



BEYOND THE BREACH

Findings, impacts and news of Pacific Whale Foundation | 2019 | Q2



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Migaloo is perhaps the world's most famous humpback whale due to his striking all-white coloration. Pacific Whale Foundation was one of the first to research this unique whale in the early 90s and our Hervey Bay operations in Australia still keep an eye on him today. You can symbolically adopt Migaloo as a way to support the ongoing research at Pacific Whale Foundation. PacificWhale.org/adopt

LETTER FROM THE DIRECTOR



A recent dive reminded me how valuable and diverse our blue planet is. Our oceans are incredible worlds filled with millions of exotic species right under our noses. As our population grows and impacts our ocean environment, I see heroes everyday choosing to spend their precious time loving and protecting our marine

mammals and inspiring everyone around them to pay attention and get involved. I am humbled by the change makers who came before me, like Greg Kaufman, who ignited enough passion in the world to bring humpback whales back from the brink of extinction. I am motivated by the fact that I see people taking action for the benefit of others, knowing that it brings the most joy than any other pursuit. Thank you for being on this journey with Pacific Whale Foundation and for being thoughtful, committed citizens making a difference in this world.

During our second quarter, PWF attended the annual meeting of the Scientific Committee of the International Whale Commission in Kenya; the first since Japan exited the International Whaling Commission and resumed commercial whale hunting. Since 1980, PWF has fought to stop commercial whaling and will continue this fight, using our research to shape global policy for the protection of marine mammals around the world. In Australia and Ecuador, we are continuing to promote sustainable whalewatching and currently fighting to prevent marine mammals in captivity in Ecuador. Impacts of marine debris and plastic pollution continue to be a significant concern and deadly threat to marine mammals. PWF scientists are now preparing for the World Whale Conference in Australia and the World Marine Mammal Conference in Barcelona. Prior to the conference in Barcelona, PWF will participate in the IWC working group meeting on sustainable whalewatching.

We all make an impact on our world every single day. The choices we make do make a difference. Thank you for being mindful and diligent inhabitants of our blue planet and for choosing to protect marine mammals alongside PWF.

Kristie Wrighlesworth
Executive Director, Pacific Whale Foundation

In Hawaiian history, Olowalu was known as a pu'uhonua (sanctuary) where people could take refuge, take time to reflect and heal.



OUR MISSION

The mission of Pacific Whale Foundation is to protect the ocean through science and advocacy and to inspire environmental stewardship.

OUR VISION

Our vision is to be the people's environmental organization for the protection of the world's whales, dolphins and other marine animals living wild in their natural habitat.

We believe that it is essential to involve the public in our mission. We encourage you to become a part of our global community of people who care about the future of our oceans and marine wildlife.

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connect with us

BEYOND THE BREACH

A quarterly newsletter geared to share values, impacts and news of Pacific Whale Foundation.

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RETHINK

SINGLE-USE PLASTICS




CHALLENGE

Plastic never truly biodegrades; instead it photodegrades, or breaks up into smaller pieces, never leaving our environment.



IMPACTS

Marine animals ingest or become entangled in plastic debris.



YOU CAN HELP!

Single-use plastics are the biggest contributor to this challenge, as they are thrown away after only one use. Visit the link below for tools and alternatives

#REUSEREFUSERETHINK

PACIFICWHALE.ORG/RETHINK



RETHINK YOUR IMPACT TOP 10 LIST

- 1 Pick up 5 pieces of trash the next time you're outside
- 2 Make sure to cut plastic 6-pack rings before throwing them away
- 3 Recycle as much as possible. Check your local guidelines to avoid wishcycling
- 4 Discard of fishing line properly
- 5 If you are a smoker, discard butts in trash receptacle
- 6 Request no plastic utensils in your to-go order
- 7 Support environmental legislation by submitting testimony
- 8 Choose an eco-friendly operator when traveling
- 9 Choose sustainable seafood. Find guidelines at PacificWhale.org/conservation
- 10 Purchase foods from the bulk section to reduce packaging waste



PWF RETHINK KIT \$50

In June 2019, we launched a year-long *RETHINK* campaign, inspiring the use of everyday alternatives to single-use plastics by sharing alternatives and exhibiting impacts.

With your help, we will offer free classroom programs and curricula, host community events across the globe, remove and document marine debris alongside thousands of citizen-scientists, expand our free beach cleanup kit distribution, and create a large-scale work of public art that engages .5 million individuals in a critical conversation about the devastating impacts that single-use plastics have on our marine environment.

Contribute today and we will send you a Pacific Whale Foundation *RETHINK* kit! For a \$50 minimum donation, you'll receive this reusable spork (spoon + fork), straw, straw protector and reusable grocery bag that easily becomes a compact pouch! Visit PacificWhale.org/rethink to get involved.



EACH WEEK, WE'LL POST A NEW EDUCATIONAL VIDEO TO FACEBOOK! for the duration of our yearlong *RETHINK* conservation campaign. Find us at facebook.com/pacificwhalefoundation.

Join us for inspiration and tools, tag your own ideas with #reuserefuserethink and @pacificwhalefoundation, and visit



PacificWhale.org/rethink to sign the pledge to rethink single-use plastics!



ABOVE: *RETHINK*-inspired artwork by Ocean Camper Mikaela. This work, and others, was exhibited at our free World Oceans Day Party for the Planet at Maui Brew Co in Kihei, HI. See p. 11 for more!



