**PR Number:** R1242110021

**Award Number:** **P11AT10869 NAU-407**

**Park/NPS Unit: FLAG (WUPA)**

**Title of Project: Mapping, Biological Inventory, and Microclimate Data for Two Earthcrack Caves at Wupatki National Monument**

**Administered through the:** Colorado Plateau Cooperative Ecosystem Studies Unit Cooperative Agreement Number H1200-09-0005

**CESU Partner:** Northern Arizona University

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**Funding Information:**

**Amount Funded: $23,000**

**Project Dates:**

**Start Date:** September 1, 2011

**End Date:** November 1, 2013

**PROJECT ABSTRACT:**

A network of unique subterranean “earthcrack” fissures is located at Wupatki National Monument (WUPA). Six of them are large enough for spelunker exploration, and were surveyed and inventoried in 1976. No biological surveys have been completed since then. Current NPS management issues include the re-inventorying the cave fauna to confirm the presence of two endemic pseudoscorpions and one bat species of conservation concern; planning information is needed to consider re-opening blocked entrances in proximity to high visitor use areas; reducing the risk of White Nose Syndrome spreading to the bat fauna; and understanding potential cave microclimate changes due to global climate warming. A cooperative study of two of the larger earthcrack caves is proposed to develop detailed subsurface maps, and to systematically re-inventory the cave fauna and acquire baseline microclimate data. The Cooperator will document the results of the study in a report to the National Park Service.