

Página 8 en español

WILD & SCENIC FILM FESTIVAL | ZERO WASTE HIERARCHY | KARUK LANDBACK | ACTIVE HOPE | BIOENERGY ATMOSPHERIC RIVERS | HUMBOLDT HONEY POSTER | VALENTINE'S GIFTS | WHY ISN'T THE BUS FREE?

ECONEWS DISTRIBUTION VOLUNTEERS NEEDED

We are looking for monthly volunteers to help distribute EcoNews around Arcata, Humboldt, Del Norte, and Trinity County. Are you interested in helping?

Email NEC@YOURNEC.ORG





Do you have a burning environmental question? Write to "Dear EcoNews" and we'll get a professional in that field to address your eco quandaries, concerns, and queries.

Email nec@yournec.org

GREETINGS FROM THE NEC

The mission of EcoNews is to inform and educate the public on environmental issues around the world, state and bioregion. Many of these issues are complex and have varying levels of support. Our goal is to provide a platform to explore, discuss, and debate these topics to better understand their nuances. The ideas expressed in EcoNews do not necessarily reflect the positions of the NEC or its member groups. We appreciate and welcome alternative points of view







ECONEWS

415 I Street, Arcata, CA 95521 PO Box 4259, Arcata, CA 95518 707-822-6918 | www.yournec.org GUESTS ON GOUDI'NI. WIYOT TERRITORY

EcoNews is the official monthly publication of the **Northcoast Environmental Center (NEC)**, a non-profit organization. Third class postage paid in Arcata. ISSN No. 0885-7237. EcoNews is mailed to our members and distributed free throughout the Northern California and Southern Oregon bioregion. The subscription rate is \$50 per year.

THE IDEAS AND VIEWS EXPRESSED
IN ECONEWS ARE NOT NECESSARILY
THOSE OF THE NORTHCOAST
ENVIRONMENTAL CENTER

NEC STAFF

Executive Director & EcoNews Editor:

Caroline Griffith, director@yournec.org

Administrative Coordinator:

Carlrey Arroyo, admin@yournec.org

Coastal Programs Coordinator:

Ivy Munnerlyn, Ivynecmail@gmail.com

Outreach & EcoNews Coordinator:

Chelsea Pulliam, chelseanec1@gmail.com

EcoNews Journalist:

Elena Bilheimer, econewsjournalist@gmail.com

Proofreaders: Kris Diamond, Fhyre Phoenix, Colleen Hilker, David Niedrich

Authors: Larry Glass, Caroline Griffith, Elena Bilheimer, Carlrey Arroyo, Matt Simmons, Jen Kalt, Andrea Pickart, Colin Fiske, Steffi Puerto, Martha Walden, Michael D. Pulliam, Krista Miller, Gary Graham Hughes, Wendy Ring, Isabella Escamilla, Ivy Munnerlyn, Ingrid Hart

Cover: Kayakers take a break on the earthen dike that normally separates Jackson Ranch Road from Liscom Slough in the Arcata Bottoms. Photo by Aldaron Laird, Dec. 23.

NEC BOARD OF DIRECTORS

President: Larry Glass,

Safe Alternatives for our Forest Environment

Vice-President: Margaret Gainer, At-Large

Secretary: Scott Sway, At-Large

Treasurer: Chris Jenican Beresford, At-Large

CJ Ralph, Redwood Region Audubon Society

Gregg Gold, Sierra Club, North Group

Tom Wheeler, EPIC

Dan Sealy, At-Large

Aisha Cissna, At-Large

FOLLOW US ON SOCIAL MEDIA

facebook.com/yournec

@ @your_nec

@ncenvirocenter

PRINTED WITH SOY INK

NEC MEMBER GROUPS

- Sierra Club, North Group, Redwood Ch. www.redwood.sierraclub.org/north/
- California Native Plant Society North Coast Chapter
 www.northcoastcnps.org
- Redwood Region Audubon Society
 www.rras.org
- Safe Alternatives for our Forest Environment (SAFE)
- www.safealt.org

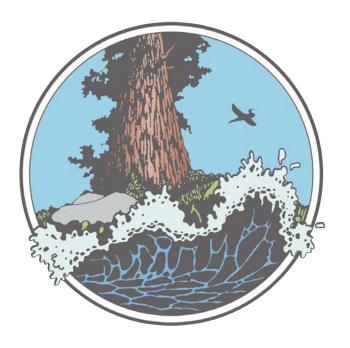
nec@yournec.org

• Environmental Protection Information Center (EPIC)

www.wildcalifornia.org

NEC AFFILIATE MEMBERS

- Humboldt Baykeeper www.humboldtbaykeeper.org
- Friends of Del Norte www.fodn.org
- Zero Waste Humboldt www.zerowastehumboldt.org
- Californians for Alternatives to Toxics www.alt2tox.org
- Coalition for Responsible
 Transportation Priorities (CRTP)
 www.transportationpriorities.org
- 350 Humboldt world.350.org/humboldt



IN THIS ISSUE

- 3 2022 NEC Donors
- 5 Dear EcoNews
- 6 Nexus: Karuk Land Back
- 7 Active Hope Book Review
- 8 Esperanza Activa
- 9 Bioenergy and Forests
- 10 California Coastal Commission
- 11 EPIC: Atmospheric Rivers
- -- The Sandpiper
- 12 Humboldt Baykeeper
- 13 Zero Waste Humboldt: Valentine's Day
- 13 California Native Plant Society
- 14 CRTP: Why Isn't it Free to Ride the Bus?
- 14 Wild and Scenic Film Festival
- 15 Humboldt Power Plant
- 16 Humboldt Honey Poster
- 17 Smith River Alliance Cleanups
- 18 Farm Feature: Sea Goat Farm
- 19 Parking Mandates
- 20 Energy Saving Appliances & Recycling
- 21 Solutions Summit
- 22 Solutions Word Search
- Vocab Highlight: Env. Justice

NEWS FROM THE CENTER ~~~

Larry Glass, NEC Board President Caroline Griffith, NEC Executive Director

The High Cost of Building Housing

Here on the North Coast, new real estate schemes that claim they will ease the housing crisis seem to be popping up like mushrooms after a rain; often ill-conceived, and driven by profit. With an increase in local growth expected due to Cal Poly's expansion and the nascent offshore wind industry, there will undoubtedly be more on the way and we need to be careful to not be seduced by the lure of projects that are poorly located and don't include truly affordable homes.

In California from the 1930s to the early 1970s, low-income housing was subsidized by the Federal Government and operated by 3,000 local public housing authorities. In California, local Redevelopment Agencies also allocated 20 percent of their budgets to low-income housing, until the State Legislature dissolved them in 2011. Don't get us wrong, these agencies were not perfect, but compared to the free-market greed fest we have now, they look a lot better.

Once public housing programs were eliminated, the unfunded responsibility for getting low-priced housing built was dumped on local governments, which is one reason they turned to trickle-down programs to replace public housing. This shift of responsibility to local governments and the free market has not worked. Rarely does low-income housing get built, which is a major reason why homelessness continues to increase.

Now it's left to speculators and developers to create housing opportunities so what we get are plans for business-as-usual subdivisions which don't serve those most in need of housing; like plans to put 300 hundred units by Indianola Cut-Off, six miles from any services and priced out of reach for the people that need the housing, or the proposed McKay Ranch development which will be priced for climate refugees from down south. Neither of these proposals are located close to services, meaning more car-dependent, car-centric development, which is not the direction we need to be going given the climate crisis.

Here's an idea: What if the City of Eureka tore down the Lloyd Building and combined that lot with the neighboring parking lot to put up a multi-story affordable housing project? In Arcata, the City Council could use its rezoning plan in the Gateway District to prioritize deed-restricted low- and very low-income housing. And both cities could pass vacancy taxes and rent control to prioritize the utilization of existing housing and keep that housing affordable.

The Environmental Costs of Not Prioritizing Affordable Housing

We often talk about the environmental impact of building housing, especially conventional single-family housing that leads to sprawl, but let's also look at the environmental impacts of not providing housing, especially for those at the lower end of the economic spectrum.

Over the last three months, staff and volunteers with the Northcoast Environmental Center have been conducting trash cleanups in the Arcata Marsh, removing over 3,000 pounds of trash from waterways. Throughout our cleanups we've interacted with and worked alongside numerous people who are living in the marsh because they have nowhere else to go. Much of what we have cleaned up is the result of people living in the marsh who don't have trash service or the resources and means for disposal. This situation is not ideal for anyone, not the people living in the marsh, the wildlife that depend on a clean ecosystem, or the recreational users.

We absolutely need more low-income housing that is close to services so that people don't need to rely on cars, but in the meantime between now and when housing becomes available, there are steps that cities can take to protect people and the environment. Establishing places where people can legally camp or park the cars and RVs that they live in would help protect our open spaces and animal habitat while also providing services (like trash service and bathrooms) that are necessary for environmental and human health.

The current policies of our local governments are to routinely push people from the places that they are camping, often justified by the existence of trash, without giving them alternative places to go. This results in people being pushed from open space to open space, which benefits neither the environment nor the community and is a waste of resources that would be better used providing services. We challenge our local governments to establish safe parking and safe camping zones, provide trash service and bathrooms, and engage the people who are using these services in the care and upkeep of the places they are camping. In our experience working with our unhoused neighbors we have found that they care for the environment just as much as we do. They value clean water. They love the wildlife. They simply lack the resources and infrastructure necessary to protect the environment in the ways they would like to. That's where local government can step in. It just needs to muster the political will to do so.

The New Green Scare

Right before we went to press, we learned that a forest defender outside of Atlanta was shot and killed by police while protesting at the proposed site of a law enforcement training center. Activists, who have been labeled as ecoterrorists in an echo of the post-Patriot Act "Green Scare", have been protesting for months against the logging of 85 acres of forested land for the development of what they are calling "Cop City." The circumstances of the shooting are still unclear, with police claiming that the protester shot at them first and activists disputing that claim. As we wait to learn more, we can't help but wonder if this is the start of another era of targeting and scapegoating activists like we saw during Redwood Summer and the early years of the Iraq War. We will be watching and waiting.

2022 DONORS

Many thanks to all of the NEC's supporters in 2022. As we enter our 52nd year, we are grateful for so many friends and allies. From all of us at the NEC, thank you so much for your support in protecting our wondrous north coast and all of its inhabitants!

Paul & Margaret Abels

Daniel Airola

Tom & Katy (Catherine) Allen

Linda Alm Daniel Alvarado Katie & John Amodio Janice Andersen Gordon Anderson

Charles & Leslie S Anderson

Ann Anderson Clifford Anderson Gary & Janice Anderson

Mark Andre Karen Angel

Chip Sharpe & Celestine Armenta

Sue Armstrong Nancy Austin Carolyn Ayres Susan K. Barnstein Amanda Barragar David Baruch Bob Battagin

Norman & Carolyn Bell

Debby Bender James & Susan Bentz Dr. Robert Berg Lynn C. Berner

Kimberly Tays & Stanley Binnie

Jesse Blacksmith

Debra Harrison & Greg Blomstrom

Jane Bothwell James & Joan Boulden

Jessica Bowles-Martinez Renay Radniecki & Bill Bowman

Teddee-Ann Boylan Scott & Lucinda Bradshaw

Carol Brant

John & Barbara Brimlow

Lorna Brown Jeffrey Bue Catherine Bunz

Suzanne & Rusty (Russell) Burke

Martin Byhower Bruce Campbell Lina Carro

Charles Chamberlin Daniel Chandler

Cathy Chandler-Klein

Janna Chapman Bernadette Cheyne

Marilyn Foote & John Christianson

Thomas J. Clark Diana & Gregg Clark Gregory & Carol Conners

Gail Coonen

Sarah Lauderdale & Curt Cooper

John Crater

Susan O'Connor & Tim Crlenjak Carol Toffaleti & Bill Croft

E.M. Zsa Zsa Dallenbach

Kit Davenport Robert Fox Davey Anna Davis Dena DeLaney

Thomas & Lorinda Dengler

Gerald Dickinson Louis Dolbeare Kathryn Donahue Robert Ducate & Family Jaffa Dugan Wahlberg Susan N. Dunn

Michael Duval

Chuck (Charles) & Sally Dwelley

James Elliott Mark Ellis

David & Patty Epstein Karen Erickson Ward Estelle III Bob Evanhoe

Robert Benson & Becky Evans

Steven Evans Julie Evans Julie Evens

Kevin Falxa

Judith Mayer & Yvonne Everett Gayle Garman & Gary Falxa Valerie Raymond & John Falxa

Clark A. Fenton Anthony Fest Alice Finen Colin Fiske Frank Fogarty

Holly Romine & Forest Redwood

Joanne & Robert Fornes

Jon D. & Cynthia J. Forsyth

Rex Frankel

Janis & Gary Friedrichsen

Jim Froland

Margaret Nulsen & Chris Frolking

Daniel Frost

Linda M. & John M. Gaffin

Denise Laberteaux & Bruce H. Garlinger

Lvdia Garvev Hal & Margot Genger David & Kerry Gibbs Greg & Kay Gibson

Pat & Steve Girczyc-Durham

Patsy Givins Marvin Goss

Shawn & Kristen Gould

Thurston Wilson & Kathleen Graham

Marie Granshaw Eric & Joan Grantz Caroline Griffith Marylee Guinon Jean Guthrie R. J. Gutierrez Susan Haase

Kris Nina Haedrich Danny Hagans Stephen W. Hager Pete & Judy Haggard

Becky Hall

Melody & Gerald Hamilton

Robin Hamlin

Karen & David Hammer Mary Susan Hansen Richard Hansis Hal & Wendy Harden

Betsy Harrell

Lisa Palermo and John Harris

Ginni Hassrick Chris & Robin Haynes John Sacklin & Mary Hektner

Lori Hendrick Mary Henshaw Lila Higgins Sandra Hill Shirley M. Hillman

Judith Hinman

Cynthia Savage & Stanley Hino Ken Hoffmen

Jeff Hogue Michael Holland

Colleen Haining & David Imper

Peggy & Jack Irvine Mark Isackson

Mordechai Liebling & Lynne Iser

Alan & Jean Jackman Nicholas Jacobson

Joe James

Robert & Ann Jamgochian Sherman Schapiro & Eva Jansen

Gary Johnson Mare Johnston

Ronalda & Daniel Jordan

Marla Joy

Gary Grounds & Victoria Joyce

Julie Joynt

Brian & Laura Julian James A. Kealey Roz Keller

Susan Cashman & Harvey M. Kelsey

Gail & Bryce Kenny Joann Kerns Bruce & Pam Kessler

Robert Rottenberg & Suzanne Kimmel Jeffrey & Stephanie King-Hoffman

Judy & Tom Klapproth Stephanie Klein Sorrel & Dorothy Klein Craig and Marianne Knox

Iill Korte

Leon & Kathryn Kos

Karen E. Isa and Richard Kreis

Kathy & Dick Laforge Kate & Chuck Lancaster

Andy Lane Barbara Lane Mark Langner

Mark A. & Sydney Fisher Larson

Kurt Lauer Randad Laughlin Laurie Lawrence Martin & Leslie Leach

David Ledger Linda Lee

Kathy Gault and Don Leet Carolyn & Peter Lehman Keith & Gail Lester

John & Judith Longshore

Mary M. & L. Alan Lowry Joanna Lynch

Byrd Lochtie

Stephen Kamelgarn & Debra MacQueen Ray Olson & Moonlight Macumber Paul Blank & Annette Makino

