The Indiana Karst Conservancy is a non-profit organization dedicated to the conservation and preservation of caves and karst features in Indiana and other areas of the world. The Conservancy encourages research and promotes education related to karst and its proper, environmentally compatible use.

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*grottos with liaison agreements

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Cover: Gale and Ray Beach near the entrance to Wildcat Cave on Mount Baker in Washington state. Photo by Bruce Rogers (1972)
The quarterly meetings are for the Executive Board to conduct business, and for our members and other interested persons to have an open forum to talk about caves and karst conservation and related topics. Past, present, and future IKC projects are discussed to solicit comments and input from our members and the caving community as a whole. The meetings are informal, and everyone is encouraged to attend and participate. The IKC Board wants your input.

**Preliminary Agenda Items:** Recap of recent work projects and the promotion of upcoming projects at our various preserves; Financial reports; Wayne Cave EQIP funding contracts update; Investment Committee update; Gale & Ray Beach Endowment policy document; Shawnee Karst Preserve Management Plan update; Sullivan Cave Preserve Management Plan update; Safety Committee approval; Election Process ad hoc Committee status report; Sullivan Cave Preserve expansion update; Cave/land acquisition activities; and more....

**Meeting Details:** We are trying something new, a Sunday afternoon meeting (there seemed to be fewer conflicts than on Saturday). Prior to the 1 PM meeting, we will have a pitch-in/potluck lunch (be there by noon). Danyele will be providing the main entrees (brats, dogs, and veggie kababs) and she requests others to bring side dishes or desserts to share.

**Meeting Contingencies:** This meeting will be held outdoors (bring your lawn chairs) following current CDC Covid social distancing/masking guidelines. If it rains, the meeting will be moved inside with masking. If the weather is forecasted to be a total washout, or if Covid conditions worsen, the meeting may be switched to a virtual meeting. If you wish to verify the meeting status, contact Matt Selig or Danyele Green (see contact information on page 2).

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**ACTIVITIES CALENDAR**

- Sept 26 – IKC Quarterly Executive Board meeting (see above)
- Nov 6-7 – Orientation to Cave Rescue Seminar (see page 13)
- Dec ?? – IKC Quarterly Executive Board meeting (place and time TBD)

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For more information on the Indiana Karst Conservancy, visit our website at [ikc.caves.org](http://ikc.caves.org), our Facebook page at [www.facebook.com/IndianaKarstConservancy](http://www.facebook.com/IndianaKarstConservancy), or write to our PO box. Membership to the IKC is open to anyone or any organization interested in supporting cave and karst conservation. Annual dues are $15. Please see inside the back cover for a membership application form or to make a much-appreciated donation. Memberships and donations may also be made electronically by credit card or PayPal using our on-line services on our website (see the Join Us! tab in the menu) or [ikc.caves.org/join-the-ikc](http://ikc.caves.org/join-the-ikc).

The *IKC Update*, distributed for free, is published quarterly for members and other interested parties. The purpose of this newsletter is to keep the membership and caving community informed of IKC activities and other news related to cave/karst conservation. Submission of original or reprinted articles for publication is encouraged. Back issues can be found at [ikc.caves.org/ikc-updates](http://ikc.caves.org/ikc-updates).

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RAMBLINGS FROM THE PRESIDENT...

The last several months are my official “first” as President of the IKC and it has been a whirlwind of planning, work, and a total honor and enjoyment.

Elsewhere in this IKC Update (see pages 6-10) you’ll read more in depth about Gale and Ray Beach, who generously included the Indiana Karst Conservancy in their estate plans. The Beaches didn’t provide us with advance notice of this gift and didn’t explain why they felt moved to help us in our mission of protecting Indiana’s caves and karst landscapes, but Ray did start his caving career in Indiana and he has been an IKC member and supporter since 2005.

And I will note that in the December 2016 (issue #123) of the IKC Update, we published Tom Sollman’s masterful history of the exploration of the IKC’s Wayne Cave. In this article, Ray Beach is quoted, “When we reached the ‘Big Room’, we found Bill [Auckerman] running around in circles shouting, ‘Look what we found! Look what we found!’ over and over again,” as he recalled their final push through the crawlway and their discovery on April 7, 1955 of what we now call Camp I.

Not many of us will be so fortunate to be in on such a monumental discovery trip, although many IKC Update readers can recall the elation of finding (and surveying) virgin cave and thinking “Look what we found!” The adrenaline rush, the pounding heart, the excitement of seeing and documenting something no human eye has ever seen, in its untouched state. That is a special thrill.

From this passion grew the Indiana Karst Conservancy and I believe (without proof) that the Beaches’ passion for Indiana’s caves led to their decision to support our good work.

On May 26, the “Gale and Ray Beach Bequest” ad hoc committee met to discuss how best to use their gift in furtherance of our exempt purpose. The IKC’s Officers (myself, Laura Demarest, and Keith Dunlap) along with Directors Rand Heazlitt and Joe Kinder, met virtually to take stock of this opportunity.

We examined many things we could do with this gift. We could fund significant land acquisitions in the name of the Beaches. We could fund current and future operations. We could fund various endowments for both education and future staffing needs.

The discussion continued and we came to realize while all of these are good and worthy ideas, and though the IKC has a strong track record with these types of projects, the Beach bequest has given us an extraordinary opportunity – to ensure the Indiana Karst Conservancy’s existence for the next 35 years, the next 100 years, perhaps even ensure we have the financial strength to accomplish our mission in perpetuity.

And at the June 19th Executive Board meeting, the ad hoc committee recommended investing the Beach bequest in its own low-fee brokerage account in order to grow this endowment over the course of time, and to allow the IKC to use earnings in excess of certain floor amounts to be used for the Land Acquisition Fund, and to fund various other projects and operations as opportunities arise. We will present formal policy recommendations for this endowment at our September 26th Executive Board meeting.

One thing that sticks in my mind from the Beach Bequest discussion is how reliant the IKC is on its members’ passion for the IKC’s mission. It is this passion that gets our volunteer Board members together once a quarter to conduct our business as an Executive Board, along with many smaller meeting and e-mail exchanges in between. This passion brings our volunteers to work days to do that hard and sweaty work. It motivates our Cave Patrons and Property Managers to take care of our caves and preserves for the people who love them.

In my short time as President, I have witnessed
this passion as we pulled garlic mustard at the Orangeville Rise, eradicated invasive multiflora rose bushes at the Wayne Cave property, treated Stiltgrass at our Lowry Preserve, taken a Board members’ trip in Sullivan Cave, worked to increase our engagement with the IKC’s social media assets, discussed our membership survey, set goals with the IKC’s Officers, and met with all of our Property Managers to discuss best how to take care of the above ground part of our properties.

We’re updating our property Management Plans. We are working on defining the responsibilities of a formal Safety Committee. Work continues at Lowry Cave to make that property even more beautiful and accessible. We have a new volunteer to monitor the conservation easement at the Sinks of Indian Creek, and members are mowing trails, stoning and re-grading driveways, assisting with plant surveys, answering emails and phone calls from persons interested in visiting our properties, updating our website, updating our education materials, increasing outreach via social media, signing documents, making investment decisions, and paying bills.

The IKC will again sponsor scholarships for its members and first responders to participate in the National Cave Rescue Commission’s Orientation to Cave Rescue training in November 2021. We’ve discussed how to effectively educate those interested in Indiana’s caves. We’ve evaluated and continue to evaluate further property acquisitions. We staffed an IKC information booth at the 2021 Cave Capers in August.

The IKC’s Investment Committee (Keith Dunlap, Tom Sollman, and myself) removed an illegal deer stand from the Sullivan Property before our June quarterly meeting while we discussed investment strategies (one always thinks better when tearing stuff up). Multiple people worked hard to put this issue of the IKC Update together for your enjoyment. When significant land acquisition opportunities arise, our volunteers will perform the due diligence to evaluate the opportunity, and then conduct the necessary negotiating and fund-raising to add to the IKC’s “crown jewel” portfolio of Indiana’s karst.

Even with this long list of projects, I’m sure I’ve missed contributions and for that I apologize. The point is that we are not resting idly on our laurels. At 35 years old, the IKC is hard at work and growing even as I write.

Ultimately it is our passion that motivates all this effort on the IKC’s behalf that I want to honor with this article. As you can see, there is a lot of work being done by our committed IKC members. There is much more to accomplish, and if you’re passionate about Indiana’s caves and karst, we are glad you’re here and invite you to join us in our work!

