

Building an Environment Education Program in Hawai'i – Woo, et al. Appendix A. Training Manual.



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Table of Contents

- Program History and Background
- Program Methodology
- Touch Tank & Coral Education Events
- Involved Hotel Personnel
- Keiki Art
- Research Seminar Series
- Introductory & Educational Video
- Outreach Materials





PROGRAM HISTORY & BACKGROUND

Beginning in June 2021, the Coral Resilience Lab (CRL) at the Hawai'i Institute of Marine Biology (HIMB) initiated a partnership with the Kahala Hotel & Resort (KHR) with the goal of improving relationships between kama'āina (local residents) and visitors. We developed and launched a program to educate visitors how to be respectful during their stay and take care of Hawai'i's natural resources. We hoped this program, Encouraging Visitors to Mālama I Ke Kai (take care of the ocean) would be a small, initial step toward a much larger issue that impacts both local communities and the environment.

As the tourism industry in Hawai'i was rebuilding and reshaping itself during and after COVID-19 regulations and the CRL team was beginning coral restoration with local partners in Maunalua Bay (RestoreWithResilience.org), it was an opportune time to focus on improving relationships between the local community, tourists, and natural resources. Hawai'i's dependence on tourism has been considered by some kama'āina as a one-sided relationship, where the industry and/or visitor takes from the environment while giving nothing in return. By educating visitors on how to mālama i ke kai, we might get closer to finding a balance between tourists and kama'āina to collaboratively support the local environment.

1

Journal of STEM Outreach

2

PROGRAM GOALS

By sharing Hawai'i's unique history and resource management strategies, we hope to...

Foster *awareness* to visitors about minimizing impacts to coral reefs.

2 Encourage visitors to care about Hawai'i's ocean resources.

This program aims to encourage new patterns of behavior that can be reflected in improved relationships and environmental conditions by providing these opportunities to acquire knowledge of current environmental topics, as well as gaining values, attitudes, and skills needed to protect and improve Hawai'i's ecosystem.

While these environmental education programs are intended to have long-term effects, we have already observed positive impacts within the first two years of the program.

Simultaneously, KHR developed the Kahala's Initiative for Sustainability, Culture & the Arts (KISCA) initiative to support sustainability educational programs.

PROGRAM METHODOLOGY

We believe that the 'Ōlelo no'eau (proverbs), ma ka hana ke 'ike (through doing one learns) is the most effective teaching method. We designed activities to incorporate active learning and experiences that engage guests. Studies have found that hands-on learning is beneficial because it allows people to create knowledge in a sensory way that lasts longterm. Further, learning experiences tied to emotional moments are catalysts for developing interest in ocean sciences. By offering these active experiences, complemented with local knowledge, we hope to increase a sense of belonging to 'place' and encourage participants to deepen their relationship with Hawai'i.

All experiences are free of charge as we strongly believe that opportunities to build relationships with place should be equally accessible to all. All participants receive parking validation in order to reduce financial barriers to attending the activities.

INVOLVED HOTEL PERSONNEL

Many hotel departments contribute to program success including...

PROGRAM MANAGER

Manages and instructs all program components.

FRONT DESK

Interfaces with guests and informs them about the KISCA initiative.

CONCIERGE

Tracks Keiki Art RSVPs; Interface with guests and inform them about the KISCA initiative.

CATERING

Schedules Sunset Seminar Series venues, sets up and takes down event venue, provides complementary food and nonalcoholic beverages to guests.

ENGINEERING

Assists with building new structures (e.g., touch tank aquarium).

MARKETING

Distributes program information within hotel networks.

HOUSEKEEPING

Maintains Keiki Art room.

PURCHASING

Purchases all program needs.

EXECUTIVE COMMITTEE

Primarily manages budget and approves all program components.



THE KAHALA INITIATIVE FOR SUSTAINABILITY, CULTURE AND THE ARTS

TOUCH TANK & CORAL EDUCATION

Incorporating "experiential learning" allows people to develop a personal relationship with the knowledge gained. The touch tank and interactive coral bleaching kit activity is intended to be an active discussion starter. Most visitors are drawn in and curious because the activities are something new and exciting to them. This facilitates casual conversations about Hawai'i's coral reefs with the hope to motivate visitors to be mindful of coral reef impacts.

