

What are fens, and how do volunteer efforts help protect them?



Back in October, CSERC volunteers aided the Forest Service by taking down an exclosure fence that CSERC staff and volunteers had erected at the start of the summer livestock grazing season. That fence kept out cattle that otherwise would concentrate in this wet meadow habitat.

In the meadow are one major and two minor fens -- peat wetlands fed by mineral-rich water that sustains the marshy area throughout the dry season. Fens can contain rare or uncommon plant species such as the sundew shown below.



Although there are numerous fens scattered across the Stanislaus Forest, their total acreage makes up only a tiny fraction of meadow habitat in the ecosystem. Over years of cattle grazing, many fens have suffered severe damage from chiseling and pocking by livestock hooves. Some have been destroyed as a result.

In the photo above, Mark (one of CSERC's volunteers) gently balances on the waterbed-like surface of the main fen feature in the meadow. Simply standing and bending your knees can send a ripple of motion that causes the saturated vegetation layer to ripple up and down. Under the guidance of the Forest meadow specialist (Tracy), the volunteers used extreme care to avoid any effects on plants or the peat layers. Unfortunately, most fens across the forest have not had fence protection approved for the duration of the livestock season. The work provided by volunteers allows certain priority fen areas to gain that protection.



Park officials and gateway partners search for solutions to traffic congestion in Yosemite Valley

For years, CSERC has called for a change in private vehicle use within Yosemite Valley. It has become common for incoming traffic from mid-morning through early afternoon to create traffic jams that can result in 2 to 3-hour delays and a total lack of parking spaces. At least 90 days per year, the number of vehicles entering Yosemite Valley exceeds the capacity of available parking and the limits of the road system.

"I implore you to do something about it;" Park Superintendent Mike Reynolds told the audience at the recent Yosemite Transportation workshop sponsored by Yosemite Gateway Partners. He was referring to the challenge of crowding and congestion. The iconic experience of visiting El Capitan, Half Dome, Vernal Fall, Yosemite Falls, spectacular meadows, and the Merced River often degenerates into a polluting line of vehicles crawling forward in spurts and stops. He emphasized it would take broad support to fix the problem.

At least in part due to years of CSERC's media messages and calls for solutions to traffic jams, the Park's Yosemite Transportation workshop brought forward valuable Park-collected data and a range of traffic management strategies. But all proposals would admittedly only take small bites out of the big problem. YARTS and Via bus service are excellent, but 90% of visitors still arrive in their private vehicles. Expanding the Park's shuttle system, providing incentives to gateway community shuttles, and adding a few hundred new parking spaces in the Park could combine to make some improvement in reducing gridlock, but Park transportation specialists admitted that ever-rising numbers of visitors would likely wipe out those gains.

CSERC has described one strategic solution, which would be to restrict day-use vehicle numbers in the east half of Yosemite Valley. The Park could set a peak-season daily limit and ensure that gateway businesses and other existing Yosemite-focused businesses would receive the majority of the permits. The remaining day-use permits could be available online or on a first arrival basis at the entrance station. This is similar to how Half Dome access permits now work. With this strategy, visitors who want assurance of parking for Yosemite Valley destinations could reserve their day-use permit and be certain of getting a space instead of fighting traffic jams and endlessly circling before leaving in frustration. This would also enhance the Yosemite visitor experience.



Tom Parrington

Steve Hannon

CSERC is highly disappointed to learn that Yosemite Park superintendent Mike Reynolds will be leaving due to a re-assignment

Anyone who rises to the position as superintendent of Yosemite Park always brings decades of experience and excellent skills for managing people and resources. Yosemite Park superintendent Mike Reynolds brought even more to the key leadership role.



Mike was raised in Yosemite Valley. His mother worked for the Park Service, and other family members were employed at the Ahwahnee and elsewhere in the Valley. Mike worked in the Park early in his career, evolved to become a Park Service leader, and even held the position of Acting Director for the Park Service in Washington, DC. He's served in a diverse range of prestigious positions.

Mike (*center in photo at left*) made it clear when he took the job as superintendent that he was eager to hear all points of view from the many different interests tied to Yosemite. It has been his ability to listen attentively and to make people feel valued that quickly endeared him to business and gateway community members.

CSERC staff has had solid working relationships with each Park superintendent for more than two decades. But when Mike arrived, he took extra steps to invite feedback.

He made himself available for in-depth discussions about upcoming Park projects, the challenges of inadequate local area housing for Park employees, the problems of traffic congestion and crowding, and the need for the Park's staff to prepare for even greater pressures as Park visitation rises in coming years. He took extra steps to be a good listener and to collaboratively strategize.

