

MISSOURI SURVEYOR

A Quarterly Publication of the
Missouri Society of Professional Surveyors

Jefferson City, Missouri

September 2023



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CALENDAR OF EVENTS

2023

September 28-30, 2023

66th Annual Meeting and Convention
Oasis Hotel, Springfield, MO

December 4, 2023

Board Meeting
MSPS Office, Jefferson City, MO

2024

February 14, 2024

Zoom Call, Board Meeting
Jefferson City, MO

March 13, 2024

USPLSS Webinar via zoom

May 1, 2024

Board Meeting
Lodge of Four Seasons, Lake Ozark, MO

May 2-3, 2024

46th Annual Spring Workshop
Lodge of Four Seasons, Lake Ozark, MO

July 6, 2024

Zoom Call, Board Meeting
MSPS Office, Jefferson City, MO

August 12-14, 2024

Review Course
Location TBD, Jefferson City, MO

October 3-5, 2024

67th Annual Meeting and Convention
Margaritaville Lake Resort
Osage Beach, MO

Cover: Danny Kibel of Allgeier, Martin & Associates operating a total station for topo check shots in the White River at the Powersite Dam near Forsyth where it forms Lake Taneycomo.

Donald R. Martin, Editor



Notes from the Editor's Desk

Donald R. Martin



Welcome to your September edition of *Missouri Surveyor*. It's full of good stuff!

First up is *The Quarter Corner Between Sections 30 and 31... One Corner or Two?* by Dr. Richard Elgin. Heed the article's advice, "...the Professional Surveyor should be in position to make an informed, defensible judgment as to this troublesome quarter corner." This is followed by the story of surveying students gathered for a *Surveying Competition Introduces Students to the Past, and a Possible Future*

Career. It too comes with sage advice, "...to find the future you have to visit the past." Larry Bollinger returns as a contributor with his *Bollinger's Yardstick of Professional Services*. Another returning author is Steve Weible who shares *Missouri's Katy Trail and the Court of Federal Claims* with readers.

As with all September editions, this one includes *Nominees for 2023-2024 Officers & Directors*. It's a good slate! Next, Scott Faenger reports on a significant state border marker in *One Heavy Monument*. A unique contribution follows in *The Soulard Stones*. Written by chiropractor and citizen historian Dr. Ryan Johnston, it is the story of the doctor and his family retracing a survey from bygone times. Dr. Johnston has retained an interest in surveying and mapping since working on a survey party in his younger days. Another in the series of *Thoughts on Professional Practice and Education* by Knud Hermansen wraps it all up with *Article 10: Professional Partnering with Surveying Programs*.

Look at that! So much member-written content! Added to it all is a wonderful contribution from Dr. Johnstone...what a bounty. It is clear that *Missouri Surveyor* not only serves our community, it is served *by our* community. Thank you, contributors, for making this the good publication it is.

This edition also includes the sad news of the passing of two fellow surveyors. Don Moore, the successful proprietor of Moore Surveying Inc. in St. Louis departed this past May. A good surveyor and business man, Don was even more successful has a loving friend, father and husband to those mourning this loss. In July we lost a renowned surveyor and educator, Dave Knowles. A professor known for developing the land surveying program of the University of Arkansas, he matched his professional accomplishments with those associated to his life's passion of trout fishing. He too exceeded acclaim in his vocation and avocations with the love he shared with his wife, children and grandchildren.

Well, I best break-it-down and bunch-it-up so I can start getting ready for the next edition ...I'll get back with ya' then... 🇺🇸

Donald

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EDITOR

Donald R. Martin
105 S. Capistrano
Jefferson city, MO 65109
Phone (573) 619-8702
E-mail: editor@missourisurveyor.org

PUBLISHER

Sandra Boeckman
722 E. Capitol Avenue
Jefferson City, MO 65101
(573) 635-9446 FAX (573) 635-7823
E-mail: msps@missourisurveyor.org

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President's Message

Ray Riggs, PLS



It has been a privilege and an honor to serve as President of the Missouri Society of Professional Surveyors (MSPS). As I prepare to turn the gavel over to my worthy successor, Robert Anderson, I have a few thoughts and a story about our progress toward the goals of MSPS

“It just takes time” or “Slow and steady wins the race” and even “Rome wasn’t built in a day (but they were laying bricks every day)” are axioms reminding us that

sometimes our need for speed meets head-on with slow-moving gears. Over the past year, we saw the bill creating the new Missouri State Plane Coordinate System being passed through the legislature. This has been “in the works” for a few years and it is satisfying to see it signed into law. We experienced this in the past with new licensure requirements, additional required college hours and continuing education. With all these, it “just took time” but we were “laying bricks” day by day, month by month and year by year.

As I considered our pressing forward with other issues near and dear to our collective MSPS hearts, I thought of a story about my old dad, Leamon H. Riggs.

When I was in my teens, my dad bought old tractors, repaired them, and then sold them through the local sales circular, “The Horse Trader”. My brother Ralph and I were recruited to help dad in various ways, to make this a profitable venture.

Along the way, he purchased a 1950’s Model M John Deere tractor. This was a row-crop tractor with adjustable-width rear wheels, which was accomplished by sliding the wheels along the axle to match the crop rows. With the wheels adjusted in, an excessive amount of axle stuck out past the wheel and was easy to forget about while bush-hogging up close to trees (there were several trees with bark missing on our place that summer!) Finally, my patient, even-tempered father had had enough.

One hot summer afternoon, he fired up the cutting torch and proceeded to cut the excess axle length off. At least he attempted it. Our torch would not even touch 3 inches of tempered, hardened steel.

After putting away the cutting torch, dad said “boys, get the hacksaw”.

After a few minutes of “hacking”, the teeth on the blade were smooth and a small groove had been cut into one axle. Not to be deterred, dad said “We’ll just go get more blades at Western Farm and Home”. We went to town, he purchased a case of hacksaw blades and we went back to work, taking turns, “hacking” at the John Deere axles.

I know things get exaggerated with the passing of time, but it seems like we spent the rest of the day cutting those axles off with a hacksaw. All I know is

(continued on page 15)

“The Quarter Corner Between Sections 30 and 31...One Corner or Two?”

by Dr. Richard L. Elgin, PS, PE, ArcherElgin Engineering, Surveying and Architecture, Rolla, Missouri

In the Original Survey

That troublesome quarter corner between Sections 36 and 31. One corner or two? In the original surveys the GLO Deputy Surveyor began at the township corner and started surveying north along the range line on true line. At 40.00 chains he set his first corner on the range line, the east quarter corner to Section 36. He continued on north setting the standard corners, they marking the section and quarter section corners to the sections to the west side of the range line, each at 40.00 chains. At a later date (could be many years later) the township to the east of the range line was subdivided, likely by some other Deputy Surveyor.

The section lines for the west column of fractional sections in that township were surveyed from east to west on true line. At the point where the closing section line intersected the previously surveyed range line the Deputy Surveyor set the closing corner and then measured the lap (or falling) to the (hopefully) nearby standard corner, either north or south from the closing corner (the lap so noted). See Figure 1.

By this scheme (Tiffin’s Instructions of 1815) the west quarter corners (the “blank” quarter corners) of the township’s western column of sections were not set. (Neither were the north quarter corners of the north row of fractional sections.) The fractional section protraction scheme used in Missouri (and Arkansas) for this west column of sections was to make the east-west quarter line parallel to the section’s south line. The east lines of these sections were “regular,” 80.00 chains. So, the east line of the southeast quarter being 40.00 chains, the west line of the southwest quarter was protracted to also be 40.00 chains. Where does that place the west quarter corner of Section 31? The GLO protraction scheme would make the west quarter corner of Section 31 coincident with the east quarter corner of Section 36 (both being on the range line). So, in the original GLO survey these two corners were coincident. See Figure 1.

In a Resurvey

In today’s resurvey along the range line will the found, monumented position for the east quarter corner of Section 36 also be the west quarter corner to Section 31? Or, might there be some combination of existent corners along the range line that, when used and when RSMo 60.345 (*Corners of quarter-sections south of the township line, east of the range line, how established.*) is applied will result in a position to establish the blank quarter corner of Section 31 that will be different from the monumented east quarter corner to Section 36? Consider the examples illustrated in Figures 2 and 3. The darkened symbols represent existent corners, found and accepted.

For the simple example illustrated in Figure 2, Corner D is lost and is to be reestablished and Corner E is to be established. Applying RSMo 60.315 (5) (*Lost corners reestablished-rules-*) Corner D would be single proportioned between Corners A and C. Applying RSMo 60.345, Corner E would also be singled proportioned between Corners A and C, resulting in that corner position being identical to Corner D. In this example the position for both corners would be identical.

But consider Figure 3, where Corners A, B and C are existent, accepted monuments. Corner D is lost and is to be reestablished and Corner E is to be established. Following RSMo 60.315 (5), Corner D would be reestablished by single proportionate between corners A and B (the midpoint). Applying RSMo 60.345 Corner E would be single proportioned between Corners A and C, and then offset to Line AB. In this example Corners D and E would be on Line AB but at different north-south positions. (Albeit some small difference...unless the GLO and today’s measured distances were identical.)

But, suppose in Figure 3 Corner D is a found, accepted existent monument. Does that monument also represent the west quarter corner of Section 31? Applying RSMo 60.345 will result in a position for E that is different than D. Does one set a monument for E (perhaps a relatively small distance from D)? Or does Corner D also represent Corner E? Can we ignore RSMo 60.345 in this instance?

Summary

This article's purpose is to point out what could be a conundrum for the Quarter Corner between Section 36/ Section 31. The Professional Surveyor should be aware of the question. After a thorough examination of ALL the available evidence and with an awareness of the potential question, the Professional Surveyor should be in position to make an informed, defensible judgment as to this troublesome quarter corner.

Postscript

This article may be a tad academic for it is highly likely our forefather surveyors considered the existent east quarter corner of Section 36 to also be the west quarter corner of Section 31. That's what the GLO plat showed. There are surveys of record to support this statement. Many experienced Professional Surveyors today would say they are the same corner and it would be superfluous to proportion in another corner and set another marker, likely a few links away.

Up until 1979 Missouri statutes specified that the blank quarter corner (on either the north or west sides of a township) would be set at the record GLO lap from its "opposite" (hopefully nearby) standard quarter corner. For the west quarter corner to Section 31, that lap would be zero. So, for a resurvey accomplished in Section 31 prior to 1979 the Professional Surveyor likely correctly used the east quarter corner to Section 36 for the west quarter corner to Section 31. If so, that position should not be changed today.

As with any found monument (marker) representing a corner of the USPLSS, the Professional Surveyor should seek a reason, consistent with applicable legal principles, to accept the marker as the corner. (The corner is the position; the monument is the object that marks the corner.) That is, confirm it, declare it, accept it, hold it as the corner. Do not set another survey marker for the found, nearby marker. Or, worse yet, DO NOT note something like "No. 4 rebar found 0.26' north and 1.41' east of the true corner" (and not set "your" marker at your calculated position). Respect your elders.

Dr. Richard L. Elgin, PS, PE is a practitioner, educator and author. Semiretired, he works for Archer-Elgin Engineering, Surveying and Architecture, Rolla, Missouri. He wrote the books "The U.S. Public Land Survey System for Missouri" and "Riparian Boundaries for Missouri" (both available through MSPS). 🇺🇸



Surveyors Materials, Inc.
8875 Frost Avenue
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Voice: 314-521-9041
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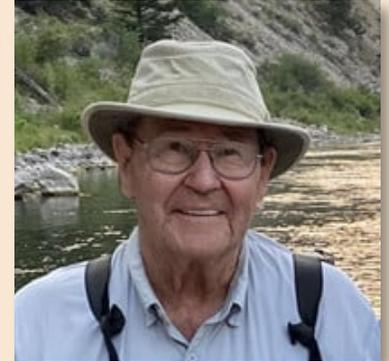
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In Memory of Dr. David Raleigh Knowles

David Knowles was a beloved husband for over sixty years, loving father and proud “Papa”, retired Professor of Civil Engineering, expert fly tyer and fly fisherman, and friend to all he met on the river. Surrounded by family, David departed this life on July 3, 2023. David was born March 7, 1938, in Chehalis, Washington, to Walter and Evelyn Knowles. With his father as a minister, David’s childhood included moves to Montana, Texas, and Georgia. As a child, David quickly grew to love the outdoors – particularly camping and fishing the Chattooga River in north Georgia.



