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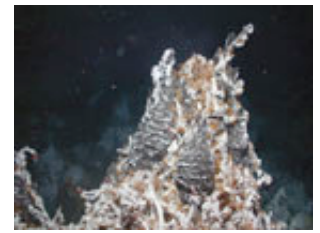
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If you can't take the heat, get away from the deep sea vent!

Ever take a nice, hot bath that felt so good, you didn't want to get out, no matter how pruney you got? Deep-sea worms called *P. sulfincola* feel the same way. Here's a big difference, though: the hot water that feels comfy to the worms wouldn't just wrinkle your fingers.



Click [here](#) for a high resolution photograph.

It would give you a monster burn.



P. sulfincola worms are also called "sulfide palmworms" because they live on sulfide minerals and their feathery heads and long, stalk-like bodies kind of look like little palm trees. They live right at the edges of hydrothermal vents, which are cracks in the sea floor where scalding hot water seeps out.

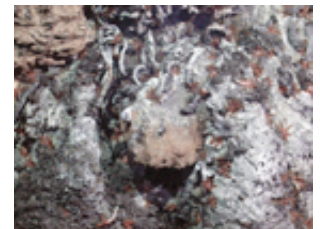
These worms are often found living right by the vents all by themselves. Other animals can't take the heat.

Scientists Peter Girguis of Harvard University and Raymond Lee of Washington State University wanted to know just how hot these worms like to get.

Click [here](#) for a high resolution photograph.

This is hard to measure on the sea floor, since the water flowing out of the vents cools off so quickly. (The seawater at the bottom of the ocean is really chilly – just a little warmer than your freezer. And the vents are about 260 degrees Celsius, or 500 degrees Fahrenheit, inside.)

The researchers built a special aquarium that heated the water at one end and cooled it at the other. Then they dumped in a bunch of palm worms and watched to see where they moved as the water temperatures changed.



Click [here](#) for a high resolution photograph.

The worms quickly moved over to spots where the water was up to a steamy 50 degrees Celsius, or 120 degrees Fahrenheit, which is roughly the temperature of the hottest desert in the middle of the day. They could even tolerate water that was 55 degrees Celsius for a short while. This makes them some of the most heat-tolerant animals on Earth, the researchers discovered.

Earlier studies have shown that some animals like sulfide palmworms can stand high temperatures for a little while, but this experiment showed that these worms actually prefer to live in water this hot.

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This research is being published in the 14 April issue of the journal *Science*.