MINNESOTA SHOW CAVES

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The following is a list of the known show caves of Minnesota in chronological order, together with years of operation. All are either natural caves or artificially enlarged natural caves. The assistance of Gary K. Soule is gratefully acknowledged.

- Fountain Cave, also known as New Cave and Spring Cave (St. Paul, MN, 1852-1857?).
- Chutes Cave, also known as Nesmith Cave (Minneapolis, MN, 1875-1883).
- Jesse James Caves, also known as Seven Caves (St. Peter, MN, 1929-3.
- Catacombs of Yucatan, also known as Black Hammer Cave (Spring 4. Grove, MN, early 1930s).
- Niagara Cave (Harmony, MN, 1934-present).
- Old Mystery Cave (Spring Valley, MN, late 1930s-1942).
- Wolfe Brewery Caves (Stillwater, MN, 1945-present).
- Mystery Cave (Spring Valley, MN, 1947-present). 8.
- Minnesota Caverns, now the Mystery II entrance to Mystery Cave (Spring Valley, MN, 1960-present).
- Hiawatha Caverns (Witoka, MN, 1964-1966). 10.
- Spring Valley Caverns, formerly Latchams Cave and International Caverns (Spring Valley, MN, 1968).

THE HISTORY OF WINDELER CAVE

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During mining operations in 1946, Windeler Cave was discovered, and in 1952, the cave was filled in under unexplained circumstances. After 20 years, the Diablo Grotto reopened the cave and they since have managed it.

Prior to 1946, Windeler Cave did not have a natural entrance. The cave was discovered by Charlie Windeler and other miners, and they permitted the now defunct Stanford Grotto to explore the cave in the years 1950-1952. The entrance gate has been broken into several times. Windeler Cave has been surveyed to 900 m and is unique to the Mother Lode area because of its many speleothems and pristine condition.

During the management of Windeler Cave, the Diablo Grotto has had to patrol, use electronic surveillance equipment, redesign gates, go to court to prosecute two vandals who were charged under the 1977 California Cave Protection Law, and fill in the entrance. Much of the problem has been traced to a person who wrote a fantasy of words and sold to many that were interested in seeking out their fortune in the era of high gold prices

Scientific exploration was attempted, with Dr. William Elliott labeling one small water creature after Windeler. One of the limits in exploring Windeler was the requirement of electric lights, which studies were to be coordinated on, but this only led to vandalism by some of those who broke in during the '70s.

IDENTIFICATION AND ANALYSIS OF A CIVIL WAR SOLDIER'S NAME IN SOUTH CARTHAGE CAVE, TENNESSEE

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In May 1999, a possible Civil War inscription was found in South Carthage Cave. On a return trip, an intensive visual inspection was inconclusive, so photographs of the inscription were made. These were later examined electronically using exploratory data analysis, which revealed additional information and resulted in a positive identification. The inscription was made by John C. Reed of the 11th Ohio Infantry. Subsequent research indicates that Reed had a spotty military record and that he visited the cave between March 20 and June 4, 1863 while encamped near South Carthage. Reed's cave trip confirms that Union soldiers visited more caves, including relatively unknown caves, than previously suspected, and that American patterns of interactions with the cave environment persisted in the Civil War, despite the dislocations of the period.

EDMUND RUFFIN AND THE CYMBEE OF WOODBOO Cato Holler, Jr., P.O. Box 100, Old Fort, NC 28762

Edmund Ruffin was a noted 19th century agricultural reformer from

Virginia as well as a staunch supporter of slavery. Civil War enthusiasts may remember him best as the individual who was selected to fire the first shot on Fort Sumter, South Carolina, thus beginning the War Between the States. Less known, perhaps, are Ruffin's antebellum speleological endeavors. In 1843 at the request of Palmetto State governor, James Hammond, Ruffin spent 8 months conducting an intense agricultural and geological survey of South Carolina. Much of his time was spent in locating limestone and marl deposits, which he felt could be used wisely for agricultural purposes. During his field work, Ruffin turned up interesting caves and karst features within the state. He described these in detail in his private diary. While visiting and talking with some of the locals, he was also introduced to a bit of folklore concerning the legendary inhabitant of a particular karst spring. This was a peculiar supernatural being or water sprite that the local Negroes called "the Cymbee of Woodboo"

CATTLE CAVE: HISTORIC ARCHIVE

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Cattle Cave in Lee County, Virginia, was mined for saltpetre. Civil War era writings on mattock marks in sediment contain more detailed inscriptions than just the names of miners. The most stirring sentiments were the following: "Nathan S. Cox Was born January 2nd 1842 This the 6th day of March 1862. Age 20 years 2 months & 4 days War is upon us But we will not be subjugated We will fight them as Long as there is a woman or little boy large Enough to raise a gun to fire Huzza Huzza Jeff Davis & the southern confederacy Nathan S. Cox Thursday Eve 1862." He served in the 50th Virginia Infantry and survived the Battle of the Wilderness and the war. A younger brother, Mitchel C. Cox, age 17 years 9 months and 6 days, recorded his thoughts during that March 6th evening. He served in the 64th Virginia Infantry and was captured at Cumberland Gap, exchanged as a prisoner, and served again before he was "Murdered and robbed in Russell Co., VA on 8/4/64." sister, Mary A. F. Cox, and her friend, Cynthia Ann Pruett, also inscribed the sediment bank that March evening. Cynthia married another Cox brother in February 1865. A partially obliterated name dated 1860, may be that of General Creech. He enlisted the same day as Mitchel Cox and was captured at Cumberland Gap. Sent to Camp Douglas, he was held until he died of endocarditis on December 19, 1864.

 DISPROVING A NEGATIVE: THE ALLEGED BLIND CAVE FISH FROM PENNSYLVANIA NEVER EXISTED

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In 1864, Edward Drinker Cope published a report on what he thought to be a new species and genus of troglobitic (blind, depigmented) cave fish, from Pennsylvania. As late as 1986, some authors, based on Cope's article, have continued to assume that there are troglobitic fishes in that state. Our study of the historical, biological, and speleological evidence failed to provide any evidence that such fish exist or ever existed. The original unsubstantiated reports seem to be based on the assumption that you cannot prove a negative, i.e., that we cannot prove that something does not exist just because we have not found

THE CAVEFISH CALENDAR: ESTABLISHING THE PRECISE CHRONOLOGY OF EARLY DISCOVERIES OF CAVE FISHES

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The history of the discovery of the first true troglobitic (blind, depigmented) fish has been unclear. Different claims have been made at different times about the primacy of discoveries in this area. There are at least three references for European cave fishes for pre-Linnean times: Besson (1569), Kircher (1665), and Montalembert (1748). All these citations are unsupported by scientific evidence and may have been based on uncritical observations. Even if they were true, they would all be preceded by a description of a cave fish in China in 1541 that seems to refer to a true cavernicole.

WHITHERE

62(3):200-200