Welcome to Ko Hema Lamalama, the newsletter of the Kaho‘olawe Island Reserve. Uncle Harry Mitchell interpreted this name as the southern beacon, which served as a source of light to weary travelers voyaging beyond the pillars of Kahiki. Let Ko Hema Lamalama aid us in sharing a source of light from Kaho‘olawe and the restoration of Hawaiian culture across Hawai‘i nei. This issue is made possible by supporters like you. Mahalo for helping us share Kaho‘olawe.
The impact of the spread of the COVID virus was also felt by the KIRC as the state began closing and people were directed to begin social distancing. Due to the combination of engine problems on our landing craft and the uncertainty of the COVID virus during the early days of the pandemic, we canceled our March 2020 access before the Statewide shelter in place announcements were made. Volunteer groups from King Intermediate and the University of Hawaii’s at Mānoa’s Geophysics Department were planning to make the trek to Kaho‘olawe to help in our spring break planting trip but were canceled.

Honokanai‘a Base Camp was opened for the April access dates, but without volunteers. Our KIRC field staff, base camp staff and contract workers for the Kaho‘olawe Dryland Forest Project were able to pick up their essential efforts on island. With fewer numbers, monthly operations on island were able to continue throughout the Spring and Summer.

Our base camp management team has developed new sanitation and social distancing procedures, based upon recent CDC guidelines, in preparation for the return of possible volunteer work groups to the island. Over the last few months, we have been testing the new procedures with KIRC and Base Camp staff in anticipation of bringing small volunteer groups back to the island in the fall to begin the new planting season on island.

Lastly, the economic impact of the COVID pandemic was also significantly felt on the KIRC. As a cost saving measure in anticipation of the projected low state revenue returns for the Fiscal Year 2021, all state hiring was frozen and the funding for any vacant positions were held back. Additionally, most of the state’s requests for supplemental funding for FY21 were canceled. This significantly impacted the KIRC by reducing its potential staff by two and a large amount of operating funds will not be coming to us for the fiscal year.

[Signature]

Michael K. Nāho‘opi‘i
Executive Director
Starting off with budget projections for sustained economic growth, the KIRC was able to continue its efforts to increase its own funding through several bills introduced by Representative Yamane (HB1880) and Senator Shimabukuro (SB3094). Both measures sought to expand the KIRC’s critical restoration work on Kaho`olawe with increases in field staffing and operational funding.

After the wildfire on Kaho’olawe that burned nearly 9,000 acres and destroyed the KIRC’s upland storage facility, we turned to the Legislators for support once again. Senators English and Kahele, along with Representative Yamane, were able to amend HB2200 in the Senate Water & Land Committee hearings to include emergency funding for the KIRC to begin fire recovery efforts on island. Former KIRC Commissioner, Sen. Keith-Agaran lent his support through an amendment to the CIP bill (HB2725) to start reconstruction of the facilities lost in the fire. Rep. DeCoite also introduced a house and concurrent resolution urging all state entities to assist the KIRC in their recovery efforts.

Enter COVID-19.

Once the pandemic hit Hawai’i, the shutdown of all non-essential business and the tourism trade quickly changed the economic picture from January. Revised revenue projections for the current and upcoming years decreased so drastically in such a short period of time that lawmakers had to immediately implement major changes to state funding measures that were under consideration, deleting most supplemental funding requests and eliminating funding for all vacant positions.

What does all this mean for the KIRC and Kaho’olawe?

The KIRC will be starting FY21 with a lower funding level than in the past four years and a hiring freeze on filling our vacant Cultural Resource Project Coordinator and UXO Safety Specialist positions. Most importantly, the KIRC will need to totally rebuild the momentum gained during the last four legislative sessions. This will be challenging because current projects show the state will be in recession for quite some time.
With COVID-19 pressing pause on the volunteer program through the summer, the KIRC Operations Team used the Staff Only accesses to mobilize some major equipment, including a Mahindra Roxor, a 4x4 off-road utility vehicle that will be used to transport supplies, equipment, personnel and volunteers on Kaho’olawe.

The Mahindra replaced one of the KIRC’s Polaris ATVs lost to the February Fire. The Roxor’s large size and the beach conditions at the Kihei Boat Ramp meant constructing specialized ramps and engaging “all hands on deck” in order to safely execute such a logistical feat.

