

TIDE Report Belize Tropical Conservation Agreement

October 1ST 2012 to March 31st 2013



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 2012 to 31st March 2013. 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

As at the end of the reporting period a total of 160 patrols were conducted by the DNS rangers on TIDE lands and on rivers bordering TIDE lands. The land patrols concentrated on all illegal activities but with special focus on rosewood extraction. During this period no illegal rosewood harvesting



DNS Land Assistant Manager on night patrol

was discovered on the TIDE lands; however concessions are given out bordering the TIDE lands so the DNS rangers will remain vigilant during this dry season especially with all the uncertainties surrounding the harvesting of rosewood in Toledo. In addition to the land patrols, DNS rangers continue to conduct patrols on the rivers focusing on night hunting on the TIDE lands and setting of gillnets across the rivers. During this reporting period two gillnets were confiscated from the Rio Grande River. Fishers use these nets to target snook as they travel up

and down stream during various stages in their lifecycle. Other targeted species also caught by gillnet in rivers include black-belted cichlid and tarpon.

TIDE printed posters with the forest laws and distribute to local communities in Toledo to increase awareness of the various closed seasons for hunted species as well as other hunting laws.

Added to patrols and law enforcement, a total of 1 mile of boundary line was cleared along one of TIDE's parcel bordering a rosewood logging concession. This area is critical in preventing loggers from entering the protected area. TIDE will continue to clear this boundary line within the next reporting period.

TIDE continued to propagate trees for riparian restoration as well as important logging trees which are planted for seeds. During this reporting period a total of 800 saplings survived and will soon be ready for transplanting. Since 2011 over 1 kilometer of riverfront has been reforested with trees from TIDE's nursery.

In relation to the trust deeds TIDE decided to rewrite all trust deeds to include the restrictions or easements as a part of the trust deed and have submitted those to the registry. We will have more update in our next reporting period.

Expected outcome 2

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

DNS rangers continue to record biodiversity information from the 5 transects on the various land parcels. A new transect was established in the upper reaches of Middle River replacing a previous transect that we were having difficulty accessing during the rainy season. Data from these transects



Large Jaguar captured by camera trapping on TIDE lands



Large Puma captured by camera trapping on TIDE lands

are being analyzed and will be reported on in our next report. Complementary to the biodiversity transects, TIDE established a structured monitoring program for camera trapping of large mammals and birds; 52 photo points were established in a grid format to cover the geographical range of most large mammals and birds. Photos from cameras were downloaded every three weeks. To date the camera haven't photograph the same large cat in more than one photo; TIDE believes that this could be an indication that the large cat population is healthy which also means that food is abundant. In November 2012 one of our cameras was destroyed by hunters. One camera was able to capture an

image of the hunter and dogs passing through the TIDE lands. TIDE met with the hunter to educate him on the rules of the protected area and since this is a first time offense a written warning was issued. He was warned that subsequent illegal hunting on the land will result in an arrest and prosecution.

In addition to the monthly biodiversity monitoring, the DNS rangers participated in the annual Christmas bird count for Toledo. A total of 122 species were recorded for this period which is lower than the count for 2011. We believe that there are two main reason for this continuous decrease in bird species in this area; 1 has to do with unfavorable weather conditions and the other has to do with the increase in boat traffic along the Rio Grande river which is scaring off wildlife.

Since the establishment of the mark and recapture hicatee monitoring in 2011 TIDE has consistently conduct monitoring events in April, May and June each year. Since that date no marked turtles have been recaptured.

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.

Meetings were held in 7 communities including San Marcus, Big Falls, Columbia, Forest Home, Elridge San Miguel and Hicatee Villages buffering the TIDE lands. The meetings were to share detail information about TIDE's work and to consult with members of the communities for the development of a project concept that TIDE intends to submit to Inter-American Foundation to build upon the work we are already doing on riparian restoration and watershed management in these communities. In addition, DNS rangers visited 5 households in Elridge Village and 1 household in San Marcus Village reaching a total of 30 people who normally do not attend meetings. DNS rangers handed out posters with the various hunting closed seasons developed by the Forest Department and printed by TIDE; they also discussed the DNS land rules as it relates to hunting, fishing and logging in the protected area.

TIDE measures its impact is by randomly asking community members if they know about the hunting



Schools visit TIDE lands

laws and various closed seasons for game species as per Forest laws. Most of the people in these communities indicated that they saw the poster, some of them knew the closed seasons while some didn't know how to read the English posters. One recommendation to the Forest Department is to have the poster translated into various languages in order to reach its intended audience.

Over this reporting period 2 schools visited TIDE Protected Areas including the DNS ranger station to

learn more about TIDE's conservation work.

Expected Outcome 4

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

In terms of capacity building for the DNS rangers, a visit to Laguna Del Tigre in Petén Guatemala was planned. This visit will be in conjunction with a Hicatee tagging and monitoring training planned for the same area in August 2013. TIDE was able to use the DNS funds as leverage to secure a grant from the Conservation Leadership Program for the management of the critically endangered Central American River Turtle (Hicatee). Hicatees on the Rio Grande River will be tagged and tracked using acoustic tags to help understand their movement and lifestyle throughout the various seasons of the year. The information will be critical to inform very important policies to prevent this turtle from Extinction.

