Thursday, Sept. 1, 2022

Getting ready to head out!
Since we need to trailer the car to Death Valley and
Redwood National Parks, we purchased a car trailer.
Getting a car up on a trailer is not as easy as one might imagine!





Rookie mistake: We forgot to remove the fender beforehand, so Greg had to climb out the window!

Sunday, Sept. 4, 2022



Here is the first of two sandwich boards that we will have with us when we are park at the National Parks. This one has brochures that are all about hydrogen cars, and the future of hydrogen as a no-emission fuel for transportation. This sandwich board has brochures that detail the impacts of climate change on our National Parks.

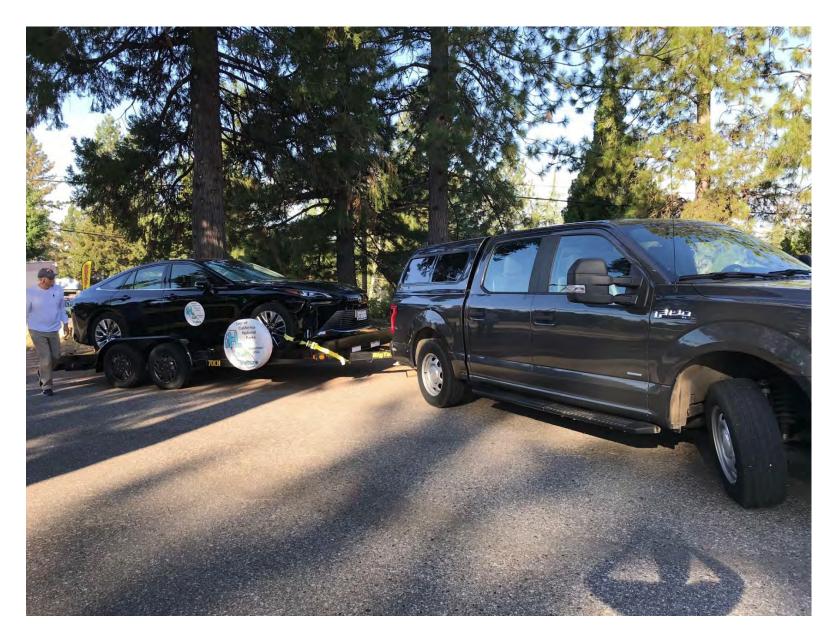


Monday, Sept. 5, 2022



Filling up at the Citrus Heights station the day before the trip. We were pleasantly surprised to find that both pumps were working. While we were filling at Pump 2, a tricky situation was happening at Pump 1 (white Mirai in the background). The customer had completed her fill and could not remove the nozzle, even after 10 minutes (on a 100-degree day). A small group of fellow Mirai owners put our heads together and agreed that this wasn't a case of the nozzle freezing in place. Someone had the idea of restarting the pump process, and walla, it worked! The nozzle was removed. Problem solved. For the most part, we find FCEV owners to be a friendly bunch; lots of camaraderie while waiting at the pumps.

Tuesday, Sept. 6, 2022



Got started early in Grass Valley before it got too hot. Two of the National Parks, (Redwood and Death Valley) are beyond the range of the Mirai. We had to trailer the Mirai to the hydrogen fueling station at Harris Ranch, in order to be able to reach Death Valley (more on this in a few days). Prior to going there, we'll take the Mirai to Yosemite tomorrow, and Sequoia/Kings Canyon on Friday.



It's not inappropriate that our first day is on the hottest day of a record-breaking heat wave! This is just outside of Harris Ranch in the Central Valley of CA.

Wednesday, September 7, 2022 From Harris Ranch, to Yosemite Valley and Return



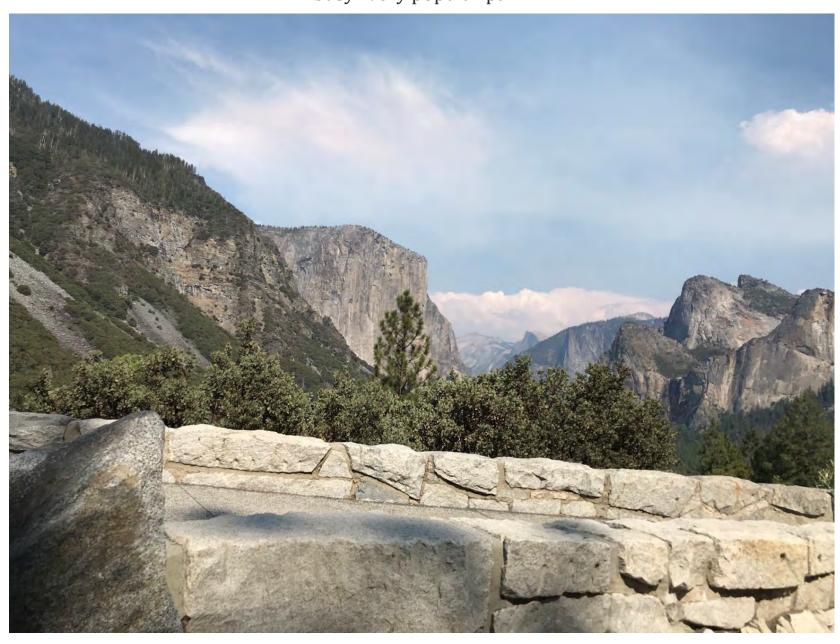
Valley overlook. View was obstructed by wildfire smoke in the morning.



Sadly, several areas of recent fires on the way to Yosemite Valley.



"Tabling" in the Day Use Parking Area. We were right next to ongoing construction. Very busy...very popular park.



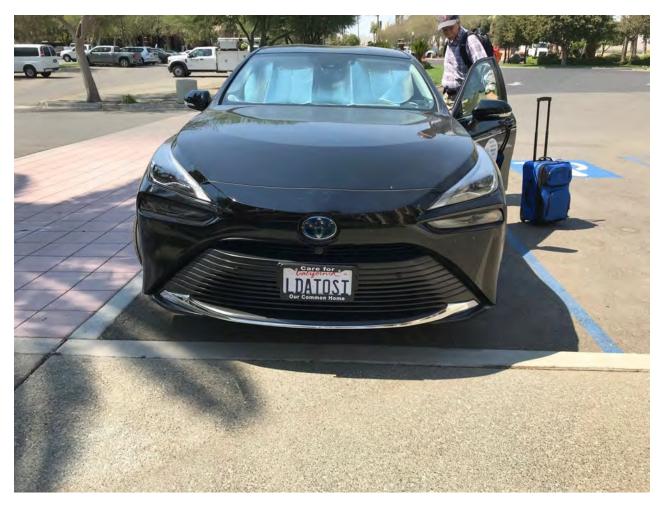
Yes! This is why visitors come here. What grandeur! This was the view from the same overlook as we left in the afternoon.

"STATS" Elevation at Harris Ranch: 450 ft Elevation at Yosemite Valley: 3,970 ft Distance, one-way, from Harris Ranch (by odometer): 140 miles (280 miles total) Fuel gauge reading prior to leaving: 351 miles (AC off) Fuel gauge reading at Yosemite Valley: 208 miles Fuel gauge reading at

end of trip: 78 miles (AC on) Fuel efficiency, going: 63 MPGe average (Air conditioning off) Fuel efficiency, returning: 81 MPGe average (Air conditioning on)

Thursday, Sept. 8, 2022 - Rest and Preparation Day

Today is an "in-between" day, resting up and cleaning the car before we head to two more National Parks tomorrow – Sequoia and Kings Canyon. We will fuel up the car here at Harris Ranch, which has a hydrogen station.



Some of you might be interested in our license plate, "LDATOSI". Our Catholic friends and family may recognize this - it is our abbreviated version of "Laudato Si', which in Latin means "Praise Be To You". It is the name of the Encyclical that Pope Francis wrote in 2015, where he laid out his ideas about climate change, and the need for all people to "care for our common home". This Encyclical has been an inspiration for us to start trying to do something to help ensure that our grandchildren have a better world to grow up in.



