

Ya'axché Conservation Trust

2011 Annual Report



Harmony between nature and human development for the benefit of both





Ya'axché Conservation Trust
2011 Annual Report

**YA'AXCHÉ
CONSERVATION
TRUST**

www.yaaxche.org

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LETTER FROM THE EXECUTIVE DIRECTOR

Dear Friends,

One of the most rewarding aspects about working in conservation and development is the passion and commitment of one's colleagues. The staff at Ya'axché is not just doing a job – it is working to accomplish a vision. For some, it's a desire to see the forest and its wildlife continue to exist in all their beauty. For others, it's a desire to help the people of their communities to achieve a better, more prosperous life.

This year at Ya'axché, we put our heads together during a strategic planning exercise and clarified our vision and mission and refreshed our strategies. I would like you to join with me in celebrating our staff on the front lines, those out in the field making this vision a reality.

Ya'axché's ranger team works hard. If you don't believe me, try going on patrol in the Maya Mountains with our expert bushman Vigilio Cal. It's tough work hiking through difficult terrain and facing dangers such as venomous snakes and armed poachers. It is challenging being the enforcer, especially to people who live in the same village as you, which is why it pleased me so much when I heard one of our rangers say, "I didn't really believe in Ya'axché's goals when I started here but now I understand why we must protect our forest and I tell people 'we must save it for our children.'"

Our ranger team is known as one of the very best in Belize. Most rangers on the team are now certified Special Constables and every individual continues to develop and refine his parabiologist skills. The freshwater specialists, Octavio Cal, Anignacio Makin, and Abelino Zuniga have over two years experience working on cutting edge research into freshwater macro invertebrates and have helped to identify at least one species completely new to science. Newest parabiologist, Pastor Ayala, joins this group in 2012. Victor Bonilla has confirmed his status as one of the best birders in the country with sightings of two new species for Toledo, while Rosando Coy has hosted numerous satisfied guests in our Ranger for a Day program. Rangers Marcus Tut and Marcos Cholom are learning snail research skills for a new monitoring program.

Our community outreach and livelihoods program has two field staff. Julio Chub, the education and outreach officer for over eight years, is well liked by everyone who knows him. He has instant rapport with the children and adults and a talent for clear, calm explanations. Julio's work is making a difference in raising awareness of pressing environmental issues and changing attitudes and behaviours. Kenny Cal, the agricultural extension officer is another popular figure in the communities. And why wouldn't he be when he brings tree saplings, equipment and valuable technical support to farming families, helping them to raise their incomes through sustainable farming? Last year, Kenny completed a Climate Change Fellowship affiliated with Harvard University and has come back even more energised and full of ideas to improve our program.

A big thank you to all the field staff! You make this organisation the vibrant force that it is.

Sincerely,

Lisel Alamilla,
Executive Director



YA'AXCHÉ BOARD OF DIRECTORS

Director
Christina Garcia

Vice-Chairman
Alphonso Cal

Treasurer
Barbara Locke

Secretary
Javier Chan

*Community
Representatives*

Medina Bank
Marcos Zuniga

Indian Creek
Adriano Mas

Fauna and Flora
International
**Robert Bensted-
Smith**

Nicky Jenner

Ex-Officio
Lisel Alamilla



STRATEGIC PLAN 2012-2014

YA'AXCHÉ STAFF

Executive Director
Lisel Alamilla

Operations Manager*
Ekaterina Alexandrova

Finance Manager
Ivanny Hernandez-Oliva

Community Outreach
and Livelihoods
Programme Manager
Bartolo Teul

Protected Areas
Manager*
Lee McLoughlin

*volunteer staff

Ya'axché's work is guided by a Strategic Plan that sets out the goals of the organization and the means to achieve them. The strategic plan for 2009-2011 expired in December. To define Ya'axché's strategy for 2012-2014, Ya'axché carried out a number of planning sessions with technical support from *Fauna & Flora International*. As a first priority, the vision and mission statements were revised to simplify the language and more clearly state the NGO's purpose.

