HONORING TRADITIONAL FIRE KNOWLEDGE

2040: A DOC TO BUILD A DREAM ON | THE JUDGES AND THE FROG | GREEN NEW DEAL THRIVES
KIN TO THE EARTH: MARK ANDRE | COASTAL CLEANUP DAY FINAL DATA | LOW EMISSION TRANSPORATION
As some of you may know, I have a home on South Fork Mountain in Southern Trinity County. Since the numerous lightning strikes in August, we have been dealing with fires in our area. The fire, now called the August Complex, is referred to as the first giga-fire - meaning it has burned over one million acres. This is the largest fire in recorded California history. After several wind events and exceedingly hot and dry conditions, this wildfire made it to my forty acres on top of the mountain.

I am pleased to say that as we are writing this column, the houses on my property have so far been spared, thanks to the diligent efforts of the U.S. Forest Service firefighters. The fire in the forest in and around my property has burned with varying degrees of severity. Some of the fire has burned very hot and has killed even large, old growth trees. In some areas the fire has scorched the ground, probably killing the micro rhizomes and rendering the ground sterile and prone to erosion.

The takeaway lesson for me so far is, in this fire, it didn't matter what the forest looked like as far as tree structure - meaning whether they're too crowded, too small, or all the same age. None of that seemed to matter. All that seemed to matter was fuel on the ground. In my area, this is the result of no fire on the landscape for almost 100 years. Without fire routinely burning through at low intensity and cleaning the fuels out of the forest regularly, you can wind up with a catastrophic event like I'm seeing in my area. Fire needs to be a part of any conversation about current forest management.

**Trinidad Rancheria Hotel Proposal Input to the Coastal Commission**

The NEC has some major concerns regarding the Trinidad Rancheria Hotel proposal, and we therefore recently encouraged our members and the public to send in comments to the Coastal Commission before October 16th. Some of the concerns we have for the proposal include: how this proposed 5-story hotel is consistent with the CA Coastal Act, the Rancheria's proposed well water supply and quality, as well as wastewater treatment and leachfields.

More specifically, we agree with HARP on the following questions which need to be answered to our satisfaction:

- When the Rancheria’s wells do not produce enough water to supply the needs of the hotel, where would the additional water come from?
- Why were the impacts of trucking in water not considered in the final Finding of No Significant Impact (FONSI)/Environmental Assessment (EA)?
- Why were the impacts on local traffic not analyzed in this report?

Other issues which were raised previously, but, in our view, never adequately addressed include: adverse visual impact on the coast; environmental impacts; impacts on the rural village character of the Trinidad; effects of draining an additional 9,500 gallons per day or more into the sandy bluff; other components of the piecemeal development yet to come: 50-unit RV park, miniamart/gas station; full highway interchange on 101; other rancheria buildout, etc.

The NEC continues to track this project and provide you with details. Here at the NEC we have wrapped up the last of our events of 2020. Despite the pandemic and being fully encompassed in smoke, we were able to bring you one brand new event - Trash-a-thon, and a twist on an NEC classic - Coastal Cleanup Day, proving that no matter what the world throws our way, this team can’t be stopped! We fully intend on continuing to create, update, and modify the way we work in order to continue bringing you efficient and effective ways to be involved with environmental activism.

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**Continued**

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**Cover:** Fern sprouting after fire. Image source: Fernando de Sousa, Flikr Creative Commons.

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www.humboldtbaykeeper.org

**Sierra Club, North Group**

www.redwood.sierraclub.org/north/

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**Friends of the Eel River**

www.eelriver.org

**Safe Alternatives for our Forest Environment (SAFE)**

www.safealt.org

**Environmental Protection Information Center (EPIC)**

www.wildcalifornia.org

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www.zerowastehumboldt.org

**Californians for Alternatives to Toxics**

www.alt2ox.org

**Coalition for Responsible Transportation Priorities**

www.transportationpriorities.org
News from the Center
Continued from prior page

During the rest of the autumn season, staff will be keeping cozy and keeping busy working on some exciting projects. The first plan of action is to revamp and restyle our office space! Since we have all been working remotely since the start of COVID-19, we have imagined a new way to utilize the space that currently houses our desks and computers. We can’t wait to open our doors to the public in an entirely new way in 2021! If you have fun ideas or office reimagining-tips, please feel free to send them to carrie@yournec.org.

We are all familiar with the NEC’s 39+ year projects, Adopt-a-Beach and Adopt-a-Block. This Fall we will be taking a deeper look at these programs to find ways to get more of our community (that’s you!) involved. We know that sheltering-in-place has made it easier to stay at home and indoors...and we want you to get motivated, get outside, and (finally) enjoy some fresh air by helping to keep our neighborhoods, parks, and beaches clean. If you are finding some free time on your hands, then this is the perfect opportunity to learn more about how you can contribute in a meaningful way to one of the NEC’s longest standing programs! If you are interested in participating or would like more information, please email casey@yournec.org.

In the last issue of EcoNews we let you in on our next project: the Reduce Single Use plastics pledge. We will be dishing out stickers to local restaurants in Humboldt and we want you to get motivated, get outside, and be sure to let restaurants know that they can sign the pledge too! For more information, visit: www.yournec.org/pledge.

In This Issue

Letters to EcoNews

Black Lives Matter still matters in Humboldt

I noticed that in the September edition of EcoNews that the Black Lives Matter movement has already been forgotten, and that’s a shame because the eco/green groups in Humboldt could learn a lot from it.

I’ve lived in Humboldt for 20 years, but like a lot of nonwhite folks, I moved here from an urban area. I didn’t feel welcomed by the green groups because nobody cared that I didn’t know where Meeting Place X was or how to even get to the Manila Dunes, etc.

Today, like a lot of nonwhite folks, I live in a city (Eureka) without a yard or even a patio, and I make less than $40,000 a year so no fancy birding equipment or trips for me.

However, I still care about global warming, and try to go birding and hiking, and put my washed recyclable containers in the bin. Maybe your contributors could meet people like me halfway, and ask themselves what they should say to the pair of nonwhite hands holding the EcoNews.

Also, a regular column by Latino Outdoors would be nice.

Thanks,
Lori Brannigan

Letters to EcoNews

We want to hear from you! Write us a letter 300 words or less that’s relevant to EcoNews and we’ll consider publishing it! Letters may be edited and shortened for space. The NEC reserves the right to reject any submitted material for any reason. Don’t forget to include your contact information when submitting!

Email caroline@yournec.org

Community Submissions

We want to feature your work! Do you have some nature art you’d like to share? How about photos of your catio, compost bin, garden, solar array, etc.? Email your photos to caroline@yournec.org and you might see them in the next issue of the EcoNews!

Bouquets

SINCERE GRATITUDE TO:

- This fire season has been brutal. We know that there have been many people and organizations that have worked hard to support the communities that have been hit hard, and we want to give a special shout-out to these ones: Pay It Forward Humboldt, Two Feathers Family Services, the Orleans Fire Department, Rogue Climate, and SCS.
- Huddie’s Harvest, Terra Family Farms, and Leonard’s Pumpkin Patch for providing families with fun fall pumpkin-picking experiences despite the challenges with COVID-19!
- Northern Humboldt Union High School District for your dedication to feeding your district! Students are now able to come to school to pick up lunch. Staff have also set up a “Food Pantry” at the Arcata site specifically for the students who are low income, couch surfing, living in motels and shelters.
What do you do?
Coordinate free tours of Humboldt Bay that are accessible and safe for all members of our diverse and multicultural community. This requires building relationships with organizations and people from various underserved populations and organizing an experience where all people are valued and encouraged to participate by providing Spanish translation and wheelchair accessible tours when needed. The tours serve to provide people with an opportunity to gather and learn about our gorgeous Bay in a relaxed environment. We do bird walks on the Eureka Bayfront and Hikshari’ Trail, charter the Madaket, partner with the Wiyot Tribe to kayak to Tuluwat Island for bi-annual cleanups, gather data for scientific studies, and rent kayaks for small group tours.

How did you get started doing the work that you do?
The opportunity to combine my botany degree and Spanish speaking background was a no-brainer. When a grant from the Coastal Conservancy became available to organize trips on the Bay emphasizing inclusion by providing Spanish interpretation and translation, I was thrilled! The chance to learn and teach local history and ecology and provide a resource for information about current issues in a bi-lingual setting was an easy decision.

Why do you think this work is important?
The natural world is not exclusive. When people are included in the process of conservation and restoration and given an opportunity to participate in activities not available prior in a safe and relaxed setting, they flourish. We all do. The issues of social and environmental justice are intersectional. The hope is that by working with all communities we can create a new era of stewardship where people feel compelled to be informed and protect Humboldt Bay.

How can people take part in your FREE tours?
Join our email list volunteer@humboldtbaykeeper.org and follow us on Facebook at Humboldt Baykeeper for the latest news and tours open to the public. Organizations that are interested in partnering can reach me directly by email jasmin@humboldtbaykeeper.org

¿Qué haces?
Coordina recorridos gratuitos por la bahía de Humboldt que sean accesibles y seguros para todos los miembros de nuestra comunidad diversa y multicultural. Esto requiere establecer relaciones con organizaciones y personas de diversas poblaciones desatendidas y organizar una experiencia en la que todas las personas sean valoradas y alentadas a participar proporcionando traducción al español y recorridos accesibles para sillas de ruedas cuando sea necesario. Los recorridos sirven para brindar a las personas la oportunidad de reunirse y aprender sobre nuestra hermosa bahía en un ambiente relajado. Hacemos caminatas de aves en Eureka Bayfront y Hikshari’ Trail, alquilamos el Madaket, nos asociamos con la tribu Wiyot para navegar en kayak a la isla Tuluwat para limpiezas binauales, recopilamos datos para estudios científicos y alquilamos kayaks para recorridos con grupos pequeños.

¿Cómo empezaste a hacer el trabajo que haces?
La oportunidad de combinar mi licenciatura en botánica y mi experiencia en español fue una obviedad. Cuando se dispuso de una subvención de Coastal Conservancy para organizar viajes por la bahía y hacer hincapié en la inclusión proporcionando interpretación y traducción al español, ¡me emocioné! La oportunidad de aprender y enseñar historia y ecología local y suministrar un recurso de información sobre temas actuales en un entorno bilingüe fue una decisión fácil.

¿Por qué crees que este trabajo es importante?
El mundo natural no es excluyente. Cuando se incluye a las personas en el proceso de conservación y restauración y se les da la oportunidad de participar en actividades que antes no estaban disponibles en un entorno seguro y relajado, prosperan. Todos lo hacemos. Los temas de justicia social y ambiental son intersectoriales. La esperanza es que al trabajar con todas las comunidades podamos crear una nueva era de administración en la que las personas se sientan obligadas a estar informadas y proteger la Bahía de Humboldt.

