

Keep Puako Beautiful and South Kohala Reef Alliance News

Ocean Stewards volunteer in the Ala Kahakai National Historic Trail Corridor

Contact: keeppuakobeautiful@gmail.com Sign up or donate: keeppuakobeautiful.com



Keep Puako Beautiful & South Kohala Reef Alliance

Hawaii Ocean Stewards Newsletter

2022 news & Coming up

Newsletter Re-Launch!

We are pleased to announce the launch of our new email newsletter.

[Click Here to Subscribe and Donate](#)



Keep Puako Beautiful and South Kohala Reef Alliance
 We believe our cleanups, outreach and educational programs make a difference in our community. We are grateful for contributions and support from our valued community partners and volunteers.
YOUR DONATIONS ARE IMPORTANT!
 Help us be sustainable and continue our community conservation efforts on the South Kohala Coast.
 Tax exempt donations accepted by South Kohala Reef Alliance, a 501(c)3 non-profit organization
Contact: keeppuakobeautiful@gmail.com
Join, Subscribe & Donate [Click Here to Subscribe](#)
facebook.com/keep.puako.beautiful

WE ARE VERY PROUD AND GRATEFUL TO HAVE OCEAN STEWARDS WHO WERE EDUCATED AND MADE A COMMITMENT AT THE CLEANUPS!
 Cleanup totals as of 10/22/22
 Site visits=240 Volunteers=A285
 C=7172
 Hours=938
 Weight=1867 lb,
 Total Pieces=38,086
 HI5 Recycled=4419,
 #Bags or buckets =296
 Plastic=25964
 Cigarette butts=7287 Pieces of fishing line=5415, Metal=4583, Glass=2677, Rubber= 551, Processed lumber=3208
 Other 1077
 Miles cleaned=60,

Mahalo to Ocean Stewardswho took the Pono Pledge, are Kama’aina and visitors. 115 of us gathered together on 10/22/22 for the 35th International Coastal Cleanup at Spenacer Beach. Our team building event was well attended by the Hawaii Island community and visitors.
 Attended=115 people, Kama’aina=97, Adults=83, Children= 32, Voluntourists=18 or 17.6%, Educators=24, Site helpers=33
 Everyone was educated in cleanup data collection, fishing line, cigarette litter and HI5 recycling efforts and more. We appreciate the community supporting our programs through partnerships, donations and great teamwork.



POLLUTION PREVENTION PROGRAMS

FISHING LINE BINS, CIGARETTE LITTER BINS, GLASS & GOLF BALL CLEANUPS, RECYCLE & UP-CYCLE

FISHING LINE & CIGARETTE LITTER PREVENTION PARTNERS: Keep Puako Beautiful, South Kohala Reef Alliance. Hawaii Preparatory Academy, Keep America Beautiful, NOAA Marine Debris, Ala Kahakai National Historic Trail Corridor VIP.

Processors:
 Berkeley and Keep America Beautiful/TerraCycle.
 Glass; Local art studio
 Golf Balls
greenlivingideas.com says it takes 100 to 1,000 years for a golf ball to decompose. The majority of the material is made of plastic and rubber. They also contain other petroleum-based polymers and heavy metals such as zinc. As they break down they release these petroleum products and metals in the process. The heavy metal attaches itself to the ground sediment and can poison the surrounding flora and fauna, especially when in water. Other heavy metals used in golf ball production include tungsten, cobalt and lead.



kab.org In the 2020 KAB National Litter Study, 9 out of 10 littered items were 4" or less with cigarette butts being the number 1 littered item in this category accounting for 9.7 billion butts counted on any given day in the US. The cigarette litter program (CLPP), now in its 23rd year, is the nation's largest program aimed at reducing cigarette litter. Communities implementing a Cigarette Litter Prevention Program, consistently reduce cigarette litter by half based on local measurements taken in the first four to six months after program is implemented. Since its inception, the program has been implemented in 1,800 US communities.

boat.org

Fishing Line Recycling Matters

Each year, more than 100,000 marine mammals die from ingesting debris or becoming entangled in fishing lines, net, and other types of derelict fishing gear. You can do your part to stop this by recycling your fishing line.....The problem ...fishing line isn't biodegradable. Instead, it can remain in the marine environment for over 600 years. Marine Debris Art activities at the cleanup has been a success!

