



PCNP Annual REPORT 2014

Prepared by: Toledo Institute for Development & Environment

Submitted to the Forest Department - Belmopan



Burn Boss Training February 2014

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Executive Summary

Words from the Manager:

On behalf of the Management and staff of the Payne's Creek National Park we present to you our annual report for 2014. With assistance from the Protected Areas Conservation trust through a grant entitled "Payne's Creek National Park Conservation and Sustainable Development" and a Capacity Building Grant as well as counterpart funding from MASS Audubon and the Summit Foundation the park enjoyed another great year. Through these grants we were able to continue what started last year with reaching out to the buffer communities through the distribution of a poster and leaflet done by the communities on the importance of Toledo's Protected Areas via a consultation headed by Ya'axche' Conservation Trust, leaflet on the endangered Yellow headed Parrot, Community meeting especially in the inland communities that buffer PCNP and meetings with community leaders as well as working with buffer communities schools via the fresh water cup and the development and implementation of 4 environmental projects in 4 inland buffer communities to the park.

We also have been able to improve the infrastructure at the park to housed overnight guests at the park with the construction of new toilet facility, construct a boardwalk on the trail system to improve access into the park's broadleaf forest for tourism related purposes. We were also able to build fire management capacity of the Southern Belize Fire Working Group (SBFWG) and other protected areas staff from Programme for Belize and the Belize Audubon Society with fire management Training up to the Burn Boss Level where the participants now have the skills to plan and lead fire management activities at their respective work place. We were able to conduct prescribed burns in some 8000 acres of savanna in Deep River Forest Reserve with assistance from UB/ERI, and SBFWG members and TIDE staff which assisted with some 70 survival rate in young pine saplings 3m and above thus continuing the process of restoring the pine stands to the uneven age structure we want to accomplish as part of the management goal of the area. We have improve our research and monitoring to now focusing on species of concern and indicator species of ecosystems' health in our biodiversity monitoring based on the data analysis done with the data collected over the past few years, improve on our Yellow headed parrot nesting season monitoring where we installed video cameras in two of our artificial nests to monitor nest success etc. We continued with our fire effects monitoring with the photo point monitoring at 8 plots set up in 2013 and collaboration with UB/ERI to ensure we are meeting our objectives with our fire program.

In closing I would like to thank the Forest Department for the support they have been giving both in and outside protected areas, PACT, Summit Foundation and MASS Audubon for their financial contribution to the management of the park. I would also like to thank the members of the Southern Belize Fire working Group for the hard work they have put in the address the issue of unwanted fires and for partaking in the prescribed burns, trainings and meetings and to the communities who saw the need to participate in the community fire training to address the issue of escaped agricultural fires that are impacting people's livelihoods and property as well as

biodiversity. We look forward to continue working with all our partners to continue managed the natural resources of Toledo and Belize.

Sincerely
 Mario Muschamp
 Terrestrial manager
 TIDE

2014 Accomplishments:

1. Protection and Surveillance:

1.1 Surveillance/Patrols

A total of 270 patrols (water 214/Land 56) were conducted within the boundaries and adjacent areas of the park in the Deep River Forest reserve and the Port Honduras Marine Reserve. Of these 2 land patrols were multi agency patrols that include staff from the Forest Department, BDF, Ya'axche' Conservation Trust and Thomas Gomez and Sons Lumber Limited and 60 water patrols were joint patrols with staff of Port Honduras Marine Reserve covering both protected areas. The table below highlights the findings of these patrols.

No. Of Patrols	Illegal Activities	Tourism Activities	Fishing/Hunting Activities	Wildlife Sightings
214 water patrols	none	98 Boats with 150 guests conducting tourism related activities in park. Boats were from PG, Placencia and Monkey River	35 boats with local fishers from PN, PG, MR & nearby caye hand-line fishing and free diving in general use zone of PHMR some just outside park at entrance to the Punta Ycacos Lagoon	53 manatee sightings recorded in lagoon and along PHMR coastline in the Deep River and Rio Grande area
56 Land patrols	Found signs from patrol done in October where Vehicle had enter park we believe to hunt and fish along lower	None	Bicycles, vehicle and motor cycle with Bladen, Medina Bank, Independence and Trio Village residents hand-line	Tracks from White-tailed Deer, Puma, jaguarondi, Grey Fox and Jaguars along patrol routes, 25 White-tailed Deer

	freshwater creek and bicycle had enter park to harvest palmetto seeds sometime in late November or early December based on evidence found.		fishing, harvesting palmetto seeds and hunting in DRFR	and 2 Jaguar sightings 1 of which was near Ranger Station and tracks from Tapir recorded in park and adjacent DRFR
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1.2 Maintenance (Patrol equipment):

