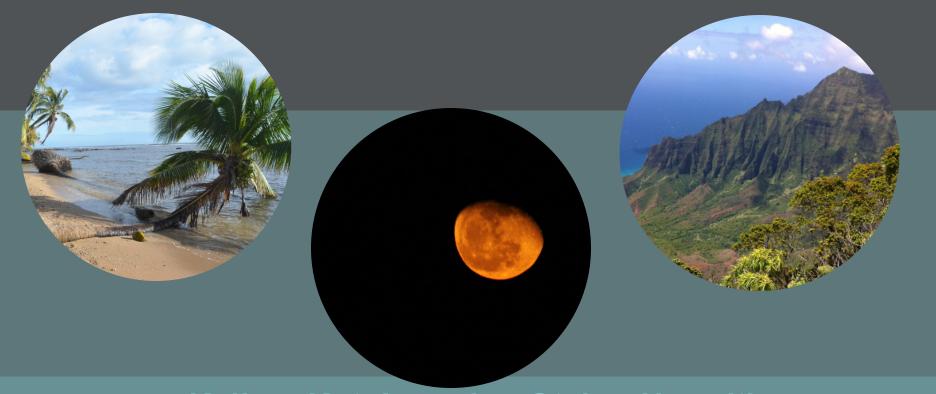
## 'AIMALAMA SYMPOSIUM REPORT



Kailua, Koʻolaupoko, Oʻahu, Hawaiʻi October 3-5, 2014





- Note from Director
- 2014 'Aimalama Symposium Introduction
- Kaulana Mahina- Hawaiian Lunar Calendar in History
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### NOTE FROM THE DIRECTOR

Aloha nui kākou e nā hoa kilo honua mai Hawai'i nui o Keawe a hiki aku i Ni'ihau o Kahelelani. Loli Aniau, Maka'ala Aniau (Climate Change, Climate Alert) or "LAMA" is a project housed within the University of Hawai'i at Mānoa Hawai'inuiākea School of Hawaiian Knowledge (HSHK), one of the largest schools of indigenous knowledge in the United States.

LAMA's mission is to catalyze climate adaptation and resiliency by engaging communities in Hawai'i and beyond through innovative training and policy tools that link decision-makers with the university, island communities, and the public as well as private sectors. It is our goal to engage and empower climate justice communities in Hawai'i and globally.

The overall goal of the "Lamakū Na'auao" project is to build the capacity of the Native Hawaiian community to participate in decision-making and contribute to an enhanced capacity for our islands' food, agricultural sectors and cultural practices to be resilient to the impacts of climate change.

LAMA believes that by enhancing the collective knowledge, skills and attitudes of the participants we are lighting the lama (torch) in each community regarding these key issues that our communities are faced with. The participants become strengthened leaders in their communities who inform others about the reality we face and encourage them to take action.

In October 2014, LAMA partnered with Kalei Nu'uhiwa and Kama'aha Education Initiative to organize the 'Aimalama Symposium. The primary purpose of the symposium was to engage, listen and learn from one another as lunar calendar practitioners and to enhance the collective knowledge and skills of the participants regarding the use of the Kaulana Mahina, ancient Hawaiian lunar calendar. We invited cultural experts, practitioners, and leaders from different islands to collaborate in building a strong kahua for the lunar calendar practitioners network and to provide feedback on the draft LAMA Kilo Honua resources. We also worked on an action plan that leads towards a lunar calendar symposium in 2015 for indigenous practitioners from Hawai'i and the Pacific and in 2016 a global symposium that would inform discussions of the IUCN World Conservation Congress, hosted in Hawai'i as well as other international meetings.

'o au iho nō, Malia Nobrega-Olivera Director of Strategic Partnerships and Community Engagement

## **2014 'AIMALAMA SYMPOSIUM**

In the ahupua'a of Kailua, the moku of Koʻolaupoko, on the island of Oʻahu, cultural practitioners, community educators, kupuna, and resource managers from Ka PaeʻĀina Hawaiʻi convened at an intensive two day symposium to explore how observation of the lunar phases effectively enhances our collective work. Together we openly shared and detailed the successes of our mālama 'āina efforts within the context of sustainability and community empowerment and we discussed how these culturally-rooted initiatives and perspectives present the unique opportunity to reconnect with Kaulana Mahina (the lunar calendar).