Busy day at the H2 fueling station. The hydrogen transport truck arrived at the same time as we did.

Friday, Sept. 9, 2022 - Kings Canyon and Sequoia NPs

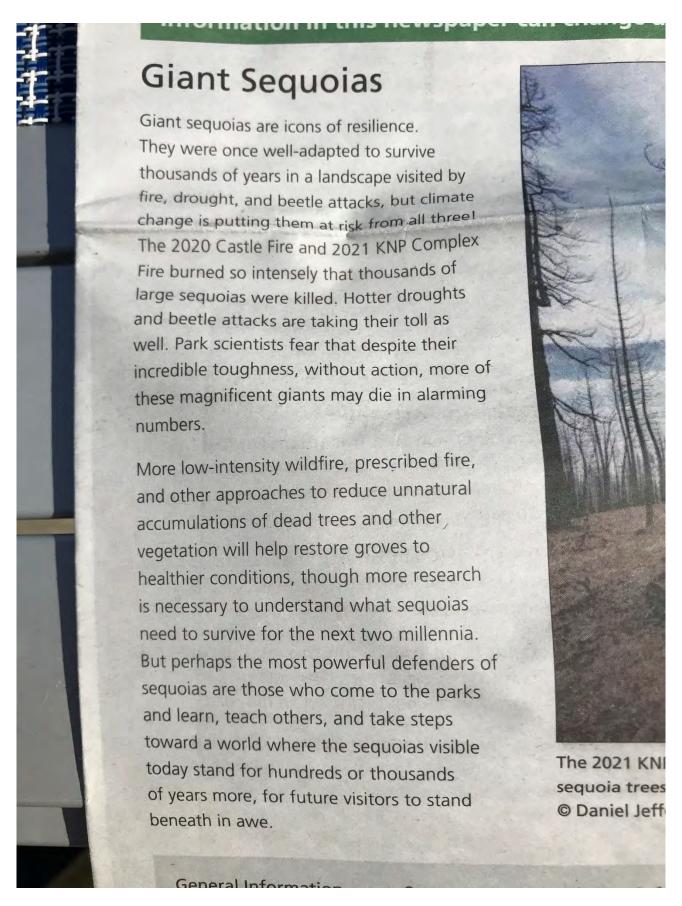
Today, we visited two National Parks, Kings Canyon and Sequoia, and in between took a mile walk at 7,000 foot elevation to see the largest tree in the world, the General Sherman Tree....



Our morning setup was at the Kings Canyon National Park Visitor Center. We are realizing that putting the hood up on the Mirai makes us look like we are in a used car lot, but it seems to get more interest than the sandwich boards! It was a bit cooler today than it has been, at least at first.



It worked! It was interesting to note that at this Park, and at Sequoia, we found at least a few people who knew a little about hydrogen cars. Most folks have never heard of it, which is understandable.



In between Kings Canyon and Sequoia, we did see evidence of fire damage, as is highlighted in the Park newspaper.





Large swathes of burned trees were everywhere, but you could still see some areas that were untouched.

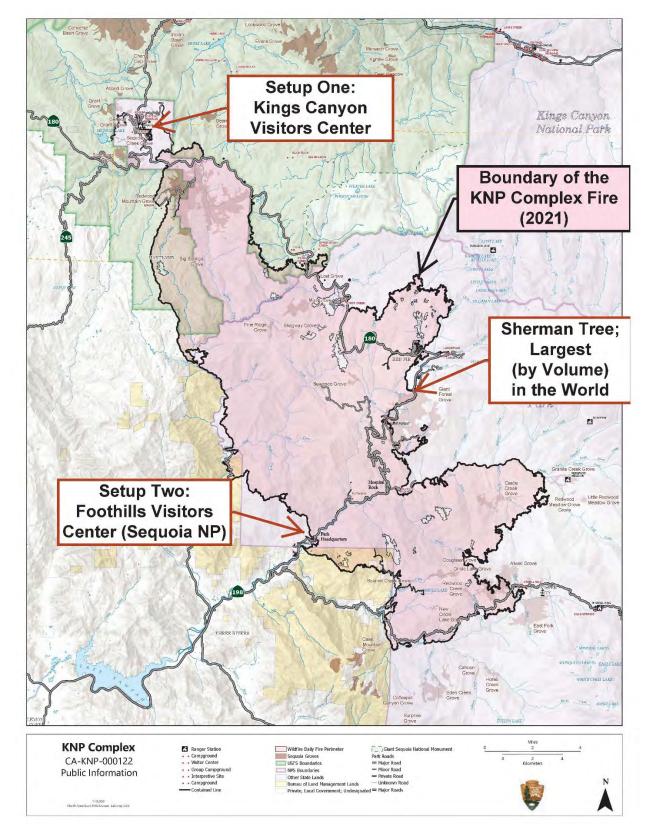


One of the areas that was not impacted, thankfully, was the area where the General Sherman tree is located. This is the largest tree, (volume-wise) in the world, and it was quite a sight to see!



On our "Climate Impacts" handout, we had included a picture of this tree being protected with fire-resistant aluminum wrapping last year during the KNP complex fire. The area immediately around it was untouched, as well.





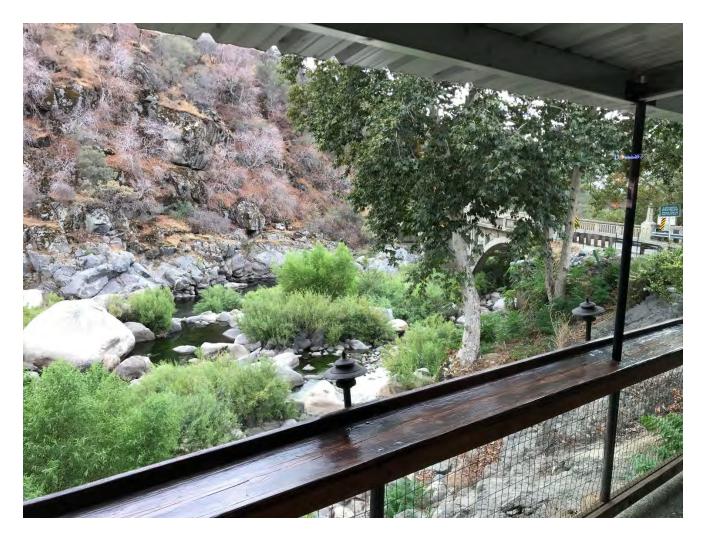
Last year's KNP Complex fire burned large areas of Sequoia National Park. It came to within a few hundred feet of the Sherman Tree.



Here we were set up at Sequoia National Park - Foothill Visitor Center. Even though this was the smallest of the lots we'd been in so far, we actually had more people come to talk to us about what we were doing. Another thing we realized after Yosemite, was that we needed to add "Please Help Yourself" signs to the boards; we think people might figure we're trying to sell something otherwise!



Pretty good mileage, eh! The mileage gauge was reset at Lodgepole. It was a very steep downhill slope from there. This was near the Foothill Visitor Center. The impact on mileage from steep downhill grades is really something!

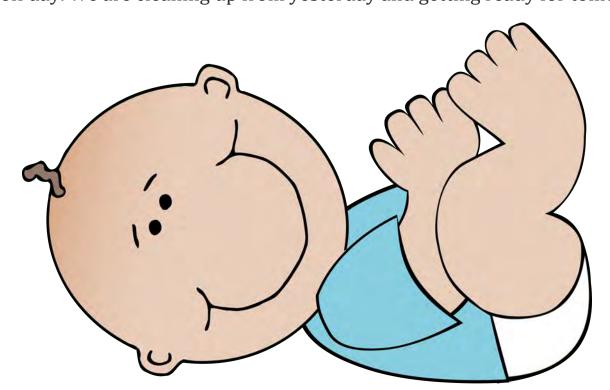


Great way to end a long day. Stopped at the Gateway Restaurant in Three Rivers. Wonderful food and view from our table.

