Barba Azul Nature Reserve 2015 August Update



Introduction

This period will always as the point where we were finally able to properly manage the Barba Azul Nature Reserve- and it is all thanks to that green and yellow beauty (Appendix 1- tractor report). We will forever be thankful for the support of American Bird Conservancy and International Conservation Fund of Canada for making a non-sexy priority become a reality.

May to July is the end of the rainy season and where roads start to open up in the Beni Savannas. This year was a late wet one, so roads that might be open in May were still closed in July. This is an important time of the year for us at Barba Azul as it is the preparation time for the heavy work that can be done during the dry season, and this year preparation was more extensive than usual, as Tjalle Boorsma joined the team as the new Barba Azul Nature Reserve manager, with one of his first tasks to purchase and transport the tractor and implements to the reserve.

Conservation and development of the Barba Azul Nature Reserve is supported in 2015 by:















CINCINNATI ZOO BOTANICAL GARDE







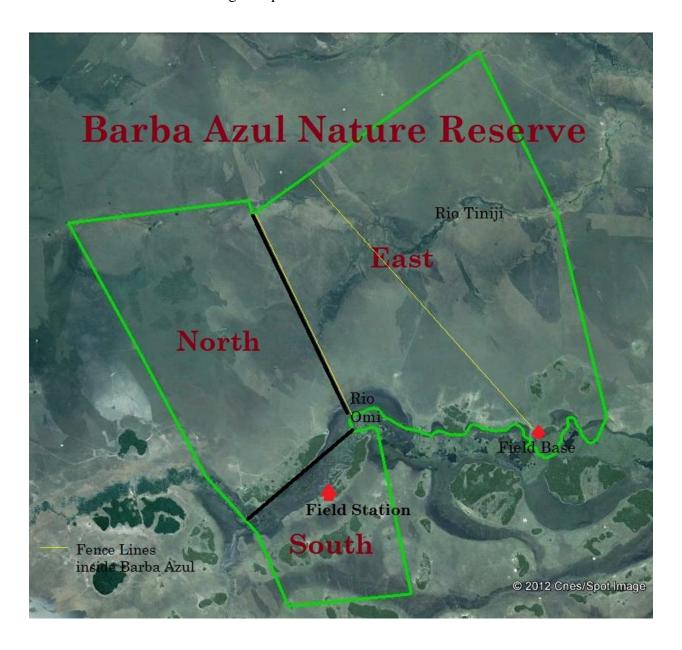


2015 Goals

For 2015 we will continue to conduct protection activities in Barba Azul throughout the year, such as fence mending, border patrols, cattle removal, grass mowing, runway upkeep, infrastructure maintenance, firebreak mowing, and overall protection vigilance.

Our development goals for 2015 are:

- 1) Remove cattle from tourism areas
- 2) Create a permanent firebreak on Barba Azul North
- 3) Create local socially beneficial activities
- 4) Maintain and improve the nest box program
- 5) Begin savanna age-class research
- 6) Complete tourism infrastructure
- 7) Design a management plan for Barba Azul East (free of cattle 2016)



Protection



Figure 1. The entomoligical study by Caroli Hamel with volunteer Marta Vailez, and reserve guard Rene Cartegena.

Staff

Tjalle Boorsma has now visited the reserve, and completed the massive task of getting the tractor and implements to the Barba Azul, the first over land trip in 2015. Hernan is now living in the Barba Azul Ranch on the north-eastern part of Barba Azul, where we will manage cattle. Rosario and Rene are putting systems in order and preparing for the oncoming projects.

The French Masters student Nicolas Lefrique completed his research and has sent us decent reports of his nest box study and Blue-throated Macaw movement study.

