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PsittaScene

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FlyFree Campaign

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Each day brings fresh reminders of the tumultuous world in which we live. Media coverage saturates our consciousness and leaves many of us feeling overwhelmed and unable to act. Yet somehow, by practicing acts of kindness in our daily lives, we really can have an impact on our world.

The overwhelming response to recent events in the Democratic Republic of Congo (DRC) over the past 6 weeks reminds me of just how powerful these acts can be (see full story on page 8). It started when a quick thinking government official stepped in to stop the illegal shipment of 523 wild caught parrots destined for pet markets in Singapore. His act of compassion began an outpouring of support for which we can all be proud.

"Kindness is the language which the deaf can hear and the blind can see."
- Mark Twain

Dozens of people found the time in their already hectic lives to focus on the welfare of these birds: from the overwhelmed keepers at the Lwiro Primate Sanctuary who now had hundreds of new mouths to feed, to the team of avian veterinarians who travelled to the war-torn region to help. Add to that the hundreds of WPT supporters who answered our urgent call for donations along with emergency grants made available by Natural Encounters Conservation Fund, Columbus Zoo and Disney Wildlife Rapid Response Fund.

This is a major confiscation located in the heart of the trade, saving hundreds of highly intelligent birds from a cruel and avoidable fate. As well as giving many hundreds of birds their freedom it also empowers local partners and governments to do more to protect wildlife. This inspiring effort embodies the spirit with which our FlyFree campaign was founded.

To all of you we offer a heart-felt thank you on behalf of the parrots. Your acts of kindness, from ordinary to extraordinary, make the difference and provide a foundation on which hope for a positive future for parrots can be built.

Best wishes,

Steve Milpacher
Director of Business Development

onourcovers

FRONT The familiarity of this stunning pair of Lear's Macaws (*Anodorhynchus leari*) belies their mystery. Until recently, researchers had never studied their reproductive biology from within the nest. Now, a whole new dark and cavernous world has opened up through the eyes of a young Brazilian graduate student who brings us the inside story. © Sam Williams

BACK As ominous as this moment looks, all is well. This plump and healthy Lear's Macaw chick is simply reacting to a researcher entering the nest chamber by playing dead. Not for the faint of heart, this research requires first descending a huge sandstone cliff before entering dark tunnels with various bats, tarantulas and scorpions. © Erica Pacífico de Assis

An inside job

Reproductive biology of the Lear's Macaw

We first learned of Erica Pacífico de Assis' work through her advisor at the University of Sao Paulo, Prof. Dr. Luís Fábio Silveira, and we were thrilled after so many years that someone was finally working inside the nests of the Lear's Macaw (*Anodorhynchus leari*). Not only were they well on their way to gathering desperately needed biological data from these nesting pairs, they were also developing creative techniques to work in these cavernous cliff nests and to save chicks from inevitable losses. We are delighted to bring you this story about Ms. Pacífico's research and are also pleased to announce that we'll be supporting her ongoing research work on the Lear's reproductive biology in 2011. - *WPT*

Photos by and Interview with
Erica C. Pacífico de Assis | Translation by André Saidenberg

Erica is a Masters student studying the nesting biology of the Lear's, a rare macaw with a small range in northern Brazil.

How did you first start working with parrots?

My first contact with parrots was at the São Paulo Zoo, where I learned, from biologist Fernanda Vaz, how to hand raise parrot chicks. I had the opportunity to help with the breeding of small conures (*Pyrrhura*) to Hyacinth Macaws (*Anodorhynchus hyacinthinus*).

My interest in working with parrots deepened when I began following the efforts to breed threatened species like the Lear's and Spix's Macaw (*Cyanopsitta spixii*) in captivity.

While researching the natural history of the Lear's I realised how little scientific information existed on the natural distribution of this species.

Considering the difficulties in breeding the Lear's Macaw in captivity, I was surprised to discover that basic information was also lacking on its reproductive biology in the wild.

With the assistance of Prof. Dr. Luís Fábio Silveira, from the Ornithology and Conservation Laboratory at the São Paulo University, I did an internship at the Hyacinth Macaw Project. Dr. Neiva Guedes taught me additional techniques for collecting data in the field and how to manage chicks and nests (both natural or artificial).

From this moment on I felt that researching the reproductive biology of the Lear's Macaw should be both a priority and a reality!

Little is known about the reproductive biology of the critically endangered Lear's Macaw in part due to their rugged habitat and inaccessible nests. Notably smaller than the Hyacinth, the Lear's sports more yellow skin at the base of the lower mandible.

When did you start work in the Lear's nests and what are the objectives of your research?

The idea of working in the field with Lear's came from the partnership between the Ornithology and Conservation Laboratory where I started a Master's degree and the Biodiversitas Foundation, an NGO in Minas Gerais which administers the Canudos Biological Station, where the second largest roosting and reproductive ground is located.

My project focuses on the reproductive biology of the Lear's Macaw which includes: details of egg laying; numbers of fertile eggs and hatching success of each clutch; neonatal development; predation indexes and potential chick predators; mortality and survival indexes; behaviours related to incubation, neonatal care, nest protection and criteria of nest selection.

We obtained a grant from the Foundation Boticário for Protection of Nature and began studying the Lear's at Canudos Biological Station in January 2008.

What was it like to climb up to the Lear's nest on your first trip?

While first surveying the area I realised how complex the work would be and immediately felt that the hardest part would be locating the nests instead of getting access to them.

The macaws tricked us, and it was amazing to see how they protected the cavities that were not actual nests. To determine what was an actual nest we spent hours waiting for the birds to arrive and leave and wrote down their behaviour to establish how much time the pairs spent inside the cavities. On my first trip to the field we located 27 nests and estimated the accessibility for ten.

And then a new dilemma: how to get the climbing (abseiling or rappelling) equipment attached to the sandstone walls? The conventional anchors wouldn't work, hence we made a first and risky attempt, using iron bars (scraps from construction sites).

