



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)

Brad Woodworth, Climate Change Ecologist, Government of Northwest Territories, Department of Environment and Climate Change, 500, 5102-50th Avenue, Yellowknife NT X1A 2L9, email: brad_woodworth@gov.nt.ca

Sponsor(s): (Organizations supporting your work)

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

Site coordinator partners: Gwich'in Renewable Resources Board, Aurora College, Mackenzie Mountain School, Sahtu Renewable Resources Board, Parks Canada, Ka'a'gee Tu First Nation. Specimen identification and long-term storage partners: Canadian Museum of Nature

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

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

Government of Northwest Territories, Department of Environment and Climate Change

Additional Licences Required:

Licences supplémentaires requises :

NWT Wildlife Care Committee Review and Approval

Research Permit for Wood Buffalo National Park (to be obtained by Parks Canada partners)

Project Title: (10 words or less)

Titre du projet : (10 mots ou moins)

NWT Small Mammal and Hare Surveys

Rationale: <i>(100 words or less)</i> Explication : <i>(100 mots ou moins)</i> The surveys track fluctuations and cycles of hare and small mammal populations throughout the Northwest Territories. Small mammals and hares play a keystone role in both arctic and boreal ecosystems. These species are a major prey species for foxes, marten, lynx, raptors, and other carnivores. Cyclic fluctuations in the abundance of hares and small mammals are reflected in similar fluctuations in the abundance of their predators. Small mammal and hare population trends are used to predict population trends of economically important predators (furbearers) and alternate prey, such as waterfowl, and in monitoring natural changes in predator/prey relationships in northern ecosystems.	
Time Period: We are requesting a 5 year renewal of the hare and small mammal survey from 01-June-2023 to 31-May-2028. Hare surveys are typically conducted in June of each year, and small mammal surveys in August, with some variation across sites. Durée :	
Location and Nearest Community: <i>(Provide latitude and longitude if applicable)</i> Emplacement et collectivité la plus près : <i>(indiquer la latitude et la longitude, le cas échéant)</i> Sahtu -- Norman Wells: 65° 18' N, 127 ° 20' W; North Slave -- Yellowknife: 62° 24' N, 114° 26' W; Daring Lake: 65° 00' N, 111° 30' W (includes Arctic hares); Gahcho Kué Mine: 63° 29' N, 110° 49' W (small mammal only; P); Dehcho -- Fort Liard: 60° 39' N, 117° 29' W *; Fort Simpson: 62° 00' N, 122 ° 00' W; South Slave -- Fort Smith: 60° 01' N, 111° 54' W; Fort Resolution: 61° 10' N; 113° 40' W; Tsu Lake: 60° 35' N, 111° 53' W (P); Wood Buffalo NP (in AB): 59° 57' N; 111° 40' W (P); Inuvialuit-Gwich'in -- Inuvik: 68° 18' N, 133° 29' W *(P). [* Survey not performed in 2016-2020 due to personnel unavailability. (P) Surveys conducted by Partners.]	
Species Studied: Hare Survey -- Snowshoe Hare (<i>Lepus americanus</i>); Arctic Hare (<i>Lepus arcticus</i>) (Daring Lake only). Small Mammal survey -- North American Deer Mouse (<i>Peromyscus maniculatus</i>), Southern Red-backed Vole (<i>Myodes gapperi</i>), Northern Red-backed Vole (<i>Myodes rutilus</i>), Nearctic Collared Lemming (<i>Dicrostonyx groenlandicus</i>), Meadow Vole (<i>Microtus pennsylvanicus</i>), Eastern Heather Vole (<i>Phenacomys ungava</i>), Meadow Jumping Mouse (<i>Zapus hudsonius</i>), and other cricetid mammals, and shrews, mostly <i>Cineurus</i> Shrew (<i>Sorex cinereus</i>), American Pigmy Shrew (<i>Sorex hoyi</i>), Arctic Shrew (<i>Sorex arcticus</i>), and possibly Dusky Shrew (<i>Sorex monticolus</i>), Tundra Shrew (<i>Sorex tundrensis</i>), Barren Ground Shrew (<i>Sorex ugyunak</i>). All specimens are sent to accredited museums for final identification. Espèces étudiées :	
Project Leader: Brad Woodworth (Interim Hare and Small Mammal Survey Coordinator) Chef de projet :	