And the next time I crawl through that long crawlway in Wayne Cave, I’ll pause to remember Ray Beach watching Bill Auckerman running around Camp I in 1955 yelling, “Look what we found! Look what we found!”

With the Gale and Ray Beach bequest, we will lay the foundation so that our grandchildren, and our grandchildren’s grandchildren can share in the passion the IKC’s members bring to this organization. I can’t think of a better way to honor their generosity.

Matt Selig

NEWS BRIEFS...

- At the June Executive Board meeting, James Adams was appointed to fill Bob Sergesketter’s Director’s position until next year’s elections. Jim has served on the Board a number of times in the past and had received the greatest number of votes of the unseated candidates in the last election.

- The Shawnee Karst Preserve is in need of a Property Manager after the retirement of Jerry Lewis. A tremendous amount of effort and accomplishments were completed on the original tract, but there are a lot of new initiatives needed on the newly acquired expansion tract, and thus the Property Manager needs to be energetic and motivated, and good at delegating. Potential tasks include tree plantings, invasive eradication, prairie restoration, cedar removal, trail expansion, driveway gate installation, garage clean-up, etc. If this sounds like a challenge you’d like to tackle and learn new skills, please contact Matt Selig to find out more about this opportunity.

- Recently Laura DemAREST refreshed the IKC’s educational/outreach display that now highlights our seven cave/karst preserves along with a locator map. The new display made its debut at this year’s...
Gale was born near Bismarck, the capital of North Dakota, in the summer of 1936. Shortly thereafter her father, a doctor, and domestic engineer mom moved to the San Fernando Valley of Southern California, settling into what was to be a section favored by Hollywood’s favored actors. About ten years later, younger brother Patrick arrived and Gale became *ad hoc* Child Care Advisor and Family Picnic Lifeguard at the Southern California beaches when notspiriting around the neighborhood on her Colson Flyer bicycle or baby-sitting for such neighbors as Dolores and Bob Hope (Gale was considered a very trustworthy and responsible young woman).

Upon graduating from Stanford University in the San Francisco Bay Area (“as far away from home as possible”), she started work in the health care community in the San Francisco area. During this time, roommate Susan Crouch dragged her to a meeting of the San Francisco Bay Chapter of the NSS. There, after being introduced to crawling around in the mud in the dark, she was pursued by several former US Marines. Staff Sargent Ray Beach, however, swept her off her booted feet. Ray was “kind enough” to allow her to spend every cent of her savings (and some of his) touring Australia for some time and to start making many more international, life-long caver friends. Since the San Francisco Bay Chapter was, along with folks from TAG, on the cutting edge of vertical caving techniques development, Gale introduced the Aussies to the topic in between scouting the coast for lobster and hob-knobbing with nearly everyone she met. Returning, wedding, and moving to a modest apartment in San Francisco, she started her ascent to being a major supporter in the central California caving community. The sight of the two washing muddy clothes and ropes on the San Francisco sidewalks during the “Summer of Love of 1962” was cause for the local bus tours to circle the block several times to let tourists “see the hippies washing their meager belongings on the sidewalk.”

While many present cavers know her as a “Senior Caver” dispensing wit and wisdom, Gale participated in many rather hard-core trips during her tenure in the underground. One such trip involved backpacking up to nearly 11,000 feet in the southern reach of the Sierra Nevada where she was sweet-talked into some of the most intensive cave surveys during the 1960s and 70s. One of those particular trips featured narrow, jagged, and vertical black marble fissure passages with slippery, rounded granitic boulders under foot while cave surveying under a sputtering glacial melt waterfall for ten or more hours at a time – all long before wet suits were available. Other trips included locating and mapping obscure Sierran Gold Belt vertical caves unvisited since the 1850s; carousing through the Great Basin in search of other caves “lost” since the late 1800s; and tramping the mountains surrounding Death Valley – all resulting in epic trip reports. A frozen Christmas Eve 4WD drive up the western slope of Death Valley to a former silver mining ghost town looking for a rumored cave resulted in finding a nearly starving, snow-bound Canadian family. The Canadians treated us to real potato pancakes the following morning after a -12 degree night in a drafty old mining shack. Gale led the following day’s “Marine Corps frontal assault” up to a mine at 9,000 feet and assisted in outlining new possible ore deposits for the Canadian family to pursue. The Beaches’ Jeep was emptied of all our provisions and supplies for them and we left humbly feeling a bit like Ol’ Saint Nick. While some would say it was exemplary action, we just did it because, as Gale would say, it was just the right thing to do.

In addition to participating in some of the initial trips into the then-largely-unknown Lilburn Cave of Kings Canyon National Park (now...
the longest along the US west coast at nearly 23 miles of zebra-striped marble passage), Gale also made frequent/numerous trips into many of the longest and toughest vertical caves and lava tubes in the West. As part of their continued support for responsible and exciting caving, in the early 2000s Gale and Ray generously supported the Research Center that we cavers designed, redesigned, funded, and built for the National Park Service in Lava Beds National Monument. After that, the caving community gave the keys to the NPS for anyone to use for research, conservation, and education. Other projects included both funding and moral support of the Western Cave Conservancy in the 2000s as well as assisting in funding the WCC’s purchase of Rippled Cave, a major Sierran Mother Lode cave now used for education, training, and recreation (and soon, hopefully, for future paleontological research). In the mid-1960s, Gale and Ray were instrumental in assisting filming and supporting one of the first cave films made in the US, *Cave of the Winding Stair*, an extremely vertical cave located in the heart of the Mojave Desert. As usual, Gale preferred to downplay her and Ray’s efforts since the results were the important thing.

Gale was a competent vertical caver, surveyor, photographer, and photographer’s assistant/model, but really was drawn to the social aspects of caving. Many long campfire and post convention philosophical discussions and observations with most of the leading cavers and academics of the spelean, anthropological, and sociological spheres for more than sixty years enriched both their lives. As a result of trips to Mexico during the 1960s to 1980s, the heydays of Meso-American research, her interest spread to Mexican, Maya, and other past civilizations’ folklore, interpretation of Maya hieroglyphs, and associated fields. Her other interests in tennis, swimming, the arts and theater were also well supported. Her long career as Admissions Director of San Francisco’s Children’s Hospital was enlightened on occasion by furtive, somewhat marginal-looking groups of apparently ne’er-do-well types picking up muddy bags of rope and gear during late hours at the hospital admissions desk. Little has been written of Darth Vader’s cheerful visit to Gale at the hospital.

In the somewhat rarified atmosphere of NSS spelean politics, Gale served on the NSS Board of Governors, she was nearly always present in numerous officer positions of the Chapter and California/Cal-Nevada/Western Region, and she was a staunch supporter of cave conservancies throughout the US. Gale became nearly a permanent fixture on the registration desk, both in the trenches and behind the scenes at nearly every NSS national and regional convention since 1962. A years-long stint on both the NSS Awards and Fellows Selection Committees was peppered with epic discussions. Their generous heart and commitment to safe, sane, and exciting caving made their large donations to the NSS fund-drives nearly mandatory for Gale and Ray. Both Gale and Ray were elected Fellows of the NSS, were Life members, and Conservation Life members. While her Leonean bent always made sure her sage voice was heard where and when appropriate, she constantly encouraged others to do likewise by both debate and in writing. Despite all her and Ray’s volunteer work, Gale quietly worked in the background – just a part and parcel of her desire to see a worthwhile outfit succeed without personal grandstanding.

A person of spirited demeanor, she gladly braved austere NSS BOG meetings to enliven the post-meeting parties (genuine photos of Gale disco dancing and caving at the post-BOG meetings do exist). Her driving style was exemplary, both while commuting from Palo Alto in the pre-Silicon Valley days to San Francisco, as well as 4WD-jumping large rocks throughout the Great Basin. Indeed, one of her mechanics observed that, while her Nova tires and running gear showed signs of wear from the daily Menlo Park-to-San Francisco commute, the brakes were virtually untouched.

Usually a quiet, but very keen, observer, Gale was always available for wise counsel and advice, (nearly) always tactfully disbursed, for newer cavers and seasoned speleologists during her tenure of her caving career, and she was a most devoted friend. As Gale once said to me, “Yes, I’ll come fetch you at 3 AM when you are stranded in some God-forsaken location... but it better be a damn good reason to get me out of bed at that hour...” A good-humored diatribe about her NSS number being seven numbers lower than mine usually followed this...

Gale leaves a quietly shining legacy distributed among many cavers and others and will be remembered for her “quiet” life of adventure and caring for others.

