

Bay Currents talks since the series began

Sept. 9, 2013: The Delta's Late-Summer Splendor

East of the coastal hills, California's great Sacramento and San Joaquin Rivers merge in a watery world, most of whose glory has succumbed to levee building and agriculture. But far-flung sites throughout the Delta remain rich in diverse native plants, unique associations, and showy wildflowers. It is a superb September destination: with water abundant, many flowers are in their prime when the lowlands all about are parched and tawny brown.



Dr. Steve Edwards, geologist, paleontologist, and for 30 years director of the Regional Parks Botanic Garden in Tilden Park, takes us on a special **two-hour** visual tour (with refreshments and stretch breaks) of the plant wonders of this expanded inner heart of our great San Francisco Bay estuary. This talk also is helpful background for knotty decisions on the future of the Delta.

Oct. 7, 2013: The Decline and Rebirth of Redwood Creek

Tumbling down Mt. Tamalpais through Muir Woods to the Pacific, Redwood Creek has enchanted generations, from the elite of San Francisco's Bohemian Grove to Zen meditators and more. But the creek and its endangered salmon were loved almost to death.



In this illustrated talk, Berkeley landscape architect John Northmore Roberts delves into the creek's rich and fascinating history and explains the complex and varied ways it is being restored -- including the largest project yet, due for completion at year's end. Roberts has designed projects in many of California's most beloved and spectacular natural areas, including El Polin Spring in the Presidio and the Monterey Peninsula's spectacular 17 Mile Drive.



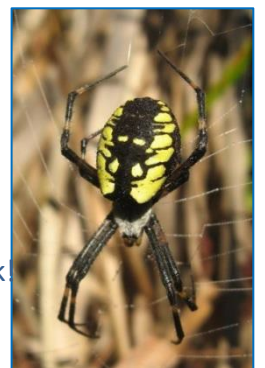
Nov. 4, 2013: Tales from a Recovered Arachnophobe

What if YOU could hear with your ankles, shed your skin to get smaller, squeeze seven kinds of silk from millions of tiny built-in spigots, or release a balloon from your hind end and sail 30,000 feet above the earth? What if you ate your mate after sex -- or conversely evolved amazing strategies to avoid becoming nuptial fodder? What if you had to carry a hundred or so of your offspring around on your back?

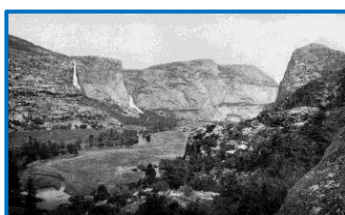
Whether you love spiders or loathe them, join Gwen Heistad, resident biologist at Audubon Canyon Ranch's Martin Griffin Preserve, for this fascinating post-Halloween talk.



Gwen's love of marine biology, especially wee things that live in water, propelled her out of the business world and back to graduate school (she has an MA in Environmental Science & Management / Applied Ecology from UC Santa Barbara). There she found herself involved with invertebrates, including a severe crush on spiders -- the subject of most of her childhood nightmares.

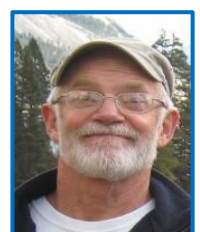


Dec. 9, 2013: 100 Years Later-- Can Hetch Hetchy Valley Come Back?



On Dec. 9, 1913, President Woodrow Wilson signed the act that allowed the City of San Francisco to clear cut, dam, and drown Hetch Hetchy Valley in Yosemite National Park.

Exactly a century later, join noted conservationists Ken Brower and Malcolm Margolin for a conversation on the battle that broke John Muir's heart, the engineering marvels of the dam, and how the glacial valley could flourish again.



Ken, oldest son of David Brower, is the author of books including *The Starship and the Canoe*, *The Wildness Within*, and, most recently, *Hetch Hetchy: Undoing a Great California Mistake*. Margolin's nonprofit Heyday Books has published hundreds of books on California ecology, cultures, and art. He also has authored many books, including *The Ohlone Way*.



