Papahānaumokuākea Marine National Monument Agency Report to the Reserve Advisory Council

June 23 – September 4, 2018

Agency: NOAA/NOS/ONMS/PMNM

Presented by: Athline Clark, Superintendent

Date: October 11, 2018

Agency Accomplishments & Recent Activities

Agency Coordination

Mokupāpapa Discovery Center (MDC) Hosts NOAA Fisheries Leadership Meeting

From June 19 – 22, MDC hosted the NOAA Pacific Islands Fisheries Science Center (PIFSC) leadership planning and training meeting. PIFSC director, deputy director, and division chiefs were in attendance. During the meeting, MDC staff met with the PIFSC leadership to dicsuss increased collaboration between the science center and MDC, potential partnership on exhibits, increased access to PIFSC scientists, and exchange of materials for display. On Thursday evening PIFSC Director Dr. Michael Seki gave a *Third Thursday* presentation on several decades of NOAA research in the Northwestern Hawaiian Islands. For more information, contact Andy.Collins@noaa.gov



Dr. Michael Seki refelects on several decades of NOAA PIFSC research adn science in the Northwestern Hawaiian Islands from the 1970's to present. (Credit: Andy Collins/NOAA).

PMNM hosts Rapa Nui delegates alongside KUPU Pacific Resiliency Fellowship program The KUPU Pacific Resiliency Fellowship (KPF) is an international fellowship program that brings together emerging local professionals throughout the Pacific region who are well-positioned to affect change within conservation and sustainability initiatives. The year-long Kupu KPF program began with a 10-day session from July 15 to July 23 in Honolulu, Hawai'i and included field-based learning, leadership training and development, action plan development and implementation, strategic communication design and practice, individualized mentorship and peer-to-peer network building. As a Kupu KPF fellow, PMNM Native Hawaiian Program Specialist Kalani Quiocho joined 12 other fellows from across the Pacific, including Poky Tane Haoa Hey and Tiare Aguilera Hey of Rapa Nui. Poky Tane Haoa Hey is an elected representative of the Commission for the Development of Rapa Nui (CODEIPA) and is responsible for management of the Rapa Nui National Park and a new large-scale marine protected area which was formally established by Rapa Nui and Chile in June of this year. Poky has been working with PMNM and MPA Center/ONMS International Activities Coordinator Gonzalo Cid for over two years. As part of a collaboration framework between Hawai'i and Rapa Nui regarding terrestrial and marine protected areas, the Rapa Nui delegates

attended various meetings hosted by PMNM to sharing experiences regarding management planning, research and resource protection, permits and policy, enforcement and co-management. The Rapa Nui delegates also attended the quarterly meeting for the PMNM Monument Management Board comprising all seven co-managing agencies representing NOAA, U.S. Fish & Wildlife Service, State of Hawai'i Department of Land and Natural Resources and the Office of Hawaiian Affairs. For more information, contact Kalani.Quiocho@noaa.gov.





Left: KPF 2018 Fellows. Right: KPF coordinators and Rapa Nui delegates visit PMNM office. (Credits: Kalani Quiocho/NOAA)

Constituency Building & Outreach

PMNM Scientist Interviewed on Local Television Show

On June 28, PMNM scientist Randy Kosaki was interviewed at the Waikiki Aquarium for the television series, "Island Focus." The half-hour show focuses on local personalities and the influences they have had on our community. The show will air in July 2018.

For more information, contact randall.kosaki@noaa.gov.



PMNM scientist Randy Kosaki interviewed at the Waikiki Aquarium on Waikiki Beach. (Credit: Lauren Van Heukelem/Waikiki Aquarium).

PMNM participates in 2nd Annual Build a Better World Environmental Fair

On June 23, PMNM staff from ONMS and USFWS participated in the 2nd annual Build a Better World Environmental Fair at the Hawaii State Library. The event was created last year to offer conservation organizations and agencies an opportunity to share about their work and provide information on how the community can help. Activities included an albatross scavenger hunt, gyotaku fish printing, PMNM hidden picture coloring, and PMNM "Can You Say It" picture frame. PMNM brochures, activity sheets and International Year of the Reef bookmarks and were made available for those interested. Approximately 60 people attended. For more information, contact Toni.Parras@noaa.gov.



