The Bi-Annual Journal of Desert Survivors Experience Share Protect Spring 2023
FROM THE EDITOR:

There have a few changes as of late for Desert Survivors. In October 2022, at our Annual General Meeting, Michelle Bashin stepped down as our president, and we elected Chuck McGinn to the post. Chuck is a long-time member of the organization, and a former trip-leader. He is particularly fascinated by the archaeology of the deserts, and his trips were often to places with evidence of the ancient people. For the past year he has hosted the Desert Survivors Book group. Chuck is a retired architect and lives in a wonderful country home outside Davis, CA—complete with a vineyard and olive grove. If you visit him there, he will give you a bottle of wine or olive oil from his harvest. You should look him up.

Michelle Bashin's most recent tenure as president of Desert Survivors began in the fall of 2019. Only a few months into the post she got the grim task of overseeing the cancellation of all of our trips and events because of the Covid-19 lockdown. In April 2020, only a few weeks into the quarantine, Michelle put together a wonderful event, that for many of us, gave hope our organization was viable in spite of the disease. It was a Zoom-based travelogue slide show, where members presented their 12 best desert photos. After five weeks isolated my apartment, it was so great to see many of my colleague's faces, albeit on a computer screen, but also understanding everyone else, not just me, was stuck sheltering in place.

In the subsequent months, and now for years, Desert Survivors has continued Michele's program of online desert-themed presentations—ranging from venomous snakes, to an archaeological dig in the Mojave, to a desert trivia contest. Much of Michelle's leadership has been focused on Desert Survivors events in the Bay Area. She has led trips to a desert plants garden in Walnut Creek, a sand dunes hiking training in Point Reys and an outdoor cooking bash where participants served up their favorite camping recipes for all to taste and test and enjoy.

Although Michelle has stepped down as president, she is still active in Desert Survivors on the board of directors and organizing and leading events. Check out her Desert Survivors trips to the Berkeley Botanical Garden in April and the Bancroft Garden in May 2023. Thank you Michelle for being our president. You did a great job and we look forward to your continued good company and efforts for the organization.

For some time now I have admired the California Botanic Garden (CalBG) in Claremont, CA. It is a facility that studies and catalogs California native plants and maintains a seed bank. It is also a graduate college of botany, with students engaged in research projects on plants and the environment in California and the U.S. west. I was particularly impressed by an on-line presentation by CalBG graduate Maria Jesus in June 2020 on the plants of Conglomerate Mesa. Her presentation exhibited a real enthusiasm for the subject and how interesting and vibrant the flora of Conglomerate Mesa is, leaving the viewer with the realization it would all be lost if mining were to come there. It was a great show.

In January 2023 Desert Survivors, recognizing how the endeavors of CalBG concur with our mission, awarded research grants to three California Botanic Garden graduate students whose projects are in the desert environment. The grant recipients and projects are:

**Courtney Matzke** – A Vascular Floristic Study of the Piute Mountains in Kern County, California

**Peri Lee Pipkin** – A Flora Study of the Silver Peak Range in Esmeralda County, Nevada

**Kimberly A. Schaefer** - A Vascular Flora of the Sacatar Trail Wilderness, Inyo County California

All of these studies have objectives to produce an inventory of flora, to document plants in the study areas and to gather temperature data that will serve as baseline data for climate change research, conservation and restoration strategies. Ms. Pipkin's project has particular importance because the Silver Peak area is botanically under documented, and it faces a precarious future from looming lithium mining interests.

Desert Survivors is proud to support these studies and we look forward to reports from the grant recipients as articles in this magazine or online presentations.

Cover photo: The twisted and gnarled trunk of this bristlecone pine seems more akin to expressionistic sculpture than a living tree, but indeed it is alive. Some trees in this White Mountains forest are over four thousand years old, making them the ultimate desert survivors.

Photo: Esperanza Hernandez
Deserts look beautiful and green fields look beautiful too. Nature is genius because it knows how to look beautiful in every way.
—Mehmet Murat Ildan


The route into this slot canyon began as a walk along a gravel bottom, but soon required clambering up dry falls. Further along, climbing ropes were necessary to keep going.

Pictured here is the spot where the trip leader realized going forward was far too perilous and he turned everybody around.

The scene was eerie and undeniably spooky.
On a typical excursion to the desert outback there is a good chance you will come across abandoned gold mines. They seem to be everywhere if you know what to look for. You can usually spot the smaller ones by their piles of rock tailings. The larger mines can also have derelict structures such as mills and cabins and even ghost towns. By and large, these relics are quaint and welcome sights. They harken back to a hard-scrabble, pioneer enterprise that long ago went bust. They are one of the things we love about the desert.

This sort of hard rock, tunnel mining is long over, but mining for gold in the desert west is still on going. It is no longer a shaft in a mountain that follows a rich vein, but an enterprise that takes down the whole mountain. Modern gold mining techniques are devastating to the landscape, poisonous to the environment, to produce a product with virtually no practical use.

**Carlin Gold**

In 1961 geologists identified a new sort of gold deposit near the northern Nevada town of Carlin. This Carlin rock is often referred to as “Invisible Gold” since the precious metal is in microscopic particles, or dissolved in host sediments, that could only be determined through chemical analysis. This gold-bearing rock was formed deep in the earth, then uplifted to the surface by the tectonic activity that also created the hills and valleys of this part of Nevada.

Though Carlin-type deposits are low grade, open pit mining and low-cost heap-leach refining makes this sort of gold production a viable business. The Carlin deposit is huge—running 5 miles wide by 40 miles long in a northwest direction. Other Carlin-type deposits have been discovered in the region, and in recent decades the state has become one of the most productive gold mining regions of the world. In 2018, 5.58 million ounces of gold, (nearly all Carlin-type) were mined in the state. Total endowments of known Carlin-type deposits are estimated to be 225 million ounces—of which 155 million ounces has already been mined.

As impressive as recent production numbers are, they are actually a 48% decrease from the peak of Carlin mining in the late-1990’s. Today, Nevada companies are mining their reserves faster than they are being replaced and there is considerable activity to find more Carlin gold fields along the western extent of the state in a region called the “Walker Lane trend.” Eastern California is also in the Walker trend.

**Cyanide Heap-Leaching**

The abandoned mines we find in our trips are really the last places where the easy-to-reach gold was mined in the American west. Gold production since the mid-20th Century come mostly from low-grade deposits, that separate the gold from other earth materials by chemical refining. Since the 1970’s the most-used process is Cyanide Heap-Leaching.

In this method gold-bearing rock is crushed to a small size (between ¼” to ¾” diameter) and stacked in heaps up to 30 feet high in a water-tight basin. The heaps are then sprayed with a liquid cyanide solution, that percolates through the heap dissolving the gold. The "gold-pregnant" solution drains to the basin, collected to storage tanks, and refined to extract the precious metal, with about 90% of the gold recovered from the rock.

