MALAMA I KA HONUA

A Quarterly Journal of the SIERRA CLUB OF HAWAI'I









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Could We Become "Climate Pollinators"?

by Colin Yost, Hawai'i Chapter ExCom Chair

This issue of the Mālama features and celebrates the role of pollinators in our environment. Given my fixation on the climate crisis, that made me wonder whether we could emulate the beneficial and symbiotic behavior of pollinators as we go about our daily lives and do our best to mitigate global warming.

Pollination works on a grand scale, with billions of small, beneficial actions leading to good things. Applying this approach to climate action means first growing the community of concerned people until nearly everyone understands the necessity and urgency of climate mitigation and adaptation. Instead of pollen, we can distribute our knowledge and ideas by educating others, whether in-person, through social media, letters to the editor, etc. It's especially important to think about ways to educate parts of the world who are ignorant of science or conditioned to ignore it—which leads perhaps to "inspiration."

Metaphorically, inspiration is a form of pollination, planting seeds of motivation and change in the minds of others. Now is the time for each of us to put our own grand ideas into action and serve as role models for the rest of society. The actor Robert Downey, Jr., who struggles to overcome his own "quiet sense of crisis," recently founded The Footprint Coalition to reduce carbon emissions and clean up the world with advanced technology. Fictional though he may be, Iron Man/Tony Stark did recently save the world several times over on the silver screen and became one of the most inspiring figures in popular culture. After so many years in the role, it's hard to tell where Downey, Jr. begins and Stark ends, so some may actually listen to him.

Hawai'i is inspiring others to set enforceable targets for renewable energy generation and net zero carbon emissions. The most recent success story is the United Kingdom, which will be the first major country to require net zero greenhouse gases by 2050. There is much more Hawai'i can do to inspire other governments as we pivot to specifying and implementing the change needed to meet our targets.

As bees know, the work of pollination is never done, and we have much to do. But I doubt that a bee feels overwhelmed when it approaches a giant field of flowers; it simply knows its role and does what it can. There's comfort for me in thinking about our huge challenge this way – just do everything possible to make it better, stay relentlessly positive, and remember the words of the United Kingdom's former chief scientific advisor, Prof. Sir David King: "What we do over the next 10 years will determine the future of humanity for the next 10,000 years." No pressure there, none at all

You Can Do It, Put Avian Pollinators

by Lucas Behnke, The Nature Conservancy

The rich diversity of native forests in the Hawaiian Islands is sustained, in part, by the unique and brightly colored relationships between the birds and flowering plants that have evolved over their long shared history. These co-evolutionary bonds have been formed over millennia and can easily be seen in deftly decurved bills and elegant tubular flowers that are locked in an engineering "arms race" driven by the need for sustenance of nectar and the advantage of sexual reproduction through pollination. Hawai"i's passerine forest birds and flowering plants serve as a clear example of what time, isolation, and a diversity of habitats can produce. Their loss and decline



is also a warning signal for the environment and a call to action.

The iconic, flame-red 'i'iwi uses its long, bright orange bill to access nectar across a range of the magnificent lobelia family's

slender curved flowers. The ubiquitous scarlet 'apapane is the most numerous and widespread of the Hawaiian nectarivores, and also one of the foundational voices of the forest. The 'akohekohe or crested honeycreeper of Maui with streaky gloss black, white and orange plumage aggressively defends blooming 'ōhi'a lehua, collecting and distributing the pollen that promotes the versatile tree's genetic diversity with a striking shock of fine white feathers protruding above its bill. Others like the yellow-

Your Beak Into It of Hawai'i

green Kaua'i,
O'ahu or Hawai'i
'amakihi species
use their stout,
black curved bills
to adapt to a wide
range of flowers
and other foods,
allowing them
to live across a
range of habitats.



The same tightly-knit relationships between these birds and plants that has led to such remarkable diversity has also resulted in a risk of catastrophic loss as one or both sides face grave and interrelated threats. The plants of Hawai'i have been losing their pollinators to introduced predators and avian disease that is transmitted by introduced mosquitoes and exacerbated by climate change. The birds meanwhile, lose the flexibility provided by a diversity of flowering plants when forests are degraded by invasive animals, weeds and introduced diseases like "Rapid 'Ōhi'a Death."

While the threats loom, large conservation efforts are already underway. Continuing to support landscape scale watershed protection and strategic habitat restoration is vital to both the diversity of the Hawaiian Islands and to the resilience of the human communities that inhabit them in the face of climate change. Innovative efforts to protect birds from mosquitoes may quickly restore some of the lost linkages between the plants and birds that rely on each other to thrive, and continued protection of both endangered birds and plants preserves the diversity that Hawai'i is known for and on which it depends.

It's for the Birds

by Nara Takakawa, Hawai'i Chapter ExCom Treasurer

Each time I drive by the Sumida watercress farm in 'Aiea, I wonder if I'll be lucky enough to catch a glimpse of an ae'o, or Hawaiian stilt. Of the hundreds of times I've driven past those watery fields, I've only seen ae'o there once. However, those odds do not discourage me; I look anyway ever hopeful that my luck will change.

I started birdwatching 20 years ago as a participant on Sierra Club service trips. On my first visit to Moloka'i, trip leader Annette Kaohelauli'i took us to the sewage treatment plant. According to Annette, that plant was the best place to birdwatch. And she was right! I saw ruddy turnstones, ae'o, and kōlea flitting about in the water. On another service trip to Hakalau Forest National Wildlife Refuge, I was introduced to the beauty of Native Hawaiian birds. After repeated service trips to Hakalau Forest NWR, I eventually learned their names and how to recognize them: 'i'iwi, 'apapane, 'amakihi, 'akiapōlā'au, 'io, and pueo. I finally saw an 'aki two years ago and I hope to one day see a palila.

To improve my skills, I took a non-credit course on bird watching at Windward Community College taught by biologist and bird expert, Sharon Reilly. I learned how to sight a bird with the naked eye, then quickly lift my binoculars to my line of sight. I also learned how to describe the features of a tree in order to direct someone else to find my feathered friend. There's much inexplicable joy in finally spotting the bird that had, seconds earlier, completely blended into the canopy.

My most memorable birding experience happened about 13 years ago, when I had the privilege to take part in the US Fish and Wildlife Service's albatross count on Midway Atoll National Wildlife Refuge. I and sixteen other lucky volunteers counted Laysan and Black-Footed Albatrosses over the winter holidays. We worked

six days a week for two weeks with days off on Christmas and New Year's Day. We counted more than 500,000 nesting pairs of Laysans and approximately 48,000 nesting pairs of Black-Footed Albatrosses. We even witnessed the arrival of a "Golden Gooney," or Short-Tailed Albatross. This particular bird had roamed far beyond its home in the Torishima Islands off Japan's coast, perhaps lured by the 16 adult and juvenile decoys and sound recordings of actual short-tails.

Being a lover of birds means that you do what you can to support their environment, so they can shelter and have access to appropriate food sources. This is why I still, 20 years on, participate in and support reforestation projects. It's for the birds!



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Making a Better Home for Wai'anae 'Elepaio

by Gary Gill, Sierra Club of Hawai'i Member

High up in the southern Wai'anae Range on Any O'ahu, a quiet transformation is taking place. A swath of shady forest, home to the endangered O'ahu 'elepaio bird, now enjoys protection from the devastating influence of rats and pigs. Native ferns are thriving. Invasive plants are yanked up, roots and all. Koa seedlings sprout up like a lawn where strawberry guava once shaded them to

Sierra Club volunteers are making these good things happen.

Two hundred years ago, shortly after Hawai'i's king accepted a gift of cattle from an European sea captain, the Wai'anae mountains lost almost all of its forest. Left to graze where they wanted, cows chewed and trampled | years ago, under the guidance of the Wai'anae Mountain

the native flora nearly to extinction.

Almost one hundred years ago, the Territory of Hawai'i set about to reforest the mountains and planted many thousands of trees throughout O'ahu. Seeking fast-growing species that would help reduce erosion and provide an economic timber resource, early foresters focused on planting eucalyptus trees. So now, our Wai'anae mountains look

more like an Australian forest than anything one would | Pālehua Road, in the mauka watershed of Kalo'i Gulch at call Hawaiian.

Yet somehow, a smattering of native trees and animals held on to their homeland. The mighty koa tree, largest in the native forest, can still be found, muscling its way to the top of the forest canopy. 'Ōhi'a, sandalwood, olopua and pūkiawe are still anchored in their dark soils along the steep valley walls.

And flittering between the branches, 'elepaio birds make a life on any tree they choose. As many as 15 breeding

pairs have been counted and tagged in the area by conservation workers.

The greatest danger to the native 'elepaio is predation by rats. The voracious rodents will devour the 'elepaio eggs right out of the nest and kill the mother bird sitting on them if she fails to fly away in time.

Controlling rats in the area has been the kuleana of the Army Natural Resources Program for decades. The latest and best tool in the rat-control arsenal is a contraption designed and built in New Zealand called the A24.

unfortunate rodent seeking the bait inside the trap gets a compressedair driven spike to the head and falls out to the ground below. The trap can



keep doing its job for months at a time without needing to be tended or re-baited.

Feral pigs can destroy anything we try to plant in the forest. They dig up the earth, creating ponds that breed mosquitoes and spread avian malaria. A few

> Watershed Partnership, volunteers cleared a path, pounded poles and stretched a hog-wire fence to enclose about five acres of forest in the 'elepaio habitat. With this barrier in place, Sierra Club volunteers are successfully planting native trees and shrubs inside the fence. Any pigs still foraging outside the fence are being aggressively trapped and removed.

> The five-acre enclosure lies along the upper reaches of

an area called Akupu. Your Oʻahu Group outings leaders have adopted the Akupu enclosure as a conservation service project. Every other month, volunteers drive up to pull out weeds and plant native trees. Slowly we are seeing native forest plants take root among the exotic eucalyptus.

Around the enclosure, a new network of hiking trails is being carved through the shady landscape. Volunteers who participate in the restoration work can cap off a morning of tree planting with a short hike to beautiful viewpoints and even stay the night in a nearby mountain cabin.

Making a better home for the native 'elepaio will take decades of work. But after just a few short years, one can see the progress being made by Sierra Club volunteers. Come join in the efforts. Maybe an elepaio will wing its way down from the tree tops to thank you for your good work.

Become a part of the legacy! Check out upcoming Mālama Tree Crew days on page 5 and Akupu service days on page 8.