What has also made Mike especially impressive has been his commitment to not just value the needs and desires of the businesses that depend on Yosemite, but to also focus on the resource protection values that Americans expect in their iconic national parks. Mike made people feel comfortable in partnering with him to look beyond their narrow objectives to consider more broadly what could be best for the Park.

It is possible that Mike's effectiveness at building that credibility may have contributed to him being reassigned by an Administration that does not prioritize collaboration and resource protection. Mike has accepted the re-assignment graciously. He will definitely be missed. As Mike transitions to his new assignment, Point Reyes National Seashore superintendent Cecily Muldoon will take over the Yosemite Park role and bring her many years of experience – including time spent in previous work assignments in Yosemite.

Merced River studies provide Park with options for deciding whether or not to remove the Sugar Pine Bridge to allow free-flow conditions

In March of 2014, when the Park Service finalilzed its approval of the Merced River Wild and Scenic Management Plan, one unresolved issue was whether the Sugar Pine Bridge should be removed to be consistent with the objectives of the Wild and Scenic Rivers Act.

Studies determined that the bridge constrains the natural processes of a free-flowing river and causes undercutting of riverbanks and riparian areas downstream of the bridge. Rip-rap is unnatural, and the river has become entrenched – preventing floodplain saturation that is imporant for some wildlife species.



Understandably, there are those who strongly oppose any removal of the historic bridge. The Park commissioned Dr. Derek Booth, a geologist from U.C. Santa Barbara, to lead a research study that has unfolded in three phases to date. Initial mitigation treatments were done to stabilize riverbanks with natural woody material (rather than rip-rap rock walls) and to increase riparian habitat, while still retaining the bridge. Large numbers of trees trunks were partially buried into sections of the riverbank and anchored so as to broaden and taper the banks. Some areas had soil filled in between the logs. The results have been positive.



To mitigate for the effects of the bridge, the goals are to reduce channel widening, to restore vegetation, and do treatments to get high river flows into side channels to saturate riparian areas. There already are some benefits for the riverine habitat along the river. CSERC does not expect the final decision to call for bridge removal, but we believe additional mitigation actions are needed.

Calaveras Big Trees State Park plans to construct cabins to meet public demands for recreational lodging options

Calaveras Big Trees State Park contains spectacular giant sequoias amidst conifer forests that spread across 6,500 acres of park land. The North Grove gets nearly all of the visitation and attention, while the more remote and less accessible South Grove features the majority of the sequoias and offers a more primitive, serene setting. The Park is extremely popular throughout the long summer season and on weekends year-round. It already faces the effects of recreational visits.

State legislation back in 2012 pressed California State Parks to develop revenue generation to improve the financial condition of the Parks. In response, in 2013 four unoccupied staff housing units at Calaveras Big Trees Park were rehabilitated and converted to rental cabins.

Based on the strong rental demand, California State Parks is now planning to construct 11 brand new cabins as well as a camp host (RV) site in an area along the Group Campground access road.



When first learning of the project proposal, CSERC questioned whether providing commercial lodging in relatively small Big Trees Park is appropriate. As CSERC reviewed the environmental documents, we found that the location of the project greatly reduces concern about potential impacts of the cabin complex. The new construction site is across busy Highway 4 from the North Grove, and increasing the number of overnight accommodations at the project site poses no risk to important wildlife habitat, water resources, or scenic values. In addition, for the trees that need to be removed, the project requires conifers from outside the area to be transplanted onto the site along with the planting of bushes to speed the recovery of vegetation.



Most visitors to Big Trees Park will never see the new cabin complex since it will be in the 5% of the Park that lies north of the highway - plus the cabins and parking area will be screened by trees and topography.

But it is worthwhile for lovers of our State Parks to stay vigilant and assess carefully which revenue-generating projects are benign and which may pose risk to the resource values that make a Park important to protect for future generations.

Fuel reduction and biomass treatments in portions of the Rim Fire -

Immediately after the gigantic 257,000-acre Rim Fire in 2013, a large percentage of the blackened burn area was mostly denuded – with little vegetation left for wildlife or for watershed

benefits. The following year, plants such as grasses and groundcovers began to re-sprout from their roots or to spring up from seeds buried in the soil.





In areas where mature conifer trees managed to survive the fire, seeds from their cones also sprouted. Despite two years of drought conditions, many conifer seedlings thrived. But across the high-severity burn areas where conifer trees were mostly killed by the fire, there were few seeds to start a new forest growing. Depending on which site in the burn area that CSERC staff visited, we could find vastly different conditions - ranging from hundreds of young conifers per acre to sites with literally no young conifers at all.

