusky, slightly forked tail. The princeps subspecies nests almost exclusively on Sable Island and winters in the mid-Atlantic States between Nova Scotia and northern Florida. Ipswich Sparrow nests in heath-dominated terrain and in dense marram grass on coastal dunes and upper beaches. Ipswich Sparrow - Important Fall Migration.

The following data source was used to produce the map:

- Crysler et al., 2016. Differential fall migratory routes of adult and juvenile Ipswich Sparrows (*Passerculus sandwichensis princeps*).

Methodology

The above publication analyzed fall migration routes (using the Motus Wildlife Tracking System) for adult and juvenile Ipswich Sparrows tagged on Sable Island, Nova Scotia (NS). The study radio tagged 64 Ipswich Sparrows (16 adult males, 15 adult females, 33 fledglings) in August 2013. To represent the potential risk of offshore wind energy development on migrating Ipswich Sparrow, ECCC-CWS-ATL used spatial data from this publication to create and map polygons of general Ipswich Sparrow migration areas in the marine environment. The polygons encompass all straight-line routes between Motus station detections for all individuals tracked in the study. The areas highlighted in blue show the spatial extent of the estimated fall migratory routes for adults, whereas the areas in yellow show estimated routes for juveniles.

This approach was used because the ECCC-CWS-ATL did not have access to raw movement trajectories.

Context and Interpretation

Spatial Distribution: The orientation of over-water flights was slightly different between adults and juveniles (288° vs. 299°; Crysler et al. 2016). Individuals then travelled southwest along the coastline. Adults seemed to move from Southwest NS over the Gulf of Maine. Juveniles either flew over the Gulf of Maine or north over the Bay of Fundy before moving down the coastline.

Temporal Distribution: In the study, juveniles were detected on mainland NS from September 17 until October 23. Adults were detected on mainland NS from October 18 until November 11. Adults and juveniles were temporally separate during migration through NS. Spring migration movement data for Ipswich Sparrow has been requested and will be provided to the committees if/when received and analyzed.

Assumptions, Caveats, and Product Updates

- These layers provide a general spatial representation of important areas for Ipswich Sparrow in fall; migration of Ipswich Sparrow is not confined to the polygons provided. Therefore, much caution must be used in interpreting these data layers.
- Update: A separate map for adults and juveniles is now presented. Movement lines have been added between Motus Tower detections to show potential routes, noting that the lines do not represent actual movement paths.

2.2.2.2 Piping Plover – Critical Habitat and Important Areas

Product Objective

This map indicates the locations of Critical Habitat and potentially important areas for Piping Plover (*Charadrius melodus melodus*), listed as Endangered under Schedule 1 of SARA. Piping Plover is a small shorebird that is found only in North America. It has a pale, sand-coloured back, short stout bill and orange legs. During the breeding season, it also has a single black band across the breast, another black band across the forehead between the eyes, and a distinctive black tip on the orange bill. Individuals of the eastern subspecies breed in the Gulf of St. Lawrence: on the Magdalen Islands of Quebec and on the coasts of New Brunswick, Nova Scotia, Prince Edward Island, Newfoundland and Labrador, and the French islands of Saint Pierre and Miquelon. They are also found along the Atlantic coast beaches of the US. Piping Plovers winter along the Gulf coast of the US and Mexico, southern Atlantic US coast, and the Caribbean, including the Bahamas and Cuba. Piping Plover - Critical Habitat and Important Areas.

The following data sources were used to produce the map:

- ECCC. 2021. Recovery Strategy (Amended) and Action Plan for the Piping Plover *melodus* subspecies (*Charadrius melodus melodus*) in Canada.
- ACCDC. 2023. Atlantic Canada Conservation Data Centre database.
- CWS. 2022. Piping Plover nesting record database, 2017-2022. Unpublished internal data. [CONFIDENTIAL].

Methodology

This product includes a 10 km buffer around shorelines that are identified as Piping Plover critical habitat, as identified in the Amended Recovery Strategy and Action Plan for Piping Plover *melodus* subspecies. Observations of Piping Plover outside the breeding season (stopover and/or pre- or post-breeding areas) and breeding locations recorded between 2017 and 2022 were also mapped with a 10 km buffer. The buffer is a conservative estimate of the distance required for plovers to reach flight altitudes higher than anticipated heights of turbine rotor swept zones (20-300 m).

Context and Interpretation

Spatial distribution: Includes Piping Plover Critical Habitat and observations in Nova Scotia, Newfoundland and Labrador, New Brunswick, and Prince Edward Island. Another spatial product available for Piping Plover is the coastal density map, to be provided to the Committees by November 30, 2023.

Temporal distribution: Includes Critical Habitat (identified up to 2016) during the breeding season (May to August) and observations of Piping Plover outside the breeding season (stopover areas post/pre-breeding or during migration). Another temporal product available for Piping Plover is the temporal trend map of Piping Plover coastal density, to be provided to the Committees by November 30, 2023.

Assumptions, Caveats, and Product Updates

- Critical Habitat for Piping Plover only includes breeding sites and foraging areas close to nesting sites. Other important habitats may not be included (e.g., stopover sites).
- Update: This map has been updated to include breeding locations between 2017 and 2022 and observations from outside the breeding season.

3.1.1 Red Knot – Important Stopover Areas

Product Objective

This map indicates important stopover sites for Red Knot (*Calidris canutus*), a species listed as Endangered under Schedule 1 of SARA. The Red Knot is a medium-sized shorebird with rusty-red plumage during the breeding season and dull grey and white plumage during the non-breeding season (Baker et al. 2020). This species undertakes extraordinarily long migrations, breeding in the high arctic and wintering as far south as Tierra Del Fuego in South America. Red

Knot occur in Atlantic Canada exclusively during spring and fall migration, with the highest concentrations occurring in late summer and early fall. Red Knot - Important Stopover Areas.

The following data source was used to produce the map:

- ECCC. 2023d. Red Knot Priority Sites in Atlantic Canada. Internal unpublished data. [CONFIDENTIAL].

