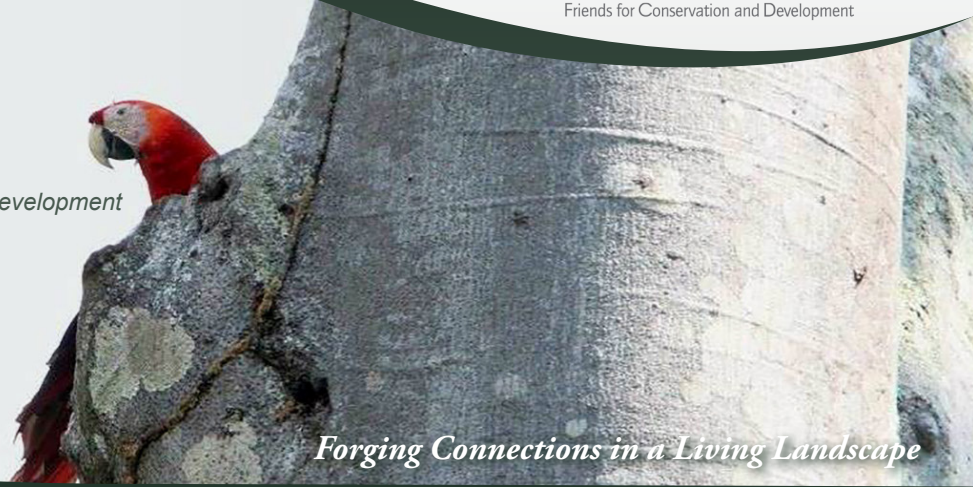


FCD Tracks

The Official E-Bulletin of Friends for Conservation and Development
December 2023, Issue #49



Forging Connections in a Living Landscape

In This Issue

2023 Patrol Report

Page 2

Community Survey
Finalized

Page 2

2023 Nesting
Season Ends

Page 2

Stakeholders
Discuss Tourism

Page 3

Stocktaking in
Vaca F.R.

Page 3

Binational Taskforce
Reactivated

Page 3

Jaguar Data
Sharing Signed

Page 4

Annual Operation
Plan Submitted

Page 4

24th AGM Held Successfully



FCD's 24th Annual General Meeting was held once more at the San Ignacio Resort Hotel bringing together over 80 guests for a 2.5-hour event. Behind the scenes, the FCD staff had converged a planning committee 2 months earlier to organize and coordinate the event. The work of the Committee became glaringly obvious through the excellent execution of the AGM that took place on December 10th.

FCD's calendar runs from November 1st to October 31st, therefore by the end of the year, a summation of results and

achievements as well as the financial report are ready for presentation to members, supporters and donors. This year, apart from the technical and financial reports several awards were provided to FCD staff for their excellence on the job. Wilmer Guerra earned the Managers Award, Ranger of the Year went to Irvin Choc, while Ellsworth Sutherland earned the Field Staff Award. BullRun Enterprise Limited and Boris Arevalo PhD were awarded as FCD Champions, while Officer Moguel of the Belize Defence Force was awarded the best Patrol Commander.

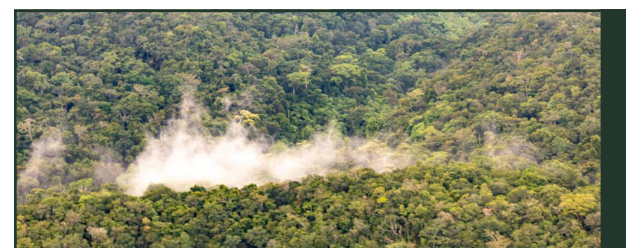
Guest speaker, Hon. Eamon Courtenay, Minister of Foreign Affairs, Trade and Immigration on his keynote address said, "Ladies and gentlemen, FCD is on the frontline protecting Belize, and at the forefront of conservation in Belize. With FCD in the lead I believe the future is promising. I ask you to remain committed and faithful to your noble endeavor."

The AGM concluded with the nomination of Mrs. Amanda Cabot as a new Board member and awarded Mr. Tony Rath for his excellent 6 years of service as Director.

State of Chiquibul Report Released

A report titled, "Status of the Chiquibul Forest: A Situational Analysis of Major Threats to the Tropical Broadleaf Forest Cover" was released by FCD in December. The report describes several threats including, cattle ranching, narcotic plantations, gold panning and forest fires. The human footprint, from a transboundary nature, affects approximately 4,725 hectares of forest cover in the Chiquibul National Park, equivalent to 4.4% of the park. In the Caracol Archaeological Reserve the human footprint amounts to 2,134 hectares, or 20.6% of the reserve.

