

May 30, 2012

Project No. 12-1151-0199

Peggy Bainard-Acheson
Public Works and Government Services Canada
Senior Environmental Specialist
Environmental Services
Public Works and Government Services Canada

RIDING MOUNTAIN NATIONAL PARK: FIRST SPECIES AT RISK AND MIGRATORY BIRD ASSESSMENT SUMMARY

Dear Ms Bainard-Acheson

This letter report summarizes the important findings of the first Species at Risk (SAR) and breeding migratory bird assessment carried out for the construction of a new road alignment at Kilometre (KM) 49 on Provincial Trunk Highway (PTH) #10 and at Hilton and Crawford Creek Trailheads in Riding Mountain National Park, Manitoba. The work was conducted by Fergus Nicoll and Paulette Hebert on 23-24 May 2012 and included evening owl surveys, early morning breeding migratory bird surveys and vegetation surveys at the three Target Areas defined below. During these surveys, each Target Area was assessed with respect to its potential as habitat for Target Species which include both provincially and federally listed SAR that have the potential to occur within the Mid-Boreal Upland Ecoregion and the Project area as identified during the desktop review (C. MaKillop pers. com 22 May 2012).

This SAR and breeding migratory bird assessment is intended to determine if any federally or provincially SAR or breeding migratory birds are present within the Target Areas. The information will be used to determine potential impacts of the project on SAR and breeding migratory birds, and to develop specific mitigation measures to protect any SAR that might be impacted by the proposed construction.

1.0 DEFINITIONS

1.1.1 Target areas

Area 1: This includes the proposed highway alignment corridor and the existing PTH #10 at KM 49 and their Rights of Way (ROW). The ROW includes an undisturbed area outside the Wilderness Boundary Limit. The Wilderness Boundary Limit is defined as a distance of ~100 metres (m) on either side of the centreline of the road. The northern limit of the new alignment is approximately 10 m south of the culvert at a tributary to Edward's Creek. The corridor has a length of 800 m.

Area 2: This includes the Hilton Trailhead located approximately 6 km south of Target Area 1, on the west side of PTH #10 near Edwards Lake. The site appears to be a former borrow pit and supports a mixture of grass and

young shrubs with a bare gravel area. Target Area 2 is being considered for storage of surplus soil material. The SAR and breeding migratory bird assessment will target the low, moist shrub-dominated area situated near the highway and the area immediately to the west.

Area 3: This is located at the Crawford Creek Trailhead parking lot approximately one km north of the culvert at the north end of Target Area 1. The area is low and flat and is being considered for disposal of surplus composite soil from the highway excavations and reclamation. The area will be graded such that it will be level with the trailhead and slope down towards the wetland to the east.

1.1.2 Target Species

A review of the Species at Risk (SARA) Public Registry as well as the Manitoba (MB) Conservation Data Centre Occurrence of Species for the Mid-Boreal Upland Ecoregion was completed to identify potential federally listed (SARA) or provincially listed [Manitoba Endangered Species Act (MBESA)] species with ranges that overlap the Target Areas (see Table 1). A list of species observation records for Riding Mountain National Park was also provided by the park's ecosystem data specialist. No additional SAR were identified through the review of this information.

1.1.3 Presence

For the purposes of this report, "Confirmed Presence" is defined as a Target Species that was observed, either heard or seen, at one or more of the Target Areas; "Potential Presence" is defined as the potential presence of habitat within a Target Area but without observation of a Target Species; "No Potential Presence Likely" means that habitat for a Target Species is absent from the Target Area.

2.0 OBJECTIVES:

The following is a list of field objectives for this project:

- 1) to determine the presence or potential presence of the Target Species identified in Table 1 at the three Target Areas;
- 2) to determine the presence of any breeding or nesting migratory birds at the three Target Areas; and
- 3) to categorize the available habitat in the three Target Areas as: 1) Confirmed Presence; 2) Potential Presence; or, 3) No Potential Presence Likely, based on the species listed in Table 1.

3.0 IMPORTANT FINDINGS

Breeding bird surveys were used to investigate the presence of breeding SAR and/or migratory birds. Breeding bird surveys were completed on 24 May 2012 which is earlier than is recommended by the Manitoba Breeding Bird Atlas, which recommends point counts no earlier than 7 June 2012. Nonetheless, it is likely that singing males heard during the present surveys were already on territory. A second round of surveys will be completed during the week of 11 June 2012 to confirm breeding.

