



# EPPA GAZETTE ~ Fall 2009

A Publication of the Edmonton Pet Parrot Association

## Table of Contents

Past Events 2

Upcoming Events 3

Wow! That Bird Sure can Scream 4

In the Land of The Hyacinth Macaws 9

Picture Page 16



**Above:** Chiku, a hybrid *Pyrrhura* conure, who lives with Jessie and Quentin.

**Left:** Military Macaw, who belongs to Marie and Dwayne.

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## Past Events

**June, 2009:** During June each year, we have a picnic instead of a regular meeting. I would like to thank Petra for hosting it again. Thanks also to Hagen for donating bird food for us to give out.

Hagen's aviculture website is at:  
<http://www.hagen.com/hari/welcome.html>

Each year at the picnic, we also give out the "Fisher Award" to a member of the club (not on the executive) who has contributed greatly to the club in the past year. The award is named after one of the founders of the club,

This year Ryan H. was given the award. He has given several excellent presentations to the club on his travels to Ecuador and India. He has also brought his Blue and Gold Macaw, Kai, to several club information tables at mall shows and at the Pet Expo.

Congratulations to Ryan!



**August, 2009:** During August, we had an information table at Londonderry Mall during PJ Pet's customer appreciation days. Marie and Dwayne, Kathy, Jessie,

Louise & David, Ryan, and Sandra brought their parrots. The parrots in attendance included Military Macaws, a Moluccan Cockatoo, a Greenwing Macaw, two White-bellied Caiques, a Quaker Parakeet, a Lovebird, a Hawkheaded Parrot, a Blue and Gold Macaw and a Jenday Conure.

Thanks to everyone who came to help and brought their birds!

For our August meeting, I gave a presentation about my trip to central Brazil and the various parrots and birds I saw there.



**Above:** Kai the Blue and Gold Macaw at the Londonderry Mall.



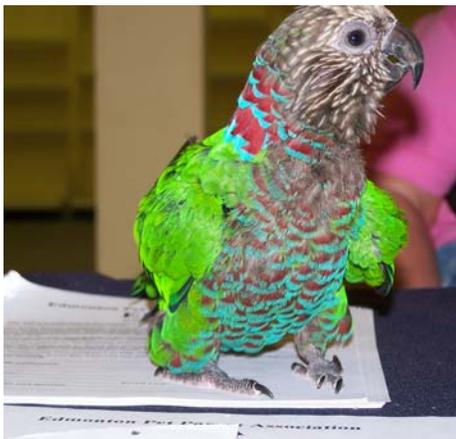
**Above:** A White-bellied Caique at the Londonderry Mall.

**September, 2009:** Club members were invited to visit an Animal Sciences class at the University to talk about our parrots and what it is like to keep them as pets. Louise and David (with their Greenwing Macaw and Black-capped Caique), Quentin and I (with Peggy the Jenday Conure and Ripley the Red-lored Amazon), and Kathy (with Azzie the Hawkheaded Parrot and Morgan the Goffin's Cockatoo) attended the class.

Thanks to everyone who brought their birds!

Also, my apologies if I have forgotten to acknowledge anyone's contributions to the club.

For September's meeting, we had a meet and greet where people could bring their birds to socialize.



**Above:** Azzie the Hawkheaded Parrot.

**October, 2009:** For October's meeting, Lu Carbyn from the Wild Bird General Store gave a presentation about birding around the world. Thanks to Lu for his presentation!

The Wild Bird General Store is on 4712 99 Street. It has wild bird seed, bird feeders, books on nature and pet birds,

binoculars, many different bird-related gifts, artwork and wild bird friendly coffee.

**November, 2009:** For November's meeting, Dr. Ken Keeler, from the Delton Veterinary Hospital (<http://www.deltonvet.com/>), gave a presentation on his veterinary work with parrots. Thanks to Dr. Keeler for his presentation.

The Delton Vet clinic is at 8203 127 Ave (780 475 9225).

