

Inter-Graduate School Program for Sustainable Development and Survivable Societies

# Interdisciplinary Seminar (1 session course) [#54-(1)]

# The elephant in the room – the difficult task of conserving elephants in a crowded and rapidly developing world

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Date: December 18, 2017 16:30-18:00

## Venue: Shishukan Hall (HIGASHI ICHIJOKAN, basement floor)

### < Summary>

In this seminar, participants will learn and discuss "human wild-life conflict", which is one of the key conservation issues in conservation of biodiversity. Elephants and other megafauna play key and irreplaceable roles in ecosystem processes but, due to their high demand for resources and lack of natural predators, are maladapted to the current human-dominated world. If we want megafauna to survive beyond the bottleneck of the 21st century, business as usual is not an option – we need to find effective ways to coexist with them. Peninsular Malaysia is home to approximately 1,500 wild elephants that in less than two generations have seen over half of their natural habitat replaced by rubber, oil palm, and other anthropogenic land uses. This has led to a sharp decline in elephant range and increase of human-elephant conflict (HEC) in the form of crop raiding. In this talk I will introduce the 'Management & Ecology of Malaysian Elephants' (MEME), an interdisciplinary project run as a collaboration between local wildlife authorities and university researchers that aims to

bring an evidence-based approach to the conservation of Malaysian elephants. We use a combination of GPS-satellite tracking, camera-traps, non-invasive molecular tools and other ecological and social science techniques to study elephants' behavior, ecology, and interactions with people. Among others, our results show that forest fragmentation by roads results in complex, often unexpected, changes in elephant movements and diet; that elephant behavior affects forest structure, composition, and diversity through the dispersal of large-seeded trees and selective feeding of preferred plants; and that translocation is not a long-term solution for HEC mitigation. We are currently proposing a new conservation strategy based on the combination of wildlife-sensitive land-use planning, crop protection, economic compensation, and education, to promote humanelephant coexistence in Malaysia. This project is a good example of the need for holistic and interdisciplinary approaches for wildlife conservation in the Anthropocene as well as the importance of bridging the sciencepolicy gap through collaboration between conservation scientists and practitioners. Peninsular Malaysia can afford to conserve its elephants in the long-term but important changes in people's attitudes and behavior are needed for this to happen.

### < Active type> Lecture and discussion

<**Obligation of attendee** > Active participation and submission of a response to a survey at the end of the class



(Ahimsa Campos-Arceiz deploying a GPS collar on an Asian elephant)