



UF Center for
Latin American Studies
UNIVERSITY of FLORIDA

TCD
Tropical Conservation &
Development Program

Join us for Tropilunch!!

Logging and indigenous hunting impacts on large Neotropical animals

by Anand Roopsind
PhD Student, Biology, UF

February 21st 2017
12:45 - 1:45pm
Grinter 376

Content: Areas allocated for industrial logging and community-owned forests account for over 50% of all remaining tropical forests. Landscape-scale conservation strategies that include these forests are expected to have substantial benefits for biodiversity, especially for large mammals and birds that require extensive habitat but that are susceptible to extirpation due to synergies between logging and hunting. Additionally, the response of large vertebrates to logging alone are poorly understood due to their cryptic behavior and low densities. In this study, we assessed the effects of logging and hunting on detection and occupancy rates of large vertebrates in a multiple-use forest on the Guiana Shield. Our study site was certified as being responsibly managed for timber production and indigenous communities are legally guaranteed use-rights to the forest. We coupled camera trap data for wildlife detection with a spatially-explicit dataset on indigenous hunting. Our multi-species occupancy model found a weak positive effect of logging on occupancy and detection rates, whilst hunting had a weak negative effect. Model predictions of species richness were also higher in logged forest sites compared to unlogged forest sites. Density estimates for jaguars and ocelots in our multiple-use forest were also similar to estimates reported for fully protected areas. Involvement of local communities in forest management, control of forest access, and nesting production forests in a landscape that includes strict protected areas seemed important for these positive biodiversity outcomes. The maintenance of vertebrate species bodes well for both biodiversity and the humans that depend on multiple-use forests.

Biography: Anand is a doctoral candidate in Biology at UF and a WWF-Russel E. Train Fellow. He is a forester by training with over 10 years of work experience in the Guyanese forest sector. His current academic work focuses on improved forest management in tropical production forests for climate change mitigation. Prior to beginning his PhD Anand was the Assistant Forest Manager at the Iwokrama International Centre for Rainforest Conservation and Development and was also employed by the Guyana Forestry Commission. His PhD thesis focuses on biomass recovery and timber yield sustainability under reduced-impact logging guidelines. He is simulating tropical forest stands under different logging scenarios using a coupled-human systems framework. To inform interventions associated with human behavior in the logging sector, he has worked with timber fellers and forest managers to assess the impacts of training forest workers to improve the residual forest stand post logging as well forest worker safety. In 2013 he won the TCD Marianne Schmink Innovation Award to support his work with timber fellers in Suriname and Guyana.

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. Students are provided with an opportunity to present and discuss their research projects with peers and faculty. In addition, discussion sessions on issues of current interest are also held. Visiting scholars and conservation practitioners also participate when available. It is held every Tuesday at 12:45 p.m. in Grinter 376.

Tropilunch presentations are recorded weekly and can be found on [TCD's YouTube Channel](#)