Lynne Manget Conway

Sheila Marks Jerry Martien Anne Mason

Gerald Drucker & Lynda McDevitt

Jean McGurk Bill McIver

Robert McLaughlin Steven McSkimming Maria Mehegan Blythe Reis Ronnie Melin Pam Mendelsohn Gerald & Barbara Meral

John Mertes Micheal R Mesler

Lorraine Dillon & Mike Metro

Marcia Miller Gina Rogers

Larry & Pam Miller Mark Mills-Thysen Greg & Linda Rose Dianne Rosser Mike & Jane Minor Beth & Clarke Moore

Jeff Russell Mark Moore

Julie Moore Donald & Kathleen Morris Diane Ryerson Gil & Mediha Saliba Archie & Sue Mossman

Greg Movsesyan Caroline & David Moyer Lisa Petterson & Alan Sanborn

Helen Mulligan Charles & Judith Munnerlyn

Russell Munsell Wanda Naylor

Margot & Chris Neamtzu Joyce Hough & Fred Neighbor

Pauline Neira Hassanah Nelson

Sonja Schultze-Huff and Robert Schultze Karen & Thomas Newton

Cary Frazee & Stephen Nielson Paul & Kay Schulz Laurel & Scott North Leslie Schweitzer

Doreen Obermeyer HWR Engineering & Science

Wolfgang Oesterreich Dan Sealy **Julie Ohnemus** Denise Seeger Hank Seemann

Felicia Oldfather, Trust Eric & Joan Olson Rita Orlandini Darcia Short Scott Osborn

Felice Pace Glenn Siegfried Laura Simpson Marilyn Page Joanne Parkhurst Emily Sinkhorn

Renee Pasquinelli Richard L. Pederson

Susan Pence Claire and Eugene Perricelli Tom and Barbara Peters

John & Jackie Petersen Gordon Pfeffer

Virginia Plambeck Clint Pogue Jude Power

Catherine (Kay) Sennott & Dale Preston

Leslie Price Mark Pringle Kathleen Imfeld & April Quigley Robert & Cynthia Quinsey

Kathryn Radke & John Williams

Dan Raleigh Terry Raymer John & Karen Reiss Richard Ridenhour

Melissa & Christian Riparetti-Stepien Robert (Chad) Roberts

Laurie Totaro & William E. Rodstrom

Erica Upton & Terry Roelofs

Lisa Nash & Richard Romano, M.D.

Robert McLaughlin & Theresa Rumjahn

Robert A. Rutemoeller

Adrienne Samaniego

Sanders-Raigosa Family Winkle & Terry Sanderson John Scaglione

Holly Scaglione Richard Scheinman Erich Schimps Larry Schlussler Mary Schroeder

John and Rebecca Shockley

Emily Hannah Siegel

Dr. & Mrs. Nancy Slenger Bruce Slightom Justin Smith

Patricia Smith Lisa & Peter Sorensen

Arlene Spiers

Trish M. Stefanik James Steinberg Terry & Gary Strachan

Mike Strande

Peter Stroud Linda Sutton Russell Sydney Ken Terrill

Dennis Therry Karen Shepherd & Bradley L. Thompson

Rob & Barb Thompson Ronald & Donna Thompson

Kimberly Thorpe Deanna R. Thrift Jeff and Lynne Todoroff

Kathy Travers Georgia Trehey Lydia Trinca

Susan Eigenbrodt & Carl Tuck

Barbara Tully Carrie Tully Dr. Dean Tully Victoria Turner Andrea Tuttle

Karen & Stephen Underwood Stefan and Tina Vaughan

Frank Verdin Steve Wakeman Don and Trudi Walker Freda Walker

Michael Wallace Nancy Wareika Daniel Wassenaar James & Virginia Waters Kerry & Garrett Watty Jud Ellinwood & Anda Webb

David & Linda Webb Ollie Weber Robin Welling Hart Welsh, Jr. Richard & Susan Whaley

Rebecca White Arnold Whitridge Donna Wildearth Sally Williams Howard Williams Karen Wilson

Jane Wilson Family Trust

Elvera Wolverton Hilary Wyner John Yoakley Mark Youdall Dan Yount

Appraisal Solutions and Products Bower Charitable Foundation

Cafe Mokka

Compass Community Credit Union

Cypress Grove Eureka Natural Foods Friends of Del Norte Green Library Stanford

Hambro CRV

Hampshire Foundation Humboldt Area Foundation **Humboldt Friends Meetings Humboldt Pet Supply**

Humboldt State Library Periodicals Humboldt Unitarian Fellowship North Group Sierra Club

Pierson Building Center Redwood Capital Bank Redwood Coast Montessori

Redwoods Abbey Cistercian Monastery RSF Social Finance

2022 SUSTAINING DONORS

Eric & Mary Almquist Florin Barnhart

Chris & Richard Beresford

Petra Bingham Pat Bitton

Ann & Bob Burroughs Daryl & Phyllis Chinn Jim & Donna Clark Suzanne & Neal Crothers

Kris Diamond Jeff Dillion

Randy Carrico & Deborah Dukes Jov Hardin & James Elferdink

Derek Ferrington Corinne Frugoni Marie Garabedian Gary and Christine Garcia Don Groom

Daniel & Claire Grunbaum

Joshua Hackett Susan Halpin Nancy Ihara Karen Isa Jeffery Johnson Lynn & Steven Jones

Richard & Marjorie Kieselhorst-Eckart

Cindy Kuttner

Alan Wolski & Mary Ann Madej Don Barry & Sarah Maninger Gordon Leppig & Julie Neander

Eric Nelson

Syn-Dee & Earl Noel Kris O'Skotheim

Janelle Egger & Neil Palmer Jeanne Pendergast

Carol & CJ Ralph Nancy Reichard Susan & Jack Rogers Tara (Sandra) Root Kenneth Sanchez Carol Scher Margaret Shaffer Sylvia Soper Zachariah Stanton Rebecca Stauffer Nancy Stephenson Scott Sway

Robin Renshaw & Richard Swisher

Marcia Thorndike Carol Vander Meer **Bella Waters Carol Woods**



Dear EcoNews,

I read an article about how little plastic actually gets recycled. Can you please weigh in on what we should be doing with plastics?

-Plastic Perturbed

Dear Plastic Perturbed,

We here at Zero Waste Humboldt (ZWH) also wrestle with the question of what we should be doing with plastics. To help us visualize this monumental task, we use the Waste Management hierarchy. Shaped like an inverted pyramid, the hierarchy is a useful tool for centering our thoughts before action on a problem like plastic. At the top, the largest portion is given to the concept of Rethinking/Redesigning (some European hierarchies include Refusing here also).

Naturally that will lead to a lot of questions and that is a great way to start thinking about plastics. What did we use before plastic? Should we still produce plastic? How can we Rethink plastic, plastic waste, and plastic dependency? How can we Redesign the systems that currently rely on plastic? What are we doing locally about plastic, plastic waste, plastic contamination, etc.?

The second largest portion of the hierarchy is given to the Reduction of Waste At Its Source, also known as, Point Source Reduction. This is helpful to remember when we feel guilt and shame about our plastic consumption because it reminds us that plastic is being manufactured by large, massive, profit generating oil/gas companies, not us. In fact, looking at the source, plastic starts its miserable life with fracking. The fracking process to suck natural gas from the earth provides the oil/gas companies with a component called Ethane. Very large industrial facilities called Ethane Crackers take this ethane and process it for the creation of plastic pellets which are then used in every imaginable plastic product on earth and in space. The newest of these facilities just came online during the pandemic in Pittsburg, Pennsylvania courtesy of Shell Oil. This ethane cracker was approved to emit 2,248,293 tons of carbon dioxide per year while pumping the market with 1.6 million metric THE ZERO WASTE HIERARCHY 8.0

For detailed version visit www.zwia.org/zwh Image modified by the Northcoast Environmental Center

Rethink / Redesign

Reduce

Reuse

Recycle / Compost

Material Recovery

Residuals Mgmt.

Unacceptable

tons of plastic pellets a year.

Something that the hierarchy does not directly mention, although absolutely required, are the metrics. We have to track plastics in order to understand how to apply the tools in the hierarchy. We can improve the plastic problem if we start measuring it. Locally, many civic leaders, business owners, and nonprofit managers are starting with measurement while simultaneously launching actions from the hierarchy. For example, Zero Waste Humboldt conducted packaging research, led by Dr. Julie Layshock, for the North Coast Co-op. The recommendations made have been a reference tool for several businesses looking to reduce or eliminate plastic packaging.

Unfortunately the answer to your question of what "we" should be doing with plastics is far past the point of only consumer action. We are not alone in the limited choices we face. That is why we are stronger together using measurement and the hierarchy tools of change. Join one of our many nonprofits dedicated to keeping the balance and help to end the tragic plastic saga.

- Krista Miller, Zero Waste Humboldt





Feds Return 'Center of the World' to Karuk Tribe

Caroline Griffith, NEC Executive Director

On January 6, in a rare act of unity for a very divided federal government, President Joe Biden signed into law an act returning the center of the world to the Karuk Tribe. Eight years in the making, the Katimiîn and Ameekyáaraam Sacred Lands Act took roughly 1000 acres of land hugging the shores along the confluence of the Klamath and Salmon Rivers near the border between Humboldt and Siskiyou Counties and placed it in trust for the Tribe. The land has previously been managed by the US Forest Service.

In 1850, the California legislature passed the Act for the Government and Protection of Indians which, among other things (including establishing indentured servitude and laying the groundwork for genocide), facilitated the removal and displacement of Indigenous Californians from their ancestral lands. By the time that the first seeds of what would become the US Forest Service were planted in the late 1800s due to exploitation of the forests by miners and loggers, the original stewards of the lands that would come to be managed by the federal government had already been forcibly removed.

For perspective, the Tribe's ancestral territory encompasses over one million acres, 95 percent of which is currently occupied by the US Forest Service, so although this act of land return is cause for celebration, it is a mere fraction of the territory historically inhabited by the tribe. This ancestral land has been managed by the Forest Service for decades, with the Tribe being granted access to it for ceremonial purposes by way of a special permit. Katimiîn is considered the center of the world for the Karuk people and is an important ceremonial place. It was also their largest village, before European settlers arrived in the area. Ameekyáaraam is just down river from the confluence of the Klamath and Salmon Rivers and is the site of the Karuk World Renewal Ceremony and where the Jump Dance is done. According to Joshua Saxon, Executive Director of the Karuk Tribe, access for ceremonies has sometimes been an issue because of the Tribe's inability to restrict public entry during specific ceremonies that call for seclusion.

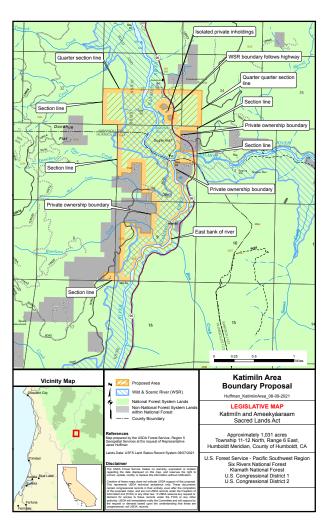
As Saxon explained, this ceremonial access is integral to the stewardship of the land and exemplifies a major difference between how the land has been managed by the Forest Service. "When we do those ceremonies, it's a reminder of the agreement we made with the spirit people on how to manage this landscape

in a way that is a way of respect," says Saxon. "So we don't treat anything as greater than us. We are a part of the whole and we're an active part of it." This transfer, he says, "allows us to . . . steward the land in the way that we would have, we have, stewarded it in the past, and in many instances since the turn of the century [we've] been thrown in jail for trying to steward these places." As he sees it, this is a religious freedom issue, much like the G-O Road fight that lasted until the mid-80s in which sacred lands were at risk due to a proposed logging road, as well as a matter of stewardship.

"Western science with all of its great things has failed Indigenous peoples. And Traditional Ecological Knowledge (TEK) is really the fundamental well of knowledge that we should be pulling from in order to manage land anywhere, whether it's in the United States or globally." One fundamental way that TEK and Western science differ is in relationality; in Western science the observer is separate from the ecosystem or phenomenon being studied, whereas TEK is based on relationships and connection to land, and the generational handingdown of the knowledge gleaned from those relationships. As the Native American scholar Vine Deloria said in Red Earth, White Lies, "The main difference between Indigenous knowledge and Western science is that for [Native Americans], the knowledge is personal, and it comes with a responsibility."

"The significance of this landback in terms of climate change and the environment is [that] this allows the Karuk people to fix the world, every year. That's what we do during our ceremonies ... that's the basis of our ceremonies is fixing the world," says Saxon. "And so when you consider that that's our worldview and our philosophy on life, allowing unfettered access to our ceremonial places benefits the entire world. Because when we say fix it, we mean the entire world. We don't just mean Klamath River. We don't just mean Salmon River. We don't just mean Karuk ancestral territory. When we dance, and when we do ceremony, we believe that we are fixing the world. And I think in a global context, you can start seeing the truth behind that when it comes to Indigenous practices because the Karuk tribe is on the forefront of educating the rest of the world on how to do Indigenous practices correctly. And in a way that is respectful of all places, not just Karuk-place, but New Zealand-place, Australia-place, Europe-place. Tying to place, any place, that tie to the land is fundamental, if we're going to have any impact on climate change."

The transfer of this land was the result not only of the slow machinations of the federal government, but also years of outreach, with the Forest Service, the local conservation community, and also amongst the Karuk Tribe to ensure that ceremonial leaders and tribal members were supportive of it. Saxon also credited the hard work and partnership of Congressman Jared Huffman, Senator Alex Padilla, and their staff in keeping the process moving forward, especially through conflicts with the Forest Service. "I think we've come a long way [with the Forest Service]. In terms of mutual benefit projects, and the ability to communicate, but there are still deep seated, colonial and paternalistic mindsets that we continually come up against when we deal with the Forest Service. And this bill was a prime example." But Saxon is hopeful that this is a sign of things to come. As he said, "This is just a small piece of land. But it's a start, right?"



Katimiîn Area Bounday Proposal Legislative Map. The proposed area is marked by the yellow line and is approximately 1,031 acres. Map prepared by the USDA Forest Service.

ACTIVE HOPE

Elena Bilheimer, EcoNews Journalist

In Active Hope: How to Face the Mess We're in with Unexpected Resilience and Creative Power, writers Joanna Macy and Chris Johnstone provide an overview of how to cultivate a desire to create change in the world even while experiencing intense feelings of alarm about the multiple crises affecting all life on Earth. Although fear and anger are natural responses to the current state of the world, Macy and Johnstone are especially concerned with the numbness and paralysis that can result when they go unacknowledged, writing that "The greatest danger of our times is the deadening of our response". In response to this concern, this book serves to ignite a variation of hope based not on hopefulness, where the preferred outcome seems likely to occur, but on desire, which requires that people become active participants in creating the world they want without passively relying on external agencies to do the job for them. This definition of hope is a practice of doing rather than having, relying less on optimism and more on intentionality and choice.

OVERVIEW

Co-author Joanna Macy has been an environmental activist for more than six decades and is a scholar of Buddhism, general systems theory, and deep ecology, while Chris Johnstone is a medical doctor who specializes in the psychology of behavior change and resilience. This book is a result of the new and deeper understanding they each received from teaching workshops together.

