



IDENTIFICATION

| Department | Position Title | |
|--------------------------------|--------------------|-----------------|
| Environment and Climate Change | Regional Biologist | |
| Position Number | Community | Division/Region |
| 23-3977 | Norman Wells | Sahtu |

PURPOSE OF THE POSITION

The Regional Biologist develops, conducts, and interprets management and environmental studies designed to provide a basis for wildlife management and environmental management policies and decisions in the Sahtu Region on species of relative importance including endangered species. The position administers the activities associated with these studies and provides information and biological advice on wildlife and the environment in the Sahtu Region, other regions, divisions, agencies, governments, and the public.

SCOPE

This position reports to the Superintendent Wildlife and Forest Management, Sahtu, and is responsible for developing, conducting, and interpreting research to ensure that wildlife use and development activities are ecologically sustainable, and that additional information is gathered to fill gaps in knowledge for endangered species listed under CITES.

The incumbent works with Departmental staff, industry, and Sahtu Indigenous Groups to determine the sustainable harvest of wildlife populations and to ensure potential impacts of development activities on wildlife, wildlife habitat and that wildlife harvesting are appropriately assessed and mitigated.

Recommendations on wildlife and wildlife habitat research and management actions and policies for wildlife management within and around the Sahtu region are made regularly to the Manager, Wildlife Research and Monitoring/Caribou Biologist, and when appropriate to the land claim organizations, co-management boards, and other Environment and Climate Change (ECC) wildlife management staff. The incumbent may need to represent the interests of wildlife and wildlife habitat, the Sahtu Region, ECC, and/or the Government of the Northwest Territories (GNWT) on various co-management boards, committees, and research groups.



RESPONSIBILITIES

- 1. Using skills developed during postgraduate study, and refined and maintained through experience and current practice, provides advice to ensure that wildlife use is ecologically sustainable, wildlife abundance and diversity is maintained, and the Department's wildlife policies and strategies are professionally credible.**
 - Identifying conservation problems and gaps in information and knowledge.
 - Making recommendations on resolving conservation problems and closing information and knowledge gaps.
 - Preparing proposals for research and management projects necessary to close information gaps.
 - Providing advice on the initiation, expansion, or termination of studies; reviewing local, regional, and other agency requests and proposals.
 - Reviewing and studying scientific literature and developing professional contacts to maintain proficiency.
 - Reviewing local and traditional knowledge and incorporating it into research planning and analysis.
 - Attending local, regional, territorial, national, and international conferences and meetings as required to present Departmental wildlife strategies and research results.
- 2. Develop partnerships with other agencies, universities, industry, etc. to conduct wildlife and wildlife habitat research to ensure that wildlife management and environmental management policies, advice and recommendations have a sound scientific basis.**
 - Working with other Departmental staff to design and conduct surveys to define wildlife populations and determine their size, trend, and demographic parameters.
 - Designing and conducting professionally credible surveys to monitor distribution, survival and behaviour using humane techniques.
 - Undertaking ecological and habitat research and monitoring is necessary to support environmental impact and cumulative effects assessments.
 - Writing and publishing progress reports and peer-reviewed journal publications; ensuring research projects use the most effective techniques available.
 - Designing innovative techniques, sampling protocols and equipment to meet study needs.
- 3. Provides ecological advice to the Department, outside agencies, Aboriginal groups, and users on conservation, environmental impacts, and management concerns.**
 - Participating in recovery teams for endangered species conservation.
 - Participating in ecological value assessments of proposed protected areas.
 - Evaluating and interpreting the results of studies by other agencies and determining the applicability of information, techniques, and practices of such.



- Participating in environmental impact screenings and reviews.
- Meeting with boards, agencies and First Nations on technical issues and briefings; meeting or corresponding with representatives of industry, government agencies, academics, consulting firms and with private individuals to discuss problems and proposed studies.
- Meeting frequently with community and First Nation organizations to discuss issues of mutual concern.

4. Administers the activities associated with research and monitoring programs being conducted by the incumbent to ensure that the objectives and requirements of the studies are being fulfilled.

- Interviewing and selecting candidates for employment in relation to the studies such as permanent or term technician employees, and casuals.
- Assigning projects to these subordinates and designating their responsibilities; evaluating work performance and appraising subordinates.
- Preparing and documenting annual estimates and forecasts for study funds, equipment, facilities, and staff.
- Controlling annual expenditures in amounts ranging up to \$30,000.00 allocating equipment and facilities to projects within the studies.
- Consulting with other professional staff and reviewing interim reports to determine work progress.
- Conducting study reviews of co-operative activities with other wildlife agencies to evaluate progress toward meeting objectives and to project future requirements for wildlife resources being studied.

WORKING CONDITIONS

Physical Demands

Hiking boreal forest both on the Taiga plain and shield (often having rough terrain).

Lifting: 500 lb. Snowmobiles onto aircraft or trucks or digging out machines/sleds stuck in snow or overflow. Wildlife trapping or tracking efforts can involve snowmobile travel over long distances.

