Symposium on Human Elephant Relations in South and Southeast Asia, University of Canterbury May 7 & 8, 2013

Tuesday 7 May

9.30am *Mihimihi*- Maori introduction (Angus Hikairo Macfarlane, Professor of Maori Research)

9.45am *Official Welcome* (Steve Weaver, Assistant Vice Chancellor [Research])

10.00am *Homage to Ganapati, remover of obstacles* (Aditya Malik, University of Canterbury)

Inaugural Lecture

10.15am Raman Sukumar (Indian Institute of Science)- *The elephant-human relationship through the ages*

11.00-11.30am break

Session 1: Entangled Species: Thinking Human Elephant Relations

11.30am Piers Locke (University of Canterbury)- *An integrated approach? Exploring the social, historical, and ecological dimensions of human-elephant relations*

12.00pm Maan Barua (University of Oxford)- *Encounter value: charisma, conflict and Asian elephants*

12.30-1.30pm lunch

1.30pm Kierin Mackenzie (University of Canterbury) - *Ethnoecological mapping as methodological approach for understanding human-elephant interactions*

2.00pm Discussion- Thinking the Human Elephant Relationship

Session 2: Humans and Elephants Through Time

2.30pm Thomas Trautmann (University of Michigan)- *Toward a deep history of mahouts*

3.00pm Patrick Olivelle (University of Texas)- *Science of Elephants in Kautilya's Arthaśāstra*

3.30-4.00pm break

4.00pm Jane Buckingham (University of Canterbury)- *Symbolism and Power: Elephants and Authority in the Mughal World*

Film: Servants of Ganesh 4.30-5.15pm

Wednesday 8 May

9.30am Amy Fletcher (University of Canterbury)- *Woolly mammoths and the paleofuture*

Session 3: Conflict and Coexistence 1: Living With Elephants

10.00am Nicolas Lainé (Paris West University Nanterre)- *Music as a training tool and a way to communicate with elephants in Northeast India*

10.30am Ingrid Suter (University of Queensland)- *Changes in elephant ownership and employment in the Lao PDR: Implications for the elephant-based logging and tourism industries*

11.00-11.30am break

11.30am Nikki Savvides (University of Sydney)- *At the brink of extinction: the captive elephant population and the dying culture of the mahout in Surin Province, Thailand*

12.00am Surendra Varma (Indian Institute of Science)- *Integrating mahout welfare with captive elephant welfare; insights from different captive elephant management regimes in India*

12.30-1.30pm lunch

1.30pm Erin Ivory (Franklin Zoo)- *Elephant Politics*

2.00pm Discussion- Living With Elephants

Session 4: Conflict and Coexistence 2: Sharing Space With Elephants

2.30pm Charles Santiapillai (Rajarata University)- *An assessment of the status of the Asian elephant (Elephas maximus) in Sri Lanka*

3.00-3.30pm break

3.30pm Shanmugasundaram Wijeyamohan (Rajarata University)- *An overview of human-elephant conflict in Sri Lanka with recommendations for its mitigation*

4.00pm Tarsh Thekaekara (Shola Trust)- *Living With Elephants: An Ethnographic approach to 'Conflict' and 'Tolerance'*

4.30pm Ursula Münster (LMU Munich) - *Towards a Multispecies Turn in Elephant Conservation? Human-Elephant Encounters at the Fringes of a Wildlife Sanctuary in Kerala, South India*

5.00pm Discussion- Sharing Space With Elephants

Symposium Dinner

Symposium Abstracts

Raman Sukumar (Indian Institute of Science)- The elephant-human relationship through the ages

The elephant has shared a complex relationship with people through Asian history. From being a source of food and an agricultural pest through its role as a beast of burden, a war machine, a cultural icon, a sacred animal, a trade commodity, and an object of public display, the elephant has profoundly influenced the course of Asian civilizations. I shall successively trace this elephant-human relationship through successive stages in history – the stone age, the Indus civilization, the Vedic period, the Mauryan empire, the Buddhist culture, the mediaeval Hindu world, the Islamic period, the colonial period and post-independent Asia. I would argue that the nature of the elephant-human relationship has been shaped by the specific ecological and socio-political conditions at various stages in Asian history. Finally, I shall briefly contrast this Asian relationship with the elephant to that of the African continent, before outlining a possible role for the animal in the wild and in captivity in the modern world.