HAWAII

MARINE MAMMAL COMMISSION

May 21 - 23 | KONA, HAWAII

PWF recently attended the annual Marine Mammal Commission (MMC) meeting in Kona to share research findings on spinner dolphin use within the Maui Nui region and the impacts on humpback whale behavior in close proximity to vessels. We presented PWF's 'Be Whale Aware' code of conduct and advocated for a speed restriction during peak whale season in addition to the existing approach regulations.

The MMC was established by the Marine Mammal Protection Act to provide independent oversight of the marine mammal conservation policies and programs being carried out by federal regulatory agencies.

To learn more, visit PacificWhale.org/research

VOLUNTEER HERO



Meet volunteer, Bob Denigris. Bob serves as a Lead Ocean Ambassador aboard our ecotours, sharing our history, mission and vision with passengers and helping to train other volunteers for this role. He is an integral part of PWF's Aloha Community Outreach Team, representing the organization and sharing information with the public about current campaigns, our Research, Education and Conservation programs, and encouraging everyone to help make a difference towards protecting our oceans. A huge mahalo to Bob for working alongside us on behalf of our oceans.

To learn about opportunities to volunteer with PWF go to PacificWhale.org/volunteer

Image below: Chief Biologist Stephanie Stack and Ecuador Director Cristina Castro at the 2019 IWC Scientific Meeting in Nairobi, Kenya

CHILE

MARK-RECAPTURE ANALYSIS

May 21 - 23 | CHILE

Our partners at the Alfaguara (Blue Whale) Project have helped increase the number of identification photos of blue whales, with 250 new ID's this year. These data will be used to develop population abundance estimates for the sub-species of blue whales using a technique called Mark-Recapture analysis. This technique is used to estimate the size of a population where it is unfeasible to count every individual. The basic idea is that you capture a small number of individuals, put a harmless mark on them, and release them back into the population. At a later date, you capture (or, photograph) another small group, and record how many have a mark. In a small population, you are more likely to recapture marked individuals, whereas in a large population, you are less likely.

ECUADOR

IWC SCIENTIFIC MEETING

May 10-22 | KENYA

With 88 member governments, the IWC is the global body charged with the conservation of whales. Each year, its Scientific Meeting invitees help to review and revise the measures laid down in the *Schedule to the Convention*, which provides for the complete protection of certain species; designates specified areas as whale sanctuaries; sets limits on the numbers and size of whales which may be taken; prescribes open and closed seasons and areas for whaling; and prohibits the capture of suckling calves and female whales accompanied by calves.

At this year's Meeting in Nairobi, Kenya, PWF Ecuador reported on its new collaboration with Ecuador's Ministry of Tourism to promote and implement responsible marine tourism practices. A recent whale watching training program attended by 102 whale tourism guides from four provinces earned the sub-committee's congratulations for being pro-active regarding its developing whale watching industry.

Information was also provided on cetacean bycatch in gillnets in Ecuador

that were recorded over 16 years (2001-2017) from strandings data. 130 carcasses of stranded cetaceans of 18 different species were examined throughout this period, demonstrating that artisanal drift gillnet fishery is the main fishing gear causing mortality for both small and large cetaceans in Ecuadorian waters, with significant bycatch of humpback whales in particular.

"Fisheries and environmental authorities must be vigilant and enforce existing marine fisheries regulations to proactively mitigate anthropogenic impacts and promote environmental education activities in fishing communities to conserve vulnerable cetacean species in Ecuador's waters,"
— PWF Ecuador Director Dr. Cristina Castro

The sub-committee discussed the high numbers of humpback whales caught, particularly in the context of the potential for animals to become entangled and drag gear as they set off on migration — potentially meaning even higher numbers would eventually die from entanglement. This encouraged the IWC's large whale entanglement initiative to work with Pacific Whale Foundation and the Ecuadorian Government to provide entanglement response training for this region of Ecuador.

[Read more on the IWC on p.14](#)



SWIM-WITH-WHALES IMPACT STUDY

Hervey Bay, Queensland is a stopover site for our East Australia target population of humpback whales as they migrate toward the Antarctic feeding grounds. Our Research team collects data in Hervey Bay to better understand population, distribution and movement along their migration route, which helps us understand changes caused by environmental and human activities.

When the Australian government approved swim-with-whales tourism in 2017 as a commercial activity in Hervey Bay, the effects of this form of tourism were unknown. While the government has provided some regulations, PWF initiated a 2018 research study to assess the possible impacts on humpback whale behavior. Results will be used to provide a scientific basis for recommendations to manage swim-with-whale tourism in Hervey Bay.

In our initial season of data collection, we ran 19 dedicated swim-with-whale ecotours, where whale behavioral data were collected before, during and after citizen scientists were permitted in the water with whales. Our preliminary results found that whales spent more time traveling rather than resting after swimmers were in the water. Preliminary findings were presented to the **Scientific Committee of the International Whaling Commission** at their annual meeting in May (p. 6), which was well received by the delegation.

Our researchers in Australia encourage citizen-scientists to assist with data collection through humpback whale photo donations and sightings. Photos may be submitted to research@PacificWhale.org. To share marine wildlife sightings, download our free **Whale & Dolphin Tracker** app, which can be used by members of the public to submit information on marine wildlife sightings from any location in the world.

