# Rodent Ecologist – CSOF5

Role summary for potential applicants

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| Advertised Job Title**:** | Rodent Ecologist  |
| Reference Number**:** | 58799 |
| Classification**:** | CSOF5 |
| Salary Range: | AU$97,276 – AU$105,269 plus up to 15.4% superannuation |
| Location**:** | Black Mountain ACT  |
| Tenure: | Specified Term 3 years (with option for 2 additional years) |
| Relocation assistance**:** | Will be provided to the successful candidate if required. |
| Applications are open to: | * All Candidates
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| Functional Area**:** | Research Scientist / Engineer  |
| % Client Focus - Internal: | 0% |
| % Client Focus - External: | 100% |
| Reports to the: | Team Leader Invasive Animals |
| Number of Direct Reports: | 0 |

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| **Role Overview:** |
| This position is an exciting opportunity for an early career, highly motivated research scientist with skills in **rodent ecology** to join the Invasive Animals Team of the Health and Biosecurity Business Unit of CSIRO.The role of a Research Scientist in CSIRO is to conduct innovative research leading to scientific achievements that are aligned with CSIRO's strategies. You will be engaged in scientific activities to develop approaches to critically examine the effect of farming practices on mouse ecology, to reduce crop damage and increase farmer profitability. Career development will require broadening your research portfolio by identifying new opportunities and securing new funding for projects that deliver on CSIRO’s strategy. You will have the opportunity to build and maintain networks, provide scientific leadership and pursue new ideas and approaches that create new concepts. Mouse outbreaks continue to cause substantial economic, social and environmental impacts to the Australian grains industry. During the 1993 mouse plague an estimated ~$100M of damage was done to grain producers, and during the 2010/11 plague, mice damaged more than 3M hectares in NSW alone, as well as causing significant damage to grain growing regions in SA, VIC and WA. In addition, farming systems have changed over the past 10-20 years towards adoption of zero-till or no-till practises and an increase in cropping intensity. These new systems provide great benefits to farmers by making farming system more sustainable, however they can inadvertently lead to more food and cover available to mice. Mice are now present in the system at higher levels and thus taking advantage of conditions to cause greater damage to crops more frequently.In the role of the rodent ecologist, you will join a dynamic and interdisciplinary team working at the interface of applied and fundamental science in a highly collaborative environment. As part of this project, you will be responsible for independently running a series of field experiments to test a range of hypotheses to lead to improved understanding of mice in Australian cropping systems so that growers and the grains industry will have improved understanding of options for minimising the impacts of mice. You will use a range of techniques and technologies to assess mouse populations and mouse behaviour in response to a range of farm management practices and manipulations and to develop specific recommendations for the grains industry. A series of replicated experiments across different regions will evaluate the impact of these practices on mouse populations, and on economics and profitability. There will be a strong communications component to the project to enable growers to understand the economic thresholds of mouse populations including management practices.**We work flexibly at CSIRO, offering a range of options for how, when and where you work.** **Find out more here!:** [Balance](https://www.csiro.au/en/Careers/A-great-place-to-work/Work-life-balance) |

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| **Duties and Key Result Areas:** |
| * Devise strategy and assume scientific responsibility for research and interpreting results to deliver on project-related outputs.
* Undertake field-based research (including experimental design and data analysis) to deliver on project-related outputs.
* Incorporate novel approaches to scientific study by adapting and/or developing original concepts and ideas into existing and future research.
* Produce high quality scientific papers suitable for publication in high quality international journals, for client reports, and for presentation at national and international conferences.
* Liaise with the grains industry and growers to discuss farm management practices. Give presentations to farmers and seek feedback about further research directions.
* Interact positively or work collaboratively with internal and external colleagues, partners and customers to build productive relationships and collaborations regionally, nationally and internationally, to enhance impact of the science or create new business opportunities.
* Make a contribution to the effective functioning of the research team, including training and supervision of technical staff and students, and help deliver CSIRO’s organisational objectives and plans.
* Provide coaching, mentoring and on-the-job training to post-doctoral fellows, technical staff and students to ensure high quality research results.
* Communicate effectively and respectfully with all staff, clients and suppliers in the interests of good business practice, collaboration and enhancement of CSIRO’s reputation.
* Adhere to the spirit and practice of CSIRO’s Values, Health, Safety and Environment plans and policies, Diversity initiatives and Zero Harm goals.
* Undertake appropriate training and development programs developed by CSIRO.
* Other duties as directed.
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| **Selection Criteria:** |
| *Under CSIRO policy only those who meet all essential criteria can be appointed****Pre-Requisites:**** **Education/Qualifications:** A doctorate and/or equivalent research experience in vertebrate pest ecology, preferably on rodents in agricultural systems.
* **Communication: Strong written and oral communication skills including the ability to publish research results, prepare reports and present the results of scientific investigations at national and international conferences and stakeholder meetings.**
* **Publications: A strong record of publication in high quality, peer reviewed journals.**
* **Collaboration: A history of professional and respectful behaviours and attitudes in a collaborative environment along with the ability** to develop productive and lasting relationships with a wide range of collaborators and stakeholders.
* **Experience:** Relevant postdoctoral research experience or equivalent.
* **Licence:** Holding or having the ability to obtain an Australian manual driver’s licence.

