

FOR IMMEDIATE RELEASE

Virginia Institute for Invertebrates Announces Discovery of Two New Species in the Commonwealth

Surprising find highlights biodiversity importance of Virginia's mountain ecosystems and underscores nonprofit's mission to protect understudied animals.

Blacksburg, VA – December 7, 2025 Virginia Institute for Invertebrates, a newly founded conservation organization dedicated to documenting and preserving hidden biodiversity, today announced the scientific recognition of two previously unknown invertebrate species discovered while surveying a potential conservation preserve on East River Mountain in Giles County, Virginia.

The first, *Nannaria n. sp.*, is a millipede in the family Xystodesmidae, the flat-backed mimetic millipedes. Many species in this family are brightly colored as a warning to potential predators that they are toxic. The genus *Nannaria* is an exception. These inch-long millipedes prefer to remain undetected by predators, with drab colors and a lifestyle that favors living just below the surface of the forest floor. Because of this, they tend to be difficult to find, and there are likely many more that remain undiscovered throughout the Commonwealth. This species was identified through traditional morphological analysis by Dr. Jackson Means, a Director of the Virginia Institute for Invertebrates, a Myriapodologist at the Virginia Museum of Natural History, and a world expert on the genus.

The second find, also identified by Dr. Means, is a spider belonging to the family of sheet weavers, Linyphiidae. When you look out on a field in the early morning and see dozens of tiny horizontal webs dotted with dew you are getting a small glimpse into the diversity of this spider family. These miniscule spiders can be found around the world, but because they are so small many have yet to be discovered. The 1 mm long linyphiid found on the property in Giles County represents not only an undiscovered species, but an undiscovered genus as well (a genus is a grouping that includes multiple species and is much rarer to discover).

“No place in the United States has been studied by trained naturalists longer than Virginia, and yet in a few hours of work on the mountain we were able to turn up two animals previously unknown to science,” said Dr. Benjamin Jantzen, founder and President of the Virginia Institute for Invertebrates. “This shows that we have much more to learn about the biodiversity in our backyard, biodiversity that is critical to maintaining the health and productivity of our ecosystems. This discovery reinforces the urgency of finding and protecting Virginia's invertebrate heritage before it vanishes.”

Key Highlights

- **Location & Habitat** – The specimens were collected on East River Mountain near Narrows Virginia at an elevation of 600–700 m on forested slope that the Virginia Institute for Invertebrates is raising funds to protect.
- **Scientific Significance** – The discovery of *Nannaria n. sp.* helps illuminate relations among a distinct subgroup that lives only in Appalachia. The recognition of a new species of spider is a significant contribution to our knowledge of Virginia's arthropods since the overwhelming majority of invertebrate animals are still undescribed.

- **Conservation Impact** – Less than 1% of known invertebrate animals have had their conservation status assessed, but there is strong evidence of broad decline and extinction risk. Identifying these new species suggests that the forests of East River Mountain are important conservation targets.

About the Virginia Institute for Invertebrates

Founded in 2024, **Virginia Institute for Invertebrates, Ltd.** is a tax-exempt 501(c)(3) organization dedicated to conserving the rich invertebrate fauna of Virginia, uncovering the fascinating natural history of these understudied organisms, and building the infrastructure to monitor their dwindling populations. By focusing on these under-explored taxa and their habitats, the nonprofit aims to fill critical knowledge gaps that hinder effective environmental protection.

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Press kit: <https://virginiainvertebrates.org/press-kits/2025-december-7/>

Images (available for download)

- *Nannaria n. sp.* – *in situ* at the discovery site ([image 1](#), [image 2](#))
- Linyphiidae *n. gen.* – dorsal view ([image](#))