



Workshop Report
Palau-Hawaii Learning Exchange
February 2012



Background

The purpose of this learning exchange was to share Palau's experiences in merging traditional and modern governance systems in the management of natural and cultural resources. A delegation of sixteen community members from the islands of Oahu, Maui and Hawaii Island participated in the Palau Hawaii Learning Exchange. The exchange follows an earlier visit of Palau community representatives to Hawaii in June 2011 reported on in a previous report.

Issues Highlighted for Participants of the Exchange included:

- An overview of conservation and natural resource management in Palau
- Palau's traditional conservation ethics in modern resource management
- The use of the bul (no take areas) historically and in modern fisheries management
- The role of science and technical agencies in conservation and management in Palau
- Managing from ridges to reefs: An overview of the Belau Watershed Alliance
- Managing tourism and conservation for the benefit of people and nature
- Active dialogue with various community groups, organizations and cultural leaders

Objectives

The Objectives of the Learning Exchange were:

1. The participants in the learning exchange will gain an understanding of the evolution of Palau's resource management and conservation practices in merging traditional resource management practices with modern conservation management.
2. The participants will also learn of key challenges and lessons in engaging with communities to gain support for conservation and management of natural resources in Palau, and how to apply these lessons in Hawai'i.
3. The participants will gain an understanding of current efforts by the National/State Government and NGO's of Palau for conservation and management of their natural resources.

Expected Results

It was expected that Hawai'i participants would come away with 1) an appreciation for the value of establishing community-based MMAs, 2) key ingredients for successful MMA establishment, and 3) compliance, enforcement, and management strategies for MMAs. In particular it was hoped, that Hawai'i participants would gain insight into the challenges of establishing MMAs, how Palauan communities turned opposition into support for MMAs, and the community benefits of MMAs. It was also expected that participants would address the value, role, and application of traditional knowledge to modern day natural resource management issues, including the effects of global climate change.

Methodology

The Learning Exchange agenda was designed to promote an open conversation of lessons learned and effective management strategies used in Palau that Hawaiians could utilize within their own place.

Below is a brief summary of each day's activities. See Appendix A for the full meeting agenda, map of locations visited and participant list.

Day 1 - Overview of Conservation & Management in Palau

This was a day designed for the group to gain an understanding of resource management in Palau, meet key conservation partners, and visit the Council of Chiefs. The morning began with participant introductions and provided the group a chance to meet each other as well as our hosts in Palau. Umiich Sengebau, from TNC Palau, gave an overview of the week's agenda and answered questions from the

group. A presentation was then given by Speaker Noah Idechong, a representative in the House of Delegates of the Palau National Congress. He provided an overview of the evolution of conservation in Palau and the merging of traditional management with modern approaches. To better help the group understand resource management in Palau the following presentations were also given:

- Role of Science in conservation given by the Palau International Coral Reef Center(PICRC)
- Bridging communities to natural resource partners to implement conservation given by Elbuchel Sadang the Executive Director of the Palau Conservation society
- Strengthening fisheries management to support conservation given by David Orrukem the Director of the Bureau of Marine Resources, Palau
- Catalyzing conservation: the role of The Nature Conservancy in Palau and Micronesia given by Steven Victor of TNC Palau

The afternoon included a very important visit to the Council of Chiefs in Ngerulmud, the capitol of Palau. At this meeting all participants were introduced to the village chiefs and the purpose of our visit was explained. The chiefs welcomed the group and gave their blessing for the group to visit the various regions during the exchange. The evening concluded with a welcome reception at PICRC.

Day 2 – Traditional Conservation Ethics in Palau

The morning involved a hike in the Ngardok Nature Reserve, the country's largest freshwater lake. On this hike the group learned about traditional uses of the area as well as the recent effort of the government to develop eco-friendly infrastructure for tourism at the site. The afternoon included meetings with three villages and village leaders to learn more about their individualized approaches to resource management (See list below)

- Melekeok, lunch and meeting with chief also included visit to the traditional bai of the village
- Ngarchelong, meeting with the Governor and Legislature to discuss the Northern bul & management plan.
- Ollei, dinner hosted in a by fisherman in the traditional community center or Bai

Day 3 – From Bul to Modern Fisheries Management

The morning involved an exciting hike to Ngardmau Taki Falls. Here the group learned from the Governor of the region how Palau is merging tourism development with conservation for sustainable resource management financing. The falls is another terrestrial site where the government has invested in tourism infrastructure in order to provide alternative livelihoods for its people. The afternoon gave the group its first chance to see the coral reefs of Palau with a visit to the Northern Reefs. At the Northern Reefs, we not only got in the water for a first-hand look at the resource but we discussed the region's first modern imposition of "bul," a traditional prohibition on resource use and how it led to merging traditional and modern resource management in Palau. The day ended with a dinner with the Board of Directors of the Palau Conservation Society including presentations on the work of the Society.

Day 4 – Managing from Ridges to Reefs

This day involved a visit to Ngeremlengui and the Palau Community College Hatchery at Ngermeduu Bay. Presentations were given on work in the state and discussions were held on the importance of Ngermeduu Bay. The group visited the hatchery and had time for a sharing session of participant's observations and lessons learned so far on the exchange. In the evening the group attended a

fundraiser dinner at PICRC. This dinner provided another great opportunity for the group to meet and speak with various officials and members of the conservation community in Palau.

Day 5 – Managing Tourism and Conservation

This day included a visit to the Rock Islands Southern Lagoon Management Area, led by the Palau Bureau of Marine Resources, the agency responsible for management of the area. The area is a UNESCO World Heritage Site and the group had the opportunity to visit various sites with park managers and enforcement officers, including Jellyfish Lake, Ulong Cave, and Soft Coral Arch. The Koror State Rangers and director discussed the importance of the Rock Islands to Palau's biodiversity, culture and economics.

Day 6 – Wrap Up

This day gave participants a chance to choose activities. Some group members went spearfishing with local fisherman, others chose to use the time for another visit to the Rock Islands while others used the time to prepare for the trip home and explore Koror.

Results/Lessons Learned/Conclusions

Both exchanges reinforced the importance of looking to your neighbors for new ideas and inspiration. See the list of highlighted outcomes from the exchange below.

Outcomes in Hawaii include:

- Strengthening of connections and relationships between Hawai`i communities, from mauka to makai, who are involved in local resource management and preservation.
 - Participants have come back to Hawaii excited to work together to achieve more than they could individually. For example, the Oahu participants in the exchange met upon returning home to discuss how they could keep up the momentum.
 - Participants felt validated in the direction they are moving and a desire to also look broadly at commonalities that can be combined and leveraged among the island communities.
 - Participants said they felt inspired and rejuvenated – both at what they saw in Palau, and in one another. Several people said they had no prior knowledge of all the work being done in Hawaii and are excited about helping each other.
- Participants expressed a renewed sense of pride in Hawaiian culture coupled with a new or expanded awareness of how to integrate community values, government, and science to increase resources for all. Participants said they also had an awareness of what has been lost in Hawaii, a new awareness of their role as leaders in Hawaii, and willingness and motivation to:
 - Call for other community members to engage in local management of marine and other natural resources
 - Serve as spokespersons in Hawaii media (such as being interviewed by reporters for TV, radio, and newspapers) as well as in their individual communities. See the following link for Hiilei Kawelo's interview on Hawaii Public Radio.
[The Conversation: Monday, February 20th](#)
[Source: hawaiipublicradio.org](http://hawaiipublicradio.org)