**December, 2009:** We will not have a regular meeting for December but we are having a Christmas party. This year, the Christmas party will be at Sorrentino's (10665 109 St) at 6 pm on Wednesday Dec 9. The cost is \$15/person and includes a buffet (with various pastas, salads, deserts) along with tea or coffee. Please let Louise ([louise.walden@shaw.ca](mailto:louise.walden@shaw.ca)) know if you are able to make it.

**January, 2009:** We will be having an information table at the Pet Expo this year. It will run from Jan 23<sup>rd</sup> to Jan 24<sup>th</sup> at the Edmonton Expo Center (Hall B). We will need volunteers to help with the table and to bring their birds.



**Above:** Military Macaw at the Londonderry show.

## Wow. That Bird Sure Can Scream!

By Barbara Heidenreich

[www.GoodBirdInc.com](http://www.GoodBirdInc.com)

“Screaming. Somebody reinforced the heck out of that behavior.” I said to myself. Misty, a double yellow headed Amazon parrot, lived with me for only a few weeks. She was there so that I could put some of her vocal behaviors on cue. However it quickly became apparent she had a few other behaviors that needed to be addressed first. Before her stay with me she resided with Jill Bell for six years. Prior to that time her history is pretty fuzzy. She is estimated to be 19 years old. This meant screaming could have been reinforced for at least 13 years. It must have been, because it was STRONG. Misty was relentless. I’d leave the room; she’d scream and scream and scream.



**Above:** A Double Yellow-headed Amazon.

She had been a good reminder of what companion parrot owners experience when faced with a very annoying and challenging problem. It can be very frustrating. Oddly enough, when I walk into someone else’s home and hear screaming birds I am usually not effected. But when a bird is screaming specifically, in what feels like a demanding way, to get my attention, it strikes a nerve. How does one find the patience to be a good trainer in those situations? It is not easy, but definitely necessary.

My mantra with Misty was “I am solving the problem. Getting angry or letting that knot in my gut sway my strategy will not give me the desired results. I am confident what I am doing will work. It has worked before with other birds I have trained. Hang in there!”

And it is true, my blue fronted Amazon parrot Tarah also learned to scream for attention. Completely through my own ignorance I reinforced screaming. I acquired Tarah, as many people do, when he was offered to me for free. At the time I was working in a veterinary hospital. One of my co-workers also worked part time in a pet store. Someone had walked in off of the street and sold her the bird for \$100. Was the bird stolen, smuggled or desperately unwanted? I don’t know. My co-worker found she was overwhelmed with too many animals in her home and asked if I would be interested in watching the bird for awhile. (That “while” has turned in 18 years.)

Once in my apartment I was thrilled when Tarah offered a “hello” at the sight of me snacking on a piece of bread. However the enchantment wore off as Tarah began to scream anytime I was out of

sight. Unaware of how to stop this undesired behavior, I did as many do, I ran back into the room each time Tarah screamed and told him to "Be quiet." Did it work to stop the screaming? No, and at the same time I found I very much disliked my attempts at punishing reactions to the undesired behavior. I so enjoy having animals respond positively to my presence and did not want to become an unpleasant experience in my bird's life in order to stop the screaming behavior.

While in the middle of dealing with this problem, I was introduced to the book "Don't Shoot the Dog" by Karen Pryor. (Also known as the bible of animal trainers) As I read the book, I latched onto two important principles that could help me address the screaming problem. Extinction and differential reinforcement. Extinction is described as the process of discontinuing reinforcing a behavior that has been previously reinforced. In other words part of my strategy should include discontinuing offering reinforcers for screaming. This meant I should no longer run back into the room, or yell at Tarah. The book did not describe the exact situation I was experiencing with my bird. Rather it described the principles and how to apply them to a variety of examples, human and animal. In reading the words, I made the connection that the concepts could apply to any behavior I no longer wanted to continue. Paired with the principle of extinction was the strategy of differential reinforcement of an alternate behavior. In other words, if screaming would no longer work to get a response from me, what would? For Tarah this turned out to be a whistle. In the middle of a session of screaming and me doing my best to ignore this undesired behavior, Tarah offered a "whistle". I immediately reinforced this by

responding with the word "good". Tarah replied with a scream. This was because at this point he only had one repetition of whistling being positively reinforced and an entire year of screaming being reinforced. However I remained consistent with my strategies and within two weeks time Tarah learned to whistle instead of scream when he wanted a response from me. 17 years later Tarah whistles when he wants to know where I am, when he desires a toy or treat, when I come home, and when he simply seems to be "happy". The undesired screaming behavior was extinguished and replaced with a whistling sound.