During this first expedition we accessed 2 nests. One contained fertile eggs and another contained 3 young chicks around 30 days of age. At another nest we got lost in the galleries that are formed inside the sandstone walls and we were unable to locate the nest.

The climbers on this trip were Dorivaldo and Eurivaldo Macedo Alves (park rangers of the Canudos Biological Station) who rapidly learned the techniques for rappelling. They taught me how to overcome the difficulties found on the 80m (200ft) sandstone walls found in the middle of the caatinga, a semi-arid habitat in Brazil.

I stood below the nest, hanging on the cliff's wall with field guides Carlos Nogueira and José Cardoso, local residents who patiently helped me handle the nestlings, sample biological material and take photographs. On the following trips we improved the capture methods and trained a team of field assistants on handling the chicks, collecting blood, banding and microchipping. After practicing a lot I felt safe to risk my first descent.

What are the nests cavities like? Can you usually enter the egg chamber?

We surveyed 10 cavities used by the macaws and gathered information never before reported. Half the cavities formed a single narrow and deep tunnel. All others were galleries varying in size without a recognizable pattern.

Cavities were 2-18m (6.5 – 60ft) deep with the egg chamber located anywhere along this area. Researchers must generally enter completely inside the chamber in order to have access to eggs and chicks, and must be sufficiently slim to do so!

The nests are completely dark and very damp. Other animals share the cavities with the macaw chicks. We encountered tarantulas, scorpions, beetles, small rodents and lots of frugivorous bats. We locate the nestlings inside the chamber with the help of a flashlight. It's hard to avoid bats and even less possible to avoid their faeces which have a strong odor that clings to your clothes!

When the chicks are small, they "play dead", turning their bellies and their claws up when they notice movement inside the chamber.

Hours of observation of adult Lear's help researchers locate possible nests and determine which cavities to explore further. After that the team rappels over the edge of the 80m (200ft) sandstone cliff and begins the systematic mapping of the tunnels. The going is tight and they never know what lies ahead.

Once they open their eyes, they silently hide in the deeper part of the cavity, making data collection more difficult.

Do the Lear's chew the rocks or employ any kind of substrate for their nests?

They choose a natural concave cavity and lay eggs on the sand. I did observe marks around the nest indicating that the macaws are chewing the substrate to some degree. However, there were two nests where the eggs were laid over a smooth surfaced rock which didn't affect hatching or neonatal success.

Have you seen disease, predation, or lack of food for the nestlings?

In two years of research we've documented six nestlings that died of natural causes. Causes of death included falls from a nest during the latter stage of development, suspicions of predation (not confirmed) and the absence of parental care. The latter was reported in the first 10 days of age, in two 3-chick nests where asynchronous hatching caused some chicks to be notably younger and weaker than others.

Do you improve the nests or assist the birds in any other way?

When two nestlings fell from one nest cavity, it was proposed that the nest entry be fixed, to avoid further accidents in the next breeding season. Therefore, the entrance was rebuilt with the very same sandstone mixed with concrete and later covered up with sand, replacing the slippery part of the nest entrance.

The big question was if the macaws would come back to use that nest after the small reconstruction. But the next year there they were, protecting the cavity and taking care of another two youngsters.

In another nest we detected a 55cm (22in) depth hole between the entry and the nest chamber so we closed the hole with sandstone rocks. In another interesting situation, a pair laid their eggs over a concave section of their cavity formed by dripping water. Both chicks were completely soaked with water and had an extensive nasel infection. In this case, we decided not to intervene. Both chicks developed quite well and fledged successfully.

Does the same pair use the same cavity each year or do they change nest sites?

It appears that they do use the same cavities from year to year, but we haven't yet been able to answer this question. While our research focuses on sampling biological material, our results can be applied to other questions like this regarding the population genetics of this species.

Our main focus is to get blood samples of all nestlings in order to test the relatedness of siblings from the same clutch in order to confirm the pair's monogamy. With our samples, we will be able to verify the relatedness between chicks of the same clutch in subsequent reproductive seasons. Hence it will be possible to test the hypothesis about whether or not nest cavities are being re-used by the same pair.

How many of the cavities that appear occupied are really being used?

To date, 30 cavities were observed where a pair displayed behaviour indicating nesting interest. Of these cavities, 13 were selected to be entered. In all 13 nests accessed, egg laying was documented, frequently consisting of three eggs.

When one pair hatches three chicks, the youngest is often notably smaller and weaker than its older siblings. Supplemental feeding has not been offered but chicks are weighed, measured, banded and microchipped and blood is taken for key genetic tests.

Nests were selected for entry based on many hours of observation. Behaviour data was compiled in order to analyse the frequency and duration of cavity use by each pair. We determined that a minimal duration of 30 minutes inside the cavity indicated that a cavity was being used for breeding purposes and not just being explored.

Two of the nests that were entered did not progress to hatching. Still, the presence of eggs indicates that 100% of the cavities selected for entry were occupied with reproductive intentions.

Have you seen problems with Africanized bees, botflies or other insects?

There were cavities we could not approach due to the large numbers of Africanized bees. In addition, I could see that the presence of bees interferes with nest occupation by macaws. One nest, where reproductive success dated back to the 1980's, had not been used since 2006 due to bees 5m (16ft) inside the cavity. In 2009 we removed the bees and since then the macaws have reclaimed the cavity and successfully fledged three chicks.

What was your best experience so far working with Lear's in the wild?

The best experience I have had is seeing that the presence of a researcher does not negatively affect the breeding success of the macaws. My most exciting moment was sharing the cliff wall with an adult macaw (below) that insisted on taking care of the nestling even with a possible predator (me!) nearby.

Several times I observed an adult remain inside the nest, even as a researcher entered. It is amazing to witness this strong bond between the adults and their chicks.

