Kanlayapat Puridechmethawatchareekul 2010: Solid Waste Management in Doi Inthanon National Park Chiang Mai Province. Master of Science (Park and Recreation), Major Field: Park and Recreation, Department of Conservation. Thesis Advisor: Assistant Professor Dachanee Emphandhu, Ph.D. 158 pages.

The objectives of this research were to study the source, amount and components of solid waste at Doi Inthanon National Park and to analyze the waste management system of the park in order to propose suggestions for improvement. The study of solid waste amount and components was carried out by sorting and weighting waste components from eight tourist sites: Kew Mae Pan nature trail, Doi Inthanon summit, Napamaytanidol chedi, Doi Inthanon royal project, Dong son campground area, Wachirathan waterfall, Mae Klang waterfall, and Mae Ya water fall between April to December, 2007, 38 days in total. The wastes producing rate per visitor per day was calculated. The investigation of waste management system of the park covered the collection at source, transportation, disposal and administrative management procedure. SWOT analysis was employed. The visitor and retail store entrepreneur opinions was collected by questionnaire survey from 408 and 34 samples respectively. The descriptive statistics of frequency and percentage was used for data analysis.

The result showed that the average quantity of waste generated in eight tourist sites was 4.3 ton per day. Doi Inthanon summit generated most waste at about 31.8 % Regarding waste components, the organic waste substance was found at the highest proportion around 56.6 % . The results found over full garbage containers, inappropriate location of garbage containers, inadequate frequency of garbage collection and no garbage separation, particularly during peak days. The significant limiting aspect from external factor was lacking cooperation in waste management among agencies located within Doi Inthanon National Park. In addition, visitors still have had low consciousness on waste problem in national park as well as lacking knowledge about proper waste separation. The major suggestions for waste management improvement were 1) waste separation by applying two or three bin method and improve collection method accordingly, 2) increase number of garbage bins during peak days in popular tourist sites, 3) appropriate size of garbage bin and ergonomically to human physical strength 4) increase visitor awareness of waste situation in the park and educate visitors proper waste separation method, 5) apply various measures to implement 3 Rs concept: reduce, reuse and recycle in the national park.

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