Digitization of an October 11, 2023, sentinel-2 imagery indicates that approximately 1,927.38 hectares of tropical broadleaf had been encroached for agricultural purposes in the Chiquibul Forest. When comparing the data from the digitization of the deforested area in the Chiquibul Forest, from 2015 to 2022, there has been approximately 46.5% marked decrease in the total deforested area for agriculture encroachments. Deforestation levels reached its peak at around 2015, when deforestation for agricultural use was approximately 4,140.67 ha. Approximately 813.7 hectares



of tropical broadleaf forest is being actively encroached for cattle ranching, with an average of 83 cattle fences documented. While a total of 606 hectares of the forest canopy had been affected by forest fires. In terms of gold panning, a 2020 study indicated that 169.10 acres of the Rio-Ceibo sub-watershed was being directly impacted.

Among the multiple recommendations, FCD recommends the revision of the Joint Forces protocol, in order to strengthen collaboration with regulatory agencies and implement a Patrol Plan that is more targeted and impact oriented for 2024 and beyond.

2023 Patrol Report



FCD's Data Analyst throughout the year has been collating and analyzing Ranger patrol efforts across the Chiquibul-Maya Mountain landscape. The sum of these efforts for the period November 2022 to October 2023 was released on a November report titled, "Protection of the Maya Mountains Massif through Monitoring and Surveillance". The total number of patrols launched from the Conservation Posts in the Chiquibul Forest summed 203 patrols, which represented 2,065 km. patrolled on foot and 2,871.4 km patrolled on vehicle. This resulted in

1,419.6 hours of active patrolling and monitoring within the Chiquibul Forest, including Tapir Conservation Post, which is the Ranger's main headquarters, especially for the months of February, May and June which amounted a total of 102 patrols, equivalent to 50% of the total patrols undertaken for all Conservation Posts.

At the Bald Hills in the Mountain Pine Ridge Forest Reserve, between November 2022 to October 2023, the two Ranger team conducted a total of 200 combined (motorcycle and foot) patrols, which amounted to a total of 5200 km. of patrol coverage and a total of 533 hours of active patrolling in the area. In the Vaca Forest Reserve, from November 2022 to October 2023, the Rangers conducted a total of 133 patrols, which amounted to a total of 2,375 km. within a combined patrol (foot and motorcycle) system, representing a total of 630 hours of active patrolling within the reserve.

Patrols are the primary intervention to assert a presence across the landscape, therefore for 2024 the recommendation is to be more versatile in the coordination and mobilization of rangers to follow a more consistent Ranger presence and ensure that there is a justifiable quantity of Rangers at each designated Conservation Post.

Goal:

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

Mission:

FCD pioneers adaptive management of the Chiquibul Forest to improve the ecological and cultural integrity of the western Chiquibul-Maya Mountains.

Community Survey Finalized

Community survey questionnaires are important research tools utilized at FCD to obtain and understand the public's knowledge, attitude and behavior towards the environment. During the month of November FCD's Environmental Educator along with three volunteers conducted a survey among 13 communities located along the Upper and Lower Belize River to know of the communities' perception and understanding of the Belize River as a source of multiple environmental goods and services.

The survey was comprised of 29 questions and 400 persons were interviewed from Esperanza, Spanish Lookout, Unitedville, Ontario, Teakettle, Roaring Creek, Valley of Peace, More Tomorrow, Big Falls/Willow's Bank, Flower's Bank, Double Head Cabbage, Isabella Bank and Bermudian Landing.

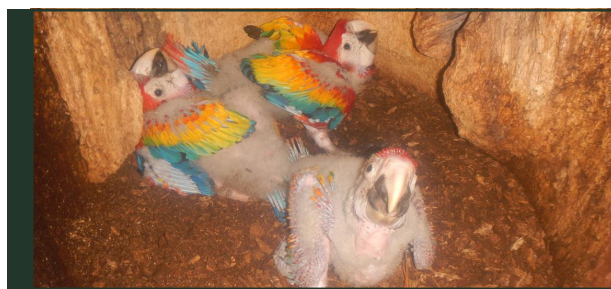
The result shows that the people have limited knowledge about the condition of the Belize River Watershed and the threats affecting the water resource at the community



level. As well it was found out that at the village level there is limited efforts for the protection of the watershed, and community organization for the protection of the watershed is low.

Based on these results, the Environmental Educator is better equipped to design and develop a workplan that is more targeted and impactful aimed at promoting community participation in the protection of the Belize River.