To get trees re-growing in the treeless areas, the Forest Service planned a series of reforestation treatments. Despite approval, a lack of funds and staff capacity delayed much of the work. Finally, six years after the fire, over this 2019 summer/fall field season, fuel reduction treatments have been done in many "units" that will be planted at some point with conifer seedlings. If salvage logging had previously removed most of the dead trees on a site, Forest Service contractors used heavy equipment to "grapple pile" the remaining broken logs, snags, and other woody fuel materials into scattered large piles to be burned on-site. (*See bottom photo*)

On other sites where no removal of woody fuels had been done previously, biomass logging was the treatment. Standing dead trees were cut and chipped so that truckloads of the wood chips could be transported to a biomass facility to generate electricity.

At many of the fuel reduction and biomass logging sites, treatments were also done to clear much of the now-dense brush and a blanket of groundcovers (like bear clover) that can choke out newly planted conifer seedlings. The fuel removal treatment combined with the clearing of some brush and groundcovers to result in a temporary condition when the site looks mostly bare and denuded (as shown at right). However, as proven by the rapid vegetative recovery after the Rim Fire, recovery over the next year or two will soon revegetate each site. (See bottom photo next page)



- Short term impacts are intended to result in long-term forest recovery



Opponents of fuel reduction and reforestation treatments in forests after wildfires seized on this summer's Rim Fire projects with misguided claims that the Forest Service was clearcutting snag forest habitat to please the timber industry. Project opponents filed a lawsuit in their attempt to stop the fuel reduction and biomass treatments.

In reality, six years after the fire, many of the remaining snags are rotting and falling over anyway. The Forest Service is strategically removing woody material and a portion of the snags in order to reduce fuel levels. Less fuel means a lower risk of a future wildfire killing the young trees that now are the main hope for a restored forest. Biomass logging and chipping of the logs also allows the woody material to be burned far more cleanly at a biomass facility than if that same woody material is burned in large piles out in the forest. The lawsuit ignored the fact that the woody material will be burned either way.

Years ago, CSERC and other local members of the Yosemite Stanislaus Solutions (YSS) stakeholder group engaged in the strategic planning for the Forest Service's fuels and reforestation projects. We know that 85% of the public forest lands in the Rim Fire are being left completely untouched by salvage logging, reforestation, or fuels reduction treatments. We also understand that guidelines for the treatments were designed to minimize impacts as biomass logging or fuel reduction treatments are done.



When project opponents used selected units in the fuel reduction areas to publicize misleading claims, CSERC staff increased our field visits to the 4,000 acresworth of treatments. We walked projects units, finding most to be fully consistent with project guidelines. We found units where the contract crews had gone to great lengths to carefully avoid thousands of young conifer trees as they worked with heavy equipment to remove the excess woody fuel.

Given how intensely wildfires have been burning in the state again this year, there are solid reasons to reduce fuels to better protect a re-growing forest. CSERC and the YSS stakeholder group strongly support the Forest Service continuing fuels treatments and getting a resilient forest growing with low fire risk.



State wildlife agency describes Snake Fungal Disease in California

Despite often-negative preconceived fears or strong animosity towards snakes by many members of the general public, snakes are an important part of the Sierra Nevada ecosystem. Some (like the rubber boa at right) can often go unnoticed because they blend so well with their habitat. Others, like the ring-necked snake below (photographed by Chad Lane), display vivid hues.





The information below was recently released by the California Department of Fish and Wildlife. CDFW confirmed the state's first case of Snake Fungal Disease (SFD) in a kingsnake in Amador County. The snake, emaciated and suffering from severe skin disease, was found by a member of the public on the side of the road and taken to a wildlife care center. Given its poor prognosis, the snake was humanely euthanized and sent to the University of Illinois, where testing confirmed it was infected with the *Ophidiomyces ophiodiicola* fungus that causes SFD. The fungus was also detected recently on another snake in Sacramento County, proving that the original case was not isolated.

Snake Fungal Disease is a newly emerging disease in snakes. Cases may be mild to life-threating. Visible signs may include scabs, skin ulcers, crusted scales, cloudy eyes and a swollen or disfigured face. The infection may cause the upper layer of infected skin to shed repeatedly. Affected snakes are often emaciated, possibly due to decreased ability to capture prey. Since 2008 SFD has been detected in more than 30 snake species in the U.S. and Europe. The fungus lives in soil and can be transmitted to snakes through skin abrasions or direct contact with infected snakes. SFD can also be passed from mother to offspring at birth.

The fungus is present in at least 23 states, primarily in eastern states and the Midwest. The detections in California are the furthest west the disease has been confirmed.

It is unknown if SFD will impact snake populations in California. SFD has caused significant mortalities in some species, while other species appear to only exhibit mild infections. CDFW will be working with academic and agency partners, and with others who work with snakes, to increase surveillance for SFD in California and implement appropriate precautions to minimize risk for human-caused spread among snakes.