Piers Locke (University of Canterbury)- An integrated approach? Exploring the social, historical, and ecological dimensions of human-elephant relations

Humans and elephants have lived together and shared space together in diverse ways for millennia. Variously representing weapons of war, commodities for exchange, emblems of prestige, symbols of divinity, objects of entertainment, vehicles for labour, and icons of conservation, the elephant is an animal entangled with human enterprises of power, wealth, worship, pleasure, and preservation. As such, the human-elephant nexus has been explored in different ways, by different means, for different reasons by disciplines across the sciences, humanities, and social sciences. Increasingly however, research emerges which not only recognizes similarities between the sentient lifeworlds of both humans and elephants, but also the ways in which their histories, socialities, and ecologies are mutually constituted. This raises the possibility of a move beyond multidisciplinarity toward a genuinely interdisciplinary approach to the study of human-elephant relations. Under the rubric of ethnoelephantology, this paper proposes an approach to the investigation of human-elephant relations in which social, historical, and ecological perspectives are symmetrically applied to both human and elephant.

Maan Barua (University of Oxford)- Encounter value: Charisma, conflict and Asian Elephants

This paper is a contribution towards working productively with the tensions between political ecology and more-than-human approaches to the study of human-animal relations. Drawing upon and developing Haraway's concept of 'encounter value', the paper takes up geographers' calls to incorporate ecology and non-dualist accounts of agency into political ecology. It examines encounter value in the context of human-elephant relationships in India. This investigation is driven by two objectives. First, to explore the different trajectories encounter value takes. Second, to examine how encounter value emerging from people's relationships with elephants, are mobilized in practices of biodiversity conservation. The paper identifies two trajectories encounter values take: charisma and conflict. Nonhuman charisma has significant organizing power, and is analyzed symmetrically in this paper. Conflicts have disruptive impacts and affect both conservation practice and rural political economies. Conservation organizations mobilizing encounter value amplify charisma through a range of technological practices. Conflict on the other hand is subdued. The paper shows how corporeal dispositions of elephants, their ethologies and nonhuman agency are an integral component of the political economies of conservation. It concludes by discussing the broader implications of the concept of encounter value and how it enables us to fuse insights from more-than-human geography into political ecology.

Kierin Mackenzie (University of Canterbury)- Mapping traditional ecological knowledge as a methodological approach for understanding human-elephant interactions

Ecological work with elephants has often relied on mapping to clarify the behaviour of herds and individuals in the landscape, as well as highlighting key areas for habitat conservation and conflict areas. This information is vital, but it is hampered by short timescales and the need for intensive fieldwork. As such, it can be prone to missing patterns that occur over larger scales of time, and certain nuances of habitat and behaviour that may vary from herd to herd and forest to forest. One set of complementary information is that of local peoples familiar with elephants, but this has been underutilized. Methodologies developed in documenting traditional knowledge and land use using Geographic Information Systems, such as "Use and Occupancy Mapping" as laid out by Terry Tobias and Participatory GIS provide a way of documenting this type of knowledge, and could be useful for elephant conservation, conflict resolution, and understandings of adaptations and responses by elephants to factors like loss of habitat and responses to changing circumstances. This paper will consider how to map traditional ecological knowledge concerning elephants, and how those working with knowledgeable communities might apply it.

Thomas Trautmann (University of Michigan)- Toward a deep history of mahouts

For some 3,000 years the Indian institution of the war elephant relied upon mahouts, who were the essential mediators between kings and their war elephants. Their knowledge, acquired by apprenticeship and experience, was an essential asset of the kingdom, and the diffusion of their knowledge was essential to the propagation of the war elephant across India and beyond, to Persians, Greeks, Carthaginians, and Romans, and to the Indianized kingdoms of Southeast Asia. Yet we know little about them. These notes toward a deep history of mahouts draws upon the Mahabharata to show their connection with forest people (atavi), the eastern and southern part of India, and with non-Hindus (mleccha); and draws upon Greek and Latin accounts to show the transmission of elephant-knowledge in Hellenistic Syria (the Seleucids) and Egypt (the Ptolemies), who called the mahout, simply, "the Indian".

Patrick Olivelle (University of Texas)- Science of Elephants in Kautilya's Arthaśāstra

Indian treatises on the science of elephants generally date back only to medieval times. The capture, training, and maintenance of elephants, as well as the variety of tasks in which they were employed, however, are referred to in passing in numerous ancient Sanskrit texts. Of these, Kautilya's *Arthaśāstra,* dating at least to the first century CE, is the most significant, because it provides more and more detailed information about elephant culture. Some of the information contained in it probably derives from actual elephant keepers and mahouts and thus becomes a window into this oral expert tradition. My paper will explore the elephant culture of ancient India as presented in the *Arthaśāstra*—from the establishment and maintenance of wild elephant sanctuaries to the construction guidelines for stables for domesticated elephants—while comparing that information with other Sanskrit texts of the period.