Park staff conducted the regular servicing of our outboard engine, changing engine oil, oil filter and gear oil as recommended in the owner’s manual. Outboard engine was also given a fresh water wash and re-greased during the servicing. Our outboard engine has given up on us and we ended up using the vessel from The Private Lands to get us through the year. We also did the cleaning of the boat and ensured that running lights were working properly. Park staff along with assistance from Dale Gomez also did the maintenance of our Polaris ranger used for land patrols, research and monitoring, Fire management etc.

1.3 Boundary line cleaning

Some 4.5 miles of boundary line demarcating the park’s northern boundary with DRFR was done by a Local contractor and community residents as part of the implementation of the PACT funded project entitled Payne’s Creek National Park Conservation and Sustainable Development. The major purpose for clearing this line was to indicate to users of DRFR where park boundary lies in order to lessen the chance of incursions into the park.

2. Institutional Management and Strengthening

2.1 Capacity Building

With Funding from a capacity building grant funded by PACT we implemented a fire management training course at the Burn Boss Level for some 9 participants from protected areas managed by TIDE, Ya’axche’ Conservation Trust, Programme for Belize and the Belize Audubon Society as well as staff from two long term forest licensees Wood Stop and Thomas Gomez and Sons Ltd. That gave participants the skills to plan and lead fire management operations at their respective sites. The training was facilitated by TIDE’s Terrestrial Manager and Fire Expert and a group of well experienced fire managers from the United States working with various entities such as the Nature Conservancy, US Fish and Wildlife Service, US Park Service and the US Forest Service.



Burn Boss Training (classroom)



Field Session

2.2 Fire Management Training for Ranger Training Academy

TIDE's terrestrial manager provided a one day classroom session on basic fire management skills to some 10 participants from the National Ranger Training Academy on July 29th 2014 held at the GSCP field station as part of module 2 of the National Ranger Training Academy training program for Protected Areas Staff. The field practical will be done during the 2015 fire season when participants will be asked to participate in the prescribed burns along with Southern Belize Fire working Group.

2.3 Boarding Procedures Training

Two park Rangers participated in a Boarding Procedures Training facilitated by the Belize Coast Guard held on November 6th & 7th. Rangers are now more equipped with more skills needed to properly board a vessel and have gained skills to safely do their duty when detaining and checking vessels while on patrols.



2.4 Boat Handling Training with Royal Yacht Association

Park Ranger Andrew Williams participated in a Boat Handling Training on November 21, 22, 27 & 28 facilitated by the Royal Yacht Association. Rangers who participated now have improved skills in boating and boating safety.

2.5 Mantas and mooring buoys installation training

PCNP Ranger Andrew Williams participated in a two days training held on August 30th and 31st at Abalone caye focusing on the installation of Mantas and Mooring Buoys in the Marine Reserve.



2.6 Training in Data Entry using Access

Park staff received hands-on training from Rosa Bevens the new landscape connectivity intern on data entry using Microsoft access for rangers to start entering data collected in the field from the biodiversity monitoring done at the park. This will improve the data entry as those collecting are entering the data which will improve and increase data analysis.

Networking

Park manager and staff attended the regular management and all staff meetings which takes place bi-weekly where the management team is updated on projects being implemented at protected areas and to discuss where resources can be pooled to effectively and efficiently implement the projects. This is also accompanied by project review meetings where we look at all projects and update their progress and see where resources can be pooled to improve the implementation where needed. These meetings assist with the smooth implementation of the projects being implemented and assist with the reporting to co-management partner and donors.

Park staff from time has been called upon to assist at the two other protected areas managed by TIDE. At these protected areas staff assists with patrols and surveillance, boundary line maintenance, research and monitoring, education and outreach, riparian reforestation among others. The time spent at the other protected areas are beneficial to us as we get to know the protected areas better, build healthy relationship with the staff and the communities that buffer these areas and allow for deeper appreciation of the work of field staff.