"STATS" Elevation at Harris Ranch: 450 ft Elevation at Lodgepole Visitor Center: 6,700 ft (approx. midpoint of trip and near the highest elevation of the trip) Going: Distance from Harris Ranch to Lodgepole (by odometer): 129 miles Return: (Returned to Harris Ranch by alternate route) (by odometer) 109 miles Fuel gauge reading prior to leaving: 347 miles (AC off) Fuel gauge reading at Lodgepole: 198 miles (AC off) Fuel gauge reading at end of trip: 101 miles (AC on) Fuel efficiency, going: 57 MPGe average (Air conditioning on and off) Fuel efficiency, return: 91 MPGe average (Air conditioning on)

Saturday, September 10, 2022 - It's a Boy!!!

Today was an off day. We are cleaning up from yesterday and getting ready for tomorrow.



Invariably, when people walk up to us when we are "tabling" at the Visitor Centers, they would ask, "What's this all about". Our answer is that we are grandparents who want to do right by our grandkids by making the future just a bit better. Well, what better gift for us than to be able to announce that today we have a new grandson and, **boy are we proud**!

Sunday, Sept. 11, 2022 Trailering the Mirai to Ridgecrest, CA

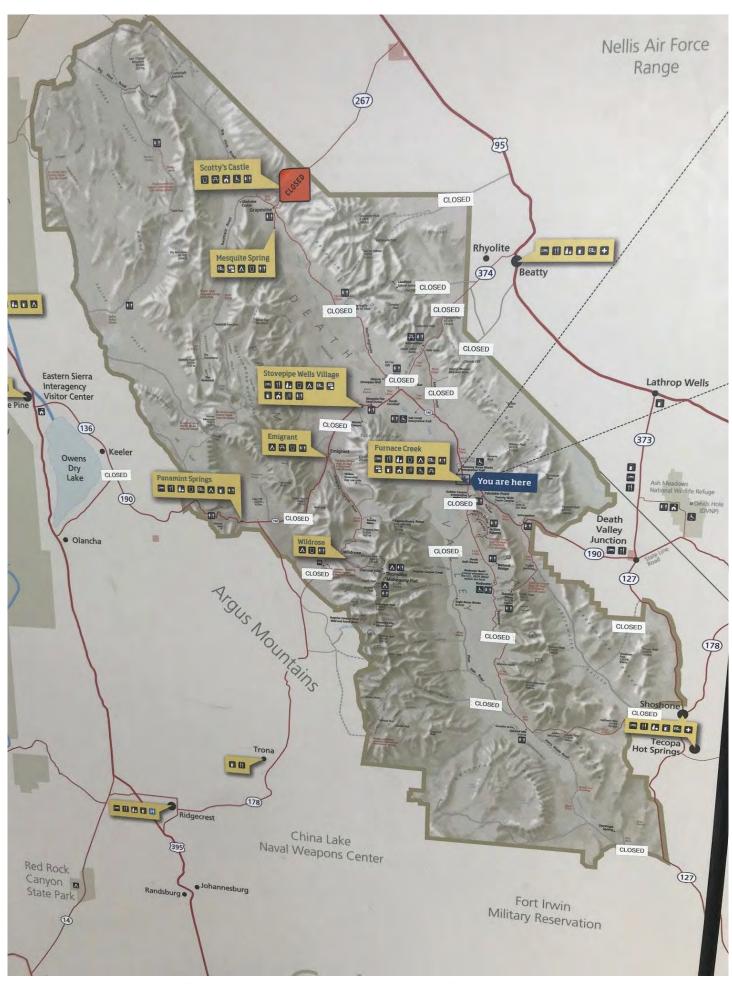


Today we traveled to Ridgecrest, CA, to be closer to Death Valley National Park. There are no hydrogen fueling stations near Death Valley, so we needed to trailer the Mirai to within driving range of the Park. Prior to the trip, we had tried to find a company that would meet us with a mobile fueling truck so trailering would not be required. Numerous companies, including Toyota, tried to help us, but after dozens of emails and conversations, it was clear that there was no possibility of obtaining mobile fueling service for this trip. The photo shows us near Lake Isabella, in the Sequoia National Forest. Given the current drought, it was no surprise that the Lake water surface level was very, very low. The area near here had sustained considerable damage in the "French" fire which happened August - October of 2021.



One nice surprise on the way to Ridgecrest today was the sight of acres and acres of Joshua Trees! We hadn't expected to find them this far north.

Monday, Sept. 12, 2022 - Death Valley NP



Today we visited Death Valley National Park. Due to the flood damage from last month's storm, many roads were closed. This map shows areas currently closed in Death Valley NP. We needed to trailer the car much farther than we had at first planned in order to reach the Furnace Creek Visitor Center.



This road (this was the detour road) was passable, but even here you can see the water over the road and on the sides. Death Valley received 1.45" of rain in July 2021, making July 2021 the wettest July on record. On Aug. 5, 2022, Death Valley received 1.7" of rain, which, according to the National Weather Service, was 75% of their annual rainfall in a single day. Normal rainfall is just 2.2" in a year. A Ranger we spoke to said they are still under a "flood watch" for a few more days, and indeed as we were leaving, we saw several rain squalls.





Otherwise, our trip here was a wonderful surprise, at least for Bobbie, who had never been here before. The many colors and configurations of the mountains, the clear air, and the rainbows in and around Death Valley all made for a very beautiful scene!



The temp was not too bad today, as far as normal Death Valley temps go. This sign display shows daily temperatures and sea level depths of the various parts of the park.





Our permit allowed us to be just outside of the Furnace Creek Visitor Center, which was great; the Mirai was parked under covered parking, so did not get the attention it usually does!



These three women were from Germany, and had knowledge and experience with the hydrogen fueled vehicles they had seen over there. Over the last several days, at the various parks, we have had some really great conversations with people from the U.S., Great Britain, South Africa, and Germany.





Outside of the NP, we saw evidence of renewable energy in action – a very large solar array near Barstow, CA and a bank of Tesla chargers in Baker, CA.

"STATS"

Not too much to say on this today. If the roads had all been open, we would have driven the Mirai from Ridgecrest to Death Valley, a distance of about 240 miles RT. As it turned out, the required detour route was \underline{way} too far for the range of the car. So, we "cheated" \Leftrightarrow and trailered the Mirai to within 1/4 mile of the Visitor Center.

Tuesday, Sept. 13, 2022Trailering the Mirai Back to Harris Ranch

This was a travel day, trailering the Mirai from Ridgecrest back to Harris Ranch. We offloaded the Mirai in preparation for driving it to Pinnacles NP on the 14th.



In our travels on this day, and on other days throughout California, it was encouraging to see numerous solar arrays and windmill "farms" at several points along the way.



The following paragraph came from an NPR article this past May: "On a mild Sunday afternoon, California set a historic milestone in the quest for clean energy. The sun was shining, the wind was blowing and on May 8th, the state produced enough renewable electricity to meet 103% of consumer demand. That broke a record set a week earlier of 99.9%." On September 19th we will be visiting a unique new type of solar array at the Heliogen site in Lancaster, CA.

Wednesday, Sept. 14, 2022 - Pinnacles NP



Today we drove the Mirai about 80 miles north, from where we are staying at Harris Ranch, to a small National Park called Pinnacles. This park is known for its California Condors, the large, endangered bird species that live here, and also for its unusual diversity of bees.