Jan. 6, 2014: Redwoods: Hope in a Changing Climate

Our iconic Coast redwoods, the world’s tallest trees, evolved in the age of dinosaurs, so they have seen many change. Join Dr. Emily Burns, science director for the Save the Redwoods League, for a slide talk on these giants’ long history, how modern climate change is affecting their foggy coastal homes, and the surprising ways that trees a thousand years old or more are responding to current changes. Plus, learn how you can collect important scientific data while just talking a walk in a redwood forest!



Dr. Burns studied redwood-forest communities while earning her PhD from UC Berkeley and doing postdoctoral research at UC Santa Cruz. She heads the Redwoods and Climate Change Initiative for the Save the Redwoods League, which has protected these ancient forests for almost a century.

Feb. 3, 2014: Mud Matters



Lowly mud is vital to San Francisco Bay. It builds marshes and mudflats, and profoundly affects water quality, plants, and animals. But mud seems to be growing scarcer at the same time that changing climate and sea level threaten both natural wetlands and our manmade communities.



Jeremy Lowe, Senior Coastal Geomorphologist at ESA in San Francisco, will talk about both the historic and current role of mud in the bay, what controls its availability — and how, in the face of sea-level rise, undervalued resources like mud and wastewater can be critical in creating new, more sustainable shorelines. Lowe’s projects on tidal-wetland restoration and sea-level-rise adaptation have taken him from Venice, Italy, to Venice, California. His current work focuses ecosystem-based adaptation to climate change in San Francisco Bay.

Mar. 3, 2014: New Safe Havens for California Sea Life

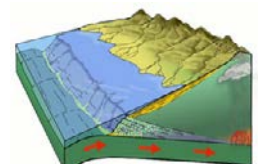
California’s new Marine Protected Areas protect sea life within their boundaries, with the aim of enriching much larger areas of ocean. Working with the state, Reef Check California trains scuba divers as citizen scientists, monitoring these exhilarating new protected places and understanding how they are working. This beautifully illustrated talk will discuss encouraging signs of recovery in Central California’s rich marine life — and how volunteer divers can help!



Dr. Jan Freiwald studied marine ecology and evolutionary biology at UC Santa Cruz, and has researched the ecology of California’s rocky reefs and kelp forests for a decade. He heads Reef Check California, which trains volunteer scuba divers to monitor these rich communities.

April 7, 2014: Living in the Plate Boundary

California’s striking and powerful landscapes are constantly being lifted and dropped, reshaped and reorganized by the relentless scraping of the Pacific Plate against our edge of North America. Scenes in our geologic drama range from how and why continents “drift” to how oil got under California and how melting Ice Age glaciers led to today’s San Francisco Bay.



Understand this with fresh clarity at an informal evening with marine geologist **Dr. Tanya Atwater**, who pioneered our modern understanding of the formation of the San Andreas Fault. Professor emerita at UC Santa Barbara and a member of the National Academy of Sciences, Dr. Atwater also is an award-winning pioneer in using animation to help everyone understand complex geologic processes.

May 5, 2014: Hunters in Our Back Yards

Mountain lions, coyotes, foxes, rattlesnakes, raptors, bats ... these and other species live with us where cities meet wild lands. With background on 15,000 years of Native American cultural history, biologist and naturalist **Dr. James Hale** will introduce the diverse and abundant wildlife that interact with us now. He’ll bring us his latest adventures with research, wild-animal rescue, and consulting with property owners.



In more than 40 years of experience, “Doc” Hale has tramped the wildlands of the East Bay, studied and defended our local wildlife, and become expert in how Native Americans used the land and its resources. In addition to consulting work, he leads interpretive walks, gives talks, rescues injured wildlife, and serves on environment-related Contra Costa County committees.

