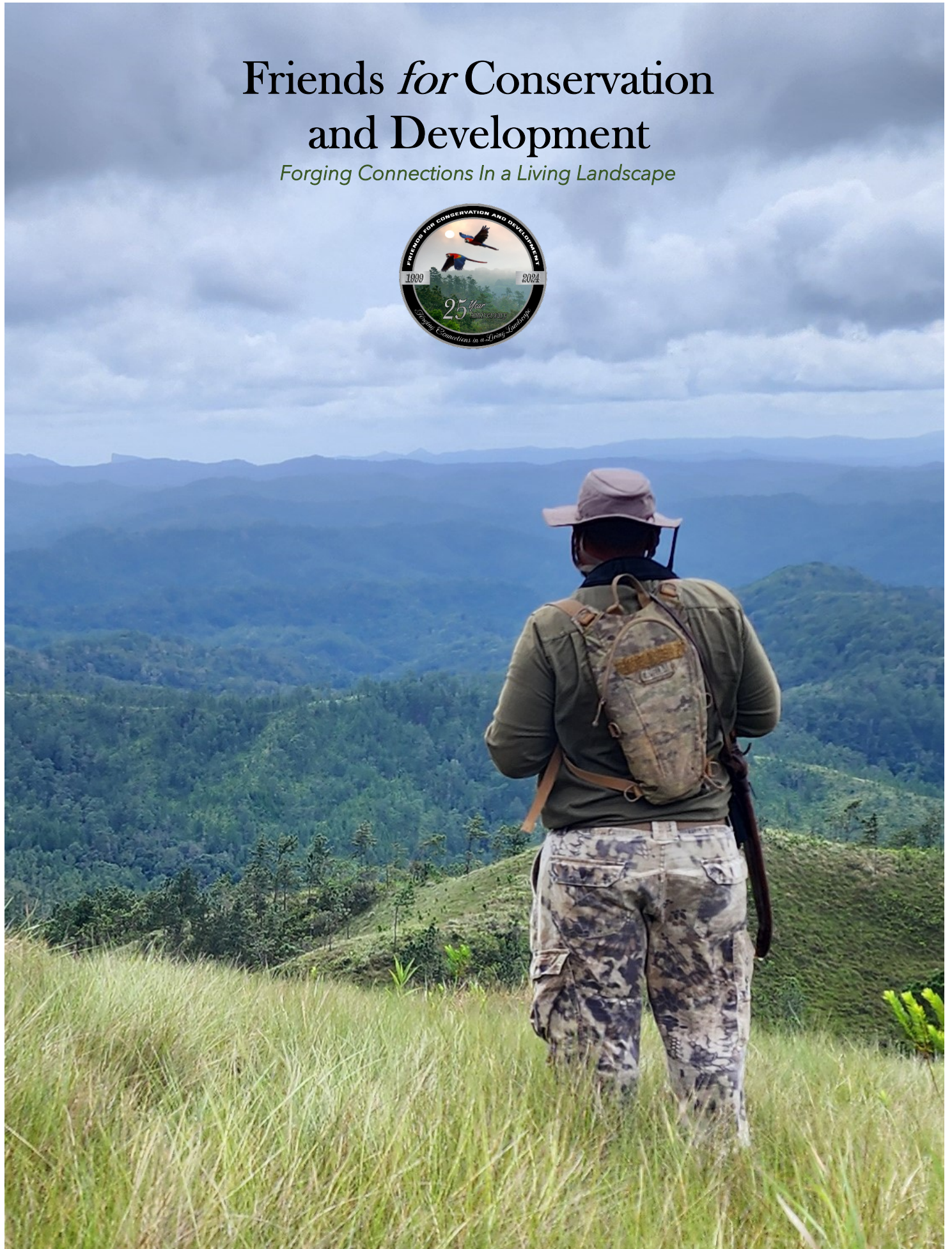


Friends *for* Conservation and Development

Forging Connections In a Living Landscape



ANNUAL REPORT 2024



The 25th Annual General Meeting of **Friends for Conservation and Development** is made possible through the full sponsorship of
San Ignacio Resort Hotel



This publication is produced with sponsorship from BRC Printing

CHIQUIBUL NATIONAL PARK A QCC Site



Cover photo: D. Rivera
Page. 5, 13 photos: E Sutherland
Page 8, 11, 18, 20, 21 (butterfly), 28: J. Najera
Page 10 (children): Maya Leaders Alliance
Page 19: F. Hachmann
Page 16, 17 (birders): R. Harris
Page 22 (cave inset), pg. 23 (Chiquibul Chamber): K. Voyles
Page 23: Cave entrance: T. Rath
All other photos: © FCD



MESSAGE FROM THE BOARD PRESIDENT

Dear Friends,

'Tis the season when we are blessed with a sprinkling of cold fronts, the hustle and bustle of holiday planning, and FCD hosting its Annual General Meeting! This year holds special significance as we mark 25 years of service and dedication to our beautiful Belize - a milestone representing a quarter century of growth, success, and resilience!

Before you delve into this year's annual report, allow me to transport you back in time. It's 1989 and a small group of young friends from San Jose Succotz, known as the Youth Environmental Action Group, have come together in search of adventure in the jungles of Cayo, and to learn more about the uniqueness of Belize. What began as short treks gradually evolved into multi-day camping expeditions, revealing to them the many treasures with which Mother Nature has blessed our small country. It's now 1999 and the group embarks on more impactful conservation activities and under a different name, the Friends for Conservation and Development (FCD). Within this new concept, the organization decides that they desire to share their enriching experiences with other Belizeans and the size of the group ebbs and flows as new friends join them.

With the passage of time, these passionate Belizeans witness the impact of human development on the environment and the inevitable pressures that population growth places on the natural landscape. United through their conviction, they lobby and organize themselves in 2005 to serve as custodians of the Chiquibul National Park. Today, we stand as a formidable organization with a strong membership base, who are committed to conserving the Chiquibul-Maya Mountains for wildlife, people and future generations.

