Job Class Profile: Wildlife Research Biologist

Pay Level: CG-43 Point Band: 1038-1081

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	7	7	3	5	7	6	6	3	4	
Points	327	117	19	24	210	130	124	64	43	1058

JOB SUMMARY

The Wildlife Research Biologist performs senior responsible professional work in the conception, design and implementation of scientific research on wildlife ecosystems and populations, with a strong focus on producing formal scientific reports for internal use and peer-reviewed publication.

Key and Periodic Activities:

- Appraises the current ecological circumstances within the province through critical analyses of pertinent scientific literature; identifies areas of ecological concerns needing research attention, with a particular focus on biotic and abiotic factors impinging upon wildlife species and their habitats; identifies new approaches and methodologies for conducting ecological research and assists in prioritizing research requirements in light of wildlife management concerns.
- Designs ecological wildlife studies to fill the gaps in knowledge with a particular focus on field oriented work but also including detailed evaluation of historic data bases: formulates project proposals including anticipated budgetary requirements.
- Ensures that data are collected efficiently and appropriately through direct involvement in the field and training and supervision of junior staff and ensures the integrity of the data through compilation and editing into computer databases; applies appropriate statistical techniques, interprets results, and assesses their implications for the management of ecological systems and the wildlife species they harbour.
- Disseminates new information in the form of progress reports, manuscripts for submission to peer-reviewed journals, internal reports, and presentations at scientific conferences. Interacts with other research staff within the department, at Universities, and other agencies through regular correspondence, meetings, attendance at conferences, and joint research projects. Remains abreast of the latest developments in theoretical and applied wildlife ecology through regular perusal of scientific literature.
- Reviews proposals and reports from other staff. Contributes to the development of wildlife research policy and direction, with a broad focus on ecosystems and particularly the ecological processes and constraints that determine species persistence, community structure, population regulation and limitation, numerical/functional responses of consumers to prey abundance, spread of introduced species, and wildlife reactions to natural and human-altered landscapes.
- Represents the Branch on research teams or committees and liaises with university scientists and research scientists in various agencies.
- Directs and supervises junior biologists, contract staff and students as required.

SKILL

Knowledge

General and Specific Knowledge:

— Knowledge of research methods, statistical analysis, GIS and other software applications
— Knowledge of current ecological and biological theory
— Knowledge of Province's ecosystems and wildlife species
— Knowledge of project management

Formal Education and/or Certification(s):

— Minimum: Masters of Science degree majoring in Ecology with considerable experience in designing, conducting and publishing research or a Ph. D. in Ecology with slightly less experience in ecological wildlife research.

Years of Experience:

— Minimum: with Masters 3-4 years; with Ph. D. 1-2 years

Competencies:

— Ability to apply research and analytical skills to research projects.
— Ability to liaise with other research staff and academia to further research findings.
— Ability to manage research projects.
— Ability to utilize computer skills (i.e. GIS and software applications) to assist in maintaining statistical data.

Interpersonal Skills

— A range of interpersonal skills are used including listening to information from others, asking questions to get information, disseminate new information through talks and presentations, providing routine information and direction to others, gaining the cooperation of others to complete work and solve problems, communicating complex/specialized information and providing direction to others, providing expert advice to others, negotiating for funding and contributing to research policy.
— Most important skills are gaining the cooperation of others, promoting research initiatives, listening and communicating complex ideas and information, negotiating contracts and agreements, providing expert advice/recommendations on policy, research priorities and methodology, mentoring/coaching, facilitating and problem solving skills.
— Communications occur with employees within immediate work area, other employees/peers in the department and managers, with peers in the research community, government employees or peers in other departments, students, general public and interest groups, project partners and Executive.
— Most significant contacts are with supervisors/managers to provide information to feed into project priorities, design and funding and policy and get direction; project partners who supply funding or expertise for research and management programs; and employees in the immediate work area for sharing of information and resources and providing direction in project implementation.

EFFORT

Physical Effort

- Occasionally the requirements of the job result in considerable fatigue, requiring periods of rest.
- Required to sit at a computer for prolonged periods of time to prepare and review reports, conduct statistical analysis and maintain data, prepare study proposals, maps and complex spreadsheets. Also required to stand to make presentations and walk or hike and climb while in the field.
- Fine finger or precision work is regularly required.
- Occasional field work requires physical exertion, gross motor skills and physical balance using machinery and equipment requiring controlled movement such as microscope, ATVs, cutting and positioning tools, walking/climbing over rough terrain and awkward or cramped positions or body movement to make observations, collect data and samples for analysis.

