

## 2014 List of Accomplishments

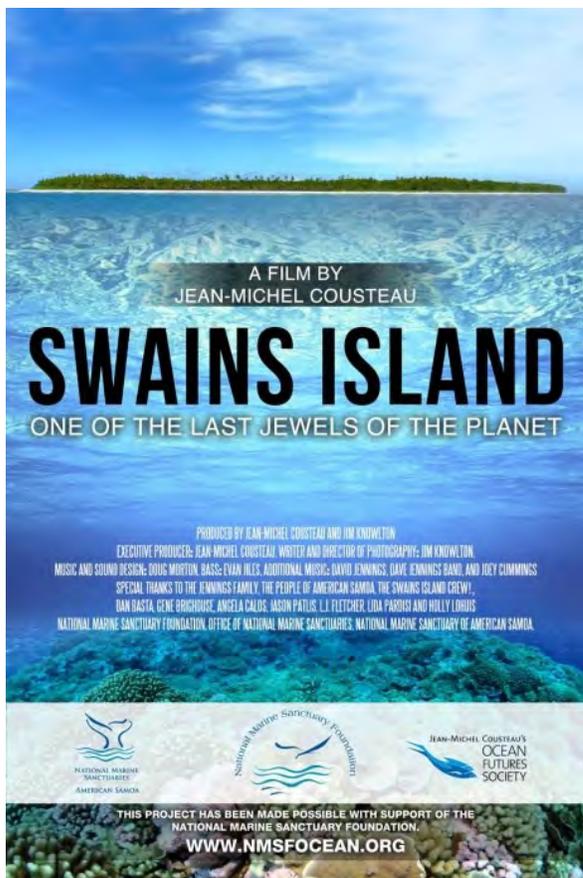
In 2014 the NMS of American Samoa Made a **SPLASH** onto the World's Stage

### Catlin Seaview Survey and Google Street View

Google Street View and Catlin Seaview Survey captured land and ocean images respectively in American Samoa, specifically in Sanctuary sites and surrounding areas. Google Street View spent over two weeks collecting images with the Trekker Street View Camera on over 26.5 miles hiked, 181 miles driven, and 21 hours of small boat transportation. Also filmed were the Ocean Center and gift shop. The Catlin Seaview Survey's goal is to record, research and reveal the world's coral reefs to all in high-resolution, 360° panoramic vision. The Sanctuary hopes this project will produce an accurate record to monitor coral reef change over time, provide virtual dive and site experiences for people to Fagatele, Fagalu'a/Fogama'a, Aunu'u, Ta'u, and Muliava (Rose Atoll), and show to the world how special and important these remote islands and surrounding coral are.



*A flattened panorama of the SVII-S camera on expedition in the National Marine Sanctuary of American Samoa.  
Photo Credit: Catlin Seaview Survey*



### Swain's Island Film Wins at BLUE Ocean Film Festival

"Swains Island: One of the Last Jewels of the Planet" took first place at the international Blue Ocean Film Festival this year in the People and Ocean Category. The hour-long, PBS documentary film is narrated by and stars, Jean-Michel Cousteau, son of famous oceanographer Jacques Cousteau and showcases the unique ecological and cultural aspects of Swains Island; the coral reef, the lagoon, the tapua, and the village. Present at the premier in American Samoa were Cousteau, Sylvia Earle, Jim Knowlton (writer and cinematographer), Polynesian Voyaging Society navigator Nainoa Thompson, Director of the Office of National Marine Sanctuaries, Dan Basta, and representatives from the Jennings family. The film has brought international attention to the Sanctuary's Swains Island unit, one of the most remote places in the world. It will continue to bring awareness to and appreciation of the small island and the unique ecosystem to American Samoa and the world.

