

## First millipede with more than 1,000 legs discovered

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A female Eumillipes persephone with 330 segments and 1,306 legs. Credit: The first true millipede—1,306 legs long, Paul E. Marek, Bruno A. Buzatto, William A. Shear, Jackson C. Means, Dennis G. Black, Mark S. Harvey, Juanita Rodriguez, *Scientific Reports*.

The discovery of the first millipede with more than 1,000 legs is



reported in *Scientific Reports* this week. Prior to this, no millipede had been found with more than 750 legs.

Paul Marek and colleagues discovered the millipede 60 meters underground in a drill hole created for <u>mineral exploration</u> in the mining area of the Eastern Goldfields Province of Australia. It has 1,306 <u>legs</u> —more than any other animal—and belongs to a <u>new species</u> that has been named *Eumillipes persephone*. The millipede's name derives from the Greek word *eu*- (true), the Latin words *mille* (thousand) and *pes* (foot), and references the Greek goddess of the underworld, Persephone. The authors measured four members of the new species and found that they have long, thread-like bodies consisting of up to 330 segments and are up to 0.95mm wide and 95.7mm long. They are eyeless, have short legs, and cone-shaped heads with antennae and a beak.

Analysis of the relationships between species suggests that *E. persephone* is distantly related to the previous record holder for the greatest number of legs—the Californian <u>millipede</u> species, *Illacme plenipes*. The authors suggest that the large number of segments and legs that have evolved in both <u>species</u> may allow them to generate pushing forces that enable them to move through narrow openings in the soil habitats they live in.





A dorsal view of head and ventral view of gonopods of a male Eumillipes persephone. Credit: The first true millipede—1,306 legs long, Paul E. Marek, Bruno A. Buzatto, William A. Shear, Jackson C. Means, Dennis G. Black, Mark S. Harvey, Juanita Rodriguez, *Scientific Reports*.

The findings highlight the biodiversity found within the Eastern Goldfields Province. To minimize the impact of mining in this region on *E. persephone*, the authors advise that efforts should be made to conserve



its underground habitat.



A ventral view of the legs of a male Eumillipes persephone. Credit: The first true millipede—1,306 legs long, Paul E. Marek, Bruno A. Buzatto, William A. Shear, Jackson C. Means, Dennis G. Black, Mark S. Harvey, Juanita Rodriguez, *Scientific Reports*.



**More information:** Paul Marek, The first true millipede—1306 legs long, *Scientific Reports* (2021). DOI: 10.1038/s41598-021-02447-0. www.nature.com/articles/s41598-021-02447-0

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