Visitor interactions with the marine creatures are often limited by swimming skill and comfort in the ocean. The Touch Tank and Coral Education activities offer a way to directly interact with marine life, and deepen their understanding and relationship with the ocean environment.

PROGRAM GOALS

- Facilitate casual conversations and educate people about Hawai'i's coral reef ecosystem.
- 2. Showcase some of Hawai'i's native species.
- 3. Help visitors build and strengthen their relationships with marine life.
- 4. Encourage visitors to value Hawai'i's natural resources.
- 5. Teach visitors how to 'tread lighter' while they are in Hawai'i and when they return home.
- 6. Help guests to understand that their actions at home impact Hawai'i since we are all connected.



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LOCATION FACTORS

The primary features of a successful Touch Tank location include being a short distance to a seawater source, positioning in a central or high-trafficked space, close proximity to a hand-washing station, overhead shade and rain cover, and air flow.

ACCESS TO SEAWATER SOURCE

The invertebrates participating in the touch tank activity should be kept on-site in a designated aquaria with limited public access for security purposes. A shallower water table can serve as a learning station but lessons must be brief (i.e., 1-2 hours) and water temperature and quality must be routinely checked and changed if needed. Proximity to the seawater source is important to consider when faced with time and physical constraints since buckets of water are heavy. A wheelbarrow or dolly is highly recommended to transport seawater.

CENTRAL LOCATION

The Touch Tank should be located in a place that is heavily trafficked to increase participation. It is important to recruit as broad of an audience as possible because the visitors that are less likely to participate are often the individuals that need to hear the messages the most.

OVERHEAD COVER & AIRFLOW

Sun exposure can rapidly heat up the touch tanks, which can result in stressed animals. It is also more pleasant for participants to be in the shade, avoid the rain, and be surrounded by some airflow.

PROXIMITY TO HAND WASHING STATION

Ask participants to wash their hands before interacting with the animals to remove sunscreen, sand, food, etc. Set the touch tank up near a bathroom or have a portable hand washing station available. Participants tend to wash their hands post-activity as well.

TOUCH TANK ANIMALS

PERMITS

The possession of most marine invertebrates is regulated by the Hawai'i Department of Land and Natural Resources (DLNR). A Department of Aquatic Resources (DAR) <u>Special</u> <u>Activities Permit</u> (SAP) is required. An application can be submitted online and it may take several months to process. It is important that the intention to use the animals for outreach rather than commercial purposes is clear. We typically request to include brittle stars, sea cucumbers, urchins, and hermit crabs in our touch tanks.

COLLECTION SITE

Some locations in Hawai'i have more issues with invasive species than others so cross-contamination of sites is important to consider. Marine invertebrates can harbor invasive species without the collector noticing. If the holding aquaria is a flow-through system that outflows into the ocean, we highly recommend collecting the marine organisms from within the same bay that they will be housed. Carefully disinfect collection gear and boat hulls if moving from one bay to the next.

ANIMAL HOUSING

The animals will require a permanent, preferably flow-through, aquaria to live in and rest between touch tank sessions. Marine invertebrates typically require minimal direct sunlight medium flow rate to oxygenate the water but not stress the animals, low nutrients, access to food (specific to each animal), and structures to hide under. Sunlight can heat up the water causing the temperature to fluctuate. Hermit crabs require an enclosure so they do not leave their shells to hide.

ANIMAL STRESS

Instructors should provide a demonstration on how to handle the animals. Always keep the touch tank animals underwater when possible. Touch with the tip of one finger or lay the animal flat on a hand. Actively limit the amount of contact to reduce stress on the animals. Suggestions include imposing a 'one touch' rule or designated touch times (e.g., animals can only be touched once every 10 minutes).

MAIN TEACHING POINTS

- Marine invertebrates play important roles as ocean "cleanup crew."
- Animals should be valued. Invertebrates and "bottom feeders" play an important role in the ocean, but are rarely recognized for their large impact. While "charismatic megafauna" usually receive most of the attention, these Touch Tank animals might look creepy, crawly and spiky but are doing important jobs and creating the foundation for a healthy habitat.
- Respect all life in the ocean.
- What will happen once the ecosystem foundation is gone?
 - Cascading impacts result if the "little guys" disappear, which ultimately impacts humans that are higher up on the food chain.
- Coral reef ecosystems are where these invertebrates live.
 - Corals are marine invertebrates. They all support each other.
- Humans must give the ocean a chance to recover.
 - Life in the ocean can recover itself if it is given the opportunity. Bleached corals can become healthy again if conditions return to being hospitable.
- Anatomy of a coral what are corals?
- How do coral reefs help humans both in Hawai'i and globally?
- What are the current threats to coral reef ecosystems?
- How can people keep coral reefs healthy? What are ways to have a positive impact and change lifestyle behaviors?