The potential presence of habitat for Target Species is based on habitat assessments completed on 24 May 2012. At this time many plant species had not yet come into bloom. The full diversity of the plant community could not be determined. The presence of Target Plant Species and their habitats will be confirmed during a second visit scheduled for the week of 11 June 2012.

The following is a summary of the findings for all Target Species (SAR and rare species) and their habitats identified during the 24 May 2012 survey. These findings include the Target Species identified in Section 2.0 of the Terms of Reference (Dated 9 May 2012) which are listed in Table 1, attached.

3.1 AREA 1 (proposed highway alignment)

3.1.1 Breeding Bird Surveys and Nocturnal Bird Surveys

Nine species of migratory birds were observed in Target Area 1. None of the species identified are Target Species. A complete species list will be provided in the final report.

Five additional species of migratory birds were observed during the evening surveys. One Target Species, common nighthawk (*Chordeiles minor*) was heard calling approximately 300 m east of the south end of the proposed alignment. Nesting habitat for common nighthawk was not identified within Target Area 1 and construction activities are not likely to affect this species.

3.1.2 Vegetation Surveys

The plant community in Target Area 1 consists of mature trembling aspen-white spruce boreal mixed wood. Trembling aspen (*Populus tremuloides*) is the dominant species with white spruce (*Picea glauca*) scattered throughout. Other species include white birch (*Betula papyrifera*), balsam poplar (*Populus balsamifera*), and bur oak (*Quercus macrocarpa*). The understory is dominated by tall, dense mountain maple (*Acer spicatum*). A diverse ground cover includes black snakeroot (*Sanicula marilandica*) and Canada mayflower (*Maianthemum canadensis*). No Target Species were identified in this area.

3.1.3 Potential Presence

Potential habitat for two Target Species was observed in Target Area 1:

- In the northern part of its range, wild ginger (*Asarum canadense*) inhabits upland deciduous forests, in association with trembling aspen and balsam poplar. The vegetation community present in Target Area 1 has some strong similarities to the preferred habitat-type for wild ginger. However, no wild ginger was observed. Target Area 1 will be re-surveyed for this species during the second round of surveys.
- Blunt-fruited cicely (*Osmorhiza depauperata*) inhabits rich, moist mixed forests. This species could potentially inhabit pockets of moist rich soil located in Target Area 1. No specimens were observed. Target Area 1 will be re-surveyed for this species during the second round of surveys.

3.1.4 No Potential Presence

Table 1 lists all Target Species for which there is no habitat within Target Area 1.

3.2 AREA 2 (Hilton trailhead)

3.2.1 Breeding Bird Surveys and Nocturnal Bird Surveys

Seven species of migratory birds were observed in Target Area 2. None of the species identified are Target Species. A complete species list will be provided in the final report.

Four additional species were observed during the evening surveys. One Target Species, common nighthawk was heard calling approximately 400 m to the east and then flew over Target Area 2. Nesting habitat for common nighthawk was not observed within Target Area 2 and construction activities are not likely to affect this species.

3.2.2 Vegetation Surveys

The plant community in the area of Hilton Trailhead has a history of disturbance and is made up of a mixed meadow, with a small thicket swamp established in a low lying area close to the main road. The adjacent forest consists of trembling aspen-white spruce with additional species similar to those observed in the proposed road alignment. Although the survey was too early to identify most meadow species, it is likely that the meadow area is dominated by non-native roadside plant species which are tolerant of disturbance. The thicket swamp is

dominated by willow species including slender willow (*Salix petiolaris*). Additional surveys will be completed during the week of 11 June 2012. At that time, species that were not in bloom during the first visit will be identified.

3.2.3 Potential Presence

No potential habitat for Target Species was observed in Target Area 2 (See Table 1)

3.2.4 No Potential Presence

All Target Species for which there is no habitat within Target Area 2 are listed in Table 1.

3.3 AREA 3 (Crawford Creek trailhead)

3.3.1 Breeding Bird Surveys and Nocturnal Bird Surveys

Ten species of migratory birds were observed in Target Area 3. None of the species identified are Target Species. A complete species list will be provided in the final report.

