

RIDGE TO REEF ECO-CAMPS 2013



September 2013

Summary Report

Summer camps were held on Saipan, Tinian, and Rota, throughout July and August. Avra Heller, the DEQ Coral Reef Project Coordinator worked with numerous partners on all three islands to host free environmental camps for 4th and 5th grade students across the CNMI. Each camp had between 20 and 45 participants. Exciting educational activities such as snorkeling, hiking, bird watching, geo-caching, visits to dumps, dry litter piggeries and cattle ranches, tree plantings and more, were co-coordinated and hosted by partner agencies such as Division of Fish and Wildlife, NOAA, the Coastal Resource Management Office, Forestry, the National Park Service, Rota office of Commerce, the Public School Systems of Tinian and Rota, Department of Public Safety, Tinian NMC CREES, Tinian Cattlemen's Association, Beautify CNMI, Micronesica Bird Conservation, and many others. A breakdown of DEQ's financial investment in the 2013 Ridge to Reef Eco-Camps can be found in Appendix IV.

SAIPAN COLLABORATORS AND PRESENTERS

Co-Coordinator:

Ranger Ros Leon Guerrero – *National Park Service, American Memorial Park*

Ranger Susan Fishman-Tudor – *National Park Service, American Memorial Park*

Ranger Nancy Klechner – *National Park Service, American Memorial Park*

Presenters:

Britta Baechler – *Division of Fish and Wildlife, NOAA Coral Reef Fellow*

Jolly Ann Cruz – *Micronesia Challenge Young Champion*

Kaitlin Mattos – *Division of Environmental Quality, Watershed Coordinator*

Nicole Schafer - *Coastal Resources Management, Coral Reef Education and Outreach Coordinator*

Robert Greene – *Coastal Resources Management, NOAA Coastal Management Fellow*

Steve McKagan – *NOAA*

Steven Johnson – *Division of Environmental Quality, Marine Monitoring Team*

Tasi Watch Rangers - *Mariana Islands Nature Alliance*

Yubert Alepuyo & Tom Pangelinan – *DEQ, Site Assessment and Remediation*

Zabrina Shai & Joe Ruak – *Division of Fish and Wildlife, Sea Turtle Program*

Zabrina Shai & Lainie Zarones – *Micronesica Bird Conservation*

Thank You:

Matthew Crane – *Driver*

Ranger Jayson Tinney – *Driver*

Saipan Southern JROTC members



For more photos check DEQ's [Saipan Eco-Camp Facebook album](#)

ROTA RIDGE TO REEF ECO-CAMP, JULY 31-3



Snorkeling at Sasanhaya Bay Marine Protected Area

About 45 3rd-6th grade students along with about 20 high school volunteer counselors participated in the Rota Ridge to Reef Camp from July 31-3. This camp functioned differently than the camps on the other two islands, in that instead of all of the camp participants going through the whole week together, the campers were broken into three groups and each attended one of three stations each day of the camp. In addition, the camp was an add-on to an existing 6-week summer camp coordinated by Eskuelan San Francisco de Borja. The key partner for the organization and execution of the Rota Eco-Camp was Agida Quitugua of the Rota Department of Commerce. She along with the DEQ Coral Reef Project Coordinator

organized the coordination of presenters, transportation and activities. DEQ funded t-shirts, fuel for the various drivers, space rental for the camp's closing event, and the shipment (and last minute rental) of snorkel gear.

The three stations were as follows: learning about and snorkeling in Sasanhaya Bay Reserve (though due to rough water the snorkeling activities were moved to Teteto Beach for the second two days); participating in the ongoing revegetation project in Talakhaya; and the third station included multiple stops: a discussion of marine debris and coastal threats with CRM at Teteto Beach, bird watching at I Chenchon Bird Sanctuary, as well as a presentation from the Brown Tree Snake program, and finally learning about sustainable farming practices on Mr. Hocog's farm.



Planting with Forestry in Talakhaya



Students outside the Songsong Roundhouse

The Rota camp's unique design was fantastic in that it gave presenters the opportunity to engage a wider audience of students, high school volunteers, parents, faculty, and resource management agency employees. If

resources are available in future, and if presenters are willing and able to devote more of their time to the other camps, Rota's camp design would be an ideal way to engage a broader community on the other islands.