Although members of the public should avoid directly handling or disturbing snakes, they can assist CDFW's efforts by reporting to CDFW any sightings of snakes with visible skin sores. **Take photos whenever possible. And in case you are wondering, there is no evidence that SFD is transmittable from snakes to** humans.

U.S. Fish & Wildlife Service finally proposes to list the West Coast Distinct Population of the Fisher as "Threatened"

For years federal agency biologists have done surveys to search for the rare Pacific fisher. CSERC has partnered in these efforts with more than two decades of photo-detection camera efforts. Only one fisher has been detected in all of those years in the Stanislaus Forest, with more located in Yosemite Park and in national forests south of Yosemite. After years of debate over their status, a proposal by the U.S. Fish and Wildlife Service (FWS) to list the West Coast Distinct Population Segment of the Pacific fisher as "threatened" under the Endangered Species Act was released on November 7, 2019.



This and bottom photo - USFS



CSERC photo

The fisher is a large, arboreal member of the weasel family that historically was widespread across much of Canada and the northeastern and western United States. It feeds on squirrels and a wide range of other prey. As described by the FWS, stressors such as drought, habitat effects, vehicle mortality, predation, and exposure to toxins (especially poisonous rodenticides at marijuana grow sites) have led to the species' decline.

If finalized, the ESA listing would be intended to protect fishers against harm or "take" – any action that can result in the death of a listed animal. For a variety of reasons, as part of the proposed listing, the FWS is proposing a special rule that would exempt certain forest management activities from the act's "take" prohibitions. The exemptions would include activities such as the maintenance of existing fuel breaks, firefighting actions, and forest habitat management. **CSERC sees a "habitat management" exemption as problematic if FWS intends to allow aggressive logging treatments such as clearcuts on private timberlands** in suitable fisher habitat. Requiring the retention of large trees and retaining continuous connected forest habitat would reduce logging impacts.

CSERC believes it is a "no brainer" that the species should be listed. Fishers were abundant enough to be trapped extensively a century ago in the local forest. As noted above, they are now so extremely rare that over two decades, scattered camera stations have detected only one fisher in the Stanislaus Forest.

A 30-day public comment period began on November 7th. The Service will consider written comments submitted by December 9, 2019. Information on how to submit comments is available at <u>www.regulations.gov</u> by searching under docket number **FWS-R8-ES-2018-0105**.



Quiet season fall destinations: Pinecrest and Hetch-Hetchy -Yes, they are reservoirs, but adjacent wildlands add to the scenery

During the hot summer season, the Pinecrest Lake area is often packed with cars, campers, boaters, and all the day-use visitors taking refuge from lower elevation heat. But in the fall and winter season, as the reservoir level drops and temperatures cool, the area can provide a different atmosphere and chances to see fish-eating ospreys or bald eagles. The highly popular trail that encircles the lake provides access to the South Fork Stanislaus River that flows down through the granitedominated watershed east of the lake. Once the reservoir drains, snow on the lake bed provides snow play for those seeking easy winter recreation access.



Hetch-Hetchy reservoir in Yosemite National Park is also highly popular during the summer season, Visitors come to see the famous reservoir, and many backpackers and hikers head across the dam and out into the surrounding wilderness. Wapama Falls and Tueeulala Falls both thunder in late spring and summer, but by fall they've nearly faded. While a fall-season reservoir visit is less visually impressive without the two powerful waterfalls, the trail along the base of the falls is far safer for those who want to venture along the north shore. The peace and quiet at Hetch-Hetchy is especially impressive once the slow season arrives.





Have you donated this year to help CSERC respond to the many challenges facing the Northern Yosemite region?

Like the fox, CSERC stays alert to threats as well as opportunities. We focus vigilantly on issues that have potential to help or harm at-risk wild places, threatened wildlife, forests, water resources, air quality, or other environmental values of the vast local region.

CSERC works to influence decisions affecting Yosemite National Park, the Stanislaus National Forest, private timberlands, and the oak woodlands of the foothills, along with water resources of the region.



Photo by Rick Kimble

IF YOU BELIEVE IN THE IMPORTANT WORK THAT WE DO, PLEASE TAKE A MOMENT TO PROVIDE VITAL SUPPORT WITH A TAX-DEDUCTIBLE DONATION.

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CSERC attends meetings inside in order to protect what's outside

This photo shows one of the 200 meetings each year that CSERC staff attends in order to serve on the front lines of advocacy for precious places and resources of the vast local region. Showing up to be a voice for nature is vital.



Fall 2019 newsletter