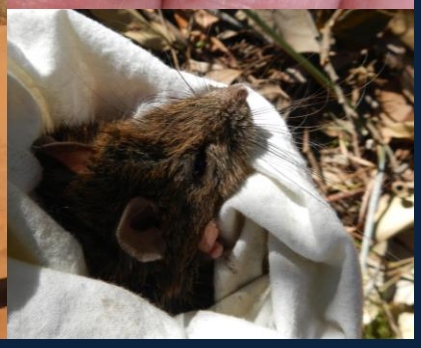

Plastic fantastic:
Understanding phenotypic plasticity for conservation

THE CENTER FOR SUSTAINABLE ECOSYSTEM SOLUTIONS PRESENTS:

Dr Stephanie Courtney Jones, UOW, Australia

Date: Monday 23rd April

Time: 16:00 – 17:00

Venue: Building 20 Theatre 5 (20.5)

Refreshments will be provided

ABSTRACT

Captive breeding programmes (CBPs) offer a method for preventing the extinction of threatened species by generating animals for reintroduction and supplementing wild populations. However, CBPs often have difficulty establishing self-sustaining populations and generating individuals for release. A contributing factor to this failure may be the condition of captivity itself, producing phenotypes that differ from wild phenotypes. These phenotypic changes may lead to captive individuals having reduced survivorship, as well as reduced reproductive success following reintroduction. Ultimately, a range of factors determine success of reintroductions; however, the effect of captivity on phenotypic traits is largely unknown. I outline how an animal's phenotype may contribute to the success or failure of CBPs, using model species to examine phenotypic changes in captivity. Specifically, I look at developmental, morphological and behavioural phenotypes across multiple generations and experimentally explore the possibility of instilling favourable traits in the rearing process of captive-bred species. By understanding how environmental factors interact in captivity to cause phenotypic change, this may assist with conservation by improving the quantity or quality of individuals generated in captive breeding programmes.

UNIVERSITY OF WOLLONGONG AUSTRALIA

BIOGRAPHY

Dr Stephanie Courtney Jones is a casual lecturer, demonstrator and tutor at the University of Wollongong. With interests in phenotypic plasticity, assisted evolution, translocations, conservation technology, community ecology and their applications for conservation biology; her current projects examine the effects of environmental change on phenotypic traits and the consequences for community structure and composition, and further examines the use of technology for wildlife management across changing landscapes in Australia and south east Asia. She studied her Bachelor of Science (Zoology, Environmental and Conservation Biology) at Monash University, a Master of Science (Environmental Biology) and completed a PhD at the University of Wollongong.