

SEMINAR

Department of Biological Sciences



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Ecosystem modification from tropical forest degradation

Robert Ewers

Senior Lecturer, Imperial College of London, UK

The Stability of Altered Forest Ecosystems (SAFE) project represents one of the world's largest ecological experiments, drawing together almost 100 scientists around the world to examine the ways in which logging, deforestation and forest fragmentation modify the functioning of tropical rainforest, impair their ability to deliver ecosystem services, and reduce their capacity to support the diversity of life. Here, I present preliminary results from a range of researchers, highlighting the role of logging in altering the physical structure of the forest, terrestrial mammalian and invertebrate communities, and fish communities inhabiting first order streams. I link these biodiversity changes to changes in ecosystem processes, such as ant-termite interactions, nutrient cycling and tree respiration rates, and the potential for changes in the transmission rates of human diseases arising from altered mosquito communities. The long-term goal of SAFE is to conduct the science needed to move away from management approaches that polarize the demands of conservation and agricultural productivity, aiding a progression towards designing multifunctional tropical landscapes.

