



Ya'axché Conservation Trust

Annual Report

2022



**Annual Report
Ya'axché Conservation Trust
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Acronyms

BNR	Bladen Nature Reserve
COL	Community Outreach and Livelihoods
COVID19	Corona Virus
FD	Forest Department
GSCP	Golden Stream Corridor Preserve
HJCP	Human-Jaguar Conflict sub-program
IAF	Inter-American Foundation
IDB	Inter- American Development Bank
IUCN	International Union for Conservation of Nature
MGL	Maya Golden Landscape
MMC	Maya Mountain Cacao
MMM	Maya Mountain Massif
MMNFR	Maya Mountain North Forest Reserve
PAM	Protected Areas Management
PAs	Protected Areas
SMART	Spatial Monitoring and Reporting Tool
TFCG	Trio Farmers' Cacao Growers
Ya'axché	Ya'axché Conservation Trust
YICE	Ya'axché Institute for Conservation Education



Christina Garcia

Message from the Executive Director

Keeping afloat and slowly overcoming the COVID19 pandemic was priority in 2022. The year started with the development of a robust work plan encompassing all our programs, overlaying the work ahead, and ensuring that we bring a level of normalcy to the engagement with the communities.

Our program staff worked in tandem with each other to ensure that strong collaboration was reflected in achieving the results needed. This allowed Ya'axché to garner new partnerships with key government departments, namely the Ministry of Sustainable Development, Climate Change and Disaster Risk Management, and Ministry of Agriculture Food Security and Enterprise, along with new donor agencies. Ya'axché hosted an array of visitors to the Maya Golden Landscape (MGL) including members of the Progressive Sugar Cane Producers Association in Orange Walk who came to view first-hand the climate-smart practices that we have been promoting over the past 15 years. We are grateful for such exchange since the work of Ya'axché is being viewed across Belize as a model to follow.

Our programs also encountered some positive changes including the integration of a new structure that allowed better efficiency and streamlining of information. The Community Outreach and Livelihoods Program in collaboration with the Protected Areas and Science Programs worked arduously to develop an Integrated Forest Management database system that will allow the agroforestry extension officers to collect farm profiles, production, trainings, soil monitoring, beekeeping, among other key data. Similarly, parameters have been developed for the work happening in the protected areas and for biodiversity monitoring and research.

The information collected over the years has allowed us to develop the first ever State of the Parks and Farmscape reports. The results show a thriving MGL with the possibility of expanding our reach to other communities that have expressed interest in participating in our programs. Ya'axché embraces new changes and looks forward to new collaborations as we move towards a redeemed 2023.

We are grateful for the unwavering support received in 2022 from our donors, partners, community groups, stakeholders, Government of Belize, Forest Department, National Biodiversity Office, Staff and Board of Directors. We look forward to a better and prosperous 2023.

Vision, Mission & Values

The work carried out by Ya'axché is guided by a strategic plan that sets out the goals of the organization and the means to achieve them.

The strategic plan for the period 2022 to 2024 was finalized in December 2021. The new iteration of Ya'axché strategic plan delves deeper into an integrated management approach for forest conservation and governance in the Maya Golden Landscape.

Vision statement

Harmony between nature and human development for the benefit of both.

Mission statement

Ya'axché is a Belizean organization which aims to maintain a healthy environment with empowered communities by fostering sustainable livelihoods, protected area management, biodiversity conservation and environmental education within the Maya Golden Landscape.

Organizational values

Integrity

Respect

Professionalism



Integrating citizen science approaches and disruptive technologies

By Marvin Vasquez, Operations Director

Post the EU/ICCO-funded Forest Governance project (2017-2021), Ya'axché has taken a robust integrated approach into project development and management that now encompasses the three main programs: Community Outreach and Livelihoods (COL), Protected Areas Management (PAM) and Science (biodiversity research and monitoring). This programmatic approach has elevated the work of Ya'axché's mission and vision in the Maya Golden Landscape (MGL) to understand to a greater extent the impact of our efforts in finding a balance between nature conservation and livelihood enhancements. Fast forward to 2022, Ya'axché has kept strengthening its monitoring and evaluation mechanisms to track better the achievements that are directly linked to project objectives, indicators, and results.

In 2022, there were two projects that offered major highlights on the progress of Ya'axché's work, capturing milestones that continue to set precedence in our areas of our work, enriching our repertoires with socioeconomic, protected areas surveillance and biodiversity monitoring data. There was major development in the online database for integrated forest management, implementation of cacao agroforestry and beekeeping curriculums and the execution of a Citizen Science Symposium that showcased camera trap monitoring efforts in agroforestry farms.

The Inter-American Foundation (IAF) and the Inter-American Development Bank (IADB) have been supporting the projects "Enhancing biodiversity awareness through citizen science and building capacity of sustainable community enterprise development of indigenous communities in the Maya Golden Landscape" (2019-2024) and "Enhancing Conservation in Belize's Protected Areas Through Disruptive Technologies" (2020-2022), respectively. Both projects have strengthened community capacities in forest management approaches with a focus on climate-smart techniques to increase resilience. There has been a high emphasis on engagement to increase community stewardship, this implying a gender-inclusive approach used to gain higher participation from women and youth. Ya'axché's capacity building and education outreach strategies also include engagement with education institutions of the MGL communities; youths have also participated in capacity building programs under the COL and Science programs.

**"Empowering Communities,
Conserving Biodiversity,
Connecting the world."**



By the end of 2022, over 150 farmers had been recorded in various cacao agroforestry trainings that include basic, intermediate and advanced components. Sixty farms have been mapped and farm profiles created, contributing to an initial baseline for area of land under sustainable climate-smart farming practices. These farms also underwent soil testing analysis to determine better soil care practices for the type of crops a particular farm can sustain. For beekeeping, 29 beekeepers were reported to have engaged in capacity building and benefitted from equipment and beekeeping tools to improve apiary management. Post-covid, the extension officer had adapted one-on-one capacity building sessions combined with field extension visits, maximizing the face-to-face interactions. Training included record-keeping to improve data collection for both the cacao and beekeeping sustainable production processes.