As with other parrots, the Lear's display strong bonds with their chicks and sometimes remain very close when researchers are present.

When 280 Orange-fronted Conures (*Aratinga canicularis*), were confiscated from trappers as chicks, they were sent to Conrehabit in Mazatlan, Mexico for rehabilitation. Here, after months of care and preparation, they delight on-lookers upon release.

One year ago, the World Parrot Trust established FlyFree, an international initiative to create awareness and support for our decade-long work to end the trade in wild caught birds.

Why?

Over the past several decades the trade in wild caught birds has caused the suffering and loss of millions of birds. Legal and illegal harvests for the international pet trade are destructive to wild populations; few birds survive from trapping to the point of sale. Those that do survive may carry diseases into the importing countries. Thanks to work spearheaded by the WPT in the EU, much of the international trade has now ceased, but countries in Asia and the Middle East still actively import wild-caught birds. And in their home ranges, parrots are still trapped to supply local demand.

How?

FlyFree supports the front-line efforts of partner agencies all over the world – all committed to ending the wild bird trade. WPT provides logistical and operating support for these groups and their efforts to enforce wildlife laws to protect birds.

MANY OF OUR MOST REWARDING PROJECTS this year have been releases of confiscated birds. These releases are exciting on so many levels – partly because of the sheer joy of seeing the birds through the rehabilitation process to the point of flying free but also because of the ripple effect of this work. The releases also open up space for authorities to place new birds confiscated from traders. They send positive messages to the politicians and the public about valuing wildlife in the wild rather than in cages. They give people, including politicians, community leaders and children, an opportunity to participate in a positive conservation and welfare activity. Releases allow us to repopulate areas where parrots have been driven to extinction locally. They teach us a lot about how to successfully release parrots, which informs our work with threatened species. Releases also provide clear and extremely positive welfare outcomes for the individual parrots that are released, and ultimately prevent many more from being taken from the wild.

Learn more: www.parrots.org/flyfree

On September 18th, 523 African Grey Parrots (*Psittacus erithacus*) were bound for Singapore with forged CITES paperwork when they were confiscated by authorities at the Kavumu airport in the Democratic Republic of Congo (DRC) in central Africa.

TWO HOURS LATER the birds arrived at Lwiro Primate Sanctuary in terrible condition. Lwiro is a rescue centre which houses over 100 orphaned chimpanzees and monkeys, with no existing facilities for birds. The arrival of the parrots was a serious strain on staff and reserves, necessitating an urgent appeal for help. "We didn't have much warning," said Carmen Vidal, manager of Lwiro Sanctuary. "We were told the parrots were coming and then they were here."

The confiscation came too late for twenty-nine birds that were dead on arrival or died shortly afterward. Some of the nearly 500 remaining birds were found to be tied to one another by one wing. They also had no food or water for an unknown period of time. Their situation required immediate stabilization.

In response, the World Parrot Trust (WPT) immediately publicised the appeal and received an outstanding level of support which went immediately to help the birds and their caregivers. This type of need is precisely the reason the FlyFree programme was initiated one year ago. It is also a perfect example of what FlyFree is about: quick and purposeful action where it is most needed to get birds back out into the wild.

THE CONGO 500 EFFORT AT A GLANCE:

- Over 220 WPT supporters from around the world answered our emergency appeal.
- Columbus Zoo, Disney Rapid Response Fund and Natural Encounters Conservation Fund all made major contributions (see p19).
- Within days, WPT sent funds for immediate food and housing costs.
- Nutritional and medical advice and flight cage plans were provided.
- Additional funds were sent to cover the construction of 8 large flight cages.
- Three veterinarians travelled to Lwiro to provide specialised medical assistance.

Upon arrival, 523 African Grey Parrots crowded in 6 small crates were released into Lwiro's education classroom. A temporary indoor enclosure was swiftly adapted for their use (top) while 8 large outdoor flights could be constructed.

Food preparation is on a huge scale with 10kg (22lbs) served twice daily. The birds are enjoying their diet of cooked beans and rice, corn, pineapple, bananas, palm nuts and oil along with a variety of supplements.

Dr. Davide De Guz, Dr. Gino Conzo (both from Italy) and Dr. Noel Arienteireho (Uganda Wildlife Education Center) arrived at Lwiro on October 21st. They brought with them a much-needed anaesthesia machine (with the help of Dr. Collarile) and 4kg (9lb) of supplements and medications donated to Lwiro by GEAVET.

The vets are working under difficult conditions due to on-going political unrest in this area. The nature of the conditions and the seriousness of the work to be done truly accentuate the dedication of those working to help these birds regain their freedom. Lwiro itself is very remote and operates with only the necessities. Basic services can be hard to find after many years of war in the DRC. Locating supplies such as an oxygen tank can be very challenging.

Initial examination revealed that most of the Greys were suffering from parasites, principally tapeworms. The infestation was very serious and was the cause of the initial deaths. The remaining birds were individually treated with great success, needing a second dose after 15 days.

Now, a month after their arrival, 460 birds have survived. Most are eating well, are banded and ready for release. Several birds are ill and are being treated and monitored in separate cages. A third group have feather damage but are otherwise healthy and will be released when their feathers re-grow.

THIS IS THE FIRST CONFISCATION OF ITS KIND in the DRC but similar illegal shipments have been confiscated several times in recent years in west Africa. In a three-year period over 2,700 Grey Parrots have been confiscated, rehabilitated and released, when possible, in Cameroon. Grey Parrot shipments have also been seized in Kenya and Bulgaria.

It is worth mentioning that these huge illegal shipments are not being transported underground. They are moving openly using forged permits, confirming that it is the on-going legal wildlife trade that is facilitating these repeated tragic situations.

