

GH BALAZS

SLP
Dec 1 2023

First Annual Workshop on
Green Turtle Diets in Hawai'i-
Food for Thought in 2020



February 10, 2020
Hawai'i Pacific University
Aloha Tower Marketplace Campus, Honolulu, Hawai'i



www.GeorgeHBalazs.com

2nd APRIL 8, 2022 3RD HPU
HPU OCT. 6, 2023

808-683-8402

"Vision For The Future"

SEA LIFE PARK VISITS

1st

1-4th

4TH ANNUAL HPU WORKSHOP

2020-2024 HPU WORKSHOPS

WIDE RULED

100 SHEETS

9 3/4 IN x 7 1/2 IN
(24.7 cm x 19 cm)

George, mahalo for
making sure the
sea turtle is cared about
globally. ☀️

We appreciate
all of your hard
work, George!
Bob

THANKS BOB
FOR CARRYING THE
CAN ON THIS WORKSHOP!
TB ☺️

I've been looking forward
to this sea turtle workshop.
Thank you for your work
and dedication to sea turtle
-Dianne-

Mōhala i ka wai ka maka o ka pua
(Unfolded by the water are the faces
of flowers)

Flowers thrive where there is
water, as thriving people are
found where living conditions are
good.

Bob, 4/8/12

I may not make it.
Will you give this
to George.

Yhd. R.

the first
communities
our
partners

| PERIOD | DAY | PERIOD | RM. |
|--------|-----|--------|-----|
| 1 | | | |
| 2 | | | |
| 3 | | | |
| 4 | | | |
| 5 | | | |
| 6 | | | |
| 7 | | | |
| 8 | | | |
| 9 | | | |

We Can't save Sea turtles unless we first
 save OURSELVES, our families, our communities
 and our Countries!

CLASS SCHEDULE

DATE APRIL 2020

NAME _____ SCHOOL _____

ADDRESS _____

| PERIOD | MONDAY | TUESDAY | WEDNESDAY | THURSDAY | FRIDAY | PREDI RNES | RM. |
|--------|---|---------|-----------|----------|--------|---------------|-----|
| 1 |  | | | | | | |
| 2 | | | | | | | |
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| 7 | | | | | | | |
| 8 | | | | | | | |
| 9 | | | | | | | |

Ulva fasciata

Limu patahalaha

Bob, 4/8/22
 I may not make it.
 Will you give this
 to George.
 Thx. R.
 Happy Alpha Friday
 ☺

10-23

HPU
TARA WILSON
TKWILSON@
HPU.EDU

(2)

- Cup from GB 90% benefit
small point. C3 PFUS
- FP Migiwa
- PDFs of presentations
8-9 flk =
2-3m ST
- POISON EITO
MTSG • POKADJIAL
- Cheryl

- STATEMENTS from
1. CONVENING
report
2. Then from
likefi Speakers/PARTIC.
• Create MAILING
LIST

Honey
CINDER
ZIGGY
Ginger

BALAZS
GEORGE

First Announcement



Large green turtles voraciously foraging during the daytime on the inter-tidal native red limu, *Pterocladia capillacea*.

First Annual Workshop on Green Turtle Diets in Hawaii- Food for Thought in 2020

An all-day workshop will be convened to explore the historical transition and current status of the Hawaiian honu (green turtle) foraging ecology and potentials for future conservation-related research and management actions. A series of relevant presentations will be given by invited speakers. A moderated panel discussion will take place in the afternoon to address several key topics to arrive at useful conclusions and recommendations. Everyone in attendance will have the opportunity to give input and ask questions. The workshop is designed to attract the interests of researchers, students, resource managers, and the general public. All are welcome. The entire day of attendance is desirable, but not required.

Monday February 10, 2020

8:30am-4:30pm

Waha Tower Marketplace

Hawai'i Pacific University



Request to be an Invited Speaker at the First Annual Workshop on Green Turtle Diets in Hawaii.

On behalf of my co-conveners, I would like to invite you to be a speaker at the "First Annual Workshop on Green Turtle Diets in Hawaii--Food for Thought in 2020" on Monday, February 10, 2020 at Aloha Tower Marketplace Campus of Hawaii Pacific University in Honolulu. We would be honored if you would give a 15-minute presentation to share your past or current research, knowledge, experiences, and/or observations involving green turtle foraging ecology or the marine plants in their diet. We have identified some important topics you may wish to consider in deciding what you would like to speak on, as follows:

- *Nonnative algae and non-traditional items in the current diets of Hawaiian green turtles;
- *Possible effects of toxicants in the green turtle diet;
- *Foraging pasture carrying capacity, slow growth rates, and poor body condition in some Hawaiian green turtles;
- *Implications of plastic ingestion by green turtles;
- *Green turtle microbiome, diet, and health;
- *Impacts of climate change on green turtle forage food;

but would welcome other topics you propose, as well.

We request that you let us know of your acceptance on or before December 6, 2019. Looking forward to seeing you in February!

Sincerely, Karla McDermid

Workshop Conveners and Steering Committee Members:

- Karla McDermid, Marine Science Department, UH Hilo
- Brenda Jensen, Dean of the College of Natural and Computational Science, HPU
- Thierry Work, Wildlife Disease Specialist, Honolulu Field Station, NWHC, USGS
- George Balazs, Golden Honu Services of Oceania- www.GeorgeHBalazs.com

NAME AFFILIATION (optional)

- 1) Karla McDermid ✓ UH Hilo
- 2) George BALAZS ✓ GH50
- 3) Thierry work ✓ usus
- 4) Brenda Jensen ✓ HPU
- 5) Gabriella Harf HPU
- 6) Nadine Nagata Maui Ocean Center
- 7) Ronald Kittle UL Lafayette
- 8) JEFF STIMSON UH Zorrooy (Res)
- 9) Lance Bodeless MCBH-KBay
- 10) Keith Roberts MCBH
- 11) BARRY CHOI NONE
- 12) Kimberly Fuller DAR

EMAIL ADDRESS

mcdermid@hawaii.edu X

ITSATONUWORLDINHAWAII@HOTMAIL.COM

THOMAS - WORKCUSES.COM X

bjensen@hpu.edu X

0 GIKERT1@MY.HPU.EDU X

0 hnagata@mauiocancer.com X

Ronald Kittle ULL@gmail.com X

JSTIRAZON@HAWAII.EDU X

LANCE BOODESS 1@USMC.MIL X

0 KEITH ROBERTS 1@USMC.MIL X

0 BARRY K. CHOI@EMAIL.COM X

Kimberly.h.fuller@hawaii.gov ~~X~~

3

NAME AFFILIATION (OPTIONAL)

- 13) Joe Murphy Malama na Honu
- 14) Genevieve Devine ~~gospodars~~ HE DAR
- 15) Debbie Herrera Malama Na Honu
- 16) Don Porter malama na Honu
- 17) Kylie Emily Malama na Honu
- 18) Beverly Murphy Malama na Honu
- 19) Melissa Walsh Malama na Honu
- 20) Erynn Tait Malama na Honu
- 21) Lolita Ayala Malama Na Honu
- 22) Kūalē, Rodops HMB
- 23) ~~Dustin Paradis MOCMI~~
- 24) Dustin Paradis MOCMI

EMAIL ADDRESS

o joemurf28@me.com X

o gen.m.devine@hawaii.gov ~~o~~

o Kuuipo4KC@yahoo.com X

o HAVE X

o kbarrige@yahoo.com ~~o~~

Xo ^{NOT U} honubeu@icloud.com ~~o~~

o melissarwalsh@hotmail.com ~~o~~

o clynn.tait98@gmail.com ~~o~~

o lolita.perez.ayala@gmail.com ~~o~~
kuuilei@hawaii.edu X

[luanna.nleyer@vun.ac.nz]

o para0409@pacificu.edu ~~o~~

NAME AFFILIATION (optional)

- 25) Jennifer Martin MOCMI
- 26) Karen Cheek Malama na Honu
- 27) Lance Cheek Malama na Honu
- 28) Randy Kosaki NOAA PMNM
- 29) Jan Vicente HIMB
- 30) Michelle Brewster ^{Neof} Malama na Honu
- 31) Lexi Brewster Malama na Honu
- 32) Kristen Kelly DAR ~~Malama na Honu~~
- 33) Kendra Babcock DAR
- 34) Bruce Beck Malama Na Honu
- 35) Jason Leonard NOAA PMNM
- 36) JOSEFA MUÑOZ HIMB
- 37) Marion Strehle Need 130 //

EMAIL

o jenaleysa@marineinstitute.org ~~⊕~~

o klcheek808@gmail.com ~~X~~

o lancegelfer@gmail.com ~~⊕~~
~~X~~

~~was~~ ~~Debbie~~ ~~X~~ janv@hawaii.edu ~~⊕~~

Michelle Kobie@yahoocom ~~⊕~~ ~~X~~

||

o MWP. Oahn@gmail.com ~~⊕~~

~~X~~ o kb711@hawaii.edu ~~⊕~~
o oldniner@inreach.com ~~⊕~~

o Jason. Leonard@noaa.gov ~~X~~

~~??~~ ~~X~~ o josef@m@hawaii.edu ~~⊕~~
o maluisa.stiente@gmail.com ~~⊕~~
NOT V H

NAME AFFILIATION (OPTIONAL)

- 38 Atako Fukunaga (UH SIMSR/NOAA PMNM)
- 39 Migiwa Kawachi UH Manoa, Botany
- 40 Kristina Deuterman HMAR
- 41 SHAWN CALEY
- 42 Cheryl King HAMER/Henawksbills
- 43 PII LAEHA MAUNA LANI
- 44 Donna Brown UH Maui
- 45 Freddie Velasquez (Sealife Park Hawaii)
- 46 WALLY ITO KUA
- 47 Andrew Graham HIMB
- 48 Joanne Pettigrew Mālama na Honu
- 49 JIM BROWNING USFWS
- 50 Andy Collins NOAA PMNM
- 51 Carissa Cabrera HMAR
- 52 Roz Rapozo World Turtle Trust. o
- 53 John Lindeman World Trade Joint
- 54 Amy Markel DAR
- 55 Dillian Nasan
- 56 Cindy Hunter UH - Biology
- 57 Alexis Aguilas UH - Botany
- 58 Scott Chulakute UH - Marine Biology
- 59 MICAH BRADLEY HMAR
- 60 Amanda Leikerran TNC
- 61 Jenn Lynch NIST HPU

→ KRISTINA DAUTERMAN@H-MAR.ORG (12)
EMAIL

- atsuko.fukunaga@noaa.gov ✓
- migiwa@hawaii.edu ✓
- Kristina.Dauterman@H-mar.org ✓
- scateylez@yahoo.com ✓
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- amanda.perron@TNC.org ✓
- jmlynch@hpu.edu ✓

welcomed
ALOTHA ^{MY NAME} JAN 1965
visited 55 years Hawaii

LIME UNIQUE
MTSG
NBO CONSULTANCY

1964 Lagoon of ^{RURAL SET OF WHITI} PEE
1969 - LAHAINA ^{DEARING FOR FISHING DRILL}
1972 48 years ago

• Ceremonial Blessing
Seen Great ^{is} change
FOR THE BETTER - BUT UNEXPECTED ^{propagation} trap
Numbers & behavior
AND Adaptations

SCIENCE DOCUMENTED
Fortunately

• HOOLAU Lim A ^{work together} common goal for

Reflections

WHO? - ^{download present} Speaker Introductions
NO COST TO TAXPAYERS

Work at
List out
co-author
Rebuttal



- ✓ need MICAH, ^B h-mar.org
- ✓ AMARKEZ@Hawaii.EDU
- ✓ Lindelow John@Lindelow.com
- ✓ Amanda.Perron@TNC.org
- ~~need fixed~~ Gen. M. Devine@hawaii.GOV

- need to manually add
- Jean HPU
 - Genevieve
 - Keith
 - Lance
 - other?

Presenters - foodforthoughtfirst
annualworkshop@groups.outlook.com

Attendees - foodforthoughtworkshop
@ groups.outlook.com

honu world <itsahonuworldinhawaii@hotmail.com>
To: George Balazs <honumazu@gmail.com>

We received 20 responses, shown as follows, to our request for feedback. Our objective was to gauge the way folks perceived the messages of the works shown in the following. We envision that any points of misunderstanding and disagreement become available or better ways to communicate the science are devised. We will provide the unedited version of what we received. We are proud and grateful to "Food for Thought" to address in the future.

11 Links PDF's of PP Presentations to insert into the Workshop Program

honu world <itsahonuworldinhawaii@hotmail.com>

Tue 5/5/2020 2:15 AM

To: honu world <itsahonuworldinhawaii@hotmail.com>

2020 HPU 1ST

George Balazs 2/9/2020 Diet Workshop- Brief Introductory Reflections.

Marc Rice and Laura Jim 2/9/2020 Diet Workshop Presentation (Shown by Thierry Work)- Growth Rates of Green Turtles (Chelonia mydas) at Several Sites on Hawaii Island from 1995-2018.