Vision

Harmony between nature and human development for the benefit of both

Mission

Ya'axché is a Belizean organization which aims to maintain healthy forests, rivers and reefs for the benefit of all through protected area management, advocacy, and working hand in hand with communities to develop capacity for the wise use of land and natural resources in and around the Maya Golden Landscape in Toledo

Through a series of discussions and problem analyses, Ya'axché identified several issues that must be addressed, formulating five strategic objectives to guide the work over the next three years.

For the full strategic plan, please visit www.yaaxche.org

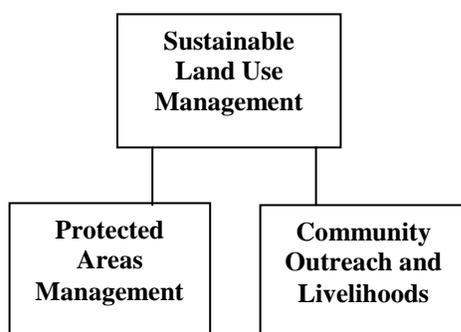
1. Increase **sustainability of extraction** in the Maya Golden Landscape, including protected areas and community lands
2. Increase **application of best agricultural practices** in Toledo
3. Improve development and implementation of sustainable **land-use planning** and management in Toledo
4. Reduce the **rate of forest clearance** for agricultural and community expansion in the MGL
5. Improve Ya'axché's **financial sustainability**



STRATEGIC PLAN 2012-2014

Ya'axché also revised and clarified its institutional structure in order to more effectively deliver the strategic objectives. Important revisions are:

- Ya'axché operates under the principle of sustainable land-use management, where conservation and sustainable development are planned at the landscape level for the benefit of all. Ya'axché has two program areas that *both* contribute to sustainable land-use management: Protected Area Management (PAM) program and Community Outreach and Livelihoods (COL) program.



- 'Advocacy' is not a program area in itself but an activity that cuts across and contributes to the two programmatic areas.
- 'Governance and Institutional Strengthening' is not a programmatic area in itself but a core function of the organization.



Ya'axché team at the strategic planning workshop, November 2011

YA'AXCHÉ STAFF

Development Officer*
James Lord

Administrative
Assistant
**Venancio Ack
Zebedee Moore**

Institutional
Development
Trainers*
**Walter & Sybille
Hossli**

*volunteer staff



PROTECTED AREAS MANAGEMENT (PAM)

PAM STAFF

Field Supervisor
Marchilio Ack

Ranger Team
Pastor Ayala
Victor Bonilla
Octavio Cal
Vigilio Cal
Marcus Cholom
Rosendo Coy
Anignacio Makin
Marcus Tut
Abelino Zuniga