Misty seemed to throw a kink in our now peaceful, well behaved and relatively quiet household. I "knew" from my past experience that I could repeat the process I had implemented with Tarah. However this time proved to be a bit more challenging. Because I was working out of the home at the time, it meant no breaks from dealing with the behavior problem. Every time I left the room I was challenged with having to be focused on training this bird. I was finding this to be very demanding. In addition there were times in the day when mentally I was just not prepared to train. Rather than feeling inspired to train and ready to resolve the behavior problem, I found myself dreading having to leave a room and work with Misty. I decided I needed to better set myself up for success. In getting to know Misty, who other than the screaming behavior, I found to be a delight, I learned that in the past she was accustomed to being covered at night. I took advantage of this and decided to leave Misty covered during the time in the morning I needed to shower and prepare breakfast and bird diets in the kitchen. This allowed me time to peacefully attend to necessary tasks in

the morning. After this, I found I was less stressed and more prepared to begin a training session with Misty.

Throughout the day I would treat each time I left the room for whatever reason as a learning opportunity for Misty. I practiced my strategy of extinguishing screaming by not responding to it, followed by reinforcing a desired behavior. In Misty's case the desired behavior was not a specific sound. Instead I chose to reinforce silence. My plan was to reinforce small increments of time of silence and gradually increase the duration Misty was silent before I would reinforce her with my presence or attention. If I was in the kitchen I would wait just outside of her view while she screamed. At first if she offered a pause in screaming that seemed the slightest second longer than what she had presented in between screams in the past, I would quickly appear and offer generous amounts of attention. I wanted quiet to receive a greater amount of positive reinforcement than screaming if I could. Overtime I gradually increased the amount of time she remained quiet before I would respond. And it worked!

However this was not without challenges. There were times throughout the day when a training session was not convenient for me when I needed to leave the room. Rather than cover Misty I opted for engaging her in other acceptable activity. For example, I often offered Misty a small cardboard box, a rolled up ball of newspaper, a new toy, or a portion of her diet just prior to leaving the room. This gave Misty another activity to focus on instead of screaming. But it also was not an opportunity for Misty to learn that screaming would not gain my attention and quiet would. It was still important to include training sessions

throughout the day. The other activity was meant only to offer a break from training for me. This may have also lengthened the amount of time it took overall to teach Misty that screaming no longer would work.

Another challenge in training Misty was that Tarah was in the same room as Misty. Tarah would whistle at times when I left the room. While I wanted to respond to his whistle, I did not want to also then accidentally reinforce Misty's screaming. My strategy had to be to only reinforce Tarah's whistle if Misty was not screaming. If I was focused on the training session, I also found I could position myself so that Tarah could see me, but Misty could not. This allowed me to reinforce Tarah's "good" behavior and wait for Misty to offer silence before responding to her.



**Above:** A Blue-fronted Amazon.

Misty's screaming also appeared to stimulate an occasional screaming behavior in Tarah as well. Fortunately because he had a strong reinforcement history for a whistle, I simply waited for him to offer a whistle before I would respond. Tarah quickly returned to offering a whistle and once again extinguished screaming.

Misty also would on occasion scream for my attention while I was in the room. When this occurred, I simply left the room. Again my thought process was to teach her that screaming now created the opposite response. Instead of people coming to her, people go away. It was also important to reinforce her with attention at times for being quiet while I was in the room as well.

Overall training Misty to present silence to gain my attention took about 6 weeks to train. Obviously this was longer than it took to change Tarah's behavior. This could have been a result of the strength of the behavior in each bird based on their individual positive reinforcement histories. It could have also been a result of the fewer training sessions applied to Misty during the given amount of time. It could also be a factor of the birds as individual learners. In any case the end result was a bird that successfully learned to present desired behavior for attention as opposed to the undesired behavior of screaming.

