



ACCA *News*

SUMMER 2025

John Richards: Securing ACCA's Legacy In Horse Cave

BY DAVID G. FOSTER, PRESIDENT/CEO

ACCA's Treasurer and Director John L.G. Richards has pledged a \$1,000,000 legacy gift to endow the American Cave Conservation Association (ACCA). The gift will be used to sustain the American Cave Museum and Hidden River Cave and the ACCA's programs for generations to come. I would like to share the story of how this generous commitment came about and let our members know a little more about John and his remarkable life.

John is the cousin of former Hidden River Cave owner Bill Austin and the grandson of W.S. Moss, who owned and operated one of the leading tobacco businesses in the community. John's mother was also born in Horse Cave. During an overseas trip, she met and later married a British Royal Airforce pilot who served during World War II. John grew up living in various parts of Canada and later Stockholm, Sweden.

Although they lived elsewhere, John visited Horse Cave during the summers and played atop the cave entrance with his cousins at his Aunt Carrie's house, which sat directly above the then-closed Hidden River Cave. His visits also included a summer job helping his grandfather. John remarked that "harvesting tobacco and thrashing wheat was enough to convince him to find a career other than the tobacco industry." Armed with a Master's degree in business, John began working for Liberty National Bank and Trust where he stayed for 36 years.

John's mentor and the Chairman of Liberty National Bank, Frank B. Hower, Jr., encouraged all the bank's executive officers to get involved in civic activities. John jumped into this task with both feet serving as



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LEADERSHIP KENTUCKY

an Executive Board Member on the Kentucky Council on Economic Education, as a member of the Board of the Kentucky Derby Festival, and as a Chairman and Board member of Delta Dental Insurance Company.

John also proudly served as a founding board member for the Louisville Heritage Weekends at the Belvedere. These highly successful multicultural weekends celebrated Louisville's diverse ethnic communities through food, music and cultural displays.

As John was cementing his leadership legacy in Louisville, John's cousin, Bill Austin, was mulling around the concept of building a national cave museum in Horse Cave. Bill and his wife Judy had already been heavily involved in creating the Horse Cave Theatre. Bill also enticed the fledgling American Cave Conservation Association to move to Horse Cave to begin efforts to restore Hidden River Cave and build the American Cave Museum at the site.

John Richards played a pivotal role in ACCA's early years, helping open doors that led to one of our first major gifts from the James Graham Brown Foundation. When Bill and Judy Austin decided to expand Mammoth Onyx Cave into an Australian-themed animal park, it was John who suggested the name Kentucky Down Under—a name that stuck and perfectly captures the spirit of this unique Horse Cave attraction.

By this time, John had become a Senior Vice-President at Liberty Bank and had also served as the Chairman of the Kentucky Chamber of Commerce from 1984 to 1985. During his tenure, he joined with a number of other key leaders across the Commonwealth to help launch a new initiative—Leadership Kentucky. Since its founding, Leadership Kentucky has grown into one of the state's most prestigious leadership development programs, uniting professionals from diverse backgrounds to promote collaboration, education, and civic engagement.

This past year, John demonstrated his long-term commitment to Leadership Kentucky with a \$1,000,000 legacy pledge. According to Leadership Kentucky



President and CEO, Janice Way, "for 40 years, John has been instrumental in forging relationships, developing programs and policies, financial support, and growth of Leadership Kentucky. He continues to lead the way with this incredible contribution."

On September 4, 2024, the Leadership Kentucky Board of Directors took action to recognize Mr. Richards' unparalleled dedication and established the John L.G. Richards Legacy Society. In his comments on the Legacy Society, John said, "For over 40 years, I have watched the program exceed even Wilson Wyatt's wildest dream. I sincerely hope others will consider including Leadership Kentucky in their own estate plans, so the legacy of leadership in the Commonwealth remains strong."

Because of John's mentorship, ACCA President David Foster and Education Director Annie Holt are both graduates of Leadership Kentucky and can attest to its value in training and connecting leaders from throughout Kentucky.

This brings us to the summer of 2019, when John Richards showed up at the door of the American Cave Museum. John was in town preparing for a family reunion and when he stepped into the American Cave Museum, he was surprised at how much we had accomplished since his last visit decades earlier. John and I went to lunch and talked for more than an hour about Bill Austin and the work ACCA was doing in Horse Cave.

As John and I visited, he realized that the ACCA was working diligently to fulfill the vision created by his cousin, Bill Austin. Although Bill passed away in 2003, it was his passion and vision that led to the creation of the American Cave Museum and the restoration efforts at Hidden River Cave.

After our lunch conversation, John returned for a second visit and agreed to join the Board of Directors of the American Cave Conservation Association. One of his first contributions was facilitating a successful fundraising trip to Houston, Texas, in October 2019 to meet with Bill Austin's family about preserving their legacy in Horse Cave. The support secured that week helped us complete the tour route into Sunset Dome in Hidden River Cave.

John Richards' leadership and generosity helped make Sunset Dome in Hidden River Cave accessible to the public for the first time in decades.

Shortly after John joined our Board, the entire world came to a standstill with the pandemic of 2020. John's banking knowledge and skill helped ACCA secure needed PPP and SBA loans that helped us survive the pandemic.

John also made a \$50,000 gift that helped us secure \$312,000 in federal funding to construct an incline elevator at the entrance of Hidden River Cave—an important step toward improving handicapped accessibility. We are currently finalizing the engineering plans for the project and hope to begin construction later this year.