- Commit to work together to reach out to a younger generation of fishers to develop a stronger conservation ethic and support for management (from younger participants)
 - Hold one another accountable for their leadership roles in Hawaii
- Chairperson Aila confirmed his commitment to support community efforts in co-management and invited communities to submit rules to enhance and improve marine regulations in Hawaii.
- Expanded knowledge of, and willingness to implement, proven conservation tools such as MPAs using both traditional and modern cultural values/tools
- Expanding knowledge of the importance of enforcement and funding for enforcement and conservation.
- Several Hawaii Island and Maui communities have asked TNC to help them develop rules for their sites in part because of what they saw in Palau, and in part because of the support they heard from the Chairperson.
- Participants noted that while conservation benefits both biodiversity and tourism in Palau, those are not the primary benefits and the feeding the local population was a key priority for villages and should be in Hawaii as well

Outcomes in Palau:

- The importance of avoiding some of the problems Hawaii faces by:
 - Avoiding stream channelization as development increases in Palau
 - Ensuring that development efforts minimize impacts to the environment, water sources, and other key ecosystem functions that are needed to maintain and protect biodiversity and serve human's needs.
- Palau participants had a renewed commitment to try and work harder to protect the cultural and traditional practices and wisdoms that are still being practiced in Palau.
- The value and possibility of conservationists and developers working together to protect resources, as is being done on Hawaii Island with the Kaupulehu Marine Life Advisory Council.
- How low-tech methods for controlling soil erosion and re-vegetation from Hawaii can be applied to Palau, where there are bare areas which have not been vegetated.
 - Example: installing a simple boardwalk in a hiking area
- Understanding the negative impact of goats and deer on the watershed and a solid argument to avoid bringing those animals into Palau.
- The importance of preventing introductions of invasive species versus managing invasive species to eradicate and control them once established.
- Managing water for future developments
 - The importance of maintaining forest to help filter water and reduce evaporation.
 - Working with land users such as ranchers to ensure there is enough water to recharge groundwater, for their cattle, and for the entire community.
 - The importance and value of protecting natural wetlands for floodwater control (rather than having to re-engineer solution later).

Follow Up

After the exchange several follow up activities have occurred or are planned including:

- Media – Evelyn Wright the communications specialist at TNC Honolulu worked to set up interviews with a variety of media outlets in Hawaii for the exchange participants in order to share lessons learned throughout the islands.
- Support for action- TNC staff that participated in the exchange were specifically selected to attend and helped to select participants on Oahu, Hawaii Island and Maui. These staff will continue to support the work of the participants through individual follow up, support in rule writing and development of next steps.
- Sharing lessons learned – Petra MacGowan, the RR Project Manager, has been asked to help support TNC and territorial points of contacts in Puerto Rico and the USVI to plan learning exchanges for 2013. The lessons learned from the Palau-Hawaii exchange will be shared with the team planning the Caribbean exchanges in order to plan the effective projects.

Testimonials

- “One of the most inspiring aspects of the Palau story is that fishermen and local communities worked together to protect their resources, it was not imposed by government.” - *William Aila, chairperson of the Hawai‘i State Department of Land and Natural Resources.*
- “In Palau they conserve resources for food, our resources should be managed for food in Hawai‘i too” - *Vern Yamanaka of the Ka‘ūpūlehu Marine Life Advisory Committee (KMLAC) on Hawai‘i Island.*
- “Seeing Palau and learning about how they manage resources is wonderful, and bringing this group together to share our knowledge and the work we are doing in Hawai‘i is inspirational. Although our journey to Palau has come to an end, it’s really just the beginning.” - *Kimi Werner, a champion Hawai‘i spearfisher*
- We already know what to do — it is part of our ancestry — and coming to Palau is a reminder of where we came from and the incredible responsibility we have to pass on the legacy of a healthy and abundant sea.

Appendices

- Appendix A. Exchange Agenda, Palau Map and Participant List
- Appendix B. Dispatch from the Field: Palau | Cool Green Science: The Conservation Blog of The Nature Conservancy
- Appendix C. Press Release
- Appendix D. Malama Maunalua Newsletter
- Appendix E. Hawaii Fishing News

Palau - Hawai'i Learning Exchange - Agenda

Alii! Welcome to the Palau - Hawai'i Learning Exchange, made possible through generous support from the **MacArthur Foundation**, the **National Oceanic and Atmospheric Administration's Coral Reef Conservation Program (NOAA CRCP)**, and **The Nature Conservancy**. Sulang, and Mahalo nui to our funders!

A special thanks to The Nature Conservancy - Palau and the Belau Watershed Alliance for hosting us and putting together a wonderful agenda.

The purpose of this learning exchange is to share Palau's experiences in trying to merge traditional and modern governance systems in the management of natural and cultural resources. This is a follow-up to the visit of Palau community representatives to Hawai'i in 2011.

Objectives:

1. The participants in the learning exchange will gain an understanding of the evolution of Palau's resource management and conservation practices in merging traditional resource management practices with modern conservation management.
2. The participants will also learn of key challenges and lessons in engaging with communities to gain support for conservation and management of natural resources in Palau, and how to apply these lessons in Hawai'i.
3. The participants will gain an understanding of current efforts by the National/State Government and NGO's of Palau for conservation and management of their natural resources.

Activities/Themes:

1. Overview of conservation and natural resource management in Palau
2. Palau's traditional conservation ethics in modern resource management
3. From bul to modern fisheries management: The role of science and technical agencies in conservation and management in Palau
4. Managing from ridges to reefs: An overview of the Belau Watershed Alliance
5. Managing tourism and conservation for the benefit of people and nature
5. Active learning exchange and dialogue with various community groups, organizations and cultural leaders
6. Having fun, island style!

Note: Due to high occupancy, we will be staying in 3 hotels (contact info on bottom) all within walking distance. The bus will pick us up in the morning from the Palasia and Penthouse Hotels. Those staying at the Guest Lodge Motel will walk to the Penthouse hotel for bus pick ups.

Attire and gear reminder: Aloha attire (men: aloha or collared shirt, pants and covered shoes; women: avoid low cut tops, dresses/skirts must fall below knees, blouses with covered shoulders) is required for our meetings with partners, officials and for all dinner functions. Please refer to the agenda for what to pack for the day as the bus will only return to the hotels in the evening before dinner.

Saturday 2/4		<i>Travel</i>	
We will be meeting at the United check-in counter. Don't forget to bring your passports!! We will be passing out group luggage tags for easy identification.			
Honolulu, HI	125P (HST)	Meet at United check-in counter at Honolulu International Airport	
	325P (HST)	Depart Honolulu, HI for Agana, Guam	United #201

Sunday 2/5		<i>Travel</i>	
Once you get to your hotel, we recommend that you keep your passports in the hotel room's safe.			
Agana, Guam	705P (ChST)	Arrive Agana, Guam	
	755P (ChST)	Depart Agana, Guam for Koror, Palau	Continental #157
Koror, Palau	855 (PWT)	Arrive Koror, Palau	
	~945P	Shuttles to hotels	

Monday 2/6		<i>Overview of Conservation & Management in Palau</i>	
We will be in meetings all day. Please dress appropriately as we will be meeting conservation partners, and the Council of Chiefs - Aloha attire (aloha shirt/collared shirt, long pants, covered shoes). In the morning, we will size people for snorkel gear (if you need it). TNC Palau will be renting equipment for those who need it. Speaker Noah Idechong will be hosting our welcoming reception at Palau International Coral Reef Center (PICRC).			
Koror	700A	Breakfast @ hotels	
	815A	Bus departs hotels for PICRC	
	830A	Meeting with conservation partners @ Palau International Coral Reef Center (PICRC) aloha attire	
	1130A	Lunch @ PICRC	
	1215P	Depart PICRC for Ngerulmud	
Ngerulmud	100P	Meeting with the Council of Chiefs	
	230P	Depart Ngerulmud for Koror w/stopover at Ngiwal mangroves	
Koror	315P	Arrive at hotel, shower & get ready for welcoming reception	
	545P	Bus departs hotels for PICRC	
	600P	Welcoming reception @ PICRC	aloha attire
	~930P	Bus departs PICRC for hotel	