It was in Toccoa, GA where David met Nan Odom. It’s unknown if David initially knew that Nan’s level of intellect could rival his own.....as it’s more likely he simply knew she was the most beautiful girl in Georgia, and her mother was a fantastic cook. David and Nan were married September 9, 1962.

David attended Georgia Tech and earned a BS and MS in Civil Engineering while a member of Pi Kappa Alpha fraternity. He obtained his Ph.D. in Civil Engineering at the University of Texas. Upon graduation, David accepted a position at Texas A&M University where he taught for nine years. In 1976, David and Nan moved to Fayetteville, Arkansas, where David developed a new land surveying program for the University of Arkansas. He retired from the U of A in 2001 after a distinguished career and was awarded Professor Emeritus of Civil Engineering. Except for travel to participate in work seminars, David never missed a day of class in his thirty-four year teaching career.

He was a life member of the Arkansas Society of Professional Surveyors, being a past President, and as long-time editor of their award-winning publication “HI’s and PI’s”. He was also a past recipient of the Society’s “Surveyor of the Year.” David served for eight years on the Arkansas State Board of Registration for Professional Engineers and Land Surveyors. David served on the National Council of Examiners for Engineers and Land Surveyors (NCEES) for over 15 years. He is co-author of “Legal Principles of Boundary Location for Arkansas”, “The U.S. Public Land Survey System of Arkansas”, and the “Celestial Observation Handbook and Ephemeris”. He is also co-developer of “ASTRO” celestial observation products. David was honored by the National Geodetic Survey with a survey monument named after him and placed on Mount Magazine.

His other passions in life were tying flies, fly fishing, and helping others be successful on the water. David developed new fly patterns, such as the “Y2K Bug”. He spent most of his time fishing in Arkansas, Georgia, and Montana. David was a generous supporter of Trout Unlimited and donated more rods and flies than most fly fishermen ever own. David was honored at the Arkansas Chapter of Trout Unlimited with the Ray Smith Award given to those who demonstrate outstanding leadership, volunteerism, and stewardship to conserve, protect, and restore cold water fisheries. In addition, Trout Unlimited petitioned the Corps of Engineers and Arkansas Game and Fish to name an access point after him on the White River.

David spent thirty-five summers fishing in Montana - a very special place for him. His early trips would include teaching a short course in Surveying at a Geological Camp at the University of Montana Western, which gave him an excuse to be in Montana. David would soon become an expert on Montana water rights, which obviously allowed him to better understand his potential fishing access along rivers. The waters around Dillon, Montana were his favorites. He also fished the Beaverhead, Poindexter Slough, the Big Hole, the beautiful Madison River and loved to camp at Wade Lake.

David was well educated on the Lewis and Clark Expedition. He fascinated others by discussing the proficiency for which Lewis and Clark mapped the navigable waters they encountered on the Expedition.

God gave David a unique combination of intellect, a passion for fishing, a heart of giving, great talent as a teacher, tremendous patience, and complete humility. David has always felt a responsibility and obligation to give back. We are all very lucky and blessed in that regard. He has instilled the love of fly fishing in his kids and grandchildren. His family and friends are sure to honor his legacy. May you fish in peace for eternity, David.

David is survived by his wife Nan, son John (Jennifer) Knowles, daughter Lisa (Kipp) Hearne, and daughter Heather (Kelly) Robason; grandchildren Grant Hearne, Claire Knowles, Eliza Hearne, John David Knowles, and George Robason; sister Mary Villaume, brother Stephen Knowles, loving nieces, and many other family and friends. 🇺🇸



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Surveying Competition Introduces Students to the Past, and a Possible Future Career

Unlocking the Mysteries of a ‘Top Secret’ Profession

NOAA, May 30, 2023



Eric Lopez, Kathlyn Nguyen, and Omar Madrigal, members of the California State Polytechnic University - Pomona team, having discarded their colonial wigs, make calculations for one of the practical tests in the National Society of Professional Surveyor Student Competition. (Image credit: NOAA Heritage)

At the peak of this year’s cherry blossom bloom in Washington, D.C., teams of students descended upon the National Mall and began surveying the land around them. One group was wearing white colonial wigs. Another was in wool vests and caps and sport jackets circa 1910. Even more puzzling: These students were carrying around antique tools, peering through optical viewfinders poised on top of wooden tripods, and unrolling metal chains to walk off the distances between two points.

Sometimes, to find the future you have to visit the past. In this case, the students with the vintage costumes were using old-school surveying tools to measure some of the capital’s oldest buildings as part of a competition jointly hosted by NOAA’s National Geodetic Survey and the National Society of Professional Surveyors. The organizers hope the students will become future surveyors.

A lot of people think when you say you do surveying, you are a poll-taker, not a measurement professional, said Joe Fenicle, one of the competition’s faculty advisors. “We joke that surveying is a top secret profession.”

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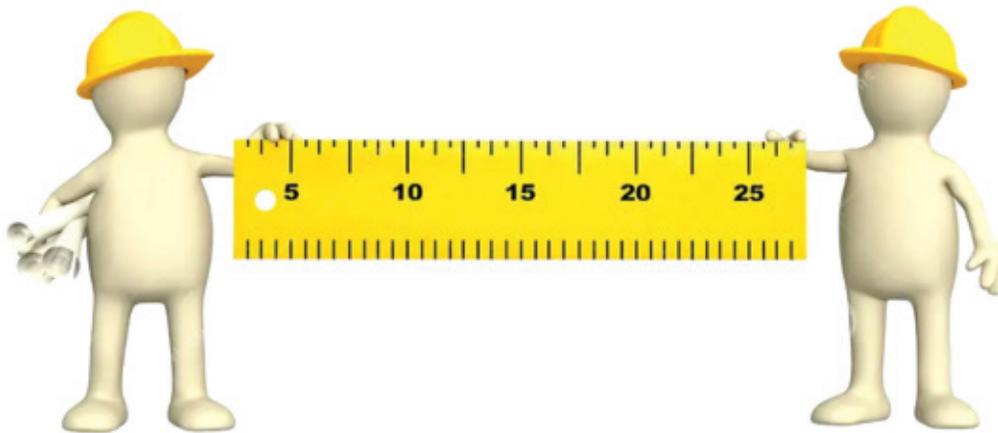
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Bollinger's Yardstick of Professional Services

by Larry L. Bollinger, PLS 1671, July 13, 2023

As some of you may know, I have recently moved from a rural setting in Bollinger County (southeast Missouri, west of Cape Girardeau) to a suburban environment in Ballwin, Missouri (located in west St. Louis County). In the moving process I was going through some of my old survey pamphlets, books, workshop notes, etc. and I ran across my "Yardstick for Professional Services". During my career, I kept the yardstick at my desk. As I signed and sealed each of my surveys, I would grade myself using the yardstick. Initially, the yardstick only had the first three items. In my later years of practice, I detected that something was missing. With input from brother surveyor Don Clinkenbeard, we added three more essential items to the yardstick.



I think the yardstick is still valid today and I would like to challenge all of my brother surveyors (young and old) to use it as a guide. We as PLS's are commissioned to produce a quality product for our clients, the community, etc. Working in the gray areas is not good for the profession!

Recently, more so than in the past I am particularly concerned with the mentoring obligation we have to our younger generation of Professional Land Surveyors. I know other PLS's have concerns as well. We must have a say in what is being taught in our colleges. If at all possible, become involved with our intuitions of higher learning. I personally have a good background with college level survey classes but where I really learned how to perform boundary surveys was from old surveyors (many of whom were not licensed).

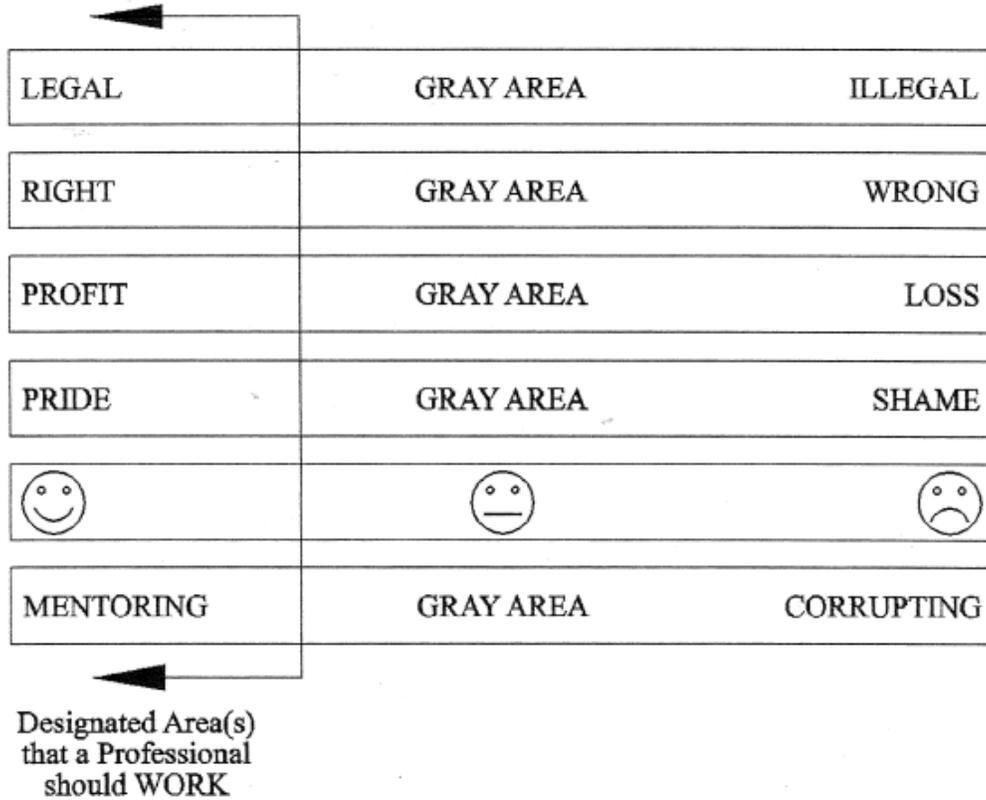
I would like to close with this statement from the late Norman Brown. Norman assisted as an aid with the survey classes when I attended the University of Missouri at Rolla (now called, Missouri University of Science and Technology). I believe Norman was working on his master's degree at that time. Norman told the class; you have a test coming up Friday and you should answer the questions as printed in your text book and you will get an A on your exam. Now with that said and done "Here's how you do it in the real world".

I think Norman realized it was important for the student to obtain a good grade but the text book author was lacking in real world experience and knowledge. Do we need more "Here is how you do it in the real world"?

What do you think? 🇺🇸

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Phone: 573-635-9446 • Fax: 573-635-7823
Email: mpps@missourisurveyor.org
Web Site: www.missourisurveyor.org

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Surveying Competition... *(continued)*

Fenicle is an assistant professor at the University of Akron, and he's seen a huge demand for the work, and not enough people to get projects done as needed. "In the entire state of Michigan, for example, there are only seven professionals younger than 30," he said.

Jacob Heck, a Regional Geodetic Advisor at NOAA's National Geodetic Survey and incoming president of the Young Surveyors Network, said he also recognizes the lack of a younger cohort. Few people know that surveyors are the professionals who work to make the precise measurements that determine property boundaries, and virtually no one knows about the career options in the closely related field of geodesy – the science of accurately measuring and understanding the Earth's geometric shape, orientation in space, and gravity field.

Many organizations use geodesy to map the U.S. shoreline, determine land boundaries, and improve transportation and navigation safety. NGS is the government agency responsible for maintaining a set of accurately measured points that form the National Spatial Reference System, which allows different kinds of maps to be consistent with one another.

The numbers and measurements are essential to commerce and security, but remain unseen by most people. They are sometimes called the nation's "invisible infrastructure." The lack of new practitioners in the field that builds that infrastructure and maintains it has been labeled a national level crisis.