The book begins by explaining the three stories of our time, which include "Business as Usual", "the Great Unraveling", and "the Great Turning". These stories are all happening concurrently, and everyone's individual perception of what is happening in the world is deeply influenced by the story they identify with. The Business as Usual story is the one promoted most often by governments and corporations, centering economic growth and individualism. The Great Unraveling reflects the consequences of the first story, including the paralyzing fear that can result from acknowledgement of the suffering caused by the current system. The last story, the Great Turning, invites the possibility of a transition and cultural shift towards a sustainable and peaceful society. While it is possible for an individual to be continuously moving through these stories, the authors hope that the tools in the book will lead more people to choose to direct their energy towards the story of the Great Turning.

A core framework to facilitate participation in the Great Turning is the Work that Reconnects, which was

developed by Macy in the 1970s as an empowerment process offered to workshop participants. The four components of this work are Coming from Gratitude, Honoring Our Pain for the World, Seeing with New Eyes, and Going Forth. Acknowledging difficult feelings is a core theme throughout the book, as the authors believe these feelings can only serve as important motivators for change if they are recognized and not dulled. It is only through acceptance of grief that it is possible to view oneself as a participant in a wider

"Books about social and ecological change too often leave out a vital component: how do we change ourselves so that we are strong enough to fully contribute to this great shift? Active Hope fills this gap beautifully, guiding readers on a journey of gratitude, grief, interconnection, and, ultimately, transformation."

— Naomi Klein, author of This Changes Everything

How to Face the Mess We're in with Unexpected Resilience & Creative Power

REVISED EDITION

JOANNA MACY & CHRIS JOHNSTONE

circle of community. The authors believe that if the perception of self is widened, the protection of nature becomes instinctive, as it is in everyone's best interest to protect that which sustains and nourishes them. Through this logic, activism doesn't require extreme selflessness, but instead requires a redefining of what the individual self is.

Although each chapter delves into a different aspect of Active Hope, the underlying message throughout the book is continuously revisited. Overall, viewing oneself as part of something larger changes what actions are taken and what success looks like. The authors write, "We can rise to the occasion with wisdom, courage,

IF THE PERCEPTION OF SELF IS WIDENED, THE PROTECTION OF NATURE BECOMES INSTINCTIVE, AS IT IS IN EVERYONE'S BEST INTEREST TO PROTECT THAT WHICH SUSTAINS AND NOURISHES THEM.

and care, or we can shrink from the challenge, blot it out, or look away. With Active Hope we consciously choose to draw out our best responses, so that we might surprise even ourselves by what we may bring forth."

HIGHLIGHTS

Because many of the insights in this book arose from the personal revelations the authors received while running workshops about the Work that Reconnects, the descriptions of the activities utilized in those same workshops or the "Try This" activities throughout the different chapters are valuable tools that allow the reader to get a better sense of the writers' approach and message. One of the activities that stood out is called "the milling", in which the authors invite workshop participants to pair up and then imagine the possibility that the person in front of them might become a victim of the Great Unraveling that is occuring. They then are asked to consider the possibility that the person in front of them might make a crucial contribution to the healing of the world. The idea behind the exercise is to break the bubble of Business as Usual for a moment while inviting in the opportunity that an individual's actions can have a decisive impact, whether or not they know it.

Other unique activities in the book include the use of imaginary time travel in order to help imagine a larger view of time, invitations to write letters to and from the future, and a process of progressive brainstorming that allows a group to develop their co-intelligence and become very clear of their goal and how to accomplish it. Most of these exercises are designed to help the reader understand how to connect with a bigger sense of time, purpose, and community and feel empowered to create a better story for themselves and others. Directing attention towards this story makes it all the more likely we can create a different future, as the authors write, "...If land-based mammals can return to the oceans and evolve into dolphins, then it is not such a stretch to think that modern human beings could return to a state of connectedness with the land and evolve into a wiser form of life."

ESPERANZA ACTIVA

Elena Bilheimer, EcoNews Journalist Traduccion por Carlrey Arroyo

En Esperanza Activa: Como enfrentarnos al desastre mundial sin volvernos locos, los escritores Joanna Macy y Chris Johnstone brindan una descripción general de cómo cultivar el deseo de crear un cambio en el mundo, incluso mientras uno experimenta intensos sentimientos de alarma sobre los crisis múltiples que afectan a toda la vida en la Tierra. Aunque el miedo y el enojo son respuestas naturales al estado actual del mundo, Macy y Johnstone están especialmente preocupados por el entumecimiento y parálisis que puede resultar cuando no se reconocen, escribiendo que "El mayor peligro de nuestros tiempos es la reducción de nuestra respuesta". En respuesta a esta preocupación, este libro sirve para encender una variación de la esperanza basada no en el optimismo, donde parece probable que ocurra el resultado deseado, sino en el deseo, que requiere que las personas se conviertan en participantes activos en la creación del mundo que desean sin depender pasivamente de agencias externas para hacer el trabajo por ellos. Esta definición de esperanza es una práctica de hacer en lugar de tener, que se basa menos en el optimismo y más en la intencionalidad y la elección.

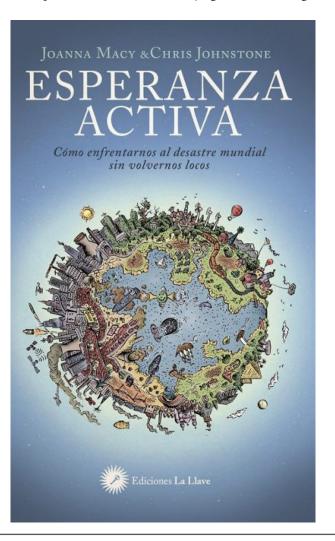
DESCRIPCIÓN GENERAL

La coautora Joanna Macy ha sido activista ambiental durante más de seis décadas y es estudiosa del budismo, la teoría general de sistemas y la ecología profunda, mientras que Chris Johnstone es un médico que se especializó en la psicología del cambio de comportamiento y la resiliencia. Este libro es el resultado de la comprensión nueva y más profunda que cada uno recibió al enseñar talleres juntos.

El libro comienza explicando las tres historias de nuestro tiempo, que incluyen "Negocios como de costumbre", "El Gran desmoronamiento" y "El Gran giro". Todas estas historias suceden al mismo tiempo, y la percepción individual de cada persona sobre lo que sucede en el mundo está profundamente influenciada por la historia con la que se identifica. La historia de Negocios como siempre, es la que promueven con mayor frecuencia los gobiernos y las corporaciones, centrándose en el crecimiento económico y el individualismo.El Gran desmoronamiento, refleja las consecuencias de la primera historia, incluido el miedo paralizante que puede resultar del reconocimiento del sufrimiento causado por el sistema actual. La última historia, el gran giro, invita a la posibilidad de una transición y un cambio cultural hacia una sociedad sostenible y pacífica. Si bien es posible que una persona se mueva continuamente a través de estas historias, los autores esperan que las herramientas del libro lleven a más personas a elegir dirigir su energía hacia la historia del Gran giro.

Un marco central para facilitar la participación en el Gran giro es el Trabajo que Reconecta, que fue desarrollado por Macy en la década de 1970 como un proceso de empoderamiento ofrecido a los participantes del taller. Los cuatro componentes de este trabajo son Desde el agradecimiento, Honrar nuestro dolor por el mundo, Ver con nuevos ojos y Yendo hacia adelante. Reconocer los sentimientos difíciles es un tema central a lo largo del libro, ya que los autores creen que estos sentimientos sólo pueden servir como motivadores importantes para el cambio si se reconocen y no son disminuidos. Solo a través de la aceptación del duelo es posible verse a uno mismo como participante en un círculo más amplio de comunidad. Los autores creen que si se amplía la percepción de uno mismo, la protección de la naturaleza se vuelve instintiva, ya que lo mejor para todos es proteger aquello que los sostiene y nutre. A través de esta lógica, el activismo no requiere ser altruista extremo, sino una redefinición de lo que es el ser individual.

Aunque cada capítulo examina un aspecto diferente de Esperanza Activa, el mensaje general a lo largo



del libro se revisa continuamente. En general, verse a uno mismo como parte de algo más grande cambia las acciones que se toman y el aspecto del éxito. Los autores escriben: "Podemos estar a la altura de las circunstancias con sabiduría, coraje y cuidado, o podemos disminuir del desafío, ignorarlo o mirar hacia otro lado. Con Esperanza Activa, elegimos conscientemente sacar nuestras mejores respuestas, para que podamos sorprendernos incluso a nosotros mismos con lo que podemos traer hacia adelante".

DESTACADOS

Debido a que muchas de las ideas en este libro surgieron de las revelaciones personales que los autores recibieron mientras realizaban talleres sobre el Trabajo que Reconecta, las descripciones de las actividades utilizadas en esos mismos talleres o las actividades "Pruebe esto" a lo largo de los diferentes capítulos son herramientas valiosas que permiten que el lector tenga una mejor idea del enfoque y el mensaje general de los escritores. Una de las actividades que se destaca es llamada "la molienda", en la que los autores invitan a los participantes del taller a formar parejas y luego imaginar la posibilidad de que la persona que tienen enfrente pueda convertirse en una víctima del Gran desmoronamiento que está ocurriendo. Luego se les pide que consideren la posibilidad de que la persona frente a ellos pueda hacer una contribución crucial para la sanación del mundo. La idea detrás del ejercicio es romper la burbuja de Negocios como de costumbre por un momento mientras se invita a la oportunidad de que las acciones de un individuo puedan tener un impacto decisivo, lo sepan o no.

Otras actividades únicas en el libro incluyen el uso de viajes en el tiempo imaginarios para ayudar a imaginar una visión más amplia del tiempo, invitaciones para escribir cartas al futuro y desde el futuro, y un proceso de lluvia de ideas progresiva que permite a un grupo desarrollar su co -inteligencia y tener muy claro su objetivo y cómo lograrlo. La mayoría de estos ejercicios están diseñados para ayudar al lector a comprender tangiblemente cómo conectarse con un mayor sentido del tiempo, el propósito y la comunidad y sentirse capacitado para crear una mejor historia para ellos mismos y para los demás. Dirigir la atención hacia esta historia hace que sea aún más probable, como escriben los autores, "...Si los mamíferos terrestres pueden regresar a los océanos y convertirse en delfines, entonces no es tan exagerado pensar que los seres humanos modernos podrían regresar a un estado de conexión con la tierra y evolucionar hacia una forma de vida más sabia".

La versión de Esperanza Activa en español se puede encontrar en la pagina: **www.activehope.info**

Are California's Forests the Next Global Bioenergy Sector's "Fiber Basket"?

Gary Graham Hughes, Americas Program Coordinator, Biofuelwatch

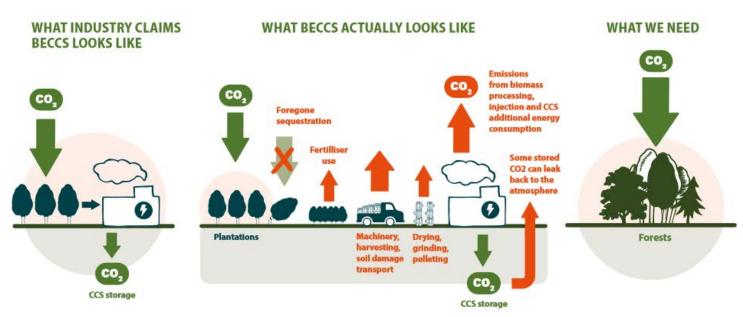
At its December 2022 public hearing, just prior to the holiday, the California Air Resources Board (CARB) unanimously approved the Final 2022 Scoping Plan Update — Achieving Carbon Neutrality by 2045.

The Scoping Plan is intended to be a road map that lays out a path for how the state will meet greenhouse gas emissions reduction goals and other climate targets. The Scoping Plan Update is a massive potpourri of existing and proposed future actions and policies that offers a broad take on how the state will meet the now legislated goal of being 'carbon neutral' by the two decades distant target of 2045. For CARB, 'carbon neutrality' means balancing the net flux of greenhouse gas emissions from all sources and sinks.

This meeting was tangibly distinct from the conflictive June 2022 hearing on the Draft Scoping Plan Update at which dozens of young activists disrupted the meeting and denounced the public process as favoring polluting industry; as the December hearing got under way the agency, industry lobbyists, and the public could feel that the die had already been cast.

Despite persistent opposition over the past year from climate justice and environmental organizations to the characterization of dangerous and unproven carbon capture and Carbon Dioxide Removal (CDR) technologies as essential for meeting state climate goals, the agency was unmovable in its commitment to promoting technologies long associated with the economic and public relations agenda of the fossil fuel and bioenergy sectors.





What Bioenergy with Carbon Capture and Sequestration (BECCS) Actually Looks Like. Graphic Source: fern.org

The Final 2022 Scoping Plan Update approved by CARB includes unprecedented reliance on a wide array of carbon capture and carbon removal technologies and schemes, running the whole gamut of geoengineering techniques such as the mineralization of carbon dioxide, Direct Air Capture, Bioenergy with Carbon Capture and Sequestration (BECCS), and other 'engineered carbon removal' approaches.

The gesture towards BECCS by California, a self-proclaimed 'climate leader,' did not go unnoticed by the global bioenergy sector. On the exact same day as the approval by CARB of the Final 2022 Scoping Plan Update the Drax Group, a United Kingdombased energy generation corporation, published a trading update that celebrated the State of California endorsement of BECCS in the Scoping Plan Update.

The massive Drax power station, located near Selby in North Yorkshire, England, is fueled by coal and biomass. Drax runs an international biomass supply chain business and sources wood pellets from what Drax calls 'fiber baskets', such as the unique lowland coastal forests of the southeast USA and the temperate old growth forests of interior British Columbia, among others.

The same as many other global energy corporations, Drax has an established track record lobbying in Sacramento, and has emerged as one of the biggest corporate advocates for BECCS, claiming that burning forest-based bioenergy is 'carbon neutral' and that

capturing and storing the emissions from burning wood pellets at their enormous Yorkshire power station will make their operations 'carbon negative'.

This claim regarding the promise of 'negative emissions' is central to Drax's public perception management campaigns, regardless of the fact that Drax has never captured any amount of carbon dioxide from their power plant operations, much less stored them in any permanent manner.

In 2021, Drax was taken out of the S&P Global Clean Energy Index, as the company is no longer considered to be a "clean" energy company by the S&P.

Nevertheless, the high-profile role given to BECCS in the latest California climate plan was taken by the Drax Group to be an endorsement of their bioenergy model. As far as Drax is concerned, they scored a major policy victory in California climate planning.

As major bioenergy interests continue to reveal their plans in the state, from established players like Drax to the newly launched Golden State Natural Resources project that aspires to manufacture and export one million tons of wood pellets a year to global markets, Californians have every right to be concerned that under the guise of climate 'action', our forests are being primed by state regulatory agencies to serve as a 'fiber basket' for the insatiable global bioenergy sector. For more information, check out climatefalsesolutions.org.

A Look at The California Coastal Commission

Steffi Puerto, EcoNews Journalism Intern

The California Coastal Commission has celebrated 50 years aimed at environmental justice, political activism, and local and state coastal information to better support California residents on issues related to the coast. The Commission has dedicated hard work to regulating development across the state's 1,100-mile coastline and ensuring equal access to the coast.

The establishment of the California Coastal Commission occurred in 1972 through the voter initiative of Proposition 20. Proposition 20 established the public's right to access the state's coastal tidelands and created what we know now as the California Coastal Commission. It also paved the way for the Coastal Act and embracing coastal preservation.