Tuesday 2/7		Traditional Conservation Ethics in Palau	
Dress for the morning hike but we will need to bring a change of clothes with us on the bus. After the hike, we will need to change into our aloha attire (w/shoes) for our village meetings. We will also be meeting with the Governor and Legislature to discuss the Northern bul & management plan. Dinner will be in a traditional community center or Bai at Ollei hosted by the fishermen of the village.			
Koror	700A	Breakfast @ hotels	
	800A	Bus departs hotels for Ngardok	
	830A	Ngardok Nature Reserve (hike)	hiking attire
Melekeok & Baimelekeong	1000A	Change into aloha attire, Cultural site visit	aloha attire
Bailechesau	1200P	Lunch & meet Ngerubelang Men's Club, Reklai & BWA	
	230P	Bus departs hotels for Ngarchelong	
Ngarchelong State Office	300P	Meet with the Governor & Ngarchelong Legislature	
	545P	Bus departs Ngarchelong for Ollei	
Ollei	600P	Baiderbei @ Ollei	
	1000P	Bus departs Klechedaol for hotel	

Wednesday 2/8		From Bul to Modern Fisheries Management	
Dress for our morning hike to Ngardmau Taki Falls. We will need to bring our swim clothes and snorkel gear with us as we will be visiting the Northern Reefs in the afternoon. At Ngardmau Taki Falls we will look at how Palau is merging tourism development with conservation for sustainable resource management financing. At the Northern Reefs, we will look at the first modern imposition of "bul," a traditional prohibition on resource use and how it led to merging traditional and modern resource management in Palau. In the evening, we will be dining with the Board of Directors of the Palau Conservation Society.			
Koror	700A	Breakfast @ hotels	
	800A	Bus departs hotels for Ngardmau	
Ngardmau	830A	Ngardmau Taki Falls (hike)	hiking attire
	~1200P	Lunch @ Falls	
	100P	Bus departs Ngardmau for Ngarchelong	
Ngarchelong	130P	Boat departs for Northern Reefs	snorkel gear
	200P	Northern Reefs (snorkel)	
	430P	Boat departs for Koror	
Koror	500P	Bus departs for hotel	
	515P	Arrive at hotel, shower & get ready for dinner	
	615P	Dinner with Palau Conservation Society Board of Directors @ Cliff Side Hotel	aloha attire
	930P	Bus departs for hotel	

Thursday 2/9		Managing from Ridges to Reefs	
We will visit Ngeremlengui and the Palau Community College Hatchery at Ngermeduu Bay. We will see some brief presentations and have some discussion on the importance of Ngermeduu Bay. In the evening, we will attend a fundraiser dinner at PICRC. This dinner will be a great opportunity to meet and speak with various officials and members of the conservation community in Palau.			
Koror	700A	Breakfast @ hotels	
	745A	Bus departs hotel for PICRC dock	
	800A	Boat departs PICRC dock for Ngeremlengui	snorkel gear
Ngeremlengui	845A	Presentation & Discussion of Ngermeduu Bay @ PCC Hatchery	
	~1100A	Lunch @ Ngeremlengui Center	
	100P	Kayak tour	
	300P	Snorkeling @ various sites	
	430P	Boat departs for PICRC dock	
Koror	500P	Bus departs PICRC for hotels	
	515P	Arrive at hotel, shower & get ready for dinner	
	630P	Bus departs hotel for PICRC	
	700P	Fundraiser Dinner @ PICRC	aloha attire
	900P	Bus departs PICRC for hotel	

Friday 2/10		Managing Tourism and Conservation	
The Rock Islands Southern Lagoon Management Area is a UNESCO World Heritage Site and arguably, one of the most unique and breathtaking sites in the world. We will be visiting various sites in the Rock Islands, including Jellyfish Lake, Ulong Cave, Soft Coral Arch. We will be hosted by the Koror State Rangers, and will discuss the importance of the Rock Islands to Palau's biodiversity, culture and economics. Our dinner will be a farewell reception on Hakkons Island and will be hosted by TNC Palau and the Palau Bureau of Marine Resources.			
Koror	700A	Breakfast @ hotels	
	800A	Bus departs hotels for PICRC dock	snorkel gear
	830A	Boat departs PICRC dock for the Rock Islands	
Rock Islands	900A	Snorkel @ various sites within the Rock Islands	
	~1100A	Lunch (may be on boat or on land, time dependent)	
	1200P	Rock Islands tour continues	
Koror	500P	Boat returns to PICRC dock	
	515P	Bus departs PICRC for hotels	
	530P	Arrive at hotel, shower & get ready for dinner	
	600P	Bus departs hotels for Hakkons Island	
Hakkons Island	630P	Farewell reception	aloha attire
	900P	Bus departs Hakkons Island for hotels	

Saturday 2/11		Free Day Activities	
We initially had planned 2 groups of activities, both boat related. 1 boat would go fishing with some local fisherman, and 1 group would go sightseeing around the Rock Islands, possibly to Peleliu to see some WWII relics. We will leave this day open to group discussion. When checking out of the hotels in the evening, please remember to take your passport from the hotel safe!!			
Koror	700A	Breakfast	
	800A	Bus departs for free activities (TBD)	
	1030P	Check out of hotels	
	1100P	Shuttles depart for airport	

Sunday 2/12		Travel	
Koror, Palau	135A (PWT)	Depart Koror, Palau for Agana, Guam	Continental #186 (1 stop)
Agana, Guam	550A (ChST)	Arrive Agana, Guam	
	630A (ChST)	Depart Agana, Guam for Honolulu, HI	United #200

Saturday 2/11		Travel	
Honolulu, HI	540P (HST)	Arrive Honolulu, HI	

Important Contact Information

□ **Palasia Hotel**
P.O. Box 10027
Koror, Palau 96940
Telephone: (680) 488 8888
Fax: (680) 488 8800

□ **Penthouse Hotel**
P.O. Box 6013
Koror, Palau 96940
Telephone: (680) 488-1941/1942/1943
Fax: (680) 488-1442

□ **Guest Lodge Motel**
P.O. Box 833
Koror, Palau 96940
Telephone: (680) 488-6320/6321
Fax: (680) 488-6323/2015
Mobile: (680) 775-6320

□ **The Nature Conservancy - Palau**
Carlos Salii Bldg 2nd Floor
Koror, Palau 96940
Telephone: (680) 488-2017

□ **Palau International Coral Reef Center**
P.O. Box 7086
Koror, Palau 96940
Telephone: (680) 488-6950
Fax: (680) 488-6951

□ **Steven Victor (TNC Palau)**
Mobile: (680) 778-9004

□ **Cell phone reminder:** International roaming charges will apply in Palau and can cost **upwards of \$5.00 per minute**, with possible additional fees. Even if you are not actively using your cell phone, you may be incurring data charges with pushed email, etc. It is advised that you either turn off your cell phone completely while on travel, or leave your phone on airplane mode.