I went through the emotional gamut that many companion parrot owners face when addressing screaming problems. However by focusing on good training strategy and allowing myself opportunities to relieve myself of the stress associated with addressing the problem I was able to attain my desired training goal. Screaming for attention is a behavior problem with a solution. Set yourself up for success and invest the time to train the desired behavior. The end result can be a lifetime of good behavior.

### **Tips to address screaming for attention**

- Extinguish screaming.

- Reinforce any other behavior besides screaming.
- Remember the extinction burst is a good sign! The end might be in sight. Change your feeling from frustrated to hopeful when your bird really goes for it.
- If you need to leave the room, but can't focus on training, offer another positively reinforcing activity prior to leaving the room. This may buy you a short window of time to move freely between rooms without screaming behavior. However you will still need to include training sessions at some point.
- Get some earplugs to help you cope with the screaming during the extinction burst.
- Plan to wait in the other room. Prepare in advance a quiet activity you can do when trying to deal with a screaming session.
- Leave the room immediately when your bird screams for your attention.
- Manage your activities to help set yourself up for success. For example keep the lights off or your bird covered for a few extra minutes in the morning until you are prepared to deal with the screaming with good training strategies.
- Get support. If neighbors are having a problem with your screaming parrot, explain to your neighbors that you are working on training your bird not to scream.
- Count seconds in intervals of silence and increase if possible.
- Focus on fixing the problem instead of your frustration.
- Believe you will get there. This strategy does work.

- Keep notes if necessary to determine how and when this behavior maybe getting reinforced. Eliminate any reinforcers for screaming.
- Offer even more reinforcers for the desired behavior than the undesired behavior would normally receive in the past.

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For more information on training your parrot visit [www.GoodBirdInc.com](http://www.GoodBirdInc.com)

Barbara has been a professional in the field of animal training since 1990. She owns and operates a company, Good Bird, Inc., ([www.GoodBirdInc.com](http://www.GoodBirdInc.com)) that provides behavior and training products to the companion parrot community. These products include Good Bird Magazine, books, videos, and training/behavior workshops. Barbara has provided behavior workshops and/or animal training presentations at the Association of Avian Veterinarians conference, The American Federation of Aviculture conference, The International Parrot Conference at Loro Parque, Parrot Festival, The International Association of Avian Trainers and Educators conference, American Association of Zoo Keepers conference, Association of Zoos and Aquariums conference, The Parrot Society of Australia conference and many more. She is a past president of the International Association of Avian Trainers and Educators ([www.IAATE.org](http://www.IAATE.org)) and served on the Board of Directors from 1997-2009. Her expertise has been utilized by the US Dept. of Agriculture, Fish and Wildlife

Service and numerous international professional organizations.

She is the author of "Good Bird! A Guide to Solving Behavior Problems in Companion Parrots" by Avian Publications and also "The Parrot Problem Solver. Finding Solutions to Aggressive Behavior" by TFH Publications. She is also the producer of the Good Bird Parrot Behavior and Training DVD series.

Barbara's experience also includes consulting on animal training in zoos and other animal related facilities. She has been a part of the development and production of more than 15 different free flight education programs. Barbara continues to provide consulting services to zoos, nature centers and other animal facilities through her other company Animal Training and Consulting Services. In her career she has trained animals, trained staff, and/or presented shows at facilities around the world.



**Above:** A Yellow-chevrons Parakeet.

## **In the Land of the Hyacinth Macaw**

**By: Jessie Zgurski**

Of all the great wilderness areas and wildlife spectacles of the Neotropics, it is the famed Amazon rainforest of northern South America that gets the biggest share of the attention and tourists. It is, after all, the world's largest rainforest and is home to countless plant and animal species, many of which remain to be discovered. However, on a recent trip to South America, I chose to explore another lesser known but no less great wilderness area: the Pantanal region of central Brazil. It is not nearly as well known as the Amazon region to the north, but its wildlife is just as spectacular, if not even more so.

