Fort Stanton Cave, beneath the pinyon-wooded ridges of south-central New Mexico, is one of the larger caves in the West at more than 11 miles, and, with its sinuous, horizontal, stream-system galleries, is the Western cave most resembling Mammoth Cave. FSC is also one of the first Western caves to appear in the historical record. The nearby fort for which it was named was founded in 1855 to control the Mescalero Apaches. Soldiers entered the cave very soon after U.S. Army operations began in the area. In what is now known as Decoration Passage, about 3/4 mile into the cave, dragoons signed their names dated 1855: Emil Fritz, Joseph Myers, Victor Brown, John Lepsey, Horace Belknap, John Cherry, and Louis Loeslie. An eighth, William Richards of Capitan, NM, may have been a civilian. Research by the Bureau of Land Management's Mike Bilbo indicates that they were there in March, even before the fort was formally established on May 4! These are the earliest FSC explorers whose names we know. The entrance appears on a map from 1857.

Although no prehistoric artifacts are known from FSC, its entrance was undoubtedly familiar to both the Apaches and earlier tribes. Nearby Feather Cave, half an hour’s walk from FSC, was a major ritual site for early Puebloan Indians. The absence of recorded relics does not necessarily mean that no Indians ever entered FSC. The sinkhole entrance is so unstable, with erosion in some places and rapid accumulation of rockfall and earth in others, that artifacts as recent as the 1800s would probably have been naturally buried.

A poorly-documented story holds that around the time the fort was established, a party of Indians was tracked to the cave and assumed to have taken refuge there, but later appeared on the surface by some unknown route. This has led to speculation about a second entrance, for which no good evidence has ever been found. If the tale is factual at all, the tracks were more likely a ruse and the Indian group had never really hidden in the cave.

Uplands south of the Fort Stanton Cave entrance.

Photo by John Garner.
From 1855 into the 1890s, soldiers frequently explored the cave, as is recorded by numerous historic signatures in both major branches. Lt. Conrad, quartermaster at the fort, had a wooden boat constructed ca. 1872 to navigate the water, which at that time partly filled the northern part of the main corridor. Some rotten boards still to be seen in that area may be remains of this craft. In 1877, the cave was visited by members of the governmental Wheeler Survey, who spent five days making an accurate survey of both branches as far as they could readily penetrate. Their map was the second known plot of any cave west of the Great Plains (the first being Cave Valley Cave, Nevada, also by the Wheeler Survey in 1869).

The most detailed narrative account of an exploration during this period was by three members of the 10th Infantry Band, who styled themselves the Great Divide Expedition (for the name of the monthly Denver magazine in which they published), and spent three days in the cave in 1891. They reported penetrating small virgin passages in the southern branch, but made no major extension. In 1896 the Army vacated the fort, which in 1899 was converted to use as a tuberculosis hospital, and continued as such for the next half century.

Around the turn of the 19th century, residents of Capitan and other local people recorded their visits in newspaper articles, including J. H. Tuttle in 1898, and others in 1897 and 1901. For the next half century, the record becomes sparse, though the main corridor was resurveyed in 1909 by the Hondo Hydrographic Survey, and again in 1913 by A. E. Lovett. The earliest evidence of exploration of Snowflake Passage, the northern end of the main trend, seems to be a 1912 signature; access before then may have been continually blocked by pumped water in the Fool's Crawl squeeze. A register note was left by five boys in 1940 at the terminal breakdown in the Skyscraper Domes passage, which was later dug through to become a bypass of the Fool's Crawl route into Snowflake. No significant discoveries were made between 1891 and the 1950s.

In its Nov. 1939 issue, *Rocks & Minerals* magazine published an article about collecting the spectacular gypsum needles in Crystal Crawl (the first part of the cave's southern branch). This of course led to increased vandalism, and ultimate near-eradicating, of the needles by mineral collectors.

In the 1950s, organized caving began in New Mexico, Texas and Colorado with the establishment of chapters of the National Speleological Society. NSS caves soon discovered a highly-decorated cluster of large corridors entered by crawling over Three-Way Hill (a breakdown at the south end of the cave)—the first sizable extension found since the Wheeler Survey. There is conflicting information about the facts of this discovery. It is generally accepted that it was first entered in 1958 by Jim Thompson, Charles and Chester Carrara, Royce Ballinger, and possibly others, and named the New Section. However, according to a 1959 report by Ballinger & A. Richard Smith of the Texas Speleological Survey, it was called Virgin Cave, and "...it has been found that Fritz and Ward from Alamogordo had visited this section in 1956." (Asked via e-mail, C. Carrara said this was not possible because they saw no footprints in 1958.) A map including the New Section was drawn by Jack Burch and Jim Papadakis in 1958, and Ballinger published an article in the NSS News, Oct. 1958. Unfortunately, the new galleries all ended in fill chokes or breakdown within a few hundred feet.