Shandell Brunson 2/9/2020 Diet Workshop Presentation- Contemporary Assessment of ForeStomach Contents from Hawaiian Green Sea Turtles in Kaneohe Bay, Oahu.

Ronald Kittle III 2/9/2020 Diet Workshop Presentation- What's in the Gut? Insights into the Gastrointestinal Microbiome in the Hawaii Green Turtle.

Migiwa Kawachi 2/9/2020 Diet Workshop Presentation- Eutrophication, Invasive Algae, and Green Turtle Fibropapillomatosis.

John Stimson 2/9/2020 Diet Workshop Presentation- Thirty Years of Changes in the Benthic Algal Community in Kaneohe Bay, and the Possible Role of Green Sea Turtles.

Ku'ulei Rogers 2/9/2020 Diet Workshop Presentation- Observations of a Rapid Decline in the Invasive Macroalgae Gracilaria salicornia associated with Chelonia mydas Grazing in the Moku O Lo'e Marine Reserve.

Lance Bookless 2/9/2020 Diet Workshop Presentation- Green Turtles on the Move for Food: Newly Found Foraging Grounds in the Nu'uipa Ponds, Marine Corps Base Hawaii.

Kimberly Fuller 2/9/2020 Diet Workshop Presentation- Invasive Algae Management in the State of Hawaii.

Cynthia Hunter 2/9/2020 Diet Workshop Presentation- Exploring Patterns of Foraging by Hawaiian Green Sea Turtles on Gracilaria salicornia in Kaneohe Bay.

Jennifer Lynch 2/9/2020 Diet Workshop Presentation- Implications of Plastic Ingestion by Green Turtles.



www.GeorgeBalazs.com

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**Workshop on Green
Turtle Diets in Hawai'i--
Food for Thought 2020
Program**



8:00 Registration & Coffee

8:45 Welcome and *Honu* Blessing

Brenda Jensen, Dean, College of Natural and
Computational Sciences, Hawai'i Pacific University

9:00 Reflections

George Balazs, Golden Honu Services of Oceania
Thierry Work, Honolulu Field Station, NWHC, USGS
Karla McDermid, Marine Science Department,
University of Hawai'i-Hilo

**9:20 Growth rates of green turtles at several sites on
Hawai'i Island from 1995-2018**

Marc Rice and Laura Jim,
Hawai'i Preparatory Academy, Kamuela, Hawai'i

• **9:40 Contemporary assessment of forestomach contents
from Hawaiian green sea turtles in Kane'ohe Bay**

Shandell Brunson, Biology Department,
University of Hawai'i-Manoa

• **10:00 What's in the gut? Insights into the gastro-
intestinal microbiome in the Hawaiian green turtle**

Ronald Kittle, Biology Department,
University of Louisiana at Lafayette

10:20 Break for 20 Minutes

• **10:40 Eutrophication, invasive algae, and green turtle
fibropapillomatosis**

Migiwa Kawachi, Botany Department,
University of Hawai'i-Manoa

11:00 **Changes in the benthic algal community in Kane`ohe, O`ahu and the possible role of green turtles**
John Stimson, Zoology Department,
University of Hawai`i-Manoa

11:20 **Observations of a rapid decline in invasive macroalgal cover linked to green turtle grazing at the Moku o Lo'e Marine Reserve**
Ku'uilei Rodgers, Hawai`i Institute of Marine Biology

11:40 **Green turtles on the move for food: newly found foraging grounds in the Nu`upia Ponds, Marine Corps Base Hawai`i Kane`ohe Bay**
Lance Bookless, United States Marine Corps

12:00 **No Host Lunch and Group Photo**

♦ 1:00 **Invasive algae management in the State of Hawai`i**
Kimberly Fuller, Division of Aquatic Resources,
Hawai`i Dept. of Land and Natural Resources

♦ 1:20 **Exploring patterns of foraging by Hawaii green sea turtles on *Gracilaria salicornia* in Kane`ohe Bay**
Cindy Hunter, Biology Department,
University of Hawai`i-Manoa

1:40 **Implications of plastic ingestion by green turtles**
Jennifer Lynch, National Institute of Standards and
Technology at Hawai`i Pacific University, Makapu`u Point

2:00 **Break for 10 Minutes**

2:10 **Food for Thought Discussion Session**
ALL INVITED TO PARTICIPATE!



4:15 **Closing Remarks**
Brenda Jensen, Dean, College of Natural
and Computational Sciences, Hawai`i Pacific University

Handwritten notes in the left margin:
11:00
11:20
11:40
12:00
1:00
1:20
1:40
2:00
2:10
4:15
Lance Bookless

SB- 3/2019 58.6 Roof
 KBAY + 2020 39
 " " " " 42
 " " " " 43

7% sponge TERPIOS
 GIS, 3 reefs and ZETEKI
 MIZ R 78 & 738
 FINE SCALE 25at TRACK
 SPONGE person

RON
Rhipids koalas
Breaks

MIGAWA High Nut. input Disease
 Hyp. Gac. correlated with
 ANCANO
 ULVA LACTUCA - ALIEN

50/ John
 1976-1977 shot off saddle
 Dictyosphaera Spring 2006 Disappear
 CAUSE of Diphine
 40 DAY COLD storm perfect storm
 Lance's volunteer

~~20~~
GREAT CHANGES ^{short span} 20 YEARS
OVER HALF A Century
& FAMILY

and / the Honu
by children of Hawaii
MEMORIAL DRESSING
CEREMONY
WELCOMING
Aloha - ^{SILENCE PLEASE} MAMA
THANKS TO HPU
BROAD

• ^{EVER JOSEPH} First workshop and Sea Turtles
Ded to the Public EVER
HELD IN THE HAWAIIAN IS.
INCLUDING AT NO COST TO TAXPAYERS
THEME OF INTRODUCING
STATEMENTS NO REFLECTIONS

• 1943 DETROIT - CALIF MOHAVE 8yo

DESERT TORTOISE & PET RED EARED
GRAD 1960 29 PALMISTS SDSG

FIRST SEA TURTLE PRECES OF GREAT SOUP

TEATRE AX - MARRIED (IN 1963)

DRIVE - TOUR MOVIE MAKING OF ^{TRAVEL LOG} MARY on

THE BOOTHY - 1964 FLEW TAHITI, 1964

VIA THEODOSIO - 7 MONTHS PAPER DIST
WITH LOCAL PEOPLE FIRST STATE - OF ^{BOARD} DIST

MISSED W/ SPRAY - MOVED TO

HAWAII I AM 65 (55 years there)

UHMAROON BS & MS IN TROP. AG.
1971 HUMB Sea Grant - Reared hatching

1973 1975 1983 1983 34 years

WHAT I BELIEVE I LEARNED IN LIFE
3 POWER POINTS THUS FAR

people make - INTRODUCTION - ^{COOPERATION} MAKE

WELCOME & HONOLULU
SILENCE PRASE
SCIENCE
CEREMONIAL DRESSING
By children of Hawaii
and the HONU

~~& AMAZING~~
GREAT CHANGES short span
OVER HALF A CENTURY 20 YEARS
Numbers - Behaviors,
ADAPTATIONS

ALL SCIENCE DOCUMENTED
3 SLIDES
HONOANU LIMA

LUALUALEI [PAPERS
PUBLICATIONS

CROSS-ROADS
Running out of gas
tank-up at Maui
pies deceptive w/o
"HUNGRY HONU LIMA HUNGER"

G.S. E.D.

Keith Roberts

Kvlei Royce

C.S. 1970s

seeded sea

by green turtles

- Impacted turtle

USFWS

"Fond Hood"

Microscopic

Turtles not taken

Kimberly

WAIKI-65

Algae Vacuum Mountain Bay

+ hot water

CLDY

Lisa Bellin

Address to program

131 Studies

Robotax

"Beaver of Good News"

Put the website

GROUPINGS

- Growth RATES
- GTFP
- EATING ALIEN ALGAE AND GREEN TURTLES
- PLASTICS

mostly of
Kimbaby turtles not taking
into account
Algae
fish water
usually only
command to allow
131 studies 2007 increase
proliferation
"Peace of God" word
Patterson
Kendrick -

MY POSSIBLE TAKE-HOMES

(22)

ALL NOT
ALC STON
WAIKOLA - Algae fertilized
HARBOR - Fish waste food.

Cancer Population became as
such DUE TO ALIENS THRNES hence
providing source of nutrients food for
Turtles - Now dependant

KONA/KOHALA West Hawaii Unique
few ALIENS, sparse turf limited habitat
Age build-up 1990's early turtles
✓ don't leave for ^{most} many long periods

West Hawaii → Maui Good Growth

HUGE Body of published & yet
to-be published data awaiting
investigators & students included

There are slow somatic rates of
growth throughout Hawaii, sampling
places - but not super low slow
like West HAWAII

See BALAZS 1982 $KAS \text{ cm/MO} \times 10^3$
.38 - .49

11

2nd Annual Workshop on Sea
Turtle Research and Conservation
in the Hawaiian Islands/Oceania

***Some Talking Points over lunch today 1130am Friday- please print and bring

1 message

honu world <itsahonuworlindhawaii@hotmail.com>
To: George Balazs <honumazu@gmail.com>

Mexico City 4HR
APIA - 2 hour
FIJI - 2 hrs

3/4/2022

Fri, Mar 4, 2022 at 9:54 AM

From: honu world <itsahonuworlindhawaii@hotmail.com> Calif. + 2 hrs
Sent: Friday, March 4, 2022 7:02 PM
To: Brenda Jensen <bjensen@hpu.edu>; Thierry Work <thierry_work@usgs.gov>; Summer.Martin@noaa.gov <summer.martin@noaa.gov>
Subject: ***Some Talking Points over lunch today 1130am Friday- please print and bring

ASTI-2PM

Time-Line for receipt of PPs: Virtual versus In-person talks

Hawaiian Opening Ceremony- Shandell Memory

Introduction of each speaker/time keeping? Summer staff? Thierry staff? Brenda student(s)?
Unity
JANITA
Crouchy
Michelle

Talks Recorded?

Virtual Log-On and Presentations. Interactive? Password vs No Password

Abstracts not to exceed 750

Parking?

Masks?

Virtual Log On and Presentations. Interactive?

Leis-Banner

EASY SIGN

Printed Program

About DAR Ryan Jenkinson

BROOK
CAROL

Dedicated to the
KAM Momen
Summer help
EATERS
Brunches

APRIL 8, 2022

1/2022

830 - 400 PM
= 7.5 hours = 450 min

Lunch 60 min

2 x 20 MIN BREAKS AM & PM
40 min

[25 MIN TALKS (20+5)
20 MIN TALKS (15+5)]
Questions

350 MIN for TALKS

20 MIN 17.5 TALKS (14.5)

or

25 MIN 14 TALKS (11.6)

60 MIN for PANEL = DISCUSSION

290 min

260 13 x 20

60

40

60 = 420

- ASUKA
- MARCO & Laura Lynch
- SHRITIKA
- KARLA

17. Still need - DEDICATED TO (28)
Attendance? list Shandell

Invite ^{Brenda Letter} - ~~IK~~ Ryan Jenkenson, Bowen
? FWS

Also - Semenov, Shritika, Francis,
RICE/LAURA
Pawloski

AG OF 2/8/2022 TUESDAY - 2 months TO GO

- 1 - ✓ KATY SHAW - Quantifying HARM... ^{to SEPTUAGES} ^{from NESTED} PLASTICS
- 2 - ✓ IRENE KELLY - NOAA Fishery Service PIR overview
- 3 - ✓ MARC - ^{DESTINATION REVEALED} Post Nesting Migrations hawksbills Nos
- 4 - ✓ UNITY ROEBECK - Turtle Research & Monitoring... TRENDS
- 5 - ✓ CHERYL KING - Hawaiian Hawksbill - Photo ID catalog
- 6 - ✓ SHRITKA IRAKASH - ^{20 years equals >300} Hawksbill Turtles in Fill ^{Research} ^{FININGS}
- 7 - ✓ ^{GODFREY AKAKA JR.} JOSHUA DEMELLO - NATIVE HAWAIIAN Cultural and Tradition
- 8 - ✓ KARLA / KARA - 'Whats on The MENU' ^{of related forage in GI digests}
- 9 - ✓ KELLEIGH DOWNS - Honu'ea and the Kai: Coast
- 10 - ✓ CROWDER - Small turtle, big Ocean
Dynamic Thermal Corridor connects loggerhead turtles across the N. Pacific
- 11 - ✓ LAURA JIM - Growth rates of gts in West Hawaii
- 12 - ✓ JOSEFA MUÑOZ - using stable isotopes ^{and} ^{GUANO} sat. tracking
- 13 - ✓ STAMAN: Status ^{TRENDS} OF HONU PAPAHANA
- 14 - ✓ GAOS: New insights hawksbills ^{MOKUAKEA}
- TRENDS = Turtle Research & monitoring DATABASE
- Summer ^{Navigation} System
- 15 - ✓ Spatial Ecology green/hawks ^{>100 SATTAGS} ^{NOVIANS}
- 16 - ✓ ^{Amalia Heimuli} Wally Ito - Hawaiian Cultural Relationships
- 17 - ✓ ^{Polo with LIMU and FORU} PII - Mālama Honua, Mālama Honua

