

TIDE Report Belize Tropical Conservation Agreement

October 1ST 2014 to September 30th 2015

INTRODUCTION



Toledo Institute for Development and Environment is an award-winning organization focused on involving communities in ecosystems management for the benefit of the people of Southern Belize. TIDE co-manages the Port Honduras Marine Reserve with the Fisheries Department; the Payne's Creek National Park with the Forest Department and 20,488 acres of private lands under the Tropical Forest Conservation Agreement. TIDE's private lands are located in several segregated parcels along the banks of the Rio Grande and Deep River in Southern Belize.

The purpose of this report is to highlight the activities and outcomes of the management of the TIDE private lands. Under the TFCA section 4.3 (c) (Authorized Purposes) for this reporting period, TIDE used the funds for conservation, maintenance and restoration of the lands in accordance with the following items; (i) the establishment, protection, and maintenance of parks, protected areas, and reserves and (ii) the development and implementation of scientifically sound systems of natural resources management, including land ecosystems management practices; (iii) training programs to increase the scientific, technical and managerial capacities of individuals and organizations involved in conservation efforts and (iv) the restoration, protection, or sustainable use of diverse animal and plant species.

This report focuses on what has been accomplished during the period 1st October 2014 to 30th September 2015. Each expected result is listed and reported on separately.

Expected Outcome 1

Illegal hunting and fishing on TIDE's protected lands have decreased by 10% compared to the previous year

With the prolong dry season in the first half of 2015 the four DNS rangers were able to clear about 6 miles of boundary line on two blocks of lands. These lands are buffering three communities, Big Falls, Hicatee and Pine Hill. In addition, growing stakes (Trees) were planted at the corners to ensure visibility of those corner pillars especially near buffer communities so that they know where the conservation area begins.

A total of 206 patrols were conducted for October 2014 to September 2015. We continue to see signs of fishing on all the rivers (Rio Grande, Middle and Golden Stream rivers) and signs of hunting on a few of the parcels near the Big Falls and Hicatee communities. A total of four gill nets were confiscated by rangers that were illegally set on the Rio Grande River during night patrol. To increase the effectiveness of law enforcement the ranger team is using intelligence such as reports of hunting sites, maps of hotspots and cameras for surveillance in the hot spot areas. A total of 6 cameras were deployed and being monitored in order to detect and capture images of hunters in land, so far images of 3 different hunters hunting on the land. We are now trying to identify these individuals so that we can send them official warning letters and subsequent arrests if they continue. Having cameras in strategic areas decrease the time and resources that rangers spent patrolling in

these areas. By doing so, we have decreased our fuel use as well as camping equipment/supplies use thereby saving money.

Expected outcome 2

TIDE is using the scientific data collected to make management decisions as indicated by adaptive management plans.



Adult Jaguar near DNS ranger station

During this reporting period, rangers continue to collect data from the biodiversity transects on the lands. Since our last report that highlighted some results of the monitoring we haven't conducted any additional analysis of the

data. New images from the camera traps are very encouraging as we are seeing increases in small mammals, large cats and game birds. In addition, rangers sighted a flock of more than 20 great curassows just a few hundred yards from the ranger station. This sighting is the first ever recorded in such large numbers.



Great Curassow (Two males and 2 females) near DNS ranger station

Expected outcome 3

An additional 500 community members in 6 communities develop a deeper respect for the environment as indicated by a change in attitude due to TIDE's Environmental Education and Outreach program.

Our Education and Outreach Unit continues to provide public awareness on the importance of the natural resources and management of the TIDE Private Protected Lands in the Maya Mountain Marine corridor (MMMC). The Education Outreach coordinator, Marine Biologist and Assistant Terrestrial Biologist conduct presentations to a class of 60 primary school students. Surveys are taken before and after every presentation to gauge whether children actually gain some knowledge during the process. The DNS funds also assisted in covering the cost of our Freshwater Cup program. In the last season, 17 primary schools enrolled in the program with 17 environmental projects. These projects are supported by TIDE jointly with the school management and the community Parent Teachers Association. Traditionally, the football competition was held; this competition saw the participation of 1,440 children & 280 adolescents aside from the teachers and parents who supported the children.

Over 6 community meetings have been conducted by TIDE Rangers jointly with the Education and Outreach coordinator. Over 500 residents and resource users in the TIDE Project target region are informed on TIDE work, Resource management and community participation in conservation.



DNS management plan consultation meeting

We are happy to report that the first official management plan for the DNS lands is near completion. TIDE engaged international volunteer students from Colorado State University to develop the management plan for the DNS lands. Community members and leaders from buffer zones have been consulted through outreach meetings by TIDE and students for their input and contribution to the plan. Various interviews by students have been conducted through dialogue with buffer community members. The plan is now in its final stages of completion and is expected to be finished by mid-December 2015.

TIDE rangers conducted over 20 informal meetings with village leaders and hunters in the communities impacted by the DNS lands. The meetings focused mainly on the hunting laws, opened and closed seasons for game species and on the location and importance of the DNS lands. There are an increase of hunters and other community members showing interest to learn the regulations and sharing with their fellow villagers.



Community meeting

TIDE has been working closely with the primary school and members of the village of Forest

Home to provide awareness on the importance of the Hicatee turtle. Forest Home and Eldrige Villages are both East Indian Communities that have traditionally hunted Hicatees on the Rio Grande River. TIDE Terrestrial Biologist conducted classroom presentations on the importance of this



Hicatee awareness presentation at Forest Home primary school

critically endangered species to the children and teachers of the Forest Home Methodist primary school. With the guidance from TIDE the school developed a video show to be used for education awareness. Students from this school were also fortunate to participate in a release of juvenile freshwater Hicatee turtle back into the Rio Grande River. In addition, TIDE is working with two farmers from Forest Home Village who are interested in starting a captive breeding program for

Hicatee. The farmers developed a proposal which was shared with both TIDE and the Fisheries Department. The department is in support of the program but has

indicated that TIDE must be a partner in order for the project to the given approval.

The overall management effectiveness of TIDE's DNS lands has increased due to the presence of high caliber rangers and managers.

A workshop on Spatial Monitoring and Reporting Tool (SMART) was conducted by the Forest Department. The Forest department is undertaking the task to develop national standards for data collection in planning and decision making for the terrestrial areas that are being properly managed. TIDE having experience in the marine area using SMART was asked to join the technical team to move forward with software with other co-managers. A follow up will be training using SMART hosted by WCS and Forest Department in Belmopan. As a part of our enforcement program, a rugged tablet with GPS capability has been obtained. Further training using the tablet will enable rangers to use the equipment properly. The software use will be more enhance with images from surveillance cameras whenever a patrol leads into the camera location.

UPDATE ON LANDS

As of September 2015, the voluntary conveyance for the Falls Property, namely the 10 and 153 acres is still at the Lands Department being recorded. The conveyance was filed on the 11th June but we have not received the recorded conveyance as yet from the Lands Department. With the exception of the 10 and 153 acre parcels from Big Falls, the trust deeds and map for all of the parcels are completed. Deed on Encumbrance is completed for Starcher and Morski parcels. Transfer certificate of title obtained for Morski, Cobar lands, Big Falls (2,977 acre block) and Blocks 123, 127 & 130. Title for Starcher is now complete. Conservation easement completed for Morski, Blocks 127, 123 & 130, Cobar lands and Big Falls (2,977 acre block). Please see table below for further breakdown.