*A version of this obituary was originally published in the February 2019 NSS News*
SHIRLEY RAYMOND BEACH, JR (NSS 2687): 1932 – 2020

by Bruce Rogers

Shirley Raymond Beach, Jr., better known as Ray “Yogi” Beach, was born in southern Indiana, a child of Indiana farmers. His youth included many trips to both Indiana caves as well as forays across the Ohio River into the classic Kentucky karst. After completing high school, he enlisted in the US Marine Corps and spent his first two tours of duty as a combat Marine in the Korean War, repeatedly escaping enemy shell fire. He mercifully avoided starting WW III over a disagreement with enemy troops about a tiny pine tree within his company’s revetment that was “accidentally” sent to heaven by a stray enemy mortar shell. Through it all, he retained a warm fuzzy feeling for Spam. Ray had a patriotic streak that showed in discussions with both those who agreed with his personal philosophy and those taking a different course. He would say: “I may not agree with what you say… but I will defend to the death your right to say it.” As a former combat Marine, Ray meant every word – and people respected that.

He was later billeted in Okinawa where he visited as many caves as possible, leaving his footprints for Bill Halliday to follow years later. He avoided being blown up by rusting explosives left over from WW II littering those caves, and avoided the much feared Habu, a “two-butt” viper (if one was bitten, one had just enough time for two cigarettes, then fell over dead… not a likeable critter). Further adventures caving in lots of lava tubes and the few limestone caves in Hawaii and finally duty as a world-roaming US diplomatic courier rounded out this stage of Ray’s career. During this time Ray spearheaded several notable expeditions into some of Indiana’s toughest caves during leave from the military. Some of these trips opened up those tough caves that remain major “Must Do” trips for current cavers. Other caves visited included delving into the furthest reaches of the Flint Ridge-Mammoth Cave system. As more and more modern cavers plumbed what were considered obscure or virtually unknown caves and pits in the Midwest, they found the NSS number 2687 and a date unobtrusively carbide-smoked on the wall (at the time, it was considered okay to do that during significant explorations)... truly “The Old Man’s Been Everywhere.”

After leaving the Marine Corps and completing his engineering degree at Purdue University, he returned to the San Francisco Bay Area and started working as a tech writer at Ampex, one of the semiconductor giants at the time. Upon finding that the San Francisco Bay Chapter was alive and prospering, he joined it. In 1960, a homeless waif by the name of Gale Laughlin attended an SFBC meeting, fell under his rugged spell and soon after the couple happily wedded... and went caving. The pair ranged far and wide, participating in many stellar expeditions.

On one such trip to a major Mother Lode cave, Ray observed a nearly impossible-looking tight fissure at the back of said cave. Smoked at the edge was a circled dot (implying “this passage doesn’t go”) and the inscription “Doesn’t Go.” Ray, always dubious of another’s “impossible passage” call, pushed it with a great loss of clothing and skin. Thus it was that the then “nearly” impossibly tight connection between Cave City Cave and Cave of the Quills was rediscovered. At the next NSS convention, another former California caver greeted Ray. Ray just smiled. The other caver then asked him what he’d been up to caving-wise in the Mother Lode. Ray just smiled. Then the other caver turned beet red, clenched his knuckles, and thundered for scores of people to hear and cringe: “Damn you, Beach, you found it, didn’t you?” Ray just smiled.

During the 1962-63 series of some of the first cave dives in the US; Ray was one of the primary SCUBA divers that plumbed the chilled depths of the lake forming the basement of Black Chasm. At that time, the SFBC was the custodian of the cave that was leased for the princely sum of $1
per year from the American Cement Company by The Nature Conservancy by SFBC founder Rane Curl. Thus the Conservancy was talked into letting the SFBC be the explorers, mappers, and ground caretakers of ‘Chasm. Among the duties were monthly trips to establish the lake water levels. The surrounding “Shadow town” of Volcano always had a water source problem and it was suggested tapping into the ‘Chasm might alleviate this. Unfortunately, this did not work out. The Beaches assisted in the first, multi-year high precision surveying project of the cave as Ray and Gale took turns assisting a professional surveyor/caver in pulling tape, taking bearings, and making both notes and photographic records, and generally causing a great deal of concern by hanging off fragile flakes of blue-black colored marble while doing so. It was at this time Ray met Alvin McLane, “Mr. Nevada Caves”. Al grew up in Kentucky and his life roughly paralleled Ray’s, but in reverse. While Ray lived in southern Indiana and caved in Kentucky, Al was living and caving in Kentucky and visiting southern Indiana caves as much as possible. It was only after both moved west that they met and formed a close bond.

Ray and Gale assisted in mapping a great number of California caves between 1964 and 1980 and even somehow got roped into assisting in providing part of the sound track for the award-winning 1966 Stan Ulfeldt film about Cave of the Winding Stair – a large part of the sound track materials garnered in none other than Rippled Cave in The California Mother Lode.

With their ever-increasing notoriety in the higher NSS scene, Gale was appointed as a Board Member, serving for several years as an ever-present Western cavers supporter. Ray, in the meantime, had semi-retired from sports car racing, but he still had his “Plastic Car” (one of only six imported into the US and four of those in California). This vehicle was a British Elva Courier, a thinly disguised and “extremely tweaked” Triumph TR-4 that only sorta looked like the standard Triumph sports car; was barely legal; and was driven by Ray with the proper spirit. This gave Ray continued chances to chat cars and such with local and State peace officers... One evening Gale mentioned it was getting late and they were scheduled to give a talk to the citizens of Volcano at 7 PM... Ray had forgotten it in the hurly-burly of work at Lockheed Missiles and Space. So they jumped into the Elva and drove spiritedly from Menlo Park to Volcano... in a little less than 1.5 hours (and remember, there were fewer freeways at that time). Ray later admitted to perhaps pushing the posted speed limit a bit, but was adamant that he did stop at every octagonal red stop sign...even if only for a few milliseconds... and never, to his knowledge, left contact with the ground. Gale, knowing Ray’s capability behind the wheel, enjoyed the trip immensely.

Ray was a rather gifted writer... and not just of technical manuals. He also published space-oriented science fiction novellas in Analog Magazine and wrote copiously for the regional California Caver and other gray literature journals. When the editorship of the Cal Caver came up, Ray stepped forward. Ray and Gale had already run off many SFBC meeting notices and printed (using the then state-of-the-art purple ditto machine) the Cal Caver, folded and addressed it in their front room, and sent it out to the nearly 700 NSS cavers in California and adjacent states. With his acumen of English and writing skills, he often edited papers on cave science, philosophy, and the like for others.

Just to keep him busy in his “copious spare time,” he also returned to school. His BS engineering degree was from Purdue University so he chose an equally important graduate school.
Masters was from Notre Dame de Namur (Belmont, CA), and he was all but finished with a Doctorate in international affairs and diplomacy at Santa Clara University when, "somewhat upset" with the curricula being presented to a particular graduate class, he engaged in a verbal “difference of opinion” with the Professor, who happened to be both his main PhD advisor and the Dean of International Studies. Despite Ray knowing he was probably going to go down with the ship, he became so (how can one say “disgusted” in polite terms?) upset with the Academic BS line being presented as the Gospel Truth and engaged in a spirited debate with the prof during one class. He passionately, logically, and cogently argued that what was being taught had little to do with the Real World and all its machinations... Despite offering tightly constructed verbal arguments as to what those other graduates were going to find and how to deal with those situations, the Prof was incensed that a mere former Marine would challenge his own decades-old knowledge. The balance of the class was nearly dumbstruck that someone who knew exactly what was happening outside the Hallowed Halls of Academia would have the intrepidness to take on the School Dean. Needless to say, we have ever since decided that Ray, while having an earned, but not awarded PhD, actually had a PhAD (“All but Dissertation”) in International Affairs.

Ray and Gale became enthralled with the Mojave Desert in the late 1960s. Every year Lockheed closed between Christmas and New Years, Lockheed figuring little would get done anyway. These breaks were often the time that the Beaches drove to San Fernando Valley, did Christmas with Gale’s family, then headed east to Death Valley and environs. Once in the region, any even faintly visible track was fair game as long as it wasn’t posted “Not a Road”. Their guide was my set of 1948 topo maps showing many old mining roads and features thought long lost by the Park Service... little did the Park Service know the resourcefulness of Ray and his companions.

