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Action Plan Series

Multi-species Action Plan for Gros Morne National Park of Canada

Gros Morne National Park of Canada

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Canada

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For copies of the action plan, or for additional information on species at risk, including COSEWIC Status Reports, residence descriptions, recovery strategies, and other related recovery documents, please visit the SAR Public Registry[1].

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[1] www.registrelep.gc.ca/default_e.cfm

Recommendation and Approval Statement

The Parks Canada Agency led the development of this federal action plan. The Vice-president, Operations, Eastern Canada, upon recommendation of the relevant Field Unit Superintendent, hereby approves this document indicating that the relevant Species at Risk Act requirements related to action plan development have been fulfilled in accordance with the Act.

Recommended by:

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Preface

The federal, provincial, and territorial government signatories under the Accord for the Protection of Species at Risk (1996)[2] agreed to establish complementary legislation and programs that provide for effective protection of species at risk throughout Canada. Under the *Species at Risk Act* (S.C. 2002, c.29) (SARA), the federal competent ministers are responsible for the preparation of action plans for species listed as Extirpated, Endangered, and Threatened for which recovery has been deemed feasible. They are also required to report on progress five years after the publication of the final document on the SAR Public Registry.

Under SARA, one or more action plan(s) provides the detailed recovery planning that supports the strategic direction set out in the recovery strategy for the species. The plan outlines what needs to be done to achieve the population and distribution objectives (previously referred to as recovery goals and objectives) identified in the recovery strategy, including the measures to be taken to address the threats and monitor the recovery of the species, as well as the proposed measures to protect critical habitat that has been identified for the species. The action plan also includes an evaluation of the socio-economic costs of the action plan and the benefits to be derived from its implementation. The action plan is considered one in a series of documents that are linked and should be taken into consideration together with the COSEWIC status report, the recovery strategy, and other action plans produced for these species.

The Minister responsible for the Parks Canada Agency (the Minister of the Environment and Climate Change) is the competent minister under SARA for the individuals, residences and critical habitat of listed species in Gros Morne National Park and has prepared this action plan to implement the recovery strategies, as per section 47 of SARA. To the extent possible, it has been prepared in cooperation with Environment and Climate Change Canada, Fisheries and Oceans Canada, the Province of Newfoundland and Labrador, the Qalipu Mi'kmaq First Nation Band, and the Miawpukek First Nation, as per section 48(1) of SARA.

Implementation of this action plan is subject to appropriations, priorities, and budgetary constraints of Parks Canada and other participating jurisdictions and organizations.

Acknowledgments

Thanks are extended to the Qalipu Mi'kmaq First Nation Band, the Miawpukek First Nation, Environment Canada, and the Newfoundland and Labrador Department of Environment and Conservation for reviewing a draft of this action plan. Parks Canada would also like to thank Natureserve Canada and the Atlantic Canada Conservation Data Centre for providing data and information used in assessing the status of species in Gros Morne National Park.

[2] www.ec.gc.ca/media_archive/press/2001/010919_b_e.htm

Executive Summary

The *Multi-species Action Plan for Gros Morne National Park of Canada* applies to lands and waters occurring within the boundaries of Gros Morne National Park of Canada (GMNP). The plan meets the requirements for action plans set out in the *Species At Risk Act* (SARA s.47) for species requiring an action plan and that regularly occur in these sites. Measures described in this plan will also provide benefits for other species of conservation concern that regularly occur at GMNP.

Where it has been determined that the sites can conduct management activities to help recover and/or manage a species, site-specific objectives are identified in this plan and represent the site's contribution to objectives presented in federal recovery strategies and management plans. Species at risk, their residences, and their habitat are protected by existing regulations and management regimes in national parks and national historic sites as well as by SARA. Additional measures that will contribute to the survival and recovery of the species at the sites are described in this plan. These measures were identified based on threats and actions outlined in federal and provincial status assessments and recovery documents, as well as knowledge of the status and needs of each species at each site. Population monitoring measures are also identified for the species for which management activities at the sites can contribute to recovery.

Critical habitat in Gros Morne National Park was identified in the Recovery Strategies for Piping Plover and American Marten, and Parks Canada has legally protected these parcels of critical habitat. Piping plovers began nesting at Western Brook Beach in Gros Morne National Park in 2012, and this site is identified as critical habitat in this action plan. Additional measures to protect critical habitat in the Park are presented in this action plan.

Measures proposed in this action plan will have limited socio-economic impact and place no restrictions on land use outside of Gros Morne National Park. Indirect costs are expected to be minimal, while benefits will include positive impacts on park ecological integrity, enhanced visitor opportunities, greater awareness and appreciation of the value of biodiversity to Canadians, and opportunities for engagement of local communities and Aboriginal groups.

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1. Context

Gros Morne National Park of Canada (hereafter Gros Morne National Park, the Park or GMNP) was established in 1973 and protects 1,805 km^2 of the Great Northern Peninsula of Newfoundland (Figure 1). The Park was established to protect representative examples of the Western Newfoundland Highlands and St. Lawrence Lowlands natural regions. It is characterized by complex relief including large areas of coastal plain, deep fiords and valleys created by glaciation, steep slopes that rise from sea level to elevations exceeding 700 m, and the Long Range Plateau. Boreal forest dominated by Balsam Fir and Black Spruce covers 44% of the Park, while Arctic-alpine habitat and barrens (35%), wetland (11%) and fresh water (9%) ecosystems are also important. Most of the western boundary of the park extends to the low tide line and spans a 60 km section of the Gulf of St. Lawrence coast. Eight communities located in enclaves within or adjacent to the Park are home to approximately 4,000 people. In 1987 the Park was designated as a UNESCO World Heritage Site in recognition of its exceptional natural beauty and outstanding examples of major stages in the Earth's geological evolution.