***Essential Criteria:***1. Demonstrated theoretical, conceptual and practical knowledge with planning and running large-scale vertebrate pest ecology field experiments to test hypotheses.
2. Demonstrated ability to lead projects or components of large multi-disciplinary projects and secure external funding for projects focused on delivering science-based solutions for stakeholders.
3. Demonstrated experience with planning and undertaking field work (trapping, handling, measuring, assessing) and experience with a range of techniques to study macro-level habitat use (e.g. radio-tracking) and micro-habitat use (e.g. spool-and-line tracking), camera trapping, and diet analysis (e.g. using stable isotopes).
4. Experience with writing animal ethics and human research ethics proposals and familiarity with relevant codes of practice.
5. Experience in using databases (e.g. MS Access), data graphic (e.g. SigmaPlot) and undertaking statistical analysis (e.g. R statistical environment).
6. Demonstrated strong oral and written communication skills, such as peer-reviewed publications or experience with high level reporting.
7. The ability to work effectively as part of a multi-disciplinary, multi-location research team, and carry out independent research, to achieve project goals.
8. A record of science innovation and creativity, plus the ability and willingness to incorporate novel ideas and approaches into scientific investigations.
9. Willingness and ability to travel for field trips.

**Desirable Criteria:**1. Demonstrated experience with collection of genetic samples and necropsy for breeding studies.
2. Knowledge of Australian farming systems.
3. Demonstrated skills in conducting economic and financial analysis of farming practices or profitability analyses.
4. Demonstrated ability and willingness to supervise students, technical staff and post-doctoral fellows.

**As Australia’s Innovation Catalyst, CSIRO has strategic actions underpinned by behaviours aligned to**:1. Excellent science
2. Inclusion, trust & respect
3. Health, safety & environment
4. Delivery on commitments.

**In your application and at interview you will need to demonstrate alignment with these behaviours.*****Special requirements:***Appointment to this role may be subject to conditions including security/medical/character clearance requirements. Applicants who are not Australian Citizens or Permanent Residents may be required to undergo additional security clearance processes; which may include medical examinations and an international standardised test of English language proficiency (i.e. IELTS test).- <http://www.ielts.org/default.aspx>To be appointed to this position you are required to have:1. Holding or having the ability to obtain an Australian manual driver’s licence.
2. Willingness and ability to work with mice including carrying out post mortems.
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| **Other Information:** |
| **How to Apply**Please apply for this position online at <https://jobs.csiro.au/> and enter requisition number **58799**. Internal applicants please apply via ‘Jobs Central’ in SAP (click ‘Recruitment’) Please load your CV and cover letter including a response to the selection criteria (Maximum 2MB). You may also be required to respond to some screening questions.  If you experience difficulties applying online call 1300 984 220 for assistance. Outside Australian business hours please email: csiro-careers@csiro.au. **Referees**: Please provide contact details of at least two previous supervisor or academic/professional referees in your resume/CV. **Contact:** If after reading the position details above you require more information please contact:**Dr Tanja Strive** via email: tanja.strive@csiro.au **OR****Dr Peter Brown**via email: Peter.Brown@csiro.au Please do not email your application directly to Dr’s Strive or Brown. Applications received via this method may not be considered by the selection panel.**About CSIRO**Australia is founding its future on science and innovation. Its national science agency, the Commonwealth Scientific and Industrial Research Organisation (CSIRO) is a powerhouse of ideas, technologies and skills for building prosperity, growth, health and sustainability. It serves governments, industries, business and communities across the nation. Find out more! [www.csiro.au](http://www.csiro.au). We work flexibly at CSIRO, offering a range of options for how, when and where you work. Talk to us about how this role could be flexible for you. Find out more! [CSIRO Balance](https://www.csiro.au/en/Careers/A-great-place-to-work/Work-life-balance) **CSIRO Health and Biosecurity** We're dedicated to conducting scientific research that develops products and services to address the complexity and interdependencies of human, animal and environmental health and biosecurity challenges to provide benefits to Australia and the world. |