Over a period of three years (2020-2022), the cacao agroforestry concession recorded a cumulative production of 207,363 pounds of wet beans and the beekeepers a total of 6,263 pounds of honey. Though the cacao sector saw an exponential increase in 3 years, this was not the same for the honey production. There was a slight increase in 2021 from 2020 and a decrease in production in 2022. This is attributed to climate change effects as extreme weather patterns affected the honey production season (heavy rainfalls and a short dry season) in 2022. As cacao farmers improved their capacities and plot maintenance and farm management to increase production, the beekeepers were assisted with building stronger apiary structures to withstand any possible effects from floodings and heavy rainfall.

Camera trapping information continues to highlight the richness and abundance of fauna with protected areas and agroforestry farms. Farms are diverse with wildlife comparable to protected areas, this highlighting that agroforestry systems do functions as corridors supporting wildlife movement. Camera traps have also been insightful in recording rare occurrences such as the naked-tailed armadillo in the Bladen Nature Reserve. Data shows that the white-lipped peccary has not yet been recorded in agroforestry farms; all wildcat species have been captured in disturbed and undisturbed areas (farmlands and protected areas). Along with surveillance of protected areas, biodiversity monitoring has contributed to State of the Protected Areas Reports capturing the health of the three protected areas that Ya'axché manages. Another year of monitoring in agroforestry farms will contribute to the 2024 Farmscape report, which is a complementary understanding of how subsistence farming and climate-smart techniques does contribute towards income generation for a local household while protecting the natural environment and its diversity.



2022 was a fruitful one for the ecotourism sector. Six farms established a business model partnership with Ya'axché for Eco farm tours that are sourced through YICE. Student groups also supported these farm visits via experiential learning packages. Three women's groups have also been part of these packages through catering services and cultural tours; showcasing the local way of life in southern Belize. These student visits partnerships grew post-covid and are expected to continue supporting the business models as more groups are booked for the new spring, summer and fall seasons. Both projects have had a positive impact in both conservation and livelihoods work in the MGL. Ya'axché aims to continue investing in the two sustainable production processes and is expanding its fundraising more towards value-added products to continue building the resiliency of the local beneficiaries. There is interest by local producers to venture into cacao by-products to increase the market value from the wet cacao beans which has been at \$1.00 BZD (US\$0.50) for the past three years.



Photo 1. Model farmer conducting a farm tour



Photo 2. Entrance to the Maya Mountain North Forest Reserve.

The Maya Golden Landscape has not had a significant loss in vegetation during the past three years, retaining around 69% of mature forest. As per IDB project target value at the end of year 3, the MMNFR has well maintained over 95% of forest canopy cover. The 2022 land use/land cover report states that MMNFR maintains approximately 98.6% of forest cover. This protected area has 936 acres as a cacao agroforestry concession which is to maintain approximately 70% of its forest cover due to its shade-management interventions for the cacao sustainable production process. The concession also boasts a high diversity index for wildlife comparable to other areas within the protected area. With the three-year findings and project results, updated baselines reflect on the possibilities of replicability and scalability of the initiatives in the MGL. Continuous monitoring and technical capacity building also involve farmers and youth in data sharing exchanges who partake in research and monitoring using a citizen science approach. This has complemented the small business model where established demo farms are documenting the high impacts of Ya'axché's efforts in promoting good forest governance in buffering communities.

Community Outreach and Livelihoods Program



Community Outreach and Livelihoods Program

The COL Program continues to engage with farmers, youths, and women from the MGL. This relationship is nurtured through regular meetings with our community stakeholders including alcaldes and village councils, organized groups and schools. This year, there was an increase from 110 to 134 farmers that the COL program is working with. There was the opportunity to expand our outreach efforts to farmers in the de-reserved area that buffers the MMNFR. This effort has resulted in the recruitment of 24 new farmers from the Trio community. Through the adoption of cacao-based agroforestry practices, these farmers will be restoring degraded lands in the buffering zones of MMNFR. The engagement of these farmers will allow them access to materials and training in various restoration techniques. This complements our efforts with Trio Farmers Cacao Growers Ltd (TFCG) in the agroforestry concession. The engagement of these farmers will mitigate the various threats to the concession which include escape fire and cross contamination of the organic fields in the concession with pesticides. This proactive approach is a collaboration between Ya'axché and the Forest Department. Our integrated landscape management approach to resource stewardship in the MGL is inclusive and proactive.



Photo 3. Planting of cash crops by MGL farmer.

Agroforestry in the MGL

There is steady increase in the yields of wet cacao beans from the agroforestry concession. This year, over 125,000 lbs. of wet beans were harvested and sold. Since the commencement of harvesting of cacao beans, over \$ 229, 000 has been generated from sales of cacao for the members of TFCG.

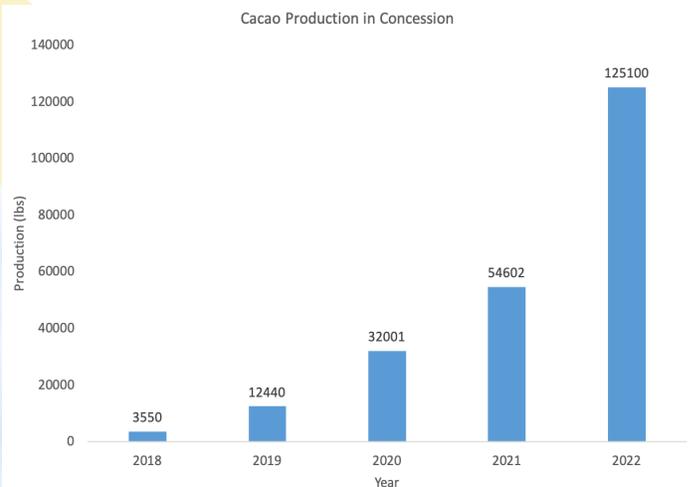


Chart 1. Production of wet cacao beans from the concession since establishment in 2015 to 2022.

