

THE VOICE OF BELIZE'S PROTECTED AREAS



The official newsletter of the Association of Protected Areas Management Organizations

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APAMO Celebrates 4th Annual General Meeting

On May 12th, APAMO celebrated its 4th Annual General Meeting in Belize City under the theme **"Securing Protected Areas Integrity and People's Livelihoods"**. The AGM featured two prominent guest speakers, Belize's local protected areas expert, Dr. Vincent Palacio, Dean of Faculty of Management Tourism and Social Sciences-University of Belize, who recognized and commended the co-managers for their unwavering commitment, dedication, passion and hard work in the management of our protected areas; and Dr. Jaime González Cano a representative of the National Commission for Protected Areas of Mexico who gave an overview of interesting and innovative projects being implemented in three protected areas in Quintana Roo, Mexico geared at reducing the threats to coral reefs in these areas.

The AGM highlighted the 2010 achievements of APAMO which included Institutional Growth and Strengthening, the addition of two key staff members and the relocation of its office; Membership Development, the implementation of a Capacity Building program "Support for capacity building for improved protected areas management in Belize"; Advocacy and Policy - APAMO continued to lobby for endorsement of a National Co-management Frame-



APAMO's 4th AGM

work, for our Barrier Reef to be removed from the list of World Heritage Sites in Danger as well as lobby against initiatives that pose a threat to protected areas such as proposed Cruise Tourism in Placencia, passing a road through a National Park. The AGM also featured some of the initiatives for 2011 including continuing to develop partnerships with other organizations.

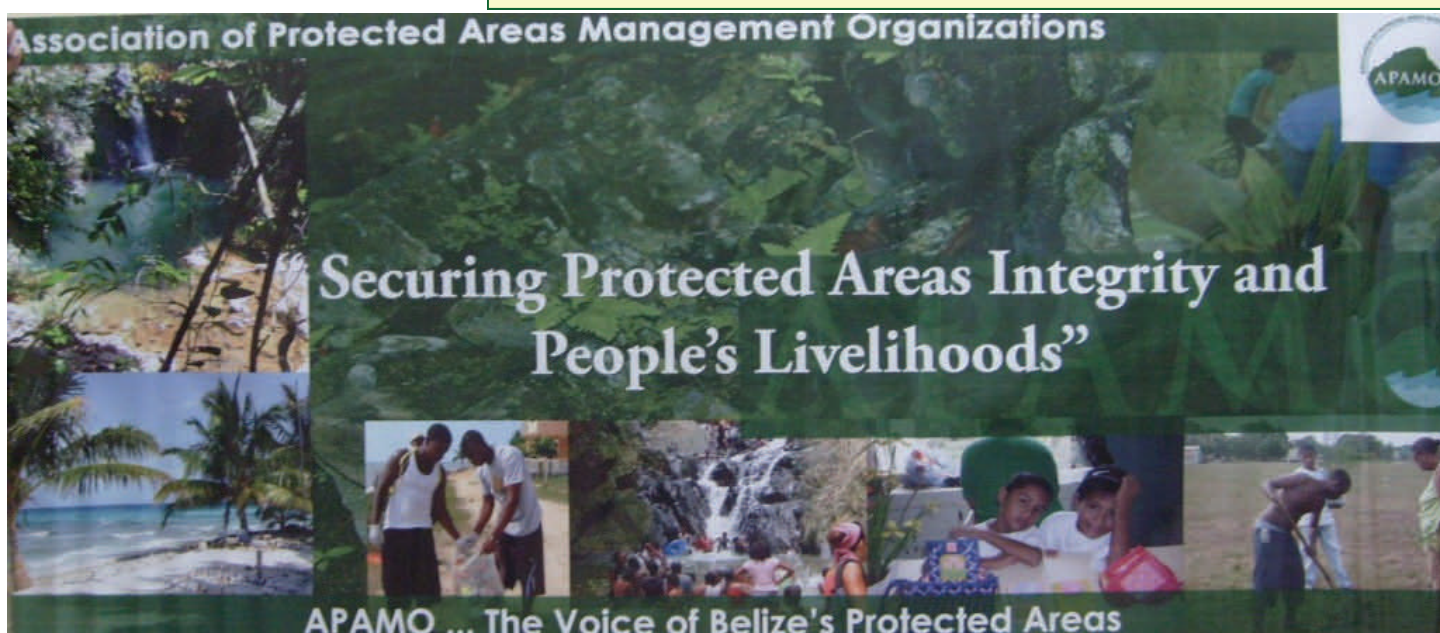
At its AGM APAMO also took the opportunity to launch the 2011 Directory of Belize's Protected Areas. The Directory covers the 32 non-extractive protected areas administered by the Forest Department and 8 marine reserves managed by the Fisheries Department, as well as information on private protected areas, bird colonies, spawning aggregation sites and protected areas being designated.