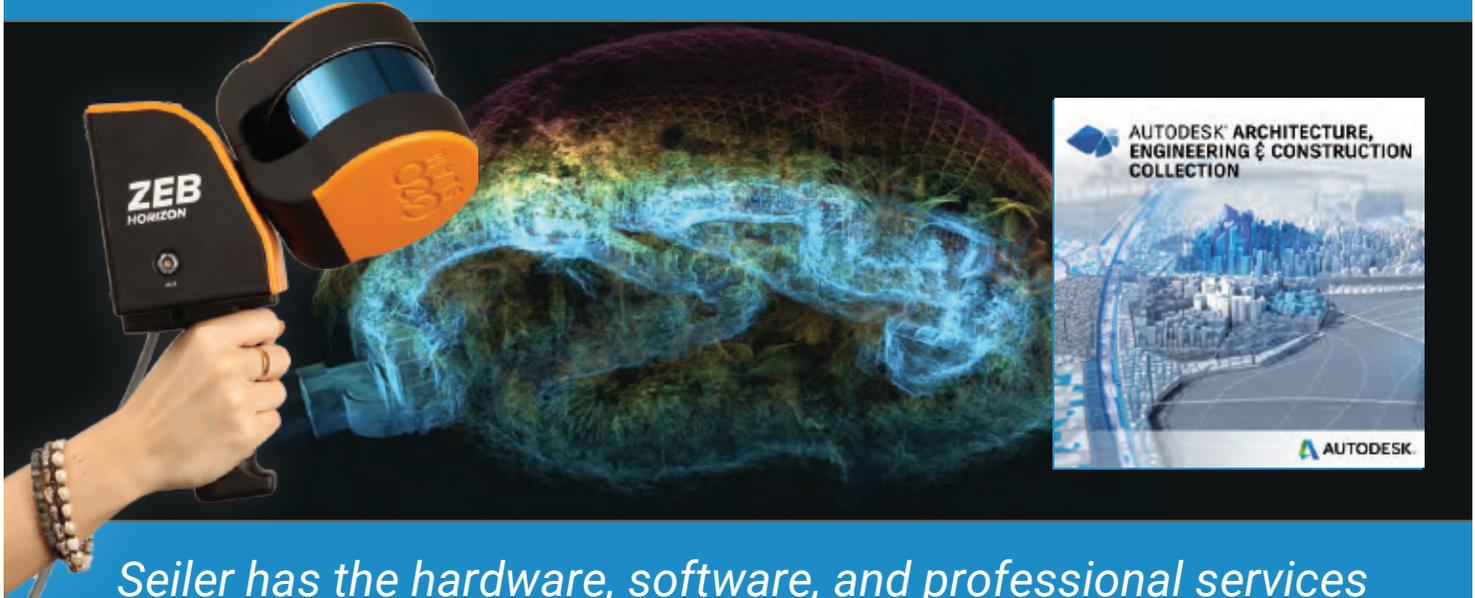


The University of Florida team poses with surveying tools. Pictured (L to R): Karol Hernandez, Gabe Hancock, Justin Thomas (Advisor), Kenneth Dell, Andrea Slaven, Isabel Dupee, Jacob Suarez. (Image credit: NOAA Heritage)

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Surveying Competition... *(continued)*

To attract potential future practitioners, Heck and others recently revamped the 20-year old national student surveying competition to be mainly a hands-on, in-the-field experience. This year, that meant surveying for guide points around the Capital's monuments. Students were given extra points for coming in period-specific costumes as a way to emphasize the long history and legacy of the work.

The guide points are mostly small metal discs set into the sidewalk or other pieces of infrastructure around the Mall, and they help NGS to synchronize all of their official maps. But one guide point known as "Bench Mark A" is hidden under a manhole cover next to the Washington Monument and is actually a 14-foot tall replica of the obelisk itself.

This mini-monument rests on the ground surface that was exposed when the big monument was built. It served as an architectural model and a survey mark during construction of the big monument. The hill that is now the ground surface around the full sized Washington monument was built up afterwards, and the mini-monument was encased in the brick well and covered by the man-hole.

The manhole cover was removed for the day of the competition and the students were given a rare look at the mini-monument. To connect the past with the future, volunteers from Dewberry's survey department brought cutting edge laser scanning equipment to survey this historic monument while the cover was off.

For the competition, students were also judged on their ability to make precise field measurements around the Jefferson Pier, a stone that marks the location that the nation's third president lined up the front door of the White House with the Capitol rotunda in the hopes of establishing the country's own prime meridian line in 1804.

Grading was based on a combination of total points for survey markers found during the scavenger hunt day and accuracy of measurements and computation of final answers during the field exercises. Professionalism was also included in the grading, with bonus points given for period dress.

Aniyea Dickerson from Klein Collins High School in Houston, Texas said that the best part of being in the competition was coming to D.C, where she hopes to one day attend Howard University. She also liked learning about a possible career and enjoyed using the old tools.

"We saw photos and we were told, 'You'll be using this.' We were like: how do you use it? They said, "We don't know, we haven't ever touched it. It's very rare'," Dickerson said with a laugh. The competing teams first saw the actual equipment the night before taking them in hand out in the Mall.

"These exercises focus on the fundamentals, encouraging the students to be problem-solvers who understand how the processes work, and not just button pushers," said Heck. "Besides that, they get a really cool experience by exploring our nation's capital."

The veteran surveyors seemed to get a needed morale boost as well.

"As corny as it sounds, it's great to see the future of surveying out here," said Jack Larter, a competition judge and Cartographic Technician for NOAA's National Geodetic Survey. 🇺🇸

In Memory of Donald Harvey Moore November 14, 1936 – May 4, 2023

Heaven became happier, May 4th, when Don, in the presence of God, his wife, Judy, his son, Eric, and brother-in-law, Joe, passed away peacefully from his life of 86 years here to his eternal life, joining loved ones that have preceded him in death.



Don, son of the late Ruth (nee Congleton) & the late Lawrence Moore, brother of Marvin Moore and Ida Czapczyk, both deceased. Beloved husband for almost 62 years to Judith “Judy” (nee Ernst) Moore, loving father of their son, Eric Joseph Moore, and fun-loving uncle and great uncle.

With courage, a determined spirit and his well-known humor, Don fought a tough battle through his recent suffering. He will be missed dearly, now being in a better place where he endures no pain or suffering. He was simple, unpretentious, and faithfully loved. He provided for Judy and Eric. He was always a gentleman, and a ‘gentle man’ plus a fun-friend to so many. He never talked or bragged about himself; he was exemplary.

Don went to Chouteau Grade School, where he was the marbles champion in the city. Don attended Hadley Technical High School and was a great gymnast on their award-winning team. Afterwards he attended Washington University. Don and his bride Judy met at the Arena Roller Skating Rink 1957. Don did freestyle/figure skating and Judy dancing. They knew that were meant for each other and a love grew that lasted a life-time.

Don’s career began at Corrigan Company doing drafting, 1955-1959. He was in the National Guard during this time (1958 – 1963) as well. Moore worked in civil engineering and drafting at Rapp & Rapp Surveyors, 1959-1977. He was co-owner of Summa-Moore Inc., 1977-1986, then owned his own company, Moore Surveying Inc., 1986-2007, retiring January 11, 2007. He belonged to Missouri Association of Registered Land Surveyors and was a member of the Engineers Club of St. Louis.

A memorial Mass was held May 20, 2023, at St. Margaret Mary Alacoque Catholic Church in St. Louis. 🇺🇸

President’s Message (continued)

this: At the end of the day, there were a bunch of dull blades in the old trash barrel and three tired arms!

The lesson of this story to us at MSPS is this: Keep on Hacking-Sawing Away! Get a sponsor for our legislation next year, keep writing letters and emails and making phone calls, keep trying to recruit new blood into our profession, bug school administrators to present to the high-schoolers, be persistent (but not obnoxious), keep laying bricks - because “It Just Takes Time”.

In conclusion; the MSPS 2023 Annual Meeting is coming up at the end of September. We have a great lineup of speakers and topics so make plans to join me at the Oasis Convention Center in Springfield, Missouri! 🇺🇸

God Bless!

Ray

Missouri's Katy Trail and the Court of Federal Claims

by Steven E. Weible, PLS, July 2023

The Supreme Court of the United States had settled the matter. The National Trails System Act as amended in 1983 (Public Law 98-11, Section 208, 97 Stat 42), allowing the interim use of railroad corridors for recreational purposes, was a valid exercise of Congressional authority (*Preseault v. ICC*, U.S. Reports, Vol. 494, pg 1). The application of the legislation, however, might block or delay the recovery of property encumbered by railroad easements that would have been extinguished upon abandonment of the railroad corridor. This denial of recovery could constitute a taking of property rights without compensation. If a taking or denial of property rights did occur as a result of federal legislation, the United States would be liable for compensation under the Fifth Amendment to the United States Constitution.

Although the Supreme Court of the United States determined the constitutionality of the legislation, it did not determine whether or not its application created a liability for the United States to provide compensation. The Court recognized that not all rail-to-trail conversions would result in a taking of property rights, since the nature of the interest originally acquired by the railroad would be the determining factor. Railroad corridors were generally acquired in numerous parcels, so each parcel would have to be evaluated on its own merits and a claim for compensation pursued through the United States Court of Federal Claims.

The United States Court of Federal Claims shall have jurisdiction to render judgment upon any claim against the United States founded either upon the Constitution, or any Act of Congress or any regulation of an executive department ... (28 USC 1491(a)(1)).

Every claim of which the United States Court of Federal Claims has jurisdiction shall be barred unless the petition thereon is filed within six years after such claim first accrues (28 USC 2501).

A claim for compensation had to be filed in a timely manner after the claim first accrued, but it would take some court examination before it could be determined exactly when a claim first accrues. The case of *Caldwell v. United States* was the first to consider at what point in the railbanking process it is appropriate to initiate a claim for compensation.

When a railroad decides to abandon any part of its railroad line, it files an application with the Surface Transportation Board (STB), formerly the Interstate Commerce Commission. Standard abandonment proceedings are governed by the provisions of 49 USC 10903 (49 CFR 1152). If there has been no local traffic over the railroad line for at least two years and any overhead traffic on the line can be rerouted over other lines, the railroad may apply for an exemption from the standard abandonment proceedings under the provisions of 49 USC 10502 (49 CFR 1152.50(b)).

If a state, political subdivision or qualified private organization is interested in using the railroad corridor for interim trail use in accordance with the amended National Trails System Act, it must make a filing to that effect with the Surface Transportation Board. Under standard abandonment proceedings the filing is in the form of a "comment" or "request." For an exemption proceeding a "petition" is required (49 CFR 1152.29).

If the railroad agrees to negotiate an interim trail use/railbanking agreement with the trail sponsor, then the STB will issue a "Certificate of Interim Trail Use or Abandonment" (CITU), for standard abandonment proceedings, or a "Notice of Interim Trail Use or Abandonment" (NITU), for exemption proceedings. If a railroad is unwilling to enter into an interim trail use agreement, it cannot be forced to do so (*National Wildlife Federation v ICC*, 850 F.2d 694 (1988)).

The issuance of a CITU or a NITU allows the railroad to discontinue service, cancel any applicable tariffs and salvage track and material consistent with interim trail use and railbanking. The railroad and trail sponsor then have a set period of time to negotiate an interim trail use agreement. If agreement cannot be reached in this set amount of time, an extension may be requested. Once an agreement is reached, the STB is notified. The CITU or NITU remains in effect indefinitely as long as

the trail sponsor maintains its obligations under the National Trails System Act. If negotiations fail and no interim trail use agreement results, the railroad is permitted to fully abandon its line.

The Railway Company in the *Caldwell* case filed a notice of exemption to abandon its line on July 5, 1994. A trail sponsor came forward and a Notice of Interim Trail Use or Abandonment (NITU) was issued by the Interstate Commerce Commission (ICC) on August 31, 1994. Several extensions were granted before an agreement was reached and a notice to the ICC was filed on July 5, 1996. The actual transfer was executed on October 9, 1996 and filed for record on October 11, 1996. Plaintiffs filed their claim for compensation in the United States Court of Federal Claims on October 7, 2002 (57 Fed. Cl. 193 (2003)). That court determined the claim to be barred as untimely, not having been filed within six years of the date of the Trail Use Agreement. Upon appeal, the United States Court of Appeals, Federal Circuit, affirmed the decision of the Court of Claims, but for a different reason (391 F.3d 1226 (2004)). The Appeals Court made the following statements:

The taking, if any, when a railroad right-of-way is converted to interim trail use under the Trails Act occurs when state law reversionary property interests that would otherwise vest in the adjacent landowners are blocked from so vesting ... We conclude that this occurs when the railroad and trail operator communicate to the STB their intention to negotiate a trail use agreement and the agency issues an NITU that operates to preclude abandonment under Section 8(d).