My own first visit to FSC was in 1960 while en route from Colorado to the NSS Convention in Carlsbad. I had then been caving for only three years and was strongly impressed by the cave, which was by far the longest I had yet seen. I began investigating its history, corresponding with other interested cavers, and revisiting the cave whenever I could, looking for possible ways to locate new passage. In 1962, with Vin Hoeman (a colleague mountaineer friend who was killed in 1969 on the first American expedition to Dhaulagiri in the Himalayas), I dug into my first FSC breakthrough: Hoeman's Passage, a short extension of Russell's Crawl near the cave entrance. Ca. 1961, John Corcoran, an Albuquerque caver who would be a pivotal figure in later discoveries, made his first visit to FSC.

In 1962, some of us noticed strong airflow from the breakdown blocking the innermost end of Gypsum Hall in the New Section. Lee Skinner, Doug Rhodes, Robert Babb, Corcoran, and other New Mexico cavers then began digging along the lower left side of that breakdown. In 1963 I burrowed my way up into the chamber from which the breakdown had collapsed, but the far end was blocked. The first really good new find was made that same year by Jack Hamm and Lee Skinner (another Albuquerque caver with a strong interest in FSC). They pushed through a squeeze at a junction off Crystal Crawl into a virgin breakdown chamber leading north, which they named Heinz Schwinge Hall to honor an Alamogordo NSS member and avid FSC caver who had died not long before.

Until 1967 FSC was not fenced or gated. It was posted with a "No Admittance" sign, but this was little enforced, and the general public was at liberty, for all practical purposes, to roam the cave at will. Considerable trash was left in the cave, and cavers sometimes removed bags of it. The BLM began to take a more active interest in administering the cave, and around 1963, John Corcoran was appointed the first formal liaison between BLM and the Southwestern Region of the NSS. In 1967 the cavers began an organized survey to modern standards; Corcoran, Jim Hardy, and Robert Babb were central in the mapping effort.

Since 1962, a core of persistent diggers had continued periodic work in the Babb's Burrow breakdown dig at the south end of the New Section. This was finally rewarded on Aug. 9, 1969, when Lee Skinner, Chuck Ridpath, Dennis Engel, and Elbert Bassham broke up into a half-mile-long southward extension of Gypsum Hall—the best discovery since the Wheeler Survey's time. This was a fine corridor, the best decorated part of FSC, with stalactites four feet long and abundant velvet flowstone. It was well worth the years of work, but the passage came to another blowing terminal breakdown, and the survey was essentially finished in one day. John McLean and I managed to work more than 100 feet into the collapse, but the rocks were bigger than at Babb's Burrow, and we eventu-

The BLM's Mike Bilbo (right) presents a plaque of appreciation to John Corcoran for his dedication.

Photo by John Ganten.
ally gave up for fear of triggering dangerous rockfall. This breakthrough, named Lincoln Caverns because it went farther into Lincoln Ridge, was kept relatively quiet, and the Burrow was carefully blocked with rocks after each trip, to keep casual visitors from finding and harming it. Lincoln Caverns was left off maps available to the public.

During this time, many of the same diggers also worked on the breakdown that blocked the Bat Cave passage going SW from the cave’s entrance room. Only two weeks after the Lincoln Caverns breakthrough, a team including John Corcoran, Wayne Walker, John Zuryk and Dennis Engel broke into a walking-height tube beyond the choke. This was smaller than Lincoln Caverns, little decorated, and didn’t go as far before hitting another blockage, but was nevertheless a significant extension going away from known cave.

These exciting successes energized cavers to seek other digs more aggressively in 1970. Mike Clark and I did a short dig through clay at the northern end of Snowflake Passage which revealed a tiny room with tree roots in it (the Rooters), and another in Hellhole 2 (a smallish passage south out of the entrance room) that passed through two tiny rooms, the Ahhh Room and Puft Room, but came to another modestly blowing pinch where we suspended work.