Sept. 9, 2014: The Coming Revolution in Urban Water

Turn on your faucet and clean water pours out. Pull the drain plug and dirty water disappears. Professor David Sedlak, author of the new book "*Water 4.0*," outlines the three revolutions that brought us this undervalued wonder, and the re-invention needed to give the Bay Area -- and civilization -- safe, drought-proof water systems friendly to nature and vibrant urban life.



Dynamic and engaging, Professor Sedlak directs UC Berkeley's Institute for Environmental Science and Engineering, co-directs the Berkeley Water Center, and is deputy director of the National Science Foundation's research center for Reinventing the Nation's Urban Water Infrastructure (ReNUWIt).



Oct. 14, 2014: Extreme Adaptation

This year has been one of California's driest on record, and carbon dioxide levels in Earth's atmosphere reached levels not seen for almost a million years. More climate changes lie ahead -- but the Bay Area, with its history of environmental leadership, is not standing idly by.

Kathleen M. Wong and Ariel Rubissow Okamoto will inspire with examples of how scientists, governments, local communities, and ordinary people are striving to ensure that San Francisco Bay and its watershed remain healthy for both people and wildlife -- from research to restoration to resolving conflicts.



Wong and Okamoto co-authored *Natural History of San Francisco Bay*. Wong, an award-winning environmental reporter, has written for *Nature*, *New Scientist*, and *US News and World Report* as well as *Bay Nature* and other local publications. Okamoto, managing editor of *ESTUARY* magazine, contributes frequently to *Bay Nature* and has written several local guidebooks as well as State of the Estuary and other reports on environmental science.

Nov. 11, 2014: Thirty Ways to Be a Shorebird

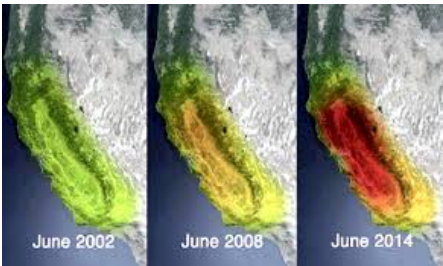
The Bay hosts an ever-changing array of 30 different species of shorebirds, living by the seasons and tides, moving and feeding in patterns that reflect their physical attributes. Meet these fascinating, varied, and beautiful neighbors -- some stay-at-home, some from half a world away -- in a talk by Bay Area birding teacher and leader Rusty Scalf. Rusty also will discuss how the Bay's shorebird populations are likely to have changed through the past, how they seem to be changing now, and what the future may hold.



Rusty Scalf has been a bird watcher since childhood and a Bay Area resident for 25+ years. Besides sharing his knowledge of bird behavior and identification through Audubon classes and trips, he is a volunteer leader of breeding-bird surveys and has discovered new and changing populations -- from swirling assemblies of migrating swifts in Marin to Western bluebirds pioneering in Berkeley and Albany. In his day job, he is a Geographic Information Systems (GIS) and database specialist.

Jan. 13, 2015: Groundwater: California's Real Buried Gold

Underground, California stores far more water than falls as rain or snow, or can be held in reservoirs. But this hidden treasure, vital for wildlife and nature as well as human use, has been treated first-come, winner-take-all.



Environmental attorney **Tina Cannon Leahy** is Principal Consultant to the California Assembly Committee on Water, Parks, and Wildlife, and the Assembly's primary water law and policy expert. She outlines the value and complexity of groundwater, along with opportunities, in the new Sustainable Groundwater Management Act and Proposition 1, that may help us use it wisely.



Feb. 10, 2015: Greening Wine

For California’s almost 4000 wineries and 6000 wine-grape growers, sustainability involves low water use, healthy streams, diverse wildlife and native plants, soil rich in nutrients and free of toxics, fair treatment of workers, vibrant local communities, and more.



Hear how some growers and vintners are embracing sustainability – from controlling weeds with sheep to restoring miles of wetlands and stream banks. Napa-area food writer **Janet Fletcher**, author of *Down to Earth: A Seasonal Tour of Sustainable Winegrowing in California*, is joined by **Allison Jordan**, executive director of the California Sustainable Winegrowing Alliance.