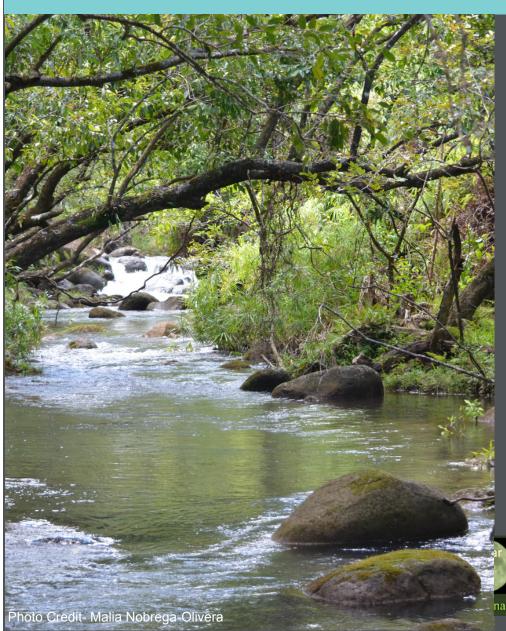
The group came together to lay the foundation and create an action plan for a Kaulana Mahina conference that would be open to Hawai'i and Pacific Island practitioners in September 2015. The network envisions the gathering will engage practitioners and the larger community with the primary goal of enhancing our collective knowledge, skills and attitudes toward our re-adaptation to a changing climate as we strengthen our traditional practice of being kilo (observers). The 2015 conference will seek to inspire the public to take action within our own communities towards sustainable systems, attitudes, and practice with Kaulana Mahina as the guiding force.

Through engaging listening, discussion and presentation sessions, the network collectively affirmed that reconnecting with the rhythm of the mahina can be an effective tool in teaching the populace to recognize natural indicators, mālama our natural resources, and return to a culture of temporal observation that has sustained and continues to sustain Hawai'i's population.



2014 'Aimalama Symposium Participants Photo Credit- Hau'oli Waiau

## KAULANA MAHINA ~ HAWAIIAN LUNAR CALENDAR IN HISTORY



Renowned Kaulana Mahina practitioner, Kalei Nu'uhiwa, opened the first day of our gathering by providing a thorough overview of Papahulilani, the traditional Hawaiian field of atmospheric studies, citing Hawaiian scholars and their mana'o based on the ancient practice of observation according to the moon phases and other celestial phenomenon. Her presentation underscored the importance of reconnecting with the pulse of nature, asserting that Kaulana Mahina is a viable guide gifted to us by our ancestors that can steer us back to a close relationship with our natural world. She shared the similarities of moon observations across Pacific cultures, and cultural traditions and histories associated with the moon.

Kalei noted that the term kaulana, often translated as "famous," also refers to cycles and the natural sequence of things, and as such, with each sequence of the moon phases, we can expect predictable occurrences on each night and climactic differences between seasons. Focusing primarily on the Hawaiian moon calendar, she detailed the 30 phases, practices occurring on each night, the seasons making up the calendar year, and the opportunities that each phase and season presented for the practitioner.

Na Pō Kapu a Hua

Mohalu Hua Akua Hoku Māhealani Kulu Lā'aukūkahi Lā'aukūlua Lā'aukūhi hoto Credit- Kalei Nu'uhiwa

## KE KAI (THE OCEAN)



One of the most noticeable/visible effect the mahina has on our earth is mirrored in her oceans. Kalei also reminded us that **Our ancestors understood the correlation between mahina and fish aggregation, tides, and seasonal changes.** Monthly, the rise and fall of the ocean's tides owes its existence to the moon, from low to high points, to fish spawning, the moon has reigned over the kai for millennia, and there is so much to be learned ~ and practiced ~ through the traditional ways of our ancestors and the knowledge that our kupuna have documented for us in our moʻolelo, mele, pule, oli, etc.