Mālama Tree Crew

There are many reforestation, carbon sequestration, and native plant restoration projects happening throughout the islands. A critical piece to all of these projects that is often overlooked is the maintenance of these plantings. While some projects have programs set up to ensure that new plantings are cared for, some do not, and that's where our new Mālama Tree Crew comes in-led by Randy, our service trip coordinator.

In order for these trees to live long, strong, carbonsequestering lives they need to make it through their first few months after being planted. While most trees can make it on their own, additional maintenance can help increase the rate of survival and thus the future carbon intake of the trees. This past quarter, the Mālama Tree Crew watered, weeded and cleared at two sites on O'ahu, Ala Mahamoe and Pālehua.

Ala Mahamoe

1,000+ native trees were planted in Ala Mahamoe in Moanalua by volunteers led by Professor Mora in partnership with The Outdoor Circle, Mālama Learning Center, Koʻolau Mountain Watershed Partnership, and the Garden Club of Honolulu in November 2018. Once a month, the Mālama Tree Crew visited the site to primarily clear grass around the trees and water. Excitingly, these trees are now strong enough to survive without us! The last Mālama Tree Crew day at this site was on June 15, marked by a pizza party and Sierra Club gifts for participants.

Gill Ewa Lands, Pālehua

300 native trees were planted in Pālehua at the Mālama Learning Center site and 25 trees in the Akupu Enclosure. The Gill Ewa Lands encompass 1,600 acres in the southern tip of the Wai'anae mountains dedicated to preserving the land's important biological, cultural, economic and historical resources. The Akupu Enclosure provides habitat for endangered 'elepaio to nest. The Mālama Tree Crew will continue to maintain these trees in the coming months.

Upcoming Events

Camilo Mora is planning to plant 10,000 trees on Saturday, October 26 for Make a Difference Day. He wants to eventually plant 1.5 million trees in Hawai'i to help sequester carbon dioxide and keep the Earth habitable. He is seeking volunteers for the planting day and to help prep the trees leading up to October. If you are interested, please contact Professor Mora at cmora@hawaii.edu.

Join us in Pālehua to care for the 300+ trees on July 7, 21, and 27, August 4, 17, and 31, September 8, 22, and 29. For more info and to RSVP visit sierraclubhawaii.org/malama-tree-crew.

Do you know of recently planted native trees that could use some extra love? Contact randy.ching@ sierraclub.org to inquire about the Mālama Tree Crew's services!

Ka Iwi Explorations 2019

The Ka Iwi Coalition — a collaboration between the Sierra Club, The Trust for Public Land, Livable Hawai'i Kai Hui, Hui Nalu Canoe Club, DLNR Parks, and Kamehameha Schools, completed another successful "Ka Iwi Explorations" in June 2019. This annual event celebrates the successful community conservation of 182 acres of the Ka Iwi mauka lands by facilitating public access into the newly protected area. The Sierra Club coordinated hike leaders for the two-day event, which resulted in over 100 participants exploring the views, flora, and fauna of Ka Iwi Coast, while also learning about the land's mo'olelo, history, and cultural significance.

Mahalo to our volunteer hike leaders and the Hawai'i Trail and Mountain Club for assisting once again in trail clearing efforts. Big shoutout to the project partners, pop-up shop volunteers, and kokua supporters for providing the public an opportunity to mālama 'āina in April and to hike in June.

Although the public access hikes are completed for 2019, we welcome you to participate in upcoming volunteer opportunities in the Ka Iwi mauka lands. Learn more and get involved at kaiwicoast.org/volunteer.

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Sierra Club volunteers working in the Akupu enclosure.

By Clyde Kobashigawa.

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Protecting Our Spaces, Species, and Sustenance

by Lauryn Rego, Hawai'i Center for Food Safety

Research shows that neonicotinoid pesticides, often referred to as "neonics, are highly toxic to pollinators | including honeycreeper birds, Hawaiian vellow-faced and are one of the leading causes of the current bee population collapse. For over 15 years, the Center for Food Safety has been working to get GMO crops and toxic neonicotinoid pesticides out of all the wildlife refuges. In 2014, following a series of successful Center for Food Safety (CFS) lawsuits, the Department of Interior finally | **faced bees!** Outside of participating in lawmaking, you prohibited GMOs and neonic pesticides in all national wildlife refuges. Unfortunately last year, under the Trump administration, the U.S. National Fish & Wildlife Services withdrew these important protections.

with the nervous system of insects, causing tremors, paralysis, and eventual death even when administered at very low doses. Neonics are 10,000 times more toxic to bees than any other pesticide.

This year on World Bee Day, new legislation was introduced in Congress to reinstate the prohibition on neonics in wildlife refuges. This bill has been cosponsored by 18 bipartisan members of the House and is endorsed by nearly 40 conservation groups. Visit https://cfs.center/NoNeonicsWR to learn more and take action to get these toxic pesticides out of wildlife refuges! If wildlife refuges aren't safe for wildlife, then what is?

Good news is that another CFS lawsuit got 12 of these neonics pulled off the market entirely. As part of a settlement in which CFS represented a coalition of conservation groups and beekeepers—including the Sierra Club—a Federal Court ruled that the Environmental Protection Agency's registration of 12 neonic pesticides was illegal, and therefore must be pulled off the market. This case only covered 12 formations of this dangerous category of pesticides, but it also resulted in the EPA agreeing to evaluate the impact of all neonic pesticides on pollinators and other endangered species in the future.

On the local front, during this year's legislative session, the Protect Our Keiki Coalition (Hawai'i Alliance for Progressive Action, Hawai'i Center for Food Safety, Hawai'i Seed and Pesticide Action Network) successfully introduced and passed a resolution to protect our local pollinator species from exposure to neonics. The resolution recognizes the importance of Hawai'i's endangered and endemic pollinator species and the threat posed to them by systemic pesticides. It urges the State to take measures to limit pollinator exposure to neonics. The failure to pass a companion bill through the House, despite lobbying efforts from beekeepers and hundreds of advocates from around the state, indicates that there is still much room for education on this issue.

Hawai'i boasts a variety of native pollinators, bees, and Kamehameha butterflies. Many of these iconic species are in peril—twenty species of honeycreepers are already extinct and seven Hawaiian yellow-faced bees are listed as endangered or threatened.

You too can help protect Hawai'i's yellow can start in your own backyard by planting more native plants. Many native plant varieties flower throughout the year and provide a consistent source of pollen and nectar for our endangered pollinators. In 2007, the Department Chemically-related to nicotine, neonics interfere | of Agriculture estimated that nearly seventy percent of the State's food crops depend on pollination by bees and other pollinator species. You'll not only help feed the pollinators but you'll also be helping us to feed ourselves.

> When we all work together, through our efforts in conservation, legislation, and litigation, we can make meaningful strides in the protection of all the world's endangered species, their habitats, and very importantly, our food systems.

Pollinators, pesticides, and



One in every three bites of food we eat comes from a crop pollinated by bees.



Pollinators are critical to valuable crops and some flowering plants, including melons, watermelons, cucumbers, squash, lychees, mangoes, macadamia nuts, coffee beans, eggplants, avocados, guavas, herbs, and sunflowers.



The main pesticides linked to pollinator declines are a group of **nicotine-based** systemic insecticides called neonicotinoids. They are absorbed and transported through all parts of the plant tissue after applicationrendering the entire plant toxic.

Source: Hawai'i's Pollinators & Food Security, The Center for Food Safety

Hawaiian Yellow-Faced Bees

by Nathan Yuen, Chapter Outings Chair

I was thrilled to stumble on Hawaiian yellow-faced bees—nalo meli maoli—on lehua flowers on Hawai'i Island. The native bees are small, less than a quarter-inch long, and look like black-brown wasps with a yellow face.

Honey bees, which are much larger, are not native to the Hawaiian Islands—the first hives were brought to O'ahu in 1857. The only bee to reach the islands on its own is the yellow-faced bee Hyleus. Over eons of time the original founders evolved into 63 known species endemic to the Hawaiian Islands.

In the 1900s famous biologist R.C.L. Perkins, who wrote the monumental work Fauna Hawaiiensis, called Hawaiian yellow-faced bees "almost the most ubiquitous of any Hawaiian insects." Sadly, this is no longer the case. Recent surveys of yellow-faced bees by entomologist Karl Magnacca show that most Hawaiian yellow-faced bee species are in decline, many are extremely rare, and several are possibly extinct. Of the 63 species, seven have been listed as endangered.

Hawaiian yellow-faced bees are solitary and do not live in colonies like honeybees. They can be found in a variety of habitats including coasts, dry forests and shrublands, mesic and wet forests, and subalpine shrublands. All depend on an intact community of native plants and are mostly absent from habitats dominated by nonnative plant species. These bees require a habitat with a diversity of plants that flower throughout the year so that a consistent source of pollen and nectar is available. Many species nest in the ground, but some nest in hollow stems of plants; the availability of nest sites is another important habitat requirement for these insects.

Hawaiian yellow-faced bees are threatened by development, especially in coastal areas, as well as by fire, feral ungulates such as pigs, invasive ants, and the loss of native vegetation to invasive plant species. Because remnant populations of many species of Hawaiian yellow-faced bees are small and isolated, they are especially vulnerable to habitat loss, predation, stochastic events, and other changes to their habitat. Conservation of these important pollinators will require active management of natural areas where populations are known to exist.



In 2016, the United States Fish and Wildlife Service added seven species of Hawaiian yellow-faced bees to the federal lists of endangered and threatened wildlife and plants.



Due to lack of regulation in Hawai'i, there is no way of knowing the exact extent of neonicotinoid use. Toxic pesticides undoubtedly play a role in the demise of our pollinators, and they are one threat that we can address immediately to help these critical species.









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O'ahu Group Outings

SEE PAGE 9 FOR GENERAL OUTINGS INFORMATION

View the latest hike listings and online registration options at bit.ly/SCH-outdoors.

Unless otherwise stated in the outing description, participants meet at 8am at the back porch of the Church of the Crossroads, 2510 Bingham Street, Honolulu. Do not leave your car in the church parking lot.