Methodology

Locations of shorelines identified as Red Knot priority stopover sites were mapped with a 10 km buffer. The buffer is a conservative estimate of the distance required for Red Knot to reach flight altitudes higher than anticipated heights of turbine rotor swept zones (20-300 m). The list of priority sites was developed by ECCCCWS-ATL and is based on Atlantic Canada Shorebird Survey (ACSS) data (maximum counts) collected since 1974. Context and Interpretation Spatial distribution: Important stopover locations in Atlantic Canada are depicted (Newfoundland and Labrador, Nova Scotia, New Brunswick, and Prince Edward Island). Temporal distribution: Data include stopover sites used during spring and migration periods. Breeding and nonbreeding habitat is not shown on the map because Red Knot are only present in the region during migration.

Assumptions and Caveats

- This product is considered CONFIDENTIAL because data are unpublished and associated with a species at risk. Therefore, it cannot be made publicly available unless otherwise specified by ECCC-CWS-ATL.
- There may be other important stopover sites not depicted on this map that will be identified through ongoing research.
- Only marine-facing sites are included (terrestrial sites were removed).

3.1.2 Lesser Yellowlegs – Migration Areas

Product Objective

This map indicates migration tracks for Lesser Yellowlegs (*Tringa flavipes*) travelling through Atlantic Canada during fall migration. The Lesser Yellowlegs is a medium-sized shorebird with long yellow legs, a long neck, buffy brown upperparts and white underparts (Tibbitts and Moskoff 2020). This species breeds in the subarctic and arctic and its non-breeding range extends from the southern United States to southern South America. They occur in Atlantic Canada primarily during fall migration, with higher concentrations in August. Some individuals also use the region during spring migration. COSEWIC assessed Lesser Yellowlegs as Threatened in 2020 and consequently, this species is currently under consideration for addition to SARA. Lesser Yellowlegs - Migration Areas.

The following data sources were used to produce the map:

- CWS. 2023d. Lesser Yellowlegs GPS tracking dataset. Internal unpublished data. [CONFIDENTIAL].
- Shorebird Science and Conservation Collective. 2023b. Lesser Yellowlegs tracking dataset.

Methodology

GPS fixes (points) and interpolated track lines were mapped over the study area. Data were collected between 2019 and 2023 and include one individual tagged in Manitoba and six birds tagged along coastal sites in southeast New Brunswick. The GPS tags collected one to two locations every two days.

