



# The Mouseion

The Official Newsletter of the UPV Museum of Natural Sciences, Dean's Office, College of Fisheries and Ocean Sciences

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## UPV Museum Extends Services to the Miag-ao Community

by Soledad S. Garibay

A sudden bloom of algae which brought irritations to the coastal residents of Barangay Kirayan Norte, Miag-ao, Iloilo was reported to UPV Museum of Natural Sciences (UPV-MNS), College of Fisheries and Ocean Sciences (CFOS) last March 1, 2005.

Early in the morning of the said date, Miag-ao Municipal Health Officers and Kirayan Norte's Brgy. Captain Angelita Norada went to CFOS requesting for an assistance in identifying some biological specimens that they had collected from the shorelines of Brgy. Kirayan Norte. They initially thought that the algae floating were seaweeds washed ashore.

The task was brought to the attention of UPV-MNS. It immediately responded to the need by directly inspecting the area.

Samples of the filamentous algae and other biological specimens were collected by the MNS staff for microscopic analysis and identification. The thick mat which

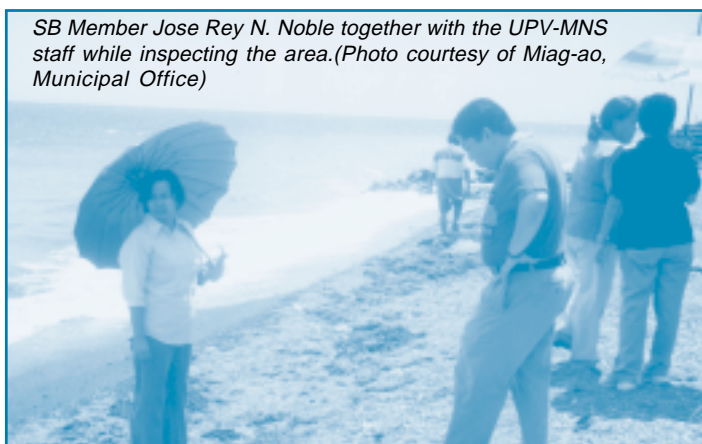
grows under, extends up to about 100 meters away from the shoreline at a depth of about 5.5 meters. The seaweed described by the residents as "lumot" formed thick mat grown at the bottom part of the water column and if carried by the current, piles up

along the shore.

This is the first major occurrence of the algal bloom in Barangay Kirayan Norte. As wind

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SB Member Jose Rey N. Noble together with the UPV-MNS staff while inspecting the area. (Photo courtesy of Miag-ao, Municipal Office)



## World's largest flower blooms in Mt. Napulak

by Alvin Joseph Novilla and Sheryll Santander  
Photo courtesy of Gabriel Gunio

Almost four months passed when six mountaineers from the University of the Philippines in the Visayas (including Leonardo H. Mooc, an MNS staff) found *Rafflesia sp.*, the largest flower in the world scattered in a thickly forested area, about three hours walk from the foot of Mt. Napulak,

Igbaras, Iloilo.

Last June 18 and 19, 2005, the group once again climbed the mountain and to their astonishment, despite the successive rains, there are still budding *Rafflesia sp.* scattered around the very same place where they previously found the fully bloomed largest flower.

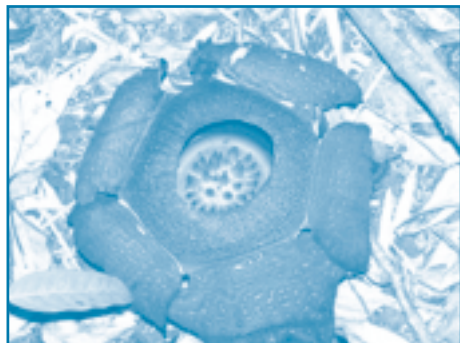
The petals of the flower are like pizza dough, stands about less than a foot high and without any leaves or stem. *Rafflesia* is in full bloom for five to six days, then blackens and wilts. It emits foul odor, which can be smelled to as far as 30 meters away, flies and all kinds of insects roost on its petals to pollinate it.

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## Philippine Fishing Gears: MNS' Current Exhibit

To educate the people regarding the current ordinance on the use of fishing gears, the UPV Museum held an exhibit entitled "Philippine Fishing Gears: their nature and impact to the aquatic environment" last February 14 until March, 2005. The exhibit was extended to accommodate more visitors particularly students from other schools.