8

PROGRAM NEEDS

- Wheelbarrow or dolly to transport supplies from storage to event
- Tub or water table
- Table
- Coral Bleaching Kit *See additional section for Outreach Materials
- Bucket
- Extension Cord
- Cord Splitter
- Live Organisms
 - Sea Cucumber
 - Brittle Stars
 - Hermit Crabs
 - Sea Urchin
- Coral Photographs
- Species informational ID cards
- Tidepool, coral reefs, shallow water, general ocean life books
- Large cooler (for organisms transport)
- Permanent tank for organisms to reside while NOT participating in Touch Tank

*Tank will need to have fresh supply of filtered seawater, water flow, weather cover, regular maintenance

- Coral Skeletons
- Ko'a cards
- Program evaluation form with QR code
- Event poster
- Weather resistant poster holder
- Outreach Binder *See additional section for Outreach Materials



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KEIKI ART

By offering ocean-centered art activities and lessons, we hope to foster environmental stewardship in our keiki. The goal with this activity is to include a younger demographic in the activities, empowering them, and teaching them the importance of taking care of the earth. Most environmental issues are humaninduced. People (starting with kids) are losing connection to "place," which leads to a loss of identity as part of the ecosystem.

Most of the participants in the Keiki Art program are under the age of 10 years old, and we recognize that one art class about why the ocean and 'āina are important will likely not change the trajectory of their lives. Rather, this program works to normalize curriculum that incorporates these values of taking care of where we live. By repeating and incorporating these values regularly into a routine, kids can develop an understanding of how to take care of the environment. Like all Encouraging Visitors to Mālama I Ke Kai programs, the curriculum touches on the importance of respectfully visiting other peoples' homes (i.e., Hawai'i). This is intended to encourage respect for the environment during their stay and foster a future relationship with the environment if they ever return to Hawai'i.



We believe art creates safe spaces for kids, making them feel relaxed and centered. By combining a safe space with learning about the environment, we hope to create a classroom where they feel comfortable and willing to learn about new concepts. Plus, doing art is fun! In class, kids are happy and focusing on doing their art activity, while peripherally learning about the ocean and 'āina through their artwork and conversations facilitated by the teacher.

All classes are free of charge to all participants and offer complimentary parking validation for parents/guardians. Students must be at least five years old to participate.

PROGRAM GOALS

- 1. To foster environmental stewardship in kids.
- 2.To teach kids the importance of taking care of your home.
- To develop students' sense of self and connection to where they come from.
- 4. To improve students' artistic skills.
- 5. To develop students' artistic creativity.
- 6. To provide free and accessible keiki programs for local families.

10

CLASS STRUCTURE

Class structure and set up will need to be adjusted depending on the amount of kids who RSVP as well as the age distribution. Upon check in, the instructor should write down the guardian's contact info in case of emergency.

The class includes:



As kids begin to arrive, a seat with a blank sheet of paper on the table is visible. As the instructor checks the kids in, they can let each kid choose where they sit and begin their ocean-themed free draw. Materials include pencils, crayons, and markers. The free draw will help them transition to being in class, get comfortable with their classmates and the physical space, and get their creative juices flowing! Kids are welcome to bring their free draws home, so they are encouraged to use lots of detail.

Free draw encourages students to be inspired by the three core principle questions of Keiki Art: 1. What does home mean to you? 2. Why do you love the ocean? 3. What does kuleana mean to you?

02 STORY TIME 5 min

While they are finishing their free draw, the instructor will read a mo'olelo. These mo'olelo are ways to not only share Hawaiian history, but to share lessons too. By sharing mo'olelo, the kids can become grounded and aware of being part of a place with an important history and culture. After reading, the instructor will prompt the students to share what they heard and ensure the key takeaways are identified.

