PsittaScene

The Magazine of the World Parrot Trust

Spring 2016

PsittaScene

Spring 2016

World Parrot Trust

Glanmor House, Hayle
Cornwall TR27 4HB UK
info@parrots.org +44 (0)1736 751026
www.parrots.org

CONTENTS

Editor: Desi Milpacher
Layout & Design: Michelle Kooistra
Production: Karen Whitley

Printed by Brewers — Part of the Martin Luck Group
Tel: 01326 563424

From the editor...

There's a lot of negativity appearing in the media these days: at least, that's how it feels. That's why when we hear of stories that build up instead of tear down we embrace them. Especially stories about parrots. When we at the World Parrot Trust hear of people protecting their private land for the benefit of wildlife, it's cause for celebration.

When caregivers take the time to understand the behaviour of their companion animals, we shout for joy. When many volunteers make light the work of dedicated in-the-field staff, we cheer them on. And when people support the many projects the WPT partners with, we shout it from the rooftops.

That's the kind of positivity we all need, not a constant diet of meanness and spite. To know that people from all walks and corners of this small blue planet are working *together* for a cause. At the Trust, we see a lot of good. Some of it is in this issue of *PsittaScene*.

Firstly, we see a world of good at the Ara Project, with an account of volunteers on the ground making a difference for macaws in Costa Rica. We see it in *Parrots of the Wild – A natural history of the world's most captivating birds* - Cathy Toft and Tim Wright's mountainous effort to compile all known parrot research and condense it into a readable, accessible volume. Then there are local people, like the Duráns in Bolivia, helping to protect Blue-throated Macaws by guarding the birds' land for them. There is a place in Indonesia - the Maharani Zoo - that took on the task of helping the so-named 'Bottle Cockatoos' to recover. And finally trainer Lisa Desatnik (a student of Dr. Susan Friedman), unravelling a mystery on what's causing fear responses in her companion bird...all by being observant and patient.

So to all of those who embrace positivity, we applaud you. To all who do so for the sake of parrots, we thank you. It's helped immeasurably.

Desi

Desi Milpacher,
Editor

ON OUR COVERS

FRONT Pair of Critically Endangered **Blue-throated Macaws** (*Ara glaucogularis*) at wild nest in Beni, Bolivia. Photo © Darío Podestá.

BACK Wild **Red-breasted Pygmy Parrot** *(Micropsitta bruijnii)* photographed on Seram Island. This tiny parrot measures only 9cm (3.5in) in length. Photo © Charles Bergman.

> "...luckily for the macaws, traffickers did not wipe them out completely."

Blue-throated Macaw © José Antonio Díaz-Luque

Unsung Heroes

Conservation work often features individuals who play as important a role as the researchers themselves.

With the sole purpose of preserving nature, these people have fought numerous battles against the threats affecting species.

- Page 4

Unsung Heroes Saving Species:
THE DURÁN FAMILY AND BLUE-THROATED MACAWS

By José Antonio Díaz-Luque, López Ramírez, V.G, I, Rivero Guzmán, R., Ten, S. & Velarde Jordán, A.M. Photos and article © *Blue-Throated Macaw Project*

THERE ARE LANDOWNERS IN BOLIVIA that can be considered heroes and heroines. With the sole purpose of preserving nature, and even before the conservation groups arrived, these people were doing remarkable work for the preservation of endemic species.

This proved to be particularly important in the Beni, a lowlands region in Bolivia, for a World Parrot Trust-supported project to study and conserve the Blue-throated Macaw (*Ara glaucogularis*). The Beni habitat of the Blue-throated Macaw is recognised for its rich flora and fauna. This distinction has led humans to exploit its resources, no matter how negative the impact to the environment.