Mar. 10, 2015: What Your Bird Guide Tells You about Evolution



What ever happened to clapper rails, brown towhees, and marsh hawks? Modern genetic testing is not only making you learn new names for familiar creatures. It’s unveiling unexpected family trees, and revealing fascinating adaptations on the long evolutionary road from dinosaurs to today’s feathered wonders. Bring a bird guide! (We’ll have loaners, too).



Retired East Bay Regional Park District Naturalist **Alan Kaplan** is renowned for the wide-ranging curiosity and enthusiasm he brings to all things natural, including human history. His Golden Gate Audubon bird walks draw crowds. Don’t miss this talk!

Apr. 14, 2015: How the East Bay Got its Forest

When European settlers arrived, the Bay Area was mostly open grassland. Builders of cities, industries, and military reserves turned much of this into an urban forest thick with non-native eucalyptus and Monterey pine. In the East Bay, this transformation was mostly



the work of one remarkable man! What became of his dream, and how do we deal with his legacy today, amid dense development, drought, changing climate, and wildfire risks?



Discuss the East Bay forest’s colorful past and uncertain future with **Jerry Kent**, who retired as Assistant General Manager after a 41-year career with the East Bay Regional Park District. A history lover, he has collected maps and photographs and researched many aspects of East Bay nature and history.

Sept. 8, 2015: New Bay Pollutants – Meeting the Challenge

San Francisco Bay is far healthier now than a few decades ago, thanks to the federal Clean Water Act and impressive state and local efforts. But early signs point to potential new sources of pollution: Stain resistant or flame retardant chemicals that leach from consumer goods, medicines and pesticides flowing from urban centers, and toxic algae fed by excess nutrients.



Dr. Rebecca Sutton, senior scientist with the San Francisco Estuary Institute, studies toxic chemicals in people, products, and the environment. She outlines the challenges and new approaches needed to protect the health of the Bay, highlighting the Bay area as a place of true leadership in seeking proactive, collaborative solutions for new pollution problems *before* they can cause harm.



Oct. 13, 2015: A Shark’s-Eye View of the Bay

The Bay’s murky waters are home to 11 varied species of shark. Broadnosed sevengill sharks cruise boldly; ray-like shov- elnose guitarfish lurk in ambush; soupfin sharks depend on warm shallows as a safe nursery. In a talk with vivid video, ex- plore the lives of these fascinating and ancient creatures and learn how we can and should protect them.





Marine biologist, ocean advocate, dive master, and filmmaker David McGuire is the founder of Shark Stewards and undersea-media provider Sea Stewards. With the California Academy of Sciences, he has researched the population and movements of sharks in the Bay, and how fishing impacts them. His varied efforts for sharks range from fighting shark-finning to seeking a Marine Protected Area in the Bay and establishing the citizen-science Shark Watch.

Nov. 10, 2015: Zombees – and Other Pollinator Tales

The insect kingdom is full of strange tales – few weirder than how a tiny North American fly has learned to parasitize honey bees, injecting eggs into the abdomens of unsuspecting worker bees, which then show zombie-like suicidal behavior. Hear the fascinating



story and learn more about native pollinators and threats both to native and European honey bees.

Almost by chance, Dr. John Hafernik discovered a North American fly controlling the behavior of bees, right on the San Francisco State University campus, where he has been professor of biology since 1977. A specialist in evolution, ecology, and conservation biology of insects, he is past president of the California Academy of Sciences, and has been part of efforts to help rare local insects including the Mission Blue butterfly and San Francisco forktail damselfly. The bee discovery led him to found the nationwide citizen-science “Zombie Watch” project.



Chris Quock

Feb. 9, 2016: Mysterious Sounds of the "Silent Sea"

The ocean --- and our Bay – are filled with a fantastic cacophony of sound. Most sea animals -- from whales and dolphins to lobsters and shrimp — use acoustics to navigate and communicate.