Equally of interest was the Great Basin. Epic trips though the wilds of Nevada to amazingly obscure sites were commonplace. Ray took each major washout as a challenge to his driving ability. The late Alvin McLane shared this passion as part of Al’s work for the University of Nevada’s Desert Research Institute. This often led to impromptu challenge between the two as to who could pilot their Jeeps across deep dry washes at speed with the minimum of ground contact and other such jollities. There is no verifiable tally, but it is estimated that while Al literally wore out four Jeeps, Ray also wore out six 4WD vehicles of similar abilities (and once used Gale’s Chevy Vega commute car as an ersatz Jeep... and the less said about that trip, the better). On another trip Al McLane and Ray were in southern Nevada near the Mythic Area 51. As they drove out onto Groom Dry Lake they noted large, billboard-sized signs with increasingly small numbers painted upon them. By the time they got to the #3 billboard, they realized they were headed for the center of a bombing range... and wisely deiced to turn around.

Ray continued caving, albeit at a lessening pace through the late 1980s. Both Gale and Ray, however, increased their support of the NSS’s national goals with generous donations to various causes. Equally important were their significant support of the Research Center at Lava Beds National Monument, and generous donations enabling the Western Cave Conservancy to purchase both the Weller Preserve and Rippled Cave. These events were in addition to many California Grotto caving trips, meetings, and a string of infamous Beach Chili Feeds at their home for various NSS cave conservation causes.

In his spare moments, Ray read voraciously, as did Gale, and Ray also amassed an envied carbide lamp collection that was partly auctioned off, along with cave-themed quilts, to benefit the NSS, Western Region, and local Grottos. While we could fill up this entire issue with entertaining stories about Ray – and Gale – we’ll just let it go at this very clipped tribute to a major player in western and US caving. Semper fi, Ray.

*We will have more memories of Gale and Ray Beach in the December issue of the IKC Update.*
CAN THE IKC BE A PART OF YOUR LEGACY?

by Keith Dunlap

Our members routinely support the IKC with dues and donations. While we ask for and receive donations with our annual renewal cycle, and we do actively solicit when fund-raising for an acquisition project, we have not previously promoted bequest gifting from our members. This topic came up at a recent Executive Board meeting. A discussion ensued of why we have not informed our members and promoted how easy it is to include the IKC in estate planning.

The IKC has received two substantial bequests in the past few years. In 2018, member Gary Whittaker left a portion of his brokerage account to the IKC which significantly assisted in the acquisition of the Shawnee Karst Preserve expansion (and in his honor, we named the small cave on that property Whittaker Cave). And last year the IKC received an organization-changing bequest from the estate of Gale and Ray Beach, which is being used to set up the Gale and Ray Beach Endowment Fund that will help fund acquisition projects in perpetuity. Both of these gifts were unsolicited and unanticipated, and clearly Gary Whittaker and the Beaches took it upon themselves to ensure the IKC is a part of their legacies.

If making a bequest (large or small) to the IKC is something that might interest you, there are several options of how to do this. If you have a will or living trust, mentioning the IKC as a beneficiary is straightforward, but usually requires the document to be prepared or revised by an attorney. A much simpler way is to just list the IKC as the beneficiary (or one of the beneficiaries) on your life insurance policy, or any financial account that allows a beneficiary designation. This could be a brokerage account, a retirement account (IRA, 401k, etc), a Healthcare Savings Account, a Charitable Giving Account, Certificates of Deposits, and many savings accounts. Almost all of these account designations can be completed with a simple form and many can be done online in just a few minutes, and most accounts allow multiple designations (e.g., 40% each to two heirs and 20% to the IKC). Account beneficiaries take precedence over wills and living trusts, and are usually excluded from probate attorney fees and trust settlement fees. Designating an account beneficiary also reduces the burden on your will executor or successor trustee, as all the distribution paperwork is done between the insurance company/financial institution, and the IKC.

Although estate planning is not something many look forward to, it can be exciting to realize you can positively affect the future of an organization you care about. And designating the IKC as a beneficiary in your legacy planning does not have to be disclosed. Typically you just need the name of the entity (Indiana Karst Conservancy, Inc) and our tax identification number (31-1185033). With that said, please feel free to contact Matt Selig or Keith Dunlap (see contact information on page 2), if you have questions, would like to inform us of your plans, or have a specific vision for the use of your bequest. The IKC would be honored to be a part of your legacy.

...continued from page 5

Cave Capers at the Crawford County fairgrounds. In addition to the display, Laura also had new IKC logo stickers to hand out. Laura’s husband Ryan, a graphic artist, also recently refreshed our membership brochure (ikc.caves.org/sites/default/files/docs/brochure.pdf).

The IKC has gained six new members in the last quarter. Welcome Wayne Auger, Teresa Clark, Vince Eggles, John Lang, Ryan Hammond, and Christina Seull. The IKC membership currently stands at 223.
THERE IS A FACEBOOK ACCOUNT? IS IT USED?

by Carla Striegel-Winner

This title was an exact quote from a comment on our recent membership questionnaire (see related article on page 14). We hoped that with our questionnaire, the board would be able to gauge how well we were doing. Were members satisfied? Did members know what we actually do? Are we doing too much or too little? One question covered our electronic communications, and mentioned that we maintain a website, a Facebook page, and send out occasional emails. The question was “...how effective do you feel these communication methods are keeping you informed?” We were pleased that of 74 responses, 84% felt we were “about right” to “effective.” Sounds pretty good, but this does mean that 16% of respondents felt we could be more effective in electronic outreach.

Of the twelve comments submitted for this question, nine of them mentioned the Facebook account. “Didn’t know” and “rarely visit” were common themes. At about the same time the membership questionnaire was going out, we were re-focusing our Facebook outreach efforts and in just a few short months, we were able to increase our visitation from an average of 12 people per day seeing our content to 88 per day.

Now we well know that there are folks out there who just don’t do Facebook. That’s fine. We understand you don’t want to see your high school friend whining about their First World problems; we get it. But please read on. Facebook can be a great tool to reach out to not only our members, but to possible new members, new cavers, cave owners, agency staff, folks from out of state with a connection or an interest in Indiana, karst, or just conservation in general. It’s like a friendly, faux-website that can get information out quickly and informally. We have approximately 230 IKC members, but over four times that many following our Facebook page. It actually seems to be working quite well for us, so I hope that if you are one of those folks who did not know we had a Facebook page, or who rarely visit it, you give it a chance. Laura Demarest, Danyele Green, and I are the current administrators (admins), with Keith Dunlap, Matt Selig, Richard Vernier, and several other members assisting with content.

The IKC Facebook page is like any other organization’s page; it is an informal face of the Conservancy, meant to show off who we are and what we do, and to create posts that engage our members and encourage others to support our work. I’ve found that some people who do not have a Facebook account do not realize that they can still view and browse public Facebook pages without being logged in to an account. As a public page, anyone in the world can see it if they search for it, similar to a website. A public page such as ours is different from a “group” page, meaning that people can interact without joining the group, and the content comes from the admins instead of from the group members (such as would be with a grotto, team, club, or family group). Our page allows us to highlight specific things about a preserve, like when Buddha’s trail has been freshly mowed, which volunteers cut up the tree that fell across the lane at Sullivan, that Robinson Ladder Cave is conveniently located for Capers weekend, when the blackberries are ripe and ready for picking at Shawnee, and an invitation to a “pop up” hike at Wayne.

As one of the admins, it has been a joy to see members appreciate our posts and has been really special to be able to communicate with folks new to our organization. Brandi was recovering from an injury preventing her from caving, but inquired about access to come see some of our entrances and walk our trails. Nic saw that we were posting on plant species on the preserves and volunteered...
ORIENTATION TO CAVE RESCUE TRAINING – NOVEMBER 6-7

by Danyele Green and Laura Demarest

The Indiana Karst Conservancy is hosting a two-day Orientation to Cave Rescue (OCR) seminar to be held on November 6-7 at the Lawrence County Independent School in Fayetteville. This is introductory training geared towards anyone who may find themselves involved in or responding to a cave rescue, as well as those who are interested in learning more about how to prevent and assess in-cave incidents, and what to expect if/when a rescue call-out is initiated. There are no prerequisites for this class though both cavers and emergency response personnel will benefit from the wide range of topics to be covered. Day one of this training will consist of classroom lessons and hands-on exercises involving patient packaging and litter movement. Topics covered will include: Incident Command System and how it applies to cave rescue management, medical assessments and patient care, hypothermia prevention and treatment, patient packaging for evacuation, considerations for extreme situations, how the cave environment influences rescue proceedings, in-cave communications, media interaction, cave search tactics, and more. On day two, a full-scale mock rescue will be conducted in-cave, giving students the opportunity to work through simulated challenges based on actual cave rescue scenarios.