Swim-with-whale ecotours will continue this year at Hervey Bay to increase the sample size of our data collection and the confidence in our findings. To learn more, visit PacificWhale.org.au/swim.

WORLD WHALE CONFERENCE

This fall, we will present the following two sessions at the 2019 World Whale Conference in Hervey Bay, Queensland. Hosted by Fraser Coast Tourism and Events and the World Cetacean Alliance, the conference theme is 'Journeys that Inspire Change.' Delegates will discuss and share evidence to better understand how we can improve and ensure the protection of cetaceans in Australia and worldwide.

What do we know about whales in Hervey Bay and how we can protect them?

Utilizing 12 years of data, Pacific Whale Foundation established a baseline of the spatial and temporal trends, residency patterns, and mother-calf behaviour of humpback whales at Hervey Bay, Australia. These data can now serve as a baseline for monitoring potential changes arising from the implementation of a new commercial swim-with-whales program. As part of this program, the whale watching fleet follows a voluntary Code of Conduct; however, the effectiveness of this Code of Conduct on minimizing disturbance to humpback whales remains unknown. Our current research focuses on determining what, if any,

behavioural changes are observed in humpback whales as a result of the swim-with-whales program. We determine this by observing whale behaviours in timed intervals before, during, and after swimmers are placed in the water. These data can then be used to provide future recommendations for managing whale watching in Hervey Bay and to balance the economic benefit of whale watching with the health of the animal population. Through these studies, we are able to build upon well-established historical baselines that can be used as a comparison to monitor future changes and ensure continued effective management of this important habitat for humpback whales.

Doing Well While Doing Good

The Importance of Social Enterprise Models in Sustainable Whale and Dolphin Watching

The term "social enterprise" refers to an organization that addresses basic, unmet needs or solves social or environmental problems through a market-driven approach. For nearly 40 years, the non-profit Pacific Whale Foundation has funded its research, education and conservation efforts through sustainable commercial marine eco-tours. The programs are run by PacWhale Eco-Adventures, a wholly-owned subsidiary of the non-profit. This presentation will review Pacific Whale Foundation's work in multiple venues throughout the world to achieve its mission to protect the ocean through science and advocacy and inspire environmental stewardship. In Australia, Pacific Whale Foundation has conducted the longest-running humpback whale photo-id project, including its work in Hervey Bay since 1988. We have provided on-board naturalist training services in Hervey Bay, Eden (NSW), and Perth (WA). Our research and advocacy have been instrumental in commonwealth and state efforts to enhance protections for humpback whales. Since 2012 we have worked to fund our ongoing efforts in Australia through a duly registered commercial whale watch operation, PacWhale Eco Adventures Australia. In collaboration with other researchers and commercial operators, we are identifying a growing number of ways in which pursuit of a social enterprise model promotes a win-win-win approach for the environment, the public and the commercial operators. We believe it is imperative that commercial marine tourism entities recognize the importance of a social enterprise approach in order to maximize educational and conservation impacts of whale and dolphin watching, and minimize disturbance to the targeted species. Ongoing support of scientific research is an essential component of our ability to effectively manage human behavior in the marine environment.



In addition to the most common humpback whale behaviors that can be seen in Hervey Bay, such as breaching, tail slapping, and head lunging, whales in Hervey Bay will often approach a vessel and stay within close proximity, interacting with people on board for significant periods of time. This behavior is known as "mugging". It is not uncommon to be unable to go anywhere because a pod of whales keeps interacting with your vessel. Indeed, you need to wait for them to move away first, following Australian regulations, which require whales to be 100 meters from a vessel before engines can be operated.



As part of our new **RETHINK** conservation campaign, we engaged in the following GREEN events, which highlight economic and environmental efficiency by minimizing the use of resources and reducing the amount of waste produced from event activities.



Earth Day

Earth Day 2019 celebrated the 1-year anniversary of our *The Last Straw* campaign, which forged partnerships with local restaurants on Maui and in Hervey Bay, Australia to *#reuseorrefuse* single-use plastic straws. The success of the conservation campaign led to today's **RETHINK** campaign, which aims to take this practice one step further by identifying

alternatives to all single-use plastics. Check out *#earthdaypwf* on Instagram to view our 30-day countdown to Earth Day challenge!



Best Places to Work: Hawai'i

Honored during the *Best Places to Work Awards 2019* this spring, PWF was touted as a progressive and sustainably minded organization during a particularly challenging time for our ocean environment. The rankings are based on employee surveys conducted and analyzed by Best Companies Group, an independent research firm specializing in identifying and

recognizing great places to work worldwide, including in the United States, Canada and the UK.



A Whale Tale

Our deepest appreciation goes out to *Wild Aloha Foundation* for organizing a benefit in support of Pacific Whale Foundation this June. Through their "Whale Tale" pau hana fundraiser, they invited supporters working to increase awareness on disappearing wildlife to learn more about our work. If you would like to invite Pacific Whale Foundation to your next event to help inspire environmental

stewardship, email us at events@pacificwhale.org.



Team Building For Good

Bank of the West believes in corporate social responsibility and sustainable practices, which is what drew them to Pacific Whale Foundation. Our *Team Building for Good* program designs activities to support your organization's corporate social responsibility goals and get more out of your donation. We provide unique opportunities to experience Hawaiian

culture, encounter rare and endangered plant species, get off-the-beaten track and truly make a difference. For more information, contact events@pacificwhale.org.



