



Commonwealth of the Northern Mariana Islands
Department of Lands & Natural Resources
Division of Fish & Wildlife



JOB VACANCY ANNOUNCEMENT

FISHERIES DATA ANALYST

Location:

Division of Fish and Wildlife (DFW)
Saipan, Commonwealth of the Northern Mariana Islands (CNMI)

Posting date:

July 30, 2021

Closing date:

August 15, 2021

Nature of work:

The incumbent will work in the Division of Fish & Wildlife (DFW) Data Section to perform data analyses and interpretation of fisheries and ecological data to inform management in the development of fisheries management plans, decision making, reports, and presentations that may be used to support marine fisheries management in the CNMI. The incumbent will be responsible for planning, executing, conducting analyses, and reporting of fishery information to management, the public, and partners. The incumbent will work under the supervision and direction of the Fisheries Data Section Supervisor, or the DFW Director. The incumbent will conduct background research and analyses of fishery data and will apply statistical and programming knowledge to fisheries data, resulting in production of a statistical report and analysis data for distribution. The incumbent will work in collaboration with DFW fishery biologists, DFW staff, and local or regional partners when necessary.

Duties and Responsibilities:

1. Provides statistical analysis, written summaries, and tables of results of fisheries data for use in statistical reports by collaborating with fishery biologists.
2. Provides comprehensive quantitative and analytical support for the statistical design, implementation, analyses, and interpretation of biological, ecological, and socio-economic investigations of fish populations.
3. Develops, evaluates, and implements research and monitors protocols and programs and makes recommendations to achieve fisheries management objectives.
4. Uses a variety of programs including but not limited to R, SAS, SPSS, and PYTHON to conduct statistical analyses of short- and long-term datasets.
5. Writes programs that are reproducible, well documented, and reusable for similar types of data.
6. Examines datasets to identify patterns and establishes relationships to solve problems through analyses (i.e. data mining), which will be used to make informed decisions when addressing fishery concerns.
7. Establishes and implements internal data quality control and quality assurance of fisheries investigations.
8. Ensures quality data output through monitoring of data inputs.

9. Participates in field sampling to ensure proper sampling practices and makes necessary recommendations to improve survey design to meet data collection objectives.
10. Ensures that field sampling designs are implemented according to sampling design.
11. Supervises technical staff in the collection, review, entry, and validation of fishery data collection programs.
12. Authors, coauthors, or reviews statistical content incorporating fisheries data in technical reports and scientific papers in cooperation with DFW Fisheries Research Section, collaborators, and others.
13. Oversees expenditures and manages the Fisheries Data Collection Program's funds.
14. Identifies and obtains additional funding sources for the Fisheries Data Collection Program.
15. Participates in the planning, development and implementation of the fishery data collection programs in the CNMI consistent with the requirements and goals of the Division of Fish and Wildlife.
16. Prepares and provides reports of fishery data collection activities and provides estimated effort and landings data as required, or as requested.
17. Participates and serves on local or regional fisheries organizations as assigned, designated, or appointed.
18. Provides technical assistance and statistical reports to the DFW Director, government agencies, or the general public as requested.
19. Trains fisheries data staff in the fundamentals of statistical analysis techniques, protocols, and sampling.
20. Presents results of research at scientific conferences and meetings as requested.
21. Performs travel as required.
22. Performs other related fisheries tasks as assigned.

Nature of duties and responsibilities:

Be able to work mainly indoors at a computer-based office environment. Be willing to work occasionally in the field. Ability to work efficiently independently or on a team. Knowledge of the basic principles and practices in fishery data collection, fishery data analyses. Participates in the planning, development, execution and analysis of fishery data collection programs. Supervision of technical staff. Identifies the analyses required to support key fisheries management decisions at the CNMI level. Analyzes fisheries and environmental data to deliver CNMI-specific scientific advice through reports, presentations, and national web pages that support fisheries management decision making at CNMI level. Provides authoritative scientific advice on fisheries and the status of marine fisheries resources as required at consultations and stakeholder workshops. Responds to ad-hoc requests from the DFW Director and fishery management council. Promotes good working relationships with cooperating agencies and the public. Must be able to learn fish species names (local, common, and scientific).

Qualification requirements - education, experience, and training:

Minimum qualifications:

Master's degree in Statistics, Data Science, Applied Mathematics, Fisheries Science, or closely related field with 2 years of in conducting statistical analyses OR related experience.

Experience in computer-based data management and statistical analysis. Proficient in R programming or in another code-based analysis language. Experience in Python, using macros, or other languages for subsetting, merging, summarizing, and querying datasets. Possess well-developed database design skills in design and implementation of data quality standards. Experience in collaborating with others to determine what data is needed, what data exists, how best to extract the data in a useful format, and whether the data collected is sufficient to meet data survey objectives. Experience in using structured querying language such as Oracle, MySQL, FoxPro, etc. commands to identify discrepancies in databases. Competence with modern statistical methods such as but not limited to multivariate analysis and univariate mixed model analysis. Strong oral, written, communication and social skills. Organized, detail-oriented, capable of meeting tight deadlines.

Preferred qualifications:

Master's degree in Statistics, Data Science, Applied Mathematics, Fisheries Science, or closely related field with 3 years in conducting statistical analyses OR related experience.

Possess strong analytical skills, knowledge of applied seafood harvesting practices and business, scientific knowledge of marine species and the marine environment. Experience in writing statistical reports. Experience in designing and budgeting projects and reporting to administrative team. Experience with work on population dynamics and stock assessment modelling of fish stocks. Experience in collecting, processing, analyzing and reporting on fisheries dependent data. Experience in working with fishermen, fish vendors, or fisheries/wildlife management. Possess a general understanding of fishing methods, seasons, locations, etc. Possess an understanding of fishery dependent data collection process. Experience in working with interjurisdictional fisheries and interpreting results from and reviewing stock assessments.

Other:

Must have ability to disseminate information to a variety of audiences including fisheries managers, industry-based professionals, and the public. Must be proficient in the use of computer programs, to include MS Office, R, MySQL, and Python, and ability to create presentation materials from each. The incumbent will have excellent analytical, critical thinking, and problem-solving skills. Flexibility, patience, and tolerance in a multicultural community like that of the CNMI is essential. Able to function individually or as a member of a small team and must be able to handle the logistics associated with working/living on a small island.

Term:

This position requires at least 3 years commitment to the CNMI DFW from date of hire, and is renewable upon mutual consent.

Salary:

Commensurate with experience

Benefits:

Paid Holidays, Sick Leave, and Vacation Leave

Annual salary increases

Group medical/life insurance (optional)

Recruitment/Repatriation (Relocation expenses provided)
401(a) retirement plan with matching contribution

Eligibility:

United States citizens or legal residents ONLY

How to apply:

Submit the following electronic documents: 1) A resume/CV; and 2) A cover letter highlighting your relevant experience, expertise, and career goals.

Additionally, please provide the names of 3 professional references, their e-mail addresses, and telephone numbers. A copy of your official transcript(s) and college diploma(s) will be required if you are selected.

Email all materials to CNMIfisheries@gmail.com with “Fisheries Data Analyst” in the subject line.

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