



JOB DESCRIPTION

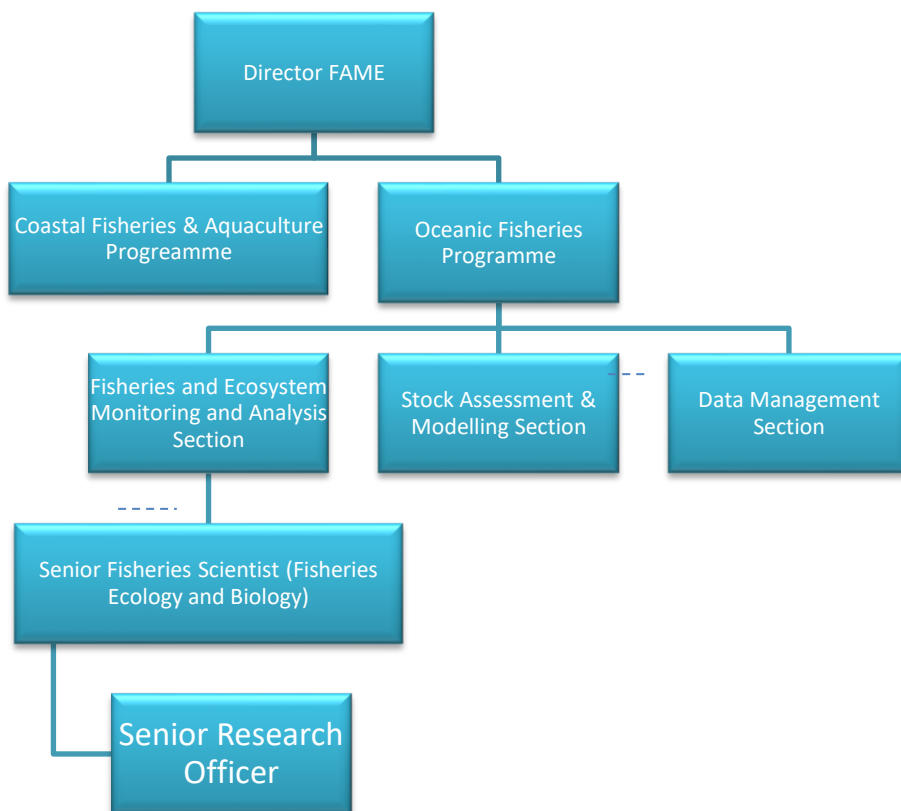
Job Title:	Senior Fisheries Scientist (Fisheries Ecology and Biology)
Division/Programme and Section/Project (if any):	Fisheries Aquaculture and Marine Ecosystems Division
Location:	Noumea, New Caledonia
Reporting to:	Principal Fisheries Scientist (Fisheries and Ecosystem Monitoring and Analyses)
Number of Direct Reports:	1
Purpose of Role:	This role will lead field-work and lab-based research to provide quality data on dynamics and life history of pelagic and coastal fisheries to improve regional tuna stock assessments and adaptations to climate change.
Date:	September 2024

Organisational Context and Organisation Chart

As one of SPC's oldest Divisions, the **Division of Fisheries, Aquaculture and Marine Ecosystems (FAME)** has been providing scientific and technical expertise to support fisheries management and sustainable development in the Pacific for over 60 years. The goal of the Division is that the fisheries resources of the Pacific region are sustainably managed for economic growth, food security and environmental conservation. In pursuit of this goal, FAME provides scientific and management advice to Pacific Island Countries and Territories (PICTs) and regional agencies to support the sustainable management of oceanic, coastal fisheries and aquaculture resources. Despite the challenges in the management of the region's marine resources, there are also opportunities to derive greater economic and social benefits from them. The development of aquaculture in the region, along with alternative livelihoods, hold significant potential. FAME provides technical assistance to support PICTs to maximize these sustainable development opportunities in the marine sector.

FAME is composed of two programmes: Coastal Fisheries and Aquaculture Programme (CFAP) and the Oceanic Fisheries Programme (OFP). The Director's Office provides divisional support and strategic direction across the programmes and cross-cutting projects. Working with all 22 PICTs, FAME has strong partnerships with regional, sub-regional and national entities working in the marine sector. FAME staff are based in New Caledonia, Fiji, Federated States of Micronesia and Vanuatu, with most of its ~100 staff being based in New Caledonia.

The OFP has initiated several programs of work that are focused on improving the understanding of the impacts of fishing and climate on the tuna fisheries of the western and central Pacific Ocean. This role will lead field-work and lab-based research to provide quality data on dynamics and life history of tuna and other regionally important bycatch and coastal species to improve regional stock assessments, including research on age and growth, and variability by sex and area, genetic stock structures and spatial mixing of stocks, and the capacity of stocks to adapt to the impacts of climate change.