No additional species were observed during evening surveys.

3.3.2 Vegetation Surveys

The plant community in Target Area 3 has a history of disturbance and is made up of a mixed meadow/deciduous shrub and tree thicket complex. The survey was completed too early in the season to identify meadow species, but it is likely that the meadow is dominated by common roadside species. Thickets consisted mainly of willow species such as Bebb's willow (*Salix bebbiana*) and balsam poplar. Species (primarily graminoids) that were not in bloom at the time of this visit will be identified during the second visit during the week of 11 June 2012.

3.3.3 Potential Presence

Potential habitat for two Target Species was observed in Target Area 3:

- Rams-head lady's slipper (*Cypripedium arietinum*), inhabits a wide range of habitats including mixed forest, forest edge, coniferous forests, fens and sand dunes. A small clump of *Cypripedium* species was located in well drained soil at the eastern edge of the central thicket. There is a possibility that this species could be ram's-head lady's slipper. However, the flowers had not yet matured and the species could not be confirmed. This location was marked with a GPS and flagging tape and will be revisited during surveys in the week of 11 June 2012 to confirm the identification.
- One male golden-winged warbler (*Vermivora chrysoptera*) was heard singing at the forest edge to the south of the meadow at Target Area 3. It was heard at approximately 1030 hr while Golder biologists were conducting vegetation surveys but it was not heard during the morning surveys. It is possible that this bird was in transit. Habitat at the Crawford Creek Trailhead is ideal for this species. Breeding activities of golden-winged warbler at Target Area 3 will be confirmed during surveys to be completed during the week of 11 June 2012.

3.3.4 No Potential Presence

All Target Species for which there is no habitat within Target Area 3 are listed in Table 1.

3.3.5 Viewing Tower

The parking area at the viewing tower on the west side of PTH#10 was visited briefly and assessed for potential Target Species presence. A typical roadside community of non-native grasses and a trembling aspen-white spruce forest surrounds the parking area. No target species were observed.

4.0 CONCLUSION

Target Area 1 may provide habitat for wild ginger and blunt-fruited sweet cicely. Neither of these species were observed within Target Area 1 during the surveys. Target Area 2, the Hilton Trailhead is not comprised of habitat for any of the Target Species listed in the Terms of Reference. Target Area 3 is habitat for golden-winged warbler which was observed singing at the edge of the forest surrounding the meadow in the late morning on 24 May 2012. Breeding evidence is to be confirmed during the second round of surveys. An immature Cypripedium specimen was observed at the edge of a willow thicket in Target Area 3. Its identity will be confirmed during surveys to be conducted in the week of 11 June 2012.

All three Target Areas constitute nesting habitat for migratory birds which were seen and heard during breeding bird surveys. Mitigation measures to protect these birds during construction will be proposed in a subsequent letter report.

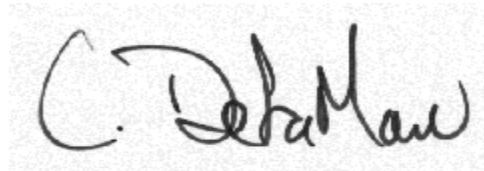
Many plants were not yet flowering at the time of the surveys and were not identifiable, particularly the graminoids. A further investigation of these species will be completed during the week of 11 June 2012.

We trust that the above information satisfies the requirements of the project,

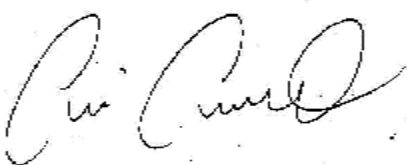
GOLDER ASSOCIATES LTD.



