



PAGTÁOB

The Official Newsletter of the McKeough Marine Center of Xavier University | Volume 4 Issue 2 | November 2016 - April 2017

PAGTÁOB is the Visayan term for the rising of the tide. Every flood of the tide brings with it new nutrients and important components that sustain the numerous denizens in the intertidal zone. Just like the nutrients that are being brought in, information is also vital for marine scientists.

This newsletter aims to update the XU community and our partners on the different programs and activities of the McKeough Marine Center.

INSIDE:

Five years after Sendong:
Katilingbanong
Hisgutanay | 2

MMC hosts special
screening of *Before the
Flood* | 3

Water source
improvement at the XU
Marine Station | 4

4th STEAG Macajalar
Bay Environmental Golf
Tournament held | 4

Giant clam monitoring in
Agutayan Island | 5

MBDA conducts Unified
Fisheries Ordinance
Workshop | 5

Marine Corner | 6

Feature: My
Apprenticeship
experience at MMC | 6

MMC joins Mindanao
Regional Scientific
Meeting held in Davao | 7

REAL FANTASTIC BEASTS WITH LAMAVE

By Nadine Arabelle L Vivares
Photos by MMC



A short talk entitled “Real Fantastic Beasts: Where to Find & How to Study and Protect Them” was held in AVR 2, Xavier University on February 10, 2017. We invited one of the Executive Directors of LAMAVE (Large Marine Vertebrates Research Institute Philippines), Gonzalo Araujo to talk about whale sharks, marine mammals, sea turtles, and large marine vertebrate research in the Philippines, specifically the research being conducted by LAMAVE Research Institute Philippines on various marine species throughout the country. Mr. Araujo talked about their research work with whale sharks all over the Philippines, particularly about how the whale shark tourism in the country is affecting their behavior, as well as the very interesting biology of the gentle giants. He also talked about the DOs and DON'Ts when encountering whale sharks. They are currently working on conducting whale shark research in

Northern Mindanao.

Gonzalo was born in Buenos Aires, Argentina, moved to the UK to get his BSc Biotechnology (Hons.), University of Nottingham, and MSc. Management Science & Operational Research, University of Warwick. In 2011, he moved to the Philippines to complete his Divemaster course. He discovered and joined LAMAVE, which was a small NGO setting up a project to study Whale Sharks in the Philippines. Since then, LAMAVE has expanded their studies on mobulids, sea turtles, sharks and rays.

LAMAVE is composed of a team of international marine conservationists who collect and analyzes scientific data throughout the country, trains the next generation of prospective researchers and scientists, and works to spread awareness about the importance of marine conservation.



HARD LESSONS. Alexie Colipano Jr, a Sendong survivor and graduating Business Administration student shares his painful experiences and the lessons he has learned from that fateful night in December 2011. Alexie now lives at Xavier Ecoville, an XU-led resettlement community in Barangay Lumbia.

FIVE YEARS AFTER SENDONG: KATILINGBANONG HISGUTANAY

Report by Nadine Arabelle L Vivares and Glenda S Factura | Photos by MMC

In commemoration of the 5th anniversary of the Sendong tragedy, Sendong survivors, partner institutions, representatives from the academe, civil society organizations, media, and the city government gathered at the forum titled “Sendong @ 5: Katilingbanong Hisgutany,” organized by the Social Development - Advocacy Program, McKeough Marine Center and Green Campus Agenda on the afternoon of December 15 at Xavier University Little Theater.

Participated in by more than 200

participants, XU vice-president for social development Roel R Ravanera kicked off the forum by recounting the deluge of Sendong on the late night of December 16 and early hours of the 17th. He said that may the Sendong tragedy serve as a lesson for Kagay-anons to reconcile with nature and build more climate change-resilient communities.

XU Engineering Resource Center founding director and engineering faculty member Engineer Dexter S Lo presented his study “Mapping the Sendong Story:

Science, Signs, and Insights,” detailing the technical factors on why and how Sendong happened, as well as what we could do to prevent it from happening again.

Brief and emotional recollections of Sendong survivors from CDO and Iligan City also dotted the forum. Stories were heard from Alexie Colipano Jr, Sendong survivor and a graduating student of XU Business Administration; Achmad S Musa, head of an organization of Iligan survivors; Mary Kris Gebe of Kuya Fish Campaign; and Alexie Colipano Sr, president of the



Xavier Ecoville Homeowners Association (XEHA).



