

## **Interspecific Encounters Among Diurnal Primates in Danum Valley, Borneo**

### **Abstract**

Polyspecific associations, in which individuals of multiple species move together, have not been reported in Asian primates. However, only one study in India has shown this lack of association quantitatively. We collected data on interspecific encounters among 5 species of diurnal primates in Danum Valley by censusing 4 predetermined routes of 9.9 km, covering 1544.3 km, and tracking red leaf monkeys (*Presbytis rubicunda*) for 423 h over 25 mo. We tested the null hypothesis that the frequency and duration of encounters did not differ from chance levels. During censuses, we detected primates 373 times and found 2 species on the same 100-m segment only 6 times. This frequency was not significantly different from the chance level. While following red leaf monkeys, the frequency of encounters was lower than expected by chance with Müller's gibbons (*Hylobates muelleri*) but higher than expected by chance with Bornean orangutans (*Pongo pygmaeus*) in the nonfruiting season. Interspecific encounters accounted for 6.4% of tracking time, and the encounter duration was significantly longer than expected by chance for orangutans. Red leaf monkeys did not change their rate or direction of travel on meeting another species. We could not distinguish the association between red leaf monkeys and orangutans in the nonfruiting season from the possibility that the two species were independently attracted to the same place. In conclusion, we show the absence of active and consistent polyspecific association and identify avoidance in some species pairs in an Asian primate community.