Cyanide heap-leaching, requires refining vast quantities of ore, removed from huge excavations—making the environmental impact of modern gold mines much greater than mines of the past. The leaching pads and basins often cover dozens of acres. Once the leaching is completed the tailings are hauled from the ponds and formed into great piles, where they remain into perpetuity. Industrial-scale cyanide heap-leaching requires the use of thousands of gallons of water. In a desert environment, this means pumping from the local aquifer—causing even broader destruction to the environment by depleting water sources for wildlife.

We all know cyanide as a poison. When used in such large quantities, spills and breaches in the collection ponds is always a huge concern. Cyanide spills into groundwater can persist for long periods of time and contaminate drinking water sources. In 2000, a tailings dam in Romania ruptured, spilling 3.5 million cubic feet of cyanide-contaminated waste into the Tisza and Danube Rivers, killing fish...
The cost to the environment damage by mining has to be weighed with the benefits of the product, and somewhere in this deal there is a price I am willing to pay. Mining is necessary. I do not feel the deserts should be off limits to mining. I am willing to sacrifice some of these lands for wise mining production. The problem with gold mining is the product itself. Other than jewelry, dental fillings and corrosion-resistant electrical contacts, gold has little practical use. Its high value is derived solely on humans agreeing on it as a medium for exchange. For all practical purposes gold has been supplanted by paper money. Even so, gold continues to hold high value as a currency of fear. Virtually all of the Carlin gold will go right back into the ground after it is sold—into vaults or secret caches. The buyers of this gold are largely motivated by fear of a terrible crisis or some sort of societal breakdown, and the gold they hoard will be the only currency for the purchase of food or ammunition. This is great stuff for action movies but such a waste and shame for the real world, and our desert lands.

For years, now mining companies have had their eyes on a wilderness high ground in Inyo County called Conglomerate Mesa as a likely place for extracting Carlin gold. Recent proposals for exploratory drilling call for retrieving samples up to 984 feet deep. If exploitable gold was found at such a depth and in the mesa as a whole, a potential mine would take down the entire mountain and leave a hole.

Recently near Mammoth Lakes, CA a Canadian mining company has drilled exploratory holes in the Hot Creek area, for what could only be a potential open pit, cyanide heap-leach mine. If this were to happen it would result in a massive hole, with all the usual damages to the environment, adjacent to of populated place with a vibrant tourist economy, that is largely based on the area’s wilderness qualities! The notion is absurd but possible because the mineral extraction rights on federal lands come from 19th Century legislation that is badly needed to be updated.

Open-Pit Mining
One hundred years ago the mining of gold was done primarily through tunneling. This difficult, dangerous and labor-intensive process meant only the richest of rock was exploited. Tunnels were burrowed underground following veins of pay dirt, leaving surrounding rock untouched.

By the mid 20th Century advances in diesel-powered excavation equipment brought the wide-spread adoption of open-pit strip mining. Massive amounts of earth could now be moved at a relative low cost, allowing easy access of low-grade ores. This, of course, meant a huge increase in the size of mines. Massive holes were dug into the earth and even whole mountains were removed to reach this lesser ore. Open-pit mining substantially affects the soil, water, air, and living beings near the mining area. The removal of surface soil brings on soil erosion, and the exposes deep buried rock to the atmosphere where it often emits harmful chemicals into the air and water. Strip mining often damages local water bodies, disrupting water tables and drinking water supply and poisoning ground water from chemicals leached from exposed rock. According to a study, open-pit mining exposes eight to ten times more waste materials to the environment than underground mining.

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“All of this for Nothing
Since this article has highlighted many of the problems with modern mineral extraction the reader might think the author is against mining. This could not be further from the truth. I fully understand that most of the materials that make for safe, prosperous modern life come from mines and oil production. The needle that went into my young daughter’s arm to inoculate her from measles was made from nickel and iron that was mined from somewhere—a place no doubt with environmental damage because of mining.

"Gold gets dug out of the ground... Then we melt it down, dig another hole, bury it again and pay people to stand around guarding it. It has no utility. Anyone watching from Mars would be scratching their head.”—Warren Buffett

and poisoning water supplies as far as 250 miles downriver. In 1997, the Gold Quarry mine near Carlin, NV released almost a thousand cubic meters of cyanide-laden waste into two local creeks.


Gold ore is piled into basins. Hoses criss-crossing the heap spray a cyanide solution, that dissolves the precious metal from the ore, for later reclamation.
Campfires have been a staple of outdoor activities for centuries. They provide warmth, light, and a sense of community for people who gather around them. However, as our understanding of the impact of fires on the environment and human health has grown, it is important to re-evaluate whether campfires are still necessary and appropriate in modern times.

From a health perspective, campfires can release harmful chemicals and particulate matter into the air, which can harm human health, especially for people with respiratory conditions. The smoke produced by campfires can also cause eye irritation and affect air quality in surrounding areas. Think about your average campground. If we were breathing that level of air pollution in our homes we would be running the air filter on high.

During the summer, the use of campfires is especially problematic and unnecessary. With warm weather and low humidity, fires can easily spread and become dangerous, leading to wildfires and property damage.

The argument that we are hard-wired to sit in front of fire is also questionable. While it is true that humans have been using fire for warmth and light for thousands of years, it is not clear that we have an evolutionary need to sit in front of a campfire. Alternative forms of outdoor light such as solar lights and lanterns with warmth provided by easy access to an extra blanket or jacket is easy for modern people to access.

While campfires may have been a cherished part of outdoor activities in the past, it is important to re-consider their use in light of their impact on health and the environment. Alternatives such as solar lights and well contained candles can provide the same sense of community without the associated risks.

Lynne Buckner
Owyhee Country

Part One

By David Oline

The Owyhee River drains over seven million acres in the area where Oregon, Idaho, and Nevada meet. It is a vast empty land of flat basalt plateaus incised by deep canyons with sheer walls up to 1,000 feet high, carved by the forks of the Owyhee and its tributaries. It is remote, it is challenging to get to, and it is very empty; what's not to like? I have been wanting to lead a trip to the area for years, but one of the difficulties is scouting such a huge area. Perhaps the biggest challenge to exploring the Owyhee is there is almost no way to cross any of the canyons—no bridges or good fords. It is about 80 miles upriver from Rome, Oregon to a possible ford of the main river, but only if you had a monster truck and certainly not during the springtime. It is also a long way upstream on the tributary canyons to find any fords as well. To explore the river you have to choose a side, then rattle down long dead-end dirt roads to get to the rim, leaving the other side for a different trip. Trying to set up a car shuttle to the opposite rim, it would probably take a day and a half. This geography is why I titled this trip “Owyhee Country Part One” in the Desert Survivors schedule. It will take future trips to visit the Idaho and Nevada sides.

