

Chiquibul National Park Guatemalan Incursions

A Case for Urgent Action

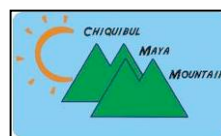


A Technical Report

From: Friends for Conservation & Development

To: The Forest Department

October 14, 2007



Chiquibul National Park

Guatemalan Incursions

Historical Context

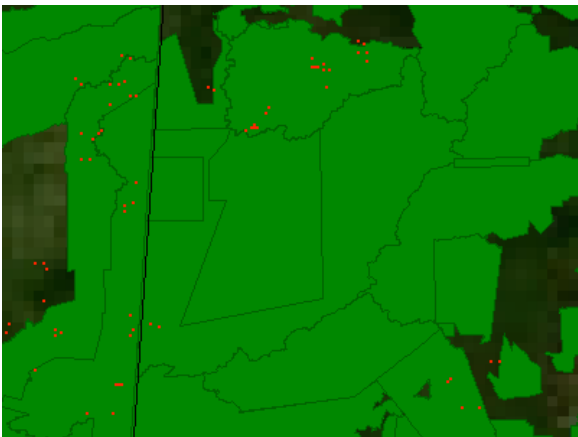
Guatemalan incursions along the borderline were monitored by Bruce King in 1995, and found to occur in 2 places of the Chiquibul forest, namely at Caracol, and Rio Blanco. The amount of agricultural incursions increased significantly over the years, from 280 acres (110 ha) in 1987 when it was a Forest Reserve to 1,710 acres (690 ha) in 1994 [See Appendix #2]. This was a six-fold increase, representing a rate of about 200 acres per year (King 1995).

Incursions in the Caracol area by 1990 was documented to occur about 0.5 of a mile away from Caracol, and therefore threatened its biological and eco-tourism potential. In response to the incursions, villagers were allowed to harvest the forthcoming crop before their encampments were removed by the Forest Department.

Recent Update



On the 26th of April, Friends for Conservation and Development conducted an aerial flight with the assistance of Lighthawk Cessna Plane. The Lighthawk flight resulted with the discovery of various illegal incursions in the Chiquibul National Park. The result in the map showed that those points taken from the plane were 3 km in Belize inside the Chiquibul National Park.



On the 9th of May, Friends for Conservation and Development received a satellite image from FIRMS. The image sent on the 9th and 10th of May revealed that there were two forest fires in the Chiquibul National Park precisely on the same area that Lighthawk had taken points. Friends for Conservation and Development responded to this by arranging a quick reconnaissance to ground truth these points.

On Saturday 12th of May, a team comprised of three Chiquibul National Park Rangers, the Park Manager, Cpl Sho A, and three other Belize Defence Force members deployed to the site to ground truth the area. A rough estimate of clearing in that area was about 100 acres. The area was scouted and the following grids were taken of the plantations:

wp20) - 269903-1830692
wp21) - 269664-1830696
wp22) - 269519-1830774
wp23) - 269696-1830585
wp24) - 269695-1830580



Incisive Gallop 5 was launched by the Belize Defence Force on May 31. Subsequently from the 9th to 12th of June Operation Maize Hunt was launched. It was at this time that an estimate of the incursions was assessed to be about 1,000 acres.

On June 24th a multi-agency meeting was held at the Forest Department Conference Room with the intention of coming up with core resolutions on how to reclaim the integrity of the Chiquibul National Park. From the 28th of June the Belize Defence Force started to destroy the crops. From the 28th of June to the 6th of August 2007, it was reported by the Belize Defence Force that approximately 64 acres had been destroyed, with a remaining of approximately 936 acres left.



On the 8th of October aerial flights were made over the Chiquibul National Park with FCD, Forest Department, BDF personnel and other invited guests on a small plane. Photos taken show the scars of the deforestation, and fresh green patches which may be crops. Observations of major deforested areas were also obvious in the Vaca Forest Reserve.

Updated Mapping

As part of the continuous updating of the 2001 Belize Ecosystems Map (Meerman & Sabido, 2001), based on Landsat tm satellite imagery:

019048_2000_03_28, 30 m resolution
019048_2004_01_27, 30 m resolution
019048_2004_02_12, 30 m resolution
019048_2006_03_21, 15 m resolution
019048_2007_05_11, 15 m resolution
019049_2000_03_28, 30 m resolution
019048_2004_01_27, 30 m resolution
019049_2006_03_21, 15 m resolution
019049_2007_05_11, 15 m resolution

Extent of areas impacted by agriculture along the western borders of the Caracol Archaeological Reserve, the Chiquibul National Park and the Columbia River Forest Reserve are presented in the following table based on GIS calculations.

Name	Acres	Hectares
Caracol Archaeological Reserve	3,303	1,337
Chiquibul National Park	7,725	3,126
Columbia River Forest Reserve	2,485	1,006
Total	13,513	5,469

Meerman [October, 2007] notes that agricultural activities fluctuate from year to year; some fields may be in active use, new fields are being created, others abandoned, others re-used after a fallow period. Since fallow fields are not always easy to detect, the best way to capture these fluctuations is by using multiple images from multiple years. This method also captures areas damaged by escaped agricultural fires, a common side effect of agricultural clearings. The results are polygons reflecting **total** areas impacted by agriculture, effectively forming an “agricultural landscape” which differs greatly from the original forest cover. The results do not necessarily reflect areas in active use.