¿Cómo puede la gente participar en sus tours GRATIS?
Únase a nuestra lista de correo electrónico volunteer@humboldtbaykeeper.org y síganos en Facebook en Humboldt Baykeeper para conocer las últimas noticias y recorridos abiertos al público. Las organizaciones que estén interesadas en asociarse pueden comunicarse conmigo directamente por correo electrónico jasmin@humboldtbaykeeper.org
Dear EcoNews,

I know that emissions from transportation make up the majority of GHGs in Humboldt County. I want to be part of the solution, but I live in Eureka and it seems like every other week you hear about a pedestrian or cyclist being hit and killed. The people of Eureka seem resistant to making changes to increase walkability and bikeability. How do we make our communities safer for those of us who want to stop driving cars everywhere?

Sincerely,
Aspiring Cyclist

Dear Aspiring Cyclist,

First, you should know that you’re not alone! Research into attitudes about biking shows that most people fall into the “interested but concerned” category. That means if we could get everyone who feels the way you do on a bike, we’d be a big step closer to addressing the climate crisis.

Also, you’re not wrong about Eureka. The California Office of Traffic Safety’s crash rankings currently place it as the third most dangerous city of its size for bicyclists. You might also be interested to know that Eureka is also ranked as the number one most dangerous city of its size for all traffic collisions, so driving in the city is pretty risky too. But that doesn’t excuse the lack of safety for people riding bicycles.

This problem has many causes, but some of the biggest contributing factors involve the way our streets are designed. Eureka has a lot of wide, straight, multi-lane roads that encourage fast driving and don’t provide good protection for people biking (or walking). We desperately need to redesign our streets to slow down traffic, and give some of the street space currently designated for cars and trucks to bikes, pedestrians and buses instead.

My organization, the Coalition for Responsible Transportation Priorities (CRTP), recently released a report called “Elephants in the Road” that provides detailed prescriptions for these kinds of changes that will tackle both the bike and pedestrian safety crisis and the climate crisis in Humboldt (as well as taking on another important phenomenon: the rise of autonomous vehicles). You’re right that the changes we need to make won’t be easy, and there will be a lot of resistance.

But that’s doesn’t mean we can’t do it!

That brings me to my first answer to your question: Nobody can change the world alone. But working together, we can educate and advocate our way to a safer and healthier community. I encourage you to consider joining CRTP, read our new report, and start telling city officials what kinds of changes you want to see for bicycle safety and climate-safe transportation.

While the real solution to your dilemma requires collective action, there are also things you can do in your personal life to get started. To begin, I would recommend just getting on a bike! Start off with short trips, and carefully plan your routes so that you only bike in places that feel safe and comfortable to you. Believe it or not, there are safe and comfortable places to ride in Eureka, from the expanding multi-use trail network to an extensive grid of low-traffic residential streets. Once you start riding a bike around, you’ll quickly figure out what works for you under current conditions. As the Office of Traffic Safety statistics show, all modes of transportation can be dangerous, but that doesn’t mean we should just hide out in our homes.

Fortunately, this personal action will also contribute in a small but meaningful way to solving the collective problem of bike safety in Eureka. That’s because there is a well-documented “safety in numbers” effect for biking—which means that every new bicyclist on the road in Eureka makes things safer for all the other people riding bikes in the community.

So talk to your city officials, join CRTP, and hop on a bike. That’ll put us several pedals closer to a safe Eureka for everyone!

Colin Fiske
Executive Director,
Coalition for Responsible Transportation Priorities

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A selection of some recent EcoNews Reports:

**Local Fire Ecologist Lenya Quinn-Davidson on This Year’s Record Fire Season**

October 10 – The Green Gang interview fire ecologist Lenya Quinn-Davidson about this year’s record fire season and what people can do to reduce fire risk on their properties. (Did you know it can be as easy as cleaning out your gutters?)

**Organic Toxins Found in the Mad River**

October 3 – Jacob Pounds of Blue Lake Rancheria Environmental Department, recently detected toxic algae in the Mad River from Blue Lake to Arcata. Anatoxins are powerful neurotoxins produced by blue-green algae when populations explode or “bloom” during unusually warm, low-flow conditions. These toxins have been detected in other local rivers and across the West, but never before in the Mad River.

**Obi Kaufmann Paints the Forests of California and Tells Their Stories**


**Interpreting the Parks**

September 19 – Hear from California State Parks, North Coast Redwoods District staff about their Interpretive programs, how they are working to tell unique stories, uplift diverse voices, and how use of digital technology has increased access to learning about these incredible public lands.

**It’s Coastal Cleanup … Month?**

September 12 – Casey Cruishank, Coastal Programs Coordinator for the Northcoast Environmental Center, talks with us about Coastal Cleanup Month.

**Building Cities for People, Not Cars**

September 5 – Three major phenomena are shaping the future of the transportation system in Humboldt County and nationwide: climate chaos, autonomous vehicles, and the road safety crisis. A new report from the Coalition for Responsible Transportation Priorities documents local transportation issues and solutions.

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**Thanks to KHUM & Lost Coast Outpost!**
Our Land Was Taken
But We Still Hold the Knowledge of How to Stop Mega-Fires

Bill Tripp,
Karuk Tribe Department of Natural Resources

As wildfires rage across California, it saddens me that Indigenous peoples’ millennia-long practice of cultural burning has been ignored as a way to reduce the threat of wildfire.

But it breaks my heart that, regardless of our attempts to retain our cultural heritage and manage our homelands in a manner consistent with our indigenous customs and culture, the Slater Fire is burning down the homes of our tribal members, of our tribal staff, of our community.

Cultural burning and prescribed burning both reduce the density of small trees, brush, grass and leaves that otherwise fuel severe wildfires. Clearing undergrowth allows for a greater variety of trees and a healthier forest that is more fire resistant, and it provides more room for wildlife to roam with beneficial effects such as enhancing the success of our hunting.

Prescribed Fire and cultural burns are intentionally set during favorable conditions, sometimes at regular intervals to achieve a variety of socio-ecological benefits. Fire suppression involves extinguishing fires using teams of people, bulldozers, fire engines, helicopters and airplanes by land management agencies assigned that duty by federal, state and local governments.

Our land was taken from us long ago and our indigenous stewardship responsibility was taken from us too. The land is still sacred and it will forever be part of us. We hold the knowledge of fire, forests, water, plants and animals that is needed to revitalize our human connection and responsibility to this land. If enabled, we can overcome our current situation and teach others how to get it done across the Western United States.

In 1850, the California legislature passed a law that essentially forced many Indigenous people into servitude and criminalized indigenous burning. This was followed by the creation of the National Forest System and the focused suppression of our cultural burning practices in northern California. Karuk people were shot for burning even as late as the 1930s. Federal laws were created that were interpreted to call for fire suppression, but were not to have an impact on hunting and fishing.

The Karuk Tribal Constitution defines Karuk Tribal Lands as consisting of our Aboriginal Territory, service areas, and all lands subsequently acquired by and for the Tribe, whether within or outside of the Tribe’s Aboriginal Territory. On these lands, we have the right to use fire in the perpetuation of our culture.

In fact, the courts have deemed that Karuk People are not Indians of a reservation. We remain a sovereign, independent nation occupying our original homelands. That is supposed to mean something. Yet our hunting and fishing areas are diminishing, while forests burn at larger scales and more sediment is added to our streams.

Fire itself is sacred. It renews life. It shades rivers and cools the water’s temperature. It clears brush and makes for sufficient food for large animals. It changes the molecular structure of traditional food and fiber resources making them nutrient dense and more pliable. Fire does so much more than Western science currently understands.

The Red Salmon Complex fire is currently burning on an area sacred to the Karuk people. Our sacred values are negatively impacted when state and federal land agencies dig fire lines with bulldozers and send hundreds of people into places where only a few at a time should go. Rare endemic plants get trampled, archaeological evidence gets rearranged, and chemicals get dumped into the watersheds we drink from and salmon inhabit. Indigenous peoples have to respond to protect these things.

The space we traditionally visit for solitude, prayer, and carrying out cultural burning has become a space of turmoil, sorrow and trauma. That’s why many Indigenous people have been fighting to use fire in the right way all our lives.

In recent decades, our area has been plagued by large fires, including the Big Bar Complex fire in 1999, the Backbone Complex fire in 2009, and the Butler fire in 2013. Time and time again we find ourselves dropping everything to respond to fire suppression activities while trying to keep up the fight to revitalize our Indigenous responsibility as we witness our culture being destroyed. The federal and state governments spend billions of dollars each year fighting wildfires in California while putting very little toward prescribed burning, or understanding that cultural burning can and should be practiced.

We know the solution is to burn like our Indigenous ancestors have done for millennia. But too often we are told we can’t burn. Simply put, it’s either because we don’t have the proper environmental clearance for burning under the National Environmental Policy Act, because of liability, or because there aren’t enough personnel available to supervise the burn. This year it is because smoke will be bad for COVID-19 patients.

These are excuses, not solutions. We carry the same qualifications as the federal and state agencies when it comes to prescribed burning or otherwise managing fire, and we hold the Indigenous knowledge that is needed to get the job done right. We have the knowledge to conduct cultural burning that is perfectly safe, and in many cases, we do not even need fire lines. Yet the federal agencies still do not allow us to lead prescribed burns on lands administered by the National Forest System.

We will not let these things stop us. We will just burn for another year on the 2% of the landscape that is held as private land and not considered part of the national forest. We will continue to build our own funding sources like the Endowment for Eco-Cultural Revitalization Fund. We will continue to fight for our indigenous rights and tribal sovereignty to be taken seriously. Overcoming the structural racism at the root of this problem has been a multi-generational task. It shouldn’t have to be.

Frequent prescribed fire and support for cultural burns conducted by individuals and families is the solution proposed by the Karuk Tribe and Western Klamath Restoration Partnership. We can do this, and we can do it together, but we need to permanently fund tribal programs that are engaged in shared stewardship activities, and allow Indigenous people to lead the way.

Bill Tripp is Director of Natural Resources and Environmental Policy for the Karuk Tribe Department of Natural Resources. For more information search for: #EndowActionNow on Facebook and Twitter. This article originally appeared in The Guardian.
Forging Fire Strategies

Kimberly Baker, Public Land Advocate

The time to adapt and live with wildfire is here. Many communities across the west are working toward that goal. The climate crisis is thrusting change upon urban and rural towns alike. As the flames and smoke become more familiar our relationship with fire must progress. Here in the Pacific Northwest corner of California, strategic fire planning is underway.

EPIC participates in the Smith River Collaborative and the Western Klamath Restoration Partnership (WKRP). The goals of the National Cohesive Wildland Fire Management Strategy, in part, guide these efforts. Completed in 2014, the national strategy represents a push to work collaboratively among all stakeholders and landscapes, using best science, to make meaningful progress towards three goals: resilient landscapes; fire adapted communities; and safe and effective wildfire response.