John's financial expertise and personal generosity are key reasons why the ACCA has experienced the most financially successful five-year period in our history. In addition to his legacy pledge to Leadership Kentucky, we are proud to announce that John Richards is also pledging a \$1,000,000 legacy gift to the ACCA to support the creation of an endowment. This endowment will help ensure that the ACCA's educational and conservation work—both in Horse Cave and across the United States—continues to make a lasting impact for generations to come.

Thanks to John Richards, the ACCA is a stronger, more effective organization, and Bill Austin's vision is not only alive—it is flourishing.

Help Secure ACCA's Future

Support the Endowment & Legacy Fund



In honor of John Richards' \$1 million legacy pledge, ACCA has created a reserve fund to build a future endowment. Our goal is to raise an additional \$1 million to match his gift and ensure the long-term stability of our conservation and education programs.

To contribute, please use the enclosed envelope and write "Endowment" on your check's memo line, or donate online at:

*caveconservation.com/donate-to-acca/
Select "Endowment/Reserve Fund" under "Gift Designation."*

Leadership Excellence Award Presented to Hidden River Cave



People's Bank presented the Leadership Excellence Award to Hidden River Cave at the Epic Award Ceremony, sponsored by the Community Partners for Recovery. The bank's foundation also supported ACCA with a \$2,000 donation this year.

Left to right: Jay Pruitt, ACCA Tour Staff Supervisor; Alma Bay, People's Bank; Al Warren, ACCA Operations Manager; Jacquelyn Crain, People's Bank Munfordville Branch Manager; David Foster, ACCA President; Tonya Redford, People's Bank Horse Cave Branch Manager; Annie Holt, ACCA Education Director; Joanne Sublett, People's Bank.

Kentucky Colonels Continue Support of ACCA Educational Programs



ACCA President David Foster accepts a check from General Lynn Aston

The American Cave Conservation Association (ACCA) is honored to be a 2025 grant recipient of the Honorable Order of Kentucky Colonels (HOKC). We received a grant in the amount of \$1,721.63 through their Good Works Program

to purchase supplies for our cave and groundwater education programs.

This generous support helps us serve thousands of school children each year through hands-on lessons that emphasize the importance of protecting our fragile karst environments.

In 2025, the Kentucky Colonels awarded \$2.5 million in grants to 333 nonprofit organizations, impacting over 4 million Kentuckians. These grants are made possible by contributions from Kentucky Colonels across the Commonwealth and around the world.

“We were able to distribute \$2.5 million through the Good Works Program that each of you generously supports. Every dollar you contribute to the Good Works Program goes out to nonprofits in the Commonwealth. Together we helped support more than 4 million people this year,” said Commanding General Gary Boschert.

We are deeply grateful to the Kentucky Colonels for their continued support of conservation education and for investing in the next generation of cave stewards. To learn more about their mission and the Good Works Program, visit kycolonels.org.

Congressman Guthrie, Senator McConnell Introduce bill to Expand Mammoth Cave National Park Boundaries

PHOTO COURTESY OF REP. BRETT GUTHRIE



Left to right: Rick Toomey, Cave Resource Specialist, Mammoth Cave National Park (MCNP); Representative Brett Guthrie, 2nd Congressional Dist. of KY; Secretary Doug Burgum, Dept. of the Interior; Superintendent Barclay Trimble, MCNP; Mrs. Kathryn Burgum; Johnny Merideth, Supervisory Park Ranger, MCNP; Molly Schroer, Management Analyst, MCNP

On May 8, 2025, Congressman Brett Guthrie and Senator Mitch McConnell introduced the bicameral Mammoth Cave National Park Adjustment Act. The bill would give the park the ability to acquire an additional 551.14 acres of land from the Nature Conservancy. The newly acquired

land would enhance protections in the Green River watershed, further conserving the area’s wildlife and cultural heritage.

Congressman Guthrie stated that Mammoth Cave “has inspired people for thousands of years, playing a foundational role in the culture of our region. I am proud to introduce the Mammoth Cave National Park Boundary Adjustment Act to expand protections for the cave system’s important biodiversity and rich history, ensuring that it can be studied, maintained, and enjoyed by future generations of Americans.”

“Kentucky is lucky to be home to an abundance of natural treasures, among them, Mammoth Cave National Park. This extensive cave network has been inspiring Kentuckians and drawing visitors from all corners of the globe for generations,” said Senator McConnell.

The new legislation authorizes the National Park Service to acquire 551.14 acres of land currently owned by The Nature Conservancy. This property includes several significant cave systems—most notably Coach Cave and James Cave—which contain prehistoric and historic artifacts. These caves are also critical habitat for federally endangered Indiana and Gray Bats, which once formed colonies in the hundreds of thousands.

Both sites were adversely affected during early cave commercialization efforts, leading to a sharp decline in bat populations. Over the years, the ACCA has been a part of restoration efforts providing insight on bat gating techniques.

Continued on page: 15

The remarkable no-eyed, big-eyed wolf spider of Kaua'i

FRANCIS G. HOWARTH
DISTINGUISHED RESEARCH ASSOCIATE, BISHOP MUSEUM, HONOLULU



FIGURE 1. "NOTHING COULD POSSIBLY LIVE HERE!" VIEW INTO THE SKYLIGHT OF AN ACTIVE LAVA FLOW. PHOTO BY F.G. HOWARTH

"Nothing could possibly live there!" they said (Fig. 1). Indeed, until the early 1970s, few specialized cave-adapted animals were known from volcanic, tropical, or oceanic island caves, and credible theories had been put forward to explain their absence. Caves in lava were considered contaminated with toxic gasses and too ephemeral to allow the evolution of cave animals. Oceanic islands were considered too young and lacked conspicuous food resources and pre-adapted taxa found in continental caves. The native plants and animals on isolated islands belong to sun-loving groups able to migrate long distances; whereas the cryptic water-loving species that colonized continental caves are unlikely to disperse hundreds or thousands of kilometers across open ocean.