03 MAIN ART PROJECT 1-1.5 hrs

The instructor will pick an art project they feel is appropriate for the class size and age while also adjusting class speed to fit the participants. Without a structure that slowly walks kids through their artwork, younger students will finish very quickly because they incorporate less detail. As a teacher, it is important to help the students slow down and do each section of their project with care and attention. Older students often can provide the opposite challenge – they spend too much detail work on their project and are unable to finish within the hour to hour and a half time frame for the Main Project. Depending on student personality and previous art experience, some kids will "do a painting" in five minutes while others will complete their painting in one hour. Being prepared ahead of time to accommodate both styles is necessary to avoid not being able to cater to all students' needs.

When the Main Project is a painting, it is important to have kids begin their painting with a sketch and pencil drawing. Then they can go back in and fill it with paint. This technique results in more thorough paintings that require more time.



Leave enough time for kids to clean up the classroom. Class culture focuses on concepts of kuleana, and so we want to teach kids to be responsible for all of their actions when they participate in Keiki Art. We teach how all students are part of taking care of the classroom together, to make sure that the next kids also have a nice place to do art. Depending on the art project, this can take a while, so leave sufficient time to clean up. The instructor should coordinate with housekeeping to acquire supplies for class-time clean up, as well as if there is any supplemental cleaning services needed.



PAINTING INSTRUCTION

The instructor will walk students through their main painting project step by step. The instructor should go through each section of the drawing to make sure all the students have completed each step before moving on. By moving through the drawing section as a group, this makes sure no student gets left behind. This process also helps students focus on going slowly and adding detail.

Students should begin their paintings by using a pencil. Once there is a detailed pencil drawing, students can then go get their paint. It is important that the students do not receive their paint and brushes until after their drawing is finished. Having paint palettes and brushes in front of them can distract the student. Once students finish their pencil drawings, they can move forward with mixing and adding paint as they see fit without the instructor dictating step by step. Instructors can be available for assistance with the painting portion as needed, but primarily should be around to help with mixing, refilling paint, and general encouragement.

At the end of the session, kids have the option to either keep their artwork or leave the artwork on the Keiki Art wall in the classroom.

HELPFUL TIPS

- Do not give students black paint until the very end unless requested (this mutes all of the colors)
- Instructor should be in charge of giving out all the paint to reduce mess
- Have a few example paintings of each types of Main Painting as inspiration for the students
- Encourage water changes
- Take a short break outside for groups of higher-energy students
- Remind students to be mindful of their body parts so they don't spill water on their neighbor's or their own work
- Students should wear a protective apron or smock when using paint
- Instructor prepares paint, brushes, and palettes before class so the transition time is smoother

MAIN ART PROJECT IDEAS

- Ahupua'a (land division from mountains to the sea) Painting
- Coral Reefscape Painting
- Underwater Ocean Scene Painting
- Marine Animal Painting
 - Use native plants & animals to Hawai'i
- Coral Reef / Underwater Ocean Scene Collage
- Hanging Ceiling Animal Cutouts
- Mosaic out of Micro Plastic
 - Use collected plastic from KISCA kit clean-ups

PROGRAM NEEDS

- (Reusable) Paper
 - All purpose
 - Multi-media / Paint paper
 - Colored Paper
- Scissors
 - Regular sized scissors
 - Fun edge scissors
- Colored Pencils
- Pencils
- Erasers
- Glue sticks and/or liquid glue
- Pencil Sharpener
- Pens
 - Ballpoint pens
 - Sharpies
 - Colored markers
- Acrylic Paint
 - Blue, Yellow, White, Green, Red, Black
- Paint palettes
- Various sized paint brushes
- Paint brush soap
- Reusable cups for water
- String
- Thumb tacks / pins
- Tape
- Cork board bulletin board
- Aprons / smocks
- Paper towels
- Cleaning supplies
 - Hand soap
 - Cleaning spray for tables
 - Rags
 - Broom and dustpan
 - Vacuum cleaner
- A heavy duty sink
- Tables
- Chairs
- Art coloring templates
- Hawaiian Values Series" book by Susan Entz and Sheri Galarza & other moʻolelo

RESEARCH SEMINAR SERIES

The Touch Tank and Keiki Art events are based on creating casual conversations that make topics of environmental stewardship personable and real. To complement this approach, the Encouraging Visitors to Mālama I Ke Kai program offers participants a chance to learn on a deeper level in a more structured setting. The "Sunset Seminar Series" is designed to build community and bring people together to learn about work being done around the island that supports Hawai'i's environment and people. This series of professional talks shares work from a variety of local graduate students, environmental, social, and cultural organizations, and other professionals. Talks last around 20-30 minutes, followed by a Q&A session. Presentation topics range from coral reefs, general ocean science, sustainability, and restoration, to local cultural programs. Talks are recorded and uploaded to an online video library.