PALAU MAP



**TNC NOAA CRCP NGO Partnership/TNC Hawai'i
Hawai'i/Palau Community Learning Exchange
February 4th 2012 – February 12th, 2012**

Maui Community Participants:

CARPIO/JAY – Member, Maui Nui Resources Council
LINDSEY/EKOLU – Member, Maui Nui Resources Council
LIND/PEKELO – Community Leader, Kipahulu Ohana
KAHOHALAHALA/SOL – Cultural Practitioner; Community Leader
NAKAGAWA/LINDA – Member, Maui Nui Resources Council; Division of Aquatic Resources/Department of Land and Natural Resources, Maui
PARSONS/ROB – Executive Assistant for Environmental Concerns, Office of the Mayor
NEWBOLD/ROBIN – Chair, Maui Nui Resources Council

Hawai'i Island Community Participants:

CHAI/DAVID – Member, Ka'ūpūlehu Marine Life Advisory Council
TOMIC/KEKAULIKE – Member, Ka'ūpūlehu Marine Life Advisory Council
YAMANAKA/VERN – Member, Ka'ūpūlehu Marine Life Advisory Council

O'ahu Community Participants:

KALUHIWA/LIKO – Operations Manager, Kāko'o 'Ōiwi
KAWELO/HIILEI – Executive Director, Paepae o He'eia
MOSSMAN/BISSA – Fisherman, Kuliou'ou
WERNER/KIMI – Fisherman, Haiku
WINTER/ALIKA – Makai Watch Coordinator, Mālama Maunaloa

State of Hawai'i Officials:

AILA/WILLIAM – Chair, Department of Land and Natural Resources

TNC Hawai'i Staff:

FIELDING/EMILY – Maui Marine Program Coordinator
MARRS/SEAN – Marine Fellowship Coordinator
MEJIA/MANUEL – Community-Based Marine Program Manager
WIGGINS/CHAD – Hawai'i Island Marine Coordinator
WIGHT/EVELYN – Senior Communications Manager

TNC Global Marine Staff:

MACGOWAN/PETRA – Reef Resilience Project Manager, Coral Reef Conservation
WEAR/STEPHANIE – Director, Coral Reef Conservation
EDER/LYNNE – Director of Operations, Central Science Office

American Samoa Community Participants:

UIKIRIFI/SAUMANIAFAESE – Fishery Extension Officer
TAFVALU – High Talking Chief, Fagamalo Village

Film Crew:

YI/CHUN-WEI – Film Producer
HARVEY/ERIN – Cameraman

Dispatch from the Field: Palau

Written by [Stephanie Wear](#)

Published on February 6th, 2012 | [Discuss This Article](#)

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Stephanie Wear, The Nature Conservancy's director of coral reef conservation, is spending a week in Palau, visiting with locals and learning about what makes their reefs so resilient. Follow her journey here on Cool Green Science, on [stephwear.com](#) and on Twitter at [@stephwear](#).

February 11: Mahalo Nui Loa



As my week in Palau comes to an end, I am filled with gratitude and hope for the future of coral reefs here. Our closing dinner was held at the [Palau International Coral Reef Center](#), complete with taro served five ways, fresh sashimi and enough tapioca to fill me twice over—an amazing finish to an amazing trip.

During the closing ceremonies, each person that had participated had an opportunity to share their thoughts. As with other end-of-day reflections throughout the week, I was struck by how powerfully the experience had affected each participant. Some were too choked up to say more than “Mahalo” (Hawaiian for “Thank you”), but most shared more on their heartfelt gratitude, what they learned and most importantly, the responsibility they felt to share this experience with their family, friends and communities upon returning home.

What struck me the most is that these six days had turned a group that at the beginning had hardly known each other at all into family. [Kimi Werner](#), a champion free diver and spearfisher, said it best when she referred to the group as her “newfound clan” — one that she promised to hold up and keep strong as each member returned home to continue their important work.

Our journey was also one of self-discovery. One participant said he now realized that he had had to come all the way from Hawaii to Palau to get to know himself. As he put it: We already knew what to do — it is part of our ancestry — and coming to Palau was simply a profound reminder of where we came from and the incredible responsibility we have to pass on the legacy of a healthy and abundant sea.

For my part, I thanked the group for their endurance (it was an intense week) and for the inspiration each of them had given me to keep going forward in the quest to save the most threatened habitat on Earth. The evening ceremonies

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- WiserEarth

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closed with the visitors getting up in front of our Palauan hosts, led by the musical talents of Uncle Sol ([Sol Kahoohalahala](#)) from Maui on ukulele. With song lyrics in hand, we sang *Aloha O'e* (“Farewell to Thee”) — and I admit there were tears in my eyes. There is just something about the sea and the way it brings us all together. For that I am grateful and send my many thanks to all that joined me in this adventure and to those that made it possible.

Mahalo nui loa.



[Image #1: Participants from Hawaii share their reflections after a day visiting a local fish hatchery. Image #2: One last view of Palau. Image credit: Stephanie Wear.]

February 10: Rock Islands Pick-Me-Up

Working to save coral reefs can be overwhelming — and, quite frankly, depressing at times. I usually maintain my optimism, but there are moments when I'm in need of inspiration and a reminder of what is possible.



Nothing cures me faster than a boat ride through the [Rock Islands of Palau](#). I've been fortunate enough to take this boat ride (or kayak paddle) several times since my first trip here in 2004. There is truly nothing like it. As I sit on the bow of the boat, wind in my hair, cruising through tight turns and narrow gaps between islands —feeling as if I am in an endless maze...I get this incredible overwhelming sense of happiness. A smile spreads across my face, I take in deep breaths, feeling exhilarated, and I think to myself — this is indeed my favorite place on Earth. This place inspires me — and compels me, really — to keep going and share the mission to [protect reefs](#) with others.

My time in Palau is highlighting these deep emotional connections so many of us have to the sea. I have seen this each evening when our learning exchange group gathers to share reflections and lessons from the day. Many times, the voices are strained from holding back tears, the words spoken are powerful, and we are all left knowing that we have been part of something special. A surprising example was the gratitude so many of our participants shared at the chance to eat turtle soup. Unlike Hawaii, Palauans have been able to manage their turtle populations well enough that turtles are still a part of traditional meals held on the most special occasions. Many participants recalled the last time they had turtle, usually when they were small children. Eating the Palauan turtle soup reminded them of a beloved grandmother or uncle and their deep ancestral connections to sea.

BlogFish	Mongabay
Bright Green Blog	Real Climate
Circle of Blue/WaterNews	ScienceBlogs: Environment
Climate Feedback	Short Sharp Science
Climate Progress	Solve Climate
Coffee & Conservation	The Great Beyond
Conservation Biology Institute	The Pew Center on Global Climate Change: Climate Compass
Conservation JournalWatch	The Prairie Ecologist
Conservation Maven	WaterWired

Green Living News & Views

Big Green Purse Blog	Low Impact Living
CleanTechnica	My Zero Waste
EcoGeek	No Impact Man
Ecopolitology	Project Porchlight
GoodCleanTech	The Chic Ecologist
Green Options	The Daily Green
GreenTech	Think Green Media
Gristmill	Treehugger
Inhabitat	Twilight Earth
Jetson Green	Wired Science
Lighter Footstep	Yale Environment 360



In trying to tell others about the value of oceans and, more specifically, coral reefs, I often get caught up in the tangible values the sea brings us, such as food, jobs, and coastal security. I can easily forget the emotional and spiritual connection people feel with the sea and the inspiration and freedom that come with that. Fortunately, I have the ocean to remind me on a pretty regular basis. So much of our lives depend on a healthy ocean and coastal habitats. My colleagues with me this week are lucky enough to understand that.

[Image #1: The author in the Rock Islands. Image credit: Chun-Wei Yi. Image #2: Another view of the Rock Islands. Image credit: Stephanie Wear.]

February 9: No Island is an Island



As I've related in a recent post from Palau, Palauans manage and enforce environmental norms on the island communally. In Palau, social pressure from both within and outside the family is an important part of natural resource management — and that pressure makes decisions stick.

This social quality isn't just a product of Palau's traditional culture. Palauans are intimately tied to their environment — just like the rest of us. The difference is, they are aware of it. That awareness is a gift, and it gives Palauans a good chance of ensuring that the resources they depend on persist into the future.

But there's one little problem with this happy scene. When it comes to its own fish, Palau isn't really an island.