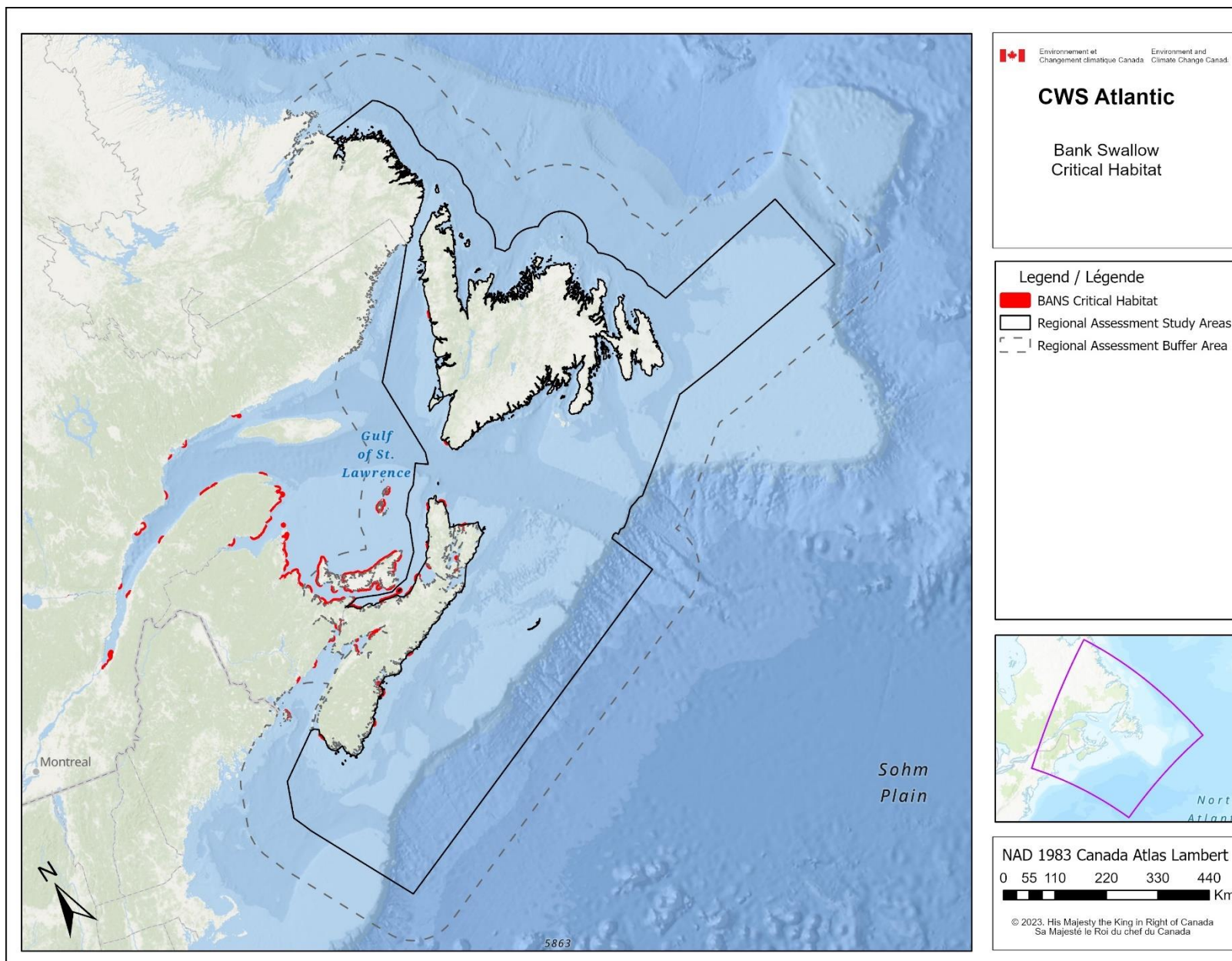
Context and Interpretation

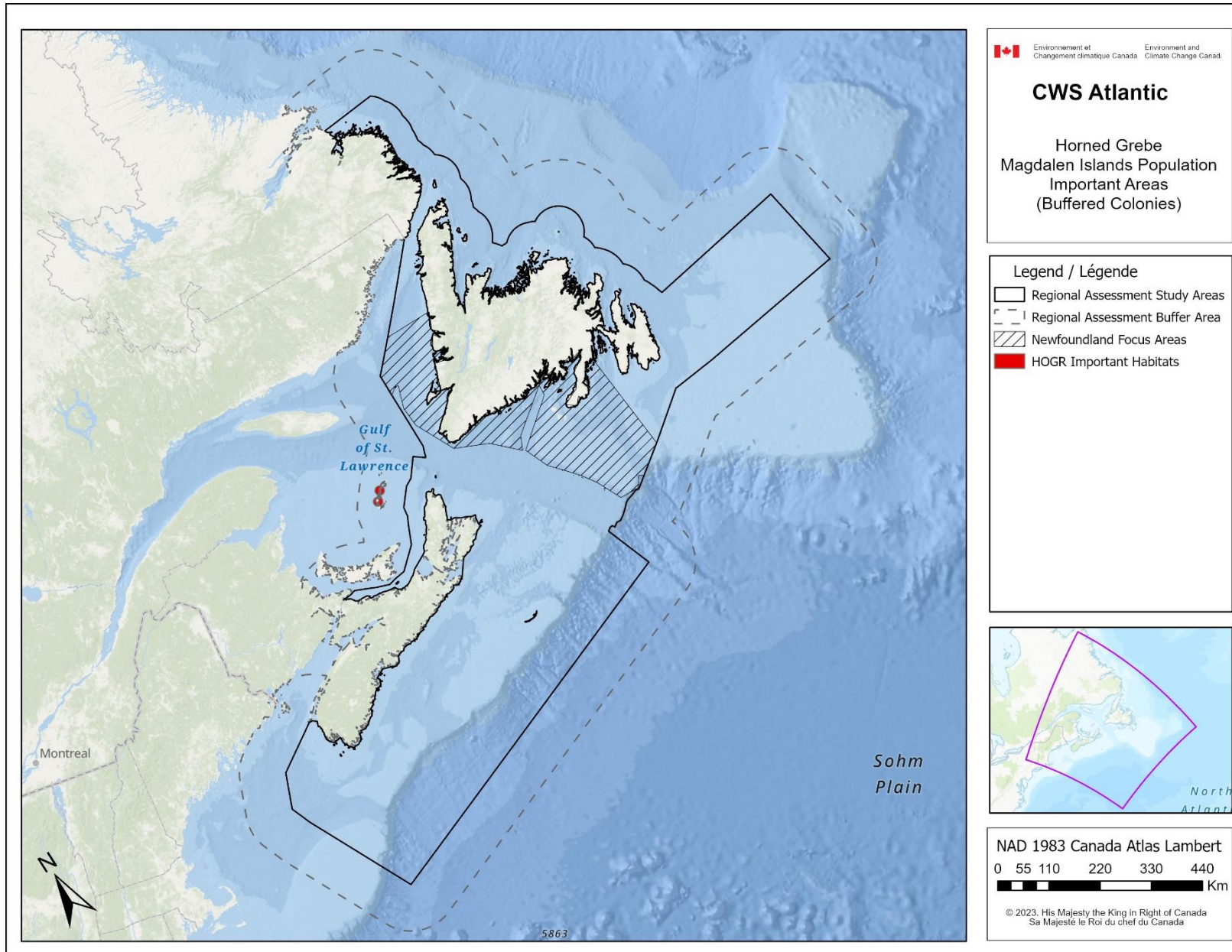
Spatial Distribution: Locations and tracks in the Atlantic Region are shown (Nova Scotia, Newfoundland and Labrador, New Brunswick, and Prince Edward Island); locations and tracks outside the region were removed. Lesser Yellowlegs undertook transoceanic migratory flights through the regional assessment study areas, travelling in a southerly direction toward New England, USA or Central/South America. Though the sample size is limited, these data show spatial overlap of Lesser Yellowlegs migratory routes with potential offshore wind energy development areas.

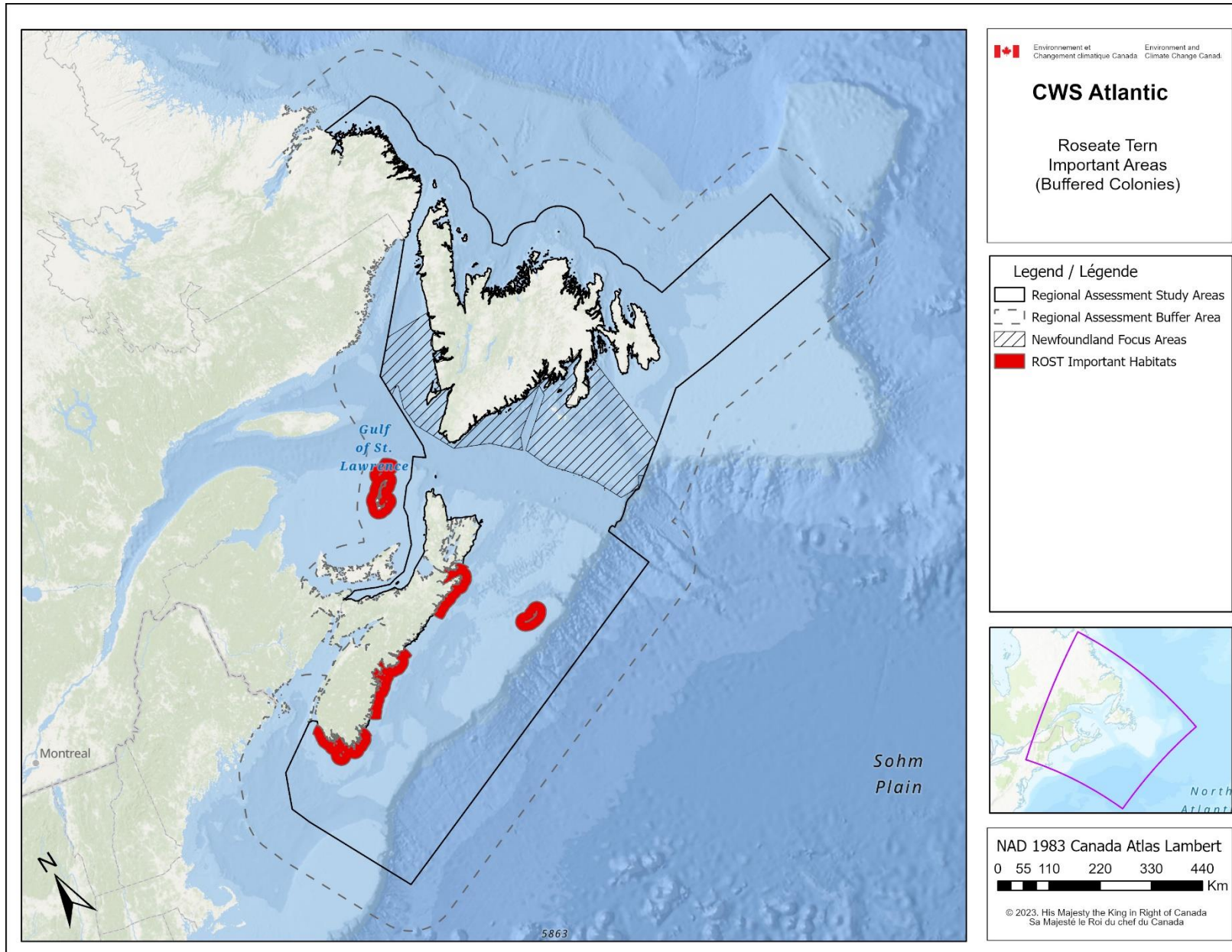
Temporal distribution: This product includes southbound tracks during post-breeding (fall) migration.