The vast expanse of grassland is likened to the Great Plains.

They walked for miles through country like this.

The Owyhee River has an ephemeral rafting season in the springtime, and the lower section put-in is at Rome, OR—which was our meeting point for the September 2022 Desert Survivors trip. From here you can float 50 miles to the slack water of Lake Owyhee, which is another 50 miles up from the dam when full. However, we were headed to the section up river, where there is a put-in at Three Forks—that is a four-day float down to Rome. It is possible to put in even further up, but only when conditions are right.

Perhaps the highlight of the entire Owyhee Country is Three Forks Hot Springs. The standard route to the springs is relatively accessible (for this area) on a passable plateau road. It approaches the main canyon rim on the east side at a viewpoint, before a final descent to the river, where the road suddenly gets steep and rocky. On the riverbank there is a campground and a bridge across the North Fork (one of the “Three Forks”) of the Owyhee. To get to the springs, you then have to hike another two miles, wade across the river, and make a short climb on the far bank, then scramble down some boulders to the pools of Warm Springs Creek. To reach these hot pools in the spring or early summer is problematic—the plateau roads consist of fine hard-packed dust which turns into tire-sucking mud when wet. Should you be able to reach the trailhead, you would discover that wading across the river is not safe due to the high water that flows that time of year. The fall season is best.
My brilliant idea for this trip was to not take the easy way, so we could explore the westside of the canyon. We would take the lesser traveled road in the west, and then turn onto a short spur road that dropped down directly to the springs. No wading required! Of course, the problem is that the lesser traveled roads in this part of the world tend to be in pretty terrible condition. Since I had never driven this route, I required the trip participants to travel in high-clearance 4WD vehicles, and hoped for the best based on what I discerned from Google Earth. As our caravan of five vehicles started out, the plateau roads were fine—bumpy, rutted in spots, and we drove through several herds of cattle. Conditions changed when we turned off onto the spur road. These were brutal miles of big firmly embedded rocks, requiring careful tire placement, which we had to negotiate at a crawling pace. I had no illusions about the road that dropped down from the rim to the springs, it was always planned to be a hike, not a drive. Getting down the last few boulders to the actual pools was tricky treading. Some of our group chose tiptoeing over the rocks; others chose to walk upriver and turn back along a route on the brushy banks of the river. In the end, we all made it to the pools. A married couple who was soaking in the big pool kindly moved to the smaller, lower pool, and gave us the big pool to ourselves. They were surprised at seeing us arrive from the west, rather than by wading across the river. Though extremely remote and challenging to get to, the Three Forks Hot Springs are well known, and have a campground relatively close by.

Reaching Three Forks Hot Springs was not easy, but the soaking was a cinch.

The entire creek is warm (93 degrees according to the thermometer Kurt packed in), and some work has been done to dam up and create soak-able pools. We spent a couple hours relaxing in the water. We had sun, clouds, and a few drops of rain during it all. It was delightful time, and well worth the huge effort required to get there.

Camp that night was back at our vehicles at a road pullout atop the plateau. Grassy and flat, the site was like being on the Great Plains, with the exception that in the distance you could see the enormous gouge of the canyon. The clouds briefly broke in a short and intense rain, causing us to scramble inside our cars. But half an hour later, the downpour ended, and we were outside finishing dinner and watching a gorgeous orange sunset through a thankfully distant haze of the now ubiquitous seasonal smoke.

The openness of the landscape was the topic of discussion. “This is not what I expected at all, I thought there would be mountains with canyons,” exclaimed one of the trip goers. The vastness of the landscape, the flatness of the plateau, the severity of the canyons, and the almost total absence of any human settlement or activity gives the Owyhee a truly unique character.

The tricky part of enjoying the Owyhee is finding a canyon bottom route that is hike-able. Willows, boulders, trees, pools, brush, and waterfalls are constant impediments, and cliffs block easy workarounds. I felt fortunate that during the next two days of the trip we did not find impassable obstacles until it was time to turn around anyway.
One hike started from the plateau, down Twin Springs Gorge to Big Antelope Canyon. We began by walking across a flat which led to a gentle grassy draw. As we trekked further, the route became steeper, cliffs formed around us, and the shade they created allowed more and more shrubs and then trees to grow. We didn't make it to the very bottom, where the permanent water allowed a true riparian zone, as shortly after lunch we came to a steep tumble of boulders filling the canyon. Had we more time, they may have been negotiated.

For our camp that night, we pulled off the road on a spur that led to Lucky Seven Cow Camp—within sight of a cluster of buildings, a curiosity in this area. As we were making breakfast, a lone rancher named Ron, who works and lives at the camp, drove by and stopped for coffee. Though Ron was curious about us, we were more curious about his life out here—where we learned he had worked much of his life. We were told the story how “Starvation Spring” got its name, and about unexpected snowstorms, and the number of tires that he goes through in his work.

On our last day, the goal was to drive the transition from canyonlands to mountains, and follow the East Fork of the Quinn River to McDermitt, Nevada. The unexpected beauty of this route turned out to be a highlight of the trip, even though it was several hours rattling down dirt roads. Through the windshield of a car, the flat plateau soon became gentle broad hills, which we climbed and got larger views of the country we had spent the last few days in. We stopped to take some photos at the Nevada-Oregon border near the highest point of the route, and then had a long descent to the river road at the bottom. South of the river, dramatic mountains rose thousands of feet at the north end of the Santa Rosa Range. We passed through the Devil's Gate, where the river makes a narrow cut through basalt cliffs. We then drove out of the canyon and across country dotted by ranches before arriving in McDermitt, and the end of the trip.

Even after making a huge loop through the west side of the Owyhee Country, what is great is that there is so much more. We explored a few miles of canyons where there are hundreds. And the distant remote other sides of the canyons are there, requiring further long and adventurous trips to even begin to explore.

Our next day's hike started from Anderson Crossing, one of the rare places where there's road access and the West Little Owyhee River can be forded. Though it is an official campground with a Bureau of Land Management recreation sign, there's no development except some flat-enough areas to park by the river. I wanted to hike downstream, as the map shows a fantastic series of incised meanders which looked well worth exploring. To do so would take a more prepared and determined canyoneering expedition than we wanted due primarily to walls of impenetrable brush—one in which you would need to get your feet wet. So we tried the other direction, and found that upriver the geography was different—a broader canyon with plenty of brush, but also with plenty of grassy and gravelly clearings which allowed us to make good progress. The clearings closed up occasionally, giving us just enough of a challenge to make it interesting, and there was one section we had to climb up out of the canyon bottom to get by. Being September, the river existed in scattered pools, but there are abundant sculpted sandbars and water scours amid a backdrop of vertical reddish canyon walls. Eventually we came to a series of ledges above some deeper water which became our turnaround point. Here also it would take more scrambling, bushwhacking, wet feet, and determination to go further.