Visitors engage in PMNM activities at the Hawaii State Library's Build a Better World Environmental Fair. (Credits: Toni Parras/NOAA)

Filmmaker talks about film made in PMNM on Hawai'i Public Radio

On June 27, filmmaker Chris Jordan appeared on Hawai'i Public Radio's The Conversation to talk about his experience filming on Midway Atoll within PMNM, and the issue of global plastic pollution. His film,

"Albatross," is now available for viewing for free around the globe. Hawai'i Communications Manager facilitated the interview. For more information, contact Toni.Parras@noaa.gov.

Link:

http://hpr2.org/post/conversation-wednesday-june-27th-2018

PMNM presents at the 25th annual Hawai'i Conservation Conference

From July 24-26, 2018, various presentations were made at the 25th annual Hawai'i Conservation Conference by PMNM staff and partners, including:

- "Marine Alien Species Distribution and Management in the Papahānaumokuākea Marine National Monument," Scott Godwin, Brian Hauk, Holly Bolick, Randall Kosaki. Brian Hauk, JIMAR Resource Protection Manager, presented updated data on the distribution of alien species throughout PMNM and management strategies aimed at preventing new introductions. Previous data was 10 years old and greatly underrepresented the number of known alien species to be establish in the Monument. Approximately 125 people attended.
- "Symposium 12: From Research to Regulation: An Evolving Blueprint to Manage Aquatic Invasive Species in Hawai'i" Atsuko Fukunaga, Randall Kosaki, and Brian Hauk.
- "Distribution and Abundance of Introduced Fishes on Shallow and Mesophotic Reefs of the Hawaiian Islands," Atsuko Fukunaga.
- "Media Training: Get Ready for Your 15 Minutes of Fame." Hawaii Communications Manager Toni Parras conducted a media training workshop assisted by reporters Diane Ako from KITV, Catherine Cruz from Hawaii Public Radio, and Nathan Eagle from Honolulu Civil Beat, consisting of a presentation on interview "how-to"s and mock interviews with participants. Approximately 40 people attended.
- "Building on Co-management: Stories and Successes of Papahānaumokuākea Marine National Monument" presentations by Monument co-managers and affiliates

In addition, PMNM staff co-hosted a One-NOAA booth with Fisheries, and NMSF also had a booth showcasing PMNM and HIHWNMS work. Approximately 1,000 people attended this year's conference. For more information, contact Toni.Parras@noaa.gov.

Education

PMNM presents at Hawai'i Environmental Education Alliance Conference

On July 23, PMNM staff from ONMS (Program Specialist Andy Collins), and USFWS (Education & Outreach Specialist Amy Olliffe), presented on 16 years of education efforts for Papahānaumokuākea at the Hawai'i Environmental Education Alliance's (HEEA) annual conference in Honolulu. The one-day conference, attended by more than 200 educators, was focused on environmental education in Hawai'i, with presentations by teachers, resource managers, informal and place-based educators, and scientists. The PMNM presentation was attended by 25 participants, who learned about all the education resources available on PMNM. For more information, contact Andy. Collins @noaa.gov.

Mokupāpapa Discovery Center (MDC) Report for June 23 – September 4, 2018

Mokupāpapa Discovery Center hosted 24,893 people during this time. Highlights include:

- Visitation continues to be high at MDC with National Park Service Interpretive and Education staff providing daily volcano briefings and weekly enrichment programs.
- Host the weekly ho'ike (presentations) for the Kamehameha Schools summer Ho'olauna Program
- NPS Ranger Dean Gallagher spoke to a crowd of 80+ at MDC's Third Thursday by the Bay Lecture, adding to the popular NPS daily eruption presentations with an expanded evening Hawai'i volcanology program.

- MDC staff led the ever-popular Craft Night, celebrating the Hawaiian green sea turtle (honu) summer hatching season and the importance of French Frigate Shoals as the primary nesting grounds for Hawaii's honu.
- Get Into Your Sanctuaries Day Celebrations. The day's events highlighted International Year of the Reef and the important role our Sanctuaries and Monuments play in the protection and understanding of these resources.
- The Third Thursday by the Bay Lecture Series featured Christian Wong, Executive Director of the Hawai'i Science and Technology Museum (HSTM). He spoke about HSTM's efforts to increase math and science scores through project-based learning. MDC will be hosting a Science and Technology day in collaboration with HSTM one day in the near future.
- Hurricane Lane grazed Hawai'i Island and released 50 inches of rain over a few days. The facility
 closed late Wednesday and was not able to reopen until Tuesday, August 28 due to several
 incidences of flooding. After several days of cleaning and drying, the Discovery Center is back in
 operation with damage assessment still in process