As an organization managing cave and karst properties, the IKC has a keen interest in supporting safe and conscientious caving activities. This OCR seminar is provided by an all-volunteer cadre of instructors and specialists trained by the National Cave Rescue Commission. The NCRC is not a cave-rescue team, but rather an organization under the National Speleological Society that facilitates training for interested groups and individuals. Trainings such as OCR allow for cavers of all experience levels to develop an understanding of how a rescue incident is conducted, including methods for increasing success and minimizing complications – both above and below ground. First-responders who work in areas where there is a potential for cave incidents will benefit from this training, especially when it comes to cave search methods, communication challenges, and in-cave evacuation considerations. OCR training also provides a unique opportunity for cavers and rescue personnel to work together to share knowledge, build trust, and understand the types of local resources available in the event of a rescue.

Thanks to several generous donors, there are discounts available to IKC members and licensed First Responders. The cost structure is as follows:

- $60 - Full fee (no discounts)
- $40 - NSS member ($20 discount)
- $35 - IKC member ($25 discount)
- $15 - NSS and IKC member ($45 discount)
- $ 0 - First Responder ($60 discount)

Depending upon demand, there may be some limits to the number of IKC discounts. See full details on the registration page:

ncrccentralregion.regfox.com/2021-ikc-ocr

REGISTRATION IS NOW OPEN!
MEMBERSHIP QUESTIONNAIRE RESULTS, PART 1
by Carla Striegel-Winner

The IKC formed an *ad hoc* Elections committee about a year ago to study alternative election processes. An offshoot from that committee was some discussion of exploring membership engagement, and Keith Dunlap brought up the idea of a membership questionnaire to gauge the IKC’s performance and generate action items for improvement. The full Board loved the idea, and after much work on Keith’s part, with suggestions and revisions from several others, the first membership questionnaire was born!

The eight-question questionnaire was mailed out in February with our renewal/ballot mailing. Eighty members responded (approximately 30% of our membership) by either returning the paper form, or completing the questionnaire online. Results were compiled and comments transcribed, then Keith created a set of charts to allow the Board and membership to view the data in a meaningful way. The summary was shared with the Board prior to our June meeting, and at that meeting we determined that we wanted to spend more time delving into the information and what actions we might want to take. A Zoom meeting was set up, and for 2 hours and 15 minutes one evening in June, we went over the results together and came up with a list of eleven action items scattered throughout two pages of notes captured by Secretary Demarest.

We are excited to share the results of the questionnaire with you. Due to the amount of information, we are splitting the results into two articles. For this issue, we will be sharing the results of Questions 1, 4, 5, and 6.

![Mission Rankings Chart]

**Question #1 – Organizational Missions:** Respondents were asked to rank our various organizational missions in order of importance. Seventy-two members ranked the six statements, and they are shown on the chart above in order of reported importance. From this, we can see that the first ranked item, “To purchase or manage caves to protect fauna and other resources while allowing appropriate visitation to the extent possible,” is significantly higher than any of the others, indicating it is a clear priority. The Board also had a long discussion on the third ranked item, “To promote and facilitate cave/karst scientific research in Indiana and especially in caves we own.” And of interest to us was what was ranked as the least important, “To promote education and conservation through public outreach.” We noticed that although ranked the lowest, responses to Question 4 (dealing with Education and Outreach) show that 35% of respondents felt we could do more outreach. So even what might be deemed the least important of our
missions, still seems to be valued by members. The action item that came from our discussion of Question #1 was to discuss options and opportunities for funding local karst science/research projects or other educational pursuits.

**Question #4 – Education and Outreach:** Seventy-four members ranked this question. Sixty percent of the respondents felt we got this “About Right”. This chart, however, weighs heavy on the “Not Enough”, with 35% rating it as a 4 or 5, indicating we could be doing more or a better job. Only 5% felt we did “Too Much”. Some specific comments included, “The bigger we get the more important this becomes”, “From the newsletter, it looks like you all do a great service…”, “Do not reach out as effectively as we could…”, “IKC needs an active public outreach committee”, and “...government officials, local planning agencies…” (assuming this means more outreach is needed as the commenter ranked as “4”). During our meeting, we commented on how it seems to be a lower ranked mission statement, but that members seemed to still find it important. We discussed what outreach we do, what we feel we can do with limited volunteer resources, and came up with an action item to update our promotional/logo materials via t-shirts and stickers, and a second action item included updating our education materials and the information on our web site.

**Question #5 – Effectiveness of the IKC Update:** Need we say more? Members value the newsletter and we are very happy to see that. Of the seventy-eight responses, Continued on page 19...
WHAT’S IN A NAME?
by Matt Selig

In his 1976 book, The Longest Cave, Roger Brucker describes the moment explorers in the Mammoth Cave system realized they had successfully connected Flint Ridge and Mammoth Ridge, making Mammoth Cave the “longest cave in the world.”

Richard [Zopf] tumbled out of the crawlway and turned around to spy something scratched through the mud on the limestone wall above the arched opening of the tube they had just come out of:

PETE H

Pat [Crowther] and John [Wilcox] were still in the tube. They could hear shouting up ahead. As John and Pat came out of the tube, Tom [Brucker] and Richard grabbed them and jumped up and down. “We’ve done it! We’ve done it!” they shouted.

Cave explorers who have surveyed into virgin cave know the feeling of elation when they suddenly realize they have found something interesting, important, or both, and have seen what no other humans in recorded history have seen.

On June 19th this year, I was somewhat less elated during the Executive Board’s trip into Sullivan Cave after our Board meeting that afternoon. Several of us had paused somewhere in a passage which is part of the Backbreaker and I spied something scratched through the mud on the limestone wall in front of me:

“Joseph June 3, 2021”
(note: name changed to protect the guilty)

In addition to enjoying our underground fellowship that day, the trip into Sullivan Cave had conservation purposes, as well. Our Treasurer had brought along trash-grabbers to reach down between breakdown in the Mountain Room and remove trash he had observed in the past, but couldn’t reach otherwise. Meanwhile, the Wayne Cave Property Manager brought in water and a small scrub brush to clean a unique white formation somewhere in the cave (that will remain undisclosed for conservation purposes).

Further, at the suggestion of the Sullivan Cave Patron, we examined graffiti and signatures in the Backbreaker to assess if there is a need for further cleanup and restoration of the cave. An issue of our discussion was, “What is the difference between ‘historical graffiti’ we should preserve, and vandalism we should remove?”

We concluded there is no easy answer, but one tends to “know it when you see it.” For example:

In this picture above from the Backbreaker, the 1888 date “feels” historical and worthy of preservation. It would be interesting to find out who B.F. Dean or N.M. Anderson were and how they ended up in Sullivan Cave on October 2, 1888. But what about the wag who crossed out this interesting 19th Century date and wrote 1955? Is this vandalism that needs cleaned up, or is it still historically significant? Would your judgement be different if 1955 was written in dayglow orange spray-paint, or was faked in 2015?

These are the kinds of questions we wrestled with as we observed wall markings from different time periods, including spray-painted graffiti. There is still restoration work to be done in Sullivan, a topic for another IKC Update.

But the philosopher in me is left with questions... In the year 2154, would future members of the IKC find “Joseph’s” signature and date historically significant? Would it matter if Joseph became a famous person or perhaps a great contributor to Indiana cave sciences? What if future explorers discovered another cave they were trying to connect to Sullivan’s and they came out of a passage and saw “Joseph’s” signature... Would they whoop with joy or cringe in disgust at cave vandalism?

I believe there is something in our human nature that drives us to mark our passage when we explore caves. I can’t prove this, but I believe it is the same impulse that drove prehistoric hominids to draw the animals they hunted and make tracings of their hands on cave walls. We value this speleo-graffiti as evidence of our human origins.

Unfortunately, the same impulse sends modern-day cave explorers into a cave with a can of spray-paint to draw phallic symbols and scrawl profanities on the walls of caves like Buckner and Sullivan...
caves. We do not disagree in defining this as pure vandalism, and cave conservationists have gone to heroic lengths to reverse this damage.

As for 14-year old “Joseph”? He and his trip leader have learned a lesson I hope they will never forget about cave conservation (the Cave Patron was able to use the date to determine the offending group in the cave on that date). They will have to put in some future “sweat equity” to make lemonade out of lemons in order to further the IKC’s efforts to protect Indiana’s caves and karst, or risk the group “Joseph” was with not being allowed into our caves in the future.

The IKC Board enjoyed its trip in Sullivan Cave. We experienced this fabulous crown jewel of Indiana’s caves, and we accomplished some conservation work as well. We saw first-hand our work is still needed and after documenting the new graffiti, we wiped smooth the initials in the mud and no future explorer in Sullivan Cave will see the damage caused by “Joseph”, or need to consider whether it is historically interesting or abject vandalism.