John Dunlap is a former California Assemblyman and Senator who was initially the first to introduce the bill into the legislature after attending a Democratic caucus where former Sonoma County environmental activist Bill Kortum informed him that there was a 5,200-home project called The Sea Ranch Development being proposed. This development extended from the Northern Sonoma coast to the south of the Gualala coast and was planned to be subdivided without letting the public on the shores, according to The Press Democrat.

"This he thought was wrong and I agreed with him, I told him that I would do something about it and that is where we started," said Dunlap in a later interview.

Dunlap began by meeting with Alan Sieroty and discussing the importance of the bill, including ensuring that when the coastal property was divided, public access was included within the development plans. Sieroty agreed and became the lead co-author of the bill.

Together they hosted a subcommittee hearing in Santa Rosa on the subject of coastal protection legislation to create conversation and awareness of the bill's legislation. Yet it didn't go as planned as the subdivision was still being handled without public access. Dunlap was persistent about the bill passing. The legislation was first introduced in 1968 but was defeated. This happened again in 1969. Eventually, in 1972, the Coastal Alliance proceeded with the successful Proposition 20 campaign, which created the Coastal Commission and led to the passage of the Coastal Act of 1976. Voters passed the act with 55 percent in favor.

The passing of Proposition 20 allowed for the establishment of the California Coastal Commission. In 1976 the state agency was made permanent by the legislature with the addition of the California Coastal Act. This act provides guidelines on how the

land along the coast of California is developed or protected from said development, focusing on the importance of public access to the coast and the preservation of the coast and biodiversity within the area.



As of today, the California Coastal Commission works to provide a wide range of information to residents of coastal communities, including accessible information to property owners, local government, and citizens. It provides bilingual information and media content to visually demonstrate the importance of its work through themes of global warming, coastal conservation, and much more.

As residents of Humboldt County and living on the coast, coastal protection projects are happening all the time. Some of the local developments that will go before the Coastal Commission will be an offshore wind energy project that will require new docks and warehouses in Samoa where the wind turbines will be built. There are also upcoming plans to upgrade the Eureka Wastewater Treatment Facility which is vulnerable to rising sea levels in the long term, but in need of improvements to protect water quality in the short term.

Jen Kalt is the director of Humboldt Baykeeper and has been directly following the Coastal Commission for over 15 years.

"Coastal cities and counties also implement the Coastal Act through local coastal programs that include policies tailored to specific areas, as long as they are consistent with the Coastal Act. Some local examples are limits on signs and night lighting (Eureka), a cap on vacation rentals (Trinidad), and an exemption for single-family homes (McKinleyville)." Kalt added that many Local Coastal Programs are very outdated, though some are in the process of being updated. "Many local government agencies opposed the Coastal Act, but the voters approved it by a 10-point margin (55.15-45.85%)," Kalt said.

The California Coastal Commission and Coastal Act's mission is to ensure equitable access to the coast. The California Coastal Trail is a general example of accessibility for all. Kalt explains that the trail is about 50 percent built, and will eventually go the entire length of the state, from Oregon to Baja California. The Coastal Act requires local jurisdictions to identify an alignment for the California Coastal Trail in their Local Coastal Programs.

"The Eureka Waterfront Trail, the Humboldt Bay Trail, and the Hammond Trail are local examples. The next planned sections will go south to College of the Redwoods and north to Trinidad," Kalt said. Although there has been accessibility provided through the trails, there have also been concerns raised about how the proposed projects create inequitable access for low-income communities, communities of color, and other marginalized groups. These communities have faced disproportionate social and physical barriers that disconnect them from coastal access and recreational opportunities.

Equitable access to coastal access and recreational opportunities for everyone has not been addressed because of practices of social, economic, and physical discrimination in the use of land and economic policies in our state.

According to The Coastal Commission Staff Report about the Eureka portion of the coastal trail, "Spatial analysis of 2010 Census data shows a majority of Californians (70.9%) live within 62 miles of the coast, but populations closest to the coast are disproportionately white, affluent, and older than those who live farther inland. However, wherever the CCT is located, it provides equitable access to all communities, including disadvantaged ones. Ensuring maximum and equitable public access to the California coastline as required by the Coastal Act public access policies cited above is consistent with the environmental justice principles reflected in the Coastal Act."

The State Legislature removed the Coastal Act's protections for affordable housing in the 1980s. Kalt added that ultimately, the best way to ensure coastal access for all is to restore protections for affordable housing in coastal areas.



Commercial office cleaning, window cleaning, and carpet cleaning services.

www.northcoastcleaning.com

707-269-0180 PO Box 177, Eureka, CA 95502

The Environmental Protection epic Information Center

Climate Change and California's Atmospheric Rivers

Matt Simmons, EPIC Staff Attorney

Call it what you want—a bomb cyclone, an atmospheric river, the Pineapple Express, whatever—large and intense winter storms are a regular occurrence on the North Coast. While an ordinary part of our weather, these events are also being made more severe and damaging by climate change.

So what is an atmospheric river? Atmospheric rivers are long, narrow bands of intense moisture in the atmosphere that can bring heavy rain and snowfall. According to the National Oceanic and Atmospheric Administration (NOAA), a strong atmospheric river can carry an amount of water vapor roughly equivalent to the average flow of water at the mouth of the Mississippi River. These weather systems are responsible for most of the precipitation that California receives each year, and without them we would be unable to support nearly as much life as we currently do.

While atmospheric rivers are common, climate change can exacerbate their impacts and potentially increase their prevalence. As the planet warms, the atmosphere is able to hold more water vapor, leading to more intense storms and heavier precipitation. In addition, rising sea levels and the associated warming of the ocean surface can provide additional moisture for atmospheric rivers, further enhancing their intensity.

One of the most significant impacts of climate change on atmospheric rivers is the increased risk of flooding and landslides. As atmospheric rivers bring heavier rain and snowfall to the region, there is a higher likelihood of flooding and landslides, which can cause damage to buildings, roads, and other infrastructure, as well as loss of life. Of particular concern are areas recently impacted by wildfire, the frequency and severity of which is also increased by climate change. As rains pound burn scars that have been stripped of vegetation by wildfires there is a lack of capacity to absorb water which leads to increased flooding. As these powerful storms approach and intensify, the National Weather Service has expressed particular concerns for recently burned areas including the August Complex in Eastern Mendocino County and for the Coffee Creek Drainage area in Northern Trinity County. If you are in or near one of these areas, prepare to leave before the storm arrives and stay tuned for any possible evacuations. In addition, flooding and landslides can also disrupt transportation and commerce, leading to economic losses. During recent storms, highways 36, 199, and 101 were temporarily closed due to rockslides and

The science behind atmospheric river (AR) is a flowing column of condensed water vapor in the atmosphere responsible for producing significant levels of rain and snow, especially in the Western United States. When ARs move inland and sweep over the mountains, the water vapor rises and cools to create heavy precipitation. Though many ARs are weak systems that simply provide beneficial rain or snow, some of the larger, more powerful ARs can create extreme rainfall and floods capable of disrupting travel, inducing mudshides and causing catastrophic damage to life and property. Visit www.research.noaa.gov to learn more. A strong AR transports an amount of water vapor roughly equivalent to 75-15 times the average flow of water at the mount of the Mississipp River. ARs are a primary feature in the entire global water cycle and are tied closely to both water supply and flood risks, particularly in the Western U.S. On average, about 30-50% of annual precipitation on the West Coast occurs in just a few life wents and contributes to the water supply—and flooding risk. ARs move with the weather and are present somewhere on Earth at any given time. ARs are approximately Scientists' improved understanding of ARs has come from roughly a decade of scientific studies that use observations from satellites, radar and aircraft as well as the latest numerical weather models. More studies are underway, including a 2015 scientific indicating a counter of the counterful of the scientific mission that added data from Instruments abourd a NOAA ship.

downed power lines, and flooding closed numerous other roadways throughout the county.

Another impact of climate change on atmospheric rivers is the increased risk of drought. As the planet warms, the West Coast is experiencing longer and more severe droughts, even in areas that have traditionally received a high amount of precipitation from atmospheric rivers. This is partly because the increased intensity of atmospheric rivers can lead to more rapid runoff and less infiltration of water into the soil, leading to reduced soil moisture and increased drought conditions. In addition, current climate science estimates that California will see longer periods without rain punctuated by more intense storms. This devastating one-two punch will dramatically affect ecosystems like ours which have evolved under more consistent conditions.

The impacts of climate change on atmospheric rivers are not limited to the West Coast. These weather phenomena have global impacts, including the potential to affect global food production and water availability.

As atmospheric rivers become more intense and frequent, they can bring heavy rainfall to regions that are not equipped to handle it, leading to flooding and landslides, as well as damage to crops and other infrastructure.

To mitigate the impacts of climate change on atmospheric rivers, it is important to address the root cause of the problem: greenhouse gas emissions. Every gallon of gas combusted in a personal vehicle, every ounce of natural gas burned to warm a house or heat a stove, and every methane burp emitted by a cow contribute to the global pool of greenhouse forcing gasses in our atmosphere. We've already emitted enough greenhouse gasses that a certain amount of climate change is "locked in" but every additional gram of CO2 and methane increases the severity of climate change and future storm systems. That's why it's incredibly important that we both reduce energy use and switch to using renewable energy wherever possible as soon as possible. Otherwise, these storms will continue to get worse.

Join RRAS for our Annual Banquet and Auction on Saturday, February 18th, at the Arcata D Street Neighborhood Center, 13th and D streets. The event

will begin with a social hour at 5:30 p.m. and dinner at 6:30, followed by a presentation by Dr. Vitek Jirinec on:

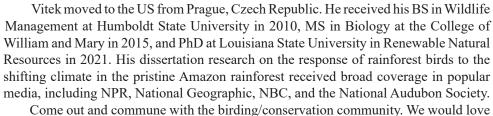
Climate Change Is Transforming the Bodies of Birds!

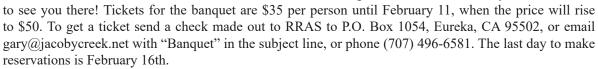
Vitek will talk about his studies of Amazonian birds, including their quickly evolving responses to climate change, and his other recent bird studies and adventures. He states "...most of the bird species we catch in mist nets are

shifting size and shape in response to climate change. Why should the general public care about this?



Individual lifestyle choices of people in distant places – like us here in Humboldt County – have consequences for such a bizarre thing as the size and shape of birds in the middle of Amazonia. If that doesn't put the 'global' in global climate change, I don't know what does."





We are seeking auction item donations such as art, optical equipment, and books. Gift certificates to local businesses are appreciated. We encourage you to ask your favorite business for a donation item! If you have auction items to donate or can help with the banquet, please email gailgkenny@gmail.com.

Above right: Vitek with an Amazonian Motmot (*Momotus momota*). Photo by Philip Stouffer. Top left: Scale-backed Antbird (*Willisornis poecilinotus*). Photo by Cameron Rutt. Bottom left: Collared Puffbird (*Bucco capensis*). Photo by Vitek Jirinec.

Calling All Student Writers & Artists

RRAS is sponsoring our 18th annual *Student Nature Writing Contest*. Up to six cash prizes will be awarded for the best essay(s) or poem(s) on "What Nature Means to Me" by Humboldt or Del Norte County students in grades 4 through 12. First-place winners will be published in the *Sandpiper*, and all winners will be published in a booklet posted on the website by mid-May.

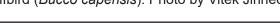
For the 20th year, Friends of the Arcata Marsh and RRAS are co-sponsoring their *Student Bird Art Contest*, with up to \$600 in prizes to be awarded to Humboldt County students from kindergarten through high school who submit a drawing of one of forty suggested species or another bird seen locally. Prizes also will be awarded for the best renditions of a bird in its natural habitat.

Entries must be received by 5 p.m. Saturday, March 18

The contests are being held in conjunction with the Godwit Days Spring Migration Bird Festival. Entries will be judged by local wildlife artists and educators. All entries will be displayed during the festival (April 13-16) in the lobby and hallways of the Arcata Community Center, and awards will be presented the morning of Saturday, April 15.

Color copies of winning artwork will be shown at the Arcata Marsh Interpretive Center during May and June. A free public reception is being planned, with a tentative date of Friday, May 19.

Details and complete submission instructions are posted at www.godwitdays.org, www.rras.org, or www.godwitdays.org, or <a href=



FIELD TRIPS IN FEBRUARY!

Sat. Feb. 4th – 8:30-11am. Birding at Arcata Marsh, led by Chet Ogan. Bring binoculars and a scope if you have one and meet at the south end of I Street (Klopp Lake). Reservations not required.

Sat. Feb. 11th – 8:30-11am. Arcata Marsh, led by Kathryn Wendel.

Sun. Feb. 12th – 9-11am. Humboldt Bay National Wildlife Refuge with leader Ralph Bucher. Meet at the Visitor Center.

Sun. Feb. 12th – 9-noon. Women and Girls' Birding Trip – Join Susan Penn and Susan O'Connor on a birding adventure to explore a tiny portion of the Humboldt Bay National Wildlife Refuge, then take a drive along a back road toward Loleta. Meet at the Hookton Slough Unit at 9 a.m., looking for grebes, ducks, pelicans, shorebirds. We may see meadowlarks, swans, and Surf Scoters, too! From there we will drive toward Loleta, stopping to watch for raptors, and checking ponds for freshwater-loving birds. We will circle back and end our adventure at the Hookton Slough Refuge.

Driving directions to the Hookton Slough Unit: Take exit 696 off Highway 101.

Northbound, turn left and go west over the overpass and take a right on Hookton Road. Follow the road about 1.2 miles and you will see the signed turnoff to the parking lot on your right.

Southbound, go straight ahead from the off-ramp stop sign. Follow Hookton Road west about 1.2 miles, and take the signed turnoff down to the parking lot. *Contact Susan Penn with questions, susanpenn60@gmail.com.*

Sat. Feb. 18th – 8:30-11am. Arcata Marsh, led by Michael Morris.

Sun. Feb. 19th – 9-11am. Ralph Bucher will lead a walk on the Eureka Waterfront. This trail is paved and is wheelchair accessible.

Sat. Feb. 25th – 8:30-11am. Arcata Marsh, led by Elizabeth Meisman.

Sat. Feb. 25th – 9-11 am. Wigi Wetlands Volunteer Workday. Help create bird-friendly native habitat and restore a section of the bay trail behind Bayshore Mall. We provide tools and snacks. Please bring your own water and gloves. Contact Jeremy Cashen at jeremy. cashen@yahoo.com or 214-605-7368 for more information.

*Contact Ralph at thebook@reninet.com for any walks he leads and all Marsh walks.

*Contact Janelle Chojnacki at janelle.choj[at]gmail.com for information on all other walks.

CHAPTER LEADERS:

CHAITER ELIBERO.	
President – Gail Kennygailgkenny@gmail.com Vice President – CJ Ralph707-822-2015 Secretary – Andrew Orahoskeandrew.rras@gmail.com Treasurer – Gary Friedrichsen707-822-6543 Past President – Hal Genger707-499-0887	
DIRECTORS-AT-LARGE: 707-499-1247 Ralph Bucher 707-267-4055 Harriet Hill 707-267-4055 Chet Ogan 707-442-9353 Jeremy Cashen 214-605-7368 Kathryn Wendel 707-834-7134	
OTHER CHAPTER LEADERS: Conservation – Jim Clark	
THE SANDPIPER: Editor, Layout, & Design for February — Judi Brownjudithbrown914[at]gmail.com Proofreader/CopyeditorPia Gabriel Historian — Gary Friedrichsen707-822-6543 RRAS Web Pagewww.rras.org RRAS Listservegroups.io/g/rras	
The Sandpiper is published eleven times a year by Redwood Region Audubon Society	
-	

P.O. Box 1054, Eureka, CA 95502.