Miniature models of fishing gears mostly made by the CFOS students were displayed for public viewing. These gears are among those commonly use by fisher folks and big time operators in the Philippines. Gill nets, trammel nets, boat dredge, trawl, purse seine, fry bulldozer, hand lines and scoop nets are some of the miniature fishing gears displayed. (Related news can be read in UPViews March 2005 issue)



## On Focus

# Horned Giant Helmet Shell (*Cassis cornuta*)

by Cornelio M. Selorio, Jr.

What are cell phones today are Horned giant helmet shells before.

Long time ago shells were considered to be the most efficient communicating device. By using series of trumpet blasts, messengers were able to summon people for religious ceremonies and warriors for battles. But aside from

its social and political uses, the Horned giant helmet shell, scientifically known as *Cassis cornuta* plays a vital role in our aquatic ecosystem.

Locally known as "Budyong", the Horned giant helmet shell feeds on echinoderms including Crown-of-Thorns. *Acanthaster planci* to the scientific

world, this echinoderm is known to devastate the coral reefs, the shelter of numerous marine organisms.

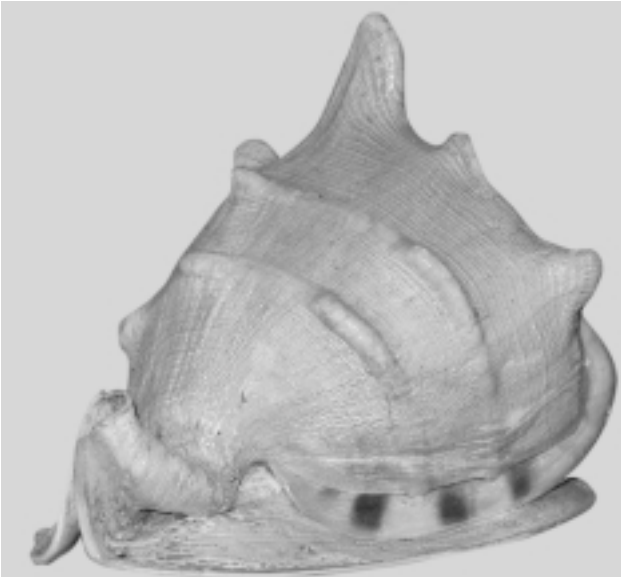
*Cassis cornuta* belongs to the Family Cassidae, a relatively small group of marine mollusks, however, the largest number of gastropod species is found in this family. And among them, the genus *Cassis* is the largest, adult specimens are as large as 40.0 cm.

The shell is solid and heavy with a short spire of about seven whorls; angular shoulder has five to seven flat protruding knobs. The suture outlines these knobs on the early whorls. Its outer lip is thick, wide and

with an edge that curves. The siphon canal is twisted and turned up vertically. The shell has a white coloration with light brown marks on the smooth bands, outer lip has almost seven brown squares, interstices of teeth and inner area of the shell is orange brown, the rest pinky-white. Budyong inhabits the inter-tidal to sub-tidal zone of tropical and temperate regions and can be found in waters as deep as 900 meters. It is widely distributed in the Indo-Pacific region, including the Philippines.

Because of its good coloration and unique shape, the Horned giant helmet shell has become a prime target for local and foreign shell dealers. It has a high commercial value that reaches to US\$25.00. This market demand slowly leads to its overexploitation. *C. cornuta* is listed at Convention of Internationally Threatened and Endangered Species (CITES) as one of the endangered shell species and therefore must be protected. Republic Act 8550 (Philippine Fisheries Law) Sec. 97 Protects the Threatened, Rare and Endangered species listed in the CITES. Violators will be imprisoned for 12 to 20 years and/or will be fined Php120,000 as punishment.

The Giant horned helmet shell may have lost its social and political value but not its ecological importance. Overexploitation of this species poses danger as if it is allowed to continue, will later end up to its extinction and further destruction of our ecosystem. We may not feel the effect now because they still exist. But the question is, until when?



**The Giant Horned Helmet Shell may have lost its social and political value but not its ecological importance.**

UPV-MNS, 2005

### World's largest flower... from page 1

The genus *Rafflesia* as a whole is considered to be rare as a result of a number of factors in their life cycle. The flower has a double habitat specialization, as this plant is a parasite and is completely dependent to a specific kind of vine, the *Tetrastigma sp.* Another is that, this plant has a list of limiting factors in propagation such as; sexual organ of *Rafflesia* is separate from male to female; an extremely unbalanced sex ratio, with more male than female flowers; only 10-18% of the flower buds (which

takes up to ten months to develop) go on to bloom, thus in return slims down the probability of fertilization. Added to these inherent factors, is the widespread destruction of rainforest, the habitat of this magnificent flower.