Classification of outings: (E) Educational/Interpretation (C) Conservation, (F) Family/Fun, (S) Service

Saturday, July 13

Pālehua 'Elepaio Enclosure "Akupu" Service (S)

Reservations required at least one week prior. Space is limited as we will be working in a sensitive area where the endangered native 'elepaio is nesting and there are some native plants already growing which we don't want to disturb or damage. We will probably hear and see some native 'elepaio as we work in the area, so bring a camera as well. Pack a lunch and/or snack and definitely mosquito repellent. Bring gloves and hand tools for weeding alien plants in the enclosure. Leaders: Clyde Kobashigawa, clydekobashigawa@hawaii.rr.com; John Shimogawa, 227-9925; Susan Tom; Curtis Kawamoto

Sunday, July 14

Family Snorkeling (F)

Beach to be determined. We will snorkel and learn about Hawai'i's coral reef ecosystems, fish, invertebrates, and algae. All participants must be able to swim. Bring your snorkel gear, swimsuit, towel, 2 liters of water, change of clothes, and snack. Leader: Sherine Boomla, 254-5712, boomla@hawaii.edu

Sunday, July 28

Kapālama Trail Hike

Kapālama, moderate/7 miles, ridge

Reservations required. Hike through native forest along a beautiful ridge overlooking the Pali Highway. Leader: Gwen Sinclair, 753-0528, gsinclai@gmail.com

Saturday, August 10

MCBH Kāne'ohe Bay Service Project (S)

Reservations required. Due to new MCBH regulations, all participants must register with DBIDS one week before outing to secure access to base. Contact Dan Anderson at 489-1695 or danderhi@gmail.com. We will be working with the Environmental Division helping clear wetlands of mangrove plants to create habitat for Hawai'i's endangered waterbirds. Because MCBH is a secure military facility, we must provide your name to the base in advance. We'll send you a waiver which you must bring with you. Leader: Deborah Blair, 392-0481 | Our accommodation for the weekend is Kapalaoa Cabin

Sunday, August 11

Makiki-Tantalus Hike

Makiki, easy/4 miles

Hike along two to three trails along the Makiki-Tantalus trail system. Partial shade. Some indigenous and native plants. Good views of the valleys and the coastline. Leader: Sherine Boomla, 254-5712, boomla@hawaii.edu

Thursday to Sunday, August 15-18

Kahauale'a Natural Area Reserve System (NARS) Service Project, Hawai'i Island (S)

We will be working with NARS clearing mainly kahili ginger. We will access the area via Volcanoes National Park where it is an easy 1/2 mile hike from Thurston Lava tube to the work site. This a relatively new NARS site that is dominated by alien kahili ginger and a great way to see how it evolves into a truly native Hawaiian Natural Area Reserve. There are native birds above in the native 'ōhi'a lehua forest trees. Our accommodation will be at a house in Hilo at the NARS base yard. This trip requires a Thursday evening departure to the Big Island. Leader: Clyde Kobashigawa, clydekobashigawa@hawaii.rr.com

Sunday, August 18

Keālia Trail

Keālia, moderate/7 miles, 1700 feet elevation gain The first mile is up switchbacks and the remainder of the hike is dirt firebreak road. Great views of North Shore and Mākua Valley. Leader: Dan Anderson, 489-1695, danderhi@gmail.com

Sunday, August 25

Photography Hike: Pālehua-Palikea (E)

Makakilo, moderate/2 miles, ridge

Reservations required at least one week prior. Contact Clyde for reservations with first and last name and phone number contact. Space limited, so make your reservations early. The pace of photography hikes is extremely slow. Pack a camera, lunch and/or snacks, and water. Not for those uneasy about heights. Due to safety concerns, only adults will be accepted. Native plants, native happy face spiders, scenic panoramas, and native tree snails are the attraction in this preserve. Leaders: Clyde Kobashigawa, clydekobashigawa@hawaii.rr.com; John Shimogawa, 227-9925; Curtis Kawamoto; Susan Tom

Sunday, September 1

Makapu'u Lighthouse Trail

Makapu'u, easy/2 miles

Hike the Makapu'u Lighthouse trail. Paved trail with some potholes. Beautiful views of the coastline and cliffs. No shade. Bring 2 liters of water, sunscreen, and snacks. Leader: Sherine Boomla, 366-4008, boomla@hawaii.edu

Monday to Wednesday, September 2-4

Haleakalā National Park, Maui (S)



O'ahu Group Outings

in the center of Haleakalā Crater. The work will be day and will exit via the Halemau'u trail. Participants eradicating California telegraph plant and plantago. This trip is for hikers in good physical condition and for those who don't mind "roughing it". We have a 7-mile hike in via the Sliding Sands Trail and will exit via the Halemau'u trail. Participants will have to deal with the elevation. The cabin was built in the 1930's by CCC workers and is rustic. There are no washroom or shower facilities, but there is an outhouse. We do have a 2-burner gas stovetop and a wood burning stove to cook and keep warm. The reward is spending a few days in a beautiful National Park trying to keep the native flora flourishing. Leader: Clyde Kobashigawa, clydekobashigawa@hawaii.rr.com

Saturday, September 7

Kamanaiki

Kalihi, strenuous/5 miles, 1400 feet elevation gain, ridge This hike starts out on a long flight of stone steps up to an old water tank, then climbs a ridge above the Kamanaiki stream. There is 1,400 ft elevation gain through eucalyptus, ironwoods, guava, and a variety of native plants on the way to our lunch spot, with views of Kalihi Valley and the city below. Moderately strenuous going up, but low risk. Reservations by Sept 1. Leader: Colleen Soares, csoares48@gmail.com

Wednesday to Friday, September 18-20

Haleakalā National Park, Maui (S)

Our accommodation is at Kapalaoa Cabin situated in the 5 hikers. We hike in via the Sliding Sands Trail the first at 1pm. Leader: Reese Liggett, wliggett@twc.com

will have to work at high altitude elevation. The cabin was built in the 1930's by CCC workers and is rustic. There are no washroom or shower facilities, but there is an outhouse. We do have a 2-burner gas stovetop and a wood burning stove to cook and keep warm. The reward is spending a few days in a beautiful National Park trying to keep the native flora flourishing. Leader: Dan Anderson, danderhi@gmail.com

Sunday, September 22

Pālehua Service Project-Trail Clearing (S)

Reservations required at least one week prior. Contact John for reservations. Space is limited due to parking, and also as we will be working along an existing trail that is not used very much to also develop it as a fire break. Pack a lunch and /or snack and lots of water. Bring gloves, pruning saws, pruning shears, loppers, mosquito repellent, and lots of enthusiasm! The area is known for beautiful scenic panoramas from the ridge overlooking Nānākuli Valley. You may also hear and see some native birds, so bring a camera too. Leaders: John Shimogawa, 227-9925; Clyde Kobashigawa, clydekobashigawa@ hawaii.rr.com; Susan Tom

Sunday, September 29

Family Hike: Mānana Part Way (F)

Pacific Palisades, easy/3.8 miles, 500ft elevation gain This hike takes us to an open ridge for a snack break before center of Haleakalā Crater. The work will be eradicating return. Kids welcome -- will teach them about hike leading. California telegraph plant and plantago. This service trip | If not old enough to complete the hike, a parent must be is for hikers in good physical condition and limited to prepared to backpack them. Reservations required. Meet

SIERRA CLUB OUTINGS POLICY

The Sierra Club outings are conducted according to Club policy and under the direction of certified Outings leaders. Our outings are group activities and all participants are expected to follow leaders' instructions and remain with the group for the entire outing. We welcome all Sierra Club members, non-members, and visitors on most of our outings; however, certain outings may be restricted to members. Firearms, pets (unless specifically allowed), and audio devices with or without headsets are prohibited. Smoking is permitted only at breaks and then only if the smell of smoke cannot be detected by other hikers. Outing leaders may prohibit smoking if, in their judgment, a fire hazard exists.

Bring with you: a liter of water (2 liters for strenuous hikes), lunch, sunscreen, insect repellent, raingear/jacket, and daypack. Boots, shoes with traction grooves (no loafers) or tabis are required. Unless otherwise noted, no bare feet or sandals of any type will be allowed.

You will also need to sign a liability waiver. If you would like to read a copy of the waiver prior to the outing please see content. sierraclub.org/outings/local-outdoors/resources or call 415-977-5630.

In the interest of facilitating the logistics of some outings, sometimes participants make carpooling arrangements. The Sierra Club does not have insurance for carpooling arrangements and assumes no liability for them. Carpooling, ride sharing, or anything similar is strictly a private arrangement among participants. Participants assume the risks associated with this travel.

For specific islands, each group may have its own outing policy. Please look at each group's page or website for more specific information on where to meet or what to bring with you.

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Kaua'i Group Report

No moo poo at Māhā'ulepū: A potential environmental disaster averted by Jade Moss

In February, Hawai'i Dairy Farms withdrew their effort to create a dairy farm on the south shore of Kaua'i, only 2.5 miles from Po'ipū. This was largely thanks to Bridget Hammerquist and the Friends of Māhā'ulepū, a non-profit that she helped form to fight the project.

In 2014, concerned community members showed up at Hammerquist's doorstep several times seeking assistance from the Koloa-raised retired judge and brilliant legal mind. Hammerquist was the person they knew that had the tools to lead the community crusade.

After those neighborly visits and some research about industrial dairy operations around the world, she concluded, "This may be a disaster waiting to unfold," and wrote an article for the Garden Island Newspaper with her concerns and facts from her research.

Hammerquist attended a community meeting at Kaua'i Community College with the Ulupono Initiative, the entity who owns Hawai'i Dairy Farms, where they unveiled the plans of the operation and why Māhā'ulepū was a "glorious" place for it. They would bring in almost 700 pregnant cows, to begin with. Things didn't sit quite right with her, so she attended another community meeting held later that very day at the Koloa Neighborhood Center.

What she and others took away was the wind vector on the map they showed was wrong, the soil type they claimed was free-draining volcanic soil was wrong and the rainfall numbers were too low. Many more questions and concerns arose, and a group of people Hammerquist hadn't vet known would soon form Friends of Māhā'ulepū.



Bridget Hammerguist receives the Sierra Club Award of Appreciation for Outstanding Achievement, presented by Judy Dalton and Jade Moss.

Hammerquist and Friends of Māhā'ulepū made connections with an array of experts associated with the facets of an industrial dairy operation, from an industrial entomologist to a nationally-renowned economist Ph.D. that consulted with communities dealing with factory farms, who simply stated, "What a dairy is, first and foremost, it's a waste machine. They produce more poop than anything else. That is their main product."