Jane Buckingham (University of Canterbury)- Symbolism and Power: Elephants and Authority in the Mughal World

According to Digby, elephants were more important in the military expansion of the Delhi Sultanate than horses, but from Akbar's time, increasing use of artillery and firearms by the Mughals reduced their strategic value in both the Indian and Mughal armies. Despite a relative decline in military value during Akbar's time, the elephant still remained a valuable military asset. Further, the elephant increased in ideological value, both as a symbol of imperial authority and an expression of the emperor Akbar as the perfect embodiment of Mughal masculine values. Akbar took a practical interest in the breeding and training of elephants for the royal stable and, with the aid of imperial artists and writers, incorporated the elephant into both the physical and artistic representation of the new empire. The musth elephant became part of the specific imagery of

imperial Akbari authority. The control of the young emperor over male elephants in rut became a metaphor for Mughal imperial power. Not only did Akbar embody in his person the masculine value of fearlessness and skill in harnessing the heightened powers of the elephant but his personal qualities were proof of his authority over the warrior elites who were crucial to the power and stability of the emergent Mughal empire.

Amy Fletcher (University of Canterbury)- Woolly mammoths and the paleofuture

This paper analyzes the debate about the plausibility of "bringing back" the woolly mammoth via ancient DNA analysis and cloning. Ancient DNA analysis reached the scientific mainstream in the mid 1980s, alongside the discovery of the polymerase chain reaction (PCR). The ability to amplify small fragments of DNA to the order of millions of copies opened up the possibility of rigorous research in paleogenomics (the scientific study of gene fragments from extinct species). This, in turn, encouraged public and mass media fascination with the idea of "resurrecting" an extinct species and reinvigorated a modernist obsession with conquering death that dominates Western science fiction and science futurism. Ancient DNA continues to push back the frontiers of research into deep time and to increase our knowledge of climate change, human migration and evolution. Yet despite many scientists' attempts to normalize ancient DNA analysis as an important and incremental but noncontroversial field, the tantalizing spectre of the woolly mammoth as paleolithic Lazarus continues to disrupt these efforts at boundary drawing. Consequently, this paper considers the idea of cloning the woolly mammoth not through a scientific lens, but through the dual lenses of politics and culture. It asks, at the very moment when critically endangered African elephants seem poised to disappear from the earth unless urgent action is taken, why are we talking about resurrecting woolly mammoths? Why has this particular species become an icon—alongside the passenger pigeon, the T-rex and the thylacine—of de-extinction? How do the scientific and public debates about cloning the woolly mammoth converge and collide in mainstream media? If the woolly mammoth ever was 'brought back,' would the result be an animal or an artefact or both and why might this matter? Using the tools of frame and metaphor analysis, this paper argues that the idea of cloning the woolly mammoth operates as a form of socio-technical imaginary that speaks both to our fears of the present environmental calamity and to our hopes for saving the future through a science of the past.

Nicolas Lainé (Paris West University Nanterre)- Music as training tool and means of communication with elephants in Northeast India

Elephant training is a crucial period within the human-elephant interspecies community. It is the time when man and animal get to know each other, define modalities and forms of communication, and create a common intelligible

world for future interactions. This initial contact is also crucial in the development of attachment and bonds: their long-term partnerships will evolve on the basis of this primary encounter.

In Northeast India the Khamtis, as well as other local populations, address chants to the elephant during each step of its training. What are the peculiarities of these chants and how can we qualify them? What roles do they play in the training process? Within this interspecies communication, what are the differences between voices (commands), sounds and melodies?

I will first consider these chants as Northeast Indian oral literacy. Then, I will explore their various functions (pedagogical, communicative, and social) during training by studying their contents (lyrics, forms, and rhythms). Finally, I argue that chants represent an intangible tool for training elephants, and that music is constitutive of interspecies community. Sung on various occasions after training, chants are also part of the continuing vocal communication used by Khamti to interact with elephants.

Ingrid Suter (University of Queensland)- Changes in elephant ownership and employment in the Lao PDR: Implications for the elephant-based logging and tourism industries

Communities in the Lao People's Democratic Republic (PDR) have been utilizing captive Asian elephants (*Elephas maximus*) for centuries. The elephant handler (mahout) profession has remained fundamentally unchanged. Captive elephants, however, are no longer necessary in roles where they were once considered vital, particularly the logging industry. To gauge mahout demographics and assess problems associated with elephant industries, we surveyed 133 mahouts in the Lao PDR. We found that mahoutship is an ageing industry with a vanishing family association. Contrasts between logging and tourism mahouts were apparent when observing family tradition, finances and industry-related experiences. Logging mahouts rely on tourism to provide them with future employment. However, tourism cannot currently employ elephants on a scale similar to that of logging operations. The need for the traditional mahout and a large population of captive elephants may have reached its finality in Laos.

