DEPARTMENT OF ECOLOGY & EVOLUTIONARY BIOLOGY

Dr. Orou G. Gaoue - University of Hawaii at Manoa

"Heterogeneity and plant population response to forest resources harvest"

Conservation biology, as a mission-oriented and crisis driven discipline, has long been concerned by the causes and socio-ecological consequences of resource overexploitation. Harvesting wild plants for non-timber forest products (NTFP) serves as a valuable source of food and medicine for local communities, and potentially contributes to poverty alleviation. However, frequent harvest at high intensity can lead to plant population decline, and jeopardize the ability of future generations to benefit from these ecosystem services. In this talk, I will discuss two emerging issues on resource overexploitation that warrant more discussion in the field of conservation biology. I will first discuss the role of individual plant level heterogeneity and temporally dynamics harvest sequence on population resilience to harvest and the implications for sustainable forest products harvest. Second, I will discuss how combined lethal (timber) and non-lethal (NTFP) harvest of forest resources may be possible in tropical ecosystems. Finally, I will discuss how an in-depth understanding of indigenous people's behavior and their ecological knowledge of their environment can be used to ask more applied questions, develop more realistic models to answer these questions and suggest culturally appropriate and ecologically sounds sustainable management systems.

RESEARCH TALK

Thursday January 28; Room 27, Alumni Memorial Bldg; 4:30- 5:30 PM.