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**GET TO KNOW YOUR INVASIVES: AUTUMN OLIVE**

*by Danyele Green*

The third in a planned installment of invasive species education series.

**Fast Facts:**

- **Common name**: Autumn Olive (*Eleagnus umbellata*).
- Deciduous shrub previously popularly sold as an ornamental and vegetation for disturbed area.
- Wide distribution as one plant can produce up to 80 pounds of fruits per year which are dispersed by birds.
- Leaves are alternate, oval to lanceolate, smooth (not toothed). The underside of the leaves has an unmistakable silvery shimmer.
- Branches and main stems glossy olive drab with scattered thorns
- Flowers in the spring and has a strong sweet scent – some love and some despise.
- Bright red berries in the fall. Loved by birds (ugh- wide seed distribution).
- This plant is fast-growing and can be hard to eradicate. Autumn Olive displaces native plants and because of its early leafing, it shades out native plants.
- Responds to chemical persuasion, but needs re-checked each year for its vigorous re-sprouting abilities. The safest and cheapest method of control is to pull small young plants. Larger shrubs respond well to ‘cut and paint’ methods.
- When pulling up plants, be sure to grab at the base and gently pull up to remove all of the root. Bag and trash to ensure no re-rooting occurs.

**Alternative to planting Autumn Olive:**

‘Autumn Olive’ is illegal to be sold or distributed in Indiana. Here are some alternative bushes:

- **Dogwoods** (*Cornus sericea, Cornus amomum, Cornus racemosa*)
- **Chokeberry** (*Aronia melanocarpa*), **Winterberry** (*Ilex verticillata*), or a nice native **Viburnum** can take its place.
- **Strawberry Bush** (*Euonymous americanus*) southern Indiana, wet woodlands. Also five petaled flowers.

For more information on identifying and managing invasives in Indiana, go to [www.sicim.info](http://www.sicim.info)
Editor’s note: I typically do not publish recreational trip reports in the IKC Update, but since Ed’s report centered on our various IKC owned/managed caves, I thought this was a good exception.

Ed LaRock (Colorado), Ira Sasowsky (Ohio), and Peter Sasowsky (New York) visited several IKC preserves during our cave trip to Indiana over August 7 – 13, 2021. Our trip was possible thanks to the IKC and the help of many IKC Cave Patrons: Ray Sheldon, James Adams, Paul Uglum, Dave Everton, and Kevin Smith.

Sunday, we visited Shiloh Cave – a lucky trip as the scheduled group for August had canceled. The water was waist-deep at the lower entrance and led into some wonderfully decorated stream passages.

Monday, we visited Eller Cave with permission from the owner. Most of the cave had recently flooded; we heard there was a seven-inch rainstorm in Bloomington in July that caused local flooding, which may have affected most of Eller Cave, but apparently not Crystal Falls.

Tuesday, we did the kayak tour at Bluespring Caverns – highly recommended, good time.
Wednesday, we visited Sullivan Cave; it has been on my bucket list for a while. Dave Everton accompanied us and we visited the Merry-Go-Round area (Dave said he had not been there before), the Mountain Room, and down to the flood route and the main stream at the South-Y.

Thursday was our trip into Endless Cave which was a lot of fun, including the 3’ high crawl with 1’ of water, before we got to the Formation Room.

Kevin was very helpful with access to Suicide Cave. We planned to go on Friday 8/13, but my hip had given out and needed a day off from caving, so we unfortunately did not go. We also had to do a final decon of our gear before flights home. Instead, we did a brief visit to the Orangeville Rise and Wesley Chapel Gulf.

...continued from page 15

all but one ranked it as “About Right” to “Effective”. One respondent rated the question as just under “About Right”. There were many positive comments, with two of the fifteen saying they read the newsletter “cover-to-cover”, and another reading “Every bit”. Also, “I look forward to each issue”, and “Important to those that live further away”. We will strive to continue to keep the IKC Update valuable to our members!

**Question #6 – Effectiveness of Electronic Communications:** This chart looks at our website, Facebook account, and emails. Once again, members were asked to rank effectiveness from one to five, one being “Not Effective”. Of the seventy-four members who ranked this question, 54% ranked electronic communications as “About Right”, 16% as less than “About Right”, and 30% as more effective. Several comments mentioned that members do read the emails, and that they rarely check the website. Also, many members mentioned they do not use/visit our Facebook page, or even know it existed. Members do basically seem to feel that electronic communications are fine. In our Board discussion, we saw room for improvement. Three action items came from our meeting: More Facebook exposure, an IKC Update article to highlight our social media presence (see article page 12), and to explore better email distribution options and enlisting the Outreach/Education Committee to assist with member emails and list management.

The Board has really appreciated seeing the feedback, so a big thank you goes out to members who returned the questionnaire. If you did not partake of this opportunity, the Board has discussed doing another questionnaire in the future in order to continue receiving feedback (of course you can always send feedback at any time to our President or anyone else on the Board). We look forward to working on the action items that came from this first questionnaire.

In the December IKC Update, we will delve deeper into the other four questions: #2 – Acquisition Resources, #3 – Stewardship Resources, #7 – Governance Transparency, and #8 – Board Representation. In the meantime, you can view all of the charts here: [ikc.caves.org/sites/default/files/webmaster_uploads/2021QuestionnaireResults.pdf](https://ikc.caves.org/sites/default/files/webmaster_uploads/2021QuestionnaireResults.pdf)
An IU research team investigates 100 springs – some famous and some unknown – across the Indiana Uplands region.

Natural springs have played an important role throughout the history of Indiana, yet for many of the springs, little is known about their specific characteristics. In partnership with the Center for Rural Engagement, a team of researchers from the Indiana Geological and Water Survey (IGWS) is hoping to uncover some of those secrets held in the springs of the Indiana Uplands to better understand the past and future of these water sources.

Tracy Branam is a scientist with IGWS and is directing a research project to collect data about the location, chemical composition, and water quality of 100 perennial springs in the eleven counties that make up the Indiana Uplands region (editor’s note: the IKC’s Orangeville Rise is one of the springs being sampled). “I first became interested when reading a 1901 report by the former state geologist William Blatchley,” he says. “At the time mineral springs were very popular and provided a sizable economic industry to the state.” Historically, springs have been the source and site of economic growth, providing power to gristmills, drinking water, and agricultural irrigation to the towns that grew up around them.

Even today, many of these springs provide water in areas with limited groundwater resources, says Branam. Some uses include drinking water for people and livestock, recreation, and even bottling. “Many of these uses depend on water quality and character,” says Branam, but there’s never been a large-scale collection of that data. Branam and his team hope to change that.

Branam’s team travels to each site and records a GPS location, flow measurements, and field chemistry data, as well as a water sample to be brought back to a lab and tested for alkalinity, nutrients, and bacteria. Many of the sites are on private property, and the team needed permission from the property owners before they could sample the springs. “I really enjoy getting to talk to the landowners,” says Lindsey Rasnake, a master’s candidate in the Indiana University O’Neill School of Public and Environmental Affairs and a graduate research assistant working on the project. “Many of them are farmers and have been living in this region for generations, and for the most part have worked hard to conserve their resources and be stewards of the land.”

One of the more prominent examples of the historic importance of springs in Indiana are those in Orange County, Indiana, where French Lick Resort is located. “Prior to statehood, this area was well known for the mineral springs, which were initially used to support the early settlers as a hunting grounds,” says Justin Harris, director of facilities at French Lick Resort. “The waters were quickly discovered to have medicinal qualities, which gained a lot of attraction from everyone, including the national government,” says Harris.

The federal government claimed the land near the springs in hopes of extracting the minerals from the ground. When this proved to not be possible, the land went up for auction, and it was purchased by William Bowles in 1845. Bowles built the resort there and sold the opportunity to bathe in the springs.

The French Lick Springs Hotel originally had four springs. Over time, development has cut that to just two, one of which is Pluto Spring, a mineral-rich spring that has natural laxative powers. The water was bottled and sold as a medicine across the country until the 1970s when the lithium it contained became a controlled substance. “Guests are welcome to visit the springs... but the only use of the water is in our spas where guests can take mineral baths,” says Harris.

“Pluto Spring was one of the highest priorities on my list,” says Branam. “There is chemical data on Pluto Spring dating back to the late 1800s, providing me an opportunity to compare and see what if any significant changes have oc-
curred in the spring composition over the last 100 or more years.” The research team contacted Harris for help with access to springs, and he was glad to help. “It doesn’t take much to convince me to talk about the history of the resort and get involved,” says Harris.

