



Bee Monitoring in the Northwest Territories – Pilot Project

The Biodiversity Conservation Section, Wildlife Division, Department of Environment and Natural Resources is proposing conducting a bee monitoring pilot project between May and September, 2019. This work is consistent with recommendations made by the NWT Species at Risk Committee in their 2019 assessment of western, yellow-banded, and gypsy cuckoo bumble bees, and supports high priority actions identified in the draft federal recovery strategy for gypsy cuckoo bumble bee.

The project is focused on bee species, although other arthropods (e.g., flies, beetles, spiders) may also make use of the traps we propose using.

We propose using two general locations for this pilot project year: the Yellowknife area and Daring Lake.

Should you have any questions or concerns, or would like to discuss opportunities for partnerships, please contact Claire Singer, Species at Risk Implementation Supervisor. Thank you,

Claire Singer
Species at Risk Implementation
Supervisor



WILDLIFE RESEARCH PERMIT APPLICATION FORM

If you are researching, observing, and/or handling wildlife in the Northwest Territories (NWT) you need to have the proper permits and licences. This applies to everyone, including government agencies, and is intended to avoid harm to NWT natural, social and cultural environments.

Your application must include:

- ✓ Cover letter, which includes:
 - Project title
 - One-line summary
 - Wildlife species that will be studied, observed or manipulated
 - Location of study area
 - Signature and contact information
- ✓ Completed permit application
- ✓ Signed recommendation form(s)
- ✓ Supporting notes and correspondence detailing consultation process

For further instructions and how to submit your application, go to: www.enr.gov.nt.ca. If more space is required, please attach additional pages.

FORMULAIRE DE DEMANDE DE PERMIS DE RECHERCHE SUR LA FAUNE

Si vous faites des recherches sur la faune, de l'observation ou de la manipulation d'animaux sauvages aux Territoires du Nord-Ouest (TNO), vous devez détenir les licences et les permis appropriés. Cette mesure s'applique à tout le monde, y compris aux organismes gouvernementaux, et vise à éviter les dommages qui pourraient être causés aux milieux naturels, sociaux et culturels des TNO.

Votre demande doit comprendre :

- ✓ Une lettre de présentation indiquant :
 - Le titre du projet;
 - Un résumé d'une ligne;
 - Les espèces sauvages qui seront étudiées, observées ou manipulées;
 - L'emplacement de la zone d'étude;
 - Votre signature et vos coordonnées.
- ✓ La demande de permis dûment remplie.
- ✓ Le(s) formulaire(s) de recommandation signé(s).
- ✓ Pièces justificatives et correspondance décrivant en détail le processus de consultation.

Pour obtenir de plus amples renseignements sur la façon de présenter votre demande, accédez au site Web suivant : www.enr.gov.nt.ca/en/français. Si vous avez besoin de plus d'espace, veuillez ajouter les pages nécessaires.

Check One / Cochez une seule réponse : New Project / Nouveau projet Ongoing Project / Projet en cours

Address: (Include e-mail)

Adresse : (y compris l'adresse courriel)

5th floor, Scotia Centre Building, PO Box 1320, 5102 – 50th Avenue. Yellowknife, NT X1A 2L9
Claire_Singer@gov.nt.ca

Sponsor(s): (Organizations supporting your work)

Commanditaire(s) : (organismes qui soutiennent votre travail)

Wildlife Division
Environment and Natural Resources

Jennifer Heron, Invertebrate Specialist, British Columbia Ministry of Environment, Conservation Science Section

Funding Source(s): (Organizations providing financial help to work)

Source(s) de financement : (organismes qui vous apportent une aide financière)

Wildlife Division
Environment and Natural Resources
Government of the Northwest Territories

Additional Licences Required:

Licences supplémentaires requises :

Wildlife Care Committee

Project Title: (10 words or less)

Titre du projet : (10 mots ou moins)

Bee Monitoring in the Northwest Territories

Rationale: (100 words or less)

Explication : (100 mots ou moins)

Information about bee species presence in boreal regions is lacking. This is reflected in the recent Data Deficient assessments of western bumble bee and gypsy cuckoo bumble bee in the NWT (2019). Given pronounced declines in many pollinator species nationally, monitoring activities need to be enhanced. This should include inventory, relative abundance, and emergence timing. Bumble bees collected for scientific surveys are not collected in numbers sufficient to disturb natural population dynamics or cause local extirpations/extinctions, and collections are important for documenting species presence and distributions.

Time Period: May 2019 - September 2019 (pilot project year)

Durée :

Location and Nearest Community: (Provide latitude and longitude if applicable)

Emplacement et collectivité la plus près : (indiquer la latitude et la longitude, le cas échéant)

Only two areas will be included in this pilot project year: Yellowknife (and surrounding area) and Daring Lake. These represent areas that are both readily accessible to Wildlife Division staff.