Key Result Areas (KRAs):

The position of **Senior Fisheries Scientist (Fisheries Ecology and Biology)** encompasses the following major functions or Key Result Areas:

1. data acquisition on fisheries ecology and biology to support stock assessment and ecosystem-based fisheries management, 25%.
2. data analysis and modelling of fisheries biology and ecology including age and growth studies, and stock structure, 25%.
3. information and capacity development at regional level for WCPFC and national level for SPC members, 25%.
4. project development, planning, fund raising, reporting and administration, 25%.

The performance requirements of the Key Result Areas are broadly described below

Jobholder is accountable for	Jobholder <u>is</u> successful when
<p>KRA 1: Data acquisition on fisheries ecology and biology to support stock assessment and ecosystem-based fisheries management, 25%</p> <ul style="list-style-type: none"> • Conduct research on fisheries biology and ecology and participate in ecological and biological research that delivers new knowledge on fisheries, populations, biology and the physical and biological environment • Develop ecosystem monitoring by designing strategies for tagging and biological sample collections (otoliths, stomach content, tissue) from diverse sources (observer-based, ship of opportunity, tagging and scientific cruise) 	<ul style="list-style-type: none"> • Data collection and analysis are implemented according to work plans and budgets and reported at relevant international, regional and national meetings • Data and analyses are used in the preparation of issue specific national reports, policy briefs and regional reports • New knowledge is published in the peer-reviewed scientific and executive literature in a timely manner.

<p>and supervise the implementation of these designs and undertake fieldwork when required</p> <ul style="list-style-type: none"> • Coordinate, supervise and undertake laboratory work and provide training for staff, attached staff or trainees in laboratory • Contribute to the development of databases for the management of the acquired data • Document the progress in data acquisition and management for publication as scientific papers, technical reports and country reports, and present findings to regional and scientific meetings 	
<p>KRA 2: Data analysis and modelling of fisheries biology and ecology including age and growth studies, and stock structure, 25%</p> <ul style="list-style-type: none"> • Analyse fisheries biology and ecology data and incorporate these and other information into existing and/or new analytical frameworks and models • Participate in ecological and biological analyses and model development that delivers new knowledge on the relationships between fisheries, populations, bycatch populations and their physical and biological environment • Analyse climate change impact on fisheries biology and ecology through model simulation and ecosystem scale analyses • Document the results of research for publication as scientific papers, technical reports and country reports, and present findings to regional and scientific meetings • Technical support provided to SPC members, to the WCPFC Secretariat, the WCPFC Scientific Committee and its technical working groups, to FFA and PNA and other regional organisations, on fisheries biology and ecology 	<ul style="list-style-type: none"> • Model development and analysis projects are implemented according to work plans and budgets and reported at relevant international, regional and national meetings • Model analyses and syntheses are used in the preparation of issue specific national reports, subregional and regional reports • New knowledge is published in the peer-reviewed scientific and executive literature in a timely manner • Advice and services are provided as agreed through formal processes, and as resources allow for ad-hoc requests, and reported in a timely and efficient manner
<p>KRA 3: Information and capacity development at regional level for WCPFC and national level for SPC members, 25%</p> <ul style="list-style-type: none"> • Provide training to attachments in fisheries biology and ecology and related analytical approaches and modelling • Contribute where applicable to OFF, FAME and SPC publications, such as Fisheries Newsletters, annual reports, and results reporting for CRGA and donors • Produce reports for all activities undertaken in the appropriate format for the activity 	<ul style="list-style-type: none"> • Training and assistance provided to attachments • Input or articles are provided for all Programme, • Divisional and Corporate publications within the set deadlines • Reports are produced in a timely manner after completing an activity

including technical reports and trip reports, and input to funding proposals, donor reports	
<p>KRA 4: Project development, planning, fund raising, reporting and administration, 25%.</p> <ul style="list-style-type: none"> Assists the Section Head, to develop the annual work plans and work plan reports for the Section, consistent with the FAME business plan Manage on a day-to-day basis a Senior Research Officer Maintains up to date corporate and administrative procedures for all activities undertaken Fills in for the other staff when they are on leave or duty travel, when required Undertakes resource mobilisation activities when required Contribute to enhanced collaboration with other science institutions Participates in other administrative duties as directed by the Section Head 	<ul style="list-style-type: none"> Annual work plans and reports for the Section are consistent with the FAME business plan All of the operations and activities undertaken are fully documented and all administrative tasks completed within the set deadline Acting roles for other staff are successfully fulfilled Concept notes are submitted for resource mobilisation Collaboration with other institutions enhanced

The above performance requirements are provided as a guide only. The precise performance measures for this job will need further discussion between the jobholder and supervisor as part of the performance development process.

Most Challenging Duties Typically Undertaken (Complexity):

- Working across the broad and dynamic field of fisheries ecology and biology
- Working across several science disciplines simultaneously
- Working at sea on research vessels
- Managing numerous tasks at the same time and answer to supplementary unplanned requests
- Conducting fisheries biology and ecology research and analyses at an international standard
- Advanced analysis of large datasets, using different statistical methods
- Communicate highly technical results to the senior executive audiences.