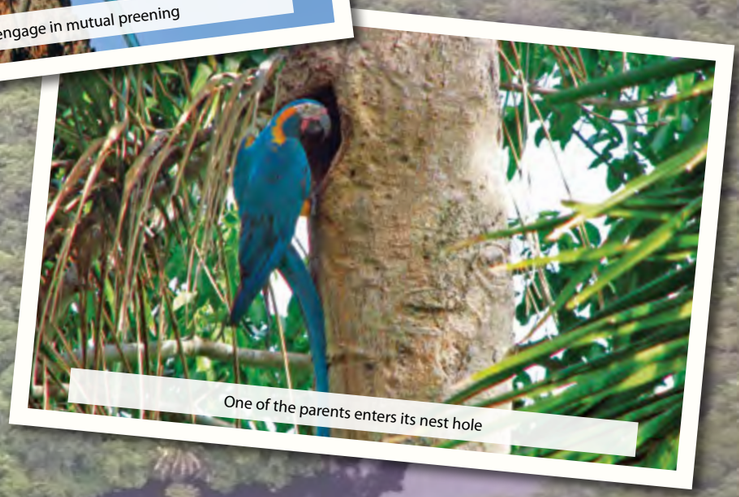
In Bolivia, species such as the Blue-and-yellow Macaw (*Ara ararauna*), Red-and-green Macaw (*Ara chloropterus*) and the Blue-throated Macaw are sad victims of trafficking by traders. It was the 1970s and 80s when the demand for wild parrots and macaws to feed the international pet trade exploded. People from mainly developed countries demanded exotic pets, and among these the macaws featured prominently as more desirable species to own.

The parrot trapping business was as simple as it was devastating. Traders visited the villages of Beni, seeking interested people to join this lucrative and growing business. The *paraba's* (parrot) hunters, "***paraberos***" as they were called, were skilled in finding the best place to plant their traps in order to capture the largest possible number of birds.

In most cases they had the permission of the landowners to catch the birds. But not all locals agreed that these intruders should be able to take the natural wealth of their lands. Some people did not understand the business or trust these outsiders, and so did not want to be part of it.

The *paraberos*, knowing where the birds were, accessed the properties with the intention of capturing as many as they could. By using a lure (usually a captured wild bird or a pet) and a rudimentary system of nets installed on branches of a tree, they drew wild parrots to the trap. The birds they caught were then lowered, one by one, to be put into crates. Finally traders, the real profiteers of this activity, came and loaded their empty planes with the frightened parrots.

Blue-throated Macaws engage in mutual preening



One of the parents enters its nest hole

It was around this time that the local heroes began to appear, those who thought no one, including themselves, owned the wild animals of the Beni. One of the most noted among them is the Durán family, whose unwavering commitment has helped preserve one subpopulation of the Blue-throated Macaw.

The family refused commissions from *paraberos* to allow access to their land, and made it clear that the trappers could not trespass. Meanwhile, these hunters were robbing nests that were found on adjoining properties, inevitably affecting populations of macaws in the entire area.

Blue-throated Macaws, at the time, were especially sought after: rarer, and the object of desire for many people. People would pay up to ten times more for a Blue-throated Macaw, compared with a Blue-and-yellow Macaw.

The Durán family, like many others, witnessed the arrival of conservationists, happily with open arms. The meeting of the two sides would turn out to be a significant help to researchers - the family knew the birds intimately; what they ate, how many chicks they raised.

They also knew about the area's predators.

Children observe the birds at the ranch

Blue-throated chicks near fledging

Aerial view of the macaws' fragmented habitat

We, the researchers, listened carefully and took notes. We learned from the Duráns facts about the macaws known from long ago, knowledge that had been passed on from generation to generation.

Using this valuable information we began a thorough study of the Blue-throated Macaw in the wild. We knew it was a different species of macaw, and that it inhabited a vast region of the Bolivian Amazon, but we knew nothing of its population density or ecology. We only knew that it was threatened.

The important knowledge that the Duráns had of these birds helped to speed actions to reduce threats affecting the species. It allowed researchers to begin supplemental feeding of chicks to increase their survival rate, and to protect their nests against known predators. The family also knew where new populations of birds were located, so researchers could study them further.