The most tantalizing lead was a massive breakdown pile along the east wall where the Sewer Pipe/Pool’s Crawl and Skyscraper Domes passages rejoined at the beginning of Snowflake Passage in the northern part of the cave. Air moved strongly through the rocks at both the northern and southern margins of this collapse. Tentative digs were started by Corcoran, myself, and others at both of these spots. The northern one was called Snowflake #3 (Snowflake #2 was a rumored passage supposed to be parallel to Snowflake Passage, but which none of us were able to find). Jim Hardy named the southern dig Priority 7, an arcane reference to the highest-priority hardware interrupt in the IBM 360 mainframe computer he worked with at the time.

We dug our way many yards into Snowflake #3, but I was scared out of that dig when a foot-square rock fell spontaneously from the ceiling and grazed my head. We got farther into Priority 7, eventually working up into an open breakdown dome that I named Menacing Dome because of the huge and threatening boulders poised above.

Others were digging in blowing rubble at Roaring Hill, the end of a low catherly tube that split off near the start of the Skyscraper Domes passage. On Feb. 14, 1971, Lee Skinner was the first to pop up into a large north-south-oriented breakdown gallery several hundred feet long. This was first named Valentine Passage, but renamed Don Sawyer Hall in 1979, in memory of the deceased, well-regarded BLM administrator who was in charge of FSC during the 1960s and early 1970s, and took a real interest in the cave. Don Sawyer Hall was evidently a northern segment of the Heinz Schwingen conduit, but a blocked gap of several hundred feet remained between them.

BLM officials gradually increased their control over the cave. In 1967 the locked chain-link fence was installed around the entrance sink, and permits began to be required to enter. In 1971, with caver cooperation, the first internal gates were built to control access to Three-Way Hill, the Main Corridor and Bat Cave. Circa 1977, BLM ordered a halt to caver-controlled digging in FSC, though some digs were pursued in following years by Joe “Buzz” Hummel, the BLM official then in control of the cave. One of the places dug was a tight northward-trending crawl off the Washub Room near the entrance sink, where a thousand feet of nasty little passage went toward the Bonito Valley parallel to Russell’s Crawl. This sumped during wet cycles and was abandoned for a decade after it was pushed. Survey stations were marked in it, but the data never reached Corcoran’s files. It would finally be resurveyed in 2002, and named Hel of a Thousand Pinches.

A wet spell hampered travel through the Main Corridor during part of this period; it was deeply flooded circa 1985-87, and raft trips were made there. Cavers continued to visit FSC through the 1990s, but there was a gap in serious exploration efforts for more than a decade. Circa 1994, Hummel was replaced at BLM by Mike Bilbo, who began to consider allowing digging to resume under formally-controlled criteria. Bilbo solicited advice from John Corcoran as to standards for developing an Environmental Assessment under which digs could be permitted. Corcoran then applied in 1995 for a permit to resume digging in Bat Cave. An EA for this was approved in 1997, and was determined to be applicable to digs elsewhere as well. The new effort was organized as a Cave Research Foundation project, with help from the...
In 2000, Corcoran applied to restart the Priority 7 dig, and received approval. Lloyd Swartz made a recon trip in November 2000, and became the leading digger there. The first official dig was in July 2001. On September 1, Swartz, John McLean, Andrew Greico, and Don Becker broke back downward into the Starry Nights Passage, a muddy crawl that soon intersected an impressive gallery going south and northeast from the junction. This was floored by a remarkable white pool-deposited channel that led Swartz to name the breakthrough Snowy River. The conditions of the dig permit, however, required that the discovery not be further explored without BLM permission.

BLM decided that a gate for Priority 7 must be constructed, and another EA written, before survey could begin in Snowy River. Both requirements were finally completed in 2003. The first survey teams went in on July 4; others followed in August and October. These have mapped more than three miles of new passage, with major ongoing leads. This history-making survey is by far the greatest increment to the cave map since the Wheeler Survey in 1877. The dream of Fort Stanton Cave explorers since the 19th century is now being realized. Ironically, John Corcoran, because of physical infirmities, has not been able to enter Snowy River himself. Nevertheless, his persistence in decades of work with BLM, and his skillful organization of all the expeditions and preparation of excellent reports, has put him at the heart of the discovery.

AUTHOR’S NOTE: Substantial information for the above history was contributed by John Corcoran, Lee Skinner, Chuck Carrara, and John McLean. Chris Andrews refined my original draft of the place-name map.