17. Continued Pi'i "As we care for our turtles,
we care for the world"

18. ^{Tommy} Cuth - Interactions of Marine Turtles
with Fisheries on the Island of Maui

(30)

- and the next steps for conservation work"

2. PRACTICES OF HONU HARVEST: OPPORTUNITIES AND CHALLENGES TO
RESTORING A CULTURAL RIGHT TO A TRADITIONAL FOOD SOURCE.

on post-nesting green turtles in Guam to identify foraging
hotspots in the Western Pacific.

oli & pole

3/30/22 Meeting Patel

- BANKER / LINE 2043690
- R.M. NO. ? Post you COOLEY
- Zoom Link PAUL
- Printed program send Andy
- Feed back Mechanism
- ~~TW/Brenda/ME~~
- Recording
- Student Posters NO FWS
- PPs NO SOH
- LEIS BLUPE
- Coffee Group photo
- photo Words from
- Registrants US 4
- Each Say something 489
- Lunch 6818
- NO. IN PERSONS 7-10
- EMAIL Message to all per 16
- EARLY LUNCH 116

Post you

Group photo

432 2000

Brenda 808

7-10

per 16

Staff Signature:

Date:

Patient / Surrogate Acknowledgement:

AVS Patient / Guardian Acknowledgement

Returned to Family

Family/designee acknowledges receiving items listed above

Need

Done

X 2

US 4

489

6818

per 16

5

116

10418

Saturday APU
4/2/2022 - Drove to Aloha Towers Marketplace

Notes Needs

- BOOKMARKERS New 160
- TW lei for Brenda Barquet
- Leis Costco 13 x 2
- Parking Piers 4-11 & 8 (in front)

293

176 Virtual
9 SIGNED
126 in person
10 person
FOR BOTH

* APRIL - EARTH DAY MONTH

* 8 YEAR OF THE LIMU

Our First Workshop

Annual Event 2 years 2 months AGO

- Earth Day is April
- Year of the Limu

HOND 5690 Book



2nd Annual Turtle Workshop

Friday, April 8, 2022

1 Aloha Tower Drive

Honolulu, HI 96813



BATHROOM
CODE

#2 134

8:30 AM

BLESSING - DANNY & ANNA X

(36)

#1) Pii - Growth Studies - KAREN B.

For me!
An opportunity
to catch up

#2) Beth - Ambassador Program

35cm within 2 years

1976 > 16,000 day old hatchlings

200 juveniles Makurahi

> 50 MOC

not switching + 5690

235 - Multiple from females

} juveniles

2017
Separated

2021
Just now

Long term Plan?

2 nest this year this week

#3) Irene

#4) KATY Shaw

#5) Replaced Tommy - Mikela / Michelle

Serpturtle Rehab Committee N=9

BREAK

#6) MARC
RICE

zoatrack.org

Need A Logo
GHSD

#7 X Cheryl King Recorded from Montana

#8 X Joshua & Godfrey ESA 78 (d) Can Taylor TAKE
prohibitions
(could allow for limited take)

#9 X KAKA & KARA

effects of glyphosate herbicide ...
Kittle, McIver, MUEHLSTEIN & Balazs

#10 X Wally Ito

"A Good fisherman is someone
knows when not to TAKE A fish"

Uncle Henry Chung No Jr.
5-19-1941 - 9/9/2015

LUNCH "LANAI - Allen ^{speed} KAI AOKA MALI'e
Lima & Honu"

Lima cages to protect against honu

Uncle Tommy Hashimoto & Annie
HASHIMOTO

2-3 Generations can't EAT
LOSE KNOWLEDGE

#11 X Laura Jim 😊 Great

#12 X Kelleigh ^{Honu'ea} and KA'U Coast
"EVERY HATCHLING COUNTS"

Gabriella Korf

[Faint, mirrored handwriting from the reverse side of the page is visible through the paper. The text is mostly illegible but appears to be bleed-through from a previous page.]

#13 X Marylou STAMAN in 2021
"2 tagged at P&H nearby FT5"

"1 year Mig interval"
9/4/4
7/3/4
9/3/4
Turtles entrapped
Mokuleia
289 hatchlings
50 ^{saved} adults
Loggerhead Attempted Tern Is, 2021

#14 X Michelle MARIAEALY CAPISTRAN
Gelatinous boiled down
Calipee Calipash
40+ Recipes

#15 X Baptism wedding Holyweek
Blood/oil Cooking TANNERY

#16 SHARITKA Prakash

#17 X LARRY CROWDER TO Summers Oceanic Earth

~~Unity~~ GB/SP < 3% went TO BAJA
"legacy DATA SET"

Unity Roebeck
Map Hawaii $\xrightarrow{510}$?

"DATA SHARING Policy"

#18X GAOS
olfactory Sensing ^{and} White

#19X Josefa Munoz ^{not self sets}
Spratly Islands? ^{Ogasawara}

~~BRAIN~~ - New Yorker
magazine?

#20X Summer

#5 Kerch - Navy Collaboration 141 TAGS

Impression
hot of parties
228 captures
663 white encounters

green 5 months / hawk 1 year / month
89% from RMI 4% YAP ^{Self Parker et al.}

"other" - Some exchange Hawaii ↔ Marianas < 5%

Jensen et al. In Prep

1998
ADV 6/20/98
CULTURE

Hawaiians value green sea turtles

It is absolutely stunning in this age of awareness to read the remarks of two letter writers regarding the cultural taking of green sea turtles.

It appears ^{that some} both perceive modern Hawaiians as mindless, wanton killers hell-bent on slaughtering and causing the extinction of the honu. Nothing can be further from the truth. Most of us are responsible people who deeply cherish the natural resources left to us by our ancestors.

Our role as stewards of the land and sea is a deeply ingrained tenet of our culture. Please be assured we fully understand that the elimination of the honu from our waters is not in our best interest. So much so, that many of us have taken active roles and dedicated part of our lives to help facilitate the resurgence of sea turtles.

Make no mistake, the perpetuation of the species is of utmost importance to us Hawaiians. Thus, come the time when the population of turtles is judged

stable enough to tolerate a limited harvest, we ask simply to be allowed to resume our millennia-old relationship with this cultural entity.

If you think the uniqueness of our Hawaiian culture is of some value to the state, then you must be willing to allow it to occur. It is unprincipled to restrict Native Hawaiians to only Merrie Monarch festivals and Kamehameha Day parades because you've decreed these practices acceptable. It is not fair for you to pigeonhole us into a box for your convenience.

Just as Native Hawaiians over the centuries have accepted you and all your idiosyncrasies, so, too, we ask to be accepted — here in this, our very own home.

Bill Puleloa
Kaunakakai, Molokai

793
Registered

2yrs 2mon Ago

58% VIRTUAL

42% In Person

growth slides

Marc Rice <mrice@hpa.edu>

Tue 2/15/2022 9:12 PM

To: honu world <itsahonuworlدينhawaii@hotmail.com>

just two simple questions: Is this slide data from strandings? What are the sa appears that FP is much more prevalent that I would have imagined?

FP more a problem E whereas starvation more W HI



2nd ANNUAL WORKSHOP

ON SEA TURTLE RESEARCH AND CONSERVATION
IN THE HAWAIIAN ISLANDS/OCEANIA



April 8, 2022
Aloha Tower Marketplace
Honolulu, HI

 **HAWAI'I
PACIFIC**
UNIVERSITY

ARRIVAL:

800-830am- Arrival at HPU Aloha Tower Marketplace Campus, Sign-In, and Seating.

OPENING:

830-845am- Opening Welcome by Workshop Organizers, Dedication of Workshop to the Memory of Shandell Brunson Hawaiian Blessing Ceremony Pule and Oli by Kahu Hanai Danny Akaka Jr. accompanied by Anna Akaka.

PRESENTATIONS:

#1- 845-900am "Malama Honu..Malama Honua: As we care for our turtles, we care for the world"- Pi'i Laeha & Danny Akaka Jr., Mauna Lani Auberge Resort.

#2- 900-915am "Four decades of green sea turtle (*Chelonia mydas*) breeding and public outreach at Sea Life Park Hawaii"- Bethany Doescher & Michelle Benedict, Sea Life Park Hawaii.

#3- 915-930am "NOAA Fishery Service Pacific Islands Regional overview"- Irene Kelly, Pacific Islands Regional Office.

#4- 930-945am- "Quantifying harm to sea turtles from ingested plastics"- Katherine Shaw & Jennifer Lynch, NIST and Hawai'i Pacific University's Center for Marine Debris Research.

#5- 945-1000am- "Interactions of marine turtles with fisheries on the Island of Maui"- Thomas Cutt, MOC Marine Institute.

Morning Break- 1000-1015am

#6- 1015-1030am- "Destination revealed: Post nesting migrations of hawksbill turtles (*Eretmochelys imbricata*) from Moso Island, Republic of Vanuatu"- Marc R. Rice, Hawaii Preparatory Academy.

#7- Recorded & Virtual Hybrid- 1030-1045am- "An Introduction to The Statewide Photo-ID Catalog for Hawaiian Hawksbill Sea Turtles (1998-present)"- Cheryl King, Hawaiian Hawksbill Conservation.

#8- 1045-1100am "Native Hawaiian cultural and traditional practices of honu harvest: Opportunities and challenges to restoring a cultural right to a traditional food source"- Godfrey Akaka, Native Hawaiian Gathering Rights Association & Joshua DeMello, Western Pacific Regional Fishery Management Council.

#9- 1100-1115am- "What's on the menu? Unexpected forage plants in green turtle diets on Hawai'i Island"- Karla McDermid & Kara Smith, Marine Science Department, University of Hawai'i at Hilo.

#10- 1115-1130am- "Hawaiian cultural relationships with limu and honu"- Wally Ito, Ewa Limu Project.

Lunch, Group Photo & Viewing of Poster Papers with Student Authors- 1130am-1230pm

#11- 1230-1245pm- "Growth rates of green turtles in West Hawaii based on 30 years of tag and recapture studies"- Laura M.R. Jim, Hawaii Preparatory Academy.

#12- 1245-100pm- "Honu'ea and Ka'u Coast"- Kelleigh Downs, HVNP Hawai'i Island Hawksbill Project.

#13- 100-115pm- "Status and trends of honu, or green sea turtles (*Chelonia mydas*), in the Papahānaumokuākea Marine National Monument"- Marylou Staman, NOAA Fisheries, PIFSC Marine Turtle Biology and Assessment Program.

*#14 Virtual Live from Mexico- 115-130pm- "People and sea turtles in Baja California: cultural practices and connections across the Pacific"- Michelle Maria Early Capistran, CICESE.

*#15 Virtual Live from Fiji- 130-145pm- "Hawksbill turtles in Fiji: Research and findings"- Shritika Prakash, The University of the South Pacific.

*#16 Virtual Live from Apia, Samoa- 145-200pm- "Turtle research and monitoring: TREDIS (Turtle Research and Monitoring Database System)"- Unity Roebeck, SPREP.

*#17 Virtual Live from California- 200-215pm- "Small turtle, Big ocean: Dynamic thermal corridor connects loggerhead sea turtles (*Caretta caretta*) across the North Pacific"- Larry Crowder & Team, Stanford University.

Afternoon Break- 215-230pm

#18- 230-245pm- "New insights into the nesting trends, threats, and social behaviors of Hawaiian hawksbill sea turtles"- Alexander Gaos, NOAA Fisheries, PIFSC Marine Turtle Biology and Assessment Program.

#19- 245-300pm- "Using stable isotopes and satellite tracking on post-nesting green turtles in Guam to identify foraging hotspots in the Western Pacific"- Josefa Munoz, University of Hawai'i at Manoa.

#20- 300-315pm- "Spatial ecology of foraging green and hawksbill turtles in the Marianas from >100 satellite tags"- Summer Martin, NOAA Fisheries, PIFSC Marine Turtle Biology and Assessment Program.

315-400pm- Group Discussion/Questions & Answers

400pm Closing Remarks- Farewell Until We Meet Again in 2023!

TITLES OF POSTER PAPERS TO BE DISPLAYED AT THE WORKSHOP:

"Habitat use assessment of green sea turtles (*Chelonia mydas*) in Puakō, Hawai'i"- Student Alden Mazo, Hawaii Preparatory Academy.

"Establishing a facial recognition database using I3S (Interactive Individual Identification System) application"- Student Eli Monello, Hawaii Preparatory Academy.

The Workshop Organizing Committee (Brenda Jensen, Hawai'i Pacific University, Summer Martin, NOAA PIFSC, Thierry Work, USGS NWHC, George Balazs, www.GeorgeHBalazs.com) would like to thank Jeannie Manzano, Gabriella Korf, Bradie Kinder, Brooke Carroll, and the HPU Events Team for contributing their talents and support for this event.

