

Idaho scientists find fabled worm

April 27 2010, By NICHOLAS K. GERANIOS, Associated Press Writer



Image credit: Yaniria Sanchez-de Leon/University of Idaho

(AP) -- Two living specimens of the fabled giant Palouse earthworm have been captured for the first time in two decades, University of Idaho scientists revealed on Tuesday.

Researchers on March 27 located an adult and a juvenile specimen of the worms, which have become near mythic creatures in the Palouse region of Washington and Idaho. The adult specimen was positively identified by University of Kansas <u>earthworm</u> expert Sam James a few weeks later.

"We are beginning to gain some understanding about where we are likely to find the giant <u>Palouse earthworm</u>," said University of Idaho soil scientist Jodi Johnson-Maynard in Moscow, Idaho, who has been leading the search.

A university statement said the two worms appeared to dispel two



reports from the turn of the previous century that had added to the myth of the earthworm: The creatures did not spit and they did not smell like lilies.

The adult worm measured about 10 or 12 inches fully extended, while the juvenile was 6 or 7 inches. The worms were translucent, allowing internal organs to appear.

Both worms had pink heads and bulbous tails, rounded unlike the flattened tails of nightcrawlers. The adult had a yellowish band behind the head.

The university said the juvenile worm is being kept in the Moscow laboratory to provide DNA to help develop future identification techniques.

The specimens were found by Shan Xu, an Idaho student, and Karl Umiker, a research support scientist. They also found three earthworm cocoons, two of which have hatched and appear to also be giant Palouse earthworms.

The discoveries followed the development of a new high-tech worm shocking probe that uses electricity to push worms toward the surface. The probe was deployed starting last summer.

Umiker discovered the worms while using the probe. After shooting more electricity through the soil, the juvenile crawled to the surface. The adult remained just beneath the surface, and Umiker used a trowel to dig it out.

The Palouse earthworm was first reported to the scientific world in 1897. Few specimens were identified again until the late 1980s, when James Johnson, a University of Idaho entomologist, found two in a



second-growth forest near Moscow.

The worms were considered extinct until 2005, when Idaho graduate student Yaniria Sanchez-de Leon found a specimen at Washington State University's Smoot Hill reserve near Albion, Wash. She found that worm after it had been cut nearly in half as she was digging a hole to sample earthworms and soil.

The worm was described as common in the Palouse in the 1890s, according to an 1897 article in The American Naturalist by Frank Smith. Smith's work was based on four samples sent to him by R.W. Doane of Washington State University in nearby Pullman.

Massive agricultural development soon consumed nearly all of the unique Palouse Prairie - a seemingly endless ocean of steep, silty dunes - and appeared to deal a fatal blow to the worm.

Conservation groups have petitioned the U.S. Fish and Wildlife Service to protect the worm as an endangered species, citing as proof the lack of sightings. But the agency said there simply was not enough scientific information to merit a listing.

Conservationists recently filed a second request, saying they had more information. The giant Palouse earthworm would be the only worm protected as an endangered species.

Most earthworms found in the Northwest originated in Europe, arriving on plants or in soil shipped to the New World. The giant Palouse earthworm is one of the few native species.

©2010 The Associated Press. All rights reserved. This material may not be published, broadcast, rewritten or redistributed.



Citation: Idaho scientists find fabled worm (2010, April 27) retrieved 10 April 2024 from https://phys.org/news/2010-04-idaho-scientists-fabled-worm.html

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.