*The issuance of the NITU is the only **government** action in the railbanking process that operates to prevent abandonment of the corridor and to preclude the vesting of state law reversionary interests in the right-of-way.*

(continued on next page)



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Missouri's Katy Trail and the Court of Federal Claims *(continued)*

Thus, the NITU operates as a single trigger to several possible outcomes. It may, as in this case, trigger a process that results in a permanent taking in the event that a trail use agreement is reached and abandonment of the right-of-way is effectively blocked ... Alternatively, negotiations may fail, and the NITU would then convert into a notice of abandonment. In these circumstances, a temporary taking may have occurred. It is not unusual that the precise nature of the takings claim, whether permanent or temporary, will not be clear at the time it accrues.

This decision was challenged by *Barclay v. United States*, 443 F.3d 1368 (2006), but it was reaffirmed by the United States Court of Appeals, Federal Circuit.

In the case of *Ladd v. United States*, 90 Fed. Cl. 221 (2009), a NITU had been issued, but negotiations failed and a trail use agreement was not reached. Plaintiffs filed a taking claim after the NITU was issued in accordance with the *Caldwell* decision, claiming they had been prevented from enjoying the unencumbered use of their property. The United States Court of Federal Claims dismissed the case, stating that no taking had occurred, since no interim use resulted. On appeal, the United States Court of Appeals, Federal Circuit, affirmed its former decisions in *Caldwell* and *Barclay*, stating that “where no trail use agreement is reached, the taking may be temporary ... However, physical takings are compensable, even when temporary” (630 F.3d 1015 (2010)). The decision of the Court of Claims was reversed and sent back for a determination of compensation.

The Katy Trail was realized when the Missouri-Kansas-Texas Railroad Company chose to abandon part of its corridor in Missouri in 1986. The Missouri Department of Natural Resources requested an interim use under the National Trails System Act as amended in 1983 and the Interstate Commerce Commission issued a Certificate of Interim Trail Use or Abandonment in April 1987. An interim trail use agreement was negotiated and the property was transferred later in 1987. Claims for compensation would follow as landowners adjoining the corridor were outraged at being denied the recovery of property occupied by the railroad.

Landowners opposing the Katy Trail took their argument to the United States District Court of Missouri, Eastern District, and were denied (*Glosemeyer v. Missouri-Kansas-Texas R.R.*, 685 F. Supp. 1108 (E. D. Mo. 1988)). Appealing that decision, they took their argument to the United States Court of Appeals, Eighth Circuit, and again were denied (*Glosemeyer v. Missouri-Kansas-Texas Railroad*, 879 F.2d 316 (1989)). They then recognized that the Katy Trail was not going away and the only option left was a claim for compensation in the United States Court of Federal Claims. Interested landowners were advised that Mountain States Legal Foundation would file a class action suit on their behalf. A few days before the six-year time limit expired, however, Mountain States informed landowners that it would not be able to file the suit as a class action.

Mountain States Legal Foundation did represent Maurice and Delores Glosemeyer, but the remaining landowners were left to scramble for other options. On the day that the six-year limit would expire in 1993, these remaining landowners were able to file a motion for certification of their case as a class action in the United States Court of Federal Claims (*Moore v. United States*, 41 Fed. Cl. 394, Action No. 93-134L (1998)). They asserted that there were over two thousand (2000) potential class members owning property along the Katy Trail. Action on this case was delayed pending a decision by the United States Court of Appeals, Federal Circuit, in *Preseault v. United States*, 100 F.3d 1525 (1996), being an appeal of a decision of the United States Court of Federal Claims.

(continued on page 22)



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Nominees for 2023-2024 Officers



President – Bob Anderson

Robert J. Anderson (Bob) is a fourth generation land surveyor. In 1993 he started his career working summers as a rodman for Anderson Survey Company. Following high school, he continued his career working full time and started taking classes at Longview Community College to pursue his professional career as a surveyor. In 2000, he was promoted to crew chief and he became a Land

Surveyor in Training in 2004. Continuing to gain practical experience and knowledge, he obtained his Professional Land Surveyor license in Missouri in 2010 and Kansas in 2016. He currently serves on the membership and legislative committees and is a director on the board of the Kansas City chapter of the Missouri Society of Professional Surveyors.

President-Elect – Chuck Quinby

Chuck Quinby originally From Northeast Ohio, Chuck joined the Army as a Field Artillery Surveyor at age 18. He earned his High School Diploma from Saint Louis High School in Hawaii, an Associate in Arts and A Bachelor of Science from the University of Maryland while on active duty. Progressing through the surveying “ranks” ranks as Chainman, Recorder, Instrument Operator, Computer and Party Chief he served in South Korea, Germany, Fort Bragg North Carolina, Fort Stewart Georgia and Fort Sill Oklahoma. He attained the position of Chief Surveyor in the 3rd Armored Division, customarily an E-7 positions while still an E-5. His service included being an instructor of Surveying and Land Navigation as well as a Training Developer before closing his Army career in 1993. Chuck began his civilian surveying career in Snyder Oklahoma as an Instrument Operator. Working his way back to Ohio he returned to school to enhance his transition from Army surveying to civilian land surveying at Columbus State Community College. An opportunity with ABNA Engineering brought him to St. Louis in 2001. He is presently Surveyor of Record at Engineering Design Source Inc. in Chesterfield Missouri. A four time President of the Saint Louis Chapter of MSPS, and their current Treasurer.

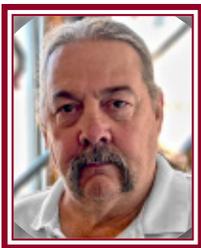


Vice President – Mark W. Wiley

Mark Wiley is a second-generation land surveyor with over 40 years of experience. He has extensive knowledge of the United States Public Land Survey system and topography in the St. Louis region.

Mark is active in the Missouri Society of Professional Surveyors (MSPS) and regularly leads classes / presentations for professional organizations including MSPS, the National

Business Institute (NIB), and the Illinois Professional Land Surveyors Association (IPLSA), and has authored numerous articles in the Missouri Surveyor Magazine publication. Mark is well-known and highly regarded in his profession and was recently awarded the MSPS Surveyor of the Year Award in 2019..



Secretary-Treasurer – Chris Ferguson

Chris Ferguson is the Boundary and Title Program Manager for the Mark Twain National Forest, headquartered in Rolla. The Forest covers over 1.5 million acres and is comprised of more than 7200 miles of Ozark boundary line throughout 29 counties mostly across the southern third of Missouri. He was previously a Forest Surveyor and Zone (District) Surveyor for the USDA-Forest Service for a dozen years. Until recently, Chris maintained Agency firefighter and law

enforcement qualifications. He has also had a temporary assignment as the Regional Surveyor for 16 Eastern Forests along with a detail as the Staff Officer in charge of Engineering, Geology, Realty, and Boundary Management. Prior to that, Chris began his surveying career by enlisting in the U.S. Marine Corps and served over 23 years in active and reserve status. He retired following a decorated career over numerous campaigns as the senior Artillery Survey Officer in the 4th Marine Division. Meanwhile, Chris worked his way from rodman to manager while at various St. Louis Metro firms. He later branched out to run his own company for over a decade highlighted by notable projects such as Busch Stadium, STL-Lambert International Airport Expansion and the Gateway Arch grounds.

Since working for the Agency, Chris has also surveyed several large projects for the Department of Interior (US Fish & Wildlife Service and National Park Service) throughout the state being especially pleased with defining the boundaries of two new Wildlife Refuges in St. Louis and St. Charles counties. Along with Missouri registration, Chris holds licensure in other Midwestern states remaining active in Kansas and Arkansas and is also a Certified Federal Surveyor (CFedS) and a Certified Floodplain Manager (CFM®). He is immensely proud of being an involved member of MSPS, having been the St. Louis Chapter President (2004) and serving on or chairing various committees over the last 25+ years. Chris has also been particularly honored to contribute to APEPLSPLA Registration Board projects and provide subject matter review to Dr. Elgin's latest book. Occasionally, he enjoys writing historical articles for the Missouri Surveyor.

Although eagerly looking to retirement in a couple of years to finally spend more time with his lovely wife Beth and their grown kids - and now grandkids (along with uninterrupted hunting, fishing, golf and time on the farm), Chris is ready to give back to the profession that has given him so much opportunity and welcomes this chance to serve as your Secretary/Treasurer.

Secretary-Treasurer – Kirk Baldwin

Kirk Baldwin is a Professional Land Surveyor licensed in Missouri, Kansas, Iowa and Kentucky. He graduated from the University of Central Missouri in 1991 and began his surveying career shortly after in Forsyth, MO, as a greenhorn rodman and eventually moving to an Instrument-man position after much training from his mentors. After spending roughly, a year in Forsyth, Kirk continued his survey career in the Kansas City area going from the instrument-man position to a party chief position. Kirk worked roughly 8 more years as a party chief and CADD Technician while taking his required courses for licensure in the State of Missouri. In 2001, Kirk obtained his Missouri license to practice land surveying and then obtained his Kansas license a year and half later. Taking a short hiatus from surveying from May 2003 to March of 2005 to work as a conductor and engineer for the BNSF Railroad. In March of 2005, Kirk returned to the profession of land surveying to lead the survey department as a small firm in Lees Summit, MO as well as be an adjunct instructor at Longview Community College, teaching Evidence and Procedures for three years. Kirk has held multiple



positions in the survey community, which include Vice President of Land Survey for Missouri Valley Engineering and Surveying. Survey Manager for Cook, Flatt & Strobel. Survey Manager and Division Leader for TranSystems Corporation. Project Manager for Westwood Professional Services to his current position as Project Manager for SAM Companies. Over his 32-year career in the survey profession, Kirk has performed

or been a part of many large scale survey, including Railroad right of ways surveys, Highway right of way surveys, wind farm surveys, solar field surveys, electrical transmission surveys and a multitude of ALTA/NSPA Land Survey surveys throughout the Midwest. Now Kirk enjoys mentoring young surveyors coming up in the professional to help them gain knowledge and understandings in their quest for licensure.

Nominees for 2023-2024 Board of Directors



Brian D. Viele

Brian Viele graduated from Southwest Missouri State University in 1983 with a BS in Geology and began his surveying career in 1984 at Moore & Wolfenbarger in Springfield, Missouri. He earned a Missouri PLS license in 1992 and served as Vice-President and Survey Manager at the Howard Moore Group, owned and operated Landmark Surveying and Consulting, LLC in Springfield from 1996 to 2010, then joined Great River Engineering as its

Director of Surveying where he is currently employed. In addition to his production work at Great River Engineering (GRE), Brian coordinates surveying activities for GRE offices in Springfield, Kansas City, St. Louis, Branson, and Jefferson City. Brian has been active in MSPS over the years, twice serving as President of the Ozark Chapter, and was an instructor at Missouri State University where he taught surveying courses for 12 years. He is also an Arkansas Professional Surveyor and a Missouri Registered Geologist. When time allows, Brian enjoys music, gardening, mountain hiking, rock collecting, and entertaining his five grandchildren. He resides in eastern Greene County with his wife of 42 years.

B. Austin DeSain

Mr. DeSain grew up surveying at the family business, learning the fundamentals of business and surveying in both the field and office for all types of projects. Familiarizing himself for nearly 3 decades now with field & office equipment, and new software and technology. Austin has worked at Clayton Engineering for 18 years, has been the President of a self formed community development 501c3, owner of 2 LLCs, is currently the Technology Director of the St. Louis Chapter of MSPS, overseeing the migration, launch and maintenance of the website & connected platforms. He graduated from St. Charles Community College with an Associates Degree in Business Management, followed by survey coursework from the University of Wyoming. A first round Missouri CST (NSPS) recipient, presented by the first Missouri State Land Surveyor Bob Myers. Becoming a Licensed Professional Land Surveyor and eventually the Survey Manager and Vice President of The Clayton Engineering Company, where he oversees a survey department and manages a variety of legal, boundary, ALTA and topographic surveys with a range of small to large construction projects, primarily from private clients. Part of the job is the digitizing and oversight of nearly 200 years worth of private plats, surveys and books. Austin is a hobby historian, traveler, husband and father.