Maintenance and restoration of ecological integrity is the first priority of national parks (*Canada National Parks Act* (CNPA) s.8(2)). Species at risk, their residences, and their habitat are therefore protected in Canada's national parks by existing national park regulations and management regimes as well as by SARA. In addition, the *Species at Risk Act* (SARA) prohibitions protecting individuals and residences apply automatically when a species is listed, and all critical habitat in national parks must be legally protected within 180 days of being identified.

Recovery measures for species at risk will be integrated within the framework of Parks Canada's ongoing ecological integrity programs. National parks maintain comprehensive, scientifically rigorous ecological integrity monitoring and restoration programs that are organized according to the major ecosystems present in the Park. The recovery measures described in this action plan are therefore organized in the same manner. Parks Canada's ecological integrity programs make contributions to the recovery of species at risk by providing inventory and monitoring data, and through the implementation of habitat restoration projects and other conservation action on the ground. The species-directed measures outlined in this plan will in turn contribute to maintaining and improving the ecological integrity of Gros Morne National Park by improving the conservation status of native species and their habitat. Species at risk information will also be integrated into the Park's comprehensive visitor experience, education and outreach programs, helping to improve awareness, appreciation, and support for recovery efforts in Gros Morne National Park and beyond.

A number of federal and provincial recovery strategies and plans, management plans, and action plans have been prepared for species considered in this action plan. Along with status assessments, those documents provide guidance for the recovery of individual species, including strategic directions, recovery objectives, critical habitat, and threats. This action plan was developed and will be implemented in a manner that is

consistent with those recovery documents, and should be viewed as part of this body of linked strategies and plans.

1.1 Scope of the Action Plan

The geographic scope of this action plan includes all lands and waters within the boundary of Gros Morne National Park, as described in Schedule 1 of the CNPA (Figure 1). This multi-species action plan has been written specifically for Gros Morne National Park because the Parks Canada Agency (PCA) is legally responsible for species at risk on PCA lands, has the ability to take direct conservation action, and deals with different threats, legislation, and management priorities than areas outside the Park.

Table 1. Species included in the Multi-species Action Plan for Gros Morne National Park.

Species	Scientific Name	COSEWIC Assessment	SARA Status	Provincial Status
American Eel	*Anguilla rostrata*	Threatened	Not listed	Vulnerable
American Marten (Newfoundland pop.)	*Martes americana*	Threatened	Threatened	Threatened
Barrow's Goldeneye (eastern population)	*Bucephala islandica*	Special Concern	Special Concern	Vulnerable
Gray-cheeked Thrush (*minimus* subspecies)	*Catharus mimimus*	Not assessed	Not listed	Threatened
Harlequin Duck (eastern population)	*Histrionicus histrionicus*	Special Concern	Special Concern	Vulnerable
Little Brown Myotis	*Myotis lucifugus*	Endangered	Endangered	Not listed
Mountain Fern	*Thelypteris quelpaertensis*	Not assessed	Not listed	Vulnerable
Northern Myotis	*Myotis septentrionalis*	Endangered	Endangered	Not listed
Olive-sided Flycatcher	*Contopus cooperi*	Threatened	Threatened	Threatened
Piping Plover (*melodus* subspecies)	*Charadrius melodus*	Endangered	Endangered	Endangered
Red Crossbill (*percna* subspecies)	*Loxia curvirostra*	Endangered	Endangered	Endangered
Red Knot (*rufa* subspecies)	*Calidris canutus*	Endangered	Endangered	Endangered
Rusty Blackbird	*Euphagus carolinus*	Special Concern	Special Concern	Vulnerable
Short-eared Owl	*Asio flammeus*	Special Concern	Special Concern	Vulnerable