The Pantanal is South America's counterpart to Africa's Serengeti plains – the wildlife there is extremely abundant and very visible. There are, however, fewer of the giant mammals Africa is famous for, and there are a lot more cattle. But, the Pantanal makes up for this in the sheer otherworldliness of many of its mammals and in the astonishing number of birds that live there. Many ecotourists who visit the Pantanal get to see furry Giant Anteaters, which look like no other mammal on earth, and almost nobody leaves a trip to the region without seeing big groups of capybara, which resemble sheep-sized, aquatic guinea pigs. At night it is possible to see armadillos, which, with their leathery shells, look a bit like a cross between a large rat and a tortoise. Huge birds such as the graceful, ostrich-like rhea and the stately black and white Jabiru Stork are very common, and sinister-looking but harmless Yacaré Caiman are almost everywhere. Birders

can see a startling variety of beautiful toucans, parrots, herons, raptors, and hummingbirds with almost no effort. With effort, the number of bird species seen in a short visit can easily climb over one hundred. I greatly looked forward to this trip for months before leaving, eager to see the Pantanal's wonderful diversity of birds, but, there was one magnificent species in particular I had my sights set on, for I was in the realm of the Hyacinth Macaw, the biggest of all of South America's parrots.

### **The Pantanal: Realm of the Hyacinth Macaw**

The Pantanal is the world's largest wetland and it is so big that early European explorers initially thought they had found a great inland sea upon discovering it. It covers 140 000 to 195 000 square kilometers of central Brazil, Paraguay and Bolivia, although most of it lies within the state of Mato Grosso do Sul in Brazil. I visited the region during the dry season, which lasts from June to August, so what I saw didn't resemble an inland sea, or even a modest lake. What I saw was grassland interspersed with patches of forest, a few small pools and some shallow, reddish rivers. However, the water marks on many of the trees revealed that much of the land had been underwater at some very recent point. In fact, about 80% of the Pantanal is submerged each year during the wet season, which lasts from November to March. A boat would have been needed to get to the lodge I stayed at during the wet season. However, it could be reached by a vehicle while I was there.

The Pantanal is truly a paradise for bird watchers such as myself, as the region is home to hundreds of species, and at least 250 of them can be found just on

the land of the lodge I stayed at (Pousada do Xaraés), which covers 4200 hectares. Eleven species of parrot have been recorded on the property and I managed to see nine of them. Even just around the lodge, I could see all sorts of hummingbirds, raptors, thrushes, blackbirds, flycatchers, jays, tanagers, and two species of kingfisher. Nanday Conures, Peach-fronted Conures and Quaker Parakeets often perched in the trees right outside my room, and flocks of Blue-fronted Amazons foraged and roosted in nearby stands of trees. The sheer number of birds was amazing. For mammals, I was able to see two Giant Anteaters, a few groups of Ring-tailed Coati, Marsh Deer, Red Brocket Deer, Grey Brocket Deer, a Giant River Otter, families and pairs of Howler Monkeys, herds of White-lipped Peccaries, and a Crab-eating Fox. I also saw jaguar and tapir tracks, but, unfortunately, not the animals that made them. I also saw no anacondas or any other snakes. That is something most people would say with a sense of relief, but I wouldn't have minded seeing some of these often-loathed animals – from a distance, in the case of the giant or venomous species. I also didn't see any of the monstrous giant spiders that live in underground burrows in the area either, but I always wondered how many I walked over, while being totally unaware of their presence a foot or two under my feet. I did get to see hundreds of caiman (a relative of the alligator), several Green Iguanas and many smaller lizard species.

I also spotted several flocks of the major flagship species of the Pantanal, and the animal I had come to see. The grand Hyacinth Macaw is a bird usually described in superlatives: they are the biggest of all flighted parrots, and are startlingly beautiful. Their glossy

feathers are a rich, royal blue colour - a colour rarely seen on such a large animal - and their golden, almond-shaped eye rings contrast beautifully with their plumage. The golden, featherless patch on the edge of their lower mandibles adds to their charm because it makes them look like they are smiling. They admittedly do look a little awkward – even somewhat puppyish - while they walk on the ground looking for palm fruits. However, in flight they are elegant and move with very shallow wing beats that appear nearly effortless. Few parrot fanciers forget their first meeting with a Hyacinth Macaw, especially if it is with a free-living bird.