Kellan Gregory

Kellan Gregory was first introduced to land surveying by his father. At the time, his dad oversaw the construction of a new addition to the Ford Motor Plant in Claycomo, where he got to know the surveyors doing the staking. Knowing of his son's love of the outdoors and proficiency in math and science, his dad suggested he consider it as a career, and it was

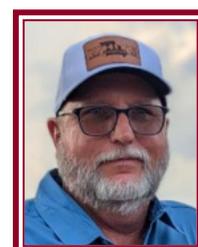


a perfect fit. Kellan enrolled in the Land Survey Program at MCC – Longview and graduated with an Associates in Applied Sciences – Land Survey degree in 2004. After several years of study and gaining experience, he earned his Missouri Professional Land Surveyor license in 2011 and just recently celebrated his 20th year in the industry. His career has centered around the civil engineering field, supplying survey services on a myriad of stormwater, water/wastewater, aquatics,

and transportation projects. He is now the Survey Practice Lead of Lamp Rynearson's Kansas City office. Kellan currently serves as the Young Surveyors Committee chairman with MSPS and is a former director of the KC Metro Chapter. He is also active in his local church as a Sunday School teacher, and in his free time, enjoys getting out to do some hunting, fishing, and trapping. Kellan currently resides in Cass County with his wife and their three children.

Aubrey Meyer

Aubrey is a Professional Land Surveyor at Affinis Corp where he has worked for his entire 21 years in the profession. Aubrey was born and raised in the Kansas City Metro and has always had an interest in construction and engineering since a he was a child. In 2001 he was presented with an opportunity to be hired on as an entry level field surveyor at Affinis Corp. With this opportunity, he immediate began working away at the requirements to become licensed. Licensed in Missouri in 2007 and Kansas in 2012, Aubrey has become a key person and is involved in nearly every project that is performed at Affinis. Over the years Aubrey has been involved with and volunteered for many community charity organizations in the Kansas City Metro. He currently lives in Lee's Summit, Missouri with his wife of 14 years, Kristen, and their two children, Owen (5) and Evelyn (2). In his free time, Aubrey enjoys spending time at the lake, boating, and fishing, and taking on new adventures with his family.



Michael White

Michael White began surveying in 1985 and was licensed in Missouri in 1994. Is the past President of the Ozark Chapter of Missouri Society of Professional Surveyors and currently serves on the Executive Committee of the Ozark Chapter of Missouri Society of Professional Surveyors. He is the owner of White Land Surveying, LLC, August 2002 to present and serves on the Christian County Missouri Planning and Zoning Commission, 2018 to Present. When he is not surveying he enjoys spending time with family (mainly my two Grandsons!), serving his church, golfing and playing guitar (old country and bluegrass music) as often as possible and for anyone that will listen.

Missouri's Katy Trail and the Court of Federal Claims *(continued)*

When the Court resumed its consideration of whether or not to certify the case as a class action, it identified the following eight criteria:

- (1) whether the potential litigants constitute a large but manageable class;*
- (2) a common question of law is present;*
- (3) that [a] common issue predominates over any separate factual issues affecting individual members;*
- (4) the claims of the present plaintiffs must be typical of the claims of the class;*
- (5) the government must have acted on grounds generally applicable to the whole class;*
- (6) the claims of the class must be so small that it is doubtful they would be otherwise pursued;*
- (7) the current plaintiffs will adequately protect the interests of the class; and*
- (8) there is risk of inconsistent adjudications if individual actions were maintained separately, some in district court and some in this court.*

More generally, class actions are appropriate only where they serve the interests of justice. [at page 397]

The Court decided that the case was well-suited for class action treatment. It, therefore, certified the action on July 2, 1998 as a class action on an “opt-in” basis. The class was to “consist of landowners whose property is burdened by the Katy Trail.” Potential class members were to be notified and those interested in joining were required to file a “Notice of Appearance.”

The Notice of Appearance shall have attached to it documentation that establishes (1) ownership of the parcel of land in question, (2) an affidavit that the parcel of land is presently burdened by the Katy Trail, and (3) proof of the property interest conveyed to the railroad. [footnote 4, page 401]

The government may contest the eligibility of any individual to join the class on the grounds that (1) the individual is not the fee owner of the burdened land, (2) the interest conveyed to the railroad contains no limitation and was in fee simple absolute, (3) the supporting documentation attached to the Notice of Appearance is inadequate, or (4) any other similar reason. [at page 401]

These preceding court actions had been specifically for those landowners adjoining the Katy Trail from Machens in Saint Charles County to Sedalia in Pettis County. There was, however, a separate abandonment proceeding in progress for the section of Missouri-Kansas-Texas Railroad corridor from Sedalia to Clinton in Henry County. The MKT had merged with Missouri Pacific Railroad Company in December 1989 and a Certificate of Interim Trail Use or Abandonment was issued in April 1991, so that Missouri Pacific could negotiate for an interim trail use agreement. An attempt was made to add landowners adjoining this second segment of corridor to the original class action suit, but the Court of Federal Claims denied this request, noting that it was both untimely and inappropriate (*Moore v. United States*, 42 Fed. Cl. 595 (1998)).

The Court of Federal Claims cases of *Glosemeyer v. United States*, Action No. 93-126L, *Moore v. United States*, Action No. 93-134L, and *Grantwood Village v. United States*, Action No. 98-176L, were consolidated for the purpose of resolving common issues of federal and Missouri law (45 Fed. Cl. 771 (2000)). The Court determined that interim trail use in

accordance with the amended National Trails System Act did not constitute a railroad purpose under Missouri law where an easement had originally been acquired for railroad purposes only. Such an easement would have been extinguished whenever the use for railroad purposes ended. Therefore, delaying abandonment of the corridor and allowing interim use for recreation created a new easement for which compensation is required. The cases were then unconsolidated for further action.

For the class action suit of *Moore v. United States*, Action No. 93-134L, two hundred and ninety-eight (298) landowners opted into the class. The properties were grouped into categories and a representative parcel from each category was presented for examination by the Court with the intention that the decision on a representative parcel could be applied to the other parcels in the same category. A bench trial was conducted in Saint Louis, Missouri from November 12 through 22, 2002 on thirteen (13) representative parcels (54 Fed. Cl. 747 (2002)). The parties and the Court conducted a site visit of the representative parcels and then fact and expert witnesses were presented to show the competing views as to the value of the easement taken.

The Court described the procedure for determining the amount of compensation as follows:

It is settled that a landowner claiming a physical, partial taking of property is entitled to the difference in value before and after the taking. In this case, each landowner suffered a partial taking in two senses. First, the new easement is less than the fee estate. Second, the new easement potentially negatively impacts a larger piece of land than the right of way itself. This is known as severance damage and constitutes a pedigreed element of compensation, assuming it can be proved.

The calculation, therefore, involved “a determination of the fair market value of the entire affected parcel as if the easement did not exist and then another determination in light of the taking.”

Each parcel was appraised to determine a highest and best use and the acreage was determined. There was some disagreement about how the right-of-way parcels should be evaluated, but the Court decided “*the right of way parcel should be diminished 100% in the “after” analysis because the landowners had no effective remaining use of the property ... Accordingly, the parties should value the land underlying the right of way in the “after” calculation at zero.*” Where there was inconsistency in the values presented by each side, the court determined a compromise value, often by averaging the acreage calculations and taking the higher per unit land valuation. Compensation for the thirteen (13) representative parcels was fixed to facilitate settlement of the remaining claims.

Based on this representative determination, the parties agreed on the amount of compensation for a total of two hundred and eighty (280) claims out of the two hundred and ninety-eight (298). In a further proceeding of *Moore v. United States*, 58 Fed. Cl. 134 (2003), the Court of Federal Claims examined and dismissed seven (7) claims. The parties were able to resolve the amount of just compensation for eight (8) more claims. In a subsequent proceeding of *Moore v. United States*, 61 Fed. Cl. 73 (2004), compensation was established for the three (3) remaining claims.

After twelve years of litigation in the United States Court of Federal Claims (1993-2005), a final proceeding was held in January 2005 to approve a final settlement in the class action suit (*Moore v. United States*, 63 Fed. Cl. 781). Judgment against the United States was entered in the total amount of \$5,065,820.62 (including \$4,065,820.62 for principal and interest and \$1 million for attorney fees, expert fees, and all other litigation expenses). The award was paid to the class action attorney for distribution to class members. Deductions from the award by the attorney of \$356,745.33 for litigation expenses and \$1.6 million for a contingency fee were approved by the Court. The remaining \$3,109,075.29 was distributed to the two hundred ninety-one (291) class members for which compensation had been approved. 🇺🇸

One Heavy Monument

by Scott Faenger, Missouri Land Survey Program

The Missouri Department of Agriculture Land Survey Program was notified in late 2022 that the “60th mile” cast iron monument had been knocked over and laying on its side. Originally placed in 1850, the monument is located one mile east of the Missouri River and on the line between Fremont County, Iowa and Atchison County, Missouri. The monument is cast iron; 5-feet in length; 12-inches at the base, tapering up to 8 inches at the top; with an estimated weight between 1,500 – 1,600 pounds.



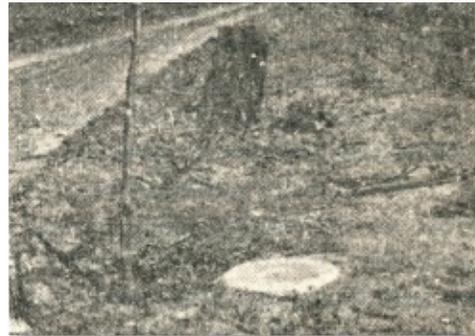
As found in October of 2022, photo is looking south.

MDA Land Survey team members worked with local officials and the Missouri Department of Transportation to reset the monument in April 2023. The position of the monument was restored using the coordinates from Missouri Land Survey Corner Document 600-76010, Troy L. Hayes, LS 2219, of Midland Surveying.



Drill rig crane lowering monument into position after digging hole.

Three of these larger monuments exist along the north boundary of the state. The three monuments are located at the west corner at the Missouri River (1 Mile east of the river), the east corner at the Des Moines River, and at Sullivan’s original northwest corner of the State (60 miles east of this corner). Between these corners are smaller pillars weighing 300-400 pounds each, placed at 10-mile increments on the border between Missouri and Iowa. It appears that the monument has been leaning since the 1940’s, based on a photo published in the 1943 book titled Original Instructions Governing Public Land Surveys of Iowa, “Dodds.” (see attached photos.)



The “60th mile” cast iron post described on p. 472 still stands in the highway, about a mile east of the Missouri River, on the line between Fremont County, Iowa, and Atchison County, Missouri. The view at the left is looking north; at the right looking east, with U. S. Coast and Geodetic Survey marker in foreground.

The 1850 field notes: Original notes Missouri and Iowa BoundaryWest on a parallel of latitude..... 60th mile. @ “80 chains set cast iron monument the words “State Line” facing the East and the word “Iowa” facing the North and the word “Missouri” facing the South. The ground here is high, affording a much more appropriate site for the monument than the terminus on the bank of the Missouri River, where the land is extremely liable to wash and is frequently overflowed.”



Monument buried about one foot below surface, witness post with sign was set two feet south. The monument along with the witness post and sign are on the edge of the road and the edge of an agriculture field.

(continued on next page)

One Heavy Monument *(continued)*

Interesting notes from the 1972 Mann survey - “The Mile 60 cast iron monument was observed to be tilted differently than shown by a photograph on page 502 of “Dodds,” published in 1943. Mr. Lucian Smith, a local property owner, stated to Mr. Dukes and his party that, years ago, a local farmer had removed the monument and dumped it in the Missouri River and that the same person later felt guilty about his action, recovered the monument and reset it. The monument as now found is in the same relative position shown by the “Dodds” photograph. It was concluded the monument had been reset in the same hole from which it had been removed and that a vertical line extended from the center of the monument base could be accepted as the true position of Mile 60. This restoration of the monument was accepted by the office of the Missouri State Land Surveyor”..... On April 11th Mr. Dukes, his party and Mr. Mann met at the mile 60 site with Mr. Norman Brown R.L.S. Missouri, and his assistant, Mr. Mike Flowers, for the purpose of establishing the state line westward of mile 60. They go on to set the 61 Mile marker a concrete monument with brass cap marked Iowa-State Line – 61- Missouri. We attempted to go to this location however the position is on an island now.



Monument buried about one foot below surface, witness post with sign was set two feet south. The monument along with the witness post and sign are on the edge of the road and the edge of an agriculture field.

