

19 January 2006

By: Tudor Raiciu, Technology and Science Editor



27 New Species of Animals in the US Caves

Spiders, centipedes, pseudo-scorpions and others

A three-year study of the subterranean life found in caves culminated earlier this month in an announcement by biologists and NPS staff of the discovery of at least 27 new species in the caves of Sequoia and Kings Canyon. All of them, spider, centipedes, pseudo-scorpion, were completely unknown to researchers. Because of their sensitivity to the environment, cave-adapted invertebrates can act as indicators of environmental problems or changes. If park cave animals decline, it may point to other problems in the park environment. Many of the invertebrates discovered live only in a limited area. Some of the newly discovered animals appear to only live in a single cave, while others are found exclusively in one room. "Not only are these animals new to science, but they're adapted to very specific environments, some of them, to a single room in one cave," AP quoted Joel Despain, a cave specialist who helped explore 30 of the 238 known caves in Sequoia and Kings Canyon national parks, as saying. "It's not necessarily unusual to find something new, but that doesn't make this less spectacular. Many people will be looking at these trying to find where they fit in the tree of life," Despain added. Many of the recently discovered animals have adapted to the cave environment and have evolved differently than their above-surface relatives. For example, the members of a bug species had become completely transparent, so that their internal organs were visible to the naked eye, and some of the insects replaced the eyes with some extremely well-developed tactile senses.

Photo credit: Joel Despain