### **Meeting the Hyacinth Macaws**

While in the Pantanal, the first group of macaws I saw was in flight over a ranch I was going horse-back riding at. One of my favourite ways to see a countryside is from the back of a horse. While the guides were preparing the horses, three hyacinths landed in a tall palm tree nearby that contained bunches of palm fruits – a favored food of wild macaws. I dumped my back pack in the dirt and grabbed my binoculars to watch them. I think I held up the group, but got a few

pictures and went riding – hoping I would see more hyacinths.



I did see many more hyacinths throughout the trip. They seemed to prefer to inhabit open areas, and they had booming voices, so they were hard to miss. However, it is best to get up early to see wild macaws actually doing something besides perching, because hyacinths, like many parrots, are early risers. I, under normal circumstances, am not. However, hearing several wild hyacinths squawking right outside my room gave me a good motivation to get up at 5:30 am while I was in the Pantanal. And what a nice thing to wake up to! Hyacinths feed largely on palm fruits, and there were several palm trees around the property I was staying at. Hyacinths will gladly forage around farm houses and people if there is food available.

Wild Hyacinth Macaws are fascinating to watch and they have a lot of character. They often hang upside down by their feet or beaks as they pull palm fruits off of trees, and despite their size, they are really quite acrobatic. They often chat to each other in low, grumbly voices and they occasionally let out very loud, booming squawks. It is also easy to pick out the couples and family groups in a

flock of hyacinths. In flight, pairs fly together, and a pair with an offspring will fly with mom and dad in front and the youngster slightly off to the side or a bit behind. Young hyacinths can stay with their parents for up to sixteen months, and the parents won't breed again until the youngster has become independent. Hyacinth families in the region I was in – the Southern Pantanal near the town of Miranda - are usually groups of three, as it is rare for a pair to be able to successfully raise more than one chick. However, in some areas where there are fewer people, hyacinths often can raise two chicks to maturity. When a hyacinth family rests during the hottest part of the afternoon, they will rest close together and a few family groups will often roost in the same tree. The roosts I saw usually contained a dozen or so birds, but sometimes, a night roost can contain up to one hundred birds. Greenwing Macaws will also sometimes roost with hyacinths.

I should note that, while they are locally common in the area of the Pantanal I visited, Hyacinth Macaws are globally endangered. They actually occur in three disjunct areas of Brazil – the Pantanal, a region of dry *cerrado* (tropical savannah) in central Brazil, and the east-central Amazon. Although some live in the Amazon region, hyacinths are not rainforest birds. They prefer to live in open habitats and where they occur in the Amazon, they prefer to stay near forest edges. During their low point in the 1980s, there were only about 2 500 Hyacinth Macaws in the world and only about 1 500 of them lived in the Pantanal.

Two main problems contributed to the hyacinth's demise in the wild: capture for the pet trade and the destruction of its

habitat. Additionally, they are captured for their feathers where they occur in the Amazon. Hyacinth Macaws are targeted by smugglers because they are greatly coveted by many parrot owners and breeders, and a single hyacinth can usually sell for \$8 000 USD or more. It has been illegal to export them from Brazil since 1967; however, between 1981 and 1984 about 700 birds were caught and exported legally from Bolivia for the US market. That was a huge portion of the population. Many of those birds were likely illegally caught in Brazil and then snuck into Bolivia for export. In 1987, hyacinths were placed on Appendix I of CITES (Convention on International Trade in Endangered Species), meaning that they could not be exported legally from any country where they occurred, but it's difficult to estimate how many birds have been exported illegally. It is also difficult to estimate how many birds have been captured and kept in captivity within Brazil. Based on how many smugglers have actually been caught, there's no doubt that hundreds of hyacinths have been removed from the wild by smugglers.