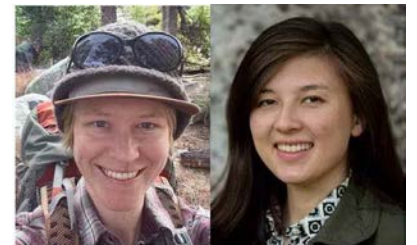
With fascinating recordings, acoustician and naturalist Michael Stocker delves into bio-acoustics beneath the sea, and the effects of manmade sound. Sound engineer for the pioneering 1992 film “Koyaanisqatsi” and designer of soundscapes for projects ranging from the National Holocaust Museum to the Monterey Bay Aquarium, Stocker also founded Marin’s Ocean Conservation Research and is an important voice in limiting noise pollution in the ocean.



Mar. 8, 2016: Engaged Locally and Globally: Young Climate Researchers at UC Berkeley

Ian Bolliger models the Sierra snowpack – and in his spare time works to make tiny houses low-cost, energy-efficient housing. Cecilia Han Springer studies the political and economic factors that affect sustainability in China. Adrienne Marshall, an experienced science educator, works on communicating climate change to California forest landowners. Rebekah Shirley, from Trinidad-Tobago, studies sustainability for islands – currently, how large dams in Borneo may affect biodiversity and indigenous groups.

Join these energetic, engaged UC Berkeley grad students to glimpse the fascinating range of climate-related research that young people are doing in our back yard – as well as their aims for the future.



April 12, 2016: Tricks from the Naturalist’s Tool Kit



How can you become a better observer and naturalist? Join noted naturalist and artist John Muir Laws for a lively evening learning drawing and journaling “tricks” — key tools to help you focus your observations, organize your thoughts, enhance recall of critical details, stimulate creativity, and expand your adventures and discoveries in nature. He will also introduce his new book, *The Laws Guide to Nature Journaling and Drawing*.

Steeped in nature and stewardship from childhood, Laws founded and hosts the free, family-friendly Bay Area Nature Journal Club, teaches nature drawing throughout the Bay Area, and writes the “Naturalists Notebook” column for Bay Nature magazine. His books include the *Laws Guide to the Sierra Nevada*, *Laws Guide to Drawing Birds*, and *Bay Area Pocket Guides*.



Tues., Sept. 13, 2016: Extreme Conservation

The elaborate and imaginative things done to save endangered species in the Bay Area and beyond – fascinating tales from Susan Euing, research biologist at local wildlife refuges for least terns, Lange's metalmark butterflies, and two rare dune wildflowers.



Tues., Oct. 18, 2016: Future Shorelines

Fresh ideas from around the world on how the Bay Area can adapt to rising seas, from Dr. Kristina Hill, UC Berkeley Associate Professor of Landscape Architecture and Urban Design. (*Baykeeper photo, Rob Most and Lighthawk Conservation Flying.*)

**Tues., Nov. 15, 2016:
Porpoises, Dolphins, and Whales of the Bay**

Exciting tales and great photos of the return of porpoises, dolphins, and whales to the Bay Area, with Bill Keener, project leader at Golden Gate Cetacean Research.



Tues., Jan. 10, 2017: Welcome Back Otters

Megan Isadore, head of the River Otter Ecology Project, brings the latest news of these lithe and charismatic carnivores' Bay Area come-back. How are populations and ranges changing? How do otters live and eat through the seasons? Learn about fascinating techniques used to research elusive, secretive mammals that slide into the water and disappear -- as well as the role of citizen science.



Co-sponsored with [Bay Nature Magazine](#) and [California Center for Natural History](#).

Tues., Feb. 14, 2017: Love Letter to Mt. Diablo

Seth Adams, longtime Land Conservation Director for Save Mount Diablo, tells first hand the fascinating story of "Re-assembling the Diablo Wild Lands" -- one of the Bay Area's most significant conservation efforts.