Maya Mountain Cacao (MMC) continues to be the biggest buyer of wet cacao beans; however, some farmers sell sun-dried beans to other local buyers. Other farm produce that are being sold include ginger, turmeric, annatto and black pepper.

Some challenges are being faced in block 3 of the concession because of water logging and soil infertility. Ya'axché has been working closely with the 6 farmers of block 3 to relocate them to a more suitable area within the concession. Approximately 7,950 cacao saplings were provided to all farmers who needed saplings for the new plots that are being relocated and to replace damaged or non-productive trees within the existing plots. Ya'axché continue to provide capacity building training in cacao field management to TFCG with the aim of maximizing yields. Additionally, the quarterly plot assessments are carried out with the aim of monitoring and gathering data which can inform future scaling up or replication of this model.

As Ya'axché seeks to improve the income streams from the agroforestry concession for TFCG, investments are being made to develop value-added products from cacao. To this end, a small cacao drying house was constructed and training delivered in fermentation and drying of cacao beans. The aim is to build the capacity of farmers to enter the cacao value chain.



Photo 4. Cacao agroforestry concession.

Agroforestry farmers in the MGL working with Ya'axché continue to expand cacao-based agroforestry within their farms. In close partnership with Ya'axché Institute for Conservation Education (YICE), six (6) of our model farmers have expanded their capacity to offer eco farm tours. They provide guests with authentic farm experiences and educational exchanges. Through 3 tour guiding training sessions our model farmers learnt the basics on how to plan and conduct these tours to ensure the best experience possible.

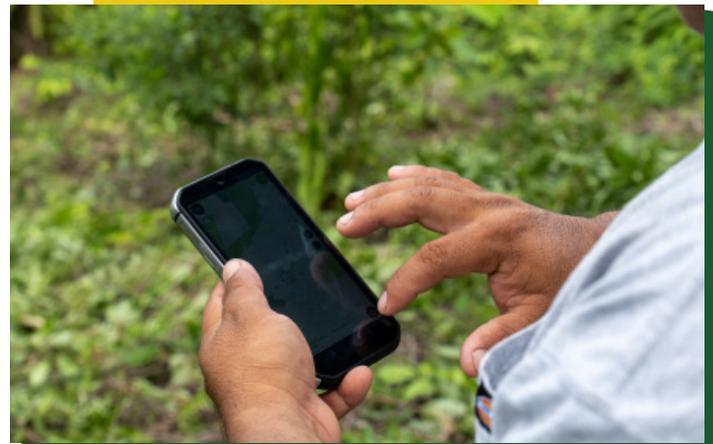
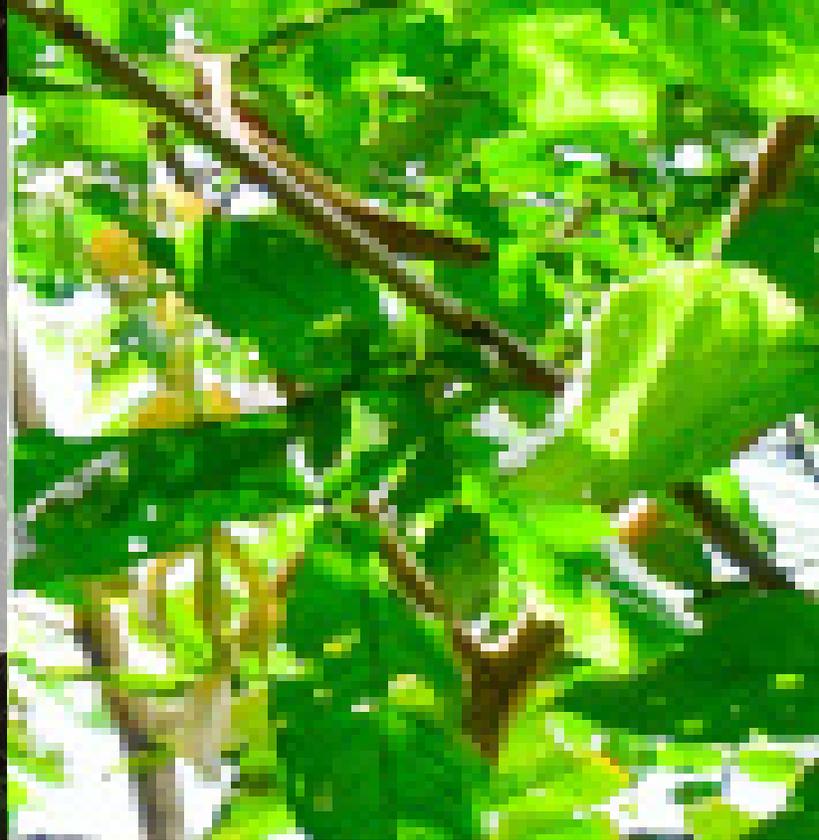


Photo 5. Data collection being done on agroforestry farms.

Beekeeping

There are 29 active beekeepers in the MGL which Ya'axché continues to invest in and support. For instance, through individualized and group training sessions, beekeepers' capacities are being developed to improve colony management, which will result in increased honey production. In addition, starter colonies, tools and equipment were delivered to all new beekeepers. In 2022, 1,856 lbs. of honey were produced and most of it was marketed locally. The aim is to increase the amount of honey that beekeepers can market thus increasing the income for these farming families.



