



## **Project description**

### **Singing, space use and genetic structure of a Kloss gibbon population in the Peleonan forest, Siberut Island, Indonesia**

Kloss gibbons (*Hylobates klossii*) are endemic to the Mentawai Islands in Indonesia and are one of only two gibbon species in which mated males and females do not produce duets. Male and female 'songs' are separated in time and space as males sing predawn from sleeping trees and females sing post-dawn from trees located near feeding areas. Analyses of the factors influencing singing in male and female Kloss gibbons, along with observations of associated behaviour, will help to evaluate the potential roles of singing in each sex.

In a recent survey, Whittaker (2005) observed Kloss gibbons in average group sizes of 10 individuals in the Peleonan forest in the north of Siberut Island; this contrasts with group size estimates of 4 to 5 individuals in the south of Siberut and on the other Mentawai islands. Gibbons are generally regarded as monogamous, living in groups consisting of an adult pair and their immature offspring. Observations of large group sizes suggest flexibility in the group structure (and perhaps mating system) of Kloss gibbons. DNA extracted from faecal matter can determine the genetic relationships of individuals within and between Kloss gibbon groups without disruption or harm. An analysis of the genetic relatedness of individuals may determine whether polygyny, polygamy or delayed dispersal is present in Kloss populations with larger than average group sizes and more than two adults.

The goals of this project are: 1) to estimate the size and density of the Kloss gibbon population in the 5000-hectare SCP area based on both long-term observations of groups and 4 months of censusing. 2) To evaluate whether physical (weather) and/or biological (singing by the opposite sex) environmental factors influence the occurrence of male and female chorusing on a given day. 3) To determine group sizes, structures and territory use by Kloss gibbon groups surrounding SCP's field camp. 4) To determine the genetic relationships of individuals within and between these Kloss gibbon groups, using DNA extracted from faecal matter, in order to evaluate the mating systems present in the Kloss gibbon population at the SCP site in the Peleonan forest.