PCMC held their four meeting for 2014, the 1st on February 19th at TIDE conference Room where the topic was to get their feedback and input into TIDE's position paper on oil exploration due to the fact that the two public protected areas and portions of the TPPL are inside the Providence Energy Belize concession. The committee is against oil exploration in protected areas. The Committee held its second meeting for 2014 on May 15th here at the park with attendance from all community reps except that of PG Town Council, Area Representative and UB, topics discussed include an update from PHMR and PCNP Managers, Presentation from Ridge to Reef Expedition Manager which is a pay to participate volunteer program which aims to bring in income to TIDE and the communities as well as help TIDE with implementation of projects and programs that aims to enhance the biodiversity of the protected areas managed by TIDE so that communities can derive maximum benefit from the management and sustainable use of the resources. Other topics include the selection of a PHMR Advisory Committee member to the TIDE Board of Directors to which Dennis Garbutt representing the PG Tour Guide Association was nominated and accepted by those present to represent them on TIDE Board of

Directors. The third meeting was held on September 12th at TIDE conference room and the 4th on December 9th In Punta Negra Village.

Terrestrial manager met with Nikki Buxton on collaboration with YHP rehabilitation and introduction back into the wild project, plan is to work with Belize Bird Rescue (BRR) on this project with the intention to release birds at PCNP. Plans are for BRR to provide training for park staff, site visit to BRR facility which was done in March and later building of an Avery at PCNP. Nikki will meet with Mrs. Mahung to further discuss and finalize collaboration agreement etc



SBFWG held three meetings for 2014, the first on February 14th at TIDE conference room, the second on October 8th and the third on December 9th and to finalize plans for the 2014 and 2015 fire season and plans for the Burn Boss Training schedule for February 24th to 28th and the refresher for other staff of the SBFWG members for February 9th and 10th 2015. Plans were to have 14 participants for the training from SBFWG members and from Belize Audubon and Programme for Belize. Three of the group members can only have one participant instead of two as was offered to them so FD was granted an extra space for the training. Also we decided to try to get as much of the burns plan for the 2014 fire season to be done during the Burn Boss training and get the 2015 burns started during the refresher training where we plan to train some 12 participants in the S130 & S190 basic fire management course.

Terrestrial Manager attended Southern enforcement Group meeting held on April 2nd at the YCT Office in Punta Gorda Town where on behalf of PCNP we looked at dates for joint operations and set dates for joint patrols in and around PCNP for 12th and 13th April and on 26th and 27th April and discussed other ways of collaboration with the forest department such as outreach in communities to which FD personnel pledge support.

Park staff attended a joint meeting with Ya'axche' Conservation Trust staff on the 15th April at the GSCP Field Station to discuss greater collaboration between the two organizations to improve the management of the protected areas managed by the organizations. Topics where we see collaboration can be improved include law enforcement, Education and outreach, Fire Management, research and Monitoring and Community Development.



Park staff attended meeting with Ridge to Reef Expedition coordinator on April 7th to bring all up to speed as to where we are with this new program and for field staff to know and understand their roles and responsibilities as it relates to this program. The Ridge to Reef Expedition is a paid to participate volunteer program which aims to bring international and local volunteers to assist with research and monitoring and other activities TIDE is engaged in as well as bring in additional income to be used for the management of the TIDE managed protected areas.

Park staff assisted with the first Ridge to Reef Expedition that ran for 8 weeks during the months of July, August and September where ever our assistance was called upon which included getting sick into the hospital, transport cook etc. Ridge to Reef is a pay to participate volunteer program which aims to bring in income to TIDE for protected areas management as well as the volunteers assist with the implementation of various activities at the protected areas managed by the organization.

Terrestrial Manager and assistant Terrestrial Manager attended the consultation workshop on the revision of the National Forest policy held in Belmopan on July 17th. The focus of the day's event was to get NGOs/land managers input into the Policy. We looked at the mission statement, guiding principles and strategies and activities to accomplish the mission.