IUCN figures provided by Birdlife indicate that almost one-quarter of existing Grey Parrot populations are being trapped each year – making them one of the most heavily traded parrot species on the international market. Adding urgency is the belief that by using established trade routes, dealers in other species, such as great apes, can quite easily cross over to parrots and visa-versa. It is our hope that this confiscation in the DRC is just one more step towards ending of the trade of wild caught Greys altogether.

Watch for updates in *PsittaScene* and at
ww.parrots.org/flyfree

Veterinarians from Italy and Uganda spent 10 days at Lwiro to help assess and treat all 500 of the bird's individual medical needs. Dedicated parrot keepers were hired to provide daily care.

One year after its inception, FlyFree has been an outstanding success. Over 20,000 visitors have viewed the FlyFree website's informational pages, gaining a new understanding of the complex issues and successful efforts taking place. More than 300 individuals have made donations. The scope of our work continues to expand as we welcome new partner organisations and extend FlyFree into a multi-year commitment.

FlyFree funds are used to:

- Help rescue, rehabilitate and release individual birds caught in trade.
- Further efforts to confiscate illegal shipments of parrots.
- Encourage the adoption and enforcement of laws that protect parrots.
- Support global awareness and education programs.
- Develop broad-based coalitions to advocate on behalf of parrots.
- Fund research into better understanding regional aspects of the trade.

FlyFree action around the world

1 Congo

In addition to working with the Lwiro Sanctuary on the Congo 500 (page 8) WPT has initiated surveys of bais (forest clearings) in the Democratic Republic of Congo (DRC) to better understand how they are used by African Greys and how much local trapping is occurring.

2 Cameroon

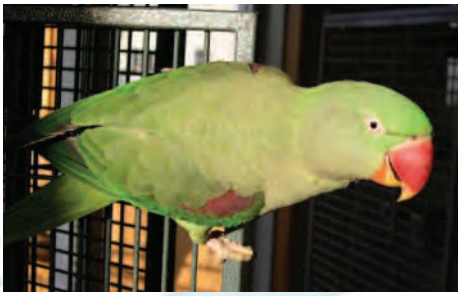
WPT assisted with the confiscation, rehabilitation and eventual release of 1500+ African Grey Parrots (*Psittacus erithacus*) taken in by the Limbe Wildlife Centre over just a few months. Emergency funds and logistical guidance were immediately dispatched to provide for the essential care of the birds. Long-term support helped see the releasable birds through rehabilitation.

3 Kenya

WPT co-sponsored a workshop of agencies to harmonize communication and collaboration especially concerning procedures to help Grey Parrots impounded in transit. We also provided support for the construction of a rehabilitation aviary for confiscated Greys.

4 India

WPT supported education, awareness and wildlife confiscation efforts by the Visakha Society for Protection and Care of Animals. WPT also provided guidance and financial support for an effort to rescue 74 unfledged Alexandrine Parakeets (*Psittacula eupatria*).



5 Nepal

WPT and Bird Conservation Nepal studied the country's wild bird trade and determined that increasing use of birds by people for pets, meat and religious purposes are the main actions fuelling the wild bird trade in Nepal. A regional working group on the wild bird trade was proposed and supported by the government.

Learn more: www.parrots.org/flyfree

6 Indonesia

WPT assisted with the release of the extremely rare Mitchell's Lorikeets (*Trichoglossus haematodus mitchellii*) on the island of Nusa Penida. This species is reduced to a small handful of remaining birds due to trade.

7 Argentina & Chile

WPT funded the printing of informational booklets for school-aged children that profile the Patagonian Conure (*Cyanoliseus patagonus*), a local species frequently found in trade. We are also funding the protection of a colony of the rare Chilean subspecies which has been under severe poaching pressure in recent years.

8 Guatemala

WPT supported the Wildlife Rescue and Conservation Association (ARCAS) to return 80 birds (*Ara* and *Aratinga* parrots) to the Rio Azul-Mirador National Park in northern Guatemala.

9 Brazil

WPT worked with partner Associação Bichos da Mata (ABM) to release 47 birds (*Amazona* and *Ara* macaws) to the Pantanal in Brazil. We participated in their latest release of almost 100 Blue-fronted Amazon Parrots (*Amazona aestiva*), provided 12 radio collars and are partnering to monitor birds post-release. WPT co-hosted a workshop with IBAMA São Paulo and ABM for those involved in rehabilitating and releasing parrots. We also provided emergency assistance for 300 Amazon parrot nestlings seized from trappers.

10 Mexico

WPT provided technical help and bands to Conrehabit in Mazatlan Mexico (see photo p.7) for the rehabilitation and release of over 250 Orange-fronted Conures (*Aratinga canicularis*) confiscated from poachers as chicks.

11 Belize

Working with Belize Bird Rescue, WPT provided support for the rehabilitation and release of confiscated birds. We participated in releases and provided bands and guidance as needed.

12 Honduras

WPT met with wildlife trade enforcement officers in Honduras about heavy cross-border wildlife trafficking with Nicaragua. Near the city of Copan a new project was initiated to rehabilitate and release Scarlet Macaws (*Ara macao*) into a UNESCO National Heritage Park and Archaeological Site.

The Kakapo and I

Article and Photos
By Scott Mouat

Growing up in Scotland I developed certain expectations about the local wildlife. I expected most mammals to live on the ground and birds, without exception, I expected to fly. Seven years ago I travelled around the globe to New Zealand, where my expectations were literally and figuratively tipped upside down! Here, all the native mammals flew, whilst many native birds could not.

Birds in this part of the world have a penchant for being different but one stands out even among the curious. The Kakapo (*Strigops habroptilus*) is the world's only nocturnal, flightless, lek-breeding parrot. While you may think it crazy for a bird to give up flight and the daylight you have to remember that New Zealand is a land where the normal evolutionary blue print was thrown away and life decided to try something a little different.