*This workshop is dedicated to the
memory of*

Shandell Eames Brunson

*June 7th, 1976
January 25th 2022*



Hawai'i Pacific University would like to acknowledge the 'āina, the root culture, and the Indigenous People of Hawai'i. We also acknowledge how their wisdom and love have shaped Hawai'i in sustainable ways that allow us to enjoy these gifts today. We recognize the pain, sorrow, and multiple intergenerational losses that have been and continue to be inflicted on Kānaka Maoli. As an HPU community, both Indigenous and allies, we offer gratitude for the land itself, for those who have stewarded it for generations, and for the opportunity to learn, grow, work, and live in solidarity with one another. We commit to honoring Aloha, Pono, Kuleana. Holomua Me Ka 'Oia 'i'o (move forward with truth).

22



YOU'RE INVITED!

3rd Annual Sea Turtle Workshop: Stranding Research and the Conservation Value to Diverse Communities of Oceania

Friday, October 6, 2023, 8 AM - 4 PM (HST)

HPU Aloha Tower Marketplace, Multipurpose Room 3

Keynote Guest Speaker: Dr. Brian Stacy, DVM, Ph.D., DACVP, Veterinary Medical Officer, NOAA Fisheries Office of Protected Resources, Silver Spring, Maryland. We also have a full roster of presenters sharing interesting and informative talks.

HPU is a proud sponsor and committed to sea turtle conservation and research in all its diverse forms. Registration and parking for this event is FREE. To register: <https://forms.gle/GAudeBHG4gNFhxgt5>

For more information, please contact George Balazs (itsahonuworldinhawaii@hotmail.com).

Handwritten notes on a lined notebook page, including the number 54 circled in the top right corner. The notes are mostly illegible but appear to be a list of names or topics.

54

Keynote
Checklist
MEGAN
Jen
Lynn
KYLEA
GRADY
KORAN
MAYAN
LIFE

N=16
7/30/23

KEYNOTE BRIAN STACY

CHERYL KING

MEGAN LAMSON / JEANNINE ROSSA

JON GELMAN

SUMNER MARTIN

ERON YOSHIDA

KARLA McDERMID

GRADY WEYENBERGER

MAREIKE DORNHEGE

ROXANNE KELIIPIKANEOKOLOHAKA

MANNY DUENAS

TYFFEN READ

8/10 Katherine Shaw

H

8/10 Jim/Rice

"

MADDUX SPRINGER

"

GREGG LEVINE

"

9/21/2023 w/ BRUNDA & JEANNE MEET
~~THURSDAY~~ ~~at~~ ~~the~~ ~~list~~ ~~of~~ ~~registered~~ ~~people~~ ~~paste~~
- Link for zoom ~~key~~

- Banner ~~beforehand~~ photos ~~list~~ ~~of~~ ~~emails~~

- Drop Box ✓ Branda
- De. Morris + my web page ✓
- Murray coffee/tea pastries ✓

- Leis ✓ ~~NET~~ = TW hand
- Group photo ✓ ~~carry~~ ~~to~~ ~~congress~~
- Program print ✓
- Videos ITS

145 pm
depart

~~Anderson~~ need
NAME 7295 ←
HPU statement

Lunch \$19. pier 9
BEING LUNCH
Deliver STRANDING
SOUP IN AN EMAIL

TOPA Bldg PALAMA
Bldg waterfront PLAZA

8/10/23 JARID UNDERWOOD ^{FWS} Telecons 1155AM
 208-2095 EWS
 8/10 VOICE MAIL CARL Campbell call

of 1 Nov 11

Outlook

HECK

MANNY 21

If you list a species you need to do things to care for it

Search Help View Home New mail Read / Unread

You forwarded this message on Fri 6/9/2023 9:23 PM

BOB MOERS (B) BLESSING George Balazs

HAWAIIAN BLESSING G-HPU STATEMENT

To: Brenda Jensen; Thierry Work; Jon Gelman

Jon, Brenda & Thierry- Here are the ones (N=9) we presently have confidence in will show and present, all in-person:

- Brian Stacy- Keynote ①
- Cheryl King- Hawkbill Injuries ②
- Megan Lamson/Jeanine Rossa- DLMR Stranding Response Kauai & Kona ③
- Jon Gelman et al- HMAR ④ ⑤
- Summer Martin et al.-NOAA
- Erron Yoshida et al.-Manalua High School Educational Outreach Involving Stranded Turtle Necropsies ⑥
- Karla McDermid- Diet and Stable Isotope Study of Stranded East Hawaii Turtles ⑦
- Grady Weyenberg/Sylar Dentlinger- Statistical Analysis of Island of Hawaii Stranding ⑧
- Tammy Cui et al.- Maui Stranding Response ⑨

BRITNEY MURKIN

BRIAN STACY

CHERYL KING

MEGAN LAMSON

JON GELMAN

SUMMER MARTIN

ERRON YOSHIDA

KARLA MCDERMID

GRADY WEYENBERG

TAMMY CUI

2023 HP

2nd Ann

2nd Annue

2023 HP

2nd Ann

2nd Annue

3rd Annual HPU Sea Turtle Workshop: STRANDING RESEARCH AND THE CONSERVATION VALUE TO DIVERSE COMMUNITIES OF OCEANIA

HAWAIIAN BLESSING G-HPU STATEMENT

HPU STRANDING

A DAY OF PLCA

2nd Annue

2nd Annue

2nd Annue

TO THE NEED THE SPEAKERS "First Lungs" National were why Stomp

- 2nd Ann 4
- 5690
- 911 5
- Accomplisi
- AFCD
- AFRICA 2
- AHonuR 9
- Aichi Maru
- ALONSO A
- AMAMI
- AMAMI: 1
- AmamiSat
- Amputatio

- Roxanne Kelliipikaneokohaka et al.- Hawaiian cultural aspects of turtle strandings
- Manny Duenas- Guam- Cultural aspects of turtle strandings (10)
- Marzena Marjembé- PNG strandings (11)
- Myffen Read- New Caledonia strandings (11)
- Rócher-Akarez- Rapar Not strandings
- Katherine Shaw- Strandings and plastics (12)
- RobIN LeRoux (13)
- KATH- Southern California stranding program
- Laura Jim/Marc Rice- West Hawaii HPA stranding program
- Jennifer Sims-East Hawaii HPA stranding program
- MADUX SPRINGER IOLANI (15)
- Mark & Baltes- 5-year Bonus Presentation (15)- Brief Overview of the Rise and Fall of
- PAPAHELOLOMA, HARMONIA HAWAII
- GREGG LEVINE (16)

Please send your Comments, and Questions on any of the above. gb

~~SMOOTH~~ JOHN MORGAN
ROBIN LEROUX STACY HARGREVE

From: George Balazs
Sent: Tuesday, June 6, 2023 11:58 PM
To: Brenda Jensen <bjenisen@hpu.edu>
Cc: Jon Gelman <jon.gelman@h-mar.org>; Thierry Work <thierry_work@ugs.gov>
Subject: 3rd HPU Turtle Get-Together
Brenda, Jon, & TW,
Infrastructure Being Degraded
Planning for our TERN Islands
Oh My, time travels fast. We are now just 4 months out from our October 6th event! I kindly suggest we move forward very soon on several essential things.

- Our provisional draft presentations lineup- I'll send that to you later today for your feedback;

- Registration to attend + a Workshop Registrar- Brenda, might we have Jeannie

brief rundown on our spea... (No subject)

ZOOM 3rd HPU 8-29-23

ID 880 2330 4716
PS 068510

Read / Unread

8-29-23 TUES, 9AM ZOOM

Banner/'This Way' signs

DEDICATED TO MAUI?

Leis

Parking

Printed Program

Sign-In at the door

Order of Presentations- Zoom & In Person

Registration Attendees Mail Group

Delivery by 9/29 or earlier of Speakers' PowerPoints & Short Introduction Sentences

Morning Coffee and donuts

Opening Ceremonial Blessing

Opening Words- Brenda

Introducing Each Speaker

Lunch for Purchase

Record Talks

Portable Mics for Q & A

Hear Q & A by Zoom presenters

Congressional Delegations Invitations

Backup Plan for Speakers affected by possible Government Shut Down

- NO PSS for Zoom
- LUNCH ORDERS PIER 9

9/29/23 9:00AM - 9:45AM

TW

BY 9/22

IN PERSON VS ZOOM
67 & 60

IN PERSON

Need STRANDING PRACTICAL DEFINITION & Webster etc. Definition

(62)

-The printed/digital program will show only your name as the presenter of your talk. Others that contributed as co-authors, or in other ways, should be shown in your Title and/or Acknowledgments slide.

For questions, please email The Organizing Committee care of:
itsahonuworlindhawaii@hotmail.com

To communicate with everyone at once (those shown below + the Organizing Committee), please use our Speakers Group email address, or simply turn this message around.

SEPTEMBER 2023

The Presentations
12 In Person
7 Zoom
1 Pre-Recorded

- 1 Mareike Dornhege- Patterns of Sea Turtle Strandings in Okinawa, Japan. Zoom
- 2 Cheryl King- It's Tough Being a Turtle, So It's a Good Thing Hawaiian Hawksbill Turtles Are Tough!
- 3 Tyffen Read- Twenty Years of Sea Turtles Strandings in New Caledonia. Zoom
- 4 Maddux Springer- Distribution of Wastewater Indicating O15N in Gracilaria salicornia and Codium edule in Kaneohe Bay and its Association with Fibropapillomatosis Rates in Chelonia mydas.
- 5 Brian Stacy (Keynote Address)- Sea Turtle Strandings in the Gulf of Mexico: A Decade in Review. Zoom.
- 6 Grady Weyenberg- Four Decades of Green Turtle Strandings on Hawaii Island (1983-2022): Causes and Trends.
- 7 Megan Lamson- DAR Marine Turtle Response: A Dive into Stranding Data.
- 8 Robin LeRoux- Sea Turtle Strandings Along the U.S. West Coast: 1958-2022. Zoom.
- 9 Erron Yoshioka- WPRFMC Summer Program Necropsy Sessions.
- 10 Laura Jim- Stranding Response Programs: An Opportunity for Education, Community Building and Engagement.
- 11 Katherine Shaw- Quantification of Ingested Plastic by Stranded and Longline-Caught Sea Turtles. *
- 12 Karla McDermid- The Last Meal: Diet Analysis of Stranded Green Turtles on East Hawaii Island Using Upper GI Tract Samples and Stable Isotopes (O13C and O15N).
- 13 Manny Duenas- US Indigenous Pacific Cultural Perspective: Perpetuate or Preserve? Zoom.
- 14 Gregg Levine- A Noninvasive Integrative Multimodal Approach to Treating Flipper Strangulation Injuries Caused by Fishing Gear Entanglements in the Hawaiian Green Sea Turtle.
- 15 Stacy Hargrove- East Coast Sea Turtle Stranding Networks and Enhanced Data Collection and Data Management. Zoom.
- 16 Trenton Aguilar- Modeling Expected Encounters and Boat Related Injuries of Green Sea Turtles in Florida.
- 17 Cameron Aroz- Response Operations, Mitigation Efforts and a 5-Year Summary of Sea Turtle Strandings on Hawaii's Busiest Island.
- 18 Brittany Clemens- A Summary of Sea Turtle Stranding Threats and Trends in the Main Hawaiian Islands (2003-2023).
- 19 Thushan Kapurusinghe- Impacts of X-Press Pearl Maritime Disaster on Sea Turtle Populations in Sri Lanka. Zoom.
- 20 David Underwood- Impacts to Sea Turtles from Degraded Infrastructure on Tern Island, Planning for the Future? Pre-Recorded. *

from The Organizing Committee
Jon, Jeannie, Brenda, Thierry & George

KAHU HANAI
MISIEL KANIELA AKAKA

BRENDA - INTRODUCE D & ANA AKAKA
D & A
BRENDA OPENING - HPU PERSON



• Turtle

ADVICE FROM A TURTLE...

SWIM WITH THE CURRENT
BE A GOOD NAVIGATOR
STAY CALM UNDER PRESSURE
BE WELL TRAVELED
THINK LONG TERM
SPEND TIME AT THE BEACH.

Message from heaven...

