## PEATDUSTER

Volume 52-1 Number P-1

Delta-Sierra Group Newsletter

January - March 2021

## Visit us at www.sierraclub.org/mother-lode/delta-sierra



"For last year's words belong to last year's language And next year's words await another voice. And to make an end is to make a beginning."

Thomas Steams Eliot

Our Executive Director Michael Brune in the November/December issue of *Sierra* wrote, "PLEASE GOD LET THIS BE the last column I ever write about Donald Trump." His prayer was answered.

President Joe Biden inherits a major honey do list, the likes you never seen before. Besides changing the locks, removing the revolving doors, finding a chef who can cook something besides a cheese burger and all the environmental issues he has to tackle, he has to repair the relationships we have with Canada, Mexico, most of Europe, the Far East and the Middle East.



He has to deal with healthcare, immigration, unemployment issues and the sputtering economy. The National Debt has surpassed 27 trillion\* and climbing. Can we just say, "So what?" Oh yeah, the COVID 19 is still hanging around with over 460,000+ deaths and climbing as he takes office. (\*The national public debt is typically shown for every two even years. In April 2016 it was 19.19 trillion.)



Some say the pandemic contributes to the legacy of a man who chose to roll back, compromise, and destroy almost every environmental regulation we have. In our newsletter 51-3 for May, June and July 2020 we listed some 105 changes he made. In the weeks that followed he added 20 or so more. We assumed nothing was left, but in October this man's administration removed endangered species protections for the gray wolf.

## Editorial: Trump Era One Last Time

Trump constructed a berm to block the view of David and Moira 'Milne's home near the Trump International Golf Links clubhouse in Aberdeenshire, Scotland. Like Greenland, their home was not for sale. They even received a bill for the dirt wall he built. Like Mexico, they didn't pay for it. The Milnes, who detest walls, fly a Scottish flag and a Mexican flag outside their home within view of the clubhouse.



The press that has been chastised for about 5 years for being the monger of fake news helped us with this election. They started calling out Trump's farrago of lies, tweets and unprofessional comments while drawing attention to his childish behavior. They dropped his title. Now he was just Donald Trump or the "Trump Administration". Before November 3rd Time magazine changed their cover name to "Vote." After the election they put President elect Joe Biden and Kamala Harris on the cover and published a few comments by their readers. One such comment stands out from their issue following the election from Kimberly Rodman in Eugene, Oregon.



"Humpy trumpty sat on HIS wall Humpty trumpty had a GREAT fall All his lawyers and all of his kin Couldn't put trumpty together again."



For many of us it was difficult to accept Donald Trump as our President. As far as the Peatduster is concerned, except for this issue, we will follow the lead of Michael Brune. If asked about Trump, we will reward you with, "Trump Who?"

Explore, enjoy and protect the planet.

## Chair's Message - WELCOME 2021

2020 has been a challenging year and regrouping is in the air as we welcome in the New Year. The Delta-Sierra Group's general membership meetings, outings and community events have been sorely missed as we required social distancing in order to stay safe. I hope you and your family are well in this New Year and I so look forward to the time when we can gather again.

Fortunately, Covid vaccines are here, so 2021 brings some hope for the health of our people. The new Administration, prepared and set for inauguration on January 20, 2021, is offering a promise for responsible care of the Earth - the people, creatures, nature, air, water, and all that makes our planet the ideal environment for us to survive. I'm so proud of our members who worked on phone calls to voters through the Sierra Club organization - it made a difference in the election results.

While we've not been having any in-person meetings, the Delta-Sierra Group has continued to work hard (at a distance) on conservation efforts in our area. We need help with some of these projects and request you will consider making it part of your New Year's resolutions to include an effort in helping care for our planet. Be it with us, we promise that we will never ask you to do more than you are willing!

We could use help with working on issues such as depletion of our ground-water aquifer, social justice, energy, transportation, climate change, and reaching out to our local politicians and citizens. Sierra Club National is working on a long range plan to eliminate our reliance on fossil fuels. We are involved with this effort because it includes coal shipped from the Port of Stockton. Perhaps you have a local environmental issue you'll take the lead on with our assistance of course. Please bring it to our attention.

