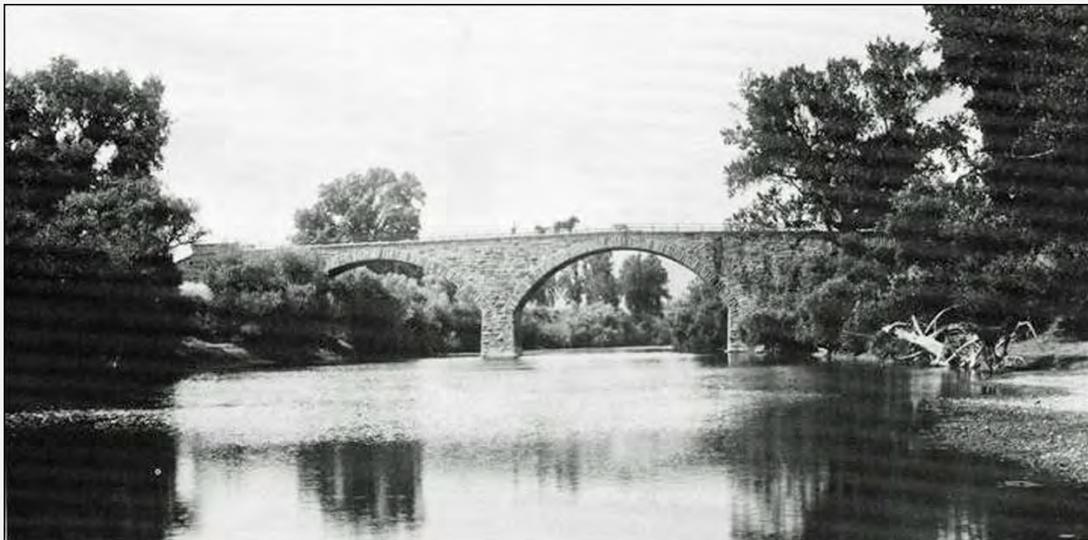


SCUBA DIVING THE PUTAH CREEK STONE BRIDGE (2012)

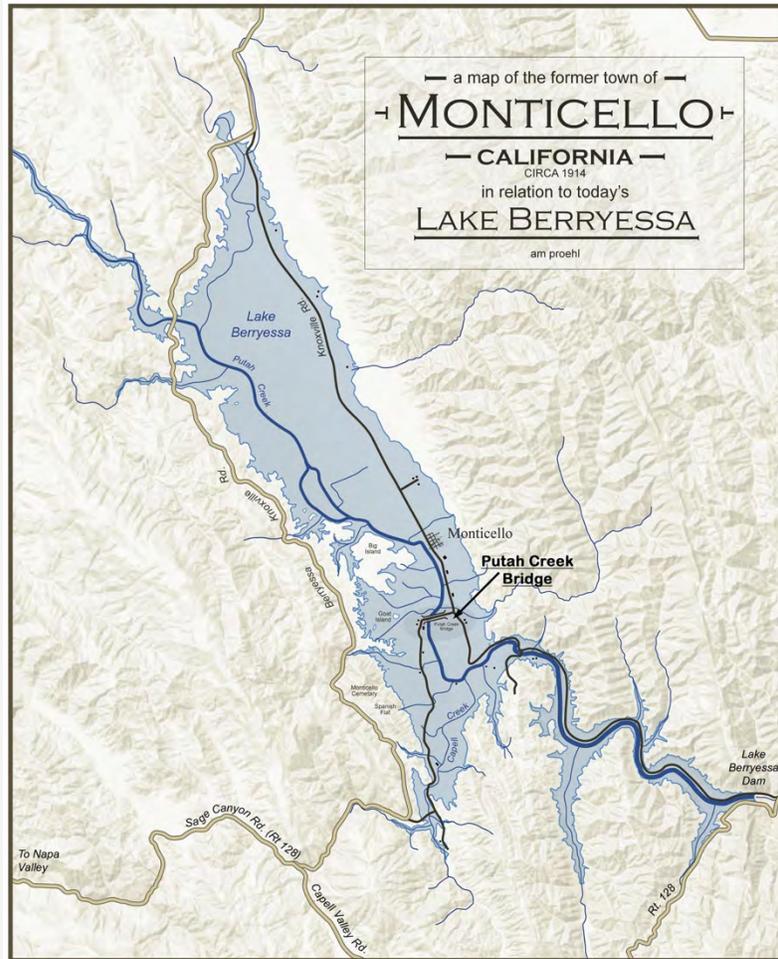
By Peter Kilkus

Most people know that the Town of Monticello is submerged beneath Lake Berryessa. They've also seen the photos of the old town and the famous Putah Creek Bridge. An engineering marvel in its day, it was titled the "Queen of the Stone Bridges". Constructed in 1896, it would become the largest stone bridge west of the Rocky Mountains. Few people living today have ever seen it or crossed over it.