While weather is always a factor in planning KIRC logistical operations between Maui and Kaho’olawe, picking the right day to attempt such a move becomes extra critical when considering surf conditions along the shore in Honokanai’a. With the summer surf season in full swing, we were grateful that on the final boat run of the July access the summer swell subsided enough for the Captain to give the go ahead.
In 2016, a preliminary study conducted on Kahoʻolawe found a seasonal presence of the Ōpe‘ape‘a, or Hawaiian Hoary Bat (*pictured above*), Hawaiʻi’s only endemic land mammal. Threatened by loss of habitat, deforestation and mortality due to wind turbines and predators, Kahoʻolawe serves as a puʻuhonua for this endangered species.

The data collected from the year-long study suggested that the bats migrated to and from Kahoʻolawe on a nightly basis, with the most activity occurring between late summer and winter, peaking in September. The KIRC Restoration staff recently installed several new bat detectors (*right panel*) on Kahoʻolawe to gather more information.

The detectors record the high frequency echolocation calls, or pulses, of the bats as they fly over. The data collected by the equipment is downloaded by the KIRC staff during monthly on-island accesses, which is then analyzed and visualized back on Maui.

*Full spectrum signatures of a pulse (top) and feeding buzz (bottom) from the first Ōpe‘ape‘a recorded on Kahoʻolawe.*
Use of “dry water” (left) and soil amendments (right) to help new plants become established without access to irrigation lines.

Without the support of a volunteer workforce, the very small KIRC Restoration team, supported by the KIRC Base Camp staff, had to be even more resourceful and creative in the field this summer to stay on track with current planting and monitoring projects.

Field vehicles were transformed into pack mules, loaded to the brim with the day’s supplies including water jugs tied to the frame, a soil mixing tray strapped to the hood, and bags of soil amendments layered on the backseat. There was just enough room left for the driver!

Planting in cleared hardpan areas, which requires a full day of preparation that involves auguring holes and laying irrigation, had to be put on hold. Instead, soft soil mounds and shallow gullies in the Kamōhio area provided natural kīpuka for outplanting larger groups of native seedlings.

The new seedlings rely heavily on the water provided by irrigation lines in the first few days after planting to become established. To overcome this challenge, the Restoration team experimented with dry water, a solid substance that resembles powdered sugar but is actually 95 percent water. Each powder particle contains a water droplet surrounded by modified silica, the same material that makes up ordinary beach sand. This sandy coating prevents the individual water droplets from combining and turning back into a liquid.

Liquid water was added to a small cup of dry water in 5-gallon buckets, and after 24 hours the powder-water mixture had morphed into a jelly porridge that could be scooped by hand and placed in the holes with new seedlings during planting.

Top: Arcus Aikau, KIRC Base Camp staff member, working in the field with the KIRC Restoration team to outplant in small, dry gullies and rivulets.

Bottom: KIRC Polaris ATV loaded with the week’s supply of buckets, water jugs, soil amendments, planting trays, shovels, safety equipment, trauma kit, and tire repair kit.
Soil from the rivulet is then used to cover the planting area (left) before mulch is added (right) to help with moisture and soil retention.

The Restoration staff also spent the summer months establishing maʻo monitoring stations in Kaukaukapapa and Kealaikahiki to track post-fire regrowth of the native species. Maʻo (Gossypium tomentosum) is more commonly known as Hawaiian Cotton.

So far, the maʻo has exhibited a regrowth rate of about 60 percent in both areas. This is not surprising considering the fact that the silver-haired leaves of the plant are able to reflect solar radiation and its woody branches are able to tolerate drought.

Did you know the maʻo once saved the modern textile industry? When maʻo is crossed with other cotton strains, the resulting hybrids are less attractive to insect pests that can destroy commercial cotton crops.
In an effort to continue the coastal restoration process during Kauwela, the hottest and driest period of the year (May-Oct), the Ocean Program has established a new method of shoreline planting to increase native plant survival and growth during this harsh and unforgiving time of the year. Using compostable food containers as planters (below, right), KIRC staff places native plants in the containers with saturated soil amendments before outplanting them in strategic areas along the coastline. This strategy, and others like it, provide the native plants the best opportunity for survival and support the long-term success of our rehabilitation of Kaho‘olawe and its surrounding waters.
Several monk seals hauled out on the sand in Honokanai’a.