Inga

Ya'axché's model inga plots continue to be used to cultivate corn, beans, and vegetables for farming families. Four (4) trainings were held this year for farmers from San Jose and Aguacate who are interested in establishing inga plots on their farms. These trainings focused on site selection, nursery management, establishment of plots and pruning. These training courses were held at various farms in the MGL allowing for peer-to-peer exchange among farmers. Additionally, 5 model farmers commenced cultivating local vegetables within their inga plots. These vegetables included cilantro, callaloo, pumpkins, okra, cho-cho and other root crops. These plots are being monitored for yield data.



Outreach Efforts

Ya'axché continues to engage stakeholder communities to build awareness on the need to sustainably use our natural resources. School visits target youth and children across all educational levels. Primary and high school students were engaged in educational presentations on climate-smart agricultural practices, research on biodiversity and the mitigation measures that are being implemented to reduce the impacts of human and wildlife conflicts. This was further complemented through our annual Summe camp and Bio Blitz activities. In 2022, Bio Blitz saw the engagement of youths and adults in the monitoring of biodiversity in the MGL. It focused on five main areas namely, birds, mammals, bees, trees, and freshwater macro-invertebrates. Experts in each of these areas were invited to share their expertise with participants. Presentations were also done to University of Belize students who visited the MGL to learn about the climate-smart agriculture practices and biodiversity conservation.

Community Enterprises

Creating equal opportunities for men and women is a central pillar to Ya'axché's community empowerment efforts. As such, the organization invested resources in capacity building for women in the MGL. Working closely with organized women's groups, business plan was developed for an additional women's groups in Indian Creek. This has resulted in a total of 3 business plans developed for three women-led community-based enterprises which seek to strengthen the groups' entrepreneurial undertakings. The completion of the business plans also allowed for these groups to apply for entrepreneurial subgrants which provided materials and equipment to improve their business spaces. At Ya'axché we believe that when women are economically empowered the entire family benefits.



A scenic view of a forest with a large white circular graphic overlaying the bottom left corner. The background shows a dense forest of green trees under a bright sky, with some dark branches in the foreground. The white circle is positioned in the lower-left quadrant, containing the title text.

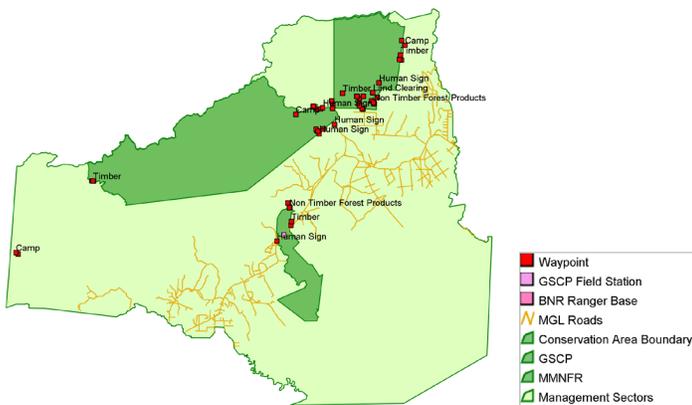
Protected Areas Management Program

Enforcement & Compliance Efforts

As the country moved toward a more “normal” way of life with COVID19 and having restrictions lifted, the enforcement and compliance teams expected a potential spike in illegal activity within the protected areas. In fact, the number of illegal activities appeared to decrease when compared to the previous year. A total of 492 patrols were conducted within three protected areas which was a decrease in patrol effort from last year by 50 patrols. Patrol effort is affected by weather conditions and other logistical issues and decreases in patrol effort do not necessarily reflect the level of illegal pressures in the protected areas. A total of 50 infractions were documented across the three main protected areas, a reduction of documented human activity by 20. The highest concentration of infractions was found within the MMNFR and to a lesser extent in the BNR.



Three main types of infractions that dominated in 2022 was illegal logging which mostly occurred within the Maya Mountain North Forest Reserve. Hunting was the second most common infraction with most of the evidence pointing to a hotspot of hunting within the BNR. The Golden Stream Corridor Preserve for the most part remains largely inactive with only one major instance of illegal non-timber forest product extraction. The patterns of illegal activity across the protected areas remain similar to previous years although figures appear lower for 2022.



Map 1. Distribution of human activity within the three protected areas managed by Ya'axché within the MGL.

Continued Growth in Technology Adoption

Camera Traps

Having had success with the adoption and implementation of SMART in the last 7 years, Ya'axché is now diversifying its tool set for enforcement and compliance. Camera traps have been in use by our Science Program for some years with great results for biodiversity monitoring and in 2022 their use was piloted for enforcement and compliance purposes. Understanding patterns of behavior such as illegal hunting can be achieved with data collected through the lens of a camera trap. This data allows us to tell when exactly people choose to enter the protected areas and where. Patrols can then benefit from improved planning based on hard evidence of illegal activity. As this exploratory work continues it will be paired with SMART as part of Ya'axché's implementation of innovative technologies.

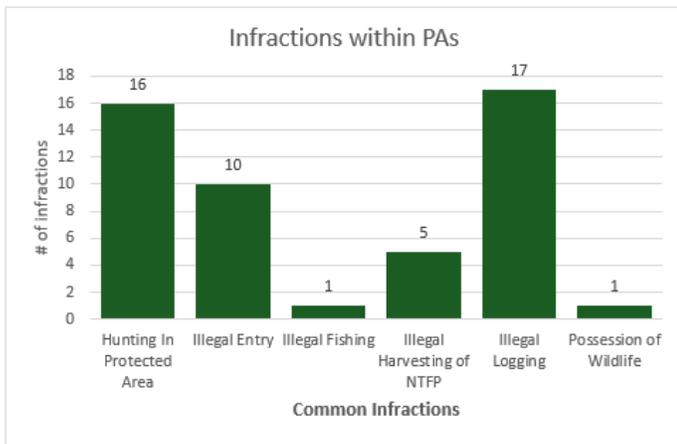


Chart 2. Infractions by type, illegal logging registered the highest followed by illegal hunting and illegal entry.