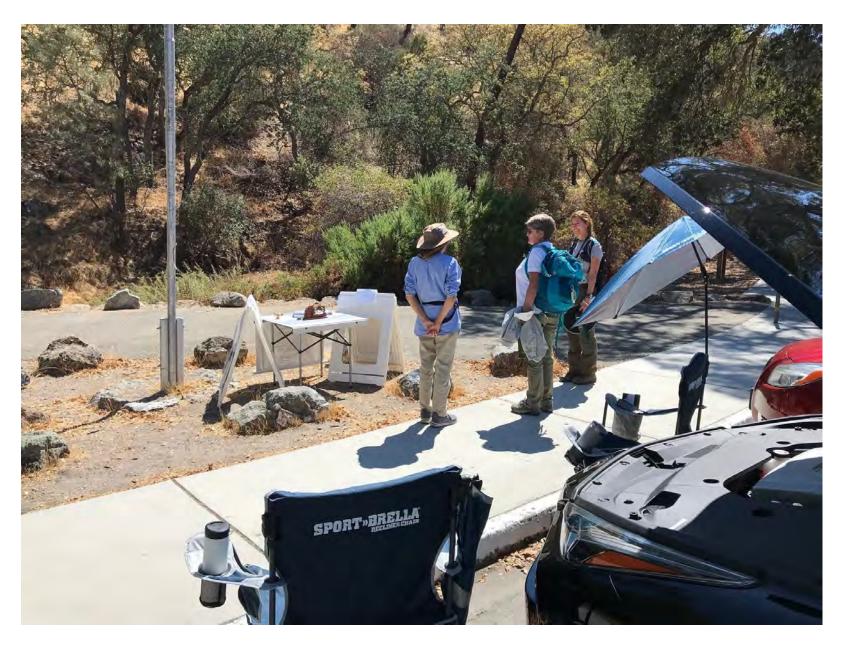
Condors can have a wingspan of up to 9.5 feet, and can weigh 20 pounds. Until very recently, they were once almost extinct. Pinnacles National Park was one of just 5 areas in California where they were reintroduced into the wild after intense recovery efforts in the 1980's. There are approximately 100 condors living in the area today, but eleven of these died in the Dolan fire of 2020.



The pinnacles, for which this park is named, were formed millions of years ago by volcanos, many miles south of the park. Plate tectonics moved them northward (the Park is directly atop the San Andreas fault). At the same time, wind and rain erosion created the spire-like rock formations that are present today.



We set up near the Bear Gulch Nature Center / Park Headquarters. Although there weren't too many visitors at this location, we did have the opportunity to talk with a number of Park Rangers.



These two Rangers, one a Biologist, the other a Park Veterinarian, were there working with juvenile condors that they were preparing to release into the wild. They were also giving Bobbie pointers about where to go to have the best chance of seeing the condors. Alas, we were not lucky



This Law Enforcement Ranger was very interested in learning about the Mirai.

Thursday, Sept. 15 & Friday Sept. 16, 2022

Took a short break from the trip on Thursday to go home and check on things. On Friday, we went to see our daughter and son-in-law and their growing family of boys and spent time at our oldest

grandson's birthday party. We were able to take the Mirai, as we filled up before we left Harris Ranch, and fueled again in Citrus Heights near Sacramento prior to our return to Harris Ranch. On to Joshua Tree National Park on Saturday!

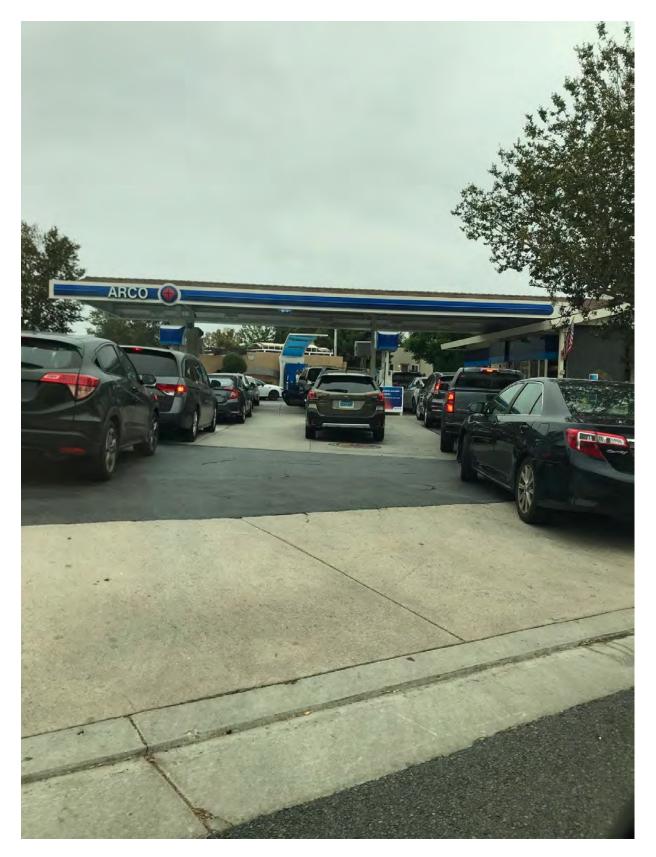
Saturday, Sept. 17, 2022 - Joshua Tree NP

Made it to Joshua Tree National Park today. Our fellow hydrogen fuel cell car owners will understand that doing so was not necessarily an easy task. Although hydrogen fueling stations are easier to find in Southern California, many times there are "issues" that prevent fueling....



Nice sight to see; first one we've seen on the trip.

We were bound and determined not to trailer the car to Joshua Tree National Park, as our route took us through the greater Los Angeles area, where hydrogen fueling stations are more numerous



The first station we went to was in La Canada which was on the same parcel as an ARCO gas station. The ARCO must have had the best gasoline prices around because it was so packed with cars that we had trouble getting over to the hydrogen pump. When we got there, we had to squeeze into a rather tight spot behind another fuel cell car. Greg had a pleasant conversation with the fellow who was fueling his Honda Clarity. However, once this man was done fueling, the pump nozzle was frozen to his car. He tried many times unsuccessfully to remove it, but in the end, we had to leave the poor chap to his fate. He seemed used to it and was planning to call the help line.

Next, we tried the hydrogen station in Baldwin Park. After a couple of unsuccessful attempts (for one reason or another) we were finally able to get enough fuel. We had been sweating it a bit by this point. Driving these cars is certainly an adventure!



We arrived at Hidden Valley Picnic Area, which was the spot that we were directed to by the Special Permits Coordinator. This turned out to be one of our best places yet. We had quite a few visitors, including one fellow who also owned a Mirai (first one of these we've met in the National Parks!) and a Park Volunteer. The Volunteer came over because he saw our hood up and thought we were in trouble; we explained that we did that to get folks interested, so instead of having to help us out, he learned a bit about fuel cell cars.



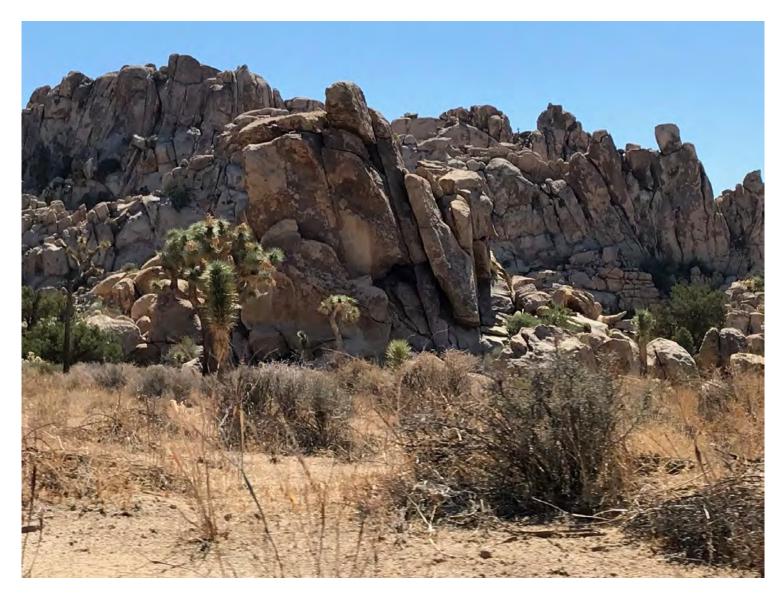
Today our new idea was to put signs on the fuel cell stack to let people know what kind of car this is. This seemed to garner a bit more interest.