To provide incentive for people to attend, all events are free of cost with complementary light pupus, non-alcoholic beverages, and validated parking. The Catering Department schedules event venues and manages menus, the Front Desk coordinates parking validation stickers, and the Marketing Department designs customized event flyers to distribute and market each individual event.

PROGRAM GOALS

- To educate visitors about Hawai'i's natural resources and people in order to encourage them to care about the unique place they are visiting, tread lighter during their stay, and make positive behavioral changes in the future.
- 2. To provide professional presentation experience for local researchers.
- 3. To provide a venue for local organizations to share their research with the community.
- 4. To welcome local people to enjoy the Kahala Hotel and Resort and open the space up to the community.
- 5. To bring people together to learn more about how to take care of Hawai'i.
- 6. To normalize conversations about taking care of the earth.
- 7. To engage kama'āina in environmental conversations and offer pathways to participation.
- 8. To give students a venue to attend extracurricular educational activities.

RECRUITING AND MANAGING SPEAKERS

The Program Manager is responsible for recruiting event speakers and ensuring they will be able to deliver a quality presentation. While we want the Sunset Seminar Series to exist as a professional development opportunity for local researchers, there is a certain caliber of presentation that makes the event enjoyable and professional enough to match the Kahala Hotel's luxury brand. To find this balance, the Program Manager meets and 'talks story' with each presenter prior to confirming their presentation. The Program Manager meets twice with each presenter to discuss event details, presentation expectations, and provide feedback on an initial presentation draft. By proactively working with each presenter and providing edits to the presentation before the seminar day, the Program Manager should be able to assist the speaker in matching the appropriate level of presentation to fit the series.

Because the goal of the series is to create a safe and welcoming environment for people to gather and get involved in cultural and environmental work, it is important that the presentations are delivered in a language that is easily understandable rather than jargon. It is important that the Program Manager assist the speaker in choosing words that people of all backgrounds will be able to understand to fully engage the audience.

To close each presentation, the presenter is encouraged to provide a few ways for audience members to get involved in their everyday lives. For example, a speaker presenting about invasive species might describe how people can make sure their hiking shoes are clean in order to not spread invasive plants. Or, a speaker talking about the importance of lo'i could provide a list of organizations where people can volunteer and get muddy. These seminars are intended to be conversation starters, and to close with ways to keep the conversation and action going.



VARIOUS SPEAKER MEETINGS PRIOR TO PRESENTATION

MEETING Ol

MEETING

)2

GOAL : To meet the speaker, hear more about their work, and gauge their level of presentation skills. Depending on this meeting, the Program Manager will either invite them to present or not.

Of the Program Manager feels the prospective speaker is a good fit and chooses to invite them to present, they will then go over event logistics and presentation expectations.

> MEETING Draft presentation review session

GOAL: To review a draft of the presentation. The speaker will give a mock presentation to the Program Manager. The Program Manager will provide feedback and offer other suggestions in order for the presentation to be successful.

Final presentation review session (optional)

GOAL: To review a final draft of the presentation and make sure all edits were applied appropriately. This could be done in a meeting, or via email.



EVENT VENUES

Events are ideally hosted outside, but can be moved indoors due to weather conflicts.



RSVP SYSTEM

An RSVP system is encouraged for Keiki Art. It is important to keep a detailed RSVP system in order to track class information so the instructor can structure the class accordingly. A class that is primarily younger kids will need a different lesson plan than if the kids are mostly older, and a class that is smaller will require a different preparation of materials.

The concierge department inputs participant information into a spreadsheet as spots are reserved and notifies individuals placed on a waitlist. The day of class, the hotel should send out a reminder email to confirm participation and update waitlisted families.

Information to be collected in RSVPS:

- Child's name
- Child's age
- Contact information for a students' guardian's (phone number and email)
- If they are a KHR guest or kama'āina

Class Spot #	Date	Child's Age	Guardian Contact Information	KHR Guest?
1	04/26/23	5	808-###-####	N
2	04/26/23	8	451-###-####	Y
3				
4				
5				
6				
7				
8				
9				
10				
Waitlist 1				
Waitlist 2				

EXAMPLE RSVP SPREADSHEET

EXAMPLE RSVP ONLINE FORM

Sign-Up: Kahala Hotel & Resort's Sunset Seminar Series

The Hawai'i Institute of Marine Biology and The Kahala Hotel & Resort are co-hosting monthly research seminars for local researchers and professionals to share how their environmental and/or social research supports Hawai'i's environment and people.

