



## **NEWS**

July 21, 2011

### **Clever botanists**

#### **Ugandan forest monkeys use fruiting synchrony to find food**

**An international team of researchers including Karline Janmaat of the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany, found that grey-cheeked mangabeys of Kibale National Park, Uganda, were able to use synchronous events of fruit emergence to predict the location of other producing trees. This is evidence for a flexible use of botanical knowledge in non-human primates. (Animal Cognition, Online First™, 21 July 2011)**

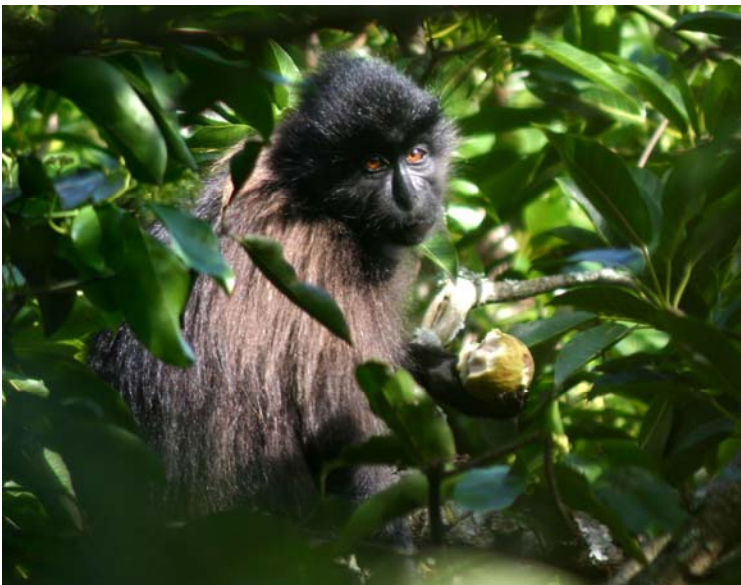


Image:  
Mangabey monkey collecting fruit from a tree (Copyright: Alain Houle).

Previous research has shown that primates can remember the location and fruiting state of individual trees within their home range. However, most primate home ranges contain large numbers of fruit trees that follow various and relatively short fruiting periods. It seems unlikely, therefore, that primates have sufficient time to update their knowledge on the state of all trees and to maintain a complete representation of their fruiting state.

In this study, an international team of researchers including Karline Janmaat of the Max Planck Institute for Evolutionary Anthropology in Leipzig, Germany, investigated an alternative and more efficient strategy to locate fruit bearing trees, the use of synchrony in fruit emergence, a characteristic of many fruit tree

species. The researchers studied whether grey-cheeked mangabeys of Kibale National Park, Uganda, were able to use synchronous events of fruit emergence to predict the location of other producing trees. They found that monkeys approached and inspected significantly more *Uvariopsis congensis* trees, a species with a strong synchrony level, when the percentage of trees with ripe fruit was high compared to when it was low in time and space. "As this was independent of the fruiting state of the inspected tree, we concluded that the monkeys followed a synchrony-based inspection strategy that was locally restricted", says Karline Janmaat: "The study provides evidence for a flexible use of botanical knowledge in non-human primates."

[KJ, SJ]

Original paper:

K. R. L. Janmaat, C. A. Chapman, R. Meijer and K. Zuberbühler  
The use of fruiting synchrony by foraging mangabey monkeys: a 'simple tool' to find fruit  
Animal Cognition, Online First™, 21 July 2011

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