

**Technical Writing Workshop for Pacific Island Managers Learning Exchange**  
**March 29 – April 1, 2015**  
**Honolulu, Hawai'i**



Managers and practitioners from Hawai'i, the Commonwealth of the Northern Mariana Islands, and American Samoa participate in the Technical Writing Workshop for Pacific Island Managers Learning Exchange.  
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## Executive Summary

A four-day writing workshop was held March 29-April 1, 2015 to build technical writing skills of Pacific Island coral reef managers and practitioners. With the support of The Nature Conservancy's Central Science team and funding from NOAA's Coral Reef Conservation Program, we supported the attendance of six managers from Hawai'i, the Commonwealth of the Northern Mariana Islands (CNMI), and American Samoa. Participants received expert mentorship from TNC's Chief Scientist Peter Kareiva and team of science reviewers to improve writing skills, finalize a publication for submission to a relevant journal, and develop a timeline and plan for submission.

## Background

The Reef Resilience Network works to strengthen and enhance training and capacity building opportunities for coral reef managers to address the impacts of climate change and local stressors to coral reefs. To address this program objective, the program organizes multiple learning exchanges each year to provide intensive in-person trainings to coral reef managers. These workshops are designed to improve management techniques and address site-specific needs of coral reef managers.

## Objectives

The aim of the workshop was to provide participants with access to science and writing experts in order to improve their writing skills and support the sharing and new coral reef science from the region through the publication of their work.

## Participants

Six coral reef managers and practitioners – three women and three men – participated in the Technical Writing Workshop. See the table below for details on the participants and their paper topics. The Reef Resilience Program staff will follow up with each individual quarterly throughout the year to monitor and encourage progress towards their publication goals, and provide support if needed.

List of Participating Organizations and Paper Topics:

Organization	Paper Topic
CNMI Bureau of Environmental and Coastal Quality	Submarine Groundwater Discharge, Water Quality, and Algal Communities at Laolao Bay, CNMI
CNMI Division of Fish and Wildlife	Invasive alga accelerates fine sediment flushing in Maunalua Bay, Oahu
American Samoa Department of Marine & Wildlife Resources	Community-based Fisheries Management Program in American Samoa
The Nature Conservancy Hawaii	Market Prices of Coral Reef Fish--Undervaluing a Valuable Resource?
University of Hawaii, Fisheries Ecology Research Lab	Reproductive life history of roi, the introduced peacock grouper in Hawaii
The Nature Conservancy Hawaii	Novel approaches for the assessment of abundance and life history of <i>Octopus cyanea</i> in support of local marine management in Hawai'i

## **Facilitators**

Learning exchange facilitators included:

- Peter Kareiva, Chief Scientist, The Nature Conservancy
- Jennifer Molnar, Lead Scientist, The Nature Conservancy
- Matt Miller, Deputy Director Science Communications, The Nature Conservancy
- Kristen Maize, Strategic Communications Manager, The Nature Conservancy Hawai'i
- Petra MacGowan, Reef Resilience Program Manager, The Nature Conservancy

## **Agenda Overview**

Prior to the workshop, all participants submitted a full draft of their paper including the abstract, introduction, methods, results, conclusion, and references. Reviewers provided paper edits to participants prior to the start of the workshop. Participants were also assigned a partner and provided their paper ahead of time to review and share feedback before day one.

The learning exchange kicked off with a field trip to He'eia, located on the eastern shore of Oahu, for a tour of the lo'i (taro field) and fishpond. There participants learned about Native Hawaiian taro farming and aquaculture practices, were oriented to the island, and discussed management challenges and strategies of the area mauka (mountain) to makai (ocean) with the field trip guides, The Nature Conservancy Hawai'i Marine Fellows. Later that evening, participants gathered for a group dinner and for introductions and an overview of the agenda and goals for the next three days. Afterwards, peer groups met briefly to discuss the progress thus far on their papers and discuss their target audiences.

During the next two days, participants worked to incorporate the feedback provided on their manuscripts. Most meals were working meals, serving to create space for informal discussion about progress on papers and journals targeted for publication and to provide mini presentations on related topics. Workshop reviewers/editors were available for one-on-one meetings during the day. In addition to these private meetings with the reviewers, participants were required to meet with their peer group each day to discuss their manuscripts. Manuscripts were due back to the workshop and peer reviewers at the end of each day, and were returned to participants with edits and comments by the next morning.