Individuals from partner organizations who helped during the aftermath of Sendong also shared their stories and experiences: Ercel Maandig of the media group Mindanao Media Advocates for Environmental Preservation (MMAEP); Sabrina Balais, area manager of Balay

Mindanaw Foundation Inc; and Lerma Bernadette Reyes, program manager for Habitat for Humanity Philippines - Cagayan de Oro.

Five years after the Sendong tragedy, Xavier University remains steadfast in its commitment to the Sendong survivors grounded in the Jesuit mission of “care for others (*cura personalis*) and seeking God in all things.”

In early 2012, Xavier Ateneo and the local government established Xavier Ecoville as the resettlement village for the victims of Typhoon Sendong, which rendered thousands of families homeless. Today, Ecoville stands as a testament to the resiliency of the families who survived

the calamity.

Editor's note: this article was originally published in the Xavier University website (www.xu.edu.ph) on December 21, 2016

MMC hosts special screening of *Before the Flood*

By Marianne Mira Katrina Macapelit | Photos by MMC

In celebration of the National Environmental Month and Global Warming and Climate Change Consciousness Week, MMC held a special screening of the documentary “Before the Flood” on November 19, 2016. This is the second Environmental Themed Documentary we showed this year, as part of the Center’s IEC Advocacy.

Starring the award-winning actor Leonardo DiCaprio, the documentary is about “how climate change affects our environment and what society can do to prevent the demise of endangered species, ecosystems and native communities across the planet.”

2 screenings were held at AVR 1 Old Library. Attendees included XU students, teachers, staff, and the entire Xavier Grade School Science Club. After the screening, the viewers posed at our photo booth outside the AVR.



Water source improvement at the XU Marine Station

Text and photos by Friday G Atilano

Ever since MMC assumed the operation and maintenance of the XU property in Jasaan, the water supply has always been a perennial problem. From rinsing the field equipment to taking a bath (for field researchers), it would take hours to finish before they can finally call an end to a strenuous day. Usually, they take turns in taking showers instead of using all the shower rooms available, and sometimes, unfortunately, experience very low water pressure to no water at all. Visitors from different organizations that availed the services of the Activity Center also experienced low water pressure during their entire visit, making it inconvenient for them to hold their activities.

When the Marine Station was constructed it had two different water sources. The old water district of Jasaan (JRWASA) provides water to the Activity Center; the Marine Lab water supply is from the LGU of Jasaan under the supervision of the municipal mayor. Unfortunately, both suppliers

had politically motivated legal disputes to which the water grid of Jasaan was deliberately compromised, resulting in the water supply of the marine lab being cut off. For almost a year, our marine laboratory had zero running water. Maintenance and cleaning of the area were challenging for our utility personnel. Fortunately, the laboratory was not yet fully operational at that time. However, the situation will definitely hamper the future operations if there are no solutions to this predicament.

On November 22, 2016, the water system of XU Marine Station in Jasaan was successfully upgraded. With the approved budget of P160,000.00,

we were able to install the 566 gallon capacity stainless steel water tank with filters, in addition to the previously acquired bladder tank and 1Hp motor pump. Initially, the stainless steel water tank was included on the items to be acquired in upgrading the water system, not until we were informed by the local water district that it is a requisite to install a water tank which will serve as a reservoir, that is directly connected to the main source, prior to the putting up of a water booster machinery. With this, we were able to buy an additional unit to complete the project. Hopefully, when the station and the marine lab will be fully operational, water sources will no longer be a problem.



4th STEAG Macajalar Bay Environmental Golf Tournament held

By Kristine Ares Galarrita | Photos by MBDA



STEAG State Power Inc., in collaboration with the Camp Evangelista Golf Club (CEGC) and MBDA successfully held the 4th STEAG Macajalar Bay Environmental Golf Tournament last November 11-13 2016 at the Camp Evangelista Golf Course, Patag, CDO City. The Ceremonial Tee Off was attended by Major General Benjamin Madrigal, Lt. Gen. Rey Ardo, Col. Jessie

Alvarez, Lt. Col. Lynart Castisimo, Mr. Jessie De Toro - STEAG SPI and Mr. Melvin A. Alvarez -STEAG SPI.

During the Awarding and Fellowship Night, MBDA Chairperson, Mayor Marietta R. Abogado expressed her thanks to all the sponsors and players who made the event possible. The funds raised will be utilized in support of marine protected area (MPA) management in the bay.