Hawaiian Monk Seals are generally solitary animals, so they had no problem adjusting to the COVID-19 physical distancing guidelines in place on Kaho’olawe!

Kaho’olawe serves as a pu’uhonua (refuge) for all forms of life. During the last access to Kaho’olawe an untagged female monk seal was observed on the beach of Honokanai’a in the same area for four days (below). Her presence, activity and interaction with other seals were monitored and documented for several hours each day. KIRC staff suspected she did not leave at all during the four day period, only moving up and down the beach with tidal and wave changes, with little to no response or interaction to other nearby hauled out seals. Although this type of behavior and long periods of rest are not uncommon, it has never been seen on Honokanai’a beach.

After sharing staff observations and photos with NOAA’s Monk Seal Research Program Supervisor Tracy Mercer, it was confirmed that the seal looked to be healthy and was likely preparing to begin her annual molting process.

KIRC staff are only allowed to approach these highly protected and endangered animals under NOAA NMFS Permit #22677.

Tagging is a method used by the Hawaiian Monk Seal Research Program for identification and tracking that allows for long-term monitoring of individual seals.

Female untagged Hawaiian monk seal hauled out in Honokanai’a.
Mahalo to our current Members and Donors!

Individual donations are critical to the KIRC’s efforts to protect, restore and preserve Kaho’olawe. Consider becoming a member today!

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Hawaiian Monk seals hauled out on Kaho’olawe.

‘Ulua aukea (Giant Trevally) spotted in the Reserve.

Ma‘o regrowing in an area burned by the February fire.

Summer Solstice sunset in Honokanai’a.
Aloha Kahoʻolawe

Aloha Kahoʻolawe is a campaign to support restoration and access. We invite participation via membership, partnerships and legislative support. By building consensus that there is value in the historical, cultural, ecological and community building resources shared through Kahoʻolawe, we aim to share this special place now and for generations to come.

Send this completed form with your donation to: 811 Kolu Street, Suite 201 | Wailuku, HI 96793.
Checks may be made payable to Kahoʻolawe Rehabilitation Trust Fund. You can also give online at kahoolawe.hawaii.gov/donations.shtml.

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Anuenu (rainbow) seen off-shore from Honokanai’a.
ABOUT THE KIRC

The Kaho’olawe Island Reserve Commission (KIRC) was established by the Hawai’i State Legislature in 1994 to manage the Kaho’olawe Island Reserve while held in trust for a future Native Hawaiian sovereign entity. The KIRC has pledged to provide for the meaningful and safe use of Kaho’olawe for the purpose of the traditional and cultural practices of the native Hawaiian people and to undertake the restoration of the island and its waters. Its mission is to implement the vision for Kaho’olawe Island in which the kino (body) of Kaho’olawe is restored and nā po‘e o Hawai‘i (the people of Hawai‘i) care for the land. The organization is managed by a seven-member Commission and a committed staff specializing in five core programs: Ocean, Restoration, Culture, Operations and Administration.

COMMISSIONERS

Protect Kaho’olawe ‘Ohana: Joshua Kaakua (UH, College of Engineering)

Protect Kaho’olawe ‘Ohana: Jonathan Ching (Land and Property Manager, Office of Hawaiian Affairs)

Protect Kaho’olawe ‘Ohana: Michelle Miki’ala Pescaia (Interpretive Park Ranger, Kalaupapa National Historic Park)

County of Maui: Saumalu Mataafa (Executive Assistant, Department of Management, County of Maui)

Department of Land & Natural Resources: Suzanne Case (Chairperson, Department of Land & Natural Resources)

Native Hawaiian Organization: Hōkūlani Holt (Director, Ka Hikina O Ka Lā & Coordinator, Hawai‘i Papa O Ke Ao, UHMC)

Office of Hawaiian Affairs (OHA): Carmen Hulu Lindsey (Trustee, OHA)

Michael K. Nāho’opi‘i, Executive Director