A newly elected Executive Council was presented. Four members of the Executive Council were elected with two being re-elected and two newly elected. Re-elected were Mr. Edilberto Romero as Chairman and Ms. Hyacinth Ysaguirre as a council member; and newly elected were

elected were Mr. Gregory Ch'oc as Treasurer and Mr. Raymond Reneau as Council Member. These four join Mrs. Amanda Acosta, Vice Chair; Mrs. Celia Mahung, Secretary; and Ms. Nellie Catzim, Council Member, to form the APAMO Executive Council for 2011-2012.



APAMO Members and Staff





APAMO Supports Members in Celebrating Earth Day 2011



Friends of Swallow Caye

In celebration of Earth Day 2011, with some financial and technical support from APAMO, the Friends of Swallow Caye (FOSC) hosted a Manatee Sand Sculpture Competition for the students of the Caye Caulker RC Primary School. FOSC is a community based organization located in Caye Caulker, which co-manages the Swallow Caye Wildlife Sanctuary, which was declared for the protection of the Antillean Manatee, an endangered species in Belize.

Six teams from standards 2 through 6 participated in the sand sculpture competition. Each team was tasked with creating a manatee sand sculpture. The sculpture was to be between 5 and 10 feet long; had to be completed in 2 hours; and was to be a sculpture made with all natural elements, sand, water, leaves, grass, seeds, sea shells etc. It was a morning filled with teamwork, creativity, a lot of work and a lot more fun. Teams were judged based on criteria including teamwork, creativity and originality, and presentation of the sculpture with a small presentation by each group on the manatee and the importance of Earth Day. There were four judges, with one from APAMO. All teams showed enormous creativity and knowledge on manatees. However, there could only be 3 winners. 1st place went to the standard 5 class, 2nd place to the standard 6 class, and 3rd place went to a standard 2 class. These classes received prizes such as trips to the Hol Chan Marine Reserve, the Swallow Caye Wildlife Sanctuary, t-shirt souvenirs, diving lessons, posters and some school supplies. This year's FOSC Earth Day activity was a fun-filled success for all.



1st Place Winners!
Std. 5 Students



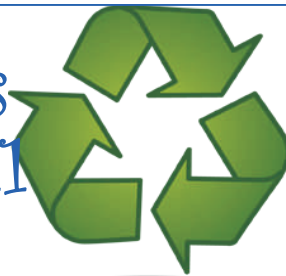
The 1st place Manatee Sculpture



2nd Place Winners
Std. 6 Students



APAMO Supports Members in Celebrating Earth Day 2011



Belize Audubon Society

In celebration of Earth Day 2011, three APAMO member organizations showed their commitment to celebrating mother Earth by hosting individual clean-up campaigns. On April 9th, the Belize Audubon Society hosted its 3rd Annual **“Walk for a Green Belize”**. Over 600 volunteers from different embassies, companies, organizations and associations, including APAMO, participated in this clean-up campaign to spread environmental consciousness to the nation for a more sustainable and ‘greener’ Belizean



Piles of garbage filled bags along the Western Highway

Environment. Over 2,000 gallon bags of garbage were filled and picked up all along the western highway on this day. What a successful Day!

Community Baboon Sanctuary Women's Conservation Group

On April 15, 2011 Community Baboon Sanctuary Women's Community Group held their earth day clean-up with the participation of the local kindergarten. Belize Audubon Society rep-



Community children and supporters putting trash in its proper place

representatives wooed and amazed the children with interactive games highlighting the importance of protecting and conserving our natural resources and the need to keep our environment clean. The Association of Protected Areas Management Organizations funded the activity and informed the community about the role APAMO has in building community capacity and awareness regarding protected areas management. The event was a success filled with laughter, smiles and bags of collected garbage!

