

FEEDING ECOLOGY AND RESOURCE VISITATION PATTERN OF THE JAVAN GIBBON (*HYLOBATES MOLOCH*)

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Gibbons rely on fruits that are patchily distributed in time and space and prefer certain fruit species. To consistently meet their dietary needs despite limited food availability, gibbons appear to foraging by systematically locating available resources. This strategy may require remembering the location of preferred food plants and timing feeding bouts to account for depletion. We studied foraging strategies in the Javan gibbon (*Hylobates moloch*) to investigate systematic aspects of foraging behavior. We observed 3 habituated gibbon groups in the Gunung Halimun-Salak National Park, Indonesia, from June 2007 to March 2009, and systematically collected data from April 2008 to March 2009. The gibbons were usually active from ~6:00-16:00 h and mean daily path length was 1180.5 m. Mean home range size was 36.6 ha. We measured food availability in 25 10X50 m phenology plots, and calculated gibbon preferences using the ranked selectivity index of Leighton (1993). Fruits comprised 61.3% of the diet, but feeding time was unrelated to overall fruit abundance and gibbons were selective among fruit species. Gibbon behavior differed when feeding on preferred and non-preferred fruits in terms of revisit frequency and pattern. The difference in feeding bout length between subsequent visits was significantly larger for preferred species, and bout length was longer in later visits for preferred but not non-preferred species. These results suggest that gibbons may monitor the availability of preferred species more carefully than that of non-preferred species, or that gibbons organize their daily feeding schedule primarily based on the availability of preferred species.

Keywords: gibbon, foraging strategy, feeding, selectivity