Species of *Rafflesia* such as the *Rafflesia manillana* is classified as Endangered on the 1997 IUCN Red List of Threatened Plants. The other species are considered Vulnerable if not Rare. Protection of its habitat is one of the key factors in securing the future of this species.

With the discovery of this renowned flower in Mount Napulak, number of tourists and climbers will

be surely drawn to the site. Thus raising a need to give more attention in protecting the area in Mt. Napulak. Just like the *Rafflesia* species protected in a number of reserves in Mount Kinabalu National Park in Sabah on the island of Borneo.

No doubt that this species is another proof to the richness of Philippine biota. That is why we should act accordingly in order to conserve *Rafflesia*, one of the world's most astonishing plant species. (Related news can be viewed at [www.thenews-today.info](http://www.thenews-today.info))

# Prudencia V. Conlu:

## Wisdom Through the Years

by Soledad S. Garibay

**H**er friends and colleagues call her "Prudy", and to her students she's the strict Professor.

Prof. Prudencia V. Conlu is one of the pillars of Philippine fish systematics and taxonomy. She is a pioneering faculty of CFOS, the then College of Fisheries and with the record of being the first woman to hold the highest position of the flagship college of UPV until her retirement in May, 1995.

One of her numerous accomplishments is the establishment of the College of Fisheries' Museum, now the University of the Philippines in the Visayas Museum of Natural Sciences. To date, UPV-MNS collection contains about 833 different species of biological specimens including fishes, mollusks, crustaceans, seaweeds and other terrestrial specimens. About 75 % of the collection was brought to UPV Miag-ao during the historical transfer of the college from UP Diliman.

Prof. Conlu finished her undergraduate course in BS Biology in 1952 and her Master's Degree in Zoology in 1960, both earned from the University of Sto. Thomas, Manila. She was then sent to the University of Queensland, Australia as a Colombo Plan Fellow to earn a Diploma in Marine Biology and a Certificate in Fish Taxonomy. In 1957, she cross Nhatrang, Vietnam for a special Training course in Marine Taxonomy (Fishes) and Planktology. After this, in 1964, the Professor was sent to Copenhagen, Denmark as UNESCO Fellow in

Advanced Courses of Marine Biology, Marine Invertebrates and Fisheries. In 1979, she represented the Philippines to the International European Ichthyological Congress in Warsaw, Poland, and in Budapest, Hungary, in 1988.

As a teacher, Prof. Conlu could probably be very strict. Tons of patience, super sharp memory, and extra diligence are required in passing her course. Taxonomy is a no joke, dedication and commitment are the words to capture it all. And with all these, Prof. Conlu showed her students the real values of quality service. The essence of a real mentor. A shepherd who nurtures the maximum potentials of her flock.

Aside from being a mentor, Prof. Conlu has also served in several professional and scientific organizations. To name a few, is her active affiliation to the following organizations: Philippine Association of University Women (UP Chapter), Phi Sigma Biological Honor Society Alpha Chi Chapter, Systematic Biologist of the Philippines and European Ichthyological Union. The professor is also one of the founding members of the Asian Fisheries Society and founding adviser of the UP Ichthyophilic Society.

At 75, Ms. Conlu remains active in her chosen career. She continued her involvement to different government and private agencies and shares her expertise through researches and private consultations.

When she was asked about her advise to the younger generation in her field, she simply said, "Continue to read and read particularly in fisheries systematics because it is



really a classic field. Your name will always be associated with this kind of work whenever and wherever you are."

Lastly, she wished that all the biological collections at the Museum be preserved and maintained. "You cannot find some of them anymore", she reminded. Words of wisdom coming from the author of the book "Guide to Philippine Flora and Fauna". The publication, which gave her the "Likas Yaman Award" from the Ministry of Natural Resources.

The professor-taxonomist is also a recipient of various awards and citations from the University of the Philippines (as holder of two Professional Chairs in 1988 and at UPV in 1991), learned societies, professionals and scientific institutions, private and government agencies.