It had 3 arches, each spanning 70 feet and extending down to bedrock. The bridge totaled 298 feet in length, and it rose 42 feet above the low water at the center of the span. The bridge stones were set into a cement mortar. The sandstone blocks used withstood testing of 8,000 to 12,000 pounds per square inch. They used 675 barrels of cement, 380 barrels of lime, 55,000 feet of lumber for false work, as well as tons of iron. The arch stones were 3 feet 6 inches deep; 12 3/16 inches at the crown and 11 inches at the base. They used 2,600 loads of rock. Each load comprised 5 to 10 cubic yards of material. The total cost of the bridge was \$19,980.



There are many types of scuba divers. Some like me want clear warm water so we can feel like birds flying freely through the clear air. Jacques Cousteau said, "From birth, man carries the weight of gravity on his shoulders. He is bolted to the earth. But man has only to sink beneath the surface and he is free."



Some adventurous souls like to cave dive and wreck dive – a much more technically demanding type of diving. And then there's Sharon Eckroth and her colleagues from the East Bay.

Sharon and her friends are trimix and tech divers. According to the Advanced Diving Technologies Dive Team, TDI/SDI, which has a tech diving training and gear center in Antioch, "For the extreme diver ready to further explore the world of technical deep diving, the gas of choice is trimix – a blend of oxygen, helium and nitrogen." Trimix is used in very deep dives instead of air to reduce the partial pressure of oxygen (to avoid oxygen toxicity) and nitrogen (to avoid nitrogen narcosis).

Sharon and her friends (six Northern California divers) have set a goal to scuba dive to the bottom of Lake Berryessa and will document and photograph the Putah Creek Bridge and possibly the remains of the old Town of Monticello. They would also like to find and dive the newer 1941 Capell Creek Bridge near the Capell Public Launch Ramp, which actually was above water in the early 1990's drought.

Sharon told the Lake Berryessa News, "We have been working the project from several angles for about 5 years now. Done a few dives in the dark, cold, 3 feet visibility water and yet to find something. We have been on the lake with depth and fish finders looking for obstacles, depressions, debris, etc. We have performed a few dives. But with the poor visibility, one could be 10 feet from the target and swim right by it. We have been calculating lake levels then and now to determine depths. After runs over the area with fish and depth finders and a tow fish, we found some interesting spikes that are out of place along the bottom.

In recent months we have located several folks, descendants of Monticello residents who have offered exciting new insight to our effort. We are engaged in this project as a means to help preserve the colorful history of the area, feed our love for adventure and most importantly give back to the families to let them know this wonderful community is not forgotten! We have searched current and historical maps, lake maps, Bureau of Reclamation records, USGS data, bridge experts, lake levels over the years, depth readings, media articles, local people and their memories, and historical records, to list a few. This has been an exciting escapade and enhanced with every new detail we uncover!"

See a short 8 minute version of the 1 hour dvd video of the dive to the bridge here.
[Scuba Diving Lake Berryessa's Putah Creek Stone Bridge](#)