Finally, though they are mentioned in the 'Thank You's' below, the Rota Ridge to Reef camp could not have happened without the support of Rota Department of Public Safety. DPS helped to transport campers to and from the activity sites, but more importantly they insured campers' health and safety, particularly during the various snorkeling events. For a full schedule of the Rota camp please see [Appendix II](#).

For more photos please check DEQ's [Rota Eco-Camp Facebook album](#).

ROTA COLLABORATORS AND PRESENTERS

Co-Coordinator:

Agida Quitugua – *Mayor's Office, Rota Department of Commerce*

Carmen Atalig – *Eskeulan San Francisco de Borja, Principal*

Presenters:

Avra Heller – *Division of Environmental Quality, Coral Reef Project Coordinator*

Bill Pendergrass – *Coastal Resources Management*

Eusebio Hocog – *Rota Department of Commerce*

Isaac Calvo – *Division of Land and Natural Resources*

James Manglona – *Rota Forestry*

Nicole Schafer – *Coastal Resources Management*

Robert Ulloa – *Division of Fish and Wildlife*

Shelwyn Taisacan – *Division of Fish and Wildlife, Brown Tree Snake (BTS) Program*

Thank Yous:

670 Rock Steady

Beautify CNMI

Blue Palms Dive Service Rota

Mariana Islands Nature Alliance

National Park Service – American Memorial Park Rangers

Rota Department of Commerce

Rota Division of Fish and Wildlife

Rota Department of Public Safety

Rota Forestry

Talakhaya Revegetation Project Volunteers



Goofing off on the school bus



Hiking into Talakhaya for plantings

TINIAN RIDGE TO REEF ECO-CAMP, AUGUST 12-15

The third and final camp this year took place on Tinian from August 12-15. The DEQ Coral Reef Project Coordinator worked closely with Catherine Shai of MINA and Keith Nabors of Project Brabu Tinian to organize and execute this camp. The project coordinator and Ms. Shai worked to establish the activities, curricula and presenters for the camp, while Mr. Nabors worked on recruiting participants and some on-the-ground logistics. Merrill Ayuyu, of DEQ Tinian also helped with organization and logistics.



Campers react to illegal burning at the Tinian dump

The Tinian camp was the smallest of all three camps with only about 15 participants. Coordinators were assisted by eight or so Project Brabu Youth Advocates who acted as volunteer counselors, helping to manage the campers, but also organizing activities and games throughout the week. The Tinian camp was slightly different from the other two camps in that more of the field trips were focused on learning about the threats (and possible solutions) from land-based pollution. For example the kids visited Tinian's open dump and witnessed illegal burning (see photo above for their reactions). The vast majority of the campers had accompanied their parents to the dump before, but many had not before thought of the impact the dump has on the reef and beach just below it.



Limestone forest hike

Livestock agriculture was another focus unique to the Tinian camp. The

agriculture day began with a fascinating presentation by Lawrence Duponcheel of the Tinian Cattlemen's Association on Tinian's rich agricultural history. The campers then learned about sustainable cattle ranching practices, followed by a visit to Tinian's only certified dry litter piggery. Other field trips included a hike in a limestone forest with DEQ's Merrill Ayuyu and the brown tree snake program's Ton Castro who taught the campers a few basic birding skills, and a snorkeling trip at Tachonga Beach. As in the other two camps, campers enjoyed this learning opportunity and many have already told organizers that they plan to be involved next year! For the full schedule please see [Appendix III](#).



Clean-up at Kammer Beach

For more photos please check DEQ's [Tinian Eco-Camp Facebook album](#).