One DNS ranger participated in the recent Protected Area Management Planning training through the University of Belize ERI program to build capacity of Protected Area Staff. TIDE will continue to ensure its park rangers participate from these planned trainings that has been identified as national priority.

DNS rangers also participated in a boat handling and maintenance training conducted at PHMR ranger station. Rangers are now doing basic servicing and maintenance of outboard engines such as oil change, carburetor cleaning, etc. This training is done annually as a refresher for long standing staff and as an introduction for new staff.

Expected Outcome 5

Increase in the number and length of stay of visitors and campers to the area as measured by log books kept at the ranger's station

As a means of increasing visitors stay in the area TIDE planned to continue the upkeep of the various low-impact amenities at the park. This includes maintenance of existing trails, botanical garden, boardwalk, renovation of learning center and docking facility. To date all of the trails as well as the botanical garden has been maintained. The boardwalk needs repairing so it is



Nature trail on TIDE lands with park rules sign

currently closed for safety reasons. The learning center is not yet renovated, but plans are to complete that in the next reporting period.

TIDE had a few visitors at the park this year; however it is not near enough as we would like it to be. One of the main reasons is that the DNS rangers had to be constantly patrolling and camping on one of TIDE's parcels that is currently under serious threat from illegal rosewood extraction.

Unexpected developments

Rosewood extraction has been and continues to be in the forefront of TIDE's enforcement program in the protected lands. We have noted both legal and illegal extraction occurring at an alarming rate. Illegal logging includes logs harvested during the moratorium as well as during the amnesty period. A logging concession was issued next to TIDE's Block 123 and DNS rangers have confirmed that rosewood was harvested from within the protected lands. Although we can't prove beyond reasonable doubt that it was done by the concessionaire there is a strong evidence



Illegally cut rosewood near TIDE lands

to suggest that that is what occurred. TIDE is currently doing an assessment of the area to determine exactly how many trees were extracted from the protected area. Our full report will be available within the next week and will be shared with the members of the DNS committee.

Another very serious threat is since TIDE finalized its purchase of the Kerns property there has been harvesting of the oranges from the grooves on the land. The producing orange grove makes up about 30 acres of the property, it is estimated that revenue of over BZD \$20,000.00 is lost annually because it cannot legally be harvested. Poachers are currently making a few bucks from this grove, but in addition they also use the opportunity to hunt on the land.

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All funds budgeted for this reporting period was spent in accordance with the approved budget. Details of the expenditures presented below.

Debt for Nature Swap Funds			
Expenses Summary and Detail use of Funds			
Grant Period October 2012 to March 2013			
SUMMARY use of funds			
Funds Received - First disbursement Oct' 2012		39,688.00	
Funds Received - Endowment Funds used for Land Management		70,674.78	
Funds Received - Second disbursement April' 2012		-	
Total funds received for grant year			<u>110,362.78</u>
Land Management - Implementation of project activities		(110,362.78)	
Endowment Funds - Augmentation of funds			
Total Expenditures for grant year			<u>(110,362.78)</u>
Funds at end of grant Period			<u>-</u>
DETAIL use of funds Land Management Funds			
Receipt of Debt for Nature Swap Funds			
Total funds available for grant period Oct, 2012 - March, 2013			<u>110,362.78</u>
<u>Expenses this grant period Land Management</u>			
Distribution of project expenses as per approved budget			
25.1% Admin		27,590.70	
74.9% Program (Park Mgmt, Transp., Maintenance & Upgrade, Equipments)		82,772.08	
Total		<u>110,362.78</u>	
Monthly Exps. (Admin, Park Mgmt, Transportation, Maintenance & Upgrade, Equipments)			
October 2012		(7,336.58)	(7,336.58)
November 2012		(24,982.95)	(32,319.53)
December 2012		(23,187.82)	(55,507.35)
January 2013		(17,222.59)	(72,729.94)
February 2013		(17,638.14)	(90,368.08)
March 2013		(19,994.70)	(110,362.78)
Total Outflow from operating activities		<u>(110,362.78)</u>	<u>(110,362.78)</u>
Other Outflows (Eg: Bank Charges)			
Cash Balance for period ending March 2012			<u>-</u>

Toledo Institute for Development and Environment

Endowment Fund Build Out

Endowment Fund as at March 31, 2013 (calculated on an accrual basis) **BZ\$ 2,927,987.81**

Endowment Build Out

Year	Principal: \$2,751,621.09	Interest: \$1,362,334.01
2001 - 2002	\$ 57,130.60	\$ 1,635.80
2002 - 2003	\$ 118,471.71	\$ 1,112.08
2003 - 2004	\$ 184,472.28	\$ 71,819.07
2004 - 2005	\$ 438,034.23	\$ 71,267.51
2005 - 2006	\$ 708,980.99	\$ 64,018.54
2006 - 2007	\$ 1,020,336.07	\$ 114,976.20
2007 - 2008	\$ 1,349,203.84	\$ 143,816.50
2008 - 2009	\$ 1,718,412.57	\$ 181,596.34
2009 - 2010	\$ 2,123,031.69	\$ 208,239.71
2010 - 2011	\$ 2,556,507.23	\$ 196,007.54
2011 - 2012	\$ 2,635,801.16	\$ 131,478.00
2012 - 2013(March)	\$ 2,751,621.09	\$ 176,366.72