Thanks to conservationists and people like the Duráns, the Blue-throated Macaw is still found in the skies of Bolivia. Fortunately there has been a gradual recovery of a number of wild populations, not only of this species but of parrots in general.

People are seeing more and more parrots since not many are being trapped – a trend noted by different people we met during our travels conducting fieldwork activities. And, luckily for the macaws, traffickers did not wipe them out completely.

Currently, the properties of the Durán family are a hub of wildlife: in addition to a main Blue-throated Macaw breeding population of about 15 individuals breeding yearly, many endangered species such as the Jaguar (*Panthera onca*), Maned Wolf (*Chrysocyon brachyurus*), Giant Anteater (*Myrmecophaga tridactyla*) and the imposing Crowned Solitary Eagle (*Harpyhaliaetus coronatus*) all call this area home.

They are all living in these rich lands, a clear example of people co-existing with wildlife, and working for the preservation of natural habitats and the species that inhabit them.

The Blue-throated Macaw project's work is dedicated to all the families - especially the Duráns - who have quietly helped to preserve these special birds, and many other species of wild animals which inhabit the beautiful land of the Beni.

All of us at the project want to show our deepest gratitude to them for their continued support of the team, day after day, so that we may achieve our project goals. These families are undoubtedly the heroes of the Blue-throated Macaw conservation story.

About the Project

The **Blue-throated Macaw Project** is a collaborative effort between multiple Bolivian and international partners and the World Parrot Trust. For over 15 years these organisations have worked together to better understand these macaws and the threats they face, and to find effective solutions for their conservation.

Conservation of the Blue-throated Macaw *(Ara glaucogularis)*

Wild population:
110-130 known individuals

Where found:
Occurs only in the seasonally flooded savannahs in Llanos de Mojos in N Bolivia, east of the upper Río Mamoré, Beni.

History:
Within a few years after their rediscovery in 1992 the birds were trapped to near-extinction for the pet trade, leaving a small population scattered over a wide area of habitat. Although most trapping ended over two decades ago, the species remains in a precarious state as only 10-15 breeding pairs are known to exist in the wild.

WPT Collaboration:
Since 2001 the World Parrot Trust has led efforts to save this species. WPT and its partners continue to support the management of wild breeding pairs and their young, conduct population surveys and other studies, track birds by satellite, lower the number of threats to the species, and analyse the genes of captive and wild populations. Extra efforts include a captive breeding program for reintroduction and educational programs for communities.

Learn more:
tinyurl.com/btmproject

Boogie AND THE "Bottle Cockatoos"

Update and Photos By Mehd Halaouate

They are images that are not easy to forget – photos showing parrots jammed into plastic water bottles with little or no room to breathe. How could a person forget; how can anybody with just a *hint* of compassion forget?

The birds, over two dozen of them, were taken from the forests on Aru Island, situated between the Papuan mainland and Australia.

They were smuggled onto a ferry in Ambon, bound for the bird markets in Jakarta. **For four miserable days they were kept hidden in bags without food or water.** There were eight birds left when they were transported to the zoo, but one was beyond saving - it died a day later.

The first time I saw these parrots was when they were sent to Maharani Zoo in East Java, Indonesia.

It was an strange, emotional encounter: a contrary mix of sadness, thinking of what they endured and happiness, that against all odds they had managed to survive. But survive they did, because of the World Parrot Trust stepping in help raise funds and awareness for the birds. Members, donors and friends were quick to respond.

Soon it was time for me to visit again and check on these beautiful creatures. They were still seven of them, slowly recovering but with one showing signs of illness. This bird wasn't concerned about my presence; in fact, it seemed as if he wanted my help, he was that tame.

Left: Mehd visits with zoo staff and Boogie, an Eclectus parrot *(Eclectus roratus*) rescued with the cockatoos.

Right: A curious Sulphur-crested Cockatoo (*Cacatua galerita eleonora)* nimbly scales a rope.

Lower middle: Boogie obligingly sits for a weigh-in.