Based on 20 years of collaborative work between diverse partners, WKRP formed in 2013. The partnership is a watershed and fire management effort between the Karuk Tribe, Six Rivers National Forest, the Mid-Klamath and Salmon River Watershed Councils, community fire-safe councils, local stakeholders, Klamath Forest Alliance, EPIC and others. The mission is to establish and maintain resilient ecosystems, communities, and economies guided by cultural and contemporary knowledge through a truly collaborative process that effectuates the revitalization of continual human relationships with our dynamic landscape.

Working together towards shared values and zones of agreement, the partnership created a strategic fire plan for 1.2 million acres. It includes the entire Salmon River watershed, a portion of the Middle Klamath River between Weitchpec and Seiad Valley, and parts of the Siskiyou, Marble Mountain, and Trinity Alps wilderness areas. It spans two national forests—the Klamath and Six Rivers—and includes the communities of Weitchpec, Orleans, Somes Bar, Forks of Salmon, Cecilville, Sawyers Bar, Happy Camp, Seiad Valley, and much of the Karuk Tribe’s ancestral territory.

Historically, the Western Klamath Mountains experienced fire every 3 to 10 years. That includes cultural burning by indigenous tribes practiced since time immemorial. Northern California is fortunate that fire is still a vital part of the living culture here today, as shown by the Karuk, Yurok and Hoopa Valley Tribes and the ‘Tolowa Dee-ni’ Nation. It is spreading more widely as understanding and cooperation grows. Traditional burning practices are helping to guide the strategies of our future.

Fire rejuvenates and helps to balance forest ecosystems. The ecological benefits are immeasurable. The partnership aims to mitigate the current fire deficit by implementing their Plan for Restoring Fire Adapted Landscapes. Multiple values were spatially modeled over 1.2 million acres, resulting in a map highlighting prioritized areas most needed for treatment. The most critical places identified were around towns, neighborhoods and along strategic ridge tops and roads.

Implementation of the first demonstration project just began this year. The Somes Bar Integrated Fire Management project consists of nearly 50 miles of shaded fuel breaks and hand lines and 5,500 acres of manual, mechanical and prescribed fire treatments, concentrated around small communities. This and all future efforts will not only accelerate the development of fire-adapted communities and resilient forests, they will integrate Traditional Ecological Knowledge; bring together food security, food sovereignty, and forest food and fiber resources; build local restoration stewardship and workforce capacity; increase cultural and community vitality; include maintenance to uphold effectiveness; advocate fisheries restoration; maintain and restore viable native plant and animal populations; build capacity for practitioner-based research and monitoring programs; and include inter-generational education programs and activities.

In addition, to put principle into practice, WKRP helps to host and organize the Klamath River TREX prescribed fire training and learning exchange. TREX trains people to implement prescribed burning, building their credentials and accomplishing restorative fire on hundreds of acres annually. The partnership coordinates the Klamath Fire Symposium, bringing together land and fire managers, researchers, scientists and interested stakeholders. The group is also working with fire planners to develop Potential Operation Delineations (PODs), that use fire modeling and spatial information to identify and plan suppression strategies. Restoring fire on a large landscape requires many levels of understanding and cooperation.

Wildfires are sparking a national shift in law, policy and opinion. Social change in coping with the climate and biodiversity crisis is beginning to ignite. With the mission to revitalize our human relationship with fire and our dynamic landscape, WKRP is leading the path to increase the pace and scale of place-based restoration. Recognized as a national model, the partnership is helping to facilitate changes in fire and land management for communities across the west that are living with fire.
Restoring Our Relationship to Fire
Following the Lead of Indigenous People Can Save Us From Mega-Fires

Caroline Griffith and Will Harling
Mid Klamath Watershed Council Executive Director

Fire has been a part of the landscape since long before we have, and humans have lived side-by-side with fire for much of our existence. Here in California, Indigenous people managed the land by regularly introducing fire to enhance the production of food, fiber, medicine, and utilitarian resources. When the Spanish colonizers arrived here, they were horrified by the practice of burning to maintain and revitalize vegetation. The practice was seen as so threatening that the first Legislature in the newly formed state of California added a prohibition on burning (specifically banning Indigenous people from burning, later expanding it to everyone) to the Act for the Government and Protection of Indians, the same law that allowed for the kidnapping and enslavement of Indigenous people. Cultural burning was outlawed for many reasons beneficial to European colonizers. Perhaps least of these was that it was a threat to life. In addition to being a threat to property and resources (including timber), it was a means to take away native people’s ability to feed themselves and produce the resources needed to live without support.

According to Will Harling, Director of the Mid Klamath Watershed Council (MKWC) and Orleans/Somes Bar Fire Safe Council, this misguided attempt to remove fire from California ecosystems is the prime cause for the spate of devastating wildfires over the past decade, above climate change and the lack of raking.

“It is hard to comprehend the fire deficit we have accrued in the past century, and it is even harder for settlers like me to understand how Indigenous burning created and maintained the diverse and productive landscapes that Muir eulogized.”

MKWC is a collaborator in the Western Klamath Restoration Partnership (WKRP, see page 6) which works with diverse partners to return good fire to their 1.2 million acre landscape. According to Harling, the problem is not only fire suppression, but the fire suppression industry and the fact that fire management, and a relationship with fire, have been taken out of the hands of the people. “Fire is currently owned by CAL FIRE and the Forest Service. While some more progressive leaders within these organizations are pushing for change, most still believe no one else is capable of managing fire,” says Harling. “Locally, indigenous led burns by Karuk and Yurok practitioners to manage their resources are still being disallowed or criminalized.”

The agency that would become the U.S. Forest Service was founded in 1876 as the Special Office of the Dept. of Agriculture tasked to “assess the state of the forests in the U.S.” As the agency changed into what it is today, it continued to sell fire exclusion as a way to turn meadows into robust timber forests. According to the U.S. Department of Agriculture, the mission of the current Forest Service is to “sustain the health, diversity and productivity of the Nation’s forests and grasslands to meet the needs of present and future generations.” As author Tim Egan elegantly described in his book, “The Big Burn,” referring to the massive wildfires in 1910, this created a reason for the Forest Service to exist: to create timber and manage this “resource.” Both traditional ecological knowledge and western science have clearly shown that intentionally reintroducing fire to the landscape will make it more resilient, healthy and resistant to mega-fires, but the agencies that are tasked with “sustaining the health” of our forests are resistant to this method. As Harling says, “Our federal partners are so consumed putting energy into fighting fires and planning salvage sales, they don’t have time or resources left to advance proactive measures.”

So, what proactive measures should we be taking? How do we change the fire suppression paradigm? One way, Harling suggests, is to change the way we fight fires on the ground. The Red Salmon Complex that started near Red Cap Lake in the western Trinity Alps Wilderness in late June provides a recent example. “So far, us taxpayers have spent around $90 million over the past two months to contain this fire by 40%. Much of this money was spent building firelines along wilderness ridges and dumping retardant from aircraft to slow the fire’s spread. With $20 million we could fall back to the communities this fire eventually reached anyways and invest in fuelbreaks in the Wildland Urban Interface we will use for decades to come.”

“What if we used unlimited wildfire resources to implement existing Community Wildfire Protection Plans in the fire’s path, as well as landscape level integrated fire management plans forwarded by WKRP and similar collaboratives?” Harling mused. “Nothing reduces the public’s healthy fear of fire more than a two mile fuelbreak around town regularly tended with fuels reduction and fire!”

The North Coast Resource Partnership recently provided funding to MKWC to work with regional fire experts and partners to create a draft network of potential strategic fuelbreaks across 11 million acres from Sonoma to Siskiyou Counties. “The first step to landscape scale fire management is agreeing to where fuels treatments can be implemented to maximize opportunities to safely manage wildfires for resource objectives and implement large scale prescribed fires,” Harling said. Modelling efforts led by Chris Dunn at Oregon State University are under way to show where these places are and what work is needed. They look at topography, existing fuel loading, infrastructure and other variables to determine where potential control lines could be placed, and under what conditions they will be able to hold a fire. These models factor in recent burn footprints that have proven to be about the only thing capable of stopping wind driven wildfires.

But simply changing the way that fire is suppressed won’t solve the problem. As Harling points out, “Every dragon they slay, more dragons come out of those ashes.” Every natural wildfire that is effectively suppressed means another fire interval missed, and a harder fire fight next time fire comes. Fire needs to be reintroduced to the landscape and there are significant policy and legislative hurdles to making that happen. CA Senate Bill 1260 took small steps towards addressing many of these policy issues, including a certification program for prescribed fire burn bosses that includes shared liability with CAL FIRE, a mandate for CAL FIRE to look into workable liability insurance models for groups wishing to implement prescribed fire, and cover costs for smoke permits that were getting untenable for non-industrial burners.

Continued on next page
we could do, according to Harling, is to develop a personal relationship with fire. He urges everyone to get involved with fire processes on their landscape, to engage in local prescribed burning efforts hosted by developing Prescribed Burn Associations and Training Exchange (TREX) events. “Making fire a grassroots endeavor again is vitally important,” he says. “Tribal people are ready to take back ownership of fire on our landscape, and there’s a place for non-tribal residents to support them. Restoring our relationship to fire is what our culture most desperately needs; to be connected to place, to take on this responsibility and steward these lands in a way that benefits all life. Fire is our greatest tool.”

The Humboldt County Board of Supervisors is composed entirely of white people. Same with the Arcata City Council. The Eureka City Council has one member who identifies as non-white, as does the Humboldt County Planning Commission. This trend is reflected in nearly every elected or appointed board in Humboldt County and on up to the state and federal level. Though the current Congress is the most racially diverse yet, gender and racial representation in Congress still doesn’t reflect the population. So, it’s not surprising to hear that one local person of color running for office this November said they had never really thought of doing so before because, “I always thought this was a white person thing.” According to Aristea Saulsbury, facilitator of roundtable discussions for Humboldt Area Foundation’s Equity Alliance of the North Coast (and Northern Humboldt Union High School District board member), this is why representation is so important: Seeing people who look like you in leadership positions inspires people to think, “I could do that, too.” Representation is also important because without proportional representation on decision-making bodies, we will never truly be serving the will of the people, and we miss out on ideas and perspectives which could profoundly enhance our communities.

Saulsbury and the Equity Alliance of the North Coast have been leading discussions about racial equity for years, most recently focusing on how to increase the presence of BIPOC community members on elected boards and commissions and stay engaged beyond the current election cycle. These discussions came out of looking at who has been representing us in local, state and federal government (not surprisingly, most often white men) and asking “What did we learn about civic engagement growing up? And what did we learn about who gets to make decisions?”

