



Project description

Comparative aspects of vocalization patterns (and speciation processes) in Mentawai macaques

Recent molecular genetic data have led to the proposal that the Mentawai macaques should be re-classified into two taxa on the full species level. In the present study we will investigate structural differences in loud calls of Mentawai macaques to find out whether they can support this proposed reclassification. A recent meta-analysis over the primate order (Which & Nunn 2002) suggests that loud calls mainly serve to defend resources and to attract mates. Interestingly, only few macaques' species produce such loud calls and it is not known why they developed only in these species. From our observations we know that both Mentawai macaques use regularly loud calls. We know from former studies on other primate species, like gibbons (Konrad & Geissmann, 2006, Thinh et al. in press), that loud calls can be useful to confirm phylogenetic relationships. To which extent this is also true for macaque loud calls is unclear. The 3 aims of the study are:

- i) to compare structural features and usage of loud calls in macaques from different Mentawai islands.
- ii) to clarify the taxonomic relationship between *Macaca siberu* and *Macaca pagensis* at a biological level.
- iii) to evaluate the role of loud calls in the progress of speciation.

A minimum of 3 months in total will be spent collecting data on the Mentawai macaques. This time period will be split in two, where the first half will be spent at the field research station on Siberut, and the second half will be situated at a geographically isolated location on a southern Mentawai island (exact location currently not determined). For approximately 3 months after this, the acoustic data will be analysed at the German Primate Centre in Goettingen, Germany. The study is scheduled to begin in September 2009.