*This chapter is amazing!
I'll see you when you get
here...*



Shandell Eames Brunson

2

June 7, 1976

January 25, 2022

SEPT. 2023

8 AM 5- 19 15min slots SEPT. 2023

DANNY 10min ANN ~~WALKER~~
BRENDA 5min

- 1) 815 - 845 AM BRYAN STACY ZOOM
- 2) 845 - 900 LAURA JIM
- 3) 900 - 915 GRADY WYENBERG
- 4) 915 - 930 MEGAN LAMSON
- 5) 930 - 945 CAMERON APOZ
- 6) 945 - 1000 BRITANNY CLEMENS

- 7) 1000 - 1015 BREAK
- 8) 1015 - 1030 TERN ISLAND JARID VIDEO UNDERWOOD

1245 - 100 PM

- 1) 100 - 115 MARIANNA DUENAS
- 2) 115 - 130 MAREIKE ZOOM DORWHEG
- 3) 130 - 145 CHERRY KIDS
- 4) 145 - 200 NEW CNEONIA TYFFEN REAR ZOOM
- 5) 200 - 215 DIET ANALYSIS/SIA KARLA MCDONNID
- 6) 215 - 230 FLIPPED TREATMENT GREGG LEVINE

Sept.
2023

(4)

~~9) 1030 WEST COAST~~ ROBIN ZOOM
~~LE ROUX~~

~~10) 1045 EAST COAST NETWORKS~~
~~STACY ZOOM~~
~~HARGREAVE~~

~~11) 1115 - 1130~~ TRENTON
~~NECROPOLIS~~ AGUILAR
~~SUMMER PROGRAMS~~

~~12) 1130 - 1145~~ ERROW
~~YOSHIOKA~~

~~13) 1145 - 1200~~ LUNCH 1 HR 15 MIN
NOON

1200 - 1215

1215 - 1230

1230 - 1245

230 - 245 BREAK

245 - 300 PRACTICES
KATHERINE SHAWN

300 - 315 MADDOX
SPRINGIER

315 - 330 X PRESS PEARL
DISMANTLER
THUZHAN KAPURY'S
INGRAHE

330 - 345

345 - 400 PM

Sept 2023

George Balazs <itsahonuworlدينhawaii@hotmail.com>
Thursday, October 5, 2023 4:37 PM
Jon Gelman; Thierry Work; Jeannie Manzano; Thierry Work
Last Minute Item for Organizers

From:
Sent:
To:
Subject:

[CAUTION: External Sender]

This afternoon I received a call from a friend of Danny Akaka and Anna Akaka saying they will not be able to travel to Honolulu tomorrow morning, as planned, to do the opening blessing. I'm not at liberty to tell you the reason, but please trust me it's entirely understandable. One of Danny's colleagues-- ETHAN EDWARD NO'EAU--- will be attending. Ethan phoned me and is very willing to do a chant and prayer blessing for the workshop opening. It will be shorter than what Danny and Anna would have done. But still entirely adequate and inspirational. Ethan is one of the caretakers of the honu at the Mauna Lani- their honu are from Sea Life Park's captive breed program.

I will arrive **no later than 7am** to assist in whatever needs doing. I know that Jeannie will be there also at least by that time. Coffee and cookie will be set up at 715am. Sign ins are scheduled to start at 730am. Brenda introducing Ethan at 8am. From 730am to 800am it's been traditional for some of us (if not all of us) to greet people near where Jeannie will be checking them in. Remembering we are striving for a Community Atmosphere of friends, colleagues AND New Comers, people keen for a variety of reasons about honu, we are seeing and saying Aloha to for the first time.

Please Drive Safe, g

Gold TRIM
AVERY
LABELS

1/2 DAY
3/4 DAY

JULIAN
IT
GB
NOTES

10-6 (FRIDAY) 2023

(66)

ETLAN NBEAU + OLI KNOWLEDGE

Brenda into convene poor job

BRIAN STACY keynote
Probability of Detection
250 "Inhabitant Captives" years

2021 - 13,000 < 10°C cold ston

DRYDOCK
FP - 70%?

GB LAURA JIM
KEKAIOLA (?)

Tue
Grady 1983-2022
Chalry/PKS - oahu only or all?

Tue Megan Lawson

~~KAWAI~~ OLY Jamie Thompson (2)

~~ALL~~ KAWAI 2022 194 greens 20B
1 Newbs 66 greens
2 hawks

KAWAI
FP 5 of 50
ALIVE 7

Hawai'i Pacific University would like to acknowledge the 'āina, the root culture, and the Indigenous People of Hawai'i. We also acknowledge how their wisdom and love have shaped Hawai'i in sustainable ways that allow us to enjoy these gifts today. We recognize the pain, sorrow, and multiple intergenerational losses that have been and continue to be inflicted on Kānaka Maoli. As an HPU community, both Indigenous and allies, we offer gratitude for the land itself, for those who have stewarded it for generations, and for the opportunity to learn, grow, work, and live in solidarity with one another. We commit to honoring Aloha, Pono, Kuleana. Holomua Me Ka 'Oia'i'o (move forward with truth).

T.I.T.D.T. =

TERN Island
Turtle DEATHTRAP

JON #5 in 8th year
CAMERON
FP = 10 CASES

#6 Britney & Shaun
"not moved over"
Last 20 years
to JUNE 2023

MDC
in water response 2020 2021 in water
FP 18% 20 years
33% fishy gear
90 unknown

#7 JARED
1991 Calendar
1/3 Billion Acres

1942-1946 USA
1952-1979

Hatchery
Attend 2,

low
CALO Abatement Workshop

GOALS
#4 Biocultural
!!

(B)

10-2-22 CONTINUED

Hawai'i Pacific University would like to acknowledge the 'āina, the root culture, and the Indigenous People of Hawai'i. We also acknowledge how their wisdom and love have shaped Hawai'i in sustainable ways that allow us to enjoy these gifts today. We recognize the pain, sorrow, and multiple intergenerational losses that have been and continue to be inflicted on Kānaka Maoli. As an HPU community, both Indigenous and allies, we offer gratitude for the land itself, for those who have stewarded it for generations, and for the opportunity to learn, grow, work, and live in solidarity with one another. We commit to honoring Aloha, Pono, Kuleana, Holomua Me Ka 'Ola'i'o (move forward with truth).

Hawai'i
root culture
acknowledg
recognize
that have
HPU commu
the land itse
for those wh
for the opport
one another
Holomua Me

the 'āina, the
Indigenous Pe
shaped Hawai'i
enjoy these gift
intergenerational
Kānaka Maoli
offer gratitude
generations, and
live in solidarity
Kuleana, Holomua
move forward with

Handwritten notes and scribbles at the bottom of the page, including the date 10-2-22 and various illegible markings.

10-6-2023 CONTINUED

(70)

ERRON

cut up

#10 Reflector tape

"SB
Best in
Love"

Much less FP
MORE fishing

#11 Trenton

AGUILAR -

Turtles team

9KT

OP

ON-LINE N=10
WAKE UP
early Dec
ARRIVE
5 PM
Leave the net
morning

TW&I met
MELISSA
EVANS-SHONTOSKI
USAF
WORKS for Keith Roberts

Re: I will introduce you, Manny

MD Manny Duenas <manny.duenas21@gmail.com>
To: You

Thu 10/5/2023 9:35 PM

Sounds great! Thank you. You are too kind and funny too. God bless

On Thu, Oct 5, 2023, 7:16 PM George Balazs <itsahonuworlدينhawaii@hotmail.com> wrote:

Manny I will introduce you when it comes time for your talk. In addition to saying what you wrote, I'm planning on adding a short statement of my own- something like- There is the desire among some indigenous peoples to sustainably use turtles for cultural and traditional purposes, as their ancestors did for thousands of years. Stranding programs are important in this issue because they shed light on what causes of strandings are impacting the status a turtle population. Managers can then focus on reducing those identified threats (causes of stranding). Thereby hopefully 'freeing up' a number of turtles that can be allowed for harvest for cultural needs.

Some wording like the above. Do you approve in principle?

Good night now, my friend. gb

READ

IK Inter American ^{Noway Forward} ^{Conventyard} ^{GITM} (72)
#12 MANN 10-6-2023
Perpetuate or Preserve?

"Life Experience"

"4000 year old people"

#13 OKINAWA

Churauma 2020
Beautiful Village

Blue Red hawk
green logghead

Modeled after Taiwan Turtle
Chia Hg Fonts
DAPHNE HO

#14 Cheryl KING ^{Highway year 2000}

#15 Maddyx ^{phot}
Accent Hopord on LEFT

EXTRA ✓

3X NO HOW ✓

WORKS FOR KEITH - [unclear]

SPALLS - [unclear]

Mr. [unclear] introduce you, Manny

Blue Box [unclear]

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10-6-23

74

#16 KARLA

#17 Gregg LEVINE

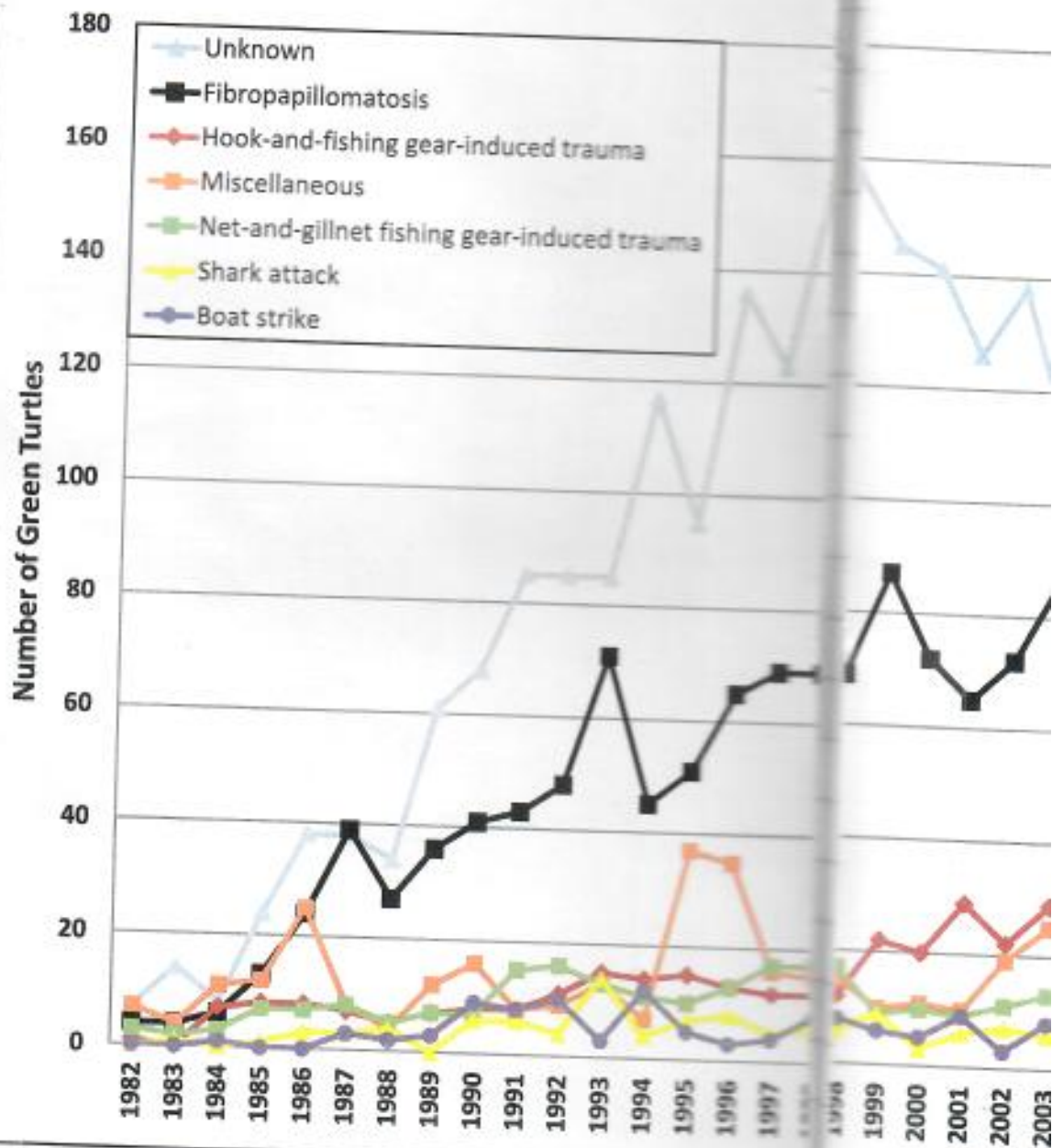
#18 ^{PNY} / ~~35~~ / KATHY SHAW
torque sticking out