By championing this landmark and its many ecosystems, Save Mount Diablo has expanded protected lands from 6800 acres to a network of over 110,000 acres of open space -- one of the Bay Area's most significant conservation efforts. Breathtaking images will bring to life the mountain's importance and its rich natural and cultural history.



Tues., Mar. 14, 2017: Stopping the Coal and Oil Trains

Citizen efforts to prevent shipment of coal through Bay Area ports and refineries have been part of similar efforts throughout the West, from Canada to Long Beach to the Dakotas. Environmental-justice groups have worked alongside main-line environmental organizations, against climate change and in favor of disadvantaged groups. Under new

conditions, what is the future for these and similar citizen efforts? Andres Soto, Bay Area native and longtime organizer for Communities for a Better Environment, Updates us on the saga of citizen engagement against risky shipping of fossil fuels.



Tues., Apr. 18, 2017: How California Rivers and Lakes "Work"



Dr. Vince Resh of UC Berkeley vividly explains the interplay of chemistry, geology, hydrology, and biology in our water bodies. Why, for example, can many plants and animals live in either lakes or streams but not both?

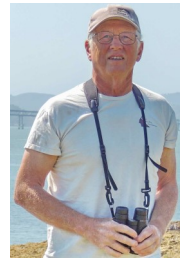
Dr. Resh has taught at UC Berkeley since 1975, in a career that has included restoration of Strawberry Creek on the Berkeley campus,



Tues., Sept. 12, 2017: Ospreys, Hooray!

After at least a century away, ospreys are nesting in the Bay in growing numbers – they even have their own festival and web cam.

Tony Brake, a founding member of the San Francisco Bay Osprey Coalition, brings the tale along with fabulous photos of the graceful but fierce “fish hawks.”



Tues., Oct 10, 2017: Bringing you Bay Nature

David Loeb co-founded Bay Nature magazine and served for 17 years as editor and later publisher. Recently retired, he reflects on the joys and challenges of publishing a local nature magazine and the importance of understanding nature.



Tues., Nov. 14. 2017: Greening the Gray

Our paved-over cities are being slowly converted to green spongy habitats. How do rain gardens, trees, and soils benefit water, wildlife, and people?

Hear about the history and potential from Peter Schultze-Allen, who brought “low impact development” to Emeryville’s legacy of heavy industry and pollution.



Spring 2018 Talks

Jan. 9: Laura Cunningham, *The Bay Area through Time*

Our Bay Area has been home to marine reptiles, and to camels and mastodons. The Bay itself is a newcomer that comes and goes.



Hear and see the fascinating pre-history of our area with Laura Cunningham, artist, paleontologist, biologist, naturalist, and author of *State of Change* (winner of the 2011 California Book Award) and the recent *The Bay Area through Time*.



Feb. 20: Dr. David Ackerly, *Climate, Fire, and the Future of our Forests*

We know the Earth is warming. But we are scrambling to learn how that may affect California’s varied plants and animals, including humans.



Learn about recent findings, including what is known so far of impacts of the recent North Bay fires, from Dr. David Ackerly, UC Berkeley Professor of Integrative Biology. Dr. Ackerly’s work focuses on how climate change is affecting California’s biodiversity. Much of his research is carried out at Pepperwood Preserve near Santa Rosa.



Mar 13: Joe Sullivan, *East Bay Fish Stories*

Did you know that the East Bay is home to North America’s largest freshwater fish? vampire fish that evolved before animals had jaws? fish built to filter and vacuum? tiny fish whose males dance for females, build nests, and tend young? a minnow that can weigh 30 pounds, once the local top predator?

Joe Sullivan, Fisheries Manager for the East Bay Regional Park District, brings us fascinating life histories and news of how local fish are faring—from extinction to recent gains.