Paulette Hebert
Jr. Env. Technologist



Corey De La Mare
Principal, Senior Biologist



Corissa Carveth
Aquatic Ecologist/Project Manager

PH/CC/gr

Attachments: Table 1: Target SAR and Potential Presence in the Target Areas

c:\users\grubino\documents\for paulette 2012\12-1151-0199 let rep first site visit_final.docx

Table 1: Target SAR and Potential Presence in the Target Areas

Scientific Name	Common Name	SARA Designation	Endangered Species Act Designation or S Rank	Confirmed Presence (Y/N)	Potential Presence ^a (Y/N)	No Potential Presence Likely ^a (Y/N)
Vascular Plants						
<i>Adoxa moschatellina</i>	Moschatel	N/A	S1	N	N	Y
<i>Asarum canadense</i>	Wild Ginger	N/A	S3?	N	Target Area 1	N
<i>Carex emoryi</i>	Emory's Sedge	N/A	S2?	N	N	Y
<i>Carex microptera</i>	Thick-spike Sedge	N/A	S1S2	N	N	Y
<i>Carex sterilis</i>	Dioecious Sedge	N/A	S2	N	N	Y
<i>Chrysosplenium iowense</i>	Iowa Golden saxifrage	N/A	S1?	N	N	Y
<i>Cypripedium arietinum</i>	Ram's Head Lady's-slipper	N/A	S2S3	N	Target Area 3	N
<i>Danthonia intermedia</i>	Timber Oat Grass	N/A	S2?	N	N	Y
<i>Elymus diversiglumis</i>	Various-glumed Wild Rye	N/A	S2?	N	N	Y
<i>Eriophorum callitrix</i>	Beautiful Cotton-grass	N/A	S2	N	N	Y
<i>Impatiens noli-tangere</i>	Western Jewelweed	N/A	S2	N	N	Y
<i>Listera borealis</i>	Northern Twayblade	N/A	S2	N	N	Y
<i>Malaxis paludosa</i>	Bog Adder's-mouth	N/A	S1	N	N	Y
<i>Millium effusum</i> var. <i>cisatlanticum</i>	Millet Grass	N/A	S2	N	N	Y
<i>Muhlenbergia andina</i>	Foxtail Muhly	N/A	S1	N	N	Y
<i>Osmorhiza depauperata</i>	Blunt-fruited Sweet Cicely	N/A	S2	N	Target Area 1	N
<i>Pyrola americana</i>	Round-leaved Pyrola	N/A	S2	N	N	N
<i>Sisyrinchium campestre</i>	White-eyed Grass	N/A	SU	N	N	Y
<i>Solidago simplex</i>	Sticky goldenrod	N/A	SU	N	N	Y
<i>Thalictrum sparsiflorum</i>	Few-flowered Meadow-rue	N/A	S2S3	N	N	Y
<i>Vaccinium caespitosum</i>	Dwarf Bilberry	N/A	S2	N	N	Y
<i>Viola selkirkii</i>	Long-spurred Violet	N/A	S2	N	N	Y
Vertebrate Animal						

Scientific Name	Common Name	SARA Designation	Endangered Species Act Designation or S Rank	Confirmed Presence (Y/N)	Potential Presence ^a (Y/N)	No Potential Presence Likely ^a (Y/N)
<i>Asio flammeus</i>	Short-eared Owl	Schedule 3, Special Concern	Special Concern	N	N	Y
<i>Caprimulgus vociferous</i>	Whip-poor-will	Threatened	S3B	N	N	Y
<i>Chordeiles minor</i>	Common Nighthawk	Threatened	S3B	N	N	Y
<i>Contopus cooperi</i>	Olive-sided Flycatcher	Threatened	S4B	N	N	Y
<i>Euphagus carolinus</i>	Rusty Blackbird	Schedule 1, Special Concern	S3S4B	N	N	Y
<i>Hirundo rustica</i>	Barn Swallow	Threatened	S4B	N	N	Y
<i>Lithobates pipiens</i>	Northern Leopard Frog	Special Concern	N/A	N	N	Y
<i>Lynx rufus</i>	Bobcat	N/A	S3	N	N	Y
<i>Melanerpes erythrocephalus</i>	Red-headed Woodpecker	Threatened	S2S3B	N	N	Y
<i>Mustela frenata</i>	Long-tailed Weasel	N/A	S3	N	N	Y
<i>Odocoileus hemionus</i>	Mule or Black-tailed Deer	N/A	S3	N	N	Y
<i>Vermivora chrysoptera</i>	Golden-winged Warbler	Threatened	S3B	Target Area 3	N	N
<i>Wilsonia canadensis</i>	Canada Warbler	Threatened	S4B	N	N	Y

a: Potential presence of Target Species was determined based on habitat assessments conducted on 24 May 2012. At this time, many plant species had not yet bloomed and it was not possible to identify them beyond genus.