Let me explain. Palau, like many other small island nations, hosts a substantial foreign fishing fleet. Commercial fishing vessels from other countries pay fees to fish the waters within the boundaries of Palau's EEZ (exclusive economic zone). The problems with this situation are numerous — regulation is minimal in many places, foreign vessels have no long-term interest in sustainability, and countries hosting these fleets are receiving a tiny fraction of the value of the fish

leaving their waters. In Micronesia's waters (approximately 3 million square miles of ocean), the majority of tuna being fished are caught by foreign fishing fleets. Very little benefit from that catch goes to the countries or territories with jurisdiction of those waters.

So how does a country like Palau — with its great social reinforcements for sustainability — operate in this context?

They might take a similar road as [Indonesia](#), which has banned foreign fishing vessels unless the catch is processed in Indonesia (called an integral process in the fishing trade). In addition, by 2017, all foreign vessels in Indonesia must be manned by Indonesians. While these steps won't solve all problems, employing Indonesians — who have a greater interest in seeing their resources thrive over the long-term — is certainly better than foreign visitors taking what they want and leaving. (And I'm not even touching on the problem of illegal fishing, which is a chronic and pervasive problem globally.)

Palau hasn't figured it out yet, but something tells me they will. I'm impressed with how Palau has joined forces with neighboring countries and territories in Micronesia and Melanesia to form the [Nauru Agreement](#), a groundbreaking pact that could help save tuna from disastrous overfishing. The signatories, referred to as PNA (Parties to the Nauru Agreement), have agreed to jointly set criteria for distant fishing fleets — including a standardized licensing process, access fees, observer program and coordinated surveillance. These sorts of efforts go a long way towards keeping licensing fees fair. While the historical trend has been for foreign fleets to play countries off each other to see who will offer the cheapest entry into their fishing grounds, efforts such as the Nauru Agreement go a long way toward keeping licensing fees fairly and fully priced. Having a fairly priced entry into the fishery, acts to limit the amount of fish taken as well as compensate the resource owners appropriately. In fact, the PNA have become known as the "OPEC of tuna" because they are controlling access to tuna in their waters, thus increasing the benefits for Pacific Islanders (and a world that likes eating tuna). These waters supply 25% of the world's tuna, with an estimated value exceeding \$2 billion per year.

And I'm also impressed to learn that there are foreign boats under arrest for illegal fishing in the Koror harbor in Palau. That tells me the pact is working.



Of course, things are not perfect here, and Palau is not immune to the problem of overfishing. As long as there are fish in Palau, Palau is not really an island. The pressures of global resource demands know no boundaries, and protecting those resources is always a work in progress. But by having a great communal ethic for responsible natural resource use and then reaching out to neighboring countries with innovative management schemes, Palau stands a chance to make it work.

[Image #1: A local fisherman's catch. Image #2: Foreign fishing vessels under arrest. Image credit: Stephanie Wear.]

February 7: A Visit to a Bai, and a Lesson in Law Enforcement

Today I visited a [bai](#), the traditional men's meeting house in Palau. A bai is a long, spectacularly decorated wooden structure with a triangular roof that rests on beams and is built without nails, so that it can be disassembled. They are amazing. I've wanted visit one ever since I first visited Palau seven years ago, and it did not disappoint.



We visited the bai for [Melekeok](#) state, home to the high chief Reklai, the second highest ranking chief in Palau. During my visit I learned about traditional Palauan decision-making processes as well as how laws here are enforced, which gave me some new insights into why it's so difficult to protect the environment in many parts of the world.

Palau is comprised of 16 states, each with 10 chiefs and all of whom are ranked by clan status. The highest-ranking chief from each state, the paramount chief, sits on the Council of Chiefs. When chiefs gather to discuss problems of the village, they enter the bai and do not come out until they have reached consensus. If they cannot reach a decision, the four highest-ranking chiefs step outside the bai and sit on designated rocks, where they come to a decision. This is then shared with the rest of the chiefs and the village.



Today's focus was on enforcement of environmental laws, and so I heard about how offenders are dealt with. Village elders recounted specific stories, naming names along the way and describing various offenses, including fines and other penalties... usually for taking fish that wasn't theirs to take.

When someone violates rules of the village, they come before the chiefs — but they don't come alone. They come with their families — mothers, uncles, sisters, etc., and the families plead their case. It is a great shame upon your family to bring them before the village elders.

And that peer pressure and shame have proven to be very effective in enforcing norms in Palau. Think about it: How would you feel if your father had to be humiliated in his community for something that you did —

as well as share in the punishment? Wouldn't you think twice?

Palauans believe that environmental transgressions are social ones, too; they understand that, when someone takes or destroys a natural resource, it affects everyone, and the impacts can be long-lasting or even irreparable. How do you measure that? How do you exact a penalty that matches the crime? In Palau, there are monetary and material penalties (hefty fines or loss of equipment, including things such as boats). Their fines match the crime. Not surprisingly, repeat offenders are rare.

Choosing proper penalties for environmental degradation is a perennial topic of conversation for marine conservationists all over the world. Such penalties are weak in many places and for many situations; judicial systems also often don't enforce the laws already on the books. We see this at every level, from poacher to corporate polluter.

A big part of the problem is that most contemporary societies don't really view most actions that hurt the environment as social acts. From driving a mile to the grocery store to polluting a waterway to not buying energy that's renewable when you have the option, people see their habits as individual ones, not ones that add up and have a social cost. But most societies don't have collective penalties for environmental transgressions, either. In Palau, the environment is everything, and the country's social norms reflect that. It will probably take something drastic to make the rest of us realize that our resources really are limited and that we need to take greater measures to hold people accountable. Palau's resort to social shaming in the service of the greater good might seem drastic to us; but it clearly works.

[Images: Two views of the Melekeok bai. Image credit: Stephanie Wear]

February 6, 2012: A Sea That Unites Us



Here on Palau, I am just back from our first day of a learning exchange between several communities spread across the Hawaiian Islands, the country of Palau, and the territory of American Samoa. Today we went to [Palau's Capitol Building](#), which was modeled after the U.S. Capitol and was built as a symbol of Palau's democracy. The neoclassic architecture, complete with a domed building, stands out in a landscape surrounded by forest and crystal clear blue waters.

We were welcomed at the Capitol by Palau's [Council of the Chiefs](#). There are 16 high chiefs in Palau, and we heard from many of them about values they and we share in protecting the environment for people. We brought gifts and shared in some amazing moments — like when our Hawaii delegation chanted oli's (Hawaiian chants) to connect their ancestors to those of the Palauans, and to share their gratitude for the welcome extended by the high chiefs.

I got emotional at times like this, I must admit. Something really special happened in that room. It was powerful to be sitting among so many like-minded folks, in a formal government building while oli's were exchanged by people using words of their ancestors. I won't soon forget it. We felt fortunate to hear from the chiefs as they shared their passion for protecting their region's natural resources for the future.

The words of one chief continue to resonate with me. He said, "The sea does not divide us — it brings us all together, it unites us." He spoke of the ocean's waves, and how the same waves that reach the shores of Palau also make their way to American Samoa and Hawaii. He's right: the ocean connects all people to all places. The theme of connection is sure to resonate throughout our week together, and what it means will be something I continue to discuss with my colleagues.

But it's a theme that has yet to resonate with most people elsewhere. Even though people depend for their very lives

on the sea, most still don't understand that. We might understand how deeply we all need clean air or productive land, but the ocean as a symbol of global unity is basically invisible to the public — and that lack of visibility diminishes whether people think about the ocean as a place that needs protection and care.

Maybe we need to frame the importance of the ocean in terms of self-preservation. In protecting the oceans, we protect and care for ourselves. The planet's "circulatory system" of ocean currents functions much like the arteries of the human body, nourishing and rejuvenating life at sea and on land. Oceans are absolutely vital to how the planet stays alive, and we should have a much better understanding of it than we do.