Photo Credit- Malia Nobrega-Olivera



Photo Credit- Malia Nobrega-Olivera

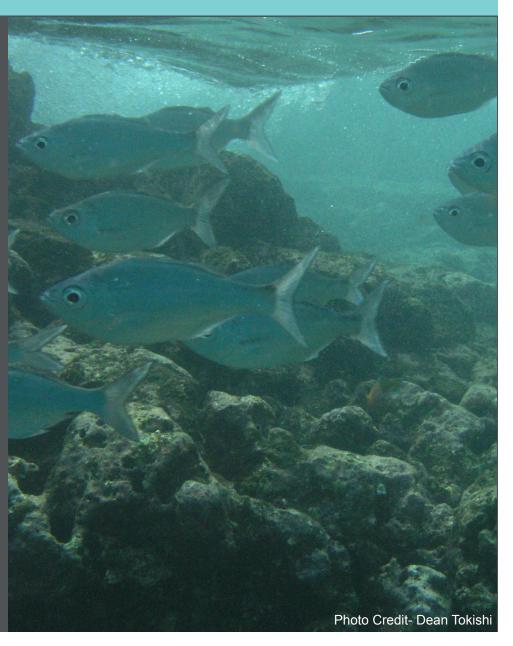


Photo Credit- Kala Thomas

## **KE KAI: LAWAI'A (FISHING)**

Today, the use of Kaulana Mahina is determined regionally and its application varies from one moku to another, from one ahupua'a to another. This notion is beautifully illustrated in the near shore and deep water fishing traditions throughout Hawai'i. As Dean Tokishi noted in his presentation to the group, this place-specific variable is crucial to maintaining the health of our ocean resources. Dean is a Wailuku bred spear fisherman who currently serves as the Ocean Program Manager for the Kaho'olawe Island Reserve Commission (KIRC). His team works with local fishermen harvesting in and around the reserve to conduct thorough analyses of spawning patterns and other marine observations in the hopes of developing a comprehensive, traveling resource to correlate moon phases with catch reports. This collaboration provides a valuable snapshot of the reserve's health, and allows for effective monitoring of the fishery.

Localized monitoring has proven effective for other fishing communities in Hawai'i, such as the recently highlighted success of the community-based subsistence fishing area in Ha'ena, Kaua'i. Kau'i Fu, who works with the Waipā and Halele'a communities in Ha'ena, is a practitioner who concurs with this form of community-based monitoring and ownership. The fishermen are the ones in the kai actively interacting with the ecosystem, and while obtaining catch reports can sometimes present a challenge, it is a vital piece to ensuring the long term health of the fishery. Revered kupuna and longtime Maui fisherman 'Anakala Les Kuloloio reminds us that our fragile ocean resource and everything in it is interconnected, and through deliberate kilo, we can ensure its sustainability for our keiki today and for the many generations to come.



## He lawai'a no ke kai papa'u, he pōkole ke aho; he lawai'a no ke kai hohonu he loa ke aho.

A person whose knowledge is shallow does not have much, but he, whose knowledge is deep, does.



Luka Mossman, who works with Hawai'i Conservation International (HCI), also advocates for the sustainable management of smallscale fisheries through his work. Echoing the mana'o of KIRC and the Ha'ena community, he asserts that lawai'a know their fisheries best, and that each place is unique in their practices, environments, and the behavior of the fish. fishing communities to study spawning patterns of fish local to specific areas, and restore coastal habitats and biological systems in an effort to transform seafood value and supply chains. This community-driven science can not only sustain the local fisheries, it can inform the State's data (which is often inconsistent with the realities of the fishery), which in turn can inform policy, as well as the practice for generations to come. 9 Engaging the youth in this plan is key, as their shift in resource management can have positive impacts on an entire community. Discussion around Luka's presentation suggested a return to the practice of catching and eating the smaller fish, allowing the bigger ones to continue to reproduce and sustain the fishery.



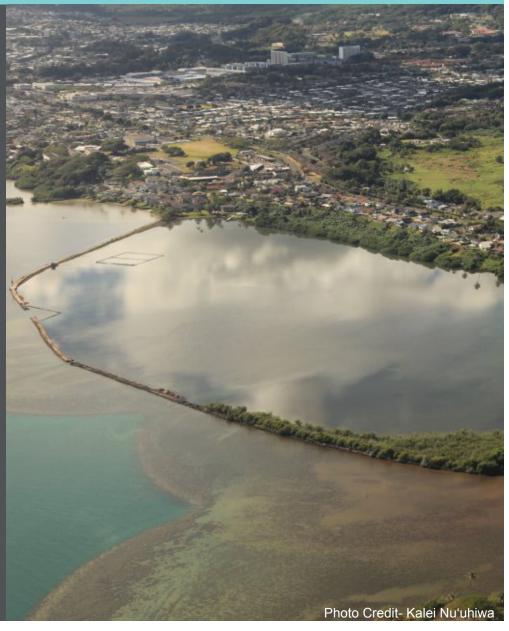
## KE KAI: LOKO I'A (FISH PONDS)