Steadfast Tourism and Conservation Association

On April 23rd, the Steadfast Tourism and Conservation Association held its 2011 Earth Day / Easter clean-up. Around 70 children from Valley Community, Alta Vista and Steadfast Villages participated in STACA's Earth day activities. After an introduction by Ms. Hyacinth Ysaguirre to STACA, the BBNP, and Earth Day the children proceeded to clean their community by picking up garbage in the area. This resulted in 81 bags of trash collected. The kids were rewarded by an Easter Egg Hunt and distribution of prizes.

The Village Council provided prizes such as school supplies and scrap books. However, Earth Day was not over just yet. During snack time, there was an Earth Day quiz contest where even more prizes were given out. Earth Day 2011 turned out to be enjoyable for everyone and very successful at increasing the awareness of the importance of conservation and the role protected areas play in particular Billy Barquedier National Park which protects a major watershed that provides clean drinking water for the surrounding communities.

APAMO:

Contributing to Environmental Awareness in Belize



APAMO partnered with the Belize Olympics Association to increase awareness on the role and importance of protected areas through an environmental essay and presentation competition. As a pilot project this competition was geared towards second form high school students of Belize City. The theme for this competition was "From the Ridge to the Reef". The groups consisted of three students per school. Seven schools participated in the competition.

In mid May, the student groups were taken on trips to two protected areas, one terrestrial and one marine, where they were able to learn about the basics of watershed and marine ecology and the relationship terrestrial protected areas and the marine protected areas share; hence, Ridge to Reef. The students were first taken to the Billy Barquedier National Park in Steadfast Village,

to learn more about watershed ecology and how the marine environment might be impacted from what happens by the processes that occur upstream. Mr. Kimo Jolly, a marine and watershed educator of the Cayo District was the watershed expert who relayed information to the student groups. Subsequently, the students were taken to the Caye Caulker Forest and Ma-

report of about 1,000 words on the importance of both inland and marine protected areas and their connectivity, their relationship to one another, some effects of one on the other, possible solutions to the problems each face, and the importance of conserving our natural resources. The top 3 groups were then tasked with a second assignment, to develop a presentation, a quick summary of their report, and with the help of a display present it before the judges.



Snorkeling the coral reef at the Caye Caulker Marine Reserve

The team coming in 1st was Edward P. York High School who received an academic endowment prize of \$1,000 per student and a trophy; 2nd place went to St. Catherine Academy (academic endowment of \$750 each); and third place went to Excelsior High school (academic endowment of \$500 each).

rine Reserves to learn about marine ecology and again about the natural connection it has to the ridge and how what happens up in the ridge may impact marine life. Biologist, Ms. Ellen McRae of Caye Caulker did an excellent presentation to better inform the students and she was also a great guide at both the forest and marine reserves.

With the information gathered at both locations, the students were then tasked with preparing a short

APAMO takes this opportunity to thank Mrs. Arrieni Palacio Morgan, Ms. Ralna Lamb and Mr. Ramon Pacheco for assisting with the judging. Thanks also to STACA and FAMRACC, and others who supported this project. APAMO hopes to continue forming partnerships to effectively spread environmental awareness and to bring forth other such projects.

