



3 of 3

3-13-02 MOC
 3-14-02 SLP ML
 alco[®] 3-6-02
 6-12-02 MOC
 6-12-02 release by SK
 Composition Book
 7-3-08
 Name: SLP TURTLES
 School: 1-8-02 -10 Released
 Grade: 1/14/02 11-17-2009
1/5/02 1/25/02
 Wide Ruled **BALAZS** 2-1-02
 9 3/4 x 7 1/2 in. 100 Sheets
 (24.76 x 19.05 cm) 2-20-02 (MANAMI CHIZURU)
 4-14-02 SLP



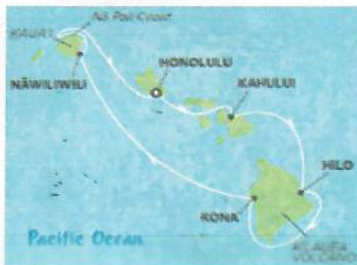
GEORGE H. BALAZS
 BIOLOGIST AND LEADER
 MARINE TURTLE RESEARCH
 N=6 (4 SATS)
 PoA 18-24 OCT08



PACIFIC ISLANDS FISHERIES SCIENCE CENTER
 NOAA, NATIONAL MARINE FISHERIES SERVICE
 2570 DOLE STREET
 HONOLULU, HAWAII 96822-2396
 Cell: (808) 286-2899
 Office: (808) 983-5733
 Fax: (808) 983-2902
 gbalazs@honlab.nmfs.hawaii.edu
 7-3-08 P.81

Below is the itinerary for the cruise you have chosen and information about the ports of call you'll be visiting.

Day	Port	Arrive	Depart
Sat	<u>Honolulu</u>	-	8:00 PM
Sun	<u>Maui (Kahului)</u>	8:00 AM	Overnight
Mon		-	6:00 PM
Tue	<u>Hilo</u>	8:00 AM	6:00 PM
Wed	<u>Kona</u>	7:00 AM	6:00 PM
Thu	<u>Kauai</u>	8:00 AM	Overnight
Fri		-	2:00 PM
Sat	<u>Honolulu</u>	7:00 AM	-



Seq.#	Res ID	First Name	MI	Last Name	Categ.	Cabin#	Embark
5	15882717	STEPHANIE		FLOOD	BD	9666	
4	15882715	ALAN		YAMAMOTO	BD	9670	
3	15882714	GEORGE	H	BALAZS	BD	9672	
3	15882714	MARC		RICE	BD	9672	
2	15882713	JERRY		STOWELL	BD	9676	19-Oct
2	15882713	ALASTAIR		HEBARD	BD	9676	19-Oct
1	15882712	PATTY		MILLER	BD	9678	19-Oct
1	15882712	EMILY		CARLSON	BD	9678	19-Oct
	15882712	NAOMI		MCINTOSH			18-Oct

FOR IMMEDIATE RELEASE

Media Contact: Dawn Hirai
Stryker Weiner & Yokota
(808) 523-8802
O'ahu Cell: (808) 722-9445
dawn@strykerweiner.com

Krislyn Hashimoto
Stryker Weiner & Yokota
(808) 523-8802
O'ahu Cell: (808) 722-4384
krislyn@strykerweiner.com

PRIDE OF AMERICA HOSTS TURTLE RELEASE, EDUCATIONAL PROGRAM FOR ISLAND KEIKI

HONOLULU – October 20, 2008 -- NCL America has partnered with the National Oceanic and Atmospheric Administration (NOAA) Pacific Islands Fisheries Science Center, NOAA Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS), Sea Life Park, Hawai'i Preparatory Academy, and Maui Ocean Center to sponsor the **Science Day at Sea** program on board Pride of America. The week-long program will take place at each port of call (Kahului, Hilo, Kailua-Kona, Nawiliwili) during Pride of America's seven-day cruise that departs Honolulu on October 18, 2008.

At each port, approximately 75 students will board Pride of America to participate in *Science Day at Sea*. This program will provide students the opportunity to tour the cruise ship to see how a "city at sea" operates; learn about green sea turtles and research conducted in Hawai'i; discover more about plankton and water quality with samples taken dockside on each island; and understand more about humpback whales and research and rescue programs being implemented in Hawai'i.

"We are pleased to launch the *Science Day at Sea* program that provides island keiki with a unique learning experience aboard Pride of America," said Alan Yamamoto, NCL America's vice president of Hawai'i operations. "It is important to raise awareness among our keiki about the need to protect and preserve our natural resources for generations to come."

In addition to the *Science Day at Sea* program, six Hawaiian green sea turtles captive bred from Sea Life Park will be released off the coast of Kaua'i on October 24. The release is part of a NOAA Pacific Islands Fisheries Science Center research project to learn more about the life and travel patterns of young turtles in the open ocean. Three turtles will be outfitted with satellite transmitters which will allow researchers to receive information about their movements and behavioral patterns in their oceanic habitat.

47
Including this current turtle release, NCL America, NOAA and Sea Life Park have teamed up to release more than 61 green sea turtles from NCL America vessels since 2006.

George Balazs, Leader of the Marine Turtle Research Program, is conducting the study that is using captive-bred turtles from Sea Life Park. "The unique and generous partnership of this project with NCLA on behalf of sea turtle conservation has been one of the most rewarding activities of my 36-year career to restore a species once on the brink of extinction in the Hawaiian Islands. I look forward to meeting the school children at each port-of-call to share our excitement and science knowledge with them."

"In addition to providing an educational experience for island keiki, the turtle release program provides an outstanding opportunity for guests aboard Pride of America to learn more about Hawai'i's environment and the importance of protecting of our natural resources," said Yamamoto.

Stephanie Flood, Education Manager, Sea Life Park, said, "Our sea turtle breeding program continues to be a resounding success as a result of events such as this. Not only are we releasing these turtles into the wild and educating our keiki, but this provides a means to educate travelers from all over the world who are here to experience Hawai'i."

Naomi McIntosh, Sanctuary Superintendent, NOAA HIHWNMS added, "Hawai'i's marine environment is the perfect natural laboratory to inspire and encourage our students to take an interest in protecting our ocean resources. This partnership provides an opportunity for students to see, touch and learn about Hawai'i oceans and its importance to us."

Schools and organization participating in the *Science Day at Sea* Program include:

Kahului, Maui:

- Kalama Intermediate School
- Kīhei Charter School
- Kamahameha School – Maui Campus
- Boy Scouts
- STEM Academy Kīhei Charter

Hilo, Hawai'i Island:

- Connections Charter School
- Ka 'Umeke Kaeo Charter School

Kailua-Kona, Hawai'i Island:

- Kealakehe Middle School
- Hawai'i Preparatory Academy
- West Hawai'i Explorations Academy
- Kaua'i High School
- Chiefess Kamakahalei Middle School
- King Kaumuali'i Elementary School

Nawiliwili, Kaua'i:



Pride of America

Shore Excursion Ticket
NWK 10/23/2008

NWKA1712 Luau Kalamaku - Group B
Adult / \$0.00

MEETING POINT: Hollywood Theater, Deck 5 FWD

MEETING TIME: 16:45

YAMAMOTO, ALAN - Cabin : 9670

528

Please Note:

You must be 21 years old to drink. Bring cash or CC for additional purchases.

Deadline to cancel is 48 hrs prior to arrival in port.

Operator: Kilohana Plantation

PRIDE OF AMERICA HOSTS TURTLE RELEASE AND EDUCATIONAL PROGRAM FOR ISLAND KEIKI

NCL America has partnered with the National Oceanic and Atmospheric Administration (NOAA) Pacific Islands Fisheries Science Center, NOAA Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS), Sea Life Park, Hawai'i Preparatory Academy, and Maui Ocean Center to sponsor the *Science Day at Sea* program onboard the Pride of America. The week long program will take place at each port of call (Kahului, Hilo, Kailua-Kona, and Nawiliwili) during Pride of America's seven-day cruise that departs Honolulu on October 18.

At each port, approximately 75 students will board the Pride of America to participate in *Science Day at Sea*. This program will provide students the opportunity to tour the cruise ship to see how a "city at sea" operates; learn about green sea turtles and research conducted in Hawai'i; learn about plankton and water quality with samples taken dockside on each island; and learn about humpback whales and research and rescue programs being implemented in Hawai'i.

In addition to the *Science Day at Sea* program, six Hawaiian green sea turtles captive bred from Sea Life Park will be released off the coast of Kaua'i on October 24. The release is part of a NOAA Pacific Islands Fisheries Science Center research project to learn more about the life and travel patterns of young turtles in the open ocean. Three turtles will be outfitted with satellite transmitters which will allow researchers to receive information about their movements and behavioral patterns in their oceanic habitat. Including this current turtle release, NCL America, NOAA and Sea Life Park has teamed up to release more than 61 green sea turtles from a NCLA vessel since 2006.

Subject

Release of 6 captive-bred green turtle from the NCL Pride of America

Aloha Domingo, I'm writing to let you know that from October 18-25 I'll be on board the NCL vessel Pride of America with 6 juvenile captive-bred green turtles originating from Sea Life Park. The turtle will be taken on board here in Honolulu. The ship will then cruise the islands- first to Kahului, then to Hilo, then Kona, then Kauai. On the return trip (10/24) to Honolulu- 10 miles or so off Kauai's north shore-- the turtles will be released. Two of the turtles will have satellite tags to track their movements. Data from the tags will be made available to school so that kids can map the movements.

Once on board the ship the turtles will not be taken off until release. School classes will come on board at each port to take part in various marine science educational activities-- including visiting with the turtles in their saltwater pool.

I wanted to inform you about the above activity. If there is anything I need to do in the way of approvals from your office, please let me know. Very Best,
George

----- Forwarded message -----

Date: Thu, 16 Oct 2008 14:12:21 -1000

From: Domingo Cravalho@hawaii.gov

To: George H. Balazs <gbalazs@honlab.nmfs.hawaii.edu>

Subject: Re: Release of 6 captive-bred green turtle from the NCL Pride of America

Aloha George,

Sorry for taking so long in getting back to you. This serves as acknowledgment of your upcoming plans to move 6 juvenile turtles interisland on the NCL from 10/18-10/25, to conduct onboard educational classes up to the last leg whereby the animals will be released prior to your return to Honolulu. I will inform our other ports of this action.

Since the animals will be secured on board throughout the port calls, there will be no additional oversight on our part. If time permits and personnel are available, we may conduct a post-entry inspection of the animals while in port. Should anything change, please let me know at your earliest convenience.

As a matter of courtesy and if you have not done so, you may wish to contact the Hawaii Department of Land and Natural Resources for any additional guidance.

Mahalo,

Domingo Cravalho, Jr.
Inspection and Compliance Section Chief
Hawaii Department of Agriculture
Plant Quarantine Branch
1849 Auiiki Street
Honolulu, HI 96819

PH: (808) 832-0580

FAX: (808) 832-0584

e-mail: Domingo.Cravalho@hawaii.gov

DOMINGO CRAVALHO

(147)

Date: Fri, 17 Oct 2008 14:38:21 -1000 (HST)
From: George H. Balazs <gbalazs@honlab.nmfs.hawaii.edu>
To: Gary Moniz <Gary.D.Moniz@hawaii.gov>,
Dr. Robert Nishimoto <Robert.T.Nishimoto@hawaii.gov>,
Dr. Dan Polhemus <Dan.A.Polhemus@hawaii.gov>
Subject: Release of 6 captive-bred juvenile green turtle from the NCLA Pride of
America- 10+ miles off Kauai 10/24/08

On 10/24/08 six captive-bred juvenile turtles from Sea Life Park will be released 10+ miles off Kauai as part of research we have been conducting of pelagic habitat use. Please see exchange of messages below. Also in minute I'll send you more information on this topic.

As a part of normal practice, a fax will be sent to DOCARE notifying of this activity (sea turtle research event). If you have any questions, please don't hesitate to contact me (cell 286-2899) Aloha, George Balazs

777

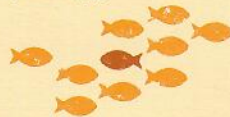
Pride of America Places to eat

Deck 5:
East Meets West
Teppanyaki Room
Sushi Bar
Jefferson's Bistro
Skyline Main Restaurant

Deck 6:
Cadillac Diner
Lazy J Texas Steakhouse
Liberty Main Restaurant

Deck 11:
Aloha Café
Little Italy

Deck 12:
Key West Grill



Bars, Lounges & Entertainment

Deck 5:
Atrium Lounge
Hollywood Theater
John Adams Coffee Bar

Deck 6:
Mardi Gras Casino & Night Lounge
Hollywood Theater
Pink's Champagne & Cigar Bar
Napa Wine Bar

- Deck 14
- Deck 13
- Deck 12
- Deck 11
- Deck 10
- Deck 9
- Deck 8
- Deck 7
- Deck 6
- Deck 5
- Deck 4

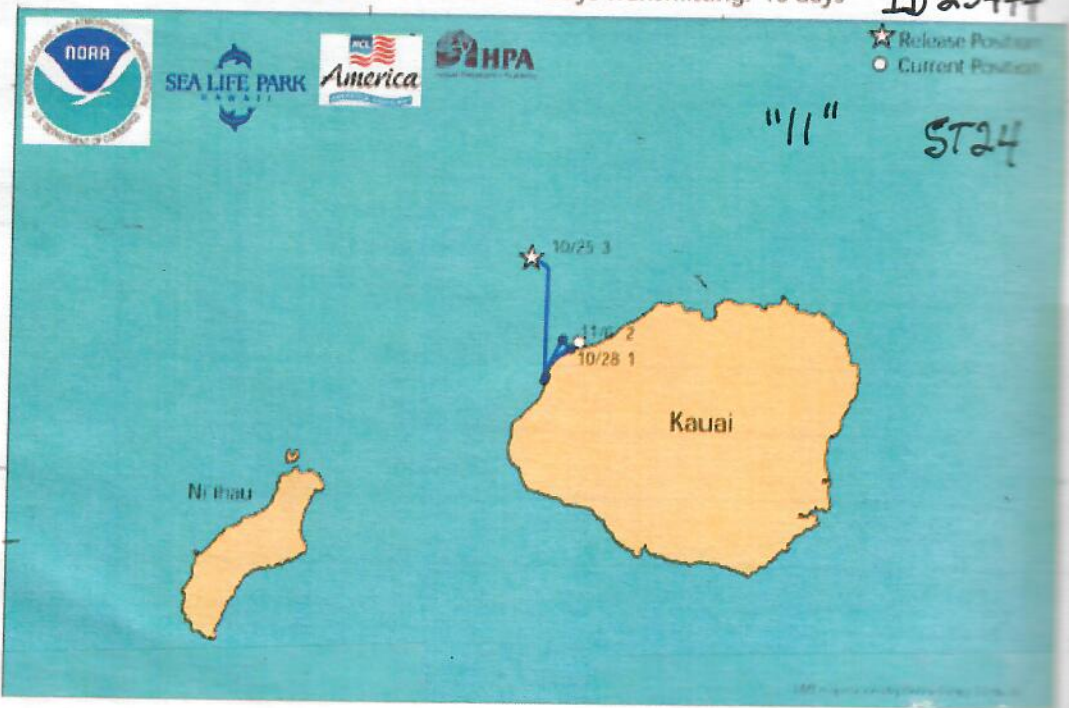
Waikiki Bar
Oasis Pool, Santa Fe Spa
Aloha Café
10152-10184, 10652-10684
9170-9204, 9670-9704
8172-8208, 8672-8708
7156-7184, 7656-7684
Liberty Main Restaurant
Skyline Main Restaurant

ELEVATORS

Sports Court
Blast Off Video Arcade
Connections Teen Club, Kid's Movie Theater, Reception
Santa Fe Fitness Center, Beauty Salon
Little Italy, Gold Rush Saloon
10090-10150, 10590-10650
9112-9168, 9612-9668
8614-8670, 8114-8170
7100-7154, 7600-7654
Lazy J Texas Steakhouse, Cadillac Diner, Napa Wine Bar
Photo Gallery, Jefferson's Bistro, East Meets West, Teppanyaki
4588-4608, 4088-4108

Released 10/24/08 from the NCLA Pride of America SCL: 37.6 cm
ST24 Transmitter Days Transmitting: 13 days

ID 23474



149

OVER

Services/Fitness

Deck 13:
 Lana'i Bar & Lounge
 Waikiki Bar
 Diamond Head Auditorium

Deck 5:
 Reception Desk
 Newbury Street Shops
 Photo Gallery
 Shore Excursion Desk
 Soho Art Gallery