As the data gathered through SMART grows, Ya'axché is now able to analyze patterns of activity as a way to strategically deploy patrols within the protected areas. The first and second quarters of the year are typically the most active. This coincides with the dry season when many entry points to the protected areas become easier to access due to drier roads and trails. Activity peaks around March and April and slows down considerably thereafter. The subsequent lull in activity coincides with the increase in rain which makes entry points difficult to access. Ya'axché's enforcement and compliance teams will continue to keep track of hotspots and peak activity patterns as a way to improve its effectiveness in managing the protected areas.

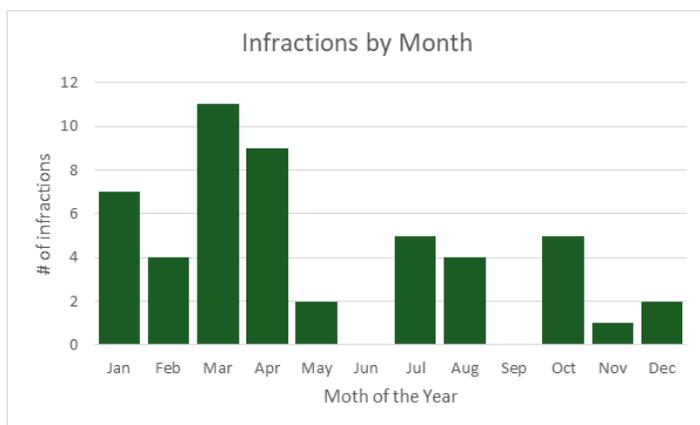


Chart 3. Patterns of activity throughout 2022. March and April were the peak of the illegal activities across all three protected areas.



Photo 6. Illegal hunter within one of Ya'axché managed protected areas in 2022.

Drone Use in Surveillance

The pilot year for the adoption of Remotely Piloted Aerial Systems or for simplicity “drones”, was in 2021. Following initial training and procurement of drone equipment the enforcement team has spent most of 2022 gaining confidence in the use of the technology. Our primary target in 2022 focused on surveillance of agriculture clearances that are encroaching into the reserves. This has allowed the protected areas team to map the extent of the clearings with a level of detail not possible with the resolution of freely available satellite imagery. While satellite imagery will continue to be an indispensable tool for forest monitoring at Ya’axché, the use of drone imagery for mapping illegal land clearings will enhance Ya’axché’s monitoring capacity in near real time with greater accuracy and detail. The adoption of this technology is still in its infancy stage and there will be much more exploration done with drones within Ya’axché’s growing body of work.

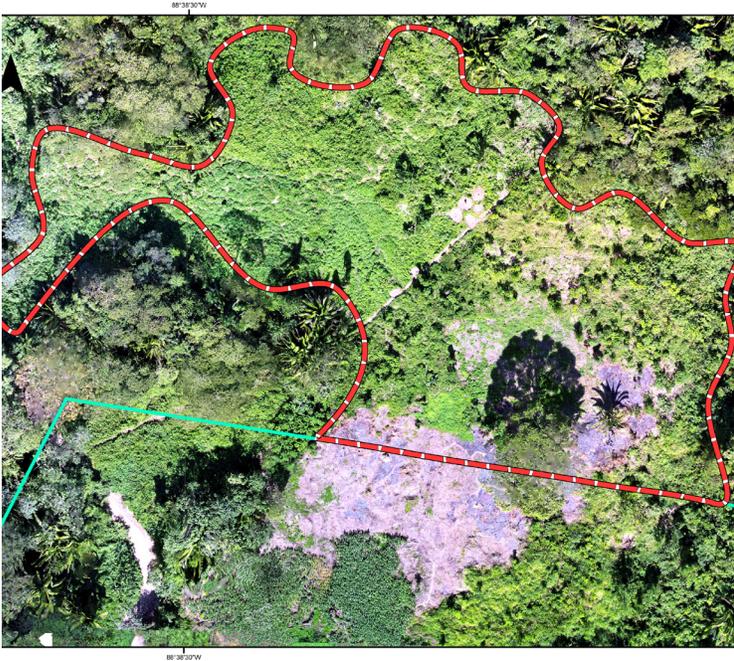


Photo 7. Illegal agriculture encroachments into MMNFR.



Photo 8. Drone image showing land clearing at the edge of the protected areas slowly encroaching on reserve land.





Science Program

Establishing the Science Program at Ya'axché

Biodiversity conservation has been at the core of Ya'axché's work in the Maya Golden Landscape since the organization was established in 1998. Rangers in the Protected Areas Program started collecting biodiversity data regularly in 2006 to monitor key wildlife species. However, as Ya'axché has grown, our biodiversity interests have shifted beyond monitoring within the boundary of protected areas and toward answering specific research questions about the wider landscape. In January 2022, Ya'axché formally established the Science Program to facilitate this shift and support the increasing need for data to drive decision making.

The Science Program operates with four research and monitoring rangers who are skilled in data collection and wildlife identification. Field logistics, data management, and reporting are led by three technical staff. The new program structure will allow for better integration of science (research, inventory, and monitoring) to address PA management and community livelihood needs.

Mitigating Human-Jaguar Conflict



Photo 9. Presenting on the use of KoBo Toolbox for data collection.