NEW
 Cigarette litter bins and new sites coming soon



Are you available for a cleanup for marine debris, litter, fishing line and cigarette litter.

Save The Date: Friday 1/6/23

Meet us at Makeehua Gulch Kawaihae Harbor at Gate 1 and 300 ft from the Akoni Pule Hwy. at Kawaihae Harbor just inside Gate 1 at the main fishing area.

Cleanup from 8:30 to 10:30 AM; Both sides of Makeehua Gulch and Coral flats

Saturday 1/21/23 Puako Boat Ramp 8:30 to 10 AM

Saturday 3/4/23; West Hawaii Community Beach Cleanup at Spencer Beach Park 8AM to 12PM; Flyer in development

See RSVP keppuakobeautiful@gmail.com or keppuakobeautiful.com for more details & coming soon

Sites 3 and 4
 Pua Ka'Ilima Cultural Surf Park (Home Base), Coral Flats & Kawaihae Small Boat Harbor South
 Access: Kawaihae Road, parking at break wall or surf park
Clean up: Facility, park, coral flats, break wall beach, picnic area, parking lot, and small boat harbor
 Ala Kahakai National Historic Trail
 DOT, DOBOR & DLNR

Facilities: Porta-Potty, shade, showers, and picnic area
 Start: Latitude: 20.03289 | Longitude: -155.828907
 End: Latitude: 20.027824 | Longitude: -155.824934



NOVEMBER 2022 HAWAII PREPARATORY ACADEMY SEA TURTLE RESEARCH WORKSHOP WAS IN PUAKO BEACH.



Post-Nesting Migrations of Hawksbill Turtles from Moso Island, Republic of Vanuatu



About Sea Turtles

There are 7 species of sea turtles worldwide (green, leatherback, loggerhead, hawksbills, flatback, olive ridley, and Kemp's ridley). Vanuatu has 5 species of sea turtle: leatherback, hawksbill, green, with small numbers of loggerhead and olive ridley.

Hawksbill turtles are listed as critically endangered by the IUCN (International Union on the Conservation of Nature) signifying the species is "facing extreme risk of extinction worldwide".

Sea turtles migrate long distances to nesting beaches in order to successfully continue the species allowing for genetic diversity. The rest of the time they spend in home "foraging" grounds.

The Project

Marc Rice and Laura Jim with Hawai'i Preparatory Academy and Francis Hickey with the Traditional Resources Management Program at Vanuatu Cultural Centre along with Moso Island participants have placed satellite tags on seven post-nesting hawksbill turtles from Moso Island between 2018 to 2020 in order to learn more about where turtles nesting on Moso Island live and forage. We hope to place additional tags over the next 3 years.

All work done while in the Republic of Vanuatu was covered by Marine Resource Scientific Research Permit number VAN 001-RES-18 provided by the Vanuatu Fisheries Department and Bioprospecting Permit VAN-ENV-03419 issued by the Department of Environmental Protection and Conservation.



Post-nesting hawksbill turtles - Tassiriki (left) and Launmakala (right) with satellite tags returning to the ocean.

Where do Moso Island nesting hawksbill turtles live and forage?

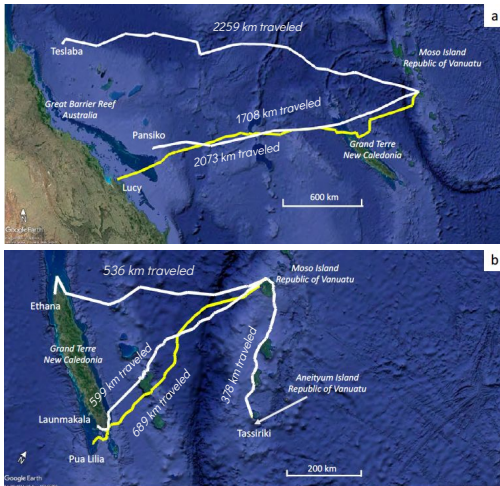


Figure 1. a. Post-nesting migration of Lucy (yellow line), Tassiriki and Pansiko from Moso Island, Vanuatu to the Great Barrier Reef region, Queensland, Australia. b. Post-nesting migration of Ethana, Launmakala, Pua Lilia and Tassiriki from Moso Island, Vanuatu to New Caledonia and Aneityum Island. So turtles nesting on Moso travel thousands of kilometers to return to their foraging grounds, and face many threats like fisheries bycatch, entanglement in plastic debris and being hit by ships.