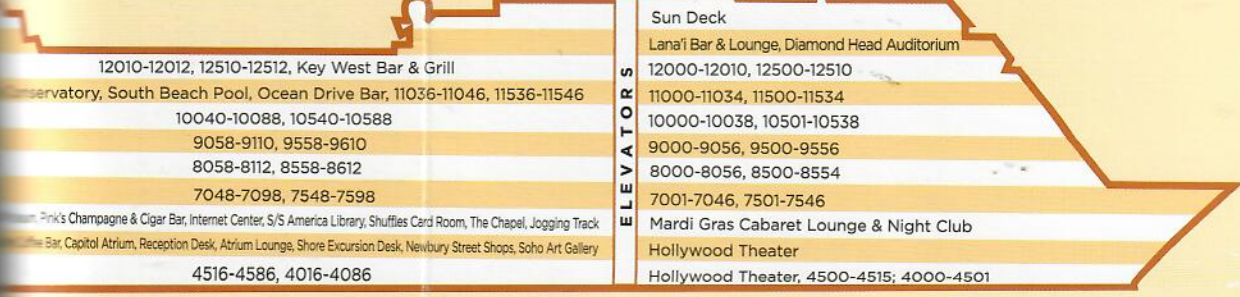
Deck 6:
 Internet Center
 Jogging/Walking Track

Deck 11:
 Hot Tubs
 South Beach Pool

Deck 13:
 Blast Off Video Arcade
 Golf Driving Net
 Outdoor Chess

Deck 12:
 Oasis Pool
 Santa Fe Spa,
 Beauty Salon and
 Fitness Center

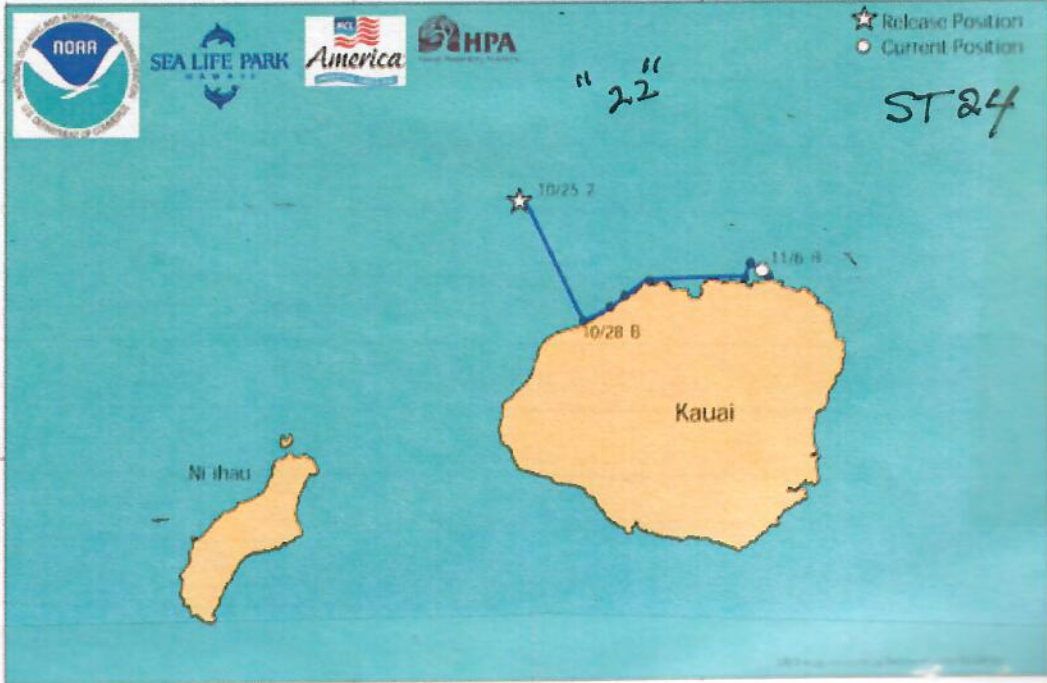
Deck 14:
 Sports Court



2000 movement of SLR captive bred green turtle 22 (tag ID 40477)

Released 10/24/08 from the NCLA Pride of America SCL: 40.8 cm

ST24 Transmitter Days Transmitting: 13 days 40477



1941

10/08

POA

Freestyle Dining **Kid's special cover charge 50% off!** Restaurant Reservations

Can be made for the same day or the next day by visiting the restaurant reservation desk in the atrium or by calling 5101 between the hours of 7:00am-9:30pm. (Same day reservations can be made up until 4:00pm)

Breakfast – Getting started

Aloha Café Continental Breakfast	5:30am-10:00am / Deck 11, Aft
Aloha Café Breakfast	6:00am-10:00am / Deck 11, Aft
Aloha Café Lanai Breakfast	6:30am-11:30am / Deck 11, Aft
Skyline Restaurant	7:00am-10:00am / Deck 5, Aft
Cadillac Diner	7:00am-11:00am / Deck 6, Mid

Lunch – Satisfy your afternoon appetite!

Aloha Café	Noon-3:00pm / Deck 11, Aft
Cadillac Diner	11:00am-5:00pm / Deck 6, Mid
Key West Bar & Grill	1:00pm-6:00pm / Deck 12, Mid

Dinner – What are you in the mood for?

Skyline Restaurant	5:30pm-9:30pm / Deck 5, Aft
Liberty Restaurant	Closed This Evening
Aloha Café Buffet	6:00pm-9:30pm / Deck 11, Aft
Cadillac Diner	5:00pm-5:00am / Deck 6, Mid
Little Italy (\$10) ext. 7790 (after 5:00pm)	5:30pm-9:30pm / Deck 11, Aft
East Meets West (\$15) ext. 5380	6:00pm-9:30pm / Deck 5, Mid
Mongolian Hot Pots (\$15) 5380	6pm/7pm/8pm/9pm / Deck 5, Mid
Sushi (\$15) ext. 5380	6pm Open Seating / Deck 5, Mid
Teppanyaki (\$25) ext. 5380	6pm/7pm/8pm/9pm / Deck 5, Mid
Jefferson's Bistro (\$15) ext. 5905	5:30pm-9:30pm / Deck 5, Mid
Lazy J Steakhouse (\$20) ext. 6210	5:30pm-10:00pm / Deck 6, Mid

Restaurant Cancellations: To ensure each of our guests receive our best service, we can only hold your dinner reservation for 15 minutes. If you need to cancel, please do so by 5:00pm on the day of your reservation to avoid having the cover charge for up to two guests applied to your account.

Table Sharing: Looking to meet new people? Sharing a table can be a great way to make new friends. Let your host/hostess know when booking a reservation or upon entering the restaurant and they will try to arrange a table share for you.

Do you prefer the same restaurant: Enjoy the same waiter- at the same time- all week long. It's another Freestyle Dining Option. For further assistance contact the Restaurant Reservations Desk in the Atrium on Deck 5 or call 5101

Corkage Fee: You're welcome to bring your own wine, but there's a \$15.00 corkage fee per bottle (750ml) if it wasn't purchased from NCLA. Kindly give us 24 hours notice before picking up your wine.

What to Wear: For dinner, collared shirts and a pair of khakis for men, and skirts or sundresses for the ladies. Nice jeans are cool in all restaurants except the Liberty and Jefferson's Bistro. Kids under 12- nice shorts or jeans are okay. The Cadillac Diner and Aloha Café both offer a casual atmosphere

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October 20, 2008

Maui students tour NCL cruise ship

Advertiser Staff

Students from three Maui schools this morning toured an NCL America cruise ship to learn about the ship's operations, along with getting a close-up look at green sea turtles, plankton and water quality testing at Kahului Harbor.

The 75 students were from Kalama Intermediate School, Kihei Charter School and the Kamehameha Schools Maui Campus.

They were participating in the Science Day at Sea program, which is sponsored by the cruise line, the National Oceanic and Atmospheric Administration's Pacific Island Fisheries Science Center and the Hawaiian Islands Humpback Whale National Marine Sanctuary.

Other sponsors include Sea Life Park, Hawai'i Preparatory Academy and the Maui Ocean Center.

The program also will take place on NCL America's ports of call in Hilo, Kailua, Kona, and Nawiliwili.

The event is in advance of the scheduled release on Friday of six Hawaiian green sea turtles that were captive bred at Sea Life Park.

The turtles will be released off the coast of Kaua'i on Friday as part of NOAA's research project to learn more about the life and travel patterns of sea turtles in the open ocean.

DIAL 8.00pm

Hawaiiana Today
with your Hawaiian
Ambassadors Malu & June

honolulu.advertiser.com

October 21, 2008

Science lesson takes to sea

Maui students learn about marine life in inaugural cruise ship program

By *Christie Wilson*
Advertiser Maui Bureau

KAHULUI, Maui — The *Pride of America* cruise ship served as a floating classroom yesterday for students from three Maui schools.

The inaugural Science Day at Sea program featured lessons on some of the ocean's largest and smallest inhabitants — humpback whales and plankton — and included an up-close encounter with a group of young green sea turtles that will be released into the wild by week's end.

The program will welcome students at each port of call on the *Pride of America's* weeklong cruise through the Hawaiian Islands. Maui was the first stop, with Hilo; Kailua, Kona; and Nawiliwili up next.

Seventy-five students from Kalama Intermediate School, Kamehameha Schools Maui campus and the Kihei Charter School visited the cruise ship at Kahului Harbor. In addition to a tour of the vessel, students attended presentations on humpback whale and sea turtle research and rescue programs and used digital microscopes and laptop computers to identify plankton in water samples taken from the harbor and to test water quality.

They also gathered around two plastic kiddie pools containing six sea turtles, four of which were bred in captivity at Sea Life Park. The other two were raised at a facility by George Balazs, head of the Marine Turtle Research Program at the National Oceanic and Atmospheric Administration's Pacific Islands Fisheries Science Center.

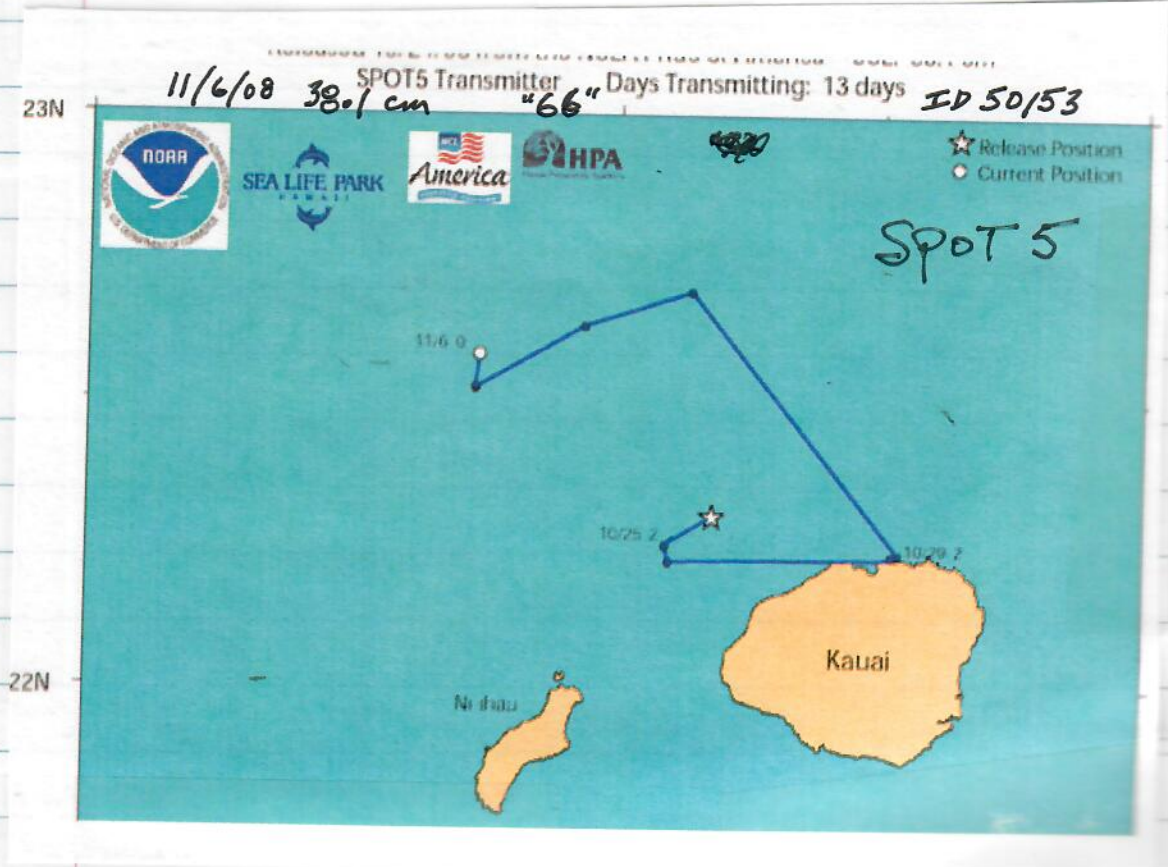
Balazs explained to the students how satellite transmitters will be attached to three of the turtles when the animals are released Friday about 15 miles off Kaua'i. The data transmitted by the devices will help researchers learn more about the life and travel patterns of young turtles in the open ocean, he said.

NOAA and Sea Life Park will have teamed up to release more than 61 sea turtles from NCL America ships since 2006. But this is the first time the company is participating in the student program in conjunction with the release.

Alan Yamamoto, NCL America's vice president of Hawai'i operations, said the program is part of the company's community integration efforts and provides marine education to both local students and cruise ship passengers who were just as fascinated to see and touch the creatures as the youngsters.

Participating schools on the Big Island are Connections Charter School, Ka 'Umeke Ka'eo Charter School, Kealakehe Middle School, Hawai'i Preparatory Academy and West Hawai'i Explorations Academy; and on Kaua'i, Kaua'i High School, Chiefess Kamakahael Middle School and King Kaumuali'i Elementary School.

Other sponsors of the Science Day at Sea program are NOAA's Hawaiian Islands Humpback Whale National Marine Sanctuary, Hawai'i Preparatory Academy and the Maui Ocean Center.



Dear Friends and Colleagues- Attached here are the final satellite tracking maps for our four turtles released north of Kauai on the Pride of Hawaii's "Honu Aloha Cruise 2006." The outcome of this study was very successful and considerable insight was obtained on the pelagic life and travels of young Hawaiian honu. In summary, signals from the transmitters lasted 98-200 days. Total distances traveled by the turtles (up, down, and around) ranged from 574-2500 miles (or 925-4023 km). The details for each turtle appear on the maps and are listed below.

5-16-07

A Sincere Thank You- Mahalo and Aloha- to SLP/DD, NCLIA, POH captains, crew, staff, and passengers, KSSK, Contest Winners, HPA, Mauna Lani Resort, and all the other delightful and dedicated people we met and worked with during the course of this special study. Please freely share these maps and information with others. Best Regards, George Balazs

Nani Pupu (Argos ID 68335)
98 days
575 miles or 925 km
Open ocean component 35%
Near shore component 65%

Ha'aheo (Argos 68330)
127 days
1520 miles or 2447 km
Open ocean component 100%

Kaimakana (Argos ID 50144)
170 days
1457 miles or 2345 km
Open ocean component 51%
Near shore component 49%

'Au Ku'oko'a (Argos ID 68334)

200 days
2500 miles or 4023 km
Open ocean component 96%
Near shore component 4%

POH N=4
2006

155



U.S. DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Pacific Islands Fisheries Science Center
2570 Dole St. • Honolulu, Hawaii 96822-2396
(808)983-5733 • Fax: (808)983-2902

MEMORANDUM FOR:

~~DOCARE MAUI~~ 10-17-08
~~DOCARE OAHU~~
~~DOCARE KAUAI~~
~~DOCARE HILO~~
~~DOCARE KONA~~

FROM:

George H. Balazs, cell 286-2899
Leader, Marine Turtle Research Program
Telephone: (808) 983-5733
Fax: (808) 983-2902

FAILED
OLE-NOAA

SUBJECT:

Notification of intended research involving ~~capture and tagging of~~ sea turtles (captive-bred) ~~from Sea Life Park~~ Release of 6

From (date) 10-18-08 SATURDAY (time) ON BOARD NCL

"PRIDE OF AMERICA" TO KAHULUI, HILO, KONA

(date) KAUAI (time) ON 10-24-08

will be conducting ~~capture, tagging, and related research activities of~~ sea turtles at

Release 10+ miles off the north shore of KAUAI
Please See ABOVE

These activities are authorized under Federal Fish and Wildlife Permit TE-739350-3, 50CFR 17.31(b), 50CFR 17.22, State of Hawaii Special Activity Permit AP 2008-95, and Permit No. 1581.

