

**Job Class Profile: Special Projects Officer (Forestry)****Pay Level: CG-35 Point Band: 766-789**

Factor	Knowledge	Interpersonal Skills	Physical Effort	Concentration	Complexity	Accountability & Decision Making	Impact	Development and Leadership	Environmental Working Conditions	Total Points
Rating	5	4	4	5	4	5	4	3	5	
Points	233	67	25	24	120	108	83	64	54	778

**JOB SUMMARY**

The Special Projects Officer (Forestry) is responsible for overseeing special projects and/or studies related to forest management. Work involves conducting special studies and projects of an advanced nature and can range from highly specialized elements of various silviculture programs to planning, organizing and directing the acquisition of forestry data from field and inventory sources and evaluating information to assist with management planning.

**Key and Periodic Activities**

- Implements Tree Improvement (TI) field trials (selects trial locations; designs trial layout; establishes trials by planting of plus tree seedlings, tagging of seedlings, GPS mapping of trials, etc.; maintains trials over multiple years (vegetation control with herbicides and/or brush saws, retagging); measures growth, health and survival of trials.
- Carries out tree breeding activities (monitors the reproductive status of trees in the TI program, i.e. status of maturity of male/female conelets in springtime in preparation for controlled pollinations); collects and extracts pollen; applies pollen under controlled conditions; monitors subsequent cone development; collects and stores mature cones; enhances flower production through application of growth hormones. Identifies and collects plus tree grafting material.
- Collects, compiles and performs preliminary statistical analysis and maintains a database of all such data and registry of information.
- Provides coordination, direction to technical and support staff; trains staff in theory and procedures; develops work schedules for staff; assigns duties from week to week/day to day; reviews work in progress.
- Compiles a variety of reports on information related to forest harvesting volumes and area levels.
- Conducts comparative analysis of forest harvesting information such as species, age and site location (actual volume and area levels vs proposed volume levels and area levels).
- Gathers information from forest management districts and creates and maintains a variety of databases.
- Acquires all materials, vehicles, machinery and technical equipment required for the implementation of the field component of various projects. Arranges for and coordinates storage space for required machinery and equipment such as snowmobiles, ATV's trailers, lawnmowers, brush saws, etc.
- Coordinates activities with regional staff when required.

<b>Key and Periodic Activities</b>
<ul style="list-style-type: none"> <li>— Prepares updates and annual reports.</li> <li>— Participates in forest management planning meetings and serves on a variety of committees.</li> </ul>

**SKILL**

<b>Knowledge</b>
<p><b>General and Specific Knowledge:</b></p> <ul style="list-style-type: none"> <li>— Specialized areas of forest management</li> <li>— Field trial establishment and related activities (forest site quality, statistical design and procedures)</li> <li>— GIS data gathering and analysis</li> </ul> <p><b>Formal Education and/or Certification(s):</b></p> <ul style="list-style-type: none"> <li>— Minimum: Undergraduate Degree in Forestry or Specialized Diploma in Forest Resource Technology and considerable experience</li> <li>— Specialized training in forestry techniques (genetics) and/or forestry inventory acquisition</li> <li>— GIS training</li> </ul> <p><b>Years of Experience:</b></p> <ul style="list-style-type: none"> <li>— Minimum: 8 – 9 years</li> </ul> <p><b>Competencies:</b></p> <ul style="list-style-type: none"> <li>— Ability to apply established techniques and procedures and modify where needed</li> <li>— Coordinate a range of related work or project activities</li> <li>— Train staff in methods and procedures</li> <li>— Conduct analysis and assessment</li> <li>— Utilize various computer software programs</li> <li>— Repair and calibrate machinery</li> <li>— Verbal and written communication skills</li> </ul>
<b>Interpersonal Skills</b>

- A range of interpersonal skills are used such as listening and asking questions when seeking complex technical advice from others such as members of the Provincial TI Committee or out-of-province TI experts; providing routine and specialized/complex information to others and providing instructions to obtain certain data from Forest Management Districts; gaining the cooperation of others and instructing/training staff during the field season (May-February) when leading a team of Conservation Officers and students in the performance of TI duties and/or presenting detailed analysis in a scientific and professional format and occasionally resolves disputes between people.
- Communications typically occur with employees within the immediate work area, department and with forestry industry representatives.
- Most significant contacts are Supervisor of Silviculture or Director of Ecosystem Management to discuss progress on activities, overall program priorities and logistical support requirements such as staffing, vehicles, equipment and supplies; Manager of Wooddale Provincial Tree Nursery to discuss progress in TI field activities, review status of joint Tree Nursery/field TI activities or Senior Planner to provide analysis on data collected; and other staff to coordinate field TI activities.