All of us struggle in conservation with how to make these connections real, meaningful and immediate to people who can't see the underwater wonders of Palau or hear the passion of these exchange participants. How do we connect the sea to the most basic needs that we all have as humans — and in doing so, create an opportunity to preserve those resources for the future? I have a feeling this week will give me a lot of opportunities to ponder this immense challenge.

[Image: Stephanie Wear and her colleagues in Palau. Image source: Stephanie Wear]



February 5, 2012: Greetings from Palau!

I've just returned to one of my favorite places on the planet: [Palau](#), a tiny country with less than 20,000 citizens in the middle of the Pacific Ocean — a tiny speck on the map. For what it lacks in size, Palau makes up for with some of the most stunning scenery both above and below the sea's surface.

Stepping off the plane, I was greeted by the sweet smells of the tropics, salty humid air and darkness. Coming and going from Palau seems to always take place in the middle of the night, which means I've never managed to get an aerial view. In fact, I've only seen it from above in scenes from episodes of [Survivor: Palau!](#) Before that television show, most people had never heard of this wonderful country. Now it's clear the secret is out. Each time I return, tourism has expanded — the tour boats are full — and the local people seem as happy as ever to share this long-kept secret.

It's easy to see why Palau's coral reefs have been named one of the seven underwater wonders of the world. The reefs are thriving; in fact, coral colonies can be seen growing on top of each other. This was not the case 14 years ago when, in 1998, Palau was hit by a global [mass bleaching event](#). Within weeks, the vibrant, colorful, teeming-with-life reefs were barren, colorless and quiet.

Yet, those vibrant reefs are back and showing signs of incredible recovery. This is one of the most exciting and hopeful things a coral reef scientist can hear. Given the state of much of the globe's coral reefs, it is easy to lose hope and hand down the death sentence for reefs — but there are reefs in Palau and around the world that [just keep coming back](#), giving us real hope and a rationale to keep on working.

This week I am in Palau with a group of community members and Nature Conservancy staff from the [Hawaiian Islands](#). Our Conservancy colleagues from Palau are hosting us, and together we are going on a journey of discovery to better understand what is happening in Palau, both on land and in the sea. We will be visiting villages, speaking with village elders and chiefs and learning about how Palau is managing its natural resources using traditional methods and laws. What we learn on this journey is sure to provide insight into how to best protect and ultimately save coral reefs from their threatened demise.

Follow us on our journey — if it is anything like Palau's coral reefs, it will be colorful and inspiring.

[Image: Aerial view of Kmekumer, Rock Islands, Republic of Palau. Image source: Jez O'Hare]

Tags: [bai](#), [Climate Change](#), [coral bleaching](#), [coral reef conservation](#), [Coral Reefs](#), [Council of Chiefs](#), [Hawaii](#), [marine](#), [marine conservation](#), [mass bleaching event](#), [Melekeok](#), [Nature Conservancy](#), [Pacific Ocean](#), [Palau](#), [Reef Resilience](#), [Stephanie Wear](#), [tropics](#)

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Comments: Dispatch from the Field: Palau

 Comment from DannyK
February 11, 2012 at 6:08 pm

I was just in Palau for the month of January, it was truly amazing!

 Comment from Liz Marchitto
February 22, 2012 at 4:05 pm

Beautifully written blog, Steph!! Thanks for taking the time to share your experience.

 Comment from Geri
February 22, 2012 at 4:37 pm

Stephanie, I have just had some time to read your blog – your passion for protecting our environment and most especially the oceans and the reefs is just amazing and I now understand your deep love for Palau. You and your team are doing a tremendous job to protect the earth for future generations. I am very proud of all that you do and to have you as my daughter-in-law and mother of my grandchildren. Love you. Geri

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Community
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Press Release March 10th 2012

Marine Conservation in Palau Inspires Hawai'i Community Groups

DLNR Chair William Aila Participates in Hawaii-Palau Learning Exchange

Honolulu, HI—A Hawai'i delegation returned from Palau this past weekend inspired by community-led conservation efforts that are restoring the nation's marine resources.

"Communities in Palau have merged culture, fisher knowledge, science and government to replenish their fish and marine resources," said William Aila, director of the Hawai'i State Department of Land and Natural Resources. "One of the most inspiring aspects of the Palau story is that fishermen and local communities worked together to protect their resources, it was not imposed by government."

Aila was among a group of 20 Hawai'i delegates who traveled to Palau from communities within the state that are working to restore natural resources and revive Hawaiian culture. The group included residents from O'ahu, Maui, Lana'i and Hawai'i Island, as well as American Samoa. The trip was part of a learning exchange sponsored by The Nature Conservancy, which is working with communities to restore and protect marine resources in both Hawai'i and Palau.

The Republic of Palau is a Pacific archipelago of 340 islands located 600 miles east of the Philippines. Its waters are among the richest marine areas in the world, containing more than 700 coral species and nearly 1,300 varieties of reef fish. The area has been named one of the "Seven Underwater Wonders of the World" by marine scientists and divers.

According to Noah Idechong, founder of the Palau Conservation Society and Speaker of the Palau House of Delegates, conservation is woven into the fabric of traditional and modern Palauan society. In the past, if a resource became scarce due to climatic changes or overharvesting, a moratorium, or bul, was declared by village chiefs. Local chiefs used bul to ban fishing during key spawning and feeding seasons, allowing fish to reproduce and replenish the waters. Following World War II, Palau's bul system faded.

In recent decades, Palau has used its extraordinary marine resources to support a growing economy. Like other developing countries, however, it realized that economic growth—especially growth based on commercial fishing and tourism—was pushing its fisheries beyond sustainable levels. Compounding the problem, a 1998 El Nino bleaching event devastated Palau's corals, further reducing fish populations.

In response, communities in two states, Kayangel and Ngerechlong, revived the traditional bul and had tremendous success in rebuilding coral and fish populations. "When other communities saw that success, they wanted to do the same thing," said Idechong.

Today, the revival of the bul system has become the basis of a network of more than 20 protected areas. By law, communities within these protected areas look first to local leaders and their traditional guidance, and then to scientists, to identify vulnerable ecosystems and institute the appropriate protection.

“In Palau, the movement to protect their marine resources came from the bottom up, not the top down,” Aila noted. “The bul and legislation complement one another—and they came at the request of the communities for support of their efforts.”

While in Palau, the Hawai'i delegation learned that dive operators there pay a user fee that helps fund management and enforcement. “Fishers have become active participants in enforcement,” said Manuel Mejia, The Nature Conservancy's community-based marine program manager for Hawai'i. “We met fishermen who used to be poachers and are now rangers, helping to enforce the laws that protect their resources.”

Vern Yamanaka of the Ka`ūpūlehu Marine Life Advisory Committee (KMLAC) on Hawai'i Island noted that while conservation benefits both biodiversity and tourism in Palau, those are not the primary benefits. “In Palau they conserve resources for food,” he said. “Our resources should be managed for food in Hawai'i too,” he said.

Kimi Werner, a champion Hawai'i spearfisher who accompanied the group, was just as inspired by the work being done by the Hawaii communities as by the examples in Palau. “Seeing Palau and learning about how they manage resources is wonderful, and bringing this group together to share our knowledge and the work we are doing in Hawai'i is inspirational. Although our journey to Palau has come to an end, it's really just the beginning.”

The visit to Palau completed the Conservancy-sponsored Hawai'i-Palau Learning Exchange. Last July, a Palau delegation visited communities in Hawai'i to learn about the potential environmental impacts that can accompany rapid change and development. They learned about the importance of managing sediment, run-off, and fresh water flows; preventing the importation and establishment of invasive species; and working in partnership with developers to manage natural resources.