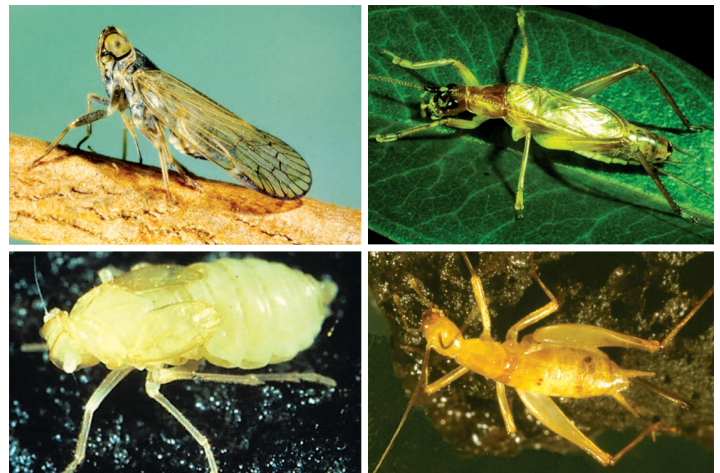


FIGURE 2. UPPER LEFT: *OLIARUS* SP., FOREST PLANTHOPPER; LOWER LEFT: *OLIARUS* WAIKAU, CAVE PLANTHOPPER; UPPER RIGHT: *PROGNATHOGRYLLUS* SP., FOREST TREE CRICKET; LOWER RIGHT: *THAUMATOERYLLUS* SP., CAVE TREE CRICKET. ALL PHOTOS BY W.P. MULL.



FIGURE 3. LEFT: *LYCOSA HAWAIIENSIS*, EPIGEAN WOLF SPIDER; **CENTER:** *LYCOSA HOWARTHII*, THE SMALL-EYED, BIG-EYED WOLF SPIDER; **RIGHT:** *ADELOCOSA ANOPS*, THE NO-EYED, BIG-EYED WOLF SPIDER. ALL PHOTOS BY W.P. MULL.

But assume nothing in science! One must illuminate, explore, and survey habitats before declaring them barren. Our understanding of cave biology changed dramatically about 50 years ago following the discovery of cave-adapted terrestrial arthropods in lava caves on the young oceanic island of Hawai'i. Surprisingly, they evolved from native species and include such anomalies as underground tree crickets, terrestrial water-treaders, terrestrial amphipods, and blind flightless planthoppers (Fig. 2).

The epitome of bizarre adaptations to subterranean life evolved within the big-eyed wolf spiders, family Lycosidae (Fig. 3). Epigean wolf spiders are characterized by their large eyes, and they are among the better sighted spiders. Most species do not build webs but are sit and wait ambush predators. They occur on remote islands, since spiderlings can disperse vast distances by using silk threads caught in the wind (called "ballooning"). The discovery of blind species in Hawaiian caves is especially remarkable. In fact, they adapted to living in caves not once but at least twice independently from separate ancestors. The "small-eyed, big-eyed" wolf spider (*Lycosa howarthi*) lives in caves on Hawai'i Island, whereas the "no-eyed, big-eyed" wolf spider (*Adelocosa anops*) lives in a few small remnant caves and within the associated lava flow, as well as, surprisingly, in a limestone cave that sits on top of the lava flow.

Wolf spider females characteristically carry their egg sac and then care for the spiderlings until they are able to disperse (Fig. 4). Surface species usually care for over



FIGURE 4. LEFT: *LYCOSA HAWAIIENSIS* FEMALE WITH EGG SAC AND YOUNG. PHOTO BY W.P. MULL; **RIGHT:** *ADELOCOSA ANOPS* FEMALE WITH YOUNG. PHOTO BY F.G. HOWARTH

300 spiderlings per clutch. These remain with their mother for over a month. The no-eyed, big-eyed wolf spider produces about 20 large spiderlings per clutch, which stay with their mother for only a few days.

During the initial surveys on the island of Hawai'i, troglobionts were found in a 90-year-old lava tube, suggesting that they were able to live in inaccessible voids within lava flows. Indeed, basaltic lava exposed on cliff faces (Fig. 5), as well as geological evidence, indicate that young flows enclose a vast anastomosing system of voids of variable sizes from cave-size passages to gas vesicles. To test whether the intermediate size voids (i.e., mesocaverns) might serve as suitable habitat for troglobionts, we constructed a nearly air-tight screen to restrict air flow into the dark passage of a short, dry cave on the island of Kaua'i (Fig. 6). The cave was one-half kilometer from the nearest inhabited cave. We added water and monitored the cave for animals. Within two months, the no-eyed, big-eyed wolf spider had colonized the cave confirming our hypothesis.