Armed with valid sources, research and the first plan from Ulupono Initiative, Friends of Māhā'ulepū determined six main concerns in April 2014, which remained their concerns to the end. Mass amounts of cow waste would spill into most of the concerns.

- 1. Waste and the public health risk The cow manure would run off into Waiopili Stream, which drains into the ocean and is already the single-most contaminated stream on Kaua'i.
- 2. Water use It takes 60 gallons of water to make one gallon of milk. Grove Farm promised Ulupono Initiative 30 million gallons of water per day from the Waita Reservoir. Stay tuned for Friends of Māhā'ulepū's next chapter on this subject.
- 3. Odor and flies The prevailing tradewinds would blow odor into Kōloa. Within six months, billions of flies would likely gather and fly within a 4-mile radius of the waste, creating a risk of infections from fly bites.
- 4. **Soil type** Detailed studies have found that Māhā'ulepū is 80% clay-based soil susceptible to run-off with rainfall. It isn't free-draining volcanic soil as it was claimed to be. "I knew that from playing out there as a kid. Whenever it rains out there, it's famous for its puddles that sit there for days because it doesn't percolate well," Hammerquist said.
- **New Zealand model** New Zealand developed an Independent Commission for the Environment to track the impact of the dairy industry because they were finding the streams were so unsafe for human contact that one couldn't even stand in them.
- 6. **Toxins** The Department of Water has three drinking water wells that supply the south side of Kaua'i, within 600 feet of the location they would pump out the manure collected in effluent ponds. Nitrates could penetrate the aquifer. "Nitrates kill a well faster than any other chemical" Hammerquist said. Hydrogen sulfide gas would have also been a by-product, which is odorless and fatal.

Kaua'i Group Outings

O'okala community on Hawai'i Island to fight the impacts | worth the effort for the lovely panoramic views of the coast from Big Island Dairy. They were going through all of the health concerns, such as e.coli and staph infections, that she was reading about. "They were the poster child for | Leader: Julio Magalhães, 650-906-2594 what we didn't want to happen," said Hammerquist.

"The education I've gotten in the last 5 years is incredible," said Hammerquist. For anyone on the receiving end of Friends of Māhā'ulepū's newsletters, one could see how thorough Hammerquist is. One of the first questions that Hammerquist asked herself was, "Who in the state is going to have to approve the plan?"

"For your community, watch the news and read your papers. Find out what someone's brain-child idea is going in and track it. Make sure it's really a sound idea." On taking on an issue, she said, "Be as well-versed as you can, the internet is wonderful, Google is wonderful."

Hammerquist credits forming the 501(c)3, whose mission is to protect the environment of Māhā'ulepū and the island of Kaua'i, as an important step to their success. "If you can get the word out and share with the community what the concerns are, there are a lot of good people in this world and they don't have the time to help but they'd want to. So they donate money and that's their way of helping.'

UPCOMING OUTINGS:

SEE PAGE 9 FOR GENERAL OUTINGS INFORMATION

Join us on one of these great outings to discover the natural treasures of our island. Mileage is total miles. Outings focus on (C) Conservation/Interpretative, (E) Educational, (F) Family/fun, and/or (S) Service.

Check bit.ly/SCH-Kauai-Hikes for updates to the schedule.

Requested donation for members and participants under 18 is \$1. For all others \$5.

Saturday, July 6

Nāwiliwili Coastal Hike (C/E/F)

Easy/3 miles

Walk along the coast through lagoons and back to Kalapaki Bay. Leader: Vivian Hager, 808-652-3234

Saturday, July 13

Awaʻawapuhi Trail

West side, intermediate/6 miles, 1800ft elevation gain Sweeping views of the ocean and Nāpali Coast from the top of this ridge and the bluff jutting out into the Nāpali

In March 2017, Friends of Māhā'ulepū joined the | Coast. The return portion will test your legs but is well and valleys of the Nāpali Coast. This hike is considered by some to be one of the best and loveliest hikes on Kauai.

Sunday, July 14

Sunset to Full Moon: Wailua to Nukoli'i Beach Walk (C/E/F)

East side, easy/1.5 miles

We'll meet at Lydgate Beach Park for a picnic dinner and walk along a pristine beach. Learn how this beach was saved from being destroyed by a 6-foot high, 3/5mile long sea wall fronting Wailua Golf Course that the County started to build in 1996. The beach began to erode and sections became impassable to walk along. It took 3 months of intensive effort to get DLNR to issue a cease and desist order, forcing the County to remove the nonpermitted sea wall. Leader: Judy Dalton, 808-482-1129

Saturday, July 20

Waimea River Walk and Float (C/F)

Strenuous/11 miles one way, part of this floating! Elevation change of 2250ft, mostly downhill. Start at Kukui Trailhead and hike down into Waimea Canyon and along the old Waimea River jeep road. Bring floatable tubes to inflate and float down the river for over a mile, passing through a tunnel. End at outskirts of Waimea town and shuttle back to Kukui Trailhead. Leader: Ken Fasig, 808-346-1229

Saturday, July 27

Kālepa Ridge

East side, intermediate/8.5 miles, 1300 ft elevation gain Enjoy sweeping coastal and valley views along the ridge which continues the Sleeping Giant range from Wailua River to Hanamā'ulu. Includes lovely views of Wailua River from a bluff. Leader: Julio Magalhães, 650-906-2594

Saturday, August 3

Māhāʻulepū Coastal Hike (C/E/F)

Po'ipū area, moderate/4 miles, mild elevation change on a rocky trail

Spectacular coastal walk with breathtaking views along this magnificent coastline! Leader: Lee Gately, 661-373-

Wednesday, August 7

Māhā'ulepū Coastal Hike (C/E/F)

Po'ipū area, moderate/4 miles, mild elevation change on

Spectacular coastal walk with breathtaking views along this magnificent coastline! Leader: Lee Gately, 661-373-4834

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Kaua'i Group Outings

Sunday, August 11

Nāpali Coast Trail to Hanakāpi'ai Falls

North Shore, upper intermediate/8 miles, +180oft elevation Hike begins at Ke'e Beach and follows the Kalalau Trail with its stunning coastal views for 2 miles to Hanakāpi'ai Beach, then continues inland 2 more miles to the waterfall. The scenery and views are spectacular and the waterfall is lovely; this trail is a personal favorite. The irregular trail from the coast to the waterfall is quite a wild adventure with some water crossings. Since this hike can be slippery and muddy when wet, we will only go forward with the hike if the trail conditions are suitable. Leader: Julio Magalhães, 650-906-2594

Saturday, August 17

Kā'aweiki Ridge (C/E/F)

Koke'e State Park, moderately difficult/7 miles, elevation change of 1549 ft

A wonderful hike along a dirt road that begins up in Kokee and terminates on a ridge above the Nāpali Coast. Leader: Ken Fasig, 808-346-1229

Saturday, August 24

Nounou Mountain - Kuamoʻo & West Side Hike East side, intermediate/5 miles, 1100 ft elevation gain Nounou Mountain, which is also more popularly called "Sleeping Giant", offers spectacular panoramic views of the east side of Kauaʻi. We will explore the mountain on several trails. Leader: Julio Magalhães, 650-906-2594

Saturday, August 31

Māhā'ulepū Coastal Hike (C/E/F)

Poʻipū area, moderate/4 miles, mild elevation change on a rocky trail. Spectacular coastal walk with breathtaking views along this magnificent coastline! Leader: Lee Gately, 661-373-4834

Saturday, September 7

Waimea Canyon Rim Vistas & Exploration Hike
West side, intermediate/8 miles, 1800 ft elevation gain
Explore lovely panoramic views of the Waimea Canyon
and ocean beyond as well as the upper reaches of Waipo'o
Falls on this intermediate-level loop hike including the
Pu'u Hinahina Trail, Cliff Trail, Canyon Trail, Black Pipe
Trail, Halemanu-Koke'e Trail, Kumuela Trail, and return
on Canyon Trail. Leader: Julio Magalhães, 650-906-2594

Saturday, September 14

Māhāʻulepū Coastal Hike (C/E/F)

Poʻipū area, moderate/4 miles, mild elevation change on a rocky trail

Spectacular coastal walk with breathtaking views along this magnificent coastline! Leader: Lee Gately, 661-373-4834

Saturday, September 21

Kaʻakaʻanui Beach (Larsen's) & Waipake Coastal Walk North shore, low intermediate/4.5 miles, +500 ft Walk along a beautiful beach and up to a breathtaking vista and on to secluded Waipake Beach for lovely coast views throughout this hike. Leader: Julio Magalhães, 650-906-2594

Wednesday, September 25

Māhā'ulepū Coastal Hike (C/E/F)

Po'ipū area, moderate/4 miles, mild elevation change on a rocky trail

Spectacular coastal walk with breathtaking views along this magnificent coastline! Leader: Lee Gately, 661-373-4834

Sunday, September 29

Kuilau Ridge Trail (C/E/F)

East side, easy to moderate/3.5 miles, +280 ft

A gentle steady walk on a wide path with sweeping view of lush valleys and Mount Wai'ale'ale and Makaleha Mountain Ranges. This trail offers great rewards without a lot of effort. Glorious views and ever-present bird songs reward you along this trail. Hike to bridge and picnic tables for lunch. Leader: Vivian Hager, 808-652-3234







Maui Group Report

Welcome the New Maui Group Manager!

Meet our new full-time Maui Group Manager Kecia Joy on page 22, and let her know you're happy she's on the job protecting Maui's unique and threatened environment: contact@sierraclubmaui.org.

Anaergia EIS

A plan by the company Anaergia to put an anaerobic biomass power plant on the site of the Kahului Wastewater Reclamation Facility has come to a halt. The company had put together a deficient Environmental Impact Statement (EIS). Besides being a bad idea to expand the Kahului Wastewater Facility in a flood area right at the shoreline and to include a very high price tag to the County for the power produced, the Sierra Club Maui Group and Maui Tomorrow claimed that it is the County that is responsible for producing an EIS for the project. Judge Cardoza at the Maui Environmental Court agreed and voided the acceptance of the EIS on April 30.

