

Position: **Benchmark Job #321**

Ministry: Forests

Working Title: **Senior Biometrician**

Branch: Research

Level: Range 27

Location: Victoria

NOC Code: 2161

PRIMARY FUNCTION

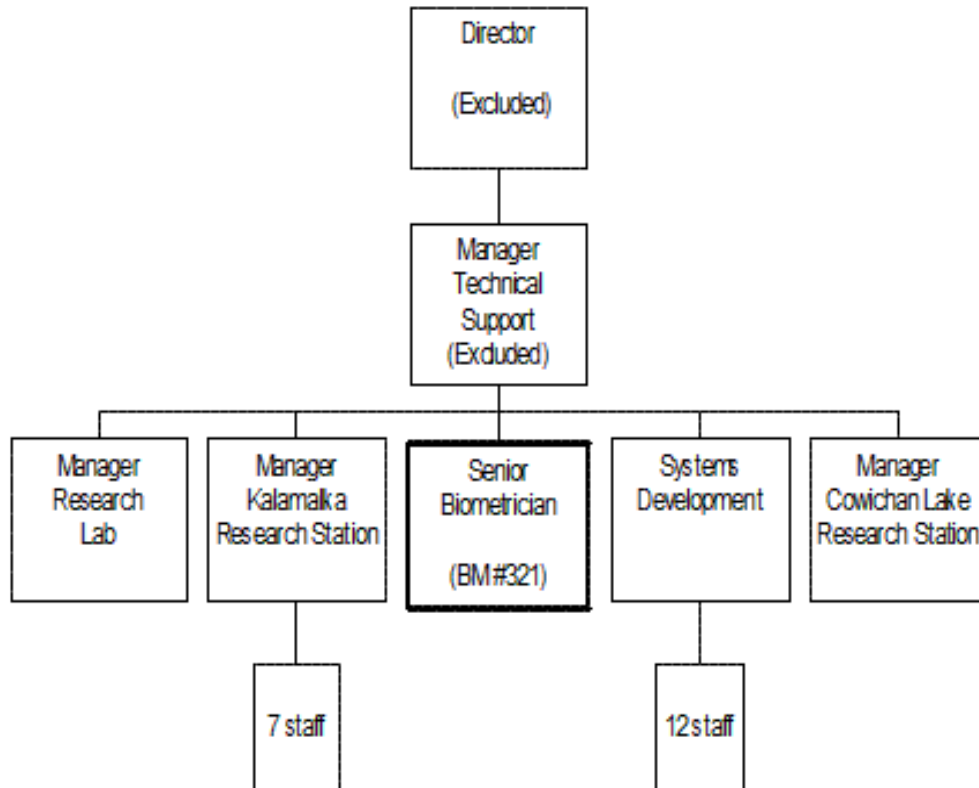
To manage the ministry's biometrics program and provide authoritative advice to research scientists and other staff on statistical and mathematical procedures for research and operational needs.

JOB DUTIES AND TASKS

1. Manages the development and implementation of statistical and research methodologies, standards, policies and procedures
 - a. provides authoritative advice to ministry staff on the proper and efficient design of experiments, trials and sampling schemes and the design, selection and use of statistical software and related computer data analysis
 - b. develops the application and use of statistical methods such as general linear, multiple regression, log-linear, logistic regression with two or more categories and non-linear regression
 - c. controls quality, acceptance sampling, and general sampling methods
 - d. provides advice on the interpretation and presentation of results
 - e. develops the appropriate statistical methodology, computer applications and numerical techniques to be used on new, uncommon or unique statistical problems
 - f. plans and conducts reviews, and reports on relevant research incorporating new approaches into ministry supported applications
 - g. encourages research scientists and other personnel to apply appropriate statistical methods
2. Manages the writing and preparation of reports and articles on statistical analysis
 - a. organizes and develops reports on the statistical analysis and interpretation of research results and recommends future research applications and priorities for the ministry
 - b. develops and approves statistical guidelines and/or summary tables for inclusion in reports and sampling manuals
 - c. organizes, reviews and approves applied research articles for Ministry publications and other appropriate journals
3. Organizes the review and analysis of information on advances in statistical analysis, experimental design and sampling design
 - a. reviews technical literature summaries and recommends changes to ministry standards and processes
 - b. corresponds and discusses new applications or problems with other statisticians
 - c. attends meetings and seminars sponsored by groups such as statistical associations and universities to make presentations as the ministry's senior expert in biometrics
 - d. reviews and evaluates statistical software and advises on its utility for branch and ministry program

applications

4. Performs other related duties
 - a. administers budget and monitors and reports on the status of the biometrics budget
 - b. plans and controls utilization of research funds for the section
 - c. determines overall section goals and priorities
 - d. coordinates biometrics services provided under contract
 - e. provides training to staff and contractors on developments in biometrics research and application software



FACTOR	REASON FOR CLASSIFICATION	DEGREE	POINTS
1	<p>JOB KNOWLEDGE</p> <p>Understands all related issues of a significant program to provide authoritative advice to research scientists and other ministry staff; manages the development of new research methods, and the revision of current procedures; provides expert advice on design of experiments, trials and sampling schemes; determines best statistical software for analysis of data and applies advanced statistical analyses; develops computer applications to be used on existing, new or unique statistical problems.</p>	I	305
2	<p>MENTAL DEMANDS</p> <p>Judgement to evaluate ministry needs in the areas of statistical analysis, experiment design and sampling techniques; develops methodology, computer applications and numerical techniques; and evaluates the design of experiments, trials and sampling schemes.</p>	H	250
3	<p>INTERPERSONAL COMMUNICATIONS SKILL</p> <p>Persuasion required to use basic negotiation skills to convince research scientists of best designs, schemes and procedures.</p>	D	45
4	<p>PHYSICAL COORDINATION AND DEXTERITY</p> <p>Some coordination and dexterity to set-up experiments, trials and sampling schemes, using computer programs with minimal requirement for speed to assist research scientists.</p>	B	10
5	<p>RESPONSIBILITY FOR WORK ASSIGNMENTS</p> <p>Guided by general biometric methodologies and standards to plan, organize and evaluate experiments and sampling techniques used by research scientists and other ministry staff, provide expert advice and training on appropriate use of advanced statistical analyses, and plan, develop and implement computer applications for use by ministry staff.</p>	F	160
6	<p>RESPONSIBILITY FOR FINANCIAL RESOURCES</p> <p>Moderate financial responsibility to administer the Biometrics Section budget as part of the Forestry Division budget.</p>	D	22.5

FACTOR	REASON FOR CLASSIFICATION	DEGREE	POINTS
7	RESPONSIBILITY FOR PHYSICAL ASSETS/INFORMATION Major responsibility to manage the development of statistical/mathematical standards to be used by ministry staff to ensure the quality of biometrics information.	F	43
8	RESPONSIBILITY FOR HUMAN RESOURCES Responsibility to provide formal training to staff.	B	9
9	RESPONSIBILITY FOR WELL BEING/SAFETY OF OTHERS Responsibility for own well-being and safety in a low risk environment.	A	5
10	SENSORY EFFORT/MULTIPLE DEMANDS Focused sensory concentration to frequently scrutinize statistical and mathematical analyses and reports.	C	12
11	PHYSICAL EFFORT Moderate physical effort to frequently visually focus attention on source document and computer screen while conducting statistical/mathematical analysis.	C	12
12	SURROUNDINGS Exposure to office setting with minimal disagreeable elements.	A	2
13	HAZARDS Limited exposure to hazards from frequent keyboarding.	B	4

Total Points: 879.5

Level: Range 27