Hyacinth Macaw populations have also declined because their habitat tends to overlap with regions where people want to raise cattle, especially in the Pantanal. I saw that they can live alongside cattle, if the palm trees that produce the food they eat and the large trees they nest in are not cut down. In the Pantanal, virtually all hyacinth nests are in Manduvi trees (*Sterculia apetala*). Like the majority of parrots, hyacinths nest in tree cavities, and Manduvi trees have all the qualities needed to make a good macaw nest, because they are tall and wide, and they have soft wood, so a macaw can easily enlarge an existing hole in one. Individual trees big enough for hyacinths

to nest in are not common and several other species, including Greenwing Macaws, also nest in Manduvi tree cavities. The availability of nest trees really limits Hyacinth Macaw populations. A Manduvi tree large enough to make a good hyacinth nest takes 60 years to grow, so if people cut down the Manduvi trees in an area, it would take decades for the area to again become suitable habitat for a breeding population of hyacinths. This is especially true if there are a lot of cattle in the area, since they can trample or eat Manduvi seedlings.



Despite these problems, a significant population recovery of Hyacinth Macaws has occurred in the Pantanal thanks to the efforts of dedicated conservationists and the farmers and ranchers who worked with them. In 1990, biologist Neiva Guedes started *Projeto Arara Azul* (the Hyacinth Macaw project), with the aim of restoring Hyacinth Macaw populations in the Pantanal and ensuring their long-term survival. One of my guides in the Pantanal had been a field assistant for this project, so I got to learn a lot about it. Part of the recovery effort for hyacinths involved installing artificial nest boxes throughout the Pantanal, so populations could increase in areas where good nest trees were scarce. Since so much of the Pantanal is private

land, researchers worked with farmers and ranchers to get the nests installed. Members of the Hyacinth Macaw recovery team educated the *Pantaneiros* (inhabitants of the Pantanal) about the macaws and why they are endangered through presentations and radio and television messages.

The Hyacinth Macaw Project has been very successful. The population of wild hyacinths now stands at approximately 6 500, with 5 000 birds living in the Pantanal region. Given the low natural reproductive rate of the species, this is a very impressive result. Poaching has also declined very sharply in the Pantanal, so things are looking up for the Hyacinth Macaws in this region.

The biologists working on the Hyacinth Macaw project have also gathered a great deal of data on the behavior and ecology of hyacinths. A research report was recently published in the journal *Biological Conservation* about the hyacinth's relationship with another big, charismatic bird that lives in the Pantanal – the Toco Toucan. While coatimundis, opossums and jays eat hyacinth eggs, the biggest predator of hyacinth eggs are Toco Toucans. The toco is the species most people would picture if asked to think of a toucan. Tocos are black with white bibs, blue eye-rings and long, bright orange beaks. They weren't too hard to spot in the Pantanal, due to their habit of flying in open areas between patches of trees and their very bright beaks. They are impossible to mistake for any other bird. They have a broad diet and eat most things they can swallow whole, and eggs make a very nutritious meal for them. I spend a lot of time watching several toucans swallow small palm fruits whole one afternoon. I found that group by following their calls,

which are rather harsh and gronky sounding.

In addition to eating their eggs, Toco Toucans also compete with hyacinths for nesting sites and will even take over hyacinth nests after killing nestlings. Thus, their presence can really create problems for the hyacinths. However, the hyacinths actually need the toucans to persist over the long term, because the toucans disperse the seeds of the Manduvi trees that hyacinths nest in. Toucans actually disperse the seeds of many plant species, since they swallow whole fruits and expel their seeds either through their droppings or by regurgitating them. Since toucans travel widely, they do a great job of spreading around seeds, including those of the Manduvi tree. Hyacinths need Manduvi trees that are spread out across the landscape, because they prefer not to nest closely to each other.