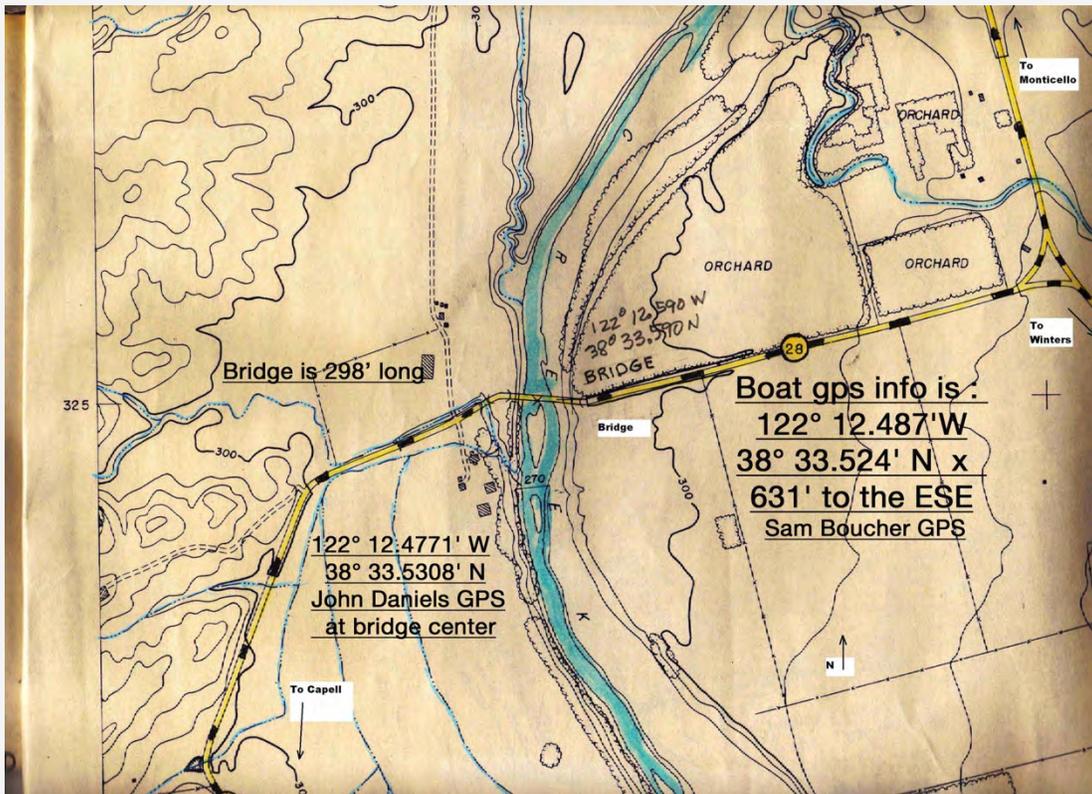
Local fisherman, Sam Boucher, provided some topo maps with GPS coordinates for the Town of Monticello and the old Putah Creek Stone Bridge. He also sent in a photo for the Capell Creek Bridge near the launch ramp when it came out of the water during the big drought of 1990.

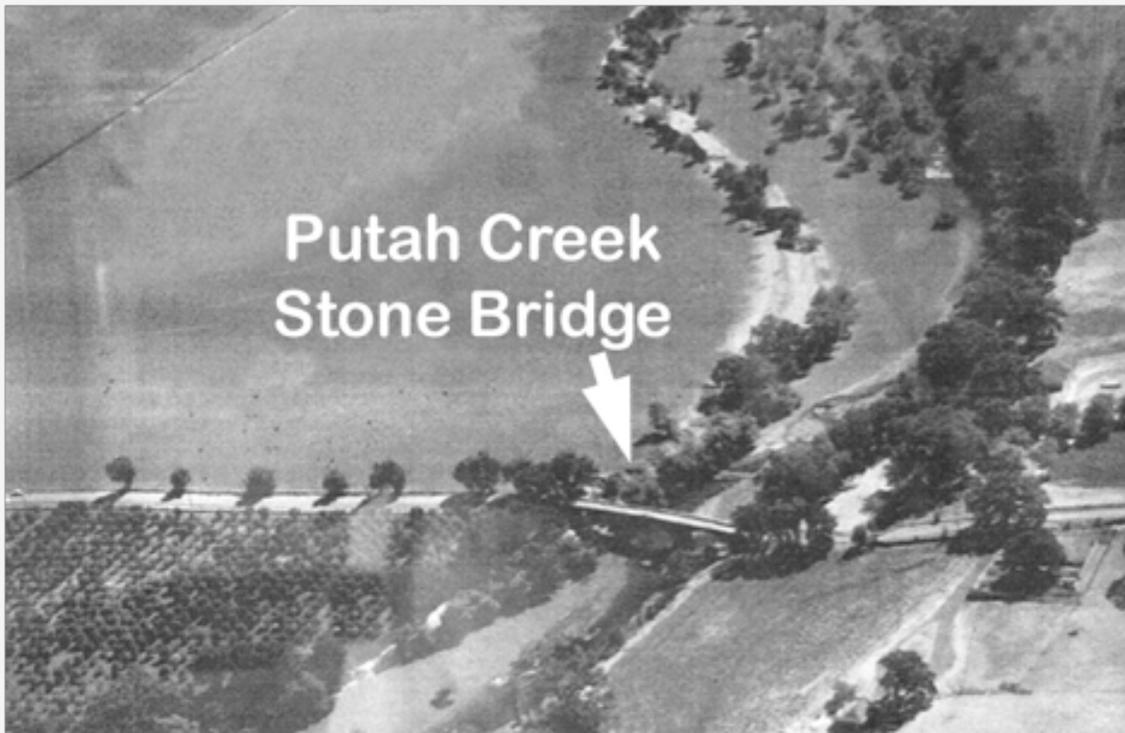
The Capell Creek Bridge (one of several with the same name) was located just east of the public ramp near the 5 mile an hour buoys. A short video of it is available on You Tube at:

Fascinating helicopter video of the Town of Monticello during a low water mark in 1990 here:

GPS coordinates:

Town of Monticello 122° 12.25'W, 38° 34.47'N
Putah Creek stone bridge: 122° 12.59' W, 38° 33.59'





The Search for the Drowned Putah Creek Stone Bridge

By Peter Kilkus

As adventures go, this is quite a story – and an interesting coincidence!

On June 25, 2011, John Daniels of St. Helena found the Putah Creek Stone Bridge. On October 8, 2011 he was the first human being to see the famous bridge since Putah Creek was harnessed by Monticello Dam to form Lake Berryessa in 1958.

On November 26, 2011, Les Wilkinson and Chris Hanson, members of the Berryessa Bridges Project, were the first human beings to see it with their own eyes and touch it with their own hands.

John's eyes were channeled through a 160-foot cable connected to an underwater video camera. The amazing video of this first sighting is available on You Tube at:

http://www.youtube.com/watch?v=NCDStk_9Vpc

Les and Chris, members of the Berryessa Bridges Project, were actually floating next to the bridge in 150 feet of cold, dark water.

John is a Napa County native who has been coming to Lake Berryessa since he was a child. He's also an avid fisherman who combined his love of being on the water with an interest in the history of the Berryessa Valley and the Town of Monticello. Since the Putah Creek Stone Bridge is a major historical artifact he decided to try to find and video record it.



In John's own words:

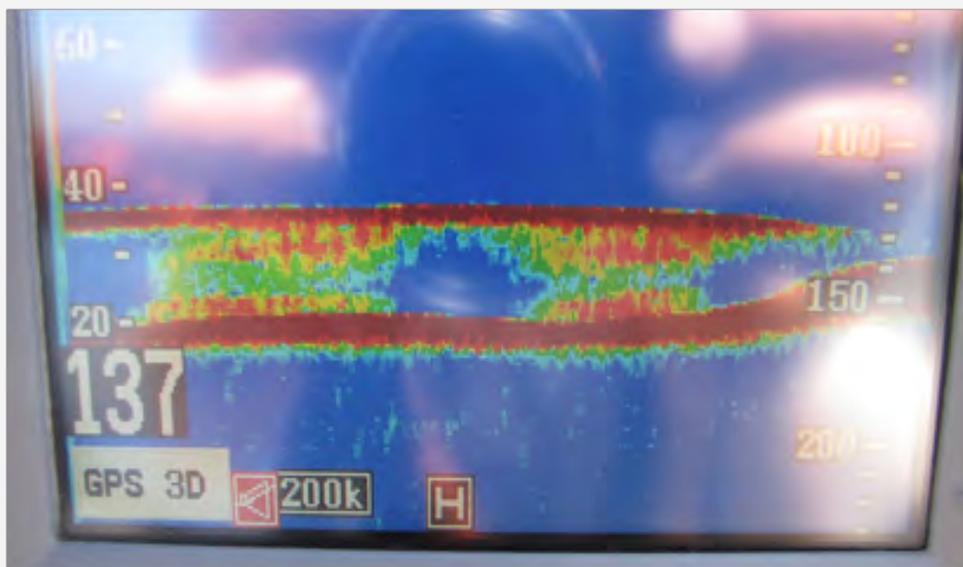
"I've spent thousands of hours with my family on Lake Berryessa, mostly waterskiing, but more recently, fishing. I've also wanted to see below the surface of the lake, to see large fish that I frequently mark on my sonar. Back in early June of this year I purchased a small underwater camera. I first tried to find any signs of Monticello, but without any success.