This story begins in late February 2008 and I was squeezed inside a small hide on one of Whenua Hou's more exposed hilltops. Also known as Codfish Island, Whenua Hou lies about 20km (16mi) off the south coast of the New Zealand mainland. It is home to the world's only breeding population of Kakapo and I was positioned right on the edge of a male's breeding arena. To the naked eye the moonless night was a black void.

One and only. Kakapo: the largest, the heaviest, the longest lived; the only nocturnal, flightless, lek-breeding parrot. Found only on two remote predator-free New Zealand Islands, all 122 known birds are tracked using radio collars.

TRACK AND BOWL. Film-maker Scott Mouat set up for a night of filming at Kakapo "Bill's" diligently maintained display area (bare ground at right).

However, my infrared camera, aided by a few carefully concealed infrared lights, displayed an eerie black and white image of a well-grubbed patch of scrub. In the middle of it, nestled at the base of a small bush, was a shallow depression about the size of a fruit bowl.

"Bill", my leading male, was a creature of habit. Thirty minutes after dark he would emerge from the scrub and creep into the "bowl" with surprising stealth. The bowl is basically Bill's bar stool and from it he sings a ballad that would make Tom Jones' eyes water. It begins with a gigantic gulp of air, quickly followed by another and another, each gulp increasing his girth until he's so swollen he can barely move. What follows is without doubt one of the strangest sounds I've experienced – a low sub-sonic boom. Four metres (13ft) distant, I didn't so much hear it as feel it vibrating in the pit of my stomach. Through the camera's viewfinder I could see the intense physical effort needed to create each call and carry it across the island.

I was making a film called "The Unnatural History of the Kakapo", a feature length documentary about the Kakapo Recovery Program. I'd been given the opportunity to record the next chapter of the recovery effort, a rather ambitious artificial insemination project. New Zealanders have an undeniable national pride in their beloved parrot and will stop at nothing to ensure its survival. I'm unaware of any other bird that's been poked, prodded, probed, pricked and pampered all, I should add, in the name of conservation, as much as the Kakapo. But what was really amazing was that in all the years people had spent in the company of these remarkable parrots, no one had seen two Kakapo mating. It was still an unobserved and un-filmed act of nature and very much a film-maker's Holy Grail.

And so it was that I spent an entire month sitting in a cold, cramped hide watching one of the world's rarest parrots perform his bizarre nightly ritual. Together we sat there in the dark, fingers crossed; hoping that tonight would be the night. But 200 metres (650ft) away it was Ox, Bill's next-door neighbour, that was getting all the action. I decided to move the hide and film him instead.

KAKAPO

Strigops habroptilus

STATUS: Critically endangered. Only 122 living individuals are known (Feb. 2010).

SIZE/WEIGHT: Males measure up to 60 cm (24 in) and weigh 2-4 kg (4.5-9 lb)

LIFESPAN: Life expectancy is 95 years. Maximum 120 years recorded.

BREEDING: The Kakapo is the only species of flightless parrot in the world and the only parrot to have a polygamous lek breeding system. A **lek** is a competitive mating display. During the courting season, males walk up to 7 km (4 mi) to hilltops and ridges where they compete to establish their own mating courts. Each **court** consists of one or more saucer-shaped **"bowls"** dug in the ground to enhance the projection of the male's **booming** mating calls. Each male's bowls are connected by a network of **tracks**. Many track and bowl courts make up an **arena**. Males boom for an average of eight hours a night for 3-4 months. Females are attracted to the booming calls and must also walk many kilometers to the arena. After mating, they return to their territory and males continue booming, hoping to attract another female.

Source: Wikipedia, parrots.org and kakaporecovery.org.nz

© Malcolm Rutherford

A RARE OPPORTUNITY. Access to Codfish Island and the species' only breeding population is strictly limited by the Kakapo Recovery Programme.

Every Kakapo carries a tiny backpack transmitter to help the recovery team monitor their movements. Every night for 25 nights all I picked up on my receiver were the signals from the over eager males. Night 26, with only 4 nights left on the island, my chances of filming Kakapo mating were running out when just after midnight my luck changed. My electronic receiver picked up a signal from a female's backpack transmitter. I could tell from the loud beeping in my earpiece that she was nearby. I pressed record on the camera, and sat perfectly still watching Ox booming on his bowl and listening to the beep, beep, beep, from the female's transmitter. Four minutes passed. Ox kept booming but the female never showed herself. A minute later the signal began to fade. She was leaving and my heart sank. For an hour I sat there, dwelling in frustration, when she returned only to repeat the same disappointing retreat. She visited another 5 or 6 times but by 5:30 a.m., after another close pass, my adrenaline was waning and I decided she wasn't coming in.

With the female's signal gone I switched the transmitter off and sat there in silence watching Ox's last few pre-dawn booms. All of a sudden he was off, a start that Usain Bolt would have been proud of. I quickly switched the receiver back on and to my astonishment heard the female's signal louder than ever. I swung the camera round as far as possible but couldn't see them. Then I heard it – the unmistakable sound of flapping wings and heavy breathing. They were right outside the hide! I poked the camera through the side window and I had them. Luckily there was just enough light to film. Unluckily, I was almost out of tape! Fortunately they were at it for over 40 minutes which was more than enough time to change tapes and grab my Holy Grail.

"The Unnatural History of the Kakapo" was completed in September 2009 and has so far won 7 national and international awards.

Visit www.parrots.org/kakapo to purchase the DVD (US$25.00, £17.50).