Apr. 10: Michael Boland, *Crafting a New Natural History for San Francisco’s Presidio*

San Francisco’s 2.3 sq. mi. Presidio, a fort since 1776, was turned over to the National Park Service and Presidio Trust 21 years ago. Feats of “reconciliation biology” have recreated dunes and marshes, freed a creek buried in garbage, revived a rare lake and a legend-wreathed spring, and more — while respecting two centuries of military history, welcoming visitors, and making the park financially self-sufficient.

Michael Boland, Chief of Park Development and Operations for the Presidio Trust, also talks about possible lessons for the East Bay.



You'll love Friends of Five Creeks' fall 2018 season of

Free Bay Currents Talks

On Bay Area natural history and environmental issues, with emphasis on positive solutions

Second Tuesdays, Sept. to Nov. ; Refreshments 7 PM, talks 7:30 - 9 PM

St. Alban's Parish Hall, 1501 Washington (at Curtis, one block N. of Solano), Albany

Free — but seating is limited

Sept. 11: Calaveras Dam Fossils — A Whale of a Tale



"Salvage" from rebuilding Calaveras Dam – and California's far-sighted rules -- brought us the Bay Area's most significant fossil finds for decades and a wealth of new knowledge about our ancient past. Dr. Cristina M. Robins, senior museum scientist, UC Museum of Paleontology, tells the tale while laying out the process and value of "salvage paleontology."



Oct. 9: Mathematics, Magic, and Meaning —

Saving California's Native Plants, Healing our Community



What does it mean to live in one of earth's biodiversity "hot spots"?

Dan Gluesenkamp, executive director of the California Native Plant Society, presents a beautiful and inspiring talk on how local nature can help us – and how we can help maintain its variety and vitality in the Bay Area and statewide.



Nov. 13: Wildlife Corridors — Pathways for Survival

With vivid tales and photos from his Bay Area explorations, wildlife



biologist and naturalist Dr. James "Doc" Hale brings to life the need to identify, preserve, and manage corridors that let wildlife move and mingle. Doc's research, part of statewide efforts, ranges from endangered frogs and salamanders to



badgers and especially mountain lions — keystone predators that are using old and new pathways to maintain genetic viability and ensure survival.

On second Tuesdays, Jan.- Apr., 2019, you'll love Friends of Five Creeks'

Bay Currents Free Talks

On Bay Area natural history and environmental issues, with emphasis on positive solutions

Refreshments 7 PM, talks 7:30 - 9 PM .

St. Alban's Parish Hall, 1501 Washington (at Curtis, one block N. of Solano), Albany

Jan. 8: *To the Edge, to the Center*

Mike Moran, supervising naturalist for the East Bay Regional Park District, shares reflections on the history of integrating nature and the American experience, through the lens of Bay Area land conservation from pre-European times to today. (Mike was kind enough to substitute when our original speaker, Dr. Jonathan Stock of USGS, was unable to attend.)



Feb. 12: *Amanitarita's Freaky and Fabulous Fungi*



Debbie Viess, co-founder of the Bay Area Mycological Society (BAMS), celebrates the beauty and wonder of the Bay Area's fungi. Now are recognized as a separate Kingdom, fungi co-evolved with the earliest land plants, and the deep and varied ecological connections with both plants and animals. Debbie will share her deep fungal fascinations and knowledge gained from more than 25 years hunting, studying, documenting, and teaching about fungi. Photos and stories will illuminate where fungi live, their diverse forms and functions, their human impacts, and myriad ways enthusiasts can access this often occult world.

Mar 12: *Rangeland Matters*

Did you know that cattle, sheep, and goats graze more than a third of the East Bay — and almost two thirds of the 120,000 acres owned by the East Bay Regional Park District? Denise Defreeze, the Park District's wildlands vegetation program manager, outlines the fascinating history of grazing in our area, as well as its often complex effects on native plants, wildlife, soil, and carbon storage. She also spotlights ways that agencies including the Park District seek to use grazers to promote safety, biodiversity, and ecological health.