As we proudly celebrate our Silver Jubilee, I invite you to join us in envisioning and creating the next 25 years of growth and success. The organization is carefully strategizing and implementing measures today to guarantee that FCD remains a robust and dynamic institution well into the future. Just as experienced in the past, we are now witnessing a new wave of external pressures impacting the Chiquibul National Park due to the pavement of the Caracol Road and other infrastructure. Undoubtedly, the highway is a remarkable feat that will provide access to some of the most unique and cherished landscapes on Earth. Its imminent completion underscores the need for responsible stewardship not only to continue, but to strengthen, ensuring that all Belizeans can revel in the natural wonders hidden within the Chiquibul-Maya Mountains for generations to come!

Onwards and upwards,

Susana D. Vanzie
FCD Board President



MESSAGE FROM THE EXECUTIVE DIRECTOR

This year has been a particular challenging one with marked management implications. Although we have been involved in various challenges for more than a decade, this year, the barriers limiting the intensity of our monitoring efforts in the Chiquibul National Park and the Chiquibul Caverns were more intense, which provoked us to revisit our management strategies. Given the situation, FCD has rebound with an energized spirit of new enterprise and forward-thinking principles. The Board has been more united as a front and the FCD staff have established a more connected environment of communication and cohesiveness.

As we move beyond our 25 years of conservation efforts in the Western Maya Mountains, one attribute is certain about FCD – that is, “persistency”. From the early days as a youth group, in the 90’s, what defined the group was the persistency to remain together and maintained a clear vision for promoting core conservation. In 2007, as we engaged in co-management, we maintained the persistency to address cross border incursions. Now, as we start a new era with new infrastructural developments in the Mountain Pine Ridge/Chiquibul/Caracol landscape new tests of persistency are forthcoming. For us it is apparent that nurturing partnerships and forging new alliances will be key. More important FCD will re-invigorate public support because in the end these wilderness areas will remain unless Belizeans at large advocate for such protection.

FCD operates primarily in public lands, therefore it is largely reliant on the Government sector to plan, coordinate and execute activities. Our daily drive is that FCD as a non-profit, non-governmental organization provides a service to this country. It abides with the rules and seeks environmental justice.

As the Chiquibul frontier becomes more accessible, an opportunity is open for all Belizeans to marvel and enjoy the beauty of the Chiquibul National Park (CNP). Features in this iconic area are unique and singular. The highest point, the longest cave system, the largest water reserve, the deepest sink hole, are all found hidden in this protected area. Our aspiration is to keep this region cloaked under protection not only for Belizeans but as a global heritage.

FCD also operates in buffering areas with the intent of safeguarding this core nucleus area, namely the CNP. The rigor of the work in the buffer areas of the Bald Hills and Vaca is at a slower pace but the field staff remain cognizant of their role to protect the nucleus. There is clarity on our role, and we remain focused awaiting from the Government for a streamlined approach to improve our efforts. Across in Guatemala, FCD will maintain the collaboration with Guatemalan authorities, while in the south it continues supporting indigenous community efforts. The next stage of FCD is challenging but promising. We will remain persistent. God willing.

Rafael Manzanero



The BERDS (Biodiversity and Environmental Resource Data System) of Belize contains 1800 plant records from the Chiquibul Forest comprising of 662 species as per August 2012. 1,352 vascular plants, 318 species of trees, 246 species of shrubs, 452 species of herbs, 109 orchid species, 182 species of vines, 20 palms, 4 cacti, 3 cycads, 107 species of ferns, 14 woody parasites and 10 lycopods have now been recorded from the Chiquibul.

Annual Operation Evaluation



FCD's co-management agreement specifies for the co-management entity to develop annual operational plans (AoPs) based on the management plan as well as to report annually on the condition and implementation of the AoP. As a result, FCDs Chiquibul-Maya Mountains Landscape Technician engaged on a series of consultations with program managers resulting on a credible assessment of performance for the 2024 period.

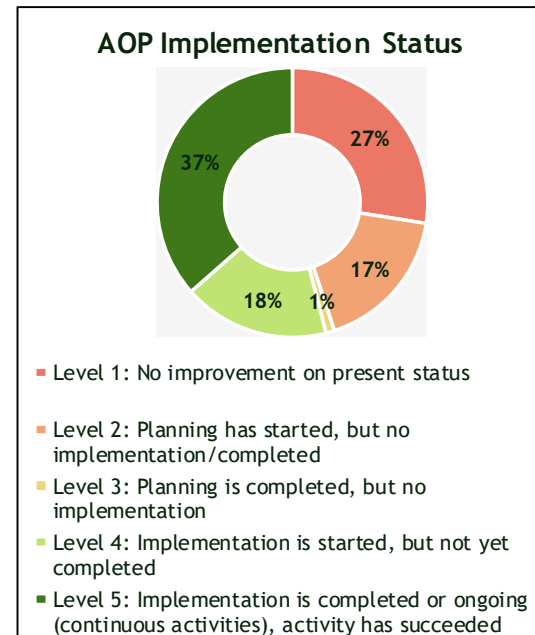
This year 303 management actions were planned for the CNP under the guidance of the 2023-2028 Chiquibul National Park Management Plan, and the Chiquibul Cave System Management Plan. Twenty-seven (27%) of the planned activities showed no improvement in their status, while 73% had varying degrees of implementation progress. Of the implemented activities, 37% were successfully executed or are ongoing, and 18% were in progress but not yet fully implemented. Only 1% had planning completed but did not progress to execution. The remaining 17% are at the initial stages of planning.

Seven programs were assessed. Program implementation ranged between 2.2 to 3.5; indicating that some programs are yet in the planning phase, while planning for others has been completed, but implementation not yet fully achieved. The Public Use Program had the lowest level of implementation (2.2) due to setbacks in tourism development. The Karst Program averaged 2.7, due to limited progress in advocating for World Heritage Status of the Chiquibul Cave System and the renewal of the Management Plan and Co-management Agreement. The Administrative, Natural Resource Management, Stakeholder Outreach and Education, Infrastructure, and the Research and Monitoring Programs all had implementation Level above 3, indicating completed planning and active, though not yet fully finished as these are ongoing tasks.