The Hawai'i-Palau Learning Exchange was made possible through generous support from the MacArthur Foundation, the National Oceanic and Atmospheric Administration's Coral Reef Conservation Program, the Harold K.L. Castle Foundation, the Maui County Office of Economic Development, the Hawaii Fish Trust and The Nature Conservancy.

"Ho'o nui i'a" by Alika Winter/ Marine Resource Manager

Malama Maunalua `Ohana Newsletter

ALOHA Friends!!!

As you may know I was fortunate enough to join a delegation from Hawaii and American Samoa to Palau in March to participate in a learning exchange. It was a life changing experience! After World War II, Palau was a territory of the U.S. Palau recently became a sovereign nation. Using "traditional knowledge", the Chiefs of Palau have been able to make decisions regarding their resources. Upon seeing massive degradation of their fishery, the Chiefs decided to bring back the BUL (what would be known as the Kapu System here in Hawaii). Each State, (something like our Moku here in Hawaii) is responsible for managing and enforcing BUL in its own area. The people of Palau now have an bountiful supply of food from the sea, as well as some of the best eco-tourism on the planet! Win, win.

On our first dive, we visited area that was BUL mainly to protect the spawning grounds of the Bumphead Wrasse. We somehow bumped into a giant school of good sized papio that were yellowish with black stripes... what a pleasant surprise!!! A couple of days later we visited the world famous jellyfish lakes. These jellyfish were trapped in this lake when the sea level dropped probably during the last ice age. These amazing creatures were isolated from the sea, and evolved to loose their stingers... and become photosynthetic. Another breathtaking example of a result of a successful BUL. There are a total of 14 states in Palau (moku in Hawaii). Each is responsible for the 1) Management 2) Monitoring 3) and Enforcement of their own resources/ Bul areas. This type of operation takes a good base of traditional knowledge, a tad of modern science, and a whole lot of funding. How do they afford such an endeavor?

Here is one of their states enforcement officers in his brand new boat. Every visitor entering Palau is charged a \$35 green fee. A combination of the green fees, and interest earned from the endowment satisfies column # 10 on their "10 Steps to a Healthy Watershed". #10 is? You may have guessed it: Sustainable Funding... What a concept!!!

Traditional Knowledge + A Tad of Science + Governmental Support + Sustainable Funding = A Healthy Sustainable Fishery that benefits Local Harvesting, and Eco Tourism... Wow.

Hawai'i-Palau Learning Exchange

by Hi'ilei Kawelo, Executive Director, Paepae o He'eia



Uncle Sol Kahoohalahala greets a Palauan village chief.

■ In February of 2012, I was asked to join a group of people from Maui, Big Island, Lana'i, O'ahu and American Samoa, to visit Palau for a Learning Exchange.

People asked me what I saw there. What struck me was the diverse canvas of colors—everywhere you swam in the water you saw healthy, colorful fish and coral and the contrasting blue of the deep drop-off. There was so much diversity of life there—big fish, little fish, soft and hard corals, anemones and all sizes and colors of clams.

We saw protected areas and learned about how Palauans are protecting their resources. We went spear fishing just one day, and it was wonderful to eat what we caught. But most of the time we were served abundant local food rich in flavor and color. Every meal we ate was harvested directly from their land and ocean.

But mostly what I saw in Palau was what our *kupūna* knew and practiced in Hawai'i for hundreds of years. It was refreshing and eye opening to see people managing resources based on their relationship with the resource. In Palau I saw a government and people who pride themselves on putting their environment first, and it was a beautiful sight.



Kimi Werner and the Samaon Talking Chief share a dance.

It's not all perfect in Palau. They went through a period of depleting their resources and using the ocean for commercial purposes. But they saw the decline and took action as a community to reverse that. And they were able to do that because their relationships are still in place. Each person is a member of a family, which is a member of a clan, which is a member of a state, with a traditional chief, as well as government representatives. The people can go to their chief, and the chief can take action.

In Hawai'i, we are more separate from one another, and I think our priorities are all jammed up. Here, we put the economy and tourism first. But if the water and fish and corals are important, then we need to re-prioritize and put the environment and education first. We depend on our resources in Hawai'i just as much as they do in Palau. There would be no need to create more rules in Hawai'i ever if everyone felt that connection and acted on it.

Seeing how Palauans managed their resources was great, but I was really blown away by the group of people from Hawai'i. For example, I am working to restore He'eia Fishpond, and my vision is to feed the community from this fishpond.



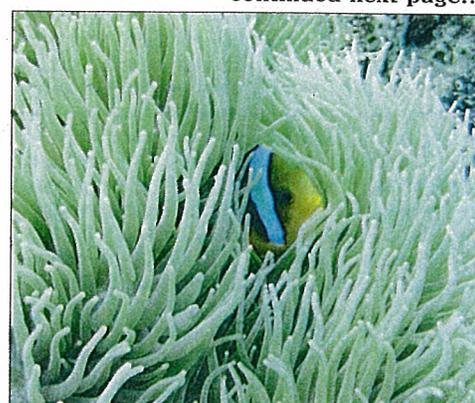
Umlich Sengebau briefed the groups before departing.

My neighbor—just 200 yards across the road—Liko Kaluhiwa, is restoring taro lo'i with Kako'o 'Liwi to provide poi to the community. We are reinstating a relationship that has struggled for the past 50 years. Through the restoration of our traditional food systems we are maintaining the physical, social and spiritual connections between *uka* (inland) and *kai* (ocean) that our parents remember.

I love fishing, but for me, fishing isn't a want. It's something I and my family do to fill our need for food. It's all about taking care of people and maintaining connections. Our connection and relationship to our environment and resources—that which feeds us—and our connection and relationship to one another. It's a cycle of taking care of each element of the ecosystem, knowing your resources on an intimate level and taking only what you need.

Ultimately, it's not the resource that needs managing, it's the people. In Palau, the relationships among people are a mainstay of life. We don't see enough of that here, but I have to be hopeful that we can work together and that we all value the resource we depend on. . . . **Hi'ilei**

continued next page...



Hawai'i-Palau Exchange ...continued

Aloha pumehana mai kakou, o wau o Kekaulike Tomich, no Kaupulehu mai au.

During the second week of February, I was privileged to go to Palau with a group of delegates from Hawai'i and Samoa. We went to experience how the people of Palau manage their watersheds and marine resources. A delegation from Palau visited Hawai'i in 2011 to learn from us.

In the 1980s, in an attempt to promote economic development, Palau's fisheries were commercialized on an international industrial scale. Within a decade the fisheries nearly collapsed. The people realized that although demand may be infinite, their natural resources are finite. This led to a movement toward conservation.

Palau is the most governed nation on earth. With a population around 20,000, there is a national government, 16 state governments, and the traditional system of chiefs who act as official advisors to the state and national governments. Marine resources are governed at the national, state and local levels, and the traditional chiefs also have a strong voice. Each state has their regulations and Marine Protected Areas, and people can only fish in the state that they are from. There are few fishing licenses, and you must be Palauan to have one (you also must be Palauan to own land there).

The chiefs can declare *bul* (kapu) if the fishermen and community members feel something needs to be done. In 1990, the chiefs of the village of Ngarchelong, northernmost state of Babeldaob, declared a bul on the spawning aggregation of groupers at Ebiil Channel to give the fish a chance to reproduce after being heavily fished. This action by the chiefs of Ngarchelong paved the way for the national government to pass the Marine Protection Act of 1994. Among other things, this act protected the groupers during the spawning season from April to July. Then, in 2000, the state passed a law to permanently close the Ebiil spawning aggregation site. This series of protections for groupers came from the communities—from the bottom up, not the top down.

We learned a lot from the Palauans, but more importantly we reaffirmed our beliefs that the way to ensure fish for our future generations is through adaptive, community-based management. As one of our Palauan guides, Braddah Umi, said, "Conservation is a way of life. We conserve because we need to eat. The side effects of biodiversity and great diving for tourists are good, but those are not the primary reasons."

