Feature Article

Brown’s Ranch in relief

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The man who measured the McDowells

Don Meserve, our lead PastFinder

Ghostly beings on a hidden road

Sorting through the past—literally

Drones pinpoint nonnative plants
The history of the place we call the Preserve is rich and varied, from the early archaic people to the people who are making history now. In this issue we focus on the work being done by the Field Institute PastFinders on the ranching, military, and early survey history, and on the early Conservancy efforts. Over the summer, the Field Institute PastFinders worked with the City of Scottsdale Preserve staff, archaeologists, and ranchers to map and describe the remains of the cattle ranching period of Brown’s Ranch. Meanwhile, citizen scientists have been organizing the Conservancy’s history in the form of photos, documents, and more, so that it can be properly preserved and accessible to the public for research and education. This issue is also an opportunity to showcase the fascinating stories of some of the people who traversed the Preserve around the turn of the 20th century, and whose “ghosts” may still remain!

From Melanie Tluczek
McDowell Sonoran Field Institute Manager

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Mapping Brown’s Ranch for Future Preservation

By Don Meserve, Field Institute Citizen Scientist and history lead

The Brown’s Ranch mapping project is a venture undertaken by a diverse group of people, led by the Field Institute, to collect data about the history of the area. The ranch was located in the present-day northern part of Scottsdale’s McDowell Sonoran Preserve. The project’s purpose is to establish a baseline of the existing conditions of the site, compare today’s conditions with those documented by two earlier surveys, and solicit stories from cowboys and ranchers about how the Brown’s Ranch operation worked and how its remaining artifacts were used. The collected data will be used by the City of Scottsdale and the McDowell Sonoran Conservancy to make future plans for preserving and possibly interpreting the cattle ranching site.

In July 2014, PastFinder and master steward Len Marcisz, PastFinder Doug Watson, and other PastFinders proposed a mapping project because they were concerned that remains of Brown’s Ranch headquarters would deteriorate through constant trail use. As a retired City of Scottsdale employee involved in historic preservation and archaeology, I agreed to lead the project, and the rest is—history.

We quickly learned that the Brown’s Ranch site was surveyed and recorded by professional archaeologists hired by private landowners in 1990 and 1997. The site was officially recorded with the Arizona State Museum as site number AZ U:1:23 (ASM). Because it is a recorded archaeological site involving an off-trail field survey,
more than one type of permit was required. First, the Conservancy needed to obtain a special permit from the City, which was obtained April 2015; but we also needed to meet the requirements of the Arizona State Museum (ASM). ASM requires field surveys, such as the Brown’s Ranch project, be supervised by a State-certified archaeologist with a permit from ASM. Fortunately the City and the Conservancy worked out an arrangement with Logan Simpson, an environmental services company already under contract to the City, to supervise the project and handle details with ASM.

Central to the success of the Brown’s Ranch mapping project is technology developed by Arizona State University geology professor Ramon Arrowsmith to gather topographic information using a camera tethered to a weather balloon that is then pulled across the site. (See the July 2014 Insider for more on this technology.) A computer program and a lot of computer time and trigonometry in the application are used to compile the roughly 1,000 photographs taken from 50 meters high to produce a high-resolution 3-D map. Using this technique for an archaeological survey is a new application.

Using a trial balloon, Dan Gruber, Field Institute Citizen Scientist and master steward, trained Field Institute volunteers on how to work the survey on the ground. Then Mark Hackbarth from Logan Simpson trained them how to use survey forms and photography standards to document archeological features according to state standards for data collection. Thanks to generous support from The Charro Foundation, this work will be completed and the results will be written and reported to the City of Scottsdale and ASM by the end of 2015.

Preliminarily, we can say for certain that the color aerial photos showing the location of archeological features are more accurate geographic depictions of the features and their locations than those provided by the 1990 and 1997 surveys. We also observe in the field that some of the features have deteriorated since they were first recorded in 1990. However, more data analysis is necessary before we can draw a full picture.

The final results of our Brown’s Ranch mapping project will contribute to the decision-making process for what will happen to this historic site in the future. At the present time, Logan Simpson and the City are finalizing a Cultural Resources Master Plan for Scottsdale’s McDowell Sonoran Preserve, which includes a specific plan for Brown’s Ranch. The master plan will include information gathered on the Brown’s Ranch mapping project. I am very pleased, as are other history and archaeology enthusiasts, that the City is reaching out to the PastFinders, the Field Institute, and the Conservancy to help inform this important master plan for the historic and archaeological resources in the Preserve.