Giant clam monitoring in Agutayan Island

By Nadine Arabelle L Vivares | Photos by MMC, Janell Sihay



On February 12, 2017, we conducted the 1st clam monitoring of the year. Since the last clam monitoring and relocation the previous year, only a few giant clams remain in the shallow area. Most of the clams were transferred in the deeper areas to protect them

from excessive heat caused by the especially strong El Nino last year. The few remaining clams in the shallow, especially the last three remaining *Tridacna gigas*, were heavily bleached. Heavy COTS (crown-of-thorns sea star, *Acanthaster planci*) infestation was also noted in the area.

New clams were also recorded, possibly reseeded there by the LGU of Jasaan.

The dive team only completed monitoring 1 of the 2 areas of the deep sites due to the now increased number of clams relocated previously.

MBDA conducts Unified Fisheries Ordinance Workshop

By Kristine A Galarrita | Photos by MBDA

The Macajalar Bay Development Alliance (MBDA), with the support from the Bureau of Fisheries and Aquatic Resources Region 10 (BFAR-X) conducted a 2-day Unified Fishery Ordinance workshop on April 27-28, 2017, at the Deluxe Hotel, Cagayan De Oro City.

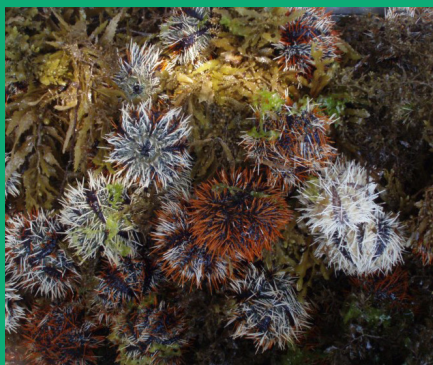
The activity was conducted to harmonize the existing Municipal/City Ordinances of the member- LGUs of the MBDA. The participants included the Municipal/City Agriculturists, Fisheries Technicians, Municipal/City Fisheries and Aquatic Resource Management Councils (M/CFARMC), SB/SP Committee

Chairs on Environment/Fisheries and Deputized Fisheries Wardens (DFWs).

The plenary was headed by the plenary speaker from Bureau of Fisheries and Aquatic Resources Central Office Ms. Abigail Zarandi and Mr. Christopher Baculi. Also in attendance were Mr. Teodoro Bacolod from BFAR - X, Partner agencies such as PCG, DILG, PNP-Maritime, and DENR-X.



MARINE CORNER



The Collector Urchin

Text by By Vittorio Anton Alagadan
Photo by MMC

Sea urchins look like the landmines of the ocean. Seeing one immediately sends signals to your brain telling you to be cautious and watch your step. Only people who are crazy would want to have any sort of interaction with this spiky critter. However, these urchins are breathtakingly beautiful and make you crave for a touch. It is advised to resist the temptation unless you want to get pricked by its poisonous needles.

The Collector Urchin (*Tripneustes gratilla*) is a species of sea urchin that are found in the waters of the Indo-Pacific, Hawaii, The Red Sea and The Bahamas. They have a habit of collecting debris in their spines that can be used for consumption, hence the name Collector Urchin. They can be found in tropical habitats, including coral reefs, seagrass meadows, and bare sediments. Their diet consists of seagrass, macroalgae, and various debris. Their beautiful display of colors varies throughout the visible spectrum.

Although the Collector Urchin is venomous, its sting isn't as painful as other urchins. They are a delicacy in many Asian countries, despite being venomous, and this has caused a decline in the sea urchin population. A hatchery for these urchins has been opened up in Bolinao, Pangasinan with a hope that it will keep the population from decreasing.

My apprenticeship experience at MMC

By Vittorio Anton Alagadan



As a part of my school's curriculum, we are required to work as an apprentice for any establishment that we desire, which would last for a total of 12 days or 80 hours. This is done so that we will have an easier time choosing a course to pursue once we are in college. Watching a great deal of National Geographic and Discovery Channel had sparked my love and curiosity for the ocean. Because of this, I had chosen to work in the Mckeough Marine Center in Xavier University as I heard from some of my teachers that working there would be a great experience for me.

As excited as I was to start my apprenticeship, I was also nervous and anxious because meeting and interacting with unfamiliar people has always been my weakness, and what made it worse was that I was alone. So on my first day, I tried my hardest to be social. Thankfully, the people in this establishment were really friendly so I didn't have a hard time getting comfortable. Although there are times when my shyness takes over and talking to my colleagues becomes difficult, I believe it is a great experience for me to be more sociable so I try my

best to overcome it.