Species Studied: Bees and other arthropods

Espèces étudiées :

Project Leader: Biodiversity Conservation Section, Wildlife Division; contact is Claire Singer, Species at Risk Implementation Supervisor
Chef de projet :

Project Personnel: (Include people who would actually do the work in the NWT, volunteers included)

Participants au projet : (inscrire les personnes qui accompliraient le travail aux TNO, y compris les bénévoles)

Claire Singer
Michele Grabke
Joanna Wilson
Suzanne Carriere
Andrea Patenaude
Johanna Stewart
Volunteer hosts for traps (people who have agreed to have a trap on their property)
IGO partners

Objectives: (Please use point form)

Objectifs : (veuillez utiliser le style télégraphique)

For this pilot year, the objectives will simply be to get comfortable with the equipment (blue vane traps), get a general inventory of bee species in the study areas, and to evaluate the success of trap locations. If this year is successful, in future years we will be looking towards getting relative abundance estimates and also, if possible, tracking spring emergence (i.e., to determine whether emergence is shifting with climate change).

Methods: (100 words or less) (Cite references, if applicable)

Méthodes : (100 mots ou moins) (veuillez citer vos références, le cas échéant)

Nine blue vane traps will be set in the Yellowknife area (3 in Yellowknife, 3 on the 'edge' of Yellowknife, and 3 in outlying areas that are still accessible by road). Locations being considered are as follows: In city - near Parker Park, Tin Can Hill, Latham Island; edge of City - Folk on the Rocks site, sand pits, ski club; out of City - residence in Prelude East, residence at Pontoon Lake, cabin at Reid Lake. Two additional traps will be deployed at Daring Lake. Traps will be deployed for 1 week each month between May and September, deployed on a Friday, and collected the following Friday. Traps contain food-grade propylene glycol. Collected specimens will be shipped, still in the glycol solution, to Jenny Heron for processing and identification.

Current Consultation: (List all contacts you have already consulted; append all recommendation forms to submission)

Consultation actuelle : (veuillez dresser la liste de toutes les personnes que vous avez déjà consultées et annexer à votre demande tous les formulaires de recommandation)

Jennifer Heron has confirmed that she is willing to receive the specimens for processing and identification. Verbal approval for trap placement at Prelude East and Reid Lake received from individuals who lease those properties. Written approval for trap placement at Pontoon Lake. Email correspondence with Wek'eezhii Renewable Resources Board on partnering on this project. Sent a similar inquiry email to the North Slave Metis Alliance and the Yellowknives Dene First Nation.

Future Community Consultation: *(List anticipated consultation activities, e.g. posters, presentations, meetings, letters)*
Consultations de la collectivité à venir : *(veuillez dresser la liste de toutes les activités de consultation prévues, c'est-à-dire les affiches, les présentations, les rencontres, les lettres, etc.)*

None planned at this time.

Opportunities for Local Participation:
Possibilités de participation locale :

See above regarding interest in partnership with local Indigenous governments and organizations, plus local individuals who have indicated willingness to host traps on their property.

Management or Recovery Plans: *(If your project is part of accepted wildlife management plans or recovery plans, list them as appropriate)*
Plans de gestion ou de rétablissement : *(si votre projet fait partie de plans de gestion de la faune approuvés ou de plans de rétablissement, veuillez en dresser la liste, s'il y a lieu)*

Work links to high priority actions identified in the draft federal recovery strategy for gypsy cuckoo bumble bee, as well as to recommendations made by the NWT Species at Risk Committee (SARC) in their recent assessment of three bumble bee species. High priority actions identified in the federal recovery strategy include: research emergence timing; manage/analyze data; develop and implement protocols and methods to conduct inventories; and develop capacity for bee identification/monitoring protocols. SARC recommended undertaking additional surveys to increase knowledge of pollinators in the NWT. Looking beyond this pilot project year towards an ongoing monitoring program; this work will help inform our territorial responsibilities for critical habitat identified in the draft gypsy cuckoo recovery strategy (critical habitat currently identified in Norman Wells and Fort Simpson).

Follow-up Report / Rapport de suivi

Check One / Cochez une seule réponse : Previously Submitted
Envoyé précédemment Attached
En pièce jointe Not Applicable
Sans objet



Recommendation Form

Wildlife Research or Observation Permit - Application

Filled out by Applicant

This recommendation refers to:

Name of Applicant or Group: <u>Biodiversity Conservation, Wildlife Division, ENR</u>
Title of Project: <u>Bee Monitoring in the NWT</u>
Address (Applicant): <u>PO Box 1326, Yellowknife, NT X1A 2L9</u>
Email (Applicant): <u>Claire - Singer@gov.nt.ca</u>

Filled out by Committee or Board

The terms "Committee" or "Board" refer to a "Local Harvesting Committee" as defined in the *Wildlife Act*.

(Committee or Board)

(Community)

SUPPORTS or DOES NOT SUPPORT
this application for the renewal or amendment of a Wildlife Research Permit.

Signature: _____

Date: / /

Recommended Terms and Conditions:

Reasons for decision:

(Use more space as required)