

Biology Research Seminar

October 17

Monroe Hall, Room 157
12:30 – 1:30 pm

“Dancing bees indicate seasonal foraging challenges.”

Dr. Margaret Couvillon

University of Sussex, Brighton, England



I am a postdoctoral researcher in the Laboratory of Apiculture and Social Insects (LASI) at the University of Sussex. I'm interested in the behavioural ecology of social insects, specifically the evolved traits that have contributed to their success.

Originally from Louisiana, I received her BSc from Loyola University and then volunteered in the national service program, AmeriCorps. After my MSc (Duke University) in Neurobiology, I joined the Department of Animal and Plant Sciences at the University of Sheffield for my PhD. There I studied mechanisms of **nestmate recognition** in honey bees (*Apis mellifera*) and stingless bees. As a postdoctoral research fellow at the University of Arizona, I worked mostly in the bumble bee *Bombus impatiens* to determine why **worker size variation** exists and how it develops.

As a postdoctoral fellow at the University of Sussex, I work with Professor Francis Ratnieks on the Sussex Plan for Honey Bee Health and Well-being. We use a unique aspect of the honey bee - the dance language - to investigate **foraging biology**. By decoding waggle dances, we determine from where honey bees collect nectar and pollen. Ultimately these data will allow us to evaluate the British landscape for honey bees.

Karl von Frisch, who shared the 1973 Nobel Prize for his discovery of the waggle dance, famously said, “The honey bees are a magic well for discoveries, where the more one draws from it, the more there is to draw.” I agree.