In early December, Rob Fowler reported a rare Nelson's Sparrow in the McDaniel Slough area of the

Arcata Marsh and Wildlife Sanctuary. I'm not the rare bird chaser I once was, but if the bird sticks around and it fits my schedule, I will take the time to look for it. Later in December, when this sparrow was still being seen, I finally looked it up on my list and discovered I had not seen a Nelson's Sparrow before. It was time to look for this rare sparrow.

On Christmas Eve, I decided, along with my daughter and Janet Stock, to look for the Nelson's Sparrow. As we headed to the spot, we ran into Kathryn Wendel, a RRAS Board Member who led the Arcata Marsh walk that morning, along with Ken Burton, and some other marsh walk participants. They had looked for the sparrow but had not seen it, but they talked to someone else who had seen it that morning. As luck would have it, Rob Fowler showed up just behind us to look for the bird. It turns out at least two Nelson's Sparrows had been seen. A King Tide made the experience even more interesting. It was a lovely sunny day and not too cold. There were lots of Savannah Sparrows to sift through while looking for the rare sparrows.

We were soon joined by longtime Humboldt birders Gary and Lauren Lester. As we looked for the sparrows, Gary and Rob remarked that Gary had seen Nelson's Sparrows four times in Humboldt County over the years, most of them at the Arcata Marsh in this same area. I have been actively birding in Humboldt since the 1980s. How had I not seen a Nelson's Sparrow before? With the help of Rob's sharp eyes and ears we were soon rewarded with both Nelson's Sparrows. We all got okay, but fleeting, looks at them. Eventually, the

pair flew into the bushes right next to us, where we got some more fleeting looks. These birds did not sit still for us to study them. What I noticed about the Nelson's Sparrows was the warm orange wash on their head and neck and the two black crown stripes. One of the pair of these birds was brighter than the other.

Later that day, I added Nelson's Sparrow to my life list, first in handwritten notes in my 1987 *National Geographic Field Guide to the Birds of North America*,

and second, in a free app called Bird Journal that I compiled my life list in awhile back. When I went to the index of the Nat Geo guide to tick the name of Nelson's Sparrow



and note the date and place, I discovered it was not in the index. That means it probably got lumped or split since this guide was published in 1987. I googled Nelson's Sparrow and discovered it has been split from Sharp-Tailed Sparrow into Saltmarsh Sparrow and Nelson's Sparrow. The Saltmarsh Sparrow range is a narrow band along the Atlantic Coast. Then I found a note in the index of my old field guide with Sharp-Tailed Sparrow ticked, the date of 5/11/90 and location Arcata. This was not a lifer. The Nelson's Sparrow is the same species as the Sharp-Tailed Sparrow I had seen in 1990, most likely one of the birds Gary had seen too. I didn't mind that it wasn't a lifer. I really did enjoy the experience of getting out and seeing this pretty sparrow for the second time in my life. What I also appreciated about this experience was the birding community. At any rare bird chase, it is fun to see who else is there and catch up with each other.

Photo of Nelson's Sparrow by Rob Fowler.

Treasurer Needed: We are seeking a volunteer treasurer. The treasurer keeps the books for our bank accounts, makes deposits and writes checks, reports to the board, and helps create the annual budget. Please email Gail at gailgkenny@gmail.com if you are interested or want more information.

Bird News Round-Up

Compiled by Gina Rogers

It's a Bird Emergency -- More Than Half of U.S. Birds in Decline: A new report issued by a 33-organization consortium produces a clarion call for increasing conservation efforts, providing concrete data on plummeting bird populations across almost all habitats. The *State of the Birds Report* 2022 indicates that three billion birds have been lost in the past fifty years, including one in four breeding birds. It identifies seventy different bird species (such as the Rufous Hummingbird, Lesser Yellowlegs, and Black Scoter) as *Tipping Point* birds, all shown to have lost at least half of their populations in the past fifty years. One bright spot is surging waterfowl and waterbird populations, up 34 percent and 18 percent, respectively, reflecting the success of forty years of concerted wetland conservation. Intensifying conservation efforts are called for, especially as climate-induced natural disasters, habitat loss, and land degradation continue to worsen the outlook for birds.

Drew Lanham Wins MacArthur Genius Award: J. Drew Lanham, a Black ornithologist who teaches at Clemson University, was one of fifteen people awarded MacArthur Foundation "genius" awards. Lanham was heralded for "creating a new model of conservation that combines conservation science with personal, historical, and cultural narratives of nature." His research and teaching focus on the impacts of forest management on birds and other wildlife. Lanham received national attention

when he published an essay in 2013 called "9 Rules for the Black Birdwatcher," spotlighting how societal racism affects the experience of Black birders.

Avian Flu Reaches Humboldt County: The first cases of avian flu (Highly Pathogenic Avian Influenza) in wild birds were officially reported in November, including a Turkey Vulture carcass found in Orick, Cackling Geese and a Greater White-fronted Goose from the Humboldt Wildlife Care Center (HWCC), and several Ravens. This was four months after California's first confirmed case back in July.

In response, the Sequoia Park Zoo relocated its Chilean flamingo flock to the behind-the-scenes Animal Care Center, closed the free-flight aviary, and has put increased biosecurity measures in place. The HWCC is still taking in wild birds in need of care under strict protocols while also monitoring the virus closely. The Northern California Condor Restoration Program, managed by the Yurok Tribe in cooperation with several other agencies, made the difficult decision to relocate their mentor bird, the seven-year-old male known as Condor 746. He was moved to a better-protected flight pen at the Condor Recovery Center at the Oakland Zoo.

If you see a sick bird, you are urged to call the HWCC at 707-822-8839. Reducing bird feeder use and cleaning feeders regularly is also encouraged. California Dept. of Fish and Wildlife reports that, while infection with avian flu viruses among songbirds appears to be relatively rare, feeding and providing water to wild birds in ways that increase congregations in any one area is generally discouraged.

Fields Landing to Cape Mendocino: Pelagic Birding in Humboldt, By Ken Burton

Recreational opportunities to view wildlife at sea in Humboldt are few and far between. Unlike most other coastal California counties, we have no pelagic tour operators. Thus, when veteran marine biologist Gary Friedrichsen recently invited me to join him and some friends on a combined fishing and birdwatching foray, I jumped on it without hesitation, even though I don't fish anymore.

Finding a day when visibility and sea conditions meshed with our schedules was predictably tricky, but we finally settled on a Monday morning in September. Western Gulls lined the docks as we set out from Fields Landing on glassy calm water against a beautiful sunrise. Cormorants and pelicans moved aside to let us pass while the sea lions on the channel markers didn't even appear to wake up.

Despite the auspicious start, it was obvious as soon as we cleared the jetties at the mouth of the bay that we were not going to get the calm sea conditions Gary had

been led to expect. Although it wasn't particularly windy, the chop and swell were substantial, and the little boat was tossed around like a toy as we took a southwest tack towards the Eel River canyon.

Trying to keep moving birds in view with binoculars is hard enough on dry land. Doing it when you and the environment are also moving, in every conceivable direction, takes it to a whole new level of challenge and frustration. Pelagic birding is not for the faint of heart. All else being equal, the bigger the boat, the more stable it is; Gary's is tiny, great for fishing but not ideal for birding under the conditions we were experiencing. If this had been primarily a birding trip, we might have turned back at that point, but as it was mainly a fishing trip, we soldiered on.

It's always a thrill on a pelagic trip to see the first tubenoses. "Tubenoses" is the vernacular term for birds in the order Procellariiformes, which spend most of their lives at sea and are seldom, if ever, seen from land away from breeding sites. The word comes from tubelike structures on their bills that excrete salt and increase the birds' olfactory sensitivity, enabling them to locate food at sea and, for some species, their nest sites in the dark. You usually need to be a few miles out before you begin seeing them.

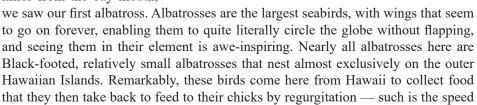
As expected, our first tubenoses were Sooty Shearwaters, generally the commonest tubenoses in our region. These dark brown, gull-sized birds nest in Australia and New Zealand during the Austral summer and spend most of the rest of the year roaming the world's oceans. Like other shearwaters, they have a stiff-winged, arcing flight with rapid, shallow wingbeats, often gliding with their wings on a vertical axis.

Soon we began picking up Buller's and Pink-footed Shearwaters as well. These species nest on only a few islands off New Zealand and Chile, respectively, and show up here during our summer and fall. We passed several Rhinoceros Auklets (which are actually puffins), which paddled out of our way if they could, diving or flying only if we got too close. Dozens of Cassin's Auklets, chunky, softball-sized gray birds, exploded off the water in front of us, their little wings churning furiously to

get out of our path. It was proving to be a good day, for us if not necessarily for the auklets.

Finally, about five miles from the bay mouth,

and efficiency of their flight.



Upon reaching the canyon, the boat's thermometer registered a water temperature of 63°F, and as we set gear for albacore, a small, dark, long-winged seabird flew by: a storm-petrel!

Storm-petrels are the smallest tubenoses and among the smallest of all seabirds, giving the impression of marine swallows. The expected dark storm-petrel in our area is Leach's, which has a white rump. Viewing conditions were still challenging, to say the least, but I sure didn't see a white rump on this bird. Soon we began seeing others, and I realized they were Ashy Storm-Petrels, normally found farther south and considered rare here. Then Gary called out, "Black Storm-Petrel!" Whoa! That's another southern species and not seen in the region since 1990! I had missed it, but before long we passed a concentration of about 100 Ashy and at least 10 Black Storm-Petrels! Gary, who has spent thousands of hours at sea off Humboldt, said he'd never seen so many storm-petrels at once

gull-like species that breeds, as its name implies, in Antarctica, appeared.

These three species were all ones I'd never seen in Humboldt and I was ecstatic.

Part of my euphoria was due to the fact that they put me into Humboldt's "400 Club," a group of about two dozen birders who have seen or heard at least 400 native bird species in the county. It was a goal I'd been chasing for years. There aren't a whole

who saw even more than we. And then, to top it off, a South Polar Skua, a predatory,

here; this was an *event*, one soon to be repeated by several later birding groups

lot of counties where it's even possible.

We never did catch any albacore. Instead, we headed inshore towards Cape Mendocino for rockfish. On the way home, the sea flattened out as if mocking us, but we sure didn't feel as if it had gotten the better of us that day!

Photos: Top right: Black Storm-Petrel, Benson Halsey, Arizona Field Ornithologists (AZFO). Center: Black-footed Albatross, Alaska Dept. of Fish & Game. Right: Pink-footed Shearwater, Ken Burton.





Woodley Island, Oct. 2021

Godwit Days Returns in 2023

The Arcata Community Center will once again be the location for this spring's Bird Migration Festival (April 13-16). This is the first time in four years that this event approaches "normal," as the festival was cancelled in 2020, online only in 2021, and with limited in-person field trips in 2022.

The festival's return to the Community Center means that we will be able to display all of the entries in the Student Bird Art Contest in the hallways and also hold our Saturday morning awards ceremony. (See the article on page 1 of the *Sandpiper* for more about the annual art and writing contests.)

RRAS and Friends of the Arcata Marsh (FOAM) are teaming up to co-organize the free Godwit Days opening reception from 5 to 6:30 p.m. on Friday, April 14, at the Community Center. Both groups will be recruiting help to staff the event, with tasks ranging from bartending or washing dishes, to hanging student art or staffing informational booths, to helping with a possible nature craft "mega-palooza" free event on Sunday, April 16.

So, mark your calendars to sign up for field trips led by knowledgeable guides (the schedule will launch in January at www.godwitdays.org) and all the ancillary activities that make Godwit Days so special.

"Bird Talk Around Town," by Jeremy Cashen

Featuring interviews with locals, on all things bird!

Jeremy met Dalton (in photo, by Jeremy) when he interviewed for a job with his company. He was hired, and they have gotten to know each other well.

Jeremy: First off, what's your favorite bird?

Dalton: That's a tough one. I really like a lot of different birds, but for the sake of answering the question, I'll say mergansers. I remember my first time walking around the Redwood Creek area and seeing a bunch of families of mergansers. It was so cool to see all the babies following the mom and running super fast across the water. Besides mergansers, I like all different kinds of raptors.

Jeremy: You run a tour company called Wildtrail Tours, where you lead biking and hiking tours, and also rent bikes to people who want to go out on their own. How'd you get into the eco-tourism business?

Dalton: Well, in general I knew I wanted to own my own business. I wanted to be my own boss, work on my own terms, and have the freedom to do my own thing. I've always been really into hiking and biking and the outdoors as a whole, and when I moved to Humboldt, I noticed that there was a gap in the local tourism industry. I figured that I could take advantage of this gap and fill a desired niche. Logistics aside, I started, and continue, to do tours because I love to give people unforgettable experiences and memories that will last a lifetime. I remember some of my first inspiring experiences of the natural world, and I want to give people that same thing. I love to know that I am facilitating a love and wonder of the planet and that my work may create a new passion or excitement for the environment.

Jeremy: So, with your love of the natural world, are you interested in birding or wildlife observation?

Dalton: Although I love the outdoors, I've never really birded much before. But I will say that I have started to notice birds more recently. I remember when I lived in Iowa I saw a swarm of about 300 Starlings flying and changing directions quickly in unison. It was quite an amazing sight. I definitely feel as though birds are special, and I recognize their awesomeness.



Jeremy: What got you interested in the environment?

Dalton: I was always outdoors when I was younger. Starting at a young age, I would go camping very regularly, and I was always out in the elements. I was also an Eagle Scout. I did the whole program from Cub Scout on. A lot of people don't get that experience at a young age, so I enjoy sharing the beauty of the outdoors with people who may be just starting to discover its greatness.

A Coalition of Acorn Woodpeckers

By Susan Penn

I became enchanted with Acorn Woodpeckers a few years ago when I started spending time inland near Blocksburg, an area abundant in oaks and acorns. They wake me up in the morning with their long, slightly nasal "ha ha, ha ha" phrases, often followed with a rolling trill. They seem to start the day laughing! If you are lucky enough to be near one of



their roosting trees, the air soon fills with their cheerful chatter.

Their antics and clownish faces always make me smile. They are medium-sized woodpeckers with black-and-white faces above a fancy black neck ruffle. Light yellow eyes stare out from the black that extends from the sides of their heads down their back. And, as any good woodpecker must, they sport a red crown.

During the day, Acorn Woodpeckers move around in groups, constantly interacting and talking with each other. In the summer, they love playing in a bird bath! I learned that they live in extended-family groups called coalitions. These



coalitions usually have one to three breeding females, up to eight breeding males, and a number of younger birds from recent broods. Young birds stay with their family group for several years. During that Acorn Woodpecker photos: Top time, they participate in all the extensive household activities.

The most obvious of these activities is the creation and maintenance of acorn trees, also referred to as granaries. Acorn Woodpeckers drill holes into dead trees, or into the bark of living trees, and stuff acorns into them. A single tree may have as many as 50,000 acorns stored in it. As the acorns dry and shrink, they are moved to smaller, snugger holes, to

reduce the predation by other birds, especially Steller's Jays, Spotted Towhees, and White-breasted Nuthatches.