Students learning about watersheds at the BBNP





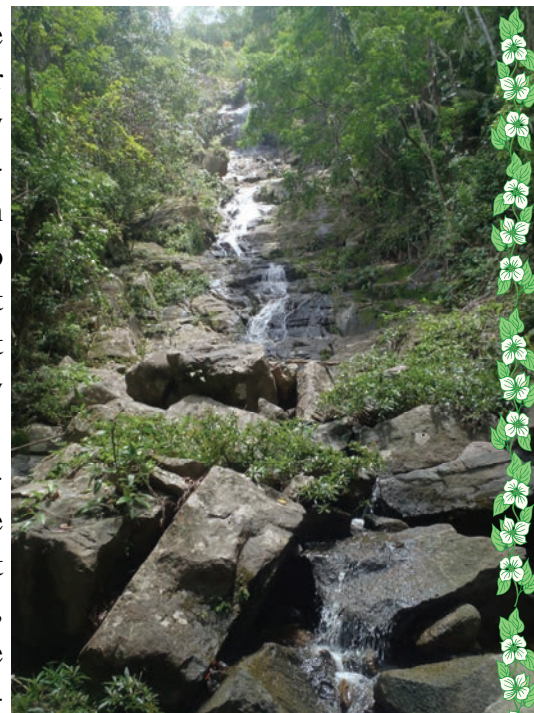
The Mayflower Bocawina National Park

On Friday June 24, 2011 the APAMO staff took a trip to the Mayflower Bocawina National Park to become more familiar with the importance, opportunities and challenges of one of our member protected areas. We were warmly welcomed by the Park's friendly ranger Mr. Ramon Guzman and our guide for the day, Israel Pau. First we were given a brief introduction to the Park including some information on all the trails, waterfalls and Maya ruins the park contains, and then off we were heading into the lush lowland broadleaf forest and up the Antelope trail, 2.9 km, to see the thousand feet Antelope Falls. On our way we ran into the Maintzunun Ruins, a large unexcavated Maya . Along the way up the trail, our guide Israel pointed out some interesting species of plants, from poke-no-bwai to pakaya, and he told us a bit about their various uses. We were also able to spot different species of butterflies, and some interesting insects and birds we had never seen before, on our hike through the trail.

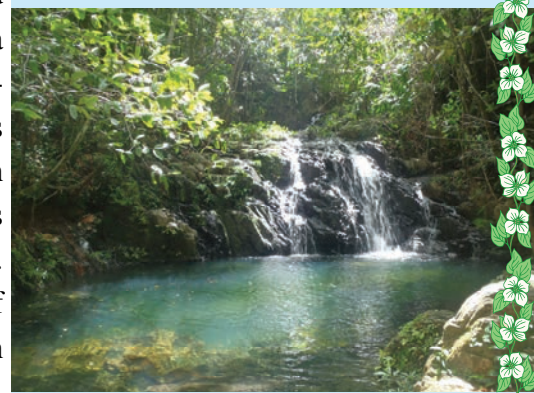
The Antelope trail proved to be a rather challenging but adventurous hike with areas of steep climbing. It took approximately an hour to arrive at the magnificent thousand feet Antelope Falls and about another half an hour to

arrive at the very top where we were promised a spectacular view from the bluff all the way to the sea, and a natural and refreshing swimming pool in which to cool off. The journey to the top was quite a challenge but the arrival to the destination at the top proved the journey worthwhile.

Mayflower Bocawina National Park is located in the Stann Creek District of Belize at the base of the Maya Mountains, with over 7,000 acres of pristine lowland broadleaf forest, waterfalls and evidence of an ancient Maya City. The park is located only 14 miles south of Dangriga Town and 4 miles off the Southern Highway. The park contains 4 waterfalls, 5 accessible Mayan ruins, over 200 species of birds and a large variety of wildlife. The park has about 4 miles of trails leading through jungle on the way to the different waterfalls, Maya ruins and other natural features. It is truly one of Belize's best kept secrets. We invite you to take a day to visit this beautiful and adventure filled park to learn and experience the value of this protected area. For more information you can contact: Terrence Salam at 523-7223, terrence_salam2@yahoo.com or send us an email at info@apamo.net



The 1000 ft waterfall



The swimming pool



Map of the Park



World Environment Day

Forests: Nature at Your Service

World Environment Day, an event dating back to 1972, is celebrated annually on June 5th in an effort to promote global responsible environmental behaviour by building community awareness through local collaborative environmental activities. For 2011, World Environment Day was celebrated under the theme "Forest: Nature at Your Service." The aim is to promote global awareness of the many environmental goods and services the world's forest provides to humanity.

When we think of forests many Belizeans may only identify its usefulness for providing wood. Closer inspection reveals that the forest provides us with many services which enable human sustenance. Forests

producing a cooling effect. Forests also serve as carbon sinks, whereby they trap carbon and reduce atmospheric carbon levels which affect global climate change.

Let us not limit our idea of forests to our inland areas as our coastal areas also boast forests cover. Of particular concern is our mangrove forests which provide coastal protection by reducing shoreline erosion and siltation and minimising the effects of storm surges and hurricanes.

and marine areas.

Ahhh! Take in a breath of fresh air and thank your forest for it! Did you know our forests function as air filters by trapping windburn particles such as dust, ash, pollen and smoke which can result in respiratory problems for humans?

Gulp!Gulp! Aww! nothing like a tall glass of cool water on a hot day! Forests are integral in providing us with clean drinkable water. Our forests reduce surface

erosion and sedimentation, filter water pollutants, regulate water yield and flow, moderates flood, enhance precipitation and mitigate water salinity all-in-all increasing water quality and yield.