*"I am grateful that the BLUE film jury and the audience alike recognize and appreciate the importance of the Swains Island story. It's a pleasure to have the opportunity to make a film that shows the world why we must protect the biodiversity and unique cultural heritage of valuable places to create a healthy ocean and ensure our continued well-being on the blue planet we call home."*

-Jean-Michel Cousteau

## The Sanctuary Welcomes SEA to its Yearly Programs

After years of preparation, the Sea Education Association (SEA) is now including American Samoa in its yearly ports visited. The SEA's Pacific sailing Vessel, the SSV *Seamans*, is a 134-foot steel brigantine and is the most sophisticated oceanographic research/sailing school vessel ever built in the United States. She docked for the first time in Pago Pago this past year and alongside the Sanctuary, organized and hosted over 10 days of programs for the benefit of the American Samoan community. Local high school students, college students, and the general community were welcomed on board for dockside tours and even day sails. The SEA's ship and programs fueled the imaginations of over 500 people, by providing meaningful personal experiences that link the study and care of the coasts and oceans with their own futures.



## A Shared Mission: The Polynesian Voyaging Society and The Hokule'a

The Sanctuary hosted many community events alongside, and to bring attention to, the Polynesian Voyaging Society (PVS). PVS's mission of "Mālama Honua" or 'take care of our earth' will be carried by their two traditional Hawaiian sailing vessels, the Hokule'a and Hikianalia, around the world. This recently begun worldwide voyage has forged a partnership between PVS and the Sanctuary system, as both promote ocean conservation efforts. Through this partnership, the Sanctuary was able to:

- **Augment Local Youth Capacity** - The Sanctuary sponsored two high school students to travel to Hawaii and learn alongside crew members at the PVS headquarters. Patricia Penitito and O'Riley Le'au learned hands-on navigational training and the importance of the PVS/Sanctuary mission.
- **Connect Pacific Islanders** - PVS and the Sanctuary will bring attention to the cultural heritage and connections to the ocean across the Pacific, maintain strong voyaging ties between Pacific islanders through collaborative programs, and learn more about our collective needs and concerns for our islands, oceans and people.
- **Enhance Education and Outreach** - PVS and Sanctuary team members visited many local schools to discuss the importance of 'taking care of our earth' (Mālama Honua). Specifically, how to live sustainably while sharing Polynesian culture, learn from the past and from each other, create global relationships, and discover the wonders of this precious place we call home.
- **Bring Attention to Tradition and Conservation** - Tours, both on board the traditional canoes and at the Ocean Center, gave the general public and students the opportunity to learn about way-finding navigating techniques. Traditional navigation techniques taught included the use of stars, moon, sun, clouds, ocean swells, seabird behavior and other natural patterns. Tours also stressed the importance of marine conservation.



## Continuing Sanctuary Efforts in 2014

### Continuing SCIENCE... Sanctuary scientists and partners continued their commitment to understanding the local ocean environment through science research, training and collaboration in 2014.

#### RESEARCH

Research being conducted in and around sanctuary units: **Contaminant Research** assessed nutrients and contaminant loads in sediments in the Faga'alu bay. Measurements and photographs were collected at **Big Momma**, the biggest *Porites* coral head in the world. Long-term **Climate Monitoring in Fagatele Bay** continued on shallow-water reefs. Research on the influence of US policies in American Samoa (i.e. environmental protection policies) since 1900 transpired with the **University of Wyoming**. And the Coastal Studies Center **Whale Survey 2014** was completed in and around the sanctuary units of Aunu'u, Fagatele Bay and Fagalua/Fogama'a Bays. Dr. Tom Oliver from the University of Hawai'i is studying **Coral Bleaching Tolerances** in two sanctuary units: Fagatele and Fagalua/Fogama'a. Reporting will occur in 2015 and provide important aspects for coral in surviving climate change.