Skype a Scientist

We were thrilled to be contacted by a first-grade Texas classroom to appear on their *Skype a Scientist* series this spring, where Chief Biologist Stephanie Stack answered questions about her job and the projects that she works on as a PWF scientist. We see this as an exciting way to engage with classrooms around the world in a smart and sustainable way. Contact us for a virtual class today!



World Oceans Day

On June 8, Pacific Whale Foundation proudly presented *World Oceans Day* events throughout Maui, HI and in Queensland, Australia. An annual, worldwide celebration of the ocean, its importance to our lives, and how each of us can protect it, the 2019 World Oceans Day theme was *Together We Can*. Read about highlights on p.11!

MAUI WHALE FESTIVAL 2020



2020 marks Pacific Whale Foundation's 40th year! MWF events attract racers from around the globe; showcases environmental filmmakers; features local storytellers and youth entertainers; offers citizen-scientists the opportunity to contribute to a worldwide database that is steering the course of humpback whale research; and features dozens of local partners. This year, we are seeking collaborations with community-based entertainers, small businesses, food vendors, and conservation organizations to offer opportunities for engagement, memories and new lessons.



MAIN EVENTS: RUN & WALK FOR WHALES (Feb 1), WORLD WHALE DAY & PARADE OF WHALES (FEB 8), MAUI WHALE FESTIVAL CONCERT CRUISES, WORLD WHALE FILM FESTIVAL (Feb 14) & GREAT WHALE COUNT (Feb 22). Visit mauiwhalefestival.org

LET'S PARTNER! With 10 million individuals directly engaged by PWF to date, our sponsors enjoy access to our social media, e-Newsletter, printed newsletter, Member updates, website, press, blog and collaboration contacts. Events recognition options include on-site displays, emcee mentions, event signage and distribution of promotional materials. Other benefits include complimentary ecotour or private charter access, corporate membership, tax identification letter and opportunities for cross-promo. Please contact events@PacificWhale.org to begin customizing your Maui Whale Festival partnership today.

CALL FOR ENVIRONMENTAL FILM SUBMISSIONS

Maui Whale Festival 40th Anniversary Presents
The 2020 World Whale Film Festival

Pacific Whale Foundation is seeking short film and video submissions that bring accessible information and awareness to issues facing our ocean health. With the purpose of protecting the ocean through science and advocacy and inspiring environmental stewardship, films must include possible solutions to the issue/s shared.

Send your film to events@PacificWhale.org
Submission Deadline: November 15, 2019

WORLD OCEANS DAY HIGHLIGHTS



68 citizen scientists collected 36, 16 oz containers of surface water during a free PacWhale Eco-Adventures cruise, with a hands-on plankton-tow activity, snorkel reef cleanup and sea-surface microplastic sampling. Our Research team analyzed the samples and found 246 pieces of microplastics and 165 microfibers, which equates to 0.43 microplastics per oz of seawater and 0.29 microfibers per oz of seawater. Last year, 36 samples were collected and 0.14 microplastics per oz of seawater were found. (No data for microfibers)



1,056 pounds of debris were collected throughout the day by 168 participating volunteers. 72% of the total debris was removed from Kahului Harbor -50 bags of trash weighing 760 lbs, including 242 feet of fishing line-, 246 lbs at Kamaole Beach III, and 50 lbs at Paia Bay. 64% of the debris collected was plastic. Mahalo to Surfrider Foundation, the County of Maui and the State of Hawai'i for your invaluable partnership!



At our sister location in Australia, we collaborated with Fraser Coast Intrepid Landcare (FCIL) to engage 137 people in a beach clean around the iconic Hervey Bay Pier and a talk story with Dr. Kathy Townsend regarding the dangers of micro plastics and single use plastics. The rubbish collected was analysed and used in Dr. Townsend's ongoing study on marine debris and how it affects our sea life.



This father and son pair are going to enjoy a cruise on us for finding the hidden pineapple in our Front Street Treasure Hunt!



Party for the Ocean at Maui Brewing Co. in Kihei.



Congratulations to Mikaela Petrilli for winning the drawing for our Keiki Plastic Pollution Solutions art contest!



SINGLE-USE PLASTIC ALTERNATIVES FOR YOUR GREEN EVENT

RETHINK THIS

- Plastic bottles, utensils, cups and glitter
- Balloons
- Mailing invitation
- One waste receptacle
- Traditional wrapping paper
- Plastic bags
- Plastic toothbrush
- Plastic straw
- Plastic water/beverage bottle
- Plastic sandwich bags

INSTEAD, TRY THIS

- ▶ Cardboard, aluminum, glass, bamboo, plant cellulose, or reusable products
- ▶ Fabric banners, paper pinwheels, tissue paper pom-poms, or flowers
- ▶ Digital invitations
- ▶ Separate bins for recycling, composting, landfill
- ▶ Plain brown (kraft) paper, newspaper or fabric
- ▶ Reusable bags
- ▶ Bamboo toothbrush
- ▶ No straw, paper straw, reusable metal or bamboo straw
- ▶ Reusable container
- ▶ Paper or reusable bags