Hi'ilei Kawelo, Executive Director at Paepae o He'eia, shared valuable mana'o about how the fishponds are regulated by mahina. The pond and surrounding areas are rich with Hina mo'olelo, and underscores the importance of a close relationship with the mahina. With shallow reef systems that are constantly subject to tidal changes directly impacting restoration work, the mahina is always in mind at the pond. In light of a changing climate and changes in our environment, she stressed the need to transition our people from lawai'a to mahi i'a ~ from fisher people to fish farmers.

Maintenance and restoration work at Paepae o He'eia is dictated by the mahina and seasonal changes. Recorded observations of these lunar and seasonal variables have allowed their hui to determine the best times to perform different kinds of work, recognize patterns in recruits and migrations of sea life, and anticipate how mahina will affect productivity. All the while, the hui incorporates an educational component, correlating the needs of the pond with learning and teaching opportunities for the community.

"Through the disciplined cultivation of observation skills, we learn about adapting to change by anticipating the forces that arrive to influence our environment" – Roxanne Stewart

Roxy Stewart, a cultural resource teacher at Ka 'Umeke Ka'eo, utilizes Papakū Makawalu methodology in all of her work. This methodology incorporates categorization, familiarization with



## E mālama 'ia nā pono o ka 'āina e nā 'ōpio.

The traditions of the land are perpetuated by its youth.



natural patterns, kilo practices, data collection, habituating practice, decision-making, thinking in terms of cycles, etc.

The educational work Roxy is doing with the haumāna seeks to internalize ancestral knowledge and practice of following the pō mahina by thinking in terms of cycles, and having that be a part of everyday culture with kilo as their foundation. The work also seeks to provide facilitation training, equipping kumu with necessary tools to successfully engage haumāna in relevant ways. Using this approach, Hale o Lono students created a lunar calendar, and presented it to the community, showcasing the value of this kind of training by utilizing ancestral 'ike as effective resource management.



## KE KAI: HOLO MOANA/WA'A KAULUA (VOYAGING)

"Guided by the heavens, our ancestors populated every corner of the Pacific Ocean. Through keen observations of the environment, they were able to glide over the vast ocean with confidence and intent. Today, the canoe remains an integral part of our existence, spurring cultural revitalization and reawakening ancient knowledge," shared by Bonnie Kahape'a-Tanner and Pua Maielua-Lincoln.

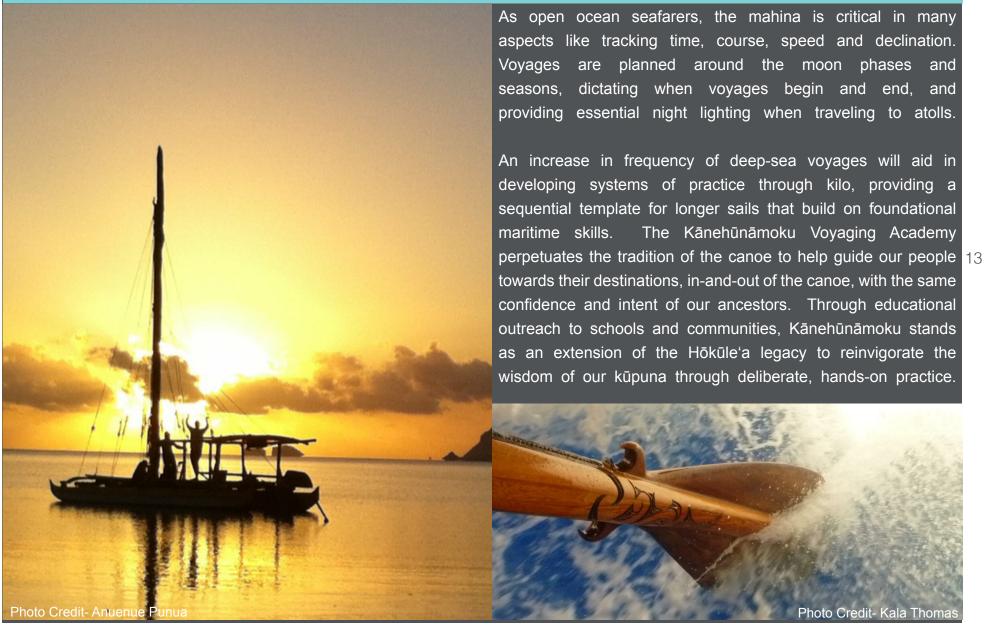
The revived art of wayfinding, attributed to the mana of Satowal native Mau Piailug and passed on to an eager crew of kānaka maoli in the late 1970's, also depends heavily on the mahina. Bonnie Kahape'a-Tanner and Pualani Maielua-Lincoln, captains of Kānehūnāmoku, a 29 foot double-hulled sailing canoe, shared that navigation practices require intense kilo techniques, and that being in the flow with navigational 'ike, and opening up to receive it, only comes through practice.