#### TRAINING



*The largest Porites coral head in the world in the Taa'u unit of the Sanctuary. Photo Credit: Catlin Seaview Survey*

Building local science capacity through training is of utmost importance to the Sanctuary: A **Coral Restoration Workshop**, taught by Dr. Shai Shaffer, where several methods of securing small coral fragments to grates was taught. Trainees will maintain the grate arrays and will be teaching the methods in other villages. A **Disaster Psychology Discussion to Prepare for Climate Change** was lead by Pacific RISA Researcher, Dr. Kati Corlew. The Sanctuary will now be able to better consider the human factors in planning disaster and climate change preparations. Much effort went into the planning/execution of a **Coral Reef Ecosystem Benthic Assessment and Monitoring Training Workshop**. Local capacity in coral demographic survey was increased through an overview of current local monitoring programs, discussion of stratified random sampling, and in-depth details on survey methodology, coral diseases and predation. **Benthic Survey Training with Partners** was attended by the Sanctuary. Benthic cover and coral demographic survey methods were covered, and several

dives took place to standardize methods among all observers. The Sanctuary will be participating in the upcoming RAMP monitoring cruises in American Samoa that include more intensive surveying in sanctuary sites: This is the primary monitoring for the sanctuary and for American Samoa as a whole.

#### COLLABORATION

Science within the Sanctuary is supported by a network of other agencies and private groups. Many research collaboration meetings in 2014 have taken place: The **Coral Reef Conservation Program, USGS, NCCOS, San Diego State University, NOAA Fisheries** discussed topics such as contaminants, current modeling, sedimentation, socioeconomic studies, and coral core studies to be conducted in the future. The **NOAA Coral Reef Watch** introduced new products now being offered as well as programs that could be developed in the future. Feedback was requested from many local and federal government agencies and the Sanctuary. A "Preserving Freshwater Resources and Minimizing Impacts of Drought" dialogue sponsored by **USAID**, offered activities to enhance scientific and technical capacity to support climate change adaptation in the Pacific Small Island Developing States. The **American Samoa Coral Reef Conservation Program** discussed FY15 proposed projects ideas to support reef management within the Sanctuary. The Sanctuary team and **American Samoa Coral Reef Advisory Group** proposed a research project to investigate natural nutrient enhancement and anthropogenic sources of pollution in relation to outbreaks of COTS. The Sanctuary is working with the head of NOAA's **Coral Reef Ecosystem Division** to solidify plans to set up a long-term collaboration for intensive reef monitoring to meet the Sanctuary's management needs. Staff throughout the year met and made plans with many other regional offices to increase the reach of collaborative research: **NMFS, Rose Atoll Marine National Monument, Fisheries Science Center, Pacific Regional Office, CRED, University of Hawaii/Marine Education Training Center, Office of Hawaiian Affairs, and SEA.**

## Continuing MANAGEMENT... by Guiding the Sanctuary through groups and actions that will better protect the ocean and its resources for future generations.

The **sanctuary advisory council (council)** and Sanctuary team have been working with the National Council Coordinator on revising the current Sanctuary Advisory Council Charter. The goal being to provide background on the NMS system and describe the objectives and roles of the council's activities, procedural requirements, and requirements for the conduct of council members and meetings. The council has been moving ahead in other ways as well:

- The Fishing Working Group has been planning for a tournament that will take place in the Sanctuary in 2015. The purpose being to raise awareness of allowable/prohibited fishing practices that vary in the different Sanctuary management areas.
- Seven new voting sanctuary advisory council members were accepted for the following seats: Fishing (2), Education, Research, Tourism, Diving, and Community-at-Large. An orientation meeting took place, where each new member was given an opportunity to ask questions prior to their first council meeting, learn about sanctuary programs, the council charter, council member roles/responsibilities, and council meeting operations. In addition to these new members, recruitment of a Youth Member position is underway.
- Topics contributed to at the 2014 SAC Summit: Leveraging resources for increased support/coalition building, recent and proposed boundary expansions, Sanctuary Nomination Process, progress since the 2012 SAC Summit, partnerships and relationship building, and corporate sponsorships.

### Management Plan Review

The Sanctuary team has been engaged in a series of exercises to track the implementation of the updated 2012 sanctuary management plan (which included the expansion of the sanctuary from .25 square mile to 13,581 square miles). This has encompassed reviewing action plan strategies, activities, associated time lines and resources required to successfully implement the plan as outlined. It has allowed the team to ground-truth progress to date, prioritize action items, and identify gaps that need to be addressed.

