



newsletter

R a i n y S e a s o n 2 0 1 4

CRI INTERNSHIP SUMMER 2014

About: CRI Internship

Since 2002 the CRI Post-Secondary Summer Internship Program has worked to raise student awareness of coral reef issues, threats, and the efforts underway to protect them. Participants are provided with opportunities to gain hands-on experience in resource management as well as outreach, and are encouraged to pursue an education and career in an aspect of coral reef resource management.

Who: This year we had 10 fantastic interns: Daniel Kaipat, Frank Rabauliman Jr., Princess Garcia, Jeromalyn Santos, Kaiza Lucido, Kristle Richardson, Marielle Kapileo, Patrick Reyes, Raymond Villagomez, and Zabrina Shai.

Projects: Interns conducted projects in direct support of current conservation efforts by BECQ, DFW, and MINA. These projects included:

- Tourist monitoring and observations at MPAs and key beaches
- Conducting surveys and other work supporting the Laolao Bay Pride Campaign
- Plastic Bag Ban Campaign with MINA
- Garapan residential and business Nonpoint Source Pollution surveys
- Monitoring reefs for signs of coral disease.



Quotes:

"I enjoyed getting exposed in the field and getting hands on experience. I'm thankful for the help from all the mentors and staff who were very kind. I enjoyed working with others interns during this summer. Everything we experienced was a new and great experience!"

"I really enjoyed meeting all of the mentors and interns in this year summer internship, the bonds and knowledge that I've gained through this internship are something that I hope to never forget."

"I enjoyed the field work, the new people I got to meet (interns & mentors), and the sense of responsibility and independence I gained."

MARINE MONITORING PROGRAM

The BECQ Marine Monitoring Team (MMT) has had an eventful 2014! Since



MMT long-term monitoring site-Tinian, 2014

last October two biologists have joined the team, long-term monitoring of sites on Saipan, Tinian and Rota have continued, and the team has traveled to the Northern Islands! For their Northern Island adventures,



Maug Island, 2014

MMT joined NOAA research cruises from June 19 – July 20,

2014. On these trips they conducted 61 surveys of shallow water nearshore habitats of Uracas, Asuncion, Pagan, Guguan, Sarigan, and Anatahan. Their preliminary findings saw low diversity of emergent reefs, bleaching in Maug, Asuncion and Pagan, and a mass mortality of shallow water corals in Guguan, Sarigan, and Anatahan as a result from last year's



Mass coral mortality, Guguan, 2014

(2013) bleaching event. But it's not all bad news – Two volcanic vent sites were discovered! MMT also continued research from the 2013 bleaching response on Saipan and Rota – surveying 20 sites



2013 bleaching event, Saipan Lagoon

for extent and impacts of bleaching, working in partnership with UoG.

STORMWATER MONITORING AND MAPPING

GOAL: To detect pollutants being carried through watersheds by intermittent streams or stormwater runoff and identify source areas for mitigation activities



The "Stream Team" takes a water break after completing GIS mapping of two key drainages in the Laolao Bay watershed.



Abandoned buildings filled with trash, greywater and wastewater discharge, and military waste are all potential sources of pollution in intermittent streams and stormwater runoff.

In 2013-2014:

- **Forty-two stream sites sampled** during heavy rain events to create baseline information about land-based pollutant loads
- **Six staff members trained** in geo-spatial data collection and source identification
- **Thirty percent of streams** in six priority watersheds were mapped to show sources of pollution.

ROTA RIDGE TO REEF ECO CAMP



BECQ and the Rota Mayor's Office, Department of Commerce, worked together to host the Rota Ridge to Reef Eco Camp this summer. The camp ran from July 22 – July 25. There were 29 participants



ranging in age from seven to fourteen, along with over 15 community staff volunteers (parents, highschool students, agency staff, etc.). This camp as always was a great example of the kinds of partnership we can achieve in CNMI. And here's the list: staff from Division of Fish and Wildlife helped organize snorkeling as well as visits to I Chenchon Bird Sanctuary, Department of Forestry organized hiking and planting activities at the Talakhaya Revegetation project, NMC organized a tour of an aquaponics production area, DPS made sure everyone



stayed happy and safe, and that's not even the whole list! The unanimous feedback from the participants was that they wanted: "MORE CAMP NEXT YEAR!"

HOW CAN YOU HELP SUPPORT THE TALAKHAYA PROJECT?



Since 2007, volunteers have been helping Rota Forestry and the Bureau of Environmental and Coastal Quality to prevent wildfires and replant the Talakhaya area to keep the soil on land where it belongs. The goal of the project is to restore ecosystem health to the area for the benefit of the people on Rota. Volunteers work during the summer rainy season to dig holes in the hard rock in Talakhaya where they then plant grasses with good roots that will hold the soil in place. Volunteers also plant native trees and create natural rock barriers to slow down rainwater and keep it from causing erosion as it flows towards the ocean. Due to increased interest in the area and the efforts of the Talakhaya volunteers and community, only two major fires have been observed in the conservation area since 2008. Before the project started, fires happened several times a year. In 2014, 18 volunteers have been working all summer to out-plant 30,000 grasses and trees in the Talakhaya area to save our soil and save our reef.



Year	# of Plants Planted
2007	27,498
2008	29,151
2009	18,765
2010	24,330
2011	22,089
2012	27,931
2013	26,581
2014 Goal is 30,000 plants!	



- Take time to enjoy the conservation area by hiking the hills or swimming on the reef
- Volunteer to help plant trees by contacting DLNR Rota Forestry at 532-0528
- DO NOT HUNT in the conservation area
- DO NOT SET FIRES in the area, including campfires
- Be careful when lighting cigarettes
- Do not burn trash
- To report fires or illegal hunting, contact:
 - Fire Department: 532-3736
 - Division of Fish and Wildlife: 532-9495

GARAPAN WATERSHED WARRIORS

GOAL:

To provide place-based, hands-on watershed education and activities to 4th grade students in the West Takpochao watershed



Clockwise from top left: Student label a storm drain with "Don't Dump" stickers. Two students plant flowering shrubs along a stormwater canal. Students complete a scavenger hunt checklist at a nearby National Park.

- **Sixteen** site-specific watershed **lesson plans** were designed and piloted
- Quarterly **FREE local field trips** were provided to students
- **Thirty trees were planted** and **thirty storm drains were marked** by students in critical stormwater zones around Saipan's tourism district
- **Fifty-six students** completed the initial "Watershed Warrior" program



LAOLAO BAY PRIDE CAMPAIGN

GOAL: The campaign is committed to protecting what we love: the ocean and our way of life here on Saipan. Our focus is on reducing land-based sources of pollution through personal action and community collaboration.

- **FREE Laolao Watershed Hike field trips** were provided to students
- **340 native trees** were planted in the Laolao Bay Watershed
- Over **5,000 campaign giveaways** distributed to the community.
- **450 native trees** given to Laolao Watershed Landowners
- Campaign presentations to over **500 students**
- **12 landowners** participated in Laolao Watershed Erosion Control Training
- A total of **41 campaign events** since September 2013.