Project Personnel: <i>(Include people who would actually do the work in the NWT, volunteers included)</i> Participants au projet : <i>(inscrire les personnes qui accompliraient le travail aux TNO, y compris les bénévoles)</i> All GNWT/ECC personnel except where noted: Inuvik -- TBD; North Slave -- Karin Clark, Colin Modeste-Burgin, Lee-Ann Knee (DeBeers), Cody Malone, Linnea McLellan, Emily Jenkins (University of Saskatchewan); Deh Cho -- Eve Lamontagne, Michael Gast, Jim Deneron; Sahtu -- Kevin Chan; South Slave -- Ashley McLaren, Liam Case, Linh Nguyen (Aurora College), Peter Lin (Aurora College), Teresa Little (Wood Buffalo NP).	
Objectives: <i>(Please use point form)</i> Objectifs : <i>(veuillez utiliser le style télégraphique)</i> A - Quantify density indices for small mammal populations to determine population cycles to predict harvest potential of furbearers, to provide baseline ecosystem information (keystone species - prey), and to test for presence of diseases (e.g., hantavirus). B - Annual monitoring of long term transects established for estimation of hare densities and determination of hare population trends.	
Methods: <i>(100 words or less) (Cite references, if applicable)</i> Méthodes : <i>(100 mots ou moins) (veuillez citer vos références, le cas échéant)</i> Small Mammal Survey: Mice, voles and lemmings are snap-trapped (Museum Specials) or live-trapped (Sherman or Longworth traps) on standardized trap lines. Usually, 100 traps are out for 5 nights. Trap lines are checked at least each morning. The trapping period should be consistent between years. August is the recommended month. Upon completion of the study each year, all traps should be checked to ensure they are in good working condition, cleaned with water and soap, air-dried, and then stored in a dry area. Hare Survey: Procedures follow Krebs et al. 1987 with an updated regression equation. Typically 4 transects are set out at each site. Each transect consists of 20 quadrats, measuring 5.08 cm x 305.0 cm, oriented along the transect and evenly spaced 15 to 30 metres apart. Hare feces deposited on each quadrat are counted and cleared annually. Hare density near each community is estimated from standard equations. The typical month for hare monitoring is June.	
Current Consultation: <i>(List all contacts you have already consulted; append all recommendation forms to submission)</i> Consultation actuelle : <i>(veuillez dresser la liste de toutes les personnes que vous avez déjà consultées et annexer à votre demande tous les formulaires de recommandation)</i> Posters are available every year to help predict and communicate harvest potential of marten and lynx using at least the last 10 years of survey data. Protocol descriptions for the small mammal and hare surveys are available online at: https://www.ecc.gov.nt.ca/en/services/small-mammals-and-hares/survey-protocols	

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.)*

In this ongoing program, information is made available to communities annually in the way of fur trapping forecasts and ecosystem monitoring information posters. Contact the survey coordinator (applicant) or the regional biologist if you would like to receive a copy of the posters for your community.

Opportunities for Local Participation:
Possibilités de participation locale :

This survey is well suited to be part of community-based monitoring. Wildlife co-management boards coordinate the surveys at some sites, schools are involved in the surveys at other sites, and participating GSWT/ECC staff facilitates local participation. The project requires 1-2 days in June for the hare transects and less than 15 hrs (spread over 5 consecutive mornings) in August for the small mammal survey. Some sites conduct both surveys in July to reduce costs for travel. In most communities, seasonal employees and summer students have participated in the survey as part of general duties.

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)*

New survey sites are very welcome. Communities and organizations should contact the Survey Coordinator (brad_woodworth@gov.nt.ca) if they would like to initiate a survey site. Funding may be available upon request. Assistance such as training, traps, and input from experienced survey participants is available within funding, time, and personnel capacity.

Follow-up Report / Rapport de suivi			
Check One / Cochez une seule réponse :	☐ Previously Submitted Envoyé précédemment	☒ Attached En pièce jointe	☐ Not Applicable Sans objet