Functional Relationships & Relationship Skills:

Key internal and/or external contacts	Nature of the contact most typical
<p>External</p> <p>Key external contacts are:</p> <ul style="list-style-type: none"> Senior Government Officials and senior Fisheries department staff of SPC members International tuna fisheries scientists Donor agencies Research Organisations and Universities (eg. IRD, CSIRO, UoH, IATTC, IFREMER, UNC, SPREP, USP, NIWA) Forum Fisheries Agency Staff Western and Central Pacific Fisheries Commission 	<ul style="list-style-type: none"> Sharing of new research, information dissemination in a fisheries management context Liaison to organise sample collection, research permits, and joint work Training attachments and students Development of proposals, work plans and budgets Collaboration on research programmes and developing research papers Communicating project results and their implications for providing a sound scientific

<ul style="list-style-type: none"> Media 	<p>basis for ecosystem-based fisheries management</p> <ul style="list-style-type: none"> Provision of briefing communications to inform negotiations for tuna fishery management Provision of technical support to Government Officials of SPC members
<p>Internal Key internal contacts are:</p> <ul style="list-style-type: none"> OFP FEMA colleagues OFP Stock Assessment and Modeling Section OFP Fisheries Data Management Section Coastal Fisheries Programme Fisheries Information section SPC Procurement and Finance and other programme support units 	<ul style="list-style-type: none"> Staff training and supervision Collaboration with colleagues on technical issues and the preparation of briefing materials Collaboration on research and with new knowledge generation Information dissemination Administrative tasks

Level of Delegation:

Routine Expenditure Budget: 60.000 EUR

Budget Sign off Authority without requiring approval from direct supervisor: 2,000 EUR

Personal Specification:

This section is designed to capture the expertise required for the role at the 100% fully effective level. (This does not necessarily reflect what the current position holder has.) This may be a combination of knowledge / experience, qualifications, or equivalent level of learning through experience or key skills, attributes or job specific competencies.

Qualifications

<p>Essential:</p> <ul style="list-style-type: none"> A relevant postgraduate qualification, preferably at PhD level, in fisheries science, population biology, population genetics, age and growth, ecosystem modelling or a related discipline or equivalent experience. 	<p>Desirable:</p> <ul style="list-style-type: none"> Post-doctoral work in fisheries biology and ecology
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Knowledge/Experience

<p>Essential:</p> <ul style="list-style-type: none"> At least seven years of professional experience in marine ecological research ideally directed at the development of scientific advice for fisheries management At least 3-5 years post-graduate experience in fisheries biology and ecology Publications in fisheries biology and ecology 	<p>Desirable:</p> <ul style="list-style-type: none"> Post-graduate experience in indo-pacific fisheries biology and ecology Ecosystem modelling skills Experience of working at-sea on research vessels Experience in supervising research assistants and students in a laboratory setting
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<ul style="list-style-type: none"> • Demonstrated quantitative analytical skills • Excellent verbal and written presentation and communications skills in English, both at a technical level and in the preparation of information destined for the general public • Proven ability to work as part of an interdisciplinary and/or multi-cultural team • Ability to meet project deadlines, often underchallenging circumstances 	<ul style="list-style-type: none"> • Experience in histology, otolith processing and age estimation • Direct experience of fisheries issues in the Western and Central Pacific region • Communication skills in French both written and oral
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Key Skills/Attributes/Job Specific Competencies

The following levels would typically be expected for the 100% fully effective level:

Expert level	<ul style="list-style-type: none"> • Implementation of large-scale multidisciplinary ecosystem, ecological and biological research programmes • Statistical and mathematical modelling • Skills in histology, otolith processing and age estimation • Fisheries biology and ecology knowledge • Communication skills, oral and written • Report writing • Provision of scientific advice for fisheries management
Working knowledge	<ul style="list-style-type: none"> • French • Database software • International fisheries management
Awareness	<ul style="list-style-type: none"> • SPC Regulations and Policies • SPC OHS Policy • Facilities Policy

Key Behaviours

*All employees are measured against the following **Key Behaviours** as part of Performance Development:*

- Change and Innovation
- Health & Safety
- Interpersonal Skills
- Teamwork
- Taking Responsibility
- Attendance and punctuality
- Promotion of Equity and Equality
- Judgement
- Building Individual Capacity

Personal Attributes

- High level of professional integrity and ethics
- High level commitment to achieving workplace performance standards
- Punctuality
- Honesty
- Sense of teamwork and organizational purpose

Change to Job Description:

From time to time, it may be necessary to consider changes in the job description in response to the changing nature of the work environment – including technological requirements or statutory changes. Such change may be initiated as necessary by SPC. This Job Description may also be reviewed as part of the preparation for performance planning for the annual performance cycle.