X

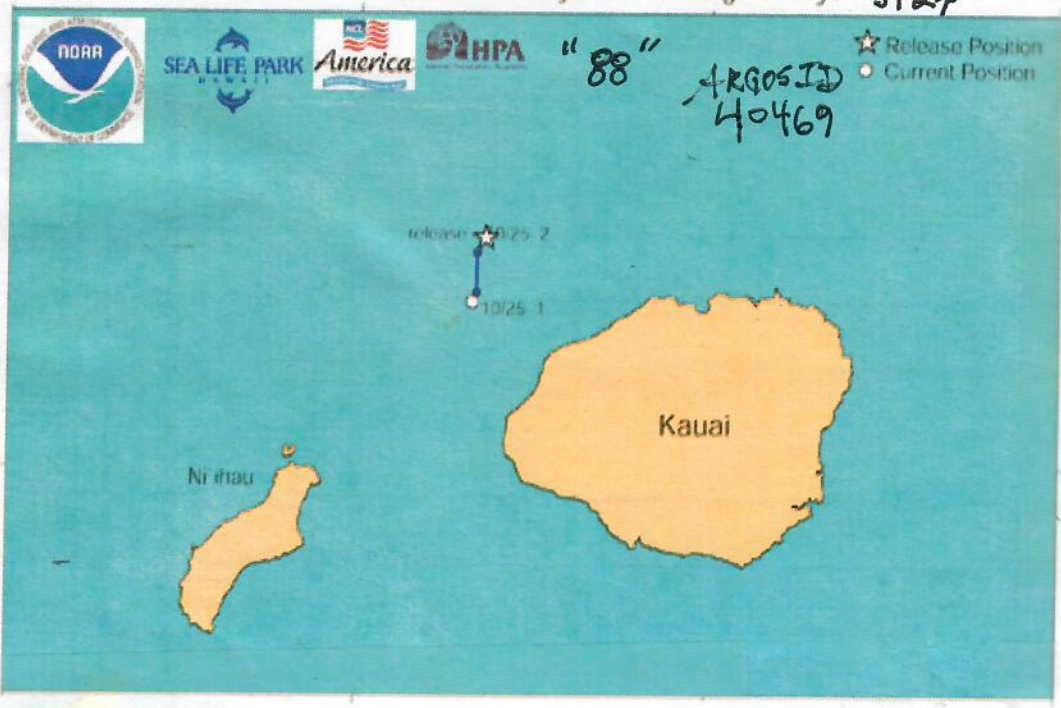
Research activities will involve ~~turtles basking ashore.~~

Honolulu 6 TURTLES WILL Remain ON BOARD SHIP UNTIL Release 10+ MILES OFF KAUAI ON 10-24-08

221

DOCARE-OAHU (808) 978-6789
 DOCARE-LEI (808) 978-6789
 DOCARE-HILO (808) 974-6789
 DOCARE-KONA (808) 327-6789
 DOCARE-WAIMEA (808) 887-6789
 DOCARE-MAUI (808) 909-6789
 DOCARE-MOLOKAI (808) 653-6789

Released 11/24/08 from the NCLA Pride of America SCL: 37.4 cm
 ST24 Transmitter Days Transmitting: 5 days **ST24**



SEA LIFE PARK Hatchling Release Information

yes 9-12-02
Shawn
were these
entered?
T.

rel

est hatch date: 03 DEC 00

release date: 04 DEC 00

data collect initials: MG, SM

releaser initials: GN

tag no (rf)	weight (gr)	carapace (cm)	release location	notes
1	ZH 17	30	5.55	KAIKOA BEACH
2	18	30	5.40	
3	19	30	5.30	
4	20	30	5.48	
5	21	30	5.40	
6	22	30	5.41	
7	23	35	5.50	
8	24	30	5.36	
9	25	30	5.32	KEPT
10	26	30	5.30	KEPT
11	27	30	5.06	
12	28	35	5.50	
13	29	30	5.34	
14	30	30	5.48	
15	31	35	5.28	
16	32	35	5.21	
17	33	30	5.20	
18	34	30	5.16	
19	35	35	5.46	
20	36	35	5.32	
21	37	30	5.27	
22	ZH 38	35	5.46	
23				
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32				
33				
34				

Post-It® Fax Note 7671

Date	05 DEC	# of pages	1
To	SHAWN M	From	LARRY R
Co./Dept.	NMFS	Co.	SLP
Phone #	983-5732	Phone #	259-2531
Fax #	983-2902	Fax #	259-7373

2002 Hatchlings

			9/19/02	9/2	9/6	9/11	9/17	9/19	9/26	10/8	
tag no (rff)	weight (gr)	c									
1	WC01	34	48	52	56	52	54	62	70		Pellets
2	WC02	30	46	48	52	54	54	64	68		
3	WC03	30	50	56	64	72	74	78	98		Pellets
4	WC04	32	46	48	46	50	54	60	88		
5	WC05	30	40	44	50	54	56	64	80		Pellets
6	WC06	30	44	46	52	54	58	66	82		
7	WC07	32	46	46	50	54	54	62	72		
8	WC08	32	46	48	56	60	62	72	104		
9	WC09	32	44	48	56	58	60	68	86		Pellets
10	WC10	30	48	48	48	60	64	76	124		
11	WC11	30	44	44	42	X	-	-	-		
12	WC12	30	46	48	52	52	64	76	114		
13	WC13	30	40	44	48	44	46	54	68		
14	WC14	28	38	38	38	X	-	-	-		
15	WC15	32	44	44	50	52	56	68	76		Pellets
16	WC16	32	50	52	50	60	60	66	88		
17	WC17	32	44	44	42	X	-	-	-		
18	WC18	32	44	46	52	58	60	80	116		
19	WC19	28	42	48	54	58	62	64	96		
20	WC20	30	38	40	46	50	52	64	86		
21	WC21	30	42	42	46	48	50	66	80		
22	WC22	26	36	36	38	42	46	50	62		
23	WC23	28	44	46	50	48	54	58	74		
24	WC24	30	40	38	38	46	46	58	90		
25	WC25	28	36	38	42	42	46	48	48		
26	WC26	24	40	42	50	54	56	60	76		Pellets
27	WC27	28	40	42	48	54	56	62	76		
28											
29											

* poss. ble mix up between WC01 and WC10 on 9/11

All others are getting fish

Post-it® Fax Note	7671	Date	10/9/02	# of pages	1
To	George Balazs	From			
Co./Dept.		Co.			
Phone #		Phone #			
Fax #	983.. 2902	Fax #			

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**N A T I O N A L W I L D L I F E H E A L T H C E N T E R
N E C R O P S Y R E P O R T**

Submitter's Name, Affiliation Address

Mr. George Balazs
NOAA-NMFS-SWFC
2570 Dole Street
Honolulu, HI 96822
Pathologist: T.M. Work

Case: 21081
Accession: 001
Collected: 03/05/2008
Exam Date: 03/06/2008
Prosector: T.M. Work

Species: Green turtle Specimen: Carcass
Bandtype: (Z) Ref/Band No: (4709741771) Euth: (N) Weight (Gm): (4864)
History Summary: This turtle was hatched at Sea Life Park, Oahu on 30 Aug 2006. It was transferred to Mauna Lani Bay Hotel, Hawaii on 10 Jan 2007. On 4 Mar 2008 the animal exhibited a prolapsed cloaca and the following day it was found dead with the prolapse retracted. Identification: F-1 on shell, LFF-WJ 08, RFF-WJ 09, LHF-470C717212, RHF-4709741771.

EXTERNAL/INTERNAL OBSERVATIONS - LABORATORY RESULTS

External: No remarkable lesions are seen on presentation. Photos taken previously reveal a prolapse of red mucosa protruding ca 20 cm.

Internal: There are excessive amounts of coelomic fat. The liver is pale, soft, enlarged with round borders. There are ca. 50 ml of foul-smelling cloudy brown fluid in the coelomic cavity. The heart is firm, smooth, homogenous red-pink and otherwise unremarkable. The lungs are spongy and homogenous pink. The tracheal lumen is smooth and tan. The spleen is firm, smooth, and homogenous red-brown. The kidneys are firm, smooth, and homogenous brown. The brain is smooth, firm, and homogenous tan. The esophageal mucosa is smooth and homogenous tan. The small intestines contain gray mucous. There is a 1 cm perforation of the large intestinal wall with raised borders on the edges of the perforation. The distal large intestinal mucosa is diffusely hemorrhaged, and there are also areas of pinpoint hemorrhage on the mucosa. Examination of stomach contents using dissecting scope reveals mainly pelleted food with rare remains of fireworms characterized by small masses of tissue with numerous bristles. No lesions are seen in the brain, musculoskeletal system, pericardial sac, heart valves, tracheal lumen, gall bladder, gonads, adrenal and thyroid glands, pancreas and superficial and cut surface of heart, kidney, spleen, and lungs.

Preliminary Diagnosis: Fireworm ingestion
Sex (F) Age (I) / () Body Cond. (E) Postmortem State (E) Giz. Lead () / () Exam Type: (GO)
Samples saved:

1. Histo: Brain (A); Liver (B); lung (C); heart, bladder (D); thymus, spleen, kidney (E); large intestines (F); stomach (G); duodenum, pancreas (H-J); jejunum (K-N);
2. Bact: coelomic cavity swab-RC.
3. Frozen: liver, large intestine(2), jejunum.

HISTOPATHOLOGY:

Liver: Diffusely, hepatocytes contain intracytoplasmic variably sized clear round vacuoles that occasionally coalesce and generally distort hepatocellular architecture. This change is most prominent in subcapsular region and is accompanied by mild infiltrates of granulocytes.

Bladder: Diffusely, the serosa is occupied by masses of eosinophilic cell debris mixed with clumps of tiny basophilic rods (bacteria).

Esophagus: Multifocal areas of hydropic degeneration are present, and diffusely, there is intracellular edema of mucosa. Focal nidi of eosinophilic debris are present in superficial mucosa.

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Large intestines: Diffusely, mucosa is ablated and replaced with prominent infiltrates of red cells that extend deep into the lamina propria, submucosa, and portions of the muscularis. Large clumps of cell debris mixed with clumps of bacteria efface the mucosa. Diffusely, the serosa is occupied by masses of eosinophilic cell debris mixed with clumps of tiny basophilic rods (bacteria). In one section (S) there is full thickness necrosis and hemorrhage of muscularis. In subsequent sections of prolapse, there is diffuse edema of muscularis, the mucosa is ablated revealing hemorrhage in the submucosa and underlying muscularis.

Case No. 21081

Page 2

Histopathology (Cont.)

Stomach: Clumps of mucosa slough into the lumen exposing submucosal blood vessels.

Duodenum: There is marked hyperplasia of mucosa cells. Clumps of mucosal cells slough into the lumen. Diffusely, the serosa is occupied by masses of eosinophilic cell debris mixed with clumps of tiny basophilic rods (bacteria).

Jejunum: Diffusely, mucosa is missing revealing pillars of submucosa with exposed lumina of submucosa blood vessels. In some sections with intact mucosa, the mucosa is lifting from the lamina propria which is markedly distended with variably sized vacuoles and effaced by homogenous tan material. Diffusely, the serosa is occupied by masses of eosinophilic cell debris mixed with clumps of tiny basophilic rods (bacteria).

Large intestines: There is diffuse edema and hemorrhage in the lamina propria and submucosa with sloughing of sheets of mucosa into the lumen.

All other tissues: No remarkable lesions are seen.

Morphologic Diagnoses:

- 1) Severity, diffuse, acute, hemorrhage and necrosis, mucosa and muscularis, large intestines.
- 2) Severe, diffuse, acute, sloughing and hemorrhage, mucosa and muscularis, large
- 3) Severe, diffuse, lipidosis, hepatocytes, mucosa, small intestines.
- 4) Severe, diffuse, acute, inflammation with bacteria, serosa, small and large intestines, and bladder.

Comments: Gross morphology revealed evidence of a severe acute irritant to the gastrointestinal mucosa. Presence of sloughing mucosa cells confirmed the gross findings in the small intestines. The severe bleeding and sloughing of mucosa in the large cavity was secondary to prolapse. The presence of foul smelling fluid in the large the intestinal wall. No evidence of primary infectious agent as a cause of the enteritis was seen. The most likely candidates continue to be fireworms based on their presence in the stomach contents of the animal. These appear to contain compounds that are extremely toxic to gastrointestinal mucosa. Separately (and probably not directly related to the fireworm ingestion), the animal had excessive amounts of body fat and a fatty liver.

Final Diagnosis (in order of importance)

- | | | | | | |
|-----------------------|--------------------|--------------------|---------|--------|--------------|
| 1. Fireworm ingestion | topog.
(T50500) | morph.
(M54000) | etiolo. | funct. | disease link |
| 2. _____ | () | () | () | () | () |
| 3. _____ | () | () | () | () | () |

Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

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**N A T I O N A L W I L D L I F E H E A L T H C E N T E R
N E C R O P S Y R E P O R T**

Submitter's Name, Affiliation Address
Mr. George Balazs
NOAA-NMFS-SWFC
2570 Dole Street
Honolulu, HI 96822

Case: 21087
Accession: 001
Collected: 03/28/2008
Exam Date: 03/29/2008
Pathologist: T.M. Work
Prosecutor: T.M. Work

Species: Green turtle Specimen: Carcass
Bandtype: (Z) Ref/Band No: (15105) Euth: (N)
History Summary: This animal was obtained from the wild by Sea
1960's. Identification: LFL-titanium tag 15105, turtle B. The MTRP stranding
identification is 032908.

Weight (Gm): (not taken)
Life Park, Oahu in the late

EXTERNAL/INTERNAL OBSERVATIONS - LABORATORY RESULTS

External: There is diffuse edema of the gular area gular edema.

Internal: The musculature appears pale and atrophied, and there is generalized edema of all organs. The liver is markedly atrophied, and there are multiple raised 1-2mm round brown nodules on the liver surface and multiple scarifications and adhesions on the liver surface. There is a pale spot on the right atrium and the heart is pale overall. The lungs are gray-pink and fluid-filled, and fluid exudes into small airways. The spleen appears small and pale. The bladder wall is thickened. The oviduct is convoluted indicating the turtle has nested at least once. There are 4-8 L of cloudy red-brown fluid in the body cavity. There is edema of salt glands. There is mucous and soft ingesta in the duodenum. There are 6 firm round masses on the intestinal serosa measuring 0.5-2 cm in diameter. The masses contain laminated layers of caseous material with a small 2-4 mm irregular firm black core. There is a piece of wood ca. 15 X 0.5 cm protruding through the duodenal wall and covered by serosa. The distal large intestines are massively distended with tightly packed fibrous material. There is a large mass at the base of the oviduct which encompasses the large intestine and another round mass is found on the large intestinal serosa both of which contain concentric laminae of caseous material with a small dark core. No lesions are seen in the brain, pericardial sac, heart valves, tracheal lumen, gall bladder, gastrointestinal mucosa, and superficial and cut surface of kidney.

Preliminary Diagnosis: Impaction

Sex (F) Age (A) / () Body Cond. (G) Postmortem State (G) Giz. Lead () / () Exam Type: (GO)

Samples saved:

1. Histo: Brain, salt gland (A); spleen, liver (B); lung (C); lung (C); kidney (D); heart (E); pancreas, thyroid, bladder (F); small intestines (G).

HISTOPATHOLOGY:

Lung: Diffusely, connective tissue spaces are separated (edema).
Pancreas: There is marked diffuse zymogen granule depletion.

Liver: There is marked diffuse decrease in internuclear distance between hepatocyte nuclei. Multiple large pleomorphic aggregates of melanized macrophage centers are present. On the capsule are deposits of pale homogeneous yellow material with lanceolate clefts occasionally mixed with eosinophilic debris and surrounded by macrophages and giant cells.
Brain: The meninges contain occasional concentric laminar deposits of basophilic material surrounded by macrophages and giant cells.

Kidney: Proximal tubules contain intracytoplasmic accumulations of golden brown pigment

Small Intestine: Within the serosa are clumps of eosinophilic debris containing variably sized clumps of basophilic rods surrounded by macrophages and giant cells.

All other tissues: No remarkable lesions are seen.