One barrier to engagement is the format of the meetings at which decisions are made. Often they are held at times when it can be difficult for working people or parents to attend. Even the structure of many meetings, with the complex rules of when and how participants can speak and the decision-makers looking down from the dias, discourages participation and feels unwelcoming to those who haven’t been trained how to participate. What if we didn’t have to use Robert’s Rules? What if we didn’t use a podium and dias? “We don’t have to do it this way,” Saulsbury says. “We can do it however we want. We can run meetings and make people feel like they are a part of the process. I love the rabble rousers, the ones who come to our (School Board) meetings who make us think differently. They are making people in positions of power ask how we can do things differently.”

We can do things differently at an institutional level, but those of us in the environmental community should also do some self-reflection and figure out how we can be doing things differently in our organizations. The same issue of white supremacy that exists in our political institutions affects the environmental movement, from the makeup of our boards to the processes we use to make decisions, to how we choose which campaigns to work on. The history of the environmental movement is intertwined with the rise of the Eugenics movement and even our ideas of conservation come from an era in which powerful white men were “saving” land for their own uses.

Though the environmental movement, locally and nationally, is working to address its racist history and correct the representation issue, our methodology still comes down from the dominant culture and ascribes to the idea that we are saviors of the land, rather than a part of it. At a presentation for Indigenous People’s Week entitled, “You’re on Indian Land: The White Supremacist Roots of American Environmentalism,” Dr. Kaitlin Reed of the HSU Native American Studies Department quoted Oren Lyons, faithkeeper of the Onondaga, who said, “What you people call your natural resources, our people call our relatives.” Even the words we use to describe what we are doing and what we are fighting for come from a place of possession and dominance. Dr. Reed asks, “How could our work be transformed if we didn’t think of our relatives as resources?”

This question brings others to mind: Why are we doing things this way to begin with? Who decided that this was the “right” way? And where do our ideas about conservation, and the words we use to talk about our relationship with the environment, come from? We are in a pivotal moment in which our climate is drastically changing because of our (in)actions, our government is in crisis and a global pandemic is raging. It’s time not only for new leadership, but a change in our orientation. Luckily, there are plenty of examples of ways to do this differently, but first we need to step down from the dias and ask those who have been excluded how we can do things differently. From the Indigenous anti-capitalist resistance in Bolivia, to the Progressive Club on St. John’s Island, S.C., to the Indigenous-led movements here in what we call Northern California, there are many examples of how we can reorient our culture to serve planet and people rather than power and profit.

As Saulsbury said, “We don’t have to do it this way.”
I’ve been studying how the media reports on wildfires since 1987. This report is about what I’ve learned.

In their public relations, the Fire Establishment seeks to manipulate public fear of fire to forestall questioning of fire suppression strategies and tactics. Reporters often assist them, sensationalizing wildfire, ignoring fire suppression ineffectiveness and parroting the Fire Establishment’s explanations of causes and solutions. When they speak to reporters, most wildfire managers and many fire “experts” emphasize “over 100 years” of wildfire suppression as the reason wildfires have become destructive and unpredictable. Some mention climate change as a factor. But the role of past forest management in how wildfires burn and how destructive they become is rarely mentioned, much less analyzed in detail.

Denying the role forest management plays in wildfire destructiveness is dangerous for one simple reason: If we do not acknowledge the factors affecting wildfire destructiveness we are unlikely to do what is needed to ameliorate the destructiveness. Furthermore, when we deny the role of forest management in wildfire behavior, we ignore one of the few ways humans can influence how destructive wildfires become. We can not control wind and weather; we can change how western forests are managed in ways that moderate wildfire behavior.

How Logging Impacts Fire Behavior

The dominant form of forest management on timber industry lands is clearcutting followed by dense tree plantations that are themselves clearcut after 30 to 80 years. On national forest lands, vast plantations of young trees result from “salvage” logging after wildfires. Salvage logging removes large green as well as dead trees and replaces them with vast uniform plantations of young trees.

Research confirms what firefighters and forest activists see on the ground: while any forest can burn hot under the right conditions, old forests tend to burn slow and cool while tree plantations burn fast and hot. That was the case during the 2018 Carr Fire that entered Redding and the 2019 Camp Fire that devastated Paradise. In both cases, nearby lands managed by Sierra Pacific Industries are a sea of clearcuts and young tree plantations. Some nearby national forest lands have been salvage logged and turned into tree plantations.

During the Carr Fire, 1900 acres of tree plantations incinerated totally. Yet media reports completely ignored the role of clearcut-plantation forestry in that fire’s destructiveness. After a Camp Fire helicopter tour with Sierra Pacific Industries executives, some reports even parroted the company’s claim that their forest management had “saved” certain residential areas.

The Fires This Time

The dominance of young tree plantations on private industrial and national forest land also played a role in the devastation resulting from this year’s wildfires. The Holiday Farm Fire east of Eugene, Oregon blew up in national forest tree plantations; the Creek and Bear Fires in California’s Sierra Nevada Mountains raged through timber industry post-clearcut plantations. But most reporting on those fires ignored the role of nearby timber industry and national forest clearcuts and plantations.

Fortunately, the environmental community, forest residents and at least some in the media have become more savvy about why some wildfires become so damaging and deadly. All confirm that weather and wind are key factors: under the right conditions wind driven flames can incinerate any forest, including old growth. But how forests are managed is often also a critical factor.

Prominent among those challenging the Fire Establishment’s misinformation and denial is author and scientist George Wuerthner. His article “Misinformation Raging Like Wildfire” in The Wildlife News is the best summary of the subject I’ve seen. Also doing yeoman’s work to educate the public, reporters and editors about wildfire is FUSEE’s Tim Inglesbee. Among numerous appearances, Tim was recently interviewed on Democracy Now.

In California, The Chaparral Institute has led the way in pointing out the connection between clearcut-plantation forestry and the risk that a wildfire will exhibit catastrophic effects that threaten or destroy nearby communities. Check out the Institute’s reports on the Creek Fire and the Bear Fire, and find their post “Five Reasons we are Taking Cal Fire to Court” on the Institute’s blog: californiachaparralblog.wordpress.com/

The Way Forward

It is not surprising that Cal Fire, the Forest Service and others in the Fire Establishment refuse to inform the public about the connection between clearcut-plantation and salvage forestry and the devastation being experienced by nearby communities. If the word gets out, the public will demand reform and if that happens politicians will get on board. On the other hand, denial of fire/forest management connections means larger and larger budgets for the Fire Establishment. There is no incentive to bring forward information that might change to whom the money flows and for what purposes.

Denial of the forest management-fire risk connection is dangerous. If we as a society do not understand the factors that impact whether a wildfire will result in extreme fire behavior and catastrophic fire effects, we will be unlikely to effectively address those factors.

There are many reasons western forests should be managed differently. As water chair for North Group, I document the water quality impacts that result from logging on landslide terrain, logging roads that are not adequately maintained and poorly managed grazing. Two other reasons to change forest management are climate change and the risk of catastrophic fire effects. It turns out that older forests are not only less prone to create catastrophic effects when they do burn, they also store more carbon for a longer period as compared to younger forests and tree plantations. A post-fire study from our own Klamath Mountains confirms that, under the same weather and wind conditions, tree plantations burn hotter and older forests burn cooler.

While the science is clear, the path to managing western industrial and public forests to restore old forest character and resilience is murky at best. But that topic must await another day and another North Group report.

Meeting Announcement

Share your ideas on wildfire, how to mitigate climate disruption and restore resilient forests or any other topic by joining the North Group’s monthly video meetings. For meeting access directions contact Gregg Gold at gregggold@aol.com or 707-826-3740.
According to reports from the California Coastal Commission, California was the world leader in cleanup events for Coastal Cleanup Month in September. Despite many challenges, over 10,000 volunteers showed up to clean their streets and beaches. In Humboldt, we had an estimated 85 volunteers that removed around 550 pounds of trash. These numbers are based on the data that was reported to us via our data reporting form.

We received a lot of positive feedback from participants about the new month-long format, a few participants even remarked about the habit forming benefits of volunteering over a longer period of time. This reaction is exactly what we had hoped for and we are excited to carry this model into future years.

As we move toward the NOAA Marine Debris Tracker app as our main source of data, we are hopeful that participants will be excited by their ability to track their cleanups and see what others are finding and where. This is all public information and can be found on the Marine Debris Tracker website.

This year, the top five items found were as follows:
1. Cigarette Butts (2,628)
2. Food Wrappers (1,168)
3. Beverage Cans (209)
4. Glass Beverage Bottles (155)
5. Plastic Beverage Bottles (127)

The items found this year were a bit different from the top five found in 2019 which consisted of:
1. Cigarette Butts
2. Plastic Pieces
3. Food Wrappers
4. Glass Pieces
5. Other Trash

I believe the difference may have come from the locations of the cleanups. This year, we had our participants focus on their neighborhoods to avoid overcrowding on beaches. It is no surprise that cigarette butts and food wrappers are the top two items on our streets.

Cigarette butts have been at the top of the marine debris data lists since we started gathering data. This is due partly to the common misconception that cigarette butts are compostable and will eventually degrade. Not only do they leach toxic chemicals into the environment (including arsenic and lead), their filters are made of plastic that easily breaks down into microplastics. According to the Truth Initiative, 4.5 trillion cigarette butts are littered into the environment every year. At the NEC, we are using data collected by our coastal cleanup volunteers to identify cigarette butt problem areas so we can tackle the issue with future initiatives.

In an attempt to address wasteful food packaging, particularly of the To-Go container variety, the NEC has embarked on a mission to get local restaurants to sign on for an opt-in mentality surrounding single-use food related items when ordering food to go. To learn more about this initiative you can visit yournec.org/pledge.

Finally, I will end with a positive marine debris removal story from Coastal Cleanup Day. On the morning of September 25th, I sat down at my computer to find an email from Robin Hamlin reporting a mooring on Clam Beach. Excitedly, I ran to grab my shoes to head out and tackle the issue before the incoming tide. As I was tying my laces it occurred to me that I would need to find a place to take the mooring once it was removed. I decided to call the Trinidad Harbor who directed me to the Trinidad Rancheria. I spoke with them, let them know where the buoy was and they said they knew exactly where the buoy came from. They spoke of a crabbing vessel mooring mishap and sent two employees out with tools to remove the mooring within the hour. I removed my shoes with a smile and resumed my work for the day.

