

Requisition ID	TBD
Student Recruitment Type	Student Hire Hourly
ASU Job Title	Student Worker (IV)
Working Job Title	Research Assistant: Decision Tool for Conservation Investments
Campus/Location	Campus: Tempe
Job Code	TBD
Department Name	School of Sustainability or ASU Wrigley
Full-Time/Part-Time	Part-time (20 hrs/wk)
VP Code	EXEC VP/PROVOST
Scope of Search	Open
Grant Funded Position	No
Salary Range	\$15/hour

Job Description

The ASU [Center for Biodiversity Outcomes](#) works with scientists and decision-makers to conduct cutting-edge research to build science-based solutions for pressing conservation threats and protect biodiversity. The center works on a number of different projects with different partners and endeavors to communicate critical knowledge and expertise to the broader scientific and practitioner community in the conservation sector.

We seek a research assistant to join the center and help develop and promote research around conservation decision-making. The candidate for this position will work in two areas: 1) developing an empirically-based decision tool for conservation investments and 2) developing communications materials for ongoing center research and news.

Project 1: Decision Tool for Conservation Investments

Global biodiversity loss is occurring at an unprecedented rate and halting this loss requires a significant increase in the level of conservation investment. Yet, cost-effective, targeted financing of conservation is hampered by a lack evidence surrounding the impact of investment on conservation outcomes of interest, e.g.: carbon sequestered, water quality improved and species secured. A recent study by Waldron et al., 2017 helps overcome this challenge by statistically quantifying the impact of conservation investments on biodiversity declines on a national level. The statistical analysis also takes into account other factors affecting biodiversity such as human population growth and the expansion of agricultural land, and therefore allows investigation of the effect of these factors on the effectiveness of conservation investment.

The aim of this project is to develop a decision-support tool, based on the Waldron et al., 2017 model, for conservation investment at the national scale. The tool would allow visualization of the biodiversity impact of alternative levels of investment, and for different values of other biodiversity drivers in the model. We envision a user-friendly tool that would allow calculation of how much investment is needed to achieve biodiversity targets under different development scenarios.

The research assistant on this project would play a primary role in assisting in the conceptualization and hands-on development of the tool under the guidance of his/her/their supervisor.

References:

Waldron, A. et al. Reductions in global biodiversity loss predicted from conservation spending. *Nature* 551, 364–367 (2017).

Possingham, H. P. & Gerber, L. R. Ecology: The effect of conservation spending. *Nature* 551, 309–310 (2017).

Project 2: Communication materials for the Center for Biodiversity Outcomes

CBO has a number of different approaches to communicating knowledge and updates around conservation and biodiversity to the conservation sector as well as the public. The research assistant will provide support to the communications lead in developing materials such as blog posts, news and updates, newsletters and social media posts.

Essential Duties

- Collaboratively designing the tool structure, compile and clean data and metadata for input
- Incorporate modeling framework into R
- Use R Shiny to build an interactive web application
- Work one-on-one with the CBO communications manager
- Develop web-based communications materials, including blogs, social media posts, newsletters.

Minimum Qualifications

Background in statistics and experience with regression modelling. Experience using R.

Desired Qualifications

- Exposure to, or experience with, designing data visualizations
- Clear and concise writing skills
- Interest in conservation and sustainability science

Working Environment

Activities are performed in an environmentally controlled office setting subject to extended periods of sitting, keyboarding, and manipulating a computer mouse (65%); required to stand for varying lengths of time, and walk moderate distances to perform work (25%). Frequent bending, reaching, lifting, pushing and pulling up to 25 pounds (10%). Regular activities require ability to quickly change priorities which may include and/or are subject to resolution of conflicts. Ability to clearly communicate verbally, read, write, see and hear to perform essential functions of the job. Regular use of standard office equipment including, but not limited to: computer workstation/laptop (keyboard, monitor, mouse), printer, fax, calculator, copier, telephone and associated computer/technology peripherals. This position receives annual managerial review of objectives.

Department Statement

The Julie Ann Wrigley Global Institute of Sustainability conducts research, education, and problem-solving related to sustainability, with a special focus on urban environments. The Institute initiates and nurtures work on issues of sustainability across many departments on the four campuses of ASU, and collaborates with other academic institutions, governments, businesses and industries, and community groups locally, nationally, and globally.

ASU Statement

Arizona State University is a new model for American higher education, an unprecedented combination of academic excellence, entrepreneurial energy and broad access. This New American University is a single, unified institution comprising four differentiated campuses positively impacting the economic, social, cultural and environmental health of the communities it serves. Its research is inspired by real world application blurring the boundaries that traditionally separate academic disciplines. ASU serves more than 70,000 students in metropolitan Phoenix, Arizona, the nation's fifth largest city. ASU champions intellectual and cultural diversity, and welcomes students from all fifty states and more than one hundred nations across the globe.

ASU is a tobacco-free university. For details visit www.asu.edu/tobaccofree

Arizona State University is an Equal Opportunity/Affirmative Action employer.

Instructions to Apply

Please contact us directly by e-mailing your resume to Anahi Astudillo at Anahi.Astudillo@asu.edu and Krista Kempinen at krista.kempinen@asu.edu.

Please include all employment information in month/year format (e.g., 6/88 to 8/94), job title, job duties and name of employer for each position.

Resumes should clearly illustrate how prior knowledge and experience meet the minimum and desired qualifications stated in this requisition.