From the satellite imagery [See Appendix #1], expansion currently appears to be vertical, i.e. along the border and filling in the gaps between the original cleared areas.

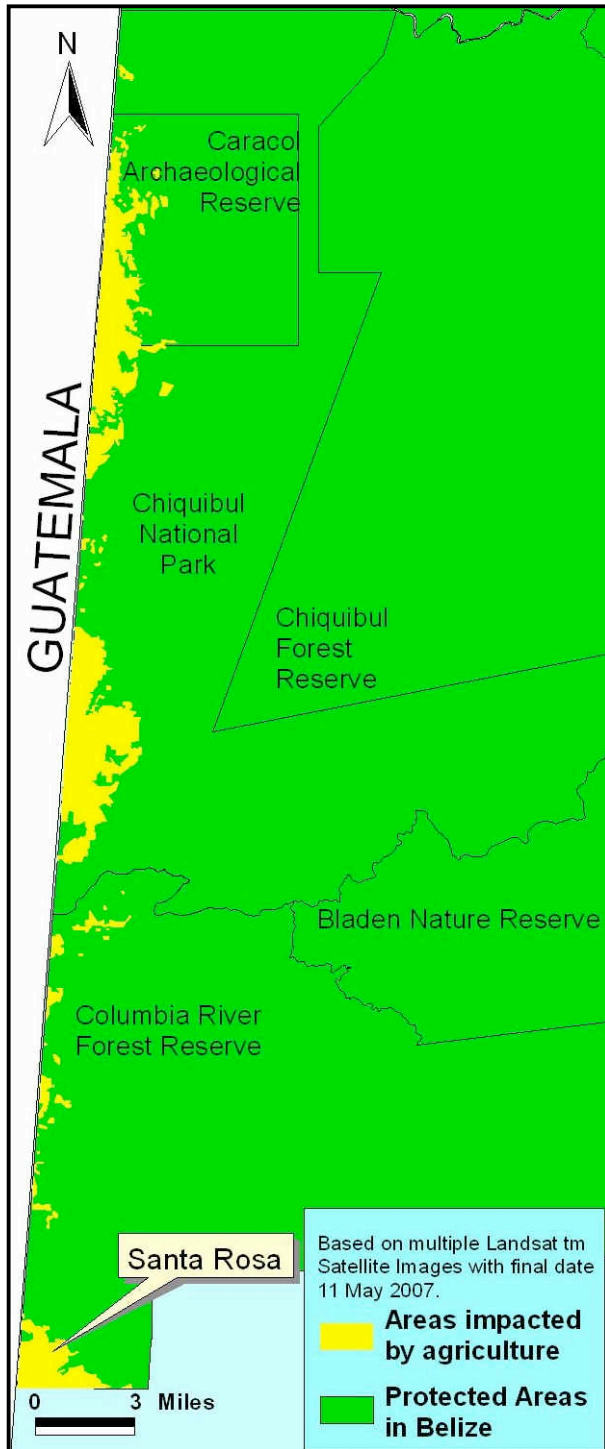
Meerman notes that freshly cleared areas do stand out clearly. Some of it is in rotation, with fields being cleared anew after some time. We may be likely seeing a conversion from shifting cultivation into more permanent farming.

Recommended steps

- Setup a permanent base in the southern edge of the Chiquibul National Park in the Rio Blanco area as soon as possible. Letter required from the Forest Department. The Belize Defence Force has committed to put a permanent presence in the area for at least 2 years.
- Obtain a labor force to include civilians so as to accelerate the destruction of the plantations. The BDF reports indicate that over 970 acres still need to be destroyed. FCD can assist in covering some of the expenses of the labor if required.
- Maintain the military presence in the area permanently. A Police Officer is also necessary. The role of the BDF would be to secure the area, monitor new incursions and prevent any new plantations. They would also provide security to the park personnel in the area.
- Upgrade the road so as to facilitate entrance of military personnel and ranger presence to Rio Blanco area for monitoring and surveillance. Given that helicopter flights in the area are expensive for the deployment of military in the area, the best option is to have a road that can be accessed.
- Request OAS for assistance in becoming more proactively involved with the community members of Monte Los Olivos in regards to Governments position of “no tolerance”. Already a reunion has been held between Government authorities, OAS and the villagers, but the message should be reinforced and emphasized.
- Institute more serious fines for any illegal Guatemalans found in the area in order to demonstrate the firm steps being taken by the Government of Belize.
- Request CONAP for assistance. CONAP can play an important role in informing the community members of the infractions and the fines that can be imposed upon them. CONAP is a signatory to the bi-national workplan and it is on their interest as well to assist in protecting the watershed.

Appendix #1

Areas Impacted by Agriculture in the Chiquibul National Park, Caracol Archaeological Reserve and Columbia River Forest Reserve



Source: Belize Biodiversity Mapping Service

Appendix #2

Agricultural incursions in the Rio Blanco Area
1994 satellite imagery indicating 1,040 acres