On the second day, Matt Miller presented tips for time management when writing, introducing the Pomodoro Technique, a strategy recommended that participants use for during the workshop. Students were given the morning to work on incorporating the peer and expert review comments into their drafts. The afternoon began with a brief discussion led by Peter Kareiva on the changing scientific journal landscape, and concluded with a briefing by Jennifer Molnar on The Nature Conservancy's partnership with DOW chemical. Throughout the day, participants continued to work on their drafts, which were submitted for review before the group dinner.

The third day followed a similar schedule, with workshop participants incorporating edits and comments from their peer group and the experts, meeting individually with the experts as needed, and participating in presentations – this time on “communicating science to a broader audience” and “what it takes to be a TNC scientist”. The day once again ended with participants submitting their drafts to the experts and their peers for review.

The final day workshop leaders conducted one-on-one exit interviews with the participants. Individually, participants discussed progress on their papers and a plan of action for finalizing their paper and submitting it for publication, as well as provided feedback about the workshop.

### **Lessons Learned and Next Steps**

Workshop participants successfully built their skills in writing through receiving daily feedback and recommendations of priority areas for improvement in their manuscripts from experts. They were also responsible for providing daily feedback on draft manuscripts from their peers further building skills as reviewers. After three intensive days of writing, reviewing, editing, and group discussions, each participant emerged with a draft paper ready for publication in a scientific journal. Publication of this new science from coral reef regions will contribute to the overall understanding of status of reef and reef resources and the workshop created new connections between managers in the region.

In workshop evaluations given to participants at the end of week all participants agreed that skills learned could be applied to their work and the workshop helped to improve their writing. Since the exchange two of the participants, Ily Igelisa and Eva Schemmel, had their work written up in the TNC Cool Green Science Blogs! See [The Octopus' Birthday](#): Understanding an Intelligent & Elusive Marine Creature and [Got Gonads?](#)

See below for additional comments from participant evaluations:

“This workshop was invaluable for developing my scientific writing skills. I got phenomenal feedback from the TNC scientists and delighted in the company of the other workshop”

“I found the knowledgeable tips and advice from the TNC scientists to be immensely helpful in improving my writing, and learning what to expect from the submission process!”

“I was able to make tremendous improvements to my paper! I am now looking forward to getting it approved and submitted”

### Pre-workshop

To avoid issues with participant access and/or familiarity with DropBox – the document sharing program used to submit, review, and distribute papers – Reef Resilience staff will work with our participants ahead of time to make sure they either have an account or to set one up. We will also set up editing folders for each participant and make sure all reviewers have access.

### During the workshop

Because the field trip plays a crucial role in introducing participants to the workshop location and each other before the start of the learning exchange, we plan to make participant attendance mandatory. We also think it would be beneficial to have the expert reviewers attend, so the participants can interact with them right away in this informal setting. From participant feedback we learned that opportunities to interact with the reviewers informally are important. Based on this feedback, we also plan to modify the group dinner the first evening so it's more conducive to mingling and getting to know other participants and reviewers.

To help participants retain the main takeaways from group presentations, we plan to create and distribute handouts summarizing the main points and with links to relevant resources. These resources, along with participants' planned timeline/benchmarks for publication, will be posted to a private group on the Reef Resilience Network Forum, where they can be easily accessed and housed in one place.

We also plan to pre-schedule check-in meetings between experts and participants on the first day to provide an opportunity for participants to receive feedback directly and ask questions. We heard from participants that they would have liked a set time to speak with the reviewers, as some people aren't comfortable reaching out/approaching reviewers to ask for help. If a meeting were already scheduled, this issue is avoided entirely.

#### Post-workshop

During the exit interview, participants identified a timeline for editing and finalizing their draft and submitting it for journal publication. Reef Resilience staff plan to check in with each participant near their planned submittal date. As previously mentioned, to help motivate participants and encourage them to share lessons learned, we created a private group for workshop participants on the Reef Resilience [Network Forum](#). It is our hope that participants will use this private online discussion platform as a way to share their experience as they reach milestones with the rest of the group, i.e. "I submitted my paper to so and so, now let's wait and see," "I wrote to XX but haven't heard back yet, any suggestions?" We'll also use this discussion platform as a way to share resources and discuss your short term and long-term participant needs.

We also discussed opportunities for participants to share their work with coral reef managers and practitioners via a Reef Resilience webinar, article summary, and/or interview on the Network Forum.