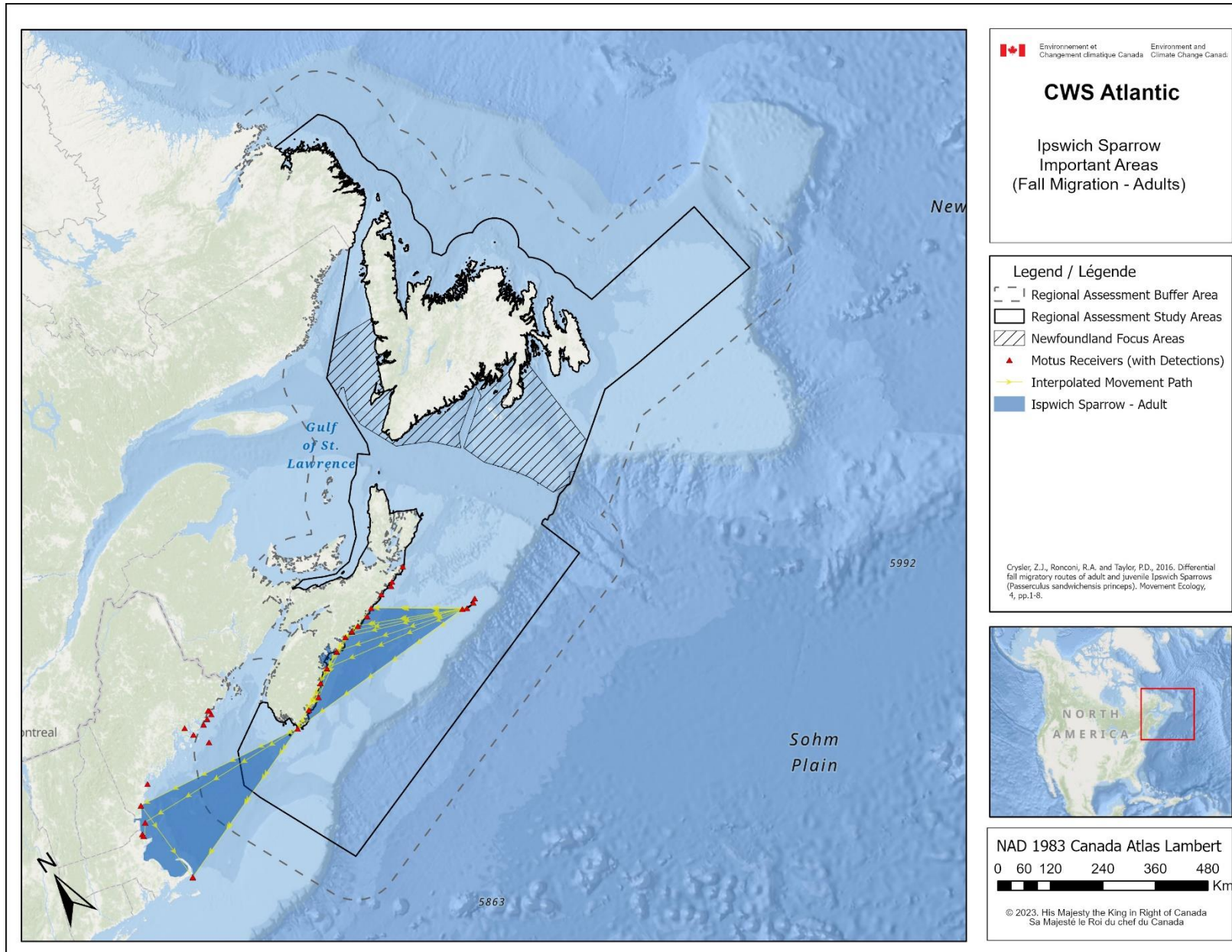
Assumptions and Caveats

- This product is considered CONFIDENTIAL because it contains unpublished data. It cannot be made publicly available unless otherwise specified by ECCC-CWS-ATL.
- This map shows migration tracks for a small number of individuals ($n < 10$) and may not be representative of the entire population.
- The map does not provide information on key stopover locations for this species. Stopover sites are used for refuelling and resting during migration and high-quality stopover sites are critical for migratory shorebirds.
- All lines are interpolated migration tracks (straight lines between GPS fixes) and therefore should not be considered 'true' migration tracks.
- ECCC-CWS-ATL did not obtain any migration tracks of individuals travelling northbound during spring migration.









