

PhD Scholarship: Citizen Science: Integrating community groups into basin-scale fish tagging and recovery programs

Project Description:

The Australian government has heavily invested in fish detection systems which have been installed across the Murray-Darling Basin (MDB) to understand fish migrations. Government agencies require the success of any tagging program requires a large pool of tagged fish to be maintained. But there are very rarely resources available. Community groups are often eager to be involved but there are many constraints to this becoming mainstreamed. These constraints include permitting, capacity, animal welfare and a general lack of a coordinated framework for citizen scientists to be involved in such programs. This PhD aims to address this gap.



Partnering with OzFish Unlimited, the student will engage with recreational fishers and First Nations people to better understand how to design and implement basin-wide scientific programs with citizen scientists. The student will establish the framework, through training and collaboration, for citizen scientists to be incorporated into basin-scale programs in a scientifically robust way which supports animal welfare considerations.

The student will be required to work with academic, government, Indigenous, community and industry actors to demonstrate the benefits of co-design through a series of targeted on-ground projects. A comparison between traditional and western fish capture methods are expected to be a key feature of this work. The long-term goal is to find a role for citizen scientists and river rangers in fish tagging programs across the Murray-Darling Basin, integrated into government initiatives as trained and trusted partners.

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Team

For this PhD project we are seeking a candidate to be part of a multi-disciplinary team of CSU and NSW DPI ecologists, fish tagging industry leaders, First Nations and recreational angler groups and OzFish Unlimited who are working to develop Australia's first basin-wide citizen science fish-tagging program by developing and evaluating pilot projects in NSW, building awareness and ensuring tagging programs are underpinned by rigorous science with legislative requirements.

The candidate will have the ability to develop cutting-edge research as part of this R&D program on a topic with limited established local expertise and will have the capacity to greatly influence future fisheries management through south-eastern Australia. The candidate will have access to state-of-the-art field equipment and a research laboratory at CSU Albury. Under the mentorship of highly qualified researchers, the candidate will be supported in their continued training as a researcher and will gain exposure to researchers and employment opportunities across the academic, public and private sector, both in Australia and internationally.

The Preferred Candidate:

Prospective candidates will need to apply via a competitive process. You will require either a First Class Honours or a Masters degree with a research component or many years' experience in research with a strong track record of publication. It is also desirable if you: have a background in ecology or environmental studies (a passion for fisheries and/or working with regional communities would be a distinct advantage); are independent; have excellent writing skills with a track record of publication; have an interest in the subject matter; and are enthusiastic about working in a dynamic interdisciplinary environment.

Place of Employment and Place of Work:

The candidate will be enrolled in the Gulbali Institute at the Albury Campus of Charles Sturt University under the supervision of Professor Lee Baumgartner and Dr Katie Doyle. Fieldwork will be essential to various sites across NSW, with capacity to utilise the Inland Fisheries Research Laboratory at the Albury Campus as required.

Stipend:

Stipend Range: \$28,854-35,000 (tax free) per year over 3 years with generous support in the form of operational expenses and technical staff assistance that exceeds typical university scholarships. There will be the potential to supplement the stipend by undertaking a limited amount of casual work on related fisheries projects to diversify skills, but this must be in accordance with the university's employment rules for scholarship students.

Selection Criteria:

Applications are assessed against [three key areas](#):

Previous Academic Performance: (70% of the assessment). This assessment considers the nature and level of the applicant's highest, relevant qualification and grade point average.

Research and/or Professional Experience: Evidence of an applicant's research achievements and relevant professional experience (15% of the assessment). This includes such aspects as peer-reviewed research outputs, high esteem academic awards and prizes, relevant research or professional experience.

Research Alignment and Supervisor Capacity at CSU: Alignment with strategic research priorities and strengths contributes up to around 15% of the assessment. This includes the strength of alignment with the [CSU Research Narrative](#); the supervisory capacity and the strength of the research environment within the field of research; and the expected impact and end user engagement of the proposed research.

Commencement:

The successful student will commence in either session 2 2022 or session 1 2023.

Expressing an Interest:

Applicants will need to apply for enrolment and also send an expression interest (including a full CV and a brief cover letter of no more than two pages) outlining your experience and research interests to Professor Lee Baumgartner (Charles Sturt University, email: lbaumgartner@csu.edu.au) and Dr Katie Doyle (Charles Sturt University, email: kadoyle@csu.edu.au).

Closing Date:

Expressions of interest will remain open until a candidate has been selected. Please submit a brief application including enrolment application, CV and expression of interest as per the details above.