DIAGNOSTIC CASE REPORT

U. S. GEOLOGICAL SURVEY-BIOLOGICAL RESOURCES DIVISION
NATIONAL WILDLIFE HEALTH CENTER-HONOLULU FIELD STATION
P. O. BOX 50167, 300 ALA MOANA BLVD., Rm. 8-132
HONOLULU, HAWAII 96850
808-792-9520, FAX 792-9596, thierry_work@usgs.gov

Case # 21087

Epizoo #

Submitter:

Mr. George Balazs
NOAA-NMFS-SWFC
2570 Dole Street
Honolulu, HI 96822-2396

Specimen description/identification:

1 green turtle carcass

Date Submitted: (03/28/2008)
(mm/dd/yy)

Date Collected: (03/28/2008)
(mm/dd/yy)

Date Examined: (03/29/2008)
(mm/dd/yy)

Location: Sea Life Park

County/site: Oahu

HISTORY: This animal was obtained from the wild by Sea Life Park, Oahu in the late 1960's. Identification: LFL-titanium tag 15105, turtle B.

SIGNIFICANT FINDINGS: This was an emaciated adult female. Diffusely, there was marked fluid accumulation in all organs. Internally, significant findings included a stick perforating the small intestines and covered by intestinal serosa, multiple adhesions of the liver to the intestines, multiple abscesses in the intestinal wall, and severe distention and impaction of the large intestines with plant fibers. Histology revealed chronic inflammation and necrosis of the intestinal wall and severe atrophy of the liver and pancreas.

DIAGNOSIS: Emaciation complicated by impaction.

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COMMENTS: Gross and microscopic lesions pointed to severe emaciation associated with chronic gastrointestinal inflammation and blockage. The perforation of the intestines by the stick was an old wound but likely led to the multiple granulomas found on the intestinal wall. The cause of the intestinal blockage by ingesta could have been due to altered motility of the gut secondary to chronic inflammation caused by the perforation. In the end, the turtle died from severe emaciation and edema secondary to improper function of the gut.

MANAGEMENT: This turtle ate foreign objects that resulted in intestinal perforation and chronic inflammation of the GI tract. Future cases of inappetence in sea turtles might be investigated by laparoscopy to see if gastrointestinal problems exist. Closer attention should also be paid to removing foreign objects in ponds so they do not get ingested by turtles.

Preliminary Report (/ /) Final Report (05/09/2008) date

Necropsy report is: enclosed _____ available upon request.

: Copies of this report sent to:
-Dr. Craig Pelton (SLP)

If you have questions regarding this case, contact Thierry M. Work MS, DVM, MPVM
at 808-792-9520. Include above Case Number. Diagnostic findings may
not be used for publication without the pathologist's knowledge and consent.

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Case No.: 21087
Page 2

Morphologic Diagnoses:

- 1) Severity, multifocal, chronic, inflammation, serosa, small and large intestines.
- 2) Severe, diffuse, chronic, atrophy, liver, pancreas.
- 3) Severe, diffuse, chronic, edema, lung.

Comments: Gross and microscopic lesions pointed to severe emaciation associated with chronic gastrointestinal inflammation and blockage. The perforation of the intestines by the stick was an old wound but likely led to the multiple granulomas found on the intestinal wall. The cause of the intestinal blockage by ingesta could have been due to altered motility of the gut secondary to chronic inflammation caused by the perforation. In the end, the turtle died from severe emaciation and edema secondary to improper function of the gut.

Final Diagnosis (in order of importance)

1. Emaciation	topog.	morph.	etiolo.	funct.	disease	link
	(T10010)	(M70700)	()	()	()	(AW)
2. Impaction large intestines	(T67000)	(M33100)	()	()	()	()
3. _____	()	()	()	()	()	()

Diagnostic findings may not be used for publication without the pathologist's knowledge and consent.

COD (04)

FD11
Subject: PCview MaunaLani Ponds outlined (fwd)

From: "George H. Balazs" <gbalazs@honlab.nmfs.hawaii.edu>

Date: Thu, 16 Feb 2006 20:57:07 -1000 (HST)

To: Cody Hooven <chooven@mail.nmfs.hawaii.edu>, Shawn Murakawa2
<shawn.murakawa@noaa.gov>, Stacy Kubis <SKubis@mail.nmfs.hawaii.edu>



AerialPhoto_MaunaLaniBay_Ponds_mrce_4web.jpg

Content-Type: IMAGE/JPE

Content-Encoding: BASE64

2007
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ASSOCIATED PRESS

Star Cruises, half-owner of NCL Corp., which this month pulled "Pride of Hawaii" out of island service, has reduced its losses. Above, the ship as it left the shipyard in March 2006.

Cruise operator cuts losses

By Allison Schaefer

aschaefer@starbulletin.com

Star Cruises Ltd., Asia's biggest cruise operator and 50 percent owner of Miami-based NCL Corp., reported that its fourth-quarter losses narrowed due to more ticket sales at prices high enough to cover rising fuel costs.

The Hong Kong-based company's net loss was \$123.5 million, or 1.66 cents per share, compared with a loss of \$147.6 million, or 2.58 cents, a year earlier, Star Cruises said in a stock exchange filing yesterday. Sales gained 13 percent to \$620.6 million.

The company, whose U.S. unit has reduced its Hawaii operations from three ships to one this year, said that it boosted fourth-quarter capacity 8.5 percent by adding two

more ships elsewhere, and also raised fares to help cover a 47 percent increase in its fuel bill.

Star Cruises operates the Star Cruises, Norwegian Cruise and Oriental Lines ship brands. The company, which makes most of its revenues from North America, is controlled by Malaysia's **Genting Group** and is still half owner of struggling NCL.

Last August, Star sold a stake in NCL to private equity firm Apollo Management LP for \$1 billion, saying it expected to decide by mid-2008 whether the Hawaii operations were viable.

Blaming a surge in foreign-flagged competition in Hawaii for widening losses, NCL pulled *Pride of Hawaii* out of island service in February to reposition the ship in Europe.

Pride of Hawaii had barely left Oahu when the company announced that it would cut its fleet further by transferring *Pride of Aloha* to Star Cruises, which will deploy it in Asia this summer.

Colin Veitch, NCL's president and chief executive officer, said the company's remaining Hawaii-based ship, *Pride of America*, "is generating an encouraging profit now."

The company continues to push for a modification of the federal cabotage law that would place increased restrictions on foreign-flag vessels' cruises to Hawaii.

"In due course, we would then expect, and hope, to be able to grow our U.S. flag business back to two profitable ships by reintroducing *Pride of Hawaii*," Veitch said.

2/26/08 HSB

Scientists Track Sea Turtles' Movement with Transmitters



Email Print A A A Text Size

Scientists Track Sea Turtles' Movement with Transmitters

Updated: Nov 26, 2007 11:07 AM

By Leland Kim

OFF KAUAI (KHNL) -- Not much is known about how the Hawaiian green sea turtle live in the open ocean. But, in this Pride of Hawaii report, a special project conducted by the National Ocean and Atmospheric Administration (NOAA) hopes to change that.

These sea creatures attracted a lot of attention aboard the Pride of Hawaii cruise ship. It may be because they have miniature radio transmitters strapped to their backs. Scientists hope to unlock the mystery of how these sea turtles survive in the open ocean with these devices.

"Their purpose is to transmit locational information to orbiting satellites, six polar orbiting satellites of the National Oceanic and Atmospheric Administration," said George Balazs, leader of the Marine Turtle Research Program at NOAA Fisheries.

"We can track them and find out where they go and better understand what their life cycle stage is out in the open ocean," said Marc Rice, director of the Sea Turtle Research Program at Hawaii Preparatory Academy.

Scientists hope to use the data they collect to help protect the turtles from dangers in the ocean. This is the second time NOAA scientists have conducted this project. These turtles were bred in captivity at Sea Life Park.

Featured Videos

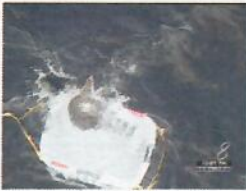
Scientists Track Hawaiian Sea Turtles with Transmitters



George Balazs



Marc Rice



BOOKMARK

Pride of Aloha is pau in May

Norwegian Cruise Line to pull another ship from Hawaii

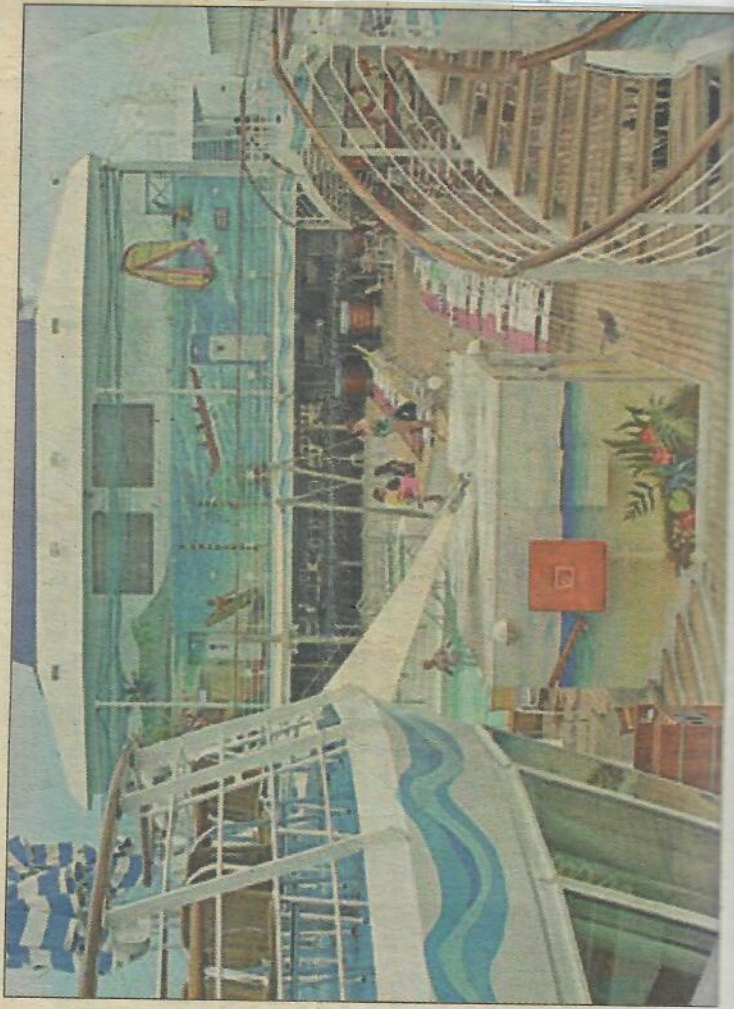
By **BRET YAGER**
Tribune-Herald staff writer

A collective groan went through Hawaii's tourism industry Monday after Norwegian Cruise Line announced that one of its ships, the Pride of Aloha, will leave Hawaii waters in May.

The move comes less than one year after NCL said it would pull the Pride of Hawaii from the interisland market, rename it Norwegian Jade, and send it to Europe.

"Coming right after the removal of Pride of Hawaii, the impact is even more stunning," said state economist Pearl Imada Iboshi. "To Hilo and the Big Island in particular, the cruise ships have been a big part of the tourism market."

The Pride of Aloha will be transferred to Star Cruises, reflagged and deployed to Asia this summer, canceling 34 Hilo port of calls for 2008. The ship carried an average of 95,680 passengers and pumped \$287 million in direct dollars spending into the state's



Tribune Herald file photo

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ALOHA

From front page

2-12-08

economy yearly.

Other factors, such as indirect spending, boost the value of the NCL vessel to \$422 million a year and 3,900 jobs, Iboshi said.

But the cruise line couldn't justify putting more investment into the Pride of Aloha as it upgrades amenities fleetwide, said Andy Stuart, NCL's executive vice president of marketing, sales and passenger services.

The Pride of Aloha made 47 stops in Hilo last year, bringing about 2,000 passengers each time. With the added loss of the Norwegian Sun and the Pride of Hawaii since last August, plus other cancellations, Hilo can expect half as many cruise ships to call this year compared to 2007 — 127 total visits, down from 241.

NCL President and CEO Colin Veitch said his ships are being squeezed by an influx of foreign vessels.

"Our Hawaii business has been extraordinarily difficult," Veitch said. "Although we have progressively established a stable operation, delivering a good product in a great destination, the overall price level has been driven down by an unprecedented expansion of low-cost, foreign-flag ships."

After May 11, the Pride of America will be the sole domestic ship remaining in Hawaii waters, deploying here at least through 2010, according to NCL.

"This is just another step towards losing a thriving industry," said Bob Williams, president of the Hawaii Island Chamber of Commerce. "This is going to devastate the eco-tours, the smaller operators,

botanical gardens; retail is going to feel the difference. It's certainly sad to see it happening."

A looming cabotage decision might give NCL some relief from competition, but could cause other trouble for the cruise industry. The U.S. Customs and Border Protection has proposed a new rule interpretation for the Passenger Vessel Services Act. The proposal would require foreign cruise ships to spend at least two days in a foreign port.

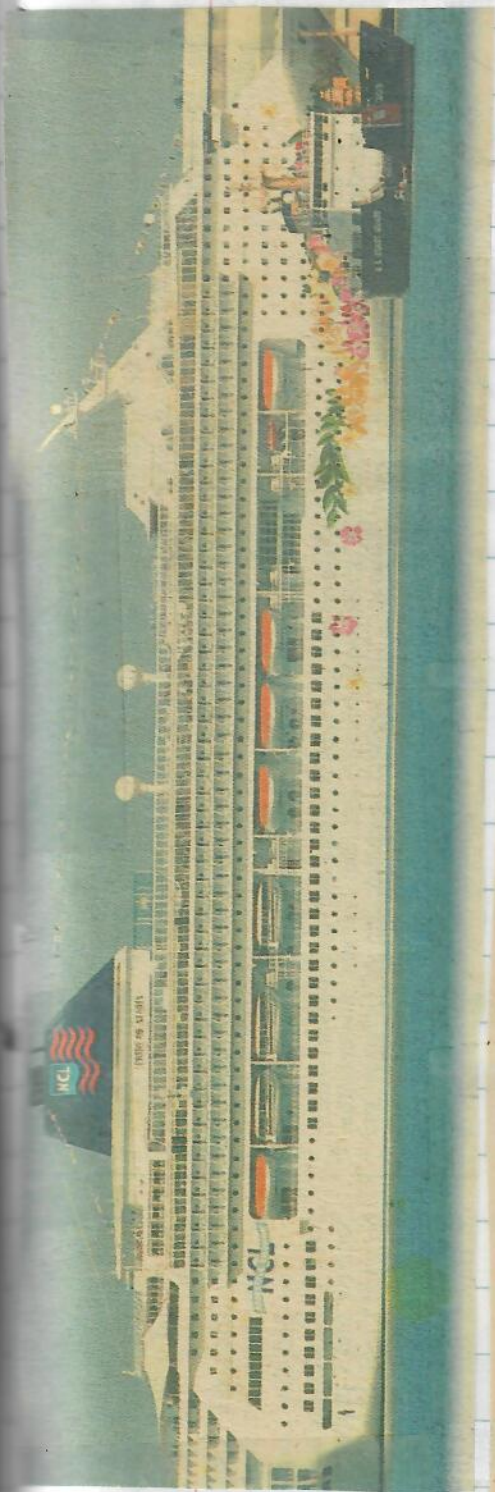
Domestic shipping interests have said the move is necessary to check unfair competition, and NCL has fingered lax enforcement of the PVSA for the flood of foreign vessels.

Foreign cruises departing from the mainland and traveling to Hawaii normally make a brief stop in Ensenada, Mexico, to meet PVSA requirements. Critics call the Ensenada visits "token" stops used to duck the PVSA.

NCL indicated that a favorable PVSA rule might enable it to bring the Pride of Hawaii back into the local market.

"We have invested heavily in U.S. flag cruising in reliance on our nation's cabotage laws providing a level playing field in Hawaii," Veitch said. "Our remaining ship, Pride of America, is generating an encouraging profit now, and we project a continued improvement as the unique nature of Hawaii — from a cabotage standpoint — is clarified and restored. In due course, we would expect and hope to be able to grow our business back to two profitable ships by reintroducing Pride of Hawaii."

Governors, tour opera-



Virus plagues

Ailing passengers on the Pride of Hawaii are told to quarantine themselves for a day

By Gary T. Kubota

gkubota@starbulletin.com

About 220 passengers, some with confirmed cases of norovirus, or stomach flu, reported they were ill on Norwegian Cruise Line's Pride of Hawaii, which docked yesterday in Honolulu.

The seven-day interisland cruise left Nov. 5. The next day, some passengers started reporting to the medical center with stomach flu-like symptoms, including nausea, stomach cramps and mild diarrhea.

The state Department of Health tested some samples from the cruise ship last week that came back positive for norovirus, which causes stomach flu, said spokeswoman Janice Okubo.

Several passengers leaving Pier 2, where the cruise ship docked yesterday, said sick passengers were told to put themselves under quarantine for at least 24 hours and to wash their hands frequently.