## EFFORT

### Physical Effort

- The demands of the job regularly result in considerable fatigue, requiring periods of rest.
- Occasionally, lifts or moves objects over 50 lbs. such as ATV's and snowmobiles on and off trucks. When conducting certain field work other items such as chainsaws, brush saws, pesticide application equipment and 12-24 foot extension ladders must also be transported to sites. While on site walking over rough terrain is required.
- As work involves travel throughout the province, driving is also a regular requirement.
- The use of fine finger/precision work occurs regularly when recording data collection on portable PC while conducting field work and/or when collecting a variety of sample material. This also involves the use of tools that require accurate control and steadiness. Analysis of data in the field is required to ensure computer data is accurate.

### Concentration

- **Visual concentration** is required when conducting trial establishments and re-measurement activities as well as computerized GIS mapping and analysis of complex statistical data.
- As a result of working in a field environment, **auditory concentration/demands** are often strained when communicating with co-workers as a result of environmental elements such as wind, water, etc.
- **Other sensory demands such as touch and smell** are used in certain forestry techniques such as determining tree species, etc.
- Activities such as tree measurements and data collection can be **repetitious and require alertness**.
- **Higher than normal level of attentiveness/alertness** is required when using equipment in the field and when driving on woods roads.
- **Time pressures and deadlines** are experienced when requested to review other files and provide data and/or when performing activities related to tree breeding. Reproductive

activity in trees is weather and seasonally dependent and occurs over brief timeframes. In addition, reproductive status varies by species and geographic location.

- GIS and computer analysis and performing certain specialized techniques require **eye/hand coordination**.
- **Exact results and precision** are required as tree improvement trials must be established in a scientific manner to ensure statistically valid results and when calculating tree area volumes and yields.

### Complexity

- Tasks range from repetitive/well defined, such as performing tree measurements and collecting and storing grafting material and/or compiling GIS data and confirming with field data to different and unrelated such as coordinating and assigning work of technical and support staff; providing training to staff in theory and procedures; developing work schedules, assigning duties and reviewing work in progress.
- While tasks and activities are diverse involving a wide variety of responsibilities and situations, challenges/problems/issues can typically be addressed by following procedures and/or guidelines. Tasks are highly technical and are performed within defined and standard work processes. Detailed analysis of forestry management data is, however, complex and can have strategic or policy significance.
- A typical challenge is identifying suitable forest locations to conduct tree improvement trials. This is a critical decision as it impacts the growth of the TI seedlings and potentially affects the outcomes of the research. As well, forest harvest and silviculture are scheduled by sophisticated computer linear programming models and must be well understood in order to evaluate results.
- Reference material available includes GIS information, historic silviculture records, manuals, guidelines and procedures.

## RESPONSIBILITY

### Accountability and Decision-Making

- Work tasks and activities are somewhat prescribed or controlled.
- Provide direction as a team lead by coordinating and assigning work to seasonal staff involved in a variety of forestry projects.
- Purchasing, leave, and travel must be approved by supervisor.
- For positions involved with tree improvement trials, the Provincial Tree Improvement Committee sets the overall goals and objectives for the program. However, employees act independently and must exercise a high degree of discretion and judgment to determine trial locations, layout and timing of related activities. Discretion can be used to assign and approve overtime for support staff to meet schedules and deadlines. For positions involved with forestry policy in relation to the sustainable management of forest resources, a high degree of discretion and judgement is used to evaluate forest harvest volume and area levels and compare to the forecasted data. Upon analysis of data, reports are written and recommendations provided.

### Impact

- Impacts are felt internally within the immediate work area/department as well as externally with the forestry industry (increased timber harvest levels and greater opportunities). Resources affected include processes and systems, information (projections of harvests and silviculture), material resources (enhanced tree and forest growth), finances (reduced unit-cost per seedling), facilities (enhanced nursery production) and corporate image.
- The risk or consequences of a mistake or error in projecting sustainable harvests or silviculture levels can have a significant impact on forest management in the province. Other errors could result in the need to repeat trials. Impacts may not be noticed immediately but will become apparent decades into the future. Failure to recognize genetic gains, after investing decades of time and money, will negatively affect the public's view. Positive impacts are enhanced tree and forest growth.

#### **Development and Leadership of Others**

- Not responsible for the supervision of staff.
- Do perform a team lead role by coordinating and providing direction to seasonal staff. Work involves scheduling and assigning work.
- Development and leadership responsibilities include providing advice/guidance, on-the-job direction, feedback, input for performance assessments, orientation to new employees, on-the-job training, acting as a technical mentor, delegating tasks, providing input to others about staffing and recruitment, organizing and reviewing work of contractors.

### **WORKING CONDITIONS**

#### **Environmental Working Conditions**

- Safety equipment and/or precautions are required when conducting field work and may include equipment related to chainsaw/brush saw use, pesticide application, helmets for ATV and snowmobile use and exercising extra caution when working in adverse weather conditions.
- There is limited likelihood for injuries or illnesses resulting from hazards, given that all health and safety regulations are followed.
- Travel is required on a regular basis to visit various forestry sites.
- Exposure to glare, wet or slippery surfaces and temperature extremes occurs on a regular basis.
- May be occasionally exposed to unusual/distracting noise, dirt, dust, fumes, vibration, hazardous chemicals, odours, dangerous heights, fire, physical dangers and sharp objects.