Research Officer*
Maarten Hofman

Aquatic Ecologist*
Rachael Carrie

Freshwater Ecology
Assistant*
Devina Bol

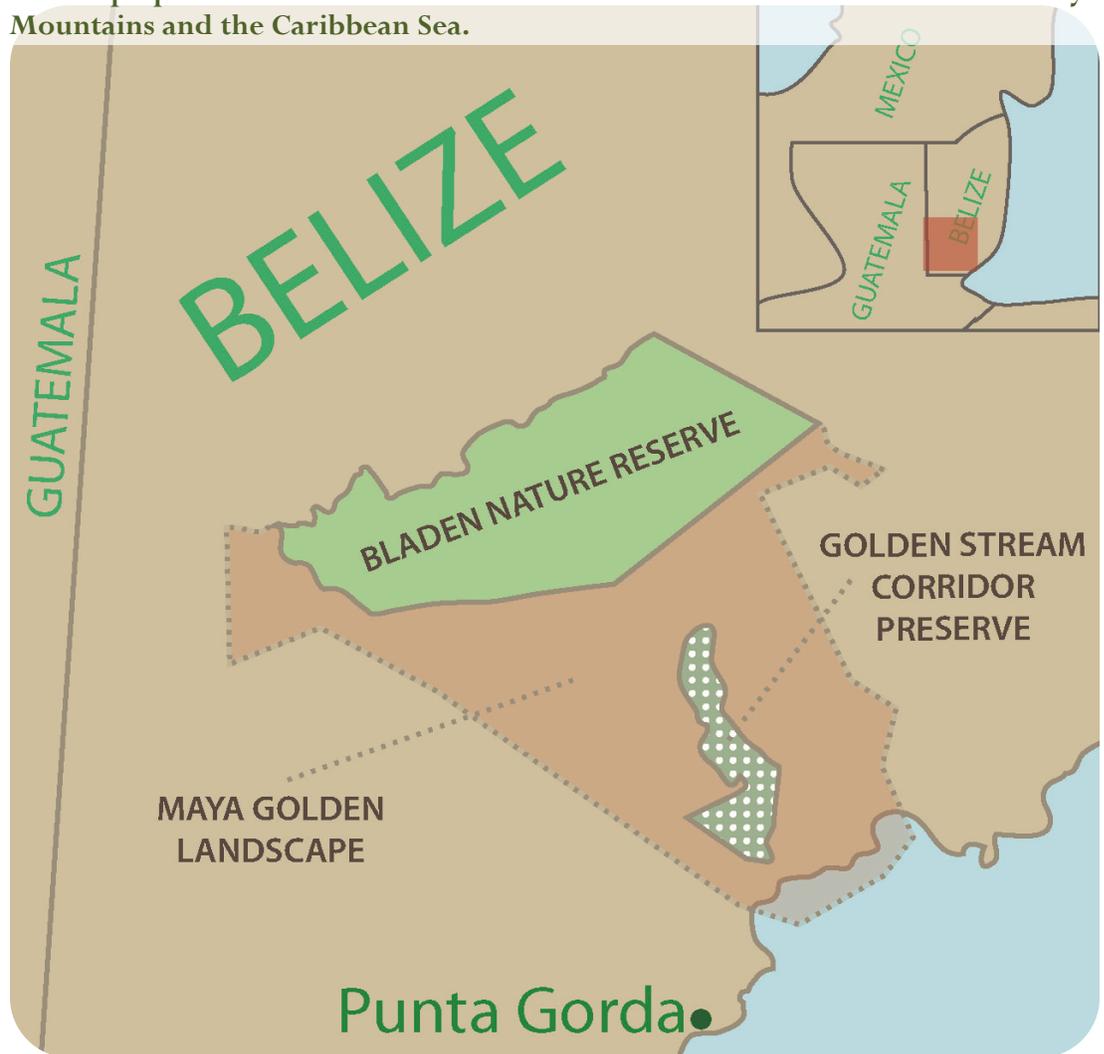
Botanist*
Gail Stott

Project Manager*
Maximiliano Caal

GIS Specialist*
Jaume Ruscalleda
*volunteer staff



The Maya Golden Landscape in southern Belize is Ya'axché's focal area. The landscape contains the Bladen Nature Reserve, co-managed by Ya'axché and the Forest Department, Ya'axché's private protected area the Golden Stream Corridor Preserve, and the surrounding private and community lands. This landscape provides the last intact wildlife corridor in Belize between the Maya Mountains and the Caribbean Sea.



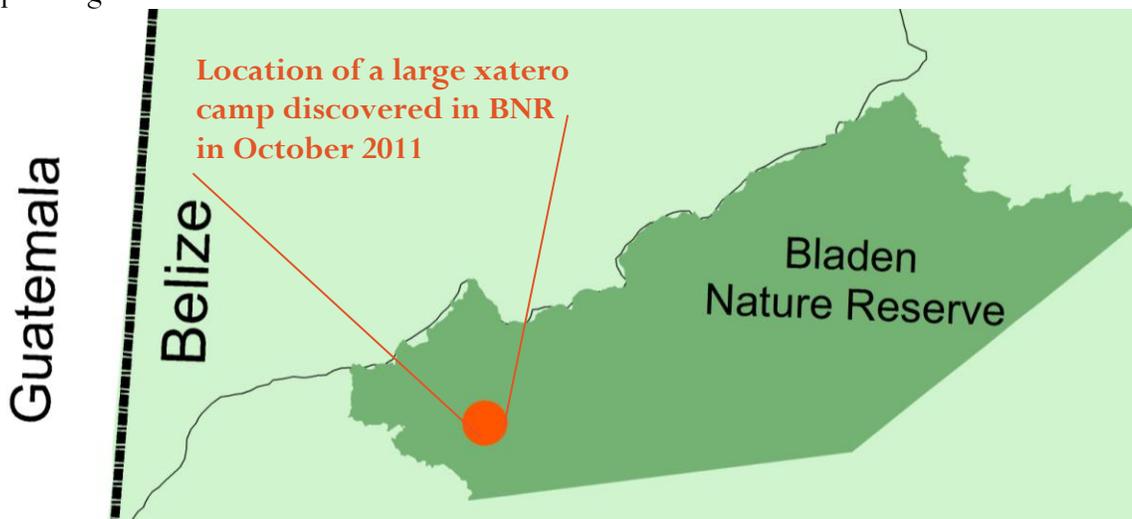
The year 2011 brought significant achievements to the protected areas team in enforcement of protected area laws and in **furthering biodiversity monitoring**. With the newly-established Research Officer position, the collection of biodiversity data, the database itself, and the analysis of the collected data have been vastly improved. Furthermore, a number of **field rangers have progressed towards becoming parabiologists**, particularly the freshwater monitoring team, which collects data for a number of research projects.