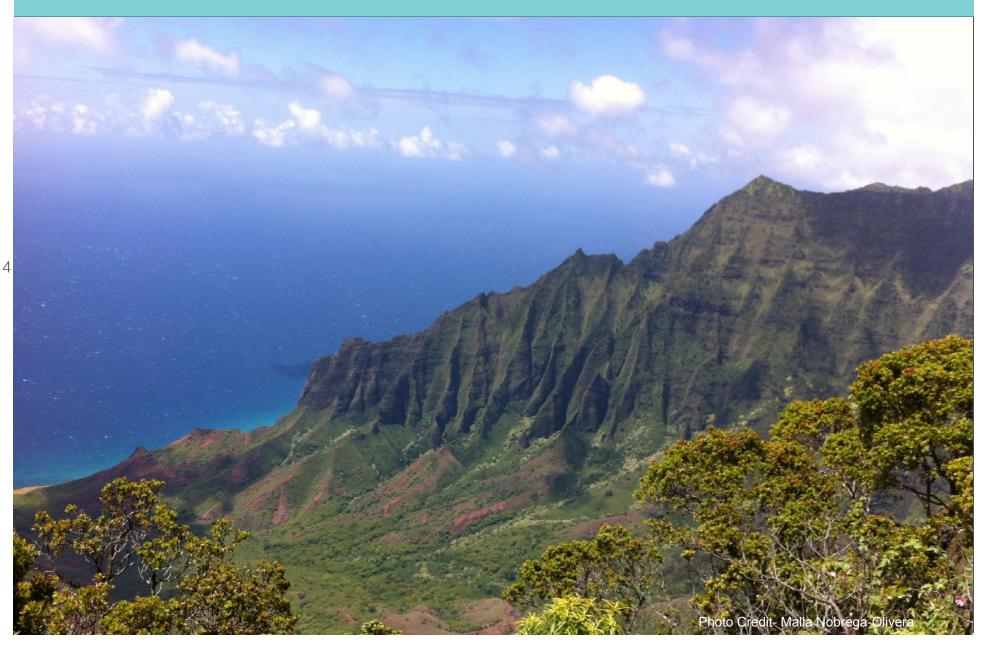


### 'Au i ke kai me he manu ala.

Cross the sea like a bird.



# KA 'ĀINA (THE LAND)



## He ali'i ka 'āina, he kauwā ke kanaka.

The land is the chief, man its servant.



Photo Credit- Malia Nobrega-Olivera



Photo Credit- Malia Nobrega-Olivera



Photo Credit- Jeff Ohata

Traditional mele and oli are infused with the deep connection Native Hawaiian people have with their 'āina (land). The 'āina, an ancestortokānakamaoli, existed in asymbiotic, reciprocal relationship with man, reaffirming kuleana and mālama 'āina values where caring for the land meant caring for the people.

As with mahina traditions make kai, observing patterns on the land heralded by Kaulana Mahina is a brilliant, sustaining factor in traditional farming practices. Utilizing biodynamic farming techniques, kānaka understood the effects mahina had on plant propagation. There are nights best to plant and harvest our mea'ai (food) and lā'au lapa'au (medicinals), and nights not suitable for planting but suitable for the practice of mālama. Kalei shared with us that "the potency of medicine crops were determined by the moon phases, as were observed ritual nights for their preparation."