Firebreaks

The number one priority issue for the Barba Azul; the protection of the savanna and forest islands from invading fires; would appear to have become an immediate non-issue with the presence of the tractor. We can now **create a permanent firebreak on Barba Azul North.** Within two weeks we were able to establish all the main firebreaks, and backup firebreaks. Given this new flexibility, and the knowledge that we can maintain firebreaks whenever we need

to through-out the year, we will rethink our firebreak strategy and design. We will still create some raised areas with canals, but this more permanent method is not as necessary now.

Management



Figure 2. Insect traps in the three year savanna as part of a comparison study.

Motacu Palm Forest Protection

Tjalle has reviewed the forest islands along Rio Tiniji and has a reforestation plan to review against our budget which will be completed mid-August. World Land Trust is supporting the Motacu Palm Reforestation project. Along with the tractor purchase, we also purchased with reforestation funds a trailer which we can use to transport Motacu palm trees from the dense forest islands to Rio Tiniji for the reforestation project. We also purchased a digger to be pulled by the tractor which will allow us to create new raised dirt mounds which we can plant with Motacu trees. This work will be done from September to October, before the rainy season.

Nest boxes

Nicolas is working on his report on **maintaining and improving the nest box program** from February to June. Nicolas found no evidence of Blue-throated Macaws using the nest boxes. We are not surprised by this result, as macaws take time to change their learned behaviour.

The Blue-throated Macaw nest box program supported by the Loro Parque Fundacion fledged 10 chicks in the southern population using 5 nest boxes. We had a meeting in Trinidad and decided to experiment with 10 new "cajas gordas", larger nest boxes to see if the limiting factor for a pair to produce more chicks could be the actual size of the cavity. And we will create 10 more natural looking boxes- possible hollowed out tree trunks. In Barba Azul, we might also make larger entrance holes to attract Blue-and-yellow Macaws, as this might be the live tutor needed for the Blue-throated Macaw to see the boxes as a viable option.

Management Plan

With the tractor, we were able to bring in fencing material and will have a fence in place along the southern border to **remove cattle from tourism areas.** Hernan has moved his cattle to Barba Azul East- where we will also fence in a cattle management area, which will exclude the Rio Tiniji forest islands. Through a March Conservation Fund and American Bird Conservancy grant We are still waiting on a visit by a local ranching expert to advise on this plan.

Our cattle ranching experience from the winter will be applied to **design a management plan for Barba Azul East** which will be part of the overall Barba Azul Nature Reserve management plan.

Private Reserve Creation

We have put together a list of priorities for Barba Azul to create local socially beneficial activities which I am presenting to potential donors. Depending on financial support, we will know what we can develop this year. We hope to develop this in order to bring in construction materials in the dry season window from August to October.

Research



Figure 3. Savanna insects collected in the three year old savanna.

The seasonally inundated Llanos de Moxos or Beni Savannas of northern Bolivia is one of South America's largest grassland floodplains. This ecoregion's conservation status is assessed as Critical/Endangered by the World Wide Fund for Nature. While natural in origin, it has been shaped by landscape modifications by pre-Hispanic indigenous people and large-scale post-Conquest cattle ranching, including the extensive use of anthropogenic dry season fires. Natural multi-year, post-fire vegetation dynamics and succession of grassland as well as its associated animal communities in the region are virtually unknown. Such information is crucial, however, for effective grassland management aimed at supporting maximum biodiversity levels on private protected areas such as Armonía's 11,000-ha Barba Azul Nature Reserve. With support from the Neotropical Grassland Conservancy an Armonía team lead by Bolivian entomologist Caroli Hamel-Leigue will gather the first ever systematic data on insect diversity and biomass in three areas of savanna with different recent histories of fire occurrence and cattle grazing on the Reserve. Field work will be carried out for about three weeks in July 2015 just after the ground has started to dry up. Several types of insect trapping methods will be used to sample a broad range of taxonomic groups, including a group with excellent bioindicator properties, the scarabaeine dung beetles. This study is intended as a first step in a several-year monitoring

program that will help guide successful grassland management strategies on the Barba Azul Nature Reserve.