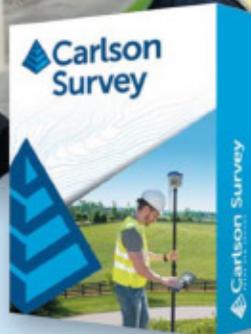
The monument was reset below grade to keep it from being hit with farm equipment or road graders. Many thanks to MODOT – Northwest District for their assistance in resetting the monument, specifically Stephen D. Miller – District Land Survey Manager, Francis Duncan, Jose Madera and crane operator Scott Witkowski and crew, who made possible the difficult task of digging a six-foot hole and lifting the monument into position. 🇲🇴



Left to Right: Scott Faenger, Jason Beasley, Sebastian Hodge-Stains, Stephen Miller, Jose Madera, Scott Witkowski, Bryan Dorrel. Not pictured and taking photo Francis Duncan

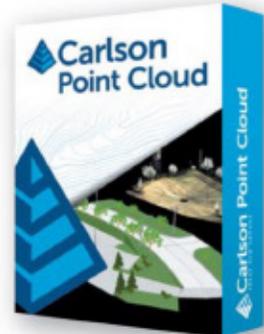
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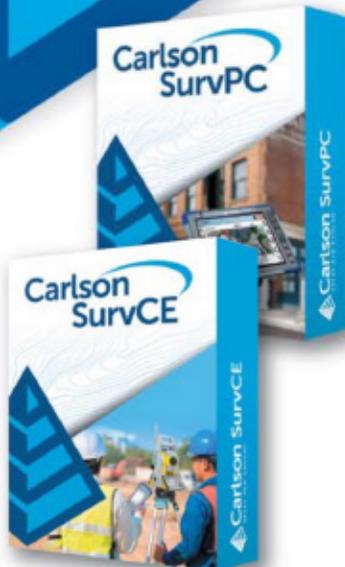
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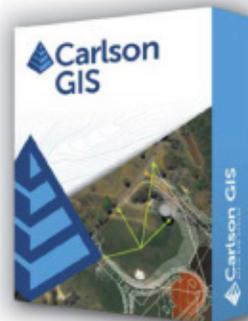
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The Soulard Stones

by Dr. Ryan Johnston D.C., July 1, 2023

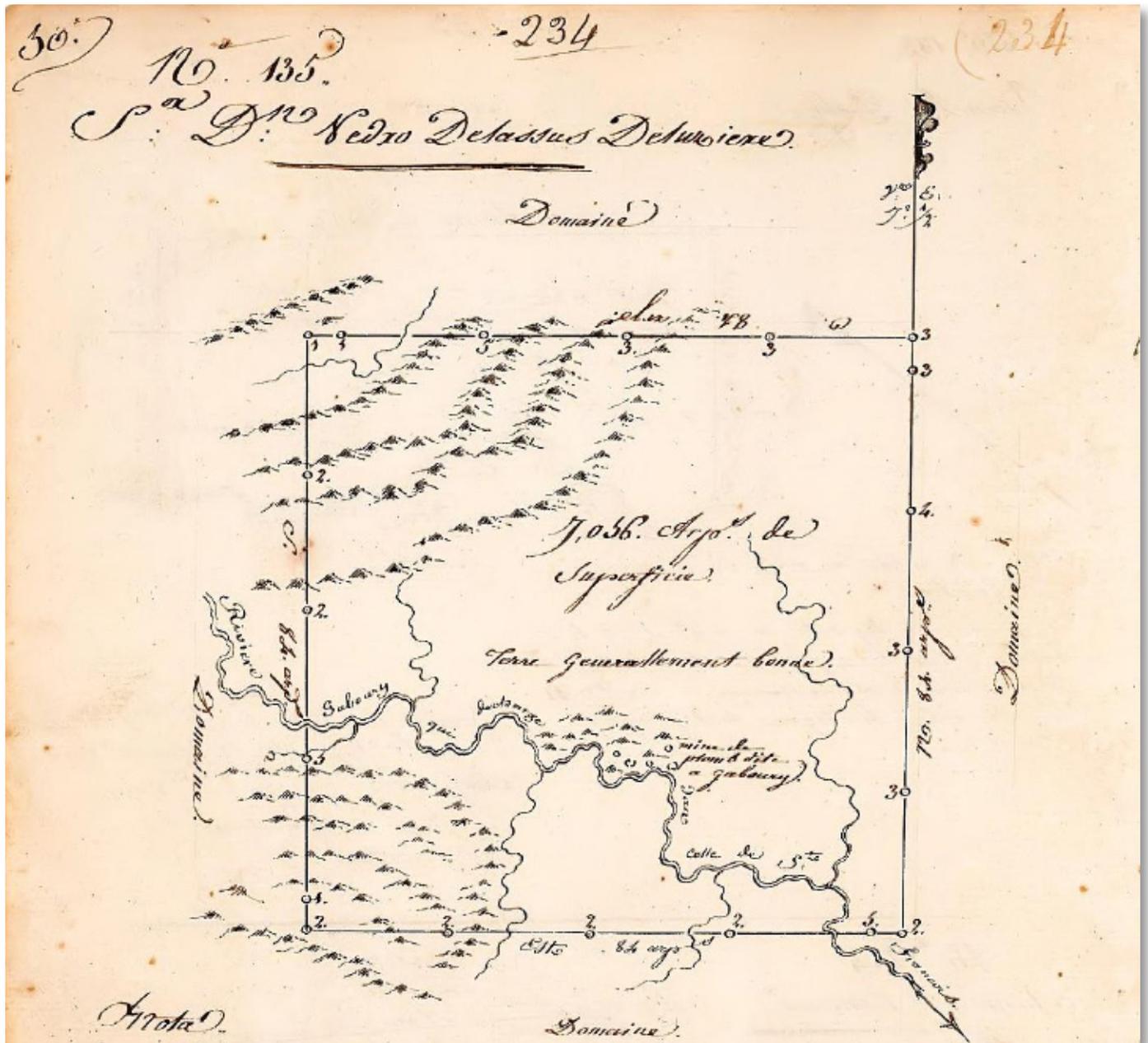
“When I found the Soulard map, I felt like I’d found a treasure map!” Dr. Ryan Johnston exclaimed. “It was winter of 2022-23 and I’d been working on a photography project in Farmington, Missouri as a local barn was taken down after being purchased by the hospital. While researching the history of the property, I learned that it was once part of a larger Spanish land grant given to a French nobleman. My family and I took it on as a homeschool history project, and that’s how the discovery of the Soulard stones began.”



Dr. Ryan Johnston and his three children the day they discovered the first Soulard Stone

Pre-dating any other land claim in the area, on April 1, 1795, Don Pedro Carlos Dehault DeLassus DeLuzieres was granted this land by Zenon Trudeau, Lieutenant Governor of Upper Louisiana. Originally part of a larger tract of land measuring one league square, (equal to 7056 arpents or approx 6,000 acres). It was given to De Lassus for the exclusive exploration of ancient lead diggings known to have existed on the property, in addition to cultivation and raising of cattle. The Commandant of Ste Genevieve, Francois Valle, gave his recommendation for approval of the request and reported to Lieutenant Governor Trudeau on March 10, 1795, that the size of the land grant at one league square was indispensable to the request in order to obtain sufficient timber and other supplies necessary for the anticipated log furnace lead smelting. Lieutenant Governor Trudeau granted the request on April 1, 1795 and DeLassus was put in possession of this land by Valle on April 15, 1795. The property was mapped by the famous Surveyor General of Upper Louisiana, Antoine Soulard,

on December 14, 1799 and recorded on March 5, 1800 as one of the 710 surveys that make up his historic Soulard Surveys Registre D'Arpentage which was created between 1798 and 1806. [1], [2]



Soulard land survey for Pedro De Lassus Deluziere (Courtesy of the Missouri State Archives)

According to the Missouri State Archives, the purpose of the Soulard Registre was to certify and locate the land grants made by the French and Spanish governments. At the time, Soulard worked for the Spanish government but wrote in his native language of French. After the Louisiana Purchase, he was appointed Surveyor General of Upper Louisiana and continued his Registre in English. [3]

(continued on next page)

The Soulard Stones (continued)



Soulard display at the Missouri History Museum

Don Pedro, or as he was known to his French countrymen, Pierre Charles Dehault DeLassus Deluzieres, Grand Cross Chevalier (Knight) in the Royal Order of St. Michael was a significant individual in the early history of Missouri. In France, he served as Advisor to the King in the Court of his cousin, Louis XVI. During the French revolution of the late 1700s that would see the fall of the French Monarchy, the DeLassus family fled Europe to avoid facing the guillotine. After a short stay at the failed French colony in Gallipolis, Ohio, DeLassus settled in Pittsburgh, PA for several years before relocating to New Bourbon along the Mississippi River. He arrived there in August 1793 and immediately began recruiting other French settlers to join him. One of those French settlers was Soulard, who DeLassus viewed as an adopted son and sponsored upon his arrival in Upper Louisiana in 1794. As a stipulation of his relocating to the Louisiana Territory, Governor Carondelet promised DeLassus a land grant, which he fulfilled in 1795. With his recruiting efforts paying off, In 1797 DeLassus was appointed the civil and military Commandant of a newly created New Bourbon administrative district. This district was taken from sections of the Ste. Genevieve District to the north and the Cape Girardeau District to the south. [4]

Dr. Johnston says, “The original DeLassus vertical log cabin which once stood on the bluffs of New Bourbon has been moved down the hill and expanded into a two story farmhouse by subsequent owners over time. It is now part of Ste Genevieve National Park and is part of a preservation effort aimed at saving this historic structure, which was damaged during the flood of 1993. That flood resulted in the first and second floor porches being washed away and caused damage that has now bowed out the front wall. The National Park is conducting a multi-phase stabilization of the property. One option being considered is reducing the structure back down to the original vertical log cabin for preservation.”



The relocated De Lassus vertical log cabin in New Bourbon, MO now owned by Ste. Genevieve National Park

(continued on next page)

The Soulard Stones *(continued)*

Becoming interested in survey and cartography while working on a survey crew in 2001-2002, Dr. Johnston recalls, “I had the opportunity to do some field work on an old mine survey in the Potosi area that gave me a real appreciation for surveying. During that job, an old surveyor told me that the corners of old properties are the most interesting places to visit. That always stuck with me.” With advances in digital satellite imagery and available GIS map databases, Dr. Johnston was able to overlay today’s neighborhoods with the Soulard survey. Next, he and his family translated the French field notes to learn that Soulard placed stone markers at specific locations along the perimeter of his survey. On the first stone marker, Soulard indicated that he carved the land owner’s initials DL. [2]

With a compass, a map, and a target, Dr. Johnston and his family set off on a sunny February afternoon to physically locate the starting point of this survey which is now located on St. Joe State Park property. The hunt was a success! They were able to locate the stone marker, and because of its historical significance reported it in March 2023 as a new archaeological site with the Missouri Department of Natural Resources. The stone itself is a hand carved block measuring approximately 14in long X 14in wide X 7in above ground level with a weathered carving on the top surface. It is located in a remote section of St. Joe State Park in a dense forest surrounded by a now wild garden of yellow “Lent Lily” daffodils, a garden plant native to old world France. The uniquely drawn L is still visible exactly as indicated by Soulard. [2], [5]



Stone marker indicating the starting point of the Soulard survey performed in 1799 for DeLassus

