## Nature's Most Powerful: The Harpy Eagle

By: Ashley Van Wieren

In the lowland Neotropical forests of Central and South America, concentrated in Amazonia, a powerful symbol for biodiversity soars through the canopy. One of earth's largest eagles in terms of mass, the female Harpy Eagle weighs up to 20 pounds, with the smaller males weighing up to 11 pounds. This might not sound like much, but for comparison, a Great-horned Owl only weighs about 3 pounds.

Defining physical features of the Harpy Eagle include a gray head with two-part crested feathers, a broad black chest band, and a gray tail with stripes. Harpy Eagles (*Harpia Harpyja*) are famous for their 3-4-inch-long talons, matching the length of claws on their favorite meal, sloths.

Harpy eagles are keystone predators. A keystone species is one that has a large impact on the food web, balancing populations and therefore promoting biodiversity. Though they are mainly sloth specialists, they also feed on a diverse range of mammals, birds, and reptiles. Animals such as the red howler monkey, boa constrictor, iguana, kinkajou, and armadillo are all on the menu. The impressive strength of the harpy eagle gives it the ability to carry prey up to 20 pounds. The average harpy eagle consumes 1.75 pounds of food a day, and can conserve energy by stashing its leftovers, so hunting trips do not have to be made daily.

Harpy Eagles are monogamous and mate for life. These partnerships can last 25 to 30 years. Eggs are laid every two to three years in massive nests upwards of eight feet in diameter constructed of branches in emergent trees, such as the kapok and Brazil nut tree. One to two white eggs are laid; however, only one chick is raised. Raising the chick is a full time job, and both parents work diligently to protect and care for their young. The average chick takes five to six months to fledge, but they remain dependent on their parents for over a year. Much like college students, they return home from time to time for a free meal.

The International Union for Conservation of Nature (IUCN) classifies the Harpy Eagle as vulnerable; however, it is endangered in South Mexico. A few of the greatest threats include shootings, powerline collisions, and habitat loss. Harpy eagles are not hunted for their meat, but can be killed out of curiosity, defense to livestock, and tourism sales. Temperature and vegetation changes accelerated by climate change could reduce their distribution, but mainly their habitat loss is driven by deforestation.

The last few years have seen exceptionally high rates of deforestation in the Amazon. However, this year, satellite imagery from January to June has shown that rates have decreased by a third in comparison to the same time period last year, which is encouraging.

The Harpy Eagle lives far from Texas, but our actions can still affect these birds! Reducing waste, avoiding palm oil products, going paperless, and planting trees are all just a few ways people everywhere can make a difference. Many small changes add up to large impacts that help wildlife locally and globally.