Terrestrial manager met with Ya'axche' Protected Areas manager to look discuss the upcoming fire management training schedule for July 29th as part of the National Ranger Training Academy training program for protected areas field staff. We looked at the content of the presentations that was modified to fit the needs of the participants and to discuss payment for the service TIDE's terrestrial manager and fire expert for providing the training as part of a consultancy that will be awarded to TIDE to provide that service

Terrestrial Manager on August 4th met with Mr. Ryan Zuniga from Caribbean Community Climate Change Center to provide input into the development of a Fire Danger Rating System for the Maya Mountain Marine Corridor as part of a consultancy from Ya'axche' Conservation Trust. The purpose of this consultancy is to develop a system to advice fire users in the communities when it's safe to use fire to burn their milpas with an aim to reduce the chance of fire escaping during the burn. The hope is for this to feed into a national fire danger rating system for Belize.

Terrestrial Manager attended meeting on 6th September with representatives from Farm 6 (banana farm) on the Trio branch of the Monkey River to discuss collaboration on riparian restoration along tributaries passing through the farm which then leads into the Trio branch and

Bladen Branch of the Monkey River as part of the environmental program being undertaken by the farm to comply with their certification program.

Terrestrial Manager attended meeting on October 23rd in Belmopan at the Forest Department with representatives from Belize Audubon Society, Forest Department, Scarlet Six, Belize Bird Rescue and Environmental Research Institute to discuss the development and implementation of a national project focusing on the conservation and protection of the Yellow headed parrot population of Belize. Major topics discussed include; partnership and potential collaborators, Funding to which BAS & Scarlet 6 will jointly lead the development of a proposal for funding to conduct a national survey to determine the population status of the species in country, Education and outreach, policy etc.

Terrestrial Manager attended meeting with FD personnel on November 12th on the development of the stage two proposal to Darwin Initiative for Management and sustainable use of Pinelands resources. The purpose of the meeting was to get the Departments' input into the proposal and to get them engaged from the onset.

Terrestrial manager attended project evaluation on community environmental projects in Bella Vista, Trio and Medina Bank as part of PACT M&E on November 22nd. All three projects are well underway with Bella Vista expecting to complete theirs by 14th December when we will be invited to the opening of their new park.

Hosted UB/ERI Instructors and team of protected areas biologists on Research and monitoring methodology training as part of the National Protected Areas Training Programme held from November 15-18 at PCNP where the methodologies for terrestrial research and monitoring were practiced and the Marine ones were done in PHMR.

Terrestrial manager along with representatives from the Machaca Forest station attended meeting with OIC of the Police Dept. in Punta Gorda and Operations personnel at the BDF fairweather camp on December 10th to solicit their assistance with inter agency patrols to address illegal activities in the protected areas of the MMMC in lieu of the holidays and the increase in hunting activities noticed over the years during this time. Both officials pledged their support and as a result a patrol was scheduled for December 20th and 21st covering PCNP, DRFR and BNR.

3. Administration:

3.1 Report Writing

Terrestrial manager and park staff produced monthly reports that were submitted to TIDE Board of Directors to update them on projects and project activities being implemented in the park. We also provided information for reports to donors and produced end of year report 2013 and mid-year report (Jan-Jun 2014) to the Forest department.

3.2 Hurricane Preparedness

Park staff reviewed and revised the park's Hurricane Preparedness Plan and submitted changes to management for inclusion into the organization's Hurricane preparedness Plan for the 2014 hurricane season.

3.3 Procurement of equipment

With assistance from the operations manager and the admin staff at TIDE were able to get some additional fire tools that include 6 hand-held radios, drip torches etc to assist with fire management in and around PCNP. With assistance from our It personnel were got a new laptop computer to assist with meeting reporting deadlines etc.

4. Public Use Planning, Recreation Management, Visitor Safety and Control

4.1 Visitors to PCNP

The monitoring and collection of data visitation to the park remains a challenge as most of the visitation to the protected area is to conduct tourism related activities (fly fishing and manatee watching) occurring in the estuary system so fee collection is difficult. During patrols 98 vessels with some 150 guests were sighted doing recreational activities; however no fees were collected since we got final word from the Forest Department to go ahead and implement the fee system. Most visitations to the park's facility were from buffer community schools and community leaders on field trips to the protected area and potential donor agencies on site visits done through the organization. Visitation is minimal and has little to no negative impact on the integrity to the protected area. Only impact we foresee is the boating traffic in the estuary which can impact manatee movement in and out of the system.

4.2 Infrastructure Development

4.2.1 Construct New Toilet Facility

We completed the construction of the new toilet block in October as addition to the main bunk house to improve the facility to accommodate overnight stays at the park..