Many thanks to McDowell Sonoran Conservancy stewards who developed, planned, and conducted this research, and for the professional leadership of Logan Simpson and the support and partnership from City of Scottsdale.
Who Put the McDowells on the Map?

By Barbara Powell, McDowell Sonoran Conservancy steward

Sidney Edwin Blout is known as the man who measured the McDowells. As McDowell Sonoran Conservancy steward and PastFinder Doug Watson explains, Blout conducted the first complete surveys of the McDowells between 1914 and 1919. Facing many challenges, including rattlesnakes, triple-digit temperatures, and nearly chopping off his foot with an axe, Blout prevailed and plotted the McDowells with determination and derring-do.

Blout was born in Prairie City, Illinois, in 1870. Educated as a civil engineer, he had a robust career as a field surveyor and rose to high administrative office during his tenure, rewarded with an annual salary of $3,200 a year. However, the rugged Blout was never deskbound, and as a distant relative of Daniel Boone, he excelled at field surveying. In Arizona, Blout was involved in surveying some 2,908 townships.

At the McDowells, Blout’s surveying monuments, or pipes, are evidence of his activities and are still found in the ground today. His 1919 survey of the McDowells spanned hundreds of miles, providing invaluable maps and field notes used by mapmakers, historians, and scientists alike. Blout shouldered many responsibilities including team recruiting, logistics for food, transport and medical supplies, obtaining and maintaining equipment, and preparing field notes and survey status reports. Blout’s humorous personal letters reveal that keeping a camp cook was his most daunting task.

Doug Watson, a career surveyor himself, spent untold numbers of hours investigating Blout. Delightfully, past and present connected when Doug’s research revealed that he and Blout had each surveyed atop Mt. Rainier, although generations apart.

“Surveying monument” is a big name for a small object used to mark key survey points on the ground. If you have a sharp eye, you might see a metal disk with a stamped legend on its face that was pounded into desert floor many years ago by Blout.
I recently sat down with Don Meserve, a New Jersey native, to discuss the Field Institute PastFinders and his longtime connection to Scottsdale’s McDowell Sonoran Preserve. The first thing I noticed about the new Field Institute history lead is his warmth and fun-loving attitude.

Prior to retiring in 2013, this husband and father of two college graduates, was a City of Scottsdale planner for 26 years. During his time as city planner, Don was involved in many Preserve projects. As he shared his insight, it was clear that he knows the Preserve well. Don is perfect as a PastFinder, because of his wealth of experience and knowledge in the areas of archeology, preservation, and human history.

When one thinks of the Preserve’s treasures, the likely images that come to mind are its beautiful mountains, well-kept trails, rock formations, stunning views, or maybe even the colorful flower show gifted to us after the winter rainy season. These treasures stimulate the senses, soothe the spirit, and even awaken the desire to hike farther into the Preserve. What about the hidden, less obvious treasures of the Preserve? PastFinders to the rescue!

PastFinders are a group of McDowell Sonoran Field Institute and Conservancy volunteers, as well as private citizens, who study archeology and human history of the Preserve. They have helped document prehistoric rock art from both the Hohokam and the Yavapai inhabitants of the Preserve lands. They have also documented artifacts from ranchers, and initials and dates from early European visitors. These are just some of the less obvious treasures hidden within the beauty of the Preserve. PastFinders work with the City of Scottsdale to see that such treasures are examined, documented, and protected, especially as new trails are constructed and the population of hikers, bikers, and horseback riders increases in the Preserve.

With a smile on his face and a sparkle in his eyes, this proud family man told me that he recently became a first-time grandfather of twins, Henry and Ruby. Don is a lifelong camping enthusiast and recalled countless fun-filled family adventures in numerous national parks including Arches, Bryce.
numerous publications on archeological finds and early human inhabitants in Scottsdale. In his new role as Field Institute’s history lead, Don continues his commitment to archeological research and preservation in the Preserve. Don is looking forward to working with the Field Institute and already has many ideas for future programs devoted to archeology. One of those is the development of an archeological-site steward program focused on training stewards to monitor archeological sites on the Preserve. Its goal would be to ensure that historic sites are not vandalized or destroyed. If history holds true, this will be only one of the innovations Don will bring to life in the future.

Canyon, Capital Reef, Grand Canyon, Sequoia, Yosemite, and Zion. Whew!! At Capital Reef, Don, his wife, Cathy Hart, and their kids, Daniel and Joy, picked peaches and ate them with ice cream while watching the sunset. Another fond memory was the time son Daniel suggested coke, chips, and burping under a waterfall at Yosemite National Park.