Summer camp groups learn about PMNM, study Hawai'i limu (marine algae) and participate in a reef fish observation activity. (Credit: Justin Umholtz/NOAA)



Left: Ranger Dean links the current eruptive activity to the entire Hawaiian archipelago utilizing the Liquid Galaxy exhibit. Right: Audrey Schmidt puts finishing touches on her honu. (Credits: Andy Collins/NOAA



Left and center: The "Build a healthy reef" is a popular activity during Get Into Your Sanctuary Day at Mokupāpapa. Right: Paulo Maurin, National Education Coordinator and Fellowship Manager for the NOAA Coral Reef Conservation Program, introduces people to coral bleaching using 3-D printed coral polyps. He also spoke after the screening of "Chasing Coral." (Credits: Andy Collins/NOAA)

Research & Field Operations

PMNM Divers Complete 100 meter, Closed-Circuit Rebreather (CCR) Course

From June 18-29, the NOAA dive team of PMNM completed the 100-meter, closed-circuit rebreather (CCR) course on Poseidon SE7EN rebreathers off the South Shore of Oʻahu. The advantages of CCR diving include longer dive times, less decompression times, and a reduction in overall gas use. This course was necessary for the upcoming research cruise scheduled to depart on August 23 and return September 16. This research cruise will conduct reef monitoring surveys at conventional SCUBA depths (0 – 30m), in addition to dives of 40m – 100m using CCRs. These deeper dives have revealed many previously unidentified new species of marine life and the team is excited to get underway. For more information, contact Jason.Leonard@noaa.gov.



Left: PMNM divers R. Kosaki and B. Hauk explore at 84.1m. (Credit: Michael Jones/ Professional Association of Diving Instructors) Right: PMNM deep reef team and instructor Michael Jones (second from left) preparing to disembark on the final day of training. (Credit: James Morioka/NOAA)

Research Cruise Funded by NFWF and PMNM Departs for French Frigate Shoals

On June 30, eleven University of Hawai'i scientists and graduate students departed on a 14-day research cruise to the NWHI. Research will include tagging and tracking of large sharks and other apex predators and shoreline erosion modeling to predict the impacts of the 1-2 meter rise in sea levels forecast for the next 100-200 years. Graduate students include Kammie Tavares (PMNM's 2017 NOAA EPP intern) and Haunani Kane (navigator on the voyaging canoe Hōkūle'a). PMNM funds leveraged a 1:1 match from a donor to the National Fish and Wildlife Foundation (NFWF). Additional research projects from this funding arrangement will sail on PMNM's cruise aboard NOAA ship *Hi'ialakai* in August. For more information, contact randall.kosaki@noaa.gov.



University of Hawai'i researchers prepare to sail on the MV Searcher (Credit: Randy Kosaki/NOAA)

PMNM continues its work to prevent invasive species

As the research field season is gearing up, so too are efforts to prevent introduction of invasive species to PMNM. During the week of August 6, PMNM Field Team members Brian Hauk, Terril Effird, Jason Leonard, and Keo Lopes suited up to perform one of the least glamorous diving jobs within NOAA: inharbor hull inspections. Any ships permitted to enter Monument waters need to undergo hull inspections to ensure that no hitchhiking species inadvertently travel to the highly protected Northwestern Hawaiian Islands. The two vessels inspected were the M/V *Searcher*, which conveys scientists conducting research in the Monument, and the M/V *Imua*, a newly appointed supply ship serving USFWS field camps on Midway and Kure atolls. For more information, contact Brian.Hauk@noaa.gov.





LTJG Terril Effird utilizes a full-face mask regulator to dive in harbor waters. Right: Brian Hauk, head of the invasive species program at PMNM, prepares to dive for a hull inspection. (Credits: Keo Lopes)

Staff Changes:

Departures

Yumi Yasutake, Kauai Education Coordinator Toni Parras, Communications Manager

Calendar:

• Research Symposium November 19-20, 2018 Ala Moana Hotel, Honolulu, HI