After tackling debris issues like this, I’ve found that there is almost always a solution. Often, the solution doesn’t come as easy as this story but with persistence and determination a solution almost always arrives. If you’re ever walking on a beach and you find large debris, please don’t hesitate to reach out and I will see what I can do to find a solution. Thank you to all of the people that are out keeping an eye on the beaches. Coastal Programs wouldn’t be a success without you. Keep on trash picking and data collecting!
The Campus Center for Appropriate Technology (CCAT) has taken a hard hit in community functionalities since the start of the pandemic, but part of the growing movement of Appropriate Technology is facing a human need and critically analyzing how to fill this need through the best possible social, economic, and environmental perspective. CCAT is currently closed and in the process of proposing to bring Volunteer Fridays back in a safe, socially distant manner. We have adapted to a full-on virtual mode that is interactive for students and the community. We post on Instagram and Facebook every day and we have updated our website and YouTube channel as well. Our content is full of Appropriate Technology demonstrations, featured photos, virtual ways to get involved, and uplifting ideas for our community.

Our newest updates include lime-coloring the Rocket Mass Heater Bench that has taken hundreds of hours of volunteers and employees to finish building. This bench is for outdoor cooking. You put firewood inside the chute (where the cat's head sculpture is located) and heat will travel up to warm the lid of the barrel serving as a stovetop. The heat also travels towards the west heating up the bench for your sitting pleasure. Then, at the very end of the process, the smoke rises out of a BBQ grill! There are also cupholders and shelving installed. We hope that we can soon use this space to bring the community together again.

We have a neat way of sharing seeds in front of CCAT, or you can drop yours off! The vegetables we grow normally were offered to students and the community to pick themselves and we cooked them for our volunteers every Volunteer Friday. However, due to Covid-19 we no longer are able to do that, so I took the initiative of dropping this produce off to the Humboldt Mutual Aid free food stands.

Another way students can get involved is by dropping off their compost any time, at the back southeast corner of CCAT next to the tool shed. We do not accept meat, dairy, or eggs (eggshells are ok). On the plus side, if you are working on your garden and are in need of finished compost you may also come over and pick it up! We have already helped several students build their garden beds at home.

We have a couple of virtual events coming up, including a Virtual Haunted House on Friday, October 30, where we invited a speaker to talk about a little history of Halloween that most people may not know about. We’re offering free pumpkins for anyone that wants to enter our pumpkin art contest! This can involve carving your pumpkin, painting it, or decorating in any other creative artistic ways. We will also have an upcycled costume contest and, yes, there will be prizes! Upcycling includes putting your costume together with second-hand materials or trash.

Our main event is Harvest Fest which will start off with a talk by Lonny Grafman, one of the Humboldt State engineering professors that ultimately has his hands-on class time at CCAT. Then for brunch we will have a pie baking show followed by an art show, which is the highlight of the event. The art show via zoom will be structured as a slideshow and we are calling singers, instrument players, and music producers to perform as each art piece slides by. Then we’re featuring the new student-led organization, B1g Foot New$, with a special episode talking about community and conversations that need to be had. Next, a couple of other speakers will talk about justice activism through the lens of appropriate technology and food justice.

Due to budget cuts, we have had to cut two of four of our 1 unit CCAT classes. One of the remaining classes is online Organic Gardening and our newest addition is Sewing and Sustainability. These classes are taught by students and they have filled up quickly and even took in extras on the waiting list.

The Campus Center for Appropriate Technology is still in the process of planning more creative ways to stay engaging and reflect the goals of our mission statement which are: to demonstrate appropriate technology in a residential setting, to provide hands-on experiential learning opportunities to HSU and the surrounding community of Arcata, to collect and disseminate information about appropriate technology, to examine the ethical and social consequences of technology, and to dispel the myth that living lightly on the earth is difficult or burdensome. Stay tuned!

Instagram: @ccathsu
Facebook: @campuscenterforappropriatetechnology
Youtube: ccathsu
Email: ccat@humboldt.edu
Website: ccat.humboldt.edu/
Michael D. Pulliam, Guest Author

2019 saw the release of 2040, an honest and hopeful documentary-meets-thought-experiment by award-winning director Damron Gameau. Combining bright visuals, masterful interpretive science communication, humor, and a dedication to solutions journalism, Gameau impactfully delivers what he calls “an exercise in fact-based dreaming.” Much of the film is presented as a letter to his daughter (4 years old at the time), and continually flashes forward to dramatizations of her young adulthood in the year 2040. Gameau asks and answers the big question: If we embraced at large scale some of the sustainable technologies that already exist, how would the world look in 20 years?

On an engaging and entertaining journey around the world, Gameau introduces us to a variety of experts and visionaries. These activists, business people, and thinkers share ideas and innovations that are already being used sustainably in communities around the globe. Electricity microgrids that allow neighbors to buy and sell power locally, driverless on-demand vehicle networks that free up time and space for commuters and the cities they call home, innovations in agriculture on land and in the sea, and a vision of economic possibilities that could tilt the scales toward justice without causing a Red Scare. And at each stop, we see how these fascinating solutions could be applied to shift our societies toward a future filled with possibility.

In Bangladesh, Gameau plugs in with the ME SOLshare organization to see how a community prone to poverty has been turning on the light for each other—and keeping it lit. Using small-scale rooftop solar arrays, people have not only powered their homes and empowered themselves, but are united both electrically and financially. If your rooftop generates more power than needed, your neighbors can buy the excess (and vice versa), keeping money and energy flowing through a neighborhood. What if a system that unites 20 homes could unite 20,000? What if you sold (or donated) power and money throughout your community while away on vacation?

In Sweden, we learn the sustainable transportation genius of city buses that run on compost-generated methane. Using convenient municipal infrastructure, citizens drop food and other wastes into bins that run to an anaerobic biodigester, supplying the biofuel stations that power their public transit. Back in the U.S., Gameau test-rides a driverless vehicle that he may learn to trust taking his daughter to school. What if sustainably-fueled rideshares were the norm, and the average US household had 0 cars instead of 2? What could we do with the millions of acres of parking lots and highways we no longer needed?

Gameau also digs into agriculture. We get a lesson on some remarkable large-scale land farming practices that have regenerative effects on soil health, and even take a dive into a domestic kelp forest to learn about marine permaculture. Seaweed has incredible uses as a product, and plays a miraculous role in restoring marine ecosystems. (And it is fast and easy to grow!) What if we grew our food in places and in ways that strengthened the interrelated ecosystems? What abundance could we ensure for our children and grandchildren?

Gameau’s final topic is as heartwarming as it is surprising: to counteract climate change, one of the most effective things we can do is educate young girls. Most climate action plans focus on technical or natural solutions, while social programs that empower women and girls can actually make a similar difference, especially over time. It can only be worthwhile to invest in a more equitable and sustainable social structure that opens more opportunity for everyone. Providing education and family planning for girls and women is also much more cost-effective than many solutions in engineering or manufacturing. What if a generation of girls grew up learning anything that interests them and were able to choose their own paths? What if the women who have been marginalized over centuries could add their voices and ideas to the problems that affect us all?

One of the guiding visuals throughout the film comes from English economist Kate Raworth in “Doughnut Economics.” Simply put, this “playfully serious” model of economic challenges gives us two bold circles, one enclosing the other: the outer boundary of natural resources and the inner boundary of basic social necessities, like a circular donut with a hole in the middle. We fall short if we don’t provide basic necessities, letting people drop through the inner hole. We overshoot if we continue unsustainably, pushing too hard against the outer edge. Raworth encourages us to find ways of making the ‘meat’ of the doughnut as inclusive and sustainable as possible. 2040 keeps this sweet spot in mind as the chapters unfold, revisiting the visual.

Taken together, 2040 is enlightening, charming, and inspiring—a breath of fresh air amidst the doomsday documentaries on global warming. Gameau’s dedication to addressing this overwhelming issue with proven, real-world technologies gives us fact-based substantiation for hope. The approach of solutions journalism can remind us that what we focus on will grow: if we think of the future and see despair, we may resign ourselves to it; if we think of the future and see possibility, we can be energized and galvanized to create it.

So let’s get dreaming! Visit whatstyour2040.com to get info on film screenings, updates, and current projects. Also take a moment to build your personal Climate Action Plan. Every act makes an impact.

*The filmmakers clarify early on that their production is carbon-neutral via credits and offsets.
Kin to the Earth: Mark Andre

Tom Wheeler, EPIC

Something was in the water in Humboldt in the late 1970s. Important events coincided with a new generation of activists armed with natural resource education, eager to put theory into practice—a fortunate stroke of serendipity. A generation of environmental leaders grew up here, passed from radical startups to respected leaders of the restoration movement. And at the core of this movement was Mark Andre. As Mark approaches retirement at the end of 2020, we thought it was appropriate to publicly recognize what he has been for over 40 years: Mark is a Kin to the Earth.

Mark moved from San Diego to Humboldt in 1976 because it was as far as he could go within the state while still maintaining in-state tuition. In moving here, Mark found his life’s passion—forest and watershed restoration—as well as a community of like-minded friends. Before school even started, Mark was already in the forest, surveying Redwood National Park, part of an effort to prevent adjacent timber companies from poaching old-growth from within the park because of unclear boundaries.

Mark graduated from Humboldt State University with a degree and graduate work in natural resource planning and watershed management. He punctuated his time inside the classroom with plenty of time in the field, working summers for the National Park Service while still finding time to travel to D.C. with Tim McKay to lobby, participate in the GO Road protests, survey what is now the Siskiyou Wilderness, and more.

Inspired by the kinder, gentler forestry preached by Dr. Dale Thornburgh, Mark became a registered professional forester and teamed up with a couple of his co-conspirators—Greg Blommstrom, Aldaron Laird, Steve Madrone, Wiley Quarles, Dusty Escano, Randy Stemler, Steve Salzman, Steve Barager, Terry Bean, Dwight Streamfellow, Keith Barnard, Ian Morrison, Randy Sherer, and others—to start a watershed restoration business. With the newly-expanded Redwood National Park, there was plenty of work available. In these vagabond days, Mark and company were building the restoration movement from tents or converted school buses.

One of those wild-eyed restoration radicals, Steve Madrone, had this to say about his old comrade: “Mark is our local ‘Man of the Trees,’ having spent his whole adult life planting, saving, and managing forests for the trees! From Redwood National Park expansion surveying to taking over the management of the Arcata Community Forest Mark has always been one with the trees. Thank you Mark Andre. You are a Kin to the Earth.”

In 1984, Mark was hired by the City of Arcata. Mark’s charge was to implement a new kind of forestry program for the community forest, one that blended a variety of values and visions together—recreation, clear water, income from forestry, and now carbon storage—and was managed openly and transparently. Many public lands operate under a similar charter—“multiple use, sustained yield,” to use the federal parlance—but few forests have balanced the competing values as well as the Arcata Community Forest under Mark’s watch. As Mark proved himself on the community forest, his role at the city grew, eventually moving up to become the Director of Environmental Services. Under his aegis, Arcata made major strides towards developing a more sustainable city. It was through big things—like doubling the size of the Arcata community forest, expanding the Arcata Marsh and Wildlife Sanctuary by 88%, the creation of the 600 acre Jacoby Creek-Cannon Slough Wildlife Area, and convincing the City of Arcata to join a landmark lawsuit concerning climate change, which resulted in a settlement with more than $500 million directed towards renewable energy development—that helped build Mark’s public reputation, but it was his kind, considerate leadership that his co-workers will miss most.