With the refocusing of technical staff TORs and program structure, management of the Human-Jaguar Conflict sub-program (HJCP) was moved from Protected Areas to the new Science Program. The HJCP helps small-scale farmers implement measures that deter jaguars from killing their livestock, and in return reduce the retaliatory killing of the jaguars by farmers. Since 2016, Ya'axché has provided technical advice and equipment to nine (9) cattle farmers in six (6) communities who participate in the program. Camera traps were deployed at these same farms to record predator and game species activity throughout the year.

In April, Ya'axché attended a national workshop on wildlife conflict response. We presented the software that we use for collecting and managing jaguar attack data, and we participated in a discussion on data sharing and the standardization of response methods between government and NGO stakeholders. The collaboration with these stakeholders will continue into 2023 as Belize moves toward streamlining and improving wildlife conflict response across the country.

Finally, Ya'axché's Wildlife Officer continued to respond to direct calls from farmers and homeowners in the MGL who experienced predator attacks. In 2022, two (2) jaguar attacks on livestock were received (a decrease from nine attacks in 2021). After interviewing the farmers and inspecting the farms, the Wildlife Officer installed fox-lights to deter further predation



Engaging Citizen Scientists

In 2016, Ya'axché began a long-term study of wildlife in MGL communities to explore the presence and abundance of species in agroforestry systems. We now work with 19 conservation-minded agroforestry farmers to deploy camera traps on farms in nine (9) communities. These farmers are trained citizen scientists and strong advocates for the co-existence between farmers and wildlife. Ya'axché provides regular support for the farmers to maintain the cameras and collect data. This year, we held one (1) camera trap refresher training with participating citizen scientists. We also brought the scientists together for one (1) data sharing workshop, in which findings from the previous year's survey were shared. Finally, three (3) exchange visits between citizen scientists and new agroforestry and cattle farmers were done to spread the message on the importance of wildlife-friendly farming practices for biodiversity conservation.

Investing in Staff

In addition to the capacity building events conducted for MGL citizen scientists, Science staff also participated in trainings to maintain and grow their skills and knowledge. All team members refreshed their wildlife identification skills during one (1) internal training on native bee identification and one (1) training on tree identification. Science rangers had additional trainings for camera trap data management and wilderness first aid. Finally, two technical staff participated in a course on pine bark beetle ecology & management hosted by the United States Forest Service, and one technical staff member became certified as a Wildlife Ambassador through a national course hosted by the Belize Wildlife Referral Clinic.

Supporting Landscape Restoration

In 2022, along with the Belize Forest Department, Ya'axché implemented a pilot project to restore 500 hectares of degraded lands in and around the MMNFR. The Science Program supported this work by securing seeds of threatened, valuable, and ecologically important native tree species and by assisting in the production of over 6,600 seedlings. During this process, we conducted nursery experiments to better understand the germination requirements for six (6) valuable tree species. During 2021-2022, we tested the effects of different seed treatments, soil types, and shade levels on germination rate, time to germinate, and seedling growth. Best practices are being integrated into a Seedling Guidebook that is currently under production by YICE staff.



Photo 10. Native tree propagation in the Ya'axché nursery.



Studying Biodiversity

Ongoing work for the Science Program in 2022 included wildlife monitoring through the deployment of 78 wildlife cameras in BNR, MMNFR, and MGL agroforestry farms. Rangers also completed 36 tree phenology monitoring visits at six (6) sites as part of a long-term study on the life cycles of seven (7) rare or threatened species. Finally, rangers walked a total of 55 km while recording bird and mammal indicator species at transects across 12 MGL sites.



Photo 11. Restoration seed collection.

Sharing Results and Building Community Awareness

Ya'axché staff collaborate across programs to communicate research results back to local communities through in-person events, social media, radio and television appearances, and custom-made educational resources. In 2022, we engaged MGL youth in a 24-hour "BioBlitz" inventory of species; shared results of biodiversity monitoring in the farming landscape with farmers, village leaders, and NGO stakeholders at a Citizen Science Symposium; and communicated lessons learned during a stakeholder workshop on threatened tree conservation. We promoted environmental stewardship at one (1) national television show and two (2) local radio shows, assisted with four (4) school visits on wildlife conflict and the importance of jaguars, and produced three (3) Facebook Live shows.

We also integrated our findings into new outreach materials such as youth activity sheets, an educational calendar on coexisting with jaguars, identification guides for threatened trees and native bees, and a photo guidebook of images collected from wildlife cameras.

