

CREATURE FEATURE

giants of the bug world

by Cyril Brass



So, tell me, how much weight can you lift? 50lbs? 200lbs?

How about 850 times your body weight? That is what Rhinoceros Beetles can lift. In proportion to their own size, Rhinoceros Beetles are the world's strongest animals. If humans were able to match that incredible strength, we could lift 65 tons.

There are several types of beetles which are classified under Rhinoceros Beetles, including Atlas Beetle, Hercules Beetle, Ox Beetle and Elephant Beetle. All these species have developed amazing power and strength to forage through the heavy decaying materials on the jungle floor and to dig their way to safety.

It was during a visit to a banana plantation deep in the eastern lowland rainforests of Costa Rica that I saw one of these Rhinoceros Beetles, the Elephant Beetle. Expecting to see bananas and more bananas, I became preoccupied by this giant of the bug world. In the parking lot alongside the banana processing plant, a tall thin man was leaning up against his bicycle holding a piece of banana stalk with a huge black and brown bug resting on it. I had never seen such a big beetle before in all my travel adventures. The friendly fellow was as keen to see the reaction on my face as I was excited to see this fierce looking insect. In the photo, you can see just how big this giant bug is by comparing it to the man's fingers holding the stick.

The Elephant Beetle is aptly named as a result of its unmistakable long upward curving horn. This trunk-like horn is only on the males. The large dome body shape, barb-like appendages and head supporting different sized horns makes these creatures especially interesting and unique.

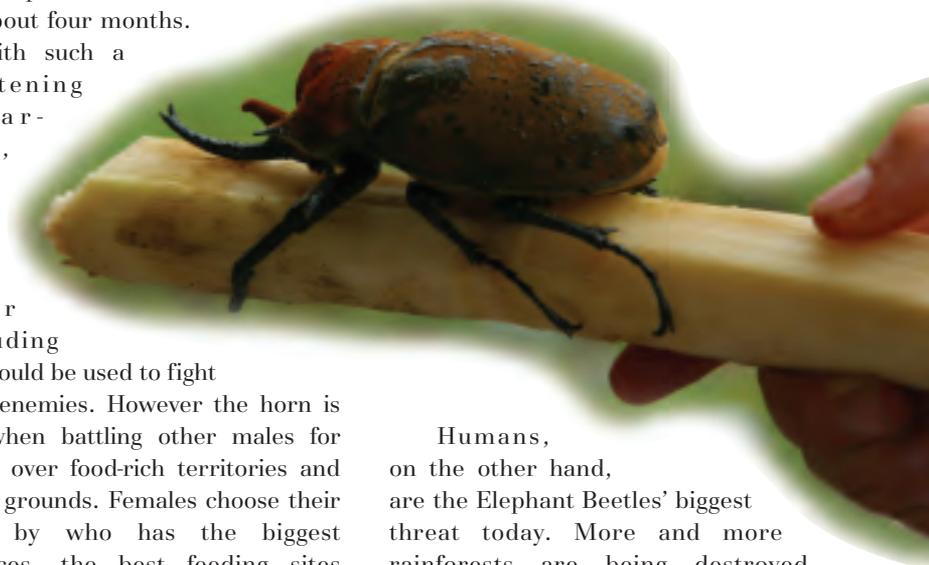
Even though Elephant Beetles are one of the largest beetles in the world, growing in size up to thirteen centimeters (five inches), spotting them can be a challenge. They are more active at night than during the day when they are hiding under logs and in rotting vegetation, away from potential dangers. Plus the life of adult Elephant Beetles is brief, only about four months.

With such a threatening appearance, one would think the larger protruding horn would be used to fight off its enemies. However the horn is used when battling other males for control over food-rich territories and mating grounds. Females choose their mates by who has the biggest resources, the best feeding sites consisting of large decaying trees where they are able produce offspring. Decay occurs quickly in rainforests so small trees and branches will not support this species of beetle.

Females lay their eggs directly into the rotting trees so the larvae have an immediate source of food when they enter the wild world. The larva stage of their transformation to maturity may take up to four years. Over this lengthy period the larvae are eating machines, devouring massive amounts of dead vegetation, forest compost and decaying wood. They eat and eat and eat where they were hatched, and stay there until maturity. Once the Elephant Beetles reach this adult stage, they do not eat much, feeding on nectar, plant sap and rotting fruit but not decaying plant material.

The Elephant Beetles' primary defense is not to fight but to escape from its predators such as snakes and birds. The powerful horn burrows deep into the thick decaying plant material away from its attackers.

These giant insects are harmless to humans unable to bite, sting or stab you with their horns.



Humans, on the other hand, are the Elephant Beetles' biggest threat today. More and more rainforests are being destroyed resulting in lost habitats. Their primary habitats are located in the tropical rainforests of Central America and South America. With the large trees cut down and removed, it is difficult for the females to find adequate breeding sites.

Elephant Beetles are important creatures to tropical rainforests as they play a significant role in the breaking down and recycling of dead plant material back into the ecosystem.

The Elephant Beetle—an insect of enormous size; a bug with incredible strength; a beetle with a vital role in our environment. **ca**

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