"What inspires me is 1) seeing passengers start out their day with little or no ocean connection who by the end of the day are in awe, wonderment and total appreciation of the ocean; 2) seeing passengers tear up while hearing their first (or fiftieth) humpback whale song; and 3) getting the opportunity to peer at a tiny juvenile Hawaiian Dasyllus or to swim alongside a whale shark." Naturalist Laura Lundby



"Sometimes we encounter spinner dolphins swimming next to us while doing mooring inspections and repairs, and you can hear the whales singing in the background underwater. I would tell a student if s/he wanted to be a dry dock lead, that they should always try to be the hardest worker in the room and always stay hungry to learn more and be humble." Maintenance Technician & Dry Dock Lead Dylan Dick



"We were on the water collecting humpback whale aerial measurements when a subadult "mugged" our boat. It surrounded us for about an hour, constantly swimming underneath the boat and bringing its' head out of the water to check us out. I looked down and was just staring into the gigantic eye of this individual as it was looking back at me - it was one of the most surreal experiences of my life." Research Biologist Abigail Machernis



"I meet these outstanding people from all over the world and get to see the excitement on their faces. To see those smiles and hear the stories of what they saw and what they learned when they return from an ecotour makes me feel good. We help make those memories and dreams come true!" Assistant Manger, Customer Care Operations Letty Tatum

GOOD NEWS!

Although we are constantly bombarded with bad news regarding the health of the ocean, there are change makers who are listening and coming up with solutions. Here is some positive ocean news from the past few months to raise your spirits and renew your hope for a healthy future.

-  Since Hawai'i passed a ban on sunscreen containing oxybenzone and octinoxate, several regions have followed suit and passed similar legislation, including Virgin Islands, Palau, Key West, Bonaire, and several Mexican tourist locations.
-  Canada passed legislation that bans keeping whales, dolphins, and porpoises in captivity for entertainment, as well as the trade, possession, capture and breeding of cetaceans.
-  The U.K. is now safeguarding ocean territory twice the size of England, thanks to massive new protections. Local fishermen and marine conservation experts alike came together in support of the expansion.
-  The Indonesian government established three new marine protected areas within the Coral Triangle, a region home to the highest diversity of corals and reef fishes anywhere on the planet.
-  A group of world leaders have banded together to form the High Level Panel for a Sustainable Ocean Economy, with a goal of improving the way we treat the ocean on a global scale by catalyzing innovations in governance, technology and investment.
-  Norway's first all-electric ferry is a success, boding well for the future of sustainable maritime travel. Carbon dioxide emissions were cut by 95% and operating costs were reduced by 80%, compared to traditional diesel-powered ferries.
-  Roughly four years after the worst mass bleaching event in Hawai'i, scientists are happy to report that Hawaiian coral reefs are finally stabilized and showing signs of growth.
-  The governments of 187 countries have agreed to add plastic to the Basel Convention, a treaty that regulates movement of hazardous materials from one country to another, in order to combat the dangerous effects of plastic pollution around the world.

MEET OUR HEROES



"To simply say I donate to Pacific Whale Foundation because I love the whales is a huge understatement. I do love the whales. I love our oceans and all the natural beauty of them. I love that we as humans understand the importance of these beautiful yet mysterious environments. I do whale watching anytime it's possible. Living in Wisconsin makes that a bit difficult, but any time I have the opportunity to see these gentle giants, I do. Thank you Pacific Whale Foundation for doing what you do every day. I'm proud to be a member of just a fine group of caring people"

Cindy Wilson and Stacey Warnke Sobieski, Wisconsin

PROTECTING THE REEF JENGA

Looking for a fun and educational way to engage your kids this summer? Try this PWF Ocean Camp fan-favorite!



Materials: 1 Jenga set and 1 set of make-your-own game cards, (1 set for every 4 players). Each card should describe a scenario that is either beneficial or harmful to the coral reef, with a coinciding number of blocks to be moved.

STEP 1 | READ: Player 1 picks a card and reads it aloud to determine whether or not the scenario is GOOD or BAD for the coral reef.



STEP 2 | IMPACT: Player moves blocks as stated on the card. If the card's scenario is beneficial to the coral reef, it will instruct the player to remove a number of blocks from the top of the tower; if the scenario is harmful to the coral reef, it will instruct the player to remove a number of blocks from the tower and place them on top of the tower.



STEP 3 | OBSERVE: As each player goes, the tower will become more or less stable based on the scenarios on the cards, just as a coral reef ecosystem would become more or less stable based on the real life impacts of those same scenarios.

THE HISTORY OF PWF AND THE IWC

The International Whaling Commission (IWC) was formed by 15 whaling nations in 1946 to regulate whaling. Most large whales (e.g., blue, fin, gray, humpback, bowhead, right and sperm) were near extinction by then. The IWC began setting annual quotas for target species to conserve stocks and ensure viability of the whaling industry.

In 1982 the IWC declared a moratorium on whaling, except for aboriginal subsistence hunting, and hunting under IWC permit for scientific purposes. Since implementation of the moratorium in 1986 whales have been hunted commercially (by Norway); for aboriginal subsistence (Denmark, Russia, USA and St. Vincent & the Grenadines); and under scientific permit (Japan and Iceland). Approximately 57,000 whales were taken between 1987 and 2018 (compared with 150,000 per year between 1900 and 1945).