Our Executive Committee is dynamic and involved. Our meetings are informative and always a call to action! If you'd like to join one of our Executive Committee virtual meetings and see just what we are involved in, please contact me at margopraus@msn.com and we will forward the link so you can connect.

Wishing you all a great year, Margo Praus

**Explore, Enjoy and Protect the Planet** 

## Membership Meetings

People have been asking about our usual membership meetings that have been on hold since Spring 2020 due to COVID 19 concerns about meeting in person. We don't know when we might even begin to consider holding in-person meetings so we're going to attempt to move forward with Zoom. It's not the same as in-person but staying informed is very important. Please let us know if you have ideas or concerns or would like to help with our efforts. We're starting with some interesting presentations that concern our local area. Please join us if you are able.

Please note: You must download the Zoom execution software and install it for your computer. You can get it here: https://zoom.us/download We must have your email address to send you a password. This is required because we have disrupted troublemakers in our society and they perform an unwelcome behavior called "Zoom bombing."

Monday January 25, 2021 at 7pm - The San Joaquin County Habitat Conservation Plan (SJMSCP) provides a balanced strategy to care for Open Space balanced with protecting the stakeholders in the area, including the agricultural economy, landowner property rights, and the long-term management of plant and wildlife species.

The SJMSCP has over 17,000 acres of protected lands in the County ranging from riparian, grassland and active row crop habitat to help proliferate the 97-covered species under the plan.

The SJMSCP is administered by SJCOG, Inc., as a non-profit 501 (c)(3) entity, to ensure local control of the protected properties with local landowners.



The January program will feature the Waldo Holt San Joaquin Conservancy. Waldo Holt was a charismatic and much-loved conservationist and birder. The City of Stockton and San Joaquin County are poorer for his loss. Following his untimely death, his friends were inspired to create a habitat conservancy in his name. The mission of the Waldo Holt San Joaquin Conservancy is to "Preserve and enhance wildlife habitat lands in San Joaquin County and nearby areas for the benefit of people and the environment". Our focus is on restoring and protecting riparian habitat.

In order to restore and protect riparian habitat we use private and public funding to acquire conservation easements over riparian habitats that are in close association with other protected habitat, most notably San Joaquin Council of Government preserves. (Editor's Note: The January meeting was previously announced by email. I was too late in getting this upload to our Sierra Club server and further delayed by the Great Winds of January 26 that brought down my ATT internet for 6 days. We include this now so we have a record of the event.)

Monday, March 22, 2021 at 7pm you can join us for Community Choice Aggregation. This is an update on the study to come before the Stockton City Council. More information and the link will be provided closer to the date

#### **Anytime** - Modern Fires in Ancient Forests

Save the Redwoods League Director of Science Kristen Shive, PhD, gave an up to date and very interesting talk about California's unprecedented fire season in 2020 and its effects on our iconic coast redwood and giant sequoia forests.

Joined by Sam Hodder, the League's president and CEO, Shive discussed fire ecology, the impacts of the recent fires across coast redwood and giant sequoia species, and provided an update on the status of League-owned properties Cascade Creek in the Santa Cruz Mountains and Alder Creek within the Giant Sequoia National Monument. To view online whenever convenient for you per this link:

https://www.savetheredwoods.org/blog/video-league-forest-expert-talks-about-redwoods-and-fire/

I'll shoot this dog.

## DA's New Book On Climate Change

He writes as he normally speaks with a smile and a British accent. His spelling is British when he discusses a new colour programme on the telly. You feel like you are a small child again at the dinner table with eyes as big as saucers in awe and imagination when he weaves a story about history, science, adventure, climate change, and his autobiography. His style is unpretentious but he explains everything in a casual way in case you need an update. There is no secret about the plot because that is given away in the introduction.