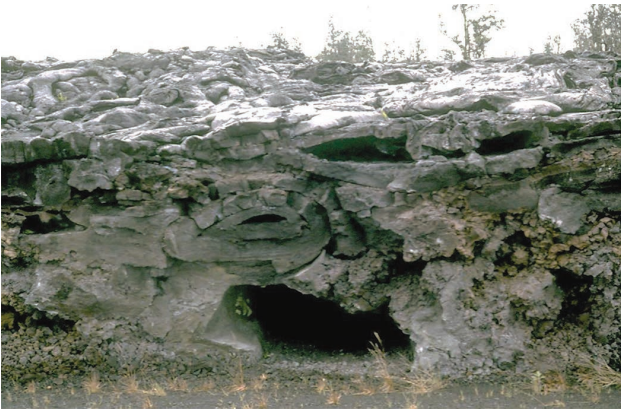


FIGURE 5. CROSS SECTION OF RECENT PAHOEHOE LAVA FLOW REVEALING ITS CHARACTERISTIC VOIDS. PHOTO BY F.G. HOWARTH



FIGURE 6. BARRIER RESTRICTING AIR FLOW INTO THE DEEPER PASSAGE WITHIN KOLOA CAVE, KAUAI. PHOTO BY F.G. HOWARTH



FIGURE 7: SPELAEORCHESTIA KOLOANA, THE TERRESTRIAL CAVE AMPHIPOD OF KAUAI. PHOTO BY W.P. MULL

The use of mesocaverns by cave-adapted animals has important implications for their conservation. The good news is that populations may be much larger (often by orders of magnitude) and more robust than indicated by counts made in caves accessible to humans. However, cave populations may not be sustainable but require continual colonization from the surrounding voids. Furthermore, the mesocavernous fauna are highly vulnerable to land-use changes and pollution occurring on the surface. Thus, to ensure long-term survival of cave fauna, reserves must include protective management of a sufficiently large buffer zone encircling the cave.

Subterranean species and ecosystems are vulnerable and threatened by many direct and indirect environmental stressors occurring on the surface. These impacts include land-use changes such as conversion for agriculture, mining, water extraction, land fill, and urbanization, as well as pollution from pesticides and chemical spills. Additional severe threats result from climate change and invasive alien species.

The caves and inhabitable voids occupied by the no-eyed, big-eyed wolf spider occur in a remnant old lava flow on the leeward coast of Kauai. The area is prime real estate for resort and urban development. Additionally, the limestone cave has been damaged by mining. These threats led to listing the spider as endangered and the terrestrial amphipod (*Spelaeorchestia koloana*) (Fig. 7) as threatened under the U.S. Endangered Species Act in 2000.

Biologists should use whatever tools that are available for conservation. For example, the Kiahuna Golf Club agreed to create a cave trap (or hazard) on their golf course on the island of Kauai to protect the listed no-eyed, big-eyed hunting spider, the terrestrial cave amphipod, and their associated species (Fig. 8).

If the Hawaiian cave fauna had gone extinct before being discovered, no one would believe they had ever existed, and our understanding of cave and island species evolution and ecology would be woefully incomplete.



FIGURE 8. SIGN INDICATING THE CAVE TRAP (OR HAZARD) ON KIAHUNA GOLF COURSE ON THE ISLAND OF KAUAI TO PROTECT THE ENDANGERED CAVE ANIMALS. PHOTO BY F.G. HOWARTH

Dr. Francis G. Howarth is a Distinguished Research Associate at the Bishop Museum in Honolulu and an honorary board member of the American Cave Conservation Association. Renowned for his groundbreaking work in cave biology and the study of island ecosystems, Dr. Howarth has dedicated his career to understanding and protecting subterranean biodiversity.



The Genesis of the Chip's Hole Land Swap

BY DR. JULIE HARRINGTON, PRESIDENT
FRIENDS OF WAKULLA SPRINGS STATE PARK

The Wakulla cave system is the longest underwater cave system in the U.S., and ranks among the largest, longest, and deepest cave systems in the world. It extends from beneath the Apalachicola National Forest in southwest Leon County and traverses southeast into Wakulla County towards Wakulla Springs before turning south towards the Gulf of Mexico (America). In 2024, Wakulla Springs was honored as an International Geological Heritage Site by the International Union of Geological Sciences. Wakulla Springs is on this prestigious list along with other sites like Mammoth Cave, Yosemite Valley, Devil's Tower, and the Arizona Meteorite Crater!

While Wakulla Springs was already recognized as a state geological site, it is now distinguished internationally for its importance to the geosciences.

As mentioned on page 12 by Dr. Chris Werner, the WKPP cave divers were actively diving during 2022 and 2023, and mapping the connection between Chip's Hole cave to the Wakulla cave system that eventually culminated in the total underwater Wakulla cave system length to 44.8 (or 45) miles, with 30 entrances.

Before the final connection was determined by the WKPP team in January 2023, the Friends of Wakulla Springs State Park began receiving the

David W Rhea
PHOTOGRAPHY



Local WKPP Divers Mapping the Wakulla Cave System.

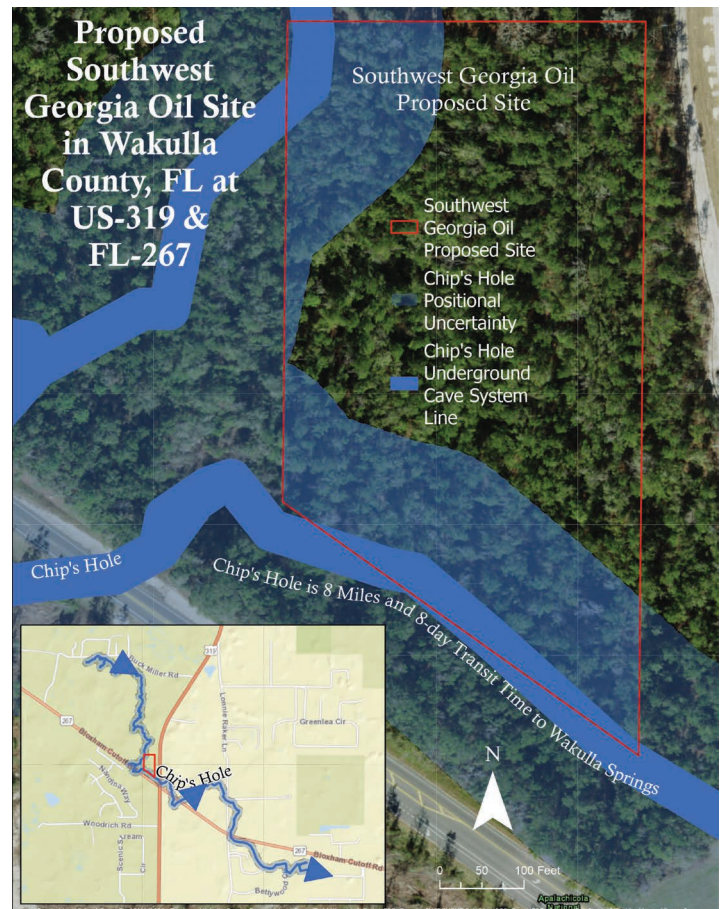
dire news in February 2022 that a looming land purchase was underway where a gas station was to be sited directly above the Chip's Hole cave passage system.