In 1996 the IWC established principles for whale and dolphin watching, due to concerns that such activities threatened recovery of endangered species. PWF began submitting scientific reports of our research to the IWC in 2000, and since 2006 we have attended the annual scientific meetings as independent observers. We have participated in projects to establish whalewatch guidelines to minimize disturbance; create a whalewatch handbook on the IWC website wwhandbook.iwc.int/;

develop operator training programs; and study impacts of human activities (e.g., our study the effects of swimming with whales in Hervey Bay, Australia).

Now our IWC involvement has greater urgency. In a stunning setback for anti-whaling proponents, Japan withdrew from the IWC June 30th, announcing it would resume commercial hunting in its Exclusive Economic Zone (EEZ) in the North Pacific (Japan has one of the largest EEZs in the world, encompassing nearly 2 million square miles). On July 1st whaling ships set out to kill 227 whales by December. Japan's whaling vessels could be operating within 1,000 miles of the Hawai'ian Archipelago (site of Papahānaumokuākea Marine National Monument, one of the largest marine protected areas in the world).

PWF has opposed whaling since our very beginning. Greg Kaufman, founder and president (until his death in 2018) attended anti-whaling rallies at IWC meetings in Washington and London in the 1970's, and was instrumental in convincing the King of Tonga to end whaling there in 1979. Now our research and conservation staff will collaborate with other anti-whaling groups, and leverage our involvement in the IWC, to convince the Japanese to end commercial whaling. Approximately 300 Japanese are currently employed in whaling, receiving a \$50 million government subsidy each year. In contrast, nearly 200,000 Japanese whalewatch each year. Approximately 150 operators generate over

\$8 million (with 100,000 international tourists adding millions more in travel, accommodation, food and entertainment). In the 1960's the Japanese consumed 225,000 tons of whale meat annually. Today that number is less than 3,000 tons. PWF helped to develop responsible whalewatching in Japan, and we believe continued effort will lead to the demise of whaling and continued growth in whalewatching. We value the encouragement of our members and supporters in making this fight possible, and invite your feedback on our efforts.



HOW CAN I HELP?

Now, more than ever, our involvement in the IWC can help strengthen a focus on expanding responsible whalewatching and standing in opposition to commercial whaling. Your continued **membership and donations will help cover the significant costs of PWF's research** and conservation staff from Maui, Australia and Ecuador to attend and participate in the annual meetings of the scientific committee.

Use **social media to express support for PWF efforts** to end whaling and expand our understanding of the positive impacts of responsible whalewatching. Spread the word!

If you whalewatch in other venues with other operators, make sure they **follow the recommendations for responsible whalewatching**. Find our 'Be Whale Aware' guidelines at PacificWhale.org/conservation and the IWC handbook at wwhandbook.iwc.int/

Adopt a whale or dolphin from PWF and proudly display your certificate or photo in your home or at work so others know of your care!

Reach out to educators you know and invite them to contact PWF regarding our marine education materials, and help promote awareness of marine pollution.



Photos of Greg Kaufman and friends in Washington, D.C., ~1977.

PWF opposes commercial and scientific whaling programs. Commercial whaling operations executed under the guise of "scientific whaling" have been conducted in direct violation of the 1986 moratorium on commercial whaling. The international scientific community agrees that no valid reason exists to support this activity.

PWF understands that, in some parts of the world, whaling and whale products play an important role in the nutritional and cultural life of native peoples. Indigenous or aboriginal subsistence whaling is not the same as commercial whaling and, rightfully, is not subject to the moratorium. Subsistence whaling does not seek to maximize catch or profit, and is managed in a manner to ensure that the hunted whale populations are maintained at healthy levels for the future.

ANNUAL
ONLINE AUCTION

Call for Online Auction items in support of our Keiki Whalewatch Program. Contact us today to donate items, experiences and more. PacificWhale.org



LAHAINA SCHOOL INTERVIEW

May 21 - 23 | MAUI, HAWAII

Media students from Lahaina Intermediate School were recently tasked with creating a video that showcases how a person or organization of their choice helps the community. Education Manager Robyn Ehrlich was honored to be selected as the subject of their video interview.

Visit facebook.com/PacificWhaleFoundation and scroll to May 31 to watch Robyn discuss our mission and the impacts we make on keiki through our education department. Great job Moses Flores, Alexandra Godoy, Karolynn Ingan, and Mohamed Jobran!

"My Uncle is the best. He was Founder and President of Pacific Whale Foundation. He started in the year of 1980 and he was and still is an inspiration to everyone, including me. Uncle Greg loved whales and all marine animals. He traveled to different places to help people see the beauty of the ocean. He cared about animals and people. He helped people care for whales and marine animals. To people, he wasn't Greg Kaufman, Founder and President of Pacific Whale Foundation. People think of him as family." — Kaylee Schauer, age 12



POSSIBILITIES OF VIRTUAL REALITY IN EDUCATION

June 2019 | MONTEREY BAY AQUARIUM RESEARCH INSTITUTE

PWF recently attended Monterey Bay Aquarium Research Institute's *EARTH (Education and Research: Testing Hypotheses)* workshop in California. Using near-real-time data from ocean observatories to design and test outreach and lays new groundwork, *EARTH* provides opportunities for researchers and educators to come together, resulting in lesson plans that incorporate real data that can be used in the classroom.

The focus of this year's workshop was distance education, virtual reality, and augmented reality. Educators were able to learn about and experience

what the presenters are working with, and share their insights into what is feasible and what they would like to incorporate into their classrooms.