2023 Nesting Season Ends



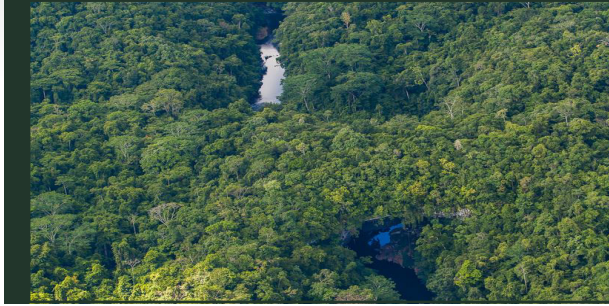
Another nesting season has successfully been undertaken by the FCD Research Unit together with a cohort of 20 individual volunteers. This year the Research Unit spent 7 months monitoring the nesting areas in the Chiquibul Forest. Their work ranged from identifying and cleaning potential cavities, monitoring the chicks and patrolling the area, while the 20 volunteers assisted with 196 days of

presence during a period of 8 weeks. The Antipoaching Unit on the other hand conducted a total of 94 patrols from May to July. A total of 3,202.1 km (546.6 Kms on foot, 1,791.6 on vehicle and 863.9 kms on motorcycle) were covered which resulted in a total of 479.7 hours of active patrols. Though the patrols resulted in documentations of poachers, there was no apprehension or interception of individuals this year.

Understanding the grim realities of the scarlet macaws in Belize which are known to breed primarily in the Chiquibul-Maya Mountains and its known population to be relatively low with no more than 350 individual parrots; then any assistance and effort pays off to sustain the precarious species in Belize.

By the end of the season, the Research Unit reported the monitoring of 21 active nests. From these nests, 16 chicks fledged naturally to the wild while 5 chicks fledged from the In-situ laboratory.

Stakeholders Discuss Tourism



Without a doubt the development of the paved road to the Caracol Archaeological Reserve will enable easier access to the Mountain Pine Ridge, Chiquibul and Caracol Complex (MCCC). These areas have historically been tucked away from the larger Belizean population. But that is about to change. According to CISCO Construction, the paved road is expected to be finalized by mid-2025.

The paved road will pass along the extreme northern fringe of the park boundary, however, already visitors accessing the road

to Caracol are curious and determined to visit emblematic areas such as the Natural Arch, Doyle's Delight and the foothills of the Maya Mountains. These areas are not yet identified as destination hubs and no public use guidelines are yet established.

With the leadership of CEO Nicole Solano from the Ministry of Tourism and Diaspora, a meeting was convened during the month of November which prompted much discussion about the need to establish parameters, guidelines and structures to ensure that wilderness zones are protected and that proper regulations are established to manage visitation for the future in the MCCC. Those attending, including the Forest Department, National Biodiversity Office, Institute of Archaeology, Belize Tourism Board and FCD recommended the establishment of a moratorium that disallows visitation to remote areas such as the Natural Arch until a time when protocols are established.

FCD believes that the magic of the Chiquibul jungle is the wilderness attribute and therefore, encourages decision makers and stakeholders to work as a collective body to keep it this way, through advanced planning, proper regulations and robust structures.

Stocktaking in Vaca F.R.

The Vaca Forest Reserve (VFR) is one of the most threatened protected areas in the Chiquibul Maya Mountain Massif. The reserve is administrated by the Forest Department with Friends for Conservation and Development assisting with monitoring efforts across 83% of the reserve. FCD has maintained a vested interest in the VFR since it serves as a critical buffer protected area to the Chiquibul National Park.

For the stocktaking exercise a total of 21 farmers were visited from December 2021 to September 2023 to collect data on the different agricultural practices implemented by farmers in the VFR and surrounding areas. The baseline study noted that the most common type of agriculture use in the eastern section of the VFR was vegetable production (47.6%), followed by mixed farming of fruit and vegetable production (28.6%), only fruit production (19.0%) and finally by cattle ranching (4.8%). This indicates that farmers, on average, were operating small productive plots of land to produce vegetables and that cattle ranching is not very common within the eastern section of the reserve. Of the 21 farmers, 19 had one productivity plot, 2 farmers had two productivity plots, and one family had 3 active productivity plots. Out of the 21 farmers inside the VFR,



the majority of them are from Benque Viejo, while 8 are from the village of San Jose Succotz, 1 farmer from Arenal, 1 from Mollejon Area and 1 farmer lives in Camp Six.

To prevent further deforestation within the Vaca Forest Landscape, especially within the VFR, the study noted of the importance for Government authorities to implement a policy that makes illegal the clearing of forest for agricultural purposes but allows the registered farmers to continue using the cleared lands for agriculture but under best management practices.

Binational Taskforce Reactivated



On the 17th of November the binational forest fire taskforce was reactivated with the participation of Programme for Belize, Belize Maya Forest Trust, El Pilar, Spanish Lookout community, Belize Forest Department and FCD. From Guatemala, the participants were representatives from Consejo Nacional de Areas Protegidas (CONAP), Asociacion Balam, Municipality of Melchor de Mencos and SE-CONRED.