Nikki Savvides (University of Sydney)- At the brink of extinction: the captive elephant population and the dying culture of the mahout in Surin Province, Thailand

Rampant deforestation in Surin Province, Thailand has led to the destruction of the habitats and food sources of both wild and captive elephant populations. In recent years the welfare of the region's captive population has become of particular interest because of the connections between the welfare of elephants and that of their mahouts. Based on interviews conducted with mahouts the paper shows that in providing alternative forms of food and habitation, elephant management has become a full time job, with mahouts spending most of their

time and income caring for these large creatures. This often occurs at the expense of the mahouts' welfare, and that of both their families and their elephants. Such welfare issues have led to decreased birth rates and numerous health problems meaning that captive elephants, like their wild counterparts, are on the brink of extinction. At the same time the culture of the mahout is dying out both in Surin and in Thailand more broadly as it becomes increasingly undesirable to engage in this difficult and financially unviable form of employment. The paper argues that increasing employment opportunities for mahouts, and hence their income, will therefore have implications for the long term care of the captive elephant population. The paper explores some of the employment programs provided by both the government and NGOs in Surin Province. These programs aim to encourage breeding and longevity amongst the captive elephant population whilst also providing an income for mahouts. The paper will examine as a case study the aims and outcomes of a volunteer-funded program called The Surin Project. The Project enriches the lives of the captive elephant population and also provides regular well-paid employment for mahouts. The paper also shows how the Project's engagement with tribal knowledge about elephant husbandry and land management has uniquely enabled it to support the mahouts, their families, and their elephants, and the culture of mahout/elephant relations in Thailand.

Surendra Varma (Indian Institute of Science)- Integrating mahout welfare with captive elephant welfare; insights from different captive elephant management regimes in India

Captive elephant environments are a complex of interactions between the elephant and its human keepers/handlers (mahouts and their assistants, cawadis). The living environment of mahouts vis-à-vis elephants or perceived socio-economic layer determines his or her welfare status and/or smooth functioning of the captive system. This study was carried out across 12 states of India, involving 6 management regimes, and interviews with 704 mahouts. The study objectives were fulfilled through the following components: A) Developing a database for mahouts and considering its potential benefits for them. B) Studying handlers' professional experience and socio-economic status. C) Quantification of the interaction between handlers and their elephants. D) Assessing welfare status through a set of parameters using values identified and reviewed by the experts. E) Assessing the mortality and risk associated with the handling profession. In this paper I report on; injuries and mortalities, mahout demographics, reasons for professional recruitment, prospects for continued familial recruitment, functional assessments of types of mahout-elephant interactions, and the significance of illiteracy, alcohol consumption, infrastructure, and remuneration.

Erin Ivory (Franklin Zoo)- Elephant Politics

How elephants are managed, and more specifically trained, has been a subject of controversy for decades. The issue has become very political with various animal rights groups, government officials, media, zoos, sanctuaries, circuses, and private owners all battling over elephants and expressing opinions in regards to their care. The battles basically boil down to two things: ankuses and space. There are typically three schools of thought on managing elephants, those that use a form of domination or control, those that use only positive reinforcement, and those that have no contact. Once you have established the way you are going to train your elephant then it's a matter of spatial logistics, the trainer's position in regard to the elephant. Do both the elephant and the trainer have free access to each other? Is there a barrier separating the elephant and trainer? The ability of the trainer and the relationship with the elephant is not based on the spatial logistics of the management, but in the methods used to establish that relationship. The future of elephant management is not being decided by those in the industry, but by public perception. It is how those perceptions are manifested and manipulated which will be the driving force for change.

Charles Santiapillai (Rajarata University)- *An assessment of the status of the Asian elephant (Elephas maximus) in Sri Lanka*

Despite its small size and high human population density, Sri Lanka supports an incredibly rich and varied fauna and flora, including one of the most viable populations of elephant in Asia. It is difficult to imagine Sri Lanka without the elephant, for it is so much a part of the island's history, culture, religions, folklore, mythology and even politics. Despite its iconic position, much remains to be understood about this species and how it interacts with man. Periodic assessment of the status of endangered or threatened species, especially such charismatic and high profile species as the Asian elephant, will help understand the population trends and thereby help assess the success of the conservation programs designed to ensure its long term survival. This paper reports on an island wide survey of elephants conducted in 2011 to determine multiple aspects of Sri Lanka's elephant population demography. The survey results provide invaluable data for anticipating population growth and the management questions it raises regarding the social and economic costs and benefits of elephants for Sri Lanka's human population. The paper argues that unless the people living in and around elephant-dominated ecosystems benefit in some way from the presence of elephants, illegal killing of elephants will continue in the absence of proper and prompt compensation. Nevertheless, given the reverence with which people treat the elephant in Sri Lanka, the prospects for its long-term survival remain good provided its habitat is not fragmented.