Mark also established himself as a leader in the national sustainable forestry movement. Mark helped to found the Forest Stewards Guild, a coalition of sustainable forestry practitioners and advocates from across the country. Mark also served on the state Board of Forestry for many years. Mark even found time for work as a forester, helping clients adopt the sustainable forestry models he had put into place at the Arcata Community Forest. And although he is retiring from the city, Mark still plans to continue work as a professional forester, but with more time for hiking and kayaking.

Mark’s legacy is not limited to Humboldt. As many of us have experienced, Humboldt is more than a physical place. It is an idea of a different kind of world, where forestry can co-exist with conservation, where working with natural processes leads to social, environmental and economic gains. Many people who come here, who experience this sense of place, are moved by the experience. Perhaps Mark’s greatest legacy are those who have come and enjoyed the community forest or the Arcata marsh and have migrated across the West, taking with them a different vision of what is possible. I am excited to see what fruit these seeds will yield.
Evening Programs
November 11, Wednesday. 7:00 p.m. “Saving Humboldt’s Big Lagoon Bog.” Big Lagoon Bog is a botanically exciting spot, with diverse herbaceous species embedded in a sphagnum matrix, including 11 species considered rare or uncommon in California. Encroachment by woody vegetation, slow and steady for approximately 85 years, threatened the existence of these bog species. After a massive woody vegetation removal project orchestrated by our chapter three years ago, Joseph Saler, an M.S. student at Humboldt State University and a biological consultant, stepped in to document the change and how the bog plants responded. This exciting presentation will introduce the need for treatment, the unique species found there, and tell how they have responded so far in this important experiment in ecological stewardship. Register for this Zoom event on our website.

Field trips
November 7, Saturday. Big Lagoon Day Hike. The diverse habitats in Big Lagoon County Park include ocean bluff, sand, wetland, spruce forest, and the small, precious bog. We will wander through as many as we want. We will look at the bog from the periphery. Our Covid protocol insists on small groups, face coverings, and social distancing. Please register with Carol at 707-822-2015 or theralphs@humboldt1.com to learn details.

“Hands Off” vs. “Benevolent Disturbance”
by Carol Ralph
Nature doesn’t stand still. In Big Lagoon Bog Dennis Walker watched over 50 years as the native shrubs and trees grew, while the area of sphagnum moss and associated rare plants shrunk. On Table Bluff Dave Imper watched over 30 years as coastal scrub replaced prairie, crowding out the Western Lilies. Where fences protected lilies from cows but not shrubs, lily seedlings sprouted in cow pies outside the fence. At Ceremonial Rock in Patrick’s Pt. State Park Virginia and Jim Waters over 50 years watched the surrounding meadow become a tall, dark spruce forest. The bog plants, lily, and meadow waste generated to track progress over time. It is an inspiring model for other large outdoor events.

The Re-School, formerly Turtle Mountain Design Reused Building Materials Salvage Yard at Redwood Acres, is run by partners, Michael Deakin and Joe Duckett. Independent contractor-builders have complained about not having a place to drop-off and pick up used building materials ever since the Arcata Community Recycling Center Reusables Depot closed. In the past four years, it has quickly become a popular hub for reused materials

Native Plants for the Garden
Our native plants are available every day, 12 noon-6 p.m., at the Kneeland Glen Farm Stand at Freshwater Farms Reserve, 5851 Myrtle Ave. If you don’t see what you want, contact us at northcoastcnps@gmail.com.

Stay Updated:
www.northcoastcnps.org
facebook.com/NorthCoastCNPS
CNPS welcomes anyone interested in native plants to join our events. No expertise required.

Zero Heroes Honored November 15

Margaret Gainer,
Zero Waste Humboldt President
Zero Waste Humboldt is pleased to announce the 2020 Zero Hero honorees. These five honorees represent a wide variety of efforts to reduce waste in Humboldt County and have been inspiring examples of adopting Zero Waste methods. They will be honored on Sunday, November 15th at 7:00 P.M. at the annual ZWH’s Zero Heroes Night event. To join in this celebration, contact them or zerowastehumboldt@gmail.com.

North Country Fair requested Zero Waste Humboldt’s assistance in 2012-2016 to prepare vendors to reduce waste, train volunteers to staff seven stations on the Arcata Plaza, and manage the flow of discarded material for the 2-day Fair. The Fair adopted the Zero Waste method with annual measurement and monitoring of

Thimbleberry Threads owner, Beth Kabat has gradually grown her business since 1987, using secondhand materials. Her attractive pillow designs and zipper bags attract crowds to her booth at California and Oregon fairs and festivals.

Plastics Uniquely Recycled is a great example of local recycling-based manufacturing. Artist-entrepreneur, Jenifer Sherman-Ruppe, has grown her business of making jewelry and other products from plastic pharmacy pill bottles.

Trinidad Beachcomber Cafe is a Zero Waste early adopter among Redwood Coast food and beverage serving businesses. Over the years, owners, Melissa Zarp and Alice Vasterling, have demonstrated at the Beachcomber how to integrate core environmental values into their business operations.
PACIFIC SIDEBAND SNAIL

We’d like to introduce you to a small, slow inhabitant of the Redwood forest: The Pacific Sideband (Monadenia fidelis). These beautiful reddish-brown snails are remarkable for a few reasons. Most snails breathe through gill slits, but this guy has a lung! Pacific Sidebands are hermaphroditic — they have both male and female parts. This is normal for most snails, but Sidebands set themselves apart with their use of “love darts”.

When Sidebands think they have located a mate, they will engage in a lengthy mating dance. Once they have determined that they are suitable partners, they will shoot a harpoon-like dart made of cartilage or calcium carbonate into their partner. The dart contains hormones that make the mating more successful, but can sometimes pierce internal organs. Ouch! Photo Credit: Andrew McKinlay, Flickr Creative Commons.

OSPREY

The Osprey (Pandion haliaetus) is known all over the world by many names: Sea-Hawk, River-Hawk, and Fish-Hawk to name a few. It is one of the most widespread raptor species, and also one of the most specialized. It hunts almost exclusively over the water, with fish making up 99% of its diet. Ospreys have many adaptations for diving: nostrils that close, barbed scales on their feet that help grab slippery fish, and waterproofed feathers.

Ospreys are easily recognized from below because of their characteristic white belly and brown underwing. If you’re close enough to see its head, the brown eye stripe is also a dead giveaway! Ospreys appear in mythology, religion, and as cultural symbols worldwide. They are truly a one-of-a-kind bird! Photo Credit: Sunny, Flickr Creative Commons.

GOPHER SNAKE

Gopher snakes are a common sight all over the western half of the US. There are many subspecies of this beautiful reptile, including the Pacific Gopher Snake (Pituophis catenifer catenifer) which you can find right here in Humboldt! Don’t go searching for them in the Redwoods, though...they like to hang out in dry meadows and agricultural areas.

If a gopher snake feels threatened, it might hiss and shake its tail like a rattlesnake. But don’t worry! These guys aren’t venomous and will generally not approach humans. These snakes are often found near roads and houses, making them one of the most familiar reptiles to many people. Photo Credit: J. Maughn on Flickr Creative Commons.

LACE LICHEN

You may be thinking...wait, that green stringy stuff is a creature? Yes! Lichens are a fascinating bunch — not quite plants, but not quite fungi either. In fact, they’re not a single creature at all! Most lichens are made up of one or more types of fungi and a green algae. The fungi provide the “body,” and the algae provides photosynthesis. Together, they are able to do much more than they would on their own.

Lace Lichen (Ramalina menziesii) is special in many ways. It’s unique hair-like appearance makes it easily recognizable. Plus, it’s the official state lichen of California! It’s a food source for deer, as well as a nest material for birds. You can spot this species almost anywhere in Humboldt, but one of the best places is at Ma-le’l Dunes. Photo Credit: Jerry Kirkhart, Flickr Creative Commons.
Forest Bathing

Forest bathing, or shinrin-yoku, is a mindfulness technique promoted as medicine by doctors in Japan. Shinrin in Japanese means “forest,” and yoku means “bath.” It involves paying close attention to our sensual experience of nature.

How does one take a forest bath? First, find a place to sit or walk - in the forest, at the marsh, or in your backyard (remember to practice physical distancing in public spaces). Begin by taking some deep breaths in and out through your nose. Maybe release a big sigh out of your mouth.

Choosing one sense to work with at a time, focus on what you are receiving. For example, see the way the light reflects on the water. Hear the birds chirping. Smell the fresh-cut grass. Taste the salty air. Touch cool, damp soil beneath your feet. Perhaps connect to your sixth sense - intuition. What arises in this moment of stillness?

Spend some time with each sense, sipping in the experience. Once you feel complete, begin to integrate your senses once again, painting a complete picture of your surroundings.

Take a final deep breath, release, and relax.

Fire’s Constructive Energy

As fires rage across our state we are reminded of how fire works to destroy and consume everything around it. Today we’re asking you to hold space for the constructive energy of fire, as it creates space and fodder for new life to spring from the ashes. Indigenous peoples from around the globe have lived with this instrumental knowledge of fire for thousands of years. Finding the balance of creation and destruction, working with fire for the purposes of sustaining both Land and People. The Yurok Tribe is a great example of how traditional knowledge can be ushered forth into the contemporary world, reigniting right relationship to Land and Fire. We have a lot to learn from this.

We watch our sibling Redwoods suffer in Big Basin State Park, and many of us grieve the losses there. Today, fed by that grief, we’re asking you to meditate on the notion that these trees, these lands, have survived and will continue to survive through the scarring of the Earth by fire. New shoots will spring, new life will surge. When we remove our own minuscule life spans and personal memories from the issue, we can hold deep gratitude that with our love, support, and efforts, generations beyond us will appreciate the same big trees.

Anti-Racism Resource

Hello community, and happy Monday. Our Mindful Monday post today is meant to re-invigorate and support our community by remembering that just because the media has stopped sharing about anti-racism and anti-police violence protests, the effort continues.

We’re sharing a resource from meditation teacher Tara Brach – a woman dedicated to teaching mindful meditation, lovingkindness, and other traditional Buddhist values through a contemporary lens. Her work often weaves social and environmental justice into her stories and advice.

During the early protests, Tara shared an anti-racism resource page from her website. Find it here: www.tarabrach.com/racism/

No matter your religious background or beliefs, Tara soothes ones worries, fears, guilt, and shame.

