



Fort Stanton Cave, New Mexico Science Conference (September 17th – 19th, 2020) Prospectus

The primary goal of this conference is to gather together the many individuals who have been working on various scientific and related aspects of Fort Stanton Cave (FSC) to share results, cross-fertilize their work with other investigators, and hopefully to stimulate more interest in scientific projects into the future.

With the discovery of the Snowy River passage in Fort Stanton Cave on September 1, 2001, FSC has emerged as one of the most scientifically significant caves in the west. A major publication has been produced by the Fort Stanton Cave Study Project titled *12 Miles from Daylight: Fort Stanton Cave and the Snowy River Discovery* that provides a wealth of background information about the cave. Ongoing and new scientific research adds valuable knowledge to the many scientific questions surrounding the cave.

We envision a meeting size in the range of 80 to 120 participants drawn from those who already have been producing scientific, photographic, cartographic, and other types of projects in the cave and extending to experts in various topics who have not previously worked in FSC but who are leaders in their respective subjects. We also hope to attract early career professionals and students to the FSC site.

We are planning the conference for September 17, 18, and 19th, 2020, to celebrate the upcoming 20th year of Snowy River's discovery. It will be held at New Mexico Tech and NM Bureau of Geology and Mineral Resources facilities in Socorro, New Mexico.

The conference structure includes Day 1 of scientific presentations by the FSC community investigators. Day 2 will be devoted to breakout sessions in different broad topics including hydrology of the system, geological setting and speleogenesis, biology and microbiology, and others as appropriate. The breakout sessions mandate is to produce a summary of the state of the art of knowledge about FSC and relevant work in the speleological sciences and arts in general and to help map out future directions for inquiry. Day 3 will present a field trip to relevant hydrological, geological, and biological sites in the area surrounding the cave.

Co-Conveners:

Talon Newton, New Mexico Bureau of Geology and Mineral Resources, talon.newton@nmt.edu
Penelope Boston, NASA, penelope.boston@nmt.edu

Scientific Organizing Committee:

Mike Spilde, Chair, UNM, mspilde@unm.edu; Johanna Blake, USGS, jmtblake@usgs.gov; Victor Polyak, UNM, polyak@unm.edu; John Lyles, LANL, jtml@vlla.com

Logistics Coordinator:

Cynthia Connolly, New Mexico Bureau of Geology and Mineral Resources, cynthia.connolly@nmt.edu

Please contact the conveners or science committee to be put on the list for more information.