4.2.2 Construct New Boardwalk

We completed the construction of a 220 ft. boardwalk on trail system into the broadleaf forest over the wetter areas to improve access for tourism related purposes. The board was built by local contractor Edgar Randas.



5. Community Development and Education

Environmental Education and Outreach plays a key role in creating awareness on the sustainable development, use and management of the natural resources in southern Belize. Some of the major education initiatives include; The TIDE Freshwater Cup, Other outreach activities include national and international environmental awareness day activities such as earth day and world wetland day. Educational school visits, presentations and field days to protected areas are integral to this program. All these activities are integrated across seven conservation targets.

5.1 Freshwater Cup

The Annual football and environmental competition, the Freshwater Cup continues to be very successful in promoting environmental stewardship in Toledo District.

An attempt was made for replication to the southern

region of Stan creek. The program commenced in early 2005 with a senior, and a junior male competition, and not until 2007 the females were included. To date the female teams' participation for primary schools has been increased, almost reaching the same number of teams like the males. It is expected that by the year 2015 there will be equal number of males and females team. The program has received several local and international awards and recognitions since its inception.



Over 700 hundreds primary and secondary school students participate each year (14 primary and 4 secondary schools), which are directly involved and are required to carry out environmental projects at their schools and communities. The projects were evaluated in February by a team based on specific criteria set before. Only those schools that had completed their projects satisfactory were qualified to enter the football competition. Some of the projects included; Eco-Parks, Organic gardening, Solid

Waste disposal, reforestation, community beautification, poetry and arts, environmental education, established signage and garbage containers. All schools were qualified and participated in a marathon before the completion commences. Over 20 environmental projects were implemented simultaneously. The purpose of the marathon was for each participating team to present their projects to public audience and have teachers, children and parents interact and promote the program. A teachers meeting was held to provide updates on progress and to evaluate the program for improvements.

The football competition commenced in March and concluded at the end of school year in June with an awards ceremony. The Education department, National sports council, and TIDE board of directors were the main presenters of the awards, which included school supplies and paid school registration fees for the winning projects, trophies and medals for the football winning teams. The public came out in great numbers to witness the event. The first place environmental winner was Trio Government School, second San Miguel schools and third Punta Gorda Methodist School. This program indirectly impacts over ten thousands inhabitants of the region.

5.2 Environmental projects in 4 buffer communities

TIDE have been working very closely with community leaders to develop small environmental projects that will enhance the community environments and at the same time encouraging leaders to participate in their own village development and building stewardship of the resources. The four communities are Bladen working with the school, Trio working with the Village Council to build an Eco park/playground, Bella Vista park and playground and Medina Bank working with the school on an organic garden to grow food for the school's feeding program.

5.3 Meetings with Community Leaders

Over 7 visits have been made to TIDE targeted communities to provide updates and improve dialogue with leaders, farmers, hunters, and fishers on tide conservation work. The fisheries and Forestry regulations on close seasons for endangered species have been discussed and distributed to communities that are within the Maya Mountain Marine Corridor in the Toledo District. Approximately 20 communities have been visited and received information through posters, Maps, and brochures. TIDE Education Outreach Coordinator and TIDE rangers have been meeting with community leaders to provide updates and progress of activities in the region of TIDE work.

5.4 Implementation of Questionnaire for household surveys

A survey on the awareness of the Payne's Creek national park and the Yellow Headed parrot was implemented in four of PCNP targeted villages, (Bladen, Trio, Bella Vista, and Monkey River). 25 households in each of the communities were interviewed with assistance from university students, Toledo campus. Information collected was analyzed by a TIDE internship student.

As a result of the initial findings from the surveys a leaflet on Yellow Headed Parrot importance and protection laws was drafted and sent to Forest Department for comments, and later printed and distributed to the four communities and schools. Over 100 households received information on the YHP regulations and now have increased knowledge on the species.

Students from communities buffering the Payne's Creek National Park participated in an essay contest on the importance of Yellow Headed parrot. Students had to describe the threats to YHP and how can

we protect them. Students participated to win school supplies as prizes and at same time learn more about the forest regulations on the YHP.