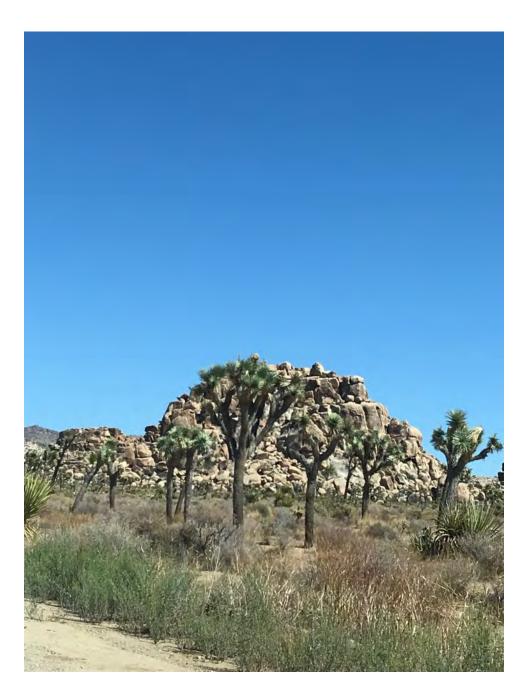
Joshua Tree NP is known, of course, for Joshua Trees, a unique plant species which is actually a member of the Yucca family. While they don't provide much shade, they offer beauty all their own, whether you see a few individual trees, or a whole "forest" of them.



This was the scene just a few steps from where we were set up in the picnic area.



The other nice thing about the Park is the rock formations. According to the brochure, they are the result of volcanic activity, and weathering. They are described as "rocks just piled up on top of each other" and that certainly seemed to be the case. There were many caution signs posted about taking extra care when rock climbing.



We enjoyed this park very much; the air was clear, the temperature was in the low 80's, and a gentle breeze was blowing – a beautiful day at Joshua Tree National Park!

Sunday, Sept. 18, 2022 Boat Tour of Santa Cruz Island, Channel Islands NP

We drove from our hotel in Twenty-Nine Palms this morning to Ventura Harbor to catch a boat to Santa Cruz Island, part of Channel Islands National Park, so this was essentially a "non-work" day for us; we will be setting up our display in Ventura Harbor in front of the Visitor Center on Tuesday.



On the way, we drove through an area where we were buffeted by the wind. What a great place for wind turbines – and there they were, hundreds of them, as far as the eye could see.



After fueling the Mirai in Placentia (without incident 5), we drove to Ventura Harbor, a nice area with plenty of shops and restaurants.



We caught the "Island Packers" boat, and took an hour-long trip out to Santa Cruz Island, one of five volcanic islands in the chain. The islands are part of the National Park system; around each island is a one-mile area designated as a National Marine Sanctuary.



The history of the Channel Islands is varied and complicated. Originally settled by Chumash and Gabrielino/Tongva native Americans, they later were home to adventurers and fur traders. Fishing and ranching came along during the 1800's and military camps were set up on a couple of the islands, with some detrimental effects to the ecology. For a period of several decades there was a sheep farm called "Scorpion Ranch" on Santa Cruz. Here is a display explaining how that came to be.



Some of the ranch buildings are still there, and today some of these house the visitor center.



The display area included this relief map of Santa Cruz, which is the biggest island in the chain. There was quite a bit of information about the Natural Marine Sanctuary as well, and pictures of the copious marine life around the island.



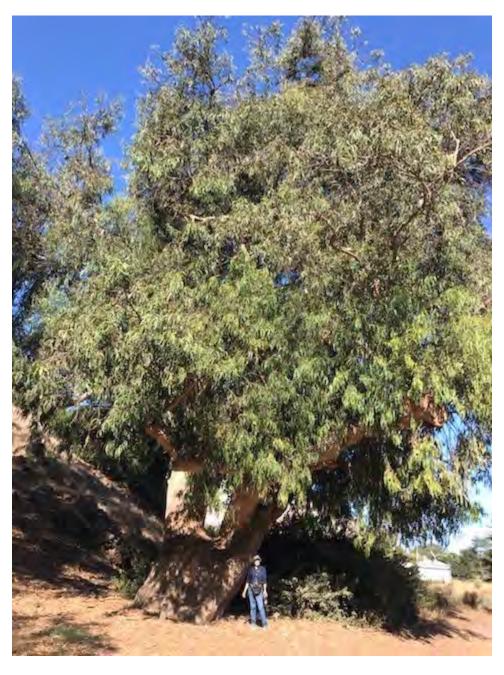
This is the entrance to the old sheep ranch. Behind this there is a campground, and a concession for kayaks and snorkeling/diving equipment. There are also many trails on the islands.



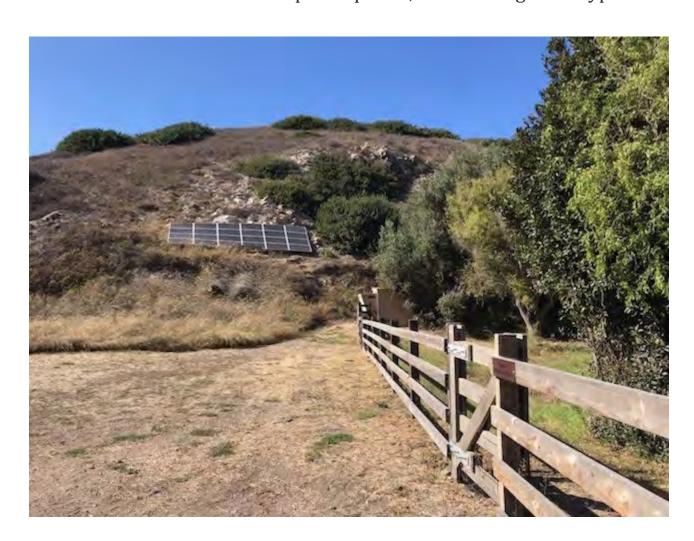
As it turned out, the island proved to be a lesson learned about a disruption in nature's balance. The sheep, along with pigs that were also shipped in, were not so great for the environment, and eventually had to be taken out because of the imbalance they created with the natural animals and flora of the island. A period of restoration followed, and now the native plants and animals are, by and large, living in harmony with one another.



Because the islands are so isolated, there are species of animals and plants here that are not found anywhere else on earth – 145 species, to be exact. One of these is the Island Fox, pictured here, which we saw near the historic buildings. These foxes were near extinction at one point, but are now plentiful. This one was about the size of a cat and had beautiful grey and orange markings.



There are still a few non-native plant species, like this huge Eucalyptus tree.



Just as Greg was starting to wonder how they got power out here for the buildings, we turned the corner and saw their solar array. This seems to be all they have here for generating electricity.



After our short stay on the island, we sailed back with a boatload of boy scouts who had been camping there for a few days. Here they are loading the kayaks onto our return boat. About halfway back we encountered a pod of humpback whales! Our Captain stopped the boat for about 15 minutes so that we could watch them.



You'll have to just believe us that they are in this picture! We saw several spouts, humps and tails, but alas, we were not quite quick enough with the camera. It was a great sight to see - even the boat captain and crew seemed to be excited, because they said this had been a lean year for whale sightings. This trip was well worth it, and we hope to come back some day.

Monday, Sept. 19, 2022 Tour of Heliogen Test Site

In the morning, we toured the Heliogen test site in Lancaster. For me, this truly was one of the real highlights of the trip. They are doing some really interesting work much of which, I must admit, was over my head.

I prepared a short write-up about our visit. Although I am far from a journalist, it is still very much worth a look. Bobbie took this photo. That's me (the geezer on the right) with Steve Schell and Joe Long of Heliogen. The tower was the focal point of the tour. Sorry about the pun.

- Greg



In the afternoon, we had coffee with Elizabeth Hersh, the very helpful staff member from the National Park Foundation. Elizabeth has been a tremendous help with the fundraising aspect of our trip.



Elizabeth and two old folks.

Tuesday, Sept. 20, 2022 Channel Islands NP Visitor Center

Today we set up at the Lagomarsino Visitor Center for the Channel Islands National Park. It is near Ventura Harbor, close to the location where we caught the boat that we took out to Santa Cruz Island on Sunday. This was one of the best set-up locations for us. (photo below).



A few folks came up to talk within the first 1/2 hour – it's the car that seems to draw most of them in.