Crew members wrapped food in buffet lines with plastic wrap and served passengers instead of allowing self-service.

Donna Miller, 50, of Beloit, Ohio, said the line going to the medical center filled the hallways.

She said she quarantined herself to her cabin for two

days, drinking Gatorade and taking medication supplied by the medical center.

"Even though I was sick, they made it work for everyone," Miller said. "It wasn't their fault. They took care of everyone as best they could."

AnneMarie Mathews, NCL director of public relations, said officials did not believe the issue would carry on to the next cruise.

Passengers on the current cruise, which left last night, were notified of the outbreak and given the option not to sail, the cruise line said.

The U.S. Food and Drug Administration's Honolulu office will be investigating the case.

Health experts said it is important for people to use good hand-washing and other hygienic practices after they have recovered from

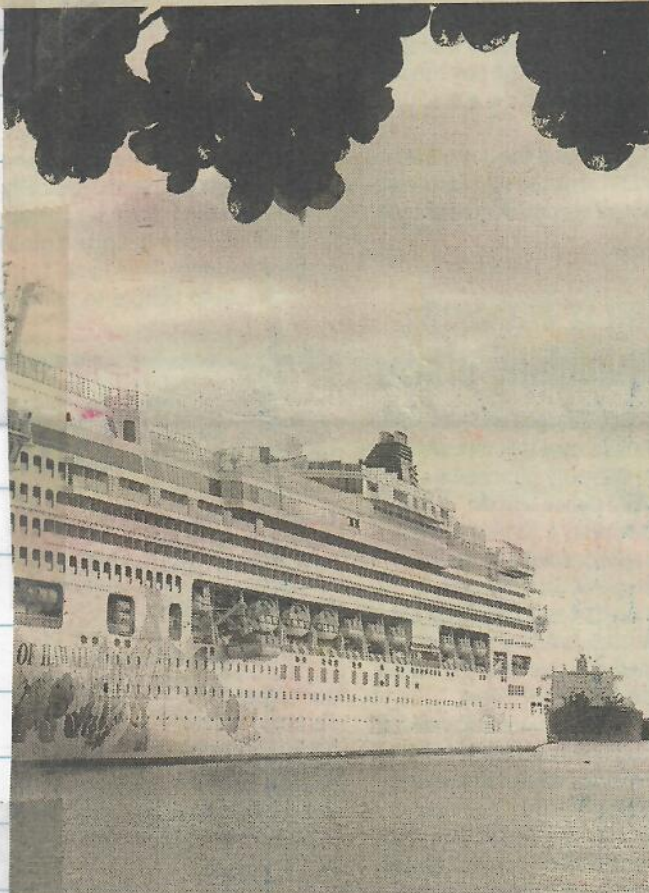


The Pride of Hawaii sat docked yesterday at Pier 2 in Honolulu. 220 passengers became ill with stomach flu-like symptoms.

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local cruise ship

11-13-07 HSB A6



FL MORRIS / FMORRIS@STARBULLETIN.COM

Harbor, ending a seven-day interisland cruise during which samples from the ship tested positive for the norovirus.

norovirus illness.

The Centers for Disease Control said about 23 million cases of acute gastroenteritis are due to norovirus infections each year. It is now believed that at least 50 percent of all food-borne outbreaks of stomach flu can be attributed to noroviruses.

Outbreaks of norovirus gastroenteritis have occurred in places where people have con-

sumed water or food prepared by others, including restaurants, cruise ships, nursing homes, hospitals and schools.

An outbreak of norovirus affected more than 245 people aboard the cruise ship Sun Princess in February 2003 as it went through a 15-day cruise from Los Angeles to Hawaii.

Star-Bulletin reporter Laurie Au contributed to this report.

NOROVIRUS FACTS

Norovirus, sometimes known as Norwalk virus from an outbreak at an elementary school in Norwalk, Ohio, in 1968, is a highly contagious germ, according to the Centers for Disease Control.

- >> People can become infected in several ways, including eating food or drinking liquids contaminated with the virus, touching contaminated surfaces and then placing hands in the mouth, sharing utensils with someone who is ill, or having direct contact with a contaminated person.
- >> People working with food who have norovirus can pass it on and contaminate food.
- >> Symptoms usually start 24 to 48 hours after ingestion or exposure but can occur as early as 12 hours. Some people are contagious from three days to two weeks.
- >> Symptoms usually include nausea, vomiting, diarrhea and stomach cramps. Some people have a low-grade fever, chills, headache, muscle aches and fatigue.
- >> The illness, often starting suddenly with the person feeling sick, is usually brief, with symptoms lasting only about one or two days.
- >> The disease usually is not serious, but sometimes people are unable to drink enough liquids to replace the liquids lost because of vomiting and diarrhea, causing them to become dehydrated and requiring special medical attention. Dehydration is usually only seen among the very young, seniors and persons with weakened immune systems.

Source: U.S. Centers for Disease Control and Prevention, Atlanta

SAILING ON DESPITE PAST TROUBLES

The Honolulu Advertiser

Monday, February 25, 2008

Outlook optimistic for Pride of America

BY DENNIS CAMIRE
Gannett News Service

WASHINGTON — As the only NCL America U.S.-flagged ship that will be cruising the Hawaiian Islands after May, the Pride of America hasn't always had smooth sailing.

The ship, whose hull is decorated with a bald eagle set off by red stripes, was left unfinished in a bankruptcy, re-

ceived a \$185 million taxpayer subsidy and partially sank four months before completion at a German shipyard.

Despite that, Colin Veitch, president and chief executive of NCL Corp., the parent company of NCL America, takes pride in the ship as the first modern U.S.-flagged passenger ship in 50 years.

"We've got what we always suspected, which is a ship that is distinctly

American in its appearance as well as crewing," Veitch said by phone from NCL's Miami headquarters.

The 2,100-passenger Pride of America comes from a congressional "Project America" program, supported by former Sen. Trent Lott, R-Miss., and Sen. Daniel K. Inouye, D-Hawaii.

SEE CRUISE, C3

Notes:



Hawaii Public Radio presents
 FROM THE TOP
 A Preview to the Islands
 National Spotlight on
 Hawaii
 Hosted by Christopher O'Rourke

dates back to at least 1999. The program was designed to revitalize the U.S.-flag oceangoing cruise fleet but never completed a cruise vessel.

NCL, which once operated three ships in the islands, announced Feb. 11 that the *Pride of Aloha* will end its Hawai'i cruises in May, making the *Pride of America* the only U.S.-flagged ship offering interisland cruises.

Veitch said the company, which has been losing money on the Hawai'i cruises, chose to leave the *Pride of America*, which has been operating 2½ years, in Hawai'i rather than the other ships because it has been profitable.

"Sentimentally, we've always looked at it as the first ship in the Project America that was intended to bring U.S.-flagged shipping back, so it was a nice coincidence that it was the one that was making the money," Veitch said.

Originally, Project America was to build two cruise ships with an option for a third for American Classic Voyages at Ingalls shipyard in Mississippi. American Classic Voyages was supposed to use the U.S.-flagged ships for Hawaiian cruises.

The U.S. Maritime Administration would guarantee \$1.1 billion in loans for the shipbuilding and the federal government would give American Classic Voyages a monopoly on the Hawaiian cruises.

But taxpayer watchdogs, Sen. John McCain, R-Ariz., and others, criticized the program with the loan guarantees as corporate welfare and a waste of the public's money.

"Talk about sinking taxpayer money into some huge wasteful boondoggle, this definitely fits the bill," said Leslie Paige, spokeswoman for Citizens Against Government Waste.

The plan as envisioned failed when the American Classic Voyages went bankrupt as tourism dropped after the Sept. 11 terrorist attacks.

The bankruptcy left an incomplete hull — eventually the *Pride of America* — and parts for another ship at Ingalls.

The Maritime Administration paid out \$187.3 million in loan guarantees for the vessels and received about \$2 million from selling the hull and other parts to NCL Corp. in 2002. The com-



Advertiser library photo

With the departure of the *Pride of Aloha*, the *Pride of America*, above, will soon be the only U.S.-flagged ship offering interisland cruises.

pany took the pieces to a German shipyard, which completed the *Pride of America* and a second ship, originally known as the *Pride of Hawaii*.

But the benefits to Hawai'i from the ships have been substantial, according to state economist Pearl Imada Iboshi, who estimated that the *Pride of Aloha's* overall economic impact was up to \$422.5 million a year and as many as 4,000 jobs. Iboshi also estimated the *Pride of Hawaii's* overall impact as up to \$542 million a year and as many as 5,000 jobs.

Despite criticisms of the loan guarantee program, some say it was at least partially successful because it gave work to a U.S. shipyard, and the *Pride of America* and the other ship built still provide U.S. maritime jobs.

"Even though the vessels were not completed in a U.S. yard, the program did fulfill its goals," said U.S. Maritime Administrator Sean T. Connaughton. "You did have the vessels generating economic activity in the U.S. as well as providing the employment for U.S. mariners, and obviously the potential is there for national security uses."

While President Bush, and President Clinton before him, tried to eliminate the loan guarantee program, Congress kept it alive. For example, the Maritime Administration guaranteed the \$140 million loan to build two ferries for Hawaii Superferry Inc.

Veitch also said the federal government has been paid back for its Project America loan guarantee through the company's payroll taxes and the economic benefits from the NCL America operation in Hawai'i over the past four years.

"Our own calculation is that we and our employees have paid back the treasury something like \$114 million so far," he said.

Veitch said that after buying the hull and equipment in 2002, the company sought permission to finish the vessels in Germany but have them U.S. flagged, a condition of operating Hawaiian interisland cruises.

Inouye liked the idea and pushed legislation through Congress to give NCL the exclusive right to operate up to three ships on Hawai'i cruises. Bush signed the legislation in February 2003.

But other events conspired to delay *Pride of America's* scheduled July 2004 entry into Hawaiian waters.

During a January 2004 storm in Germany, the partially finished ship sank up to its third deck in 35 feet of water — the depth of the harbor. "It was one of the Maalox moments when you get the phone call," Veitch said. "Had it been in deep water, it would have sunk up to the funnel. That was the saving grace, I guess."

The accident was one of the largest marine accidents in Germany, leading to a \$200 million insurance claim, Veitch said.

"The ship was heavily booked and looked like it was going to be commercially successful from the word go, had it not sunk," he said. Veitch said the ship's entry into the Hawai'i market was delayed for a year but now is providing "a really excellent product."

The *Pride of America's* future in Hawai'i also looks bright, said Veitch, who remains optimistic about increasing the number of ships his company operates in Hawai'i.

"The ship is profitable today and on that basis, we are confident about its future," he said. "It's generating tremendous economic benefit in Hawai'i."

Contact Dennis Camire at dcamire@gns.gannett.com.

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Return to Sea

NCL, NOAA Release Four Hawaiian Sea Turtles Today at Na Pali

by Lester Chang – The Garden Island (originally published October 8, 2006)

NAWILIWILI — Four federally protected Hawaiian sea turtles will be released from the NCL Pride of Hawaii passenger ship 10 miles offshore from Na Pali Coast Sunday – an event that is the first of its kind to raise public awareness about the species and to preserve it.

The 2-year-old turtles, measuring 17 inches long, will be released from the fourth deck of the 15-deck ship between 4 p.m. and 5 p.m., according to chief officer Mingta Yuen. "When they are released, they will be about seven to eight feet from the water's surface," Yuen said.

With transmitters glued to the turtles' backs, the National Marine Fisheries Service in Honolulu can track them in the open ocean. The information gleaned will help support the recovery of the species, whose population has climbed steadily since the enactment of federal and state protection laws since 1978, said George Balazs, the head of NOAA's Marine Turtle Research program.



The turtles were rotated between a salt-water swimming pool and cages on the 12th deck of the ship yesterday and displayed for hundreds of passengers.

"It is a very important project," said Chimaine Pouteau of NCL's public relations department. "We want to support the environment as well. It is a small gesture that will have a very big impact."

NCL America, NOAA, Sea Life Park and KSSK radio station in Honolulu sponsored the project. As part of it, four Honolulu residents won interisland cruises after naming the turtles Au Ku'oko'a (swim free), Nani Pupu (beautiful shell), Ha'aheo (pride) and Kaimakana (ocean-gifted), said Kaleihikina Akaka, the granddaughter of U.S. Sen. Daniel Akaka, D-Hawai'i and an NCL representative.

Five other people won cruises as well as part of KSSK radio station's promotion of the event, according to

Denise Hayashi, director of community relations for NCL America.

The turtles were recently flown from a NOAA facility on O'ahu to Kona on the Big Island, where they were given a Hawaiian blessing by Daniel Akaka Jr. at the Mauna Lani Resort.

The Pride of Hawaii then steamed into Nawiliwili Harbor with the turtles in tow – or on deck – Saturday morning.

Balazs said the impetus for the project came three years ago while he was in Japan studying how to revive the flagging population of Japanese Loggerhead turtles. Transmitters were put on turtles from the Nagoya Aquarium in Japan to track them in the ocean, he said.

"The biggest mystery is how do they live between the time they are born to the time when they are 15 to 17 inches long," he said. The answer, he said, will help in lessening negative impact on infant and adolescent turtles.

The information may encourage fishermen to avoid ocean areas where large numbers of the turtles congregate, and not inadvertently snag turtles and kill or injure them, Balazs said.

He said 35 such turtles will soon be released from the Aichi Maru, a Japanese student training ship, to continue the research. Following three years of research on the loggerheads, Balazs and four other scientists from Japan, Hawai'i, Oregon and California published a research study on the species in *Deep Sea Research*, a renowned science journal.



"Their jeopardy is many times that of the Hawaiian sea turtle," Balazs said. He said no data was available back then, but the Hawaiian turtle population may have started to decline during World War II, when the

Navy and U.S. Coast Guard dug up the coastline in the Northwestern Hawaiian Islands for military installations. He does know, however, the numbers dropped in the late 1960s and early 1970s because turtles were commercially harvested, Balazs said.

"When people came to Hawai'i, and people offered them something like turtle steak, they wanted it," he said.

Since 1978 though, the enforcement of stronger protective measures and laws have given the turtles a break, Balazs said.



Having researched turtles for 36 years, Balazs first became aware of the demise of the turtle in 1973 when he visited Hikina Island at French Frigate Shoals, some 400 miles from Kaua'i, to count migrating, birthing turtles. Then a 28-year-old biologist with the University of Hawai'i, Balazs brought surprising news back to his superiors at a time when people thought that turtle population was healthy.

"The numbers of migrating turtles to the island were lower than was expected," he said. "There were only 67 mothers on that island." Recent research, however, shows the turtle population on that island is on the upswing, he said.

"Three years ago, we had 540 migrating turtles and this summer, we had 514," he said. The difference doesn't bother him, he said, because "it is due to normal fluctuations in the migrations of the turtles."



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Pride of Aloha	12/31/06	\$649	\$749	\$1099	-
Pride of America	12/16/06	-	-	\$899	-
Pride of America	12/30/06	-	-	\$999	-
Pride of Hawaii	12/18/06	\$649	\$749	\$899	\$1199
Pride of Hawaii	12/25/06	\$649	\$799	\$1399	\$1999
Pride of Hawaii	01/01/07	\$649	\$749	\$899	\$1199

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Top Right: (L-R) Katie Dalgamouni & Katy Martin | Center: (L-R) Michael W. Perry, Sweetie Pacarro & Jamie Hartnett | Bottom Right: (L-R) George Balazs & ...