5.5 Participate in Race against Fire

Park staff assisted the Education and Outreach coordinator at the “**Race against Fire**” event organized by Ya’axche’ Conservation Trust held in the Village of Silver Creek on March 30th 2014. The Information Booth set up by TIDE at the event shared info on fire management in the MMMC being done through the Southern Belize Fire Working Group and info on wise fire use focusing on the two faces of fire (the good and the bad).

5.6 TIDE Annual Summer Camp

Park assisted with transporting and hosting campers from the annual TIDE SUMMER CAMP 2014 with the team for this year’s camp being “

5.7 TIDE Weekend

During the month of October park staff assisted with TIDE WEEKEND (that include the Sea Food gala held on the 11th, the Youth Conservation Competition on the 12th and Annual Fish Fest on the 13th) pre and post activities setting up and dismantling of booths and assisted with activities during the annual fish fest held at the TIDE compound.

5.8 Distribute maps of Toledo’s protected areas and their Rules and Regulations

Maps created during via a consultancy awarded to Ya’axche’ Conservation Trust in 2013 done through a participatory process depicting Toledo’s Protected Areas and their rules and regulations were distributed to community all over Toledo to village leaders to display in public places in their communities.

6. Natural Resource Management

6.1 Integrated Fire Management

Integrated Fire Management is a management tool use in the management of fire dependent ecosystems across the world and in the park’s largest and fire dependent ecosystem its pine savannas. It’s a tool that brings together all stakeholders and incorporates local knowledge, science and technology to conduct safe fire operations.

6.1.1 Development of Prescribes Burn Plans

As part of the Burn Boss Training done in February the burn plans for the five units burned in the Deep River Forest Reserve as part of the 2014 prescribed fire operations were developed and the burns were conducted led by the 9 newly trained burn bosses from protected areas managed by TIDE, BAS, PFB and long term forest licensees from the southern coastal plains pine savanna Thomas Gomes and Sons and Wood Stop both holding licenses in the Deep River Forest Reserve.

6.1.3 Conduct Prescribed Burns

Prescribed burns for the 2014 fire season were done as part of the Burn Boss Training Done in February. 5 Units in the concession hold by Thomas Gomes and Sons covering approximately 8,000 acres were burnt to meet various objectives. The burns were led and done by the 9 participants in the Burn Boss Training as part of the field practical for the course which aimed to build these participants the capacity to plan and lead fire management and implement activities safely.

6.1.4 Wildfire suppression and Use

Wild fires during the month of March, July and October in the Deep River Forest Reserve were left to burn as they were done under good weather conditions and the areas were mainly grasslands with few scattered pines and scrub thus not much of a concern for us. Some 2500 acres were burnt in the three wildfires for the 2014 fire season.

6.1.5 Fire Effects Monitoring

Hosted UB/ERI students from March 3rd to 6th to get assistance with fire effects monitoring on six 1km long transects set up and monitored last year focusing on vegetation as part of our collaboration in research and monitoring and did training in fire management techniques during a prescribed burn in the Deep River Forest reserve.

Park staff did photo point monitoring at 8 plots 50mx 20m in four fire management unit in the park as part of our fire effects monitoring to assist with evaluating our fire management program to see if we are meeting the objectives of the Fire management plan. These were the third set of photos taken at these plots since we set up the plots.



7. Research and Monitoring

7.1 Biodiversity Monitoring

Monthly biodiversity Monitoring was conducted along two 1000 meter transects in the Payne's Creek National Park. The objective of the monitoring program has now switched after analysis was done of the data collected over the past 5 years to now focusing on species of concern and indicators of ecosystems'

health. The data also showed that the broadleaf transect in PCNP is the most diverse transect in both PCNP and TPPL.

7.2 Yellow-headed Parrot Nest Monitoring

This year's yellow headed parrot nest monitoring commenced with the installation of 10 new nest boxes with the assistance of Michael Keys a biologist at the St. Mark/s Wildlife Refuge in Florida, 3 in PCNP, 3 in DRFR South and 2 in DRFR North and 2 in Bladen Nature in conjunction with Ya'axche' Conservation Trust, Thomas Gomez & Sons Ltd and, The Wood Stop bringing the total nest boxes to 30 installed over the last three nesting season. The project seeks to enhance the nesting environment in and around the park for this endangered species. By the end of the nesting season 16 of the boxes were used with a total of 38 eggs laid of which 21 hatched of which 19 survived and fledged their nests. 10 eggs were predated upon and the others did not hatch for whatever reason. One chick died due to loss of parent to predation and 2 were extracted from nest boxes due to boxes not having the space to raise all three chicks that were hatched in two of the three boxes in DRFR South.

