Thananh Khopathoom 2011: Home Range and Habitat Utilization of Kha Nyou (*Laonastes aenigmamus* Jenkins, Kilpatrick, Robinson & Timmins, 2005) in Phou Hin Poun National Biodiversity Conservation Area, Central Lao PDR. Master of Science (Forest Biological Science), Major Field: Forest Biological Science, Department of Forest Biology. Thesis Advisor: Associate Professor Naris Bhumpakphan, Ph.D. 100 pages.

The study on the home range and habitat utilization of the Lao endemic Kha nyou (*Laonastes aenigmamus*) was carried out from September, 2009 to January, 2011. Four Kha nyou were live-trapped, weighted, measured and equipped with radio collars to study their home range size and habitat use in different seasons. The average home ranges size were  $1.69 \pm 0.53$  (n=4) and  $1.49 \pm 0.45$  ha (n=3) for the dry season and the wet season respectively. No different was found (t=-0.54, df=5, p=0.61). Home range was high overlapped between all individuals in both the dry and the wet seasons. The home range overlapped ranged from 30.21 to 75.89% and 45.25 to 58.62% for the dry season and for the wet season respectively.

Average distance of daily movement among sexes: 2 males and 1 female in the dry season were respectively  $1,687.88 \pm 261.56$  and  $1,431.00 \pm 105.42$  m (t=2.41, df=10, p=0.03), while in the wet season were respectly  $1,589.63 \pm 183.36$  and  $1,528.33 \pm 370.40$  m (t=0.37, df=7, p=0.72). The habitats of Kha nyou were limestone boulder, sinkhole where appeared complexe crevice system and covered above mainly with deciduous and evergreen trees. The proportions of habitat used were 75.84% LDF and 24.16% SEF for the dry season and 71.09% LDF and 28.91% SEF for the wet season. Kha nyou shared habitat with sympatric terrestrial rodents such as limestone rat *Saxatilomys paulinae* and long-tailed giant rat *Leopoldamys sabanus*. Kha nyou fed on a variety of plant species. The main threat to Kha nyou was from illegal hunting. The knowledge gained from this research is helpful for informing future conservation and management plans for the Kha nyou.

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