"The momona of the people is the momona of the 'āina"

~ Kauwila Hanchett, Executive Director, Ka Honua Momona



## I ola no ke kino i ka ma'ona no ka 'ōpū

The body is healthy when the stomach is well filled ~ a healthy diet is essential to good health



Discussion regarding mahina and her effects on the 'āina focused largely on abundance ~ increasing it, sustaining it, thereby increasing the abundance for the people living on and caring for it. Restoring 'āina momona, a recurring objective across all planes of cultural rediscovery and restoration, is seen as a paramount goal in this return to 'ike kūpuna. Through place-based learning and observation, we are better equipped to mediate the changing environment and create community repositories of knowledge that is transferrable across generations. Once observations are gathered over a period of time, it can not only inform community 17 management, but also policies to protect our valuable resources.

At Kokua Kalihi Valley (KKV), a pu'uhonua specializing in farmer education and propagation/use of traditional healing plants in Koʻolaupoko, Oʻahu, a movement is growing around concepts of planting and harvesting according to the moon phases, and traditional practices surrounding childbirth. By "growing farmers," KKV ensures that valuable 'ike regarding plant propagation is learned and practiced in a community setting. Ka'iulani Odom, ROOTS Program Director at KKV, shared that

spiritual practices govern the planting, harvesting, and eating of food, and as moon cycles dictate the optimum times to engage in these various stages of farming, its significance to their work is paramount.

## KA HULI AO (CLIMATE CHANGE)



## KA HULI AO: THE LAMAKŪ NA'AUAO PROJECT





LAMA (Loli 'Aniau, Maka'ala 'Aniau), an initiative housed at Hawai'inuiākea School of Hawaiian Knowledge, seeks to catalyze climate adaptation and resiliency by engaging communities in Hawai'i and beyond through innovative training and policy tools that link decision- makers with the university, island communities, and the public as well as private sectors. LAMA Director, Malia Nobrega-Olivera, shared that the goal of the Lamakū Na'auao project is to engage and empower climate justice communities in Hawai'i and globally. LAMA, hosts of the October 2014 gathering, believes that a to the ancestral traditions return presented discussed wavs and practitioners are key to planning 19 the in Hawaiʻi. sustainable future for

LAMA is developing Kilo Honua resources that will be used in community workshops that highlight the work of Native Hawaiian practitioners and organizations and their work in mitigating and adapting to climate change. The resources focus on key thematic areas of climate change, traditional knowledge, food security, and renewable energy. LAMA seeks to foster community mobilization towards self sufficiency and responsible resource management.

LAMA also shared one of the action items that transpired out of the March 2014 Kilo Honua workshop and that is the Hō'ā i ka Lama event that is done monthly on the full moon with your 'ohana and friends. Participants were excited about this event and saw it as an easy way to share our key messaging and practices with the wider community. For more information about this event visit- http://hoaikalama.com

## KA HULI AO: HŌʻĀ I KA LAMA-A MONTHLY INITIATIVE ON THE FULL MOON

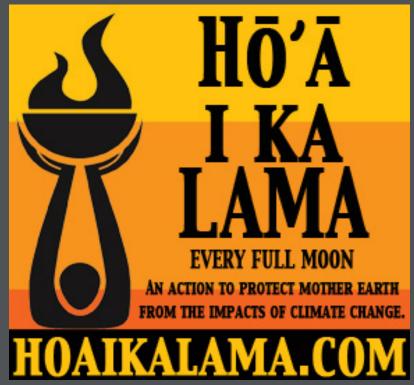
Hōʻā i ka lama is a monthly initiative that was initiated by the participants of the LAMA Kilo Honua workshop in March 2014. It transpired from a day of action that would be done once, to a monthly action done on every full moon.

It is a call to our global community to "Hō'ā i ka lama" (ignite the torch) and turn our attention to the night sky to show our collective support for the Mālama Honua Worldwide Voyage,to raise awareness around the global 20 issue of climate change, and encourage simple, conscious efforts to mālama 'āina

(care for the land). Participants of the 2014 'Aimalama Symposium were excited about this initiative and saw it as an easy way to share our key messaging and practices with the wider community.