The Oregon Natural Desert Association (ONDA) has made the Owyhee region one of its biggest conservation priorities. You can become a part of their efforts at https://onda.org/regions/owyhee-canyonlands/
Thacker Pass in northern Nevada, also known as Pehhee Mu’huu, is the site of the largest known lithium deposit in the U.S., a prized commodity for electric vehicle batteries, and where Lithium Nevada Corporation (a Canadian Company) has plans for a massive mine. The Federal permitting process for the project took less than one year, as opposed to three to five years for the typical mine of this size and complexity. In January 2021 the Bureau of Land Management (BLM) approved permits for the mine. Soon environmental groups, two tribes and a rancher joined in law suits against the BLM. The plaintiffs alleged the Environmental Impact Statement was done illegally and inadequately, ignoring the significant and permanent damage that would be done to area wildlife, including critical sage-grouse populations, golden eagles, burrowing owls, and long-billed curlew habitat. The Kings River Pryg spring snail, which was recently petitioned for listing under the Endangered Species Act, lives nearby. There are also serious ground water and cultural resources issues. These ecological and cultural disasters cannot be adequately mitigated if the mine is constructed.

Thacker Pass symbolizes the BLM’s wrecking ball approach to “green” energy on public land, and their cozy relationship with industry. Mining companies are expert at exploiting BLM loopholes that damage or destroy public land with inadequate public comment and review.

On February 6, 2023, Judge Miranda Du, of the United States District Court of Nevada, issued a ruling on the case. She found the Federal Lands Policy and Management Act was violated when BLM approved Lithium Nevada’s plan to bury 1300 acres of public lands under waste rock. The BLM was ordered to go back and determine whether the company had valid existing rights under the 1872 Mining Law to occupy the waste dump lands. However, ruling against the environmental groups, she did not overturn the BLM’s permit for the mine. At the same time, Judge Du also ruled that the BLM had not broken the law by not consulting the Reno-Sparks Indian Colony or the Burns Paiute Tribe.

On March 1, 2023, the 9th Circuit Court of Appeals denied the emergency preliminary injunction motions to block construction of the mine, but agreed to an expedited schedule for the appeal. On March 2, 2023, Lithium Nevada announced the start of construction of Thacker Pass lithium mine.

Lake Paiute Tribe, filed a new lawsuit in Nevada federal district court. They assert that new evidence indicates the BLM violated the Federal Land Policy Act, the National Historic Preservation Act and the National Environmental Policy Act, and is guilty of Breach of Contact having lied about the extent of its consultation with tribes. On February 20, the environmental groups filed a notice of appeal with the 9th Circuit Court of Appeals, which is the necessary first step in challenging the Nevada federal district court decision. The very next day, the environmental groups filed an emergency motion for preliminary injunction in Nevada federal district court, seeking to block construction of the mine until the appeal could be heard by the appeals court. The Nevada federal district court said no on February 24, so on February 27, the environmental groups filed an emergency motion for preliminary injunction in the 9th Circuit Court of Appeals, asking the court to immediately intervene to block mining construction pending appeal. Rancher Edward Bartell also filed a similar motion with the 9th Circuit Court of Appeals.

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The environmentalist appeal will be heard in the 9th Circuit Court of Appeals in June 2023. Rancher Bartell and the Burns Paiute tribe have also filed notices of appeal. So, while much of the recent news about the Thacker Pass lithium mine has been discouraging, the fight is by no means over.
The General Mining Act of 1872 is a piece of legislation that has garnered a significant amount of criticism in recent years for its impact on the environment, indigenous communities, and the American people. This law, which was enacted during the country’s expansion into the western frontier, was designed to promote the development of mining operations in the United States and move settlers onto non-arable public lands. However, the lack of regulations and restrictions has led to significant harm in several areas.

One of the biggest criticisms of the 1872 Mining Law is its impact on the environment. The lack of restrictions has allowed mining companies to extract minerals with little regard for the consequences. This has resulted in widespread environmental degradation, including the contamination of water sources, the destruction of wildlife habitats, and the release of toxic chemicals into the air. The negative impacts of this law have been felt in communities across the country, and many have called for reforms to mitigate the damage.

The law has also had a significant impact on indigenous communities. The absence of regulations has allowed mining companies to operate on native lands without proper consultation or fair compensation. This has led to the displacement of indigenous peoples from their ancestral homes, the destruction of sacred sites, and the exploitation of natural resources that are critical to the survival of indigenous communities.

Additionally, the 1872 Mining Law has been criticized for its impact on the American people. The absence of regulations has allowed mining companies to extract minerals without paying a fair price for them. This has resulted in the American people effectively subsidizing the mining industry, as they bear the costs of environmental degradation and other negative impacts, while the mining companies reap the benefits. The United States, with policies that allow hardrock mineral mining free of royalties to the U.S. government, is unusual among nations, causing mining companies from Canada and Australia to flock here. We truly are fools for giving away our mineral resources for free.

In response to these criticisms, there have been several efforts to reform the Mining Law of 1872. One of the most notable is a bill introduced in May 2022 by Congressman Raul Grijalva, D-AZ (House Natural Resources Committee). This bill proposes several reforms, including the imposition of royalty fees on mining operations, the creation of a trust fund to support environmental cleanup efforts, and the establishment of a permitting process to ensure that mining operations are conducted in a sustainable and responsible manner.

In conclusion, the Mining Law of 1872 is a piece of legislation that has had a significant impact on the environment, indigenous communities, and the American people. While it was enacted with the intention of promoting the development of mining operations in the United States, the lack of regulations and restrictions has led to significant harm. Reforms, such as those proposed by Congressman Raul Grijalva, are necessary to ensure that the mining industry operates in a sustainable and responsible manner and to protect the environment, indigenous communities, and the American people from harm. Please voice your support of the efforts of Raul Grijalva to your representatives. Also contact President Biden about an executive order if the legislation does not pass. Lynne Buckner
**LITTLE KNOWN TREASURES IN THE ARGUS**

**by Karen Rusiniak**

**Thursday**
Another year almost gone by, another Thanksgiving feast to be had at Panamint Valley Springs Resort—opened by Buffalo Bill Cody’s cousin, Agnes Cody, in 1937—now in 2022, featuring a smoked turkey and ham holiday dinner complete with all the trimmings. The Cassell family, who these days own the resort, hosts the event each year for family members, grateful locals and travelers stopping by.

**Friday**
Lynne Buckner and I planned to visit some of the lesser-known sites in the Argus Range and environs just north of Trona this holiday weekend. Trona seemed a little sad and struggling on the day we arrived. At the rest stop on the main drive through town we noticed a stray dog who looked forlorn and homeless walking very slowly, in search of food. While waiting for the museum to open at 10:00AM we walked around and saw a number of buildings with noticeable cracks that had been red-lined after the earthquake of July 7, 2019—including the Searles Domestic Water Company—and some seniors waiting in line at the Senior Center for their weekly vegetable pick up; the grocery store in town having closed down due to earthquake damage. There was the house at the end of Magnolia Street festooned with right-wing political placards, and a “Let’s Go Brandon” flag. The museum never opened although the hours were posted on the door. So much for Trona.