During this session the Belize Forest Department gave an overview of fire incidences that occurred in Belize for 2023, while CONAP also presented an overview of the state of fires that occurred in Guatemala for that same period. FCD's

Wilmer Guerra, on the other hand described the fires detected in the Chiquibul Forest for the recent years. He explained that within a 5 kms buffer from the Chiquibul Forest there were great clusters of hotspots detected, indicative of the areas that was burnt during February 2022-October 2023. Up to October 2023, a total of 606 hectares of the forest canopy had been affected by forest fires.

Typically fires due to agricultural burning will originate from the Guatemalan side and slowly creep inside the Chiquibul Forest. For this reason, FCD has sought collaboration from Guatemalan counterparts seeking their help in preventing the advancement of fires into Belize's protected areas. This approach is also important to other Belizean protected area managers that share a border with Guatemala. And under the same principle, Guatemalans seek assistance from Belizeans such as the Mennonite community in preventing cross border fire incidences.

By the end of the session clear contacts of coordination were identified and development of joint actions for the 2024 dry season was began. The articulation of a joint action plan would be presented in early January between the parties involved.

Vision:

FCD envisions healthy terrestrial ecosystems that are sustainably managed for Belize and the region.

Board of Directors

President:

Mr. Mick Fleming

Vice-President:

Dr. Elma Kay

Treasurer:

Mrs. Susana Vanzie

Secretary:

Mrs. Valerie Woods Smith

Director:

Mrs. Tanya Santos Neal

Director:

Mr. Mark Wilkins

Director:

Mr. Tony Rath

Jaguar Data Sharing Signed



The Chiquibul National Park Management Plan identifies the jaguar as a conservation target, therefore the FCD Research Unit annually dedicates efforts in gathering data on the conditions of this species.

Wildlife camera traps are used to detect the jaguar and other wildlife populations. While efforts are concentrated inside the park limits, jaguars are known to cover large territories, thus it becomes important to obtain data from buffering

areas such as the Chiquibul Forest Reserve and Mountain Pine Ridge Forest Reserve. As a result on the 6th of December, FCD signed a two year data sharing agreement with Dr. Marcella Kelly on behalf of the Wildlife Habitat and Population Analysis (WHAPA) Lab at the College of Natural Resources, Department of Fish and Wildlife Conservation at Virginia Tech.

The Parties agreed to enter into a collaborative data sharing agreement with the objective of improving the monitoring of Jaguars and co-occurring felids (cats), as well as their prey species in the Chiquibul National Park and Chiquibul Forest Reserve through a collaborative field research program.

The WHAPA Lab conducts long term monitoring of difficult-to-track large, forest-dwelling carnivores in order to promote biodiversity conservation around the world. In Belize, the WHAPA Lab investigates demographic parameters using non-invasive sampling and modeling; the impacts of timber extraction on jaguars; habitat associations of predators and prey; assessment of meso-predator release and/or jaguars as umbrella species.

Annual Operation Plan Submitted

With approval of the Chiquibul National Park Management Plan (2023 – 2028), FCD proceeded to develop its Annual Operational Plan (AoP) and submitted it to the National Biodiversity Office (NBio) in November. The AoP is to serve as the roadmap for management interventions in the Chiquibul National Park and is to be observed closely by the Park Manager.

The Annual Operation Plan (November 2023 to October 2024), prepared by the Chiquibul-Maya Mountains Landscape Manager, Salvador Mesh, is composed of four main sections. The first section provides a background of the Chiquibul National Park (CNP); including its biological importance, the conservation targets, the threats and the impending impacts of climate change. Section 2 briefly describes the governance framework of the CNP, and the programme areas of management. The third section details activities and timeframes for accomplishing the new fiscal year's objectives. The budgeting and funding section expounds on the allocation needed to support work in the CNP. The last section is a collection of supporting references and appendices.



Seven conservation targets have been identified in the Management Plan of the CNP: Tropical Broadleaved Forest, Aquatic Systems, Scarlet Macaw, White-Lipped Peccary, Jaguar, Upper Elevation Amphibians, and Karst Systems. While five threats to biodiversity have been identified. These includes, poaching of wildlife; deforestation as a result of agriculture and cattle ranching; forest degradation from escaped agricultural fires; illegal extraction in the form of logging, hunting, and looting; and reduced water quality and flow from rainfall deficits, mining and land use change.

E-Bulletin Funded by:

FORTIS BELIZE

For more information contact:

Friends for Conservation and Development
Chi-Hah Street, San José Succotz, Cayo District
Tel: 823-2657 • Email: fcd@btl.net • website: www.fcdbelize.org