Who do you look to for guidance during these times?
The Judges and The Frog
by Ellen E. Taylor

An account of the Dusky Gopher Frog’s Defense, and Fight for His Life, before the US Supreme Court, October 1, 2018, and the consequential US Fish and Wildlife Service’s and the National Marine Fisheries Service’s revision of the Definition of Habitat.

A dusky frog, in crisis, makes
A magic cape. Now it annealed
Peptides, proof to plagues and quakes
More steadfast than a missile shield.

Mississippi left behind
She bounded northward. Time was short.
Arguments flashed through her mind
To move the august Supreme Court.

“Oyez! Oyez!” came the cry
So, with her bosom tight acclench
And stately hop, and purposed eye
The Dusky Frog approached the Bench.

And now, the Judges heard and saw
A frog instruct, as Age would Youth
Upon the sloth of human law
In pursuit of Cosmic Truth.

“My Mississippi bogs are gone..”
My need for habitat is critical:
Lethal are the lot and lawn.
Raise your solemn hand juridical!

Weyerhaeuser took a breath
But Justice Gorsuch cried, “This case
Is not about frog life or death
Or if on Earth she has a place.

It’s use of agency discretion
We’re discussing at this hour,
Does it require our intercession
Here to limit federal power?”

Chief Justice Roberts glowed with pleasure
Keen to argue Law and Fact.
“My friend,” he said, “Here we must measure
The Endangered Species Act”.

He raised a finger pedagogic:
“Adjectives compact and rare
Their nouns. A brown bear, says our logic
Must, quite clearly, be a bear.

Therefore, habitat, to be critical
To itself must correspond.
In my perception analytical
Here you only have a pond.”

Weyerhaeuser smiled at last.
“Our tree farm there is ours to log.
The reality value’s growing fast
And we’ll change nothing for a frog.”

As does her species when chagrined
Frog hid her eyes. Although abstract
These words were like an evil wind
Athwart the Endangered Species Act.

A worried dusky gopher frog.
Once tortoise-tenanted, now hid
Of the Definition of Habitat
The National Marine Fisheries Service’s revision
Defense, and Fight for His Life, before the
An account of the Dusky Gopher Frog’s Defense, and Fight for His Life, before the

With elan then, of her order,
(Ranidae of these are chief),
She leaped the Press, and Court Recorder
Landing on Judge Robert’s brief.

She fixed each Judge with space-black eyes.
There, in their depths, they glimpsed savannahs
Bursting with beasts of every size
And midst them, raising wild hosannas

In laughing camaraderie
Through a world of ambient wonder
Danced their Forebears, fierce and free
Exulting in the fire and thunder.

“Justices!” Her voice resounded
Through the Court, saluting each
“Human Chaos is unbounded
Heretical overreach!”

Careless of Life’s Mystery
For venal ends you laws deploy
A birthmark on your history:
You do not know what you destroy!

Market is your Woodland god
Gain your goddess of the Sea
Your specious baseline, plumbed, though broad
With superficiality!

With habitat we kingdoms lose.
Your Species Act requires redress
“At any cost!” No chance to choose
You humans must clean up your mess!”

From the Bench escaped a grunt,
An indeterminate expression
Laying bare the urge to punt
To Justice Roberts’s grammar lesson.

(The frog, absorbing this, was prescient:
In definition reemployed
The Agencies were acquiescent:
Excluded habitat destroyed.)

Paused, the frog peered round the Hall
And saw to her unboundeded glee
Raul Grijalva by the wall
The Tribes, Earthjustice, CBD,

The desert tortoise, EPIC, whales,
A condor on the chandelier
And salmon streams, with flashing tails
And music marvelous to hear.

She gravely leaped through shining air
Saluted Court with courteous mien.
They heard her last, low words: “Take care
Surviving the Anthropocene!”

EcoNews Community Creations
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WWW.YOURNEC.ORG
NOVEMBER 2020
GREEN NEW DEAL THRIVES!

The Green New Deal is not dead yet! The THRIVE Act (H.R. 1102: Transform, Heal, and Renew by Investing in a Vibrant Economy) uses parts of the Green New Deal to tackle current economic issues related to Covid–19 to stabilize a wobbly economy. THRIVE would create millions of good-paying jobs, through collaboration among union, clean, green jobs while building a more just, healthy, and stable economy that leaves no one behind. The THRIVE Act outlines a framework built on consensus among labor, racial justice, environmental, Indigenous, and other groups for an economic renewal plan that addresses the economic and social impacts of Covid-19. The last issue of EcoNews included an article about the master’s thesis of recent Harvard Graduate, Saul Levin (EcoNews October 2020, p 7). Saul took lessons from the synchronicity between the environmental and labor movements on the North Coast to protect Redwood National Park and applied those to current opportunities that arise from the New Green Deal. It is, perhaps, not surprising Saul currently works for U.S. Rep. Deb Haaland (D-NM). Rep Haaland said: “Every person in this country should have access to opportunity, but tens of millions of our neighbors, family, and friends are unemployed and our country is facing the interlocking crises of a global pandemic, economic downturn, and climate crisis. ...I worked with Senator Markey (D-MA) and a coalition of grassroots organizations and labor groups, so that we are better positioned to lay the groundwork to create millions of good paying, green jobs and address environmental injustice.”

WHEN IS A DIRECTOR NOT A DIRECTOR?

That question was always murky but this administration has used acting and rotating designations for heads of agencies and departments perhaps more than any previous one. The U.S. District Court in Montana gave the administration a partial answer when Montana Gov. Steve Bullock recently won his challenge to the legal legitimacy of the acting Director of the Bureau Of Land Management (BLM), William “Perry” Pendley. Pendley was never confirmed by the US Senate but has been making decisions delegated to that position regardless. U.S. District Judge Brian Morris ruled Pendley had unlawfully held the office for well over a year and must vacate his position. The governor and environmental groups are expected to bring legal challenges to many if not all the decisions Pendley made during that time, which could affect personnel hiring, contracts, as well as policy decisions.

While Sec. of the Interior, Bernhardt is expected to appeal that decision, yet another prominent acting appointment legal challenge is awaiting a decision regarding the unconfirmed appointment of acting Director of the National Park Service (NPS), Margaret Everson. Bernhardt designated Everson to “Exercise the Authority of the Director of the NPS” but the Public Employees for Environmental Review and environmental watchdog group, Western Watersheds, has similarly claimed that Everson’s appointment is unconstitutional. The groups assert that Everson’s designation violates the Federal Vacancies Reform Act. Appointment for an agency head, such as Director of the NPS requires the “advice and consent” of the U.S. Senate under the Constitution, and may only be filled on a temporary basis by a qualified official appointed directly by the President, not Secretary Bernhardt. President Trump has shown a deep reluctance to go through the public vetting process of confirmation hearings and has not submitted any nominee for NPS Director to the Senate or to appoint an “acting Director,” which only he can do under the Federal Vacancies Reform Act. That Act was deemed necessary as the use of acting designations increased after President Nixon’s Watergate Scandal.

Regarding the Pendley decision, Legal Advisor, or Solicitor, for Department of the Interior (DOI) Daniel Jorjani wrote: “The Department of the Interior believes this ruling is erroneous… Nevertheless, the Department will comply with the Court’s Order, while we move forward with an appeal and review all other legal options.”

Rep. Deb Haaland (D-NM) wrote: “William Perry Pendley was a dangerous choice to serve as the Bureau of Land Management Director and he should have never been in that position in the first place.”

SUSTAINABLE ENERGY — SOLAR

The Federal Energy Regulatory Commission (FERC) issued an order that reversed 40 years of precedent under the Public Utility Regulatory Policies Act (PURPA) and could stymy solar energy research and implementation. The Solar Energy Industries Association (SEIA), a lobbying voice for the solar industry, pushed back by demanding that FERC overturn the rule. The rule would limit developers’ ability to sell power to electric utilities. “This decision reeks of a concerted effort to slam policy through while no one was looking,” said SEIA spokesperson Katherine Ginsler. “FERC launched this surprise on the entire stakeholder community, and the decision threatens to upend the status of hundreds of solar projects already delivering clean electricity to the grid.”

Currently, electric utilities are required to purchase energy from small power producers. Forty years ago, FERC capped “small” at a capacity of 80 megawatt. If you are a homeowner who sells power back to your local energy grid and has an 80 megawatt or less capacity -- no problem so far. In September FERC denied the “small” status to a Montana company in a numbers game of production. Dan Whitten, SEIA’s vice president of public affairs said, “It (the rule) seems like another effort to limit the use of PURPA in a way that really kills any competition.”

A solar industry spokesperson, Chip Cannon, agreed saying, “The fact that it came out of the blue and is overturning what has been standard policy for 40 years is pretty striking. It seems like they went out of their way to take a swipe at the renewables sector.” Though this is primarily a concern of mid–larger solar production facilities, the rule could discourage broader, more competitive use of solar to replace the use of fossil fuels as energy companies move from fossil fuels to alternative energy. Until FERC explains the rationale behind the rule, industry holds their legal challenges. This administration’s actions give the impression it is determined to thwart alternative energy even by industry itself. Many believe that in larger urban centers, the only way to move to alternative energy sources is through industry vs. small homeowners with solar cells.
ABALONE: THE REMARKABLE HISTORY AND UNCERTAIN FUTURE OF CALIFORNIA’S ICONIC SHELLFISH

Jen Kalt, Humboldt Baykeeper

This year’s widespread wildfires, hurricanes, droughts, and other extreme weather events are a harsh reminder of our tendency toward short-term thinking. Taking the long view isn’t easy for a culture that colonized California less than two centuries ago – a blip in time for the original inhabitants, who managed much of the landscape with fire until it was declared a crime in the 1930s.

For non-indigenous Americans, history is often limited to a few generations. Anyone who remembers California in the mid-20th Century remembers the abundance of abalone. Similar to old-timers’ stories of rivers so full of fish you could walk across their backs, tales are told of collecting abalone by the dozens without even getting your feet wet.

Author and ecological historian Ann Vileisis’ latest book explores the abalone’s trajectory from superabundance during the Gold Rush to nearly-extinct in 2020. Combining information gathered from interviews, oral history, archaeological texts, and scientific research, Abalone: The Remarkable History and Uncertain Future of California’s Iconic Shellfish recounts the “human love affair” with the abalone that dates back at least 13,000 years.

Indigenous Californians have used the shells as food, tools, and ceremonial regalia since time immemorial. On the North Coast, ceremonial dresses feature polished abalone shells hung so the shells “sing” when dancers sway (for more on this, see the Northwest Coast Regalia Stories Project at www.nativewomenscollective.org). Changes in sizes of abalone fragments in middens point to fluctuating populations over many centuries, but nothing as drastic as the boom-and-bust cycles first caused by 18th Century fur traders, and later by waves of newcomers from the Gold Rush to the present.