Seventeen barriers to successful implementation were identified. Management actions were not undertaken because (1) they were not of immediate priority and can be undertaken later in the duration of the Management Plan, (2) poor coordination and equipment availability limited implementation (logistical setbacks), and (3) prior approval and collaborative implementation depended on regulatory agencies.

To improve performance the following recommendations are outlined: Improve planning with the National Biodiversity Office, assess outcomes on a quarterly basis, strengthen collaborative efforts with regulatory agencies and develop and implement a strategy to retain and enhance organizational human resources.

The co-management agreement also requires for FCD to conduct management effectiveness assessment every two years. To meet this, a consultant was contracted this year to assess the outputs. The result shows FCD achieving a score of 76%, similar to the assessment conducted in 2022. In 2020, the score was 74.7%.



Enforcement and Surveillance

Behind the scenes, much planning and coordination takes place every two weeks at the desk of the Park Manager, Derric Chan. Reviewing of grids and reports from the field reveals the hotspot areas of human activity within the limits of the Chiquibul National Park (CNP). These are shared and discussed at meetings with Belize Defence Force (BDF) personnel whereby taskings are set for the troops and Rangers for the next period of duties at the Conservation Posts. Mondays, prior to Ranger deployment, the Park Manager hastily travels to Camp Belizario to join the BDF Commanders for a briefing of the tasks coming up.



For this year, we clearly can report that cattle ranching remains the key threat to the habitat and ecosystems in the CNP. Although the area of impact is well documented and recognized, the efforts have not been able to have any impactful deterrence. 7 targeted operations to destroy cattle fences and other infrastructure were conducted. These operations were done jointly with the Belize Defence Force (BDF) due to the proximity with Guatemala.

A resurgence of illegal logging has been observed in the Caracol Archaeological Reserve (CAR) and the CNP, particularly in the southern Rio Blanco region. Near that same area, a 1.2 km. long dirt road was opened by Guatemalans inside the park limits to have easier access to water for cattle pastures. This triggered an increase of patrols and manpower in southern Chiquibul.

Gold panning continues to occur, 8 kilometers within the CNP boundary, located at the foothills of the Maya Mountains. The limited number of patrols have not helped remedy the problem. In addition, inside the CNP limits, signs of poaching continue to be registered, although it is not as widespread as before. The severity of illegal wildlife trafficking is unclear, since Rangers were unable to conduct anti-poaching activities this year due to the prohibition imposed over us in accessing known poacher routes.



Rangers in the CNP and CAR conducted a total of 128 patrols (7 operational), summing a total of 1,400 km. patrolled. This resulted in 910 hours of active patrolling. In the Vaca Forest Reserve, Rangers conducted a total of 109 patrols on foot and motorcycle, amounting to 1,923 km covered, totaling 664 hours of active patrolling. At the Bald Hills meanwhile, Rangers conducted a total of 281 combined (motorcycle and foot) patrols, amounting for a total of 11,661 km., representing a total of 1,831 hours of active patrolling. Six aerial recces were made along the western flank of the CNP and CAR to document incursions. This year Park Ranger Mainor Sibrian was ranked and awarded as the most accomplished Ranger in the field, while Sergeant H. Peck of the BDF was merited with the best patrol officer in the Chiquibul National Park for the year 2024.

The team of Rangers suffered several changes this year as 2 senior Rangers left after their ten years of service. With this, new staff have started to evolve as future leaders. To maintain the skills and confidence several trainings were undertaken for the Ranger team, including Tactic Fire Course, Jungle First Aid, Search and Rescue, Basic Medic, Basic Life Support, Social Safeguards, Basic Firefighting, SMART and Special Constable.

Research and Monitoring

The Research team conducted research and monitoring activities using carefully designed methodologies. The six-person team comprised of a BRIM Technician, a Data Analyst and four field assistants have the primary objective of evaluating the status and conditions of the conservation targets identified in the Chiquibul National Park Management Plan. These targets consist of **Tropical Broadleaved Forest, Aquatic Systems, Scarlet Macaw, Jaguar, Upper Elevation Amphibians and Karst Systems**

The field activity; therefore, included monitoring of the Scarlet Macaw in the Chalillo Lake, the monitoring of water quality in five main sub-watersheds, monitoring of the forest cover and monitoring of wildlife using cameras with emphasis on the Jaguar and White lipped Peccary; that are key identified species.



For the 2024 Scarlet Macaw nesting season, a total of 21 active nests were systematically monitored along the Macal and Ruspaculo River. Of these, a total of 11 Scarlet Macaw nests (52.38%) produced natural fledglings; a total of 5 nests (23.81%) did not produce any naturally occurring fledging because chicks were extracted to be hand reared at the Las Cuevas Research In-Situ Laboratory, while 5 other nests (23.81%) had natural nest failure. A total of 57 eggs were documented, out of which 37 eggs hatched, equivalent to 64.9% hatching rate. The number of eggs laid was highest in 2024, since monitoring started in 2012 while the hatching rate was the second highest since 2016, where there was a 77.8% hatching rate. Out of the 37 eggs that hatched, only a total of 19 chicks fledged from natural cavities along the Ruspaculo and Macal Rivers which is equivalent to 51.35% fledging rate. A total of 9 chicks (21.62%) fledged from the In-Situ laboratory.

In the area of water quality, the 2024 document titled, “An assessment of In-Situ Physiochemical Water Quality Parameters in Streams of The Chiquibul Ecosystem and Bald Hills,” indicates that for the most part the headwaters are consistent with a healthy aquatic system. The Ruspaculo and the Macal River, while still healthy water systems, did present data that are consistent with environmental impacts caused by the Chalillo reservoir. Overall, the Chiquibul boasts a healthy aquatic system that maintains a balance of these water quality parameters, supporting diverse and productive ecosystems. Regular monitoring and management are essential for maintaining these conditions and address any deviations that may indicate environmental stress or degradation.