PROTECTED AREAS MANAGEMENT (PAM)



As of 2011 most of the ranger team became certified Special Constables, giving the rangers full authority to make arrests in protected areas. In January, the team arrested one of the most notorious illegal hunters in Bladen Nature Reserve and, as a result, **illegal activities have subsided in eastern Bladen.**

Despite these successes, territories of western BNR continue to face threats. A large camp of xateros (illegal harvesters of the rare xaté palm who also hunt, loot Maya ruins and cut trails used by illegal loggers) has been discovered in the Snake Creek region, signifying that illegal activities are still rife in the western part of the reserve. Ya'axché will continue its productive collaboration with the Belize Defence Force tackle pressing threats.



LAND-USE CHANGE IN THE MAYA GOLDEN LANDSCAPE

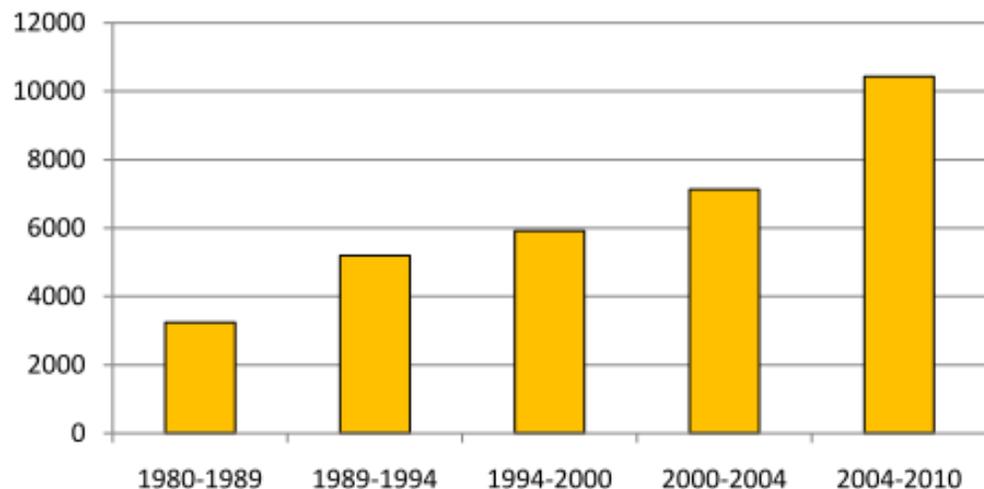
1980-2010

In 2011 Ya'axché undertook an extensive study of changes in land use and land cover (LULC) in the Maya Golden Landscape over the past three decades. The study, led by volunteer GIS specialist Jaume Rusalleda, analyzed 30 years of satellite data and assessed forest fragmentation and agricultural expansion over time and space.

The results highlight the **enormous importance of the Maya Golden Landscape, as the last intact rainforest corridor** between the Maya Mountain Massif and the Caribbean Sea.

However, the analysis also showed that outside of protected areas deforestation between 1980 and 2010 was 2.43% per year. The deforestation is due to drastic expansion of agriculture during the past thirty years. These figures further highlight the **importance of Ya'axché's landscape-level approach** in the region, where communities and private stakeholders are engaged in conservation of the still-abundant natural resources within and outside of the protected areas.