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OCT 2007 P.O.H

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18 Mauna Kea Turtles

Table 2. Mauna Kea Immatures

Age	N/A	LFV-742	
DATE		SCL (cm)	WGT (lbs)
8/2000		32	
08/17/2000		32.8	12.5
01/25/2001		36.4	14.5

Age	2 yrs	RFWA-96		RFWA-89		RFWB-08	
DATE		SCL (cm)	WGT (lbs)	SCL (cm)	WGT (lbs)	SCL (cm)	WGT (lbs)
6/2000		23.5		19.3		24.7	
08/17/2000		24.6	5.5	20.2	3.75	26.5	7
01/25/2001		31.3	9.7	23	3	32.3	10

Age	3 yrs	LFV-741		LFV-744		LFV-745	
DATE		SCL (cm)	WGT (lbs)	SCL (cm)	WGT (lbs)	SCL (cm)	WGT (lbs)
6/2000		30		28.7	3	31.3	
08/17/2000		30.9	11	29	10	32.7	5
01/25/2001		35.4	15.2	34.6	13	37.3	16.3

Age	4 yrs	LFV-740		LFV-743		RFV-738		LFV-722		LFV-723		LFV-747		LFV-730		RFV-738		LFV-731		LFV-737	
DATE		SCL (cm)	WGT (lbs)	SCL (cm)	WGT (lbs)	SCL (cm)	WGT (lbs)	SCL (cm)	WGT (lbs)	SCL (cm)	WGT (lbs)	SCL (cm)	WGT (lbs)	SCL (cm)	WGT (lbs)	SCL (cm)	WGT (lbs)	SCL (cm)	WGT (lbs)	SCL (cm)	WGT (lbs)
5/2000		34.6		35		41.9		41.7		38.1		43		45		39.4		42		42	
08/17/2000		35.3	15.5	36.4	15	42.5	21	42.4	24.5	38.7	17.5	43.5	23	44.6	>25	40.3	20.5	42.8	24.5	42.8	24.5
11/28/2000		38.7	19.7	39.4	18.4	44.3	23.6	45.8	28.25	41.4	25.9	46.5	26.5	47.2	34.1	44.3	28.1	44.6	25.4	44.6	25.4

Age	5 yrs	LFV-720		LFV-725	
DATE		SCL (cm)	WGT (lbs)	SCL (cm)	WGT (lbs)
5/2000		44.1		42.6	
08/17/2000		45	>25	43.7	>25
11/28/2000		47.1	33.4	46.1	27.7

The Turtle Cruise

Cruise Log

Tom Wakita | Director of Sales, Non-Stop Travel

Monday, October 2, Honolulu – 151 excited Non-Stop cruisers, name the Turtle contest winners, and hosts Michael W. Perry and Sweetie Paccaro from KSSK Radio boarded the beautiful Pride of Hawaii at Aloha Tower for the First Annual Turtle Release Cruise.

Tuesday, October 3, Hilo – NCL hosted a breakfast at which Michael W. Perry introduced Sweetie Paccaro, the "Name the Turtle" contest winners, and reviewed the upcoming events.

Wednesday, October 4, Kahului, Maui – An informal private dinner was enjoyed by all at the Alizar restaurant. Prizes were given to lucky ticket holders. Also included in the events were a karaoke night, and a pool party.

Friday, October 6, Kona – Four turtles were brought onboard the ship after being blessed at the Mauna Lani Resort.

They were viewed by passengers in a portable salt-water pool located on the pool deck. George Balazs, the head of NOAA's Marine Turtle Research program was available to answer questions on turtle behavior.

Saturday, October 7, Nawiliwili, Kauai – The captain held an exclusive private cocktail party in the Spinnaker Lounge for KSSK listeners who reserved their cruise through Non-Stop Travel. Everyone was in a happy mood and shared their enjoyment of the cruise.

Many first-time cruisers indicated they would like to join us again next year. People were mingling and enjoying their new friends that they met on the "Turtle" cruise.

Sunday, October 8 – The four turtles were released at sea off the Na Pali Coast of Kauai – to the sounds of cheering passengers who had come to wish them well. Seeing them now on their own, in the vast ocean after being raised for two years at Sea Life Park on Oahu, gave many of us a feeling of sadness yet happy they were now free! (Chicken skin)





Katy's Corner

Katy Martin | KSSK Contest Winner

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My experience with this whole contest has been phenomenal. My turtle name was Au'ku'oko'a. I entered online at the Sea Life Park website. I came up with the name by thinking of Swimmy. My mom was thinking of Freedom. I merged the two, looked it up in Hawaiian then I entered, I just did it for fun. I did not in my wildest dreams ever think I was going to win. When Michael W. Perry announced my name on the radio, I was ecstatic. I feel so lucky.

I decided to bring my friend, Katie. She and I got a week off of school to go on a cruise! We had to bring homework to do, though. We had to tell everyone about it! In two days, the whole fifth grade knew!

When we boarded The Pride of Hawaii, I was amazed at how big and beautiful and new it was. It had two swimming pools, a water slide, 4 hot tubs, and more restaurants than I could find! I played golf, ping pong, basketball, giant checkers and chess, and shuffleboard on the sports deck. The spa was amazing! I ran a mile on the jogging track, too!

The shore excursions were awesome! I got to ride horses in Kona, drive bumper boats, rock climb, and go on a really fun trampoline on Maui! I got to see the sunrise on Haleakala, too. I also had fun on a swinging bridge on Kauai!

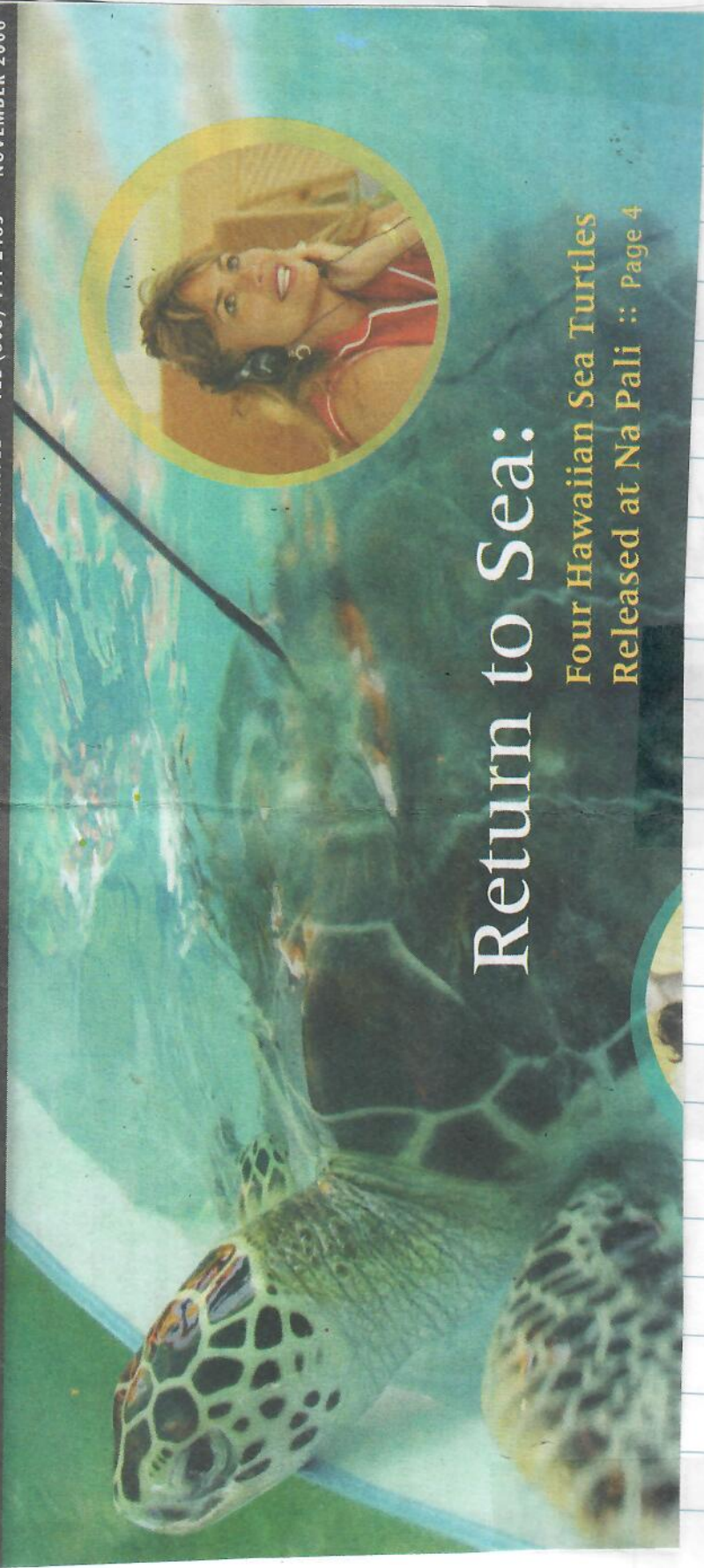
I would like to thank Sea Life Park, NOAA Fisheries, KSSK, NCL America, and Non-Stop Travel. None of this could be possible without their help. I learned so much about sea turtles from Dr. Balazs and Mr. Rice. I was touched by the release. This was a memorable experience I will never forget. I am tracking Au'ku'oko'a through the Sea Life Park website.

** Advertised prices are for new bookings only; must be a Hawaii resident. Per person based on double occupancy, includes \$140 NCF. Gov't taxes are additional. All fares are subject to change at anytime with/without notice. Ship Registry: United States



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Return to Sea:

Four Hawaiian Sea Turtles
Released at Na Pali :: Page 4

2002

Date: Sun, 13 Jan 2002 15:35:45 -1000
From: George H. Balazs <gbalazs@honlab.nmfs.hawaii.edu>
To: Peter Dutton <peter.dutton@noaa.gov>
Cc: Robin Leroux <r_leroux@hotmail.com>
Subject: Fedex #8291-8984-2452 Sea Life Park progeny green turtle samples

From 43 captive-hatched, captive reared green turtles Whole Blood in DMSO, 2cc cryovials. Sample list enclosed (note that lots of other blood analyses data is included on the sample sheets- not need for you- the vitals- SCL and vial number and turtle tag number cross-reference are the basics of what you need.

NOTE- These samples, as with the frozen partially developed embryos sent to you several weeks ago, are part of the Sea Life Park offspring genetics project Peter and I discussed at length when I visited in November. Best Regards, George

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MAUNA LANI GROUP

Exam Date	ID	LOC	DMSO	DESCRIPTION	NOTE	SCL (cm)
12/19/01	NT-V744	1	26	Five 1mm plaques on soft palate.		45.5
				1/4/02 - NSL		
12/19/01	LFV-743	2	24	Two 1mm plaques on soft palate.		49.5
				1/4/02 - One small 1mm diameter linear scrape on soft palate		
12/19/01	RFV-738	2	22	Eight 1mm red bumps on soft palate.		53.2
				Three to four 1mm red bumps on soft palate		
12/19/01	NT	12	28	Six 1mm plaques on soft palate.	Bite on rt hind flipper-ventral side. Fecal sample taken.	42.7
				1/4/02 - NSL		
12/19/01	NT	6	29	One 1mm plaque on soft palate.		44.1
				1/4/02 - NSL		
12/19/01	LFV-741	6	21	One 1mm plaque RE		45.4
				1/4/02 - NSL		
12/19/01	LFV-740	3	30	NSL		48.2
				1/4/02 - NSL		
12/19/01	RFV-724	5	23	Four 1mm plaques on soft palate.	Multiple superficial bite wounds on neck.	49.1
				1/4/02 - NSL		
12/19/01	RFV-748	5	25	NSL		56.2
				1/4/02 - Three 1mm plaques on soft palate.		
12/19/01	NT	7	27	Three 1mm plaques on soft palate.		54.4
				1/4/02 - NSL		
12/19/01	RFV-719	7	37	NSL		52.4
				1/4/02 - NSL		
12/19/01	RFWA-89	4	36	Twelve 1mm bumps on soft palate.	Chronic carapace ulcerations of medial margins of caudal lateral scutes-bilaterally.	32.1
				1/4/02 - NSL	Hold until problem cleared.	
12/19/01	RFV-739	8	38	Five 1mm red bumps on soft palate.		54.6
				1/4/02-NSL		
12/19/01	RFV-736	11	34	Four 1mm plaques on soft palate.		56.5
				1/4/02 - NSL		

PARK HAWAII
Investigation
EXAMS/CBC RESULTS

SEP 13/02

WBC CNT	HCT	HETER	NEUTRO SEG	LYMPH	MONO	EOS	ABS HETER	ABS NEUT	ABS LYMPH	ABS MONO	ABS EOS	THROM	POLYCH	BLD PARASITES	PLASMA PROT
15	38	19	4	75	1	i	3705	780	14625	195	195	ADEQ	SLIGHT	NONE	4.6
13	39	20	3	75	1	1	2660	399	9975	133	133	ADEQ	SLIGHT	NONE	4.4
21	39	8	1	90		1	648	81	7290		81	ADEQ		NONE	5
13	40	13	2	79	1		4464	496	19592	248		ADEQ	SLIGHT	NONE	5.4
11	39	11	2	85		2	1111	202	8585		202	ADEQ	SLIGHT	NONE	
11	38	12	3	84		1	1332	333	9324		111	ADEQ		NONE	5
13	38	20	3	72	1	4	4560	684	16416	228	912	ADEQ	SLIGHT	NONE	4.5
12	37	20	3	74		3	3440	516	12728		516	ADEQ		NONE	5.5
12	31	22	1	70	1	6	4356	198	13860	198	1188	ADEQ		NONE	4.4
10	35	23	2	69	1	5	4968	432	14904	216	1080	ADEQ		NONE	4.4
10	35	10	1	83		6	760	76	6308		456	ADEQ		NONE	4.6
15	25	26	3	69	1	1	3510	405	9315	135	135	ADEQ	SLIGHT	NONE	4.8
10	35	16	5	72	1	6	5568	1740	25056	348	2088	ADEQ	SLIGHT	NONE	4.4
10	37	14	2	81	1	2	2450	350	14175	175	350	ADEQ		NONE	4.3

MAUNA LANI GROUP (Page 2)

TURTLE P...

Exam Date	ID	LOC	DMSO	DESCRIPTION	NOTE
12/19/01	LFV-725	9	31	Eight 1mm plaques on soft palate.	Superficial neck wounds.
				1/4/02 - Five 1mm plaques on soft palate.	
12/19/01	LFV-745	10	40	NSL	
				1/4/02 - Small linear plaque on right buccal mucosa.	
12/19/01	RFV-735	10	32	Five 1mm plaques on soft palate.	
				1/4/02 - Small linear plaques on right buccal mucosa.	
12/19/01	LFV-742	11	39	One 1mm plaque on soft palate.	
				1/4/02 - NSL	

Notes:

000446

11/04/2007



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MARK HAWAII
Investigation
EXAMS/CBC RESULTS

ON 1/3/02

BC CNT	HCT	HETER	NEUTRO SEG	LYMPH	MONO	EOS	ABS HETER	ABS NEUT	ABS LYMPH	ABS MONO	ABS EOS	THROM	POLYCH	BLD PARASITES	PLASMA PROT
32	38	14	2	80		4	1148	164	6560		328	ADEQ		NONE	4.5
26	37	19	1	77		3	2394	126	9702		378	ADEQ	SLIGHT	NONE	4.4
45	38	8	2	88		2	1160	290	12760		290	ADEQ		NONE	4.7
22	37	16	2	77		5	1952	244	9394		610	ADEQ		NONE	5.2

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SEA LIFE PARK IMMATURES GROUP

Exam Date	ID	LOC	DMSO	DESCRIPTION	NOTE	NOTE: SCL (cm)
12/13/01	LFF-4696		7	NSL	Congenital skull deformity.	55.7
				1/4/02 - NSL	RELEASED 1/8/02 (SA-4)	
12/13/01	RFF-4699		10	Fourteen 1mm plaques on soft palate.		56
				1/4/02 - Three 1mm plaques on soft palate.	RELEASED 1/8/02 (SA-3)	
12/13/01	LH-4697		8	One 1mm plaque on soft palate.		51.2
				1/4/02 - NSL	RELEASED 1/8/02 (SA-5)	
12/13/01	LFF-4700		5	Three 1mm plaques on soft palate.		54
				1/4/02 - NSL	RELEASED 1/8/02 (SA-6)	
12/13/01	LH-4698		1	One 2mm plaques on left side of soft palate.		54.2
				1/4/02 - NSL	RELEASED 1/8/02 (SA-7)	
12/13/01	LFF-4693		4	NSL		43.2
				1/4/02 - NSL	RELEASED 1/8/02 (SA-2)	
12/13/01	RFF-4694		6	Two 1mm plaques on soft palate.		42
				1/4/02 - One 1mm plaque on soft palate.	RELEASED 1/8/02 (SA-9)	
12/13/01	RFF-4691		2	2cm-L, 1mm-W linear plaque on L-buccal mucosa. Two 1mm plaques on soft palate.		46
				1/4/02 - NSL		
12/13/01	LFF-4692		9	2mm healing wound on left buccal mucosa.		45.1
				1/4/02 - NSL	RELEASED 1/8/02 (SA-8)	
12/13/01	RFF-4695		3	NSL		44.4
				1/4/02 - NSL	RELEASED 1/8/02 (SA-1)	
12/13/01	NT(WB-20)		17	1cm length, 1mm width linear plaque on hard palate.		44.5
				1/4/02 - NSL	RELEASED 1/8/02 (SA-10)	
12/18/01	RFV-732 (HIGGINS)		20	Six 1mm plaques on soft palate. Eight 1mm plaques on rostral esophagus.	BASOPHIL=1 ABS BASOPHIL=56	71.1
				1/4/02 - Four to five 1mm plaques on soft palate.		