Opposite Page, Lower: Sulphur-crested Cockatoos recover at the zoo shortly after their confiscation.

Among the cockatoos rescued there was one other bird, an Eclectus parrot. Zoo staff named him Boogie, and he is the reason that he and the cockatoos were saved. The smuggler, unaware of wildlife regulations in the country, stepped off the ferry in a harbor in Surabaya with the young parrot on his shoulder, in full view of authorities. When the police arrested him some of the passengers came forward and informed them of a pair of bags with screeches and yells coming from them.

The first time I met Boogie at Maharani Zoo I didn't think that he would make it. He looked undernourished and feathers were missing everywhere. He perched in a corner, avoiding any contact. Staff nursed him back to health, providing him with a variety of foods, therapeutic showers and exercise.

Boogie is now very active and healthy, and the remaining cockatoos are recovering slowly from their ordeal. Boogie serves as ambassador, educating zoo visitors about the dangers of trade.

"Indonesia Nine" Campaign Update

In 2015 WPT supporters sent much needed funds - over $6,300(USD) - to assist in the recovery of these birds, and aid parrot conservation efforts in Indonesia.

About the Author

Mehd Halaouate is the Indonesian project manager for the World Parrot Trust where, among other projects, he has been helping to assess and protect the small remaining population of Yellow-crested Cockatoos. In addition, Mehd is the manager of the breeding center at the Green School in Sibang, Bali.

Article and Photos By Matt Kirchhoff

IT TAKES A VILLAGE:

The Volunteers of the Ara Project

Bo, a recent high school graduate from Vermont, was probably wondering how he'd drawn the short straw. I had sidled up to him as the morning staff meeting was getting under way. The meeting was in Spanish, and I thought I might lean on him for translation duty.

I was visiting the Ara project's field site in Costa Rica. This particular field site was at Punta Islita, a small, end-of-the-road town on the drier, Pacific side of the country. Remote, sunny, beautiful… I could see why volunteers would like it here. I caught myself scanning the shade for hammocks. My siesta-on-the-beach musing didn't last for long.

The staff meeting started at 8 AM sharp. Not at the beginning of the work day, mind you, but after the crew had already been working for 2 hours, chopping fruit and veggies, cleaning food and water bowls, checking on birds and delivering breakfast to the parrots. The Islita parrot family includes some 150 birds, mostly Scarlet Macaws (*Ara macao*), housed in a dozen aviaries scattered widely around the park-like grounds.

Perhaps the 8 o'clock meeting start is for practical reasons. It's hard to hear oneself think, much less hold an orderly staff meeting, when the macaws want their breakfast. As the volunteers wandered into the kitchen meeting area, I wondered, where are the chairs? I've been to plenty of staff meetings in my day, and every meeting had chairs. Not this one. This was the Islita "stand-up" staff meeting, intended to keep things moving—crisply, efficiently. Imagine!

The meeting was led by Celine, a petite, 20-something veterinarian from France. Her veterinary skills contribute greatly to the ongoing testing for disease and parasites, fine-tuning of diets, and development of sanitation protocols to keep these birds in the picture of health. Besides Celine and Bo, those attending included Fabio, a laborer from the local community; Mauricio, a biologist from Mexico, and Alina and Julia- two volunteers from Germany. Absent was the Ara Project's Executive Director, Dr. Sam Williams (UK) who was driving a departing volunteer, Sophie (Netherlands) to the bus station and picking up a new volunteer. Also absent on this Sunday morning was the Islita manager, Angharad, from Australia, who was taking her day off (although she led a tour that afternoon). These were people that were drawn here from all corners of the globe with one desire in common—helping parrots.

All, except Fabio and I, could communicate in 2 or 3 different languages. The meeting was conducted in Spanish. When someone struggled to find a word, there was lots of help. Although these volunteers probably hadn't signed up for Spanish learning, this was certainly a side benefit.