Human footprint (ha)



Area of land (in hectares) under human influence in the Maya Golden Landscape at different time periods over the past 30 years.



TIMBER, CARBON, AND THE VALUE OF THE FOREST

Carbon and timber stocks in the Golden Stream Corridor Preserve

Supported by funding from the Protected Areas Conservation Trust, Ya'axché has completed an assessment of carbon and timber stocks in the Golden Stream Corridor Preserve. Led by forestry consultant Percival Cho, a team of 8 local community members received comprehensive training in navigation, plot establishment, and forest inventorying. The team conducted timber and live carbon assessment over 6 weeks in May and April 2011 measuring and identifying over 3500 trees.



Timber and carbon assessment team in Golden Stream Corridor Preserve

The project provided Ya'axché with the first reliable estimate of timber and live carbon stocks in the GSCP. Data analysis revealed that although past logging activities and the devastating effects of hurricane Iris in 2001 have had a significant impact on timber resources, the live carbon stocks in GSCP are encouraging. With these preliminary figures, Ya'axché is now working with Fauna & Flora International to determine the feasibility of a REDD project for the GSCP.

The future of rosewood in Belize

Ya'axché's national-level advocacy in 2011 focused on the ever-increasing level of rosewood extraction from Toledo district. The species (*Dalbergia stevensonii* – also known as 'Honduran rosewood') is rapidly disappearing from Belize due to unsustainable levels of extraction, especially the removal of large seed-bearing trees.

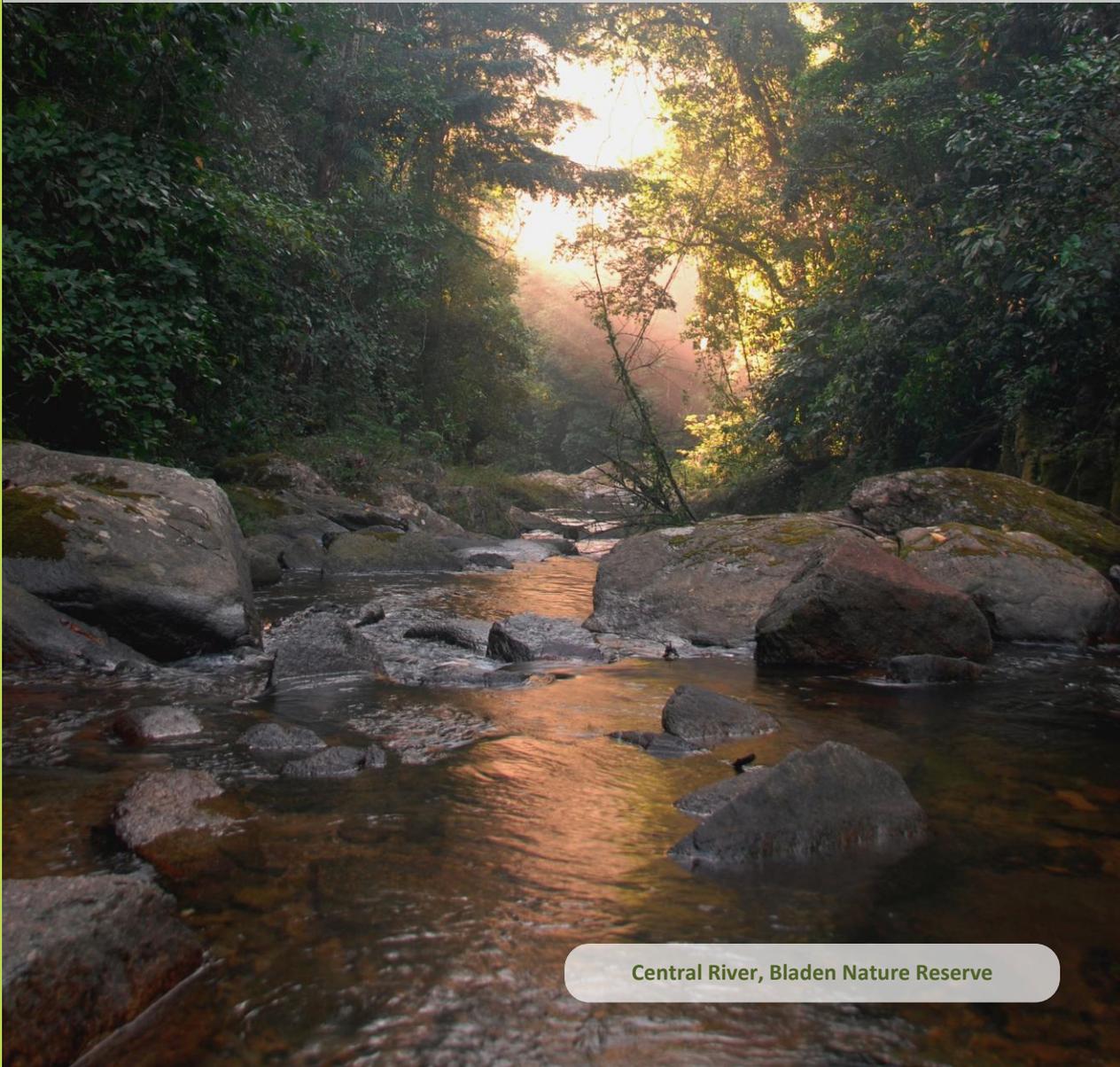
Ya'axché persistently communicates to the government and to the wider public the research priorities and conservation interventions necessary to protect rosewood. As a result of Ya'axché's work, the Forest Department has announced a rosewood stock assessment, a positive step forward in developing conservation strategies for one of Belize's most valuable timber species. In 2012, Ya'axché plans to commence local-level advocacy, aimed at raising awareness about the importance of sustainable resource use and encouraging local Maya communities to develop forest management plans.