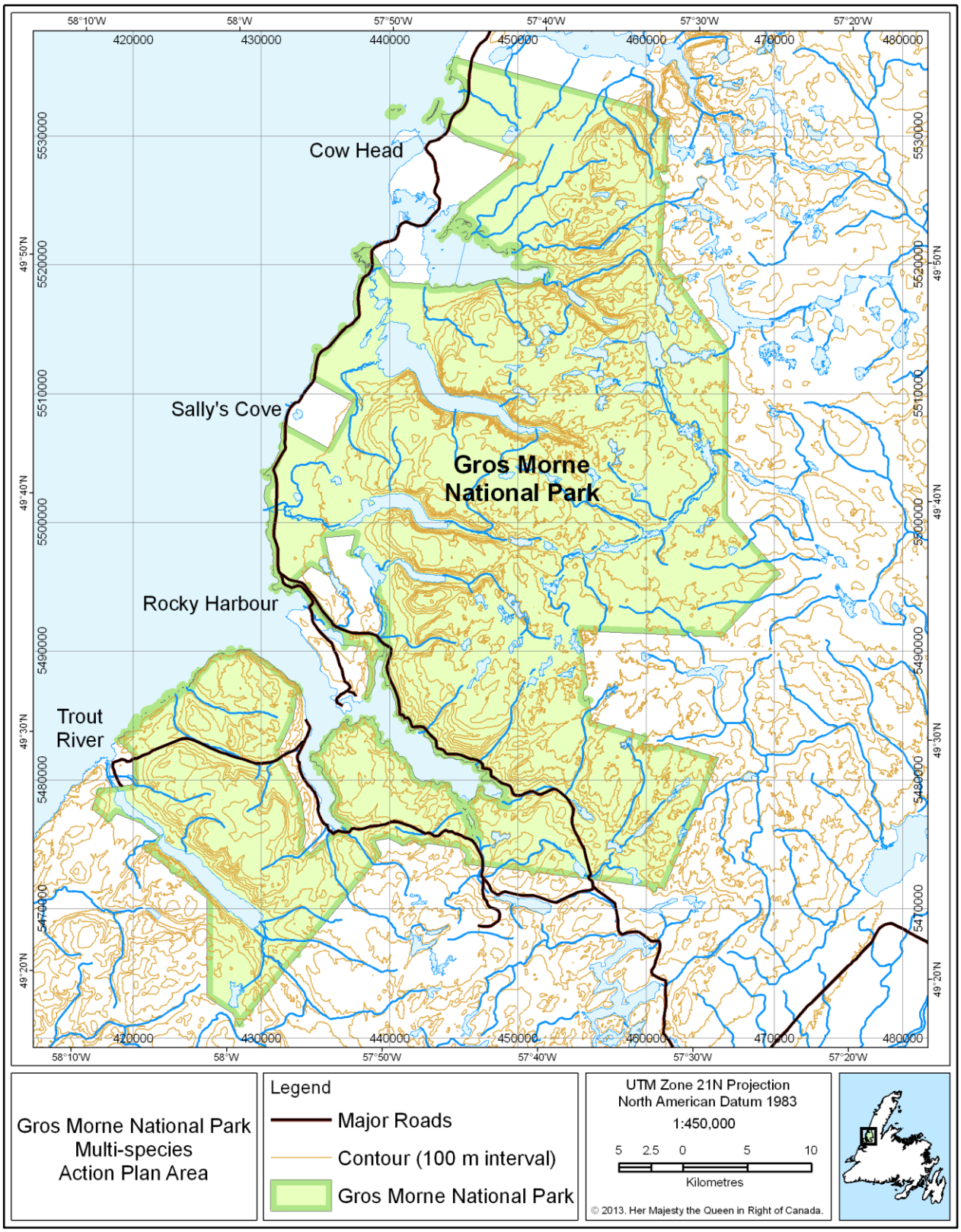

Figure 1. Geographic scope for the Multi-species Action Plan for Gros Morne National Park of Canada. The park is located in western Newfoundland and includes lands and waters totaling 1,805 km^2.

This action plan addresses SARA-listed species that regularly occur in GMNP which require an action plan under SARA (s.47), as well as other species of conservation concern (Table 1). This approach both responds to the legislated requirements of the SARA and provides the Parks Canada Agency with a comprehensive plan for species conservation and recovery at these sites. The plan will be amended as required to meet SARA requirements for action planning.

2. Recovery Objectives and Measures

The opportunity for Parks Canada to undertake management actions at Gros Morne National Park that will contribute to the local and national recovery of each species was assessed. Park-specific population and distribution objectives have been developed to identify the contribution that the Park can make towards achieving the national objectives presented in recovery strategies and management plans (Table 2). Because they are directly linked to population and distribution objectives, monitoring activities are reported in Table 2 rather than in the table of recovery measures (Table 3). In some cases the opportunity for Gros Morne National Park to contribute to the recovery of a species will be relatively small, for example due to the distribution of the species in Canada or because the primary threats it faces occur outside the Park. In these cases site-specific objectives and conservation actions may be limited to protection measures in place under the CNPA and SARA, population monitoring, and habitat maintenance and restoration through the existing park management regime.

Table 2. Population and distribution objectives, status, and approach to monitoring and recovery for species at risk occurring in Gros Morne National Park.

Species (SARA status)	National objectives (from recovery strategy or management plan)[1]	Population & Distribution objectives for GMNP (contribution to national goal)	Trend in GMNP over last 5 years (2008-2013)	Population monitoring[2]	General Information and Broad Park Approach
Piping Plover – *melodus* (Endangered)	(1) Maintain at least 255 pairs in Atlantic Canada, increasing to 310 pairs over time; (2) fledge at least 1.65 chicks per pair	Maintain productivity of 1.65 chicks per pair per year, calculated as a 5 year running average	Unknown: Population zero 1975-2008, 1-2 pairs 2009-2013; productivity 1.67 fledglings per pair per year (2009-2013)	Suitable habitat is surveyed each spring; once a pair is found productivity is monitored following Parks Canada's Piping Plover monitoring protocol	Mitigate disturbance of breeding pairs, which is identified as a high-level threat (Environment Canada 2012b). Each spring all suitable breeding habitat is surveyed and when a nesting pair is observed the section of beach is closed to the public until chicks are 28 days old. Interpretive panels and signage are used to promote compliance with beach regulations (e.g., dogs on leash) and, when closures occur, to redirect visitors to open beaches.
American Marten – Newfoundland population (Threatened)	(1) Increase the wild population to establish a stable & self-sustaining population (2) Maintain existing populations & establish in adjacent areas where the potential for occupancy is high	*Short term goal*: Maintain occupancy of potential marten habitat at current level. *Long term goal*: Maintain or increase occupancy of potential marten habitat	Increasing: Population of marten in GMNP presumed extirpated through 1990s, estimated as <5 in 2001-2002 and 15-20 in 2012	Monitoring will consist of presence (occupancy) detection in suitable habitat units using winter track transects supplemented with observations obtained through hair trapping, incidental sightings and citizen science monitoring	Key threats are incidental mortality from snaring and trapping and habitat loss and degradation (Environment Canada 2013b). These are relevant in GMNP because residents are permitted to snare Snowshoe Hare and because overbrowsing by moose may have led to habitat degradation.
Red Crossbill – *percna* (Endangered)	Interim goal: to restore species to a self-sustaining population level able to withstand stochastic events	No objective established: though occasionally observed this species is not known to regularly occur in GMNP	Red Crossbill has not been observed in GMNP during the past 5 years	Continue winter bird surveys under the Park ecological integrity monitoring program (includes broadcast of Red Crossbill vocalizations)	Red Crossbill are transient breeders and may never have been common in GMNP; Focus on monitoring (Environment Canada 2012a) unless and until a population is identified in GMNP.

