



NATIONAL GEOGRAPHIC Daily News

Home Animals **Ancient** Energy Environment Travel/Cultures Space/Tech Water Weird News Photos News Video News Blogs

World's Leggiest Animal Found Near Silicon Valley

"Extinct," 750-limbed millipede species sports claws, spins own "clothing."



Illacme plenipes went undocumented for 84 years.

Photograph by Paul Marek

Share

Like 3.7k

Tweet 805

475

Email

More »

News Video



First Day in the Fossil Chamber

Kate Andries
National Geographic News
Published November 14, 2012

The leggiest creature on Earth lives in California. But it's not a movie star or a model. In fact, it's smaller than a human pinky finger. It's a 3-centimeter-long (1.2-inch) millipede with 750 legs.

First seen by government scientists in 1928, *Illacme plenipes*—"the acme of plentiful legs"—keeps such a low profile that for the rest of the 20th century the species was thought to be extinct. Then University of Arizona entomologist Paul Marek spied one near Silicon Valley.

Marek and colleagues' new paper—published Wednesday by the journal *ZooKeys*—offers the first scientific description of *Illacme plenipes*, including insights into its strange anatomy.

For one thing, females have up to 750 legs, and males have more than 550. Most other millipede species have between 80 and 100 legs apiece, Marek said. For another thing, *Illacme plenipes* can spin silk from long hairs that cover its back, thereby creating its own "clothing."

"It's the coolest millipede I've ever heard about," Marek added.

(New species pictures: Giant millipede among Borneo finds.)

Trending News



Pollution Blamed for Child's Lung Cancer

An eight-year-old Chinese girl was diagnosed with lung cancer that has been attributed to pollution—one more tragedy in how air quality can affect health.



How Ancients Moved Mountains

From temples to pyramids to statues, ancient techniques moved giant blocks weighing tons.



Sky Events to Watch This Week

Look to the skies for not one but two meteor showers, a green-giant planet and one of the most beautiful deep-space sights seen in the heavens.

ADVERTISEMENT

EOS 5D Mark III **Canon**

Learn how to take shots like these.

▶ LEARN MORE

NATIONAL GEOGRAPHIC

Urban Photography Tips

Explore with Nat Geo





Meet "Underground Astronauts" Recovering Fossils



Tiger Cubs Pass Swim Test



Fresh Produce Sails the Hudson



Hurricane Sandy's Ecological Upside

See All News Video »

Mythical Millipede

Illacme plenipes has "kind of had a mythical status among millipede people," Marek said.

So in 2005, an intrigued Marek—then a doctoral student—began searching for the legendary invertebrate in a foggy 2.8-square-mile (7.3-square-kilometer) area outside San Francisco.

Over three years Marek and his team turned up 17 specimens, each clinging to sandstone boulders. Though they suspected more millipedes might be found, the team stopped collecting specimens in 2007, so as not to potentially deplete the species in the wild.

(Also see "New 'Devil Worm' Is Deepest-Living Animal.")

More Than Just a Great Set of Legs

Because these burrowing arthropods live deep underground, their legs have adapted to include claws. Marek and other researchers hypothesize that these talons may help *Illacme plenipes* cling to subterranean rocks.

Other surprising anatomical features include massive antennae (relative to the scale of its body), which the millipede uses to feel its way through the dark; a jagged and translucent exoskeleton; and body hairs that produce a sort of silk that may help *Illacme plenipes* adhere to the undersides of boulders. And unlike in other millipedes, the mouth of this species is specifically structured for piercing and sucking plant tissues.

(Find out how some millipedes' legs serve as sexual appendages.)

But Marek said *Illacme plenipes* does have at least one thing in common with other millipedes: a name that's "sort of a misnomer." No millipede has ever been known to have a thousand legs, he said (though he concedes that a species with that leg count may exist).

Now that *Illacme plenipes* has been rediscovered, how much longer does it have left?

Constant development in the area is destroying its habitat, Marek said. It would be a shame, he added, for this "bizarre" species to vanish again before we can learn more about it.

More: [Meet the Jack Daniel's millipede >>](#)

Like 3.7k 805 475 More »

0 comments

Sign in

Comment input area with text box, icons for edit, delete, and social media, and a "Post comment as..." button.

Newest | Oldest | Top Comments

Powered by Livefyre

Real-Life Vampires Hunt with Stealth



Solar Camel

Paul Salopek has a belching, furry, ambulatory wall plug for his satellite phone.

Something to Share?

- [E-mail Us at Newsdesk@ngs.org](mailto:Newsdesk@ngs.org)
- [Send Us Your Photos](#)

SPECIAL AD SECTION



125 YEARS OF WONDER

National Geographic celebrates its 125th anniversary. Revisit the most exciting moments in exploration, photography and discovery.



GREAT ENERGY CHALLENGE

Go inside global events from around the world.



Save \$40 on Geno 2.0

This new DNAtest uses cutting-edge technology to give you the richest ancestry information available.

[National Geographic Shop »](#)

Great Energy Challenge Blog

- [Electric Power Conundrum at the Crossroads of Energy, Climate and Water](#)
- [TV Show "Revolution" Teams Up With United Nations to Shine Light on a World Without Power](#)
- [Solar Researchers Dig Deeper Into Snow Issue](#)
- [Why the New Biofuel Feedstocks Deserve Investment, Incentives](#)
- ['American Blackout': Four Major Real-Life Threats to the Electric Grid](#)