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CWS Atlantic

Ipswich Sparrow
Important Areas
(Fall Migration - Adults)

Legend / Légende

- Regional Assessment Buffer Area
- Regional Assessment Study Areas
- Newfoundland Focus Areas
- Motus Receivers (with Detections)
- Interpolated Movement Path
- Ipswich Sparrow - Adult

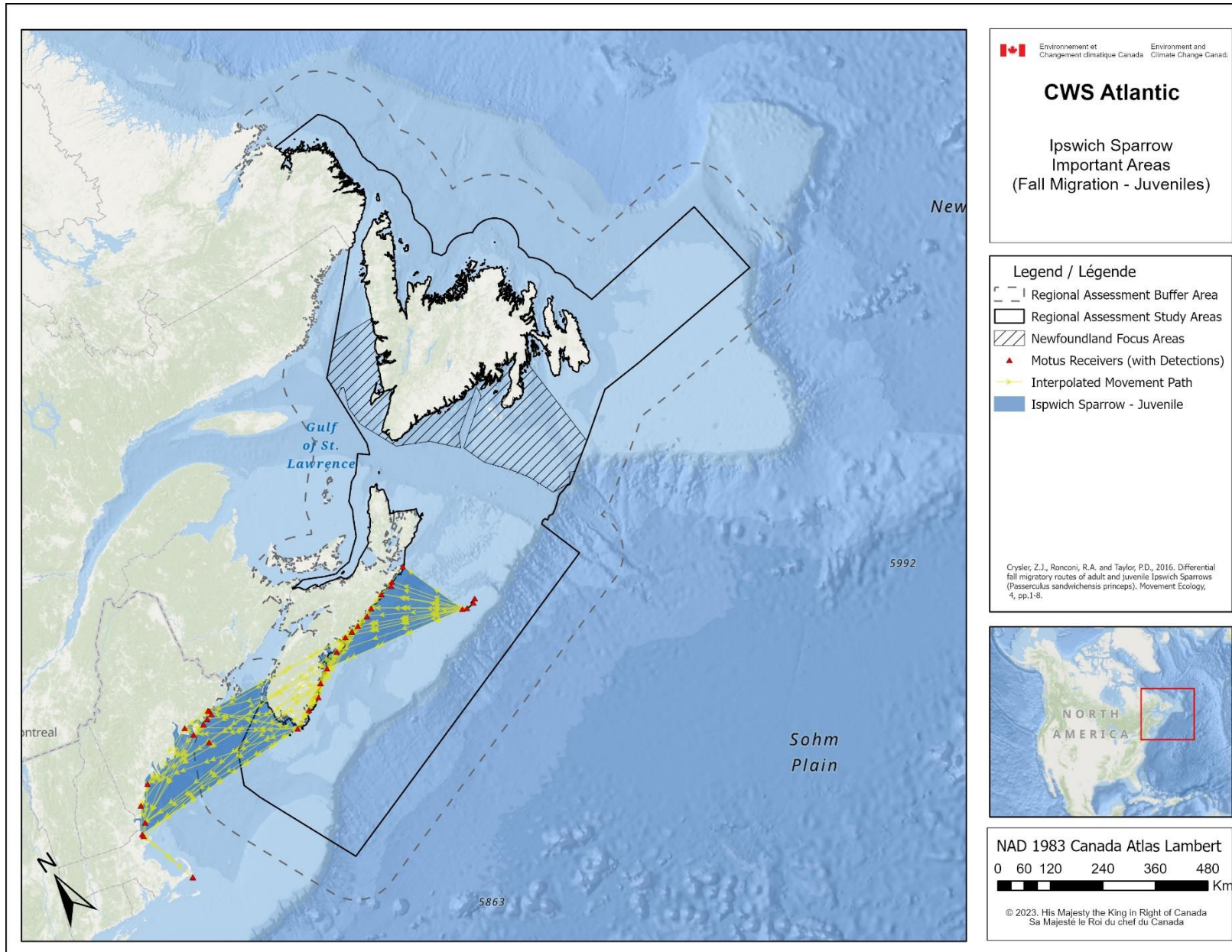
Crysler, Z.J., Ronconi, R.A. and Taylor, P.D., 2016. Differential fall migratory routes of adult and juvenile Ipswich Sparrows (*Passerculus sandwichensis princeps*). *Movement Ecology*, 4, pp.1-8.



NAD 1983 Canada Atlas Lambert

0 60 120 240 360 480 Km

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Sa Majesté le Roi du chef du Canada



<map of Piping Plover redacted as per the Committee's [Confidentiality Procedures](#) due to the inclusion of unpublished data>

<map of Red Knot as per the Committee's [Confidentiality Procedures](#) due to the inclusion of unpublished data>

<map of Lesser Yellowlegs redacted as per the Committee's [Confidentiality Procedures](#) due to the inclusion of unpublished data>

Species at Risk Summary

Acronyms

Acronym	Definition
ACCDC	Atlantic Canada Conservation Data Centre
BBA	Breeding Bird Atlas
CH	Critical Habitat
EBAR	Ecosystem-based Automated Range
NL	Newfoundland and Labrador
NS	Nova Scotia

SARA Listed Species

Taxon	Common Name	Scientific Name	Current SARA Status	Potential Overlap with RA	Last assessment	Recovery Document Status	Critical Habitat	Marine Habitat Exposure	Marine Movement Exposure	Terrestrial Exposure	Notes
Arthropods	Monarch	<i>Danaus plexippus</i>	Endangered	NS	November 2016	Final Management Plan	N/A	No	Potential Yes	Yes	CH not yet identified (unlikely to be any CH identified in Atlantic in the recovery strategy). Assumed to migrate along the coast Coastal observations in the 2024 NS and 2021 NL ACCDC database MOTUS: assumed tracks in the offshore around NS; Unknown swallow species detected 40km offshore foraging near wind farms in other jurisdictions
Birds	Bank Swallow	<i>Riparia riparia</i>	Threatened	NS, NL	May 2013	Final Recovery Strategy	Partial ID	Potential Yes	Yes	Yes	

Taxon	Common Name	Scientific Name	Current SARA Status	Potential Overlap with RA	Last assessment	Recovery Document Status	Critical Habitat	Marine Habitat Exposure	Marine Movement Exposure	Terrestrial Exposure	Notes
Birds	Barn Swallow	<i>Hirundo rustica</i>	Threatened *	NL, NS	May 2021	Draft		Potential Yes	Yes	Yes	*Proposed status change to Special Concern - see updates tab MOTUS: assumed tracks in the offshore around NS; Unknown swallow species detected 40km offshore foraging near wind farms
Birds	Barrow's Goldeneye , Eastern Population	<i>Bucephala islandica</i>	Special Concern	NS, NL	May 2011	Final Management Plan	N/A	Yes	Yes	Yes	Coastal observations in the 2024 NS and 2021 NL ACCDC database
Birds	Bicknell's Thrush	<i>Catharus bicknelli</i>	Threatened	NS	December 2022	Final Recovery Strategy	Partial ID	No	Potential Yes	Yes	Coastal CH in Cape Breton; Coastal observations in the 2024 ACCDC database; Confirmed breeding coastally in Cape Breton (NS-BBA)