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PEAK HAWAII
Investigation
TEAMS/CBC RESULTS

13/02 RELEASED LOCATION: KAUPU BAY

	HCT	HETER	NEUTRO SEG	LYMPH	MONO	EOS	ABS HETER	ABS NEUT	ABS LYMPH	ABS MONO	ABS EOS	THROM	POLYCH	BLD PARASITES	PLASMA PROT
	36	9	1	89	1		1080	120	10680	120		ADEQ		NONE	4.5
	35	12	2	85		1	1488	248	10540		124	ADEQ		NONE	
	37.5	18	1	81			1656	92	7452			ADEQ	SLIGHT	NONE	
	37	12	2	84		2	1668	278	11676		278	ADEQ		NONE	4.3
	38	14	1	84		1	1540	110	9240		110	ADEQ		NONE	4
	38	15	1	82	1	1						ADEQ		NONE	6.4
	39	25	1	70		4	2350	94	6580		376	ADEQ		NONE	4.8
	35.5	14	1	85								ADEQ		NONE	4.8
	36	13	2	83		2	1378	212	8798		212	ADEQ		NONE	4.2
	38.5	10	1	88	1		770	77	6776	77		ADEQ		NONE	4.5
	39	14	1	83	1	1	1302	93	7719	93	93	ADEQ	SLIGHT	NONE	6.5
	31.5	27	2	63		7	1512	112	3528		392	ADEQ		NONE	5.5

SEA LIFE PARK YEARLINGS 2000 GROUP

NOTE: SCL TAKEN 1/3/02

Exam Date	ID	LOC	DMSO	DESCRIPTION	NOTE	SCL (cm)
12/27/01	ZG-04		46	One 1mm plaque on soft palate.		36
				1/4/02 - NSL		
12/27/01	ZG-05		42	Three 1mm plaques on central soft palate.		31.8
				1/4/02 - Three 1mm plaques on soft palate.		
12/27/01	ZG-07		65	One 1mm plaque on soft palate.		32.7
				1/4/02 - NSL		
12/27/01	ZG-01		41	NSL		32.3
				1/4/02 - One 1mm plaque on soft palate.		
12/27/01	ZG-03		68		Broken right humerus during restraint.	25.4
				1/4/02 - NSL		
12/27/01	ZG-02		47	Two 1mm plaques on soft palate.		34
				1/4/02 - One small 1mm plaque on soft palate.		
12/27/01	ZG-09		48	One 2mm plaques & five 1mm plaques on soft palate. Tongue reddened on margins.		32.8
				1/4/02 - Three to five 1mm plaques on soft palate.		
12/27/01	ZI-36		43	Two 1mm plaques on soft palate.		32.8
				1/4/02 - NSL		
12/27/01	ZG-08		45	NSL		30.8
				1/4/02 - NSL		
12/27/01	ZG-06		49	Two 1mm plaques on soft palate.	Small erosion on left side of carapace-healing wound.	30.1
				1/4/02 - NSL		
12/27/01	ZI-29		70	Two 1mm plaques on soft palate.		32.4
				1/4/02 - NSL		
12/27/01	ZG-10		44	Three 1mm plaques on central soft palate.	New tag# was ZI-31.	32.8
				1/4/02 - Two 1mm plaques on soft palate.		
12/27/01	ZG-11		50	Three to four 1mm plaques on soft palate.	New tag# was ZI-56.	32.3
				1/4/02 - NSL		

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PEAK HAWAII
Investigation
KAMS/CBC RESULTS

WBC TAKEN ON 1/2/02

WBC CNT	HCT	HETER	NEUTRO SEG	LYMPH	MONO	EOS	ABS HETER	ABS NEUT	ABS LYMPH	ABS MONO	ABS EOS	THROM	POLYCH	BLD PARASITES	PLASMA PROT
15	29	29	1	69	1		6235	215	14835	215		ADEQ	SLIGHT	NONE	4.2
18	28	19	1	79	1		1482	78	6162	78			SLIGHT	NONE	4.6
13	39	14		85	1		1582		9605	113		ADEQ	SLIGHT	NONE	5.4
13	23	25	1	72	1	1	3575	143	10296	143	143	ADEQ	SLIGHT	NONE	4.2
10	24	33	2	65			3300	200	6500			ADEQ	SLIGHT	NONE	5.3
15	30	28	1	72			4060	145	10440			ADEQ		NONE	4.2
14	39	35	1	63	1		8400	240	15120	240				NONE	4.6
11	38	36		62	1	1	5400		9300	150	150	ADEQ	SLIGHT	NONE	4.6
11	25	34	2	63	1		3502	206	6489	103		ADEQ	SLIGHT	NONE	4.8
11	25	34	2	63	1		3502	206	6489	103		ADEQ	SLIGHT	NONE	4.9
10	30	15	1	82	1	1	1770	118	9676	118	118	ADEQ	SLIGHT	NONE	3.8
10	26.5	23	4	71	1	1	3174	552	9798	138	138	ADEQ	SLIGHT	NONE	4.3
10	36	25	1	73	1		2625	105	7665	105		ADEQ	SLIGHT	NONE	4.9

Sea Life Park Hawaii immature Sea Turtle oral exams and morphometrics;

Turtle Id	AGE YOB	SCL/Wt May 2000	Oral Cavity May 2000	SCL/Wt 8/17/00	Oral Cavity 8/17/00	Oral Cavity 10/12/00	Oral cavity 11/24/00	SCL/Wt 11/28/00
E940 RFF-4699 R 2-3S PIT tags LH-42502E5B43 RH-423F377B00	1998	43.7cm 24.8lbs	Small plaque on tongue Level 1	45cm >25lbs.	1 mm plaque on soft palate Level 1	Mult. 1-2 mm plq on rostr esoph., tissue is not inflamed Level 3	Mult 1-2 mm plqs on soft palate Level 3	47.4 cm 31.35lbs.
RH-4697 PIT TAGS LH-4250337D4D RH-42502D4F54	1998	39.4cm 19.3lbs.	1 small ulcer on soft palate Level 1	41cm 22.5lbs	Mild redness on soft palate Level 2	1 small 1mm scar on soft palate Level 1	Blood sample for mycoplasma Soft palate clean Rostral esophagus inflamed	45.5 cm 31.25 lbs
WB16 LFF-4693-L1-2S PIT TAG LH-42375E3639 RH-4235027809 ZF77-"runt"	1999	22.6cm 3.75lbs	Plaque on tongue Level 1	27.5cm 7lbs	1 mm plaque on soft palate Level 1	1mm plq on tongue, 1 1mm plq on R soft palate Level 1	Level 2 1mm plq on soft palate Level 1	30.9cm 11.05 lbs
LFF-4696 L 2-3S PIT TAGS LH-424F311F07 RH-42502D4F54 E950	1997	42.3cm 24.2lbs.	NSL Clean Level 0	44.9cm >25 lbs.	Necrotic tissue on tongue Level 1	Clean Level 0	Clean Level 0	45.5 cm 31.25 lbs.
LFF-4700 L 2-3S PIT TAGS LH-424D160603 RH-424E4F5012 424E4F5012 424E4F5912	1998	40.1cm 20.5lbs	Small plaque on tongue Level 1	41.7cm 23lbs	Moderate plaques on soft palate Level 3 Viral culture Oral swab Herpes-neg	Mult. 1-2 mm plq on rostr esoph., tissue is not inflamed Level 3	Mucosa is inflamed. Mult. 1-2 mm white bumps on soft pal Level 3 Blood sample for mycoplasma	44.5 cm 27.1 lbs.

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LH-4698	1998	39.8cm 18.7lbs	Moderate plaques on soft palate, mild inflammation Level 2	41.3cm 22.5lbs	Moderate plaques on soft palate, mild inflammation Level 2 Viral culture oral swab Herpes- neg	2 1mm plqs on central soft pal., 2 1mm plqs on rostral esoph Level 2	2 1mm plaques on rostral esophagus 2 1mm plaques on soft pal Level 2 missing	44.4 cm 26.5 lbs.
WB12	1999	23.9cm 4.80lbs.	Plaque on tongue Level 1	28.7cm 8.75lb	NSL	Missing	missing	
RFF-4694 R2-3S PIT TAGS LH-422F060C40 RH-42501B0155	1999	25.1cm 5.5lbs.	NSL Level 0	30cm 9lbs.	NSL Level 0	3 1mm plqs w/mild mucosal inflammation Level 2	1 1mm plaque on rostral esoph Level 1	32.5 cm 12.95 lbs.
RFF-4691- R3-4S PIT TAGS LH-422F07554C RH-422F215E1B	1999		Level 0	30.7cm 8.5lb	NSL Level 0	1 1mm plq on central soft palate, 2 1mm plqs on rostral esoph Level 1	1 1mm necrotic patch on tongue Level 1	33.9 cm 12.65 lbs
LFF-4692 -L3-4S PIT TAG LH-422F203F56 RH-42395E535B	1999		Plaque on soft palate Level 1	30cm 9lb	NSL Level 1	1 5mm plq on rostral esoph Level 2	1 1mm plaque on soft palate Level 1	32.7 cm 13.4 lbs.

Turtle Id	AGE YOB	SCL/Wt May 2000	Oral Cavity May 2000	SCLWt 8/17/00	Oral Cavity 8/17/00	Oral Cavity 10/12/00	Oral cavity 11/24/00	SCL/Wt 11/28/00
WA94 RFF-4695- R1-2S PIT TAG LH-423F3A1F2F RH-423B3C467A WB20 Sheraton	1999	23.5cm 4.2lbs.	NSL Level 0	27.5cm 9lbs.	NSL Level 0	Clean Level 0	Clean Level 0	30.7 cm 10.9 lbs.
	1999			30.9cm 9lbs.	NSL	1 1mm plq on SP		

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Melick Aquafeed

TURTLE FINISHER

GUARANTEED ANALYSIS:

Crude Protein	Minimum 35%
Crude Fat	Minimum 4%
Crude Fiber	Maximum 5%
Phosphorus (P)	Minimum 1%
Ash	Maximum 15%

Ingredients

Animal Protein Products, Plant Protein Products, Processed Grain By-Products, Fish Oil, Soy Lecithin, Calcium Lignin Sulfonate, Vitamin A Supplement, Vitamin D3 Supplement, Riboflavin Supplement, Niacin Supplement, Calcium Pantothenate, Vitamin B12 Supplement, Choline, Chloride, d-Biotin, Thiamine Mononitrate, Pyridoxine Hydrochloride, Vitamin E Supplement, Menadione Sodium Bisulfite Complex (source of Vitamin K activity), Folic Acid, L-Ascorbyl-2-Phosphate (source of Vitamin C), Ethoxyquin (a Preservative), Potassium Iodate, Salt, Manganous Sulfate, Zinc Sulfate, Copper Sulfate, Sodium Selenite.

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2002. Proceedings of the Twentieth Annual Symposium on Sea Turtle Biology and Conservation, February 29 - March 4, 2000, Orlando, Florida. NOAA Tech. Memo. NMFS-SEFSC-477:187-189.

ADAPTATION OF CAPTIVE-REARED GREEN TURTLES RELEASED INTO HAWAIIAN COASTAL FORAGING HABITATS, 1990-99

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Green turtles obtained from Hawaiian waters by Sea Life Park on Oahu in the 1960's have nested and produced hatchlings on an artificial beach every year since 1976 (see Bourke et al., 1977). Most of these hatchlings were released into the wild shortly after emergence. However, starting in 1989, a few were retained each year for an educational loan program to facilitate the display of small turtles less than about 40 cm in straight carapace length (SCL) at qualifying aquaria in Hawaii, Canada, and the mainland USA. Steve Kaiser, the program's originator, called this novel outreach the "Hawaiian Sea Turtle Ambassador Program." Steve's rationale, shared by many, was that live sea turtles, especially small ones, are their own best advocates for conservation when viewed up close by the public. The end-point of each carefully conducted loan occurred when the turtles reached the carrying capacity of their display tanks and were certified healthy for release into Hawaiian waters. "Head-starting" has not been the purpose of the program, although at times this aspect has been given inappropriate emphasis by the news media and others. The program's ongoing fundamental goals, currently being accomplished with distinction, are the enhancement of public awareness and conservation education on behalf of sea turtles.

For the past decade, most of the turtles in the Sea Life Park program have been released as part of the July 4th "Turtle Independence Day" celebration at the Mauna Lani Bay Hotel on the South Kohala Coast of the island of Hawaii (20°N, 156°W). This coastline constitutes rich underwater foraging and resting habitats for an abundance of naturally occurring green turtles. Terrestrial basking also takes place along this lava rock shoreline. Investigations of the biology, ecology, and life history of these turtles have been underway since the 1980's by the National Marine Fisheries Service (NMFS), in partnership with the Hawaii Preparatory Academy (Balazs, 1996; Balazs et al., In press; Davis et al., In press; Harrington et al., This volume; Rice et al., This volume). These research activities have provided excellent opportunities to recapture and evaluate turtles originating from Sea Life Park. Since 1993, all turtles released at Mauna Lani have been measured, weighed, and positively identified by NMFS using Inconel flipper tags and PIT tags. Herein we provide a summary of the results of tag recoveries made to date.

RESULTS

From 1990-99, 102 captive-reared green turtles ranging from 25.5 - 68.0 cm SCL (mean - 40.7 cm) were released at the Mauna Lani Bay Hotel (Figure 1). Twelve turtles (11.7%) have been recaptured/resighted from 1-5 times by hand, net or (in one instance) a visual tag reading during in-water research (Figure 2). Elapsed times from initial release to the most recent recapture ranged from 2.3 - 7.3 years. Eight of the 12 turtles were encountered within 5 km of the Mauna Lani Bay Hotel. Three others were recaptured along the coastline 45-80 km to the south at Honokohau (1), and Honaunau (2). Another turtle was recaptured in the major foraging habitat of Kaneohe Bay on Oahu, a distance of 270 km (Figure 3).

Six other turtles (5.9% of 102) were found stranded 0.8 - 2.4 years after release (Figure 2). Two were dead and four were alive. Necropsy of the former revealed that one was severely emaciated, and the other in good body condition with no indication of the cause of death. This turtle stranded 2.4 years after release along green turtle foraging habitat on the island of Lanai, 150 km from Mauna Lani. The four live strandings included three emaciated and/or excessively buoyant turtles, and one with a severe propeller injury to the carapace. This latter turtle also had two small fishing hooks externally and one internally as revealed by x-ray. All four live strandings required

considerable veterinary treatment and captive rehabilitation by NMFS before being released a second time.

As shown in Figure 4, the SCL growth rates of the 11 turtles recaptured and remeasured during in-water research ranged from 0.7 - 3.2 cm/yr (mean = 2.1 cm/yr). The Kaneohe Bay recapture displayed the most rapid rate of growth (3.2 cm/yr). A small fibropapilloma was recorded on the eye of this turtle. Growth rates for the 11 turtles compare favorably and are consistent with data obtained over the past 25 years for naturally occurring green turtles in a wide array of foraging habitats throughout the Hawaiian Islands. However, three of the 11 turtles are known to have been fed pelleted fish food and lettuce by tourists and others during their post-release residency near the Mauna Lani Bay Hotel. The growth rates of the six stranded turtles ranged from only 0.5 - 0.9 cm/yr (mean = 0.6 cm/yr). These data suggest the failure of the turtles to adapt to the wild and thrive.

CONCLUSION

Nine of the 18 captive-reared turtles encountered have successfully adapted to natural Hawaiian marine habitats. The other nine did not adapt (6 stranded and 3 being fed in the wild). Eighty-four turtles have thus far not been seen again. The two PIT tags used to identify each animal should help ensure longer term recognition if or when the turtles are recaptured during coming years or decades.

