ARGOS 6621

343 DAYS PROJECTED LIFE

PNPA 2022-2023

I ♥ Hawaii

+1 808 683 8402

caliber.

2624
79 BLANK PAGES

COMPOSITION BOOK

STRETCH JAPAN

GEORGE H. BALAZS, CO-CHAIR
OCEANIA REGION, IUCN/SSC
MARINE TURTLE SPECIALIST GROUP
EMAIL: ITSAHONEYWORLDINHAWAII@
HOTMAIL.COM; CELL 1808-6838402

BALAZS

WIDE RULED | 100 SHEETS | 9 ¾ IN x 7 ½ IN (24.7 cm x 19 cm)

090-7039-6837

Kureita
Cell

MASANORI

9 days +
7 DAYS
DEPLOYMENT
SITE

LANIAKEA
BEACH STORE

LE

HOOL

| PERIOD | LUNDI LUNES | RM. | MARDI MARTES | RM. | EDNESDAY MERCREDI MIERCOLES | RM. | | EDI RNES | RM. |
|---|---|---|---|---|---|---|---|---|---|
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| | | | | | | | | | |
| 6 | NAGOYA | | | | NOVEMBER 2022 | | | | |
| 7 | NAGOYA 2I- | | | | JANUARY 2023 | | | | |
| 8 | | | | | | | | | |
| 9 | ROWAN CALDER | | | | | | | | |

Speed Post 特快專遞 EMS Hongkong Post 香港郵政

寄件人姓名及地址 Name and address of sender
Christy Ng
Flat E, 15/F, Block 6
Tsing Yi Garden Tsing Yi 香港 HONG KONG
電話Tel: (852) 62247780
電郵e-mail: hunghung55555@yahoo.com
寄件人海關編號(如適用) Sender's customs reference (if any)

NANAMI SAITO
(7 SEAS)

387 = 171 DAYS
(PROGRAMED FOR 343 DAYS)
Bottom of SPOT 6 387

■ Apply epoxy to tag immediately after removing peel ply.
■ Do not touch exposed tag bottom surface before attaching.

marerrice@gmail.com
Carreta = 2023

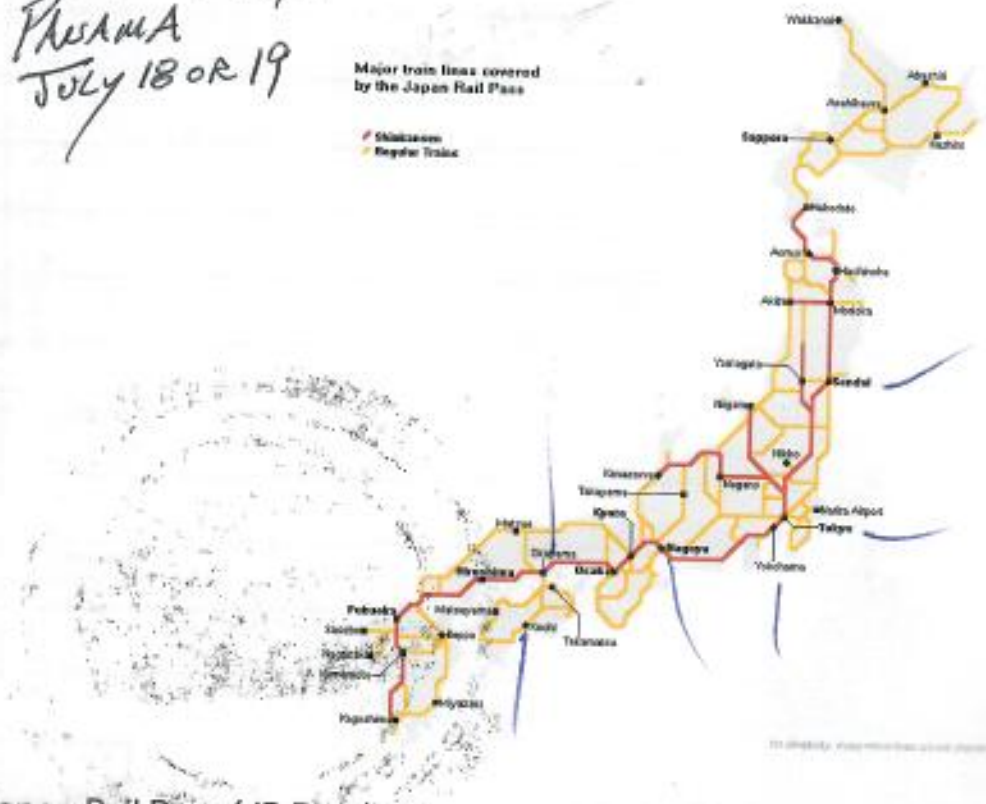
VEHICLES CARRIER
"GALAXY ACE"
IMO 9624237

189 kN
2012 FLAGGED LIBERIA
199M / 32M

DEC 25 2022

MR. NOAH YAMAGUCHI USA KOCHI

Japan Guide
Depart NAGOYA JUNE 27 =
PANAMA
JULY 18 OR 19




Japan Rail Pass (JR Pass)

TSA PRECHK

.3NOV22

4NU /HNL HONOLULU

BALAZS/GEORGE

FROM HONOLULU

TO OSAKA KANSAI

HA 449 K 13NOV150P

********** GOLD

*

*

FYUFSN /HA

* BOARDING PASS * PREMIUM

********** SEAT/SMOKE

16J NO

DOES CHECKED

********** ********** ZONE 2 091 **********

********** ELECTRONIC

**********

**********

NOTICE: PASSENGERS MUST BE AT THE GATE OR ON THE AIRCRAFT 30 MINUTES PRIOR TO DEPARTURE FOR ALL FLIGHTS.

1 173 21

TSA PRECHK

20NOV22 JP

SLM /KIX OSAKA KANSAI

ZS/GEORGE

AKA KANSAI

NOLULU

HA 450 K 20NOV845P

********** GOLD

*

*

FYUF

* BOARDING PASS * PREMIUM

********** SEAT/SMOK

17A NO

********** ********** ZONE 2 055 **********

********** ELEC

NOTICE: PASSENGERS MUST BE AT THE GATE OR ON THE AIRCRAFT 30 MINUTES PRIOR TO DEPARTURE FOR ALL FLIGHTS.

2 1

EXTRA Comfort Seats HA

| | |
|---|---|
| US September 11th Security Fee | $5.60 |
| US Transportation Tax | $39.40 |
| USDA APHIS Fee | $3.96 |
| US Immigration Fee | $7.00 |
| US Customs Fee | $6.11 |
| US Passenger Facility Charge | $4.50 |
| **Total Travel Cost:** | **$1,505.37** |



| | | 9:00 | 10:00 | 11:00 | 12:00 | 13:00 | 14:00 | 15:00 |
|---|---|---|---|---|---|---|---|---|
| 16th | your idea | | | | lunch | meeting and discussion | | |
| | my idea | | Greeting | Tour | lunch | meeting and discussion | | |
| 17th | your idea | | self-guided tour | | | lunch | meeting and discussior | |
| | my idea | guided tour and check the turtles | | | lunch | attach the new style satel | | |
| 18th | your idea | attach the new style satellite tag | | | lunch | | | |
| | my idea | meeting and discussion | | | lunch | | | |

中日新聞 編集局社会部

記者 坂本圭佑

中日新聞社
〒460-8511 名古屋市中区三の九一丁目6番1号
電話代表 052(201)8811
直通 052(231)1656
FAX 052(201)4331
E-mail:sakamt.k@chunichi.co.jp
携帯 080-3498-1463

Reporter

SAKAMT.K
@CHUNICHI.
CO.JP

朝日新聞社

大野晴香

名古屋販売センター
記者

Reporter

朝日新聞
DIGITAL

朝日新聞名古屋本社
〒460-8488 愛知県名古屋市中区栄1-3-3
Tel 052-221-0327 Fax 052-231-0391
Mobile 080-2479-8124
E-mail ono-h5@asahi.com

ONO-H5@
ASAHI.COM

- TURTLE NAMES
- DISTANCE SPEED SPEED
  STRAIGHT & TOTAL
- EAST VS WEST
- GENDER Blood
- FES overnight

NEAR EEL FARM (?)
HAMAMATSU
NAKAATAJIMA KOEN
BEACH -
Nesting loggerheads

Wed. 11/16 & Thurs 11/17/2022

MISHIMA PNPA PRMAN

AT END JUST Before release Blood? vet care

TURTLE MAN PNPA

— MASANORI MORI going on ship

"AZARO CARDENA" MEXICO

(0)

Need Reinforce for clip pages

6000# Resin

2016 around a year

70,000 CNP from CNP STA

They Are what they eat.

Red crab worm water attraction

PORT OF NAGOYA
PUBLIC AQUARIUM

Chief , Sea Turtle Section

**Masanori Mori**

**Nagoya Port Foundation**
1-3 Minato-machi, Minatoku, Nagoya 455-0033 Japan
TEL +81-52-654-7080
FAX +81-52-654-7001
~~m-mei~~ m-mori@nagoyaminato.or.jp

公益財団法人　名古屋みなと振興財団
名古屋港水族館　飼育展示部
飼育展示第一課　課長（学芸員）

**中嶋　清徳**
NAKAJIMA KIYONORI

TEL 052-654-7080 (代) TEL 052-654-7046 (直通)
FAX 052-654-7054
〒455-0033 名古屋市港区港町 1-3
E-mail : k-nakajima@nagoyaminato.or.jp

日本動物園水族館協会
JAPANESE ASSOCIATION OF ZOOS AND AQUARIUMS

Masanori Kurita

Vice-Chairman
Conservation Committee

4-23-10-402 TAITO, TAITO-KU, TOKYO, -8567, JAPAN
Tel: +81-3-3837-0211 Fax: +81-3-3837-1231
Email m-kurita@nagoyaminato.or.jp URL: http://www.jaza.jp/

over

11/17/2022 Thursday

How cold is the water they don't want to go through?

How cold/warm is Kuroshio Current?

10 AM arrive
Talk
Swam 2 years classes of turtle

TALK Money Rear vs Travel

1 PM Meet the Press

Turtles go to Mexico - Warm year; cold year they don't - turn around.

Expect more warm years - Climate change - so more loggerheads go to BAJA.

Safer in Calif than in CNP ? or?

"Tropical" Turtles

Invest 2021
Invest 2022

need TRAVEL
Budget

TROVAN pit
+ Stockbrand LARGE
+ NBT Inconel

MR. Soichi - former Director

100 pit tags need

Cameras - for Saito

["We Have a lot of Money"]

10

If sterilizing tag, ... you
remove peel ply fabric.
Apply epoxy to tag immediately a
removing peel ply.
Do not touch exposed tag bottom
surface before attaching.

OVER


公益財団法人名古屋みなと振興財団
事業部　営業企画課

佐藤　ちづる
Chizuru SATO

〒455-0033 名古屋市港区港町1番3号
TEL:052-654-7134　FAX:052-654-7001
e-mail: c-sato@nagoyaminato.or.jp
https:// nagoyaaqua.jp

FROM DANA et al. 2021

ANA CROWNE PLAZA
AN IHG HOTEL
HOTEL GRAND COURT NAGOYA

of 6, Reaching BAJA REGION

Encourage

Discourage

4 Reversed Direction

2 continued

E=>18°C

山ちゃん
http://www.yamachan.co.jp

Questions -
web site link to ours? + ~~DO~~ separate?

Talking Points for the STRETCH Goodwill Coordinating Meeting with PNPA & Kochi University Colleagues, 16-18 November 2022.

11/16/22 END 505PM

---

-Welcome and Self-Introductions- Words of Mutual Appreciation.

-Designation of a notetaker to record significant outcomes during our time together.

- Overview and History of the Stretch Project- by Professor Crowder including 12-min video of Larry's Stretch presentation.

-Update on rearing of cohort Year 1 turtles for 2023 release, and cohort Year 2 turtles for 2024 release. Visit to see the turtles and learn about rearing techniques.

5 DAY WINDOW - 1 MONTH

-Update to the extent known on ship schedule for late April/early May 2023 and Japan port of departure. LAZARO CARDENA Yok

YOKOHAMA 4 HOUR DRIVE

-Possibility of holding a 'Bon Voyage' formal send-off "Red Ribbon Cutting" ceremony at PNPA for the Stretch turtles- including banners, publicity and attendance by local officials, MOL officials, school children, news media, and the general public.

-Possibility and/or the need/importance for Kurita, Saito, Crowder, Rice and Balazs together to meet in person with MOL Officials. A courtesy visit to pay respects and express appreciation.

-Ship's Ports of Call in Mexico/Panama Canal and the USA East Coast. LAZARO CARDE ME

LAZARO CARDENA

- USA and other Visas for Professor Saito and PNPA person accompany the turtles for release.

-Traveler Health Insurance Coverage for Professor Saito and PNPA person.

- Travel expenses to cover transport to ship, shipboard lodging, hotel lodging East Coast USA, meals and incidentals, and flight home to Japan (to place of residence) for Professor Saito and PNPA person.

-Shipboard internet access and Iridium satellite phone for Professor Saito and PNPA person. 3 A D

3 HRS A DAY

-PIT tags/flipper tag(s) for the Stretch turtles.

-Final date/deadline for determining release coordinates for the turtles. 30 days 30 DAYS LATE MARCH/LATE APRIL MA

-Back-up release plan, should sea conditions not allow opening the door close to sea surface shown in Director Kurita's photo. Ropes, baskets, materials and assembly for lowering and release of the turtles from a higher deck, if it becomes necessary. 3 SHIPS

-Non-invasive samples from Stretch turtles for genetics by Japanese researchers (Kochi University?)

8-10 ml Blood draw 1 MONTH PRIOR YOSHI BLOOD INDONESIAN

-Video documentation contracted expert from Japan to accompany Professor Saito and PNPA person; video of rearing of turtles and of tag attachment work; video of egg collection and initial hatchling rearing at Kochi University.

-April/May 2023 satellite tag attachment team- students from the Hawaii Preparatory Academy (HPA)- lodging, meals and other coordination, including opportunities for educational group interactions, cross-cultural sessions, with students from the Nagoya area.

-Mapping and map distribution of satellite tracking results- initially every 7-10 days, thereafter once a month. And/or possibility of automated daily map updating for each turtle through state-of-the-art Stretch web site.

-Coordination of public relations educational outreach, including web site development. How best to support each other's plans. Two separate website plans or one?

-ANA All Nippon Airways Turtle Motif passenger planes- possible avenue for additional advertising of Stretch.

-Feasibility of an outside well-ventilated and shaded area to do the attachment of satellite tags.

-Practice attachment of mock satellite tag during the present visit to adapt for different design of the new Spot 387 tag.

-Locally sourced fresh polyester and epoxy resins for practice attachment of a mock satellite tag in preparation for April/May 2023 attachments.

Inventory TAKEN 11/18/22 FRIDAY before TRIAL Attachment (24)

50+20
~~40~~ Stir Sticks
20+5 Brushes -
9 Cups
3 Plastic cups

1 - Dropper pipette
5 - Rags

1 UV Light + Glasses
28 Plastic cups
1 Bastard

Glass cloth
1 roll 1" fine weave
1/4 roll - 2" course Tape
2' Carbon cloth
2' - 1/2" Cloth
36 - brushes 1"

Buy double A & AAA batteries
'AA'

1 - Blue Tape
1 - Thermometer
1 - scrub sponge
3 pks Photo activator
10 - Zipper Bags -
12 - sandpaper 1/2 sheet
2 - Box cutters
1 - Pr. Scissors
2 Blk Marking pen
4 Scalpals
4 Biopsy punches
2 measuring Tap
1 - Pliers
4 - .5 cc cryovilles
2 - Elastomer
2 - 1 min Epoxy
1 box gloves
2 X 25 City mill Rags

# LIST OF ITEMS BEING PROVIDED

| |
|---|
| ST14 transmitters |
| Scrubber pad |
| Putty knife |
| Cloth towels |
| Coarse sandpaper |
| Silicone Elastomer kit |
| Trash bags |
| Mixing cups |
| Stirring sticks |
| Empty plastic dropper bottles |
| Scissors |
| Rubber gloves |

| |
|---|
| Fiberglass cloth kits |
| "Castro Cigar" cylinder kits |
| Indelible pen |
| Card for message on transmitter |
| Camera (one-time use) |

MASK, LOGOS

EYE DROPPER or PIPETTE

Items That Need to be Obtained in Your Country

1. Polyester laminating resin (= marine or surfboard laminating resin)
2. MEK Peroxide catalyst for resin
3. Rubbing alcohol (such as 70% isopropyl)
4. Lumber to construct a turtle holding container
5. Awning for shade and rain protection

ANTI FOULING PAINT

- PAPER TOWEL
- IR Thermometer

Resin 11-18-2022 1100-1230h

PNPA

Resin + Cloth- Ambient T = 15°c

Resin + cloth + natural Light

Time
0 - 15.9
3 - 15.9
5 - 15.2

(No reaction in shaded area)

Resin + UV Light

10" - 5 sec

Time
0 - 15.9°
0:45 - 31.6
2m 30.4
3 ~~2~~m - 23.7
5m 19

Never got above 32°c
5 sec Exposure at 10"

1 min 37° -
2m 32.1

1m 31°c
2m 27
- 5 more
37
5 min 29.9

Epoxy — 1 min Epoxy PNPA 11-18-22

| Time | | Thinner coat | | 5 min Epoxy 1st coat Supplied By WC |
|---|---|---|---|---|
| 1 min | 26° | 2 min = 20°c | | 3 m - 21 |
| 2 min | 57°c | 2:34 | 21°c | 4 m - 21 ON CARD BOARD |
| 3 min | 44°c | 3:30 | 24°c | 5 m - 27 |
| | | 4:00 | 25.2°c | 6 min ~32°c see photos |
| | | 4:35 | 28.9 | 6.5 - 36°c |
| | | 5:00 | 31.9 | 7.5 - 53°c |
| | | 5:15 | 38.4 | 9 - 34.1 |
| | | 5:46 | 41.1 | 6:20 - 54.9°c |
| | | 5:53 | 46.6 | 7:00 - 47.8 |
| | | 6:05 | 57.8 | |

ON CARD BOARD
see photos

Experimental attachment

11-18-2022
PNPA

SCL = 30.3 cm

CCW = 24.9 cm

22°
23
1:30 - 23°
3:30 - 24
6:41 28

Carapace Temp. 22.9 °C at start
Mixing Elastomer - 1350 - 1537 finished work

Finished up turtle w/ carbon fiber bumper in front
I think I would like to add a drop or 2 of MEK to make sure the resin will harden over time.

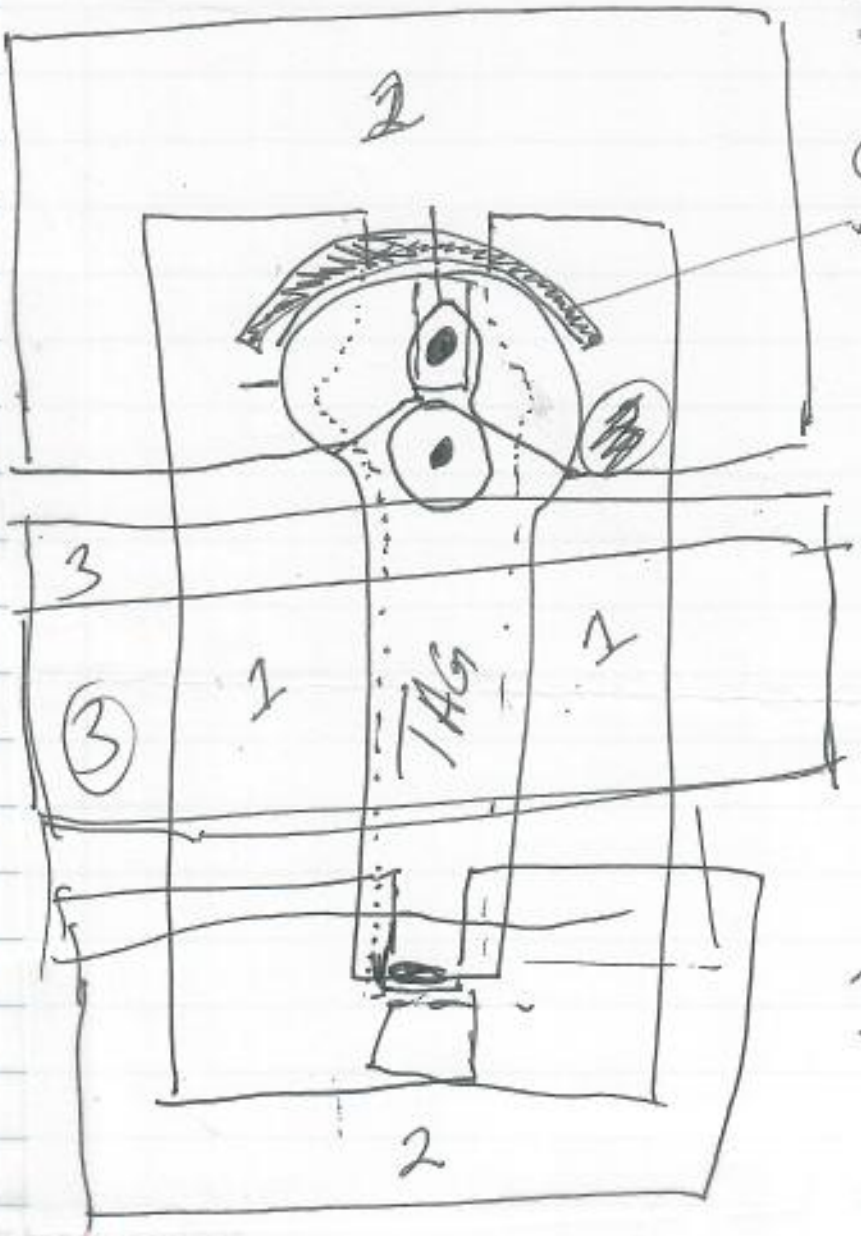
During attachment using UV resin there was no time that surface temp got above 30°C.
Keeping UV flashlight exposure to ≤ 10 sec from ~ 8-10 inches keeps the reaction slow & the temperature low. The "cure" time is still only about 10-15 min.