Please RSVP to reserve your spot!

We use this form to manage our guest list within size capacity, so please fill out 1 form PER attendee.

We will send you an email notification to confirm your attendance and provide additional event details. Mahalo!

- 1. Name (First) *
- 2. Name (Last) *

3. Which Sunset Seminar(s) would you like to attend? *

Check all that apply.

June 29, 7pm - Kuleana Coral Restoration

- July 29, 7pm
- August TBD 7pm

September TBD

4. Contact email (for RSVP Confirmation & Event Details etc.) *

5. Will you be a guest staying at the Kahala Hotel & Resort during the date(s) you select? *

Mark only one oval.

Yes

6. Optional - How did you hear about this event?

Your space is not confirmed until AFTER you receive an confirmation email with event details. Because spaces are limited, if you receive an email RSVP confirmation but for some reason can no longer attend, please notify <u>sarahwoo@hawaii.edu</u> of your cancellation. Mahalo!

EXAMPLE ACCEPTANCE EMAIL



"Creating Impact Through Community Engagement in Coral Restoration"

Mahalo for signing up for our Sunset Seminar Series! We are excited to welcome you to our next event with a speaker from the environmental non-profit, <u>Kuleana Coral Restoration</u>, talking about what real-life coral restoration looks like and how community members can get involved!

Kindly let us know by responding to this email to confirm you and/or your party's seats for the June 29th event.

We still have available spaces, so if you would like to bring an additional guest, please let us know!

Where: The Plumeria Grove at The Kahala Hotel & Resort 5000 Kahala Ave, Honolulu, HI 96816

When: Thursday, June 29th, 2023. Please arrive ~6:45pm for a 7pm start time.

What: "Creating impact through community engagement in coral restoration" by Kyleigh Kuball, Scientific Diver with Kuleana Coral Restoration

Other details:

You may either self-park in the parking garage or arrive out front and the valet team will park your car for you. We will provide complementary validation stickers that will work for both selfpark and valet.

Due to limited seating and a <u>50 person</u> maximum capacity, if for some reason you are no longer able to attend, please contact <u>sarahwoo@hawaii.edu</u> for any cancellation or other questions. Mahalo!

There are still additional spaces left so if you would like to bring an additional guest, please let us know!

PROGRAM NEEDS

- Projector screen
- Outdoor Projector (> 3,300 lumens)
- Extension cords
- Projector Stand
- Computer Stand
- Computer adaptor cables and chargers
- Computer for presentation
- Computer or video camera for recording
- Chairs
- Tables
- Event sign
- Parking validation stickers
- Clipboard and pen
- Attendance guest-list check-in sheets
- Microphone and speaker
- Catering Department
- Wheelbarrow for transporting materials

The Kahala Hotel & Resort and The Hawai'i Institute of Marine Biology presents the



INTRODUCTORY & EDUCATIONAL PLACE-BASED VIDEO

The introductory educational video provides contextual place-based environmental and cultural information regarding the KHR's unique position within the Kahala-Wai'alae region. The video plays in hotel lobbies and guest rooms, bringing awareness about Hawai'i's natural resources while giving helpful do's and don'ts for visitors.

We believe that most visitors have the intention of respecting Hawai'i's natural resources, but they have limited access to information about how to avoid and minimize negative impacts. In Hawai'i, government agencies, academia, and non-profit organizations have done an exceptional job educating kama'āina with place-based information about our natural resources. Now it is time we make the extra effort to share that information with Hawai'i's visitors so we can give back to the environment as a collective population.

The video should focus on the positionality of the place that the video is representing. There is information relating to Hawaiian islands as a whole, but also specific to each island, and even more specifically to each part within each island.

The goal with this video is to center the guest to where they are staying in Hawai'i - to give them context as to where they are and what has come before them. We hope that this information will ground them and encourage them to tread lighter with specific intent. A hotel on the north shore, for example, will have a different history then a hotel in Waīkikī. The hotel's introductory video then will be different.