### Crown of Thorns Starfish Eradication and Monitoring

In April 2014, Sanctuary lead a COTS eradication and monitoring team in sanctuary management areas around Tutuila and Aunu'u. The mission involved regional collaboration and included team members from the Papahānaumokuākea Marine National Monument, Hawaiian Islands Humpback Whale National Marine Sanctuary, NOAA Dive Center, American Samoa Community College, the American Samoa Department of Marine and Wildlife Resources, LBJ Tropical Medical Center, National Park of American Samoa, and American Samoa Coral Reef Advisory Group. The goal of this team was to ramp up the COTS removal program and protect Sanctuary management areas, national park sites, and other priority reefs in American Samoa.



#### Summary of Work Conducted

- 10 DAYS OF DIVING
- 32 DIVES
- 184 DIVE HOURS
- 20.6+ MILES SURVEYED
- TOTAL COTS ERADICATED: 1,440
- SITES CLEARED:
  - National Marine Sanctuary
  - National Park
  - Territorial no-take
  - Priority sites

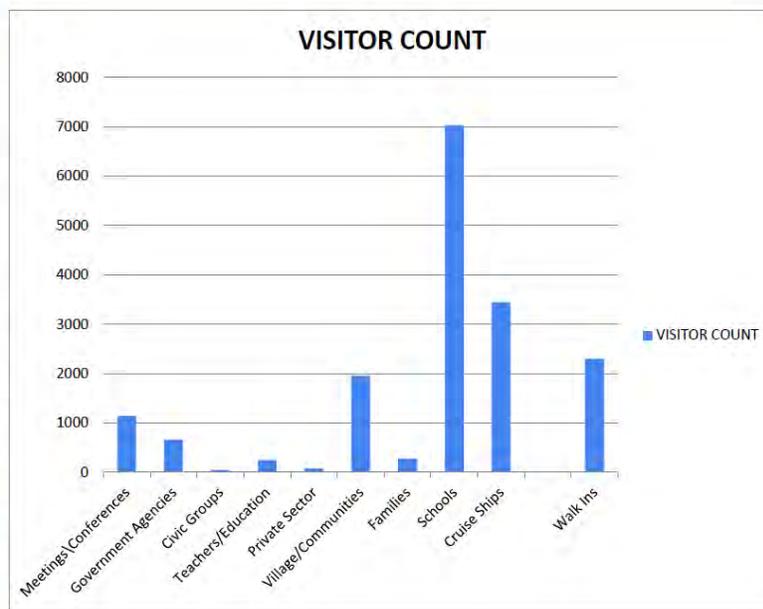
\*\*Coordinated monitoring and eradication efforts will continue in 2015 with the Coral Reef Advisory Group and the Coral Reef Conservation Program.

**Continuing OUTREACH and EDUCATION... with new exhibits at the Ocean Center and strong connections to visitors and local schools. Outreach and Education is going strong.**

**Tause P.F. Sunia Ocean Center Visitor Count**

The visitor count to the left represents the total number of visitors as of December 17th, 2014. August of this year marked two years of service for the Ocean Center. To date, the visitor center has welcomed over 17,000 people to learn about the people and place of American Samoa.

SCHEDULED TOURS	VISITOR COUNT
Meetings\Conferences	1142
Government Agencies	662
Civic Groups	52
Teachers/Education	250
Private Sector	78
Village/Communities	1960
Families	283
Schools	7032
Cruise Ships	3446
Walk Ins	2302
<b>TOTAL VISITORS:</b>	<b>17207</b>



**TWO NEW EXHIBITS AT THE OCEAN CENTER**

**1) Renowned Marine Life Artist Paints the Ocean Center** - Wyland's newest art addition in American Samoa, an underwater mural, is dedicated to the crew members of the Hokule'a and more specifically to all "champions for the ocean." Over 100 people were in attendance at a dedication ceremony that also recognized the contributions of local artists. Students present were able to paint alongside Wyland on 6 large canvases prior to the dedication. Each school represented took a canvas back to their educational facility to commemorate this historical event.