Taxon	Common Name	Scientific Name	Current SARA Status	Potential Overlap with RA	Last assessment	Recovery Document Status	Critical Habitat	Marine Habitat Exposure	Marine Movement Exposure	Terrestrial Exposure	Notes
Birds	Bobolink	<i>Dolichonyx oryzivorus</i>	Threatened *	NL, NS	May 2022	Proposed Recovery Strategy	Partial ID	No	Potential Yes	Yes	*Proposed status change to Special Concern - see Updates tab Proposed Critical Habitat in both NS and NL, none coastally; subject to status change. Coastal breeding records (NS BBA); migratory corridors unknown
Birds	Buff-breasted Sandpiper	<i>Calidris subruficollis</i>	Special Concern	NS, NL	May 2012	Final Management Plan	N/A	No	Yes	Yes	Coastal observations in the 2024 NS ACCDC database. Only one coastal observation near PFDAs in the NL 2021 ACCDC database
Birds	Canada Warbler	<i>Cardellina canadensis</i>	Threatened *	NS	November 2020	Final Recovery Strategy	Not Identified	No	Potential Yes	Yes	*Proposed status change to Special Concern - see Updates tab

Taxon	Common Name	Scientific Name	Current SARA Status	Potential Overlap with RA	Last assessment	Recovery Document Status	Critical Habitat	Marine Habitat Exposure	Marine Movement Exposure	Terrestrial Exposure	Notes
Birds	Chimney Swift	<i>Chaetura pelagica</i>	Threatened	NS, NL	April 2018	Final Recovery Strategy	Partial ID	No	Potential Yes	Yes	Coastal breeding records (NS BBA); migratory corridors unknown Coastal observations near PFDAs in the 2024 NS and 2021 NL ACCDC database
Birds	Common Nighthawk	<i>Chordeiles minor</i>	Special Concern	NL, NS	April 2018	Draft	N/A	No	Potential Yes	Yes	Coastal breeding records (NS BBA); migratory corridors unknown *Proposed status change to Special Concern - see Updates
Birds	Eastern Whip-poor-will	<i>Antrostomus vociferans</i>	Threatened *	NS	December 2022	Final Recovery Strategy	Partial ID	No	Potential No	Potential No	Few records, no confirmed records of coastal breeding activity
Birds	Eastern Wood-pewee	<i>Contopus virens</i>	Special Concern	NS	December 2012	Proposed Management Plan	N/A	No	Potential Yes	Yes	Coastal breeding records (NS BBA); migratory

Taxon	Common Name	Scientific Name	Current SARA Status	Potential Overlap with RA	Last assessment	Recovery Document Status	Critical Habitat	Marine Habitat Exposure	Marine Movement Exposure	Terrestrial Exposure	Notes
Birds	Eskimo Curlew	<i>Numenius borealis</i>	Endangered	NL	November 2009	Final Recovery Strategy	Not Identified	No	Potential No	Potential No	corridors unknown No observations in the ACCDC 2021 database. Very few sightings in 100 years
Birds	Harlequin Duck, Eastern Population	<i>Histrionicus histrionicus</i>	Special Concern	NS, NL	November 2013	Final Management Plan	N/A	Yes	Yes	Yes	Coastal observations in the 2024 NS and 2021 NL ACCDC database
Birds	Horned Grebe, Magdalen Islands Population	<i>Podiceps auritus</i>	Endangered	NS, NL	December 2023	Final Recovery Strategy	Complete ID	Yes	Potential Yes	Yes	Coastal CH in Magdalen Islands; Coastal observations in the 2024 NS and 2021 NL ACCDC database; exact wintering grounds of the Magdalen Islands Population are unknown but are assumed to be along the Atlantic coast
Birds	Ivory Gull	<i>Pagophila eburnea</i>	Endangered	NS, NL	December 2023	Final Recovery Strategy	Partial ID	Yes	Yes	Yes	Coastal observations in the 2021 NL ACCDC database, no

Taxon	Common Name	Scientific Name	Current SARA Status	Potential Overlap with RA	Last assessment	Recovery Document Status	Critical Habitat	Marine Habitat Exposure	Marine Movement Exposure	Terrestrial Exposure	Notes
											observations in the NS database; movement tracks through area
Birds	Olive-sided Flycatcher	<i>Contopus cooperi</i>	Special Concern	NL, NS	April 2018	Final Recovery Strategy	N/A	No	Potential Yes	Yes	Extensive probable, few confirmed breeding sites in NS (BBA)
Birds	Piping Plover, melodus subspecies	<i>Charadrius melodus melodus</i>	Endangered	NS, NL	May 2001	Final Recovery Strategy and Action Plan	Complete ID	No	Yes	Yes	Coastal CH in NS; Coastal observations in the 2024 NS and 2021 NL ACCDC database
Birds	Red Crossbill, percna subspecies	<i>Loxia curvirostra percna</i>	Threatened	NS, NL	April 2016	Final Recovery Strategy	Not Identified	No	Potential Yes	Yes	CH not yet identified; Coastal observations in the 2024 NS and 2021 NL ACCDC database
Birds	Red Knot, rufa subspecies	<i>Calidris canutus rufa</i>	Endangered	NL, NS	November 2020	Final Recovery Strategy	Partial ID	No	Yes	Yes	Likely no large changes to consider to DUs; MOTUS estimated tracks indicate migratory departures into offshore environment