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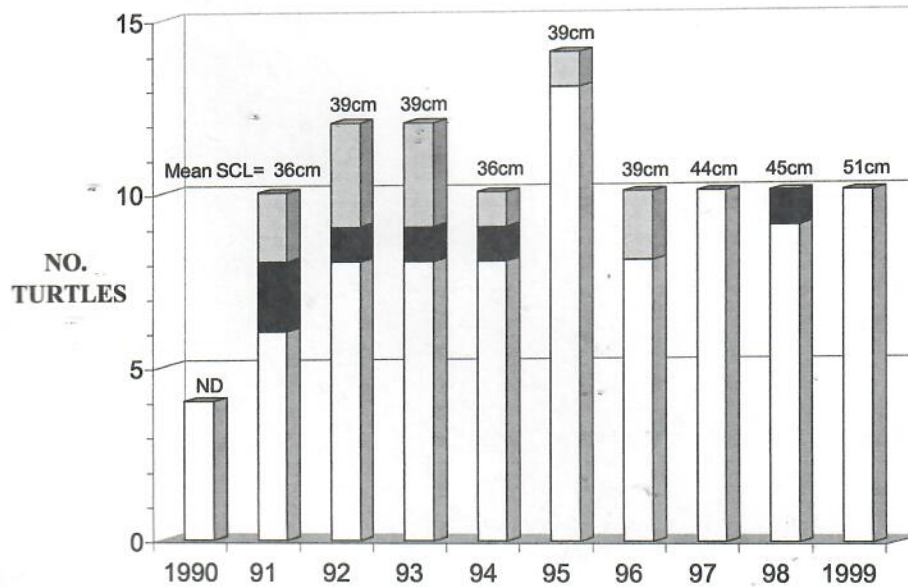
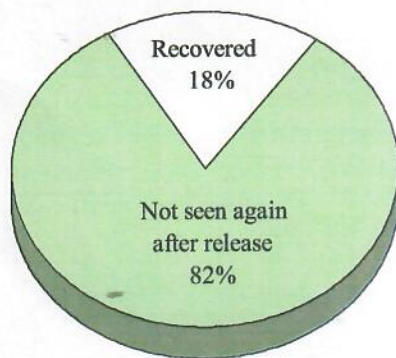
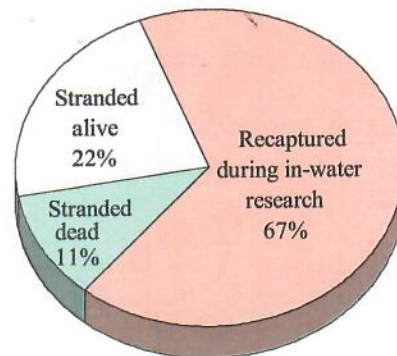


Figure 1. Captive-reared green turtles released annually at the Mauna Lani Bay Hotel. Gray indicates the number recaptured in each year-class during in-water research. Black indicates the number stranded.

Figure 2. HAWAIIAN GREEN TURTLES:
OUTCOME OF A DECADE OF CAPTIVE-REARING AND RELEASE
FOR EDUCATIONAL DISPLAY



Outcome of green turtles released into the wild at the Mauna Lani Bay Hotel
N = 102



Circumstances of recoveries
N = 18

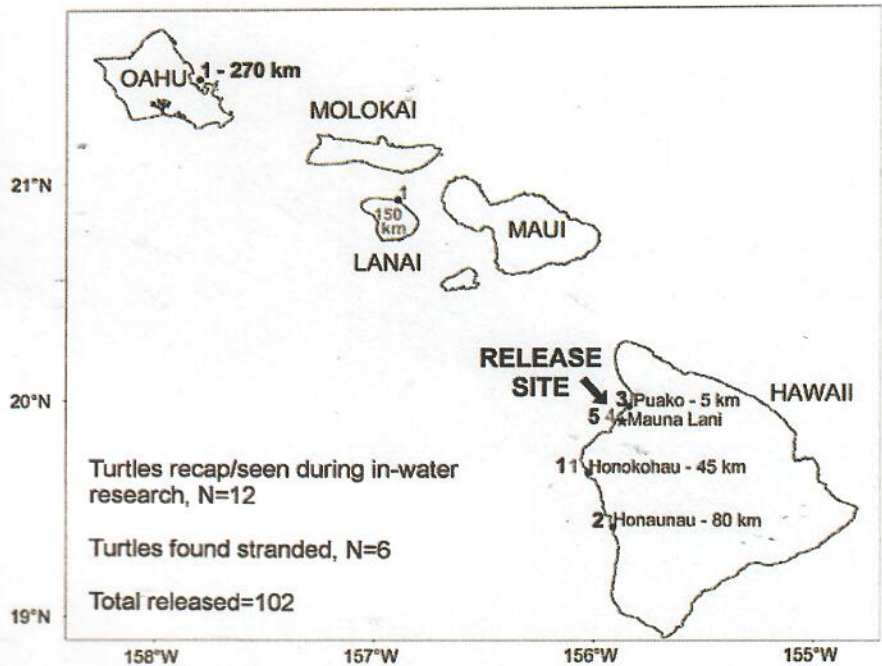


Figure 3. The main Hawaiian Islands. Recapture locations and distances from the Mauna Lani release site.

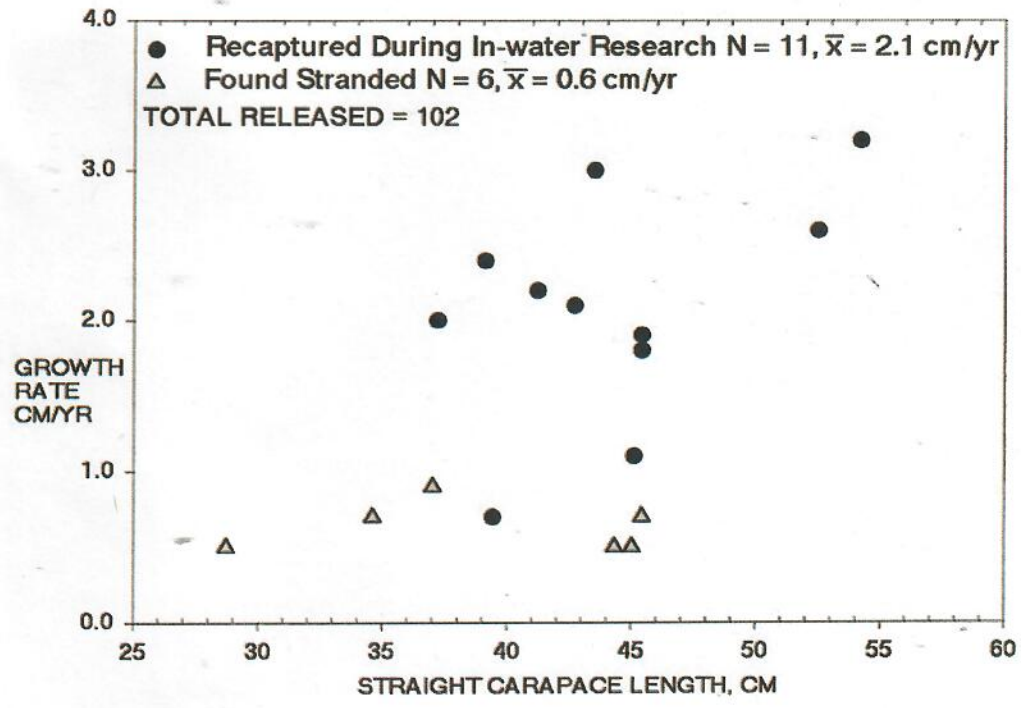


Figure 4. Growth rates in the wild of recaptured turtles released at Mauna Lani.

USEFUL INFORMATION

CONVERSION TABLE

METERS	YARDS	INCHES
1.000	1.093	39.37
.914	1.000	36.00

CENTIMETERS	INCHES	FEET
1.00	.394	.0328
2.54	1.000	1/12
30.48	12.000	1.000

KILOMETERS	MILES
1.000	.621
1.609	1.000

GRAMS	OUNCES	POUNDS
1.00	.035	.002
28.35	1.000	1/16
453.59	16.000	1.000
1,000.00	35.274	2.205

KILOGRAMS	OUNCES	POUNDS
1.000	35.274	2.205
.028	1.000	1/16
.454	16.000	1.000

LITERS	PINTS	QUARTS	GAL.
1.000	2.113	1.057	.264
.473	1.000	1/2	1/8
.946	2.000	1.000	1/4
3.785	8.000	4.000	1.000

LENGTH

1 meter (m)	=	100 cm	=	1,000 mm
1 millimeter (mm)	=		=	.001 m
1 centimeter (cm)	=		=	.01 m
1 decimeter (dm)	=		=	.1 m
1 decameter (dam)	=		=	10 m
1 hectometer (hm)	=		=	100 m
1 kilometer (km)	=		=	1,000 m

CAPACITY

1 liter (l)	=	100 cl	=	1,000 ml
1 milliliter (ml)	=		=	.001 l
1 centiliter (cl)	=		=	.01 l
1 deciliter (dl)	=		=	.1 l
1 decaliter (dcl)	=		=	10 l
1 hectoliter (hl)	=		=	100 l
1 kiloliter (kl)	=		=	1,000 l

WEIGHT

1 gram (g)	=	100 cg	=	1,000 mg
1 milligram (mg)	=		=	.001 g
1 centigram (cg)	=		=	.01 g
1 decigram (dg)	=		=	.1 g
1 decagram (dkg)	=		=	10 g
1 hectogram (hg)	=		=	100 g
1 kilogram (kg)	=		=	1,000 g

Table of Time Measure

60 seconds	=	1 minutes
60 minutes	=	1 hour
24 hours	=	1 day
7 days	=	1 week
30 days	=	1 calendar month
12 months	=	1 year
365 days	=	1 common year
366 days	=	1 leap year
100 years	=	1 century

Table of Dry Measure

2 pints (pt.)	=	1 quart (qt.)
8 quarts	=	1 peck (pk.)
4 peck	=	1 bushel (bu.)
1 cord	=	128 cu. ft.

Table of Liquid Measure

4 gills (gl.)	=	1 pint (pt.)
2 pints	=	1 quart (qt.)
4 quarts	=	1 gallon (gal.)
31 1/2 gallons	=	1 barrel (bbl.)
2 barrels	=	hogshead (hhd.)

Table of Paper Measure

24 sheets	=	1 quire
20 quires	=	1 ream
10 ream	=	1 bale

Table of Linear Measure

12 inches	=	1 foot
3 feet	=	1 yard
16-1/2 ft. (5-1/2 yds.)	=	1 rod
660 feet	=	1 furlong
320 rods (5280 ft.)	=	1 mile

Miscellaneous Measures

12 units	=	1 dozen
12 doz.	=	1 gross
12gr.	=	1 great gross
20 units	=	1 score
1 hand	=	4 inches
1 fathom	=	6 feet
1 knot	=	6086 feet
3 knots	=	1 league
1 bu. potatoes	=	60 lbs.
1 barrel flour	=	196 lbs.
1 cu. ft. of water	=	7.48 liquid gals. and weighs 62.425 lbs.
Diameter of circle x 3.1416 = circumference		
Diameter of circle square x .7854 = area		
Atmospheric pressure is 14.7 lbs. per sq. in. at sea level.		
13-1/2 cu. ft. of air weighs 1 lb.		

Table of the Cubic Measure

1728 cubic inches	=	1 cubic foot
27 cubic feet	=	1 cubic yard
128 cubic feet	=	1 cord of wood
24 3/4 cubic feet	=	1 perch of stone
NOTE: A cord of wood is a pile 8 feet long, 4 feet wide, and 4 feet high.		
A perch of stone or brick is 16 1/2 feet long, 1-1/2 feet wide, and 1 foot high.		

Table of Avoirdupois Weight

16 drams	=	1 ounce (oz.)
16 ounces	=	1 pound (lb.)
100 pounds	=	1 hundred-weight (cwt.)
2000 pounds	=	1 ton (T.)
2240 pounds	=	1 long ton (L.T.)

Table of Troy Weight

24 grains (gr.)	=	1 penny-weight (dwt)
20 penny-weights	=	1 ounce (oz.)
12 ounces	=	1 pound (lb.)

Table of Circular Measure

60 seconds (")	=	1 minute (')
60 minutes	=	1 degree (°)
360 degrees	=	1 circumference
A degree of the earth's surface or a meridian = 69.16 miles at the equator.		

Table of Apothecaries' Weight

20 grains (gr.)	=	1 scruple
3 scruples	=	1 dram
8 drams	=	1 ounce
12 ounces	=	1 pound (lb.)

Table of Surface Measures

144 sq. in.	=	1 sq. ft.
9 sq. ft.	=	1 sq. yd.
30 1/4 sq. yds.	=	1 sq. rod
160 sq. rods	=	1 acre
640 acres	=	1 sq. mile

An acre measures 208 71 ft. on each side.
A section of land is 1 sq. mile.
A quarter section is 160 acres.
A township is 36 sq. miles.

MULTIPLICATION TABLE

1	2	3	4	5	6	7	8	9	10	11	12
2	4	6	8	10	12	14	16	18	20	22	24
3	6	9	12	15	18	21	24	27	30	33	36
4	8	12	16	20	24	28	32	36	40	44	48
5	10	15	20	25	30	35	40	45	50	55	60
6	12	18	24	30	36	42	48	54	60	66	72
7	14	21	28	35	42	49	56	63	70	77	84
8	16	24	32	40	48	56	64	72	80	88	96
9	18	27	36	45	54	63	72	81	90	99	108
10	20	30	40	50	60	70	80	90	100	110	120
11	22	33	44	55	66	77	88	99	110	121	132
12	24	36	48	60	72	84	96	108	120	132	144



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PRIDE OF AMERICA HOSTS TURTLE RELEASE, EDUCATIONAL PROGRAM FOR ISLAND KEIKI

HONOLULU – October 20, 2008 -- NCL America has partnered with the National Oceanic and Atmospheric Administration (NOAA) Pacific Islands Fisheries Science Center, NOAA Hawaiian Islands Humpback Whale National Marine Sanctuary (HIHWNMS), Sea Life Park, Hawai'i Preparatory Academy, and Maui Ocean Center to sponsor the **Science Day at Sea** program on board Pride of America. The week-long program will take place at each port of call (Kahului, Hilo, Kailua-Kona, Nawiliwili) during Pride of America's seven-day cruise that departs Honolulu on October 18, 2008.

At each port, approximately 75 students will board Pride of America to participate in *Science Day at Sea*. This program will provide students the opportunity to tour the cruise ship to see how a "city at sea" operates; learn about green sea turtles and research conducted in Hawai'i; discover more about plankton and water quality with samples taken dockside on each island; and understand more about humpback whales and research and rescue programs being implemented in Hawai'i.

"We are pleased to launch the *Science Day at Sea* program that provides island keiki with a unique learning experience aboard Pride of America," said Alan Yamamoto, NCL America's vice president of Hawai'i operations. "It is important to raise awareness among our keiki about the need to protect and preserve our natural resources for generations to come."

In addition to the *Science Day at Sea* program, six Hawaiian green sea turtles captive bred from Sea Life Park will be released off the coast of Kaua'i on October 24. The release is part of a NOAA Pacific Islands Fisheries Science Center research project to learn more about the life and travel patterns of young turtles in the open ocean. Three turtles will be outfitted with satellite transmitters which will allow researchers to receive information about their movements and behavioral patterns in their oceanic habitat.

-more-

Including this current turtle release, NCL America, NOAA and Sea Life Park have teamed up to release more than 61 green sea turtles from NCL America vessels since 2006.

George Balazs, Leader of the Marine Turtle Research Program, is conducting the study that is using captive-bred turtles from Sea Life Park. "The unique and generous partnership of this project with NCLA on behalf of sea turtle conservation has been one of the most rewarding activities of my 36-year career to restore a species once on the brink of extinction in the Hawaiian Islands. I look forward to meeting the school children at each port-of-call to share our excitement and science knowledge with them."

"In addition to providing an educational experience for island keiki, the turtle release program provides an outstanding opportunity for guests aboard Pride of America to learn more about Hawai'i's environment and the importance of protecting of our natural resources," said Yamamoto.

Stephanie Flood, Education Manager, Sea Life Park, said, "Our sea turtle breeding program continues to be a resounding success as a result of events such as this. Not only are we releasing these turtles into the wild and educating our keiki, but this provides a means to educate travelers from all over the world who are here to experience Hawai'i."

Naomi McIntosh, Sanctuary Superintendent, NOAA HIHWNMS added, "Hawai'i's marine environment is the perfect natural laboratory to inspire and encourage our students to take an interest in protecting our ocean resources. This partnership provides an opportunity for students to see, touch and learn about Hawai'i oceans and its importance to us."

Schools and organization participating in the *Science Day at Sea* Program include:

Kahului, Maui:

- Kalama Intermediate School
- Kīhei Charter School
- Kamahameha School – Maui Campus
- Boy Scouts
- STEM Academy Kīhei Charter

Hilo, Hawai'i Island:

- Connections Charter School
- Ka 'Umeke Kaeo Charter School

Kailua-Kona, Hawai'i Island:

- Kealakehe Middle School
- Hawai'i Preparatory Academy
- West Hawai'i Explorations Academy

Nawiliwili, Kaua'i:

- Kaua'i High School
- Chiefess Kamakahahelei Middle School
- King Kaumauali'i Elementary School

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