RESEARCH

Rapid Ecological Assessments

Ya'axché continues to support research of key taxa in previously unstudied regions of the Bladen Nature Reserve (BNR). Expeditions in March and October 2011 explored the middle and upper elevations of Bladen to study vascular plants, snails, birds, and amphibians. These expeditions produced records of 386 plant species, 58 snail species, 106 birds including a rare species only ever seen on Belize's highest peak, 14 amphibians, and 10 reptiles. Species discovered include some of the rarest and most threatened in Belize, confirming western Bladen as *the* national hotspot for biodiversity and highlighting the need for further study and protection of this remarkable landscape.



RESEARCH

Bladen Nature Reserve is an IUCN Category I protected area, where only education and research activities are permitted. As co-manager of Bladen, Ya'axché grants permits to researchers from around the world to carry out independent studies, which generate important knowledge about the ecology of Bladen's pristine habitats.

In 2011, the first breeding pair of wild harpy eagles in Belize was detected in Bladen Nature Reserve by researchers from the Belize Foundation for Research and Environmental Education. The chick of the pair was observed continuously for several months by the research team and was eventually tagged with a GPS unit to track its movement. Due to a series of unfortunate coincidences the project was concluded prematurely, but valuable lessons have been learned and there is hope that the species is recovering in the reserve.



Harpy Eagle in Bladen



In 2011 Bladen's role as a source for scientific knowledge was also exemplified by exploratory trips into eastern parts of the reserve by snail and slime mold scientists of the Lincoln Memorial University in Tennessee, who aimed to document species richness and discover species new to science.

GOLDEN STREAM CORRIDOR PRESERVE CAVE EXPLORATION



Mastodon tooth discovered in a cave in GSCP

Preliminary exploration of the caves in Golden Stream Corridor Preserve uncovered a spacious cave system extending several kilometres. The research team mapped out the first 225 meters of the cave system and discovered paleontological materials, including a mastodon tooth and a presumed molar of an extinct horse species.



COMMUNITY OUTREACH AND LIVELIHOODS (COL)

COL STAFF

Community Outreach Officer
Julio Chub

Extension Officer
Kenny Cal

Horticulturalists
Veronica Pop
Patricia Sacul

Project Manager*
Amanda Salb

*volunteer staff

Ya'axché's Community Outreach and Livelihoods Program creates opportunities for the people of the Maya Golden Landscape to engage in sustainable livelihoods and conservation. In 2011, Ya'axché continued to provide training and technical support to 83 farming families in the MGL using environmentally friendly methods. Through the generous support of the Organization of American States eight vegetable farmers are now fully equipped with irrigation systems and the community of Indian Creek has a solar drier for cacao beans.