This year the installation of wildlife trap cameras was more limited in land coverage. A total of 15 stations (30 cameras) generated data that presently are yet being analyzed. It is important to note, however, that the latest report from Panthera concludes that, “Chiquibul is a recovering ecosystem and with the protections in place, it would be imperative that this area is monitored over long-term to monitor jaguar and prey population, as they are considered an umbrella species.” The report further notes that “This area is still under recovery after the pressures suffered by Guatemalan incursions in the Chiquibul, but there are positives (e.g. presence of white-lipped peccaries) that over long-term monitoring would show the slow recovery of this ecosystem.”

Throughout the year Park Rangers operate and launch patrols from 6 Conservation Posts in the Chiquibul



Annually the Research Unit spends 7 months conducting biomonitoring of scarlet macaws



Community Development and Extension

FCD's community development efforts were widespread covering not only the area where we operate traditionally but added new areas. In the Vaca plateau a community climate adaptation plan was developed to identify specific considerations related to climate change that can help guide support to the farmers in the Vaca Forest Reserve. Two meetings were held in the Arenal area to assess the viability for instituting a women conservation effort that can have some positive effect in building stewardship for the Vaca Forest Reserve. The Extension Technician, meanwhile, continued working with 12 farmers inside and buffering the reserve, providing vital technical assistance in areas of agriculture and fire prevention/suppression.



Through the UNDP GEF6 Project, FCD's Environmental Educator reached out to the Valley of Peace SDA Academy for the development and activation of a community nursery. Via a formal agreement the Academy became responsible for caretaking the nursery which harbors a total of 3,500 seedlings. By the end of the year, another nursery was started up in the village of Bermudian Landing. This time with a partnership established with the Community Baboon Sanctuary.

In the Toledo District, through a collaboration with the Maya Leaders Alliance (MLA), Julian Cho Society and the Toledo Alcalde Association, a common objective has been to strengthen outreach and communications to raise awareness about the threats of forest fires in Belize, promote best practices in indigenous Communities in Southern Belize and raise the profile and visibility of the Chiquibul–Maya Mountains. In this regard, The MLA's Community Outreach Coordinator under the slogan of “Healthy Forest, Healthy People and Healthy Community”, had the participation of students planting over 200 seedlings, erection of 15 environmental sign boards with messages: **Protect Mother Earth, Plant More Trees, Don't Play with Fire, Stop Littering, Don't Cut Trees**, and reducing, reusing and recycling materials.



In the Red Bank community located in the Stann Creek District, a community consultation process is ongoing that may support for a more community driven approach to the protection of scarlet macaws. So far, the individuals interviewed support the initiative; however, the key recommendation has been to launch meetings at the community level organized by the local alcaldes and chairmen from 4 key communities.

Birds recorded for the Chiquibul stands currently at more than 300 species



Studies indicate that approximately 350 individual scarlet macaws are found in Belize



Vaca Forest Reserve

FCD's mission in the Vaca Forest Reserve is to conduct research, biodiversity monitoring, and promotion of alternative livelihoods.



With high temperatures, forest fires were prominent in the areas where FCD operates.



FCD centered its fire suppression efforts in the Vaca and Chiquibul National Park



Outreach and Education



FCD prides itself as an institution that stoically has maintained a vibrant environmental education and outreach program. Justin Pook has not failed us in keeping this program rolling. This year, the main topics addressed and delivered included: forest fire prevention, poaching, river conservation and forest protection.

During the dry season, Justin and the Extension Technician reached out to the farmers inside and adjacent to the Vaca Forest Reserve, sensitizing them about the importance of opening fire lines, obtaining the adequate permits for burning and where to reach for reporting illegal forest activities. In the end there were several farmers that abided with the rules, but it took only a few indiscriminate acts to create major impacts in the reserve. For weeks both farmers and FCD staff then tuned from prevention to combat of forest fires. A total of 286 mandays of fighting fires ensued. The main target was to prevent the cross-over of fires into the eastern section of the reserve.

The protection of the forest took a different perspective in the southern Toledo District. Here under the slogan, **'Healthy Forest, Healthy People and Healthy Community'**, the Outreach Educator, Elodio Rash of the Maya Leaders Alliance conducted 9 school visits in three communities covering the ecological importance to forest, Human Impact on forest, Conservation and sustainable practices and the collective action to protect forest. A total of 105 students participated in Environmental Education awareness. Then during the month of July, a total of 76 students participated in the Summer Camp Initiative 2024. The Initiative was done in two cohorts: Cohort one included students of STD 4-5 of San Vicente and STD 5 of Jalacte. Cohort two included students of STD 4 of Jalacte and STD 4-5 of San Jose.



In the Red Bank area the topic of poaching was the central topic led by the Community Outreach Coordinator, Miss Ornella Cadle. Macaws are threatened in the Eastern Maya Mountains due to habitat alteration but also poaching. The program has recently started, and so far 175 students have been addressed in 3 communities.



Meanwhile, in Central Belize Justin Pook advanced well in reaching out to 13 communities located along the Belize River. For the UNDP GEF6 project titled, 'Integrated Management of Production Landscape to deliver Multiple Global Environmental Benefits', two messages were key in the outreach programming: (a) Legislation and authorities that manage the water resources and (b) Importance of water as a global environmental benefit (GEB). By the end of the year, a total of 1,035 children, 228 youths and over 140 adults were sensitized about the importance of the Belize River. A total of 100 cloth market bags, 100 t-shirts, 1,000 pencils, 100 nylon string bags, 100 aprons and 600 posters have been distributed and 13 expos were attended to enhance environmental awareness.