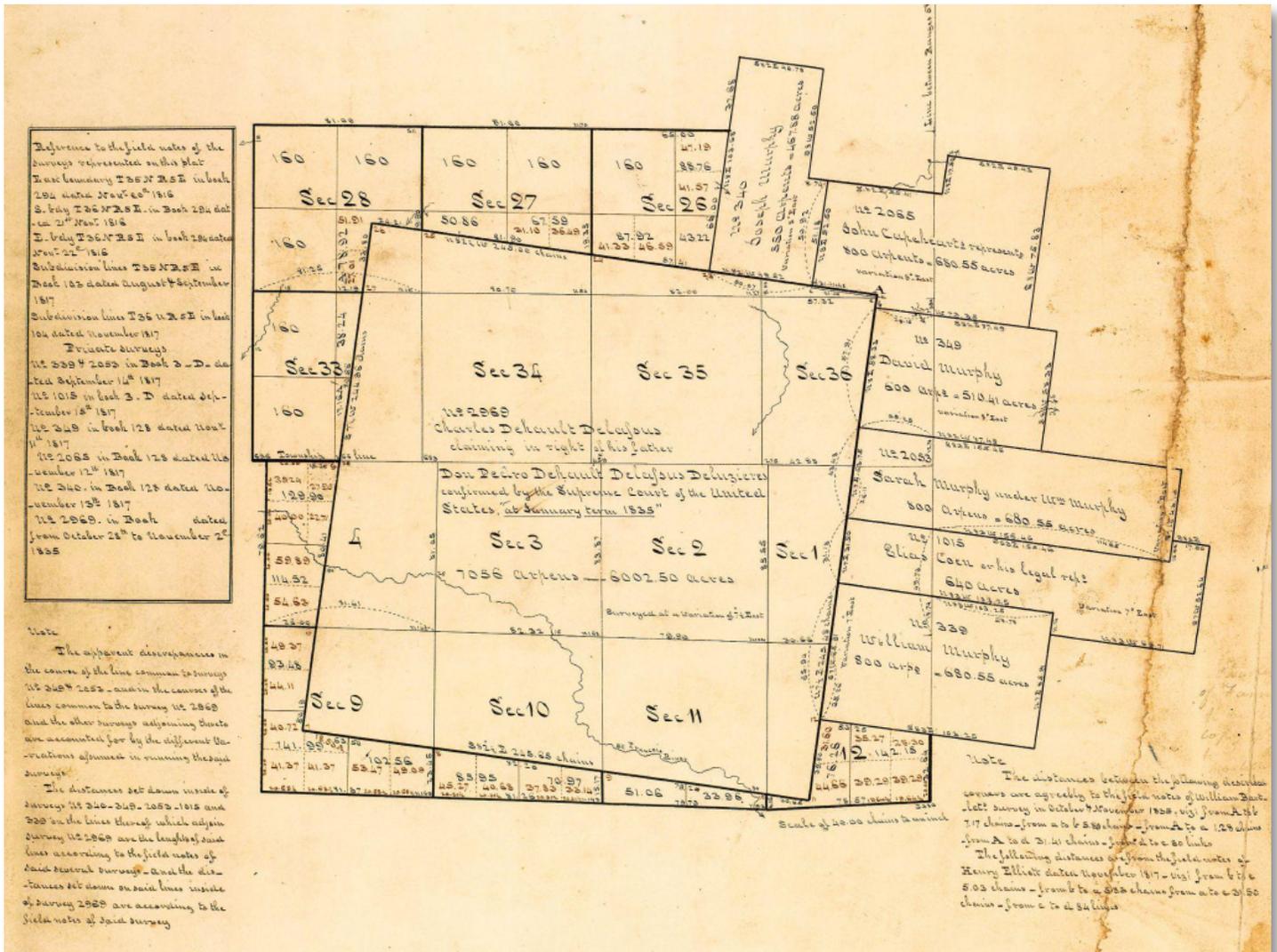
As the hunt continued, a second hand carved stone marker was identified measuring 12in long X 4in wide X 4in above ground level set securely in the ground and located exactly where indicated by Soulard on his Survey. The second stone marker is of similar age, material, and condition. The carving on the top surface depicts two distinct lines intersecting at right angles creating a cross or “+” symbol. [2]

In 1798, Reverend William Murphy, a Baptist minister, came to New Bourbon with his three sons David, Joseph, and William (Jr.) from Tennessee. They approached DeLassus, as the Commandant of New



Additional stone marker placed during the Soulard survey performed in 1799 for DeLassus

Bourbon, about settling in his district. At this time, the Spanish government was trying to increase the number of farmers and individuals with skilled trade within the territory. With their experience farming, Reverend Murphy's request to settle was approved and he, along with three sons, were each granted a property bordering the DeLassus land grant. Approved by Lieutenant Governor Zenon Trudeau on March 1, 1798, These four properties were surveyed by Antoine Soulard in 1800 and are included in the historic Soulard Surveys Registre D'Arpentage. On their return trip to Tennessee to retrieve the rest of the family, Reverend Murphy passed away. According to Sarah Murphy's sworn testimony, after her husband passed away, she sent one of her younger sons to settle the land on December 20, 1803, and raise a crop there with his family. Sarah and her family, together with three slaves, arrived in 1804. DeLassus verified this arrangement with a certificate letter granting special permission of settlement to the Murphy family on December 20, 1805. The area soon came to be known as the Murphy's Settlement and eventually Farmington. [6], [7], [8], [9], [10], [11]



Conway (1847) survey showing the Murphy land grants in relation to the older and larger DeLassus land grant [12]

Although no grave location is known, Catholic burial records kept by the St. Louis Archdiocesan Archives in Shrewsbury, MO show that just before the winter solstice on December 21, 1806, the body of Pierre-Charles Delassus de Luzieres, former civil and military commandant of New Bourbon was buried in the cemetery at Ste. Genevieve. [4], [13]

(continued on page 36)

Thoughts on Professional Practice and Education

Article 10: Professional Partnering with Surveying Programs

by Knud E. Hermansen[†], P.L.S., P.E., Ph.D., Esq.

This is the tenth article I have prepared in the series offering thoughts on professional practice and education. In this article I advocate for a close partnership between professional members and the regional or state surveying programs.

In preparing this article, I draw on over thirty years of teaching in surveying studies. I have taught courses at Penn State University, University of Maine, Florida Atlantic University, and Florida State University. Each is different. All have strengths and weaknesses. With more than fifty years of practice, I have been a member of several state professional societies and national professional societies. I have maintained active professional consultation throughout my careers as an educator and military member.

I begin with the premise that I believe a surveying program should be a professional program. By professional program I mean a program that offers a focused education providing graduates with skills that are both practical and applicable - a program that pointedly leads to a career as a licensed professional. Examples of other professional programs at the bachelor of science degree level include nursing, accounting, and engineering.

I believe the focus of a survey program is to provide skilled graduates able and willing to enter the profession of surveying and take on typical surveying services soon after graduation. I strongly believe the graduate of a surveying program should be knowledgeable enough to begin practicing with competency in the profession of surveying upon graduation. The graduate should have the skill set to provide an employer with knowledge and efforts that will be profitable for the employer's business.

In previous articles, I have spoken about faculty qualifications so I will not speak in depth on that topic in this article. Suffice to say that knowledgeable, experienced, and qualified faculty are not always able to stay abreast of what an employer would prefer that a graduate should know and possess. Many faculty lack practical knowledge while often exceling in research

knowledge. Yet, it is the practical knowledge that is much more important to the employer than cutting edge research knowledge. The reason for this disparity in faculty focus is not necessarily the faculty member's fault. University administrators are apt to focus their attention and efforts on increasing the money flowing into the university rather than upgrading the knowledge of graduates leaving the university. For state institutions, much emphasis is placed on obtaining research grants. Faculty promotion and tenure is often tied to research dollars. Hence, faculty focus their efforts on research rather than practice.

In order that students be taught practical and applicable knowledge, there should be a consistent and constant assessment of program courses, course content, and suggested course requirements. This assessment should be done by knowledgeable practitioners of the surveying profession. For ABET accredited programs, this is often done by an advisory committee mandated by ABET continuous assessment requirements.

Participation in this advisory committee is usually done by invitation of the program faculty. I will suggest that faculty invitations are not always sent to practitioners best able to assess or improve the program content for practical, relevance, and current knowledge. Many are the committees I have seen that seem to be composed of mostly alumni and retired faculty from the program. This makeup of an advisory committee is like asking grandparents, cousins, nieces, and nephews to look for faults in the family tree that are to be made public.

In my experience an advisory committee composed of practical and knowledgeable members usually provides a great deal of good, practical advice with the added bonus the members can be strong outside advocates of the surveying program when the program seeks donations or is thwarting attempts by the university administration to eliminate or modify the program into something useful for the administration but not necessarily for the program, the profession, or the employer of the graduate from the program.

A second method of assuring relevant and practical education of the surveying student is to assess and improve the success rate of students and graduates that take the fundamentals of surveying exam. I believe NCEES does a credible job of keeping the contents of the exam consistent with current practice due in large part by relying on licensing board members and professional input. However, if a program does not require students take the fundamentals of survey exam or use the exam scores for program assessment, this valuable source of assessment is wasted.

A much less effective manner of assuring relevant and practical education of the surveying graduate is through ABET program accreditation. By not fully lauding and embracing this avenue, I do not wish to discourage a program from seeking and obtaining accreditation or disparage ABET accreditation. The program content guidance available under common disciplines listed within ABET looks at a macro view of the surveying studies rather than focus on a micro view of professional needs. As an aside, I am not going to argue or encourage ABET take on a micro view by discipline.

Rather, I wish to make a point that ABET accreditation does not assure the program contents of an ABET accredited program are necessarily offering a relevant and practical education sought by the typical employer within the profession. The criteria that ABET accredited programs undergo continuous improvement and periodic assessment, often with the aid of an advisory committee, can help considerably with relevant and current knowledge if the assessment is taken seriously and aid sought from the profession through advisory committee members. I hope to write more about the benefits and limitations of ABET accreditation in another article.

Having given my opinion, I now offer advice by suggesting that yearly evaluation of program courses and course content be done by a committee composed of members of the profession. The committee should take on the role of friendly guidance – much like the bride’s mother for her daughter’s wedding. Then again, I may have used the wrong example given stories I have heard about the weddings of others where mothers went way beyond friendly guidance. I shall refine my parallel by adding so long as the bride’s mother is not allowed to take over the planning of the wedding itself.

Let me give some advice in detail. I think a committee is best composed of at least one active member of the state surveying profession that is supporting the program such as the immediate past president of the state society. If the surveying program is a regional program, a member from each state should be sought. Another member should be a current licensed member of the state surveyor licensing board.

All other members of the advisory committee should be employers or likely employers of the graduates from the program. Large multi-disciplinary firms and small firms should be well represented. Public and private sector employers should be represented as well. Donors or potential donors to the program should be welcomed as members. Someone that is willing to back their advice with donations are to be actively sought. For example, including a member that is an equipment supplier that generously donates up-to-date equipment to the program would be wise.

Some may fault the perception I have just ‘painted’ that membership on the committee can be bought. I would wink and nod while countering with a Jewish saying that: *“Life’s not as good with money as it is bad without it.”* Let me state the intention of this Jewish saying in other terms, *“A program that brings money to the university is less likely to be eliminated than a program that costs the university money.”*

† Other books and articles by Knud can be found at <https://umaine.edu/svt/faculty/hermansen-articles/> 



The Souldard Stones *(continued)*

DeLassus's son, Charles Dehault DeLassus, or Don Carlos as he was known to the Spanish, was born in France in 1764 and entered the Spanish military at 18 years old. While a Lieutenant, he led a charge of Spanish troops on Fort Elmo in 1793 which earned him the rank of Lieutenant Colonel. To be near his family, he requested transfer to the Upper Louisiana Territory where he was appointed as the Commandant of the post on the Mississippi River at New Madrid from 1796-1799. Notably, Lieutenant Colonel DeLassus served as the last Lieutenant Governor of Upper Louisiana serving from August 29, 1799 to March 10, 1804. He was serving in this position when the Lewis and Clark Expedition wintered in St. Louis in 1803-04. While in St. Louis, they witnessed the transfer of Upper Louisiana to the United States. William Clark noted in a letter to his brother on February 25, 1804 that Captain Amos Stoddard had arrived in St. Louis and when he arrived, Lieutenant Governor DeLassus informed him that he was ready to transfer Upper Louisiana to the United States. A great parade followed and dinner took place at the Lieutenant Governor's. During the Three Flags Day celebration, on March 9th and 10th, DeLassus served as the government official charged with handing over the territory with dignity to the United States, thus completing the Louisiana Purchase. [4], [13], [14], [15], [16], [17]

