



# National Coral Reef Management Fellows Newsletter

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### **Catching up with the Atlantic fellows!**

It's been over eighteen months since the fellowship began – read about some of their fellowship highlights.

### **Fellow's focus: Professional Development**

The fellows have now undergone at least one professional development experience. Read about what they've learned!

The Fellow Newsletter is published by the National Oceanic and Atmospheric Administration (NOAA) Coral Reef Conservation Program, the United States Department of the Interior, and Nova Southeastern University to relay information related to the

## **Fellowship Recap**

**Matt Davies – US Virgin Islands:** Matt coordinates the response to the stony coral tissue loss disease (SCTLD) outbreak on St. Croix and is also working towards reducing impacts of boating on coral reefs, through public outreach and improving the territory's vessel grounding response.

**Tori Barker – Florida:** Tori continues to work with the Florida Disease Advisory Committee to coordinate the response to SCTLD in Florida.

**Emma Korein – Puerto Rico:** Emma helps coordinate the response to coral disease outbreaks in Puerto Rico, especially SCTLD, and is developing a participatory tool with stakeholders to identify priority sites for coral disease intervention.

**Cara Lin - Guam:** Cara's work in Guam focuses on mangrove and seagrass ecosystems, and includes research, restoration, education, and outreach.

**Bert Weeks – Hawai'i:** Bert has been working in Hawaii to develop Hawaii's Holomua 30x30 plan and to increase DAR's capacity in coral restoration management.

**Ilan Bubb – The Commonwealth of the Northern Mariana Islands:** Ilan has been working to integrate fire management within the island's three priority watersheds into established coral conservation priorities and goals.



*Photo by Bert Weeks*

# Catching up with the Atlantic fellows!

## Emma Korein – Puerto Rico



### What new skills have you learned during your fellowship?

Networking is a big part of my fellowship, whether it's reaching out to key informants for interviews about coral disease management or corresponding with potential presenters for our annual Coral Reef Week. This fellowship has taught me a lot about the essential skills of communication and collaboration in order to achieve coral reef management goals.

### What are you most proud to have accomplished?

I'm very excited about the early results of a participatory mapping project I am conducting. For this project, I have customized an online mapping platform that allows participants to identify reefs where they have observed coral diseases and select priority sites for coral disease monitoring and intervention efforts. I'm proud this map is now being used to help plan stony coral tissue loss disease (SCTLD) response efforts across all regions of Puerto Rico.

### What is your favorite thing about living in your jurisdiction?

San Juan is definitely on my top list of favorite places to live - great people, great food, and great general atmosphere. Even though I am in the capital city, I'm only a quick drive away from beaches, national parks, rivers and tropical forests. As someone who loves both nature and city life, this is the dream!

## Matt Davies – US Virgin Islands



### What are you most proud to have accomplished?

I am most proud of the success of the St. Croix SCTLD Strike Team in responding to the outbreak. Since October we have trained 19 volunteers and the team has applied over 1,100 coral treatments, with an average success rate of 82%. Although the team is only able to treat a small percentage of the island's reef, it is rewarding to see the treatments working. In May, The Nature Conservancy collected gametes from 13 *Diploria labyrinthiformis* colonies the Strike Team successfully treated over the previous few months, for propagation in their newly completed land-based nursery. Without the team's intervention, most, if not all, of those colonies would have surely died before spawning began.

### What has been the greatest challenge?

The COVID-19 pandemic has certainly been the biggest challenge for me, as I'm sure it's been for many. Most of the training sessions, meetings, and presentations I give and attend have gone virtual. I struggled with this shift away from traditional interactions and the social isolation of working from home. Since a lot of my work involves working closely with stakeholders and the general public, I felt limited by the virtual world at times. Of course, we learn and we adapt, and

virtual meetings do provide the opportunity to reach new audiences, but I am eternally grateful that, at least here on St. Croix, we are beginning to return to some form of normality.

### What is your favorite thing about living in your jurisdiction?

I moved here from St. Louis, Missouri, which was the furthest from the ocean I have ever been, let alone lived! On St. Croix, I am never more than five minutes from the water, which holds some of the Caribbean's best dive sites. I am grateful every day for this and will never tire of it.