**2) Dive American Samoa** - This exhibit is meant to inspire people to explore the underwater world of the islands, and more specifically, the units within the Sanctuary. The display contains a description off all gear required to scuba dive, a quote by the famous marine biologist, Sylvia Earle, and a mannequin wearing scuba diving gear with a beautiful backdrop of the Sanctuary underwater world. At the Opening of this exhibit were renowned oceanographer, explorer/author/marine biologist, Dr. Sylvia Earle; French explorer, environmentalist, educator, and film producer Jean-Michel Cousteau; Native Hawaiian navigator and the president of the Polynesian Voyaging Society, Nainoa Thompson; and the Director of the Office of National Marine Sanctuaries.



## Continuing to ENCOURAGE TOURISM... Sustainability depends upon a healthy economy. The Sanctuary continues to encourage the growth of tourism and business in American Samoa.

### First Festival of Sites for 2014

Cruise ships that visited American Samoa this past year were greeted with a festival at the Ocean Center. The Sanctuary and its unit's communities (Swains, Ta'u, Muliava, Aunu'u, Fagatele & Fagalu/Fogama'a) continue to project the value of people and place - American Samoa style! Local crafts, Samoan food, fruits and cultural performances were showcased to tourists from the cruise ships. The "Penina Tutasi o Amerika Samoa" film was also shown in the Ocean Center. Cultural dances were performed by students from the American Samoa Community College. These festivals continue to highlight Sanctuary sites, generate income for local groups, while giving tourists a preview of Samoan culture.

### Looking for the Right Opportunities

The sanctuary team has been meeting and encouraging a wide range of groups in the hopes of bringing recreational tourism opportunities to American Samoa.

- ⇒ Members of the sanctuary advisory council and a community member from Aunu'u meet regularly to discuss the idea of creating a surf camp and recreational fishing business that could benefit communities in areas adjacent to the sanctuary.
- ⇒ The Sanctuary economic development team and sanctuary liaison meet to discuss eco-place opportunities at Fagatele Bay. Snorkeling, cultural shows and marine mammal watching are some topics discussed that can be offered to visitors as part of tours. The Sanctuary offers assistance with putting together business proposals to purchase gear that tour operators can rent out to tourists/visitors.
- ⇒ The Sanctuary economic development team met with the manager for the Business Development Division of the American Samoa Community College Small Business Development Center to discuss types of services the Center can offer to individuals who would like to own and are ready to start a new eco-tourism business within the sanctuary managed areas.

### Working with Established Businesses

In the hopes of expanding village and cruise ship tourism, Sanctuary team members met on several occasions with Tradewinds Tours, who coordinate international cruise ship tourism in American Samoa. Tradewinds Tours has been in operation for 47 years and has recently added the Ocean Center to cruise ship promotional materials. The Ocean Center is now the highlight finale to one of the offered tours. Additionally, village-based tours are being developed for sanctuary management areas on Tutuila and Aunu'u.

Coordination meetings are currently taking place with Sanctuary communities. All tours will showcase marine and cultural resources found in the Sanctuary.

### Sanctuary Exhibits at the 2014 Samoa Tourism Exchange

The Sanctuary participated in the 2014 Samoa Tourism Exchange in Apia, Samoa in April. The trade show provided American Samoa and Samoa the opportunity to network with tourism suppliers, international tour operators, and media from New Zealand, Australia, United States, United Kingdom, Europe, China, and South Korea. Sanctuary staff provided travel/trade agents with an overview of the National Marine Sanctuaries and emphasized ocean recreation in American Samoa.

Trails to the units as well as snorkeling and diving opportunities throughout the Sanctuary were significantly highlighted in the presentations and meetings with representatives. The Sanctuary booth predominantly attracted representatives that coordinate hiking/backpacker adventures and dive expeditions. Other interested parties were representatives for exclusive tours and volunteers of citizen science projects.



