

INFLUENCE OF VEGETATION CHARACTERISTICS AND POPULATION DENSITY ON THE CALLING BEHAVIOR OF TWO SPECIES OF BORNEAN GIBBONS

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Gibbons are characterized by their vocal behavior, engaging in coordinated morning duets. This singing behavior is thought to play a role in pair bonding and/or territorial defense. Calling by gibbons has been found to be influenced by climatic variables at some study sites (rain, wind, cloud cover, smoke), with either calling frequency or duration being affected. It was also observed that singing can be stimulated by duets from neighboring groups, in a phenomenon of chorus. We tested the hypothesis that the calling behavior of two species of Bornean gibbons (*Hylobates albibarbis* and *Hylobates muelleri*) is dependent on population density, with gibbons singing less in areas with lower group densities. Having observed a strong correlation between vegetation characteristics and gibbon density in the peat-swamp forest of the Sabangau catchment, we also tested whether singing variables were influenced by characteristics of the gibbons' habitat. Analyzing singing frequency, onset time, duration and the number of female great calls, we found that singing behavior is influenced by group density in both species of Bornean gibbons and that this corresponds to some vegetation variables.

Keywords: Hylobatides, singing, habitat, peat-swamp forest.