Cooperation and Confidence



The binational effort based on the aim of protecting the Chiquibul-Maya Mountain ecosystem with partnerships in Guatemala continued this year with the formalization of three agreements. Early in the year a new Government was inaugurated in Guatemala, with this, new authorities were set in place. Through the coordination of La Mesa Inter-Institucional de Tierra y Ambiente (MITA) Secretariat, Donald Perez, a first seating of new municipal alcaldes saw a review, endorsement and signing of a 4-year tripartite agreement with five alcaldes of the Commonwealth of Municipalities of Southern Peten, Asociacion Balam and FCD. This agreement provides and enables for us to engage with Guatemalan communities located on the adjacency zone in areas of environmental protection and community development.

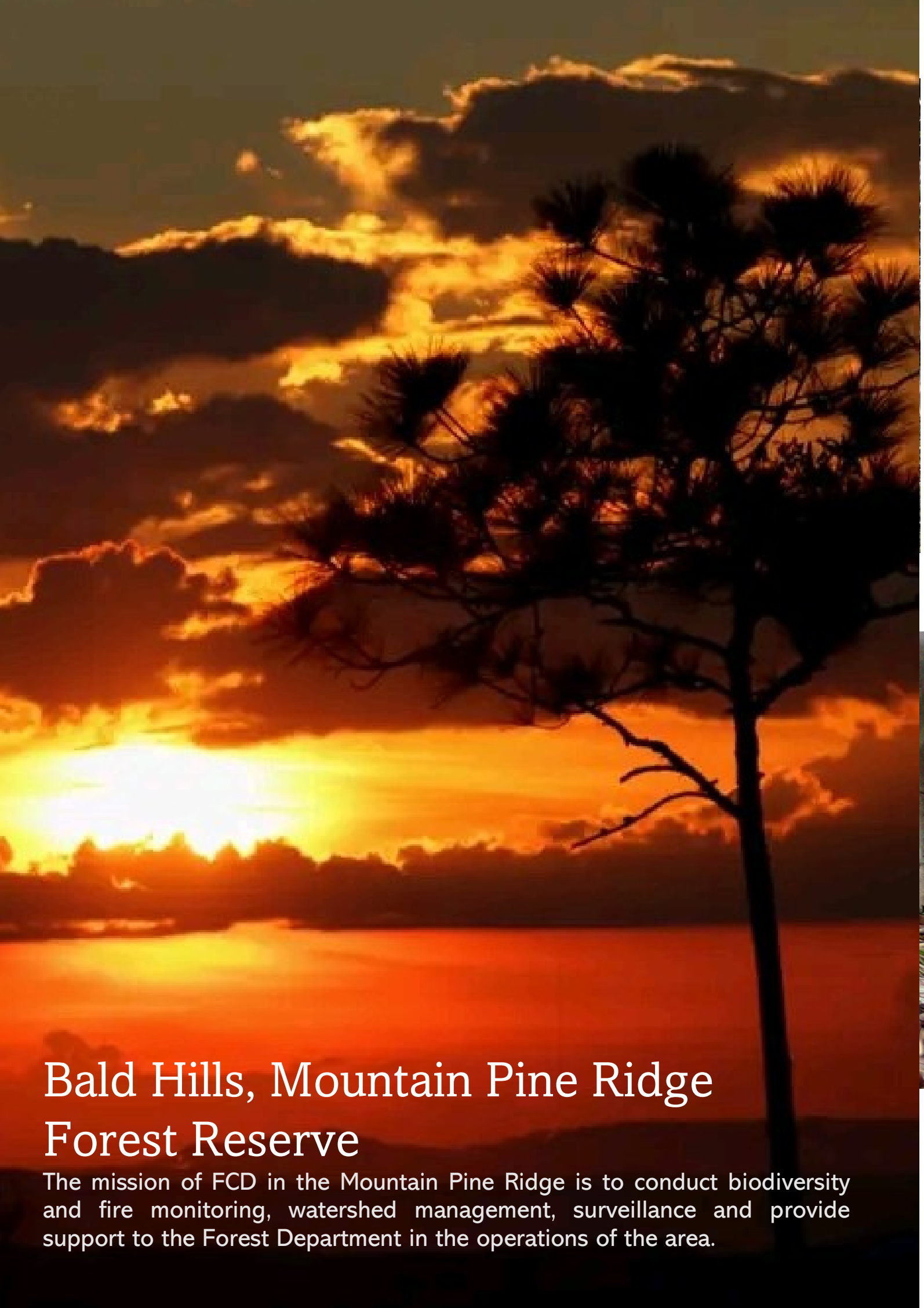
The second agreement took place with ASIPROCOM whose main mission is to protect and restore the Chiquibul and Mopan Rivers in Guatemala. The arrangement with this Guatemalan NGO, which is located in the village of Cidabenque enables FCD to jointly plan, coordinate and execute public outreach, clean-up campaigns and reforestation of riverine ecosystems. It is expected that a similar NGO from Belize can join this binational effort following FCD's Advocacy Strategy which recommends the inclusion of other grass root organizations and promote community participation.



The third agreement was signed with Asociacion Balam which marks another phase of 5 years of collaboration between the two like-minded conservation organizations. Balam has served as FCD's primary counterpart in Guatemala since 2011. This collaboration has been the key instrument for diversifying other partnerships in Guatemala; highlighted the serious necessities lacking among communities on the adjacency zone and has brought international attention to the environmental crisis. More important Balam has been the champion for instituting alternative livelihoods in hotspot communities thereby helping reduce conflict and incursions into Belize's Chiquibul National Park.

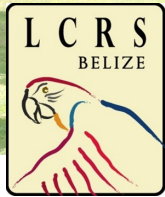
By the end of the year, a systematization of success stories, lessons learnt and effective tools and strategies were examined by Balam and FCD Managers. The overall assessment shows that the binational effort led by Balam and FCD for more than 13 years is a type-example of the important role of NGO's in addressing complex environmental, social and economic issues amidst a sensitive and precarious frontier.

This year the Binational Taskforce for the Prevention and Combat of Forest Fires and the Taskforce on Illegal Wildlife Trade were re-established. These taskforces bring together technicians from both Belize and Guatemala to share information, develop actionable plans and assess results.



