



## Bushhopper

*Phymateus viridipes*

**Gorongosa National Park, Mozambique**

A nymph of the bushhopper from Mozambique can afford to be slow and conspicuous thanks to the toxins in its body. These insects feed on plants rich in poisonous metabolites, including some that can cause heart failure, so most predators avoid them.



## Stalk-Eyed Fly

*Diasemopsis fasciata*

**Gorongosa National Park, Mozambique**

Like antlers on a deer's head, the long eyestalks on this fly's head are used in male-to-male combat, allowing the individual with the largest stalks to win access to females



## Coconut Crab

*Birgus latro*

**Guadalcanal, Solomon Islands**

The coconut crab is not just another land crab; it is the largest living terrestrial invertebrate, reaching a weight of nine pounds and a leg span of over three feet. Their lifespan is equally impressive, and the largest individuals are believed to be forty to sixty years old.



## Periodical Cicada

*Magicicada septendecim*

**Annandale, Virginia**

Periodical cicadas spend seventeen years underground, feeding on the roots of plants. After that time they all emerge at the same time, causing consternation in people and a feeding frenzy in birds. A newly emerged (eclosed) periodical cicada is almost snow white, but within a couple of hours its body darkens and the exoskeleton becomes hard.



## Dung Beetles

*Kheper aegyptiorum*

**Gorongosa National Park, Mozambique**

Dung beetles are very important members of Savanna communities. Without their waste removal work, the place would quickly sink under layers of dung produced by mammalian grazers and browsers. Their ability to return nutrients trapped in dung back to the soil is a part of the positive feedback loop between rapid vegetation growth and herbivory.



## Lappet Moth

*Chrysopsyche lutulenta*

**Gorongosa National Park, Mozambique**

At the beginning of the dry season in Mozambique many deciduous trees lose their leaves. This is also the time when Lappet moths emerge, and their coloration allows them to blend in among the fallen foliage.



## Giant-Jawed Katydid

*Gnathoclitia vorax*

**Sipaliwini, Suriname**

Giant mandibles in the male of this highly territorial katydid are mostly used to fight other males, but they also help block the entrance to his hiding place in a hollowed-out branch.



## Human Bot Fly

*Dermatobia hominis*

**Belize/Boston, MA**

Bot flies are parasites that develop in the skin of mammals, including humans, and many visitors to Central and South America unwittingly bring them back home. While we may not like parasites, they play a critical role in all ecosystems, regulating the population sizes of their hosts. [This uninvited passenger came with me from Belize as a tiny larva embedded in my arm. —P.N.]



## Golden Orb-Weaver

*Nephila senegalensis*

**Gorongosa National Park, Mozambique**

The golden orb-weaver is one of the world's most impressive spiders. Its name comes from the beautiful, golden coloration of its silk, which is strong enough to capture small birds.



## White Ringed Atlas

*Epiphora mythimnia*

**Gorongosa National Park, Mozambique**

Almost as big as a dinner plate, the white ringed atlas is one of the largest moths in Mozambique. Yet despite its size, this moth is surprisingly difficult to spot when it rests on the trunk of a tree.

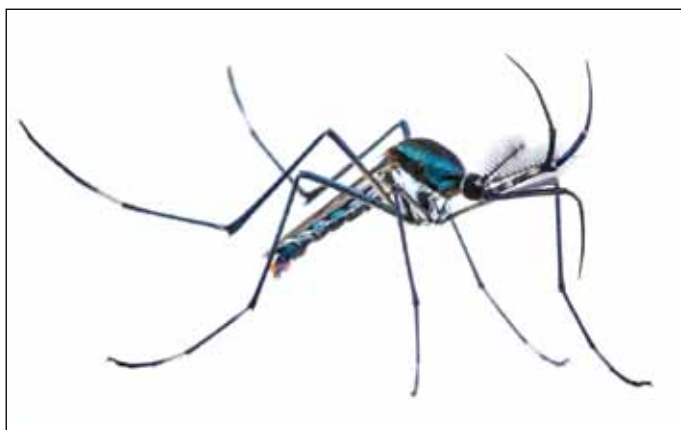


## Leaf-Footed Bug

*Anisoscelis flavolineata*

**Barbilla National Park, Costa Rica**

A combination of black, yellow, and red is a good indication that this leaf-footed bug is not edible. Many toxic or venomous animals use such markings, known as the "aposematic coloration," to warn potential predators of the harm they may cause if attacked.