The scientific name for the Acorn Woodpecker is Melanerpes formicivorus – black creeping anteater. These birds do eat ants, along with other insects, grubs, flying insects, fruit, lizards, and eggs. But it is the acorns that allow them to avoid

migrating. If they have a well-filled granary, they may even nest in the fall, one of the few birds to do so.

In conjunction with their family structure, these birds have an unusual breeding practice which is shared by just 9 percent of bird species – polygynandry. In a nutshell, males and females of breeding age mate freely. This saves the birds the energy of looking for a mate, and helps with genetic diversity. It is typical for breeding males to be brothers, and breeding females to be sisters, but intra-family breeding does not

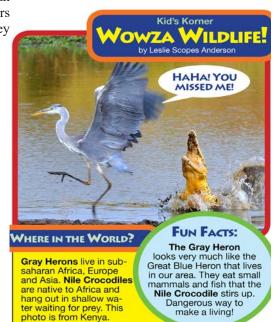
Coalitions excavate cavities in dead trees, or dead branches of living trees. Some of these are used as roosting sites, and one is reserved for nesting. All the females lay their eggs in the same nest. Females lay three to seven eggs, and as many as seventeen eggs have been found in a single nest cavity.

It is common for a female to destroy eggs that are already in the nest when she lays her eggs. Fortunately, once the birds are laying in sync, this practice stops. This habit seems counter-productive to me, but scientists think there may be advantages to having the chicks be the same age. Once the eggs are laid, the entire coalition helps with incubation and with feeding the young.

You won't find these birds on the coast, as they are truly dependent on acorns.

But if you find yourself in an area with oaks, a coalition of Acorn Woodpeckers is likely to announce its presence. They are fun birds to get to know!

right by Joseph Morlan; left by Pauhana, courtesy Birdforum.





King Tides Provide a Glimpse into the Future

Jen Kalt, Humboldt Baykeeper Director

It's that time of year again, when the highest tides of the year often coincide with storms to cause flooding and erosion in coastal areas. Known as King Tides, they tend to be about a foot higher than typical high tides, providing a glimpse into the future. With one foot of sea level rise, these high water levels will become more and more common.

The December 23 King Tide was even higher than predicted by about half a foot, peaking at 9.28' at the North Spit tide gage. According to meteorologist Troy Nicolini at the National Weather Service in Eureka, this was due to storm surge and southerly winds pushing more water toward the coast, a phenomenon known as Ekman Transport.

The Humboldt Bay area is experiencing the fastest rate of sea level rise on the West Coast. That's because plate tectonics are causing the ground beneath us to sink at the same rate as sea level is rising, doubling the relative rate of sea level rise.

To document King Tides, Baykeeper volunteers photograph high water levels relative to bridges, roads, seawalls, and other man-made structures. To add your photos to our collection, you can email them to <code>KingTidePhotos@gmail.com</code>. Or you can upload them to the Coastal Commission's California King Tide Project at <code>www.coastal.ca.gov/kingtides</code>.



Kayakers take a break on the earthen dike that normally separates Jackson Ranch Road from Liscom Slough in the Arcata Bottoms.

Photo by Aldaron Laird, Dec. 23.



The former Sierra Pacific Industries lumber mill in Manila is one of dozens of low-lying contaminated sites around the bay. Although the site has been partially cleaned up, contaminated groundwater beneath the buildings could move off-site as groundwater rises, impacting Mad River Slough and the bay. Photo by Jen Kalt, Dec. 24.



Erosion along New Navy Base Road dislodged a PG&E utility vault near the County boat launch in Samoa. Photo by Jen Kalt, Dec. 24.

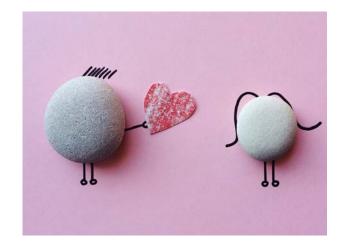
WASTE HUMBOLDT

Isabella Escamilla, Zero Waste Humboldt Intern

Since the 14th century, Valentine's Day has been a notable celebration of love around the world. Many significant-others celebrate this day by exchanging gifts to show their admiration for one another. However, frequently these gifts are single-use items that are not environmentally friendly nor long-lasting. Whether the gifts include bouquets of flowers that die in a matter of days or unethically sourced chocolate bars with plastic wrapping, humans can do much better in choosing sustainable and meaningful presents.

If you're a chocolate fan like me, I recommend you check out the Arcata-based brand "Cacao Cocoon." This local dark chocolate brand is sweetened with pure honey and contains single origin cacao from a family run farm. Another chocolate brand, which is not local but I would also recommend, is "Hu." Both Cacao Cocoon and Hu dark chocolate bars are free from palm oil and dairy, two industries that contribute to climate change through large-scale factory farms. In addition, unlike many valentine chocolate products, these brands ethically source their

Sustainable Valentine's Day Gifts



ingredients and use compostable wrapping. Shopping locally saves energy from transportation, so a Cacao Cocoon bar would be a great valentine's gift.

Instead of gifting your partner a bouquet of flowers, which often die quickly, give them a living plant instead! Living plants, if cared for properly, last much longer than store bought bouquets and require less energy in the importation process. Flowers that are in bouquets usually contain fungicides, insecticides, and herbicides that are linked to respiratory problems. Aside from being more sustainable gift options, living plants are much more personal and unique than store bought bouquets.

A very common valentine gift is jewelry, which is

long-lasting and visually beautiful. However, not all brand name jewelry stores get their gems, stones, metals, and crystals by using responsible and sustainable mining practices. Mining for these jewelry materials can pose several health risks and the production process has been known to produce toxic waste. To ensure that your jewelry gift is ethical and sustainable, I suggest that you make sure that the company has transparent, responsible sourcing and production processes. I have found many pieces of beautiful, affordable jewelry locally and in second-hand stores, too.

On the topic of second-hand stores, getting your significant-other a present from there is a great alternative to shopping at commercial stores. Shopping at thrift stores is good for the environment because it reduces the carbon and chemical pollution created by new clothing production. Thrift stores have a variety of items that are long-lasting such as clothes, jewelry, books, mugs, furniture and shoes. Long-lasting gifts are much more meaningful than single-use ones.

When it comes to a Valentine's Day card, try making your own card from recyclable or compostable material. If you do want to buy a pre-manufactured card, do so locally and try to find fair trade ones. Many people appreciate the gift of time. Set aside time to do activities your partner enjoys or would appreciate. Valentine's Day is all about love — what better way to show your appreciation for someone than by giving them your time!

NORTH COAST CHAPTER



CALIFORNIA NATIVE PLANT SOCIETY

Evening Program

Wednesday, **February 8**, 2023: Dynamic speaker, and respected forester and adviser, **Yana Valachovic** with UC Cooperative Extension will give a presentation on some aspects of local forests, including **Sudden Oak Death Syndrome**. Register on Zoom on the website to join from home, or gather at Six Rivers Masonic Lodge, 251 Bayside Rd., Arcata, refreshments at 7:00, program at 7:30 p.m.

Field Trip

Saturday, February 4. Humboldt Botanical Gardens (HBG) Field trip. The Lost Coast Brewery Native Plant Garden in HBG has a fine collection of manzanitas, which bloom this early (or even earlier). We will hike as many of the trails in the Gardens' natural habitat as we can. Bring lunch and water. Meet at 9 am at Pacific Union School (3001 Janes Rd., Arcata), or 9:30 am at the south end of the Bayshore Mall parking lot (looking at McDonald's), or at 10 am at the Garden entrance (adjacent to College of the Redwoods). If you are a Garden member, bring your card. If you are not, you can join at the Garden, or CNPS will pay your admission. Contact Carol: theralphs@humboldt1.com; 707-822-2015

Rohner Park Forest Restoration

Help volunteers restore the redwood forest at Rohner Park by removing invasive English Ivy and French Broom on February 18 from 9 a.m. to 11 a.m. Meet at Fireman's Pavilion at 9 am. Tools and gloves available but you are encouraged to bring your own. Sponsored by the North Coast Chapter of the Native Plant Society and the Fortuna Parks and Recreation Department. Contact Steve at **unde1942@gmail.com**. High winds or heavy rain will lead to cancellation. Light snack provided.

Native Plant Nursery

We are not currently selling plants from our nursery. Please see our website for updates.

Western Lily

Note: Kelsey McDonald of California Department of Fish and Wildlife (CDFW) has written a longer version of the following condensed article that you can look for in the next issue of Darlingtonia.

Western lily (*Lilium occidentale*) is a Federally and State Endangered flowering perennial bulb found in coastal wetlands, prairie, and coastal scrub habitats from

the Humboldt area north to Coos Bay, Oregon. Western lily's distribution has been reduced to a small number of scattered populations. Îts vibrant red flowers have a contrasting green-to-gold star at the center, and the showy pendant flowers hang from leafy an impressive



shoots. After The unsurpassed beauty of the Western lily.
an impressive Image credit: Andrea Pickart.

amount of growth in the spring, and a stunning floral display in mid-to-late summer, western lily will set seed in the fall and enter a dormancy period underground for the winter months. It may take years for juvenile bulbs to reach reproductive maturity.

Stay Updated:

www.northcoastcnps.org facebook.com/NorthCoastCNPS CNPS welcomes everyone. No expertise required.



Why isn't it Free to Ride the Bus?

Colin Fiske, CRTP Executive Director

Riding the bus is almost always cheaper than driving, but it doesn't always feel that way. Most people pay a fare every time they board the bus, while fueling up a car, making payments on insurance and auto loans, and taking your vehicle in for maintenance and repair happen less frequently. In other words, the cost of riding the bus is more "in your face." This often leads to the question from bus riders: why isn't public transit free?

In fact, public transit is free in some places, including a number of small towns and rural communities in the United States. Research shows that going fare-free is one of the most effective ways to increase ridership. Also, mobility is so central to the ability to survive and thrive in modern societies that many advocates—including CRTP—believe that public transportation should be considered a civil right. That means no one should be denied transportation just because they can't afford to pay the fare.

But implementing fare-free transit presents some challenges. For one thing, fares help pay for the transit service, so if you eliminate them you need to find another source of revenue to replace them. In fact, if you want fare-free transit that's effective, you have to actually increase investments. That's because all the other ways to increase ridership—most notably increasing the frequency of buses—cost more money. Making the bus free doesn't do any good if the system doesn't meet people's needs.

In California, there's another problem: state law actually requires that our local transit agencies cover at least 10 percent of the operating expenses of each bus service with fares. However, there is a loop-hole. We are allowed to replace the fare revenue with another source of funding, as long as it's local (not state or federal).

In other words, we can go fare-free and make other improvements, if we just make the local investment. One version of this is already starting to happen: at CRTP's urging, some local employers (including the County of Humboldt and the City of Eureka) are starting to buy up bus passes and give them free to employees, and some affordable housing developers are doing the same thing for their tenants. Because

free bus rides make it more likely that people will ride, these programs can be part of a positive feedback loop. Expanding them to more employers and landlords would be a great way to invest in local transit.

There are also other dedicated sources of funding we could develop. If local governments started charging for parking in downtown areas, for example, they could use the meter revenues for transit. The County of Humboldt is also considering putting a new transportation tax on the 2024 ballot, and there is an opportunity to ensure that it funds not only pothole repair, but also public transit. If we choose to develop sources of transit funding like these, we could have a transit system that is both highly effective and fare-free.



Humboldt Transit Authority Redwood Transit System. Source:

TRINITY COUNTY'S WILD & SCENIC FILM FESTIVAL



Press Release

March 4, 6-9 pm at the Trinity Alps Performing Arts Center in Weaverville, California.

The Wild & Scenic Film Festival On Tour is coming to Weaverville! Join Trinity County RCD, Trinity River Restoration Program, and Ascend Wilderness Experience for a night of inspirational and powerful films all about environment science, advocacy, and adventure. Donations collected at the event will help support youth programs in Trinity County including Ascend Wilderness Experience's youth backpacking trips, Weaverville Summer Day Camp, and the Bar 717 Sixth Grade Environmental Camp.

This event is sponsored by the Northcoast Environmental Center and will include prizes and beverages for purchase.

Humboldt's Dirtiest Power Plant has been Breaking the Rules for Years

Wendy Ring, Guest Author

Have you ever had a medical test which found an abnormality other than what the doctor was looking for, and that required another test which determined the first abnormality was OK but turned up another unexpected finding, leading to another test? Doctors call those unexpected and ultimately unimportant abnormalities "incidental findings", and the frequency with which they occur is why we are careful to only order tests which might change our treatment. But every now and then, one of these unexpected results and the chain of investigations it incites do turn out to be important. I recently had an experience like this, but the investigation wasn't medical and its conclusion has health implications for our entire community.

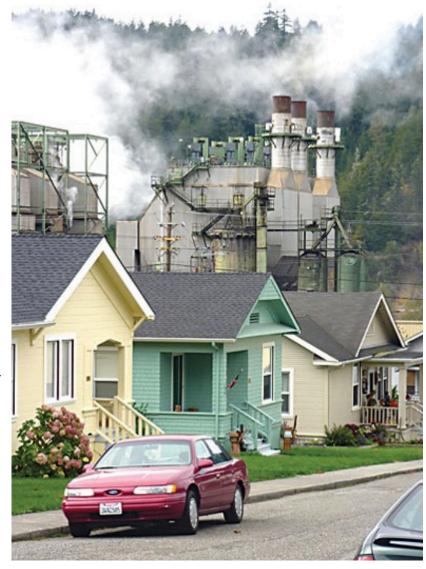
I discovered that Humboldt County's dirtiest power plant has been breaking pollution laws for years and so has the regulator who is supposed to catch them. I'm talking about the biomass plant in Scotia, which emits a host of toxic, endocrine disrupting, and carcinogenic chemicals along with fine particulates which transport these toxins from the lungs into the bloodstream and ultimately to our vital organs. I'm also talking about the North Coast Unified Air Quality Management District (NCUAQMD aka "the air district") the agency charged with enforcing state and federal pollution laws. And I'm talking about Redwood Community Energy Authority (RCEA) which aided and abetted by supporting the biomass plant with ratepayer dollars while assuring the community it was clean energy conforming to state and federal standards.

I stumbled upon all this while trying to answer a question, but first I need to explain why I was asking. For full disclosure, I'm hardly impartial about biomass. I've been trying to get RCEA to stop buying biomass energy for years. With only 7 years left to cut Humboldt's greenhouse emissions in half, we need big fast greenhouse gas reductions. Hastening

the demise of the biomass plant by depriving it of our energy dollars is realistically one of the only ways we can do that. Closing the plant would cut annual emissions by 300,000 metric tons while redirecting mill waste to uses like compost for application on working lands and green hydrogen production might avoid or sequester 100,000 tons more. None of that addresses our fossil fuel addiction but with time running out and climate impacts accelerating, we must do what we can.