Mahalo to Chief Marimalu, Chief Aikau, Nolan Kalmelu, Evan David, Derrick Peter, James Tamala, Owen Drew and Tranquility Staff, Donna Kalfalak, Director at the Republic of Vanuatu's Department of Environmental Protection and Conservation, William Navili, Director of Fisheries, Donald James Aromalo of the Vanua-Ial Network, and Marama.

Micronesica 2022-01: 1-16

Destination Revealed: Post-Nesting Migrations of Hawksbill Turtles (*Eretmochelys imbricata*) from Moso Island, Republic of Vanuatu¹

LAURA M.R. JIM*

Science and Technology Department, Sea Turtle Research Program, Hawai'i Preparatory Academy, 65-1692 Kohala Mt. Rd., Kamae, HI 96743, USA
laura.jim@hpa.edu

MARC R. RICE

Science and Technology Department, Sea Turtle Research Program, Hawai'i Preparatory Academy, 65-1692 Kohala Mt. Rd., Kamae, HI 96743, USA

FRANCIS R. HICKEY

Traditional Resource Management Program at Vanuatu Cultural Centre, Republic of Vanuatu

GEORGE H. BALAZS

Golden Horn Services of Oceania, 992 Awaawanoa Pl. Honolulu, HI 96825, USA

Abstract— Hawksbill turtle (*Eretmochelys imbricata*) nesting populations and behaviors in the Republic of Vanuatu are poorly understood. In an effort to evaluate their interesting home range, post-nesting migration and foraging habitat home ranges, 7 post-nesting hawksbill turtles were satellite tagged at Moso Island, Republic of Vanuatu between January 2018 and January 2020. The mean interesting home ranges of two turtles was 0.8 km² proximal to their nesting beach indicating possible value in establishing a marine protected area along the north coast of Moso Island during the nesting season. The Great Barrier Reef, Australia and New Caledonia were the two major post-nesting destinations. Hawksbill turtles are legally protected by law in both countries. Foraging home ranges for 4 hawksbill turtles in New Caledonia and Aneityum Island, Vanuatu ranged from 1.7 to 28.9 km². It will be important to continue this study to better determine the total area of habitat utilization of the interesting hawksbills at Moso Island in order to facilitate the implementation of community-based conservation measures and to illuminate home range location and size.

Introduction

Hawksbill turtles (*Eretmochelys imbricata*) are critically endangered throughout most if not all of their range in the south-western Pacific Ocean (Mortimer & Donnelly 2008, Work et al. 2020). In this region, the resident population size and the number of nesting female hawksbills are poorly understood but the apparent trend is toward declining numbers in most areas. Reports indicate the Solomon Islands' largest hawksbill rookery is showing signs of recovery after the establishment of the Arnvon Community Marine Conservation Area (Hamilton et al. 2015, Hausheer 2017, Holland 2017, Vuto et al. 2019, Hamilton et al. 2021).

Nesting hawksbills in Vanuatu have been shown to come from foraging grounds as far away as Northern Australia (Parmenter 1983, Miller et al. 1998, Bell et al. 1999, 2012, Read et al. 2015, Bustard, 2016). Siota (2015) lists two Vanuatu hawksbill recoveries from animals flipper tagged

¹ Citation: Jim, L.M.R., M.R. Rice, F.R. Hickey & G.H. Balazs. 2022. Destination Revealed: Post-Nesting Migrations of Hawksbill Turtles (*Eretmochelys imbricata*) from Moso Island, Republic of Vanuatu, *Micronesica* 2022-01, 16 pp. Published online 26 November 2022. <http://micronesica.org/volumes/2022> Open access; Creative Commons Attribution-NonCommercial-NoDerivs License.

*Corresponding Author