

A Brief History of Biospeleology in Virginia

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ABSTRACT

The study of cave biology or biospeleology in Virginia had its beginning in the second part of the 19th century with two papers published by E. D. Cope followed by a monograph in 1888 by A. S. Packard. Packard's extensive work resulted from his observations on caves in Kentucky, Indiana, and Virginia. Following a period of inactivity, biological study of North American caves was resumed in the 1930s with investigations by both American and European workers, presumably driven by the rapidly increasing interest in evolutionary biology. Explanations for the loss of eyes, pigment, and attenuation of appendages in cave animals were especially interesting. Beginning in the 1950s and continuing until the present time, both extensive and intensive investigations of caves and their biotas have been carried out and many new species of insects and crustaceans have been discovered and described. One of the most remarkable has been the discovery of the marine relict isopod *Antrolana lira* from Madison Saltpetre Cave. Concurrent with a rapidly developing interest in both the biology and geology of caves, a "formal" Biological Survey of Virginia Caves was initiated in the early 1960s and resulted in a publication in 1988 titled "The invertebrate cave fauna of Virginia and a part of eastern Tennessee: zoogeography and ecology." Subsequent to this publication, collecting has continued on a reduced scale paralleled by ecological studies by graduate students. Long-term studies on ecology, biological monitoring, and conservation of specific caves continue as well.

Key words: biospeleology, Edward Drinker Cope, A. S. Packard, Madison's Cave, troglomorphic, Burkes Garden, Thomas C. Barr, Jr., Biological Survey of Virginia Caves, Virginia Natural Heritage Program.