Read his book or

"We are all people of Pripyat now. We live our comfortable lives in the shadow of a disaster of our own making. That disaster is being brought about by the very things that allow us to live our comfortable lives. And it is quite natural to carry on in this way until there is a convincing reason not to do so and a very good plan for an alternative. That is why I have written this book.

The natural world is fading. The evidence is all around. It has happened during my lifetime. I have seen it with my own eyes. It will lead to our destruction. Yet there is still time to switch off the reactor. There is a good alternative. This book is the story of how we came to make this, our greatest mistake, and how, if we act now, we can yet put it right."

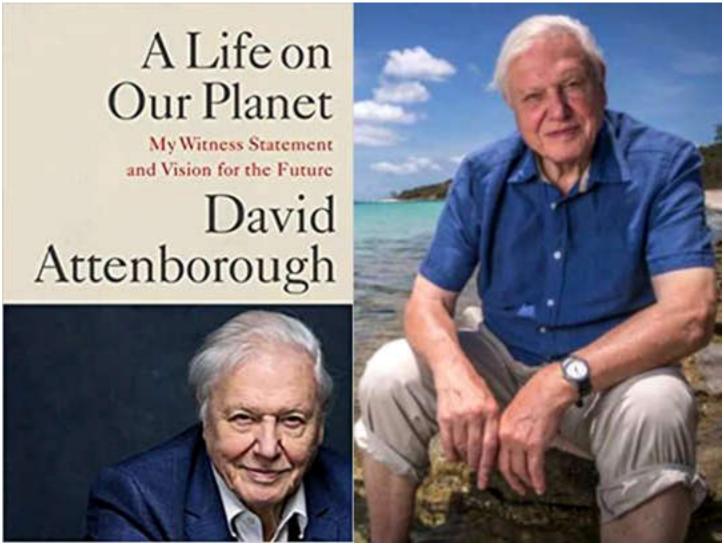
We are referring to David Attenborough who I'll just call DA and his new book A Life on Our Planet. DA divides his book into 5 parts that includes an Introduction and Conclusion: Our Greatest Mistake, My Witness Statement, What Lies Ahead, A Vision for the Future: How to Rewild the World and Our Greatest Opportunity.

He further divides My Witness Statement into 10 segments starting with 1937 when he was 11 years old and beginning to explore this world. Each additional segment reflects a year when something significant in his life occurred like a career change or a quest to create a new documentary film.

Besides the year, like 1937, he lists the world population: 2.3 billion; carbon in the atmosphere 280 parts per million; and remaining wilderness 66 percent. Sadly we see a pattern emerge and DA ends the year 2020 with the world population at 7.8 billion; carbon in the atmosphere at 415 parts per million; and remaining wilderness only 35 percent.

Part 2, What Lies Ahead, is only 14 pages of text outlining the doom and gloom likely to result in the 6th extinction on this planet.

So why should you read his book? Perhaps you or close friends have children or grandchildren and this is the future we leave them for them. I have quoted this statement many times: "We do not inherit the Earth from our ancestors: we borrow it from our children."



Explore, enjoy and protect the planet

Others I know could care less what happens with our species, but are concerned about the biodiversity that cannot protect their selves from our wrath. They existed before the Holocene Period, our period. Fair enough, both ideologies are on the same page and we can work together. DA ends his book with optimistic opportunity only if we act now.

Unlike most books this one has a glossary and halfway through it, I saw a need to read it. One term stands out that supports the gradual decline of Earth and it is called Shifting Baseline Syndrome. You recognize it when someone says, "I remember when..."

For example, I remember when I could leave Modesto on the Friday of a three day weekend in my bug, and be at the White Wolf Campground on the Tioga Pass road and find a camping spot. No fees or reservations were required.

The next generation, of course, has a lesser experience dealing with traffic and is lucky just to enter Yosemite National Park knowing there are no camping spots available. People forget or never knew what the previous generation experienced. The baseline has shifted downward and is greatly compromised. Reviewed by Robert Evans and available at Amazon.com \$23.40 Hardcover.