TINIAN COLLABORATORS AND PRESENTERS

Co-Coordinator:

Catherine Shai – *Mariana Islands Nature Alliance*

Keith Nabors – *Project Brabu, Tinian*

Presenters:

Avra Heller – *Division of Environmental Quality, Coral Reef Project Coordinator*

Britta Baechler – *Division of Fish and Wildlife, NOAA Coral Reef Fellow*

Catherine Shai – *Mariana Islands Nature Alliance*

Jesus Cruz – *Dry-litter piggery owner, NRCS partner*

Joe Dela Cruz – *Tinian Cattlemen's Association*

Joel Untalon – *Department of Public Works*

Lawrence Duponcheel – *Tinian Cattlemen's Association*

Merrill Ayuyu – *Division of Environmental Quality, Tinian*

Sam Palacios – *Tinian Cattlemen's Association*

Ton Castro – *Division of Fish and Wildlife, Brown Tree Snake Program, Tinian*

Thank You:

Beautify CNMI

Bus Driver Leo – *Tinian Elementary School* - **A very big THANK YOU to Tinian Elementary for the donation of the school bus (and bus driver) for the entirety of the camp**

Connielou Manglona – *Tinian Elementary School, Principal*

Ed Hofschneider – *Coastal Resources Management, Tinian*

JC Café

Mariana Islands Nature Alliance

National Park Service – *American Memorial Park Rangers*

Project Brabu Youth Advocates

Saipan Apparel

FINAL THOUGHTS AND THANK YOUS:

Each island's camp had a slightly different twist, but all emphasized the study of our watersheds, ridge to reef, in their entirety. Educators at each camp worked to expose participants to various land and natural resource uses and highlighted ways that an individual's daily choices can impact the islands' land and marine resources.

Overall, the camps were a resounding success, the only universal critique being that they didn't last longer!

APPENDIX I – Saipan Eco-Camp Schedule



REEF RANGER

Ridge to Reef Summer Camp Daily Schedule

July 15-19, 2013

Monday, Thursday, & Friday (8:00 am – 12:30 pm)

Tuesday & Wednesday (FIELD TRIP days 8:00 am – 2:30 pm)

July 15, Monday

8:00 am to 8:15 am	Ridge to Reef Registration
8:15 am to 8:30 am	Icebreakers & Introductions
9:00 am to 9:30 am	Break into groups (5 rules for camp “Think like a Ranger, Think Safe”)
9:30 am to 9:45 am	Break & Snacks
9:45 am to 10:45 am	Presentations: Birds & Value of a Tree – <i>Lainie Zarones</i>
10:45 am to 11:00 am	Break & Snacks
11:00 am to 11:55 am	Activity: _____
11:55 am to 12:05 pm	Word/Question of the Day & Reflection
12:05 pm to 12:25 pm	Booklet Review
12:25 pm to 12:30 pm	Reminders

July 16, Tuesday (FIELD TRIP)

8:00 am to 8:15 am	Ridge to Reef Sign In
8:15 am to 8:30 am	Icebreakers
8:30 am to 9:00 am	Snorkel Safety Procedures
9:00 am to 9:10 am	Presentation: Watershed & Coral Reefs
9:10 am to 9:30 am	Getting on the vans (organizing, gear, bathroom breaks, last minute clothing changes, etc).
9:30 am to 1:40 pm	FIELDTRIP to Laolao Bay Watershed (Reveg. site and snorkel) – <i>Kaity Mattos and Steven Johnson (and Tasi Watch Rangers)</i>
1:40 am to 2:00 pm	Travel back to American Memorial Park
2:00 pm to 2:10 pm	Word/Question of the Day & Reflection
2:10 pm to 2:25 pm	Booklet Review
2:25 pm to 2:30 pm	Reminders

July 17, Wednesday (FIELD TRIP)

***PARENTS ARE INVITED!! – Need prior notice of participation, call Ranger Ros 287-7677 (No later than noon, July 16)

8:00 am to 8:15 am	Ridge to Reef Sign In
8:15 am to 8:30am	Icebreakers
8:30 am to 9:00 am	Debrief Snorkel Safety Procedures
9:00 am to 9:45 am	Presentation: Size Matters! – Fishing – <i>Steve McKagan</i>
9:45am to 10:00 am	Walk over to Outer Cove Dock
10:00 am to 10:30 am	FIELDTRIP to Managaha Island & Settling at Site