Taxon	Common Name	Scientific Name	Current SARA Status	Potential Overlap with RA	Last assessment	Recovery Document Status	Critical Habitat	Marine Habitat Exposure	Marine Movement Exposure	Terrestrial Exposure	Notes
Birds	Red-necked Phalarope	<i>Phalaropus lobatus</i>	Special Concern	NS, NL	November 2014	Final Management Plan	N/A	Yes	Yes	Yes	Coastal observations in the 2024 NS and 2021 NL ACCDC database; Phalarope assumed tracks offshore
Birds	Roseate Tern	<i>Sterna dougallii</i>	Endangered	NL, NS	April 2023	Final Recovery Strategy	Partial ID	Yes	Yes	Yes	NL - not breeding Sable Island, Magdalene Islands - large migration movements
Birds	Rusty Blackbird	<i>Euphagus carolinus</i>	Special Concern	NS, NL	April 2017	Final Management Plan	N/A	No	Potential Yes	Yes	Coastal observations in the 2024 NS and 2021 NL ACCDC database
Birds	Savannah Sparrow, princeps subspecies	<i>Passerculus sandwichensis princeps</i>	Special Concern	NS, NL	May 2023	Final Management Plan	N/A	No	Yes	Yes	Coastal observations in the 2024 NS and 2021 NL ACCDC database; MOTUS migratory tracks to and from Sable Island
Birds	Short-eared Owl	<i>Asio flammeus</i>	Special Concern*	NL, NS	April 2021	Final Management Plan	N/A	No	Potential Yes	Yes	*Proposed status change to Threatened - see Updates tab

Taxon	Common Name	Scientific Name	Current SARA Status	Potential Overlap with RA	Last assessment	Recovery Document Status	Critical Habitat	Marine Habitat Exposure	Marine Movement Exposure	Terrestrial Exposure	Notes
Birds	Wood Thrush	<i>Hylocichla mustelina</i>	Threatened	NS	November 2012	Draft		No	Potential Yes	Yes	
Mammals	Little Brown Myotis	<i>Myotis lucifugus</i>	Endangered	NS	November 2013	Final Recovery Strategy	Partial ID	No	Yes	Yes	Coastal observations in the 2024 NS ACCDC database
Mammals	Northern Myotis	<i>Myotis septentrionalis</i>	Endangered	NS, NL	November 2013	Final Recovery Strategy	Partial ID	No	Yes	Yes	Coastal observations in the 2024 NS ACCDC database. No coastal observations in the 2021 NL database
Mammals	Tricoloured Bat	<i>Permyotis subflavus</i>	Endangered	NS	November 2013	Final Recovery Strategy	Partial ID	No	Yes	Yes	Coastal observations in the 2024 ACCDC database

SARA Status Updates

Taxon	Common Name	Scientific Name	COSEWIC Status	Current SARA Status	Proposed SARA Status	Potential Overlap with RA	Last assessment	Stage of current assessment/status	Marine Habitat Exposure	Marine Movement Exposure	Terrestrial Exposure	Notes
Birds	Barn Swallow	<i>Hirundo rustica</i>	Special Concern	Threatened	Special Concern	NL, NS	May 2021	Final recovery strategy draft; Under consideration for status change	Potential Yes	Yes	Yes	MOTUS: assumed tracks in the offshore around NS; Unknown swallow species detected 40km offshore foraging near wind farms
Birds	Bobolink	<i>Dolichonyx oryzivorus</i>	Special Concern	Threatened	Special Concern	NL, NS	May 2022	Under consideration for status change	No	Potential Yes	Yes	Proposed Critical Habitat in both NS and NL, none coastally; subject to status change. Coastal breeding records (NS BBA); migratory corridors unknown
Birds	Canada Warbler	<i>Cardellina canadensis</i>	Special Concern	Threatened	Special Concern	NS	November 2020	Under consideration for status change	No	Potential Yes	Yes	Coastal breeding records (NS BBA); migratory corridors unknown

Taxon	Common Name	Scientific Name	COSEWIC Status	Current SARA Status	Proposed SARA Status	Potential Overlap with RA	Last assessment	Stage of current assessment/status	Marine Habitat Exposure	Marine Movement Exposure	Terrestrial Exposure	Notes
Birds	Eastern Whip-poor-will	<i>Antrorstomus vociferus</i>	Special Concern	Threatened	Special Concern	NS	December 2022	Under consideration for status change	No	Potential No	Potential No	Few records, no confirmed records of coastal breeding activity
Birds	Gray-cheeked Thrush (minimus subspecies)	<i>Catharus minimus minimus</i>	Threatened	-	Threatened	NL, NS	December 2023	Under consideration for addition	No	Potential Yes	Yes	Coastal and island breeding sites around NL, Potential breeding sites in NS (BBA); migrates through NS
Birds	Hudsonian Godwit	<i>Limosa haemastica</i>	Threatened	-	Threatened	NL, NS	May 2019	Under consideration for addition	No	Yes	Yes	Track data of birds offshore provided by the Shorebird Science and Conservation Collective.
Birds	Leach's Storm-Petrel	<i>Oceanodroma leucorhoa</i>	Threatened	-	Threatened	NL, NS	November 2020	Under consideration for addition	Yes	Yes	Yes	Extensive use of the offshore environment; nests in colonies coastally

Taxon	Common Name	Scientific Name	COSEWIC Status	Current SARA Status	Proposed SARA Status	Potential Overlap with RA	Last assessment	Stage of current assessment/status	Marine Habitat Exposure	Marine Movement Exposure	Terrestrial Exposure	Notes
Birds	Lesser Yellowlegs	<i>Tringa flavipes</i>	Threatened	-	-	NL, NS	November 2020	Under consideration for addition	No	Yes	Yes	Track data from shorebird collective. MOTUS: confirmed tracks to Sable Island, assumed tracks in the offshore in NS
Birds	Red Knot <i>rufa</i> (5 populations/DUs)	<i>Calidris canutus rufa</i>	Endangered/Threatened/ Special Concern	Endangered/Threatened/ Special Concern	-	NL, NS	November 2020	Undergoing DU change	No	Yes	Yes	Likely no large changes to consider to DUs; MOTUS estimated tracks indicate migratory departures into offshore environment
Birds	Short-eared Owl	<i>Asio flammeus</i>	Threatened	Special Concern	Threatened	NL, NS	April 2021	Under consideration for status change	No	Potential Yes	Yes	
Mammals	Eastern Red Bat	<i>Lasiurus borealis</i>	Endangered	-	Endangered	NL, NS	May 2023	Under consideration for addition	Yes	Yes	Yes	
Mammals	Hoary Bat	<i>Lasiurus cinereus</i>	Endangered	-	Endangered	NL, NS	May 2023	Under consideration for addition	Yes	Yes	Yes	

