

Suporn Polphan 2009: Impacts from Forest Area Utilization of Local Communities to Habitat Utilization of Wildlife: A Case Study of Kaeng Krachan National Park. Master of Science (Parks and Recreation), Major Field: Parks and Recreation, Department of Conservation. Thesis Advisor: Assistant Professor Noppawan Tanakanjana Phongkhieo, Ph.D. 116 pages.

The objectives of this research were to analyze natural area utilization of local communities, to study on habitat utilization of wildlife, and to analyze impacts from natural area utilization of local communities to habitat utilization of wildlife in Kaeng Krachan National Park. Questionnaire was used to collect data from local people and 202 representatives from sampled households participated in the survey. Five species of large and medium size mammal including Guar, Common Barking Deer, Sambar Deer, Wild Boar and Elephant were selected as target species in the study. The researcher set up 6 lines transect with 69 kilometers in overall length for wildlife survey. Descriptive statistics, Mann-Whitney U Test, and Correlation Analysis were used to analyze the survey data and to conclude the study.

Results from the analysis of natural area utilization of local communities found that 69.3% of local people consistently collected forest products and 50.0% of them accepted that they did the collection within the national park's boundaries. The average distance from local villages to the place where people collected forest products was 2.23 km. and the average time per day spending in the forest was 1.36 hours. Forest product collecting taken place during March to December. October was the most frequent month people did forest product collecting. The major kinds of forest products collected by local people were mushrooms (50.5%), Phak waan pa (39.1%) and bamboo shoot (33.2%). Most people realized that forest product collection disturbed wildlife but they stated that it was necessary for local livelihood. Results from the wildlife survey found that the average number of wildlife tracks in rainy season was larger than the number in dry season by 68.31 and 51.46 tracks / km. respectively. The analysis found that the average number of tracks in the area where intensively use by local people was smaller than the number in the natural area where slightly used by local people, with the number of 32.97 and 86.78 tracks / kilometers, respectively. Mann-Whitney U Test found that the average number of tracks were significantly different in every species: $U=231571.5$; $p=0.001$ in Guar, $U=214804.50$; $p=0.000$ in Sambar Deer, $U=224404.00$; $p=0.000$ in Common Barking Deer, $U=233929.5$; $p=0.000$ in Wild Boar, and $U=243894.0$; $p=0.008$ in Elephant. Correlation Analysis found that distance from local village to forest area where people performed forest product collecting and number of wildlife track were significantly correlated in Guar, Sambar Deer, and Common Barking Deer with Correlation Coefficients of 0.221, 0.439, and 0.384, respectively. The study results led to the conclusion that natural area utilization of local communities negatively impacted to habitat utilization of wildlife in Kaeng Krachan National Park.

Student's signature

Thesis Advisor's signature