## PCNP Highlights for the period Jan-Jun 2016

## Patrol/ surveillance

A total of 85 water patrol were conducted during the first half of 2016. Some 62 boats with 111 guests were encountered conducting tourism related activities within the park such as fly-fishing and manatee watching with tour guides from the buffer communities of Monkey River, Punta Gorda and as far north as Placencia. 14 boats with local fishers from Punta Gorda, Punta Negra, Monkey River and PHMR cayes were encountered conducting recreational and commercial fishing in the General Use Zone of the Port Honduras Marine Reserve. 17 manatee sightings were recorded in the lagoon on these patrols one of which was rescued by rangers from PCNP and PHMR and taken to PG from where it was taken with the assistance of the Fisheries Dept to Wildtracks facility for treatment and recovery if possible from what we believe to be a boating incident.

Some 49 land patrols were done for this period as well. No signs of illegal activities in the park on these patrols but encountered fishing and hunting activities in neighboring Deep River Forest Reserve by buffer community residents from Bladen, Trio, medina Bank, Bella Vista and as far as Independence. We have no issue with the fishing as the folks are doing it with hand lines but have some issue with the hunting as the hunters are the ones starting the wildfires burning the savannas on an annual basis that is having negative impacts on the ecosystem.

# **Networking**

Community meetings in the community of Bladen, Trio, Medina Bank, San Isidro and Bella Vista have taken place to discuss the community involvement in the fire situation and their getting involve the management and sustainable use of the resources focusing on the Non timber Forest Products in the protected areas to which they are buffering namely, the Payne's Creek National Park, Deep River Forest Reserve and the Swasey Bladen Forest Reserve. The communities welcome the idea of getting involve and are willing to work towards this end given the Forest Department is willing to go that route. The discussion with the Forest Department towards this endeavor has commence and will continue with the aim to create sort of a rights base program such as Managed Access being implemented in the marine areas by the Fisheries Department for the community involvement in the management of the national fishery. Funding for the implementation of these activities is from a Darwin Initiative project being implemented by TIDE, Belize Forest Department, University of Belize Environmental Research institute and Edinburg University entitled "Conserving pine woodland biodiversity in Belize through community fire management"

#### **Research & Monitoring**

With funding under the Darwin project and assistance from our partners in its implementation for this period we were able to develop protocol with the assistance of a forester and fire management expert from the united States in Rick Anderson for the monitoring of Caribbean pine and saw palmetto focusing on fire effects and how it impacts productivity such as seed production, growth, health and survival of

you pine regeneration with an aim to improve seed production in palmetto and increase survival rate in young pine regeneration to increase biomass with an aim to allow sustainable extraction to improve buffer community livelihoods as well as conserve biodiversity. In the implementation of this protocol six community members [hired] from Bladen, San Isidro, Trio and Medina Bank and one Forest Department personnel were trained in the Protocol and its implementation and assisted with the setting up of 28 plots for monitoring of pine and palmetto across the 3 protected areas. We also developed protocol to monitor biodiversity focusing on birds and mammals as well as protocol for the monitoring of two plant species of concern that are found in the savannas fiddle wood and zamia.

We also were able to develop protocol focusing on the endangered yellow headed parrot. This protocol will allow us to monitor the population by first assessing the national status, using line transects, identifying and doing roost counts, monitor and protect nesting sites and monitor nest success as well as provide health assessments to address any health issues at the nests sites. Surveys [using line transects, roost counts and nests monitoring where possible] were done across the savannas of Belize during this reporting period where by TIDE led the surveys conducted in the three protected areas mentioned previously. 62 Line transect and 2 roost count data is currently being analyzed. Nests monitoring data from both natural and artificial nests for the 2016 nesting season in PCNP, DRFR and BNR revealed that a total of 54 artificial and 4 natural nests were completely monitored for nest success this season. Of the 54 artificial nests 34 were not used for various reasons [rotten box, termites, bees, tree fallen], in the 20 that were active a total of 46 eggs were laid of which 35 hatched with 32 of the hatchlings fledged successfully. As for the proper monitoring of the success in natural nests we were only able to monitor 4 nests for nests success as we would like, some 8 eggs were laid with all 8 eggs hatched but only 4 chicks were able to fledge successfully. Two of the chicks fell from the nests and died and two were predated by some bird of prey. Some 13 other natural nests were encountered during the transects survey in all three protected areas and other activities such as the pine and palmetto monitoring but we were unable to carry out the monitoring we would have liked.

# **Integrated Fire Management**

Great strides in getting the communities involve in fire management have been achieved for this reporting period. It began last year with the development of training materials to increase communities fire management capacity and the implementation of those materials with the training of some 77 community members in basic fire management techniques \$130/\$190 with assistance from Rick Anderson, Fire Management Expert from the US. The training focus on topics such as basic fire ecology and its impacts on the environment [both positive and negative], fire weather, ignition breaks and ignition techniques, safety and contingencies, safety, mop up, fuel characteristics and managing the burn. The aim of these trainings is to build the communities capacity to participate in fire management activities to manage the resources of the pine woodlands to improve productivity to for sustainable extraction and biodiversity conservation. The training was tailored to address fires in savannas [wild fire suppression and fire use] and the safe implementation of agricultural fires. As a result of these trainings communities were able to assist in the implementation of prescribed burns in the deep River Forest Reserve to meet specific objectives implementing what they learnt in the classroom sessions in the field. With their assistance we were able to do most of the prescribed fires planned for the 2016 fire season by the members of the southern Belize Fire working Group covering some 2500 acres as well as we were able to demonstrate safe agricultural burns with farmers form the communities of Trio with the Trio Farmers Group working with Ya'axche' Conservation Trust in the Maya Mountain North Forest Reserve,

and farmers from Medina Bank, Golden Stream, Indian Creek and Tambran. As part of further building the communities fire management capacity plans are in place to further trained 7 outstanding students from the basic training in a training of trainers' session so they will be able to go back and further trained their community members and to lead fire management activities at the community level to safe guard their communities and their livelihood.

Another advantage already experienced with the building of the communities' fire management capacity was when 6 of the participants from the communities were available to assist with wild fire suppression in PCNP in May. Wild fire started in the eastern section of the park in wetlands near the coast between Monkey River and Punta Negra and came across into the pine savannas where we were able to fight it for 3 days before we were able to contained this fire. The fire burnt some 5000 acres in the park half of which was pine savanna. The most visible and immediate impact seen is the loss of the palmetto seed production for this year thus impacting food source for wildlife. Further monitoring will be necessary to determine the loss of such a fire. Some of the areas impacted were fire free for some 4 years and plans were to do prescribed burns later this year so as not to impact the palmetto and other fruits production and other wildlife species that uses these areas for other activities such as nesting and feeding.