### **Tori Barker - Florida**

#### What new skills have you learned during your fellowship?

One of the most valuable skills I have learned during my Fellowship is the art of facilitation - particularly for large groups! During my first few months of the Fellowship, I was tasked with planning and then running and facilitating a technical workshop for nearly 100 people. Not only did it mean I had to learn the material quickly, but I also had to learn the various roles and personalities of our resource managers, academic researchers, and non-governmental partners. While this was a challenge, it prepared me for the unprecedented shift to remote meeting that has taken place during the COVID-19 pandemic. I now regularly plan and facilitate virtual meetings for groups of several hundred people.

#### What has been the greatest challenge?

Work life changed dramatically in 2020 as COVID-19 restricted in person gathering and many people began working from home. I was faced with a new challenge: how to maintain - and even build - momentum within the coral disease response when social distancing restrictions made it difficult (or even impossible!) to conduct work both in the lab and in the field. Despite these challenges, the Florida coral disease response is larger and more capable than ever. Our partners have shown amazing creativity and resilience to continue their work. For instance, our Intervention Teams treated nearly 1,400 diseased corals in 2020 while adhering to mask wearing, social distancing, and quarantine protocols. You can learn more about the Intervention Team's amazing work on their Dashboard (<https://floridadep.gov/rcp/coral/content/reconnaissance-and-intervention-coral-disease-response-team>). For me, working within the "new normal" meant switching from conference calls to video calls and in person meetings to virtual workshops. There was a lot of learning required to ensure folks remained engaged and productive during virtual meetings and ensure that our time was productive and well spent.

#### What is your favorite fellowship memory?

One of my favorite memories from my Fellowship experience was the 2019 Stony Coral Tissue Loss Disease Technical Workshop. This four-day event was held in St. Petersburg, Florida and provided a unique opportunity to meet with researchers, resource managers, and partners from across the region. Due to COVID-19 travel restrictions in early 2020, this was the first, and in

some cases, the only time I was able to meet some of my closest co-workers in person and was invaluable for building professional relationships and research collaborations.

## Fellow's focus: Professional Development

### What did you do for your 2020 professional development and why did you choose it?

#### Matt Davies – US Virgin Islands

For my professional development I completed an online six-week grant writing certificate from the University of Georgia. Grant writing is an integral part of many natural resource management and research positions, and I wanted to learn more about the process to better equip myself for my current and future roles.

### How have you applied what you learned to your Fellowship work?

Since completing the grant writing certificate, I took the lead on writing one of the projects for the U.S. Virgin Islands 2021-2022 NOAA Coral Reef Conservation Program Cooperative Agreement funding. My project sought funds to support a more effective response to coral disturbances such as vessel groundings, and increased capacity for the St. Croix East End Marine Park, through a boat share agreement between Coastal Zone Management, the Division of Fish and Wildlife and the Division of Environmental Enforcement. We have yet to hear the final decision, but I hear it has been well received, so fingers crossed!

#### Bertram Weeks - Hawai'i

In 2020, my initial ideas for professional development were disrupted, but like many things in a pandemic-filled year, plans were changed, and I was still able to make the most of out the situation. In the late summer of 2020, I attended the Hawai'i Conservation Conference that is hosted annually in Honolulu, Hawai'i, typically at the Hawai'i Convention Center, but this year adapted to a virtual platform. This was my fourth time attending this conference and my first virtual conference.

### How will your professional development help you achieve your professional goals?

It is always good to hear updates about the various conservation projects going on throughout the state and especially nice to hear some of the success stories from others to inspire and give energy to your own work. Meeting the researchers, managers, and





community members who are behind these projects is so valuable in a small community like Hawai‘i where the ecosystems and conservation landscape is so unique. Knowing who is doing what kind of work is so important for both my fellowship work and beyond. On an island, collaboration is key to success, and forums to communicate are great opportunities to build relationships. It is hard to compare meeting in-person to a virtual setting, but I’m still grateful that technology has allowed us to still share our stories even when we need to stay physically apart from one another.



### **Cara Lin - Guam**

Last year I was able to participate in a five-day conservation conflict transformation (CCT) workshop run by the Center for Conservation Peacebuilding. To understand and work through complex natural resource management problems requires being able to listen to and facilitate discussion between different stakeholders. I chose to participate in the CCT workshop to develop a better framework for understanding and navigating conflict for my fellowship and future work.

