Biology's Most Amazing Lists: The Top 10 New Species of 2011

Most of the time, we hear how humans are wiping out species at an alarming rate across the world. Thankfully, this new Practical Science list is a testament to the fact that there are many living things out there totally unknown to science.

PRACTICAL SCIENCE WITH PHIL FREDA

On Monday, May 23, the International Institute for Species Exploration at Arizona State University unveiled the Top 10 New Species list with help from a committee of taxonomists.

I received this scoop via email from one of my readers who showed interest in the subject, and I thought it would be a good addition to the Practical Science collection.

Without further adieu, here's the list in no specific order, thanks to the International Institute for Species Exploration at Arizona State University:

- **Darwin's Bark Spider** (***Caerostris darwini***)**:** This spider builds the largest orb-style webs known to biology, which have been found spanning rivers and lakes with a maximum length of 82 feet! In addition, the strength of the silk found in this web is the strongest biologically produced substance known to man, being 10 times stronger than a similar sized piece of Kevlar. This spider is found inMadagascar and was discovered in 2009, which marked the 150th anniversary of the publication of *On the Origin of Species*. Another interesting thing is that in addition to the Darwin's Bark Spider's discovery, an undescribed symbiotic species of fly was also found.
- **Eternal light mushroom** (***Mycena luxaeterna***)**:** This Brazilian Fungi gets its name from the fact that its gel-covered stems, which support the mushroom caps, emit very bright yellowish green light all day, hence "eternal." Out of the 1.5 million species of fungi known to science, only 71 of them exhibit bioluminescent properties, and the eternal light mushroom is the most vivid and visually striking.
- ***Halomonas titanicae*****:** This amazing species of bacteria actually has no common name yet. But get this, *Halomonas titanicae* was found on large particles of rust on the submerged "corpse" of the RMS Titanic. Yes, the same *Titanic* that set sail out of Southampton, England, for New York City on April 10, 1912 and sank after hitting an iceberg in the North Atlantic on April 15, 1912! Incredibly, this amazing bacteria actually lives off of the iron oxide on the badly rusted exterior of the *Titanic*. Scientists believe that species like *Halomonas titanicae* will eventually lead to the disappearance of the mammoth vessel.
- **Sierra Madre Forest Monitor or Golden Spotted Monitor** (***Varanus bitatawa***)**:** This monitor lizard lives off fungi in the Northern Sierra Madre Forest on Luzon Island, in the Philippines. This lizard can grow to lengths of 6.6 feet and weigh up to 22 pounds. The lizard gets its name from the fact that it is brightly colored with stripes of gold flecks. This species was known to local hunters in the Philippines and, upon its discovery, has already been added to a list for conservation. As seen in the species name in the Latin epithet, this lizard is known as "bitatawa" to the indigenous Agta tribespeople.

- ***Glomeremus orchidophilus*:** This interesting cricket has yet to be given a common name, but as seen in its epithet, it is an orchid lover (*orchido* = orchid, *philus* = lover). Crickets, locusts and grasshoppers belong to an order of insects known as Orthoptera. This is the only member of that order that is involved in pollination. To make things more interesting, this cricket pollinates the extremely rare species of orchid known as *Angraecum cadetii*. This cricket is only found on theMascarne Archipelago located in the Indian Ocean.
- **Walter's Duiker (*Philantomba walteri*):** This new species of duiker, which are small, antelope like species, was actually found in Benin, West Africa, at a bush meat market. It was interesting to the discoverers of the species to find it in a bush meat market because the duiker species are well-studied. This discovery is a testament to the bio-diversity of this planet, in that there are still species of mammal yet to be discovered. This species was named in honor of Walter N. Verheyen(1932-2005) because of his work with African mammals.
- ***Tyrannobdella rex*:** This leech has also not yet received a common name, but as you can see shares a similar name to the feared extinct dinosaur, *Tyrannosaurus rex*. The name*Tyrannosaurus* rex literally means "tyrant lizard king," so *Tyrannobdella* rex means "tyrant leech king." This leech got its name because it sports a single jaw lined with large, sharp teeth. To make things worse, and a bit gross, this leech was discovered feeding on the nasal lining of a little girl in Peru. Yuck!
- **Rogue Mushroom (*Psathyrella aquatica*):** This species of fungi is the first known to science to grow its mushroom, or fruiting body, under water. This species was actually found here in the United States, in Oregon. After watching a video on the species, it's amazing to see how this mushroom can stay anchored in strong currents.
- **Leaproach (*Saltoblattella montistabularis*):** This South African cockroach sports extremely developed legs that have evolved for one purpose—jumping! Prior to the discovery of this species, biologists had previously thought that all jumping cockroaches went extinct in the late Jurassic period, some 150 million years ago. This roach can hold its own with the grasshoppers when it comes to jumping distance.
- **Pancake Batfish (*Halieutichthys intermedius*):** Interestingly, this species of fish was actually discovered just before the infamous 2010 oil spill in the Gulf of Mexico. Sadly, its entire known distribution and habitat is in the region of the spill. This grotesque, flat, spikey fish actually hops on its fins. The Pancake Batfish also has extremely large bulging eyes. Hopefully, the vitality of this species was not too adversely affected by the oil spill.

  This article has given me newfound hope.

  Even though we humans have caused the extinctions of numerous species because of habitat destruction, over-hunting, global climate change and pollution, there are still moments in time where we discovery totally new species out there in the wild.

  New discovery, coupled with combined efforts of conservation, will help further establish the need to take care of our planet and all of its denizens.

  Think about it!