Any interest in these springs and in this area helps to expose these hidden gems and attract more people to this area.

While the data is valuable for Branam’s research purposes, he says it may also renew interest in the French Lick region. “Knowing that this unique spring is still functioning at the same level as when it was first tasted and sold would add to the interest as a growing tourist attraction for the area,” says Branam.

Harris says he hopes that Branam’s research will help them understand the history and origin of the springs’ water, as well as reignite some of the excitement that French Lick used to hold. “Any interest in these springs and in this area helps to expose these hidden gems and attract more people to this area.”

Not every spring is as well known. Most, in fact, are small springs that run through private property. Lois and Dick Clark live in Greene County, Indiana, and the springs on their property have been sampled a few times by Branam’s team. “I have been involved in agriculture my whole life and currently have approximately 500 diverse acres of pasture, hay fields, and forestry with a creek and several natural springs.” says Dick.

The Clarks are one of many who live in a rural area and rely on spring water in some capacity. “These springs have played a vital role and have a nutritional benefit in raising the cattle and sheep as well as being a nice place to visit with lots of wildlife to see.”

Dick says he enjoyed working with the researchers, and he understands the value of the data they’re collecting. “Any study that promotes how important it is to protect water is a benefit,” he says.

Deanna Davis, a Washington County resident, has also had her springs sampled by the team, and she was eager to participate as well. “We are extremely excited and grateful for the interest in the quality of our groundwater,” she says. “Most landowners, myself included, want to be good stewards of the land. Any information that can help us towards that goal is very welcome.”

The end goal of Branam’s research project is for the collected spring data to be made available to the public through an interactive map available on the IGWS website. Additionally, the public will be able to upload their own information about springs to the map. “We have to get all of the analyses back from outside labs and enter the new data along with historic data and site descriptions,” says Branam, but it will be available near the end of the 2021 spring semester.

While the springs hold a trove of information, they are also a part of Indiana’s natural beauty. “There is so much beauty in this area of Indiana,” says Steph LeGare, also a master’s candidate at O’Neill and a research assistant on the project. “On fieldwork days, I often find myself thinking how lucky I was that I got to work in such awesome areas.”

See the web version of this article with additional images at rural.indiana.edu/news/2021-03-uncovering-the-secrets-of-the-springs.html
A LOOK BACK AT INDIANA KARST

by John M Benton

Upper photo: Taken in Fanueil Hall (entrance room of Wyandotte Cave), looking towards the entrance prior to the construction of the concrete steps (the steps were built circa 1969 after the DNR acquired the cave). The rock walls shown in picture are gone.

Lower photo: Taken in Wyandotte Cave parking lot of Charley Rothrock talking to an unknown woman. Charley was one of the discoverers of the New Discovery (in 1941) in Wyandotte Cave. Note the “bumper sticker” on car.

Both of these photos are believed to have been taken in the 1940s or 1950s and were from the George Jackson estate, but now owned by the author.
### Income/Expense Statement
**From April 1, 2021 to June 30, 2021**

**INCOME:**
- Dues Apportionment and Residuals: $796.25
- Donations - General: $513.20
- Donations - Land Acquisition Fund: $525.00
- General Investment Earnings: $44.37
- Endowment Funds Earnings: $4,410.95

**EXPENSES:**
- IKC Update (printing, production, mailing): $337.36
- Education / Outreach: $14.82
- Stewardship / Conservation: $1,036.23
- Property Taxes: $273.64
- Business (PayPal fees, renewal/election letter): $222.36
- Transfers to/from restricted funds/other adjustments: $4,965.95

**NET OPERATING EXCESS (DEFICIT) THIS PERIOD:** ($560.59)

### Balance Sheet
**June 30, 2021**

**ASSETS:**
- Cash in Checking/Saving/Brokerage accounts: $619,094.64
- Robinson Ladder Cave Preserve (73.48 acres): $162,000.00
- Shawnee Karst Preserve (67.78 acres): $175,000.00
- Wayne Cave Preserve (57.59 acres): $188,000.00
- Buddha Karst Nature Preserve (36.84 acres): $29,000.00
- Sullivan Cave Preserve (28.00 acres): $72,000.00
- Lowry Karst Preserve (6.66 acres): $33,000.00
- Orangeville Rise Nature Preserve (3.01 acres): $7,000.00
- Indian Creek Conservation Easement (valued at $1/acre): $13.16

**Funds & Operating Excess:**
- Land Acquisition Restricted Fund: $63,871.42
- Deferred Dues Restricted Fund (217 members): $6,266.25
- Stewardship Endowment Fund (+5.30%): $86,973.83
- Gale & Ray Beach Endowment Fund (+0.03%): $400,033.00
- Previous General Fund (total): $62,523.89
- Net Excess (Deficit) This Period: ($560.59)
- Current General Fund (unrestricted): $61,963.30
- Current General Fund (committed): $1,100.00
- Real Estate Basis (excluding value of CE): $666,000.00

**Total Liabilities & Operating Excess: $1,285,107.80**
Board Members Present:
Matt Selig, President
Laura Demarest*, Secretary
Keith Dunlap, Treasurer
Jeff Cody
Scott Frosch
Danyele Green
Rand Heazlitt
Goni Iskali
Joe Kinder
Tom Sollman
Carla Striegel-Winner
Paul Uglum*
Richard Vernier
* represented by proxy (see below)

Board Members Absent:
Dave Haun
Bob Sergesketter (deceased)

Call to Order
Meeting was called to order by Matt Selig at 11:10 AM.

Acceptance of Proxies
Jasper Beavers for Paul Uglum
Sue Vernier for Laura Demarest

Approval of Previous Minutes
The minutes from the March meeting were approved and published in the June 2021 IKC Update.

Treasurer Report
Keith outlined the current financial status of the organization:

Assets:
- Cash assets totaling $616,876.52
- Land assets totaling $666,000.00
- Total Assets $1,282,876.52

Dedicated Funds:
- Land Acquisition Fund $63,836.42
- Beach Bequest $400,028.00
- Stewardship Fund $84,912.18
- General Fund $62,039.92
- Deferred Dues $6,060.00
- Total Dedicated Funds $616,872.52

Membership currently stands at 247 members with 209 members renewed and 38 remaining to renew.

Investment: Since January, the Investment Committee has been slowly investing the Stewardship Fund in mutual funds and we are now 100% invested as of 6/18. Target 75% equities (S&P 500 index) and 25% investment bonds.

Appointment of Director to Replace Bob Sergesketter
The board moved to appoint James Adams as the replacement for Bob Sergesketter, as Jim was the next person with most votes in the most recent election. Rand made the motion, and Scott Frosch seconded. Unanimously passed.

Beach Bequest Ad Hoc Committee Recommendations
Committee members: Matt Selig, Keith Dunlap, Laura Demarest, Rand Heazlitt, and Joe Kinder

Recommendation of the Committee: Invest the Gale and Ray Beach Bequest into mutual funds until it grows to $500K. At that point, the principal amount will be indexed with inflation. Amounts greater than the principal in any given year can be distributed, at the discretion of the Board, for Land Acquisition and/or General Fund projects.

Rand noted that having more money will attract more funds and you can leverage the money, so spending it all up front may actually hurt the IKC. Tom Sollman added that the thought is to set up the fund similar to the NSS Endowment Fund to invest in perpetuity and set a certain percent (4% for example) to pay out to the IKC above the principal and not everything above the base floor. The IKC board will decide each year how much to withdraw and how to spend the money. Richard Vernier noted that you can borrow against the funds for any large acquisition that may come along. The Board can then make large and important acquisitions without having to borrow from a bank, and can pay the fund back. Danyele asked if there are any penalties for withdrawing the funds prematurely? Matt stated that there should not be any large penalties for withdrawing the money whenever we want.

Keith wants to work on a policy statement to formalize exact steps and present it to the Board during the next meeting for approval. The Investment Committee will also take control of the funds for the moment and invest in prudent investments. Funds are currently in a savings account. Rand suggested that funds be moved to a Brokerage account to invest and accrue interest until the next meeting. Richard Vernier suggested to not put a significant amount in a bond fund for now until a more long-term decision is made.

Motion for Investment Committee (Matt, Keith, Tom) to create a new dedicated brokerage account for the Gale and Ray Beach Bequest and to invest up to 75% in prudent investments. Sue made the motion. Jasper seconded. Unanimous consent.
Action item to Board members: Do outreach to ensure that other members know that they can donate and include the IKC in their estate planning.