During California’s Gold Rush, some Chinese immigrants began exporting dried abalone back home, where it had been highly prized for centuries. In the mid-19th Century, abalone had become so scarce in China that only the wealthy were legally allowed to harvest it. In the 1880s, when anti-Chinese attitudes peaked, Chinese boats were banned in California waters.

In the late 1890s, a new industry sprung up to export abalone to Japan, where traditional fishing practices had recently been disrupted, leading to overharvesting there. In 1899, Monterey County adopted the first abalone fishing regulations, launching more than a century of controversy, much of which shifts blame from one group of “outsiders” to another – including sea otters.

Before EuroAmericans colonized California, Russian fur trappers had tremendous impacts on abalone populations. They decimated sea otter populations along the Pacific Coast from Alaska to California, virtually eliminating the abalone’s main predators. By the mid-19th Century, abalone populations boomed in absence of the sea otters.

Once sea otters began recovering along the Central California coast, the commercial abalone industry was booming, resulting in heated conflict between factions. Some favored sea otter protection, while others favored sea otter exclusion so the abalone harvest could continue without competition.

Today, this once-abundant delicacy is again threatened by over-harvesting, but warming ocean temperatures are a more ominous threat to the abalone’s survival. The recent closure of what remained of the red abalone fishery sent shock waves across coastal Northern California.

Like so many natural resources in the West, abalone management was misguided by the static views of nature found by early EuroAmericans. Vileisis engagingly describes early misperceptions and scientific discoveries that have led to a better understanding of mistakes made during our long relationship with abalone. This riveting account features biology and ecology of abalone as well as human history spanning three centuries of ingenuity, controversy, and underwater adventure.

Ann Vileisis
You can listen to an interview with Ann Vileisis about the remarkable history and uncertain future of abalone by finding the June 27, 2020 edition of the EcoNews Report wherever you listen to podcasts.

Get on Board for the Climate:
Keep Rolling with Less Emissions

Martha Walden, What Now Coalition

California is already in climate crisis as record-breaking wildfires burn. A shaken Governor Newsom has vowed to speed up the reduction of greenhouse gas emissions. The first thing he set his sights on is transportation, the source of 41% of the state’s emissions. The internal combustion engine [ICE] is now destined to be a dinosaur by 2035. All new cars manufactured and sold in California after that date will emit nothing but good vibes.

Meanwhile, Covid-19, our other crisis, encourages us to stay at home more than usual (but also ended ridesharing). Staying home can be a fine option, especially if you can make a living there. Telecommuting has made it possible for many people to do just that. But there are still places to go, errands to run, and big beaches out there. How can we all do our part to decrease transportation emissions as soon as possible?

1. Ride a bike. In terms of converting energy into movement, the bicycle is the greatest invention ever, and bicyclists are a superior, vigorous breed. Less pure but still good, clean fun are E-bikes, E-scooters, Segways and such. The vast majority of car trips are less than six miles -- well within the capabilities of non-motorized wheels.

2. Take the bus. One big vehicle uses much less fuel than a bunch of smaller vehicles. The more people who take the bus, the greater the advantage. Convert those buses to electricity as HTA has started doing, and the emissions outlook is rosy indeed. Especially if we can persuade people to get on them! Unfortunately, buses are too slow for most people. Humboldt County Association of Governments (HCAOG), which oversees our transportation system, is considering how to facilitate faster bus routes that run more often -- but cover less ground and make fewer stops. You may well ask how that will increase ridership. HCAOG is looking at a gamut of mobility-on-demand possibilities to get people to the stops along the major routes when they need to go. These include improved bike infrastructure and bike-shares and "micro-transit" such as vans that can gather people up for less carbon cost than a fixed route bus. Ride-hailing is included in this list of possibilities, but recent studies suggest that services like Uber and Lyft actually increase emissions.

3. Drive an electric vehicle. If you feed your EV nothing but solar and wind energy you keep the luxurious autonomy of your me-mobile without any of the guilt. Even if you’re using dirty energy to charge that battery, you’re still emitting less carbon than petroleum. However, all cars contribute towards traffic congestion.

4. Be smart with your hybrid or regular ICE vehicle. The least we fossilized drivers can do is to efficiently plan and organize our trips. A little delayed gratification can decrease trips to town. Another underappreciated tactic for reducing emissions is to drive 55 m.p.h. on the highway. You emit 10 to 15% less carbon than all those other vehicles blowing by you. What’s the rush anyway?
Gov. Newsom Signs Executive Order to Conserve Coastline

The order sets a first-in-the-nation goal to conserve 30 percent of the state’s land and coastal water by 2030 to fight species loss and ecosystem destruction and to combat the biodiversity and climate crisis. According to a statement released by the governor’s office, California is considered one of the world’s 36 “biodiversity hotspots” because of its high concentration of unique species that are also experiencing unprecedented threats. Of the estimated 5,500 plant species found in California, 40 percent are “endemic,” found nowhere else on Earth. California relies on 100 million acres of land for food, water and habitat, and feeds the nation and world through its agricultural activities. The $50 billion California agriculture industry produces over 400 commodities, including over a third of the nation’s vegetables and two-thirds of the nation’s fruits and nuts.

The executive order states that State agencies must come together with tribes, community and business leaders and other experts and, using best available science and traditional ecological knowledge, establish a baseline assessment of California biodiversity. The collaborative must then report back to the Governor with conservation strategies no later than February 1, 2022.

Study identifies Traits of Climate-Resilient Red Abalone

Red abalone mothers from California’s North Coast give their offspring an energy boost when they’re born that helps them better withstand ocean acidification compared to their captive, farmed counterparts, according to a California Sea Grant-funded study from the Bodega Marine Laboratory at the University of California, Davis.

The study also found that farmed abalone grew about three times faster than their wild-sourced North Coast counterparts. While growing abalone quickly makes sense from a market standpoint, the researchers found that the fast-growing abalone were also the most susceptible to dying from ocean acidification.

“Somehow, the wild abalone evolved to give their babies a better start in life,” said study author Dan Swezey, project scientist at the UC Davis Bodega Marine Laboratory. “The more energy the mom gave, the more tolerant her offspring were of acidification stress. That energy boost carries over and makes a big difference.”

Friends of the Dunes is Interim Owner of Samoa Dunes and Wetlands

Friends of the Dunes has completed a deal with Security National, the Humboldt Bay Harbor Recreation and Conservation District, the Wildlife Conservation Board, the California Natural Resources Agency, and the California State Coastal Conservancy to acquire the Samoa Dunes and Wetlands for the purposes of conservation and public access. The Samoa Dunes and Wetlands is a 357-acre coastal dune and bayfront property that includes the former Dog Ranch.

“Friends of the Dunes does not see ourselves as the long-term landowner of the Samoa Dunes and Wetlands, and we do not plan to do any development of trails, parking areas, or restoration activities during our tenure as interim land manager,” said Carol Vander Meer, the Board President of Friends of the Dunes. “We are cooperating with our county, state, federal, and Tribal partners to determine what ownership and management is in the best long-term interests of this land and our community.”

“All of the partners working on this project are committed to protecting the beauty and diversity of this remarkable piece of land,” said Vander Meer. “That’s really the core of this conservation project—working cooperatively with committed partners so that the beauty and diversity of our coast can be enjoyed for generations to come.”

600 Law Students Sign Pledge Not to Work for Law Firm Defending Exxon’s Role in Climate Crisis

After the new 2020 Climate Change Scorecard found that the law firm of Paul, Weiss, Rifkind, Wharton & Garrison LLP conducts more litigation exacerbating climate change than any other law firm and rated the firm an ‘F,’ law students delivered pledge signatures to the firm’s NYC headquarters. In the last five years, Paul, Weiss has represented ExxonMobil in 21 cases relating to efforts to hold the oil giant accountable for climate damages. The firm’s tactics are extreme. The Attorney General of Massachusetts, Maura Healey, called Paul, Weiss’s work “absurd” and “blatantly obstructionist.” With the help of Paul, Weiss, the fossil-fuel industry has defended itself by “trotting out fake experts, promoting conspiracy theories and cherry-picking evidence.”

Said William Rose, a second-year student at NYU School of Law who helped deliver the pledges in Manhattan, “We won’t work for you as long as you’re working for ExxonMobil—and literally hundreds of students from your top recruitment schools have made the same pledge. If you want our generation’s talent, stop helping to destroy our generation’s future.”

Dakota Access Pipeline Clears Hurdle for Expansion, Despite Being Temporarily Shut Down by the Courts

The Illinois Commerce Commission has approved a permit for the parent company of the Dakota Access Pipeline, Energy Transfer, LLC, to expand its pump stations and increase pumping capacity from 570,000 barrels a day to 1.1 million barrels a day. The pipeline was ordered to shut down in August when a judge determined that the Army Corp of Engineers failed to perform necessary environmental reviews. The fate of the pipeline is currently in the hands of the U.S. Court of Appeals. A panel of judges for the circuit court is scheduled to hear arguments in November on upholding the lower court’s decision.
**FOREST CROSSWORD**

**ACROSS**
1. The harvest of all the trees in an area.
2. An instrument used to determine the height of a tree.
3. The boundary between two ecological communities.
4. A tree felled by wind.
5. Area: The cross-sectional area of a tree trunk at breast height.
6. The natural replacement of one plant (or animal) community by another over time in the absence of disturbance.
7. Trees that shed or lose leaves annually.
8. A region defined by patterns of stream drainage.
9. Branches and other woody material left on site after logging.
10. The art and science of growing forest trees.
11. The trunk of a tree.
12. The uppermost branches and foliage of a tree.
13. The compass direction toward which a slope faces.
14. A dead tree that is still standing.
15. Any species in immediate danger of becoming extinct throughout all or a significant portion of its range.

**DOWN**
1. A tree defect characterized by a sharp bend in the main stem.
2. A tree felled by wind.
3. The boundary between two ecological communities.
4. The level of forest vegetation beneath the canopy.
5. Area: The cross-sectional area of a tree trunk at breast height.
6. The natural replacement of one plant (or animal) community by another over time in the absence of disturbance.
7. Trees that shed or lose leaves annually.
8. A region defined by patterns of stream drainage.
9. Branches and other woody material left on site after logging.
10. The art and science of growing forest trees.
11. The trunk of a tree.
12. The uppermost branches and foliage of a tree.
13. The compass direction toward which a slope faces.
14. A dead tree that is still standing.

**STUMPED? VISIT YOURNEC.ORG/NOVCROSSWORD**

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**PEDESTRIAN FRIENDLY EUREKA | BY JOEL MIELKE**
Help us continue to advocate, educate, and bring you EcoNews

YES! I will help the Northcoast Environmental Center protect our watersheds, wildlands, and communities!

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Address ____________________________
City ____________________________ State __________ Zip __________
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