

CALIFORNIA STATE SCIENCE FAIR 2002 PROJECT SUMMARY

Name(s)

Kylise J. Hare

Project Number

S1004

Project Title

How Many Parents Does Asante Really Have? Colobus Allo-Parenting

Abstract

Objectives/Goals

The objective of this study was to determine if and how the San Diego Zoo Angolan colobus monkey troop allo-parented. Allo-parenting is a behavior where an animal other than the biological mother temporarily cares for the infant.

Methods/Materials

Behavioral data were taken from 8:00 to 10:00 a.m. and/or 2:00 to 4:00 p.m. on 23 days between July 9 and August 31, 2001. During each session three types of data were recorded, all-occurrence of some behaviors (troop), 1 min. point sample (infant behavior and location), 30 min. location point sample of troop location. Comments about the infants# development and any other interesting observations were recorded.

Results

The mother, Lu Lu, remained significantly closer to Tamu when Tamu was allo-parenting than she did with any other monkey. Tamu was not one of Lu Lu#s own children and was the youngest troop member. Tamu#s success rate of taking the infant was significantly lower (24%) than that of any of the other juvenile allo-parents (range 43 to 52%). Lu Lu#s success rate was 99%.

The father and dominant male was occasionally seen stopping allo-parents from taking the infant when he was on his mother resting or nursing. The infant chose to be on Spike, his eldest brother, significantly more than any other juvenile monkey (0.4/hour).

Conclusions/Discussion

The Zoo#s troop did allo-parent, all members other than the father allo-parented, chiefly the juvenile males. The mother was mostly in control of who allo-parented the infant, she likely chose allo-parents based on their age and relationship to her. Occasionally, the adult male and the infant himself may have had control over who allo-parented.

Summary Statement

This study is about the Zoo troop#s allo-parenting behavior and who was in control of where the infant was.

Help Received

Primate keeper LeeAnn Anderson provided me with information about colobus monkeys and the Zoo#s troop. Behaviorist Valerie Hare helped me with experimental design and data analysis.