

2012 International Primatological Society Congress

Cancun, Mexico

Symposium Title: *Primate Navigation and Decision-Making in Large-Scale and Small-Scale Space*

Symposium Organizers: *Francine L. Dolins¹ and Paul A. Garber²*

¹Department of Behavioral Sciences, University of Michigan, Dearborn, Michigan, 48128, USA

²Department of Anthropology, University of Illinois, Urbana, Illinois, 61801, USA

Symposium Abstract:

The efficiency with which primate foragers exploit resources in a tropical forest is dependent on their ability to encode, recall and integrate spatial, temporal and quantity information in selecting feeding sites. Given differences in diet, home range size, and daily ranging patterns, it is likely that different primate species encounter foraging challenges that require alternative cognitive solutions and problem-solving skills. Current understanding of primate spatial memory principally comes from studies of wild primates navigating in large-scale space or captive studies that examine cognitive capacities in small-scale space. The degree to which primates use different spatial representations and landmark cues when navigating or orienting between large- and small-scale remains unclear. In an effort to bridge this gap, this symposium aims to examine the ability of monkeys and apes to internally represent spatial information across a range of spatial scales and to compare species differences and flexibility in the types of information used and integrated in forming internal spatial representations across a range of foraging and social behaviors.

Symposium Contributors and Titles:

Paul Garber and Leila Porter: The use of route-based mental maps during traveling and foraging in wild Bolivian saddleback tamarins (*Saguinus fuscicollis weddelli*)

Francine Dolins and Charles Menzel: Examining captive chimpanzees' navigational strategies and spatial memory in virtual small- and large-scale space

Andrea Presotto, Patricia Izar, Marguerite Madden and Dorothy Fragaszy: Route-based navigation in wild bearded capuchin monkeys (*Sapajus libidinosus*)

Amy Schreier and Matt Grove: Foraging and the evolution of spatial memory in primates: Hamadryas baboons as a case study

Karline R. L. Janmaat, Simone Ban, Roger Mundry and Christophe Boesch: The use of botanical knowledge by Tai chimpanzees in search for fruit

Rahel Noser: When interests diverge: group encounters, individual small-scale movements and collective space use in groups of wild Chacma baboons (*Papio ursinus*)

Charles Menzel: The rank ordering problem in primate foraging: evidence from chimpanzees, macaques, and capuchins

Charles Janson: Monkeys and traveling salesmen: theory meets reality