Fishing is about food, a necessity for all life. And because it's about food, our resources should be managed accordingly. It is my hope that the communities of Hawai'i can come together, put politics aside and do what's right for ourselves and our *keiki*.

*Mahalo,
Kekaulike Tomich*

Lessons From Palau

by Kimi Werner



■ I love Palau and was excited to go back, but when I heard this opportunity was a learning exchange with **The Nature Conservancy (TNC)**, my first thought was to pull away. I drew a line in my head before I even knew it. For me as a fisherwoman/spear fisher, I thought I might be the odd man out with a bunch of "tree huggers." But I realized on the trip that we all want to sustain the resource so we can eat fish, and so our children can eat fish. It was great to see an organization like TNC understand they need to work with the people who use the resource if they want to improve the environment.

The abundance of fish in Palau is amazing. Palau is heaven, the ultimate diving experience. When I was breathing up to take a drop, I saw lots of bait fish at the surface. Then when I started to kick down to a drop, I started seeing coral and fish like uhu at the top of the reef. Then on the ledge, I saw bigger fish like schools of Napoleon wrasse. And then deeper down, I saw big grouper and tuna. In one dive, I could see the whole food chain and all the layers of the ecosystem. It was like seeing a rainforest underwater—every habitat from the ground to the canopy—and every habitat was thriving. That is rare to see anywhere.

One of the highlights of the trip for me was the food the Palauans served us. It was all grown and harvested locally. Everyone who grows up there is aware of the importance of their natural resources and community, and that things are done according to traditional methods and customs.

The people asking for marine protection are the fishermen and communities, and the people doing the science to support that protection are Palauans, too. Granted, they have a lot fewer people and less complexity than we do in Hawai'i, but we can still learn from them. More than anything, I saw a general blueprint of how to work together within a community.

This trip was humbling because it made me realize how little I know about what's going on in my own community. For me, change starts there.

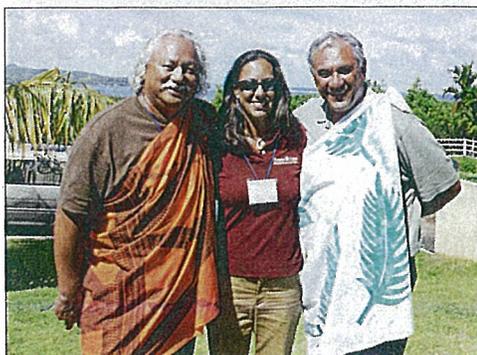
I feel like I'm still on a learning exchange and I am working hard to learn everything I can about our own resources and traditions. It's not common knowledge any more what spawning or moon phases are for fish, but we can learn it again. We each have our own special *mana'o*.

In Palau, the people all belong to a family, a clan and a state, with a chief. When I looked around at the group of people from Hawai'i, I felt so inspired by this family of people working to make change for the greater good together.

Part of what I learned is you can't disconnect and you can't say your part doesn't make a difference. You need to make an effort to do your own learning on a daily basis and get involved with your community. Getting involved makes the people's voice stronger, and that's what we need. We can restore our resources in Hawai'i, and a great way to do that is to connect with your food and with your community.

Marine Conservation in Palau Inspires Hawai'i Community

by Grady Timmons



Sol Kahoohalahala, Hillei Kawelo and William Aila in Palau.

DLNR Chair Participates in Hawai'i-Palau Learning Exchange

■ A Hawai'i delegation returned from Palau inspired by community-led conservation efforts that are restoring the nation's marine resources.

"Communities in Palau have merged culture, fisher knowledge, science and government to replenish their fish and marine resources," said William Aila, director of the Hawai'i State **Department of Land and Natural Resources**. "One of the most inspiring aspects of the Palau story is that fishermen and local communities worked together to protect their resources; it was not imposed by government."

Director Aila was among a group of 20 Hawai'i delegates who traveled to Palau from communities within the state that are working to restore natural resources and revive Hawaiian culture. The group included residents from O'ahu, Maui, Lana'i and the Big Island of Hawai'i, as well as American Samoa. The trip was part of a learning exchange sponsored by **The Nature Conservancy**, which is working with communities to restore and protect marine resources in both Hawai'i and Palau.

The Republic of Palau is a Pacific archipelago of 340 islands located 600 miles east of the Philippines. Its waters are among the richest marine areas in the world, containing more than 700 coral species and nearly 1,300 varieties of reef fish. The area has been named one of the "Seven Underwater Wonders of the World" by marine scientists and divers.

According to Noah Idechong, founder of the Palau Conservation Society and Speaker of the Palau House of Delegates, conservation is woven into the fabric of traditional and modern Palauan society. In the past, if a resource became scarce due to climatic changes or overharvesting, a moratorium, or *bul*, was declared by village chiefs.



The Hawai'i delegation learned how community-based marine conservation was successfully employed in Palau.

Local chiefs used *bul* to ban fishing during key spawning and feeding seasons, allowing fish to reproduce and replenish the waters. Following World War II, Palau's *bul* system faded.

In recent decades, Palau has used its extraordinary marine resources to support a growing economy. Like other developing countries, however, it realized that economic growth—especially growth based on commercial fishing and tourism—was pushing its fisheries beyond sustainable levels. Compounding the problem, a 1998 El Niño bleaching event devastated Palau's corals, further reducing fish populations.

In response, communities in two states, Kayangel and Ngerechlong, revived the traditional *bul* and had tremendous success in rebuilding coral and fish populations. "When other communities saw that success, they wanted to do the same thing," said Noah.

Today, the revival of the *bul* system has become the basis of a network of more than 20 protected areas. By law, communities within these protected areas look first to local leaders and their traditional guidance, and then to scientists, to identify vulnerable ecosystems and institute the appropriate protection.

"In Palau, the movement to protect their marine resources came from the bottom up, not the top down," William noted. "The *bul* and legislation complement one another—and they came at the request of the communities for support of their efforts."

While in Palau, the Hawai'i delegation learned that dive operators there pay a user fee that helps fund management and enforcement. "Fishers have become active participants in enforcement," said Manuel Mejia, The Nature Conservancy's community-based marine program manager for Hawai'i. "We met fishermen who used to be poachers and are now rangers, helping to enforce the laws that protect their resources."

Vern Yamanaka of the **Ka'upulehu Marine Life Advisory Committee (KMLAC)** on the island of Hawai'i noted that while conservation benefits both biodiversity and tourism in Palau, those are not the primary benefits. "In Palau they conserve resources for food," he said. "Our resources should be managed for food in Hawai'i, too," he said.

Kimi Werner, a champion Hawai'i spearfisher who accompanied the group, was just as inspired by the work being done by the Hawai'i communities as by the examples in Palau. "Seeing Palau and learning about how they manage resources is wonderful, and bringing this group together to share our knowledge and the work we are doing in Hawai'i is inspirational. Although our journey to Palau has come to an end, it's really just the beginning."

The visit to Palau completed the Conservancy-sponsored Hawai'i-Palau Learning Exchange. Last July, a Palau delegation visited communities in Hawai'i to learn about the potential environmental impacts that can accompany rapid change and development. They learned about the importance of managing sediment, run-off and freshwater flows; preventing the importation and establishment of invasive species; and working in partnership with developers to manage natural resources.

The Hawai'i-Palau Learning Exchange was made possible through generous support from the **MacArthur Foundation**, the National Oceanic and Atmospheric Administration's **Coral Reef Conservation Program**, the **Harold K.L. Castle Foundation**, the Maui County **Office of Economic Development**, the **Hawaii Fish Trust** and **The Nature Conservancy**.

The Nature Conservancy is a leading conservation organization working around the world to protect ecologically important lands and waters for nature and people.

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