Bald Hills, Mountain Pine Ridge Forest Reserve

The mission of FCD in the Mountain Pine Ridge is to conduct biodiversity and fire monitoring, watershed management, surveillance and provide support to the Forest Department in the operations of the area.



Research and Recreation

Over the past decade, FCD has transformed Las Cuevas Research Station (LCRS) into a fully functional, off-the-grid research facility with minimal environmental impact. This transformation includes upgraded facilities and equipment, the establishment of modern communication infrastructure, and adherence to international health and safety standards. Today, Las Cuevas stands as a testament to sustainable development and conservation.



The Universities that visit LCRS annually use the destination for running their ecological and biological classes. These apply for research permits from the Forest Department following the national guidelines for the conduct of scientific research. Since 2016, over 3,158 researchers and students have visited Las Cuevas, gaining invaluable experience through field courses and knowledge exchanged by FCD staff. This influx of researchers has not only enhanced our capacity-building efforts but has also positioned Las Cuevas as a hub for scientific excellence and innovation.

This year Las Cuevas expanded its facilities by the upgrading of the Dry plant building into a dormitory with the capacity to cater for up to 12 persons. This year the Research Station catered for 501 guests. 84 foreign students who stayed at LCRS marveled at the biodiversity and tranquility of the place. These students came from the University of South Wales, Brentwood College School and Durham University, among others. Dr. David Lee of the University of South Wales, in writing his report and submitting it to the Forest Department, wrote, “Some important findings include the first record of Scaled Antpitta for Belize and, potentially, three new bat species records for Belize. We have submitted the Scaled Antpitta record to Cotinga for publication and are looking at the bat records in more detail.”

Other guests at Las Cuevas included 154 local school children and 28 family members. The children and teachers spent the time hiking the trails, climbing the tower lookout and admiring the landscape. Justin Pook, FCD’s Environmental Educator made sure to join the children on bus and served as the main guide of the one-day trips.



Keeping with the definition of specialty tourism, LCRS also catered for low impact, low number of naturalists who visited for bird and dark sky watching. 17 persons did birdwatch. The main group visited as Birders celebrating Global Big Day on the 11of May. Tour Guide Richard Harris wrote, “Finally, as the golden hues of dusk painted the sky, we made our way back, weary but triumphant. With a total of 160 species recorded and tons of photographs. Our Global Big Day had been nothing short of spectacular. Las Cuevas Research Station is a very interesting place to bird and has a variety of species.” Another 69 persons as tourists to view the landscape. Additionally, 56 persons came and used the facilities for meetings, 66 for conducting research and 27 for training.

The jumping viper is one of the venomous snakes found in the humid areas of the Chiquibul



44 reptile species have been recorded for the Chiquibul. Of these the Morelets Crocodile is on the list of conservation concern





Starry night at Las Cuevas Research Station



Buffer Protection

The Macal River traverses a series of protected areas including the Chiquibul National Park, Mountain Pine Ridge and the Vaca Forest Reserves. Located on this river is also the Hydro Upstream Storage Facility comprised of the Chalillo, Mollejon, and Vaca Hydroelectric Projects. Fortis Belize, plays a pivotal role in Belize's energy landscape, having ownership and operation of these three dams. Within this landscape are also forests summing up to 1,700 acres.

Since 2018 FCD has established a relationship with Fortis Belize to assist in overseeing protection of these forested areas through the Eco-Guard Program. This year the 7 person team maintained a presence throughout the year, night and day. The presence of FCD staff played an essential role in monitoring and controlling any human footprint that can subsequently advance into the Chiquibul National Park from these buffer areas; these include hunters, farmers and outdoor campers. No major issues were registered this year, although with the pave road advancing on the Chiquibul A10 Road, this condition is prone to change.



Eastern Maya Mountain



Annually, by October macaws fly from the high-elevation region of Chiquibul to the low-elevation eastern Maya Mountain foothills, and especially Red Bank. The Red Bank area now remains as the most important feeding ground for the Scarlet Macaws where they east on polewood and coffee tree. By March the red feathered birds return back to Chiquibul. But this area is under threat from habitat loss.

This year, the Southern Mo'h Working Group comprised of the Forest Department, National Biodiversity Office, community leaders and FCD launched a community outreach program led by Miss Ornella Cadle. Both adults and children are learning more about the importance of macaws as a tourism attraction in the area, the economic benefits and the local pride for hosting such a spectacular bird. Targeted communities include Red Bank, San Pablo, San Roman, Georgetown and Maya Mopan. The working group has also been advocating for the creation of a Wildlife Sanctuary to include the primary feeding grounds for the macaws. Individual surveys are being conducted to document the community perspective. But time is of essence since habitat fragmentation is a grim reality.

In 2012, the BERDS listed 584 invertebrate species from the Chiquibul based on a total of 4,066 records. Most of these were butterflies, moths and dragonflies.



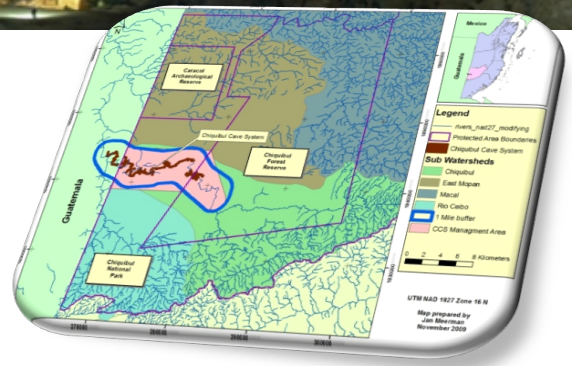
Based on the BERDS database, 26 Amphibian species have been recorded for the Chiquibul. Of these no less than 12 species are on the list of conservation concern



Inventory and Mapping

Without a doubt the Karst Management Unit (KMU) continues to make astounding cultural heritage discoveries in the Chiquibul National Park and the Chiquibul Cave System.