No. 1 - 2 side pieces
No. 2 - Bow & stern pieces
No. 3 - Cross Straps x 2

Recomendation - Make the side pieces wider to give more area of shell attachment

11/18/2022 – Attachment Design
Wildlife Cam – Spot 6-387 version

By MARC RICE



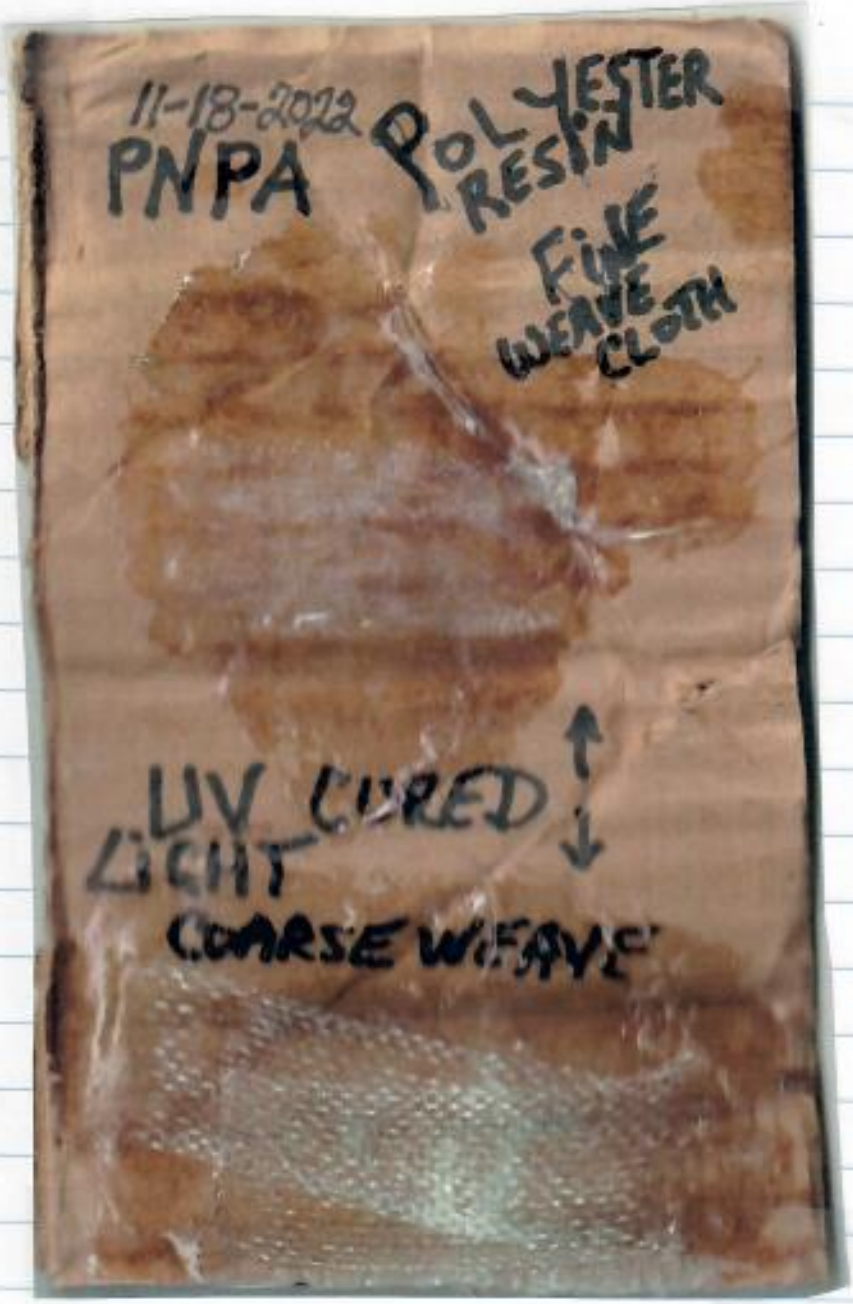

3 LAYERS TOTAL

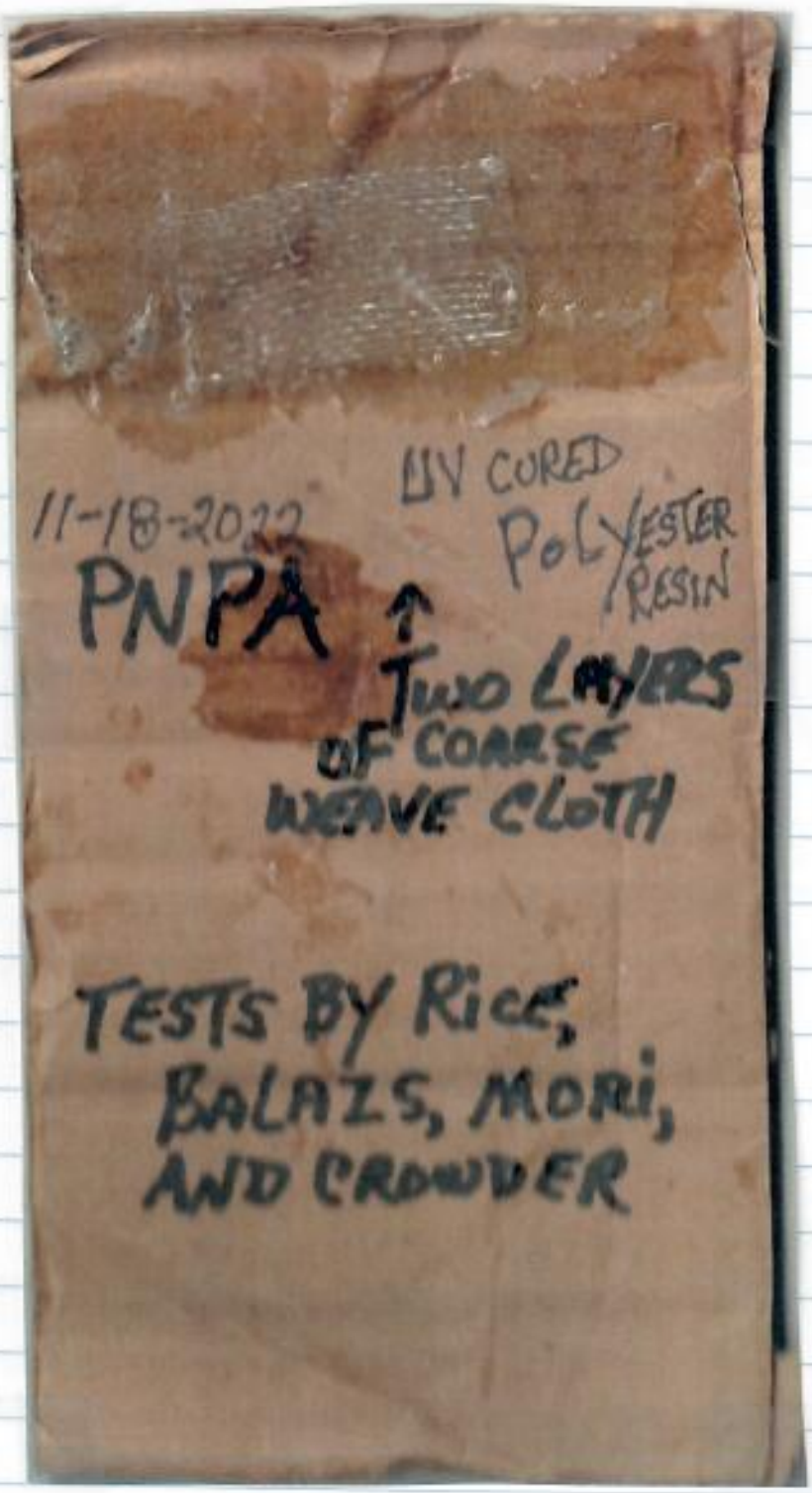

TESTS BY RICE BALAZS
Supplier Epoxy 5 minute
By WE
AT 7.5 MIN =
11-18-2022
53°C
PNPA
(=127.4°F)
54.9°C
(130.8°F)
THIN COAT


**Sent:** Friday, November 25, 2022 1:30 AM
**To:** Marc Rice <mrice@hpa.edu>; Marc Rice <mrice@hpa.edu>; Larry B. Crowder <lbcrowd@stanford.edu>
**Subject:** About Burns

"What temperature water will burn human skin Celsius?"
Answer- Studies show that a temperature of 52 degrees C (125 degrees F) can cause a full-thickness skin burn in 2 minutes and a temperature of 54 degrees C (130 degrees F) can result in a full-thickness skin burn in 30 seconds."

GB comment- I suspect the growing tissue immediately under the thin scutes of our small loggerheads are more se than human skin.


11-18-2022
PNPA
POLYESTER RESIN
FINE WEAVE CLOTH
UV CURED
LIGHT
COARSE WEAVE


11-18-2022
UV CURED
POLYESTER
RESIN
PNPA
TWO LAYERS
OF COARSE
WEAVE CLOTH
TESTS BY RICE,
BALAZS, MORI,
AND CROWDER

STRETCH NAGOYA

# FIRST DAY TALKING POINTS

November 16, 2022


STRETCH Goodwill Coordinating Meeting

Talking Points for the STRETCH Goodwill Coordinating Meeting with PNPA and Kochi University Colleagues, 16-18 November 2022.

---

-Welcome and Self-Introductions- Words of Mutual Appreciation.

Very cordial and respectful day of meetings, renewing old acquaintances and making new ones.

- Overview and History of the Stretch Project- by Professor Crowder including 12-min video of Larry's Stretch presentation.
Larry Presented his PICES talk and fielded questions about the STRETCH project. Question and answer session followed.

LINK TO LARRY'S STRETCH TALK

-Update on rearing of cohort Year 1 turtles for 2023 release, and cohort Year 2 turtles for 2024 release. Visit to see the turtles and learn about rearing techniques.

Today we will visit the juvenile turtles we will be deploying with satellite tags. Just got back from visiting our the turtles and they look wonderful. healthy and growing. I will post videos soon.

There are 29 turtles in the 1st cohort and there are 30 turtles in the second cohort and they are in a separate facility... videos on todays post.

-Update to the extent known on ship schedule for late April/early May 2023 and Japan port of departure.

Director Kurita said that we will know the date of the ships sailing 1 month in advance with a variation of plus of minus 3 days. We learned that sailing times in late March, early April might be available. They would really like to do late March.

-Possibility of holding a Bon Voyage; formal send-off "Red Ribbon Cutting & quot; ceremony at PNPA for the Stretch turtles- including banners, publicity and attendance by local o2cials MOL o2cials school children news media and attendance by local, MOL offi2cials, school children, news media, and the general public.

The sailing will begin at Yokohama which is about 4 hours away from Nagoya.

Security is extremely strict around the MOL port of departure and any sort of bon voyage is impossible. A small departure ceremony could occur at

the aquarium but there was seemingly little interest in anything too extensive.

MASANORI MORI - raising turtles and will travel on the ship to deploy them.

-Possibility and/or the need/importance for Kurita, Saito, Crowder, Rice and Balazs together to meet in person with MOL O3cials. A courtesy visit to pay respects and express appreciation.

Director Kurita will communicate with MOL to determine if they would welcome any sort of a courtesy call.

Kurita san said that a visit was unnecessary.

-Ship's Ports of Call in Mexico/Panama Canal and the USA East Coast.

Director Kurita told us the probable port of calls but this seems to be somewhat sensitive so I will not share it online here. Larry, George or I can share individually if needed.

Cleared to publish: Port of calls will be Lazaro Cardena and ~~Cristobol~~ BALBOA Panama and it appears that the Japanese team will be able to fly out of L Cardena to get back to Japan via LAX or SFO. However, transport to the airport is difficult.

- USA and other Visas for Professor Saito and PNPA person accompany the turtles for release.

This was discussed but was put on hold pending the decision on where the deployment team wants to depart the ship. George and Larry assured Kurita san that one or both of them would meet the team in LA or SF to help smooth the trip home.

-Traveler Health Insurance Coverage for Professor Saito and PNPA person.

It seems to me that Director Kurita is well aware of the various logistic and regulatory requirements of travel for his team.

- Travel expenses to cover transport to ship, shipboard lodging, hotel lodging East Coast USA, meals and incidentals, and ight home to Japan (to place of residence) for Professor Saito and PNPA person.

Larry is working with everyone to make sure the appropriate payments to the aquarium and staff and Dr. Saito occur as smoothing as possible.

Yesterday, we came to an agreement about funds and sourcing for PNPA (raising turtles) and the deployment team, etc.

-Shipboard internet access and Iridium satellite phone for Professor Saito and PNPA person.

Internet access is limited to 3 hours a day onboard the ship so we agreed that it would be wise for STRETCH to supply the PNPA team with an Iridium Satellite phone.

STRETCH will provide a sat phone and service for the deployment team.

-PIT tags/4ipper tag(s) for the Stretch turtles.

Flipper tags and PIT tagging was discussed and tags and procedures were agreed upon. STRETCH will purchase 100 PIT tags for the project (PNPA will put in a Trovan PIT tag in addition) and both STRETCH and PNPA will apply a metal tag with appropriate addresses on them.

-Final date/deadline for determining release coordinates for the turtles. Pending decision by Jeff P and Dana

Pending decision by Jeff Pand Dana.

Back-up release plan, should sea conditions not allow opening the door close to sea surface shown in Director Kuritas photo. Ropes, baskets, materials and assembly for lowering and release of the turtles from a higher deck, if it becomes necessary.

Directory Kurita has one backup person (himself) in case one of the current deployment team gets ill or cannot make the dates of the sailing. He also felt that there was no need for ropes, baskets, materials, etc. for

deployment from a higher deck. Kurita san did say that they will have lines and baskets to do the lowering from the side deck.

-Non-invasive samples from Stretch turtles for genetics by Japanese researchers (Kochi University?)

Everyone agreed that we should take blood samples well in advance of the release and store them in -85 C freezer

Tomomi Saito will check with colleagues about analysis of genetic samples

-Video documentation contracted expert from Japan to accompany Professor Saito and PNPA person; video of rearing of turtles and of tag attachment work; video of egg collection and initial hatchling rearing at Kochi University.

I think that the PNPA/ Kochi U team will need to figure out a way to take video and photos of the deployment as Director Kurita said emphatically that there would not be room for anyone else on the ship.

Tomomi Saito has agreed to do the video documentation of the transport and release of cohort 1. STRETCH will supply camera equipment to Saito san for the trip.

-March/April 2023 satellite tag attachment team- students from the Hawaii PreparatoryAcademy (HPA)- lodging, meals and other coordination, including opportunities for educational group interactions, cross-cultural sessions, with students from the Nagoya area.

Not discussed

-Mapping and map distribution of satellite tracking results- initially every 7-10 days,thereafter once a month. And/or possibility of automated daily map updating for each turtle through state-of-the-art Stretch web site.

Not discussed

-Coordination of public relations educational outreach, including web site development.How best to support each other plans. Two separate website plans or one?

The PNPA web site person and the Director indicated that they would do minimal PNPA STRETCH web pages and wish to link to the STRETCH web site for all of the tracking and outreach stuff.

Mishima san is the person in charge of the PNPA web site

-ANA All Nippon Airways Turtle Motif passenger planes- possible avenue for additional advertising of Stretch.

Discussed - anything is possible but the Japan team did not seem to be terribly interested.

-Feasibility of an outside well-ventilated and shaded area to do the attachment of satellite tags.

We will do an attachment outside this morning so we will have a better idea of what we can do. The attachment location just outside of Chelonia Institute seemed to work fine. We will make room in the area, add tables and be able to have 5 to 10 animals in the work area at a time.

-Practice attachment of mock satellite tag during the present visit to adapt for different design of the new Spot 387 tag.

Practice attachment went well. We spent some time measuring curing temperatures of polyester resin versus epoxy and found that epoxy got very warm (57$^0$C)... both the 1 min and the 5 min epoxy. We were able to control the max temp very well on the POLY resin.

The tag is now on a member of cohort 1 and will remain on until we return (hopefully) in March or April.

-Locally sourced fresh polyester and epoxy resins for practice attachment of a mock satellite tag in preparation for April/May 2023 attachments.

We have a locally sourced PR but we are not terribly happy with its consistency and it is very expensive. Marc will investigate shipping fiberglass Hawaii PR from Hawaii.

*November 12, 2022*

## STRETCH Trip- Day one

*November 13, 2022*

11/12/2022 To see more about the STRETCH project, please visit the HPA Sea Turtle Research Program web site . To learn more about the North Paci7c Loggerheads. we are working with, please visit George Balazs' web ...

**READ MORE**

11-20-2022

- GOPRO HERO10
  W/Head MOUNT
  EXTRA BATTERY
  256 GB CARD
  GIGBITS
- Head STRAP Quickclip
- AI SHIN-OSAKA
  11/26/22
  HC-VX981
  K-9K
  800
- Lessons YOUTUBE
  JAPANESE

380x2
25x2
47
88
800
77

Rearing over
Time

azon.com

## Details for Order #111-6781900-8720250

Print this page for your records.

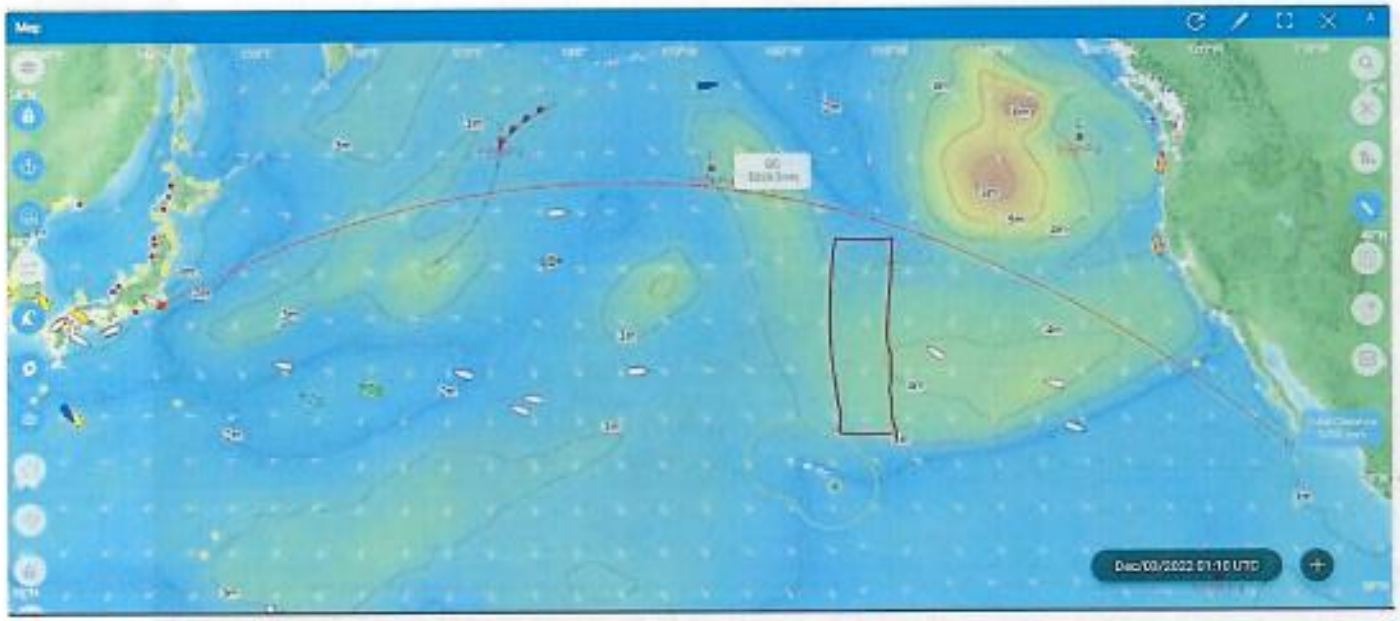
**Order Placed:** December 15, 2022
**Amazon.com order number:** 111-6781900-8720250
**Order Total: $1,721.45**