Lahaina Injection Wells

After losing four times in the courts, the County of Maui is taking its case against the Clean Water Act to the Supreme Court. Sierra Club and allies hold, as the courts have ruled, that the County must acquire a permit if it is to continue to release treated wastewater into injection wells, where the pollutants reach the ocean. A permit would specify the conditions for such releases, with the goal of reducing pollutants in the water. If the Supreme Court decides that the Clean Water Act does not apply to pollution if it is dumped into a hole next to the ocean rather than directly in the ocean, then polluters around the country will get a green light to dump coal ash, fracking wastewater and many other toxic materials indirectly into waterways, lakes and oceans. Ask the Maui County Council to settle the case at bit.ly/settle-lahaina

Environmental Impact Statement for Wind Farms

Three wind farms on Maui and Oʻahu have applied for a higher "take" number for endangered ʻōpeʻapeʻa (Hawaiian hoary bats), ʻuaʻu (Hawaiian petrels) and nēnē (Hawaiian geese). A fourth wind farm on the Big Island which does not have a Habitat Conservation Plan is now asking for an allowed take. The two wind farms on Maui are Kaheawa II above Māʻalaea and Auwahi.

Little was known at the time of the original Habitat Conservation Plan's about the number of bats present on each of the islands, their roosting areas and their range of foraging. The number of bats estimated to have been killed at each farm has been much higher than anticipated. As part of the original Habitat Conservation Plan, the companies committed to habitat restoration in areas where the bats were known to roost and to finance research to learn more about their needs. At this point we know more about their feeding habits and their range, but we still don't know how many bats there are overall or in any particular area.

DLNR is reviewing Habitat Conservation Plan amendments for each of the wind farms while the Forestry and Wildlife Service has published a Programmatic Environmental Impact Statement for the Habitat Conservation Plans for all four and is inviting public comments. While strongly in favor of wind power to replace fossil fuel usage at the Māʻalaea and Kahului Power Plants, the Sierra Club Maui Group feels more needs to be done in three areas: 1) Better tracking of bat casualties, 2) Adjustment of the wind speed cutoff level during bat foraging times to reduce the casualties, and 3) Expanding the number of restored habitats to three noncontiguous regions for roosting and three for foraging to increase resiliency to fires and other catastrophes.

Sand Mining

The judge's order on Maui Lani Phase 6 upheld that the Architectural Impact Statement for the project was adequate, even though 200 additional burials have been found since it was done. However, he also ordered more investigation of the remaining property, including the use of Ground Penetrating Radar. No work can be done before that is complete.

BLNR Case on Stewardship of Streams

Every year for 18 years, BLNR has authorized A&B to divert millions of gallons of water daily from East Maui. It has done so despite the harm these diversions cause to native aquatic species, cultural practices, recreational uses and scenic beauty. Long ago, DLNR recognized that the diversion of streams threatens native 'o'opu and 'opa'e species. Yet, DLNR has allowed A&B to continue to take water from our streams without: the completion of an EIS; measurements of how much water A&B is taking from each stream; an understanding of the harm caused; effective conditions that protect native biota; or efforts to ensure that A&B has complied with permit conditions. Although the Water Commission ordered restoration of ten streams, A&B can still take more than half the water from more than a dozen other streams despite the harm diversions cause.

We have sued to prevent more water from being diverted until BLNR obtains the information it needs to make a reasoned decision. An EIS should be completed before more water is taken out of our streams. We are also asking BLNR to make A&B clean up the garbage it has left in and around our streams and eradicate the invasive species that are taking over the public watershed.

HB 1326 - Water Theft Bill Defeated

Thanks to significant and sustained community efforts, HB 1326 which aimed to extend revocable water permits to A&B by circumventing a circuit court ruling, failed to pass in the Senate. Read more about the fight against HB 1326 on pages 20-21.

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Maui Group Outings



SEE PAGE 9 FOR GENERAL OUTINGS INFORMATION

Please register for all hikes with the leader listed; provide your email and cell phone number. Bring lunch, water, rain gear, sunscreen, and appropriate footwear. Hiking boots are recommended for longer hikes. A donation of \$5 (\$3 for Sierra Club members) is requested of hikers over age 14 except where otherwise indicated.

Hike description key: (C) Conservation focus, such as discussing how to conserve this land for future generations to enjoy; (E) Educational, such as visiting and learning about archeological sites and naming the plants and flowers; (S) Service outing (no donation requested).

We always welcome more hike leaders! Contact sierraclubmauigroup@gmail.com if you are interested.

Check **bit.ly/SCH-Maui-Outdoors** for updates to the schedule.

If the hike description states an EMI waiver is required: East Maui Irrigation Company (EMI) allows access to their trails as long as each hiker has a waiver. An EMI waiver is absolutely required for EMI hikes. Call in your waiver request at 579-9516 well in advance to make an appointment to sign it. Then go to EMI's Pā'ia office at 497 Baldwin Avenue to sign the waiver. It is open Mon- Fri 7am-3pm. Waivers cannot be mailed, faxed, or emailed. Please be considerate of EMI staff time and pick up the waiver 5 days in advance whenever possible. The waiver must be brought on the hike and shown to the hike leader.

Friday, July 5

Wailea 670 Service Day (C/E/S)

South Maui, 2-3 miles

Help care for ancient Hawaiian sites in Wailea 670 preserve. All tools provided. Rugged terrain. Closed shoes/boots, long pants and good balance a must. Bring water, hiking stick. Meet 4:30pm at top of Kaukahi Road in Wailea. Limit 18. Leader: Lucienne de Naie with guidance by Hawaiian cultural practitioners. Register with laluzmaui@gmail.com or 214-0147

Sunday, July 7

Wahinepe'e Water Hike (C/E)

East Maui, 8 miles

Hike historic trail to overlook Honomanū stream and valley. Pools. Waterfalls. Great scenery. Can be muddy. EMI waiver required (see above). Bring water, lunch. Meet 8am Ha'ikū Community Center. Limit 15. Leader: Miranda Camp, mauimiranda@hotmail.com

Saturday, July 13

Hanawī (Nahiku Area) Stream Hike (C/E)

East Maui, strenuous/4 miles

Pools, waterfalls, native stream life. Numerous stream crossings. Good water footwear a must. Meet 8:30am at Ha'ikū Community Center. EMI waiver required. Limit 15. Leader: Rob Weltman, robw@worldspot.com | practitioners. Register: laluzmaui@gmail.com or 214-0147

Sunday, July 21

Upper Waiohuli Trail (C/E)

Kula, 5 miles

This is a hike up in the Kula Forest, up towards Polipoli State park. We will do a 5-mile route to a beautiful lunch spot. This is an intermediate hike at about 5,000 plus elevation. We can only get up there to the trail head with 4 wheel drive so we will carpool. Meet at Pukalani Ace at 8am. It is a long drive getting up there so this is a whole day event. Be prepared for variable weather with sunscreen; boots are suggested. Leader Kalei Johnson 344-0006, no text, or kalei1908@gmail.com

Saturday, July 27

Hāmākua Mālama Day (C/E/S)

Haʻikū, 4 miles

Monthly community service outing to remove trash and keep coastal trails open on 267 acres of Hāmākua lands purchased by Maui County. Bring gloves, hand tools, water, hat, lunch, sturdy shoes. Meet 9am at Ha'ikū Community Center. Limit 15. Leader: Lucienne de Naie, lauzmaui@gmail.com or 214-0147

Friday, August 2

Na Hoku Star-Gazing Benefit in Palau'ea (Wailea 670) (E) Noted astronomer, educator, and author Harriet Witt shares lore of our Hawaiian night sky. Meet at 6pm at top (mauka end) of Kaukahi Street in Wailea. Bring folding chair, warmer clothes and shielded flashlights. Donation: \$5 for members, \$10 for non-members. Register with Rob Weltman, contact@mauisierraclub.org

Saturday, August 3

Waikamoi Preserve Trail and Boardwalk (C/E)

Haleakalā, 3.5 miles

Uneven and sometimes slippery terrain. Hike into a true native Hawaiian forest preserved by The Nature Conservancy with a docent who will describe the flora and fauna. This trail is up in Haleakalā National Forest near Hosmer's Grove campground. Meet 8am at Pukalani Ace Hardware parking lot to carpool. Bring lunch, water, and rain gear. Hiking boots are suggested. Limit 12. People who have been on the Big Island any time since February 2019 are not allowed due to 'ōhi'a disease risk. Must register by July 18. Leader: Rob Weltman, robw@worldspot.com

Saturday, August 10

Wailea 670 Native Plant Hike (C/E)

South Maui, 2-3 miles

Look for wiliwili blooms and other exotic native plants set amid ancient Hawaiian sites in Wailea 670 preserve. Rugged terrain. Closed shoes/boots, long pants, and good balance a must. Bring water, camera, and hiking stick. Meet 4:30pm at top of Kaukahi Road in Wailea. Limit 18. Leader: Lucienne de Naie with guidance by Hawaiian cultural

Maui Group Outings

Sunday, August 11

Kahakapao Forest (C/E)

Makawao, 7 miles

Entire route loop is 7 miles, however we may only do a part of it. Shady all the way and gentle undulating terrain. Meet at St Joseph bus parking lot at 9:30am. Leader Kalei Johnson 344-0006, no text, or kalei1908@gmail.com

Sunday, August 18

Wailua Iki Stream Hike (C/E)

East Maui, 6 miles

Moderate hike above Hāna Highway through beautiful forest on winding, muddy, jeep road. Pools, waterfalls, and lush plant life. Bring appropriate footwear, sunscreen, lunch, and water. Meet 8am at Ha'ikū Community Center. EMI waiver required (see pg 14). Limit: 15. Leader: Miranda Camp, mauimiranda@hotmail.com

Friday, August 23

Pu'u Pahu Reserve Reforestation (C/E/S)

Haleakalā Ranch

The weather on Haleakalā varies greatly so be prepared for any kind of weather—hot/cold, sunny/cloudy, windy/ calm, wet/dry. We will provide work gloves, tools, plants, and drinking water at the truck (please bring refillable bottles). We will be cleaning and sanitizing all hiking out and collect native plant seeds, the first step in the shoes and tools with a 90% alcohol solution to help prevent the spread of the Rapid 'Ōhia Death fungus. You will need hiking boots/closed toed shoes, layered clothing | Preserve is the largest private nature preserve in the state - we suggest wearing LONG pants as we will be walking of Hawai'i. Extending across more than 9,000 acres from through shrubs and tall grass, raingear, lunch/snacks, ma uka to ma kai of Mauna Kahālāwai on Maui's west sunscreen, hat and a pack to carry it all in. All gear should side, it is home to some of the rarest endangered flora be clean of hitchhiking seeds. Meet in parking lot of Pukalani Long's Drugs at 8:30am, return around 1:30pm. Leader: Rob Weltman, robw@worldspot.com