Prof. Prudencia V. Conlu has unselfishly and untiringly served the academe and the industry through her efforts and wholehearted service to teach the students and researchers in pursuing taxonomic work. Indeed the strict Ma'am Prudy is nothing but a role model, an inspiration, and a perfect image of a precious and rare mentor and a scientist rolled into one.

*One of her numerous accomplishments is the establishment of the College of Fisheries' Museum, now the University of the Philippines in the Visayas Museum of Natural Sciences.*



# Visayan Sea, A Haven for Fishes

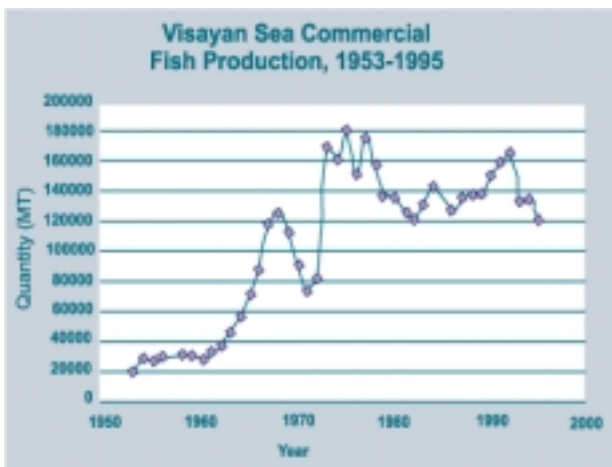
by Melchor C. Cichon, CFOS College Librarian

The Visayan Sea is one of the most productive fishing grounds in the Philippines. It is enclosed by the island-provinces of Cebu, Masbate, Iloilo and Negros Occidental and is located between 11° and 12° North latitude and 123° and 124° East longitude. The Visayan Sea area is approximately 10,000 square kilometers wide.

In Panay alone, Visayan Sea's rich resources cater to more than 6,000 fishermen. Large amount of fishes like barracudas, big-eyed scad, groupers, lizard fishes, marlin, milkfish, moonfish, moray, rays, snapper (maya-maya), Spanish mackerels, threadfin breems (bisugo), and many others are caught in this area. Added to these are the abundant mollusks and other crustaceans.

Based on fisheries statistics available at the UPV-CFOS Library, Miag-ao, Iloilo, this fishing ground has always been among the top three of the more than 50 commercial fishing grounds in the country. Its lowest commercial production was in 1953 with a total production of 17,673,216 kgs (5.78% of the Philippine total fish production), while its highest was in 1975 with 181,030,900 kgs.

In the last four years, from 1992 to 1995, the Visayan sea's total fisheries production went down



from 165,256 MT to 120,267 MT. This shows that this particular fishing ground is depleting perhaps due to over-fishing.

In Iloilo, a group of municipal coastal communities has formed a community-based alliance called the Northern Iloilo Alliance for Coastal Development that aims to prevent illegal fishing. This must have been the concrete result of the Visayan Sea Coastal and Fisheries Resources Management Project (VisSea) which was developed in 1998. This integrated coastal resource management project aims to have sustainable resource management and utilization and, ultimately, to improve the socio-economic conditions of the participating communities along the Visayan Sea. But since no recent data on Visayan sea production is available, it is still immature to conclude that the move to revitalize this area has been effective.

## New Acquisitions of MNS

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direction blows landward, it brought irritating effects to the coastal residents, particularly those staying close to the beach, about 100 meters away from the shoreline.

As mitigating measures, the coastal residents were advised to gather the algal mats and bury them in a make up pit. About two truck loads of algae were harvested in the first day. Although the algal species that caused the irritations was identified, there is still a need to continue the study on the species to determine the extent of harm that it might bring.

Aside from the thick growth of algae, other biological specimens found along the shoreline were sea hares, sea cucumber, shells, puffer fish and other types of seaweeds.

In response to this, the Faculty and Researchers of UPV, CFOS are now conducting studies in relation to this phenomenon. Dr. Jose Peralta, Faculty of the Institute of Fisheries Processing and Technology, heads the project.

In a meeting called "Pulong-pulong sa Barangay" held on April 8, 2005, Mayor Gerardo N. Flores expressed his commitment to help the different coastal barangays in maintaining a clean and healthy environment. He also thanked UPV for the assistance given to the community. (SSGaribay, UPV-MNS)

"The Mouseion" is a bi-annual publication of the UPV Museum of Natural Sciences, Dean's Office, College of Fisheries and Ocean Sciences, University of the Philippines in the Visayas, Miag-ao, Iloilo

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