#19 New Caledonia
Tyfflen Road ←

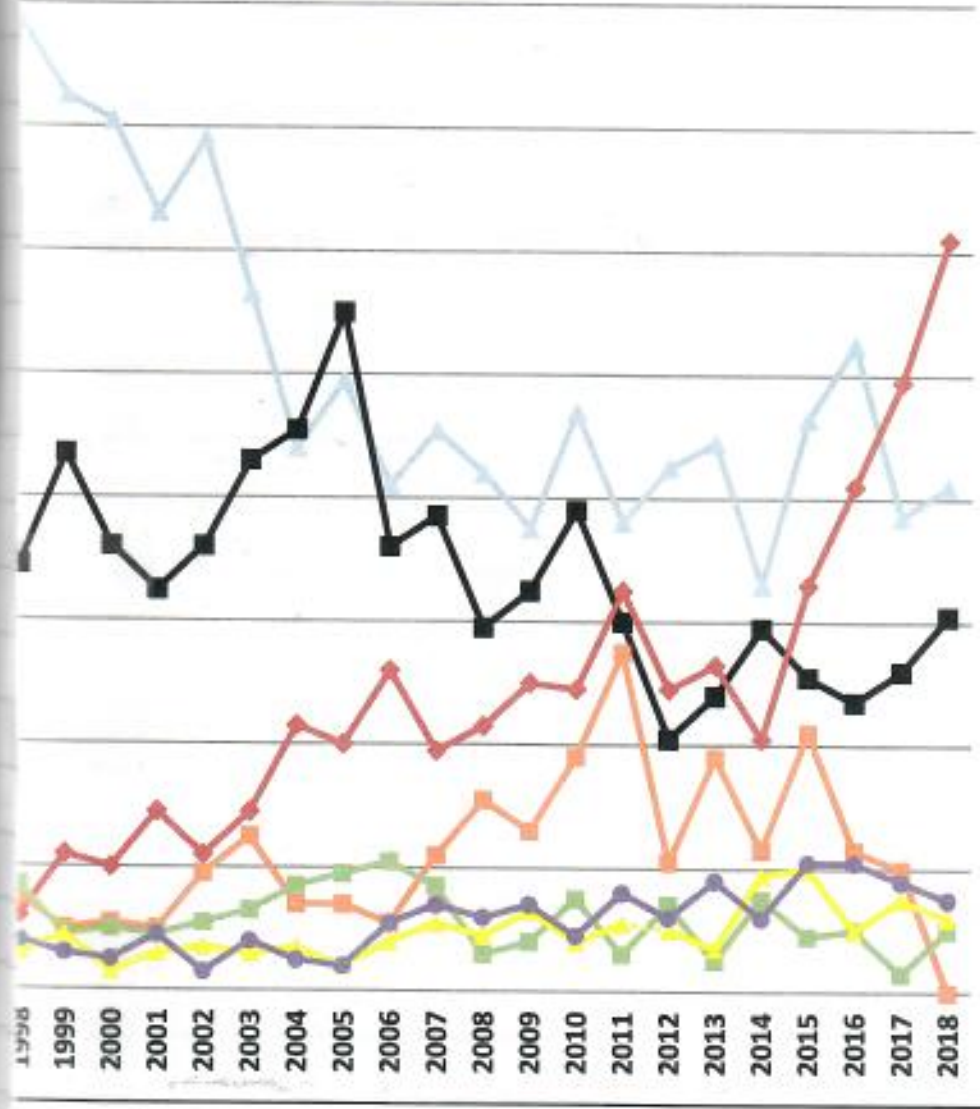
#20

FP 2011-2020

1982-2018 All Hawaiian Green Turtles (n= 7949)



Green Turtle Stranding Events (1998-2018)



Read by
G&B AT THE CLOSE
OF THE
WORKSHOP

Kia'i Kanaloa statement regarding the care and disposition of honu

**3rd Annual Sea Turtle Workshop
October 6, 2023**



*Lana i ke kai, lana i ka honua, lana i ka houpo a Kanaloa.
'O Haumea kino pāha'oha'o, 'o Haumea kino papawalu.*

We recognize honu as a form of the deity Kanaloa. Kānaka Hawai'i are genealogically linked to Kanaloa forms such as the honu, and therefore, we have an ancestral duty as their descendants to care and advocate for them. Given this status, specific kānāwai (edicts) dictate how we engage with honu physically and spiritually.

Indeed, honu were a part of the Hawaiian diet and practice. Still, in the traditional practice of eating honu, much of the honu (i.e., the carapace, the flipper claws, etc.) was repurposed into things like fishing tools.

These edicts manifest into behaviors and actions that place the honu in the center of a sphere of respect and function to the greater expanse of Kanaloa. There is no justification for honu to be stockpiled in freezers, which may be the current practice, or dumped in landfills, as we saw in 2016.

At sea burial is both a respectful and functional means of disposition as it returns the honu to the pō and allows the honu to feed the greater Kanaloa. A process should be developed to enable Hawaiian cultural practitioners to receive deceased honu for traditional artisan processing and disposition back to the kai.

We advise developing authentic relationships with Hawaiian cultural practitioners and organizations such as ours who carry the kuleana of caring for our Kanaloa forms. Through these kinds of co-stewardship relationships, you, your departments, and your agencies can begin to rebuild trust with communities and build your own kahua (foundation) in understanding what it means to care for our Kanaloa forms here in Hawai'i.

Ola i ke au a Kanaloa!

For questions or further consultation contact Dr. Roxane Keli'ikipikāneokolohaka at kiaikanaloa@gmail.com.

Leslee Matsushige
Associate Curator



9500 Gilman Drive #0207
La Jolla, CA 92093-0207
phone: 858.534.4089
cell: 858.967.2161
email: lmatsushige@ucsd.edu
web: aquarium.ucsd.edu



We connect understanding
to protecting our ocean planet.

over

Punahelo

Kaula

KULIH

Hualaiva

Woolley Butty

NORTH SHORE O'AHU

UCSD Curator: Leslee Matsushige, Associate Curator, Birch Aquarium at Scripps Institution of Oceanography, 9500 Gilman Drive, #0207, La Jolla, CA 92093-0207, phone: 858.534.4089, cell: 858.967.2161, email: lmatsushige@ucsd.edu, web: aquarium.ucsd.edu

20 SHORT BIOS FOR SPEAKER INTRODUCTIONS AT THE 3RD HPU SEA TURTLE WORKSHOP 2023

1 message

George Balazs <itsahonuworlindhawaii@hotmail.com>

To: George Balazs <itsahonuworlindhawaii@hotmail.com>, George Balazs <honumazu@gmail.com>

Wed, Oct 4, 2023 at 2:26 PM

#1 Brian Stacy, our Keynote Speaker, is a Veterinary Medical Officer within NOAA's National Sea Turtle Program. His responsibilities include a diverse array of duties related to health, welfare, and mortality in support of sea turtle conservation and recovery. He works extensively with sea turtle stranding networks within the US and abroad.

#2 Laura Jim is a seasoned educator at Hawai'i Preparatory Academy on the Big Island of Hawaii. Serving as Co-Director to HPA's Sea Turtle Research and Stranding Program, she supports the mission of the school and the program to provide students with exceptional learning opportunities while supporting turtle research and education with the greater community.

#3 Grady Weyenberg is Associate Professor of Mathematics at the University of Hawaii at Hilo. He received his PhD in statistics from the University of Kentucky in 2015, and specializes in areas related to mathematical biology and the analysis of ecological data sets. Since arriving at UH Hilo, his projects have often centered on collaborations with marine biologists and oceanographers, with some minor ventures into mathematical and scientific pedagogy.

#4 Megan Lamson is a marine biologist specializing in coral reef fish ecology, coastal restoration, anchialine pools and community-based management. She has an undergraduate degree in Marine Biology from UC Santa Cruz and a graduate degree in Tropical Conservation Biology and Environmental Science from UH Hilo. Megan wears many hats and is currently an Intermittent Research Assistant and Diver, plus a Protected Species Program team member with DLNR Division of Aquatic Resources "DAR" in Kona (and has worked for RCUH on contract to DAR) since 2012. Megan also works full-time as the Hawai'i Program Director for the local nonprofit org, Hawai'i Wildlife Fund.

#5 Cameron Aroz is the Operations Support Manager for Hawai'i Marine Animal Response, or "HMAR." She is responsible for all hotline operations, data collection, back-office systems, and multi-agency response coordination. She is also a member of the HMAR field response, rescue, and stranding support team. After graduating from the University of Oregon with a Bachelor's of Science degree in Multidisciplinary Sciences, Cameron went on to become one of HMAR's hard-working field interns, before she was promoted to her current management role earlier this year.

#6 Brittany Clemans Brittany is a student at UH Manoa and has been working with MTBAP as a Student Assistant for Turtle Stranding since 2019. In 2021, Brittany spent 6 months as a Field Biologist at Lalo for the nesting season. During her time with the Turtle Program, she has been fortunate enough to take on many different duties including leading large necropsies, heading stranding responses, assisting with rehabilitation and surgeries of turtles, satellite tagging, in water work, and leading the citizen science project Honu Count that she presented on at the 2023 ISTS in Colombia. Brittany will be graduating from UH Manoa this year and hopes to continue working with turtles.

Shawn Murakawa has been working with the Turtle Programs since 1992. She has been fortunate enough to visit memorable places such as Lalo (French Frigate Shoals), Pihemanu (Midway), Mississippi during the Deepwater Horizon oil spill response, and Muliava (Rose Atoll), American Samoa. Throughout her career, she has dabbled in many different positions such as budget, purchasing, co-founding and overseeing the (UHM) Stranding and Salvaging group, as well as serving as the Pacific Region stranding coordinator. Currently, Shawn oversees and manages the turtle database and the sea turtle aging & growth laboratory. She also leads the Rose Atoll nesting and in-water surveys and provides guidance and support to the Turtle Biologist at American Samoa's Department of Marine and Wildlife Resources. She is grateful for the opportunity to meet so many people who share her love of all things sea turtles, many of whom are here today. With just six years left before retirement, Shawn looks forward to collaborating with many partners."

#7 Jared Underwood is currently the U.S. Fish and Wildlife Service Superintendent for *Papahānaumokuākea Marine National Monument*. Jared has a passion for marine biodiversity and its conservation and has spent the last 15 years working on these topics across Hawaii and the Pacific.

#8 **Robin LeRoux** is the Deputy Director of the Marine Mammal and Turtle Division at NOAA's Southwest Fisheries Science Center in La Jolla, California where she has over 25 years of experience as a marine turtle biologist. Her research has focused on using genetics to improve our understanding of marine turtle nesting and foraging population structure, monitoring of foraging green turtles in Southern California, as well as serving as the SWFSC Sea Turtle Stranding Coordinator for over 10 years. In her current role as Deputy Director, she works closely with the Divisions' 5 scientific research programs to conduct strategic planning efforts and manage all aspects of operations for the Division.

#9 **Stacy Hargrove** has connections to Hawaii and sea turtles in the Pacific. She worked in my program at the Pacific Islands Fisheries Science Center from 2006-2011. Her career with sea turtles has spanned the full spectrum of positions, she started as a college student, then an intern, a fisheries observer, a staff scientist, a research scientist, a project manager, and now the National Sea Turtle Coordinator for NOAA Fisheries. Stacy will be presenting on the East Coast Sea Turtle Stranding Network.

#10 **Erron Yoshioka** has been a teacher at Moanalua High School for 32 years. He teaches Biology and Marine Science, and has been the lead teacher for the WESPAC Summer Fisheries Program since 2006. Erron's hobbies are fishing and collecting old junk!

#11 **Trenton Aguilar** is a 5th year PhD Candidate at the University of Florida, in the Fisheries and Aquatic Sciences Department. He is a member of the Archie Carr Center for Sea Turtle research and his dissertation research focuses on the impacts vessel strikes have on green turtles in Florida.

#12 Since the age of six, **Manuel P Duenas II** was raised in the hills and valleys of Guam's jungles alongside the wonders of the ocean. The real-life experiences from harvesting fresh shrimp and eels from streams to shoreline seasonal appearances of forage fish. He grew up at a time when harvesting from terrestrial to oceanic resources was a normal and respected traditional way of life. His direct fishery experiences include President of the Guam Fishermen's Cooperative Association for more than 30 years, an artisanal fishing organization which includes involvement in local, national, and international fishery management entities for nearly 30 years. Driven by a conscientious belief that Cultural Perpetuation must overcome Preservation within a respected governance.

#13 **Mareike (pron. Maralka) Dornhege** holds a PhD in marine ecology from Sophia University, Tokyo. Most of her research focused on sharks, including the sustainability of the Japanese shark fishery and leading the global finprint project in Okinawa, Japan - the largest study ever done on global shark and ray biodiversity. Mareike is the scientific advisor to Churamura.

Healy (pron: Hailey) Ealy graduated from Hawaii Pacific University in 2021 with a BSc in Marine Biology. She currently works as the field operations manager for Churamura sea turtle conservation in Okinawa, Japan.

#14 Along with her many other marine biology-related jobs and hobbies, **Cheryl King** has been searching for and helping hawksbills of all sizes in Hawai'i for almost a quarter of a century. She's excited to spread the word about this iconic species with you all today!

#15 **Maddux Springer** is a senior at Iolani School that has been dedicated to studying green sea turtles after seeing the effects of fibropapillomatosis while diving in Kaneohe Bay. Maddux has investigated the causes of fibropapillomatosis through the Kay Fellowship at Iolani School and an Honors Independent Research Program, previously presenting his findings at the Hawaii Conservation Conference.

#16 **Karla McDermid** is a Professor at UH Hilo who studies seaweeds. **Miranda** and **Bella** recently completed their senior thesis research and are now pursuing their careers in Australia and Albania!

#17 Based on the island of Oahu, **Dr. Gregg Levine** is a contract veterinarian with NOAA's Pacific Islands Regional Office, with a focus on response to stranded cetaceans, monk seals, and sea turtles. He is an associate veterinarian with the Marine Mammal Center Monk Seal Hospital, and is the attending veterinarian for Dolphin Quest Oahu and Dolphin Quest Hawaii. Since the Spring of 2020, Dr. Levine has advised and consulted with the veterinary and animal care staff at the Maui Ocean Center Marine Institute as they develop their sea turtle response and rehabilitation program. As a small animal veterinarian, he integrates veterinary acupuncture, laser and rehabilitation therapy into his traditional medical practice. Today's presentation of incorporating multimodal rehabilitation therapy to treat sea turtle entanglement injuries has been a very exciting project for Dr. Levine.