At that time, the local citizens were just becoming aware of the pending land purchase by Southwest Georgia Oil Company (SWGA) to be sited (requiring a land zoning change) for a gas station directly over Chip's Hole. The Friends of Wakulla Springs State Park initially wrote a letter to the Wakulla County code enforcement Board, and also to the Wakulla

County Board of County Commissioners. The Friends and area water conservation groups assembled rapidly over the Spring 2022 to early 2023 time-frame. In essence, the Friends of Wakulla Springs State Park letter expressed the following:

The Friends of Wakulla Springs State Park were recently made aware of a truly grave threat to Wakulla Springs resulting from the proposed rezoning of the northwest corner of Hwy 319 and 267 to permit a gas station to be established on the site. In an effort to gain additional information, the Friends of Wakulla Springs State Park (FOWS) recently invited expert cave diver Casey McKinlay (Director of WKPP) to provide a presentation of the Chip's Hole Cave System at our monthly Board meeting on January 5th. Casey's presentation and results are also available on our website: <https://wakullasprings.org/wakulla-springs-news-events>.

A few summary findings from Casey, among other experts, point to the extreme vulnerability of the cave system located at the Hwy 319 and 267 intersection.



Initial Proposed SW GA Oil Parcel Map for the Proposed 7 Acre Site and Chip's Hole Cave Conduit. Figure prepared by Mike Core, GIS Application Developer Designer at FSU FREAC, and PhD Student, FSU EOS

The Chip's Hole Cave System is in an area located just 100 feet below the ground surface in one of the shallower sections of the entire cave system. In addition, the site is composed of very sandy soil, with high permeability. Even if the gas station was not placed directly over the cave, toxins from small daily spills and car wash runoff could easily spread laterally, leaching into the aquifer and causing serious harm to the ecosystems at Wakulla Springs, approximately one week later. At worst, storage tank malfunctions (which are not uncommon) could inflict catastrophic and irreparable harm to Wakulla Spring. We are unified in supporting the efforts of the Wakulla Springs Alliance in bringing awareness to this issue and to ensure the protection of this highly sensitive parcel of land. Wakulla Springs is a unique national destination that brings thousands of visitors annually to Tallahassee and Wakulla County. It is too precious a resource to contaminate.

During 2022, the Wakulla County Commission held monthly meetings and commissioned an engineering study to be completed by the SWGA Oil Company. The Wakulla County Administrator expressed that they would be forming an advisory committee comprised of local science experts and members of area environmental groups. Unfortunately, that never occurred. It was then conveyed that a public forum would be held in the Fall informing people of the expected plan of action, which also never happened. It should be noted that 4 out of the 5 commissioners were dogged in their intent of voting for the gas station to be built on the Chip's Hole site. There were a number of meetings either postponed or tabled (for when the engineering final report would be ready). The area environmental groups knew then that this would indeed be a very tough road ahead to advocate for the protection of the Chip's Hole area (and ultimately the Wakulla Springs cave system).

Community Engagement and Action

As mentioned earlier, in January 9th, 2023, a connection was made by the WKPP team, confirming the link between Chip's Hole and the Wakulla cave system, nearly completing the mapping process of the 45-mile underwater cave system. Following this cave connection discovery, in late April, the Friends of

RIVERS BENEATH US
A look at the Wakulla Springs underwater cave system

FREE
In-Person & Virtual

TOM GREENHALGH
Hydrogeology Expert

DR. CHRISTOPHER WERNER
World-Renowned Cave Explorer, Researcher & Filmmaker

JAD KABBANI
Research Assistant

TUESDAY, APRIL 25, 2023 - 6:30 PM
WAKULLA ENVIRONMENTAL INSTITUTE
Register: www.wakullasprings.org

Photo Courtesy of Lauren Wilson

The "Rivers Beneath Us" Forum and Presentation flyer held April 25th, 2023

Wakulla Springs State Park held the "Rivers Beneath Us": a look at the Wakulla Springs underwater cave system forum and presentation at the local Wakulla County Environmental Institute (WEI). The presentation was very well attended, and included Dr. Chris Werner, PG Tom Greenhalgh, and FSU graduate researcher Jad Kabbani. These featured guests shared information with the local community on the Wakulla Springs underwater cave system, the hydrogeology of the area, and the economic impacts associated with Wakulla Springs. The presentation was hybrid; with standing room only at WEI, and over 300 viewing online via Zoom. Overall, and through an education-focused and scientific approach, the event solicited a swallet of positive feedback, which helped to mobilize the next phase of the community action effort.

During July and August, the time for public comment, over 2,000 emails were sent to the Wakulla County commissioners by the public and distributed through the Florida's Springs Council system. Another approach mounted concurrently, included additional opposition across the state via partner groups such as the Florida Wildlife Federation, Progress Florida,

Sierra Club, and the local groups on the front lines: the Wakulla Springs Alliance, Friends of Wakulla Springs State Park, and the Downriver Project.