The Karst Management Unit efforts focus on the preservation of our cultural heritage through inventory, monitoring and documentation of natural and cultural features within the Chiquibul National Park. This year the 3 person team spent 46 days in patrol and monitoring for illegal activities, while a similar number of days was used for inventory. Recent looting activity was documented in the northern area. Two vessels were extracted by the Institute of Archaeology due to the hazard of being looted, while an archaeologist retrieved 11 cultural artefacts.



With the completion of inventory and mapping in the Chiquibul Cave System, the KMU has moved their efforts this year, North of the CNP where great finds have been continuously documented. Blocks North of the CNP has been divided into two sectors. Section 1 has a total of 30 identified blocks of which all have been documented, explored and added into the repository of data at the Institute of Archaeology. Section 2 has a total of 42 blocks; of which only a total of 4 block have been explored and documented. To date 34 blocks North of the Chiquibul National Park have been completed within a span of 11 months.

A total of 115 features have been documented within an area which covers 24 blocks. Blocks have produced unique architectural structures of abandoned sites, such as causeways, terraces, house mounds- structures, modified reservoirs, caves with modified architectures (walls, terraces, platforms), tombs, caches, ceremonial dumps, polychrome vessels, jade ear flares, pots, plates, obsidian blades, worked shells (beads, spindle whirles), grinding stones (manos and metate), modified bones (needles) and remains. The documented features and artifacts underscore the importance of sustaining the exploration and preservation efforts to safeguard this historical treasure trove.



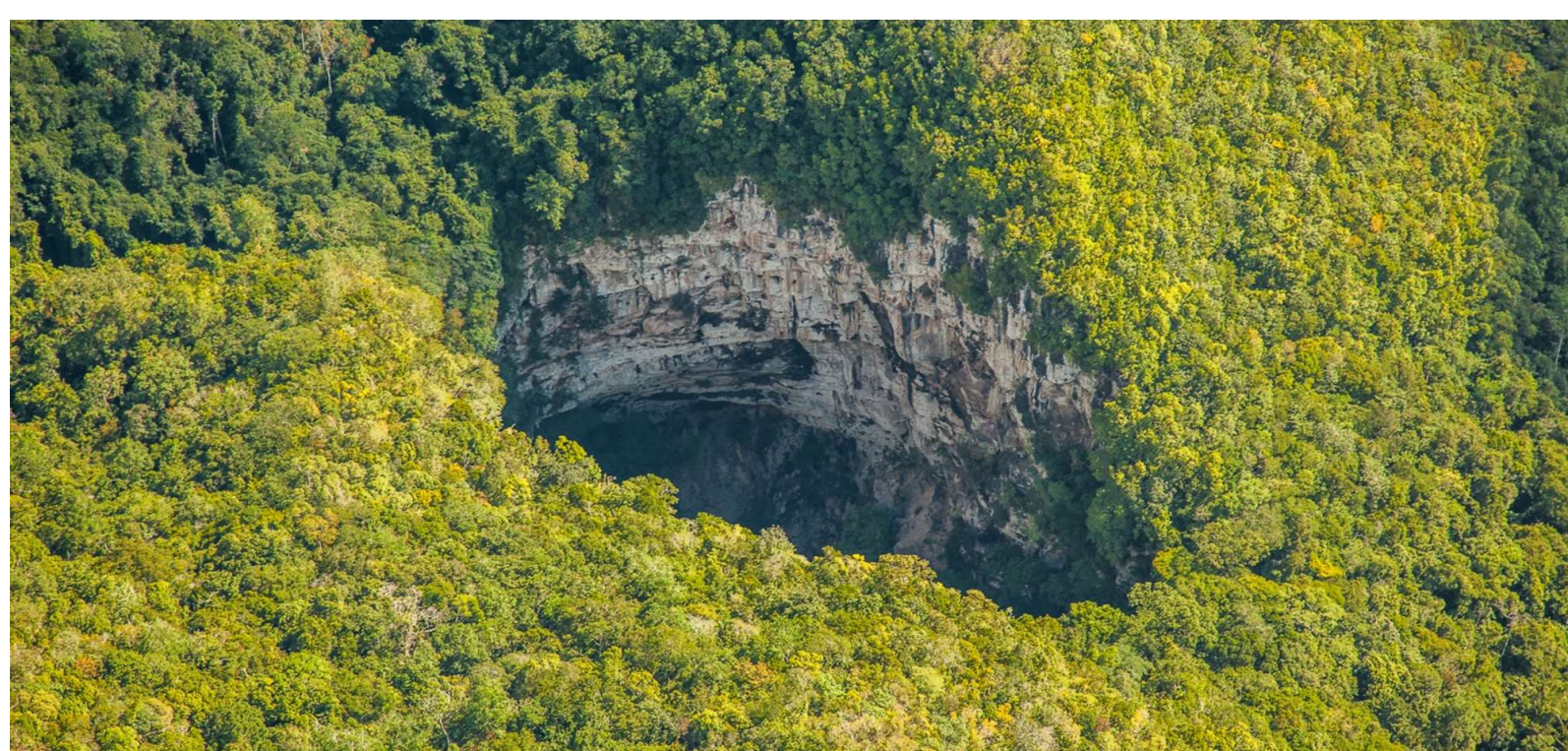
This year, the KMU underwent special training from an expert group of American cave specialists. The 5-person team coordinated through the US Department of the Interior-International Technical Assistance Program arrived to Belize during the month of April on a 12 day technical visit. The USDOITAP and cave specialists worked with the KMU staff to assess, train and outline a roadmap of next steps to meet karst management objectives. The report produced by Savannah Agardy notes, “Belize is renowned for its exceptional biodiversity above ground, attributed to its

diverse habitats, expansive wilderness area and minimal human disturbance. This rich biological tapestry extends underground, particularly within the Chiquibul Cave System.”