This friendly fellow saw us drive in, and as a fire fighter noticed that we were parked in the fire lane, atlhough he did note we were not near the fire hydrant, so he wasn't concerned. (We did have the proper permission to park in this spot!) Then he noticed the car and proceeded to ask very intelligent questions about the Mirai, as he had been doing research on this car and others that have zero or low emissions.



This is a very impressive Visitor Center. The displays both inside and out were outstanding. This is the other side of the VC, near the harbor.



The displays here, sitting on top of relief maps, gave information about each island.

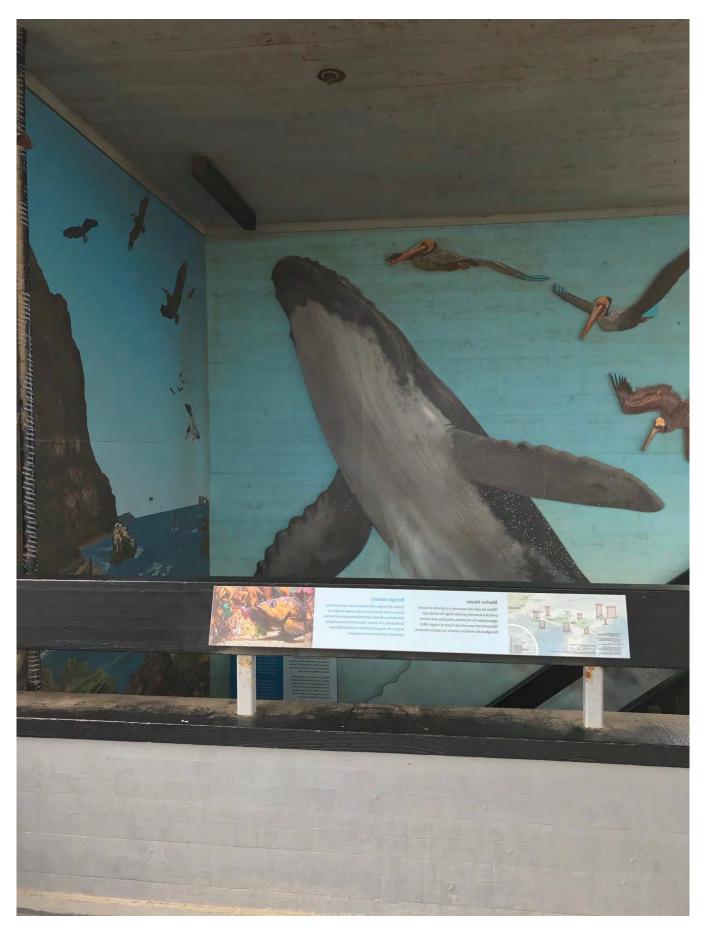


This bathymetric map shows the ocean depths around the islands. As mentioned before the National Marine Sanctuary extends one mile around each of the islands. Along with Channel Islands NP, it protects the largest seal and sea lion rookeries in the world. Each year, tens of thousands of them congregate on the islands isolated beaches to breed and rest.



Inside there was a live pool with a selection of the many different species that live in the ocean around this area, including this spiny lobster (see below).

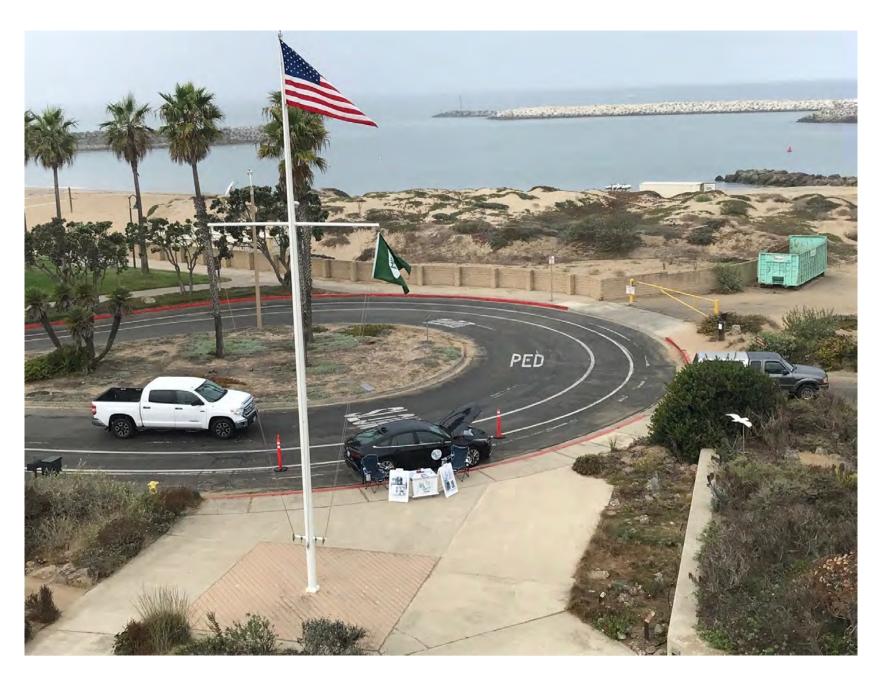




Near the outer display boards was a stairway, and all the way up the stairs were paintings of fish, whales and other sea life.



At the top of the stairs, you could see out into the harbor. I did spot one lonely seal here having fun, but he didn't want his picture taken.



Here is us from up above! Across the street you can see a popular beach next to the harbor.



Outside of the VC there was a display garden surrounding the building, full of native plants. Channel Islands National Park is helping to preserve a segment of the Mediterranean ecosystem that is recognized as one of the most imperiled in the world. We had to cut short our stay here a bit as it started to rain, of all things. The volunteers inside said they hadn't seen rain for a while, so they were glad to see it!

Wednesday, Sept. 21, 2022 Trailering the Mirai to Arcata, near Redwood NP

Yesterday, after our stop at the Channel Island VC, we drove back to Harris Ranch. This morning we put the car back on the trailer and drove to Arcata. Arcata is the home of Cal Poly Humboldt and the Schatz Energy Center and is about 30 miles south of the Kuchel VC at Redwood National Park.

The existing hydrogen fueling stations in California are not located such that a fuel cell car can reach either Death Valley or Redwood National Parks. There is, however, much hope on the horizon for future H2 visitors to the Redwoods. The Humboldt Transit Authority (HTA) and Schatz Energy Center have been awarded a \$39 million grant to purchase and use eleven fuel cell buses and to construct a hydrogen refueling station. The station will be available for use by the public, including those of us with fuel cell cars. This will be, by far, the most northerly hydrogen station in the State. This is really good news for us range-challenged hydrogen drivers. Read more about it here.

Thursday, Sept. 22, 2022 - Redwood NP

Today we drove the Mirai a few miles up the coast from Arcata to the Thomas Kuchel Visitor Center inside Redwood National Park.



By the time we got here in the afternoon, it was a beautiful sunny day; often times it is foggy, especially in the mornings.



We were able to set up in front of the Visitor Center and talked to several folks in the two hours that we were here. Here is Bobbie talking to a retired National Park Ranger, who seemed to be very interested in our efforts, and offered a lot of encouragement.



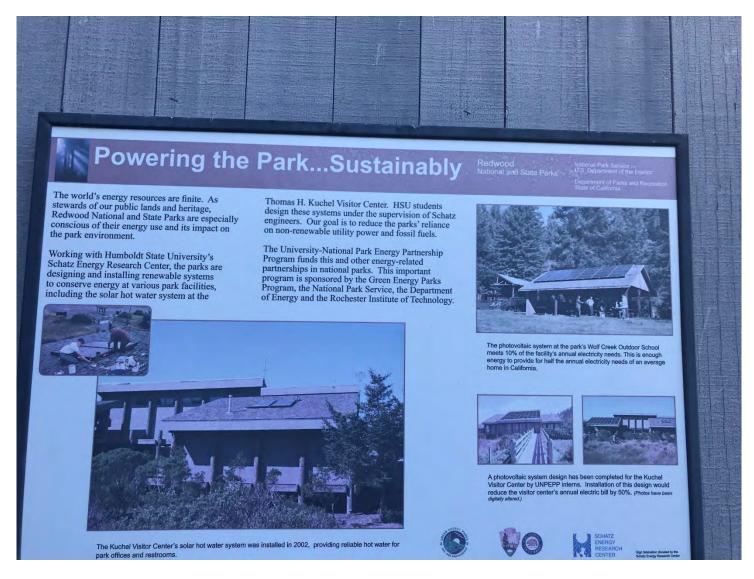
This was a really nice location for us, and we were able to talk to quite a few people, although the Park itself was not very busy on a late September day.