Safety (COVID) Committee
Carla and Danyele suggested to create a Safety Committee with Danyele taking lead. Committees are approved by the President. Matt asked to please present to the Board by next meeting who would be on this committee and what the role and responsibilities of this committee would be, but he is in full support of such a committee.

Cave Visitation protocol for COVID to be updated
Danyele outlined the suggested changes to essentially state: Stay home if you’re sick and follow CDC guidelines. Main changes are to rescind the one trip per day and take out cave size group restrictions and go back to cave size restrictions listed in the specific management plans. Grotto Liaisons can go back to authorizing trips. Danyele made a motion to remove the limits that we currently have on the website and substitute with new guidelines. Joe seconded it. Unanimous consent. Keith asked that the group size guidelines from the various management plans be e-mailed to the Board.

NCRC training class – IKC sponsor
Danyele reported from Jess Deli (NCRC Central Region Coordinator) that all October weekends and Nov 6/7 are currently open for hosting a NCRC class. Location of the training is not known and currently not decided. October 16/17 or November 6/7 were selected as potential dates. Other questions asked: Does the IKC want to do a scholarship fund for IKC members, similar to previous training? How much per person and limit to how many people? Keith noted that IKC also has funds left over from the last NCRC training that can be used for upcoming training.

Keith proposed to pay $25 for the first 25 IKC members and maybe also paying the full class fees to first responders. Goni seconded it. Unanimous consent.

Outreach and Education Committee
Check with Salisa Lewis if she wishes to continue as the head of the Outreach and Education Committee before deciding on next steps.

Election Ad Hoc Committee Discussion
Carla continued to work on how various conservancy organizations (cave conservancies and land trusts) recruit their board members, advisory committee (full time or temporary), etc. Carla presented a table that compared how other conservancies and boards appoint/elect officers.

Goni suggested that we provide more direction on the skillset that the Board is looking for and a more detailed description of the Director position for the next nomination/election committee in order to target and attract potential board members.

Questionnaire Review
Approximately 30% response from members. Keith suggested one or two articles for the IKC Update to relay the results. Keith suggested that we have a more focused meeting to come up with action items and discuss the results. Danyele and Laura will work on synthesizing the results for this upcoming meeting and the article(s). Meeting will be a Zoom meeting for Board members. Meeting will take place Wednesday, July 21st at 7-8 PM and Danyele will send invite to the Board.

Buddha Karst Nature Preserve
Trails mowed. Low cave visitation and will hopefully pick up soon.

Lowry Karst Preserve
Property Manager Ray Sheldon will be out on medical leave for a while. Invasive control is the priority and Keith and others have worked on eradication of multiflora rose, bush honeysuckle, and autumn olive, but several more rounds will be needed. Other species (garlic mustard and stilt grass) are still problematic.

Orangeville Rise Nature Preserve
May 1st workday had 14 volunteers. Neighbor offered to donate a limestone bench and Carla/IKC likely to accept and place in preserve.

Robinson Ladder Cave Preserve
Jamie Winner mowed the property and chestnut plantation continues to be maintained. Insect treatment (for beetles) has been administered, but the cicadas have damaged some of the chestnut trees.

Shawnee Karst Preserve
Jerry Lewis has retired as Property Manager and we will need to find a new manager. Danyele suggested that we email members that live nearby. Joe asked what the job description is and the response was: keep an eye on property, ideally mow the trails, although Keith is doing it now, and be the Point of Contact for people who want to camp. Matt suggested that we come up with a job description for Property Managers and Cave Patrons to delineate duties.

Upper Twin Cave: Do we have to limit the number of people allowed in the cave to protect state-endangered fish? The suggestion was to provide education to Cave Patron so that he can relay info to trip leaders to not trample into sensitive pools. Also, limit size of cave group to 10 and one trip per day. Matt will relay these messages to the Cave Patron. Plan is to revise the management plan and present to the Board for approval during the September meeting. Danyele suggested that the cave and property managers review their plans and provide recommendation before the plans get revised.
Matt suggested that revising all plans and coordinating with patrons may be too ambitious to complete by September, so the plan is to tackle Shawnee and Sullivan by September. Current management plans are on the IKC website and board members are encouraged to review.


**Sullivan Cave Preserve**

Keith has done some invasive species control and prior to the meeting, he and others took down the illegal deer stand. Cave Patron inquired if doing restoration work in the cave (graffiti removal) should be authorized by Cave Patron or Board? The Board decided that Cave Patron has the authority to authorize work, but should check with the Board. Paul Uglum is also interested in resurveying the cave.

**Wayne Cave Preserve**

Invasive species control continues and the last work day was very productive. The IKC did get approved for the EQIP grant for Tract 2, but the funding has not been obligated, so no action yet. A few trees have come down and probably more after storm, so need to investigate. A sedge species of interest was found in the pond, and a very rare liverwort on trees near fire pit. Tom Campbell found the liverwort and is studying it; the species is an indicator of good air quality. Camping at the property has picked up. Next workday is July 20th and two more days will be planned for the fall, but no dates have been set yet.

Public hike will be planned to raise awareness on plants and geology along the loop trail. Danyele asked if we should be hesitant to point out rare fossils because they may be vandalized. Carla and Keith stated that we are probably fine, but depends on the group and the group leader can decide. Another hike may be planned next spring to see wildflowers. The Board noted that raising awareness may help increase group membership and we should consider doing it in other preserves with trails (Shawnee and Buddha).

**Indian Creek Conservation Easement**

Need a new monitor for the easement. Rand is willing to take on this work because he lives nearby and has a personal interest in seeing conservation in the area. A job description outlining that work has been created and provided. Keith made a motion to appoint Rand as the new monitor and Scott seconded the motion. Unanimous consent. Jamie Winner is the retiring monitor and will show Rand around before handing off the responsibility. Matt and Keith would like to accompany Rand and Jamie on the trip (likely July) to check out the property, locate posts, etc. Next action item is to send letters to nearby landowners.

**Land Acquisition Activities**

The Wayne Cave Preserve potential expansion is not looking good in terms of being able to subdivide and the high asking price. Maybe the owners will be more interested in splitting and selling the property later if there is no interest from other buyers. Keith stated that it's too risky for him at the moment to buy and facilitate transition to the IKC. Land surveying may also take more time than anticipated and is likely to take six months currently.

Sullivan 2-acre property acquisition: Next steps are to get it appraised to get a value for the Board to consider. The buildings on the property have been demolished and the septic system has been disconnected. Is the driveway to the property safer than what we have at Sullivan? Less of an incline, but more of a blind spot. Area could be used in the future as an additional parking lot and the current Sullivan driveway can be connected. Matt made a motion to get an appraisal by next board meeting for the property, and Danyele seconded it. Keith abstained from vote (conflict of interest as the owner of the property) but all other board members voted “yes”.

**Fund-raiser project**

Keith presented two framed cave fish prints donated by Mike VanNote to the IKC. How do we monetize these? Auction? Danyele suggested online Facebook auction and we can also solicit outside bids for people who are not on FB. Other option would be to sell at Cave Capers or show at Cave Capers and auction afterwards. Carla suggested to sell one a time to increase value of each print. The general consensus was to have a Facebook auction for one of the prints, but also show at Cave Capers and have the auction end at the last day of Capers in case winner wants to pick it up in person (or otherwise we will ship). Danyele will facilitate auction. Rand will also talk to one targeted member about potentially selling one to him or offering first in exchange for a donation.

IKC Information Booth at Cave Capers? Scott can facilitate if we want a table and Laura had expressed interest in the past. Check with Laura on interest of running booth and other IKC Board Directors can also help man the booth.

**Items from the Floor**

Matt brought up the topics of:

1) Succession, i.e. how to ensure the IKC’s future, recruit the next generation of Board members and also recruit volunteers?

2) Land acquisition—should we have a committee that is responsible, and do we create a targeted or strategic list of caves and properties? Keith stated that we have such
a list but it’s outdated and needs to be updated.

3) Engagement - How do we engage the community (cavers, organizations, communities near caves, etc.)?

Board was generally very interested in increasing outreach and being more strategic with land acquisition.

Next Meeting

Next Meeting will take place at Danyele’s house in Bloomington on September 26th at 1 PM. Potluck at noon, and Danyele requested to bring sides and she will provide main dishes. Danyele will send more details, including the address.

Adjourn

Meeting adjourned at 1:45 PM.

Respectfully submitted by Goni Iskali (acting minutes taker).

Orangeville Rise in low flow (see related article on page 18). Photo by Ira Sasowsky.