HAND CARRIED TO JAPAN 1/2023

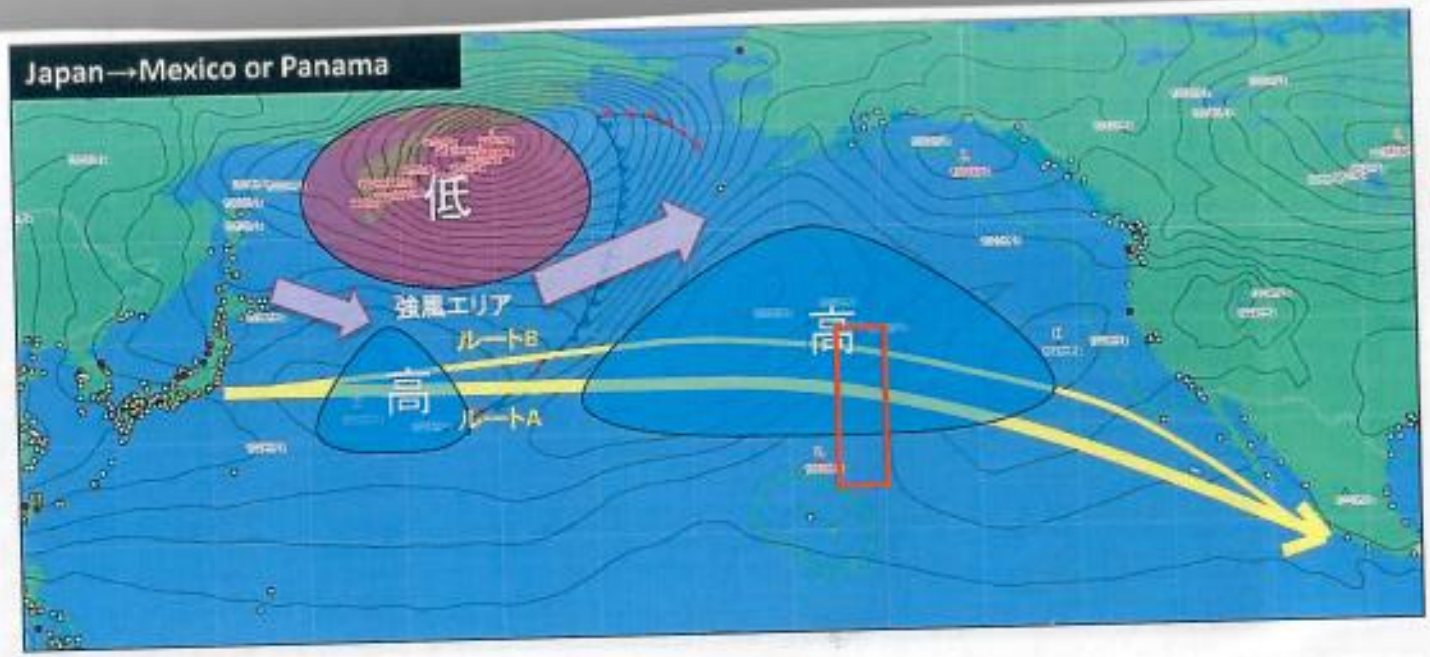
**~~Not Yet Shipped~~**

| Items Ordered | Price |
|---|---|
| 2 of: *GoPro Head Strap with QuickClip - Official GoPro Mount,Black*, GoPro<br>Sold by: Amazon.com Services LLC<br>Condition: New | $16.99 |
| 2 of: *SanDisk 256GB Extreme Pro Micro SD Memory Card for GoPro Hero 10 Black Camera Hero10 UHS-1 U3 / V30 A2 4K Class 10 (SDSQXCZ-256G-GN6MA) Bundle with 1 Everything But Stromboli SDXC & Micro Card Reader*<br>Sold by: CWP Online (seller profile)<br>Condition: New | $41.11 |
| 2 of: *GoPro HERO10 Black Bundle + Dual Battery Charger + 1 Extra Battery + 64GB SD Card - E-Commerce Packaging - Waterproof Action Camera with Front LCD & Touch Rear Screens, 5.3K60 Ultra HD Video*<br>Sold by: TTP Retail (seller profile) \| Product question? Ask Seller<br>Condition: New | $384.99 |
| 2 of: *Dream Bull Chest Mount Harness Chesty Vest Head Mount Strap for Action Camera Compatible with GoPro Hero 11,10,9,8,Max,Go Pro Hero 7,6, 5,4, Session,3+,3,Hero (2018),Fusion,DJI Osmo,AKASO*<br>Sold by: Dream-Bull Direct (seller profile) \| Product question? Ask Seller<br>Condition: New | $20.99 |
| 1 of: *Panasonic 4K Ultra HD Video Camera Camcorder HC-VX981K, 20X Optical Zoom, 1/2.3-Inch BSI Sensor, HDR Capture, Wi-Fi Smartphone Multi Scene Video Capture (Black)*, PANASONIC<br>Sold by: Amazon.com Services LLC<br>Condition: New | $697.99 |

Fig. 1




OVER


Japan→Mexico or Panama
低
強風エリア
ルートB
高
ルートA
高

**From:** 栗田　正徳 <m-kurita@nagoyaminato.or.jp>
**Sent:** Monday, January 9, 2023 7:52:21 PM
**To:** Larry B. Crowder <lbcrowd@stanford.edu>; ogurayama102@gmail.com <ogurayama102@gmail.com>
**Cc:** Larry.Crowder@stanford.edu <Larry.Crowder@stanford.edu>; honu world <itsahonuworldinhawaii@hotmail.com>; Dana K Briscoe <dbriscoe@stanford.edu>; Polovinajeff@gmail.com <polovinajeff@gmail.com>; Jeffrey Seminoff <jeffrey.seminoff@noaa.gov>; t-saito@kochi-u.ac.jp <t-saito@kochi-u.ac.jp>
**Subject:** Re: Loggerhead STRETCH 2023 Deployments

Dear Larry-san

I perfectly understand your worry. No need for you to apologize.

I told MOL that our earliest option possible is depart in the late March and release in the early April and that we'll see the climate situation of December and then decide the releasing point. So, I don't think our explanation to them should be much different than it's been.

The most important thing we must keep in mind is that we cannot ask MOL of any change of its route because it's totally at their discretion depending on the ocean condition of the time.

The shortest route is shown in Fig. 1. Northern, shortest. Great Circle Route

The route in Fig.2, which was shown before, is only an example when the ocean is rough and the ship avoids low-pressure. It's not until immediately before that we'll know the exact route to be taken.

In order to shake off our worries, we let MOL know when it's safe for the turtles to be released even on the farthest north route (Fig.1) and that we are to be on the ship after that. That's the most important point. Depending on the schedule, I might need to take over Saito san.

I learned recently from MOL that although there are multiple ships a month to go via Panama from Japan as I said in the meeting, our chance to be aboard is limited. Even if MOL owns ships and manages to schedule, there's a case a company in Singapore operates. Those ships might not be available to us. And MOL also says disembarking in Lazaro Cardenas is not recommendable at all. Being aboard for extra days, I think we'd best think getting off the ship in Panama thinking safety first. Although it's safe to disembark in Panama, we need a barge from the ship to the port as they do not unload cars there. MOL is now checking on the cost.

The number of ships that we can possibly go aboard gets slimmed, but it does not rule out our plan this year. Only the release timing may delay and it may not suit to the originally planned members to go aboard.

I trust out plan gets done.

Monday 1/16/23 ZOOM Steering boundary (July-Sept)
JULY ?
Thermocline - depth
Isotherm - Lines

******************************

Masanori Kurita
Director
Port of Nagoya Public Aquarium
1-3 Minato-Machi, Minato-ku
Nagoya Japan 455-0033

Tel +81-52-654-7080
Fax +81-52-654-7001

Water Temp in tank on Boat

STRETCH Oceanography Meeting 18 January 2023

Zoom link to meeting

Wednesday Time to acclimate

1 pm

1/18/23

1. Greetings and brief updates
2. Review of latest information
   a. 2023 cohort deployment
   b. Current ocean state and ENSO forecast
3. Exploratory analyses for 2023 turtle release
   a. Sea surface temperatures along shipping route
   b. Location of historic tracks moving across eastern North Pacific
   c. Transit time from release location to thermal corridor
4. Next steps
   a. Oceanography: additional analyses (e.g. Chl-a/winds/currents)
   b. Deployment: George's upcoming Japan trip
5. Any other project news/updates


UA JANUARY 2023

| Flight | Departure Date | Departure Time | Departure City | Arrival Date | Arrival Time | Arrival City |
|---|---|---|---|---|---|---|
| 449 | 1/21/2023 | 1:10 PM | HNL | 1/22/2023 | 6:45 PM | KIX |
| 450 | 1/29/2023 | 8:45 PM | KIX | 1/29/2023 | 8:50 AM | HNL |

Sunday / 845PM

ARRIVE HNL

N23

4WH /HNL HONOLULU

BALAZS/GEORGE

FROM HONOLULU

TO OSAKA KANSAI

HA 449 C 21JAN11OP

********** GOLD

* *

* BOARDING PASS *

**********

ZUXGIG /HA

PREMIUM

SEAT/SMOKE

2G NO

********** **********

********** ZONE 1 070 **********

********** ELECTRONIC

********** NOTICE: PASSENGERS MUST BE AT THE GATE OR ON THE AIRCRAFT 30 MINUTES PRIOR TO DEPARTURE FOR ALL FLIGHTS. 1 173 21921829

GOLD

BALAZS/GEORGE

115219970

FROM HONOLULU

TO OSAKA KANSAI

HAWAIIAN AIRLINES

CARRIER FLIGHT CLASS DATE TIME

449 C 21JAN11

DATE BOARDING TIME SEAT SMOKE

8 1225P 2G

ZONE 1 070

PREMIUM

ELECTRONIC

HNL64VH 1039 21JAN

BALAZS/GEORGE

BALAZS/GEORGE

KIX

SKD 1310

449

HA

HNL

SKD 2045

450

HA

HONOLULU HI

HA 32 18 97

OSAKA KANSAI JP

BOARDING PASS

GOLD

BALAZS/GEORGE

HA 115219970

FROM

TO OSAKA KANSAI

HONOLULU

HAWAIIAN AIRLINES

CARRIER FLIGHT CLASS DATE TIME

HA 450 C 29JAN845P

GATE BOARDING TIME SEAT SMOKE

12 755P 2G NO

ZONE 1 011

PREMIUM

ELECTRONIC

SXL /KIX

1/26/23 Thursday
PNPA
Kurita/GB
Lunch

SA RA

JAPANESE SAKE & TEMPURA

OSAKA-NAGOYA SUNDAY 21 - 29 JAN. SUNDAY 2023 (56)

× Close Previous Next

## Approximate Schedule of Balazs Trip to Japan 22-29 January

HW honu world
To: Larry B. Crowder; jeffrey.seminoff@noaa.gov; Dana Briscoe +6 others
Mon 1/16/2023 1:09 AM

Dear Stretch Full Team- I'll be traveling to Japan starting next Sunday. Here's a sketch of my activities and movements. Note please this trip is not being funded with Stretch monies. However, to a large extent I'll be doing things in support of Stretch. The trip is being self-funded. Aloha, George

January 22 Sunday- arrive Kansai in the evening stay overnight at Airport Nikko Hotel.

January 23 Monday- Train to Nagoya check in at Crowne Plaza Hotel Kanayama mid-afternoon.

January 24 Tuesday- Late morning visit PNPA, meet with Kurita-san and Mori-san. Host them for lunch nearby or on site. Afternoon spend time with Stretch turtles (both year classes), observe and video feeding and other behaviors. Check mock transmitter on turtle.

January 25 Wednesday- take train to various places to be determined. Note I have a green car JR pass so will use it for enjoyment. No set schedule, entirely flexible on my own.

January 26- Thursday- Late morning visit PNPA, meet with Kurita-san and Mori-san for a short time. Observe Stretch Turtles. Tour aquarium and enjoy.

January 27 Friday late morning- depart Crowne Plaza Hotel take train to Kochi City arrive late afternoon. Check in at Comfort Hotel Kochi near train station.

January 28 Saturday meet with Saito-san for breakfast, visit his university, visit Kochi Beach where Stretch turtles originate. Host his family for dinner at a restaurant of their liking.

January 29 Sunday late morning check out of hotel and take train to Osaka > Kansai for flight back to Honolulu departing early evening. Arrive home same day in Honolulu at 9am.

ISSUED BY
TSA PRECHK
NAME OF PASSENGER (NOT TRANSFERABLE)
BALAZS/GEORGE
FROM OSAKA KANSAI
TO HONOLULU

29JAN23 JP
SNL /KIX OSAKA KANSAI

CARRIER FLIGHT CLASS DATE TIME
HA 450 C 29JAN845P

GOLD
PNR CODE ZOXGIG /HA

BOARDING PASS

PREMIUM
SEAT/SMOKE
2G NO

ZONE 1 011

ELECTRONIC

NOTICE: PASSENGERS MUST BE AT THE GATE OR ON THE AIRCRAFT 30 MINUTES PRIOR TO DEPARTURE FOR ALL FLIGHTS.

2 173 2192182972 5

6C = 46F
2C = 34F

NEED KASADERA



MITSUKI
OCT FEB AR SOUTH
MORI HAWAII
2 SECTIONS SEPARATED
22° NOW / moved FROM 27C IN DEC.
SLOW GROWTH Reduce
TEST TURTLE ON DISPLAY food
26°
Seawater piping
TAKEOUT SHIP
FIRE DINNER INVITE
Photo OF ME W/TURTLE
INCONEL left
TROJAN RIGHT
All Measurement + EXP. ATTACH
MIYUKI CORSO
Get Thermometer
More Food LABOR
TANKS SPACE CONTAINERS

Lowered 1°C each week

INCONEL TAG

5367 LF
5305 LF

Moderately Deformed CARAPACES

Diet COMPO? =

HAWAIIAN PUBLIBRES

# MOVEMENTS & ACTIVITIES 21 – 29 JANUARY 2023



1/21 SAT. Depart HNL
1/22 SUN. ARRIVE KIX 630pm - Long Emigration
NIKKO Hotel KIX
1/23 MONDAY Breakfast McD - RAIL PASS - Green Car
TRAIN TO Shin OSAKA / OSAKA → NAGOYA
NIGHT 1 ANA CROWNE PLAZA. DINNER Sushi
1/24 MONDAY - TO PNPA Met with KUAITA,
Tuesday MORI - Saw Chizuru (for book)
← See DISCUSSION List. Lunch at Food Court.
NIGHT 2 Shinkansen < > Hamamatsu - Light Snow.
ANA WED. DARK Return - Nothing to See OUT WINDOW
NIGHT 2 AT Night, Wednesday
1/25 LIGHT SNOW then Sun 8am-9am.
TRAINS Called POLOVINA Re Month Consistency of
2 HRS LATE Release. TO SHIZUOKA SUMP CASTLE ABDIMA Return
DINNER AT HIKARI Sushi Restaurant
NIGHT 1
1/26/23 4 TO PNPA ARRIVE 11AM Met w/ KUNITA
Thursday DISCUSSION TOPIC on Next Page
MORI TO ME TO WATCH Turtles being fed.
Saw and photo Attachment Test Turtle
TAG NOT CLINCHED. Feeding 5-6 kg
need to compute DAILY IN NOV at 27C, NOW 2kg Daily 22°
PM TOUR By KIYO of SPECIMENS.
VISIT BY NOZUMI & MITSUKI 4 MONTHS OLD.
MID APRIL BACK WORKING A PNPA

MEANS HOPE = NOZUMI TOHYAMAZAKI

1/28/2023
KOCHI
w/ SAITO

3-5 g wet wt per day

At 25° SST
more active
Large Tuna
Small group than Indiv
as needed

MR. YOSHINORI KUMAZAWA
NAME OF "PATHWAY" INVENTOR
Kochi Pond
He Died 2 years ago

SHIKOKU AQUARIUM
KAGAWA JAPAN

Udatsu Station

Yoshi's Aquarium
UTAZU-CHO

NOZUMI TOHYAMAZAKI

NANAMI SAITO
8 YO
MEANS "7 OCEANS"

SAITO
Screening
Chose from 100
SWIM CRAWL ETC
Nori - Examin

Means FULL MOON

August 14, 2022 Mitsuki 5 MONTHS OLD Birthday

Continued Thursday Night 4 ANA/KANAYAMA - Big Mac Dinner.

1/27/23 up 700AMS - Depart ~ 10AM HIKARI Friday NAGOYA TO OKAYAMA; NAMPU TO KOCHI To Kochi Comfort Hotel Rm 912

Usa = Kochi Beach

1/28/2023 SAT. Breakfast 9AM w/ SAITO; Drove to Kochi Beach → Usa MBI Kochi Univ. his office Met Students. Toured FACILITY. Drove TO Hatchery enclosure ACROSS Highway from "LAWIAKEA Beach STORE" "ALOHA VILLAGE" COLD GOLD + WIND but clear skies.

OVER

Comfort™
by CHOICE HOTELS

## コンフォートホテル高知

〒780-0056　高知県高知市北本町２丁目 2-12
TEL. 088-884-2811　FAX. 088-884-2812

**Comfort Hotel Kochi**
2-2-12 Kita-Honmachi, Kochi-City, Kochi, 780-0056 Japan

●ご予約は、公式 Webサイトから https://www.choice-hotels.jp

**交通のご案内 Transportation**

JR「高知」駅南口より
徒歩約５分。

高知自動車道「高知」IC より
車で約９分。

「高知龍馬」空港より
「高知駅前」まで空港連絡バスで
約 24 分。

5-minute walk from South Exit of JR Kochi Station.

9-minute drive from Kochi Exit on Kochi Expressway.

24-minute drive from Kochi Ryoma Airport to Kochieki mae by Kochi Airport Connecting Bus.


WAKATSUKI Motoki

Now School house Aquarium Director Mutsuto

はこべ本店 はこべいの店

VISITED HAWAII w/ OKINAWA GRAD STUDENT STUDYING HAWKSBILL


Aloha Village
Tsuiseki-ul Shop

太平洋を隔てて
ハワイと向き合う甲殻海岸に
"小さなハワイ村"
「AlohaVillage」を創っています。

**中村　雄大**
アロハヴィレッジ office
〒781-0322
高知市春野町甲殻1422-27
TEL 088-854-8588・HP 080-5666-3333
e-mail : blueheaven.mail@gmail.com

FROM NAGOYA

SAITO STUDENT N=7

**Usa Marine Biological Institute Kochi University**
194 Inoshiri, Usa, Tosa, Kochi
781-1164 Japan

**Noah Yamaguchi**

Mobile phone: +81-90-8134-8869
✓E-mail: noaymgch53@gmail.com

1/28/23 KOCHI BEACH

OVER

Usa Marine Biological Institute Kochi University


OVER for other student

Mikihiro Nakagawa
幹大 中川
✓✓ mikimiki2000@ezweb.ne.jp
b193s027@s.kochi-u.ac.jp
一真 金本
✓ kazu80220308@gmail.com

Welcome to Kochi!
I'm happy to see you!

from NAGOYA

OVER

X Close Previous Next

**Noted 1/26 wednesday** GHB

HW honu world
To: You
Thu 1/26/2023 7:51 AM

- 29 turtles total (that includes 2 badly deformed & 2 moderately deformed. Photos taken of 2 moderately.
- Deformity not noted in any when hatchlings
- Seawater now at 22C in Nov was 27C. Feeding 2 kg daily now in Nov was 5-6 kg.
- ~~26~~ 27 turtles available includes mock turtle. (4 SWAYBACK)
- Extension of contract w/Stanford needed since release is >= July and contract ends in June. Cites requires contract to be valid when release happens.
- October thru February MOL route is different- shifts far south.
- Change in release month March/April to July/August 4 months) means added expenses for aquarium- food, labor, additional containers.
- Visit for Mori and/or Kurita to Hawaii.

from hot nests POST TRIP
premature closure
of epiphyseal plates
starting well before 14-months
Jeanelle
WYNNE KEN

1/28/23 Mouth of Niyodo River
8/2/21 Nesting DATE
9/23/21 HATCHING DATE 114 EGGS
SUCCESS 83.2% 94/113 Temp 29.5 ± 1.7
31.9 – 25.2

Re: Congrats on your safe return

from Tomomi-san

斉藤　知己 <t-saito@kochi-u.ac.jp>
To: You

1/31/2023

Tue 1/31/2023 4:57 AM

Dear George-san,

As I mentioned at my office, the 30 hatchlings were selected from about 100 individuals. Moreover, I sent them after keeping at our facility about a month. During the period of a month at our tank, we observed the appearance and swimming behavior of them many times. Also, although we did not measure the moisture content in the sand of the hatchery, it is not thought that it was insufficient, considering the body shape and activity of most of them.

As for morphological abnormalities, if they are of a nature that causes deformity during the developmental stage, I am sorry, and it is impossible to detect them at the time of hatching. As a countermeasure for this, from next summer onwards, I will send more than 40 inds to Nagoya instead of 30 inds and have them selected during raising.

There is one thing that has occurred to me over a few days, thinking about my past experiences. It's a little long, but please be patient and read.

It is possible that the 2021 hatchlings had gotten pneumonia during the cold winter in Nagoya (around 2021-2022).

Around 1995, when Dr. Uchida and we succeeded in artificial reproduction at the Nagoya Aquarium, we obtained many hatchlings, but we did not come up with an appropriate raising method, and many of them caught pneumonia.
The cause was that the oil film and dirt derived from the food containing a lot of lipid that floated on the surface of the tank were absorbed by the turtles. The oil film seems to contain not only dirt, but also a multitude of harmful bacteria to grow on. Turtles breathe through their lungs, so if they inhale the oil film, they will get pneumonia especially in cold winter.
It is also more likely to occur in winter, when the difference between water temperature and air temperature is significant. We and veterinarians came to the diagnosis by autopsying a number of dead turtles.
This causes partial or total organ death, and the alveoli remain atrophied rather than inflated, making it difficult to maintain balance while swimming, resulting in erratic swimming.
In addition, they are supposed to be symmetrical, but they grow up with a strange body shape. When such inds died and an autopsy was performed, it was determined that the lung cells did not appear to heal, leaving the lungs collapsed and atrophied. Also, although not proven, necrosis of lung cells due to pneumonia may affect the development of the carapace around there.

Therefore, even if we don't know that hatchling had pneumonia when they were small, it may be discovered after they grow up and their swimming balance deteriorates.

By the way, we, the turtle breeding staff and veterinarians, overcame this symptom by devising a system that actively drains, exchanges the surface water and uses UV. Furthermore, pneumonia is less likely to occur in sunny and warm places. Since then, the number of deaths from pneumonia has decreased significantly. Although this is not written anywhere as the paper, it was a common understanding among the staff and veterinarians at Nagoya Aquarium before 2010.