As many of you know, the National Park here collaborates with California State Parks to preserve and protect almost half of the world's remaining old growth redwood forests. This map shows only the National Park portion. Being so close to the coast is why the redwood forest is here; according the Park brochure, old growth redwood forests can get up to 40 % of the water they needs from fog, in the summer.



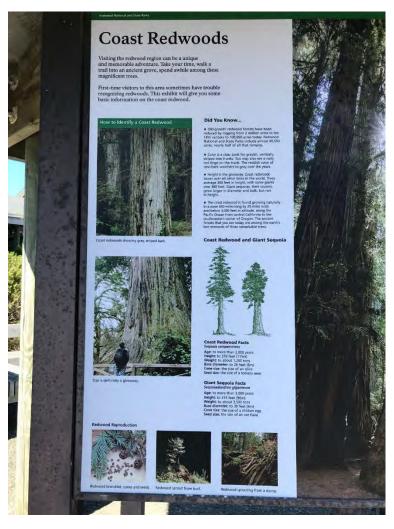
Here is a portion of the inside of the Visitor Center. Similar to all the others, it was chock-full of very informational displays!



This National Park seems to be very interested in climate issues and is very active in projects to mitigate the effects of climate change.



Their goal is to reduce the Parks' reliance on non-renewable utility power and fossil fuels. To that end they got help from the Schatz Energy Center, which is located at Cal Poly Humboldt in Arcata. (A place we are going to visit on Friday).



This poster helpfully explains the difference between Redwood and Sequoia trees, a question I had before starting this trip. As we noted in our "climate impacts" page, redwood trees actually grow bigger with more carbon in the air, and they are less prone to wildfires, because of their thick bark, and lack of resin. However, in 2020, there were some redwood trees in the State Park that burned in the CZU complex fire. Since redwood trees store more carbon per acre than any other forest type, the further loss of these trees could be very detrimental to the climate. The Park has introduced "controlled burns", on the forest floor to control fungi and other diseases that can kill young seedlings. Redwood Rising is a group, formalized in 2018, that combines the efforts of the Save the Redwoods League, the National Park Service and the California State Parks to restore, improve, and protect the forest and watershed of the 120,000 acres of redwoods in both park systems.



This is a picture taken from the back of the Visitor Center. Similar to Channel Islands, the National and State park boundaries extend a quarter mile into the ocean to protect marine life.



What? More condors? We were surprised to see this poster, as we did not realize condors were this far north, and indeed, they haven't been seen up here for many years. However, this year they became the release site for an experimental condor population, which is being led by the Yurok Tribe, working with many partners, including the National Park Service. We learned that condors are an important part of an ecosystem as they are scavengers, and help to clean up dead carcasses of other wildlife.



Last image of the day. We have seen 8 parks in two and a half weeks! One more park to go, Lassen Volcanic, which we will visit on Tuesday, Sept. 27.

Friday, Sept. 23, 2022 Schatz Energy Research Center at Cal Poly Humboldt



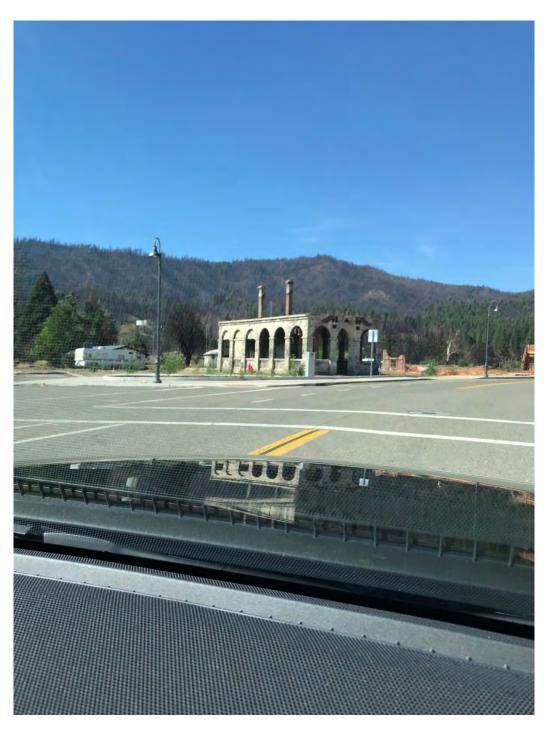
This truly was one of the highlights of the trip. They are doing some great things at the **Schatz Center.** For more information, I've prepared a short write up (not on this blog).

Tuesday, Sept. 27, 2022Lassen Volcanic NP

Today we drove the Mirai from our home in Grass Valley, up to Lassen Volcanic National Park, with a stop in Truckee for hydrogen fuel. We had a bit of "range anxiety" because we thought were were going to be pushing the limits of how far our car could take us. We kept calculating the number of miles left on our car with the amount that we still had to go, telling ourselves that we would just stop and turn around if it became apparent that we weren't going to be able to make the round trip. However, in the end, we had about 100 miles of range left! The Dixie Fire in 2021 was the largest, single wildfire in California history, and it started just 40 miles southeast of this Park. By the time it was fully contained, 963,309 acres were burned. According to the Park brochure, 69% of the park was affected, with some areas in the eastern portion more affected than elsewhere.



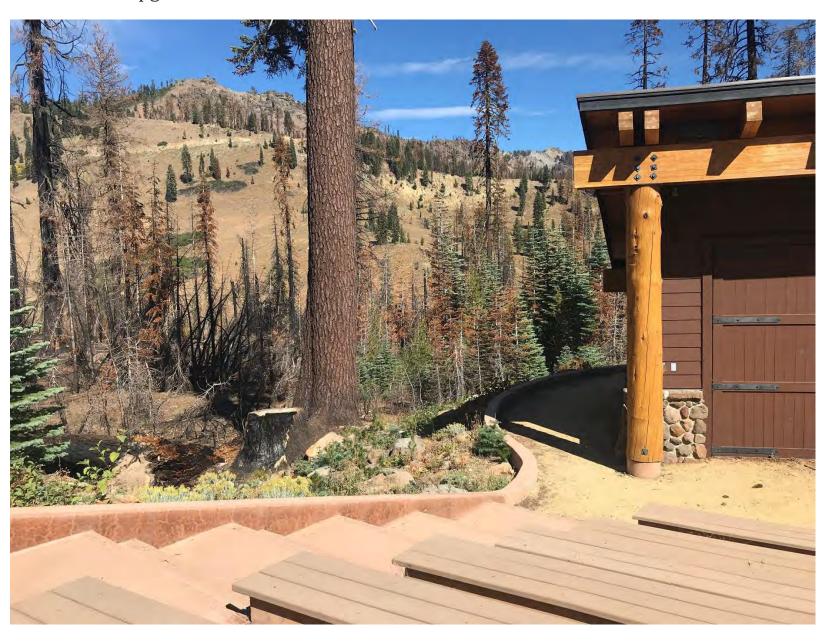
Indeed, even an hour away from the Visitor Center, we started to see evidence of it.



This small town near the Park experienced some burned buildings. Other towns were spared. As we neared the Park, the evidence was more and more apparent, but strangely, as often happens in wildfires, some areas remained untouched, even when surrounded by fire.