In addition to its impact on climate, biomass takes a toll on our health. EPA modeling estimates that Humboldt Sawmill Company's biomass plant costs us \$4-6 million annually in heart attacks, asthma attacks, cancer, hospitalizations and premature deaths. When the EPA came out with new emission limits for biomass plants, I wondered if this could be the key to shutting our aging local plant down. It turns out it's not. But the "incidental findings" from reading the EPA regulations and reviewing the reports the plant submits for compliance led me to an entirely different conclusion. The plant hasn't met federal standards for years and the body charged with enforcing these rules has been letting them get away with it. I thought, "surely this can't be true", and kept looking for records to prove myself wrong, but instead found

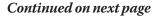
the situation was even worse. State laws were broken as well, and not by the power plant, but by the agency supposed to regulate them. I uncovered more than I can write about without boring you to death with

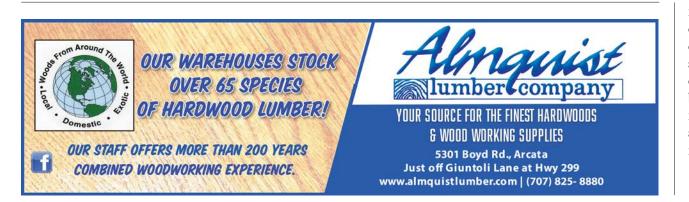


Homes in Scotia, CA with a back drop of the Humboldt Redwood Company, LLC power production plant. Photo credit: Ryan Burns

nerdy details, but here are the most important things.

Fine particulates are the most dangerous pollutant coming from the biomass plant. These emissions are regulated under the federal Clean Air Act but the EPA delegates their enforcement to regional air quality management districts, like NCUAQMD. To prove compliance, power plants must measure the actual concentration of particulates in a sample from their smokestack every 1-3 years and operate continuous opacity monitors. Since all of a community's protection between smokestack tests relies on these opacity monitors, federal rules require quarterly quality assurance and an annual performance tests which must be reported to the air district.





Humboldt's Dirtiest Power Plant has been Breaking the Rules for Years

Continued from prior page

Over the last 6 years no annual performance tests of opacity monitors were done, no quarterly testing was reported, and no action was taken by the air district. During most of those years, the smokestack tests at least met EPA standards, up until September 2022. That test sample showed high levels of particulates but the air district wasn't notified for 2 months. With untested opacity monitors as an inadequate backstop and the last stack test done 2 years prior, the plant may have exceeded federal pollution limits for as long as 2 years.

The biomass plant emits another class of pollutants called air toxics. These include chemicals like benzene, dioxin, and formaldehyde which cause cancer, developmental abnormalities, and other acute and chronic health consequences. California's Air Toxics Hot Spot Act directs air districts to follow certain procedures to protect communities. NCUAQMD last took a halfhearted stab at enforcing this law over 20 years ago and then pulled a Rip Van Winkle. While the

law required risk to the community from the biomass plant's toxic emissions to be re-evaluated every 4 years, 22 years went by and nothing was done.

During that time, the plant's toxic emissions increased, nearly 40 additional biomass pollutants were added to the state's air toxics list, cancer potency factors were increased and health risk assessment procedures updated to account for childhood exposures, and the biomass plant's priority score, used to measure the urgency of evaluating community health risk, rose from 79 to 5599. Any one of the above events should have triggered a re evaluation, and the annual air toxic reports the state requires of air districts could have served as a reminder, but no reports were ever written and no new assessment was ever done. If a re-assessment had revealed a high risk, the community would have been informed and the plant required to reduce its toxic emissions, but without quadrennial reviews, these opportunities were lost.

After getting reinforcements from the California Air Resources Board to join my pressure campaign, we were able to get NCUAQMD to agree to start fully

enforcing state and federal laws at the biomass plant. That doesn't hit rewind and suck years of pollution back into their smokestacks, and even when the rules are followed they still allow biomass plants to pollute as much as coal. I can't tell you what this pollution has cost our community's health. The \$4-6 million a year I quoted earlier is based on particulate emissions when the plant follows the law, and doesn't account for air toxics at all. Did these years of broken laws cause your grandfather's heart attack or your best friend's cancer? We'll never know.

What I can tell you is that anything that incurs millions of dollars in annual health costs, creates a toxic hot spot and requires continuous policing by the air district, isn't clean energy. In 2019 RCEA recognized this by committing to plan for a long-term transition away from biomass combustion and provide 100% clean and renewable energy by 2025. Then they broke these promises by extending the biomass contract to 2031.

Incinerating mill waste is a dirty archaic technology that pollutes the air and destroys valuable feedstock for real climate solutions. It needs to end and the violations I've described allow RCEA to get out of their contract early, but they won't do it without strong community pressure. If you want real clean energy, contact the city council member or supervisor who represents you on RCEA's board and ask them to dump biomass now.

THE ICONIC HUMBOLDT HONEY POSTER CELEBRATES 40 YEARS

Ingrid Hart

It's been 40 years since the poster's first publishing in 1983. Since that time, producer and HSU alumni Ingrid Hart has never earned a penny from the poster.

Back in 1983, the poster "Are You A Humboldt Honey?" was created as equal parts parody and love letter to the ideals of a utopian woman's message of peace, happiness and, above all, love. The woman in the poster wears a No Nukes t-shirt, a Question Authority button, and Bobby McGee's dirty red bandana. In her right hand she's holding a joint filled with Humboldt's finest weed – cannabis sativa. What's not to love about this honey? Apparently quite a bit.

On April 17, 1983, Humboldt's daily newspaper, the Times-Standard, put the poster on the front page above the fold, helping the poster's press run of 1,000 sell out in two months. "When the story ran the nasty grams started and I received lots of hate mail in the Letters to the Editor section of the Times-Standard," said Hart. I had to disconnect my telephone because people were calling and leaving awful messages."

The poster revealed a divide in the Humboldt County community, separating the lumber and fishing industry from the youthful alternative lifestyle of the Arcata area, a rift that 40 years later remains to this day.

"To be fair," said Hart, there were many people who loved the Humboldt Honey. There were many letters to the editor that defended her. My favorite is a letter written by Eureka resident Michael R. Langdon titled 'The woman is a rare flower' and ends with the sentiment, "I think I'm in love."

It's been 40 years since Hart has published the poster. Since that time, she's never earned a penny from this entrepreneurial effort. Nor has she ever marketed or merchandised the Humboldt Honey until now. "I've never sold her out," said Hart. "This commemorative printing of the poster is a gift I'm returning to anyone who's been lucky enough to experience Humboldt County and embraces the Humboldt Honey's message of peace, happiness and above all, love."

In keeping with the Humboldt Honey's integrity, Hart is donating 25 percent of the net profit to the North Coast Environmental Center in Arcata. The poster cost is \$25 and is available at **www.thehumboldthoney.com**

ARE YOU A HUMBOLDT HONEY?

Openion Authority

No Nokes T-citize

Presse day with Tracial symbol
of the Yill and yang

Rediling flower

Interpretate the same of the general state of the Yill and yang

Rediling flower

Interpretate the same of the general state of the Yill and yang

Rediling flower

Interpretate the same of the general state of the Yill and yang

Rediling flower

Interpretate the same of the general state of the Yill and yang

Rediling flower

Interpretate the same of the general state of the same of the general state of the year of the general state of the year of the general state of the year of year of the year of year year year of year

Smith River Alliance Keeps Del Norte Clean

Smith River Alliance

Trash is a serious problem in our waterways and ocean, which harms wildlife through contamination and ingestion. Regardless of where you live, you have probably seen trash in your community. Although this is a common everyday occurrence, it is a concerning issue that we need to address as a community.

The Nature Conservancy estimates that 11 million tons of trash enter our oceans each year. Much of this trash enters the ocean through our beaches, rivers and waterways, which can be harmful to animals and humans. This kind of trash isn't what most people expect it to be; the majority of trash found in our waterways consists of household items that we use every day.

Items such as plastics break down in the sun, contaminating water by becoming microplastics and being consumed by fish. Used styrofoam take-out containers float in the ocean before being picked and eaten by birds. Left-behind fishing line and lures entrap seals and wildlife, creating a life-threatening situation. There are many ways we can help relieve this problem from reusing and recycling, but this does not address trash that has already found its way into our waterways.

In 2022, the Smith River Alliance ramped up its efforts in protecting and conserving the Smith River watershed through coastal and river cleanups throughout the entire county of Del Norte. Funded by the WHALE TAILS Grant Program, with the help of volunteers, have collected more than seven tons of trash and debris along the California Coast and Smith River. Much of this trash was found either alongside the Smith River, Elk Creek Wildlife Area, or the Pacific



Volunteers removed close to 3.25 tons of trash and debris on California Coastal Cleanup Day in Del Norte County on Saturday, September 7, 2022. Smith River Alliance and Tolowa Dee-Ni' Nation coordinated two different cleanup efforts in northern and central Del Norte County to remove trash left behind from illegal dumping and abandoned campsites along the California Coast.



Smith River Alliance and Tolowa Dee-Ni' Nation coordinated two different cleanup efforts in Northern and Central Del Norte County for California Coastal Cleanup Day on Saturday, September 17, 2022. Close to 3.25 tons were removed along the California coast and sensitive wildlife areas, much of which were left behind from illegal dumping and abandoned campsites located in sensitive coastal areas. Burned pieces of scrap metal, large wooden pallets, synthetic flooring and old cloths were some of the many things recovered along the beach and sensitive coastal areas. Photos courtesy of Smith River Alliance.

Ocean, where if left unchecked, it would have eventually found its way into our waterways.

In coordination with California Department of Fish and Wildlife, Del Norte High School, Redwood National and State Parks, Tolowa Dee-Ni' Nation and Tolowa Dune Stewards, more than 180 volunteers collected an estimated 16,525 lbs of trash in 2022 alone.

The majority of trash and debris collected comes from illegal dumping and abandoned illegal campsites in sensitive wildlife areas, such as Elk Creek Wildlife Area. Elk Creek's wetlands and streams provide ideal rearing habitat for salmonids (particularly Southern Oregon/Northern California Coast Coho Salmon), as well as an ideal habitat for other wildlife and plant communities.

"I am amazed by the turnout of volunteers and community members interested in keeping our sensitive coastal areas clean of trash and debris" said Gustavo Vasquez, program associate with the Smith River Alliance. "The work we are doing to steward the Smith River Watershed and removing trash that can be harmful to wildlife wouldn't be possible without volunteers from the community."

Part of this effort by Smith River Alliance includes coordinating the Adopt-A-Beach program in Del Norte County. It is similar to CalTrans' Adopt-A-Highway program, but focuses on California's coast and waterways.

Community members do not need to wait for Smith River Alliance events to help keep their communities and coastline free of trash. Individuals and groups can host their own cleanups using the CleanSwell App that can be downloaded on a smartphone. The app can coordinate events and can also be used to track what is being found. Signing up for your local regional Adopt-A-Beach program provides individuals and groups supplies and training to keep their coastal communities clean, and information about where to properly dispose of what is found.

It's not about the amount of trash or the size of trash that matters, but more about the combined effort of keeping our coastal communities clean. The National Oceanic and Atmospheric Administration is finding that the most common trash being found on our coastlines is broken bottles, plastic toys, food wrappers and cigarette butts. In Del Norte County, we are finding these same common items on our beaches, and in our rivers and waterways.

Do your part to keep our beautiful beaches and waterways clean. If we don't pick up after ourselves and protect our wildlife, who will?

To learn more about Smith River Alliance and to participate in a cleanup in Del Norte County, go to Smithriveralliance.org/volunteer or contact Gustavo Vasquez, Program Associate at gustavo@smithriveralliance.org.

Not in Del Norte County? Learn more about ways to help protect and keep our coastal areas clean by going to the California Coastal Commission's website at **www.coastal.ca.gov**. If you are in Humboldt County you can visit **yournec.org** to find more information about local cleanups.



Elena Bilheimer, EcoNews Journalist

In the months since the first article about Abbey of the Redwoods' Sea Goat Farmstand came out in July, a lot of exciting changes have occurred. Megan Blumenstein, the farm and farmstand's project manager, has had her hands full creating an indoor mercantile extension of the farmstand in addition to extending hours of operations and implementing new workshops and experiences.

Utilizing a grant from the local Coast Central Credit Union, the new indoor space protects the more sensitive products like grains, dry goods, jewelry and local art from rain while also providing refrigeration for dairy and meat products. Another impressive change is the development of a website and online store where customers can order either a small or large pickup produce box with add-ons including eggs, bread, dry beans and honey. This system is different from a CSA as people have the option to order them week by week or in a three month subscription in order to receive a 15 percent



Abbey of the Redwood's Sea Goat Farmstand.

discount. While the produce included in the boxes in the summertime is made up of about 95 percent of Sea Goat Farm's own produce, the fall and winter season also includes produce from the most local sources possible, including but not limited to Wild Rose Farm, Blue Lake Rancheria's Daluviwi' Community Garden, and Green Spiral Farm.

"I want to make it convenient and easy for people to eat locally and buy local products," said Blumenstein. "For some reason I think that's been a motivation of mine for my whole life. So it clearly



Megan Blumenstein, Sea Goat Farm/Farmstand project manager.



Sea Goat Farm's new indoor space protects the more sensitive products like grains, dry goods, jewelry and local art.

feels like my calling." In order to make this goal a reality, Blumenstein hopes that the farmstand will someday be open five to seven days a week like other retailers so that the community has a reliable place to come and get all of their local staples. Right now, the farmstand is open Thursdays and Fridays from ten to four, and Saturdays from nine to two. In April, it will open for summer hours four days a week.

Other new developments for the farm include quarterly farm-to-table dinners that highlight different chefs from Humboldt using the seasonal, local ingredients grown in the area. Blumenstein is also working to create a farm school in the summer, and more workshops year round that include topics such as fruit tree pruning, herbal medicine making, fermentation, canning, seed saving, and plant propagation. Blumenstein also noted that the space is available for people to do workshops that fit within Sea Goat Farm's mission and values.

In order for the community to stay informed on events and updates, Blumenstein has created a regular newsletter that usually includes a recipe that uses seasonal farm produce. The latest recipe is a Spanish onion soup that includes Wildrose Farm potatoes, Green Spiral Farm onions and local beef bones. The recipe is available on the Sea Goat Farm Facebook page with more information at their website www.seagoatfarmstand.com or their Instagram @seagoatfarmstand.

"I know that people really long for that quintessential farmstand experience where people can connect with their farmers and reconnect with some of the old ways," said Blumenstein. "I think a lot of people are longing for that connection to the land, to the farmers, and to their food."

How Unscientific Parking Mandates Have Created and Enforced Car Dominance

Colin Fiske, Coalition for Responsible Transportation Priorities Executive Director

This is the fifth in a series of articles in the EcoNews about the history of how American communities were designed for cars. The first four articles described the origins of traffic laws, the criminalization of walking in the street, the rise of zoning laws that led to segregated, car-dominated communities, and the impacts of the Interstate Highway System.

In 1956, the same year that President Eisenhower signed the law that created the Interstate Highway System, another, less famous but arguably even more influential document was also produced by the nascent federal transportation bureaucracy: the Bureau of Public Roads (later renamed the Federal Highway Administration) published the innocuously titled Parking Guide for Cities. By that time, many cities had already adopted laws requiring new homes and businesses to provide off-street parking spaces. The Bureau's guide, however, was the first systematic attempt to justify these requirements, and its endorsement of the practice was hugely influential. Roughly a decade later, in 1968, an analysis by the Federal Highway Administration showed that the number of parking spaces per capita was increasing dramatically in almost all American cities.