I then started to search for the Putah Creek Bridge. After several weekends of attempts I finally found it on June 25th, about 1,200 feet south of where I first thought it was, in 160ft. of water. I marked and saved it on the sonar. I spent numerous times crossing back and forth over it to verify it's center until I felt that I might be able to secure my boat over that spot.

I lowered a bow anchor line down with the boat perpendicular to the bridge and secured it to the North face of the bridge wall. I then cast a stern anchor and secured it to the opposite wall. I lowered the camera down on a 160ft cable with small LED lights attached.

To finally send the camera down I needed a perfectly calm day on the water. There was very little control of the camera, with it being so small and trying to send it straight down on a line that was half the length of a football field.

I was thrilled to see this beautiful front face of the bridge wall with mortar joints still looking as if they were just placed yesterday. The top outer edge had a perfectly shaped stone cap and reveal, typical of stone bridges for that time in Napa County. The key stones that formed the arches were massive and appeared gigantic in relation to others I've seen."



Putah Creek Stone Bridge on sonar

Coincidentally, during that same period another group of explorers was looking for the same bridge, as well as several other bridges, that are below the surface of Lake Berryessa. The group of technical scuba divers, led by Dave VanValkenburg and Sharon Eckroth, had formed the Berryessa Bridges Project to find and document the historical bridges with still photography and video recordings. They've designated the Putah Creek Stone Bridge as the BSB, Berryessa Stone Bridge.

The Lake Berryessa News did its small part in this adventure by bringing John, Dave, Sharon, and Les together to share notes over pizza in October. I was amazed at the research that had been done by the Berryessa Bridges Project group, especially the computer graphics magic of Dave Van Valkenburg. Dave had superimposed a view from Google Earth, an old aerial photograph, and the plot map from Carol Fitzpatrick's Monticello History Exhibit to pinpoint the location of the bridge.



Left to right: John, Les, Dave, Sharon

On November 26, the Berryessa Bridges Project team geared up, rented a patio boat from Pleasure Cove Marina, and sailed out on an exceptionally beautiful day – warm, sunny, and flat as glass.

According to Dave:

“Les Wilkinson, Sharon Eckroth , Gary Callihan, Chris Hanson, and I rented a patio boat from Pleasure Cove Marina and set out about 9:30 AM Saturday morning. We are all technical divers, and have been diving together for quite a while. To be honest, although we were prepared, we were not really planning on getting any diving done Saturday, but things moved along well, and the conditions were ideal, so we went for it.

Using a chartplotter GPS with sonar we grappled near the bridge. Next we placed a commercial grade color television camera on a shackle to the grapple line and lowered it on its 300 foot cable along the line. With Les monitoring and maintaining the grapple line and directing boat movements, me driving, and Sharon and Chris handling the electronics, we confirmed that what we were seeing was the bridge. Gary handled the camera cable and with Chris giving him directions like "down one foot - back a little", we were able to get close enough to see the stonework of the bridge.

Our formal plan called for more TV camera work, but we were all thinking the same thing - it was dead, flat clam, and sunny, and we were over the bridge - maybe we should send divers down to verify. A quick check of the sixteen scuba tanks aboard reflected that we had some gas appropriate for the depth. So we devised a dive plan for Les to bring an anchor down on a lift bag slowly so as not to hurt the bridge.

However, due to some software problems, video recording didn't start until about one minute before Les left the bottom for his ascent. Les reports about eight inches of powdery silt on the roadway, midnight black without lighting, and roughly six feet of visibility with the lights on. He says the bridge is covered with virgin, undisturbed silt, a likeness to a fresh snowfall.

We really enjoyed ourselves that day and felt a profound satisfaction in getting someone down there. We celebrated our success by donning our new yellow "Berryessa Bridges Project" tee shirts." The photo below is of our best diver, Les Wilkinson, hitting the water for what is the very first dive in history to the bridge - as far as we know. Photos courtesy of David VanValkenburg.