I thoroughly enjoyed my experience even though it wasn't quite what I had expected. I assumed that we would be traveling all around Cagayan, visiting marine conservation areas, observing various marine organisms, discovering exotic creatures, etc. So I was slightly taken by surprise when I found out that I had to sit down and research. However, it doesn't seem as boring as it sounds. I get delighted when I read and gather information because I enjoy learning about new, fascinating discoveries and occurrences that happen all around the world. I hadn't really appreciated the wonders that the Philippines beheld up until my experience here. I was able to discover the beautiful marine species that can be found in the Philippines, some of which I had never even heard about. I had learned about numerous beautifully strange, astonishing creatures found in the ever so mysterious ocean. Because of this, I am now able to appreciate our planet even more and not take everything we have for granted. The sad part, however, is that I also learned about the horrible atrocities that we are constantly committing towards our environment.

I realized that if we continue to neglect the harmful activities we are doing to our environment, the lives of all these marvelous creatures including ourselves is at stake. We must negate all the damage we are doing and start making a change so that our earth and its inhabitants may live on. I hope that we will be able to change our ways in the future, for the better of mankind.

MMC joins Mindanao Regional Scientific Meeting held in Davao

Text and photos by Nadine Arabelle L Vivares



This year's Mindanao Regional Scientific Meeting was a two-day event conducted on March 13-14, 2017 at the SMX Convention Center in Davao City, and McKeough Marine Center (MMC) was able to attend the event. It was conducted in connection with the 39th Annual Scientific Meeting (ASM) on July 12-13, 2017 with the theme "Attaining Sustainable Development Goals: Philippines Fisheries 20/20."

With the Agricultural Science Division being the host, NAST PHL adopted the Sustainable Development Goals (SDGs) to be its central theme this year, focusing on "fisheries" where science is critical. In line with the thrust of the Philippine President's Administration of bringing science initiatives to the regions where food production needs to be improved and innovation needs to be developed, NAST PHL will conduct the Regional Scientific Meetings in Luzon, Visayas, and in Mindanao where the first leg of the regional meetings was held.

The regional event in Davao was organized by the National

Academy of Science and Technology, Philippines (NAST PHL), and Department of Science and Technology (DOST) Mindanao Cluster from Regions IX, X, XI, XII, CARAGA, and ARMM, and in cooperation with the Mindanao Business Club.



The 2-day Scientific Meeting highlighted 4 Plenary Sessions and forums, with experts and resource persons in the fields of fisheries, aquatic resources, and other related areas of study. The speakers included: Dr. Cesar L. Villanoy, professor at the University of the Philippines (UP) Marine Science Institute, who discussed about the "Sustainable Sardine Production"; Mr. Alfredo Pedrosa III, president of the Seaweed Industry Association of the Philippines, who talked about the "Current Status of the Seaweed Industry"; Academician William T. Torres gave a talk about "Information, Communication, and Technology Ecosystem for Fisheries/Aquatic Resources in Mindanao," and Academician Guillermo Q. Tabios III who discussed the topic "Hydrologic-Geomorphologic-Ecologic Considerations for

Sustainable Fisheries in Agusan River Basin"; Academician Reynaldo B. Vea who presented a talk on "Optimization of Fishing Vessel Design"; and Dr. Glenn Doromal Aguilar, chancellor of UP Visayas who gave a talk on "Municipal Fishing Boats."

During a Dialogue Session, Academician Filemon A. Uriarte talked about "Engineering Structures for Maritime/Fishing Industry (Solid Waste Management in Tuna and Sardine Canning and Processing Industry)", which was then discussed on by representatives from both industries. Academician Rafael D. Guerrero III was the speaker during the Science Legislative Forum with a talk entitled "Towards a Blue Economy." He also discussed the Report of the Committee on the Creation of the Department of Fisheries and Aquatic Resources, and the reasons and advantages towards creating a separate Department for BFAR.

A Resolution was then presented towards the end of the Scientific Meeting, highlighting Policy Recommendations on appropriate interventions as agreed upon during the plenary sessions. It will be submitted to the Philippine Government and the private sector.

Marine Word Search



Search for the following words:

LAMAVE

Whale shark

Beasts

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Before the Flood

Marine Station

Giant clam

Tridacna

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Sea urchin

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