Construction of solar drier in Indian Creek

What is TANGO?

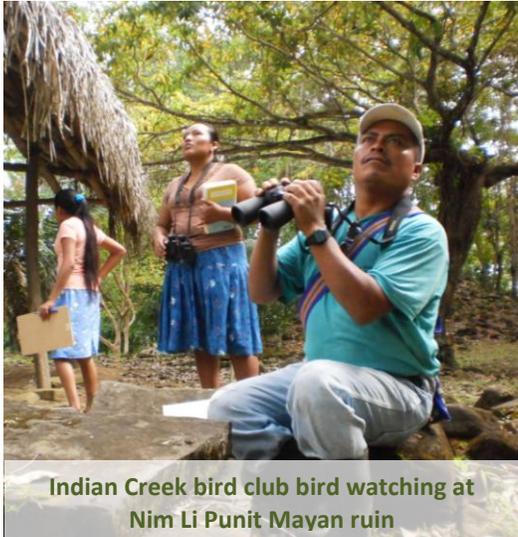
Based on the belief that we can achieve more by working together, Ya'axché and the Toledo Development Corporation brought Toledo's agricultural NGOs (TANGO) together in a series of meetings throughout 2011. The participating organizations include: Sustainable Harvest International, Plenty Belize, the Maya Mountain Research Farm, the Ministry of Agriculture & Fisheries, the Toledo Cacao Grower's Association, Moho River Cacao and the Citrus Growers Association, among others.

All the groups warmly welcomed the initiative and have been extremely cooperative and constructive. As a result, the organizations have: 1. learned about one another's work; 2. identified practical ways to cooperate, such as sharing training sessions and synchronising work schedules to optimise farmers' benefits from extension services; 3. prioritised extension officers' training requirements; 4. begun to meet those training needs in key areas such as agroforestry, and 5. identified the criteria on which a "sustainable farmer of the year" competition should be judged and, in doing so, developed our shared vision for sustainable farming in Toledo. Thank you to all those involved!



COMMUNITY OUTREACH AND LIVELIHOODS (COL)

Raising awareness through bird-watching



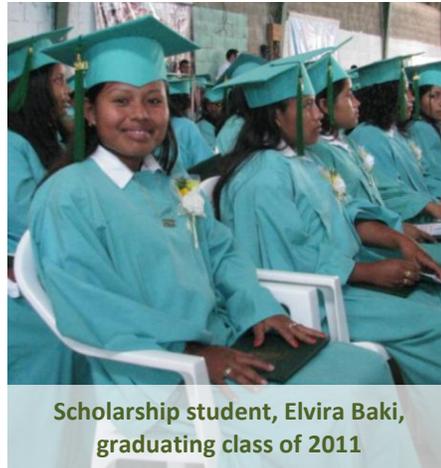
Indian Creek bird club bird watching at Nim Li Punit Mayan ruin

As a way to promote the importance of sustainable land-use and forest cover, Ya'axché has successfully established bird clubs in its three primary buffer communities: Medina Bank, Golden Stream and Indian Creek. These clubs are lead by young people from the communities, who organize excursions to watch and learn about birds.

Furthermore, the establishment of the "Farmers Bird Alliance" has allowed Ya'axché to train interested farmers about bird identification and how to monitor bird diversity on farmlands.

Scholarship students

Each year, Ya'axché provides scholarships to talented high school students who cannot afford secondary education otherwise. Students are selected in consultation with primary school principals and village leaders based on merit and need. Six students have graduated in 2011 bringing the total number of Ya'axché-supported graduates to 33 since the start of the program in 2003. **For the 2011-2012 school year, Ya'axché provided support to 49 high school students from nine communities.**



Scholarship student, Elvira Baki, graduating class of 2011

Socio-economic monitoring

Ya'axché's terrestrial biodiversity monitoring program is considered to be the strongest in Belize. To develop a similarly effective system for understanding and documenting socio-economic change, Ya'axché partnered with Fauna & Flora International and a Master's student from Cambridge University to develop locally appropriate and practical socio-economic monitoring protocols. The monitoring framework will be piloted in 2012.



