

## 2013 List of Accomplishments

The NMSAS has had an electrifying year. In 2013, our goals have been realized through engaging the public, teaching our future decision-makers and protecting our precious resources.

### How we EDUCATE...

- The NMSAS, NMFS and the **Bruckner Chase-Ocean Positive** revitalized the connectivity of Samoans to the ocean. Bruckner Chase swam around Aunu'u (5 miles), paddled from Utulei to Fagatele Bay (12 miles), and visited local schools. This "Blue Journey" will furnish a 2-Samoas documentary film about the connection of Samoans to the ocean.
- The NMSAS with Cardinal Point Captains, hosted a **CPR/First Aid/O2 Training** for staff, and members of local agencies and businesses including Marine Patrol, DMWR, Industrial Gases, NOAA PIRO, and the Coral Reef Advisory Group.
- Sarah Seabrook completed her work as a **NOAA Hollings Scholar** at the NMSAS. Using data collected through site surveys and research, she has been able to predict how coral community composition is likely to change in the future. Her work will better inform decision and policy makers on how to deal with these changes.
- **Jean Michel Cousteau** visited Swains Island with the Director of National Marine Sanctuaries and local government officials in August. A team of scientists and divers (maritime archaeologists) also joined this mission. Over one hundred and thirty members of community in American Samoa were witness to the renowned ocean explorer as he presented on the importance of protecting our oceans at the Tauese P.F. Sunia Ocean Center.



**The Sanctuary Wellness-Tae Bo Fitness Program** continues strong since its beginning in May. This community service has been a success and is extremely beneficial through promoting a healthy lifestyle.

### Ocean Swimming/Ocean Science (OSOS)

The NMSAS and ASDOE are in the second year of a partnership where students enroll in a credit course lead by NMSAS and the American Samoa Aquatic Agency. The program started in Spring 2012, and teaches students about ocean safety/swimming, marine science and the value of our natural resources. The enrollment this year is 25 new students comprised of juniors and seniors. Although over 100 students have been enrolled in this program to date, OSOS still has a waiting list.

The OSOS students of Samoana High School recently presented on a marine science topic that they have learned in the program, which included their accumulated knowledge from presenters of the college and various agencies and departments. Topics covered: Threats to our Ocean, How to Prevent Threats, Different Kinds of Threats (natural vs. human), and Why Not to Fish Big Fish.



## How we PROTECT..

The NMSAS has sustained many projects in 2013 that will protect natural resources in American Samoa:

**Watershed-based sources of pollution and its impacts** - The Pacific Marine Resources Institute, with the NMSAS Research Coordinator, conducted surveys of corals, algae, fish, and invertebrates across Tutuila to increase understanding of watershed-based sources of pollution and its impacts. Fagatele Bay and Fagalua/Fogama'a sanctuary units were included in the 15 survey sites.

**Nautilus Research** - University of Washington scientists collected data to ascertain population numbers of the cephalopod Nautilus. Tentacle clips were taken, and captured animals were weighed, tagged, and released. This research was funded by NOAA Fisheries and the NMSAS. The NPAS and DMWR provided staff and dive support.

**The First Survey of Swain's Island as a Sanctuary Unit** - The NMSAS Research Coordinator conducted a biological assessment of the outer reef and reef flats with the help of representatives from Western Samoa and DMWR. Reefs were surveyed to assess coral cover, coral disease/predation, macro-algal growth, macroinvertebrates, and large fishes. Sea cucumbers, currently a lucrative export item, are present in low densities making their proposed collection not worthwhile from a business perspective and unsustainable from an ecological perspective.

**Climate Change Indicators Monitoring** - NMSAS has started temperature and conductivity monitoring in Fagatele Bay to monitor climate change indicators within sanctuary waters. Sanctuary scientists, with the assistance of ASCC interns, attached small waterproof Hobo data loggers to the reef at multiple depths.

**Hands on Clean-Up** - The NMSAS OSOS students participated in the American Samoa Environmental Protection Agency's adopt a stream program. They adopted Utulei beach and keep it clean. Middle school students from the village of Avaio toured the Ocean Center and participated in a snorkel and marine debris clean up during their spring break. All students learned about the importance of coral reefs while putting this knowledge into action by helping clean up our natural marine areas.

**Research Proposals** - NMSAS has partnered with outside scientists to submit several research proposals for funding. One project will assess the presence and toxicity of chemical contaminants in sanctuary sites and around the island; an issue that is of special interest given the proximity of dump sites to marine protected areas. NMSAS also joined CRAG and NOAA Fisheries to submit a proposal to develop sea-level rise models to help prepare villages for future inundation. Another proposal will fund a joint coral monitoring training program with CRED, DMWR, and NMSAS. All research will further the science mission of NMSAS.



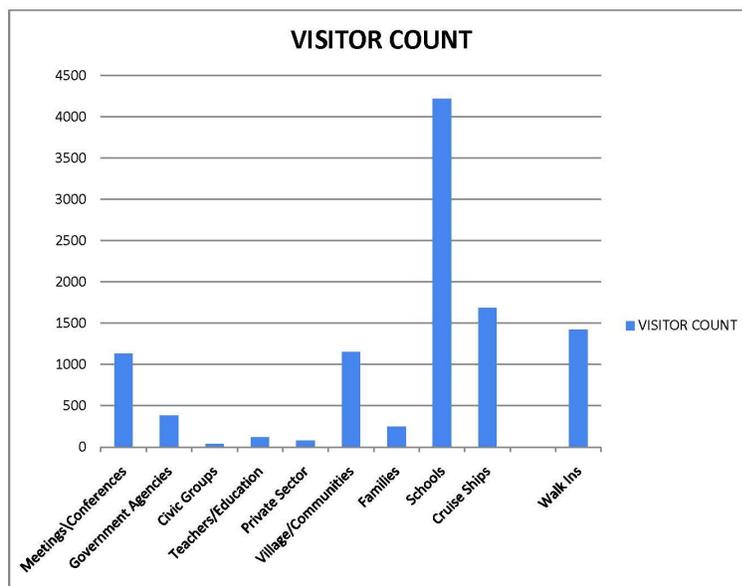
## How we ENGAGE...