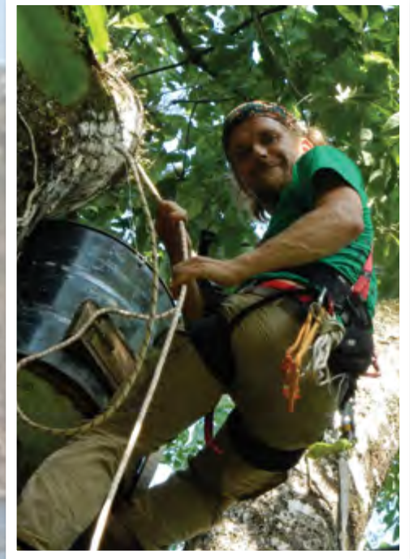
Celine went around the room, asking every person for a quick report on what they'd observed this morning. How were their birds? What needed work? What were their priorities for the day? The reports from the volunteers were varied. A stuck lock on Aviary 9B; a pair in Aviary 7 was showing signs of nesting (yea!); the disinfecting solution in the footbaths was too weak.

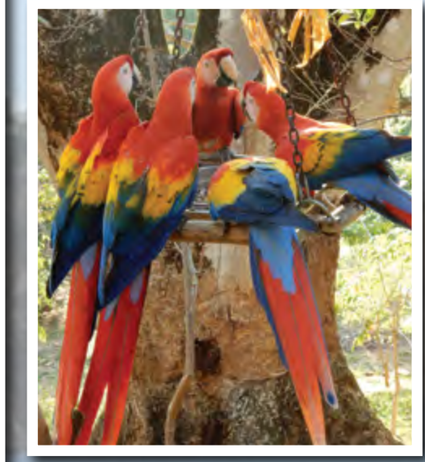
Everyone had their set jobs for the day…building nest boxes, cleaning aviaries, feeding birds, building trails. It was a cooperative team approach to setting the priorities, and there was no lack of work. The volunteers kept their eyes open for problems and maintenance issues that needed addressing; Celine scribbled these on a white board. If anyone finished their regular jobs early, they could consult the board, and tick it off the list.

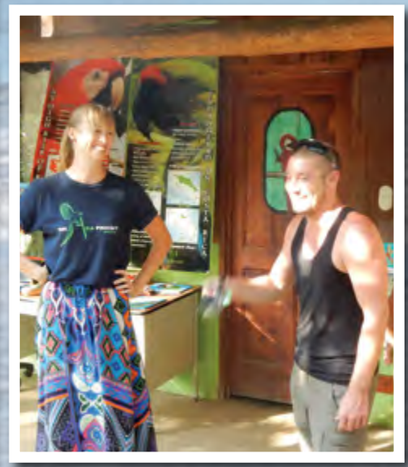
I wondered, how did the volunteers "really" feel about this project? After hours, I approached them individually for honest opinions about what they liked, or disliked about the experience. I found that they all valued making a contribution that mattered. No one liked doing "busy work", or worse, having no work.

The two volunteers from Germany had made an extended time commitment to volunteering. This was the 4th project they'd worked on, and they graded it near the top. They liked the collaborative aspects, the education they were getting, and the feeling of making a difference. And they liked the people they were living and working with. This group clearly enjoyed one another's company.

Upper left: A Great Green Macaw *(Ara ambiguus)* forages amongst blossoms. ***Upper right:*** A homemade nest barrel awaits occupants. ***Centre left:*** Volunteer Tom climbs high up to check on a nest barrel. ***Centre right:*** Scarlet Macaws *(Ara macao)* form a pinwheel around a feeder. ***Lower left and right:*** Staff members Angharad and Mauricio discuss parrot care.







Dr. Sam Williams (far right) chats with staff and volunteers

Later that day, I tagged along with a group of tourists that Angharad was guiding around the grounds. They hung on her every word, which didn't surprise, given her knowledge and articulate style. She also had presence and a ready smile, making her pleasantly approachable.