Use All Terrain Vehicles (ATV) to get into field camps to collect wildlife data along transects, involving rough terrain. Load/unload ATV onto truck.

Boats are occasionally required to access wildlife, camps or study plots.

Aerial surveys involve sitting in a small, confined space for long hours. Weather permitting, surveys continue non-stop for several weeks; for example: Moose/caribou surveys; Wildlife capture and collaring, Wildlife tracking.



Handling of live animals Capturing, collaring, relocating wildlife; species (i.e., bears, moose, bison, caribou) weighing over 200 lbs.

Environmental Conditions

Exposure to potentially extreme climatic/weather conditions - Weather can change quickly. Cold (-35°C), sunburn, skin cancer) wind (burn, wind- chill), rain (hypothermia), snow blindness. Risk while walking/snowmobiling over thin ice/or overflow.

Immobilizing Wildlife - Can be dangerous, particularly when dealing with carnivores. Capture work requires the handling of wild animals, powerful immobilizing drugs and loaded firearms.

Physical danger is involved while flying low level in helicopters and small, single engine aircraft. This risk is increased with:

- the NWT's vast geographic size
- mountainous terrain
- harsh climatic conditions
- limited search & rescue facilities
- distant medical facilities, and
- awarding contracts to the lowest bidder.

Unpredictable weather conditions and the nature of wildlife research in the NWT requires that biologists work long hours.

Aerial surveys can involve 6-12 hours of flying per day, followed by data entry or analysis, and camp chores in the evening.

Working in Isolated Field Camps - Involves having no immediate medical aid available, paying particular attention to Safety issues, and managing people with varying cultural & linguistic backgrounds and personality traits.

Exposed to elevated levels of noise from snowmobiles, ATV's, firearms, helicopters, and piston aircraft. In addition to acquiring short- term headaches, prolonged exposure to high decibel noise levels can also lead to hearing impairment.

Sensory Demands

Heightened Awareness-While in the field, biologists are responsible for the well-being of field staff on a 24-hour basis. This involves being aware of:

- Pending threats from passing wildlife
- Any change in weather conditions



- Aircraft fuel caches/supplies
- Supplies/conditions incamp, and
- Overall safety & wellbeing of field staff

Aerial surveys/Radio tracking - During long survey flights, biological staff must concentrate on specific monotonous tasks (e.g., headaches and fatigue as a result of wearing headsets for hours at a time).

Visually searching for wildlife or tracks from an aircraft, for hours at a time is demanding work and often leads to eye fatigue and/or headaches.

Mental Demands

Coordinating Field Projects Safely - While putting in long hours in the field under difficult weather conditions, biologists must coordinate the safe and efficient operation of aircraft and personnel while attempting to meet research objectives. The lack of medical facilities and presence of firearms in camp requires an increased sense of caution & alertness.

Cross Cultural Awareness - In addition to conducting research under difficult field conditions, biologists are often required to take inexperienced people, whose first language is not English into field situations.

Focusing Attention to Detail in the Field – The successful execution of field projects requires a high level of advanced planning and attention to detail.

Shared Accommodation - In small camps with little privacy, for 1 - 3 weeks at a time.

Public Scrutiny - Many activities are conducted with the public, or observers present. Must conduct the activities properly, respond to questions and concerns and be sensitive to cultural and political implications.

Multi-tasking Under Time Constraints - Biologists are required to coordinate several research projects concurrently, handle correspondence and public contacts diplomatically, and face time constraints for project completion. This multi-tasking can sometimes be stressful.

KNOWLEDGE, SKILLS, AND ABILITIES

- Knowledge of environmental processes that determine the distribution and abundance of terrestrial organisms.
- Understanding of cross-cultural differences, as well as northern conservation and resource development and management issues.



- Ability to communicate in English to a variety of audiences through written and oral presentations.
- Ability to function well with desktop computers with a variety of software including GIS applications.
- Ability to operate specialized scientific equipment.
- Experience with research proposal preparation, estimation of study costs and administration of study budgets.
- Ability to assist in the delivery of conservation and education programs.
- Ability to commit to actively upholding and consistently practicing personal diversity, inclusion, and cultural awareness, as well as safety and sensitivity approaches in the workplace.

Typically, the above qualifications would be attained by:

A post-graduate degree program (M.Sc.) in biology supplemented with two years of directly related experience.

Equivalent combinations of education and experience will be considered.

ADDITIONAL REQUIREMENTS

Position Security (check one)

- ☒ No criminal records check required.
- ☐ Position of Trust – criminal records check required.
- ☐ Highly sensitive position – requires verification of identity and a criminal records check.

French language (check one if applicable)

- ☐ French required (must identify required level below)

Level required for this Designated Position is:

ORAL EXPRESSION AND COMPREHENSION

Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐

READING COMPREHENSION:

Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐

WRITING SKILLS:

Basic (B) ☐ Intermediate (I) ☐ Advanced (A) ☐

- ☐ French preferred

Indigenous language: Select language

- ☐ Required
- ☐ Preferred