10:30 am to 11:10 am	Presentations: Marine Protected Areas & Micronesia Challenge - <i>Kodep Ogumoro-Uludong, Jojo Cruz, Britta Baechler</i>
11:10 am to 12:40 pm	Snorkel Time & Change into Dry Clothes/Snacks – <i>Steven Johnson</i>
12:40 am to 1:00 pm	Load Gear
1:00 pm to 1:30 pm	Travel back to Dock & walk over to American Memorial Park
1:30 pm to 1:55 pm	Activity
1:55 pm to 2:05 pm	Word/Question of the Day & Reflection
2:05 pm to 2:15 pm	Booklet Review
2:15 pm to 2:25 pm	Reminders

July 18, Thursday

8:00 am to 8:15 am	Ridge to Reef Registration
8:15 am to 9:00 pm	Icebreakers
9:00 am to 9:20 am	Presentation: Climate Change – <i>Robbie Greene</i>
9:20 am – 10:00 am	Presentation: Marine Debris – <i>Nicole Schafer</i>
10:00 am to 10:15 am	Prepare for heading outdoors
10:15 am to 10:45 am	Activity: Geocaching - <i>Robbie Greene</i>
10:45 am to 11:15 am	Beach cleanup - <i>Nicole Schafer</i>
11:15 am to 11:25 am	Make way back to AMP
11:25 am to 12:00 pm	Activity: Create Ridge to Reef Logo from trash collected - <i>Nicole Schafer</i>
12:00 pm to 12:10 pm	Break & Snacks
12:10 pm to 12:15 pm	Word/Question of the Day & Reflection
12:15 pm to 12:25 pm	Booklet Review
12:25 pm to 12:30 pm	Reminders

July 19, Friday

8:00 am to 8:30 am	Ridge to Reef Sign In
8:30 am to 9:00 am	Icebreakers
9:00 am to 9:30 am	Presentation: Turtles – <i>Jessy Guerrero & Joe Ruak</i>
9:30 am to 10:00 am	Presentation: SAR – <i>Yubert Alepuyo & Tom Pangelinan</i>
10:00 am to 11:00 am	Activity TBD
11:00 am to 11:10 am	Break & Snacks
11:10 am to 12:00 pm	Games & Activities
12:00 pm to 12:10 pm	Word/Question of the Day & Reflection
12:10 pm to 12:30 pm	Presentations of Certificates *** Parents are invited!!



APPENDIX II – Rota Eco-Camp Schedule

Time: JULY 30 TO AUGUST 2, 2013
 7:30am to 7:45am Campers drop-off site Roundhouse.
 7:45am to 8:00am Safety Briefing/Water Refill/Bathroom.
 8:00am to 12:30pm Groups will depart to assigned stations by 8:00am and return by 12:30pm
 12:30 pm Campers pick-up site Roundhouse
 SATURDAY, AUGUST 3, 2013 AT TETE TO BEACH CLOSING CEREMONY

Station	Location	Facilitators	Time	Activity	TUE 7/30	WED 7/31	THU 8/1	FRI 8/2	SA T 8/3
1	Talakhava, DLNR (Forestry)	Mr. James Manglona	8:00 to 9:00 9:00 to 12:00 12:00 to 12:30	Depart to Talakhava Presentation by Mr. James Manglona <ul style="list-style-type: none"> Revegetation Hike to designated barren land Plant seedlings Regroup and depart to the roundhouse Depart MPA site	E S F D B	Group 1	Group 2	Group 3	F U N
2	Coral Garden, DEQ (MPA)	Ms. Avra Heller	8:00 to 9:00 9:00 to 12:00 12:00 to 12:30	Presentation by Ms. Avra Heller <ul style="list-style-type: none"> MPA Snorkel and explore Regroup and depart to the round house	C A M P E R S	Group 2	Group 3	Group 1	A T
3 (A)	Tete'to Beach, CRM	Mr. Bill Pendergrass Ms. Nicole Schaefer	8:00 to 8:15 8:15 to 9:30	Depart to Tete'to Beach Presentation by Mr. Bill Pendergrass <ul style="list-style-type: none"> NO BURN CAMPAIGN Depart to Talo'	R E G I S T R A T I O N	Group 3	Group 1	Group 2	T H E B E A C H C L O S I N G
(B)	E-Gualo' EQIP (Farming Conservation Practices)	Mr. Eusebio Hocog	9:30 to 9:45 9:45 to 10:45	Presentation By Mr. Bill Hocog <ul style="list-style-type: none"> Hands on activity Farming Conservation Practices Depart to Bird Sanctuary					
(C)	Bird Sanctuary DFW-Birds DFW-BTS	Mr. Robert Ulloa Mr. Shelwyn Taisacan	10:45 to 11:00 11:00 to 11:30 11:30 to 12:00 12:00 to 12:30	Presentation by Mr. Robert Ulloa <ul style="list-style-type: none"> Hike, Bird Discussion Presentation by Mr. Shelwyn Taisacan <ul style="list-style-type: none"> Brown Tree Snake Regroup and depart to roundhouse					