Saturday, August 24

Kailua Stream Hike (C/E)

East Maui, 4 miles

Hike from private land to scenic pools and waterfalls along adventure trail. Bring appropriate footwear, sunscreen, lunchandwater. Meet 8:30am at Ha'ikū Community Center. EMI waiver required (see pg 14). Limit: 15. Leader: Lucienne de Naie, lauzmaui@gmail.com or 214-0147

Saturday, August 31

Hāmākua Mālama Day (C/E/S)

Haʻikū, 4 miles

Monthly community service outing to remove trash and keep coastal trails open on 267 acres of Hāmākua lands purchased by Maui County. Bring gloves, hand tools, water, hat, lunch and sturdy shoes. Meet | keep coastal trails open on 267 acres of Hāmākua lands 9am at Ha'ikū Community Center. Limit 15. Leader: Lucienne de Naie, laluzmaui@gmail.com or 214-0147

Sunday, September 8

Papa'aea Reservoir (C/E)

East Maui, 5 miles

Moderate, uphill hike above Hāna Highway in lush East Maui watershed. Eat lunch and swim at a beautiful pool with waterfall. EMI waiver required (see pg 14). Bring lunch, water, and bathing suit. Meet at the Ha'ikū Community Center at 8:30am. Limit 18. Leader: Miranda Camp, mauimiranda@hotmail.com

Monday, September 9

Wailea 670 Adventure (C/E)

South Maui, 2-3 miles

Help search for seven unlocated Hawaiian cultural sites documented in 2000-2005 and now said to be "missing". Plenty of clues. Fun adventure. Rugged terrain. Closed shoes/boots, long pants, and good balance a must. Bring water and hiking stick. Meet 4pm at top of Kaukahi Road in Wailea. Limit 18. Leader: Lucienne de Naie with guidance by Hawaiian cultural practitioners. Register with laluzmaui@gmail.com or 214-0147

Wednesday, September 11

Seed Collection in West Maui (C/E/S)

Meet 9am at the Pu'u Kukui Preserve baseyard to head reforestation process. Directions and instructions will be provided on accepted registration. Pu'u Kukui Watershed and fauna in the islands. Limit 9. Leader: Rob Weltman, robw@worldspot.com

Friday, September 20

'Āhihi Kīna'u to Anchialine Pools (C/E)

South Maui, 3 miles

Moderate. Rare access to this protected area across the lava field, led by Jeff Bagshaw, Volunteer Coordinator of the DLNR for 'Ahihi Kīna'u. Jeff has a wealth of knowledge about the plant and animal life of this sensitive region. Meet 1pm at the Kanahena "Dumps" parking lot. Bring water, sun protection (reef-safe) and footwear with toe protection and strong soles. Limit 15. Leader: Rob Weltman, robw@worldspot.com

Saturday, September 28

Hāmākua Mālama Day (C/E/S)

Haʻikū, 4 miles

Monthly community service outing to remove trash and purchased by Maui County. Bring gloves, hand tools, water, hat, lunch and sturdy shoes. Meet 9am at Ha'ikū Community Center. Limit 15. Leader: Lucienne de Naie, laluzmaui@gmail.com or 214-0147

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Moku Loa Group Report

Pōhakuloa by Cory Harden

About 75 people, including many students, showed up for a May meeting on the Army's plans to manage historic resources at Pohakuloa Training Area and Kawaihae Military Reservation. A reporter was barred from entering.

The concerns people voiced were:

- inadequate survey and documentation of cultural sites
- the Army downplaying risks from depleted uranium and other hazardous substances
- people being cut off from their connection with the land, since they are not allowed on the land and military training is destructive to the land
- children visiting Pohakuloa despite the presence of hazardous substances, and concerns that military destruction would become normalized for them
- the United States illegally occupying Hawai'i

When asked to test groundwater for contamination from military activities, and do thorough archaeological surveys, the Army said they were short on money. That response drew skepticism.

People are concered cultural sites in the Pohakuloa Training Area impact area have been fired at for decades and left to deteriorate. Since no surveys were done there before the training area opened, and now it's generally considered too dangerous to survey, the Army doesn't know the extent of cultural sites in the training ranges However, some Native Hawaiians say there are burial caves there.

Several people who read the management plan, and are familiar with the cultural significance of Pohakuloa, found this Army statement to be mind-boggling: "Based on currently available information no TCPs [traditional cultural properties] or properties of religious significance to Native Hawaiian organizations have been identified at PTA." Programmatic Agreement, August 2018, p. 133

Nakahili by Steve Holmes and Cory Harden

Changing aguifer boundaries may solve one thorny problem for a developer—but only one.

A developer is proposing Nakahili, a "family agricultural community", for almost 1,600 acres near the junction of Mamalahoa Highway and Waikoloa Road.

At first glance, it looks dreamy—lots of affordable housing, agriculture lots, and open spaces. It would have almost 1,200 new houses and apartments on 700 oneacre agricultural lots, plus 150 more agricultural lots of two to five acres. It would include a commercial district, some light industrial areas, and a wastewater facility.

But the State Office of Planning is not enthused. It notes that the land is classified as "poor" by the Land Study Bureau, has some of the lowest rainfall on the island, and lacks enough groundwater for full project build-out. On top of that, live-fire military training was done in the vicinity decades ago, but there has been no cleanup of old | other substances onto the porous landscape at the summit

munitions for about half of the Nakahili site.

The association for the nearby Mauna Lani Resort concurs, and also cites fire risk; distance from fire, medical, and police services; pollution from agricultural chemicals and wastewater; duplication of infrastructure that is already in place nearby, and the general impacts of about 3,000 new people in the area. Not mincing words, the association says the Nakahli "vision is pure fiction and does not even begin to assess the environmental impacts of essentially uncontrolled, unprofessional truck farming in an environment that is so hostile to agricultural use that is has never been used for this purpose."

Regardless, it appears Nakahili may solve one problem, if the legal boundaries of the Waimea Aquifer are changed so the project winds up with sufficient water.

Mauna Kea Update by Deborah Ward

In early June, a second round of hearings on proposed Administrative Rules for Mauna Kea was conducted. The Sierra Club Moku Loa Group submitted comments which can be viewed on the Moku Loa Group website. Chief concerns included the potential for selective enforcement of arbitrary rules that could lead to criminal charges against residents and practitioners, subject to the University administration's sole discretion to charge and decide on appeal.

The Thirty Meter Telescope project proposed for Mauna Kea was the subject of a hearing regarding an application for a construction stormwater permit, conducted by the Hawai'i Department of Health on June 25. The National Pollutant Discharge Elimination System application and draft permit to discharge stormwater into state waters, subject to special conditions, is associated with proposed construction activities from the observatory. TMT's previous NPDES permit, which it did not utilize, expired on June 11. The receiving waters, Kemole Gulch, Ku'upaha'a Gulch, Pu'u Pōhakuloa Gulch, and Wailuku River, are classified by the Health Department as Class 2 Inland Waters. Under Hawai'i Administrative Rules, Section 11-54-4, the objective of Class 2 waters is to protect their use for recreational purposes, the support and propagation of aquatic life, agricultural and industrial water supplies, shipping, and navigation. The uses to be protected in this class of waters are all uses compatible with the protection and propagation of fish, shellfish, and wildlife, and with recreation in and on these waters. These waters shall not act as receiving waters for any discharge which has not received the best degree of treatment or control compatible with the criteria for this class.

Sierra Club members are recreational users of both the Mauna Kea summit and northern plateau, and the stream areas to be affected by the runoff. We are concerned about the disposal of wastewater runoff, as a result of observing the leakage of hydraulic fluid, oil and

Moku Loa Group Report

of Mauna Kea in 2015. We were constantly told that the black oily patches under the construction equipment were "condensation", but having been there myself, and repeatedly disappeared and reappeared under jagged having collected some of the fluid, I can attest to the fact arms of a'a. The lava wall encroaches the park on the that no "condensation" has a black oily film that causes a | north end and towers over 20 feet in some sections. permanent stain under parts of specific equipment.

Mauna Kea is entirely fresh water. As evidenced by seeps and springs, shallow groundwater does exist in the | the ahupua'a of the area, but more commonly is known mountain's flanks below the summit area. Analysis of | for the once favorite surf spot and the little red house on spring water shows it to be recent and identical to rainfall the shore. Pohoiki Bay was partially filled in by the 2018 at the summit. At least some of the water percolates downward to ultimately discharge as a spring or seep. The comprehensive management plan states that threats to the hydrology of Mauna Kea include those associated with human presence and activity on the mountain and climate change. Examples include leaking facility pipes; accidental spills of contaminants; and improperly filtered wastewater. These contributions may affect the quality of water seeped to springs along Mauna Kea's flanks, as well as the freshwater aguifers beneath the mountain. Spills of oil, sewage and hazardous chemicals have been repeatedly reported by researchers working at the summit, and defiantly sit above the sand line, and remnant brackish they note that oil, in particular, will take a long time to biodegrade because of cold and dry conditions. The plan goes on to state that transport of contaminants through enter. There is currently no freshwater source at Pohoiki, the substrate has the potential to impact the quality of | although outhouses are available. both surface water and groundwater. Runoff would move downward through the unsaturated lava, traversing sandhills into the coconut groves and kamani trees. vertically downward to underlying groundwater. As noted in another article in this Mālama, the Waimea aguifer has nearly reached capacity, and the county expects to tap high level sources on Mauna Kea.

Pohoiki Reborn by Lisa Mason, CLA High School Hikers

Almost a year had passed since the Kīlauea eruption in Leilani on Hawai'i Island in May 2018. Many of us had not been back to lower Puna since then, so we were excited about April's High School Hikers outing. On April 6, Christian Liberty Academy Junior High School Hikers visited the newly shaped Puna coastline on the eastern tip of Hawai'i Island. Our journey began down a winding road through the village of Opihikau. As we drove, brief openings between thickets of wild guava and cathedral-sized mango trees revealed the hidden orchards and farmlands of these fertile farmlands. The meandering road eventually split into Highway 137, separating the sparkling ultramarine shoreline on our right from the dense tropical jungle on our left. We could smell the fragrance of ripening hala fruit and salt in the air. The lushness suddenly ended as we crossed a gravel road, about 0.6 miles across, over the lava field of Fissure 8. Still officially unnamed, the pu'u formations sit curved against the open skyline like ominous sleeping giants in the distance.

