Fruit bats 'vitally important' to Guam's forests

October 7 2019, by Jonas MacApinlac

Seed dispersal on Guam, a crucial process for regenerating and diversifying the island's forests that has significantly declined with the diminishing bird population, is still being carried out by the few remaining Mariana fruit bats, or fanihi, a University of Guam graduate student confirmed in a research project.

Jeried Calaor, a master's biology student, studied the rates of germination after seeds passed through a bat's digestive system. His study found that while germination rates are low, they do occur, suggesting that bats are dispersing seeds over long distances. His study used seeds from the Ficus prolixa fig species, but fruit bats consume at least 16 other types of fruits as well, including breadfruit, papaya, fading, kafu, and talisai, according to the U.S. Fish & Wildlife Service.

"This illustrates that bat conservation and restoration and protection of their habitats on Guam and the Mariana Islands is vitally important to the region's forest ecosystems," Calaor said.

The Mariana fruit bat is listed as threatened under the Endangered Species Act. Today, it is estimated that only 45 to 50 fruit bats remain in the wild on Guam, down from 400-500 in 1984, because of poaching and habitat destruction, according to the U.S. Fish & Wildlife Service.

Ever since human activity began detrimentally impacting forests and the invasive brown tree snake wiped out nearly all the birds on Guam, the fruit bats have been one of the few seed dispersers left standing.

In August, Calaor joined about 450 other researchers from around the globe for the 18th International Bat Research Conference in Phuket, Thailand, to present his thesis work on the threatened Mariana fruit bat.

"I was able to learn from other researchers who are facing the same issues with their bat species," he said.

The biggest takeaway from the conference for Calaor was realizing Guam isn't alone in its fight.

"There are a lot of people who put their time, money, and efforts into researching endangered species to try to bring back their populations," he said. "That was special for me to see because there are people out there to lean on for advice, tap into their experience, and learn their methodologies to make the research better."

More information: www.fws.gov/refuge/guam/wildli … riana_fruit_bat.html

Provided by University of Guam

Citation: Fruit bats 'vitally important' to Guam's forests (2019, October 7) retrieved 25 April 2024 from https://phys.org/news/2019-10-fruit-vitally-important-guam-forests.html