



**ZOO ATLANTA**

# Zoo Knowledge Quest

EXPLORE THE ZOO TO FIND OUT ABOUT SOME ANIMAL SEED SPREADERS!

## Rhinos

First stop: Read the rhino signs across from the vultures.

Rhinos are sometimes called “ecosystem engineers,” and when you look at this habitat, it’s easy to imagine how rhinos can shape the land. In the wild, they use their horns to dig and expand water holes. They wallow in muddy wet soil, spreading it to other areas. White rhinos are known for their flat, wide upper lips, which enable the animals to graze on short grasses. As they eat, they trim certain plants, which clears patches of short grass where other herbivores and birds can find food.

Rhinos are essential to their \_\_\_\_\_ ecosystem.

## Elephants

African elephants may transport seeds farther than any other land animal. Seeds in fruit are eaten and then carried up to 65 kilometers away, where they are planted in elephant dung in a new location. Plant seeds need to grow farther away from the parent plants so they don’t have to compete for resources.

Each elephant may deposit nearly 3,200 seeds a day. Elephants eat several hundred pounds of food a day, and poop several \_\_\_\_\_ pounds.

## zebras

Zebras are nicknamed \_\_\_\_\_ grazers because of their sharp teeth. Zebras help the local ecosystem by grazing on dry, hardened grass that is too tough for other species to digest. They have sharp front teeth for cutting grass and flat molars for crushing.

## pancake Tortoise

It might be easy to overlook reptiles as seed spreaders, but like the other herbivores, they eat fruit with seeds that are carried to new locations through droppings. Reptiles squeeze into cracks, crannies and crevices, depositing seeds. Succulents like agave, yucca and aloe have shallow roots that can attach to rocks.

Read the signage at Exhibit 9 to find out why pancake tortoises squeeze into tight places. Pancake tortoises wedge between rocks to \_\_\_\_\_ predators.

## Land Iguanas

Land iguanas spread seeds on the island through their poop. One study found 32 plant species in samples. Even though many seeds are damaged from being chewed and digested, around 20% of the seeds are viable (able to grow).

What type of iguana can be found in Exhibit 35? \_\_\_\_\_

## Red-Eyed Treefrog

Herbivores aren't the only seed spreaders. Amphibians do not eat fruit with seeds. They climb trees and plants, and moist skin is the perfect place for sticky seeds.

A special type of carnivore, red-eyed treefrogs are \_\_\_\_\_

## Lemurs

Small lemurs eat small fruits, while large lemurs eat large fruits. The seeds travel through a lemur's digestive tract before being dropped on the soil. The lucky seeds end up far from the mother tree where they can get more sunlight to grow.



An animal that only eats fruit is called a \_\_\_\_\_

## Gorillas

Read the signage about how a gorilla spends its day.

After spending about half the day eating, gorillas give back to the forest by providing fertilized seed \_\_\_\_\_ to the forest floor

## Blue-throated Macaw

When birds travel, they do not have to worry about barriers that land animals must cross. Birds fly high up in trees, cracking nuts, wasting seeds and dropping in new locations.

The blue-throated macaw, once thought to be \_\_\_\_\_, was rediscovered in 1992

## White Stork

Wetland birds, like the white stork, migrate great distances. As they travel, they can carry mud between their toes. Tiny mudballs have been studied to see if seeds could grow. The results were surprising when one tiny mudball sprouted 82 plants!

The white stork uses its long, sharp \_\_\_\_\_ to forage fish and insects.