Park staff also monitored natural YHP nests in the park and adjacent Deep River Forest Reserve, a total of 12 natural nests were monitored this nesting season with park staff able to reach to only 6 of the nests cavities to do proper monitoring. In those six nests some 13 eggs were laid with some 9 hatching but only 7 survived and fledged the nests. We lost 2 chicks as snag toppled over to predation and 1 died naturally giving us a total of 26 chicks fledging from both natural and artificial nests for this nesting season naturally while the 4 were hand fed and later release here at the park bringing the total to 30 chicks.



Installing Nest Boxes





YHP Natural and Artificial Nest Monitoring

With assistance from Dr. Isabelle Paquet Durand from the Belize Wildlife Referral Clinic did small training for park staff on chick health assessment methodology and chick health monitoring of the parrot chicks in PCNP on April 10th and 11th on some 5 chicks we were able to get to over the two days, all the chicks were in very good conditions



With Assistance from Belize Bird Rescue we extracted 4 chicks from two artificial nests with 3 chicks each and two natural nests with exposed chicks to predation and or poaching to be taken to BBR facility for care and later for releasing back into the wild here at PCNP. This is being done under a permit from the Forest Department with an aim to protect/consERVE this endangered species. Also as part of this collaboration an enclosure to house the birds in their final stage of rehabilitation was constructed by BBR at PCNP in August. The 4 birds extracted from this area as well as two confiscated by FD were brought to PCNP in October and are now fitting in with the wild flock at the park.



At Risk Chicks extracted and taken to BBR



YHP Enclosure (10'x30')

7.3 Rainfall data collection

Park staff collected daily rainfall data at the park during this reporting period. Total rainfall recorded for 2014 is inches with October (") being the month with the highest rainfall while April (") received the least.

7.4 Amphibian Monitoring

Did our two monitoring of amphibians for the dry season with assistance from terrestrial biologists on February 10th and May 21st & 22nd, some 5 species of frogs (Stouffers and Mexican Tree Frogs, Valiance, white-lipped and Rio Grande Leopard Frogs) and 1 species of Toad (Gulf Coast Toad) were recorded during these monitoring and two in the wet season one with assistance from the Ridge to Reef Expedition Volunteers in July and the other was done in December same species were found on these monitoring .



8. Infrastructure Management

8.1 Maintenance of Park's infrastructure, solar system and grounds

The staff is responsible for the upkeep of the park's facilities making sure they are clean at all times. Park staff engage in the daily cleaning of the facilities, the minor repairs such as replacing broken screens, ensure that running water is available at all times by checking water lines for leakage on a regular basis and repair where needed and servicing of water pump. We also do the maintenance of the solar/wind hybrid system that supplies us with power for lighting, charging communications equipment and running our computer. Staff also engages in the cleaning of the grounds around all park's facilities that include the ranger station/visitors center, kitchen, lodge, storage room, toilet facility and water tower to protect them from fire damage in the event of a wild fire or during prescribed fire operations.

9. Financial Report

Toledo Institute for Development and Environment (Payne's Creek National Park) Income and Expenditure Report January through December 2014

Ordinary Income/Expense	
Income	
Grants	184,012.94
Expense	
3001 · Equipment	1,706.18
3005 · Buildings	25,102.76
5001 · Salaries & Wages	51,241.29
5003 · Cleaning & Sanitation	234.11
5006 · Insurance, Licensing & Permits	4,043.56
5007 · Postage & Delivery	510.00
5009 · Public Awareness & Env. Ed.	27,233.85
5010 · Repairs and Maintenance	7,604.83
5011 · Supplies	4,914.02
5012 · Training	12,885.68
5014 · Board/Advisory Board Expense	784.58
5016 · Bank Charges	34.50
5017 · Telephone, Comm. & Internet	180.00
5019 · Reserves & Parks Improvement	19,792.05
5020 · Net Working	2,267.50
5025 · Institutional Strengthening &	667.09
5026 · Research & Monitoring	718.90
5035 · Surveillance, Patrol & Enforce	18,962.21
5037 · Community Development	1,728.73
Total Expense	180,611.84
Surplus of Income over Expenditure	3,401.10