#18 Dr. Katy Shawis is a Research Biologist at the National Institute of Standards and Technology (NIST) and Hawaii Pacific University Center for Marine Debris Research. Her research goals are to improve the health and conservation of the oceans using chemical and toxicological measurements. Her work with sea turtles focuses on the measurement of organic and inorganic contaminants and plastic ingestion.

#19 Binational Australian/New Caledonian, Dr Tyffen READ, has been researching sea turtles for more than 15 years in both countries. Now working for a New Caledonian governmental agency, Tyffen manages a team of park rangers that are in charge of strandings of protected species (thus today's presentation on the sea turtles strandings of NC) but has also started, as a side project, working on the photo-identification of foraging sea turtles in New Caledonia.

#20 Thushan Kapurusinghe has received his academic training on sea turtle biology, conservation and management from the Duke University in North Carolina, USA. He completed his Masters degree from the Durrell Institute of Conservation and Ecology (DICE) at the Kent University. Mr. Kapurusinghe joined the Young Zoologists Association of Sri Lanka (YZA) in 1985 and he was appointed as the Secretary of the YZA in 1990 and he was the chief Instructor of the Mammals group of YZA from 1990 to 2001. Mr. Kapurusinghe is the chairman of the Sri Lanka Turtle Conservation Project (TCP) which was initiated in 1993 and was directly responsible in declaring Rekawa Sea Turtle Sanctuary. Mr. Kapurusinghe served as the Project Coordinator of the UNDP GEF SGP Tsunami Recovery Programme between 2005 and 2007. He also worked as the Programme Development Officer of the UNDP's Disaster Management Unit. Mr. Kapurusinghe has extensive experience in turtle conservation, mangrove restoration, sand dune restoration, exotic fish breeding, nature tourism etc. with community participation. Mr. Kapurusinghe's main interests are community-based ecosystem conservation, diversification of community livelihoods, protected area co management strategies and sustainability of community-based projects.

HPU Statement Bob Morris JB

NUMBER TALKS

3rd ANNUAL SEA TURTLE WORKSHOP

Stranding Research and the Conservation Value to Diverse Communities of Oceania

EMILY BALAZS
Themed

HOSPORARIAN FOR DAN

October 6, 2023
Aloha Tower Marketplace
Honolulu, Hawaii

CAMERA



www.GeorgeHBalazs.com

prof bobrick
CCT
Green quarterly or something future
Shirley Noy

SEIDY AN
BRENDA BOOKMARKS

LEIS N = 17

per Zoom CREATIVE LEIS PRESENTER (?)

Sea Turtle Workshop: Stranding Research and the Conservation Value to Diverse Communities of Oceania

11 7:30 - 8:00 Arrival & Greetings at HPU Aloha Tower Marketplace Campus- Coffee & Pastries, Sign-in, and Seating.



12:00

2 Have program ANNA ANNA

9:00 - 8:15 Hawaiian Blessing Ceremony Pule and Oli by Kahu Hanai Danny Akaka Jr. Assisted by Welcome by HPU Dean Brenda Jensen and Workshop Organizing Committee. *Jeanie*

Transition to Institute

2

1/2 8:15 - 8:45 **Brian Stacy** Keynote Address - Sea Turtle Strandings in the Gulf of Mexico: A Decade in Review. (Zoom)

2/2

8:45 - 9:00 **Laura Jim** - Stranding Response Programs: An Opportunity for Education, Community Building and Engagement.

3/2

9:00 - 9:15 **Grady Weyenberg** - Four Decades of Green Turtle Strandings on Hawaii Island (1983-2022): Causes and Trends

4/2

9:15 - 9:30 **Megan Lamson** - DAR Marine Turtle Response: A Dive into Stranding Data.

5/2

9:30 - 9:45 **Cameron Aroz** - Response Operations, Mitigation Efforts and a 5-Year Summary of Sea Turtle Strandings on Hawaii's Busiest Island.

6/2

9:45 - 10:00 **Brittany Clemens** - A Summary of Sea Turtle Stranding Threats and Trends in the Main Hawaiian Islands (2003-2023).

7/2

10:00 - 10:30 MORNING BREAK (Group Photo in Courtyard)

8/2

10:30 - 10:45 **Jared Underwood** - Impacts to Sea Turtles from Degraded Infrastructure on Tern Island, Planning for the Future? (Pre-Recorded)

9/2

10:45 - 11:00 **Robin LeRoux** - Sea Turtle Strandings Along the U.S. West Coast: 1961-2022. (Zoom)

10/2

11:00 - 11:15 **Stacy Hargrove** - East Coast Sea Turtle Stranding Networks and Enhanced Data Collection and Data Management. (Zoom)

HST (Hawaii Standard Time)
UTC/GMT -10 hours

10. 11:15 - 11:30 **Erron Yoshioka** - WPRFMC Summer Program Necropsy Sessions.
11. 11:30 - 11:45 **Trenton Aguilar** - Modeling Expected Encounters and Boat Related Injuries of Green Sea Turtles in Florida.

11:45 - 1:00 LUNCH

12. 1:00 - 1:15 **Manny Duenas** - US Indigenous Pacific Cultural Perspective: Perpetuate or Preserve. (Zoom)
13. 1:15 - 1:30 **Mareike Domhege** *and Healy Ealy* - Patterns of Sea Turtle Stranding in Okinawa, Japan. (Zoom)

14. 1:30 - 1:45 **Cheryl King** - It's Tough Being a Turtle, So It's a Good Thing Hawaiian Hawksbill Turtles Are Tough!

19. 1:45 - 2:00 **Jyffan Reed** *3:00 - 3:15 PM New* - Twenty Years of Sea Turtles Strandings in New Caledonia. (Zoom) ✓

16. 2:00 - 2:15 **Karla McDermid** - The Last Meal: Diet Analysis of Stranded Green Turtles on East Hawaii Island Using Upper GI Tract Samples and Stable Isotopes ($\delta^{13}C$ and $\delta^{15}N$).

17. 2:15 - 2:30 **Gregg Levine** - A Noninvasive Integrative Multimodal Approach to Treating Flipper Strangulation Injuries Caused by Fishing Gear Entanglements in the Hawaiian Green Sea Turtle. *Reverse*

2:30 - 2:45 AFTERNOON BREAK

18. 2:45 - 3:00 **Katherine Shaw** - Quantification of Ingested Plastic by Stranded and Longline-Caught Sea Turtles.

15. 3:00 - 3:15 **Maddux Springer** *1:45 - 2:00 PM New* - Distribution of Wastewater Indicating $\delta^{15}N$ in *Gracilaria salicornia* and *Codium edule* in Kaneohe Bay and Its Association with Fibropapillomatosis Rates in *Chelonia mydas*.

20. 3:15 - 3:30 **Thushan Kapurusinghe** - Impacts of X-Press Pearl Maritime Disaster on Sea Turtle Populations in Sri Lanka. (Zoom)

3:30 - 4:00 Group Discussion, Questions & Answers, Closing Remarks, and Farewell Until 2024.

Please Relax Talking to Friends & neighbors



- Small cups
- PASTRIES IN HALF ✓

PA ^{END} ^{SLAND} ^{TRU} ^{STIC} ^{TRAP}
 T I T _{Death}

- Common Language
- EXTRA BOOK MARKS
- LETS THURS.
- DANNY CARD HONORARIUM
- Numbered Talks

Attached to EMAIL
 VS in Drop Box

Program - HPV statement ✓

Book Marks Brenda ✓

TIMER ✓

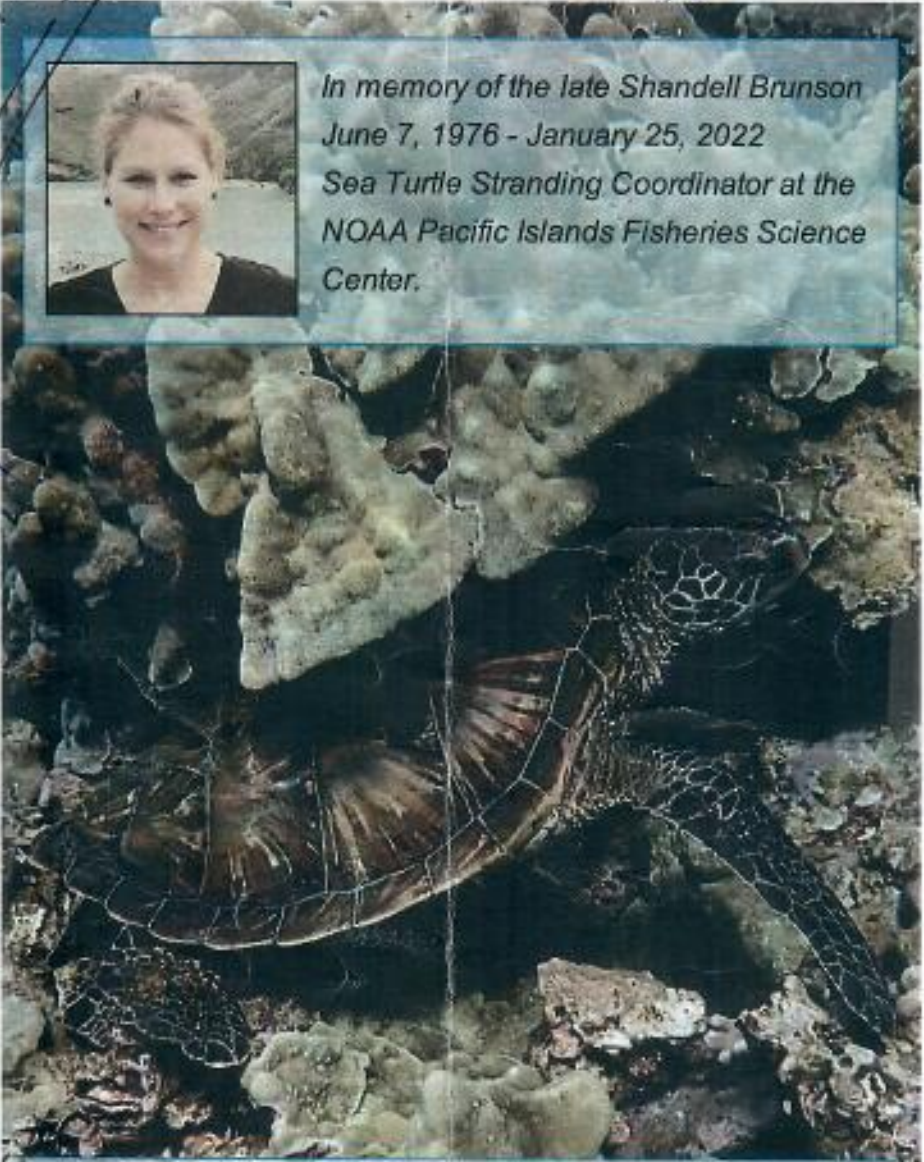
~~NOT FINAL~~

COMMON LANGUAGE



In memory of the late Shandell Brunson
June 7, 1976 - January 25, 2022
Sea Turtle Stranding Coordinator at the
NOAA Pacific Islands Fisheries Science
Center.

read vs How early?



photos please

The Sea Turtle Workshop Team sends their expressions of sympathy, prayers, and support for the tragic losses and suffering by the people of Lahaina and all Maui from the recent wildfires.

Donate to the Maui Strong Fund.



MAUI STRONG FUND

3rd ANNUAL SEA TURTLE WORKSHOP

Stranding Research and the Conservation
Value to Diverse Communities of Oceania

October 6, 2023
Aloha Tower Marketplace
Honolulu, Hawaii

HAWAII PACIFIC UNIVERSITY

3rd Annual Sea Turtle Workshop: Stranding Research and the Conservation Value to Diverse Communities of Oceania

7:30 – 8:00 Arrival & Greetings at HPU Aloha Tower Marketplace Campus - Coffee & Pastries, Sign-in, and Seating.

8:00 – 8:15 Hawaiian Blessing Ceremony Pule and Oli by Kahu Hanai Danny Akaka Jr. assisted by Anna Akaka.

Welcome by HPU Dean Brenda Jensen and Workshop Organizing Committee.



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3:30 – 4:00 Group Discussion,
Questions & Answers,
Closing Remarks,
and Farewell until 2024.



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Donate to the Maui Strong Fund.

<https://www.hawaiicommunityfoundation.org/strengthening/maui-strong-fund>

Hawai'i Pacific University would like to acknowledge the 'āina, the root culture, and the Indigenous People of Hawai'i. We also acknowledge how their wisdom and love have shaped Hawai'i in sustainable ways that allow us to enjoy these gifts today. We recognize the pain, sorrow, and multiple intergenerational losses that have been and continue to be inflicted on Kānaka Maoli. As an HPU community, both Indigenous and allies, we offer gratitude for the land itself, for those who have stewarded it for generations, and for the opportunity to learn, grow, work, and live in solidarity with one another. We commit to honoring Aloha, Pono, Kuleana, Holomua Me Kā 'Ōia'i'o (move forward with truth).



Individuals committed to sea turtle conservation and research came together at HPU for the university's 3rd annual sea turtle workshop.