## **KA HULI AO:** ADAPTATION TOOL & METHODOLOGY

Instagram MOON PHASE moonphaseproject

"The Moon Phase Project was born out of a curiosity to know mahina more intimately than having look at calendar, to build new platforms knowledge systems, and to create a tool to share information about what is being observed. place based applicable everywhere!" Jamie Makasobe

http://moonphaseproject.com

hilo 'ia a pa'a tag observations @moonphaseproject #hiloiaapaa I moon phase journals

ail, at kealopiko.com | select photos will be featured here and on the blog

PROJECT

**Edit Profile** 

Presenting on behalf of the Moon Phase project was artist and Kealopiko designer Jamie Makasobe, and team member Kanani Frazier. By tapping into social media, the project convened a team across different locales to develop a database of observations. These participants share observations through a variety of social media platforms, including Instagram and FaceBook, the Moon Phase project website and blog. Mostly an online presence, the project documents fish spawning, weather observations, blooming patterns of plants, farming and harvests, anything! Accompanying the project is the Hilo Ia a Pa'a journal, a small paperback tool where people can record their own individual findings on particular moon phases in different seasons, and use the journal as a personal guide to compare observations across the months 21

The project serves as an engaging educational tool in Hawai'i schools by creating platforms for haumāna who are tending gardens to address next generation STEM standards (which technology is inherently tied to), and create penpal communities where haumana can share their findings with one other.

As the project is still in the development stage, the team is open to suggestions on ways to further its reach. Symposium participants suggested conducting kumu and community training of how to utilize the journal, and they in turn can share this with the haumana to support their learning. Other next steps included the creation of a knowledge web system, hosting a compilation of feeds based on areas of interest, kumu-initiated grant proposals tying the project to science-based standards being met through participation, and empowering communities to understand their own environments using this tool.

### **ACTION PLAN & NEXT STEPS**

### PLANNING FOR THE 2015 'AIMALAMA' SYMPOSIUM

WHEN- September 25th – 27th (Hoku moon) or October 9th- 11th (What moon? Kanaloa moon, Kane night, creating sacred spaces)

#### WHAT (goals & objectives)-

RE-adaptation, Mauli Au Honua, Sharing of tools to mitigate re-adaptation, Place-based personal practice

Hawaii-based participation addressing climate change and the role of the mahina in it. The focus is the mahina as a tool for 22 strengtheningclimatechangeasatoolforadaptation/re-adaptation. Kaulana Mahina is an adaptation tool that has always been used. Used to observe and understand trends around climate change.

WHO (participants)- Indigenous Peoples of the Pacific and Hawai'i-based practitioners, practitioners doing the work (ma'awe, ceremony, wa'a, wai, lā'au lapa'au, lawai'a, loko i'a, māla, reforestation, climate change/re-adaptation, birthing), utilizes science - experts in their field, approximately 150-300 attendees, Possible partners – Kohala Center, 'Oiwi TV, 'Ōlelo, LAMA, Kama'aha, HSHK, Puko'a Council

WHERE-Possible Venues-1) Windward Community College/He'eia (WCC for tech/space needs, He'eia for Kamakakūokalani – Kānewai 'āina needs), 2) (free, internet access, lo'i kalo, classroom space), 3) 'Imiloa, 4) Bishop Museum, 5) Kanu o ka 'āina- Hawai'i Island Venue must be able to provide accommodations

everyone, food, technology wi-fi, electricity, for Transportation – airport to venue shuttles, huaka'i transport

**HOW-** Panels (3-5 people), focused workshops, livestream hubs in various locations, 'aipono menu, publication, policy recommendations, everyone stays together, everyone hears together, everyone makes fire together (no break out), create a way for the panelists to connect with each other ahead of time, make the setup in a circle, the focus is not on how each panelist will present about how they utilize mahina, kākou discussion to provoke questions ~ need to 'plant' people to ask certain questions, need to help people identify if they are practitioners, even if they don't consider themselves practitioners or don't fit into a category, documentation (works with tech but more apprentices, how to write it in mele, mo'olelo, transfer of info beyond technology), any insurance needed