The largest chambers of the CCS are known as the Belize Chamber and Chiquibul Chamber



One of the many entrances to the first system of caves, Actun Kabal



Partnerships

FCD is honored to have worked with more than 90 partner institutions from Belize and abroad. From the private sector and community-based organizations to government and international organizations, they have made our work more effective and result oriented.

GOVERNMENTAL AGENCIES

Belize Defence Force
Belize Forest Department
Belize Police Department
Immigration Department
Institute of Archaeology
Agriculture Department
Belize Tourism Board
Hydrology Unit
Department of the Environment
National Biodiversity Office
Ministry of Foreign Affairs
Ministry of Defence and Border Security
Ministry of SD, Climate Change
U.S Department of the Interior-ITAP
USAID
U.S Fish and Wildlife Service
US Forest Service
British High Commission of Belize
British Army Training Support Unit Belize
Consejo Nacional de Areas Protegidas (Guatemala)
Organization of American States
Protected Areas Conservation Trust
Ministry of Education (Cayo District)
Commonwealth of Municipalities of Southern Peten



COMMUNITY BASED ORGANIZATIONS

Caretakers for Our Rivers & Environment
Grupo Integral para Conservación de las Cuencas
Todos Por Un Mundo Verde
FCD Environmental Youth Group
Friends of Vaca Forest Reserve
Friends of Lower Dover
Itzamna Society
Maya Leaders Alliance
Julian Cho Society

Upper Macal Watershed Working Group
Red Bank Bed and Breakfast
Southern Mo' Working Group
Exploring Solutions Past ~ The Maya Forest Alliance

NON-GOVERNMENTAL ORGANIZATIONS

Association of Protected Area Management Organizations
Centre for Strategic Studies, Policy Analysis and Research

Asociación Balam
Programme for Belize
Belize Maya Forest Trust
Engaged Scholarship & Service Learning
Foro de Justicia Ambiental
Belize Wildlife and Referral Clinic
The Belize Zoo and TEC
Harvest Caye Conservation Foundation
Chaa Creek Foundation
Wildtracks
Institute for Social and Cultural Research
Natural History Museum of Belize

Toucan Ridge Ecology and Education Society

INTERNATIONAL ORGANIZATIONS

United Nations Development Program
The European Nature Trust
Forecastle Foundation
Sisters of Nazareth
The Nature Trust of the Americas
Toucan Education Programs
Wildlife Conservation Society
World Wildlife Fund
Panthera Belize
GIZ-Selva Maya
Adventure Travel Conservation Fund
Wildlife Media
Global Financial Integrity



PRIVATE SECTOR

Belize Communication Services Limited
Fortis Belize Limited
Chaa Creek Inland Expeditions
Hidden Valley Inn
Blancaneaux Lodge
John and Susana Vanzie
Bull Run Farms
Pacific Heights
Cayo Cargo
Turtle Inn

GAIA River Lodge
Channel 5 Belize

Channel 7 TV
Bissystems
RST Consulting

ACADEMIA



University of Belize - ERI
Brentwood College School
Durham University
University of South Wales
Southampton University
University of Saint Andrews
University of California, Merced
University of California, Davis
Saint Catherine Academy
Valley of Peace SDA Academy



Table Rock Lodge staff visiting Las Cuevas Research Station

Board and FCD Staff

STRATEGIC GOAL

FCD aims to conserve the natural and cultural resources of the western Chiquibul Maya Mountains for the sustainable development of Belize.

BOARD OF DIRECTORS

Ms. Susana Vanzie – Board President
Dr. Elma Kay – Vice President
Mrs. Tanya Santos Neal – Treasurer
Mrs. Valerie Woods Smith– Secretary
Mr. Mick Fleming – Director
Mr. Mark Wilkins – Director

STAFF

Rafael Manzanero, Executive Director

Esther Sho, Programs Director
Diana Garcia, Accounts Clerk
Derric Chan, CNP Manager
Ornella Cadle, Outreach Coordinator
Rafael Mesh, Assistant Station Manager
Marco Diaz, Chief Ranger Level I
Steve Joel de la Fuente, Station Caretaker
Yasmini Manzanero, Cultural Heritage
Alexander Pop, CNP Ranger
Mainor Tzalam, CNP Ranger
Samuel Chavarria, CNP Ranger
Josue Najera, Research Assistant
Darwin Rivera, MPR Ranger
Joshua Seguro, Research Assistant
Gerardo Magana, CNP Ranger
Emiliano J. Enriquez, CNP Ranger
Mynor G. Sibrian, CNP Ranger
Simon Lotiff, MPR Ranger
Alberto Cruz, Eco-Guard
Yordi Esquivel, CNP Ranger
Christian Mena, Research Assistant
Rocendo Chun, CCS Ranger
David Benjamin Cruz, Eco-Guard
Daniel Cruz, Eco-Guard

Luceli Itza, Finance Manager
Salvador Mesh, Landscape Manager
Wilford Pook Jr., Enviro Educator
Wilmer Guerra, Data Conservation Manager
Ronnel Melendrez, CCS Ranger
Donicio Cal, CCS Ranger
Kenny Pech, CNP Chief Ranger and Medic
Erwin Chi, CNP Ranger
Ellsworth Sutherland, MPR Ranger
Evaristo Pop, Research Assistant
Lizandro Tun, CNP Ranger
Alden Chi, CNP Ranger
Marcos R. Enriquez, CNP Ranger
Eduardito Mendez, Extension Technician
Santiago Cal, CNP Ranger
George Pott, Data Analyst
Irvin Choc, CNP Ranger
Aron Canchan, Receptionist
Douglas Monroy, VFR Ranger
Elton Gian Cantun, Chief Eco-Guard
Eric Antonio Max, Research Assistant
Ken Smith, Eco Guard
Axel Castellanos, Eco Guard
Angelica Morales, Cook
Carrin Martinez, Janitor



**CHI-HAH STREET
SAN JOSE SUCCOTZ
CAYO DISTRICT
823-2657
www.fcdbelize.org**