

EVOLUTION, ECOLOGY, & GENETICS
RESEARCH SCHOOL OF BIOLOGY

SPECIAL SEMINAR – Tuesday 6 Sept, 1pm

Dr Jo Madden

School of Psychology, University of Exeter

Cultivating a Sexual Display



Cultivation drives co-evolutionary change typically through enhanced food supply for the cultivator and improved growth and protection for the cultivar. Cultivation by non-humans is usually restricted to food, but I describe how male spotted bowerbirds *Ptilonorhynchus maculata* cultivate *Solanum ellipticum* to provide fruit solely as decorations in sexual display.

Bowers become surrounded by many *S. ellipticum* following occupation and males benefit exhibiting more fruit at bowers. Plants benefit because fruit are deposited in unusually clear locations. Fruit from plants next to bowers are visually similar to fruit found on bowers but different from fruit from plants far from bowers, and are preferred by males. This novel case of niche construction involving cultivation of non-food elements of a sexual display has implications for display costs.

My research interests focus on the role of the social environment on the expression of sexual traits and the implications for mate choice and sexual selection, using pheasants and bowerbirds as model systems. My wider interests encompass the social environment more generally, using a social network approach to explore communication and the emergence of costly behaviours within groups.

For further info please contact:
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**Seminars are held in the Gould Wing Seminar Room, Building 116 Daley Rd, ANU
ALL STAFF AND STUDENTS ARE WELCOME TO ATTEND**