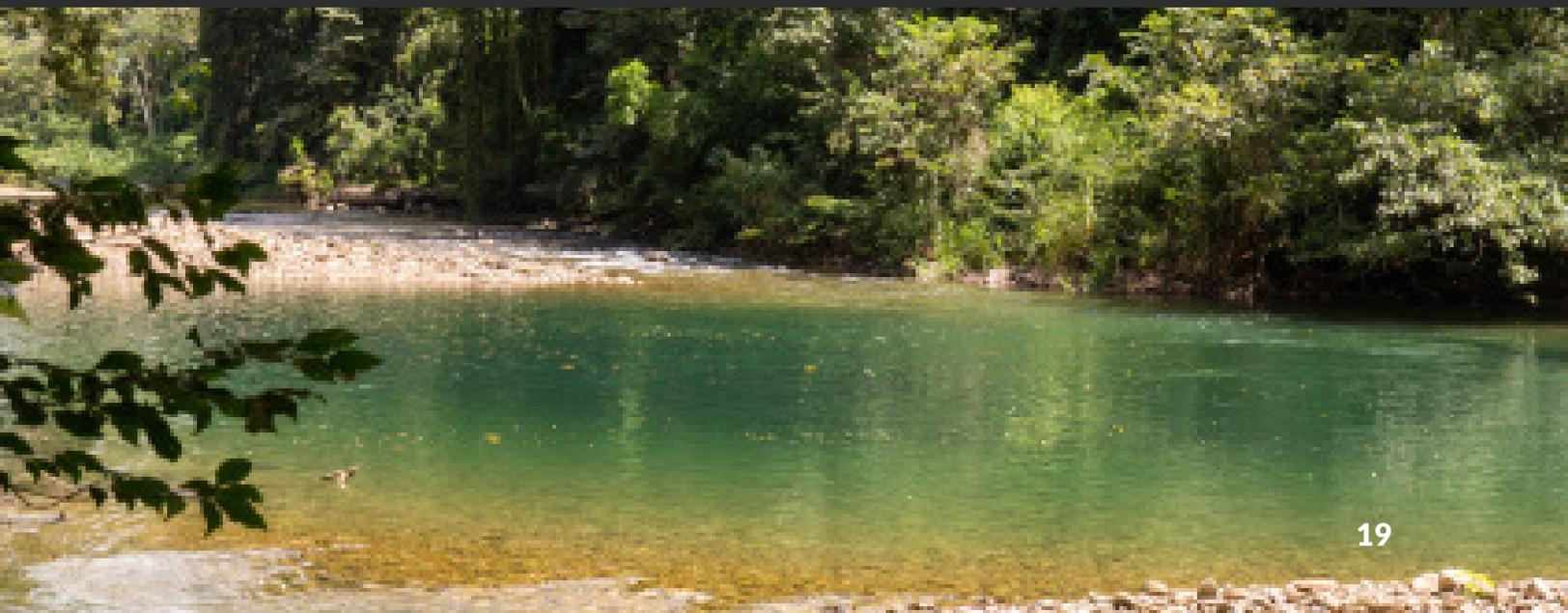


Collaborating with Research Partners

Every year, Ya'axché welcomes long-standing and new research partners studying topics related to conservation and livelihoods in the MGL. Ya'axché supports international partners in various ways, such as facilitating access to field sites, contributing to project design, coordinating discussions with community members, or collecting data. During 2022, eight (8) partners coordinated projects with Ya'axché to study fauna, flora, and cultural resources in the BNR, GSCP, MGL watersheds, and community farms. Through these partners, we contributed data and/or critical review for two (2) new research publications and two (2) conference presentations, and we also participated in multiple knowledge exchanges in the field.



Photo 12. Otter scat research collaboration.





Ya'axché Institute for Conservation Education

Supporting Community Development and Conservation in the MGL

YICE is now in its ninth year of existence. YICE continues to support Ya'axché Conservation Trust in its conservation efforts in the MGL by generating sustainable financing for its programs and initiatives. This continues to be successful through the development of unique experiences that combine education, leisure, conservation and enhanced services in ecotourism.

In 2022, YICE enhanced a few of its facilities, tour packages and added new tours that will be promoted in the coming year. Constructing of a guest kitchen, improvement of signage on nature trails, equipping kayaks with safety gear (a new tour) and investing in tour equipment. With all the enhancement, YICE will now offer ten different tours, two vacation packages and continues to develop unique experiential learning programs - study abroad programs in collaboration with its international partners.

In preparation for growth in hosting partners, YICE also welcomed and trained two additional tour guides. These guides will be delivering tours in the coming year. The team is prepared to plan and deliver wonderful experiences in southern Belize.



Photo 13. Seedlings for restoration project.

Ya'axché Nursery Supports Reforestation Initiatives



Photo 14. Seedling delivery to Dolores for community planting initiative.

The Ya'axché nursery continues to grow, nurture, and deliver organically grown seedlings to support the sustainable farming practices in the MGL. This year it commenced an immense support to propagate approximately 54,000 trees for more reforestation activities in degraded areas in nature reserves and farmlands.

The reforestation initiatives are done in collaboration with its parent organization - Ya'axché and donors supporting the reforestation cause in the Maya Golden Landscape. Plant species propagated include cacao, *inga edulis*, fruit, timber and native trees. To continue sharing the impact of planting for the protection and improvement of the environment, the Ya'axché nursery provided approximately 1,200 fruit trees to eight remote communities and primary schools in the Toledo District through a partnership with Barefoot Children Ministries.

The commitment of the nursery team to grow and supply quality seedlings to the public remains a priority. This year, thirty-four varieties of fruit and timber trees were planted and sold in the nursery. Customers and partners are of utmost importance to the nursery as it continues to support initiatives that will contribute to the restoration of a greener planet.

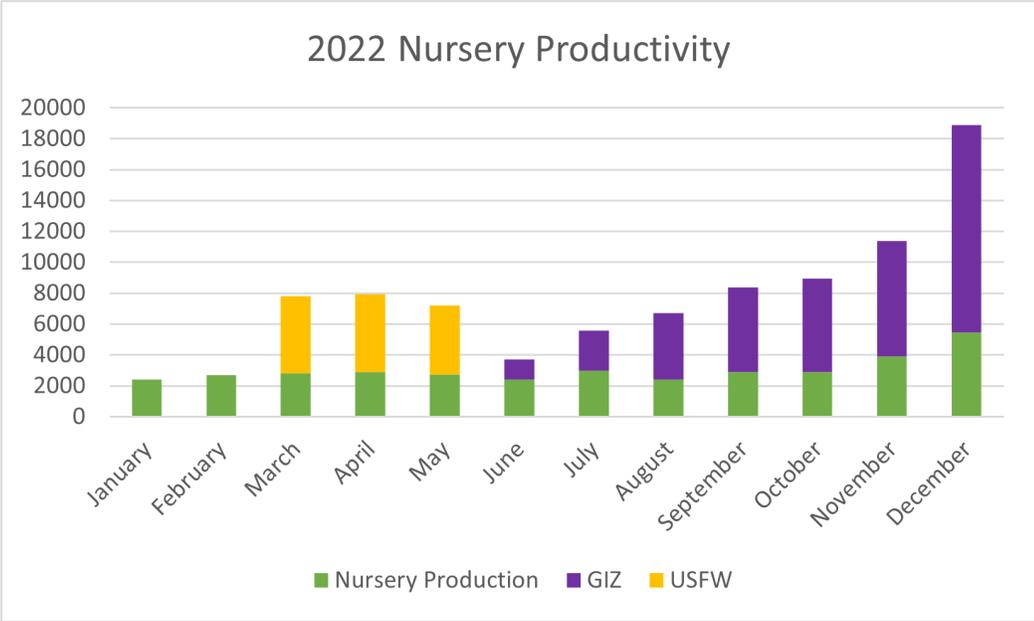


Chart 4. Total trees propagated in 2022 to support projects and nursery customers.