Species (SARA status)	National objectives (from recovery strategy or management plan)[1]	Population & Distribution objectives for GMNP (contribution to national goal)	Trend in GMNP over last 5 years (2008-2013)	Population monitoring[2]	General Information and Broad Park Approach
Red Knot – *rufa* (Endangered)	Not applicable (Recovery Strategy not posted at time of writing)	No objective established: low numbers pass through GMNP on migration, so park is of limited importance to the species' national recovery	Unknown: stopover site identified in 2010 and has been monitored since; Possibly declining due to population-wide trend	Monitor Belldowns Point stopover site during fall migration using Environment Canada's Atlantic Canada Shorebird Survey protocol	Belldowns Point was recently identified as a stopover site (August to October). Disturbance at stopovers is considered a low-level threat (Garland and Thomas 2009) that can be mitigated through compliance with existing park regulations (dogs on leash, ATV prohibitions, etc.).
Olive-sided Flycatcher (Threatened)	Not applicable (Recovery Strategy not posted at time of writing)	No objective established: no threats known in park and GMNP is of limited importance to the species' national recovery	Unknown; species still widespread in park	Opportunistically record observations and any changes to the status of species in GMNP	Breeds in forests throughout GMNP; continue to protect and maintain habitat.
Barrow's Goldeneye - eastern pop. (Special concern)	From Management Plan: (1) Maintain and or increase population size & range. (2) Maintain ≥6,800 individuals over next 10 years.	No objective established: Status in GMNP uncertain though park is likely of limited importance to the species' national recovery	Unknown; small numbers winter along coast each year; breeding status unknown	Opportunistically record observations and any changes to the status of species in GMNP	Barrow's Goldeneye may breed in the highlands of GMNP (Environment Canada 2013a); focus is on clarifying breeding status in GMNP.
Harlequin Duck - eastern pop. (Special concern)	From Management Plan: Increase winter population to 3,000 including ≥1,000 breeding-aged females in 3 out of 5 years	No objective established: no threats known in park and GMNP is of limited importance to the species' national recovery	Stable based on regular surveys since 1997	Continue Harlequin Duck population size and productivity surveys at 5-year intervals under the GMNP ecological integrity monitoring program	Existing park management regime appears to be sufficient; continue to protect and maintain habitat to support current population (Environment Canada 2007).
Rusty Blackbird (Special concern)	Not applicable (Management Plan not posted at time of writing)	No objective established: no threats known in park and GMNP is of limited importance to the species' national recovery	Unknown	Opportunistically record observations and any changes to the status of species in GMNP	Continue to protect and maintain habitat.

Species (SARA status)	National objectives (from recovery strategy or management plan)[1]	Population & Distribution objectives for GMNP (contribution to national goal)	Trend in GMNP over last 5 years (2008-2013)	Population monitoring[2]	General Information and Broad Park Approach
Short-eared Owl (Special concern)	Not applicable (Management Plan not posted at time of writing)	No objective established: no threats known in park and GMNP is of limited importance to the species' national recovery	Unknown	Opportunistically record observations and any changes to the status of species in GMNP	Occasionally breeds in the park; continue to protect and maintain habitat (Schmelzer 2005).
Little Brown Myotis (Endangered)	Not applicable (Recovery Strategy not posted at time of writing)	No objective established: no threats known in park and GMNP is of limited importance to the species' national recovery	Unknown	Complete inventory initiated in 2013; develop protocol to monitor trends in occurrence and activity levels	Status in GMNP poorly understood; immediate need is baseline data on distribution and relative abundance, as well as protection of any roosts in park buildings. Measures related to white nose syndrome will be considered if hibernacula are found in GMNP.
Northern Myotis (Endangered)	Not applicable (Recovery Strategy not posted at time of writing)	No objective established: no threats known in park and GMNP is of limited importance to the species' national recovery	Unknown	Complete inventory initiated in 2013; develop protocol to monitor trends in occurrence and activity levels	Status of in GMNP poorly understood; immediate need is baseline data on distribution and relative abundance, as well as protection of any roosts in park buildings. Measures related to white nose syndrome will be considered if hibernacula are found in GMNP.
Mountain Fern (Not listed)	Not applicable	No objective established: no threats known in park and species is not listed under SARA	Unknown; was stable based on 2002/2004 surveys	Conduct monitoring as described in the 2011 NL Management Plan (5 subplots every 5 years, complete census every 10 years; Wildlife Division 2011)	Continue to protect and maintain habitat to support current population; monitor population periodically to meet stewardship responsibility.
American Eel (Not listed)	Not applicable	No objective established: no major threats known in park and GMNP is of limited importance to the species' national recovery	Unknown	Monitor occurrence and relative abundance of adult eels in major watersheds of GMNP	Distribution and abundance in GMNP poorly understood and needs clarification; Continue to protect and maintain habitat; opportunistically remediate impassable culverts during road maintenance (Wildlife Division 2010a)
Gray-cheeked Thrush - Nfld pop. (Not listed)	Not applicable	No objective established: this species is not listed under SARA and status in GMNP poorly understood	Unknown; has declined in GMNP since 1970s (SSAC 2010)	Opportunistically record sightings and any changes to the status of species in GMNP	Continue to protect and maintain habitat; Given the dearth of information. GMNP should support research where possible (Wildlife Division 2010b)

[1] National objectives from recovery strategies or management plans available on or before April 7, 2014.
[2] Where population and distribution objectives have been established for GMNP, monitoring is designed to directly measure success in achieving those goals; otherwise baseline population monitoring efforts necessary for park stewardship, management and reporting are described.