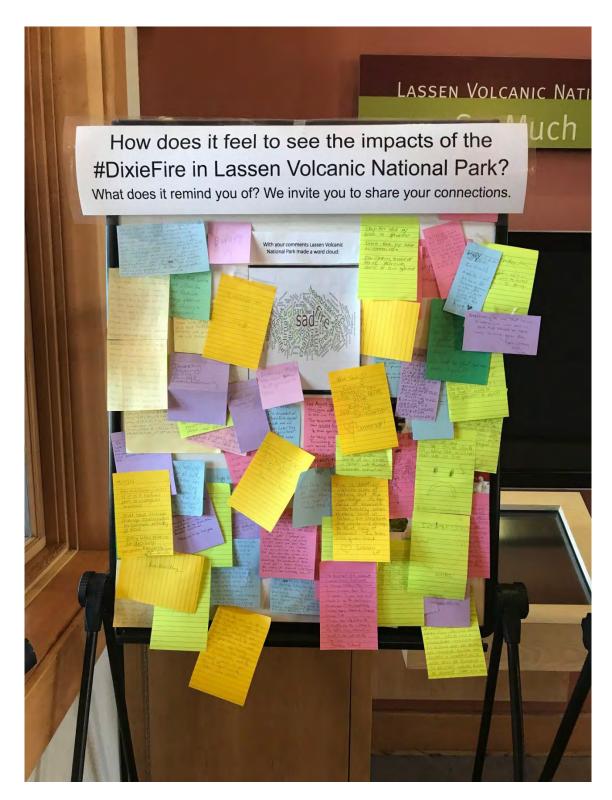


The area near the Visitor Center itself shows some definite evidence of the fire as well; some of the trails and campgrounds were closed.

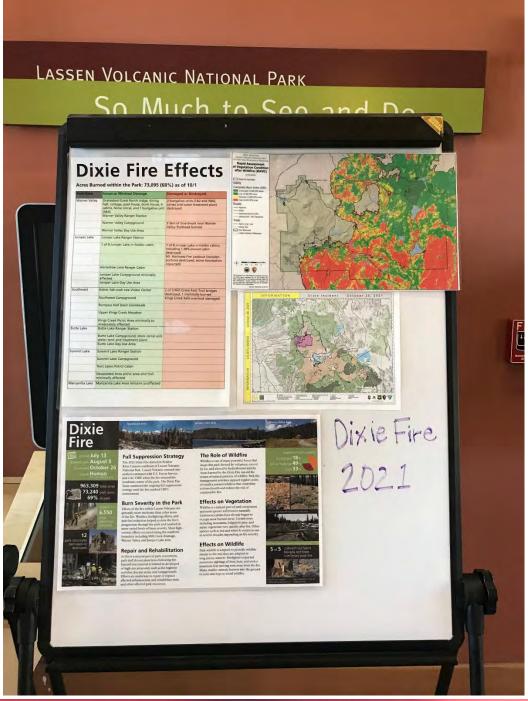


This Amphitheater is directly across from the VC, and it shows just how close the fire came on this side.



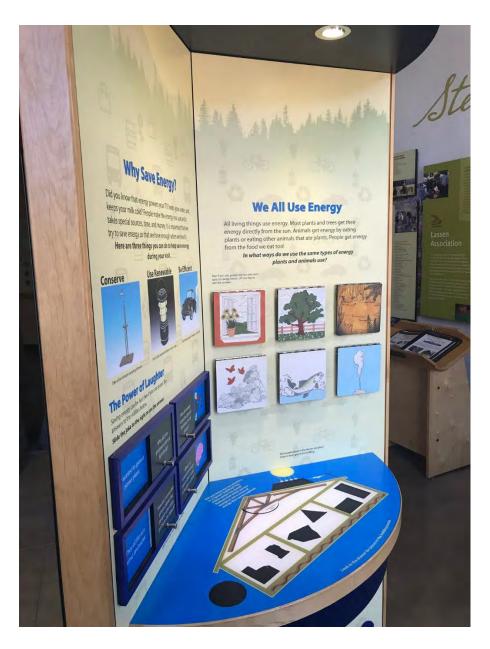


Inside the VC, there were signs that the Dixie fire was still very much on the minds of the people who visit this Park.





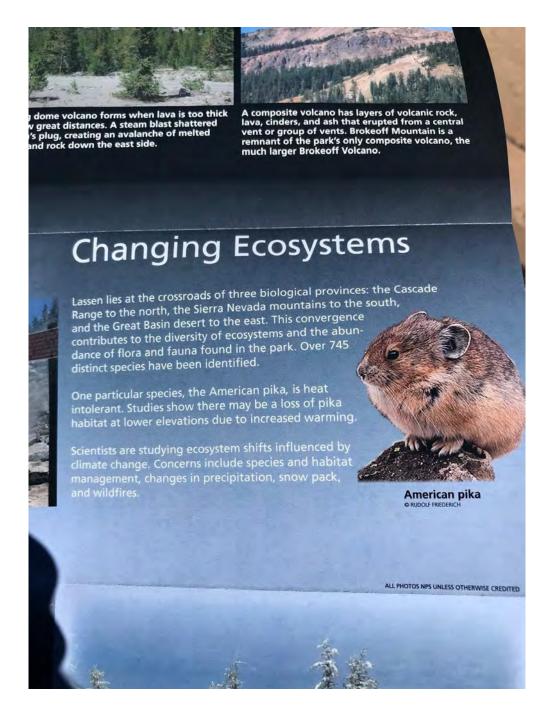
This Park has geothermal characteristics, similar to Yellowstone, but on a smaller scale. Here is a display of the 4 different types of volcanoes found in the park. The last eruption was Lassen Peak, in 1915. The Park is still considered an "active" volcanic area. There are boiling mud pots and fumaroles in different areas in the Park, but we did not have time to see those today.



Displays in the VC showed that this Park pays attention to energy usage and climate change goals.



Even the building was built "green". This brochure explained that some of the materials were recycled and reused from the old Lassen Ski Chalet, and any new wood that was used came from certified sustainable forests. There is a solar system offsite that provides 30-40% of their electricity needs, and the building was designed to use as much natural light as possible. It was apparent they are doing their part to lessen their impact on the environment.



According to their brochure, the diminutive Pika is just one of the animals adversely affected by the warming climate, as these small rodents cannot live in warm temperatures. We have seen these up in Washington but were not up high enough to glimpse any today.

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This was the last of the nine California National Parks that we visited this month. As we stated in Our Story, the whole reason for our doing this was to highlight the impacts that climate change is having on our National Parks, not only in California, but across the Nation. We also wanted to present an alternative emission-free vehicle. We did not set out to find evidence of climate change, but in at least four of the parks, Sequoia, Yosemite, Death Valley and Lassen, you couldn't miss it, from smoke to extreme fire damage to unusual flooding. To ourselves, we started to call our trip, "A tour through climate change". And of course, the underlying reason for taking on this task was to try and do our "one millionth of one percent" for the future of our grandchildren. We believe that our children and grandchildren and all future generations deserve to experience what we have seen in our lifetimes - beautiful vistas, clean air, green, lush forests full of wildlife. We have been encouraged on this trip at finding sincere technological efforts being undertaken by so many very smart people such as at Heliogen and the Schatz Energy Center. We know that it's not going to happen in our lifetime; studies undertaken by MIT have shown that even if we do all that can be done, it will take many decades before we turn this carbon ship around but, as we like to quote from a Greek proverb that we came across: "A society grows great when the elders plant trees whose shade they know they will never sit in". Also, from Environmental Scientist Dana Nuccitelli: "There will be no point in any of our lifetimes when it will become too late to leave the world a better place for future generations, than that which will result If we give up." Here is my poor attempt at a selfie at the end of the day, at the end of our tour.



Thank you to all who slogged through this blog. We didn't mean to be preachy, and hope we didn't come off that way. We just have found a passion that we will pursue as long as we are able. Bobbie and Greg

(P.S. - A summary on the mileage "STATS": We drove the Mirai a total of 2,121 miles on the trip. Our average mileage was 73 MPGe. Most of the driving was on the highway, on winding roads. What most impacted mileage was uphill vs downhill driving with the uphill portion being much lower than coming down. Also, turning on the AC seemed to noticeably reduce mileage, perhaps on the order of 10% to 15%. At 73 MPGe, and with a fuel tank capacity of 5.6 kg, our range was 409 miles, very close to the EPA estimated range (402 miles) for the Mirai.)