I don't know how many current staff in charge know the hardships of that time. If the current staff were to continue using the system inherited from the predecessor, nothing would have happened, so it is possible that they may not have seen turtles with pneumonia. When it became necessary to replace the tank for some reason, it is possible that the current staff did not follow the pipework devise that was used in the past because they did not think about it at all.

Or if the 2021 hatchlings were kept in a facility with a greenhouse on the south side of the Nagoya Aquarium grounds, I think they would be less susceptible to the disease, but currently the west side of the grounds where they are kept does not get much sun. I think the temperature is lower.

Thank you for reading my long delusion.
It's just my opinion, but I can't be sure.

66

# High resting metabolic rates with low thermal dependence induce active dives in overwintering Pacific juvenile loggerhead turtles

**Chihiro Kinoshita[1,*], Takuya Fukuoka[2], Yasuaki Niizuma[3], Tomoko Narazaki[1] and Katsufumi Sato[1]**

2018

**ABSTRACT**

The metabolic rate and activity of sea turtles generally decreases with decreasing seasonal ambient temperature. Juvenile loggerhead turtles in the Mediterranean Sea made prolonged inactive dives (>400 min), indicating a state of dormancy during the cold winter period. However, seasonal differences in dive duration were not detected in juvenile loggerheads in the western North Pacific, even though the ambient water temperature changed by more than 10°C. Thus, metabolic states might differ among populations, explaining differences in the diving behaviour of juveniles during winter. Here, we tested the hypothesis that the active overwintering behaviour of juvenile loggerheads in the western North Pacific is driven by a high resting metabolic rate (RMR) with low thermal dependence. The RMR of juveniles in the western North Pacific ($N$=13) was 1.4–5.7 times higher ($Q_{10}$=1.8) than that of juveniles in the Mediterranean Sea ($Q_{10}$=5.4). To validate the high RMR values in the western North Pacific, the difference between core body temperature and ambient water temperature ($\Delta T_b$) was estimated from measured RMR and was compared with measured $\Delta T_b$. The measured and estimated $\Delta T_b$ matched each other. In addition, most of the dives conducted by the turtles in the western North Pacific were within the calculated aerobic dive limit (cADL) expected from the measured metabolic rate. Our results indicate that high RMR with low thermal dependence induces active diving during the overwintering periods of juvenile loggerheads in the western North Pacific, supporting the suggestion that metabolic states differ among populations.

amazon.com

SGBGWv2Pwv

Purchase Order #: 63125482
Your order of April 11, 2023 (Order ID 111-6281078-1449808)

| Qty. | Item | Item Price | Total |
|---|---|---|---|
| 1 | uvBeast V2 - Black Light UV Flashlight with HIGH DEFINITION with Flood Effect 385-395nm UV Best for Commercial/ Domestic ... | $39.99 | $39.99 |
| | Kitchen | | |
| | X001O91ZLF | | |
| | 9I-326T-N81D 633632141072 (Sold by uvBeast(tm)) | | |
| 1 | Animal ID 20-Pack ISO Compliant Transponder RFID Microchip Tag | $27.99 | $27.99 |
| | Kitchen | | |
| | X001VBNO9H | | |
| | MRT212A 686907444835 (Sold by manruta) | | |

We've sent this part of your order to ensure quicker service. The other items will ship separately.

| | |
|---|---|
| Subtotal | $67.98 |
| Tax Collected | $3.20 |
| Shipment Total | $71.18 |

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1 or replace your item
-nazon.com/returns

0/G7kNJPdv/-3 of 3-//KSBD-KSBD-0/std-us-non48/0/0412-03:00/0411-17:45 PM7

21 FEB 2023
TUESDAY

68

**STRETCH PIs Meeting 21 February 2023 (4-5pm PST / 2-3pm HST / 1-2pm NZDT)**

ZOOM

Attendees: Balazs, Briscoe, Crowder, Polovina, Seminoff

200-320PM

Zoom link: https://stanford.zoom.us/j/98452984698?pwd=VVo4UEsxWW82MHpMNk1PanpLbnRadz09

salary ↑ Mari-SW

11-16 AUG ORION "Proof of Concept" Yellowfin

**Agenda**

1. Greetings and brief updates – All

Seminoff June Philippines

2. Recent trip to Japan – George
   a. Update on cohort rearing
   b. Swayback turtles

30 days

NARAZAKI et al. paper

Tiny [illegible] of ships

1) 3. Deployment & Oceanography update – George, Larry, Jeff P, Dana
   a. Possible June deployment for Year 1 cohort
   b. Physical oceanography along shipping route
   c. SST biweekly updates

2 wk updates "what's going on in 2023"

4. Stanford Accounts, rehiring Dana – Larry, Dana

5. Satellite tags – George
   a. Lotek 5G tag need ISTS

"changed expectations"

6. Onboard & Return considerations – George
   a. Water for turtles onboard/MOL seawater system
   b. Arrangements for PNPA/Kochi colleagues to return to Japan from Panama

7. Additional project or committee business – All

none 2024? Release

"The realities of the deployment" consistent year to year

DOESN'T have to be 2023 SEPT.

ALL TEAM Meeting 11:30AM — Wed. 4/5/23 ZOOM STRETCH

DANA SUBAWARD Signed off DANA

Need SHORT written description CC ALL of us

Could be HOT year

GULF of Calif. Jeff

"2 weeks before"

5 Day Before

171' to 257 w/25%

" 343 0%

"Getting A BAND TOGETHER"

LOCATION/DURATION

DENISE go?

— Gulf of Calif —

X Close Previous Next

## Re: STRETCH: SST Report & link to view

LC Larry B. Crowder <lbcrowd@stanford.edu>
To: You; Jeffrey Seminoff; dana kb
Cc: Polovinajeff@gmail.com; Alberto Abreu **+4 others**

Wed 4/5/2023 9:07 P

Brief agenda,

1. Appointments, equipment orders, contracts (Larry)
2. Emerging oceanographic conditions for 2023 deployment, Dana's temperature product (Daana)
3. Logistics for travel to Japan, tagging (mid-May to Mid-June depending on sailing dates) (Larry, George)
4. Any concerns or issues being ready in ONE MONTH to travel and tag turtles? (George and Marc)
5. Website development (Dana, Bianca, Jeff)
6. Other

See you in 20 minutes!

Larry

Larry B. Crowder (he, him, his)
Edward F. Ricketts Provostial Professor
of Marine Ecology and Conservation
And Senior Fellow, Woods Institute
for the Environment
Hopkins Marine Station of Stanford University
120 Oceanview Avenue, Pacific Grove, CA 93950

✕ Close Previous Next

# NEED TO ORDER-- Temperature Data Loggers Instrumentation- to record egg nest environment during incubation

SAITO NEED TO ORDER

HW honu world
To: You

Thu 2/9/2023 6:34 AM

ordered VIA STADFORD

**From:** 斉藤 知己 <t-saito@kochi-u.ac.jp>
**Sent:** Thursday, February 9, 2023 5:04 AM
**To:** honu world <itsahonuworldinhawaii@hotmail.com>
**Subject:** Re: Temperature Data Loggers- to record temperature in the egg nests during incubation

Dear George-san,

Next summer, I would like to install the following two types of loggers, HOBO MX Soil Moisture and Temperature Data Logger and TidbiT v2 Water Temperature Data Logger.

I've used Tidbit v2 before, so I have a reader that connects to my PC.

*HOBO MX Soil Moisture and Temperature Data Logger ..... 2 (for hatchery and incubator) 340. x 2 680.

https://www.onsetcomp.com/products/data-loggers/mx230x

HOBO MX Soil Moisture and Temperature Data Logger | Onset's HOBO and InTemp Data Loggers

Low-cost, fully integrated soil moisture loggers with convenient Bluetooth wireless data offload.

www.onsetcomp.com

*HOBO TidbiT v2 Water Temperature Data Logger ..... 4 (for inside nests) $169.00 EACH x4 676.

https://www.onsetcomp.com/products/data-loggers/utbi-001

HOBO TidbiT v2 Water Temperature Data Logger | Onset's HOBO and InTemp Data Loggers

TOTAL - 1356.

Only 3x4 cm, the tiny waterproof TidbiT v2 data logger measures temperatures over a wide range, providing 12-bit resolution and ±0.2 °C accuracy.

www.onsetcomp.com

**STRETCH Website Meeting Agenda & Notes**
**May 15, 2023 4 - 5pm PDT**
Zoom link

1PM HST MAY 15 MONDAY

Website link: www.loggerheadstretch.org
Password: japan

STRETCH & PNPA "On Turtle" STORYTELLING

1. **Welcome and brief updates:**
   **General**
   - June 2023 deployment date (Larry/George)
   - Tags and Argos updates (Marc/George)
   - Naming of turtles (Larry/George)
   - Meeting outcomes with GBMF team, Apr 26th (Larry/Dana/Bianca)

   LOGOS + # ON TURTLES

   Diet Study(?) ALBERTO

   **Website**
   - Website subscription status & timeline to launch (Dana/Bianca)
   - Goal for today: Team feedback & discussion of remaining to-do's before site goes live

   BANNER STRETCH IN JAPANESE

2. **Website discussion and feedback by page:**
   - ***To optimize our discussion, please take time to review the website and content before we meet. Link and password info are provided above***

   - **Home:** Discussion of content and map/Argos updates
   - **Team: Still need profile photos & contact info. Please review your photo, name, title, location and contact info, providing edits if necessary. Discuss inclusion of partners & links**
   - **Research sections**
     **Background:** Discussion of content
     **Overview:** Discussion of content; Additional info to be added upon deployment
     **FAQ:** Drafted text by Jeff S & Alberto; Addition of Oceanography text?
     **Education:** Potential student intern to help (Cali)
     **Resources:** Discussion of content for this page

   Blood Sample (ABRY Peter Dutton)

   PANAMA TURTLE PERSON

   - **Blog: Review conversation to include brief updates/news feed on Map page**
   - **Map: Discussion included above**
   - **Translation: Discussion of translation into Spanish and Japanese. Use of plug-in and then reviewed by someone fluent in each language.**

   TOCUMEN PANAMA UA#1500, 14Hours

3. **Any additional project business** (All)

栗田　正徳 <m-kurita@nagoyaminato.or.jp>

To: You; Masanori Mori (PNPA Turtle Chief); Tomomi SAITO  Wed 4/19/2023 7:46 AM

Cc: Larry B. Crowder; Jeff Polovina; Marc Rice; Dana Brisco

Colleagues,

I went to the MOL's head office in Tokyo yesterday to see the new contact personnel who took over in April and discussed the matter freshly.
I've just told them that El Nino is quite likely to emerge this year and that we must get the release done successfully.

Although the ship schedule is not finalized yet, there will be none before June 10. This may not be the good timing for Balazs san and Rice san, but I'm sorry there's nothing we can do about it.
They said that they have fewer ships available this year and that the preparation is harder. Having said that, I felt through the meeting that they are very cooperative. For the following years, they'll have more ships and that'll make their work easier than this year. I requested them to think about permitting a camera crew aboard once again.

In PNPA, a loggerhead turtle layed eggs on April 23. It'll be helpful for the release 2 years out.

**********

Masanori Kurita
Director
Port of Nagoya Public Aquarium
1-3 Minato-Machi, Minato-ku
Nagoya Japan 455-0033

Tel +81-52-654-7080
Fax +81-52-654-7001

# tracking little loggerheads

GB George Balazs

To: You

Fri 3/31/2023 3:25 AM

## Tracking early-stage juvenile loggerhead sea turtles in the North-East Atlantic Ocean

**Frederic Vandeperre[1,2], Martina Bartolini[1,2], Joana Batalha[1,2], Tony Candela[3,4], Andrea Herguedas[1,2], Philippe Gaspar[3], Peter Leijen[5], Françoise Lima[1,2], Hugo Parra[1,2], Ana Mafalda Sousa[1,2], Julien Temple-Boyer[3], Sean Williamson[4,6], Jeanette Wyneken[6], George L. Shillinger[4]**

[1]Institute of Marine Sciences - Okeanos, University of the Azores, Horta, Portugal; [2]Institute of Marine Research – IMAR, Horta, Portugal; [3]Mercator Ocean International, Toulouse, France; [4]Upwell, Monterey, California, USA; [5]Lotek Wireless, Inc.; [6]FAU Marine Lab, Florida Atlantic University, Florida, USA

The oceanic juvenile stage remains one of the most enigmatic life stages of loggerhead sea turtles (*Caretta caretta*). The dispersal, oceanic habitat and movements of the youngest age classes in particular remain poorly known. After hatching, these small sea turtles disperse over vast oceanic areas only to return to neritic areas many years later, a period often referred to as the "lost years". The Azores is an oceanic archipelago in the central North-East Atlantic, and one of the few places where all juvenile age-classes of oceanic juvenile loggerheads can be found, from young-of-the-year to late oceanic juveniles, with sizes ranging from 7.8 – 82 cm CCL. To investigate the movements of early juveniles, we equipped 30 small loggerheads measuring between 13.8 and 33.2 cm CCL (mean 19.6 ± SD cm CCL) with novel miniature Argos satellite tags (Lotek). All of the turtles, with one exception, were wild caught, by hand or with dip nets. One turtle was found stranded on the beach and rehabilitated at the Aquário do Porto Pim (Horta, Faial, Portugal). The turtles were released in 4 separate batches between November 2021 and June 2022. Days at liberty ranged from 8 to 188 days (mean: 63.5 ± 38.1 SD days).

We will present the first results of this tracking experiment and discuss the movements, behaviour and habitat use of the turtles in relation to oceanographic features, such as sea surface temperature, productivity and ocean currents. This study is an important step towards a better understanding of their pelagic ecology and habitat in the open ocean in support of their conservation.

# Re: STRETCH Website Meeting Notes from May 15th

Zoom 5-18-2023

DB Dana K Briscoe <dbriscoe@stanford.edu

To: You; Jeffrey Seminoff; Alberto Abreu; E Thu 5/18/2023 12:32 AM

Hi Team,

Thanks for a great meeting the other day and for all the helpful feedback as we move closer to next month's exciting release!

Bianca & I met today and will continue to incorporate all suggestions that came our of our Monday discussion. For a very high-level recap and note of next steps, I have put together a short summary of our main website discussions below, and to the agenda on the google doc. Please feel free to make any additions to anything I missed.

We'll plan to incorporate all updates by next Weds (May 24th). We'd like to ask that folks take a moment between then (next Weds) and next Friday (May 26th) to provide one more review as we near a final version.

Thanks!
Dana

**Website Meeting (May 15) | Post-Meeting Updates & Action Items:**

Website Feedback & Updates:

- Team info:
  - **Action Item (All):** If you have not done so, please check your bio & contact info for any corrections
  - Additions for Mori-san and Noah Yamaguchi

- Photos & videos:
  - Working with Ralph Pace to purchase photos for use
  - Bianca & I will do final check for all photos (copyright access & assigning photo credits)
  - Addition of video on Home page

- Blog:
  - **Action Item (All):** Please contact Marc if you would like to be added as an Editor to his linked blog
  - To complement Marc's blog, Bianca & I are exploring the plug-in to provide a short 2-3 sentence 'latest update' with the updated tracks/map

- Outreach & Education:
  - Cali with be working with her incoming summer intern to develop and curate content for these pages

- Translation:
  - Plug-ins only provide the 'switch' between languages. Translations will need to be done separately.

    - Steps for translation:

      1. Bianca & I will use Google Translate to manually translate sections
      2. We will create Spanish/Japanese versions of each web page. We will focus on static content for now (text that will not change or be updated regularly, but will need to revisit a plan for this)
      3. We will use the multi-language plug-in to allow user to easily access versions in their language of choice
      4. All pages & content will then need to be proof-read and updated for grammar/correction usage

    - Spanish: Alberto has kindly offered to help proof-read
    - Japanese: Proof-reader to be confirmed

Timeline
- Bianca & I will continue incorporating all feedback from our May 15th meeting by next Weds, May 24th.
- **Action Item (All):** Please review and provide any additional comments to Bianca or me **by next Friday, May 26th**
- At this time, we hope to have a beta version to begin the translations of static content

Thurs 18 - Friday 19 MAY 2023 OVERNIGHT AT MARC'S TO RUN 24 (EST) SPOT 6 389 TAGS

HAWAIIAN AIRLINES Boardingpass

| | | | |
|---|---|---|---|
| Name: | BALAZS/ GEORGE | Date: | 18MAY23 |
| Flight: | HA 278 Z | E-ticket: | 1732300559910 |
| Departs: | 12:15P Honolulu/HNL | Stop: | |
| Arrives: | 1:06P Kona/KOA | Conf: | 6HR9NG |
| Lylty#: | *******9970 HACC | | |

Bag count / Bag tag #

| BOARDING START | GATE | SEAT | ZONE | BOARDING CLOSES |
|---|---|---|---|---|
| 11:50A | A19 | 13E | 4 | 12:00P |

TSA Pre✓

Name: BALAZS/ GEORGE
Flight: HA 278 Z
Departs: 12:15P
Arrives: 1:06P
Lylty#: *******9970 HACC

| | |
|---|---|
| GATE | A19 |
| SEAT: | 13E |
| ZONE: | 4 |

| Local ID | CITES ID | Trovan PIT Tag ID (Right hindlimb) | Inconel Tag No. (left forefoot) | SCL (cm) | SCW (cm) | BW (kg) | SCL (cm) |
|---|---|---|---|---|---|---|---|
| | | Installed on 12/5/2022 | | Measured on 12/5/2022 | | | Meas |
| CcW21-01 | ① | 00013C598A | 5325 | 31.6 | 25.6 | 5.6 | 33.3 |
| CcW21-02 | ② | 00014356AB | 5324 | 29.4 | 24.9 | 4.6 | 30.4 |
| CcW21-03 | ③ | 0001334416 | 5323 | 36.9 | 30.0 | 8.8 | 38.3 |
| CcW21-04 | ④ | 000133EF35 | 5322 | 33.5 | 28.1 | 6.7 | 34.5 |
| CcW21-05 | ⑤ | 0001BBF972 | 5321 | 31.1 | 26.1 | 5.3 | 32.6 |
| CcW21-06 | ⑥ | 0001324346 | 5320 | 29.9 | 25.8 | 5.4 | 32.4 |
| CcW21-07 | ⑦ | 0001BC07EB | 5319 | 30.5 | 25.2 | 4.7 | 31.9 |
| CcW21-08 | ⑧ | 0001336970 | 5318 | 31.4 | 26.3 | 5.2 | 33.1 |
| CcW21-09 | ⑨ | 00013AA23F | 5317 | 31.4 | 26.8 | 5.9 | 33.0 |
| CcW21-10 | ⑩ | 00013265A4 | 5316 | 28.6 | 24.0 | 4.2 | 29.7 |
| CcW21-11 | ⑪ | 0001DA5E7C | 5315 | 28.0 | 24.9 | 4.1 | 29.5 |
| CcW21-12 | ⑫ | 000132E881 | 5312 | 30.0 | 25.4 | 4.9 | 31.1 |
| CcW21-13 | ⑬ | 0001335566 | 5311 | 31.4 | 26.6 | 5.4 | 32.6 |
| CcW21-14 | ⑭ | 000133050A | 5310 | 28.4 | 24.0 | 4.2 | 29.4 |
| CcW21-15 | ⑮ | 0001339F06 | 5309 | 27.8 | 24.4 | 4.0 | 28.9 |
| CcW21-16 | ⑯ | 000133B533 | 5308 | 31.4 | 26.1 | 5.5 | 32.8 |
| CcW21-17 | ⑰ | 0001323FD3 | 5307 | 29.4 | 24.7 | 4.4 | 30.4 |
| CcW21-18 | ⑱ | 000134223F | 5306 | 30.9 | 25.2 | 5.1 | 32.3 |
| CcW21-19 | ⑲ | 000132E8CF | 5305 | 31.9 | 28.2 | 5.7 | 33.3 |
| CcW21-20 | ⑳ | 0001DB6005 | 5304 | 31.1 | 26.3 | 5.4 | 32.6 |
| CcW21-21 | ㉑ | 0001DB5F78 | 5303 | 30.1 | 25.6 | 5.0 | 31.6 |
| CcW21-22 | ㉒ | 000133F18B | 5366 | 31.3 | 26.1 | 5.7 | 32.7 |
| CcW21-23 | ㉓ | 0001BC0968 | 5362 | 30.0 | 25.7 | 5.1 | 31.3 |
| CcW21-24 | ㉔ | 00013293F4 | 5368 | 31.3 | 26.5 | 5.1 | 32.5 |
| CcW21-25 | ㉕ | 0001325205 | 5365 | 29.1 | 24.9 | 4.4 | 30.5 |
| CcW21-26 | ㉖ | 0001325A40 | 5367 | 28.8 | 25.7 | 4.8 | 29.6 |
| CcW21-27 | - | 0001334BB0 | 5369 | 30.9 | 25.0 | 4.5 | 32.2 |
| CcW21-28 | - | 0001332707 | 5314 | 28.3 | 26.3 | 4.7 | 28.6 |
| CcW21-29 | - | 0001325F69 | 5313 | 25.8 | 25.2 | 3.7 | 26.5 |

| Change of water temperature setting | |
|---|---|
| ~Nov. 22 | 27.0 |
| Nov. 23 | 26.0 |
| Nov. 30 | 25.0 |
| Dec. 8 | 24.0 |

| | |
|---|---|
| Dec. 14 | 23.0 |
| Dec. 20~ | 22.0 |

| SCW (cm) | BW (kg) | |
|---|---|---|
| ured on 1/3/2023 | | |
| 26.8 | 6.4 | |
| 25.9 | 5.0 | |
| 31.2 | 10.0 | Largest individual |
| 29.2 | 7.7 | |
| 27.3 | 6.0 | |
| 27.1 | 6.1 | |
| 26.3 | 5.5 | |
| 27.5 | 6.0 | |
| 27.8 | 6.8 | |
| 25.0 | 4.6 | |
| 25.3 | 4.7 | |
| 26.5 | 5.3 | |
| 27.7 | 5.9 | |
| 25.1 | 4.7 | |
| 25.2 | 4.6 | Min. individual |
| 27.1 | 6.2 | |
| 25.6 | 5.0 | |
| 26.3 | 5.9 | |
| 29.3 | 6.4 | Slightly deformed carapace |
| 27.3 | 6.2 | |
| 26.6 | 5.9 | |
| 27.1 | 6.3 | |
| 26.7 | 5.7 | |
| 27.7 | 5.9 | |
| 25.8 | 5.0 | |
| 26.7 | 5.3 | Slightly deformed carapace |
| 26.7 | 5.9 | An individual with a transmitter attached for testing. |
| 26.7 | 4.8 | Carapace large and deformed |
| 25.8 | 4.0 | Carapace large and deformed |

Trains and vehicles stranded amid cold snap

# Heavy snow causes chaos across nation

KYODO

Heavy snow continued on Wednesday across much of Japan as the country grappled with the most severe cold snap of the season so far, with trains and vehicles stranded due to difficulties caused by the winter storms.