Tourism

Four tourist cabins supported by Rainforest Trust (each with two single beds and private bathroom) have been completed and are ready to use. The first tourists arrived at Barba Azul in June where they saw over 60 individuals of Blue-throated Macaw's. Tjalle had a high count of 92 individuals at the second week of June. This is an extraordinary high number for this time of the year.

There are scheduled over 5 tourist group visits to Barba Azul for 2015.

Also, thanks to support by American Bird Conservancy and March Conservation Fund, Asociacion Armonia has contracted a communication staff member, Alfredo Rodrigues who will help Armonia develop its tourism projects. Part of his work will be World Land Trust supported training for the new web page and conservation NGO promotion and techniques.

Promotion

Through World Land Trust support we are developing the new Armonía web page which will have information regarding visiting the Barba Azul. This should be completed in September. We hope that will be ready in the next two months.

YouTube

We have published 3 new videos since the last report, with a total of seven videos on the YouTube channel Barba Azul Nature Reserve.

Barba Azul Nature Reserve – Motacu Seed Dispersal https://www.youtube.com/watch?v=v2ukxABWiqc

Barba Azul Nature Reserve – Motacu Palm Regeneration https://www.youtube.com/watch?v=vbFCmatfgrA

New Tractor and implements heading to Barba Azul Nature Reserve, Beni, Bolivia https://www.youtube.com/watch?v=SPN8qxPFwdo

In the oncoming months I hope to produce videos on Motacu Regeneration, Savanna Succession, and Motacu Seed dispersal.

Tourism Cabins

The four cabins (each with two single beds and private bathroom) are completed. We now need

Barba Azul Nature Reserve August Update 2015

to refine the cabins with furniture, and to sleep in each with a view of fixing potential hiccups with roofing, small holes attracting bats, insect problems, and making sure they are tightly mosquito proof.

Horses

We have purchased two more horses and have funding to buy one more horse; that will be 5 horses in total.

Appendix 1 Tractor Report

ARMONÍA'S NEWLY PURCHASES TRACTOR AT WORK

The Barba Azul Nature Reserve is threatened by fires every dry season as cattle ranchers around the reserve set their land on fire to ensure new and fresh grass sprouts for their cattle. In order to

overcome this threat. firebreaks have to be created around the Barba Azul border to safeguard the unique Beni savanna and ecosystem their forest islands SO valuable for the Bluethroated Macaw.

At the end of June Asociación Armonía was able the purchase a



new John Deere tractor (6403) with it's necessary implements (Plow, Grass mower, Dirt digger) with the great help of American Bird Conservancy (ABC) and International Conservation Fund Canada (ICFC). On July 14 the tractor with trailer and 700 liters of diesel set off to the reserve to undergo a 29 hour adventure to reach Barba Azul, which is a mere 80 km drive from Santa Ana de Yacuma.



The tractor with its implements arrived safely at Barba Azul two days later having to go through deep ponds, flooded roads and endless fields. After revising the equipment with a John Deere technician the tractor was ready for use.

https://www.youtube.com/watch?v=SPN8qxPFwdo&feature=share (New Tractor and implements heading to Barba Azul Nature Reserve, Beni, Bolivia)

FIREBREAK CREATION

The first firebreaks have been created just after the tractor with its implements have arrived to Barba Azul. With use of the plow, a strip of 10 meters has been plowed to ensure a grass (fuel) free band. The rough terrain has been leveled out and that strip is now ready to create a permanent firebreak with use of the Dirt Digger. A ditch will be created which will fill with water in the wet season and keep containing water in the dry season, functioning as permanent firebreak. The plowed strip will be mowed once or twice a year in order the keep the grass short so no fire will pass through, safeguarding the forest and the savanna ecosystem.

Fire breaks have been created north of the Rio Omi and the biological station, as the main fire threat comes from the north-west. Due to the continuing wet conditions in the far north-west end, it was not possible to continue creating firebreaks to the border.