#### **How have you applied what you learned to your fellowship work?**

During the CCT workshop, I was able to hear from various other professionals about their work in different conflict situations, including conflicts with fishing and recreational use, efforts to save vulnerable and endangered species, and land easement programs. The workshop emphasized the importance of listening and gathering information from various perspectives, and I hope to utilize this approach while working with private landowners to conserve mangroves in my fellowship work. As part of the workshop's alumni network, I also hope to discuss and work through future conflict situations in my own work and others.

### **Ilan Bubb – The Commonwealth of the Northern Mariana Islands**

Last August, I was able to travel to Rota, the southernmost island of the Northern Marianas. While staying there for a week I got to travel across the island, look at various revegetation projects funded through internal and external partners, talk to locals about their experiences with coral degradation and help with the Marianas Crow project. Overall, the trip was a fantastic experience that put me in touch with local wildlife professionals on the island who gave me valuable career advice and ideas for ways to improve my work on Saipan. Visiting the Talakaya watershed was an incredible experience. Here the local forestry department has planted hundreds of trees including a species of grass called



vetiver that has a long/strong root system making it able to significantly reduce erosion downslope. This project is working to reduced land-based sources of pollution from going straight into the coral reef while at the same time creating jobs for the local economy.

### How have you applied what you learned to your Fellowship work?

Since returning, I have used what I learned in Talakaya in my work on Saipan. Thanks to the successful awarding of a grant, the watershed coordinator and I are working to restore six acres of land in the Achugao watershed. Using the lessons learned in Talakaya, we now know we do not need to use vetiver grass for soil stabilization since fires and ground conditions are not nearly as bad. Instead, we can jump straight to phase two of revegetation and start planting native trees such as Da'ok and fire-resistant trees such as banana.



### Valentine Vaeoso – American Samoa

I was able to attend an in-person three-day workshop on island for The Nature Conservancy Territorial Restoration Planning Process with local and federal resource managers. The focus of the workshop was brainstorming ideas to develop restoration plans for the territory to restore ecosystem functioning in a degraded or damaged reef habitat.

### How have you applied what you learned to your Fellowship work?

The workshop was a great opportunity for me to meet and work together with all the partners involved in the restoration planning process. Particularly, I'm currently working on a restoration project in Aua which will act as a pilot study to investigate reef restoration methods, species, and successes to enable the development of future restoration projects in the Territory.

### Emma Korein – Puerto Rico

For my professional development, I had the very exciting opportunity to attend a Coral Reef Ecology course at the Bermuda Institute of Ocean Sciences. This hands-on master's level program taught me how to conduct and analyse common benthic cover survey techniques, including line point transects, quadrats and photo-mosaics. I also learned various techniques for studying water quality and reef metabolic rates in the lab and in the field, as well as the significance of these processes in assessing reef health.



## How have you applied what you learned to your Fellowship work?

One of the most beneficial things I learned through this course was how to interpret ongoing scientific studies in Puerto Rico relevant to coral diseases. For example, the benthic survey techniques I learned are currently being used to track the spread of stony coral tissue loss disease. I also work with managers who use metrics of water quality to better understand the impact of coastal pollution on coral disease prevalence. Furthermore, through this course I was able to network with esteemed scientists who specialize in coral reef management and remote sensing, which is an important topic in reef monitoring efforts in the Caribbean.



### Tori Barker - Florida

For my 2020 professional development, I completed an online continuing education course in project management, offered by Stanford University. During this 12-week course, I learned the ins and outs of project management, have since become more efficient in my planning of various workshops and meetings, and am more capable in balancing the many tasks required to complete my work.

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**The National Coral Reef Management Fellowship was established in 2003 to respond to the need for additional coral reef management capacity in the U.S. coral reef jurisdictions in the Pacific and Atlantic/Caribbean. The fellowship is a partnership between the National Oceanic and Atmospheric Administration's Coral Reef Conservation Program, the U.S. Department of Interior's Office of Insular Affairs, the U.S. All Islands Coral Reef Committee and the Nova Southeastern University's Halmos College of Natural Sciences and Oceanography. The program's vision is a thriving collaborative fellowship program that builds excellent next generation leaders and capacity for effective local coral reef ecosystem management.**