In the mid ’70s to the mid ’80s, Don was a member of two clogging clubs. He danced at the White House for President Jimmy Carter with the Cub Hill Cloggers of Maryland, and when he moved to Chapel Hill, North Carolina, he joined the Apple Chill Cloggers, clogging his way to England, Ireland, and Switzerland with the club. How cool is that?

In his role as city planner, Don was involved in countless projects at the Preserve and authored
Spirits Along a Ghost Road

By Bob Payne, McDowell Sonoran Conservancy steward

As we set out on a hike from the Fraesfield Trailhead in the northern region of Scottsdale's McDowell Sonoran Preserve, it is only natural that Field Institute PastFinder and master steward Len Marcisz is telling me about departed spirits. We are, after all, walking a piece of the ghost road that once connected Fort McDowell near present-day Fountain Hills, with Fort Whipple in Prescott.

The 95-mile route, officially known as the Stoneman Military Road, has all but disappeared, falling into disuse after Fort McDowell closed in 1890 and eventually succumbing to the erasing effects of monsoons and residential developers.

“We can’t even be sure of the exact route, because it changed over time,” Marcisz said. But what he does know, I discover as we walk the Preserve trails, are the stories of the people who created the road, and traveled it, and had their lives affected by it.

“The Spirits of the Stoneman,” is how he referred to those people in a paper he wrote a few years ago for the McDowell Sonoran Conservancy. (For serious students of the Preserve, in 2012 the Field Institute’s PastFinders produced a digital compendium, researched primarily by Marcisz, Conservancy master steward Larry Levy, and PastFinder Doug Watson, containing all known references to the road.)

One of the early nonnative spirits was Henry Robert, who oddly enough is most noted for creating the parliamentary procedures known as Robert’s Rules of Order. An Army engineer, he produced an 1869 map showing ancient trails that the Stoneman Road would roughly follow.

Also in 1869, David Clendenin scouted a route that shortened the distance from Fort Whipple to Camp McDowell (as it was originally known) from 170 to 95 miles. Clendenin, too, earned an historical asterisk elsewhere, serving on the military tribunal that sentenced the Lincoln assassination conspirators to death.

In 1870, the commander of the military district of Arizona, George Stoneman, who the road is named...
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after, ordered it to be built, mostly following Clendenin’s route. A hands-on officer, he was among the first to travel the completed road, which he’d given his troops a month to construct.

There was John Marion, a newspaper editor who rode with Stoneman along the road, noting in his journal that what is today the Preserve looked like “poor country.” And there was John Bourke, whose own journal, in 1873, helped establish that the road ran diagonally northwest from the Fraesfield Trailhead and between the two buttes clearly visible from what is now Brown’s Ranch Road.

There was trail scout Al Sieber, whose idea of a practical joke was to lay caskets of dead friends against the doors of homes in Prescott. And Annie Dowling White, who was traveling the Stoneman Road, on her way to Prescott to ask the governor to intervene in a property dispute with the Fort McDowell commander, when soldiers from the fort removed her five unattended children from their home and burned it.

Adna Romanza Chaffee, the fort commander at the time of the White incident, would go on to have a much-decorated career that included becoming army chief of staff under Theodore Roosevelt. William “Doc” Crosby, a military surgeon who traveled the road to the fort in 1884, stayed long enough to register a cattle brand using his initials, which survive today in the DC Ranch community.

And of course there were the hundreds of unheralded Stoneman Road travelers, military and civilian, whose own spirits I am reminded of as Marcisz and I are out walking during this Halloween season. Because it was those travelers, discarding their empty bottles along the road, that helped give the Stoneman the alternative name it was sometimes known by—the Whiskey Bottle Trail.

Although use of the Stoneman Road within the boundaries of today’s McDowell Sonoran Preserve declined with the closing of Fort McDowell in 1890, segments of the road were used from circa 1919 to 1970 by the Brown family and their ranch foreman.


Harvey Noriega (ranch foreman), lived to age 105.

Photos courtesy of JoAnn Handley, Scottsdale Historical Society.
Archiving a Founder’s Treasures
The End of the Beginning

By Carmel Robbins, McDowell Sonoran Conservancy steward

When PastFinder Linda Watson undertook her first archival assignment for the McDowell Sonoran Conservancy indexing the Conservancy’s Mountain Lines magazine collection from 1993 to 2012, she had no idea of the magnitude of her next project.