Shanmugasundaram Wijeyamohan (Rajarata University)- An overview of human-elephant conflict in Sri Lanka with recommendations for its mitigation

With the increase and spread of the human population, and the reduction of wilderness, incidences of human-elephant conflict have increased in Sri Lanka, threatening a tradition of human tolerance unless conflicts with elephants are mitigated. The human-elephant conflict has replaced poaching as the major cause of mortality of elephants in the wild. Today 50-70 humans and 180-200 wild elephants are believed to perish in the conflict annually. Elephants are shot, poisoned, electrocuted, knocked down by trains, and deliberately killed or maimed by irate villagers with deadly, homemade bombs known locally as "hakka-patas". However, ascribing all elephant mortality to the human-elephant conflict could well mean the triumph of hype over truth, since elephants also die naturally of old age. Elephants are being killed in Sri Lanka mainly because they interfere with agriculture. Although it is unlikely that the human-elephant conflict can be eliminated altogether, every effort must be taken to reduce it to tolerable levels. Electric fences can be effective, whilst the translocation of uncontrollable marauding elephants tends to merely displace problems of conflict with humans. Modern GPS technology can be useful for monitoring such problem elephants however, helping to provide early warnings to chase elephants away from human habitats, whilst FM transmitters can be used to warn individuals through their cell phones.

Tarsh Thekaekara (Shola Trust)- Living With Elephants: An Ethnographic approach to 'Conflict' and 'Tolerance'

The dominant narrative around human wildlife interactions in the realm of conservation science is one of 'conflict', since humans and wildlife, particularly elephants, compete for space and resources leading to dangerous, even deadly, encounters. Emerging from this, proposed solutions revolve around technologies to demarcate and separate human and elephant spaces. Anthropologists, however, have been skeptical of the ecological sciences as the sole authority for the management of human-animal interaction, and many prefer to dwell on what it means to live with animals in a community of beings. Over the last three years we have used an ethnographic approach to better understand conflict in the Nilgiri Hills, South India. We start with an ethnographic analysis of how different peoples perceive elephants, and then examine 'tolerance' [as both a concept and set of relational practices] and how it varies among different ethnic groups with different cultural orientations, but living in the same area and responding to the same 'conflict events'. We find a marked difference between communities, many at odds with the dominant 'conflict' baseline, and propose that 'optimizing tolerance', through a variety of specific, often subtle, techniques, can be an important means of not only minimizing human-elephant conflict but also

ensuring a better integration of human-wildlife spaces.

Ursula Münster (LMU Munich) - Towards a Multispecies Turn in Elephant Conservation? Human-Elephant Encounters at the Fringes of a Wildlife Sanctuary in Kerala, South India

This paper builds on recent explorations in multispecies ethnography that have tended to engage with "interspecies mingling" (Kirksey and Helmreich 2010) and new flourishing forms of "interspecies collaborations" (Tsing 2009), focusing on "convivial modes of human-animal companionships" (Lorimer 2010) and pointing towards "interspecies intimacies" (Haraway 2001) that emerge in the contact zones between humans and non-humans. My case study of human-elephant encounters at the Wayanad Wildlife Sanctuary (Kerala) presents a less "hopeful" case of violent human-animal conflicts, interspecies clash, and the imminent threat of species extinction in South India. The paper shows how human-elephant relations, both in clash and intimacy, are shaped not only by cultural ontologies, but have co-evolved in the region's particular political-ecological circumstances. Humans and elephants in Wayanad share an entangled environmental history. Their disharmonious relationship is not a primordial fact, but has been created through decades of colonial forest management, histories of resource extraction and rapid environmental change. My paper is thus a call for thinking human and nonhuman histories together in the co-production of Wayanad's landscape of conflict and degradation. I argue for extending ethnography beyond the human, focusing on the entanglements between humans and elephants in "socioecological networks" (Rocheleau 2011). Thereby, the paper also hopes to provide new insights for elephant conservation, moving away from a "fortress" approach and the strict separation between humans and wildlife, and instead envisioning a multispecies landscape where human-elephant coexistence is possible.