Record cold temperatures were seen in parts of Japan, with snow falling on the Sea of Japan coast stretching from the country's north to west. Amid concerns of further snowfall, including in low-lying areas on the Pacific coast, Japan's weather agency called for vigilance against blizzards, rough seas and icy roads.

The weather brought widespread disruption. Thousands of people using local train services in Kyoto and Shiga prefectures were forced to stay overnight in carriages or stations, while vehicles on major roads across the country were left stranded and hundreds of flights canceled.

At least one person has died and two more deaths are being investigated in connection with the cold weather, Chief Cabinet Secretary Hirokazu Matsuno told a news conference in Tokyo.

Among the effects on transportation, Japan Airlines and All Nippon Airways said more than 300 flights scheduled for Wednesday were canceled.

On local railways, passengers were stranded on several trains on the Biwako Line and Kyoto Line overnight from Tuesday due to snow and strong winds, operator West Japan Railway said. The company reported delays and cancellations on around 20 of its lines, including express services, through Wednesday morning.

The Kyoto Municipal Government said that around 1,700 people at Yamashina Station and 2,300 people at Kyoto Station were left stranded.

Some passengers reported feeling unwell and had to be taken away by ambulance. Masahiro Nishikawa, a 48-year-old who spent the night in an underground passage at Kyoto Station, said, "We only got one thermal sheet each from staff, I couldn't sleep because it was so cold."

**Order**: 108 **Abstract ID:** 1618 **Type:** Poster **Subject:** Behavior and Movements

## USING HYDROACOUSTICS TO PREDICT HABITAT USE OF FORAGING JUVENILE LOGGERHEAD TURTLES IN BAJA CALIFORNIA SUR, MEXICO

2006


BRISCOE

**Dana K. Wingfield[1], S. Hoyt Peckham[1], Donald A. Croll[1], Wallace J. Nichols[2], Kelly Newton[1], and Egle Flores[3]**

ISTS 26

[1] University of California, Santa Cruz, USA
[2] California Academy of Sciences, USA
[3] Universidad de las Americas Puebla, Mexico



Predicting habitat use of highly migratory endangered megavertebrates can be useful in reducing fisheries mortality. In addition, habitat use of a full range of pelagic species show strong correlation to trends in the distribution and abundance of their prey (Croll *et al.*, 2005). Studies by Peckham and Nichols (2002 and unpublished data) have shown that juvenile loggerheads (*Caretta caretta*) foraging off Baja California Sur (BCS) feed primarily and exclusively on the pelagic red crab (*Pleuroncodes planipes*). We are developing an integrated approach for testing the hypothesis that loggerhead distribution can be predicted by the distribution and abundance of swarms of red crabs in the water column. We will test the efficacy of measuring prey abundance by using hydroacoustics to chart red crab aggregations along the inshore edge of loggerhead foraging hotspots. Preliminary results show targets that appear to be red crab frequency and density increase along transects of increasing loggerhead abundance. We conclude that hydroacoustic surveys are useful in ascertaining red crab distribution within loggerhead hotspot areas. In 2006 we will be initiating hydroacoustic surveys on larger vessels to map red crab abundance across a full range of loggerhead abundance, onshore and offshore.



Acknowledgments: DKW gratefully acknowledges travel support from Disney Animal Kingdom, Western Pacific

(144)

# Severest cold spell so far this season forecast to hit Japan

1/23/2023 THE JAPAN NEWS

The Yomiuri Shimbun

This season's severest cold spell so far is forecast to envelop the Japanese archipelago from Tuesday through Thursday, likely causing heavy snowfall and freezing temperatures across a wide swath of the nation.

For central Tokyo, Osaka, Nagoya and Fukuoka, the Japan Meteorological Agency is warning of snow accumulation and traffic disruptions as the low temperatures are expected to be below zero over several days.

Hokkaido was among the areas of Japan that on Saturday experienced snowstorms due to a strengthening winter pressure pattern, the JMA said.

There will be a slight break in the cold weather, but from Tuesday intense cold air ranging from minus 12 C to minus 21 C or lower sitting 1,500 meters above Japan will cause low temperatures.

The Japan Sea polar airmass convergence zone, known as JPCZ, may develop to bring bands of snow clouds that can cause heavy snowfall in a short period of time on the Japan Sea coast.

In addition to concerns about water pipes freezing and icy roads, experts also urged people to be careful of thermal shock due to sudden temperature changes going indoors and outdoors.

The Tokyo metropolitan government's Waterworks Bureau has tweeted to remind residents to be careful of water pipes freezing, suggesting measures such as insulating pipes to protect them from the cold air.

Some expressway companies said that certain road sections might be closed, especially along the Japan Sea, through Thursday.

"I advise people to adapt to the temperature by putting on warmer wear, not only when going outdoors, but also when moving from the living room to the colder hallway or bathroom so as to prevent thermal shock," said Nobue Kunizaki, head of the Risk & Crisis Management Education Institute Co. in Tokyo.

The Yomiuri Shimbun

Pedestrians walk through the snow in Otaru, Hokkaido, on Saturday.

Gordon and Betty Moore Foundation
Movement Ecology Initiative

OVER

"Sea Turtle Research Experiment to test the Thermal Corridor Hypothesis" Larry B. Crowder (PI), Dana W. Briscoe (Co-PI), George H. Balazs (Co-PI), Jeff A. Seminoff (Co-PI)

| Direct Cost Budget<br>Total | 2023 | 2024 | 2025 | 2026 | 2027 |
|---|---|---|---|---|---|
| **Salaries (plus 30% benefits)** | | | | | |
| LBC (1 month summer) | 30K | (increase 3% per year) | | | |
| DWB (50%) | 91K | (increase 3% per year) | | | |
| Ocean Data Scientist | | | | | |
| Website Developer/Maintenance | 50K | 20K | 20K | 20K | |
| Bianca (PostDoc) | | | 70K | (increase 3% per year) | |
| **Equipment** | | | | | |
| Satellite Tags and Argos Time (25 per year@$4K) | 100K | 100K | 100K | 100K | |
| Computers, servers, graphics plotters | 12K | 5K | | | |
| **Contract for services** | | | | | |
| Rearing Loggerhead Sea Turtles (Port of Nagoya Aquarium) appropriate support for Japanese Partners?) | 30K | 30K | 30K | 30K | (increase to provide |

146

ル日航関西空港

海エアポート株式会社
泉佐野市泉州空港北1番地(関西国際空港内)
111(代表) Fax. 072-455-1155
Izumisano-shi, Osaka 549-001, Japan
tp://www.nikkoki.v...

NIKKO HOTEL

**MR GEORGE HARVEY BALAZS**

MEMBERSHIP NO.

**203753638**

**Member** [redacted] Chan Lung

| NAME | MR. | GEORGE HARVEY BALAZS | | |
|---|---|---|---|---|
| ROOM No. | 10067 | PAX | 1 | |
| ARR. | 2023/01/22 | DEP. | 2023/01/23 | |

| DATE | DETAIL | ROOM No. | CHARGES | CREDIT | EXPLANATION |
|---|---|---|---|---|---|
| 01/22 | HOTEL STAY PLAN | 10067 | 13,320 | | |

1

hotel nikko kansai airport

*IDENTIFICATION CARD*

ご宿泊確認書

1/22/2023

NIKKO HOTEL

| | | | |
|---|---|---|---|
| Room No. お部屋番号 | 10067 | Room Rate お部屋料金 | |
| ご芳名 Name | MR. GEORGE HARVEY BALAZS | | |
| No. of Guest(s) ご利用人数 | 1 | | |
| Arrival Date ご到着日 | 2023/01/22 | Departure Date ご出発日 | 2023/01/23 |
| Deposit お預かり金 | | □現金 Cash □クーポン Coupon | |

hotel nikko kansai airport
nikko hotels international

1/22/2023

「クレジット売上票」 G

加盟店名
HOTEL NIKKOKIX52
072-455-1111

NIKKO

端末番号 49712-560-60553
ご利用日 23/01/22 20:28:17
伝票番号 14915
会員番号 XXXXXXXXXXXX4036(IC)
承認番号 045454

| 取引内容 | 支払区分 | 取扱区分 |
|---|---|---|
| 売上 | 一括 | 110 |
| カード会社 | 有効期限 | |
| ビザ/マスター | XX/XX | |

金額 ¥13,320
合計金額 ¥13,320

BALAZS GEORGE
ご利用ありがとうございました
またのご来店お待ちしております
A0000000031010
S493737 C03 A00033 VISA
売場: 係員:
00
7b29a515c8eb8f67

お客様控え

11-14-2022

Transaction Accounting Memo

Kansai - Int L/Side Arr Lobby North

| TRANSACTION ID | DATE | TIME |
|---|---|---|
| 6153-99-12073 | 14-Nov-2022 | 19:21 |

Sales Consultant (1398)

EXCHANGE USD 600.

| | |
|---|---|
| United States Dollar | 600.00 |
| We BUY Currency @ 134.2800 | |
| Japanese Yen | 80,568 |
| Commission | 0 |
| Commission Adjustment | 0 |
| Nett Commission | 0 |
| Fee(s) | 0 |
| Sub-Total | 80,568 |

KANSAI

Transaction Sequence No: 4RQC-Y7TR

KIX AIRPORT

Kansai-Int 1 L/Side, Arr Lobby North,
1F Terminal Bldg., 1Senshu kuko Kita
Izumisano-shi, Osaka Japan 549-0001.
Tel:072-447-5472.
We will get through this together and soon to be normal routine. Travelex Japan pray for you and your family good health. Sincere appreciation for visiting Travelex Japan today.
#wearetogether
You can enjoy preferential rate upon showing this transaction memo.

SUBTRIFIN SUMMARY

| | |
|---|---|
| Total Commission | 0 |
| Total Fee(s) | 0 |
| Sub-Total | 80,568 |
| Total Pay: | 80,568 |

ANA CARDNET HOTEL

SERVICE INFORMATION

This service allows you to pay in your home currency.

| | |
|---|---|
| JPY AMOUNT | JPY 102,000 |
| USD AMOUNT | USD 754.80 |
| EXCHANGE RATE* | JPY 1 = USD 0.0074 |

Please select currency for payment

CARDNET

Select on PINPAD

Push F1 Button
Push F2 Button
n will be based
FSALE INTERBANK
and includes a
margin*.

11-16-2022

[NFCPayment売上票] G

加盟店名
スシロウ カナヤマミナ
052-681-0041

| | |
|---|---|
| 端末番号 | 49664-560-38847 |
| ご利用日 | 22/11/16 19:57:37 |
| 伝票番号 | 00532 |
| 会員番号 | XXXXXXXXXXXX4036(RF) |
| 承認番号 | 021304 |

| 取引内容 | 支払区分 | 取扱区分 |
|---|---|---|
| 売上 | 一括 | 110 |
| カード会社 | 有効期限 | |
| MUFGカード | XX/XX | |

| | |
|---|---|
| 金額 | ¥2,200 |
| 合計金額 | ¥2,200 |

CARDHOLDER/VISA
ご利用ありがとうございました
またのご来店お待ちしております
A0000000031010
S454328 C03 A00022 ENV
VISA payWave
売場： 係員：

00
AFC3841AC07A2005
INFOX

お客様控え

(148)

11/15/22 LUNCH

クレジット売上票

加盟店名 ダンチャクエン

MERCHANT 06-6305-5096

端末番号 TERM No. 71111-620-45975

ご利用日 DATE 2022/11/15 12:26:20

会員番号 438857******4036 IC

ACCT #

カード会社 CARD COMPANY ビザ/マスター

承認番号 APP CODE 008592D

処理通番 TRAN No. 0222300

| 取引内容 | 伝票番号 | 有効期限 |
|---|---|---|
| 売上 | 03223 | XX/XX |
| 支払区分 | 取扱区分 | 商品区分 |
| 一括 | 110 | 990 |

金額 ¥900

AMOUNT

CARDHOLDER/VISA 様

ご利用ありがとうございました

またのご来店をお待ちしております

ARC 00 ATC 00018 No.03

AID A0000000031010

VISA

APP.LABEL VISA CREDIT

売場 SALES 係員 CLERK

GMO-FG お客様控え

---

寿司本家

株式会社 札幌かに本家

愛知県名古屋市中村区名駅南1-17-20

11/16/2022

寿司本家 金山店

052-681-0041

2022/11/16 (水) 19:50

1名

飲食

| | | |
|---|---|---|
| 110円皿 | | ¥110 |
| 390円皿 | | ¥390 |
| 560円皿 | @560 × 2個 | ¥1,120 |
| お酒 | | ¥580 |

合計 5点 ¥2,200

(内消費税等 ¥200)

(10%対象 ¥2,200 標準税率 ¥200)

クレジットカード 1 ¥2,200

会計担当 加藤

オーダー担当 加藤

---

11-15

マクドナルド関西国際空港店

泉佐野市泉州空港北1番地

072-488-7628

営業時間 24時間営業 KANSAI

マックカフェ 6:00-22:30

55 レジNO 04 2022年11月15日 (火)07:03

| | | |
|---|---|---|
| (グリルドチーズエッグセット) | 630 (2コ) | ¥1,260 |
| グリルドチーズエッグ | 2コ | |
| ハッシュポテト | 2コ | |
| プレミアムローストコーヒーM | 2コ | |

| | | |
|---|---|---|
| 小計 | 6コ | ¥1,260 |
| (内消費税 | | ¥114) |
| 10%対象 | | ¥1,260 |
| (内消費税 | | ¥114) |
| 合計 | | ¥1,260 |
| クレジット支払 | | ¥1,260 |
| おつり | | ¥0 |

クレジット IC売上

VISA/MasterCard VISA

伝票番号 8211

会員番号 **********4036

承認番号 0027784

上位端末ID 082468406047 2

AID A0000000031010

VISA CREDIT

11/17/2022

マクドナルド金山店
名古屋市中区金山4-6-25
052-321-3157
営業時間 24時間営業

78 ﾚｼﾞNO 01 2022年11月17日(木)07:51

| | | | |
|---|---|---|---|
| (ﾋﾞｯｸﾞBFﾃﾞﾗｯｸｽｾｯﾄ) | 730 | (1コ) | ¥730 |
| ﾋﾞｯｸﾞBFﾃﾞﾗｯｸｽ | | 1コ | |
| ﾊｯｼｭﾎﾟﾃﾄ | | 1コ | |
| ﾐﾆｯｸｽﾒｲﾄﾞM | | 1コ | |
| ﾌﾟﾚﾐｱﾑﾛｰｽﾄｺｰﾋｰM | 150 | 1コ | ¥150 |
| ﾊﾞﾀｰﾊﾟｯﾄ | 0 | 1コ | ¥0 |
| ｷｯﾄｸｰｷｼﾛｯﾌﾟ | 0 | 1コ | ¥0 |
| ｽﾄﾛﾍﾞﾘｰｼﾞｬﾑ | 0 | 1コ | ¥0 |
| ﾗｵ・ｺｼｮｳ | 0 | 1コ | ¥0 |

| | | |
|---|---|---|
| 小計 | 8コ | ¥880 |
| (内消費税 | | ¥80) |
| 10%対象 | | ¥880 |
| (内消費税 | | ¥80) |
| 合計 | | ¥880 |
| クレジット支払 | | ¥880 |
| おつり | | ¥0 |

CL売上

クレジット
VISA/MasterCard 2542
伝票番号 ********4036
会員番号 0048004
承認番号 082468403975 3
上位端末ID A0000000031010
AID VISA CREDIT

注) *印は軽減税率(8%)適用商品
スマホアプリでお客様の声を聞かせてください
アンケートの御礼にクーポンを差し上げます
マクドナルド公式アプリから「KODO」にアクセスください

1-178

セブン-イレブン
名古屋金山駅南口店
愛知県名古屋市熱田区金山町1丁目2-1
電話：052-683-0577 ﾚｼﾞ#1

2022年11月18日(金) 16:44 責101

領収書

| | | |
|---|---|---|
| ｻｯﾎﾟﾛ 黒ﾗﾍﾞﾙ 缶 350ml | | |
| @210x | 2 | 420 |
| 7P ﾊﾞｰﾍﾞｷｭｰｽﾅｯｸ | | *100 |
| ｷﾘﾝﾗｶﾞｰ缶350ml | | |
| @210x | 2 | 420 |
| 7ﾌﾟﾚﾐｱﾑ うにせん | | *138 |

Beer chips

11/18/22

| | |
|---|---|
| 小 計 (税抜 8%) | ¥238 |
| 消費税等 ( 8%) | ¥19 |
| 小 計 (税抜10%) | ¥840 |
| 消費税等 (10%) | ¥84 |
| 合 計 | ¥1,181 |
| (税率 8%対象 | ¥257) |
| (税率10%対象 | ¥924) |
| (内消費税等 8% | ¥19) |
| (内消費税等10% | ¥84) |
| ｸﾚｼﾞｯﾄ支払 | ¥1,181 |

お買上明細は上記のとおりです。
[*]マークは軽減税率対象です。

クレジット売上票
(お客様控)

| | |
|---|---|
| ご利用日 | 2022年11月18日 |
| 会員番号 | **********4036 |
| 支払方法 1回CL | 承認番号 032024 |
| 金額 | ¥1,181 |
| APL名 | VISA CREDIT |
| AID | A0000000031010 |
| 伝票番号 | 221-118-166-4891 |

150

STAY ? MIYUKI HONOR

11-18 2022

マクドナルド金山店
名古屋市中区金山4-6-25
052-321-3157
営業時間 24時間営業

3 レジNO 02 2022年11月18日(金)07:53

| | | | |
|---|---|---|---|
| (ソーセージエッグマフィンセット) | 470 | (1コ) | ¥470 |
| ソーセージエッグマフィン | | 1コ | |
| ポテトL | | 1コ | |
| プレミアムローストコーヒーM | | 1コ | |

| | | |
|---|---|---|
| 小計 | 3コ | ¥470 |
| (内消費税 | | ¥42) |
| 8%対象 | | ¥470 |
| (内消費税 | | ¥42) |
| 合計 | | ¥470 |
| クレジット支払 | | ¥470 |
| おつり | | ¥0 |

EEL

McDONALDS

クレジット
VISA/MasterCard 01.売上
伝票番号 **********
会員番号 08246B4039
承認番号 A0000000031010
上位端末ID VISA CREDIT
AID

11 CLASS OF 2021 2022

注) *印は軽減税率(8%)適用商品
スマホアプリでお客様の声を聞か
アンケートの御礼にクーポンを差
マクドナルド公式アプリから
スください

NAKAJIMA

1-203

BEACH

GOLD FISH FARM

11/18/2022 LUNCH

クレジット売上票

加盟店名 レストラン アリバダ
MERCHANT 052-654-3808
端末番号 TERM No 84029-620-46180
ご利用日 DATE 2022/11/19 12:40:16
会員番号 438857******4036 IC
ACCT #
カード会社 CARD COMPANY ビザ/マスター
承認番号 APP CODE 000495D
処理通番 TRAN No 0393068

| 取引内容 | 伝票番号 | 有効期限 |
|---|---|---|
| 売上 | 02969 | XX/XX |
| 支払区分 | 取扱区分 | 商品区分 |
| 一括 | 110 | 310 |

金額 ¥1,680
AMOUNT
CARDHOLDER/VISA 様
ご利用ありがとうございました
またのご来店をお待ちしております
ARC 00 ATC 00028 No.03
AID A0000000031010
VISA
APP.LABEL VISA CREDIT
売場 SALES 係員 CLERK
GMO-FG お客様控え

ARIBADA

11/19/2022 LUNCH

アリバダ
愛知県名古屋市港区
名古屋港水族館 南館2F内
TEL 052-654-3808
店No-0000000000001-0001
2022/11/19 (土) 12:41
伝票No-00323
11 1名