At the Wakulla County Commission meeting on August 7th, 2023, the Wakulla County commission was set to approve the recently amended rezoning change, however, they were not prepared for the overwhelming show of support in opposition to the amendment to the comprehensive plan and rezoning request. Over 400 people who traveled from all over the state attended the commission meeting, during the HOTTEST day of the year! Historically speaking, it represented the largest turnout ever for any Wakulla County Commission meeting! Some citizens planted themselves on the steps of the dais and refused to budge and the police did escort a few citizens out of the meeting. During this melee, among other commission-oriented equipment breakdowns that day, there was a 5-minute recess called by one of the commissioners. Upon his return to the commissioners podium, he expressed that they'd received some positive information in a meeting the night before with a local Representative and expressed that they were all in favor of moving forward with the prospect of a land swap of the Chip's Hole section of land. The crowd cheered upon learning of this sudden good news, and thus began the formation of the team to orchestrate the land swap effort along with representatives from SWGA Oil.

The Emergence of the Land Swap Plan of Action

The plan to protect Chip's Hole entrance to the Wakulla cave system began with an appropriation request for \$3,782,000 for the acquisition of 237 acres of St. Joe Property (including the seven ± acre parcel owned by SW GA Oil). Ultimately, State funding was secured for the purchase of this property. The combined efforts of Representative Shoaf and Senator Simon secured the necessary funds, and the nonprofit Conservation Florida has worked to complete the land transactions.

To date, the land sale has been successfully completed! The land swap team, comprised of representatives from the local environmental groups (Wakulla Springs Alliance, Friends of Wakulla Springs State Park, the Downriver Project), Conservation Florida, and the SW GA Oil company, held a series of meetings from the end of 2023 to Spring 2025, to ensure that the final legislation, or agreement, was adhered to by all parties. There were considerable discussions centered around including language that would prevent possible contamination of Wakulla Springs, and that covered the relocation of the proposed fuel station for development over the Wakulla cave system. The group underscored the importance of protecting about 33 acres, along both the northwest and southwest corners of the Bloxham Cutoff intersection, as contamination at either site would pose a significant threat to the Chip's Hole cave and aquifer system. The agreement also specifies that once the land swap is finalized, the fueling station will not install underground gas tanks and will locate fueling operations as far from the cave system as feasibly possible. To date, the land swap final agreement is still under development, with hopes that a final agreement will be reached by the end of 2025.

In summary, this proposed land swap deal/agreement germinated from a groundswell of support demonstrated by the entire community and state, to work towards a common goal for the perpetual protection of an environmentally sensitive area with an unconfined aquifer feeding into one of the most outstanding first magnitude Springs in North America (and to protect the groundwater that the citizens are dependent on for their drinking water). The combined efforts of the members of the Friends of Wakulla Springs, Wakulla Springs Alliance, Downriver Project and Florida Springs Council were effective in conveying a clear message ensuring current and future Springs and aquifer protection of this national treasure.



Over 400 citizens in attendance Wakulla County Commission Meeting held August 7, 2023, on the hottest day of the year (over 100 degrees)



Woodville Karst Plain Project (WKPP) Exploration and Dye Tracing

BY CHRISTOPHER WERNER PH.D., P.G., SCIENCE DIRECTOR
WOODVILLE KARST PLAIN PROJECT

Over the past few decades, the Woodville Karst Plain Project (WKPP) had explored and mapped the underwater Chip's Hole cave hoping to connect it to the Leon Sinks cave system in 2005 and 2006. Unfortunately, WKPP divers came to what appeared to be a terminus of the main downstream passage in 2006. Observations by WKPP divers reported high flow in sections of the main downstream cave passages, but very limited to no flow observations near the terminal southwest extent of the cave (McKinlay, 2006).

The WKPP explorers believed that the water in Chip's Hole cave would likely drain to the downstream section of the Leon Sinks cave system. In 2007, WKPP explorers connected the downstream Leon Sinks cave system passage with its corresponding upstream cave passage in Wakulla Springs cave. WKPP divers revisited Chip's Hole starting in 2013 cave hoping to find the missing flow and the ultimate connection to the Wakulla Cave system. After seven years of exploration, new passages were found in both Chip's Hole cave and downstream

Turner Sink which brought cave passages very close to each other (Figure 1). However, the two were not connected physically via WKPP diver exploration.

To help the explorers find the physical connection between the two cave systems, a qualitative dye trace experiment was conducted to determine if the Chip's Hole cave was physically connected to the Wakulla Cave system. A qualitative trace will only indicate either negative or positive results, but cannot be used to determine travel time, breakthrough curves concentration, or the total dye recovered. It was determined to use a fluorescein dye and charcoal receptor packs. Sixteen locations were determined for placement of charcoal receptors for the dye trace design (Figure 2). The specific location of any positive receptor results would assist in focusing future exploration.

Cave maps of both Chip's Hole and the Wakulla Cave system were used to identify possible flow paths for

Above: Figure 3. WKPP diver Steve Cox releasing fluorescein dye at the injection point of Chip's Hole cave. Photo: Blake Wilson.

the dye tracer. The injection point was to be at the current exploration limit within the downstream Chip's Hole cave named Lost Hope passage. From there multiple conduits and inputs into the Wakulla cave passage were identified both north and south of Turner Sink along the main conduit which provides flow south to Wakulla Spring (Figure 2). In all, fourteen stations were identified for which had a high probability of detecting dye from the injection point in downstream Chip's Hole (Stations #1 to #14), as well as two control points, one in each cave system. The dye trace experiment was initiated on June 4, 2021 (Figure 3), and the final charcoal packets were retrieved on June 20, 2021. Once the analysis was completed, there were two positive stations where exploration focused, namely stations #13 and #14, both in the downstream portion of Wakulla Cave south of Turner Sink.