Scott Mouat is Producer, Director and Director of Photography for his company, Elwin Productions, specialising in natural history films. He has also produced 2 independent films; Primeval Paradise and The Unnatural History of the Kakapo. www.elwin.co.nz

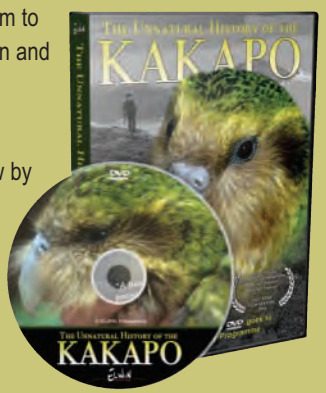
THE UNNATURAL HISTORY OF THE KAKAPO

Filmed and narrated by Scott Mouat

This quiet, haunting film chronicles the life and near death of the world's most endangered wild parrot, the flightless Kakapo. This gentle bird, unequipped for the invasion of man and his various animals, was presumed extinct by the early 1970s. The story, gracefully filmed and narrated by Scott Mouat, takes the viewer through the very unusual natural history of the Kakapo, a parrot so unusual it carves dust bowls out of bare ground to aid in its courtship ritual. This is the basis of the film - the story of lonely male Kakapos, the lack of females to breed with, difficulties with infertility and inbreeding and an absence, for many years, of these parrots anywhere. Were it not for the heroic efforts of Don Merton, Ron Nilsson, Ron Moorhouse and the Kakapo Recovery Programme, various New Zealand sponsors and Dr. Juan Blanco, an avian insemination expert with a magic touch, the Kakapo would have joined the Moa and other flightless island birds as distant memories...a heartbreaking thought for us all.

This is a film to watch again and again.

Film review by Desi Milpacher



Parrot Bones Speak

Ancient Macaw Breeding in the Deserts of Chihuahua

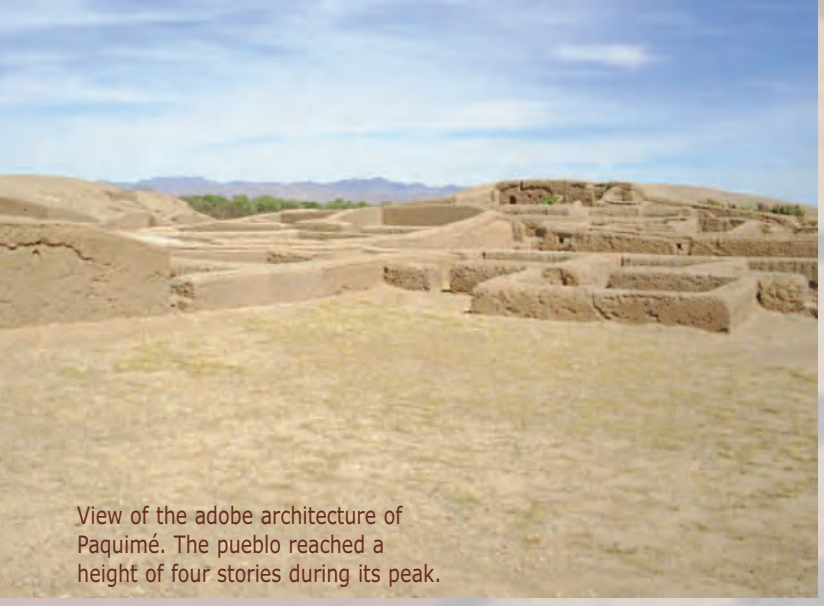
By Andrew D. Somerville

Imagine you're a trader and you've spent the past two weeks traveling on foot from the Pacific Coast deep into the Chihuahuan Desert of Northwest Mexico. The time period is 700 years before the present day, you've never seen a horse or a donkey, and your pack is loaded with goods to trade at distant communities. At a distance you begin to make out the outline of a great adobe pueblo – four stories high and catching the light of the setting sun. All traffic seems focused on this bustling center of activity. Smoke from countless hearths rises to the sky and you detect the aroma of roasting maize.

As you arrive at the edge of town you hear a strange noise emanating from the pueblo, something you've never heard before – the squawking of a hundred parrots as they settle for the evening. As you enter the last stretch of the journey you see them: bright red and green macaws perched on pueblo rooftops, nesting in adobe cages, and flapping their wings in the fading light. The pueblo is the ancient town of Paquimé, and, unbeknownst to you, you've just arrived at the last and greatest pueblo of the Southwest cultural region, and the center of a nearly industrial program of ancient macaw keeping and trading.

The Chihuahuan Desert of Northwest Mexico seems an unlikely place for the large-scale care of tropical birds. Indeed, during the dry season, the rolling hills - covered in desert grass and yucca cacti – resemble a desolate moonscape rather than a backdrop for colorful parrots. Yet, hundreds of years before Columbus set foot in the Americas, the people who inhabited this arid region successfully maintained a vast colony of both Scarlet (*Ara macao*) and Military Macaws (*Ara militarus*). The foreign sounds and the sight of their iridescent red and green feathers against the natural browns of the desert must have presented a startling and alien scene for visitors to the region.

Scarlet Macaws were particularly prized among pueblo cultures that maintained a flourishing industry of macaw keeping and trading in northern Mexico dating back 700 years.



View of the adobe architecture of Paquimé. The pueblo reached a height of four stories during its peak.

Macaw nesting pens made of adobe with "donut" entrance stones are found on the Paquimé site.

Evidence from macaw breeding pens, artwork, feathers and bone chemistry paints a fascinating picture of macaw keeping centuries ago.
Photos © Andrew Somerville

During the 1960s archaeologists excavated a third of this pre-Hispanic settlement, located just south of the New Mexico/Chihuahua border, and, to their surprise, discovered the remains of over 500 macaw skeletons buried throughout the site. Some of these were Military Macaws, which are known to have a range that extends near Paquimé, but at least 322 of the skeletons were Scarlet Macaws, which are found naturally only in tropical lowland forests. The nearest such habitat is in southern Tamaulipas, Mexico – more than 500km (310mi) south of the dusty desert center of Paquimé.