For 2010, the country of Belize boasted a 62.5% forest cover, re-

portedly having the relative highest for the Central American



View from the top of the Antelope Trail--Mayflower Bocawina National Park

play an integral role in global climatic conditions. Trees absorb heat energy thereby reflecting less heat back into the atmosphere and

Mangroves filter and remove some nutrients from upstream sources thereby increasing the quality of water entering coastal

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Ya'axché Rangers: Parabiologists

Contributed by Ya'axch Conservation Trust

As protected areas managers we realize that effective protected areas management requires that a number of factors, from enforcement to research to advocacy, must interact with each other. Rangers can play an important role in this process if they are involved in the multiple aspects of protected areas management, thereby acting as links between the contributing factors. To achieve this, Ya'axché Conservation Trust rangers go beyond the requirements of running patrols and enforcing the rules and regulations of the protected reserves. They are also encouraged to become advocates within their communities and parabiologists by pursuing a field of research that interests them. The total combined knowledge among the Ya'axché rangers spans from freshwater monitoring to expertise in identification of flora, avifauna and mammal species.

In early 2010 one of Ya'axché's rangers, Octavio Cal, received an opportunity to participate in a reptile study conducted by Thomas Rainwater through support from the Turtle Survival Alliance. The study assessed the remaining populations of Hicatee turtle throughout Belize. Hicatee

(*Dermatemys mawii*) is a Central American River turtle, whose populations in Mexico and Guatemala are virtually extinct, while in Belize they are critically endangered due to severe over-harvesting for consumption. The assessment, held in April and May of 2010, traversed 6,200 kilometers of Belize, surveying a wide range of habitats, including estuarine rivers; brackish rivers, creeks, and lagoons; inland freshwater rivers, creeks, lagoons, and ponds; a mountain river, and a coastal bay. This was the first assessment of Hicatee populations in Belize performed since early 1990's and its findings displayed alarming declines in the number of localities where the Hicatee turtles remain, as well as the number of turtles at these localities.

This study provided valuable data for the development of conservation strategies and also allowed Thomas Rainwater, the primary investigator, to train two rangers, Tom Pop (Belize Foundation for Research and Environmental Education) and Octavio Cal of Ya'axché Conservation Trust in turtle assessment techniques.

Octavio reflected on the training given by Thomas Rainwater. He liked the way Rainwater taught because he would push them to do all the work themselves including diving for the turtles and taking their measurements. Of the many turtle assessment techniques he learned, Octavio recalled learning how to conduct surveys during both the day and nighttimes, having to set nets across rivers and go diving for Hicatee during the daytime, and conducting spotlight surveys in the night. He also mentioned that through his experience as a ranger he already knew the background of freshwater ecology in regards to monitoring the different aspects of water quality. Given the training he could then easily see the relationship of a healthy environment to the Hicatee.

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Photo Credit: Dr Thomas Rainwater
Survey team members Tom Pop and Octavio Cal (from left) and local fisherman displaying adult *Dermatemys*

Continued from Page 8... "Parabiologists"

Octavio Cal originally participated in the study due to his interest in freshwater ecosystems, but during the completion of the assessment he acquired new knowledge that deepened his understanding of ecology. Such exposure provides the rangers with an important context for their work and creates a clearer understanding of conservation. In fact, the work of rangers *should* extend beyond the standard duties related to patrols and monitoring. If rangers are involved in various elements of conservation, such as community outreach and ecological research, they will act as valuable links between these fields and inevitably strengthen the management of protected areas in Belize.



The Voice of Belize's Protected Areas

The Association of Protected Areas Management Organizations (APAMO) will be hosting its first Protected Areas Management Symposium on 23rd September, 2011 in Belize City under the theme:

**Communities and Resource Managers:
Bridging the Gap– Engaging Communities
in Integrated Resource Management**

To view the **Call for Papers** please visit
<http://bit.ly/jE8SES> online
or Contact Ms. Ralna Lamb at 223-7266

*Continued from Page 7... "Forests:
Nature at Your Service"*

region, accounting for 10% of the regions carbon stock. However, this was a marked decrease from 1980 when Belize's forest cover was reportedly 75.9% of the land-mass. Threats such as illegal land clearing for forest product sale across the border, as well as the high rate of land clearing attributed to development has resulted in Belize having an estimated annual deforestation rate of 0.6% equating to 10,000 hectares of forest cover removed per year.

Based on the services provided by our forests it is important that all our forests are utilised sustainably, balancing development with forest conservation. Thirty six percent of Belize's landmass is under some form of protection, with a majority of the protected areas including some form of forested area. A study conducted by Cherrington et al (2010) reveals that Belize's forested area that are under some form of protection experienced a significantly smaller percentage of land clearing during the past 30 years as compared with forested areas not under protection. Based on the various essential services provided by forests, policy-makers and more important the community, must consider the impacts attributed to forest removal and alterations.