Concentration

- **Visual** concentration is required when staring at a computer screen to write reports and correspondence, do calculations and analysis, examine maps, spreadsheets and data files, enter datasets and use a magnifying glass and microscope to view small details that are hard to focus.
- **Auditory** concentration is required when exchanging information, listening to peers and team members in meetings and on the telephone for long periods, listening to cell/satellite phone in areas of poor reception, conducting animal surveys.
- There is a need for alertness in the field for safety when working in remote locations.
- **Time pressures** include field work and survey work that must be completed during the seasonal window and in line with project timelines; budget submission deadlines; and reports that must be completed in time for regular management meetings or presentation dates.
- Generally there is **control over the work pace** of regular work. Unexpected or high priority external influences can affect degree of control.
- **Higher than normal levels of attentiveness or alertness** are required when in the field to pay attention to ensure the safety and comfort of students and field assistants from environmental, terrain and wildlife dangers.
- **Eye/hand coordination** is required in computer/keyboard work, microscope work, use of field equipment, hand lenses and digital callipers and operating motorized vehicles.
- There is a need for **precision** and accuracy when describing details of plants, animals, or biotic and abiotic factors affecting species and their habitat, taking field and laboratory measurements, performing calculations, working with maps, entering and analyzing statistical data.

Complexity

- Tasks are regularly different and unrelated involving a wide variety of responsibilities and situations which could have a limited number or no guidelines or procedures. Tasks are regularly highly technical and have strategic or policy significance.
- Problems are occasionally well defined and which can be addressed by following procedures or guidelines.
- Regularly problems have limited opportunity for standardized solutions, however more likely issues must be defined, require creativity and analysis and solutions to be developed. Research and literature review are often required.
- Examples of typical problems or challenges are related to the conception, design and

implementation of scientific research on wildlife ecosystems and populations including identifying new approaches and methodologies for conducting ecological research and contributing to the development of wildlife research policy and direction. Other issues revolve around coordinating and gaining cooperation of others.

— Reference material to assist in solving problems includes primary scientific literature, existing datasets and reports, academia, senior professional staff, legislation and policies.

RESPONSIBILITY

Accountability and Decision-Making

— Operates very independently in indentifying knowledge gaps, setting field work priorities; determining research project design and survey methodology; purchasing goods and services to predetermined limit; leading project teams and setting activities of summer students and contractual employees.

— Requires formal approval of work plans and budget submissions; to purchase goods over predetermined limit; and to set final cost-shared project commitments.

— A high degree of professional independence, judgement and accountability is exercised under the general direction of the Senior Scientist. Represents the Branch on research teams or committees and liaises with university scientists and research scientists in various agencies.

Impact

— Decisions and/or work has impact both internally and externally to the organization, within immediate work area, with the general public and the wildlife/natural resources of the province.

— Results impact processes and systems, information (reports/data, legislation regarding ecology of the province, species risk management), finances (research funding, development proposals and related economic activity), material and human resources (project partners), facilities, health and safety (ecosystems, field staff) and corporate image (based on effectiveness of policy and research programs).

— Quality of information, advice and recommendations impact on biodiversity, wildlife and forestry resource management policy and programs, such as species management and conservation plans, forest management plans, protection and recovery plans, industrial economic development.

— In the event of a mistake or error the consequences are directly felt within the immediate work area, department, outside the department and the government, on clients, industry and resource users, ecosystem integrity (species becomes extinct) and the general public. Mistakes may be subtle, complex and difficult to detect or take months or years to identify.

— Work is performed under general direction with considerable latitude to exercise independent professional judgement.

Development and Leadership of Others

— There is no supervision of staff.

— Performs a team lead and project leader role on research teams and committee work. Trains and supervises junior staff in field work and data collection procedures. Organizes and coordinates the work of field crews, students, and contract staff.

WORKING CONDITIONS

Environmental Working Conditions
— Considerable amount of time is spent in the office however there is a field component which requires specialized training such as firearms safety and use for bear protection, an advanced wilderness and remote first aid course, remote and wilderness hiking, canoeing and backpacking skills. Positions must also wear appropriate clothing, gear, equipment, and follow safety procedures when in the field and/or laboratory. — Likelihood of minor cuts, bruises and fractures is moderate and more serious injury/illness is limited. — Occasionally exposed to glare, dirt and dust, fumes, hazardous chemicals, toxic or poisonous substances, bodily fluids and waste, infectious disease, odours, dangerous heights or depths, wet or slippery surfaces, physical dangers, sharp objects, adverse weather conditions, travel, lack of privacy and temperature extremes while engaged in field and laboratory work.