#### Hard Statistics That Support David Attenborough's Book

Would you believe the American Association for the Advancement of Science reported that temperatures last year tied the previous records? Overall, the whole planet (oceans and land) was about 1.25°C warmer than in preindustrial times, according to jointly reported assessments from NASA, the British Meteorological Office, and other sources. This occurred even though we slowed emissions of greenhouse gases in 2020.

The past 6 years are the six warmest on record, but the warming of the atmosphere is unsteady because of its chaotic nature. The ocean, which absorbs more than 90% of the heat from global warming, displays a steadier trend, and 2020 was also a record year.

This heat is monitored as far down as 2000 meters (6569 feet) by a fleet of 4000 robotic probes. The probes show the heat is spreading deeper into the ocean while also migrating toward the poles. For the first time, warm Atlantic waters were penetrating into the Arctic Ocean and melting sea ice from below and driving its extent nearly to a record. The warming ocean and melting ice sheets are rising sea levels by 4.8 mm per year, and the rate is accelerating. You would never notice a sea rise of 4.8 mm, but it represents an undesired trend.

On land alone where most of us live, 2020 was even more relentless, with temperatures rising 1.96°C above preindustrial levels In the United States, unprecedented heat came to the desert Southwest, which is already warming faster than the rest of the country. Phoenix wilted under its hottest summer ever, averaging 36°C.

#### **GREEN NEWS**

As we say on the cover, we have lost more than 4 years because of Donald Trump's denial of science. Climate change has been occurring at an exponential rate. This means it is accelerating, but the rate at which it accelerates is also accelerating. It is doubtful we can reverse it and be back at the "old normal" quickly, and certainly not in the next 4 years. In spite of the politics of climate denial, many companies are on the move seeking solutions.

SOLAR additions last year totaled 119 gigawatts, representing 45% of all new capacity for a one year period according to a report by Bloomberg NEF September 2020. Still, the world added 39 gigawatts of net new coal capacity, up from a 10-year low of 19 gigawatts in 2018. A gigawatt is 1000 megawatts. You will have to do your own fact checking, but one source said this is enough to power about 725,000 American homes assuming demand is constant. However, on those hot August nights when you have the air conditioner on while drying clothes and cooking with your electric oven, you get a peak demand and the number of homes is more like 300,000.

China added 33.2 gigawatts; India, 11.6 gigawatts; and USA 11.1 gigawatts during this last period. Presumably they will serve way more households than ourselves due to our astonishing standard of living with our contrasting wasteful habits.

According to CNN Business, Researchers at Oxford PV, a company spun out of the University of Oxford, made their first major breakthrough in 2018. A group of materials called PEROVSKITES are used to create the next generation of solar panels, which could eventually be twice as efficient as current models, and flexible enough to wrap around entire buildings. By coating silicon with perovskite they achieved 28% efficiency. The company believes it can eventually reach 40% or higher.

**Perpvslote Model** 

Oxford PV aims to begin producing cells made from perovskite on silicon early in 2021 at a new purpose-built factory in Brandenburg, Germany. It estimates that panels made from the cells could save homeowners up to \$1,000 on the purchase and installation of the average solar system.

Other companies working with perovskite include Warsaw-based Saule Technologies, which has secured funding of €10 million (\$11.7 million) from Polish photovoltaics company Columbus Energy.

Last month, Saule Technologies' new factory in Warsaw began printing perovskite solar cells using inkjet printers. In 2021 it will start supplying Swedish construction company Skanska Group, which says it wants to be the first developer to attach printed solar cells to the façade of a building on a commercial scale.

The Army Corps of Engineers announced via public notice that it's withdrawing plans to dredge the shipping channel connecting San Francisco Bay to Stockton deeper. The scheme was a favor to the Bay Area's oil refineries to help them operate larger oil tankers on the Bay. The ill-advised, misguided plan would have increased the risk of disastrous oil spills, posed a threat to local drinking water and farms, and cost taxpayers tens of millions of dollars. The proposal might also have set the stage for the Port of Stockton to expand toxic coal pollution in the Bay.