Chris with TV camera



Gary with TV camera line to the BSB



Les surfacing

[Bridge Dive Video](#)

Scuba Diving To and Through the Putah Creek Stone Bridge
By Sharon Eckroth, Berryessa Bridges Project

Our team has made yet another terrific SCUBA dive to the Big Stone Bridge. My partner and I performed the dive on May 12. It was in a word; amazing. The day offered the best in-water visibility we've had in the lake to date. The surface conditions were fabulous with the warm, nearly tropical sun falling on the placid teal water. A refreshing northerly breeze kept the boat deck conditions comfortable. We quickly descended to the bridge carefully arresting our decent above the roadbed at about 120 feet so as not to disturb 55 years of baby powder fine silt. I tied off a safety line and we swam over the side of the BSB to locate an arch. This was truly a sight to behold, the BSB in all of her architectural splendor. The beautiful soft hues of the stone had an almost calming effect.

With lights ablaze and video camera rolling, we collected ourselves and executed the dive plan, a swim through the arch to the other side. The roadbed is roughly 27 feet in width so it was a short jaunt as underwater swimmers go. Although the visibility was an amazing twenty feet, the water was dark akin to a coal mine after midnight. Without artificial light the conditions could rapidly turn into one's worst nightmare. The water temperature was a comfortable 52 degrees, if you're an Eskimo!

We proved the arch is clear to a depth of 144 feet void of debris that may have submerged over several decades or washed down originally with the inundating waters. Now 27 feet doesn't seem like far until you consider the darkness, limited visibility, and potential for disorientation in an overhead environment. Suffice to say this is where specialized training comes into play and is crucial to diver safety. We documented the condition of the arch as best possible ultimately emerging on the North side. We were promptly greeted again by the beautiful golden taupe and brown hues of the masterfully laid stone. I'm having second thoughts about which rocks are a girl's best friend!

Our time beneath the BSB arch was limited to 15 minutes. A diver's time at depth is brief due to the bodies' inert gas absorption from respiration. With that, the decompression obligation grows exponentially each passing moment so we wrapped up the video documentation and made for our first of many decompression stops. However as short-lived the time at depth was, coupled with the pending slow monotonous ascent to the surface, it was well worth the effort to visit the beautiful Monticello Stone Bridge.

It is beyond words and humbling to have had the opportunity to dive this wonderful historical site. To know the story behind this lovely productive valley and the lives of those that called Monticello home, most crossing the BSB as part of their daily routine, makes for one fabulous and enriching experience. It's saddening that the BSB is so far out of reach for the majority. Regal in its grandeur this magnificent architectural work, with its perfectly preserved golden stones and graceful lines, now lies alone, hidden and unappreciated.

Our team is thrilled, extremely proud and thankful to have been the first to touch the BSB since 1957. A special note of thanks to everyone in the community for supporting our efforts to document the BSB's condition and help preserve its memory. We look forward to sharing our experiences with the folks that remember the bridge from back in the day and hearing their stories and sharing in their memories.

Touching the Big Stone Bridge
By Sharon Eckroth, Berryessa Bridges Project

Once again, I questioned my sanity rising at this hour of the day, carefully tiptoeing past the chicken coop so as not to disturb the rooster, and load the remaining pieces of gear. I'm sure it's the thrill of yet another unexplored locality that drives one to the adrenaline-filled serenity that is the abyss. I scarcely noticed the crisp and cold early morning air with the majority of my focus on the task at hand, loading the last of the SCUBA gear and double-checking support equipment.

It was near mid-day when we anchored over the dive site. Berryessa greeted us with the serenity of a sleeping child. With the surface conditions as tranquil as any that could be mail-ordered from Mother Nature, as if it were possible, the equipment was readied and a dive plan formulated. A lone osprey screeched overhead, a very good sign. I geared up methodically in the warm noonday sun, smugly confident in the solid professionalism of the surface support team, my ever-energetic safety diver, and the overall plan. This wasn't

going to be a relaxing dive in pristine waters. The BSB (the historic Putah Creek Stone Bridge built in 1893) lies 125 feet below the inviting surface in a cold, dark grave. After several thousand dives you know when it's right and when its time to walk away. Today it's right to go to BSB.

I stepped from the boat into the azure waters replete with equipment fit for a moon landing. One more check. Let's see, decompression gas bottle – check. Drop camera with umbilical cable – check. Mushroom anchor with associated line and surface marker – check. Gauges and verify gas levels, check – check. Lift bag with clamps, carabiners, double ended bolt snaps, o.k. – o.k. check – check – check! After a quick dive plan and contingency review, the project manager offered a few cautionary words...“Don't shine your light into the camera lens or foul the umbilical with the buoy line or anchor rope. And get some good shots!”

