



Smithsonian Tropical Research Institute
Instituto Smithsonian de Investigaciones Tropicales

FOR IMMEDIATE RELEASE

Contact: STRI Staff Scientist, Dr. David Roubik, Tel. 202 786-2094 ext 8109,
roubikd@si.edu

Chimps, gorillas and humans harvest honey- and stingless bee nests in Ugandan reserve



In the first study of native African honeybees and honey-making stingless bees in the same habitat, humans and chimpanzees are the primary bee nest predators. Robert Kajobe of the Dutch Tropical Bee Research Unit and David Roubik from the Smithsonian Tropical Research Institute report this finding in the March, 2006 issue of *Biotropica*.

Batwa Pygmies, who have traditionally harvested honey for food, located 228 bee nests (both honeybees and stingless bees) for the study. Roubik identified the bees and found that Pygmy names for the bees corresponded to scientific names, except for a black and a brown form of *Meliponula ferruginea*. Honeybee (*Apis*) nests were numerous compared to other sites in the tropics, whereas honey-making stingless bee nests were relatively scarce. Nest abundance did not vary with altitude, nor did pollen collection or the seasonality of flowering.

Both honey bees and stingless bees make honey. *Apis mellifera*, the most commonly cultivated honeybee, is native to Europe and Africa. *Apis mellifera* subspecies *scutellata*, the very defensive tropical African honeybee, was transplanted from Africa to Brazil as part of a scientific experiment to boost honey production in 1956. From Brazil, it invaded the Americas, working its way northward and is now found in southern U.S. states.

Dave Roubik has followed the progress of Africanized honeybees in the New World, documenting effects of pollen and nectar collecting and nesting ecology on native-American stingless bees. Kajobe invited Roubik to visit the Bwindi-Impenetrable National Park in southwestern Uganda, where African honeybees



Smithsonian Institution
Smithsonian Tropical Research Institute
Apartado 2072
Balboa, Ancón
República de Panamá
Tel. 507.212.8216
FAX 507.212.8148
Email: kingb@tivoli.si.edu



Smithsonian Tropical Research Institute
Instituto Smithsonian de Investigaciones Tropicales

coexist with five or more species of honey-making stingless bees in their native habitat.

Chimps in the Park peel and chew the tips of vines and twigs to make honey dipsticks. Roubik notes that indigenous groups in the Americas use similar honey brushes to harvest honey in areas where Africanized bees are relative newcomers [see photo].

“Most studies of stingless bees have been undertaken in South America and south-east Asia and have ignored the ecology and context of Afro-tropical stingless bee species, particularly in equatorial regions. I hope this is just the beginning of a long-lasting collaboration that will make a significant contribution to Afro-tropical bee research,” Kajobe writes.

“Bwindi-Impenetrable is the only place on earth where gorillas, chimps and humans partition forest resources. Given the importance of honey as one of the most concentrated sources of sugar and protein in the forest, and the fact that the park management plan allows collection of non-timber forest products, there is an abysmal lack of ecological information about the role of honey-making bees and the role of their natural predators in this ecosystem. Nothing is known about the amount of honey produced in nests of different species. Nothing is known about how often bee species found new nests. Unfortunately, this dearth of information about native bees will continue unless more funding for basic natural history research is forthcoming,” asserts Roubik.

##

The Smithsonian Tropical Research Institute (STRI), a unit of the Smithsonian Institution, headquartered in Panama City, Panama, furthers our understanding of tropical nature and its importance to human welfare, trains students to conduct research in the tropics and promotes conservation by increasing public awareness of the beauty and importance of tropical ecosystems.

Ref. Kajobe, R. and Roubik, D.W. 2006. Honey-Making Bee Colony Abundance and Predation by Apes and Humans in a Uganda Forest Reserve. *Biotropica* 38(2): 210.

Smithsonian Institution
Smithsonian Tropical Research Institute
Apartado 2072
Balboa, Ancón
República de Panamá
Tel. 507.212.8216
FAX 507.212.8148
Email: kingb@tivoli.si.edu



Smithsonian Tropical Research Institute
Instituto Smithsonian de Investigaciones Tropicales

Photos:

- Gorilla photos courtesy of Ged Caddick, Terra Incognita Ecotours
- Honey brush from Bolivia, above, honey sticks used in Uganda, Photo: David Roubik

<http://www.blackwell-synergy.com/doi/abs/10.1111/j.1744-7429.2006.00126.x>

Smithsonian Institution
Smithsonian Tropical Research Institute
Apartado 2072
Balboa, Ancón
República de Panamá
Tel. 507.212.8216
FAX 507.212.8148
Email: kingb@tivoli.si.edu