**"What we are doing to the forests of
the world is but a mirror reflection of
what we are doing to ourselves and
to one another."**

- Gandhi

APAMO Supports and Participates in National Projects aimed at Strengthening the Protected Areas System

The Government of Belize is implementing the projects: *“Strengthening National Capacities for the Operationalization, Consolidation, and Sustainability of Belize’s Protected Areas System”* and *“Sustainable Finance for the Implementation of the Belize National Protected Areas System Plan, Cost of the System and Economic Valuation”* with funding from the Global Environment Facility via the United Nations Development Programme and the Global Environment Facility (GEF) Trust Fund executed through the United Nations Office for Project Services (UNOPS) respectively. The projects are being implemented by the National Protected Areas Secretariat. The projects are aimed at ensuring that Belize effectively develops legal, financial, and institutional capacities to ensure sustainability of the existing National Protected Areas System (NPAS).

APAMO is a key stakeholder in both these important projects and is in full support and actively participating in these projects. *The following are brief overviews of the country projects currently in progress.*

Strengthening National Capacities for the Operationalization, Consolidation, and Sustainability of Belize’s Protected Areas System

The goal of this project is to safeguard globally significant terrestrial, coastal, and marine biodiversity of Belize. The project is expected to create an operational, centralized PA network and consolidate PA units to allow for greater effectiveness in their management as well as a more coherent approach for expansion of the country’s PA system. The project focuses on the PA system in its entirety and proposes interventions which will allow national authorities to initiate a process of replacing site level management with a more effective process of systems management. The project will also promote consistent assessment of PA effectiveness and thus will leave an appreciation for monitoring outcomes, both in terms of ecosystem functions and sustainable use of resources.

Expected outcomes are that by 2011, national frameworks and capacities are in place enhancing the ability to adequately address adaptation to and mitigation of the impact of disasters as well as the comprehensive, equitable, sustainable and effective management of the nation’s natural resources; and that by July 2013, Belize will have effectively developed legal, financial, and institutional capacities to ensure sustainability of the existing NPAS.

National Projects ...*Continued*

Sustainable Finance for the Implementation of the Belize National Protected Areas System Plan, Cost of the System and Economic Valuation.

Aware of the need to conserve and manage its biological and cultural richness, Belize has declared a series of Protected Areas which total 94 protected representing 44% of the national territory. Belize has made significant advancement towards meeting the obligations required under the implementation of the Convention on Biological Diversity Programme of Work on Protected Areas. Among these achievements is the design and approval of the National Protected Areas Policy and System Plan. To continue advancement with the required obligations and implementation of the Programme of Work on Protected Areas it is necessary to develop a plan for long term financial sustainability of the NPAS and to conduct economic valuation studies of the priority terrestrial systems. This then forms the basis for mobilizing support for a robust protected areas system and providing information.

A project under this includes the Economic Valuation of the Environmental Goods and Services of the Maya Mountain Massif and the Maya Mountain Marine Corridor. The information derived from this study will assist in determining the overall economic contribution of the system to national development and will be used as an

instrument for guiding decisions related to the development of policies and financial mechanisms for ensuring the conservation, proper management and sustainability of the natural systems and protected areas of Belize.

Expected outcomes of the project include that the contribution of the priority Terrestrial Protected Areas of the Maya Mountain Massif and the Maya Mountain Marine Corridor to the country's economy is determined and that major stakeholders and decision makers are aware of these economic benefits; and that a PA System Finance plan is completed and that mechanisms are designed and implemented towards an effective management of financial resources.

To learn more about these projects, the full project documents can be accessed on the APAMO website at www.apamo.net



Bladen Nature Reserve—Photo Courtesy YCT



Our Mission!

“APAMO is an association of non-governmental protected areas management organizations that advocates for and contributes to the sustainability and proper management of Belize’s protected areas thus ensuring benefits for all stakeholders.”

Our Vision!

“APAMO, Belize’s leading network of protected areas management organizations, envisions a healthy, productive and vibrant environment in which protected areas maintain their ecological integrity in perpetuity, play an integral role in national development, and contribute directly to the well being of communities and the nation of Belize.”

HOW YOU CAN HELP!

You can help by getting involved or sending donations to the address below.

APAMO

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