Improving Livelihoods of Community Partners

Conservation Through Sustainable Micro-enterprises and Ecotourism

YICE's aim remains to create economic opportunities and support the development of community livelihoods. Therefore, YICE continues to empower its community partners in the MGL through signing agreements and supporting the growth of their sustainable entrepreneurial initiatives with capacity building opportunities. This is done with the support of its parent organization.

Empowered partners elevate the experience that is offered to all visitors that are welcomed for tours or educational visits. Delivering high quality experience and service is a priority.

Each year its partners, including farmers and women's groups, participate in assessments and evaluations to prepare them for the upcoming year of business relationship. Therefore, YICE remains committed to supporting these partners.



Photo 15. Women capacity building workshop.



Photo 16. Agroforestry farmer with students.

YICE has seen tremendous growth and improvement in 2022. Overall, the number of visitors to the MGL has increased and continues to diversify experiences that are provided. YICE team members remain committed in upholding strong working relationships with both community service partners and customers to promote ecotourism service in southern Belize. YICE has seen another year of productivity, development, and growth and hopes to continue providing its partners with the support needed in this journey. YICE extends its sincere appreciation for the support in 2022 and keeps aiming to formulate new partnerships and engage new customers in 2023.

Financial Statement

YA'AXCHÉ CONSERVATION TRUST

STATEMENT OF COMPREHENSIVE INCOME

YEAR ENDED 31ST DECEMBER 2022

All amounts are expressed in Belize Dollars

<u>INCOME</u>	<u>2022</u>
Grant Receipts	\$1,735,206.05
Other Income	\$ 523,521.89
<u>EXPENSES</u>	
Salaries, wages, and allowances	\$ 961,342.70
Training and development	\$ 1,528.80
Legal and professional fees	\$494,525.30
Depreciation	\$ 92,232.06
Materials and Supplies	\$ 54,704.33
Community Activities	\$83,647.73
Eco Tourism Belize	\$102,022.52
Advertising and Promotion	\$ 16,462.54
Communication	\$ 15,131.11
Building, Equipment Maintenance and Repair	\$ 18,122.29
Travel and transportation	\$ 5,899.20
Office expenses and equipment	\$ 25,664.82
Field Supplies and equipment	\$ 99,243.80
Vehicle, fuel, maintenance, and repair	\$138,425.92
Dues and subscriptions	\$ 507.96
Nursery and garden	\$ 16,605.47
Interest and bank charges	\$ 23,682.17
Loss on Disposal	\$ -
Other Expenses	\$ 32,641.16
Total Expenses	\$ 2,182,390.94
NET INCOME/(LOSS) FOR THE YEAR	\$76,337.00

Staff

The list below represents staff members (past and present) that have contributed to Ya'axché's achievements throughout 2022. As of December 2022, Ya'axché employed 37 full time staff. Leadership members are indicated by an (L).

CORE & Administration

Christina Garcia ^L	Executive Director
Marvin Vasquez ^L	Operations Director
Ivanny Oliva ^L	Finance Director
Dianne Gomez	Finance Manager
Amira Palma	Administrative Assistant

Community Outreach & Livelihood Program

Gustavo Requena ^L	Community Outreach & Livelihoods Program Director
Julio Chub	Community Liaison Manager
Evarista Sho	Education & Outreach Officer
Erwin Tush	Agroforestry Extension Officer
Estevan Assi	Agroforestry Extension Officer
Ronaldo Coc	Agroforestry Extension Officer

Protected Areas Management Program

Said Gutierrez ^L	Protected Areas Management Program Director
Marchilio Ack	Protected Areas Manager (Exited February 2022)
Alex Vierod	GIS Specialist (Exited January 2022)
Hilberto Rash Ranger	Protected Areas Manager
Vigilio Cal	Enforcement Ranger
Juan Cal	Enforcement Ranger
Ramon Sanchez	Enforcement Ranger
Delbert Pop Ranger	Team Leader, Enforcement Ranger
Roberto Tzib	Enforcement Ranger
Israel Canti	Enforcement Ranger
Marvin Pop	Enforcement Ranger
Arturo Zuniga	Enforcement Ranger

Science Program

Elizabeth Dorgay ^L	Science Director
Florentino Chiac	Wildlife Officer
Diana Mai	Science Officer (Exited June 2022)
Anignazio Makin Ranger	Team Leader
Rosendo Coy	Monitoring & Research Ranger
Gerasimo Coc	Monitoring & Research Ranger
Andres Chen	Monitoring & Research Ranger

Sustainable Conservation Financing

Marcelia Assi ^L	Conservation Business Director
Miguel Coc	Nursery Technician
Petrona Coc	Housekeeper

Development

Megan Lopez	Development Manager (Exited January 2022)
Carlene Myvett	Development Manager

Marketing and Communications

Nathaniel Castillo	Marketing & Communications Officer
Sayuri Tzul	Marketing & Communications Officer

Ya'axché Conservation Trust
P.O. Box 177 , 3 Ogaldez St.
Punta Gorda, Toledo District



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