The rapid increase in the number of local parking mandates and the number of actual parking spaces wasn't solely the result of one document, of course. The Parking Guide for Cities reflected attitudes toward parking that were widespread among planners and policy-makers of that era. A 1971 report called "Parking Principles" from the Highway Research Board, part of the prestigious National Academy of Sciences, revealed these attitudes and assumptions clearly. The report treated the increasing amount of driving done by Americans as an unalterable fact and argued that the need for off-street parking was a natural consequence. Interestingly, planners of the time often also viewed off-street parking partly as a replacement for on-street parking that would allow them to increase travel lanes, allow more driving, and reduce collisions associated with parking. Eventually, however, on-street parking became almost as sacrosanct in transportation planning as off-street parking, as any observer of a modern city street can plainly see.

The 1971 Highway Research Board report included recommendations of specific parking mandates for local governments to adopt into their zoning codes: 2 spaces for each single-family home, 3.3 spaces per



thousand square feet of floor area for banks, 0.3 spaces per seat for a church, and so on. This attempt to codify the number of parking spaces that should be required for a given land use was fully institutionalized in 1985 with the publication of the first *Parking Generation Manual* by the Institute of Transportation Engineers. (Readers of this series will recall that the Institute has played a major role in promoting many other policies and plans that prioritized cars over other modes of transportation as well.) The *Manual* contains precise estimates of parking "demand" for every conceivable land use. The latest edition was published in 2019, and it continues to provide the basis for most of the parking mandates adopted into local zoning codes.

UCLA Professor Donald Shoup, widely regarded as the world's foremost expert on parking policy, has dedicated much of his career to debunking these estimates of parking "demand." He has shown that most of the estimates provided in the *Parking Generation Manual* and adopted into local zoning codes are based on a small number of observations that have no scientific or statistical validity. Moreover, according to Shoup's 2005 book *The High Cost of Free Parking*, the observations are almost always done in places with unlimited free parking and no public transit at times of peak demand (e.g., Black Friday at a shopping mall), meaning that they reflect the maximum conceivable requirements.

Following up on Shoup's debunking of the theoretical basis for parking mandates, recent research has confirmed what many observers have long suspected: instead of parking "demand" being a natural consequence of supposedly independent decisions to drive cars everywhere, the availability of abundant, free parking actually causes more people to own cars and to drive. In other words, the last 75 years of parking mandates—based on evidence pulled mostly from thin air—helped create the world that they claimed already existed.

Now, we all live in a world dominated by parking. A recent study estimated that 14 percent of land in incorporated parts of Los Angeles County—about 200 square miles—is devoted to parking. And despite its

car-centric reputation, Los Angeles is not an outlier. According to research from the Research Institute for Housing America, Jackson, Wyoming has 27 times more parking spaces than homes, and in Seattle there are more than twice as many parking spaces per acre as there are people. Local governments barely have to require parking anymore: it's become so expected that the banks that finance development often insist on including it in their projects.

Devoting vast areas of land to storage for vehicles not only subsidizes and encourages more driving, it also makes other modes of transportation less appealing. It's difficult to keep people's homes close enough to where they work, shop, or go to school for them to walk or bike, for example, when every building is surrounded by a sea of parking many times the size of the building itself. And it's expensive: parking drives up the cost of construction, which—as Professor Shoup likes to point out—is passed onto the rest of us in the form of higher prices for everything else, from housing to groceries. A single garage parking space can add almost 20 percent to an apartment's rent—whether the renter owns a car or not.

After many years of efforts by advocates, some progress is now being made toward eliminating unscientific parking mandates. The Parking Reform Network maintains an ever-growing list of cities nationwide that have eliminated their mandates, and a new law in California will prohibit parking requirements from being enforced near high-quality public transit. But major obstacles remain. Recently, an outcry from business owners kept the City of Eureka from turning several city-owned parking lots into affordable housing. Clearly a lot more will need to be done to remake our communities in ways that prioritize people over automobiles.

Recommended Reading:

- Manville, Michael. 2021. How Parking Destroys Cities. The Atlantic. www.theatlantic.com/ ideas/archive/2021/05/parking-drives-housingprices/618910/.
- Shoup, Donald. 2005. *The High Cost of Free Parking*. Routledge.
- Oliver, Ned. 2022. Secret parking minimums are driving up development costs. Axios. www.axios. com/local/richmond/2022/10/11/secret-parkingminimums-developments.
- Gabbe, CJ and Greg Pierce. 2017. The Hidden Cost of Bundled Parking. Access Magazine. www. accessmagazine.org/spring-2017/the-hidden-costof-bundled-parking/.



Get on Board for the Climate

Saving Energy Saves Us

Martha Walden

Thanks to the ample rebates and tax credits provided by the Inflation Reduction Act, Humboldt appliance dealers should stock up on heat pumps, hybrid water heaters, electric stoves (including induction stoves), and heat pump clothes dryers. The time to buy these items starts as soon as California implements the IRA rebates program in 2023 – I'm guessing pretty early in the year – and continues through 2031. If you don't know what I'm talking about, check rewiringamerica.

org online for information about eligibility for energy efficiency improvements.

I plan to buy a hot water heat pump, which is also known as a hybrid water heater. The IRA rebate is \$1750 - about enough to cover the entire cost of the thing itself though not the installation. I've been thinking a lot about what to do with our old one once we have the new one installed. It goes against the grain to throw away something that still functions even though it is an energy hog. I could

probably donate it to someone who needs a water heater. Cheap or free obsolete equipment has always played a big role in my life, but passing along an energy hog poses an environmental and financial dilemma. The hybrid heat pumps use 70 percent less energy than conventional ones and can save up to \$500 a year. At that rate it wouldn't take long for the new owner to pay more money for using the free one than they would for buying and using an energy efficient one if they take advantage of rebates.

Recycling is certainly the easiest option for old equipment. Water heaters are mostly made of steel with brass and copper attachments, all of which are quite recyclable. Most new appliances contain 25 percent to 90 percent recycled steel. Steel is one of the most valuable recycled materials on the planet because it can be endlessly recycled and turned into anything.

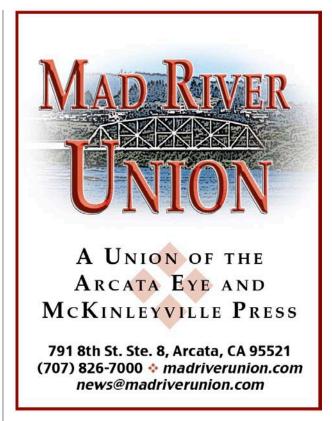
Humboldt Waste Management Authority (HWMA) used to recycle appliances, but its recycling center has shut down in order to make room for organic waste processing. Eel River Recology charges \$12 for dropoff of any appliance that doesn't contain refrigerants, and North Coast Appliances in McKinleyville will take your appliance to a recycling center for you for \$25 if it doesn't contain refrigerants. Humboldt Sanitation in McKinleyville will charge you \$20 to crush most appliances with an excavator, extract the unrecyclable



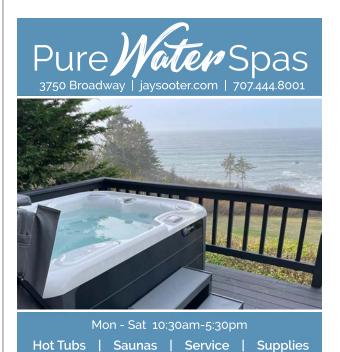
parts and bale the metal.

I don't know how thorough the recycling process is, or how much of the materials are still wasted. Recycling is not yet the sophisticated industry it deserves to be – at least around here – because we're still running on capitalism's delusional ability to manufacture stuff cheaply. Of course, this is accomplished by offloading the true costs onto taxpayers and future generations.

Repurposing saves more energy than recycling. So instead of recycling that old water heater, turn it into a passive solar water pre-heater. It's called a batch heater. You need a sunny outdoor location and some basic carpentry and plumbing skills to route water through the passive solar collector to your new hybrid heat pump. You just need some actual instructions instead of a summary that makes it sound easier than it actually is. But think of all the energy you would save.







Serving Humboldt County for over 35 years.



Michael D. Pulliam



ITALY'S ROAD REVOLUTION

A road construction company in Italy has created a type of asphalt mixture that solves numerous problems at once: longer lifespan for asphalt roads, simpler and cheaper road maintenance, reduced noise from vehicle tires, recoverable paving materials, and a non-polluting use for hard plastics.

Mariella Giannattasio, CEO of Italy-based road construction company Iterchimica, was concerned about the impacts of her region's waste-to-energy plant incinerating large amounts of non-recyclable plastic. So Giannattasio and her collaborators conducted a six-year research and development project which culminated in a new product: Gipave, an asphalt additive made with non-recyclable plastics. "... We found a solution that made all that plastic useful again."

Asphalt is a compound material consisting of several vital ingredients. The balance of ingredients in this mixture can make road paving more or less

weather resistant, durable, environmentally friendly, and expensive. When the mix includes Gipave, an ingredient about the size of a coffee bean with a small plastic core, asphalt roads can have roughly double their conventional lifespan. This significantly reduces maintenance and management costs. Biccoca University in Milan found that manufacturing Gipave resulted in a 70% decrease of greenhouse gas emissions compared to making conventional asphalt. For every kilometer of road paving laid, around 20 tons of non-recyclable plastics are diverted from landfills and incinerators. Even more, Gipave roads are 100% recyclable — each element in a Gipave road can be reclaimed and reused elsewhere. The social impacts are obvious as well: a more durable road means fewer potholes and pothole-related vehicle or bicycle incidents, as well as fewer road closures for repaving.

"Sustainability and the challenge of protecting the environment have always been part of the culture of our company," said Giannattasio, recalling the history of the family business. "Our philosophy is to create an ever greener and more high-tech ground surfacing."

As of October 2022, Gipave has been tested and applied in eleven locations throughout Europe including roads, bridges, and airport runways. The company currently plans to pave 466 miles (750km) of bicycle paths in Milan, and is working on technology to reuse rubber from old tires to help make Gipave roads even quieter.

Source: news48.it



electricity-generating window glass, paving the way for solar windows that could help power our homes and devices

The Happy Broadcast

WORLDWIDE MANGROVE LOSS NEARS A STOP

According to the 2022 State of the World's Mangroves report, mangrove forests around the world have high levels of protection and thriving conditions, slowing the loss of these climate-crucial forests to almost negligible levels.

Mangrove forests are unique coastal ecosystems consisting of trees and shrubs growing in the soil between high and low tide lines (the intertidal zone). Many mangrove forests can be recognized by their 'prop roots,' dense tangles of long roots that make the trees look like they're on stilts in the water. These roots are an excellent nursery habitat for numerous species of wildlife, a stabilizing force against coastal erosion, a highly efficient carbon sink, and a natural wave breaker capable of absorbing 70-90% of the kinetic energy of a tsunami.

For a few decades, worldwide mangrove forests were being lost and depleted to a nearly irreversible extent. But the average rate of forest loss in the period between 2010-2022 decreased by 600% (compared with the previous 14 years), showing that attitudes and conservation trends are almost fully protecting these ecosystems. As of the 2022 State of the World's Mangroves report, there are only 25 square miles (66 km2) lost per year — a rate of 0.04%. The Global Mangrove Watch satellite maps calculate that about 57,000 square miles (147,000 km2) of Earth's surface are covered in mangrove forests. And roughly 42% of all mangrove forests are under some type of protection. These benefits come from many large-scale mangrove reforestation and conservation efforts as well as climate change policies focused on aquatic ecosystem health.

The State of the World's Mangroves report recommends a three-step plan for countries and partners called 'Halt, Restore, Protect': halt mangrove loss entirely, restore half of the deforestation since 1996, and double the total forest area currently under protection.

As of 2022, the largest restoration and conservation programs are happening in Senegal with nearly 80 million trees planted, Indonesia with their policy to reforest more than 2,300 square miles (6,000 km2) by 2024, and China having successfully planted 4 million trees.

Sources: Good News Network, NOAA.gov





FIND THE SOLUTIONS!



Created on thewordsearch.com

- Protect
- Cultivate
- Reduce
- Restore
- Culture
- Equity

- Care
- Landback
- Community
- Youth
- Justice
- Stewardship



Elena Bilheimer, EcoNews Journalist

Environmental Justice

Put simply, environmental justice strives to provide everyone, regardless of identity, with equitable access to a clean and safe environment and resources. In response to environmental racism and unequal distribution of environmental harm experienced by communities of color, the Environmental Justice movement began. Although there have been examples of people fighting for environmental justice before 1982, the movement itself gained momentum after a non-violent protest was organized in response to the dumping of thousands of tons of polychlorinated biphenyl (PCB) contaminated soil near a Black community in Warren County, North Carolina. This incident spurred more research into the disproportionate environmental harms and health hazards experienced by minority and low-income communities in the United States.

Around this same time, scholar Dr. Robert Bullard, sometimes called the "Father of Environmental Justice", enlisted his students to conduct a first-of-its-kind study researching the location of municipal waste disposal facilities in Houston to aid his wife, Linda McKeever Bullard, in filing a class-action lawsuit. Following these events and other studies that made it undeniably clear that unequal environmental risks were borne by marginalized communities, people at the first multinational People of Color Environmental Leadership Summit in 1991 developed the "Principles of Environmental Justice" which include 17 precepts that are still used to guide many environmental groups today.

Shortly after, environmental justice was officially defined by the U.S. Environmental Protection Agency (EPA), and environmental justice offices were established in the EPA, DOJ, and other federal agencies. As described by the EPA, the goal of environmental justice is to provide everyone with "The same degree of protection from environmental and health hazards, and "Equal access to the decision-making process to have a healthy environment in which to live, learn, and work."

However, as stated on the EJ net website, "The environmental justice movement isn't seeking to simply redistribute environmental harms, but to abolish them."

Help us continue to educate advocate, and bring you



Please join or renew your annual membership to the Northcoast Environmental Center.

<u>Name</u>		
Address		
City	State	
Phone	Zip	
E-mail		
Annual Membership Amount		
☐ \$30 - Trillium	■ \$50 - Pacific Fisher	
🗖 \$100 - Coho Salmon	□ \$500 - Orca	
☐ \$250 - Spotted Owl	□ \$1000 - Redwood	
☐ Other		
Payment Options		
☐ Check enclosed (Payable to NEC)		
☐ Charge my Debit or Credit Card		
Card Number Exp. Date	CSV	
Exp. Date		
 Memberships include a monthly subscription to EcoNews □ Do not mail me a print copy. I will read online at www.yournec.org/econews □ Please mail me a print copy. 		
I would like to become a sustaining member! I pledge \$ per month. ☐ I will donate online at www.yournec.org/donations ☐ Please bill my credit card monthly (fill form above) ☐ I will mail a check monthly		
This Membership is: (check only if applicable) ☐ in memory of ☐ in honor of ☐ a gift Name		
Address		
City, State, Zip		
Cut out and mail to: NEC, PO Box 4259, Arcata, CA 95518		
In recognition of your ge name as a donor in l	nerosity, we will list you EcoNews once a year.	

☐ I prefer my donation remain anonymous.

The Northcoast Environmental Center is a 501(c)(3), non-profit. All donations are tax-deductible. EIN 23-7122386.

Northcoast Environmental Center

415 I Street, Arcata, CA 95521 MAILTO: PO Box 4259, Arcata, CA 95518 NON-PROFIT ORG. U.S. POSTAGE PAID Arcata, CA PERMIT NO. 3



EcoNews Report is a half-hour enviro news/chat program

10:00 AM KHUM 104.3FM

Links for later listening will be posted to www.yournec.org/econews-report