PLANNING FOR THE FUTURE: NATIONAL RANGER TRAINING ACADEMY

Recognizing the need to standardize national approaches to research, monitoring, enforcement and data collection, Ya'axché secured funding from the United States Fish & Wildlife Service to undertake a feasibility study for a National Ranger Training Academy to be hosted at the Golden Stream Corridor Preserve field station. Stakeholders across the country have reported significant support for this idea.

In partnership with the University of Belize, Ya'axché conducted a national training needs assessment, followed by a series of consultations to produce a draft curriculum for the program. The consultation also explored the possibility of financing the academy through educational tourism and ecotourism. A market survey initiated in late 2011 will determine the viability of this option.



THANK YOU!



Fauna & Flora International is Ya'axché's principal institutional partner and has supported our work from the beginning

Granting organizations

- Community Management of Protected Areas Conservation Programme (COMPACT), Global Environment Facility Medium Sized Project, via the United Nations Development Program
- Fauna & Flora International (FFI)
- Grassvalley Trust
- Halcyon Land & Sea
- Matsarol Foundation
- Mohammed Bin Zayed
- New England Biolabs Foundation
- Oak Foundation
- Organization of American States (OAS)
- Panthera Foundation
- Planet Action - Environmental Systems Research Institute (ESRI)
- Protected Areas Conservation Trust
- USFWS – Neotropical Migratory Birds Conservation Act
- USFWS – Wildlife Without Borders Latin America and Caribbean
- Valentine Charitable Trust
- WildInvest

Thanks to the funders who supported Ya'axché's Scholarship Program:

- Conservation and Research Foundation
- Environmental Trust Fund (Justin Godfrey and Family)
- Mr. and Mrs. Griffin
- James Albert Foundation
- James Lord
- Restore Belize

Partners

- The Government of Belize: Forest Department, Fisheries Department and Policy Unit, Agriculture Department
- Association of Protected Areas Management Organizations (APAMO)
- Belize Association of Private Protected Areas (BAPPA)
- Belize Foundation for Research and Environmental Education (BFREE)
- Environmental Research Institute - University of Belize
- Grassvalley Trust
- LightHawk
- Maya Mountain Research Farm
- Moho River Cacao
- Plenty Belize
- Sarstoon-Temash Institute for Indigenous Management (SATIIM)
- Southern Environmental Association (SEA)
- Sustainable Harvest International (SHI)
- Toledo Cacao Growers Association (TCGA)
- Toledo Development Corporation
- Toledo Institute for Development and Environment



FINANCIAL STATEMENT 2011

REVENUE	Belize Dollars
Grants carried forward from 2010	279,966.00
New grants	599,797.64
Sales	1,416.25
TOTAL REVENUE	881,179.89
EXPENSES	
Salaries	397,565.45
Advertisement & Promotion	15,253.10
Building Maintenance	1,755.85
Communications	15,507.27
Dues & Subscriptions	240.00
Equipment: Maintenance	3,797.01
Field Supplies	14,935.43
Interest & Bank Charges	3,679.65
Legal Fees & Professional Fees	44,462.56
Materials & Supplies	17,784.12
Nursery	8,077.50
Office Space	21,750.81
Office Supplies	5,494.88
Scholarships	10,353.10
Staff Appreciation	969.75
Stipends & Allowances	39,456.54
Sundry	10,343.53
Training & Development: Board	868.00
Training & Development: Staff	1,008.00
Fuel	27,830.09
International & Local Travel	16,374.44
Vehicle License & Insurance	2,775.14
Vehicle/Motorcycle Maintenance	12,613.29
<i>Total Core and Program Expenses</i>	<i>672,895.51</i>
Office Equipment	4,456.54
Field Equipment	10,572.93
<i>Total Capital Expenses</i>	<i>15,029.47</i>
TOTAL EXPENSES	687,924.98
Total carried forward to 2012	193,254.91