Very quickly, WKPP explorers Steve Cox and Blake Wilson initiated a search for a tunnel from Turner Sink in Wakulla Cave to Chip's Hole cave. They positively found a small passage that exploration had been abandoned in back in 1993. They performed nearly two dozen dives into the cave passage before pushing the exploration within several hundred feet of the initial dye release point in Chip's Hole Lost Hope passage. After nearly 18 months, the effort of the two explorers was rewarded. On January 9, 2023, the WKPP exploration divers physically connected Chip's Hole cave to the Wakulla Cave System bringing the total length of surveyed underwater cave passage in the system to 236,723 ft (44.8 miles).

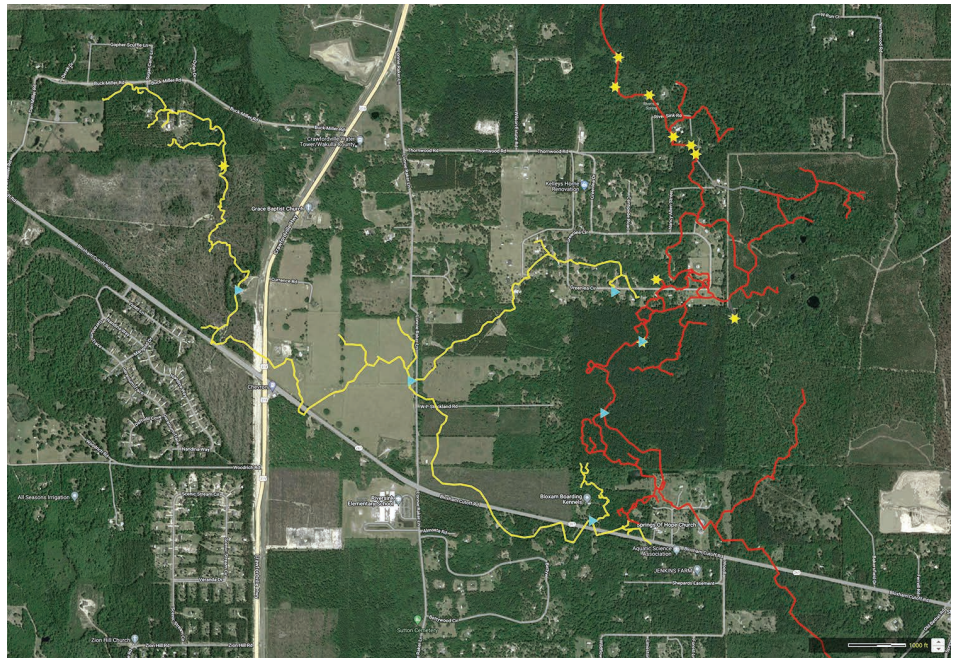


Figure 1. Chip's Hole cave (yellow) in relationship to Wakulla Cave system (red).

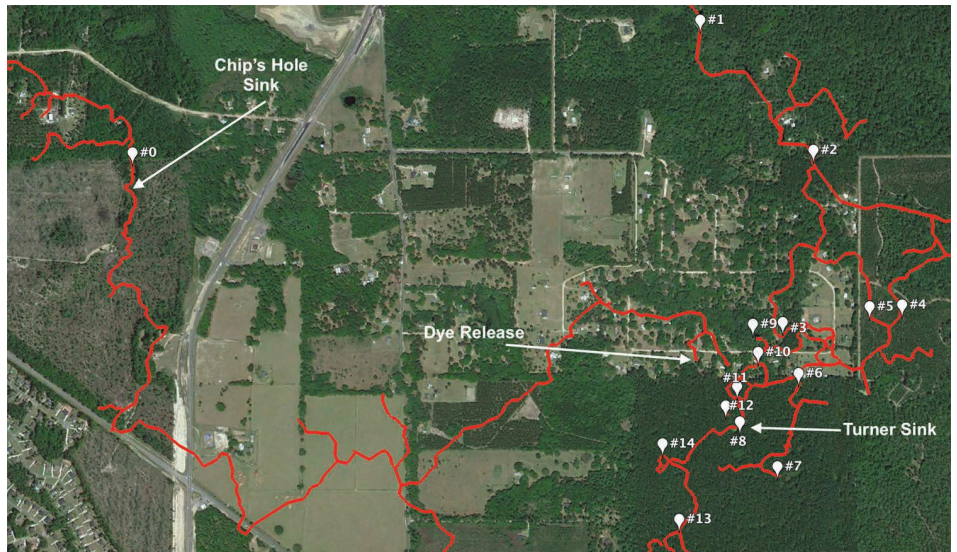


Figure 2. Map showing Chip's Hole sink, Turner sink, the dye injection location and charcoal pack receptor stations.

Editor's Note: In our Spring 2023 newsletter, we highlighted the connection between the Chip's Hole and Wakulla Cave Systems through the exploration efforts of the Woodville Karst Plain Project (WKPP), along with concerns about potential threats from nearby development. We are so pleased to present these two related articles: "The Genesis of the Chip's Hole Land Swap from Friends of Wakulla Springs State Park" and "WKPP Exploration and Dye Tracing." Together, they shed new light on ongoing efforts to protect this remarkable karst region and the dedication of the concerned citizens that made this possible. You can view the newsletter online at: caveconservation.com/acca-news-spring-2023.