EAT-IN
シャークバーガー ¥1,680

合計 1点 ¥1,680
(内消費税等 ¥152)
10%対象 ¥1,680
(消費税等 ¥152)
クレジット 1 ¥1,680

104 ビザ/マスター
4036
02969

担当 内山
15661

NOV 2022

11-15-22

C制 区間変更券 (幹) R537
(4-タ)
関西空港 → 名古屋市内
経由:関西空港・阪和・大阪環・東海・新大阪・新幹線・名古屋
11月15日から11月17日まで有効 ¥4,730
発売表示の都区市内各駅下車前途無効
旗収額 ¥3,340
原券 ¥1,390
2022.11.15
50915-02 新大阪駅F80発行

11/15/22

領収書
Receipt
様
領収年月日 2022.11.15
金額 ¥6,410(消費税等込み)
〔クレジット払い〕
購入商品 JR乗車券類 JR tickets
(50915 2枚)
西日本旅客鉄道株式会社
新大阪駅
新大阪駅F80発行 60916-01
印紙税申告納付につき大阪税務署承認済

11/20/22

C制 乗車券 (幹)
■・FARE TICKET
(中)金山 → 新大阪
KANAYAMA SHIN-OSAKA
経由:名古屋・新幹線・新大阪
NOV.20(VALID 2 DAYS) ¥3,410
乗車済 使用済
2022.11.20 (中)金山駅NR2発行
60251-01 (3- )R544C53 発1

11/20/22

(152)

C制 新幹線特急券
SUPER EXP. (RESERVED)
名古屋 → 新大阪
NAGOYA → SHIN-OSAKA
NOV.20 (12:23発) (13:12着) C61
NOZOMI 223 CAR.12 SEAT.20-D S
¥3,270
N03060
R544
2022.11.20(中)金山駅MR2(3- ) 60251-02

11-20-22

C制 B自由席特急券
LTD.EXP. (NON-RESERVED)
乗車記念 使用済
新大阪 → 関西空港
SHIN-OSAKA → KANSAI AIRPORT
NOV.20(VALID 1 DAY)
Valid for only one trip
¥990
2022.11.20 新大阪駅F80発行
40991-01 (4- )R552C01

11-22-2022

C制 乗車券
FARE TICKET
乗車記念 使用済
新大阪 → 関西空港
SHIN-OSAKA → KANSAI AIRPORT
経由:東海道・大阪環状・阪和・関西空港線
NOV.20(VALID 1 DAY) ¥1,390
No stopover permitted
2022.11.20 新大阪駅F80発行
40991-02 (4- )R552C43

～酒場ちろり

〒532-0011大阪市淀川区西中島5-16-1 24マルシェ新大阪内
酒場ちろり店 （TEL）06-4862-6278

毎度ありがとうございます。
又の御来店をお待ちしております。

***領収書***

2022年11月20日 15:56

伝　票:01-8602
ﾃｰﾌﾞﾙ :0000
ｵｰﾀﾞ帯:14-17
精算帯:14-17
人　数:0002

PNPA GIFT SHOP

| | | |
|---|---|---|
| TOとんかつ弁当 | | 1,460※ |
| ( | 2 | 730) |
| 小　計 | | 1,460 |
| (内消費税) | | 108 |
| 合　計 | | 1,460 |
| ｸﾚｼﾞｯﾄ | 104 | 1,460 |
| 8%対象 | | 1,460 |
| 消費税 | | 108 |

は軽減税率対象

914　001/01

11/20/2022

クレジット売上票

加盟店名 ﾀｲﾔｶﾝﾎﾟﾘ
MERCHANT 06-4862-6278
端末番号 TERM No 71111-620-42147
ご利用日 DATE 2022/11/20 15:59:03
会員番号 410039******5769 IC
ACCT #
ｶｰﾄﾞ会社 CARD COMPANY ﾋﾞｻﾞ/ﾏｽﾀｰ
承認番号 APP CODE 053417
処理通番 TRAN No 081986

| 取引内容 | 伝票番号 | 有効期限 |
|---|---|---|
| 売上 | 01504 | XX/XX |
| 支払区分 | 取扱区分 | 商品区分 |
| 一括 | 110 | 310 |

金　額 ¥1,460
AMOUNT

BALAZS/GEORGE 様

ご利用ありがとうございました
またのご来店をお待ちしております
ARC 00 ATC 00540 No.01
AID A0000000031010
VISA
APP.LABEL VISA CREDIT
売場 SALES　係員 CLERK

GMO-FG　お客様控え

154

11-20-22

マクドナルド関西国際空港店
泉佐野市泉州空港北1番地
072-488-7628
営業時間 24時間営業
マックカフェ 6:00-22:30

36 ﾚｼﾞNO 04 2022年11月15日(火)08:00

| | | | |
|---|---|---|---|
| ﾌﾟﾚﾐｱﾑｺｰﾋｰS | 120 | 1ｺ | ¥120 |
| XTRA ｺｰﾋｰｸﾘｰﾑ | | 1ｺ | |
| ﾌﾟﾚﾐｱﾑｺｰﾋｰS | 120 | 1ｺ | ¥120 |
| ｻﾝｶｸﾁｮｺﾊﾟｲｲﾁｺﾞ | 200 | 2ｺ | ¥400 |

| | | |
|---|---|---|
| 小計 | 4ｺ | ¥640 |
| (内)消費税 | | ¥58) |
| 10%対象 | | ¥640 |
| (内)消費税 | | ¥58) |
| 合計 | | ¥640 |
| クレジット支払 | | ¥640 |
| おつり | | ¥0 |

| | |
|---|---|
| クレジット | |
| VISA/MasterCard | IC売上 |
| 伝票番号 | 8265 |
| 会員番号 | ********4036 |
| 承認番号 | 0038774 |
| 上位端末ID | 082468406047 2 |
| AID | A0000000031010 |
| | VISA CREDIT |

注) *印は軽減税率(8%)適用商品
スマホアプリでお客様の声を聞かせてください
アンケートの御礼にクーポンを差し上げます
マクドナルド公式アプリから「KODO」にアクセスください

1-436

TABLE
15

11-20-2022

ESPRESSO & BAKERY

ESPRESSO & BAKERY 072-456-6526

大阪府泉佐野市泉州空港北1番地
北ウイング2階

タリアVERGNANOコーヒ
イス製Premiumコーヒーマシン
ランス直輸入ベーカリー
るでヨーロッパ
ve a nice flight!!

2022年11月20日(日)19時14分000101

| | |
|---|---|
| ﾊﾞｹﾞｯﾄｻﾝﾄﾞ ﾊﾑ&ﾁｪﾀﾞｰ | ¥630 |
| アップルデニッシュ | ¥360 |
| ﾐｯｸｽﾅｯﾂ | ¥500 |
| オランジーナ | ¥300 |

| | |
|---|---|
| 小 計 額 | ¥1,790 |
| 10%外税対象 | ¥1,790) |
| 10%外税額 | ¥179 |
| 税TAX 計 | ¥179) |
| 合 計 | ¥1,969 |
| 売掛支払 | ¥1,969 |
| (税TAX 計 | ¥179) |
| 合計点数 | 4点 |

87扱 No.6700 1名

|は軽減税率対象商品です。

デニーズ

11/20/2022

デニーズ金山駅前店

08032111698

愛知県名古屋市中区金山

1-14-9 長谷川ビル2F

2022年11月20日(日) 11:21 0183

**領収証**

アボカドチーズHB&パンケ ¥1,19

選るシーザーサラダM ¥66

フランブル&チーズFトー ¥990

NO:002585

計 ¥2,84

計 ¥2,84(

率10%対象額 ¥2,840)

消費税等10% ¥258)

クレジット預り ¥2,84

**クレジット支払**
**(お客様控え)**

会員番号(下4桁) 4030

伝票番号 0011409

取引内容 売上 IC(PIN レス)

カード会社 212 VISA

承認番号 046390

センター処理通番 256621

AID

A0000000031010

支払額(一括) ¥2,840

店番01834

暗証番号入力は省略させて頂きます

扱者:001 No.114091 3名

私たちと一緒に働きませんか?

**パート・アルバイト**

**募集中!!**

※時間はお気軽にご相談ください

11/20/2022

[WP] Payment売上票 G

加盟店名

ESPRESSO&BAKERY1

072-456-6526

端末番号 49712-560-60514

ご利用日 22/11/20 19:15:30

伝票番号 04481

会員番号 XXXXXXXXXXXX4036(RF)

承認番号 059234

| 取引内容 | 支払区分 | 取扱区分 |
|---|---|---|
| 売上 | 一括 | 110 |
| カード会社 | 有効期限 | |
| ビザ/マスタ | XX/XX | |

金額 ¥1,969

△計△額 ¥1,969

CARDHOLDER/VISA

ご利用ありがとうございました

またのご来店お待ちしております

A0000000031010

S439478 C03 A00032 EMV

VISA payWave

売場: 係員:

00

27787A7EBEGF3CF3

INFOX

お客様控え

領収書No

駅No 5130520 改札No 2

領収書

様

金額 ¥6,680円

「消費税等込み」

但し、乗車券類(クレジット扱い)として

2022年11月20日

東海旅客鉄道株式会社

ご利用いただきましてありがとうございます

印紙税申告納付につき名古屋中村税務署承認済

現金出納社員

Nikko HOTEL

NOV. 2022

# IDENTIFICATION CARD
## ご宿泊確認書

| | | | |
|---|---|---|---|
| Room No. お部屋番号 | 7034 | Room Rate お部屋料金 | |
| ご芳名 Name | MR. GEORGE BALAZS | | |
| No. of Guest(s) ご利用人数 | 1 | | |
| Arrival Date ご到着日 | 2022/11/14 | Departure Date ご出発日 | 2022/11/15 |
| Deposit お預かり金 | | ☐ 現金 Cash<br>☐ クーポン Coupon | |

世界各地の6,000以上のホテルやリゾートで、IHG®リワーズの多彩な特典とIHGリワーズポイント獲得をお楽しみください。ポイントは無料宿泊特典をはじめとする数々の素晴らしい体験にご利用いただけます。

特典の詳細は、
IHG.com/RewardsJP または
IHG®アプリにてご確認ください

ANA CROWNE PLAZA

Enjoy exclusive benefits and earn IHG® Rewards points at 6000+ hotels and resorts worldwide to redeem for Reward Nights, unparalleled experiences and more.

Unlock your rewards at IHG.COM/Rewards or download the IHG® App

客室番号: 2119
Room:

Wi-Fi: grandcourt
Wifi:

宿泊日数: 1/23 - 27/2023
# of nights:

[クレジットカード売上票]
CREDIT CARD SALES SLIP

加盟店名 ANA CROWNE PLAZA
MERCHANT052-682-4111
ご利用日DATE 2023/01/27 19:08:36
カード番号CARD NO. 438857XXXXXX4036 E

| | | | |
|---|---|---|---|
| 伝票番号 SLIP NO. 09838 | 有効期限 EXP DATE XX年XX月 | 取引内容 TRAN TYPE 売上 | |
| 支払区分 PMT TYPE 一括 | 取扱区分 TRAN CODE 110 | 商品区分 COM CODE 0300 | |
| 端末番号 TERMINAL 55094-516-12853 | | | |
| カード会社 CARD COMPANY MUFG カード(105) | | | |
| 承認番号 APPROVAL CODE 048144 | | | |
| 処理通番 TRAN NO. 021244 | | | |
| 金額 AMOUNT ¥71,586 | | | |
| 合計金額 TOTAL AMOUNT ¥71,586 | | | |
| GEORGE BALAZS | | | |
| AID00 A0000000031010 | | | |
| VISA CREDIT | | | |
| 売場 SALES CLERK | 係員コード LINK | | |
| お客様控 CUSTOMER COPY | | | |

ANA CROWNE PLAZ
AN IHG HOTEL
TEL GRAND COURT NAGO

INVOICE

1/2023

| | | | |
|---|---|---|---|
| 会社名 /Company | : | ご到着 /Arrival | : 2023年01月23日 |
| エージェント名 /Agent | : Individual Hotel Web Site (0pc | ご出発 /Departure | : 2023年01月27日 |
| 売掛番号 /AR No. | : | 人数 /No. of guest | : 1 |
| 備考 /Remarks | : | 客室番号 /Room No. | : 2119 |
| | | メンバー番号 /IHG® Rewards Club | : 276925712 |
| | | 明細番号 /Folio No. | : 220424 |
| | | 担当 /Cashier | : Front2-1 |
| | | ページ /Page No. | : 1 of 1 |

| 日付 Date | 摘要 Description | 備考 Reference | ご利用 Debit | お預かり Credit |
|---|---|---|---|---|
| 01-23-23 | Accomodation | | 15,714 | |
| 01-24-23 | Accomodation | | 17,460 | |
| 01-25-23 | Accomodation | | 17,460 | |
| 01-26-23 | Accomodation | | 20,952 | |
| 01-27-23 | Credit Card | | | 71,586 |

**king.com** NOV. 2022

KIX

(168)

Booking Confirmation
CONFIRMATION NUMBER: 3463.108.398
PIN CODE: 8493

**Hotel Nikko Kansai Airport - 3 mins walk to the airport** (ホテル日航関西空港（関西空港へ徒歩3分））

**Address:** Senshu-kukou Kita 1, Izumisano, 549-0001, Japan
**Phone:** +81 72 455 1111
**GPS Coordinates:** N 034° 26.193, E 135° 14.569

| CHECK-IN | CHECK-OUT | ROOMS | NIGHTS |
|---|---|---|---|
| 14 NOVEMBER Monday from 2:00 PM | 15 NOVEMBER Tuesday until 12:00 PM | 1 | 1 |

IN

OUT

| | |
|---|---|
| rty service charge | $66 |
| | $7 |
| | $7 |
| | approx. $80 |
| | ¥11,520 |

NAGOYA

RM 2305

**ANA Crowne Plaza Hotel Grand Court Nagoya**

1-1-1 Kanayama - Cho
Nagoya-shi, Aiti [Aichi] 4600023
Japan

Reservations 1 877 2 CROWNE (1 877 227 6963)

Front Desk 81-52-6834111

5 Nights

| Rate Per Night | 20,400.00 JPY |
|---|---|
| (Includes taxes and fees) | |
| **Itemized nightly rates, taxes, and fees for 1 room** | |
| TUESDAY NOV 15 2022-THURSDAY NOV 17 2022 | 17,000.00 JPY |
| THURSDAY NOV 17 2022-FRIDAY NOV 18 2022 | 16,000.00 JPY |
| FRIDAY NOV 18 2022-SATURDAY NOV 19 2022 | 21,000.00 JPY |
| SATURDAY NOV 19 2022-SUNDAY NOV 20 2022 | 31,000.00 JPY |

IN

OUT

TOTAL ¥102,000

TOTAL ¥102,0

(169) Jan. 2023

JAPAN RAIL PASS
(GREEN 7DAYS)

576
-34

2023.-1.23~2023.-1.29
YEAR-MONTH-DAY (グリーン車 7日間用)

This pass is non negotiable. Insert it in ticket gates and don't forget to take it.

¥39600(A)

(4-タ) 00189-01
C05

7345/0234-523449 2023.-1.23関西空港駅F12発行

---

指定券 (グリーン)
RESERVED SEAT TICKET (GREEN CAR)

関西空港 → 新大阪
KANSAI AIRPORT → SHIN-OSAKA

JAN.23 (12:44発) (13:35着) C61
HARUKA 24 CAR. 1 SEAT. 8-C
¥***

2023.-1.23関西空港駅F12(4- ) 10190-01
7345/0234-523449

---

新幹線指定券 (グリーン)
RESERVED SEAT TICKET(GREEN CAR)

新大阪 → 名古屋
SHIN-OSAKA → NAGOYA

JAN.23 (13:48発) (14:42着) C14
HIKARI 510 CAR. 9 SEAT. 1-D S
¥***

2023.-1.23新大阪駅F77 (4-タ) 41061-01

---

15

新幹線指定券 (グリーン)
RESERVED SEAT TICKET(GREEN CAR)

名古屋 → 浜松
NAGOYA → HAMAMATSU

JAN.24 (16:43発) (17:13着) C64
HIKARI 514 CAR. 9 SEAT. 8-D
¥***

2023.-1.24(中)金山駅N2(3- ) 10344-01
7345/0234-523449

新幹線指定券（グリーン）
RESERVED SEAT TICKET(GREEN CAR)
浜　松 → 名　古　屋
HAMAMATSU → NAGOYA
JAN.24（18:31発）（19:01着） C34
HIKARI 521 CAR. 8 SEAT.13-D
¥＊＊＊
2023.-1.24浜松駅MR003(3- ) 10645-01
7345/0234-523449

1/27/23
指　定　券（グリーン）
RESERVED SEAT TICKET（GREEN CAR）
岡　山 → 高　知
OKAYAMA → KOCHI
JAN.27（13:05発）（15:39着） C04
NAMPU 11 CAR. 1 SEAT. 3-C
¥＊＊＊
2023.-1.26（中）金山駅MR1(3-タ) 40151-01
7345/0234-523449

新幹線指定券（グリーン）
NAGOYA SHIZUOKA
名　古　屋 → 静　岡
1月25日（ 9:43発）（10:37着） C40
ひかり 500号 全席禁煙 8号車11番A席
¥＊＊＊
2023.-1.25名古屋駅南乗2 (3- ) 40207-01

指　定　券（グリーン）
高　知 → 岡　山
1月29日（11:13発）（13:40着） C36
南風 12号 1号車 2番C席
¥＊＊＊
2023.-1.29高知駅M52 (5-タ) 30115-01

新幹線指定券（グリーン）
RESERVED SEAT TICKET(GREEN CAR)
静　岡 → 名　古　屋
SHIZUOKA → NAGOYA
JAN.25（15:21発）（16:37着） C20
KODAMA 731 CAR. 9 SEAT.11-D
¥＊＊＊
2023.-1.25静岡駅MR004(3- ) 20415-01
7345/0234-523449

新幹線指定券（グリーン）
岡　山 → 新　大　阪
1月29日（14:53発）（15:38着） C61
さくら 554号 全席禁煙 6号車14番D席
¥＊＊＊
2023.-1.27（中）金山駅MR2(3-タ) 60125-01

1/27/23
新幹線指定券（グリーン）
RESERVED SEAT TICKET(GREEN CAR)
名　古　屋 → 岡　山
NAGOYA → OKAYAMA
JAN.27（10:03発）（12:16着） C56
HIKARI 503 CAR. 8 SEAT.10-D
¥＊＊＊
2023.-1.26（中）金山駅MR1(3-タ) 30150-01
7345/0234-523449

指　定　券（グリーン）
新　大　阪 → 関西空港
1月29日（16:00発）（16:50着） C50
はるか 39号 1号車 7番C席
¥＊＊＊
2023.-1.27（中）金山駅MR2(3-タ) 10127-01

START 1/29/23 SUNDAY

12:13 KOUCHI

↓

14:41 OKAYAMA

14:53

↓

15:38 Shin Osaka

16:00

↓

GOAL

16:50 AirPort

eparts 9:51 → arrives 15:39
me: 5hr48min 2 transfer(s)

1 ﾊﾟﾀｰﾝ 経路
| 1/27 9:51発→15:39着
| 所要時間 5時間48分 乗換回数 2回

1/27

Kanayama 9:47 No2

:51 KANAYAMA
▼
▼ Tokaido Line
▼ [Travel Time 6min]
▼
:55 NAGOYA
:03 [Time Between Trains 3min]
▼
▼ Hikari 503(No Smoking Only)
▼ [Travel Time 133min]
▼
12:16 OKAYAMA
13:05 [Time Between Trains 49min]
▼
▼ Nampu 11
▼ [Travel Time 154min]
▼
:39 KOCHI
----------END----------

2023/01/26 10:06 JRE

領収書
ディスカウントショップ
ドン・キホーテ
本社：東京都目黒区青葉台2-19-29

1/25/23 DON QUOTE

様
栄本店 TEL0570-060-211
営業時間 24時間営業
2023年01月25日(水)17:58 ﾚｼﾞ0004
責No*****460濱田
2400039633930JAN SAKAE
レジ袋45号 ¥4
4582593595089JAN
噂のパイプ ローズ ¥5,780
小計 ¥5,784
(外税10ﾀｲｼｮｳ ¥5,784)
外税10 ¥578
(税合計 ¥578)
合計 ¥6,362
クレジット ¥6,362
(消費税等 ¥578)
お買上点数 2点

クレジット売上票
お客様控え

会社 02234

172

**nart**

1/23

領収書

ルマートキヨスク新大阪乗換口
TEL： 06-6302-5704

2023年 1月23日(月) 13:28 No:0002

| | | |
|---|---|---|
| おむすび小箱 | ※ | ¥430 |
| 綾茶 300ml | ※ | ¥124 |
| 内税8%対象額 | 8.00% | ¥554 |
| 内税8% | 8.00% | ¥41 |
| 合計 | | ¥554 |
| クレジット | | ¥554 |
| (消費税等 | | ¥41) |

クレジット売上票
お客様控え
この控は大切に保存して下さい。

ご利用日DATE 2023/01/23 13:28:41
カード会社 a99664-014 IC/CR
CompanyUFJカード
番号 4388-57XX-XXXX-
No

[NFCPayment売上票] G
加盟店名
スシホンタ カヤマミヤ
052-681-0041
1/23/23
端末番号 49664-560-38847
ご利用日 23/01/23 19:41:55
伝票番号 00797
会員番号 XXXXXXXXXXXX4036(RF)
承認番号 046804

| 取引内容 | 支払区分 | 取扱区分 |
|---|---|---|
| 売上 | 一括 | 110 |
| カード会社 | 有効期限 | |
| MUFGカード | XX/XX | |

金額 ¥7,300
合計金額 ¥7,300
CARDHOLDER/VISA
ご利用ありがとうございました
またのご来店お待ちしております
A0000000031010
S525060 C03 A00037 EMV
VISA payWave
売場： 係員：
00
F396FA6C653A85FB
INFOX
Sushi
お客様控え DINNER