#### **TENTATIVE SCHEDULE-**

- Day 1- Arrival of participants/ Launa, Keynote ~ application to daily life
- Day 2- Possible themes- ma'awe, ceremony, wa'a, wai, lā'au lapa'au, lawai'a, loko i'a, māla, reforestation, climate change/readaptation, birthing
- Day 3- Huaka'i, make fire, service work

COMMITTEES- Logistics (venue, accommodations, transport), Funding/Budget (Conference fees, Scholarships, Grants, Find interested donors), Communications/PR (Website, internal, marketing, trailer), Tech/documentation/Hubs (witness, note taking, video, facilitate hubs), Facilitation, Ceremony, Mea 'ai, Huaka'i

#### KILO HONUA- TRANSFER 'IKE

- Haku mele, haku moʻolelo, hana noʻeau build repository Determine content!
- Document what is happening, provide the imagery, and make it relevant for the 2020 kanaka
   the genius of 'ōlelo preserves relevance for future generations, even though some terms are archaic and obsolete
- Publish!
- Technology is a great tool, but when the lights go out, then what? Use it until you don't need it anymore – plan for this! BE THE APP!!!
- Math conversions ~ know the math, know the correlation between Gregorian and lunar calendars
- Mo'opuna taught him something quiet time, go to zero to clear the mind KILO HONUA!
   'Anakala Les
- The momona of the people is the momona of the 'āina- Kauwila

#### **PEHEA KA WAIWAI**

- 'Ike kūpuna not defined by western science
- LAWA KA I'A how can we ensure that there is enough i'a? HARVEST WISELY TO ENSURE FUTURE CATCHES!!!
- Who has the authority to determine whether or not our practices are sustainable?
- Once there is an established process ('ike kūpuna + science backup), then these practices can inform management policies
- ADAPTATION now more than ever it's important to document what's happening make kai, maka honua

## APPENDIX-2014 'AIMALAMA SYMPOSIUM AGENDA

October 3				
		3:00pm	Discussion (15 min)	
4:00pm	Arrival at Honolulu Airport and Shuttle to Kailua Hale	3:15pm	Hawai'i Fish Trust - Conservation International – Luka Mossman	
6:00pm	Participants arrive at Kailua Hale Dinner	3:45pm	Discussion (15 min)	
7:30pm	Introduction & Purpose of the symposium	4:00pm	Break (15 min)	
	Expectations of the time together	4:15pm	LAMA Kilo Honua – Malia mā	
9:00pm	Final thoughts before closing for the day. What's your practice?	5:00pm	Discussion	
October 4		6:00pm	Evening break & Dinner	
6:30am	E ala e Breakfast	7:30pm	Emperical Data & Climate Change Identifying Natural Indicators	
8:00am	Kaulana Mahina – Hawaiian Lunar Calendar in	9:00pm	Pau for the evening	
	history	October 5	October 5	
10:00am	Quick break	6:30am	E ala e	
10:30am	Kaulana Mahina – Today	0.000111	Breakfast	
	The Kaulana Mahina, moon calendar, in your practice/profession	8:00am	Waʻa Kaulua Culture & the Moon – Bonnie Kahapeʻa & Pua Lincoln Maielua (30 mins)	
12:00pm	Lunch	8:30am	Discussion (15 min)	
1:00pm	Hale o Lono/Ka 'Umeke Ka 'Eu – Roxanne (30 min)			
1:30pm	Discussion (15 min)	8:45am	Action Plan towards 'Aimalama Conference and publications – 2015 (Pacific) & 2016 (Global)	
1:45pm	Moonphase Project Presentation – Jme mā (30 min)	11:30am	Lunch	
2:15pm	Discussion (15 min)		Hoʻokuʻu	

## APPENDIX-2014 'AIMALAMA SYMPOSIUM PARTICIPANTS LIST

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Staff, students, volunteers, and other contributors make up the LAMA team. The core LAMA program staff and project team members are listed below. LAMA encourages participation and collaboration from all departments at the University of Hawai'i at Mānoa, as well as from external individuals and organizations.

- Malia Nobrega-Olivera, LAMA Director and Hawai'inuiākea Director of Strategic Partnerships and Community Engagement, nobrega@hawaii.edu
- Micky Huihui, LAMA Program Assistant, mickyhuihui@gmail.com
- India Clark, LAMA Project and Research Specialist, india@hawaii.edu
- Special thanks to volunteer: Hau'oli Waiau

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