

Extreme Science

The Undiscovered

Everyone agrees that insects are the largest group of animals on Earth, but nobody knows exactly how many insect species exist. Some estimates predict that there are as many as 30 million species. However, only 900,000 species have been classified. Twenty-nine million insect species may be waiting to be discovered!

Where in the World?

Many of the new insect species are found in tropical forests of South America and Asia. But plenty may be hiding close to your own home.

- The most massive bug in Southern California went undiscovered until April 4, 2002. This wingless relative of the Jerusalem cricket looks something like a puffed-up 3-inch-long ant.
- While studying for her graduate degree, Christina Sandoval captured insects in Santa Barbara, California. She caught an unidentified species of walking-stick insect, which she named after herself: *Timema Cristinae*.
- The Hanford Nuclear Reservation, in Washington state, was closed to the public for about 50 years. After it opened for cleanup, the Nature Conservancy found 27 new insect species in just 4 years, including a new micromoth, less than 1/8 inch long.

Scientists think that over one third of the estimated 164,000 insect species in the united states have yet to be discovered and named. Start looking. Who knows where the undiscovered may be.

A Whole New Order

In March 2002, for the first time in 87 years, a whole new order of insects was discovered. Insects in this new order look like a cross between stick insects, praying mantises, and grasshoppers. Upon its discovery, the order was nicknamed *gladiators*. Now called *Mantophasmotodea*, the “gladiator bugs” raised the total number of insect orders to 31.

Explore:

1. **ANALYZE** List some things about an insect that could be included in its species name. Tell why each feature is important.

2. **CHALLENGE** Scientists recently discovered a new centipede in New York’s Central Park, the first new species in the park in over 100 years. Centipedes are related to insects. Find out what centipedes and insects have in common, and how they differ.

<339 words>

© McDougal Littell, Houghton Mifflin. *from Life Science: Unit B Life Over Time*