Our agenda evolved the more we studied the maps and noted this species is less nocturnal than other owls and is often seen in daylight and seen in daylight and roosts in hidden spots. Check and check! Highlights of this hike included finding a coyote gourd vine with about 15 ripe, green fruits spilling across a rock, and also some Thorn Apples, which is another name for Datura with its spiky capsules.

We saved Great Falls for another day and went off in search of “Indian Joe’s Garden”—officially named the Indian Joe Springs Ecological Reserve, administered by the California Department of Fish and Wildlife. Guess how many Ecological Reserves there are in California? All together 141, totaling about a quarter of a million acres. Who knew? These reserves are a statewide program whose primary purpose is the protection of rare, threatened, or endangered native plants, wildlife, aquatic organisms, and specialized habitats. Several of them are located in California deserts. This one was set up to provide habitat along an intermittent spring for the Inyo California Towhee—a bird subspecies that is found only in the Argus Range with an estimated population of under 800.

The reserve features 520 acres of creosote bush, narrow-leaved willow, and burro weed communities, including two acres of riparian scrub habitat. It is located about five miles north of Trona on the eastern slope of the Argus Range. The reserve was formally designated in 1994.

We drove to the boundary gate of the reserve, parked the car and set out on foot. We entered a canyon, and immediately encountered dump sites of various “historic” ages, that included an old car with running boards, a NY license plate dated 1930 and a relatively recent, embossed-glass Wishbone salad dressing bottle with a metal cap. Starting in 1870, base deposits were discovered by the California Department of Fish and Wildlife. Several of them are located in California deserts. This one was set up to provide habitat along an intermittent spring for the Inyo California Towhee—a bird subspecies that is found only in the Argus Range with an estimated population of under 800.

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We then traveled in nearby Homewood Canyon, largely being shut down in mining was stopped because of World War II. There had a production span from 1899 to the 1970s, but where we camped at the Ruth Mine. This gold mine was occupied this site with his California black walnuts, grapes and vegetables, to provide food to the miners at Trona and Ballarat. Following in 1870, base deposits were discovered by the California Department of Fish and Wildlife. Several of them are located in California deserts. This one was set up to provide habitat along an intermittent spring for the Inyo California Towhee—a bird subspecies that is found only in the Argus Range with an estimated population of under 800.

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A short-ear owl.

Bird sanctuary ahead.

Left: A broken metal bit found near Trona.

Below: The scribbling of the “Mad Russian.”

The “Mad Russian” cabin.

The schoolhouse at Ruth Mine.

A few of the black walnut trees at the Indian Joe Garden had nut husks.

Mumford Springs.

Lynne Buckner, holding a persistent, dessicated desert fungus.

Nearby Homewood Canyon, near Ruth Mine. This gold mine operated from 1899 to the 1970s, but largely being shut down in 1942 when nonessential mining was stopped because of World War II. There were bunkhouse, mess hall, general store/saloon, manager’s house scattered along with some salt cedar planted for shade. Many signs of burros here, too, and along the road I spotted a sandy spot where a burro had made circular designs in the sand with his hoofs while preparing its bed to lay in.

**Saturday**

We finally felt acclimated enough to strenuous hiking for a trek into Homewood Canyon and find the Russian Cabin, aka the “Rusky Cabin.” The trek was really an all-day affair and the cabin was challenging to find even with two GPS devices, but we reached it. Once again, many burro trails led into the canyon and we even found a place that had obsidian scatter, the nearest obsidian deposits being about 200 miles away! Locals call the man who lived there the “Mad Russian.” What is notable about this old building is that the former owner wrote in pencil all over its tin siding. I would call the writing “rants” and the subject matter seemed to be political with comments on Russia, Germany, the United States and World War II. The setting was particularly stunning on our visit as the willow trees were golden and someone had planted some Joshua trees. It was nice to see some baby Joshuas taking root too. I have many questions about the “Mad Russian.” What was his name? Where was he from? Has anyone documented the wall writing? Is there a photo of him?

**Sunday**

The trip ended with a mystery. I had brought along a copy of *Gem Trails of California* that told of areas around Trona where one could prospect for the semi-precious mineral, onyx. One area mentioned was off Nadeau Road, which had the added attraction of garnets embedded in granite. Upon arrival we found the prospecting site was covered with a very nice desert pavement, and we did find the dark pinkish granite with garnets—not gemstone quality, but the garnets were small, shiny inclusions. I spoke with my go-to geologist friend about the granite and she told me that it was rare for granite to have garnets, as granite is an igneous rock and cools quickly. The fact this granite was infused with garnets indicated that at some point sediments got mixed into the molten mass. This was fascinating, and an example of how interpreting an environment really adds to the appreciation of it. We did not find onyx.

The mystery that ended the trip, was many, many broken pieces of metal strewn about on the desert pavement. My metal consultant, Stan Huncilman (who I contacted after the trip), said the pieces appeared to be a non-ferrous alloy, and some trauma had occurred—indicated by gouges, sheared off pieces, scratches, etc. One piece had military green paint on it. Each piece was a clue with a story to tell, but what was it? Our speculation to its origin included a plane crash, model rocket gone wrong or maybe military operations. On June 3, 2022 a Super Hornet crashed just north of Trona. Could those metal pieces be from that aircraft? One piece with wires coming out of it had the name “Amphenol” stenciled on it. I learned later that company supplies interconnect systems for military applications. The plot thickens and the mystery remains.
Hawks Valley is remote enough to make it difficult to describe its location to most people. If I say, “West of the Pueblo Mountains and north of the Sheldon Antelope Refuge,” does that help? At least these latter landmarks are to be found on some Oregon highway maps, whereas you won’t find Hawks Mountain, Lone Mountain, or Hawksy Walksy until you zoom in to the level of a topographic map.

Our route into Hawks Valley on the June, 2022 Desert Survivors trip started out the same as my 2019 trip—which had to be modified at the last minute when the Bureau of Land Management (BLM) closed roads due to fire danger. During extreme fire danger all roads not clear of vegetation from berm to berm are closed. Much of our planned route back then had been on lesser roads consisting of parallel ruts with tinder dry underbelly-scraping vegetation in the middle. In 2019 we were able to make it to the Oregon End Table, a large basalt mesa with some interesting dry lakebeds on top. Now able to go further in 2022, our goal was to climb two peaks on either side of Hawks Valley—Lone Mountain and Hawks Peak—which we reached by driving up a gradual ascent over a low pass, located just below the three summits of Lone Mountain.