San Francisco Baykeeper joined forces with a coalition of Bay Area environmental and community organizations including Sierra Club. to challenge the proposal. Baykeeper actively opposed the Army Corps' dredging plan and raised significant legal and technical concerns over the project's Environmental Impact Statement during the public rulemaking process, which ended with the project's termination. In response, Baykeeper Executive Director Sejal Choksi-Chugh issued the following statement: "Today's cancellation of the dredging boondoggle is a big win because it was nothing more than a hand-out to the fossil fuel industry that posed a significant risk to the health of our Bay and Bay Area communities.

## Which Came First - The Turtle Or The Turtle Egg?

From The American Association for the Advancement of Science comes this invention. Conservation scientist Kim Williams-Guillén was wracking her brain to come up with a way to save endangered sea turtles from egg poachers when she had an "aha" moment: If she placed a fake egg containing a GPS tracker in the turtles' nests, she might be able to track the thieves. Sea turtle eggs are a culinary delicacy in Central America, and some believe the eggs can improve sexual performance.

The idea won her the 2015 Wildlife Crime Tech Challenge and a \$10,000 prize. She has now published the results of the first field test. Of 101 decoy eggs, five were able to track the routes of poachers up to hundreds of kilometers away.

To build them, Williams-Guillén found a pliable plastic material called Ninjaflex that mimics the spongy exterior of real turtle eggs. She and colleagues then used a 3D printer to fabricate the fakes. Finally, they embedded the smallest GPS tracking device they could find inside each fake egg. The result: a decoy about the same size, weight, and texture of a green sea turtle egg, one of the larger species of sea turtle.

Of the 101 deployed eggs, 25 were taken by poachers. The thieves quickly discovered six of them and left them on the beach. The team received tracking data for five other decoys, three of which had been hidden in olive ridley sea turtle nests and two of which had been concealed in green turtle nests.



Olive ridley sea turtles also known as the Pacific ridley sea turtle commonly nest in successive years. They typically nest 1 to 3 times per season, producing about 100 to 110 eggs on each occasion. The farthest moving egg traveled 137 kilometers inland.

She emphasizes that the tracker is not a way to catch local poachers, many of whom are living in poverty, but rather a tool to better understand their routes. Learning local trading hot spots could help them as well as law enforcement to identify larger players in the trafficking chain.

If you would allow me, I would like to add a personal story. My family was stationed in Manila for a year and we had ample time to visit a beach resort located about four hours south. In our world it would be about an hour away, but there were so many potholes you had to drive very slowly and very carefully. We had our two Miniature Pinschers with us, Chino a female and Taco a male. These are small dogs that resemble real dogs like Dobermans.

Previously back in Denmark, Chino had dug up a mouse nest with seven or eight baby mice in it. This happened in a vacant field near a new IKEA store that was located in Taastrup not far from Copenhagen. We pulled her away, of course, but wondered if she smelled the nest, heard something or felt vibrations in the ground?



So back on the beach, surrounded by family and friends, Chino dug up a turtle nest. Why were we surprised? I still don't know how she found it. The baby turtles were already hatching. This was bad news because the hatchings normally wait until night to emerge from the nest. The gulls came, then more gulls

came, so we had to escort the little guys to the water. I cannot put into words the experience of witnessing that march to the sea.

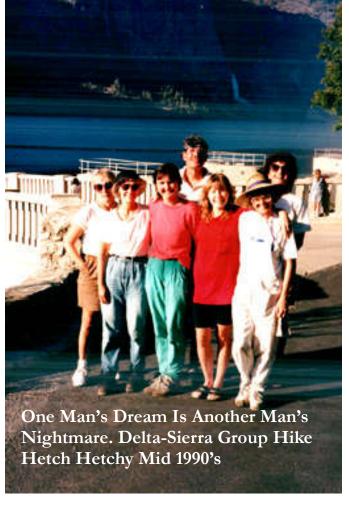
Shamefully I admit that I did take one particular hatching and turned it around 180 degrees. It turned back and headed for the water. I tried it two more times placing it on a downhill slope and other tests, but it always turned around. Eventually I picked it up and took it to the water myself. I hoped it had a safe journey.