2.1 Measures to be Taken and Implementation Schedule

Measures that are proposed to achieve the site-based population and distribution objectives, along with any measures required to protect the species and to learn more about them, are presented in Table 3. For each measure, timelines, targets, and desired outcomes were established, and the approach by which progress will be measured was determined.

In addition to the implementation of conservation measures that contribute to species recovery, Parks Canada has an important role in promoting awareness and appreciation of species at risk. Providing opportunities for the public to learn about and experience national parks is a central component of Parks Canada's mandate. Thus national parks afford an opportunity and an imperative for engaging the public in species at risk recovery, so a suite of public outreach, education, and visitor activities was developed as part of the action planning process (Table 4). These will engage audiences using a broad range of approaches and levels of participation, including passive media such as interpretive panels and print publications, interactive outlets such as public events and on-demand electronic information, and hands-on activities where the public can participate in monitoring or recovery.

Table 3: Recovery measures for species at risk occurring in Gros Morne National Park. Measures are grouped by ecosystem indicator, as defined under the park's ecological integrity monitoring program.

Species	Measure number	Measure description	Desired outcome	How will progress toward the outcome be measured?	Threat or recovery measure addressed	Timeline
Coastal Ecosystem						
Piping Plover	1	Reduce human disturbance of breeding plovers: Take steps to reduce disturbance of breeding plovers, including use of interpretive panels and signage to promote compliance with disturbance mitigation measures (e.g. dogs on leash) and, if warranted, area closures in the vicinity of nests coupled with signage to redirect visitors to nearby open beaches	Annual productivity is ≥1.65 chicks per pair per year (calculated as a 5 year running average)	Each year productivity of each plover pair is monitored following Parks Canada's Piping Plover monitoring protocol	Reduce human disturbance of breeding pairs (Environment Canada 2012b)	Ongoing
Red Knot	2	Visitor awareness about shorebird stopovers: Install interpretive panels and signage at Belldown's Point and other stopover sites identified in future	Information on site importance to shorebirds and park regulations is available to visitors to stopover sites to encourage compliance and minimize human disturbance	Appropriate information panels and signage is in place at stopover sites and maintained through time	Reduce human disturbance at stopover sites (a low-level threat in GMNP; see also Garland and Thomas 2009)	Ongoing
Forest Ecosystem						
American Marten	3	Snaring Regulations: Develop initiatives to promote compliance with brass / picture cord snare wire regulations in GMNP and adjacent areas	No stainless steel snare wire is used in GMNP	Compliance is monitored by field staff & park wardens	Reduce risk of incidental mortality during snowshoe hare snaring (high level threat; Environment Canada 2013)	Ongoing
American Marten	4	Habitat Mapping: update GIS land cover maps for GMNP, then, in conjunction with island-wide efforts, use updated classification to map suitable and critical habitat for marten	Marten habitat in GMNP is mapped by 2015	(1) Updated GIS landcover data is available by 2015 (2) Map of suitable marten habitat is produced by 2016	Map critical habitat and other suitable habitat throughout GMNP	2016

Species	Measure number	Measure description	Desired outcome	How will progress toward the outcome be measured?	Threat or recovery measure addressed	Timeline
American Marten	5	Moose population management: Reduce moose populations and maintain them at the target density of 1-2 moose/ km^2	Moose population density is reduced by 2018 and is maintained at between 1 and 2 moose/km-sq by 2023	Aircraft-based moose population surveys conducted at 5 year intervals	Habitat loss and degradation (Parks Canada 2011, Environment Canada 2013b)	Ongoing
Little Brown Myotis & Northern Myotis	6	Bat Inventory: assess distribution and relative abundance of bats in GMNP using digital ultrasonic activity recorders	The distribution and relative abundance of bat species in GMNP is understood and a long-term bat monitoring protocol developed by 2016	Data on the activity levels of bats, assessed by recording species-specific rates of calling, will be available and an associated report and monitoring protocol is available	Clarify population status in GMNP	2013-2016
Little Brown Myotis	7	Bat Best Management Practices: Develop and implement BMPs for maintenance of infrastructure used by roosting bats	Bat BMPs are available and in use by 2016	BMPs are available by Spring 2016	Protection of individuals and residences	2016
Freshwater Ecosystem						
Barrow's Goldeneye	8	Breeding status of Barrow's Goldeneye: Monitor use of nest boxes by Barrow's Goldeneye	Breeding status in GMNP is clarified by 2018	12 boxes were deployed in 2013; data and a report on occupancy of nest boxes by Barrow's Goldeneye from 2014-2018 will be available	Clarify breeding status in GMNP (medium priority research need; Environment Canada 2013a)	As resources allow
American Eel	9	Mitigate barriers to fish passage: Implement BMPs for fish passage at road crossings when culverts are replaced during road maintenance	All new / replaced culverts in GMNP are passable to eels	Assessment of proportion of culverts that are passable to fish following installation or replacement	Loss of freshwater habitat due to anthropogenic barriers (Wildlife Division 2010a)	Ongoing

Table 4. Outreach, education and visitor experience measures related to species at risk in Gros Morne National Park.