Much of this country is rounded, sagebrush-covered summits and level basalt plateaus, so it was a surprise for us to find an isolated expanse of craggy cliffs and rock outcrops and a small forest of Juniper when we drove into view of Lone Mountain. Though both the forest and rock formations are impressive, and make for an interesting hike on the way to the mountain top, we realized how small these features were the following day when we spied them from the summit of Hawks Peak, on the opposite side of the valley.

Two major springs were on our hiking route to the top of Lone Mountain—both with large BLM signs that have become faded, weather beaten, and obscured with vegetation since a time when there was more hope for agriculture in the valley. The bulldozed pond at Juniper Spring was dry this year. Granite Spring water was piped into a cattle trough that was full, and there was a small area of wet meadow vegetation. Here the botanists in our group began identifying plants in earnest, and they continued as we trekked upward. Though it was mid-June, the late-spring rains and the 6,000-foot elevation here provided some good flower dis-
plays, including bitterroot, dwarf purple monkeyflower, and a few very impressive specimens of thick stemmed wild cabbage.

Just below the summit, we stopped at a curious round-shaped micro-playa perched on the plateau. Its basin had recently dried out and was about an acre in size. Visible from Google Earth, it had an edge-of-the-world aspect with a broad view to the valley below just past a few small rock outcrops. We continued to the summit, where winds soon blew us off the peak after we took a few quick photos.

Our camp that night was at Moss Waterhole, which empty of water, was good flat ground for us to camp, and pleasant enough after shoveling some cow pies out of the way. At the small scale: camping in the bottom of a bulldozed dry cattle-trampled pond has its drawbacks. At the larger scale: when you look up to see the sunset glow on the mountains rolling off into the distance the sense of openness, isolation, and beauty reminds you of why we make the effort to come to these wilderness places.

Our next day’s hike was to the top of Hawks Peak. This required driving up an old jeep trail to as close as we could get before setting out on foot. Rather sketchy at times, the jeep route was particularly hard to follow in grassy areas, where there were not even obvious ruts in the ground. We did make it as far as I’d hoped in our vehicles, based on my maps and the images from Google Earth, making the summit a reasonable hike. As on Lone Mountain, the combination of using jeep trails and then animal trails made the hiking easier than expected. Without these, scrambling across open country, weaving around sagebrush, and using basalt rocks for footing gets tiresome and makes for slow going. We reached the summit and ate our lunches, taking in the expansive view as we dined. Then it was back to our cars.

Though we had planned to camp on the Hawksy Walksy playa that evening, we found a “road closed” marker on our route. This was new since my scouting trip, and it left us scrambling to find a substitute campsite. Although I had driven out onto the playa previously, it was on a dead end road going into part of the Wilderness Study Area (WSA). So a new road closed sign suggests either the Bureau of Land Management is managing the WSA more strictly, or that too many people have been driving out onto and damaging the playa. I suspect the latter, though on our walk onto the Hawksy Walksy playa the next day there was nothing obvious. We did find a surprising number of flowers on the playa, and even a bit of water remaining in an impoundment at the playa’s low point. The water had attracted several avocets, which was a surprise.

As we returned from our playa walk, a long-threatened rain began to fall. It became heavier as we reached our cars, and we quickly headed out, given our potentially perilous position ten miles from pavement. In this low valley, the roadbed consists of fine dust which can quickly turn to tire-sucking muck when wet. Brief heavy downpours with big drops noisily pounding the hoods of our cars quickly made the top layer very slick, causing a little slipping now and then, and forcing us to go slow. We got to Oregon Highway 140 before any of the mud got deep, and as we did the rain began to abate.
As we approached the paved highway, we saw a car speeding by, hit a patch of water, send a huge splashing rooster tail into the air, then skidded off the road, rolled over, and coming to a stop upright. We hurried to help. By the time we reached the crashed car, the two passengers had simply opened the doors and gotten out. They were thankfully fine. Yes, they had been wearing their seatbelts. After assessing the situation, and given that we were 120 miles from Winnemucca, NV, and 80 miles from Lakeview, OR, we decided to use our Garmin SOS buttons to get help far sooner than we otherwise could.

Lots of Desert Survivors have Garmin or SPOT satellite communication Devices with an SOS feature (four of us on the trip had one), but only a few have likely ever used them. From our experience, there are two things we learned about using these in an emergency. First, that when you activate it for someone else, your registered contacts will receive emergency notifications and will likely assume you are in trouble. Getting a message back to them about your situation can save a lot of worry. Second, if you have a model without built-in texting capability and connects via Bluetooth to your phone—and you have had your phone in airplane mode to save battery when you are in a remote area—you need to turn off airplane mode and then turn on Bluetooth separately in order to connect and communicate to the emergency responders about the situation and what is needed. In our case, establishing communication and letting the rescue workers know that our situation was not life-threatening was important, as an SOS alone requires them to assume the worst and respond urgently without any information.

Highway 140 is a paved state route in both Oregon and Nevada, but in this region of baking summer heat and freezing winter cold, the pavement has become deeply warped and grooved—something that is common on minor paved roads in the desert. Spending time by the side of the road while we waited for the highway patrol this becomes much more noticeable than when driving on it at speed. A sudden heavy downpour can quickly pool deep water in these poorly drained grooves, making hydroplaning dangerously likely when you hit them at high speed. The solution is to simply be aware and slow down.

The rain showers changed plans for some of our group and they had departed the trip first thing in the morning. Fortunately, many of us did not have to rush home, so we were able to stay and help as we waited for the State Police. Later, a few of us went to the Virgin Valley Hot Springs pool for a swim and a shower in their artesian hot spring, perpetual shower house. I was especially fortunate to have an extra day with Frank where he showed me a spot on Massacre Rim, with wonderful wildflower displays. This area is well worth coming back to; keep an eye on the Desert Survivors trip schedule.
A road sign cautioning “Trailers Not Recommended” is posted where the pavement ends and the rough dirt road begins heading into the White Mountain range in Eastern California. Having previously visited, I knew what road conditions to expect. Not so bad. I ignored the official warning and slowly towed my small trailer up 10 miles of steep, twisty, corduroy road to the welcoming log cabin dormitories operated by UCLA at the White Mountain Research Station.

Upon arrival, I discovered that there was no power in my towed home, despite being equipped with rooftop solar panels that charge two batteries. First, I sought advice from a savvy technician who was working on-site to test medical oxygen generating equipment that the military wants to deploy at altitudes over 10,000 ft. He quickly diagnosed that the trailer’s power cable had pulled apart while bouncing up the bumpy road. Then I sought additional expert assistance from Desert Survivors’ unofficial auto mechanic Scott Hassler, who graciously used his tools from his kit to reattach the wiring.

Thankfully, all was well for three nights of comfy quiet sleeping, blissfully separated from the loud snoring that echoed through the men’s dorm on my last visit.