- The NMSAS Visitor/Volunteer Coordinator joined the **American Samoa Visitor's Bureau** to market American Samoa as a travel destination at the Cruise Shipping Miami 2013 convention. The National Marine Sanctuary of American Samoa was the main feature of the display. Discussions on future tours and excursions are taking place.
- The NMSAS developed a promotional film titled "**Penina Tutasi i Amerika Samoa**". The NMSAS science team and guest videographers captured underwater coral reef footage in the sanctuary units and scenic landscapes in the NPAS. Community members were also filmed to highlight Samoan culture. The video has been playing in Tauese P.F. Sunia Ocean Center.
- The NMSAS together with local/federal Environmental Agencies that make up LE-TAUSAGI, organized an annual **Enviro-Discovery Summer Camp** at Utulei Beach. Over 50 participants of ages 5 to 18 experienced the importance of caring for our ocean and land.
- The NMSAS hosted the four week, hands-on learning, **Ocean Star Summer Program**. Children (ages 10-12) discovered the following topics: Introduction to coral reefs, the importance of coral reefs; threats to coral reefs; and what can you do to save our ocean.
- **Village Based Visitor Development** is a work-in-progress for the NMSAS. We have hosted a series of discussions with the public and private sector on how we, as partners, can cultivate a sustainable market through establishing "Eco-Place Opportunities" in villages that are adjacent to sanctuary units. Input has been collected from a variety of sources and relationships have been formed. This effort is in preparation for the Festival of Sites expo which NMSAS has hosted since May, as well as the Visitor-to-Village excursions later in the summer.

## Tauese P.F. Sunia Ocean Center Visitor Count

August marked one year of service for the Ocean Center. To date, the visitor center has welcomed over 10,000 people to learn about the people of and place of American Samoa.

SCHEDULED TOURS	VISITOR COUNT
Meetings/Conferences	1131
Government Agencies	382
Civic Groups	37
Teachers/Education	115
Private Sector	78
Village/Communities	1149
Families	245
Schools	4219
Cruise Ships	1685
Walk Ins	1420
<b>TOTAL VISITORS:</b>	<b>10461</b>



## How we COLLABORATE...

- **USFWS** - The NMSAS Superintendent and Research Coordinator met with the USFWS Rose Atoll Manager, Frank Pendleton to discuss the current management situation and the potential for collaboration in outreach and science efforts. The main issues (permits, outreach, research, emergency ship groundings, guiding principles, and enforcement) were outlined to be discussed in a meeting with the other co-manager from NMFS.
- **2- Samoas** - The sanctuary team participated in a week-long workshop on reef resilience for MMA practitioners. Presenters were from SPREP, The Nature Conservancy Indo Pacific Region (TNC), South Pacific Commission (SPC), CRAG, DMWR, and NOAA PIRO. NMSAS was featured at the 2-Samoa Exchange Visit meeting which was hosted by DMWR. NMSAS presented and shared information about the National Marine Sanctuary of American Samoa, in the Samoan language, to our visiting friends as well as staff of the Department of Marine and Wildlife Resources.
- **CRAG** - NMSA team members participated in a meeting of the Coral Reef Advisory Group, American Samoa. Participants include representatives from the DMWR, Western Pacific Regional Fisheries Management Council, USDA - Natural Resources Conservation Service, NOAA Coral Reef Conservation Program, American Samoa EPA, NPSA, USFWS, and NOAA PIRO. Topics of discussion included the Shark Conservation Act, climate change funding opportunities, Population Policy Workshop, and Western Pacific Regional Fisheries Management Council report. The NMSAS Superintendent gave a presentation to CRAG covering the management areas of the sanctuary.
- **Marine Protection Groups** - NMSAS team members hosted a meeting to discuss efforts involving outreach to communities relating to marine protected areas. Participants included representatives from the DMWR - MPA Program, DMWR - Community-Based Fisheries Management Program, DMWR - Enforcement Program, Coral Reef Advisory Group - American Samoa, Western Pacific Regional Fisheries Management Council, NOAA Coral Reef Conservation Program and Coastal Zone Management Program Liaison, and National Park American Samoa.
- **NPAS** - NMSAS staff members met with NPAS for a team building and collaboration meeting. Fruitful discussions were held about how staff can work together on science and education programs, connect visitors to resources, and build interagency coordination. Since this meeting:

- The NMSAS education team has co-taught several programs for local schools with the NPAS.
- The NMSAS and NPAS divers have signed reciprocity agreements which have allowed them to work together on the COT eradication and check-out dives.
- The NMSAS will host the NPAS staff at the Ocean Center in April.
- The NMSAS and NPAS have entered into a MOA to work on village-based marine protected areas ecotourism development, coordinate education and outreach, and continue the sanctuary advisory council.
- The NMSAS together with many agencies have worked to kill over 5,000 COTs from surrounding waters.
- The NMSAS and NPAS teams coordinated training on 'How to Develop Effective Interpretive Programs' for our sanctuary communities.



“Protect The Ocean, Protect Yourself.”

-Jean-Michel Cousteau