



## Nevin Wilson Davis

*NSS 6227, RL, FE, LB  
(1942—2021)*

Nevin passed away March 13, 2021 at home on his beloved Virginia farm in the heart of cave country, leaving behind Judy, who was his wife, his best friend and caving companion for 59 years.

Quite simply, Nevin had an intense interest in caves. This interest, this curiosity, this compulsion to know what lies underground persisted throughout his life. After reviewing his life, it's hard to imagine the amount of virgin cave passages he surveyed, the hours spent drawing maps, composing cave reports, technical papers, and designing items ranging from science apparatus to cave gate designs. He was more than a caver—his accomplishments are varied and numerous. His friends said he could repair, fix, restore, or build any piece of equipment or machine. As a Penn State electrical engineer, Nevin designed electronic devices that were said to be ingenious, bordering on genius. But beyond all this, he was one heck of a caver!

Living in the limestone landscape of central Pennsylvania, he began exploring caves as a boy. In caves he found mystery—a fascination that demanded more data. Soon enough, he joined the Nittany Grotto in 1960 where he quickly established that he was a member whose talents went far beyond just caving. Aside from his many cave reports, he was a photographer, explosive expert (when legal), and master designer. Eventually, he held most all the organization's positions. He was instrumental in the discovery of Hosterman's pit, one of Pennsylvania's largest caves and he discov-

ered, mapped, and gated J4 Cave as well as many others.

Jumping ahead in time, he designed and built a gasoline-powered motorized ascending device called MAD. In 1968, he used MAD to ascend Sótano de las Golondrinas in Mexico, the first time this vast pit had been climbed using a device gripping the rope while powered by a gasoline engine! MAD now resides in a private collection.

In 1972 Nevin and Judy packed up their pickup and traveled to Mexico where they spent a month, eventually joining up with Rick Rigg and others, exploring and mapping the caves of Cuetzalan, Puebla and published a monumental tome on the caves in *AMCS Newsletter Vol. 4, no. 5-6 (1974)* (free download at <http://www.mexicancaves.org/oldNL.html>).

In 1977 Nevin and Fred Wefer traveled to Greece to join an expedition to the Astraka Plateau at the edge of the Vikos Gorge to explore pits (Provatina Abyss was one). Nevin and Fred then made a reconnaissance of the nearby Tymphe Massif.

In the sixties, Nevin and other members of the Nittany Grotto became interested in surveying Breathing Cave, located in Bath County, Virginia. The lure of all the Virginia caves in Bath/Highland Counties caused a major change in Nevin and Judy's life. In 1968 they bought a cabin on the banks of the Bullpasture River in this sparsely populated area—an area with big caves and potential for more. Ten years later they sold the cabin and bought a beautiful farm complete with an old farm house and a big barn with a number of outbuildings. It was just what they wanted—to live a simpler life in the middle of what is now called the Burnsville Cove. So, they retired to their Spring House Farm and settled in for the count.

However, he didn't really retire—he just changed hats. He taught Electronics as an adjunct professor at Dabney S. Lancaster Community College for 9 years. After this, Nevin established a company called Nevtek which manufactured a medical device (ASI 400) used in laboratories around the world. He and Judy also established a mixed-fruit orchard consisting of apple, peach, and cherry trees, selling their apples and cider on the farm. They also established various grapes, which were made into grape juice and transformed into excellent wines.

But a lot of Nevin's time was spent caving. Butler Cave and Breathing Cave, two jewels of Virginia, were just a stone's throw from their farm, with so much potential for more. Nevin was one of the founding members of The Butler Cave Conservation

Society. It was formed in 1968 and was the first privately owned cave conservancy in the US. Nevin served 29 years as its president; under his leadership the organization flourished and remains a vibrant cave conservancy today. Naturally Nevin became very familiar with the miles of complex passages in Butler, especially those coming toward his farm. On the east side of the farm was Chestnut Ridge, where numerous sinkholes and limestone ledges covered the slopes. There were also small caves and holes that blew warm air in the winter. Nevin walked the winter slopes and marked the location of snow melts and blowing holes. Some of these, when dug open, proved to be significant caves. Curious about sinking streams and underground streams, Nevin did extensive dye tracing. This effort led to an understanding of the watershed and underground drainage of the Burnsville Cove.

