

Ekasit Akarachaiyasak 2007: Ecology and Seasonal Forage of the Phayre's Langur (*Trachypithecus phayrei* Blyth, 1847) in Phu Khieo Wildlife Sanctuary, Chaiyaphum Province. Master of Science (Forestry), Major Field: Forest Biology, Department of Forest Biology. Thesis Advisor: Associate Professor Naris Bhumpakphan, Ph.D. 70 pages.

This research was conducted in Phu Khieo Wildlife Sanctuary between November 2003 and October 2004. Fourteen months of observation of the habituated group of Phayre's langurs at Huai May Sot was conducted for 518 hours 10 minutes of contact time and 557 hours 50 minutes of observation time. The habitat types used by the Phayre's langur were composed of Dry evergreen forest, Moist evergreen forest near the stream, and Mixed deciduous forest. Most of the time Phayre's langurs used Dry Evergreen Forest, and Mixed Deciduous Forest included water sources and salt licks.

The Phayre's langurs used for their home range an area of 1.02 km<sup>2</sup> or 635.9 rai. In the dry season the area was 0.80 km<sup>2</sup> or 501.6 rai and in the wet season it was 0.94 km<sup>2</sup> or 585.9 rai.

The number of food species used by Phayre's langur during the whole year was 46 species of which 20 species were used in the wet season, 10 species were used in the dry season and 16 species were used throughout the year. Most of the food used in the wet season was young seed (29.17 %) and in the dry season was young seed too (27.85). The most common food species that was used by Phayre's langurs was *Azelia xylocarpa* Craib. (11.42 % use out of all number of individual records, N= 1,673)

The number of food species showed that 46 species from 42 genera, 28 families were used by the Phayre's langur, in the dry season 10 species were used such as *Pterocymbium tinctorium* (Blanco) Merr., *Acer oblongum* Wall. ex DC. In the wet season 20 species were used such as *Canthium glabrum* Blume, *Peltoporum dasyrachis*, and 16 species were used by Phayre's langurs both in the dry and the wet season such as *Azelia xylocarpa* Craib, *Bauhinia saccocalyx* Pierre, *Mitrephora vandaeiflora* Kurz, *Pterocarpus macrocarpus* Kurz, *Millettia leucantha* Kurz var. *leucantha*.

The daily activities of Phayre's langur were separately analyzed by three age classes distinguishing Adult, Juvenile and infant. The behavioral data were calculated as percentage of behaviors by numbers of individuals. The activities were 21.50 % of feeding, 25.94 % of traveling, 14.16 % of resting, 2.67 % of auto grooming, 21.85 % of social behavior and 13.88 % of inactive.

  
Student's signature

 28/ May/ 2007  
Thesis Advisor's signature