Measure[1]	Measure number	Desired outcome	Proposed Measures[2]	How will progress toward the outcome be measured?
Develop & implement media strategy	1	At least one media story highlighting species at risk in GMNP each year	• Develop and implement a media plan (print, film, radio, etc.) to disseminate species at risk messaging through news media, web content and social media • Illustrated with engaging stories and images	• PCA media monitoring system
Contribute to in-park school programming	2	School students in region are aware of species at risk conservation in GMNP	• Include species at risk information in programs offered for in-park school visits • When requested contribute to regional and national curriculum-linked school programming delivered by partners regarding species at risk • Support outreach & education resource material development for species at risk with conservation partners	• Up-to-date content is available to education partners and programs
Incorporate species at risk monitoring and recovery into visitor experience opportunities	3	Foster connection to place by incorporating species-at-risk content into visitor experience opportunities	• Species at risk information is included in training for front line staff • Develop an eel monitoring interpretive program that integrates park visitors and presents First Nations perspectives • Promote and support provincial marten hair snagging program with volunteers and First Nation partners in region • Include species at risk content in interpretive programs presenting regional First Nations culture	• Numbers of visitors and volunteers participating in programs
Provide species at risk information throughout park	4	Park visitors learn about species at risk through a diverse suite of non-personal media (e.g., interpretive panels, website content, social media platforms, visitor guide)	• Interpretive panels are installed at visitation points where species at risk occur (e.g., day use areas, trails) • Species at risk information is available at Visitor Reception Centre and Discovery Centre • Selected species at risk information is featured in the Tuckamore (visitor guide) • "On demand" species at risk information is included in content for self-guided tours	• Species at risk information is available at points of contact and included in self-guided tour materials

[1] All measures will be implemented on an annual, ongoing basis and apply to all species at risk occurring in the Park.
[2] Actual measures may vary from year-to-year based on available resources, opportunities, and emerging program needs.

3. Critical Habitat

Critical habitat is “the habitat that is necessary for the survival or recovery of a listed wildlife species and that is identified as the species’ critical habitat in the recovery strategy or in an action plan for the species” (SARA s.2(1)). Critical habitat is identified in this action plan to the extent possible for species for which i) a recovery strategy has been posted on the SARA public registry, ii) the recovery strategy does not identify all critical habitat required to meet the population and distribution objectives, and iii) there is sufficient information available to identify critical habitat in the Park (Table 5).

Table 5. Status of critical habitat identification in Gros Morne National Park.

Species	**Is critical habitat identified in the recovery strategy?**	**Is critical habitat identification complete?**	**Is critical habitat identified in this action plan?**
Piping plover, *melodus* subsp.	Yes, in GMNP and elsewhere	Yes, critical habitat is fully identified in the recovery strategy. However, as the population objectives have not been met additional critical habitat will be identified if new sites having suitable habitat are occupied by nesting pairs	Yes, Piping Plovers nested on Western Brook Beach in 2012 & 2013, making this site critical habitat based on the identification criteria in the recovery strategy
American Marten, Newfoundland population	Yes, in GMNP and elsewhere	No, the critical habitat identified in the recovery strategy is not sufficient to meet national population and distribution objectives	No, no new information exists with which to identify additional critical habitat in this action plan. The Schedule of Studies outlined in the recovery strategy is ongoing
Red Crossbill, *percna* subsp.	No	No, critical habitat has not been identified	No, sufficient information is not available to identify critical habitat. The schedule of studies in the recovery strategy and action plan is ongoing

Critical habitat has been identified in Gros Morne National Park in SARA recovery strategies for American Marten and Piping Plover. This includes 3 parcels of American Marten critical habitat along the western boundary of the Park, which total 5,380 ha (Environment Canada 2013b), and one parcel of Piping Plover critical habitat at Shallow Bay Beach (Environment Canada 2012b). SARA prohibitions protecting these parcels of marten and plover critical habitat have been enabled by publication of descriptions of the habitat in the *Canada Gazette.* This action plan identifies one new parcel of Piping Plover critical habitat at Western Brook Beach. As of April 2014 it is not possible to identify additional critical habitat in the Park. Any data or information received after that date was not considered for this action plan but will be considered for critical habitat identification in the future. Where critical habitat identification is not complete it will be

identified in an upcoming or revised action plan or updated recovery strategy; refer to the schedule of studies in the marten and crossbill recovery strategies for further detail (Environment Canada 2012a, 2013b).

3.1 Identification of Critical Habitat for Piping Plover, *melodus* subspecies

3.1.1 Geographic Location

The beach at the mouth of Western Brook (Latitude 49.826° N, Longitude 57.860° W; NTS map 12 H/13, Edition 3 [1990]) is identified as critical habitat for Piping Plovers. Critical habitat is bounded to the north by Western Brook; to the south by the northeast boundary of an inholding of private and provincial land, as described in the park boundary survey (Canada Lands Survey Record 69288; see Detail J [Western Brook Fish Landing and Staging Area]); elsewhere the boundary is based on the biophysical attributes provided below. Shorelines on the north side of Western Brook and to the south of the critical habitat, including the inholding of private and provincial land, do not contain the appropriate biophysical attributes and are not identified as critical habitat.

3.1.2 Biophysical Attributes

The biophysical attributes of Western Brook Beach are consistent with the critical habitat identified in the recovery strategy (Environment Canada 2012):

Suitable habitat occurs in areas of early successional habitat characterized by a lack of dense vegetation on wide sand, gravel, or cobble beaches, sandspits, or peninsulas in marine coastal areas. Within these areas, suitable habitat is the area of the coastal zone extending from the low water mark and intertidal zone, up to the crest or peak of the vegetated dune (typically identified by the presence of marram/beach grass or other dune vegetation), and roughly approximated by the following habitat attributes: gently sloping foredunes; beach widths that afford protection from flooding at normal high tides; substrates of sand, gravel or cobble, or some combination of these; and foredunes that are either sparsely vegetated or relatively free of vegetation.