It's not a huge stretch to say that the ancient Paquimeños were obsessed with Scarlet Macaws. Local potters created ceramic vessels in macaw effigy shapes, they painted stylized macaw heads on other pots, and their feathers were used for headdresses and in other adornments. The colorful feathers of Scarlet Macaws would have been important items for rituals associated with the sun, fertility, and for bringing about the rainy season, as well as for economic and political purposes. Indeed, today macaw feathers are still important to modern pueblo groups of Arizona and New Mexico (see *PsittaScene 21.4, Nov 2009*).

For decades researchers have wondered whether the presence of these parrots at Paquimé indicated that the ancient Paquimeños were engaged in constant long-distance trade with southern Mesoamerican groups, such as the Toltecs, to acquire these highly prized birds, or whether they had actually developed the methods to maintain a breeding population of Scarlet Macaws in their new desert home. A recent study by myself and two anthropologists from Arizona State University, Ben Nelson and Kelly Knudson, has shed new light on this question. But before I discuss our findings, it is worth saying a few more words about the ancient settlement of Paquimé.

Paquimé has confounded archaeologists for generations. The settlement, which reached its apex between the years 1250-1450 A.D., consists of a giant adobe pueblo, making it closely resemble the famous pueblo cultures of the North American Southwest, such as Hopi and Zuni. However, several features of the site make it unique. Firstly, the site is gigantic. With over 1,000 rooms and reaching four stories in height, Paquimé was one the largest pueblos of the entire Southwest cultural area. But its uniqueness doesn't stop there. Excavations at Paquimé unearthed several additional artifacts and architecture that appeared to indicate its connection with complex, urban societies to the south in Mesoamerica (e.g. the Toltecs). For example, Paquimé had at least two ballcourts constructed in the Mesoamerican style, which were used to play an ancient sport (probably something like a cross between American soccer and basketball); it had modest pyramid mounds surrounding the pueblo, and many Mesoamerican-style artifacts were found throughout the site, including copper bells, marine shells, and, of course, Scarlet Macaws. Additionally, several of the Mesoamerican gods, such as the feathered serpent Quetzalcoatl, were found painted on colorful ceramic pots. Was Paquimé an outpost of a distant Mesoamerican empire? Perhaps intentionally settled as a trading post in the region? Or was it a

> Paquimé had indeed developed...the skills to maintain and reproduce a large population of Scarlet Macaws, presumably to harvest their feathers for political and ritual means

Southwestern pueblo that appropriated Mesoamerican styles and objects (like macaws) into its cultural repertoire?

To investigate these questions we sought to determine whether the Scarlet Macaws were actually bred and raised at Paquimé or whether they were constantly being imported from Mesoamerican centers to the south. If the birds were in fact bred in the deserts of Chihuahua, you could surmise that Paquimé was a Southwestern pueblo with a Mesoamerican style. If they were not bred but imported, it would indicate that the site had close ties to distant Mesoamerican polities.

Everybody knows that "you are what you eat". But you may not realize that the same adage applies to animals. The bones of mammals and birds are constructed of elements, such as carbon and oxygen, acquired from their food and drinking water. By analyzing the chemistry of their bones we can determine certain details about the diet and environment of the animals during their lives.

As it turns out, maize (corn; Zea mays) is a chemically unique plant to the area and birds or humans that ate it exhibit a characteristic carbon isotope signature in their bones. Since Scarlet Macaws didn't have much access to maize in their native forests, aside from crop raiding, the presence of the chemical signal of maize in their bones would indicate that they were raised in captivity. Parrots love corn and it happened to be the agricultural specialty of Paquimé.

Oxygen, like carbon, is another element that can tell us valuable information about the ancient lives of the macaws. Oxygen from bone tissue primarily comes from the water you drink, and different regions, due to differences in rainfall, altitude, temperature, or local humidity, have naturally different ratios of oxygen isotopes in their local water sources. The unique oxygen isotope ratio found in bones, therefore, serves as a rough fingerprint for the region where an animal lived. At a basic level we know that the water of the natural tropical forests of macaws differs significantly from the water of the Paquimé region.

With this knowledge of expected chemical signatures in hand, we analyzed 30 long bones from Paquimé's Scarlet Macaws, graciously lent to us by the Museo de las Culturas del Norte in Casas Grandes, Chihuahua with permission granted by the Instituto Nacional de Historia e Antropologia. To our surprise all of the macaws had a diet that included a large portion of maize. Perhaps "large" is an understatement. The average percentage of maize in their diet was 94%! These birds were fed practically nothing but maize. Certain patterns in the data suggest that younger macaws may have enjoyed a more varied diet (though still mostly maize), but as soon as they were past the delicate nestling phase, they knew nothing but corn. Thus, the birds appear to have been captive from egg to burial pit. These were not wild-caught parrots traded up from the lowland jungles; they had spent their entire lives living with humans and being fed by humans. But was it at Paquimé?

The oxygen data suggests that Paquimé was indeed the only home these birds ever knew. The oxygen values across the different macaw bones seem to mimic the local rainfall patterns of northern Chihuahua. This finding suggests that the birds were not exotic imports, but desert-raised captives.

Therefore, the carbon and oxygen isotope values both provide strong support to the idea that Paquimé had indeed developed, or acquired through training with southern specialists, the skills to maintain and reproduce a large population of Scarlet Macaws, presumably to harvest their feathers for political and ritual means. Archaeological evidence shows that not only did they successfully maintain this colony, but they did so for at least 200 years!

Certainly some sort of contact must have existed between the American Southwest, including Paquimé, and southern communities of Mesoamerica. Indeed, we have recently learned that the ancient inhabitants of Chaco Canyon in New Mexico had access to cacao (chocolate) drinks – a product grown only in Mesoamerica. And let's not forget that the macaws were acquired via trade in the first place. Our data suggests that Paquimé had a degree of independence and that it did not constantly rely on Mesoamerican polities to fuel its economy. By possessing the means to produce and then trade or gift the high-prestige parrots and feathers, Paquimeños would have seen their status in the region grow. Since they already controlled the distribution of other high status items such as shell bracelets and copper bells, Paquimé rose quickly to become one of the most complex and impressive pueblos of the ancient New World.