023
072-0001
3名
A
¥140
¥900
¥240
1,740
1,020
1,560
1,120
¥580
00
(663)
(663)

1/24/23 DINNER
クレジット売上票
加盟店名 ハルヒ゛ジ゛エ ミュー゛ラ゛ルトカヤマテン
MERCHANT 052-265-7879
端末番号 TERM No 71134-620-30341
ご利用日 DATE 2023/01/24 21:11:53
会員番号 438857******4036 IC
ACCT #
カード会社 CARD COMPANY ヒ゛ザ゛/マスター
承認番号 APP CODE 004591D
処理通番 TRAN No 0921579

| 取引内容 | 伝票番号 | 有効期限 |
|---|---|---|
| 売上 | 06976 | XX/XX |
| 支払区分 | 取扱区分 | 商品区分 |
| 一括 | 110 | 990 |

金額 ¥1,595
AMOUNT
CARDHOLDER/VISA 様
ご利用ありがとうございました
またのご来店をお待ちしております
ARC 00 ATC 00038 No.03
AID A0000000031010
VISA
APP.LABEL VISA CREDIT
売場 SALES 係員 CLERK
GMO-FG
お客様控え

**Kit**

領収書

ギフトキヨスク静岡幹線
TEL： 054-654-7064

2023年 1月25日(水) 15:05 No:0002

| | | |
|---|---|---|
| まるごとリンゴ | ※ | ¥270 |
| ジョージア ラテ | ※ | ¥160 |
| レジ袋 | | ¥3 |
| 内税8%対象額 | 8.00% | ¥430 |
| 内税8% | 8.00% | ¥31 |
| 内税10%対象額 | 10.00% | ¥3 |
| 内税10% | 10.00% | ¥0 |
| 合計 | | ¥433 |
| クレジット | | ¥433 |
| (消費税等 | | ¥31) |

クレジット売上票
お客様控え
この控は大切に保存して下さい。

ご利用日DATE 2023/01/25 15:06:14
カード会 64-014 IC/CR
CARD Com ード V/M
会員番号 X-XXXX-4036
ACCT No

DINNER
[クレジット売上票] G
加盟店名
スシホンタ カヤマミヤ
052-681-0041
1/25 Sushi 2023
端末番号 49664-560-38847
ご利用日 23/01/25 20:51:32
伝票番号 07161
会員番号 XXXXXXXXXXXX4036(IC)
承認番号 039764

| 取引内容 | 支払区分 | 取扱区分 |
|---|---|---|
| 売上 | 一括 | 110 |
| カード会社 | 有効期限 | |
| MUFGカード | XX/XX | |

金額 ¥2,740
合計金額 ¥2,740
BALAZS GEORGE
ご利用ありがとうございました
またのご来店お待ちしております
A0000000031010
S499184 C03 A00041 VISA
売場： 係員：
00
d1d3a89474db366c
INFOX
お客様控え

1/25/23

クレジット利用明細(お客様控)

**STARBUCKS®**

JR名古屋駅 新幹線南ラチ内店
#2048 TEL 052-533-9821

1 S ドリップ コーヒー 319軽
本体合計(1点) 319
( 8%対象 319 消費税 25)
総合計 344

三井住友(V/M) 344
お釣り 0

---

マクドナルド金山店
名古屋市中区金山4-6-25
052-321-2157
営業時間 24時間営業

21 レジNO 02 2023年1月26日 (木)19:30

| | | | |
|---|---|---|---|
| (ビッグマックセット) | 750 | (1) | ¥750 |
| ビッグマック | | 1コ | |
| ヨーグルト | | 1コ | |
| ミックスベリー | | 1コ | |
| 小計 | | 3コ | ¥750 |
| (内消費税 | | | ¥68) |
| 10%対象 | | | ¥750 |
| (内消費税 | | | ¥68) |
| 合計 | | | ¥750 |
| クレジット支払 | | | ¥750 |
| おつり | | | ¥0 |

1/26/23

Thurs.

クレジット CL売上
VISA/MasterCard
伝票番号
会員番号

---

1/27/23

[クレジット売上票] G
加盟店名 MERCHANT
ﾌﾄﾞﾔﾏ ｴｷﾍﾞﾝ
086-801-0043
端末番号 TERM No 49664-560-51081
ご利用日 DATE 23/01/27 12:27:22
伝票番号 SLIP No 18912
会員番号 XXXXXXXXXXXX4036(IC)
ACCT No
承認番号 APP CODE 016974

| 取引内容 | 支払区分 | 取扱区分 |
|---|---|---|
| 売上 | 一括 | 110 |
| カード会社 CARD Co | 有効期限 EXP DATE | |
| MUFGカード | XX/XX | |

金額 AMOUNT ¥1,331
△計△額 ¥1,331
BALAZS/GEORGE
ご利用ありがとうございました
またのご来店お待ちしております
A0000000031010
S475728 C03 A00044 VISA
売場: 係員:
SALES CLERK
COUNTER CUSTOMERS
INFOX お客様控え COPY

TRAIN LUNCH

---

Kochi 1/27 & 1/28 out 1/29

Comfort™ HOTEL
RECEIPT

MR./MS. George Balazs

AMOUNT DUE ¥18,360

Paid by credit card.

Comfort Hotel Kochi
TEL 088-884-2811

Trx#:0210020012702377 2023/01/27 16:08

Total ¥18,360

---

DINNER 1/28/23

[クレジット売上票] G
加盟店名 MERCHANT
ﾌﾄﾞﾔﾏ
088-823-0084 KOCHI
端末番号 TERM No 59875-560-37743
ご利用日 DATE 23/01/28 20:14:23
伝票番号 SLIP No 01357
会員番号 XXXXXXXXXXXX4036(IC)
ACCT No
承認番号 APP CODE 027094

| 取引内容 | 支払区分 | 取扱区分 |
|---|---|---|
| 売上 | 一括 | 110 |
| カード会社 CARD Co | 有効期限 EXP DATE | |
| ﾗｸﾃﾝｶｰﾄﾞ | XX/XX | |

金額 AMOUNT ¥23,210
△計△額 ¥23,210
BALAZS GEORGE
ご利用ありがとうございました
またのご来店お待ちしております
A0000000031010
S531602 C03 A00046 VISA
売場: 係員:
SALES COUNTER CLERK
INFOX お客様控え CUSTOMERS COPY

STRETCH loggerhead project

GENOMICS

Genomics of Pacific loggerheads (1st November 2022)

Peter Dutton (NOAA-SWFSC, Peter.Dutton@noaa.gov)

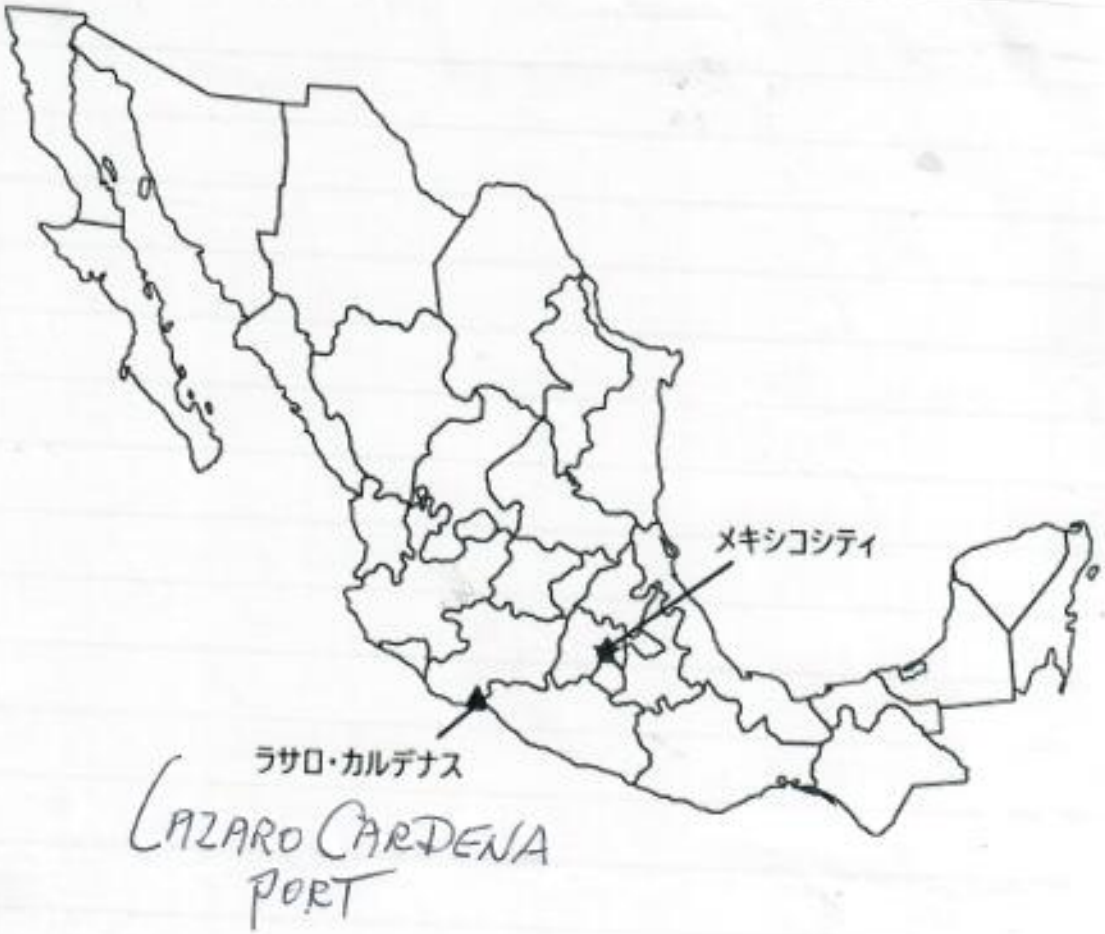
Summary

The STRETCH project offers a unique and unprecedented opportunity to incorporate genetics and genomics aspects that (1) enhance qualitative dimension of the experiment by characterizing the genomic profiles of the juveniles that are released as part of the project in order to help interpret some of the behavioral observations, and (2) allow hypothesis testing by selecting juveniles with certain genomic characteristics and documenting expected vs. observed behaviors. This has never been possible for any species, not only because controlled release of juveniles in pelagic habitats under the STRETCH experimental framework has never been done, but also because the genomic tools and resources have until now, not been available.

High quality, annotated whole reference genomes have been completed for green and leatherback turtles, and work is underway for all the other species. A working reference genome is expected to be available for loggerheads in early 2023 for use by the PI's on the genome project (Peter Dutton). This will provide the capacity to discover the genetic basis for behavior, physiology and other adaptive traits and develop assays that characterize the variation within species, populations and individuals. It will also allow epigenomic and transcriptomic studies to proceed that could provide insights into how the environment influences gene expression, and which genes are associated with migration and the related environmental/oceanographic factors relevant to the STRETCH experiment.

For this initial stage of STRETCH, sampling would be performed opportunistically. Methods involve retaining a portion (1 - 5ml) of whole blood that is collected from the juvenile loggerheads during routine monitoring by veterinarians and preserving for different types of analysis (with current routine genetic markers, and future genomic markers as they are developed). The laboratory analysis could be performed in Japan, and subsequent data analysis done by a collaborating group of Japanese and international experts. Samples would be frozen and/or preserved in specialized buffer (e.g. for transcriptomics).

1) CURRENT: Basic mtDNA sequencing and nDNA genotyping to characterize the populational genetic signatures of the juveniles released and confirm family relatedness (e.g. are they full siblings, half-siblings, or unrelated?).
2) FUTURE: Conduct Whole Genome Sequencing and targeted sequencing of a suite of genomic markers of interest to (a) characterize the variation of the experimental population and (b) select individuals with certain genomic makeup to release as part of a later stage of the STRETCH experiment




-カメ放流に同行する斉藤先生と PNPA の乗船者の米国その他ビザについて

-斉藤先生と PNPA 乗船者の旅行健康保険について

-斉藤先生と PNPA 乗船者の乗船までの交通費、宿泊費（船上）、米国東海岸での宿泊費（ホテル）、食費雑費、日本までの航空運賃（自宅までの交通費）について

-斉藤先生および PNPA 乗船者が利用する船上でのインターネットアクセス、イリジウム衛生携帯電話について

180

HA 449

| Nov 13 | HNL → KIX | Guest | Details |
|---|---|---|---|
| | Flight HA 449<br>Honolulu, Oahu<br>to Osaka Kansai, Japan (KIX)<br>Depart<br>11/13/2022 01:50 PM<br>Arrive<br>11/14/2022 06:45 PM | GEORGE<br>BALAZS | Seat 16J<br>Extra Comfort |

HA 450

| Nov 20 | KIX → HNL | Guest | Details |
|---|---|---|---|
| | Flight HA 450<br>Osaka Kansai, Japan (KIX)<br>to Honolulu, Oahu<br>Depart<br>11/20/2022 08:45 PM<br>Arrive<br>11/20/2022 09:15 AM | GEORGE<br>BALAZS | Seat 17A<br>Extra Comfort |

11-20 915 AM

# Payment Summary

| Flight # | Route | Fare type | USD |
|---|---|---|---|
| HA 449 | HNL → KIX | Extra Comfort | $458.60 |
| HA 450 | KIX → HNL | Extra Comfort | $483.60 |

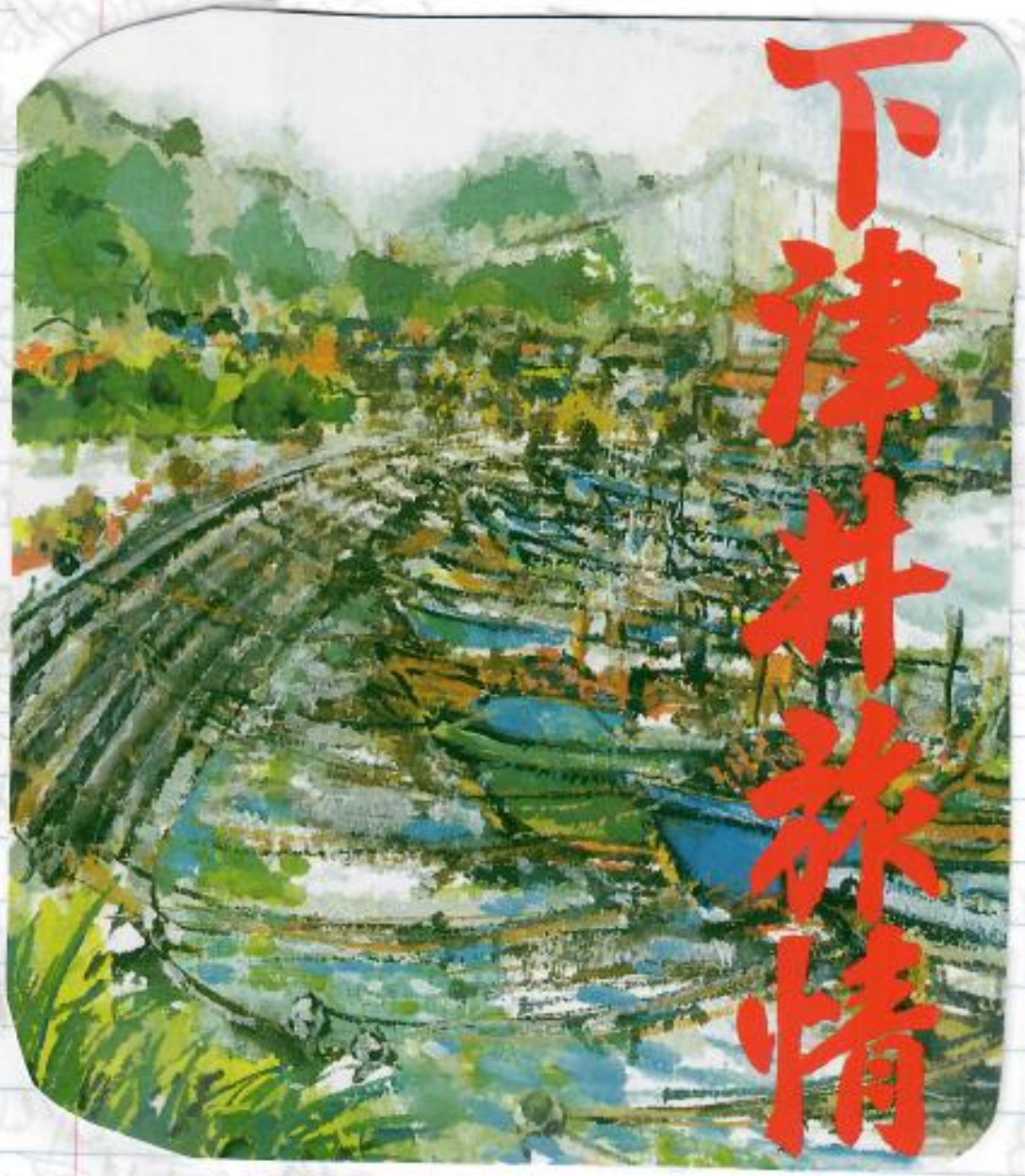
| | |
|---|---|
| **Taxes and Fees:** | **$563.17** |
| HA YQ surcharge | $468.00 |
| Passenger Security Service Charge | $2.20 |
| Japan International Passenger Facility Charge | $19.40 |
| Japan International Tourist Tax | $7.00 |

George H. BALAZS 13-20 NOVEMBER 2022
NAGOYA JAPAN TRAVEL - MOVEMENTS, ACTIVITIES, AND EXPENSES CLAIMED FOR STRETCH COORDINATING MEETING - PROFESSOR LARRY CROWDER P.I. INCLUDING SATELLITE TRANSMITTER ATTACHMENT TRIAL

| DATE | LOCATION/MOVEMENT | ACTIVITY | EXPENSE |
|---|---|---|---|
| 11/13/22 130PM | Depart Honolulu HA 449 | Flight to Japan | $1,281.17 USD |
| 11/14 645PM | Arrive Kansai (KIX) Osaka, Japan | | |
| 11/14-11/15 | Hotel Nikko Osaka Airport | Overnight | ¥11,520. |
| 11/15 | Osaka Airport Train to Shin-Osaka Station | Trains to Nagoya | ¥2,710. |
| 11/15 | Shin-Osaka Train to Shin-Nagoya | | ¥6,410. |

PAGE 2 of 3 G.H. BALAZS TRAVEL CLAIM NAGOYA (182)

| DATE | LOCATION/MOVEMENT | ACTIVITY | EXPENSE |
|---|---|---|---|
| 11/15 PM 22 CHECK IN AND 11/20 CHECK OUT | ANA CROWNE PLAZA HOTEL, KANAYAMA, NAGOYA. | 5-NIGHTS LODGING | ¥102,000. |
| 11/15 PM | NAGOYA | MET W/ LARRY CROWDER | |
| 11/16 | ANA HOTEL <> PORT OF NAGOYA PUBLIC AQUARIUM (PNPA) SUBWAY | MET WITH PROJECT COLLEAGUES | |
| 11/17 | ANA HOTEL <> PNPA | " | |
| 11/17 | TAXI FROM PNPA TO ANA HOTEL | PROJECT MEETINGS | ¥3,210. |
| 11/18 | ANA HOTEL <> PNPA | " PROJECT MEETINGS AND TRIAL ATTACHMENT OF MOCK SATELLITE TAG TO JUVENILE LOGGERHEAD TURTLE. | |
| 11/19 | ANA HOTEL <> PNPA | MET WITH PROJECT COLLEAGUES AND RE-EXAMINED LOGGERHEAD TURTLES | |



# 下津井旅情

G.H. BALAZS TRAVEL CLAIM NAGOYA (184)

| DATE | LOCATION/MOVEMENT | ACTIVITY | EXPENSE |
|---|---|---|---|
| 11/20/22 | ANA HOTEL TO SHIN-OSAKA | TRAIN | ¥6,610. |
| 11/20 | SHIN-OSAKA TO OSAKA AIRPORT | TRAIN (RESERVED SEAT NOT AVAILABLE) | ¥2,310. |
| 11/20 | DEPART OSAKA FOR HONOLULU HA450 | | |
| 11/20 | ARRIVE HONOLULU 930AM | | |