Critical habitat includes the entire area of suitable habitat including the intertidal zone from the low water mark, sand or mud flats and upper beach that normally include dune vegetation up to the crest or peak of the vegetated dune. Breaches that cross from the ocean to bays, low back shores, landward extensions of washovers, washover fans, sand fans, and river outlets are considered extensions of the beach habitat and therefore are critical habitat. When a distinct dune crest does not exist (i.e. where a dune is not present), the landward boundary of critical habitat extends to the line of permanent non-beach vegetation (e.g. marsh or bog vegetation, shrubs, trees, farmland) or another permanent physical structure (e.g. road, bridge, culvert, river).

3.1.3 Examples of activities likely to result in destruction of Piping Plover critical habitat in Gros Morne National Park

Any anthropogenic activity which alters or disturbs the key habitat attributes described in section 1.3.1 above is considered an activity likely to result in the destruction of Piping Plover critical habitat. Also, any activity that reduces access to habitat by plovers or reduces the functionality of habitat for plovers is considered a destruction of critical habitat. Examples of activities which are likely to result in the destruction of Piping Plover critical habitat in Gros Morne National Park include:

- off-road, all-terrain, or motorized vehicle use;
- coastal development occurring in plover habitat or in other habitats closely associated with plover habitat, including construction of cottages, homes, or tourist accommodations, boardwalks, and trails;
- beach nourishment;
- beach stabilization;
- sand mining and extraction;
- beach cleaning or raking activities that remove elements of natural habitat; and
- deliberate or accidental discharge of oil and toxic chemicals.

3.2 Proposed Measures to Protect Critical Habitat

Critical habitat identified in this and other recovery documents within Gros Morne National Park of Canada is legally protected from destruction under section 58(1) of the SARA.

4. Evaluation of Socio-Economic Costs and of Benefits

The Species at Risk Act requires the responsible federal minister to undertake *"an evaluation of the socio-economic costs of the action plan and the benefits to be derived from its implementation"*.

4.1 Costs

The cost of implementing this plan will be low and will be borne by Parks Canada. Many of the proposed measures will be integrated into the operational management of Gros Morne National Park and there will be few new costs. These costs to Government will be covered by reallocation of existing funds so will not result in additional costs to society.

No major socio-economic costs to park visitors, partners, stakeholders or Aboriginal groups are expected as a result of this action plan. The action plan applies only to lands and waters in Gros Morne National Park, and does not bring any restrictions to land use outside the Park. While minor restrictions may be placed on visitor activities on park lands and waters to protect and recover species at risk, implementation of this plan is expected to have an overall net benefit to visitor opportunities.

4.2 Benefits

Measures presented in this action plan for Gros Morne National Park will contribute to meeting recovery strategy objectives for three species. For American Marten (Newfoundland population), this action plan will contribute to increasing the wild population and allow it to expand its range into currently unoccupied habitat. For Piping Plover (*melodus* subspecies) this plan will contribute to breeding productivity. For Red Crossbill (*percna* subspecies) this plan will help safeguard potential habitat from degradation by non-native moose and will support population monitoring objectives. This plan will also benefit other species of conservation concern that are found in Gros Morne National Park, including Red Knot (*rufa* subspecies), Barrow's Goldeneye (eastern Population), Little Brown Myotis, Northern Myotis, and American Eel.

These measures are expected to have an overall positive impact on the ecological integrity of Gros Morne National Park, for example through improvements to forest health, and to enhance opportunities for appreciation of the Park and the species by visitors and the general public. This action plan includes measures which could result in benefits to Canadians, such as positive impacts on biodiversity and the value individuals place on preserving biodiversity, as well as protection and enhancement of ecosystem services such as maintenance of fuelwood resources for domestic timber harvesters. The proposed measures seek a balanced approach to reducing or eliminating threats to species at risk populations and habitats, and include protection of individuals and their habitat, potential species re-establishment, and increasing public awareness and stewardship.

Potential economic benefits of the recovery of the species at risk found in Gros Morne National Park cannot be easily quantified, as many of the values derived from wildlife are non-market commodities that are difficult to appraise in financial terms. Wildlife, in all its forms, has value in and of itself, and is valued by Canadians for aesthetic, cultural, spiritual, recreational, educational, historical, economic, medical, ecological and scientific reasons. The conservation of wildlife at risk is an important component of the Government of Canada's commitment to conserving biological diversity, and is important to Canada's current and future economic and natural wealth.

Implementing this action plan is expected to have benefits for park visitors, local residents and Aboriginal groups. These include opportunities to learn about and take part in the recovery of culturally important species at risk, opportunities for Aboriginal groups to become involved in conservation issues in the Park, and greater awareness of Aboriginal values and culture in the region. Benefits and opportunities for involvement should be relatively evenly distributed across Aboriginal and non-Aboriginal members of local communities and will be available to all park visitors.

5. Measuring Progress

Reporting on implementation of this action plan (under s. 55 of SARA) will be done by assessing progress towards implementing the measures presented in Tables 3 and 4.

Reporting on the ecological impacts of the action plan will be done by assessing progress towards meeting the site-based population and distribution objectives presented in Table 2.