We finally arrived at Isaac Hale Park and walked along the remaining sections of a concrete path which Kōlea birds, dressed in their tuxedo plumage, didn't seem The Waimea aguifer beneath the summit of to mind us and continued picking at the short grass. Pohoiki - meaning "a small depression"- is the name of Kilauea lava flow; however, the practice of traditional fishing in the area is still alive and well. On our way, we paid homage to the owners of the red house, the hale 'ohana, as descendants and caretakers of this area. Not too far from shore, the historic Rycroft coffee mill, from the late 1800s, is somewhat visible through a receding treeline.

> County lifeguard, Brad Young, gave our group a talk about ocean safety and reminded us that the course sand and strong currents are constantly changing and the beach is still growing. Parts of the old breakwater wall water pools - encased away from their ocean source - provide a swimming hole for those brave enough to

> Our group explored a little further past the open Washed up onto the rocks was a massive mound of tangled fishing nets and random pieces of marine debris reminding us of the significant impacts humans have on our planet. We picked up as much debris as we could fit in our packs and returned the way we came as not to trespass on private property. After lunch we swam in a couple of shallow tidepools, cheering as big waves crashed over the outer landings creating a curtain of bubbles over our heads. Overall, we had a great day learning about Pohoiki and experiencing its magic once more.

> This year our club had over 29 student participants and 19 outings and events throughout the school year. Mahalo Moku Loa Group for allowing us to represent Sierra Club of Hawai'i in our community! Happy hiking and have a great summer.



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Moku Loa Group Outings

SEE PAGE 9 FOR GENERAL OUTINGS INFORMATION

IMPORTANT: The Moku Loa Group Outings are subject to "ROD Protocol" which asks participants of hikes in 'ohi'a forests to wear clean clothes, scrub their boots, then spray with alcohol. We will publish notice of ROD prone areas in outing descriptions. This preventative procedure is best done at home before reaching the area but leaders will have needed items at meeting places Please help us protect our precious forests.

Friday, June 7

Explore Pohoiki (E/F)

Puna District, moderate/3-4 miles

We will explore Pele's 2018 lava flow at Pohoiki, see new beaches Pele made and hike up Mango Road for views of the area. Lunch will be on the beach. Sturdy boots are required for traversing rough lava, wear sun protection, bring water and swim gear is optional. Leader: Diane Ware, 967-8642

Friday, June 21

Pu'u Maka'ala NAR (E)

Ka'u District, moderate/5-7 miles, 4,600ft

See the "walking 'ōhia" trees in 'Ola'a forest. Wear good hiking shoes, bring a lunch, and at least 2 liters of water. We will meet at Cooper Center in Volcano Village and carpool to the trailhead. Leader: Linda Larish, 966-6337

Saturday, July 6

Mauna Kea Service Outing (S)

Saddle Road area, 7000ft approx., work from vehicles 'Hana hou' for the last time to plant sandalwood trees on Mauna Kea with Mark Hanson's Hawai'i Reforestation Program. (The program will be shifting areas after this.) We'll be planting endemic 'iliahi and other native seedlings in areas around 7000 feet. Closed toed shoes, sunscreen, and raingear are suggested for this rain or shine project. We should be done by about 3pm, so please bring lunch, snacks, and water. Bird watching in this palila critical habitat is an option afterward. Leader: Rob Culbertson (805)-316-1380

Friday, July 19

Hawai'i Volcanoes National Park Forest Restoration (S/C) Hawai'i Volcanoes National Park, easy/1-2 miles, 3400ft +/- 600ft

We will be working with Friends of Hawai'i Volcanoes National Park most likely to help restore an area of forest burned by fire last year. Koa is being planted along with removal of invasives like banana polka. Hiking boots, long pants and ROD protocol required. Also bring lunch, plenty of water, sun and rain protection. Leader: Diane Ware, by July 10 at 967-8642

Saturday, July 20

Pu'uhululu to Mauna Ulu Crater Loop (E/C)

Hawai'i Volcanoes National Park, moderate/5-6 miles, 3400ft +/- 600ft

Hike in Hawai'i Volcanoes starting at the Mauna Ulu parking lot, walking to the Pu'uhululu kīpuka and beyond to circle the summit of the Mauna Ulu Crater. Explore native plants and geology of this region. Follow ROD protocol, bring boots, plenty of water, sun and rain protection, sunglasses, lunch and walking stick. Leader: Roberta Brashear-Kaulfers at 966-7002

Friday, August 16

Punalu'u Beach Park to Kawa Beach (E)

Ka'u District, easy/4 miles, sea level

This is a rugged, exposed coastline hike that follows the ala kahakai trail in some places. We pass cultural sites and freshwater springs to arrive at Kawa Beach. We will have lunch at Kawa Beach where we can swim if it's not too rough. Be prepared to hike over a'a lava. Leader: Linda Larish, text or call (808)-657-9640.

Saturday and Sunday, Aug 24-25

Hakalau Service Trip (S)

Hakalau Forest, moderate/4 miles, 6-7,000ft

The service projects usually involve planting native species such as koa or working in the greenhouse. Please practice ROD protocol. Accommodations are at a cabin at the 6,200-foot elevation with kitchen and bunk beds with mattresses. Participants will need to bring their own sleeping bags. At this high elevation, cold wet weather is always possible. The free time activity may include a hike in a koa-'ōhi'a forest to observe endangered native forest birds. Leaders: Sunny and Michael LaPlante, 964-5017

Saturday, August 31

Keanakakoi Crater and Crater Rim Trail (E/F/C) Hawai'i Volcanoes National Park, moderate/4-5 miles, 3600ft +/- 300ft

Hike in Hawai'i Volcanoes starting at devastation trail parking lot, walking to the trailhead on Chain of Craters Road to discover the native forest and geology of tree molds on this crater trail. Stark contrasts of live 'ōhi'a and ash burned trees, native vegetation, and great views of Halemaumau and Mauna Loa. We will circle back to crater rim to view areas recently reopened. Follow ROD protocol; wear boots, bring plenty of water, sun and rain protection, sunglasses, lunch and walking stick. Leader: Roberta Brashear-Kaulfers at 966-7002

Friday, September 6

Snorkel Honaunau Bay (E/F)

South Kona District, easy/sea level

Part of our developing marine activity section, we want to investigate the marine life near the historic Pu'uhonua o Hōnaunau (Place of Refuge) site. We especially want to invite the participation of any experienced water-persons with knowledge and memories of this special place.



Mālama Mākua, to access cultural sites in Mākua Valley twice a month.



Mākua Valley has been occupied by the US Army since World War II and has been used as a live fire training area for decades. There is unexploded ordnance in the valley and the area is off-limits to the public. The only way to hike in the valley is with Mālama Mākua and the Army contractors who accompany, oversee, and guide the group.

I was amazed to see the expanse of the beautiful valley and the many heiau, petroglyphs, and other features in the valley. Several hikes are scheduled in the next few months and I encourage you to come and experience the beauty and history of Mākua Valley.

Saturday, July 13 Saturday, August 3 Sunday, August 25

Check website for more hiking dates in the future



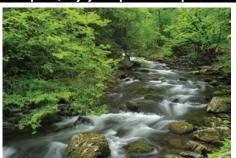
To attend, sign up at malamamakua.org. Each person must register in advance on the Monday-Wednesday prior to the hike and will be screened by the US Army prior to entry. Hikers will receive an email notification if they are allowed to enter. Hikers must bring a photo ID and sign a liability waiver on the day of the event. It's a beautiful and spiritual place. If you haven't been there, now is your chance!



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Carrying the Water for Our Kūpuna

by Kau'i Pratt-Aquino, Hawai'i Chapter ExCom Member

E ola I ka wai a Kāne, is an 'ōlelo no'eau, which means let the waters of Kāne live, a value we held close to our hearts during the 2019 legislative session to end House Bill 1326, otherwise known as the "Corporate Water Theft Bill". The measure would continue the unlawful practice of unrestricted water diversions in Hawai'i, a practice that has destroyed communities for over 100 years.

With us, we carried the lives of kupuna lost, kupuna who never saw their water restored to farm kalo or gather food, a sobering realization for those intimately involved. We are grateful and recognize the advocacy of those before us, and the responsibility we have to carry their work forward. It was not easy but we prevailed in honoring that work by closing the door on corporations, like Alexander and Baldwin, that desire to control our water resources for profit.

There were ups and downs through the process, a misinformation campaign from the other side, a last minute gut and replace bill, the unwarranted intervention by the Governor, and tons of back door dealing to make this bill into law. Yet despite the obstacles, a core team of dedicated individuals from diverse backgrounds—good governance, social justice, economic justice, as well as taro farmers and fishers and environmentalists—remained steadfast, tirelessly working for long hours at a time to educate our leaders and the community to empower them to make an informed decision based on the law and facts. Money did not drive our advocacy. It was driven by the passion to demand a better Hawai'i, not only for us, but for our children and generations yet to come. Through this, we exposed the "not so good" part of how business is conducted at the legislature, something we must address in the near future—and in the next election. The reality of law making is corporate interests, not the people, rule some of the most important decisions of our future. My hope is that we can join forces to change that. This measure provided us with a road map to move forward to evaluate our leaders, to determine if they are worthy of serving the people of Hawai'i, so less time is spent fighting bad legislation and more time is spent on creating good laws to sustain us now and into the future. I want to thank all who contributed to this effort. Your voice and your advocacy made all the difference. Mahalo!

Learn more about water rights issues & HB 1326 at waiforall.com.



Our Executive Committee Needs You!

Now more than ever, Hawai'i's environment needs your support. Looking for a way to help? Join us at the Sierra Club of Hawai'i and consider running for a seat on the Hawai'i Chapter, O'ahu, Kaua'i, Maui, or Moku Loa **Group Executive Committee.**

Visit bit.ly/SCH-nom20 to review Executive Committee member responsibilities, for more information, and to submit your nomination. Deadline for nominations is August 15, 2019.

2019 Legislative Session Highlights

by Jodi Malinoski, Chapter Policy Advocate

The Sierra Club testified on 75 bills and resolutions during the 2019 legislative session, focusing our efforts on clean energy initiatives, planning for sea level rise, reducing our waste, and a number of coalition bills with economic and social justice allies. Below are a few environmental highlights from the 2019 session:

Bad Bills Killed

The Water Theft Bill (HB 1326):

Our biggest accomplishment this session was working with a coalition of organizations and a grassroots movement to stop HB 1326, the water theft bill. This bill would have given Alexander and Baldwin a \$62M bailout and allowed them to continue diverting public trust stream resources for another 7 years. Without this bill, A&B will no longer be able to divert water from East Maui under its four permits starting the end of this year. A&B must now complete their long-term lease application, which has been in process since 2001.