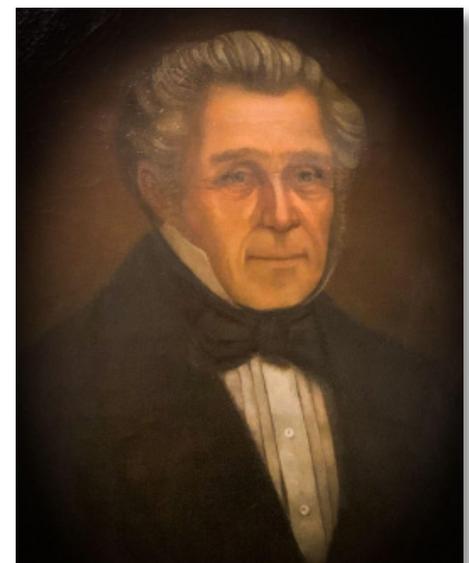
Following the Louisiana Purchase, in an attempt to prevent fraudulent speculation, Congress created a Board of Land Commissioners to confirm or reject the Spanish and French land grants that had been assigned at various points between 1680 and 1803. This called the DeLassus land grant, along with many others, into question. Following his father's death, Lieutenant Colonel Charles Dehault DeLassus asserted his inherited claim to his father's land grant while continuing his military service for Spain. In 1808 DeLassus was appointed Governor of the Spanish controlled region of West Florida until the September 1810, patriot led, West Florida Rebellion saw him imprisoned and the region handed over to the United States a little more than 2 months later. That same year DeLassus resigned his commission and became a private US citizen of New Orleans. While living in New Orleans, in 1813 his only child Auguste was born, however, just a few years later in 1816, his wife passed away. Following the death of his wife, he relocated to St. Louis with his young son where he lived in St. Louis and St Francois County for approximately ten years. DeLassus moved back to New Orleans with his son Auguste in 1826. [1], [15], [18], [19], [20], [21]

On May 18, 1829, Charles DeLassus filed a petition with the District Court of Missouri who, in January 1830, refused to confirm the DeLassus land grant in St. Francois County on the grounds that the land contained a lead mine and for no other reason. This decision was appealed to the United States Supreme Court who had seen their first appeal related to Spanish land grants earlier that year and subsequently decided to postpone all decisions on these cases to allow time for consideration. In January 1831, the Missouri General Assembly asked Congress for a speedy and final adjudication of these land claims, however, it would not be until January 1835, that the Supreme Court would reverse the decision of the district court and upheld the original land grant. [1], [22]

Charles Dehault DeLassus passed away in New Orleans on May 1, 1842 and was buried in St. Louis Cemetery Number 1. According to published county maps, his son, Auguste DeLassus inherited most of the original DeLassus land grant



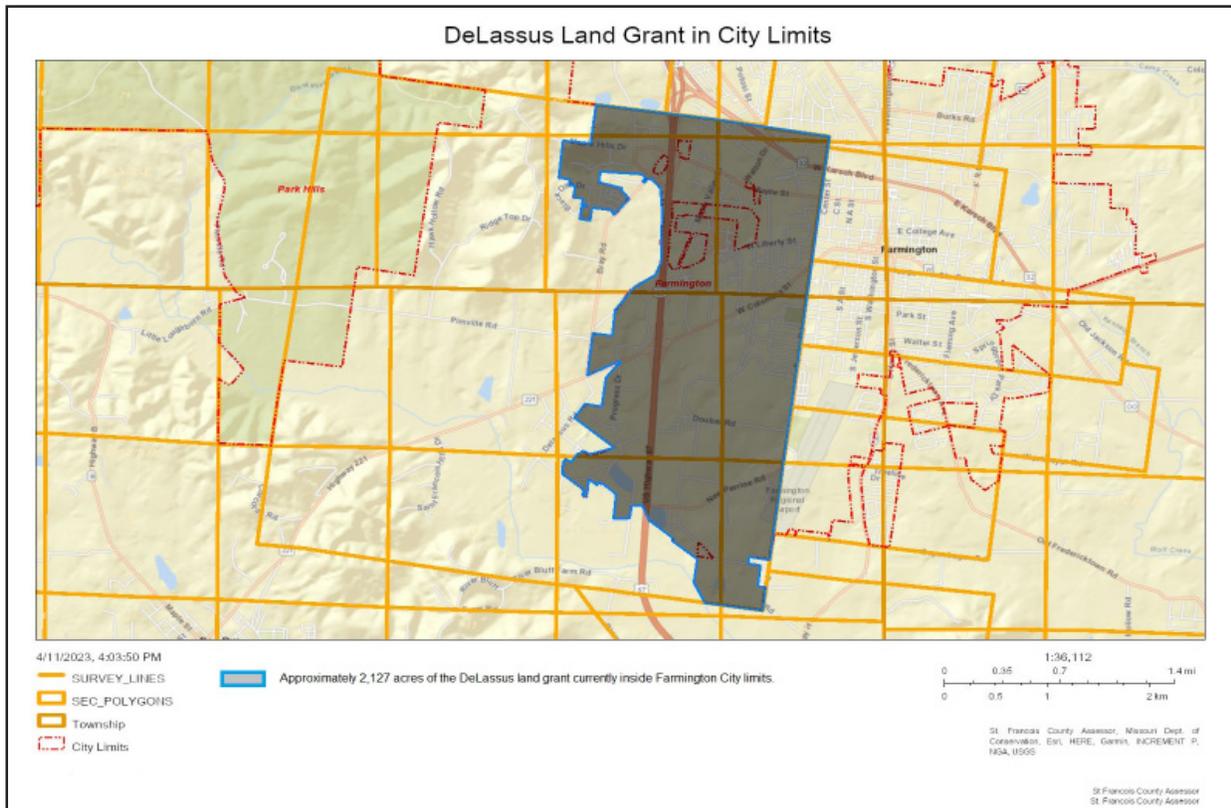
*Cpt. Stoddard and Lt. Gov. DeLassus on Three Flags Day
(Courtesy MO Historical Society) [17]*



*Carlos Dehault Delassus
(Courtesy MO Historical Museum)*

including the properties with the two recently identified Soulard survey marker stones. The DeLassus family continued to own these properties through 1882, however, by 1901, the properties with the two identified Soulard stones had been sold. The property with the starting point marker was purchased by the Missouri Lead Fields Co. who had a large adjacent land holding. This property was then subsequently owned exclusively by lead companies until becoming part of St. Joe State Park. [23], [24], [25]

Today over a third, or approximately 2,127 acres, of the original DeLassus land grant is now located inside Farmington city limits. Additionally, one of the survey stones identified may now represent the oldest documented human placed object within Farmington city limits. The next step will be rigorous verification of authenticity, followed by planning and execution of a preservation project aimed at telling the story of these potentially unprecedented historic survey markers.



References:

1. U.S. Supreme Court (1835). *Delassus v. United States*, 34 U.S. 117. Retrieved March 14, 2023 from <https://tile.loc.gov/storage-services/service//usrep/usrep034/usrep034117/usrep034117.pdf>
2. Soulard, A. (1800). *Soulard Land Survey for Samuel Stodard; Soulard Land Survey for Deluziere Pedro De Lassus*. *Registre d'Arpentage*. Retrieved March 14, 2023 from <https://cdm16795.contentdm.oclc.org/digital/collection/regdarpn/id/227>
3. Missouri State Archives (n.d). *Registre d'Arpentage*. Retrieved March 14, 2023 from <https://mdh.contentdm.oclc.org/digital/collection/regdarpn>
4. Ekberg, C. J. (2010). *A French Aristocrat in the American West : The Shattered Dreams of De Lassus de Luzières*. University Of Missouri Press. Columbia, MO.
5. Royal Botanic Gardens, Kew (n.d.). *Narcissus Pseudonarcissus*. Retrieved March 14, 2023 from <https://powo.science.kew.org/taxon/urn:lsid:ipni.org:names:66177-1>
6. Sheals, D. (Sep, 2003). *Survey Report Architectural and Historical Survey of Murphy's Settlement District Farmington, Missouri*. Retrieved March 14, 2023, from <https://mostateparks.com/sites/mostateparks/files/Farmington%20CBD%20Report.pdf>
7. Lowrie, W. (1834). *Early Settlers of Missouri as Taken from Land Claims in the Missouri Territory*. VII, p.425. Duff Green Publisher. Washington DC.

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The Soulard Stones *(continued)*

8. Soulard, A. (1800). Soulard Land Survey for William Murphy. Registre d'Arpentage. Retrieved March 14, 2023 from <https://cdm16795.contentdm.oclc.org/digital/collection/regdarpen/id/233>
9. Soulard, A. (1800). Soulard Land Survey for David Murphy. Registre d'Arpentage. Retrieved March 14, 2023 from <https://cdm16795.contentdm.oclc.org/digital/collection/regdarpen/id/234>
10. Soulard, A. (1800). Soulard Land Survey for Joseph Murphy. Registre d'Arpentage. Retrieved March 14, 2023 from <https://cdm16795.contentdm.oclc.org/digital/collection/regdarpen/id/235>
11. Soulard, A. (1800). Soulard Land Survey for William (Jr.) Murphy. Registre d'Arpentage. Retrieved March 14, 2023 from <https://cdm16795.contentdm.oclc.org/digital/collection/regdarpen/id/232>
12. Conway, F. R. (Mar 20, 1847). US Survey No 2969. Missouri Agriculture Land Survey Index. General Land Office Plats, 3, 12A, Doc Name Y9903570.
13. Rozier, F. A. (July 21, 1885). 150th Celebration of the Founding of Ste Genevieve - Address. Retrieved March 14, 2023 from https://ia803206.us.archive.org/cors_get.php?path=/11/items/150thcelebration00rozi/150thcelebration00rozi.pdf
14. Clark, W., Clark, J., & Holmberg, J. J. (2002). Dear Brother: Letters of William Clark to Jonathan Clark. Yale University Press. P.76-77.
15. Blackmar, F. W. (1912). Kansas. Standard Publishing Co. Chicago, IL.
16. Houck, L. (1908). A History of Missouri from the Earliest Explorations and Settlements Until the Admission of the State Into the Union. Vol 2, p.356-3557. R.R. Donnelley & Sons Co. Chicago, IL.
17. Stoddard, F. L. (n.d.). Transfer of Upper Louisiana at St. Louis, 1804. Missouri Historical Society. Retrieved March 14, 2023 from <https://mohistory.org/blog/early-st-louis-and-the-transfer-of-power>
18. Missouri Digital Heritage: French & Spanish Land Grants (n.d.). Missouri Secretary of State. Retrieved March 14, 2023, from <https://www.sos.mo.gov/mdh/curriculum/africanamerican/guide/rg951>
19. Davis, W. C. (May, 2013). The History of the Short-Lived Independent Republic of Florida. Smithsonian Magazine. Retrieved March 14, 2023 from <https://www.smithsonianmag.com/history/the-history-of-the-short-lived-independent-republic-of-florida-28056078/>
20. Zimmer, G. M. (1944). Place Names Of Five Southeast Counties Of Missouri. M.A. thesis. University of Missouri Columbia.
21. Ramsay, R. L. (1928-1945). Missouri Place Names. The State Historical Society of Missouri. Retrieved March 14, 2023 from <https://collections.shsmo.org/manuscripts/columbia/C2366/st-francois-county>
22. Weible, S. E. (Sep, 2021). Claims to Land and the District Court. Missouri Surveyor. p.16-23. Jefferson City, MO. Retrieved March 14, 2023 from https://www.missourisurveyor.org/images/72/document/mspssept21_607.pdf
23. Chambon, C. M., & Fortier, J. J. A. (1938). The St. Louis Cathedral and Its Neighbors (2nd ed.). p.127. Louisiana State Museum.
24. Higgins, J. S., & Higgins, R. T. (1882). Map of St. Francois County, Missouri.
25. Heagy, L. W. (1901). Map of St. Francois County, Missouri.

About the Author:

Ryan D. Johnston DC, is a 2009 graduate of Logan University in Chesterfield, MO. Prior to chiropractic, Dr. Johnston gained experience working on a field survey crew in St. Francois and Washington counties in 2001-2002. While serving in the military as a combat aviator from 2002-2006, he received specialized cartography training in plotting, point to point navigation, and location triangulation.

In 2020, Dr. Johnston developed a new soft tissue therapy tool that was awarded a unique design patent by the US Patent and Trademark Office. Also in 2020, Dr. Johnston and his family made a historic discovery in Guilford, CT where they located a previously unknown millstone on a large eighteenth century private estate. Searching the town's vital records, they identified that the millstone was created in 1706 and used to grind grain at the town mill.

The recent rediscovery of the Soulard survey stones occurred while Dr. Johnston was conducting research for a self published history book named *The Shaping of Farmington, Missouri*. That book is available on his website www.thejohnstoncenter.com, and at the Farmington Public Library. Currently, Dr. Johnston and his wife Tiana are primarily involved with homeschooling their 3 children.

“As a licensed chiropractor, I understand that professional associations provide educational opportunities with industry specific information. That is why I sought out the Missouri Society of Professional Surveyors to tell this amazing story.”

This article Included excerpts from *The Shaping of Farmington, Missouri (2023)*. For more from Dr. Johnston, visit www.thejohnstoncenter.com.

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