6. References

Environment Canada. 2006. Recovery Strategy for the Red Crossbill, *percna* subspecies (*Loxia curvirostra percna*), in Canada. *Species at Risk Act* Recovery Strategy Series. Environment Canada, Ottawa, vii + 29 pp.

Environment Canada. 2007. Management Plan for the Harlequin Duck (*Histrionicus histrionicus*) Eastern Population, in Atlantic Canada and Québec. *Species at Risk Act* Management Plan Series. Environment Canada. Ottawa. vii + 32 pp.

Environment Canada. 2011. Atlantic Canada Piping Plover Conservation Guidance Manual. Internal Canadian Wildlife Service Report Series May 2011. Canadian Wildlife Service, Atlantic Region. 64 pp.

Environment Canada. 2012a. Action Plan for the Red Crossbill, *percna* subspecies (*Loxia curvirostra percna*) in Canada. *Species at Risk Act* Action Plan Series. Environment Canada, Ottawa. iii + 21 pp.

Environment Canada. 2012b. Recovery Strategy for the Piping Plover (*Charadrius melodus melodus*) in Canada. *Species at Risk Act* Recovery Strategy Series. Environment Canada, Ottawa, v + 29 pp.

Environment Canada. 2013a. Management Plan for the Barrow's Goldeneye (*Bucephala islandica*), Eastern Population, in Canada. *Species at Risk Act* Management Plan Series. Environment Canada, Ottawa. iv + 16 pages.

Environment Canada. 2013b. Recovery Strategy for the American Marten (*Martes americana atrata*), Newfoundland population, in Canada. *Species at Risk Act* Recovery Strategy Series. Environment Canada, Ottawa, xi pp. + appendix.

Garland, S. and P. Thomas. 2009. Recovery Plan for Red Knot, *rufa* subspecies (*Calidris canutus rufa*), in Newfoundland and Labrador. Wildlife Division, Department of Environment and Conservation, Government of Newfoundland and Labrador, Corner Brook, NL. iv + 12 pp.

Parks Canada, 2009. Gros Morne National Park of Canada Management Plan. Parks Canada, Rocky Harbour, NL. xii + 61 pages.

Parks Canada, 2011. Hyperabundant moose management plan for Gros Morne National Park. Parks Canada, Rocky Harbour, NL.

Schmelzer, I. 2005. A management plan for the Short-eared owl (*Asio flammeus flammeus*) in Newfoundland and Labrador. Wildlife Division, Department of Environment and Conservation. Corner Brook, NL.

SSAC 2010. The status of Gray-cheeked Thrush (*Catharus minimus*) in Newfoundland and Labrador. Newfoundland and Labrador Species Status Advisory Committee, Report No. 24.

Wildlife Division. 2010a. Management Plan for the American Eel (*Anguilla rostrata*) in Newfoundland and Labrador. Department of Environment and Conservation, Government of Newfoundland and Labrador, Corner Brook. Canada. v + 29 pp.

Wildlife Division. 2010b. Management Plan for the Gray-cheeked Thrush (*Catharus minimus*) in Newfoundland and Labrador. Department of Environment and Conservation, Government of Newfoundland and Labrador, Corner Brook, Canada. iii + 19 pp.

Wildlife Division. 2011. Management Plan for the Mountain Fern (*Thelypteris quelpaertensis*) in Newfoundland and Labrador. Wildlife Division, Department of Environment and Conservation, Government of Newfoundland and Labrador, Corner Brook, Canada. iii + 14 pp.

Appendix A: Effects on the Environment and Other Species

A strategic environmental assessment (SEA) is conducted on all SARA recovery planning documents, in accordance with the *Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals*. The purpose of a SEA is to incorporate environmental considerations into the development of public policies, plans, and program proposals to support environmentally sound decision-making and to evaluate whether the outcomes of a recovery planning document could affect any component of the environment or achievement of any of the Federal Sustainable Development Strategy's[1] (FSDS) goals and targets.

Recovery planning is intended to benefit species at risk and biodiversity in general. However, it is recognized that recovery measures may also inadvertently lead to environmental effects beyond the intended benefits. The planning process, which is based on national guidelines, directly incorporates consideration of all environmental effects, with a particular focus on possible impacts on non-target species or habitats. The results of the SEA are incorporated directly into the plan itself, and are summarized below.

Overall, it is anticipated that implementation of this action plan will have a beneficial impact on non-target species, ecological processes, and the environment in Gros Morne National Park. This plan puts into practice measures presented in recovery strategies for Piping Plover (*melodus* subspecies), American Marten (Newfoundland population), and Red Crossbill (*percna* subspecies), all of which were subject to SEAs during the development of those documents (Environment Canada 2006, 2012b, 2013b). Further, this action plan was developed to benefit all species at risk that regularly occur in Gros Morne National Park. Consequently all of these species were considered in the planning process, any potential secondary effects were evaluated and mitigated, and, where appropriate, measures were designed to benefit multiple species. The planning process was also guided by priorities identified in the Park's ecological integrity monitoring program, the Park's management plan (Parks Canada 2009), and the Park's hyperabundant species management plan (Parks Canada 2011). As a result, measures outlined in this plan address key management priorities aimed at improving the broader ecological health of the Park. This includes improvement of forest health though moose management, as well as mitigation of existing and anticipated environmental impacts such as the restoration of stream connectivity in the Park. Finally, this plan outlines stewardship actions, educational programs, and awareness initiatives involving park visitors, local residents, Aboriginal organizations, and the general public. This will lead to greater appreciation, understanding, and action towards the conservation and recovery of species at risk in general.

[1] www.ec.gc.ca/dd-sd/default.asp?lang=En&n=F93CD795-1