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HABITAT SELECTION BY BORNEAN ORANGUTANS: POPULATION DISPERSION IN RESPONSE TO TEMPORAL CHANGES IN LOCAL FOOD AVAILABILITY

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Understanding the ecological factors that influence variation in orangutan population dispersion in space and time would both enhance our understanding of orangutan socioecology and contribute meaningfully to the conservation of this threatened taxon. I present results of a three year study of a population of Western Bornean Orangutans (*Pongo pygmaeus wurmbii*) at Gunung Palung National Park, West Kalimantan, Indonesia. My team and I assessed orangutan population dispersion across seven distinct tropical rainforest types (spanning lowland peat swamp to montane forest) using direct observations of orangutans on an extensive system of fourteen long-term survey transects spanning these distinct orangutan habitats. We also monitored the availability of orangutan plant foods monthly in ten randomly-placed phenology plots in each of the seven forest types. These data permitted a detailed examination of spatial and temporal variation in orangutan population dispersion in response to food availability across a highly heterogenous ecological landscape. Orangutan population dispersion varied radically over the three year period, as did the absolute and relative availability of food in each forest type. The results support the hypothesis that orangutan populations at Gunung Palung partially buffer themselves against resource scarcity by switching habitats. Further, these results support hypotheses postulating that mosaic landscapes can support unusually high orangutan population densities, and that peat swamp forests may serve as "fallback habitats". Research was kindly supported by the University of California, Davis; the Hellman Foundation; and the Leakey Foundation.

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