Andrew Somerville is a Ph.D. student in biological anthropology at the University of California, San Diego.

Stylized macaw motifs on this Ramos Polychrome vessel from Paquimé point to the importance of macaws in pueblo culture.

Credit © Maxwell Museum of Anthropology, University of New Mexico

Psitta News


© Barranquilla Police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Parrotevents

IAATE Annual Conference

February 16-19, 2011
Pittsburgh, Pennsylvania, USA

Since its inception IAATE has facilitated the exchange of information through a 4-day annual conference. The conference has grown to be one of the most important gatherings available to animal trainers with a special interest in avian species. Through structured paper sessions, informal workshops, and social events the conference provides an ideal information exchange opportunity.

The 2011 conference is hosted by the National Aviary in Pittsburgh. Speakers include the Aviary's Director of Conservation and Field Research, Dr. Todd Katzner, who will speak about his conservation research and Avian Veterinarian Dr. Jeleen Briscoe, who will speak about the Animal Welfare Act.

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Parrotnews

Amazon foils arrest

Barranquilla Columbia police on Wednesday arrested a parrot whose job it was to warn a local drug gang in case of police raids.

The parrot was arrested when the police saw the apprehension of the local drug dealers go up in smoke because the bird unexpectedly started screaming "run! run!," ruining the law's surprise element.

"It's a curious thing that we thought was very funny. Apparently the animal was trained to alert its owners about police presence" a cop told local newspaper El Heraldo.

The look-out bird was arrested, because its cage inhibited the access of the local cops.

Following his detention, the Barranquilla cops decided to name the parrot "Lorenzo."

Lorenzo reportedly has not spoken since his arrest.

Source: www.colombiareports.com

Parrottrips

Brazil 2011: Pantanal Wildlife Safari

May 28 – June 6, 2011
Optional Hyacinth extension to June 12

Give yourself the best holiday gift ever! Join WPT and Tropical Nature on this adventure of a lifetime to some of the most diverse and wildlife-rich locations on earth. We will visit three of the best places in the world to see wild Blue-and-Gold, Red-bellied and Hyacinth Macaws.

We'll also visit a unique ecosystem called the "Hole of the Parrots" to watch and photograph Green-winged Macaws and many other species. We'll spend two full days at the Pantanal Wildlife Center, a world-famous destination for wildlife lovers. Besides fabulous birding, caimans, monkeys and tapirs, the Center is home of the world's only tame group of wild giant otters – guaranteed! Don't miss this unforgettable trip!

www.parrots.org/parrottrip

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WPTpeople

The World Parrot Trust is excited to welcome several new representatives around the world. Having representatives in many countries allows WPT members to work in their own language and currency. Our reps help us interpret the politics and events locally as they relate to parrot conservation; and they serve as the face and voice of the Trust in their own countries.

Steve Boyes may be familiar from his work on the Cape Parrot as well as his contribution to our online blogs. He has worked with us on trade issues in Africa for years and now serves as our representative there.

Jim McKendry is also a parrots.org "blogger" who has worked with parrots in Australia zoos, leads parrot behaviour workshops and writes about parrot issues for many organizations when he is not busy teaching school. Jim joins Nic Bishop representing WPT Australia.

Nic has spent many years as a parrot trainer in various zoos worldwide, runs training workshops and has been involved in parrot welfare and conservation for many years.

Avin Deen is a management consultant from Bangalore and has been a WPT member since 2001. He is very interested in helping to promote WPT in India.

ARE YOU

LOOKING FOR

SOMETHING FOR YOUR

PARROT OR PARROT

LOVING FRIENDS ?

LOOK NO MORE - GO TO

WWW.PARROTS.ORG

Natural Encounters' unique approach to fundraising for conservation

Thankyou

Bird show conservation

Heartfelt thanks go to **Steve Martin** and his extraordinary **Natural Encounters Inc. team** who, at **San Diego Zoo**, raised funds for the World Parrot Trust at this year's free-flight bird show. The show featured, among many incredible birds, an enterprising crow that assisted people in donating their money while they learned about the work of the World Parrot Trust. All donations go to the Natural Encounters Conservation Fund (NECF) which is supported entirely by Natural Encounters, Inc. and has no paid employees. Therefore, one hundred percent of the proceeds raised through NECF go directly to conservation projects. Steve's World of Birds Show team and NECF has raised and donated over $600,000 to conservation projects in the past 20 years. At the San Diego show this year, that engaging crow generated $54,858 in donations for WPT.

Greys

NECF also joined the **Columbus Zoo** and the **Disney Worldwide Conservation Fund Rapid Response Grants** in making significant contributions to provide emergency assistance for the Lwiro African Greys. The results of their gifts are evident and much appreciated by the birds and caregivers alike. See pages 8-9.

Blue-throated Macaws

The **Mohamed bin Zayed Species Conservation Fund** is a philanthropic endowment established to provide targeted grants to individual species conservation initiatives. We are honoured to be among their recognized leaders in the species conservation for our work on Blue-throated Macaws (*Ara glaucogularis*). A warm thanks to the Mohammed Bin Zayed Foundation for generous support of this important work.

We sincerely appreciate the **Point Defiance Zoo**'s continued support of the Blue-throats as well. The Zoo's conservation committee has diligently remained connected with this project through precious on-going support.

Rufford Small Grants for Nature Conservation (RSGs) have been part of the Rufford Maurice Laing Foundation for 8 years. In that time over 900 projects have been supported in over 95 countries. RSG is now a proud supporter of the work of WPT's Igor Berkunsky and the Blue-throat team in Bolivia.

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Parrots in the Wild