

7 April 2008

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Pallid bat (*Anthozous pallidus*)
saguaro-juniper.com

[Bats and Cheaper Coffee](#)

Bats destroy more pests than birds do

They are associated with the dark and with the myth of [vampires](#) (even if only 3 tropical American species consume blood, out of about 1,100 species). In fact, we know that most bats appreciate insects more than other foods. And two new researches published in the Science journal show us why bats control the annoyance caused by insects in the tropics and bring us a cheaper coffee: they consume much more insects than birds do. The decline of bat populations worldwide could severely impact agriculture and boost the insect populations. One team, led by Kimberly Williams-Guillen, a tropical ecologist at the University of Michigan, investigated bats at Finca Irlanda, a 300-hectare organic coffee plantation in Chapas, Mexico. The researchers placed three types of enclosures: one that only impeded birds to get inside, one that only impeded bats at night, and nets that excluded both birds and bats. The team found that during the summer wet season, the coffee trees devoid of bat visits had 84 % more insects, spiders and other invertebrates, as compared with unprotected plants. Trees devoid of bird help had significantly less insects. The other team led by Margareta Kalka of the Smithsonian Institution in Balboa, Panama, made a similar experiment in a pristine rain forest. "Plants shielded only from birds during the day had double the insect damage of plants that were uncovered. But plants netted at night to keep bats out had three times the usual insect damage. The findings have important implications for conservation. Bats worldwide are suffering. Climate change may be a threat to bats," said Kalka. Kalka told Reuters. Bats are known to consume 50% of their body weight in insects per night. And they do not only capture insects on the fly: many tropical bats also perch upside-down from branches, consuming non-flying insects and other invertebrates located on the leaves. Both research teams are worry about the greater interest accorded to bird conservation, compared to bats. "People like birds better and they are more obvious - they are colorful, they are singing. People love them - they see them eating bugs off leaves. It seemed more obvious that birds have a role in pest control. Bats hunt in the dark so it is really hard to study them. They are completely overlooked," said Kalka.