### THOSE DAMN DAMS

O'Shaughnessy Dam creating Hetch Hetchy Reservoir is not an eyesore. It is just that historical documents and art show that the Hetch Hetchy Valley with Tueeulala Falls and Wapama Falls was such a delightful, pristine place within the boundaries of Yosemite National Park.

In fact, those that want to free it from its dam prison are willing to have a new dam on the Tuolumne River downstream. If that unlikely event ever happens, we now have to consider the environmental damage caused by removal of the dam structure verses the aesthetic view by simply draining the reservoir.

That would certainly leave a massive 2-sided surface for the best American graffiti we can offer.



If you are collecting dams in our area like you would collect mountain peaks you have climbed, then you have to expand your definitions to cover the appropriate basin rather than the river name. The San Joaquin River Basin is a good example. This river has three forks, thus a lot of dams. Here is a list of dams on each river in California. A cursory check for Lake Eleanor near Cherry Lake is missing indicating the list is not yet complete. Yet, this is a significant dam as it is also located within the boundaries of Yosemite National Park.

https://en.wikipedia.org/wiki/List\_of\_dams\_and\_reservoirs\_in\_California

You could say the Tuolumne River has 4 dams on it: O'Shaughnessy Dam – 1923; Don Pedro Dam aka Old Don Pedro Dam –1924; New Don Pedro Dam – 1971; and La Grange Dam – 1883 and still in use. The point being is we have dams that cover other dams, not to mention other structures located below their waters.

If you Google "How many dams have been built since (it doesn't matter)", you get numerous links to articles about dams that were removed instead. California's last major reservoir, New Melones Lake near Sonora was constructed by the U.S. Bureau of Reclamation in the 1970s.

We recognize our dams were built with good intentions: water storage, flood control, hydroelectric power, recreation, but according to a database kept by American Rivers, 1722 dams have been removed across the country since 1912. Most (1476) were removed in the past 30 years and 26 were removed in 2019. You can find a map showing this on their website: https://www.americanrivers.org/threats-solutions/restoring-damaged-rivers/dam-removal-map/

Probably a good reason for removing a dam is it simply doesn't work anymore; it has silted up. A fine example of that is the Matilija Dam on the upper Ventura River near Ojai California and 16 miles from the Pacific Ocean. It has a scissors cutting guide painted on its face. If it were cut along that line it would be a major challenge figuring out what to do with the fine particles of sediment that have built up behind the dam. It provides no recreational value, no flood control and no water to the area. It has trapped 8 million cubic yards of sediment in its reservoir, and by 2020 was completely silted up. How much is that? Well, if you spread it out one foot high, it would cover about 5000 acres or 7.7 square miles. (Make it 6 inches high and we could cover the city of Lodi including the roof for the Walmart Supercenter.)

Below Matilija Dam is another small diversion dam that diverts water into Casitas Reservoir, the primary water storage facility for Ojai and Ventura. There has been concern that the sediment would overwhelm that dam, potentially leading to nutrient contamination issues in the reservoir.

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Peatduster Delta-Sierra Group

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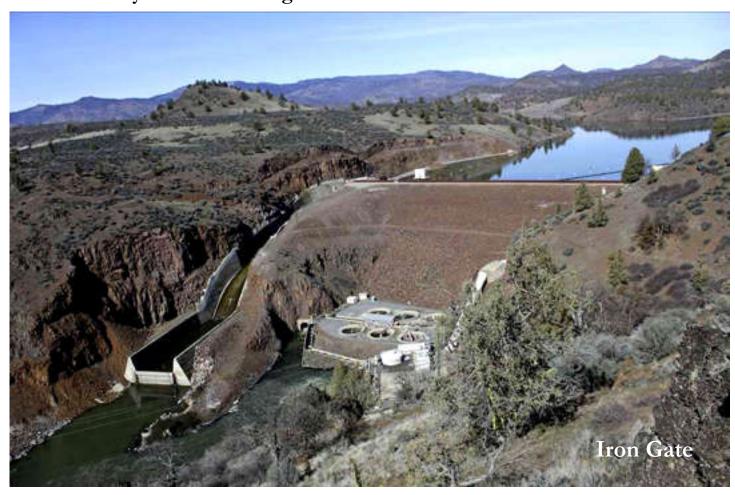
Probably the worst dam constructed in modern times is the Three Gorges Dam on the Yangtze River in China completed in 2006. The dam is one of the world's largest megaprojects.