To find out more about the Friends of Wakulla Springs State Park:
<https://wakullasprings.org/>

To see more on WKPP: <https://www.facebook.com/woodvillekarstplainproject/>



Left to right, Standing: Katie Collins, Julie Schenck-Brown, Kai Getrost (standing in window), Stacy Hathcock, ACCA Project Manager Cole Avery, Richard Russell, Chris Jones, Danny Gregory, Thomas Poynter, Karen Collins. Kneeling: Devin Grubke, Curt Harler, Fran, Vlcheck.

Bob Danielson Day At Hidden River Cave

On Saturday, June 7, 2025, eight members of the Cleveland Grotto of the National Speleological Society journeyed to Horse Cave for the annual Bob Danielson Day at Hidden River Cave. Bob passed away on August 16, 2024, at the age of 90. Throughout his long and accomplished life, Bob was known for his generosity and support of causes in the caving community. As a long time Cleveland Grotto member, Bob and his wife Bev came to Horse Cave numerous times to participate in volunteer work days to help us clean up and restore Hidden River Cave. In honor of Bob's generosity to the American Cave Conservation Association, the annual volunteer day was recently renamed in his honor!

The Cleveland grotto volunteers were joined by several ACCA staffers and four additional local volunteers. There was no shortage of work to do in the cave, as we are still making repairs from numerous flood events this spring. One of the first projects tackled was removing old lighting from the cave that had been damaged by the flood.

The group also carried 20 heavy bags of concrete into the cave and poured a base for a steel support to improve a section of cave trail that was sagging.

It's always a challenge moving materials in and out of the cave (which involves negotiating hundreds of steps), and so having so many volunteer bodies to help enabled us to get a lot done in a hurry. Once these projects were completed, the group split up into sections. One group worked on stabilizing the wooden stairway into the cave that had been undermined by flood waters. A second group mowed and conducted weed eating around the cave entrance. A third group began moving some of the historic pieces of the hydroelectric system out of the flood zone. Many of these items from the 1930s and earlier were lying in the mud and deteriorating rapidly. The most challenging task was carrying an approximately 300-pound armature from the historic electric generating system out of the cave. The armature had been rolled into the cave decades ago by vandals and was partially buried in the mud near the base of the cave stream. We have moved it out of the flood zone now and are hoping in the future to use it as part of a reconstruction of the historic cave generating system, one of the earliest in Kentucky.

After lunch, the group tackled one final project. Behind the American Cave Museum on Cave Street sits the remains of a partially demolished building, torn down several decades ago. The surviving brick

(Continued from page 4:)

Guthrie & McConnell Bill to Expand Mammoth Cave National Park

Since being re-gated, James Cave has shown promising recovery. However, Coach Cave continues to face challenges. While natural temperatures have been restored, the cave still draws in too much moist air during the summer, causing humidity levels to remain abnormally high.

“We’re essentially trying to reverse damage that was done decades ago—well before anyone was documenting the cave’s natural conditions,” said Jim Kennedy, ACCA’s Conservation Director. “With no historical data to guide us, we’re moving forward carefully, using ongoing monitoring and working closely with the U.S. Fish and Wildlife Service to give these endangered bats the best chance at recovery.”

ACCA hopes to be included in future conservation efforts after the boundary expansion.





Debra Silverman Honored for Song About Floyd Collins

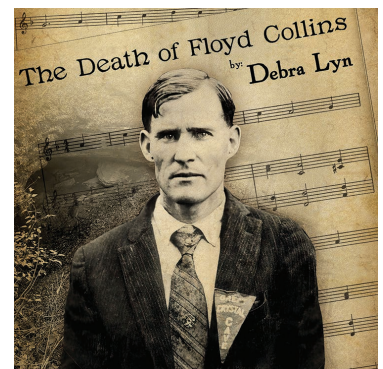
We’re proud to announce that Debra Silverman, ACCA’s Director of Member Services (recording artist Debra Lyn), is a pre-selected winner at the Hollywood Independent Music Awards for her rendition of “The Death of Floyd Collins.”

The award coincides with the 100th anniversary of Floyd Collins’ tragic entrapment in Sand Cave, just miles from Hidden River Cave—a story that captured national headlines in 1925, became central to Kentucky cave history, and cemented Floyd’s legacy as a legend among cavers worldwide.

This spring, Hidden River Cave also received national press in connection with the centennial. Read more at: hiddenrivercave.com/category/news/

Debra’s video features historic newspaper clippings and photos, and was filmed on location at Sand Cave (Mammoth Cave National Park) and Hidden River Cave.

Watch the video and learn more: <http://bit.ly/45GLOob>



walls were in poor condition, with many loose bricks along the top edges posing a safety hazard—especially for visitors who often stop to take photos by the wall. Volunteers removed several hundred bricks and cleared the building footprint. The ACCA has submitted a grant application to the Appalachian Regional Commission to fund the construction of a deck over the site, add an awning and improved signage, and convert the below-street-level areas into storage and a washroom for cleaning up after caving trips.

Above: Scenes from the annual Bob Danielson Day at Hidden River Cave, as volunteers tackled cave repairs, trail improvements, and site cleanup in honor of Bob’s legacy of service to the caving community. Photos by Karen Collins and Curt Harler

American Cave Conservation Association
P.O. Box 409
Horse Cave, KY 42749



Hosted by the Western Cave Conservancy

October 6-10, 2025
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Ely, Nevada USA
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ACCA members receive a 10% discount. When registering please use this code:
accaNV25



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Editor/Layout & Design: Debra L. Silverman

MEMBERS: Please send change of address and correspondence to: P.O. Box 409, Horse Cave, KY 42749; (270) 786-1466 • Email: debbie@caveconservation.com

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