"I got the opportunity to go on a virtual scuba dive, become microscopic to explore a small sea creature, float above the city of Santa Cruz and visualize how sea level rise will impact the coastline, experience the sensation of falling, and create my own 360 videos and tours," shares Education Manager Robyn Ehrlich, "These virtual reality experiences have a way of enhancing the experience of a 2D video in a way that makes it more tangible and meaningful. I knew it was not possible for me to truly fall; yet as I reached the end of the plank, I was nevertheless afraid to step off, and after I did, it actually felt like I was falling! While virtually scuba diving, I truly felt like I was underwater, exploring a coral reef."

Through virtual reality experiences, it is possible for people to experience the ocean in ways that they may never have before, giving them a stronger appreciation for and understanding of the marine environment and why it is important we protect it.

Please stay tuned as we apply this new knowledge to the many new ideas we hope to bring to Pacific Whale Foundation.

Mahalo to all 2019 program partners: Kihei Charter School • Maui Adventist School • Baldwin High School • Carden Academy • Sacred Hearts School • Lahainaluna High School • Emmanuel Lutheran School • Molokai High School • Hawaii Tech Academy • Lana'i High School • St. Anthony School • Lokelani Intermediate School • Maui High School • Maui Waena Intermediate • Lahaina Intermediate • Holy Nativity School • Maui Ocean Center • Maui Sports Unlimited • Maui Humane Society • Maui Canoe Club Ko'ie'e Fishpond • Atlantis Adventures

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- Timothy Haynes
- Jennifer Hazen
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- Mila Hebert
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- The Hollman Family
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- Neil Hoyt
- The Hug & Hall Family
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- Caryn Ige
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- Aleena Paragas
- Pranav Patel
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- Charles and Larue Wilton
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- The Wisner Family
- Mike and Deb Wojcik
- The Wood Family
- Roger K. Wood
- David Wudel
- Michael Young
- John Young
- The Zandee Family
- John Zick
- Janet Zimmerman
- The Zive Family
- Pat Zona
- Nevena Zubcevick

WHY I ADOPT

"We came across a false killer whale and just floated in the boat while the whale swam around us. At one point it surfaced near us and my sister looked into its eye - she felt so overwhelmed. We talked about it for days. 5 years later, I adopted one for her, knowing it was the perfect gift."

– Barbara Mitchell
Etobicoke, Ontario (MAKA KILO, false killer whale)

"I adopted a whale for my father. As a young man in the 1950's he was an officer in the Holland America lines. Prior to that, he was in the submarine service of the Dutch navy. So when he was a young man, he got to explore the world by sea. I thought he would appreciate the memory and also like to do something meaningful to help preserve the seas."

– Ben Mesander
Longmont, CO (a whale for his father)

"The passion of your crew and educated staff inspired me so much that I felt a connection. I wanted to help these creatures have a place to live and hear more about the work you will be doing. It feels great to be a part of an organization doing the work you do. Your staff is to be commended for their passion and for sharing it with guests of the island."

– Nancy McDevitt
Surf City, NJ (JOVIE, whale)

"It was important to me to make the whale a part of my 'ohana, as I was made a part of Hawai'i's during my trip! Receiving my adoption papers in the post with the PWF stamp on the envelope brought so much happiness to me and I wouldn't hesitate to keep donating because I love supporting such an amazing cause with the hardest working people!"

– Hannah Hulse
Chester, England (KAMAAINA, whale)

"When we were pregnant with our daughter, we visited Alaska to see the humpback whales. While we were there, we found ourselves singing the children's song "Baby Beluga" to her. The name stuck and whales became "her animal". Since she passed away, we have used whales to honor her memory. We thought adopting a whale would be a perfect way to honor her and to help protect these amazing creatures."

– Mark and Maria Vega
Washington (ELISA, whale)

"The decision to participate in the Adopt program turned out to be a very positive and rewarding experience. I purchased the classroom package for my niece, Chloe, who is a second grade teacher. I was not prepared for such adorable feedback! I encourage folks to consider adopting a marine animal for a young classroom through Pacific Whale Foundation. You won't regret it!"

– Penni Whaley
Texas (SPLASH, whale)



MEMBERSHIP

As an organization of the people, our **MEMBERSHIP** program exemplifies the value of relationships to our work. Creating a community of ocean ambassadors through special online discussions with our Programs teams, regular communications regarding project progress and results, participatory-driven benefits such as discounted whale and dolphin watches and more, we aim to connect a strong network of protectors. Join as a Member today!



CHAMPION | \$5,000 & above

Helping to protect endangered marine mammal species from extinction

HUMANITARIAN | \$2,500 - \$4,999

International programs and humpback whale research

ADVOCATE | \$1,000 - \$2,499

Advocacy work on behalf of the marine environment

EDUCATOR | \$500 - \$999

Preparing our youth to become ocean stewards

CONSERVATIONIST | \$250 - \$499

Coastal marine debris monitoring to protect ocean habitats

FAMILY | \$125

(2 adults plus children under 18 years of age)

INDIVIDUAL | \$75

(\$55 for seniors age 60 and above)

Membership benefits include ecotours and VIP boarding, Member tee shirts and totes, exclusive invitations to special and online events, FREE newsletter subscription, Members-only access, 20% discount on PacWhale Eco-Adventures + Ocean Stores + Ocean Camp enrollment, \$20 discount at Northshore Zipline, 10% discount at Maui Ocean Center, 10% discount at Maui Sports Unlimited, and more! Visit PacificWhale.org/member.