Since the water level of upper reaches was raised, the upper river flows more slowly than before and the sand and rocks cannot be rushed down in time and are piled up in the river beds and reservoirs. As time passes by, the upper stream river beds are raised higher and higher, which leads to flooding more easily. Such threats from the flooding have led to the evacuation of about 40 million people. If that wasn't enough, the dam created threats to downstream riverbanks and the Yangtze River Delta, caused many aquatic creatures to be endangered, believed to have cause climate change to the Yangtze River Basin and lots of cultural relics and historical sites were submerged.

A better reason for removing a dam or a series of dams is it is a disaster for migrating salmon and steelhead. Take the four dams on the lower Snake River in Idaho which were completed in the 1970s.

They have locks that allow barges to transport wheat to the sea, but they've also created 140 constricted river miles with huge reservoirs where slow-moving water heats to levels harmful to salmon and harbors predatory fish that eat them according to Rocky Barker of the National Wildlife Federation.

The Bonneville Power Administration, the owners, has spent millions on fish ladders, spill release plans and other strategies to mitigate loss of chinook, sockeye, steelhead and other migratory fish. In 1991, Snake River sockeye were federally listed as endangered.



Thank goodness finally some good news: Four dams on the Klamath River, the J.C. Boyle, Copco No. 1, Copco No. 2 and Iron Gate built between 1908 and 1962, will soon be coming down. A key goal of the Klamath dam removal project is reopening at least 420 miles of historic habitat for salmon and steelhead.

It will also improve water quality by eliminating the toxic algae in the reservoirs behind the dams which threatens the health of people as well as fish. The four dams don't provide flood control or irrigation and they generate a small amount of hydropower, which will be replaced using renewables and efficiency measures and without contributing to climate change according to the website americanrivers.org

I bet you know that farm-raised salmon come in one color. Yes, it is plain old white. For both wild and farm-raised salmon the red color comes from pigmenting compounds called carotenoids. These are found in crustaceans, algae and other naturally occurring sources. Without carotenoid, flamingos are also white. Wild salmon get their color by eating shrimp and krill; farm-raised salmon have added to their feed. The source can be ground-up crustaceans or synthetic forms like astaxanthin. It is used to enhance the pink, red or orange shade and the U.S. Food and Drug Administration says it is yummy good as long as it does not exceed 80 milligrams per kilogram (0.00128 ounces per pound according to our on-site research laboratory).



Prominent sellers of farm-raised salmon like our grocery store chains and restaurants, Costco, WalMart etc, can get a dollar or more per pound just by choosing the right color. How do they that? They use a color fan just like you would do using color samples to choose a color for painting a room. So, how does the FDA monitor that standard should be the question.

#### Tribute to Martha Mallory

Martha Mallory was a gracious, soft-spoken, not-in-your-face member of the environmental community. She could have been a conservationist who seeks the proper use of nature, or a preservationist who seeks protection of nature from use, but she wouldn't give a label to herself. She would probably only say, "I'm just Martha."

We would find her at events like Earth Day at Victory Park in Stockton, California; the Sandhill Crane Festival in Lodi; Coastal Cleanup Day and the picnics Delta-Sierra Group held at Oak Grove Park and Lodi Lake near the nature area. When that happened we always greeted each other and had a





She was a docent at Oak Grove Park for 25 year and a native plant enthusiast (and expert). She was also a member of San Joaquin Audubon and our Sierra Club.