It was at that moment I confirmed this was going to be a busy dive. After a quick exchange of O-K signs with the deck boss, I vented my BC and began the decent towards BSB. The visibility was good for lake diving and comfortably inviting. Experience told me those conditions are about to change and not for the better.

With the descent clipping along at glacial speed I kept wondering if I would reach BSB with enough gas to complete the tasks and linger for just a moment or maybe a bit of unauthorized exploration. The suspense was nearly overwhelming but its mission first as always. So I focused on the increasingly demanding tasks at hand while gliding weightlessly into the depths. I chose to ignore the growing cold and enveloping gloom that began to enshroud me as I moved deeper. Progress was fluid and effortless then almost as if scripted, a show-stopping event.

There it was, as big as a bull elephant in a burlesque show, a knot in the anchor rope that brought the descent to an abrupt halt. Now if the umbilical handler had been aware of that fact he would have likely ceased paying out cable. With the topside crew unaware of the situation, several pounds of cable were now pulling me towards the depths, proof-positive that you can never over-plan a dive or its details. Now generally this would be a non-issue except for the fact my thumb had somehow become firmly wedged into the slide of an attached fifteen pound mushroom anchor that I was supposed to “gently” set onto the roadbed.

A neophyte or the uninitiated would likely succumb to the task-loading in the cold and gloom and immediately free themselves to find their way posthaste back to the safety of the surface, sunlight, and abundant air. I had that fleeting thought, but facing the project manager after dropping his camera was just too much to bear. I quickly fastened the equipment load below the offending knot and began the process of extricating my now numb digit from the line's embrace. I recovered the equipment and the descent continued uneventfully.

Another seven minutes dragged past like pouring molasses in a snowstorm. Then, suddenly, it loomed massively from the icy blackness revealed by the beam of my primary light, the BSB. I was impressed to the point that I cleanly forgot about the feeling returning to my thumb and the associated throbbing. Though not necessarily intimidating, BSB demanded respect and waited patiently for me to oblige. Awe struck, I had to repeat the first rule of SCUBA diving; inhale, exhale, repeat as necessary and relax.

After a quick survey of the area around the anchor rope it was obvious there was nowhere available to set the surface marker anchor without disturbing the inches deep silt. While continually wrestling with the increasingly annoying camera umbilical, I carefully lowered the mushroom anchor to the deck like a bomb squad technician so as not to agitate the baby powder fine sediment. With that wasted effort the silt erupted like Mount St. Helens, I was instantly enveloped in a cloud of what's best described as chocolate milk. Reading gauges or seeing beyond my nose was well out of the question. I moved carefully to the south towards the bridge rail and into what could be perceived as clear water and that's when it happened - I touched it. BSB had welcomed me or so it felt.

With that touch I could feel its loneliness reverberate through me like a wave. At first barely perceptible, but then it grew rapidly to a crescendo. I was feeling the weight of emotion pressing on me. It was as if BSB was thankful to no longer be alone. Through the frigid ink black water, I delivered a ray of warm soothing light that BSB has waited a lifetime for. It was then I, a stranger by any definition, was instantly transformed into a long awaited friend. It's been a long time since I've been touched emotionally by an inanimate object.

The feeling was very much akin to when I first made contact with the grand dame of the sea, the Mount Everest of technical diving, Andria Doria. SCUBA divers are a strange lot and I'm guilty as charged, superstitious, adventurous, emotional and passionate. I could go on but will reserve.

Every diver with at least a few dives under their belt has experienced that feeling of near despair when their bottom time has been exhausted on a fulfilling and enriching dive. Just as this time it has come to depart, I remember the project manager's admonition and quickly panned with the camera for any footage possible. I touched the taupe brown stone gleaming in the soft glow of my primary light again to say goodbye. After a quick scan with the camera for any footage possible I must depart. I long to linger but my safety diver is waiting patiently and with extensive decompression remaining to be performed, I take one last look at my friend, secure the site and initiate an ascent.

The sorrow of leaving my new friend, I feel, is equal to that of a loved one's departure after an extended stay. As the Big Stone Bridge faded into the black I bid her farewell. Let not your soul be troubled, my friend, I murmured while turning towards the surface. I'll see you again.