GIVING

For groups and individuals seeking specialized support opportunities, our **GIVING** programs invite participation through campaigns, events and grants. These include Research appeals for equipment and specific projects, Education program sponsorship opportunities for schools and communities in need, and Conservation campaigns that advocate for robust environmental protection measures. Donate now to support an item below!



CURRENT RESEARCH PROJECTS

- Blue Whale Research in Chile
- Spinner Dolphin Research in Hawai'i
- Humpback Whale Research in Ecuador, Australia and Hawai'i
- False Killer Whale Research in Hawai'i

EDUCATION PROGRAMS

- Keiki Whalewatch
- Ocean Camp
- Plastic Pollution Solutions
- Outreach Information Stations

CONSERVATION INITIATIVES

- Coastal Marine Debris Monitoring Program
- International Coastal Cleanup Day
- Adopt-A-Highway & Volunteers on Vacation
- RETHINK Single-Use Plastics

ANNUAL EVENTS

- Maui Whale Festival (mauiwhalefestival.org)
- Earth Day & World Oceans Day
- Welcome Home the Whales
- Annual Online Auction

OTHER WAYS TO SUPPORT

- Greg Kaufman Scholarship Fund
- Carole Carlsen, PhD Scholarship Fund
- Corporate Giving Program & Team Building for Good
- Amazon SMILE, Give Aloha and Bonfire Campaigns
- Giving Tuesday
- Pacific Whale Foundation Annual Campaign
- Private Boat Charter
- In-Kind Gifts, Discounts and Volunteer Support
- Planned Giving
- Custom Collaboration

Pacific Whale Foundation is a nonprofit tax-exempt 501(c)(3) organization: federal tax ID number 99-0207417. Your donation is U.S. tax deductible to the extent allowed by law.

PacificWhale.org/you-can-help

WHO WE ARE

With a mission to protect the ocean through science and advocacy and to inspire environmental stewardship, Pacific Whale Foundation (PWF) conducts Research, Education and Conservation programs for the communities in which it serves. Founded by Greg Kaufman in 1980 as a 501(c)(3) nonprofit organization dedicated to saving the world's whales from extinction, PWF now operates a social enterprise that offers fee-based programs and services through PacWhale Eco-Adventures to help fund its nonprofit work. Combined with memberships, donations, charitable grants and a remarkable group of dedicated volunteers, PWF now reaches more than 400,000 individuals each year through its Maui and Australia offices and research projects in Ecuador and Chile.

WHAT WE DO



RESEARCH

Bona-fide, peer-reviewed research on marine animals and marine debris in Hawai'i, Australia, Chile and Ecuador



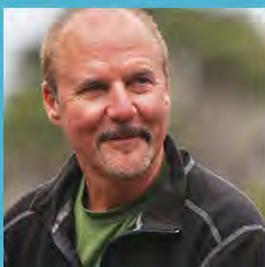
EDUCATION

Award-winning ecotours, camps, workshops and keiki whalewatches with schools



CONSERVATION

Citizen-science *Coastal Marine Debris Monitoring Program* (FREE clean-up kits available) and the RETHINK campaign



Gregory D. Kaufman
Founder
12/24/54 - 2/10/18

A VOICE FOR WHALES

Our thoughts and love are with you and your 'ohana.



Pacific Whale Foundation
300 Ma'alaea Road, Suite 211 | Wailuku, HI 96793
PacificWhale.org | (808) 201-1983

Connect with Pacific Whale Foundation at   

10 WAYS TO GET INVOLVED

ADOPT

Your love for humpback and false killer whales, dolphins and turtles can be expressed with a donation in a number of ways – and helps to make a world of difference.

PARTICIPATE

Each month we offer a calendar of free opportunities in addition to our Eco-Adventures, including free Haleakalā excursions, *Coastal Marine Debris Monitoring Programs* and more.

JOIN

As a Member, you connect with a large and dynamic family working to protect the world's marine wildlife and our shared ocean.

CRUISE

Hop aboard one of our "floating classrooms," where every Marine Naturalist has collegiate-level science experience and has been recruited specifically to offer the greatest possible Eco-Adventure.

SHOP

Empower philanthropy and social good by shopping at our physical or online Ocean Stores. With proceeds directly supporting our nonprofit programs, your spending power makes you a conscious consumer.

EXPLORE

Visit PacificWhale.org and our *Whale & Dolphin Tracker* mobile app to access a wealth of information for remote participation in our programs and services.

LEARN

Pass it on! Our informational campaigns are designed to encourage green practices that offer ready-to-use solutions for environmental issues. Register for email updates at PacificWhale.org/mailling-list to get involved.

ENROLL

Seasonal *Ocean Camps* and *Plastic Pollution Solutions* educate, inspire and motivate the next generation to care for our environment, and to have a lot of fun doing it.

VOLUNTEER

Offer your in-kind services to assist our Research, Education, Conservation, special events or fundraising teams – or – check out our *Volunteers on Vacation* offerings (FREE).

DONATE

Your contributions directly fund our nonprofit Research, Education and Conservation programs, geared to encourage a global community of people who care about the future of our planet's oceans.