We joined her walks she held on Saturday mornings at Oak Grove Park in the year 2000. I know that because I have some terrible photos taken with a Sony Mavica, one of the

first digital cameras. Martha would discuss the use of the land by our Native American Miwok Tribe, the plants and trees and if distracted by a red tail hawk landing in a nearby oak tree, that bird. Then she resumed the walk staying on script. In the photo above she is holding a stuffed owl and giving us a lecture about its habitat.

Back in 2000 we also joined her for an outing to Coyote Creek on the Natural Bridges trail at Parrotts Ferry Road, Vallecito, California. It is a two-mile round trip hike that leads you to spectacular limestone caverns that were carved out by Coyote Creek which feeds into New Melones Lake.

During the walk down the trail, it was so delightful to hear her say, "Oh my, look at this" and it would be a flower she hadn't for some time. I may be the only one who got poison oak on that trip. You can experience the site with this YouTube video: https://www.youtube.com/watch?v=LhKWiF2CopY

Martha left us with a generous and substantial grant and we want to honor her by using these funds in useful ways. We welcome your suggestions. You can send them to our email address found on Page 22. Meanwhile, during this pandemic, Delta-Sierra Group plans to hold the funds until better opportunities come our way. (Robert Evans contributed to this story. Thank you Martha. RIP.) `--,,---><((((°>)

#### **Dwarf Giraffes**

Changing gears, both of the giraffes in the photo are a full grown adults. The short one from Namibia is one of the first of two low-rider dwarfs ever discovered. One of the dwarfs is 2.8 meters (9.2 feet) tall and the other is 2.6 meters (8.5 feet) tall as reported in the *The New York Times*.



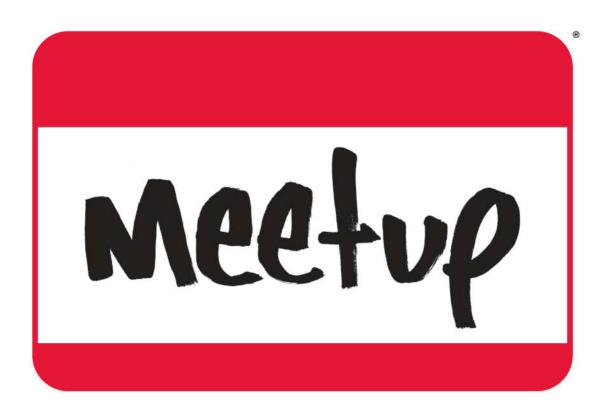
They were found in national parks in Uganda and Namibia. Both dwarfs were diagnosed with skeletal dysplasia, a condition that affects bone growth. This condition is rare in wildlife and noticeably shortened the giraffes' legs. This means they can't use their legs to run or kick effectively, but dysplasia had no effect on their neck other the making it shorter.

Giraffes are classified as "Vulnerable" on the International Union for Conservation of Nature Red List. Watch these little fellows in this video from Giraffe Conservation Foundation:

https://www.youtube.com/watch?v=yf4NRKzzTFk&feature=emb\_logo

# Stockton, Modesto & Sonora Sierra Club Groups Find us at this active link:

https://www.meetup.com/S-M-S-SierraClub/members/28813452/



We have been in operation since October 2011 and now have 2040 members. During COVID 19 we are following California State restrictions by holding occasional Zoom meetings at your home.



## **Executive Committee**

Please use the following email address to contact any members of your Executive Committee or staff. In the subject line please include the name of the person or persons you wish to contact.

## dsg-news@comcast.net

Chair & Program Chair: Margo: Praus

Vice Chair & Membership Chair:: Paul Plathe

Treasurer & Chapter Delegate: Richard Abood

Secretary: Steve Harvath

Conservation Chair & Web Master: Mary Elizabeth

**Executive Committee Member: Knute Momberg** 

**Newsletter: Robert Evans** 





## THE LAST PAGE



Please recycle the Peatduster by sending an email copy to your friends.





Architects have to become designers of ecosystems. Not just designers of beautiful facades or beautiful sculptures, but systems of economy and ecology, where we channel the flow not only of people, but also the flow of resources through our cities and buildings.

Bjarke Ingels, Danish Architect