

Pollinator observatories – citizen science to reconnect people with nature in cities

Preferred presentation type: Long talk

Relevant themes: Engaging citizens & Field-based citizen science

Name and position of lead presenting author: Dr Luis Mata, Research Fellow

Luis Mata^{1,2}, Janet Bolitho³, Justin Foster⁴, Holly Kirk¹, Cathy Oke², Kirsten Parris^{2,5} and Sarah A. Bekessy^{1,2}

¹Interdisciplinary Conservation Science Research Group, Centre for Urban Research, School of Global, Urban and Social Studies, RMIT University.

²Clean Air and Urban Landscapes Hub of the Australian Government's National Environmental Science Programme.

³Friends of Westgate Park.

⁴Earthwatch Institute Australia, Research Programs.

⁵School of Ecosystem and Forest Sciences, University of Melbourne.

Abstract

Untapping the benefits of insect biodiversity in cities is contingent on making insects, and the ecosystem services they deliver, tangible to people. Yet most insect species are small and fast, and therefore remain elusive to the majority of onlookers. In this case, plants can serve as an anchor to draw attention to plant-insect interactions. Pollinator observatories – a network of flowering plant species monitored for pollinator interactions by academic and citizen scientists – are a novel approach to reconnect people with nature and demonstrate ecosystem service delivery in cities.

We introduce two citizen science programs, led by a Landcare group and a non-profit organisation respectively, that have incorporated pollinator observatories as part of their community engagement activities. We describe our training and certification methods for citizen scientists to record plant-pollinator interactions, and an app specifically designed to record interaction data. We use our findings to illustrate how citizen science is contributing to fine-tune our knowledge of greenspace pollination networks.

In time, the interaction data documented in each observatory will allow us to gain an understanding of the temporal match between the observatory's flowering phenology and its associated pollinator assemblage. These data could be then linked to the observatory's associated microclimatic data to produce predicted 'observation windows'. We envision that in any given day, season, and weather condition, managers will be able to use this knowledge to guide greenspace users to the pollination observatories where they are more likely to witness insect pollinators in action.

Biography

Luis Mata is a Research Fellow with RMIT's Interdisciplinary Conservation Science Research Group and works as part of the NESP – CAUL Hub. He is an ecologist with an interest in plant-insect interactions, conservation science in urban environments and citizen science.

I acknowledge that I intend on registering and attending CitSciOz18 if my abstract is accepted.