In early 2012, the Field Institute received a large collection of artifacts from Jane Rau’s family, representing the history of the organization from the early days of kitchen-table advocacy, through creation of the McDowell Sonoran Land Trust and formation of Scottsdale’s McDowell Sonoran Preserve, to the present-day McDowell Sonoran Conservancy. Jane’s children had each been given scrapbooks, and the residual was gifted to the Conservancy and placed in the safekeeping of the Field Institute.

The storage room, affectionately referred to as The Pit, was filled with boxes containing letters, photographs, minutes of meetings, newspaper articles, letters to editors, early membership rosters, magazines, and more. In Linda’s words this was the entire history of the Conservancy.

While considering the best approach, Linda researched archival processes and met with the Arizona Historical Society’s archivist. After an initial sort to separate personal from historically relevant records, the major task of categorizing the artifacts began. This process took entire days, working with a small, motivated team of dedicated volunteers.

As she worked through the collection, Linda gained an appreciation of the challenges faced by early supporters of the Preserve. These living historical records provide a strong sense of Jane Rau, indefatigable champion of the Preserve, whose tireless effort and refusal to take “no” for an answer helped turn a dream into a reality.

Thanks in no small part to Linda’s hard work, the Rau family collection and other artifacts of the Conservancy’s history will be permanently preserved and available to the public. The next step involves digitizing the print media artifacts (photographs, documents, and other memorabilia). With over 300 volunteer hours invested to date and committed to seeing the project to completion, Linda answers the question, “where are we in the process?” by invoking Winston Churchill’s famous statement: “It is neither the end, nor the beginning of the end. It is, however, the end of the beginning.”

One of the first printed pieces handed out to hikers in the Preserve. It was prepared by the McDowell Sonoran Land Trust, forerunner of the McDowell Sonoran Conservancy.
Remote Sensing of Nonnative Plant Species
Drones Watching Plants

By Brenton Scott, Field Institute Fellow

It is no secret that scientists are often excited by new technology and the chance to incorporate it into their research. In 2015, I was selected for the first Biodiversity Fellowship with the Field Institute to study interactions between nonnative plant species and native vegetation communities. This research is a continuation of an effort that began in 2011 to map the distribution of three nonnative plant species identified in the Scottsdale’s McDowell Sonoran Preserve by volunteers and stewards. Since the initial mapping work, new technology has emerged that is now being incorporated into research as a valuable tool for data collection. What is this new technology? Unmanned aerial vehicles (UAV), more commonly referred to as drones.

The idea to use drones in this project emerged during field work last September. Field Institute Citizen Scientists, Conservancy stewards, and volunteers assisted in ground-mapping a large population of buffelgrass (Pennisetum ciliare), a nonnative plant species found at Brown’s Mountain. The goal of this outing was to collect GPS points to produce an accurate map depicting the distribution of this population. After hiking off-trail on steep, rocky terrain, an idea was born to use aerial imagery to reproduce our efforts. This approach is often used in the field of remote sensing, which utilizes satellite imagery and computer algorithms to analyze vegetation patterns across very large landscapes. The use of UAVs and digital cameras has only recently begun to be used as a tool in remote sensing at much smaller landscape scales. In contrast to ground-mapping, aerial imagery and remote sensing requires little physical effort, does not damage or disturb native habitat or disperse seeds from nonnative species, and is easily reproducible.

This research is heavily dependent on the equipment and expertise from the Arizona State University’s Autonomous Systems Technologies Research and Integration Laboratory in the School of Earth and Space Exploration, and operated by fellow graduate students Ben Stinnet and Amanda Urquiza. We hope to continue this research as an interdisciplinary team to track population changes of nonnative species over time and are also interested in pursuing further projects with robotics and UAV remote sensing in the McDowell Sonoran Preserve.

Brenton Scott is a third-generation native of Phoenix and a current graduate student at Arizona State University. He started work with the Field Institute beginning in 2010 as an undergraduate intern. During his first internship, he worked with Steve Jones, Field Institute principal investigator for flora, on flora collections and database management at the ASU herbarium. In 2011, during his second undergraduate internship, Brenton began mapping and monitoring nonnative species in the Preserve. In 2015, Brenton was selected for the first Biodiversity Fellowship with the Field Institute.
Beware of hovering eyes in the night. Photographer Marianne Jensen, Conservancy master steward, has fun with the flora and fauna of the Preserve in this spooky image of a Halloween sky.