

## Exotic exploits: invasive weed induces anti-herbivore defense but recruits no mutualist, only thieves

**Date** 22<sup>nd</sup> Oct (Fri.)

**Time** 16:00 (UTC+8)

**Venue** 3N01 & Zoom



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Biological invasions alter the structure of native ecosystems worldwide by displacing native species, which in turn affects the function of ecosystem processes (Vitousek et al., 1997). Invasions may be particularly detrimental when ecosystems are invaded at multiple trophic levels, especially if invaders form mutualistic or exploitative associations with one another, as such multitrophic interactions can produce cascading ecosystem effects (Green et al., 2011; Mitchell et al., 2006; O'Dowd et al. 2003; Richardson et al., 2000). Despite the importance of investigating these interactions for understanding invasional success, limited research has been done in this area (Kuebbing et al., 2013; Richardson et al., 2000; Simberloff & Holle, 1999). The goal of this research was to determine if invaders from multiple trophic levels form novel, mutualistic interactions in the southeastern U.S. Specifically, I sought to determine if an invasive Chinese tallow tree (*Triadica sebifera*) induced a latent anti-herbivore defense against an introduced specialist herbivore, and if it was rewarded in this effort by attracting the dominant ant species – invasive *Nylanderia fulva* – as a mutualist.



**Emily Jones** is an RA in the Bonebrake lab, where she works on an Asian butterfly species distribution project. Previously, she worked on a public education project with K11 Musea and the Hong Kong Biodiversity Museum (HKU). In 2022, she'll begin her PhD on filters of weed invasion in manuka scrublands with Bioprotection Aotearoa in NZ. In this talk, she'll present research she conducted for her master's degree in the US.

**All are welcome!**