Fifteen Desert Survivors gathered convivially for a delicious dinner cooked by a research station staff member Tim, who prepared all our breakfasts and dinners and set out lunch foods daily for us to assemble. Nightly happy hours lubricated lots of laughter and storytelling. We especially appreciated Kurt Staib’s potent homemade pomegranate juice with vodka cocktails.

Past Desert Survivors leadership believed that suffering was a necessary part of desert camping and hiking. Fortunately, we are now of a different mind, and today many members enjoy trips replete with civilized car camping facilities and equipment. This trip, we were blessed to have the leadership of Mike Wells and Charlene Daniels, who always bring warmth and good humor to the excursions they organize.
Hardier (and mostly younger) Desert Survivors members have ample opportunity to “enjoy” more strenuous trips, with rugged, long-distance cross-country hikes and backpacking, led by Stacy Goss, Dave Oline, Paul Harris and Carol Clark. Different stokes for different folks—and we have a lot of “different” characters among our members. If you’ve spent any time amongst our desert denizens, you will know what I mean.

We all volunteered for daily meal setup and cleaning. The breakfast preparation shift meant arising at an insanely early hour prior to mealtime at 7:00AM. Not a morning person, my chosen shifts were all at dinner time. But Tim appreciated my otherwise diligent and helpful work habits, and deployed me to dust the higher reaches in the dining room I am 6 feet 6 tall, so always seem to get these lofty assignments.

After breakfast, four passengers climbed into my Jeep Cherokee and we drove to the Patriarch Grove hiking trail at 11,700 ft. elevation. With increasing sensitivity to gender-appropriate labelling, we want to know why it’s not called Matriarch Grove. After all, females do live longer, and living as long as a 5,070 year-old Bristlecone pine requires much endurance.

The ancient Bristlecones are truly spectacular and inspiring, with gorgeously convoluted branching and richly varied coloring. Surprisingly, they are flourishing in this time of extreme drought and increasing global temperatures. Lots of seedlings are taking root in the white dolomite (magnesium-rich limestone) soil that was once a prehistoric seabed atop the White Mountain range. It is humbling to observe and experience these magnificent ancient trees growing continuously since long before Egyptians built the pyramids, and the unmistakable evidence of monumental ongoing changes in the Earth’s geology. Lightly vegetated desert vistas like this reveal so much visually about the remarkable and turbulent evolution of the planet.

The author feels that women should be included in the naming of this forest.

After traipsing around Patriarch/Matriarch Grove, we hiked to an abandoned mine that featured several derelict log cabins and a single vertical shaft likely more than 100 ft. deep. Hematite, an iron ore, was supposedly dug up here, but it was more likely a scam investing operation, as iron mining, to be profitable, would have required transporting enormous quantities of ore by a nonexistent railroad. The White Mountains are most unusual within the desert because of their well-known absence of valuable minerals and mines.

The pinecone is covered in sharp barbs, that give the tree its name.

In the late afternoon, Kurt and I carried passengers in our Jeeps on a 4WD excursion down Crooked Creek to an area featuring spectacular granite boulder formations. We stopped when approaching a change in topography from granite to volcanic lava rock, as we had been warned by Tim that rocky switchbacks ahead were most unforgiving and treacherous, and there was no opportunity to turn around in that further section. This exploratory outing nonetheless revealed entirely new (to us) opportunities for camping in a remote, lightly visited and beautiful area. High clearance (but not 4WD) is necessary to access the more-accessible section that we drove.
The next day our Desert Survivors group split into several parties. A few folks hiked Mt. Blanco. Isn’t that Spanish for White Mountain? Perhaps something or someone got lost in the translation. Kurt took Mike Wells on a 4WD excursion to view petroglyphs along Wyman Road.

The rest of us returned to Crooked Creek to investigate and hike a side road officially designated SO1B. In high spirits, we decided to rename it more memorably as “Road 1SOB.” Along the way, we were delighted to discover old Forest Service cabins, pitched tents and a corral of very friendly horses. Originally, the cabins housed rangers charged with moderating conflict between shepherds and cattlemen whose livestock competed for the grazing here. Today the cabins and tents are occupied by young folks from Deep Springs College. Nobody was home as we passed through and continued walking up the road. Further along, we were amazed to encounter in the boulder fields an apparition of the Virgin Mary, and then Kermit the Frog.

Retracing our steps by the cabins we met a young woman named Hannah, who of all things, was shoeing horses. This impressive and charming lady showed remarkable skill and confidence rasping their hooves, shaping horseshoes on an anvil, and nailing them to the horses’ feet. Re-nailing is required every six weeks due to wear and tear. Hannah learned this and other ranching skills while studying at Deep Springs College—a unique two-year college located on a cattle ranch located perhaps 20 miles distant.

At the college, a student body of 26 bright and gifted young people learn academic and life skills, with most graduates going on to prestigious four-year universities and leadership careers. By coincidence, our Hannah was featured milking a cow in a 60 Minutes feature about the college. We were so happy to meet this young “star” in person. I envied her unique college experience and acquired knowledge—having learned no practical life skills as a psychology major at UC Berkeley.

During our three days in the mountains, other than our small group and Hannah, we encountered only a few day trippers, and some hunters equipped with bows and arrows. Bow hunting makes for a more fair—and likely unsuccessful—interspecies contest: targeting alert, nimble, fast-moving deer, including some equipped for combat with pointy antlers.

On the final morning we cleaned the facilities and headed home. Temperatures at Lone Pine, CA 6,000 feet below reached 107°F and so I made a beeline for home in much cooler Burlingame, CA on San Francisco Bay. Traversing Bakersfield on Hwy 58 I was amused by local signage touting the virtues of piety along with firearms. These messages reminded me of important reasons to escape civilization and seek fundamental truths and serenity in the desert wilderness.

**The hikers think these boulders look like the Virgin Mary and Kermit the Frog. The Editor suggests acute mountain sickness.**

The college was founded in 1917 by L.L. Nunn, to advance a curriculum of academics, manual labor and student self-governance.

**The hikers happened upon a young woman shoeing horses**

**There was lots of equine adoring.**

**Scenes of Bakersfield.**

**The college was founded in 1917 by L.L. Nunn, to advance a curriculum of academics, manual labor and student self-governance.**

**Think Eternity Think Jesus**

**Believe in the Lord Jesus and You Will Be Saved.**
Afton Canyon - Crucero

by Eric Rasmussen

We Desert Survivors love to test ourselves. So again and again we travel to some of the harshest environments on earth determined to have fun.

Twelve of us convened on a Friday morning in January for first such adventure of 2023 at Afton Canyon on the Mojave River. Most had driven several hundred miles from their comfortable homes to get to this place also known as the "Grand Canyon of the East Mojave." Camping in the desert in January is done largely to avoid excessive heat. This trip accomplished that. Over breakfast Kurt Staib declared, “The thermometer dropped to 25° last night.”