Living on his farm, located right in the middle of an area that proved to be one of the most significant cave and karst areas in Virginia, gave Nevin many opportunities to serve a primary role in all the discoveries being made. He was very good at recognizing potential in neophytes and served as a mentor and role model to several generations of cavers. Now, forty years later, there are passages totaling over 80 miles in the Burnsville Cove and many of these have seen his footsteps. Beyond the Cove, Nevin was part of many projects (new discoveries) throughout Virginia.

One discovery near his farm that proved to be both challenging and gratifying was the vast Chestnut Ridge Cave System. Its exploration challenged the strongest cavers. The demanding nature of the cave lent itself to camps being used for multiday expeditions. Twenty-seven cave camps were established from 1984 to 1990—Nevin would participate in all but one! Eventually, the cave system consisted of three entrances—all required a demanding access. It now measures over 22 miles in length and is second-deepest in Virginia. This cave was one of Nevin's most satisfying achievements.

One of Nevin's many legacies in the Burnsville Cove is that he permanently gained access to Barberry Cave. Two years after the first two entrances to the cave were excavated, cavers lost access to them. Nevin decided that his mission was to create a third entrance at a point where the stream trunk passed under the Davis' property. Using a cave radio that Nevin had previously built from scratch, they found a suitable location and the 'digging' began. After a year of intense work, several thousand \$ of



**Judy Davis with Nevin's MAD ascender**

his money, countless setbacks, and many hundreds of hours of his time (plus dozens of volunteers), Big Bucks Pit was created by drilling and excavating a 72-foot shaft until it intersected the top of the 70-foot-high stream trunk. The large trunk passage has many flowstone formations but one section is especially stunning. It is called the Big Wow because it is the typical reaction when first seen. Nevin would say with a grin "This is my favorite cave and it is my cave." The entrance now sits beneath the 'Apple Shed' where Nevin and Judy would use the cool air from the cave to create a perfect environment for storing the bounty of apples harvested from their orchard.

Later in life, over a 10-year period, Nevin and Judy traveled to Hawai'i on winter trips to explore and survey numerous lava tubes both on their own and with others. Nevin led the exploration and survey of Green Skull Cave, which reached over 100 feet below the surface with passages over 80 feet wide. He was a leader in the exploration and survey of the 15-mile-long, 1,480-foot-deep Hualalai Ranch Cave system, drafting the map of this complex cave. He also led the survey of the Pueo/Two Owl cave complex with over 7 miles of passage, and Lama Lua, a 3.5-mile-long, 620-foot-deep cave with 30-foot-diameter passages extending into darkness for over a mile and a half from the nearest entrance. With Judy, he surveyed many miles in numerous other large caves: the 2.3-mile-long Dove Cave and the West Hawai'i Landfill Cave with 2.6 miles surveyed, for example. Nevin was a prolific Hawai'i caver with over 40 miles of surveyed passages to his credit. Project leader Doug Medville described Nevin as always calm, competent, analytical, and a great caving partner. Nevin made several presentations about Hawai'i caves in US Explorations sessions during NSS Conventions.

Nevin was certainly a conservationist. The Butler Cave Conservation Society presented to Nevin their highest honor, the

Limestone Award. He was a member of the Hawai'i Speleological Survey and the Cave Conservancy of Hawai'i, a director of the Virginia Speleological Survey, and a member of the Cave Conservancy of the Virginias. He was a life member of the National Speleological Society and a Lew Bicking Award recipient. He was a co-author of the book, *The Caves of the Burnsville Cove, Virginia*.

He was an inventor. Aside from MAD, mentioned earlier, he developed a fluorescent helmet-mounted cave light—the only one of its kind—as well as two variants of LED helmet-mounted cave lights well before they were available commercially. When commercial explosives could be used without permits, he developed a small BANG box, used as a detonator, to fit snugly in a cave pack. He developed a small signal device that would trigger slave units for cave photography. But perhaps the most ingenious device, in

this author's opinion, was a highly sensitive ultrasonic anemometer that could detect air moving at a fraction of mph. This was key in the development of the instruments and fans used to determine air connections between caves entrances. A paper, "A Method of Detecting Cave Connections by Induced Air Flow," was presented by its authors Phil Lucas, Frank Marks, and Nevin Davis at the 15<sup>th</sup> International Congress of Speleology at Kerrville, Texas, July 2009.

Nevin Davis was a man of many talents and interest, but his main focus throughout his life was the study and exploration of caves and their environment. His accomplishments would be hard to match. He is a true loss to our caving community and to all his many friends scattered around the country. He will be sorely missed.

**Philip Lucas**  
NSS 4820