

PhD Dissertation
Department of Environmental Science and Policy
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Defense Date and Time: April 8, 2024 at 10:00am

Defense Location: Hybrid – Exploratory Hall 3301 and virtually on Zoom

Title: Relationship between community structure of frugivorous mammals and the provision of ecosystem services in the Peruvian Amazon

Dissertation Directors: Dr. Rebecca Forkner

Committee: Dr. David Luther, Dr. Chris Kennedy, Dr. Travis Gallo, and Dr. Trond Larsen

ABSTRACT

In the megadiverse Peruvian Amazon, frugivorous mammals contribute to the survival of many utilitarian plants through seed dispersal. Indigenous communities rely on the ecosystem services (ES) these animals and plants provide. Through an analysis of field surveys and questionnaires conducted in protected areas and Indigenous lands in Madre de Dios, Peru, this dissertation highlights the importance of frugivorous mammal diversity relative to ES. Protected areas registered more arboreal mammals, wild fruit, and raw material provision than Indigenous lands. Plant saplings and the potential productivity of wild meat, wild fruit, and raw material increased with frugivorous mammal species and functional diversity.