Taxon	Common Name	Scientific Name	COSEWIC Status	Current SARA Status	Proposed SARA Status	Potential Overlap with RA	Last assessment	Stage of current assessment/status	Marine Habitat Exposure	Marine Movement Exposure	Terrestrial Exposure	Notes
Mammals	Silver-haired Bat	<i>Lasionycteris noctivagans</i>	Endangered	-	Endangered	NL, NS	May 2023	Under consideration for addition	Potential Yes	Yes	Yes	

COSEWIC Assessment Updates

Taxonomic group	Common Name	Scientific Name	Potential Overlap with RA	COSEWIC Status	Current SARA Status	Last Assessment	Assessment Anticipated Date/Priority	Stage of current assessment	Marine Habitat Exposure	Marine Movement Exposure	Terrestrial Exposure	Notes
Birds	Snowy Owl	<i>Bubo scandiacus</i>	NL, NS	Under re-assessment	Not at Risk	April 1995	November 2024	Revision to initial report (Fully Updated Report)	Yes	Yes	Yes	Found coastally in non-breeding season (eBird); known to use ice flows offshore
Birds	Least Bittern	<i>Ixobrychus exilis</i>	NS	Under re-assessment	Threatened	April 2009	April 2024	Revision to final report (Fully Updated Report)	No	Potential No	Potential No	No recently confirmed breeding sites in NS (BBA)
Birds	Short-billed Dowitcher	<i>Limnodromus griseus</i>	NL, NS	Under assessment	-	-	November 2024	Revision to final report (New Report)	No	Yes	Yes	Track data from shorebird collective. MOTUS: assumed tracks in the offshore in NS
Birds	Horned Lark	<i>Eremophila alpestris</i>	NL, NS	Candidate for future assessment	-	-	High Priority	Proposed	No	Potential Yes	Yes	eBird breeding observations in NL, and non-breeding and migratory coastal observations in NS
Birds	Bermuda Petrel	<i>Pterodroma cahow</i>	NS	Candidate for future assessment	-	-	High Priority	Proposed	Yes	Yes	Potential Yes	Found in offshore environment during non-breeding season and on foraging trips during breeding season. Stop-

Taxonomic group	Common Name	Scientific Name	Potential Overlap with RA	COSEWIC Status	Current SARA Status	Last Assessment	Assessment Anticipated Date/Priority	Stage of current assessment	Marine Habitat Exposure	Marine Movement Exposure	Terrestrial Exposure	Notes
												over sites are not confirmed
Birds	American Tree Sparrow	<i>Spizella arborea</i>	NL, NS	Candidate for future assessment	-	-	High Priority	Proposed	No	Potential Yes	Yes	Overwintering along NS, ebird breeding and migratory observations along coastal NL - ebird non-breeding and migration observations along coastal NS
Birds	Arctic Tern	<i>Sterna paradisaea</i>	NL, NS	Candidate for future assessment	-	-	High Priority	Proposed	Yes	Yes	Yes	Active colonial nesting bird, known marine forager with marine movements.
Birds	Nelson's Sharp-tailed Sparrow	<i>Ammodramus nelsoni</i>	NS	Candidate for future assessment	-	-	Mid Priority	Proposed	No	Unknown	Yes	Found coastally in saltmarshes ; renamed Nelson's Sparrow
Birds	Black Tern	<i>Chlidonias niger</i>	NS	Candidate for future assessment	-	-	Low Priority	Proposed	Yes	Yes	Yes	Relatively low abundance in region; potentially low exposure

Taxonomic group	Common Name	Scientific Name	Potential Overlap with RA	COSEWIC Status	Current SARA Status	Last Assessment	Assessment Anticipated Date/Priority	Stage of current assessment	Marine Habitat Exposure	Marine Movement Exposure	Terrestrial Exposure	Notes
Birds	Purple Martin	<i>Progne subis</i>	NS	Candidate for future assessment	-	-	Low Priority	Proposed	No	Potential No	Potential No	eBird: Very low abundance in region; likely low exposure One observation of probable breeding PUMA in second NS Breeding Bird Atlas
Birds	Blackpoll Warbler	<i>Setophaga striata</i>	NL, NS	Candidate for future assessment	-	-	Low Priority	Proposed	No	Yes	Yes	eBird: observations on NL (including coasts); breeding observations coastally including pre and post breeding movements in NS MOTUS: assumed tracks in the offshore and coastally in NS
Birds	Common Tern	<i>Sterna hirundo</i>	NL, NS	Candidate for future assessment	-	-	Low Priority	Proposed	Yes	Yes	Yes	Active colonial nesting bird, known marine forager with marine movements.

IUCN Updates

Taxonomic group	Common Name	Scientific Name	Potential Overlap with RA	IUCN Status	IUCN Trend	Marine Habitat Exposure	Marine Movement Exposure	Terrestrial Exposure	Notes
Birds	Black Scoter	<i>Melanitta americana</i>	NS, NL	Near Threatened	Decreasing	Yes	Yes	Yes	
Birds	Common Grackle	<i>Quiscalus quiscula</i>	NS, NL	Near Threatened	Decreasing	No	Potential Yes	Yes	Extensive confirmed breeding sites coastally in NS
Birds	Semipalmated Sandpiper	<i>Calidris pusilla</i>	NS, NL	Near Threatened	Decreasing	No	Yes	Yes	
Birds	Black-capped Petrel	<i>Pterodroma hasitata</i>	NS, NL	Endangered	Decreasing	Yes	Yes	Yes	
Birds	Common Eider	<i>Somateria mollissima</i>	NS, NL	Near Threatened	Unknown	Yes	Yes	Yes	
Birds	Desertas Petrel	<i>Pterodroma deserta</i>	NL	Vulnerable	Stable	Yes	Yes	Yes	
Birds	Fea's Petrel	<i>Pterodroma feae</i>	NL	Near Threatened	Unknown	Yes	Yes	Yes	
Birds	Horned Grebe	<i>Podiceps auritus</i>	NS, NL	Vulnerable	Decreasing	Yes	Yes	Yes	
Birds	Long-tailed Duck	<i>Clangula hyemalis</i>	NS, NL	Vulnerable	Decreasing	Yes	Yes	Yes	
Birds	Sooty Shearwater	<i>Ardenna grisea</i>	NS, NL	Near Threatened	Decreasing	Yes	Yes	Yes	
Birds	Zino's Petrel	<i>Pterodroma madeira</i>	NS, NL	Endangered	Stable	Yes	Yes	Yes	