

Spider World Records: record-breaking achievements by spiders

Stefano Mammola (1), Peter Michalik (2), Eileen A. Hebets (3, 4) & Marco Isaia (1)

(1) Department of Life Sciences and Systems Biology, University of Turin, Torino, Italy

(2) Zoologisches Institut und Museum, Ernst-Moritz-Arndt Universität Greifswald, Greifswald, Germany

(3) Division of Invertebrate Zoology, American Museum of Natural History, New York, USA

(4) School of Biological Sciences, University of Nebraska - Lincoln, Lincoln, United States

Spiders have a bad reputation among the general public: they are considered ugly, hairy, brown, and deadly poisonous creatures. There are tales describing how they lay eggs in human skin, frequent toilet seats in airports, and crawl into your mouth when you are sleeping. Misinformation about spiders in the popular media and on the World Wide Web is often rampant, leading to distorted perceptions and often negative feelings about spiders. However, despite their negative connotation, arachnids offer intrigue and mystery and can be used to effectively engage even arachnophobic people into scientific discussions and activities. In order to provide an entryway for teachers and students — as well as scientists themselves — into the biology and diversity of spiders, we compiled a list of 99 record-breaking achievements by spiders (the “Spider World Records”). We chose a world record style format, as this is known to be an effective way to intrigue readers of all ages. We group our records into different macro-categories ranging from Taxonomy and Morphology to Ecology and Diversity. We also report on curiosities and clarify fake news about these underappreciated animals. By making these achievements accessible to non arachnologists and arachnologists alike, we suggest that this list could be used: (i) by educators to draw in students for science education, (ii) to highlight gaps in current organismal knowledge, and (iii) to suggest novel avenues for future research efforts. Our contribution is thus specifically aimed to raise public awareness and attractiveness of spiders, meanwhile providing the first official knowledge base for world spider records.