TROPILUNCH

Land use change and bat biodiversity: understanding patterns, driving mechanisms and impacts of mitigation

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TUE, NOV 6

12-45-1:45

Grinter 376

Tropilunch is a weekly seminar run by graduate students from the Tropical Conservation and Development (TCD) Program. It provides a forum for a range of discussions and presentations related to TCD work and research. Special guests, visiting scholars and practitioners also participate. It happens every Tuesday @ 12:45 – 1:45 p.m. in Grinter 376.

Tropilunch presentations are recorded and posted weekly on TCD's YouTube Channel.

BIO

Farah was born in Lima and raised in Iquitos, Peru. She obtained her bachelor in Biology and a master in Conservation of Forestry Resources, both at Universidad Nacional Agraria La Molina. In 2013, she started her PhD in Interdisciplinary Ecology at UF as member of Dr. Bette Loiselle Lab. She is interested in understanding how human activities impact wildlife. Her experience has been mainly in the Peruvian Amazon studying mammals, principally primates and bats. For her undergrad thesis she generated a baseline of the endoparasites of spider monkey Ateles belzebuth chamek. For her master's thesis she studied bat diversity present at two elevations in a pre-montane and a montane forest in the Central Yungas of Peru. Before her PhD she was part of the Biodiversity program of the Smithsonian Biology Institute in a project that evaluated the impacts of the construction of a pipeline, and tested the effectiveness of natural canopy bridges for arboreal mammals.

PRESENTATION SUMMARY

Transformation of forest into production systems is one of the major causes of habitat and biodiversity loss. In Amazonian forests of Peru, forest-dominated landscapes are affected by production activities causing rapid and widespread changes, which generate a conflict between the efforts to conserve and the needs for economic development. The work that will be presented examines three topics: (1) importance of riparian forest strips in maintaining bat diversity, (2) the impact of agriculture (papaya plantations and cattle pasture) on bat taxonomic and functional biodiversity, and (3) how three habitats affected aerial insectivorous bats diversity in the same forest-dominated landscape. We found that maintaining riparian forest strips within areas cleared for agriculture has an important conservation value. Agricultural use areas maintain a subset of the diversity of Phyllostomids originally present in the area with papaya as "better" habitats than cattle pastures. Also, agricultural use shows higher activity of aerials insectivores compared to forests. Results from this study can be used to inform management decisions and land use planning.

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