For most of its course the Mojave River runs underground. There are a few stretches where it flows on the surface—such as where we camped. The trip leader, Nick Blake, had planned the day’s activities for the opposite side of the river. The plan was to ford the river in our high-clearance vehicles.

The water at the crossing spot was murky and we could not tell its depth. To be sure the river wasn’t too deep for crossing, Nick donned shorts and tennis shoes to wade across first. There was one small issue: a thin layer of ice had formed on the water.

Nick wadded in, lifting each foot high out of the water and ice, then sharply back down, breaking through the frozen surface one high step at a time. The chill reddening his calves. The ice cracked on each tread. His ankle was bloodied. He made it across the river and determined it was only 16 inches deep. After bandaging his ankle, we confirmed his inspection by driving his Jeep across the ford. I came along as a passenger, and it was a splash! A kids delight. Making a wake with a car is fun! Waves formed right below the passenger door: Whitewater! The new adventure was on.

The itinerary for the first day was to visit three different caves. We clambered into vehicles and carpooled to each of the sites. The first cave we explored appeared as a fissure in an 80-foot-high wall of conglomerate. It was narrow, but open at the top, and a few meters across at the bottom where we stood. Everybody found it fascinating.

Not far away, we hiked to a second cave, this one with a ceiling. This grotto was the size of a two-car garage, and had been used by early settlers, traveling along the river on the Mojave Road. They had sheltered their wagons in it.

On a few areas of the ceiling, we found whitish patches. Teresa Gula wondered out loud if these were lichens. Her questions inspired close inspection. We saw that the light color was once mud, scooped by wasps from puddles, then formed into pencil-shaped compartments, each about an inch long. When we opened one, we found the dry remains of small spiders, long-ago caught and paralyzed by the wasps to be eaten by their hatched larvae. Most of the caches had holes where adults had chewed exits for their young.

The third cave was “Spooky Canyon.” This began as a slot canyon, open to the sky. The pathway started in bright light, then darkened, then soon turned into a pitch black tunnel. Headlamps got us easily through several twisted turns until the path stopped at a wall. Dangling down was a climbing rope. Several of us accepted the invitation and used the rope to support us as we found foot and hand-holds and ascended the ten-foot vertical.
A few yards farther in was another wall and again a rope. More walls and ropes followed. That someone had put ropes in place impressed us. Quite a considerate and generous deed. But each time we gripped the well-spaced knots, and trusted our lives to the rope’s integrity, dark doubts appeared. At length we reached a wall that was some 30 feet high, with a rope that disappeared over the top.

Nick seeing the greatly increased height of the climb, its difficulty, and likely remembering that few of us had survived less than 70 years of age up to this moment, he announced that we’d now turn back. It was the right thing to do. As we walked out, we agreed the strangest thing about Spooky Canyon was the mysterious placement of the ropes and that they made our dark trek much easier, and safer. Who was that good Samaritan?

While our Friday sights were all natural and geologic, on Saturday we visited and puzzled over human creations. To reach them our vehicle caravan covered miles of very bumpy road, often much of it unmarked, to a long gone railroad junction called Crucero.

The first attraction was the grave of an infant girl, who died in 1931. The plot was well-marked and surrounded by a steel fence. The grave itself was demarcated by railroad spikes, its wooden cross decorated with dozens of colorful plastic flowers; left there by people touring the desert. The still busy railroad ran only a few yards away.

There was a grove of tall (30 foot) trees close by, indicating a spring at the site; probably once a water source for steam trains. The thick-trunked trees were Athels, native to deserts, but not the Mojave. They were introduced from North Africa, as windbreaks. Too bad they weren’t planted in rows where we put our tents.

Following a guide book, Nick next led us to an igloo-like structure, made of stones. It was like a kid’s fort, but has lasted for decades. Time, and tourists, have taken a toll on it. There was no longer a roof, and the walls have new holes.

The most curious human contribution to the landscape was made of steel, shaped like a giant hunting scope, but some six feet long, cemented to the top of a rock outcropping. Called the “Mojave Megaphone”, it was fabricated and installed by anonymous persons. Somehow they got the clunky pieces up the steep, rocky slopes, bored holes in stone, and cemented the thing into its picturesque place. The consensus of us trip-goers was that conception took place in a bar, but the artists were stone sober when they installed their creation. Otherwise there would be graves here, not art.

On Sunday—our last day on the desert—for a last hurrah, a few of us walked on a path that was probably thousands of years old, that led from highlands down to the Mojave River. The fine, small stones directly underfoot long supported the feet of indigenous people and thanks to the elevation and aridity of the area guided our steps. When we walked as far as we could along the ancient path, atop a bluff overlooking the river flood plain, we saw the railroad—the machine that ended the ancient traffic.

While I would not liken the place to the Grand Canyon, Afton Canyon has its own grandeur, that continues to attract and please people who travel here. I drove home appreciative of this special desert place.
A unanimous vote at the Annual General Meeting, October 2022.

Stacy Goss chairing the Sierra Club Desert Committee Meeting February 2023

Neil Cassidy, Denette Dengler and Malcolm Ettin practice signaling with a rescue mirror, October 2022.

This fellow tried to crash our "Physiology of Human Temperature Regulation" seminar.

Kurt Staib out in the wild.

Like moths attracted to the light.

Afton Canyon selfie.

Cute dog on one of our trips.

Going for the last slice of pie at the Holiday Party, December 2022.
Photos From Our Trips & Events

For the first time in three years we held our holiday party. Yay!

Point of view of an adorable lizard the hikers happened upon.

Erie Rasmussen, taking a break in the shade.

Right photo: Jora Fogg in a meadow of virtual spring flowers during her Zoom presentation on the Bodie Hills, December 2022.

Teresa Gula picking up trigger trash in the Mojave.

Demonstrating how to change a tire at the Annual General Meeting, October 2022.

Lunch break in the Owyhee Canyon. September 2022.

Hawksy Walksy walker...

Photo: Deirdre Cebulko; Nick Vasquez, Lynn Budner, Esperanza Hernandez, N. Blake, David Olsen, Craig King, and the Editor if you catch his eye.
Desert Survivors Membership Form

Membership dues are just $30/year, although additional donations are welcome. You can join or renew your membership by filling out this form and mailing it in with a check to the address shown below.

Name (req'd) _____________________________________________________________
Street Address (req'd) ______________________________________________________
City, State, Zip Code (req'd)__________________________________________________
Phone number: ___________________________________________________________
E-mail address: ___________________________________________________________

I want to join or renew at the following rate (make check payable to “Desert Survivors”):

____ $30 - Tortoise (basic rate) ____ $50 - Roadrunner ____ $100 - Coyote
____ $500 - Bristlecone ____ $1000 - Bighorn

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Climbing up a dry fall in Owl Canyon.