# Position Details

## Research Scientist/Engineer- CSOF6

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| The following information is for applicants | |
| Advertised Job Title | Quantitative Ecologist |
| Job Reference | 72542 |
| Tenure | Specified Term of 3 years  Full-time |
| Salary Range | AU$113,338 to AU$132,811 pa (pro-rata for part-time) + up to 15.4% superannuation |
| Location(s) | Australian Tropical Sciences and Innovation Precinct (ATSIP) Townsville, QLD |
| Relocation Assistance | Will be provided to the successful candidate if required |
| Applications are open to | Australian/New Zealand Citizens and Australian Permanent Residents currently residing in Australia |
| Position reports to the | Team Leader – Sustainable Northern Australia |
| Client Focus – Internal | 20% |
| Client Focus – External | 80% |
| Number of Direct Reports | 0 |
| Enquire about this job | Helen.Murphy@csiro.au |
| How to apply | Apply online at <https://jobs.csiro.au/>  Internal applicants please apply via **Jobs Central**  If you experience difficulties when applying, please email [careers.online@csiro.au](mailto:careers.online@csiro.au) or call 1300 984 220. |

### Role Overview

The role of Research Scientist Staff in CSIRO is to conduct innovative research leading to scientific achievements that are aligned with CSIRO’s strategies. You may be engaged in scientific activity ranging from fundamental research to the investigation of specific industry or community problems. You will have the opportunity to build and maintain networks, play a lead role in securing project funds, provide scientific leadership and pursue new ideas and approaches that create new concepts.

The Quantitative Ecologist will join the Living Landscapes Program as a member of the Sustainable Northern Australia Team. Based in Townsville, the role will primarily undertake research focused on developing ecologically-based approaches to wildlife management issues. Existing projects are large, transdisciplinary, multi-institutional and multi-governmental efforts which have a major impact on government and industry policy and action. Indigenous collaboration and co-development of research is a strong feature of the Team’s work.

The Quantitative Ecologist will contribute high level ecological and statistical skills to a range of projects undertaking innovative research into the ecology and management of native and invasive vertebrate species. Current projects include the design and implementation of long-term, national scale threatened species monitoring programs, understanding movement and resource use of mobile vertebrates to better address current and future management needs, and the development of new land management tools for feral animals in Northern Australia.

### Duties and Key Result Areas:

* Work with internal and external stakeholders to co-develop research products that support ecologically-based wildlife management strategies.
* Provide original quantitative analyses to understand species population dynamics, the effectiveness of management actions, and the complex interactions among species and humans
* Contribute to and/or lead scientific research that integrates spatial data, field collected data and remote data-streams to enhance environmental management outcomes
* Translate complex data and analytical outputs into easily interpreted end-products for use by non-scientific stakeholders.
* Maintain confidentiality when dealing with commercially sensitive information.
* Act as a trusted advisor, utilising knowledge of client’s business and understanding of their underlying needs.
* Anticipate industry and/or community needs and market direction through client liaison/networking and identify and adapt quickly to changes.
* Within broad guidelines, use professional expertise, knowledge of other disciplines and research experience/achievement to formulate, develop and complete an approved research program with general direction as to the aims of their activities.
* Communicate research results to clients and the scientific community through oral and written reports
* Communicate openly, effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Work collaboratively as part of a multi-disciplinary, often regionally dispersed research team, and business unit to carry out tasks in support of CSIRO’s scientific objectives.
* Adhere to the spirit and practice of CSIRO’s Code of Conduct, Health, Safety and Environment procedures and policy, Diversity initiatives and Making Safety Personal goals.
* Other duties as directed.

## **Required Competencies:**

* **Teamwork and Collaboration:** Cooperates with others to achieve organisational objectives and may share team resources in order to do this. Collaborates with other teams as well as industry colleagues.
* **Influence and Communication:** Identifies critical stakeholders and influences them via an influential third party, for example through an established network, to gain support for sometimes contentious proposals/ideas.
* **Resource Management/Leadership:** Sets up and maintains effective and efficient work teams and manages performance and resources, to achieve objectives. Chooses appropriate management strategies and communication styles to maintain high levels of motivation and productivity. Gives feedback for development purposes and provides support and direction for improvement.
* **Judgement and Problem Solving:** Anticipates and manages problems in ambiguous situations. Develops and selects an appropriate course of action and provides for contingencies. Evaluates, interprets and integrates complex bodies of information and draws logical conclusions, synthesises proposals and defends options with reasoned arguments.
* **Independence:** Assesses the risk and opportunity of identified strategies, options and actions. Overcomes problems and setbacks in achieving goals. Invariably includes consideration of value-added future impact on bottom line when determining the optimal and efficient use of resources.
* **Adaptability:**Demonstrates flexibility in thinking and adapts to, and manages, the increasing rate of organisational change by adjusting strategies, goal and priorities.

## **Selection Criteria**

#### Essential

*Under CSIRO policy only those who meet all essential criteria can be appointed.*

1. A PhD (or an equivalent combination of qualifications and research experience) in a relevant field such as ecology, quantitative ecology, behavioural ecology, etc
2. A current driver’s licence.
3. A strong ecological background, including field and experimental design skills, and an on-going interest in field-based research, as well as the ability to use ecological concepts to address environmental issues.
4. Highly developed skills in the general areas of data-driven modelling and programming, ideally including some area of special expertise e.g. spatial statistics, movement analysis, or developing mathematical models of ecological processes.
5. Demonstrated ability and drive to undertake original, creative and innovative research by generating and pursuing novel ideas and solutions to scientific research problems, and following through to published reports and papers.
6. Previous experience transforming complex data and concepts into easily interpreted end products for policy makers and non-scientific stakeholders.
7. Willingness and interest to work across a range of projects and in a variety of capacities.

## **Desirable:**

1. Willingness to participate in field work, sometimes in remote locations, involving periods of up to several weeks away from base.
2. Experience in the capture, restraint (manual and/or chemical), and biological sample collection (e.g. blood and tissue samples) of native or invasive vertebrates.
3. Expertise in High Performance and/or cloud computing systems and experience with relational databases (e.g. SQL, postGRES).
4. Experience working within Northern Australian land management systems.
5. Experience with analysis and collection of citizen science data as well as aggregators (e.g. GBIF, ALA).
6. Mobile app and/or data collection systems development.

Special Requirements

Appointment to this role may be subject to conditions including provision of a national police check as well as other security/medical/character clearance requirements.

* The successful candidate will be asked to obtain and provide evidence of a National Police Check or equivalent. Please note that people with criminal records are not automatically deemed ineligible. Each application will be considered on its merits.
* The successful candidate will be required to undertake a pre-employment medical examination prior to commencement.

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