## Good Mosquito

*Toxorhynchites brevipalpis*

**Gorongosa National Park, Mozambique**

A living, breathing oxymoron, the good mosquito is a highly beneficial insect. This species does not feed on blood, but on flower nectar. More importantly, its larvae prey on the larvae of other mosquitos, targeting mostly those highly harmful species that carry dengue and yellow fever.



## Matabele Ants

*Megaponera analis*

**Gorongosa National Park, Mozambique**

With mandibles full of freshly killed termites, a column of Matabele ants returns from the successful raid of a termite mound. A thousand-strong, this group of ants acts almost like a single organism, equivalent in its impact on the termite colony to a medium-sized mammal.

## Sylvan Katydid

*Acauloplax exigua*

**Gorongosa National Park, Mozambique**

Sylvan katydids are masters of camouflage. Their bodies are perfect replicas of the leaves on which they feed, making it difficult to tell where the plant ends and the insect begins.



## Scorpionfly

*Panorpa acuta*

**Estabrook Woods, Massachusetts**

Scorpionflies have an elaborate courtship behavior. In many species males try to win a female's favor by presenting her with a nuptial gift, usually in the form of a freshly killed insect.

## Conehead Katydid

*Copiphora hastata*

**Barbilla National Park, Costa Rica**

Armed with powerful mandibles and sharp spines on its legs, this Central American katydid is an efficient predator of insects and other invertebrates. It is also capable of hunting small lizards and snails with thick shells.



## Silent Katydid

*Macrochiton sp.n.*

**Sipaliwini, Suriname**

Tropical forests of the globe hide many organisms that scientists have not yet named and described. Unlike most katydids, which are well-known for their singing behavior, this recently discovered species is unusual in its inability to produce sound. As we lose natural habitats, we lose the ability to catalog all of Earth's life—before it disappears forever.

## Goliath Birdeater

*Theraphosa blondi*

**Sipaliwini, Suriname**

The South American goliath birdeater is the largest spider in the world. Its leg span approaches thirty centimeters (nearly a foot) and it weighs up to one hundred and seventy grams—about as much as a small puppy. These spiders truly are Goliaths, but are they are not bird eaters. Rather, they feed mostly on earthworms and other invertebrates.



## Treehopper and Ant

*Harmonides sp. and Camponotus sp.*

**La Selva, Costa Rica**

For ants, a colony of treehoppers is like a pasture full of cattle. They protect the insects and collect their honeydew, a sugar-laden fluid produced by treehoppers. An ant can elicit the production of a droplet of honeydew by gently stroking a treehopper with her antennae.

## Rain Locust

*Lobosceliana cinerascens*

**Gorongosa National Park, Mozambique**

Following the downpours of the rainy season, nights in the East African Savanna begin to reverberate with loud calls of adult rain locusts. However, before the rains come, young locusts must survive the dry season. Looking like a piece of a dry, shriveled leaf helps them blend in and avoid being detected by predators.



## Tree Scorpion

*Opisthacanthus asper*

**Gorongosa National Park, Mozambique**

Many scorpions glow a beautiful, blue color when exposed to ultraviolet light. The function of this fluorescence is not understood fully. Recent research suggests that the entire body of the scorpion acts as a light-sensitive organ, helping the animal find shelter and avoid exposure to the sun.



## Giant False-Leaf Katydid

*Celidophylla albimacula*

**Barbilla National Park, Costa Rica**

Almost as large as a hand and sitting fully exposed on vegetation, this katydid virtually disappears thanks to its remarkable resemblance to a leaf.

## Piotr Naskrecki

Piotr Naskrecki is a photographer and entomologist based at Harvard University's Museum of Comparative Zoology.

Field research on insects has taken him to six continents, where he strives to promote understanding, appreciation, and conservation of invertebrates and other "non-charismatic" animals. Through photography, he aspires to capture both their beauty and their roles as critically important members of the Earth's ecosystems.

"These are some of my favorite images, each showing an organism that has a special significance to our own species, the global ecosystem, or me personally," Naskrecki was quoted in the Daily Progress. "Some were selected simply because I was impressed with the intricacies or colors of their bodies. A couple of photos show insects discovered and named by me. All show that insects are as worthy of our attention as any other animal on Earth."