PROGRAM GOALS

To communicate to viewers that...

- Guests are part of a long, complicated history of people visiting Hawai'i and often leaving it off worse than they found it, without any sort of reciprocity or giving back to the beauty and aloha they received
- 2. Help people understand their.positionality with their neighbors. Local people are struggling to maintain a healthy and safe place to live, while guests can come experience a luxurious "paradise" and not have those same worries. Why is that?
- 3. Respect the way things are done in Hawai'i. Respect the people, plants, and animals that live here. Respect the natural resources that sustain peoples' lives here.
- Give information about how guests can tread lightly while here and avoid repeating previous common tourist mistakes by providing do's and don'ts.

VIDEO SNAPSHOTS

Introductory & Educational Place-Based Video <u>link</u>. KISCA program video <u>link</u>.

Videos should include messages from mauka to makai. For the Kahala Hotel & Resort's video, the video was a collaboration effort with various regional environmental and cultural non-profit partners.





AN AHUPUA'A IS A WEDGE-SHAPED LAND SECTION THAT RAN FROM THE MOUNTAINS TO THE SEA Designed to provide all the natural resources a community would need











OUTREACH MATERIALS

OUTREACH EDUCATIONAL BINDER

The Outreach Binder should accompany touch tank & coral education events so participants can reference what coral reef ecosystems look like in real life, see visuals that accompany verbal information, and other helpful teaching materials. It is important to have the information printed on either waterproof paper or inside paper protector sheets and have them attached via a 3 ring binder or other alternative that keeps them together. Weather often can be unexpected at outdoor events, and so having water protection and wind mitigation are both extremely important. If the binder is accompanied by a coral bleaching kit, having sheet protectors is especially helpful in case of any spills.

MATERIALS NEEDED

- 1. Three-ringed binder
- 2. Laminated covers for each piece of paper to protect from weather
- 3. Microscope images of difference between Bleached & Non-Bleached Corals and presence of symbionts
- 4. Individual coral polyp structure
- 5. Coral reef structure
- 6. Images of ocean landscape coral reef ecosystems
- 7. Map of where other tropical coral reefs are around the world
- 8. Animals that rely on coral reefs
 - a. Fish, Turtles, Eels, Urchins, Sea Cucumbers, Sea Stars, Octopus, Sponges, Sea anemones, Worms, Crustaceans, zooplankton, etc.
- 9. Images of types of coral reefs: Fringing, Barrier, Atolls
- 10. How corals stop wave damage from coastal communities
- 11. Printout of Kumulipo part about coral
- 12. Traditional Hawaiian use for coral (ie. shaping va'a, filling in cracks & building kuapā (wall of fishpond), hale ko'a, fishing

CORAL BLEACHING KIT

The Coral Bleaching Kit is an interactive tool that teaches people about coral reefs and coral bleaching. It is composed of numerous coral skeletons that are painted with the same color of thermochromic paint and regular paint. In this way, it is unbeknownst to the viewer which corals will change color when the coral fragments go from the ambient water to the hot water. It is helpful to have coral skeletons and/or an outreach binder to be able to show people what corals look like on the reef.

The coral bleaching kit is helpful because it visually shows coral "bleaching" and actively teaches people why they do or do not bleach. Having a physical object that people can touch - real coral skeletons - is a great learning tool. People (especially kids) get very excited when the fragments change color and can identify which corals are more tolerant to heat stress.

More information on how to use the kit & other coral bleaching curriculum here.

MATERIALS NEEDED

- Roughly 10-20 coral fragments, some painted with thermochromic paint and some with regular paint. This makes the bleached and non-bleached coral pieces
- 2 large heat-safe glass beakers/jars marked 'AMBIENT' and 'HOT'
- One set of tongs (used to remove coral pieces from 'HOT' water, use caution when doing so)
- Outreach Educational Binder
- Hot water kettle
- Small-medium sized bucket to hold all coral fragments
- Larger tub to hold all of bleaching materials
- Coral skeletons as visual presentations



24



Next Steps

After initial partnerships with the Coral Resilience Lab at the Hawai'i Institute of Marine Biology, the *Encouraging Visitors to Mālama I Ke Kai* program is firmly established at the Kahala Hotel & Resort.

Moving forward, the KISCA Manager will be responsible for managing all program components.

Please contact sarahwoo@hawaii.edu or kirawa@hawaii.edu with any questions or feedback.