TOTAL TRAVEL CLAIM FOR REIMBURSEMENT
USD $1281.17
+ JAPANESE ¥ 134,770

NOTE - PER DIEM DECLINED

REMIT TO: GEORGE BALAZS
992 AWAAWAANOA PLACE
APT A
HONOLULU, HI 96825
808-683-8402
ITSAHONUWORLDINHAWAII@HOTMAIL.COM

| Date of Transaction | Merchant Name or Transaction Description | $ Amount |
|---|---|---|
| **PAYMENTS AND OTHER CREDITS** | JAN 2023 | |
| 02/13 | Payment ThankYou Image Check | -836.00 |
| **PURCHASE** | E/P: 1,202.94, Check #360 3/2/23 | |
| 01/22 | HTL NIKKOKANSAI AIRP OSAKA<br>01/24 YEN<br>13,320 X 0.007749249 (EXCHG RATE) | 103.22 |
| 01/23 | TOKAIKIYOSUKU BERUMA-TO OSAKA<br>01/25 YEN<br>554 X 0.007797833 (EXCHG RATE) | 4.32 |
| 01/24 | HANBIJE NAGOYA<br>01/26 YEN<br>1,595 X 0.007749216 (EXCHG RATE) | 12.36 |
| 01/23 | MCDONALD'S TOKYO<br>01/26 YEN<br>940 X 0.007734042 (EXCHG RATE) | 7.27 |
| 01/23 | SUSHIHONKE KANAYAMAMISE NAGOYA<br>01/26 YEN<br>7,300 X 0.007791780 (EXCHG RATE) | 56.88 |
| 01/25 | DONQUIJOTE NAGOYASAKAEHON 052-957-6311<br>01/27 YEN<br>6,362 X 0.007706267 (EXCHG RATE) | 49.04 |
| 01/25 | TOKAIKIYOSUKU GIFUTOKIY SHIZUOKA<br>01/27 YEN<br>433 X 0.007713625 (EXCHG RATE) | 3.34 |
| 01/25 | SUSHIHONKE KANAYAMAMISE NAGOYA<br>01/28 YEN<br>2,740 X 0.007708029 (EXCHG RATE) | 21.12 |
| 01/27 | ANA CROWNE PLAZA HOTEL NAGOYA<br>01/29 YEN<br>71,586 X 0.007723158 (EXCHG RATE) | 552.87 |
| 01/27 | OKAYAMA EKIBEN OKAYAMA<br>01/30 YEN<br>1,331 X 0.007753568 (EXCHG RATE) | 10.32 |
| 01/26 | HAKOBE KOCHI<br>01/30 YEN<br>23,210 X 0.007723395 (EXCHG RATE) | DINNER x9 179.26 |
| 01/27 | COMFORT HOTEL KOCHI YOKKAICHI<br>01/30 YEN 2 Nights<br>18,360 X 0.007723311 (EXCHG RATE) | 141.80 |
| 01/26 | MCDONALD'S TOKYO<br>01/30 YEN<br>750 X 0.007720000 (EXCHG RATE) | 5.79 |
| 02/12 | UNITED 0162465202708 800-932-2732 TX<br>041923 1 Y HNL ICN<br>2 Y ICN TPE<br>3 YO TPE ICN<br>4 YO ICN HNL | 55.35<br>Fees FF Miles |

186

| | | |
|---|---|---|
| 10/27 | Payment Thank You Bill Pay Service | -21.20 |

**PURCHASE**

VISA JA Explorer 2022

| | | |
|---|---|---|
| 10/21 | HYATT CENTRIC PIKE LNG B LONG BEACH CA | 1,207.46 |
| 11/14 | HTL NIKKOKANSAI AIRP OSAKA<br>11/16 YEN<br>11,520 X 0.007263888 (EXCHG RATE) | 83.68 |
| 11/15 | EKIMARCHESHIN-OSAKA OSAKA<br>11/17 YEN<br>900 X 0.007200000 (EXCHG RATE) | 6.48 |
| 11/15 | ANA CROWNE PLAZA HOTEL NAGOYA<br>11/17 YEN<br>102,000 X 0.007208725 (EXCHG RATE) | 735.29 |
| 11/15 | WEST JAPAN RAILWAY CO. OSAKA<br>11/18 YEN<br>6,410 X 0.007201248 (EXCHG RATE) | 46.16 |
| 11/15 | WEST JAPAN RAILWAY CO. OSAKA<br>11/18 YEN<br>2,710 X 0.007202952 (EXCHG RATE) | 19.52 |
| 11/15 | MCDONALD'S TOKYO<br>11/18 YEN<br>1,260 X 0.007198412 (EXCHG RATE) | 9.07 |
| 11/15 | MCDONALD'S TOKYO<br>11/18 YEN<br>640 X 0.007203125 (EXCHG RATE) | 4.61 |
| 11/16 | MCDONALD'S TOKYO<br>11/19 YEN<br>570 X 0.007157894 (EXCHG RATE) | 4.08 |
| 11/17 | MEITETSUKOTSU 2 NAGOYA<br>11/19 YEN TAXI<br>3,210 X 0.007161993 (EXCHG RATE) | 22.99 |
| 11/16 | SUSHIHONKE KANAYAMAMISE NAGOYA<br>11/19 YEN<br>2,200 X 0.007263636 (EXCHG RATE) | 15.98 |
| 11/18 | SEVEN-ELEVEN TOKYO<br>11/21 YEN<br>1,181 X 0.007163420 (EXCHG RATE) | 8.46 |
| 11/18 | MCDONALD'S TOKYO<br>11/21 YEN<br>470 X 0.007170212 (EXCHG RATE) | 3.37 |
| 11/18 | FAMILYMART TOKYO<br>11/21 YEN<br>658 X 0.007158054 (EXCHG RATE) | 4.71 |
| 11/19 | RESTAURANT ARRIBADA NAGOYA<br>11/21 YEN<br>1,680 X 0.007160714 (EXCHG RATE) | 12.03 |
| 11/17 | MCDONALD'S TOKYO<br>11/21 YEN<br>880 X 0.007159090 (EXCHG RATE) | 6.30 |
| 11/20 | KIX TENANTS OSAKA<br>11/22 YEN<br>1,969 X 0.007135601 (EXCHG RATE) | 14.05 |
| 11/20 | DENNYS CHIYODAKU<br>11/22 YEN<br>2,840 X 0.007161971 (EXCHG RATE) | 20.34 |

EATURES

66-156/531

Date: 02/13/2023
Check #: 2350265

Reimburse

Amount
$******86.82

VOID AFTER 180 DAYS

Authorized Signer

EATURES

66-156/531

Date: 02/15/2023
Check #: 2350641

Reimburse

Amount
$****2,245.84

VOID AFTER 180 DAYS

Authorized Signer

ıg.com

KOCHI CITY

Booking Confirmation
CONFIRMATION NUMBER: 3887.063.3[illegible]
PIN CODE: 6761

**Comfort Hotel Kochi** (コンフォートホテル高知)
**Address:** Kita-Hommachi 2-2-12, Kochi, 780-0056, Japan
北本町2-2-12, 高知市
**Phone:** +81 88 884 2811
**GPS Coordinates:** N 033° 33.960, E 133° 32.760

| CHECK-IN | CHECK-OUT | ROOMS | NIGHTS |
|---|---|---|---|
| 27 JANUARY *Friday* from 15:00 | 29 JANUARY *Sunday* until 10:00 | 1 | 2 |

TOMOMI SAITO'S CITY

$128
$12
approx. $140
¥18,360

Hawaiian Airlines® Bank of Hawaii Mastercard® Statement

GEORGE BALAZS | Account Ending 8440 | 01/21/23 | Page 3 of 5

## Transactions

| Transaction Date | Posting Date | Description | ıs | Amount |
|---|---|---|---|---|
| **Payments** | | PAID check #366 1/29/2023 | | |
| Jan 07 | Jan 08 | ARC Payment Received Thank You | N/A | -$1,179.42 |
| **Total payments for this period** | | | **N/A** | **-$1,179.42** |
| **Purchase Activity for GEORGE BALAZS card ending 8440** | | | | |
| Dec 24 | Dec 26 | HAWAIIAN 17315061827932 WEB SALES HI BALAZS/GEORGE 12/24/2022 HNL HNL Agency: HAWAIIAN AIRLIN #17315061827932 | 39 | $12.99 |
| Dec 29 | Dec 29 | HAWAIIAN 17321921478282 WEB SALES HI BALAZS/GEORGE 02/17/2023 HNL ITO HNL Agency: HAWAIIAN AIRLIN #17321921478282 | 362 | $120.60 |
| Dec 29 | Jan 02 | HAWAIIAN 17321921620743 WEB SALES HI BALAZS/GEORGE 02/20/2023 HNL ITO HNL Agency: HAWAIIAN AIRLIN #17321921620743 | 392 | $130.59 |
| Dec 30 | Jan 02 | HAWAIIAN 17321921829726 WEB SALES HI BALAZS/GEORGE 01/21/2023 HNL KIX HNL Agency: HAWAIIAN AIRLIN #17321921829726 | ,780 | $3,259.85 |
| Jan 14 | Jan 15 | HAWAIIAN 17321925085146 WEB SALES HI BALAZS/GEORGE 02/28/2023 HNL LIH HNL Agency: HAWAIIAN AIRLIN #17321925085146 | 213 | $71.21 |
| **Total purchase activity for this period** | | | ,786 | **$3,595.24** |

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## PAYMENTS AND OTHER CREDITS

| | | |
|---|---|---|
| 12/03 | Payment ThankYou Image Check 11/22 | -2,224.58 |

## PURCHASE

| | | |
|---|---|---|
| 11/20 | WEST JAPAN RAILWAY CO. OSAKA<br>11/23 YEN<br>2,380 X 0.007088235 (EXCHG RATE) | 16.87 |
| 11/20 | JR CENTRAL MINATOKU<br>11/23 YEN<br>6,680 X 0.007161676 (EXCHG RATE) | 47.84 |
| 12/06 | GOOGLE *Google Storage 855-836-3987 CA | 31.41 |
| 12/19 | CARINGBRIDGE 651-452-7940 MN | 50.00 |

| Transaction Date | Posting Date | Description | Miles | Amount |
|---|---|---|---|---|
| **Payments** | | | | |
| Nov 30 | Nov 30 2022 | PAYMENT RECV'D CHECKFREE | N/A | -$161.22 |
| **Total payments for this period** | | | **N/A** | **-$161.22** |
| **Purchase Activity for GEORGE BALAZS card ending 8440** | | | | |
| Nov 21/22 | Nov 22 | HAWAIIAN 17321914693252 WEB SALES HI BALAZS/GEORGE 12/09/2022 HNL ITO HNL Agency: HAWAIIAN AIRLIN #17321914693252 | 722 | $240.61 |
| Nov 30 | Nov 30 | HAWAIIAN 17321916360125 WEB SALES HI BALAZS/GEORGE 12/05/2022 HNL ITO HNL Agency: HAWAIIAN AIRLIN #17321916360125 | 212 | $70.61 |
| Dec 10 | Dec 11 | HAWAIIAN 17321918270425 WEB SALES HI BALAZS/GEORGE 02/07/2023 HNL KOA HNL Agency: HAWAIIAN AIRLIN #17321918270425 | 332 | $110.60 |
| Dec 10 | Dec 11 | HAWAIIAN 17321918266214 WEB SALES HI BALAZS/GEORGE 01/07/2023 HNL ITO HNL Agency: HAWAIIAN AIRLIN #17321918266214 | 332 | $110.60 |
| Dec 16/22 | Dec 18 | HAWAIIAN 17321919256062 WEB SALES HI BALAZS/GEORGE 01/09/2023 HNL LGB HNL Agency: HAWAIIAN AIRLIN #17321919256062 | 1,941 | $647.00 |
| **Total purchase activity for this period** | | | **3,539** | **$1,179.42** |


www.GeorgeHBalazs.com

GEORGE H. BALAZS, CO-CHAIR
OCEANIA REGION, IUCN/SSC
MARINE TURTLE SPECIALIST GROUP
EMAIL: ITSAHONUWORLDINHAWAII@
HOTMAIL.COM; CELL 1808-6838402

STRETCH

STRETCH
SEA TURTLE RESEARCH EXPERIMENT
THERMAL CORRIDOR HYPOTHESIS

190


. 25 OC

駿府城公園 共通券

大人 360円

- 本券は、発効日のみ有効です。
- 各施設受付で本券をご提示ください。
- 本券1枚で大人1人入場できます。
- 払い戻しはできません。
- 本券をもって領収書といたします。

1. 東御門・巽櫓

1/25/23

2. 紅葉山庭園

Sump Castle

3. 坤櫓

発券所 駿府公園 東御門

# JAPAN RAIL PASS

## Can also be Used for Shinkansen "bullet train" Travel

Hokuriku Shinkansen "KAGAYAKI"etc.

**Hokuriku Shinkansen** (450.5 km)
Train Names: KAGAYAKI, HAKUTAKA, TSURUGI, ASAMA

Jōetsu Shinkansen "TOKI"etc.

**Jōetsu Shinkansen** (333.9 km)
Train Names: TOKI, TANIGAWA
Max-TOKI, Max-TANIGAWA

Sanyō & Kyūshū Shinkansen "SAKURA"

**Sanyō Shinkansen** (622.3 km)
Train Names: NOZOMI*, MIZUHO*, HIKARI (incl. HIKARI Rail Star), SAKURA, KODAMA
(Tokyo thru Hakata, 1,174.9km)

Tōkaidō & Sanyō Shinkansen "HIKARI"

**Tōkaidō Shinkansen** (552.6 km)
Train Names: NOZOMI*, HIKARI, KODAMA

Kanazawa

Hakata Kokura Hiroshima Okayama Shin-Ōsaka Kyōto Nagoya

* There are six types of train services, "NOZOMI," "MIZUHO," "HIKARI," "SAKURA," "KODAMA" and "TSUBAME" trains on the Tōkaidō, Sanyō and Kyūshū Shinkansen, and the stations at which trains stop vary with train types. The JAPAN RAIL PASS is only valid for "HIKARI," "SAKURA," "KODAMA" and "TSUBAME" trains, and not valid for any seats, reserved or non-reserved, on "NOZOMI" and "MIZUHO" trains. To travel on the Tōkaidō, Sanyō and Kyūshū Shinkansen, the pass holders must take "HIKARI," "SAKURA," "KODAMA" or "TSUBAME" trains, or pay the basic fare and the Shinkansen express charge to take "NOZOMI" and "MIZUHO" trains (see p.7 and p.8 for details).

Kumamoto

Kagoshima-Chūō

Kyūshū Shinkansen "Series 800"

**Kyūshū Shinkansen** (288.9 km)
Train Names:MIZUHO*, SAKURA, TSUBAME

192

**Order:** 78 **Abstract ID:** 1469 **Type:** Poster **Subject:** Behavior and Movements ISTS-26

# THE DIVING BEHAVIOUR OF HIBERNATING LOGGERHEAD TURTLES IN TEMPERATE MEDITERRANEAN WATERS

2006 Greece

**Sandra Hochscheid [1], Flegra Bentivegna [1], Paolo Luschi [2], Carola Vallini[3], and Graeme C. Hays[4]**

[1] Stazione Zoologica Anton Dohrn, Villa Comunale 1, 80121 Naples, Italy
[2] Department of Ethology, Ecology, Evolution, University of Pisa, Via A. Volta 6, 56126 Pisa, Italy
[3] A.R.C.H.E'. Research and Educational Activities for Chelonian Conservation, Via Mulinetto 40/A, I-44100 Ferrara, Italy
[4] School of Biological Sciences, Institute of Environmental Sustainability, University of Wales Swansea, Singleton Park, Swansea SA2 8PP, UK

Loggerhead and green sea turtles have been reported to hibernate on the bottom of the sea when water temperatures decrease below 15°C. However, because of the long apnoeic periods and the often unknown location of the hibernacula it is difficult to investigate the diving behaviour of hibernating sea turtles. We equipped five loggerhead turtles with satellite transmitters and released them from Italian shores (three in the Gulf of Naples, Tyrrhenian Sea, and two near Porto Garibaldi, Adriatic Sea) to monitor their behaviour throughout the winter. Both "Adriatic" turtles and one of the "Naples" turtles spent the winter in coastal waters off Peloponnese (Greece), while two turtles remained in the Gulf of Naples area. Minimum water temperatures were 14.4°C (Peloponnese) and 13.5°C (Naples). Dive data, also relayed via satellite, revealed a marked change in diving behaviour with the onset of the cold winter period. Dive durations increased with decreasing water temperatures and maximum recorded dive durations ranged between 3 and 7 hours. At no time during the winter did turtles cease to surface. However, surface times remained short (1-2 min), indicating that no excessive lactate was accumulated which would have required prolonged time for post-dive clearance. Our results are in contrast to earlier reports where turtles apparently spent months on the bottom of the sea floor without re-emerging. We conclude that resting turtles have sufficiently reduced metabolic costs at low temperatures, and that short surfacing episodes supply enough oxygen to last for several hours, without the necessity to become anaerobic.

11/2022

1/2023

✓ COVID CARDS, PASSPORT, INT. DRIVERS LICENSE
- NOTIFY CREDIT CARDS
✓ FOREIGN $ USA $
✓ EXTRA GLASSES
✓ VITAMINS / METFORMIN / ASPIRIN / ADVIL / TUMS ANTI ACID / DRAMA MINE YOUTUBE
✓ FLASHLITE / ANTIBIOTICS / EYE DROPS / SALVE
GIFTS - ✓ Books
- TEA / OATMEAL / BAGELS
- CONVERSION PLUGS
- COVID TESTS
✓ DAISY JOY
- WALNUT CRACKER
✓ PASSWORDS *
✓ KN95 MASKS
- WALNUT CRACKER
- CHOCOLATE
✓ EXTRA SHOES
✓ BUSINESS CARDS H STRAP
✓ WALL Charger for Cell / WIRE USB Charger for PLANE *
- HAIR CUT
✓ $ MONEY $
✓ TOOTH BRUSHES / charger * HAIR BRUSH
- EYE WARMER *
✓ NOTEBOOK *
✓ T-MOBILE VOICE MAIL
✓ BAGELS *
✓ BANDAIDES

Good Will Visit

- PEPTO BISMOL

# USEFUL INFORMATION

## CONVERSION TABLE

| METERS | YARDS | INCHES |
|---|---|---|
| 1.000 | 1.093 | 39.37 |
| 0.914 | 1.000 | 36.00 |

| CENTIMETERS | INCHES | FEET |
|---|---|---|
| 1.00 | 0.394 | 0.0328 |
| 2.54 | 1.000 | 0.0833 |
| 30.48 | 12.000 | 1.0000 |

| KILOMETERS | MILES |
|---|---|
| 1.000 | 0.621 |
| 1.609 | 1.000 |

| GRAMS | OUNCES | POUNDS |
|---|---|---|
| 1.00 | 0.035 | 0.0020 |
| 28.35 | 1.000 | 0.0625 |
| 453.59 | 16.000 | 1.0000 |
| 1,000.00 | 35.274 | 2.2050 |

| KILOGRAMS | OUNCES | POUNDS |
|---|---|---|
| 1.000 | 35.274 | 2.2050 |
| 0.028 | 1.000 | 0.0625 |
| 0.454 | 16.000 | 1.0000 |

| LITERS | PINTS | QUARTS | GAL. |
|---|---|---|---|
| 1.000 | 2.113 | 1.057 | 0.264 |
| 0.473 | 1.000 | 0.500 | 0.125 |
| 0.946 | 2.000 | 1.000 | 0.250 |
| 3.785 | 8.000 | 4.000 | 1.000 |

### LENGTH

| | | |
|---|---|---|
| 1 meter (m) = 100 cm | = | 1,000 mm |
| 1 milimeter (mm) | = | 0.001 m |
| 1 centimeter (cm) | = | 0.01 m |
| 1 decimeter (dm) | = | 0.1 m |
| 1 decameter (dkm) | = | 10 m |
| 1 hectometer (hm) | = | 100 m |
| 1 kilometer (km) | = | 1,000 m |

### CAPACITY

| | | |
|---|---|---|
| 1 liter (l) = 100 cl | = | 1,000 ml |
| 1 milliter (ml) | = | 0.001 l |
| 1 centiliter (cl) | = | 0.01 l |
| 1 deciliter (dl) | = | 0.1 l |
| 1 decaliter (dkl) | = | 10 l |
| 1 hectoliter (hl) | = | 100 l |
| 1 kiloliter (kl) | = | 1,000 l |

### WEIGHT

| | | |
|---|---|---|
| 1 gram (g) = 100 cg | = | 1,000 mg |
| 1 miligram (mg) | = | 0.001 g |
| 1 centigram (cg) | = | 0.01 g |
| 1 decigram (dg) | = | 0.1 g |
| 1 decagram (dkg) | = | 10 g |
| 1 hectogram (hg) | = | 100 g |
| 1 kilogram (kg) | = | 1,000 g |

### Table of Time Measure

| | |
|---|---|
| 60 seconds | = 1 minute |
| 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 pecks | = 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 | = 1 hogshead (hhd.) |

### Table of Paper Measure

| | |
|---|---|
| 25 sheets | = 1 quire |
| 20 quires | = 1 ream |
| 10 reams | = 1 bale |

### Table of Linear Measure

| | |
|---|---|
| 12 inches | = 1 foot |
| 3 feet | = 1 yard |
| 5-1/2 yards | = 1 rod |
| 40 rods | = 1 furlong |
| 8 furlongs (5280 ft.) | = 1 mile |

### Miscellaneous Measures

| | |
|---|---|
| 12 units | = 1 dozen |
| 12 doz. | = 1 gross |
| 12 gr. | = 1 great gross |
| 20 units | = 1 score |
| 1 hand | = 4 inches |
| 1 fathom | = 6 feet |
| 1 knot | = 6076 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
Atmospheric pressure is 14.7 lbs. per sq. in. at sea level
13-1/2 cu. ft. of air weighs 1 lb.

### Table of 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 36sq. miles.

## MULTIPLICATION TABLE

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

IN NAGOYA '92

# The Marine Turtle Specialist International Workshop

## 海亀専門家国際会議イン名古屋'92

*March 14th(Sat.)-16th(Mon.),1992 / Venue:Nagoya Congress Center*

*Organizer:Japan Bekko Association*
*Secretariat:SIMUL INTERNATIONAL INC.Kansai Office*

期間●1992年3月14日［土］ー16日［月］ 会場●名古屋国際会議場

主催：日本鼈甲協会
事務局：（株）サイマル・インターナショナル関西支社

www.GeorgeHBalazs.com

GEORGE H. BALAZS, CO-CHAIR
OCEANIA REGION, IUCN/SSC
MARINE TURTLE SPECIALIST GROUP
EMAIL: TYSAHCNUWORLDINHAWAII@
HOTMAIL.COM; CELL 1808-6838402

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SEA TURTLE RESEARCH EXPERIMENT
THERMAL CORRIDOR HYPOTHESIS