Apr. 9: *Insects and the Apocalypse*

Insects are everywhere, they are abundant, and they play vital roles in our ecosystems. Recent news of severe declines in honey bees and monarch butterflies, and the impending insect apocalypse seems dire. What is the science behind these claims, and what is the prescription to improve the fate of our ecosystems? The answers are not always clear. Join a discussion with Dr. Peter Oboyski, curator of the Essig Museum of Entomology at UC Berkeley, about insects, ecosystems, and what you can do to help.

Fall 2019 Talks



Sept. 10: The Curious World of Seaweed

Artist/naturalist Josie Iselin's newest book focuses on ecological relationships of these colorful marine algae.

This seventh book illustrated by Josie's unique art brings to life the roles of seaweeds as marine engineers and providers of habitat vital to life on the Pacific's edge.



Oct. 15: (Green) Power to the People



Bringing sustainable energy, low carbon emissions, and green jobs to low-income people is the passion of Zach Franklin of Bay Area non-profits Grid Alternatives and Rising Sun Center for Opportunity.

Stories of struggle and success illuminate why these efforts matter for workers, volunteers, and all of us affected by global warming.



Nov. 12: Islands in the Bay

Depending how you count, San Francisco Bay has as many as four dozen islands. Get to know some of their varied and surprising natural and cultural history with Brad Balukjian, head of Merritt College's new Natural History and Sustainability program.

Brad has a lifelong fascination with islands. He did his PhD research in Tahiti, and developed a course on California islands at Peralta College.



Jan.- Apr., 2020, you'll love Friends of Five Creeks'

Bay Currents Talks

On Bay Area natural history and environmental issues, with emphasis on positive solutions

Second Tuesdays; refreshments 7 PM, talks 7:30 - 9 PM

St. Alban's Parish Hall, 1501 Washington (at Curtis, one block N. of Solano), Albany

Free — but seating is limited

Jan. 14: *Healing a Trashed World — At 25 Cents a Cup?*



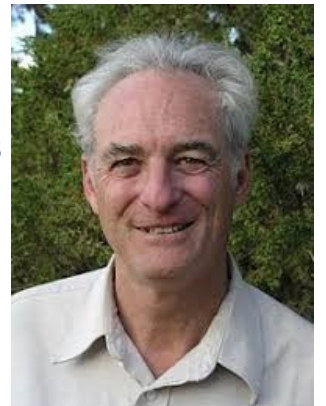
Martin Bourque, Executive Director of Berkeley's Ecology Center, takes us on a tour through the gritty world of the international trash trade, why it isn't working — and how Berkeley, despite its small size, can continue to be a force in our mounting problems with waste.



Feb. 11: *Stories of a Changing Planet: Environmental Documentaries in Transformative Times*



Author and filmmaker Stephen Most has scripted and co-produced environmental documentaries including *Oil on Ice*, *Green Fire*, *River of Renewal*, and *Wilder than Wild*. His book *Stories Make the World* reflects on storytelling and the art of the documentary. Showing trailers from his films, Stephen talks about various and vital ways that documentaries open minds, educate audiences, and engage the public -- especially in the face of climate change.



Last two talks not held due to COVID-19

Mar. 10: *Leveraging Bay Area Technology to Solve National Scientific Challenges*



How can remote DNA detection, drones, real-time sensing, artificial intelligence, and other new technology help meet environmental challenges? Dr. Jonathan Stock, Director of the US Geological Survey's Innovation Center, tells how the USGS is partnering with Bay Area scientific and technological powerhouses to deal with risks from earthquakes and floods to extinction and pollution.



Apr. 14: *The Marvelous Microbes Beneath Your Feet*

What we call "dirt" or "soil" teems with little-known tiny creatures that are neither plant nor animal. These bacteria, fungi, viruses, and more are critical to healthy and climate-resilient ecosystems. Explore this hidden



world and its importance with Dr. Eoin Brodie, Deputy Director of Berkeley Lab's Climate and Ecosystem Sciences Division, and co-leader of the Joint Berkeley Initiative in Microbiome Sciences.