HPU HOSTS 3RD ANNUAL SEA TURTLE CONSERVATION WORKSHOP

Written By Lianne Yamamura

October 27, 2023

Share this article:



COPY LINK

"Therry and I recognized the need for people to come together, working toward a common cause," Balazs said. "We spoke with representatives of the University of the South Pacific in Fiji, and in 2018, facilitated a sea turtle workshop in Fiji."

After the workshop in Fiji, they thought why not host a sea turtle workshop in Hawaii? They did just that, joining forces with HPU Dean of the College of Natural and Computational Sciences (CNCS) Brenda Jensen, Ph.D., organizing the first annual workshop held in 2020.

Protected under the U.S. Endangered Species Act, sea turtles are vulnerable to threats, including fisheries bycatch, loss and degradation of their nesting and foraging habitats, entanglement in marine debris, vessel strikes, and in some areas, the excessive hurting of turtles and the collection of eggs for consumption.

On October 6, 2023, nearly 300 individuals - researchers, students, resource managers, and the general public - committed to sea turtle conservation and research came together at Hawaii Pacific University for the third annual workshop entitled "Stranding Research and the Conservation Value to Diverse Communities of Oceania." Balazs, Work, Jensen, and HPU CNCS staff member Jeanne Manzano and Jon Gelman, Hawaii Marine Animal Response President, organized the 2023 workshop.

Fiji.

Balazs and Work, who have served as the International Union for Conservation of Nature co-chairs of the marine turtle specialist group for Oceania over the last several years, have worked together for over 25 years on sea turtle issues.



Workshop presenter Jared Underwood, Ph.D., U.S. Fish and Wildlife Service, talks about the trashed Tern Island turtle stranding tragedy.

The workshop day began with Jensen welcoming the participants to the workshop and HPU. Ethan Souza, a natural resources manager at Maunaloa on Hawaii's island, led the group members who joined hands in a circle, delivering an *oi* (chant). E Ho Mai, signifying the request to gather knowledge.

Over 20 workshop presenters from across Hawaii, the continental U.S., Asia, and the Pacific delivered talks on various topics related to sea turtles. The presenters included a high school student dedicated to studying green sea turtles after seeing the effects of fibropapillomatosis, a tumor-causing disease, while diving in Kaneohe Bay. Another presenter, an HPU alumna who earned a bachelor's degree in marine biology, works as the field operations manager for Churamura Sea Turtle Conservation in Okinawa, Japan. Brian Stacy, Ph.D., Veterinary Medical Officer within NOAA's National Sea Turtle Program, delivered the keynote speech; Stacy works extensively with sea turtle stranding networks within the U.S. and abroad.

"On behalf of HPU and the College of Natural and Computational Sciences, it brings me great pleasure to collaborate with scientists, students, educators, and community citizens with a shared interest in sea turtle conservation and research through this annual workshop," Jensen said.



From left to right are the 2023 workshop organizing committee members: Brenda Jensen, Ph.D., HPU Dean of the College of Natural Sciences and Computational Sciences (CNCS); George Balazs, Golden Honu Services of Oceania and retired NOAA sea turtle biologist; Jeanne Manzano, HPU Faculty Staff; Jon Getman, Hawaii Marine Animal Response President; and Thierry Work, DVM, USGS National Wildlife Health Center Honolulu Field Station project leader.

MONDAY 11/13/23
What Hay Day
/over

"Reflection Point"

- Facilitate
 - notes
 - Record
 - Games
 - coffee
 - Rooms
 - Zoom
 - Parking
 - Pre message
- 9 AM
Zoom
Brenda &
Thierry
45 MIN
"IMPACT"
Ground
d.
Salem Science
participate

SLP VISITS

9-17-09 SLP
 MALE N=4
 A
 C
 W
 H

15 TOTAL

FEMALE N=11
 P U
 KIANA G
 MAUR
 NUI
 K
 N
 E

2022 NOT
 Michael Davis - Education
 Stephanie Herdt Registrar
 Beau Richter Curator

SPARK = K, L, M, N, P, E, G, H, I, J, O, Q, R, S, T, V, W, X, Y, Z
 N=8

Bethany Doescher <BDoescher@sealifeparkhawaii.com>

Fri, 4/22/2022 7:13 PM

To: You

4/23/2022

Hi George-

We had very persistent breeding activities with the turtles this year. One of the males is being housed off exhibit due to an injury to his penis. He is doing very well now and shows a strong appetite. He is due to move back on exhibit shortly.

After many years of good fortune, I am sad to say that we lost 2 of the adult turtles this year. An older male and one of the younger females. Both were actively engaged in the breeding activities this year. The COD for the male is not clear as he was eating, breeding and seemed to be doing well immediately prior to an acute death.

The female appears to have prolapsed her oviduct. A >1 foot section of tubular material was found in the pool. The tissue was very necrotic and as a result it was difficult to identify what it was even on histopathology. Three weeks later this turtle was observed to be expelling eggs into the pool and laid a nest that night, however, she died the next morning. There were very large blood clots in one of her oviducts at necropsy, but no obvious cause was found (no tumor, obstruction, etc), except for the suggestion of a torsion. She was gravid, but no shelled eggs were seen. I hope that the eggs she laid are fertile as she was frequently seen being bred by the male that died. Final histopathology of her is still pending.

I would appreciate your confidentiality about these cases. Thanks, Beth

From: hony world <tsahoroworld@hawaii@hotmail.com>

Sent: Friday, April 22, 2022 8:07 PM

To: Bethany Doescher <BDoescher@sealifeparkhawaii.com>

Subject: [Internet Sender] Aloha Dr. Beth

Hope you are doing ok. Today I went to the Park and renewed my annual pass. Spent 15 min with your turtles. Noted only 3 males and 8 females present. It's been several months since I've been there. But looking at my notes from at least August of last year there were 5 males and 8 females. Some are being ho off exhibit? Or? Hope they are ok, though we know they are ... getting old(er) just like me. Warm Regards, George

"What we are seeing now may be the fruits of SLP's actions over the many years"

Jeff Pawloski Curator SLP
2004 - Sept 2022

5/2/2022 3PM From p. 28 (104)

World Turtle SLP
 SAT + Malana NA Home + NOAA Booth
 + OISC
 OAHU Invasive Species Committee
 WWW.OAHUISC.ORG

Turtle Lagoon (photos taken)

| | |
|-------------------------|-------|
| FEMALES N=8 | MALES |
| K - lethargic AT FRIEND | N=4 |
| N | W |
| MAUI | J |
| E | A |
| L | C |
| P | |
| U | |
| KIANA | |

4/22/22 SLP Renewed annual pass (100)
 Friday N=11 (3 MALES "A", "W", "C", 8 Females,
 4 Tracks on Beach. Photos

4/24/22 Sunday N=11 TOTAL
 N=8 ♀ Pink: KIANA, MAUI, E, K, L, N, P, U

N=3 ♂ BLUE: A, C, W. N=3

5/6 FRIDAY SLP photo of Mating
 C MALE on K female
 J MALE on K female
 ♂ BLUE = C, A, J, W (not there 4/22/22)
 ♀ PINK = K, L, N, MAUI, P, E, U, KIANA
 J & B N=8

6/30/2022 SLP Met w/ Beth DOESCHER vet
THURSDAY & Michelle Benedict.

3 Turtles believed to be nesting,
3 Emergencies but only collected 14 live



hatchling -
Photos!
Feeding Pellets.

8 females 4 males counted in lagoons



SIP VISIT (L)
12 TOTAL 3:00 PM
4/25/23
4 Males TUESDAY
8 females
Pick L & KIANA BASKING
NEW ANNUAL PASS
Sand on Rocks + RAKED
Beach see p. 88

88

See page 62 844-944/782 PC
Wed 8/9/2023 2-3 PM 4/25/2023
SLP visit. few photos taken.
Alphabets on turtles not distinct so
no count taken. No tracks/digs evident.

10/11/2023 SLP 315-345 PM
Monday

10/11
TeleCon
w/ Peter Dutton
"Conservation
(Genetics)
Concerns
and Issues"
and Successes"



See p. 62 to p. 99

See page 63 844-944/102 RC
 Wed 8/9/2023 2-3 PM 4/15/2023
 SLP visit. Few photos taken.
 Alphabets on turtles not distinct so
 no count taken. No track/digs evident.

(88)

(107)

Go to page 108

10/11/2023 SLP 3:15-3:45 PM
 Monday

10/11
 TeleCon
 w/ Peter Dutton

"Conservation
 Genetics
 Concerns
 and Successes"



See p. 62 p. 94

"47 years of Captive
 Breeding: ROLE
 Sea Life Park's Contribution
 IN ~~THE~~ [Hawaiian] Green Turtle
 Conservation in Hawaii
 AN INFORMATION AND CONVERSATION
 SESSION"

108

47 Years of Captive Breeding Green Turtles in Hawaii: A one-day meeting of open discussions on the past, present and future



George Balazs

To: You



Sat 10/28/2023 6:06 AM

Draft Title: "47 Years of Captive Breeding: Sea Life Park's Role in Hawaiian Green Turtle Conservation"
An Information and Conversation Session. A Session (Day) Dedicated to Conversation and Information Exchange.

In Memory of Jeff Pawloski Sea Life Park Curator of Turtles 2004-2022.

Preamble/Mission/Rationale/Objective/Motivation

Invitational Attendees-

- Gregg Levin
- Bob Braun
- FWS
- NOAA
- Pii Laeha
- Dan Akaka
- SLP-
- Thierry Work
- Peter Dutton
- Denise Parker
- Marc Rice
- Laura Jim
- Brenda Jensen

Some Background Papers/Articles-

- Bourke, Balazs and Shallenberger (1977) Breeding of the Green Sea Turtle at Sea Life Park.
- Morris, Balazs, Spraker, Work, and Levine (2003) Pharyngeal

Handwritten notes on the left margin, including "ACTA" and other illegible scribbles.

Large handwritten notes at the bottom of the page, including "H = H (Bak H.) (U 8 A 8 T = 23) A M" and "Formose = H 2 F M 2 F 2 F 2 F".

Several of us have been quietly planning to convene a small perhaps half-day invitational meeting (but observers would be welcomed) likely at HPU downtown, to celebrate and have conversation/information exchange about SLPs *47 years* of captive breeding Hawaiian green turtles. Past, present and future. The role played in conservation- e.g., education, research, & release (of ~18,000 hatchlings + ~400 juveniles). Yes, 47 years!- since 1976 when the first hatchlings emerged on the Park's then-newly-built nesting beach.

The story of SLP captive breeding and spin-off activities (Mauna Lani, Kahala, MOC) is not well-known by the public. Few would guess it's been successfully happening for 47 years. The program should not be taken for granted. Those of us that have long histories of involvement (like Dr. Gregg) need to tell our stories. To one another and to as many that will listen.

Gregg, as of right now, 9am Saturday morning, you are one of the very few that know the above plan. SLP will be made aware later today. I am hopeful they will happily join in.

So, more soon re Dec 1.

PS I'm thinking the session would be dedicated to Jeff Pawloski- and his 18 year career nurturing and defending SLPs turtle breeding program.

11/30/
7p-2B
N 7:30
2:50-3pm



see p. 127 Photos Feeding
TALKED TO
JESSIE - ATSD
^2 years. KNEW
JEFF.
"M" IS MAUI.
KIANA & NUI
DIED.

MALES = J, C, A & W (light shell) N = 4
Females = N, P, L, M, E, J & K N = 7
11

2023

Likely suspects are E,K,L,P who were all observed mating.

None

Which ones and how many can't be sure.

2023 Season SLP

From: George Balazs <itsahonuworldinhawaii@hotmail.com>
Sent: Friday, October 13, 2023 9:07 PM
To: Michelle Benedict <michelle.benedict@sealifeparkhawaii.com>
Subject: Re: Final Tally for 2023 Season

Any hint of who the mom or moms were?

From: Michelle Benedict <michelle.benedict@sealifeparkhawaii.com>
Sent: Saturday, October 14, 2023 3:03 AM
To: George Balazs <itsahonuworldinhawaii@hotmail.com>
Subject: Re: Final Tally for 2023 Season

Sorry for the delay, I got sick and took a day off.

This year we logged 25 digs but that includes any significant depression observed in the morning.

Hatchlings numbered 489 489

TH HPU
BRENDA
JENSEN

TO
MAUNA
LANA
GM/TN

PETE
ALLES,
Pi'i,
KATHOKU
HURLEY

THAN
OUZA

Regan

perspective
ie

(110)

"Technology" and "Reality" and PUSAKO
PIT TAG Recovery 11/7/13
4C3C 602017
LHF Jeff Pauloski 2013 Beach Release

The SHACK
11/15/2023 2pm Lunch w/ Gregg Levine
Wed. & Julie Rochford re: SLP +
Notes - Post GM SLP Wayne Neibow
Curator MKA Nishimura
1989 - 2002

JOANNE
Renate GM AND curators?
Jesus GM
Waikiki Aquarium & Sheraton Hotel
Displays

11/28 Talk w/ Bob Brown
TUESDAY Betty Lion
Dave McKay
Marlee Breece

TO
p. 112

MALES = J, G, A, W (K. H. Sheld) N = 4
FEMALES = N, P, F, A, E, V, K N = 7