During this session, we met with the Governor to collaborate on a proactive path forward for small water users based on the Department of Land and Natural Resources' existing legal authority. We will continue to work with the Administration to find a solution that respects our courts and laws, while still protecting our streams and the communities that rely on them.

Our advocacy on this issue resulted in 2,800+ emails sent to legislators, over 1,000 pieces of testimony in opposition, over 700 emails sent to the Governor, and 40 press hits. Thanks to these collective efforts, people power prevailed and the bill was killed (a few times).

Authorizing solar on A-rated agricultural lands (HB 593):

This bill would have allowed utility-scale solar to be built on Hawai'i's "A" rated agricultural lands, subject to certain requirements. While we support renewable energy, we opposed the bill due to concerns of allowing large-scale solar to be built on our most fertile and productive A rated ag lands. Utility-scale solar is already authorized on ag lands rated B, C, D, and E, and this bill favored a particular project on O'ahu, in an area currently in intensive agricultural production.

Broadening the definition of renewable energy and reducing the solar tax credit (HB307):

This bill would have broadened the definition of renewable energy to include "self-replenishing nonfossil fuels", allowing sources such as nuclear power to be considered renewable. The bill went through a re-referral and waiver to quickly pass through the House, and then was amended in the Senate to further change the definition of renewable energy and also slash Hawai'i's renewable energy tax credit by more than half. This bill was deferred in conference.

Good Bills Passed

Adopting appliance efficiency standards (HB 556):

This bill proposes that Hawai'i adopt energy and water efficiency standards for certain household and commercial appliances. Projections of cumulative savings over the next 15 years estimate that adoption of these appliance efficiency standards could result in residents and businesses saving \$537 million, 700,000 metric tons of CO2 emissions, and 34 billion gallons of water. Energy efficiency is an important component to reaching our ambitious clean energy and carbon-neutral goals. This is particularly important for low and moderate income households, who not only pay a larger portion of their income on utility bills, but will also struggle in the longterm as our planet faces the brunt of climate change.

Restructuring the State Energy Office and appropriating \$150k for a carbon tax study (HB 852):

This bill not only restructures our State's Energy Office to focus on clean energy solutions, but also appropriates \$150,000 to complete a carbon tax study. The Hawaii Climate Change Mitigation and Adaptation Commission believes that putting a price on carbon is the most effective single action that will achieve Hawaii's ambitious and necessary emissions reduction goals. However, no state has adopted a carbon tax and Hawai'i's carbon tax could disproportionately affect low income communities if not implemented correctly. We supported a study on a carbon tax to provide much needed policy guidance for how future carbon tax proposals can be both effective and equitable.

Other good bills that passed:

- **HB 2** Appropriating \$12M for watershed protection
- **HB 401** Authorizing public agencies to implement vehicle fleet energy efficiency programs
- **HB 551** Extending the work and funding for the cesspool conversion plan
- **HB 808** Protection for all species of rays
- **HB 1548** Appropriating \$750K to combat Rapid 'Ōhi'a Death
- **HB 1585** Establishing a rebate program for installation of electric vehicle charging systems
- **SB 390** Appropriating funds for food stamps to receive "double bucks" for local produce
- **SB 522** Establishing a plastics reduction working group

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Welcome Kecia Joy to the Maui Group

Please extend a warm welcome to our new Maui Group Manager, Kecia Joy! For over thirty years Kecia Joy has been a dedicated environmentalist, marine biologist, educator, and wellness practitioner with



experience as team leader, director, and co-creator of innovative projects. She aspires to serve the planet with integrity through the journey of inner growth and a profound connection to the natural world.

Kecia strives to be a catalyst for the change we yearn to see in the world and is passionate about the environment—especially water! As Director of Education at the Maui Ocean Center, Pacific Whale

Foundation, and the Roundhouse Lab & Aquarium" in California, she has created hundreds of educational programs, trainings, workshops, and leadership courses. She also enjoys teaching and lecturing internationally. As a guide and mentor for the next generation of activists who will take a stand (and the action necessary) for a sustainable future, Kecia holds a vision for a thriving community and a healed world.

Kecia has a deep respect and reverence for Hawaiian culture, traditions, and practices. It is Kecia's "highest honor to collaborate with all in our collective mission to protect and preserve the environment while bridging traditional teachings with new sustainable technologies."

Kecia is a roll up your sleeves and get it done kind of person. As our new Maui Group Manager, you will find Kecia on the trails, in our county council leading offices, activities and events, and much more.



With a vision of humanity in peaceful partnership with the land and sea, she aspires to co-create a blueprint for a sustainable Maui as a living example to the world of peace and aloha.

The Clean Water Act & Lahaina Wastewater

by Kecia Joy, Maui Group Manager

We are at a pivotal point in the 7-plus year battle over ocean pollution from the Lahaina Wastewater Reclamation Facility.

In 2012, four environmental groups sued Maui County over its use of injection wells at the Lahaina facility; the effluent was reaching the ocean and negatively impacting the coral reefs, which should require an NPDES permit.

In 2014, the U.S. District Court in Hawai'i ruled the County's use of injections wells was a violation of the Clean Water Act. The court ruled that the County cannot get around the regulation of discharges into the ocean by dumping them into a hole near the ocean first.

In 2018, the County appealed to the 9th Circuit Court and lost.

Earlier this year the U.S. Supreme Court agreed to hear the case after Circuit Courts around the country were

split over whether or not the Clean Water Act applies to indirect discharges into navigable waters. The High Court could hear the case as early as October 2019.

There is still time for the County to withdraw from the case, opting for



Algae bloom on reefs near Lahaina facility. Photo by Earthjustice.

ocean protection rather than the right to pollute without a permit.

Sierra Club, Earthjustice and Surfrider are urging the County Council to do just that. If the Supreme Court were to rule in favor of the County, it would mean polluters around the country would be free to discharge pollution without a permit through indirect means into rivers and oceans—a serious weakening of the Clean Water Act. Does Maui County Council want Maui to be known as the county that challenged and limited the ability of the Clean Water Act to protect our rivers and oceans?

The County's Governance, Ethics and Transparency committee met on May 23 but was unable to reach a majority decision on settling the case so the item was filed for later consideration. The matter should be taken up again and resolved to put the litigation to rest so the focus can finally be on reducing pollutant flow to the ocean.

Share your mana'o with the County Council and Governance, Ethics and Transparency committee at bit.ly/settle-lahaina

When an Increase is a Decrease: Toxic Gas from the Last Coal Plant

by Marti Townsend, Chapter Director

The time has come to ask the Department of Health for a public hearing in AES's proposal to increase greenhouse gas emissions from its coal plant, instead of reducing its emissions by 16% as state law requires.

Officials in the air quality division of the Health Department are considering whether to allow AES to share emissions quotas with nearly a dozen other facilities throughout the Hawaiian Islands. Basically, AES argues it can increase its greenhouse gas emissions by more than half a percent because other power plants on Maui and Hawai'i Island have reduced their emissions well beyond the minimum required reduction. Let that sink in. AES is looking to pollute the air more in Ewa Beach because power plants in Kahului and Puna have reduced their emissions more than minimally required.

AES is pushing for this because it does not want to do anything that might reduce its profits from this power plant. In its application, AES explains that it simply cannot muster the extra 50 bucks per ton of carbon it would take to install sootblowing improvements. And ramping down energy production enough to comply with the law is not even an option seriously considered in the application.

This is outrageous! AES's profit margin on the last coal-fired power plant in the Hawaiian Islands is not worth the air quality of the Wai'anae Coast.

The residents of West Oʻahu deserve better. That is why we are asking the Health Department to hold a public hearing on AES's permit application. We should never allow the cleaner air of wealthy communities to be used as justification to worsen the air quality along the Waiʻanae Coast. Please join our call for a public hearing on the "AES Hawaii Covered Source Permit No. 0087-02-C." Email the Clean Air Branch of the Health Department at: cab@doh.hawaii.gov or 808-586-4200.

AES COAL PLANT WANTS TO INCREASE EMISSIONS

West O'ahu deserves better!

Call for a public hearing 808.586.4200 cab@doh.hawaii.gov

Cracking Down on Red Hill

by Kirsten Fujitani, Chapter Communications Manager

Navy's Permit Application

In July 2017, the Sierra Club of Hawai'i filed suit against the Department of Health for the unlawful exemption of the U.S. Navy's Red Hill fuel tanks from local underground storage tank regulations. As a result of the lawsuit, regulations were implemented that require the Navy to obtain a permit to operate the tanks. The Navy submitted a permit application in March but the original application was rejected by the Department of Health. After addressing the inconsistencies, the Navy resubmitted their application in June and public comments were accepted. The Sierra Club of Hawai'i's main concerns with the application include:

- Much of the application is redacted and some parts missing. A public hearing should be held on this application to provide more information to the public,
- The Navy's own studies have shown corrosion of the tanks and releases from pipelines transporting the fuel from Red Hill to the bases, and
- The permit does not assess the risks of an earthquake to the facility and therefore O'ahu's aquifer.

The permitting process provides an opportunity to impose additional requirements on the tanks and better regulate the day to day operation of the Red Hill facility. We are currently awaiting a response to our comments.

Petition for Rulemaking

The Sierra Club of Hawaii and its members recognize that this permit and the recently implemented regulations do not go far enough, therefore in May we also submitted a petition for new rules to the Department of Health. If granted, our proposed rule would require the eventual relocation of the Red Hill tanks. The rule would prohibit large-capacity underground storage tanks above our aquifer.

Red Hill Provision

In early June, the House Armed Services Readiness Subcommittee passed a provision requiring the U.S. Navy to hold quarterly public community meetings to provide updates about the Red Hill facility. The provision was introduced by Rep. Tulsi Gabbard in the 2020 National Defense Authorization Act and requires quarterly meetings for at least the next five years unless the facility ceases operations.

True transparency and public information has been a long-standing challenge at the Red Hill facility and we are grateful to Rep. Tulsi Gabbard for her efforts to make the information on this facility more accessible. We are now asking our Congressional delegation to support the relocation of these antiquated rusty, leaky fuel tanks.

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