## NATIONAL MARINE SANCTUARY OF AMERICAN SAMOA

### ENCOURAGING TOURISM... (Cont.)

#### Work with the AS Visitors Bureau

The Sanctuary team participated in the Pacific Regional Tourism Strategy (PRTS) 2015-2019 Stakeholder Consultation Workshop at the Tradewinds Hotel in Pago Pago, American Samoa. The workshop was sponsored by the AS Visitors Bureau, South Pacific Tourism Organization, and Pacific Regional Tourism Capacity Building Program. The PRTS will provide a strategic framework to support the development of the Pacific tourism sector for the next 5 years. The Vision for the tourism sector in the Pacific Region, endorsed by the South Pacific Tourism Organization Board and Council of Pacific Tourism Ministers (Apia 2013), is the "Tourism will inspire sustainable economic growth and empower the Pacific people."

The Sanctuary team also met with Deputy Director, Vaitoa Langkilde of the AS Visitor's Bureau Authority as an in-reach to work with them as partners in developing eco-place opportunities in Sanctuary units. This continuing information exchange is important to link the Sanctuary with established networks and opportunities. These will support 'community led eco-place experiences' tourism that the Sanctuary hopes to launch in August, 2015.

### Continuing INNOVATION... through programs and projects that are unique to the National Marine Sanctuary of American Samoa and set us apart from the crowd.

- \* **Training Sanctuary Staff** - Training that took place this year to build the capacity of staff within the Sanctuary: Media Training, NOAA Small Boats Component Course, and Search and Rescue training was taken alongside the National Park of American Samoa. One Sanctuary staff member also became Red Cross CPR/First Aid/AED instructor certified in 2014 in an effort to build local capacity.
- \* **Media Coffee Chat** - Quarterly, the Sanctuary hosts a "Media Coffee Chat." In an effort to build trust and stronger relationship with the American Samoa media groups, the Sanctuary invites them to a presentation. This presentation is an overview of events and programs worthy of news coverage that will take place in the following 3 months. These "chats" enabled the media to give feedback on collaborative efforts with the Sanctuary and to ensure our community is well served. This has led to stronger relationships with media groups and more accurate information being shared with the public.
- \* **Small Boat Mission Needs and Marine Operations** - Vessel needs of the Sanctuary has been outlined in a 'mission matrix' in the hopes it will lead to acquiring resources needed to fulfill sanctuary goals. Discussions inspired by this matrix have focused on vessel requirements not currently available on island. Personnel, facilities, contracts, platforms and other equipment were also listed to help facilitate future planning and growth of the Sanctuary marine operations program.
- \* **The Sanctuary Wellness-Tae Bo Fitness Program** - Sanctuary staff hosted the "Healthy People-Healthy Ocean Family Fun Day", an occasion to commemorate the one year anniversary of the Sanctuary Wellness-Tae Bo Fitness program at the Ocean Center. The event attracted close to 400 individuals, including children, each of whom received information about the importance of marine conservation, as well as pointers on fitness and healthy eating/living. Fitness demos from the different fitness groups on island (Hot Hula, Zumba, Body Combat, MMA, and Tae Bo) were enjoyed to the fullest by everyone. Honored at this event were 6 individuals who have lost over 50lbs each with this fitness program.



- \* **Sanctuary Interns** - Through the 2014 summer, six college level interns and two recent high school graduate volunteers gained hands-on experience at the Sanctuary: Field days were spent collecting/downloading data from temperature loggers from Sanctuary units. Interns assisted in training for the marine science program at the ASCC. Career days at local schools were staffed by interns who shared valuable experiences from working at the Sanctuary. And the Ocean Star Summer program was completely run (with oversight from Sanctuary staff) by interns and volunteers. The program ran 4 weeks with 35 students and consisted of lesson plans focusing on coral reefs, marine animals, threats, and swimming.