APPENDIX III – Tinian Eco-Camp Schedule

12-Aug

7:30-8:00	Registration Meet at Pavilion
8:00-8:20	DEQ/MINA/BRABU Introductions
8:20-8:30	Break into and name groups
8:30-8:40	Create and share rules of camp
8:40-8:50	Break
8:50-9:00	Pre-test
9:00-9:05	Ridge to Reef Introduction
9:05-9:10	Natural Resources
9:10-9:35	Catch Phrase
9:35-9:45	Pre-bus Break
9:45-10:00	On the bus TO the dump
10:00-10:40	DUMP field trip / presentation
10:50-11:00	On the bus TO the Camp
11:00-11:30	BRABU Presentations
11:30 -12:00	BRABU Icebreakers
12:00-12:30	Post-Test Intro to Skit

13-Aug

7:30-8:00	Registration Meet at Pavilion
8:00-8:15	Icebreakers
8:15-8:45	Presentation on Tinian's Agricultural History
8:45-9:15	Break and Getting on the bus
8:45-9:15	Break and Getting on the bus
9:15-10:30	Cattle Farm
10:30-10:50	Break and Getting on the bus
10:50-11:30	Piggery
11:30-11:50	Go back to camp
11:50-12:05	Post-Quiz
12:05-12:30	Work on Skit/Wrap up

14-Aug

7:30-8:00	Registration Meet at Pavilion
8:00-8:15	Icebreakers
8:15-8:35	Getting to R1/R2
8:35-9:45	Hike into Limestone Forest/ Presentation
9:45-10:05	Return to camp
10:05-10:20	Break
10:20-10:40	Marine Debris Game Intro
10:40-11:30	Marine Debris Presentation & Clean-Up

11:30-11:50 Post-Quiz
 11:50-12:30 Skit Prep

15-Aug

7:30-8:00 **Registration Meet at Tachogna Beach**
 8:00-8:20 Icebreakers
 8:20-9:00 Coral Reef and its threats / MPA presentation
 9:00-9:10 Break
 9:10-9:40 snorkeling safety / gear assignments
 9:40-10:00 kids get into groups / change into suits / gear etc.
 10:00 -11:00 kids all in water
 11:00 -11:40 changing rinsing gear, skit prep
 11:40- 12:40 skits
 12:40 - 1:00 JC Pick up
 1:00 - 2:00 lunch at JC + certificates

Daily Quiz Questions:

Waste Management

What is a dump?
 What is a landfill?
 What is the difference between them?
 What does Tinian have?
 What can you and your family do to decrease your waste?

Agriculture Day

How is a dry litter piggery different from a traditional piggery?
 Name three benefits of a dry litter piggery.
 Where does bacon come from?
 How can a cattle farm impact the coral reef?
 What are Tinian cattlemen doing to prevent soil erosion?
 What part of the cow is the T-bone steak made of?

Limestone Forest Day

What makes a limestone forest unique?
 Name three types of birds only found in the CNMI.
 Name three types of plants that are found in a limestone forest.
 Why are there caves in limestone forests?

Reef Day

What is a coral reef?
 What is a MPA?
 What is marine debris?
 How long can a diaper stay in the ocean?
 Name one marine animal that can hurt you while snorkeling?
 What are the three snorkeling safety rules for you and the reef?
 What do you do when you get caught in a rip tide?