**Above:** Toco Toucan

### **Foraging Habits**

Aside from the Manduvi trees they nest in, Hyacinth Macaws also rely strongly upon two species of palm trees for food: the acuri palm (*Attalea phalerata*) and the Bocaiúva palm (*Acrocomia aculeata*). While walking around the lodge one

afternoon, I picked an acuri fruit off of a tree to examine. They are rock hard and very smooth, but the hyacinths can still open them with their incredibly powerful beaks. I would have needed a hammer and all of my strength. However, it still takes the hyacinths a lot of beak grinding to get these fruits open. It's also a skill that takes juveniles some time to learn. But, as I saw later, some hyacinths have also found a way to get at the nutritious and fatty meat of the palm fruits without having to do as much beak work.



At one point, while traveling in a jeep, my guide and I came across a group of eight Hyacinths on the ground in the middle of a field that cattle graze on. They were clearly eating something they could hold with their feet, though they were very far from any palm trees, or any other plants that produce large fruits. We pulled in closer to the macaws, but not so close that the birds became agitated.

What the macaws were doing was picking palm fruits out of cattle manure. The droopy-eared, hump-backed Brahman cattle of the Pantanal – of which there are about eight million – will eat palm fruits that have fallen on the ground. They cannot digest the entire fruits, but they can digest off their tough, fibrous outer coatings. They then expel

the fruits in their manure or they regurgitate them. Without the tough outer coating, the fruits are much softer, so when a group of hyacinths comes across a batch of these processed palm fruits, they will take the opportunity to get an easy-to-open meal.



Hyacinth Macaws have another neat little trick to deal with opening their meals. They are one of only two parrot species (the other being the Black Palm Cockatoo) that have been observed using tools in the wild. Wild hyacinths may take a leaf, roll it around a palm fruit, position the fruit in the beak and remove the fruit's outer shell by moving the lower mandible back and forth. Perhaps the leaf makes the fruit easier to "peel," by making it less slippery? This would be similar to how some people put a dish cloth over a tight jar lid to make it easier to get a grip on and twist open. This hypothesis regarding why hyacinths use leaves to open palm nuts is backed by the fact that hyacinths feeding on palm fruit found in cattle manure don't bother wrapping the fruit in leaves. The fruit would not be as slippery and difficult to peel, so the leaf wrap would not be needed.

## Saying “Goodbye” to the Hyacinths

My last day in the Pantanal was great in terms of hyacinth viewing. I saw several groups on a jeep ride and watched several foraging and resting around the lodge after I got back. After that, I left for Bonito, a town about a four hour drive away. I got to see more parrots around that town, especially Greenwing Macaws, which are very common around a large nearby sinkhole called “Buraco das Araras,” or “Hole of Macaws.” The greenwings nest in the sides of the cliffs there. I also saw a few flocks of Greenwing Macaws in the Pantanal as well, although while they will forage or roost alongside hyacinths, I never saw the two species together. Around Bonito, I also got to see more Orange-fronted Conures, Blue-fronted Amazons and Green-cheeked Conures. Bonito is most famous for the clear rivers full of colourful fish that run through the nearby countryside, so I also went snorkeling while I was there.



Was I happy with my decision to visit the Pantanal? Absolutely! The wildlife there was absolutely amazing. I would definitely recommend the region to bird-watchers, people who want to see wild parrots, or anyone who enjoys seeing wildlife. I would even like to go back to

Brazil someday, to go back to the Pantanal again - I really loved it there - but also to visit the Amazon rainforest and the Atlantic rainforest.

## Further Reading

*Projeto Ara Azul* – The Hyacinth Macaw Project  
<http://www.projetoararaazul.org.br/Arara/>  
-this site is in Portuguese, but can be translated into English with the [google.com](http://www.google.com) translator.

<http://www.bluemacaws.org/index.htm>  
-a site about the Hyacinth Macaw and its relatives.



**Top:** Quaker Parakeet. **Bottom:** Peach-fronted Conure.

**Picture Page: All pictures were taken at the November meeting.**



**Top to Bottom: Abu & Jojo (Black-capped Caiques), Charlie (Quaker Parakeet).**

**Top to Bottom: Chicken the African Grey Parrot, Sammy the Crimson-bellied Conure, and Mr Stitches the Moluccan Cockatoo.**