

Pursuit: Putting pesticides on the map to guide conservation of pollinators and their ecosystem services

Time of Event:

Monday, August 12, 2019 - 09:00 to Wednesday, August 14, 2019 - 17:00

"Putting pesticides on the map to guide conservation of pollinators and their ecosystem services"

This is a closed meeting for a funded group of visiting scholars.

Wild and managed pollinators are essential to both food production and natural ecosystems; however, their populations are threatened by multiple stressors including habitat loss and pesticide use. Several models have recently been developed to identify regions where conservation practices can provide the greatest benefit to pollinator populations (wild bees, honey bees, and the Eastern population of the monarch butterfly) and the ecosystem services they provide. These models incorporate habitat quality, but they do not yet take into account patterns of pesticide use in the landscape, despite the availability of relevant data from several state and federal agencies. We will synthesize existing public data sets on pesticide use, pesticide toxicity, and land use to generate several novel indices that reflect spatial and temporal patterns of aggregated pesticide use and potential toxicity to pollinators. We will combine these toxicity-adjusted pesticide use indices with existing landscape data on pollinator habitat and demand for pollination services to identify potential 'hotspots' of exposure in agro-ecosystems. Finally, our group will incorporate our novel indices into existing models to guide the selection of sites for conservation efforts for wild bees, honey bees, and the monarch butterfly.

To learn more about this Pursuit, click [here](#) [1].

Event type:

Project Meeting

Event Attendance:

Private Working Group

Source URL:

<https://www.sesync.umd.edu/events-announcements/tue-2019-06-04-2046/pursuit-putting-pesticides-on-the-map-to-guide-conservation>

Links

[1]

<https://www.sesync.org/project/propose-a-pursuit/putting-pesticides-on-the-map-to-guide-conservation-of-pollinators-and>