She explained the purpose of the Ara Project to the visitors. Although some of the breeding birds were rescues, this was not a rescue facility. This was a conservation effort, she noted, aimed at re-introducing wild populations throughout Costa Rica - restoring populations that had been depleted through habitat loss and decades of exploitation for the pet trade.

As we made our way up the dusty road to the visitor center/kitchen/living quarters, we were stopped in our tracks by the raucous arrival of a dozen brilliant Scarlet Macaws to feeders in a large tree just below the roadside. The birds began squawking and capering around the platform, looking for their favourite foods. Their already vivid colours were splendidly enhanced in the sunshine.

The stars of the tour had arrived, providing an apt exclamation point to the tour experience. People were in awe, and for the next 15 minutes, cameras clicked and whirred. Then, as Angharad wrapped up her talk, and the tour vans idled waiting to deliver guests back to their hotel, three or four were plainly reluctant to leave. They wanted to know what more they could do, besides leaving a donation in the jar on the table, or buying the parrot-themed t-shirts and artwork.

An engineer from the UK offered Angharad his card, saying if the project needed any engineering services - buildings, sanitation systems - to contact him. He'd draw up plans for free. Angharad received the offer warmly, with thanks. This wasn't new to her. It typified the giving spirit not only of tourists, but of the people she was working and living with.

As Angharad packed up the local artwork and display materials, I quietly slipped a bill into the donation jar. Based on what I'd observed the last few days, the people I met, and the extraordinary macaws, I couldn't imagine a better investment.

About the Author

Matt Kirchhoff is the Communications Director for the World Parrot Trust. A retired wildlife research biologist with experience serving on various nonprofit boards, he volunteers for the World Parrot Trust, working from his home in Anchorage, Alaska.

About the Ara Project

The Ara Project is a Costa Rican licensed, government-supervised, conservation organization operated by the non-profit organization Asociación El Proyecto Ara. Its primary purpose is focused on reintroducing macaws to their former ranges throughout Costa Rica. To learn more about volunteer opportunities at the Ara Project, visit their website at **thearaproject.org.**

In 2015 World Parrot Trust funder **ZooMarine Roma** (Italy) had a 'World Parrot Day' to raise awareness and funding for parrot conservation. Cristiana Senni, WPT's Social Media Coordinator/ Bird Trade Specialist, was in attendance at the event. WPT provided them with images for use in their parrot show, information about parrots in the wild and the status of WPT projects, and wristbands for resale and/or donation. On the first day there were educational activities and workshops for kids visiting from local schools. There was face painting, free with the purchase of one wristband, and an expert's area, with bird trainers available in the morning and afternoon to answer questions about parrots. Rounding out the day was a photo taking session with parrots for a fee, with 50% of the proceeds going to fund WPT conservation efforts.

Zoomarine Algarve (Portugal), another World Parrot Trust sponsor, in 2012 decided to update its parrot show – focusing on the birds' natural behaviours and the challenges they face in the wild. It was decided that the WPT would become a partner and benefactor in these efforts – and over the years the park has raised tens of thousands of dollars for parrot conservation. During the show WPT projects are highlighted in a video presentation, inspiring visitors to act for parrot conservation worldwide. Also new is a remodel of the ConsCiência museum, where the conservation projects the park supports are featured – along with an attractive display highlighting the WPT.

We at the WPT are extremely grateful for the work of these two amazingly supportive and creative institutions!

Barnaby, the Timneh Grey © Lisa Desatnik

THE PARROT THAT FEARS

By **Lisa Desatnik**

Is that "out-of-the-blue" fear *really* out-of-the-blue?

I have heard people talk about their parrot's sudden neurotic, phobic behaviors (or other pets for that matter). For no apparent reason, their loving companion screams, lunges or tries to escape the hands that in the past had only been associated with positive things.

What I hope is to help people understand that actually those 'phobic' behaviors described above do not just happen out of the blue. No behavior occurs in a vacuum. Measurable, observable behaviors are an animal's tools to get consequences within the context of the surrounding environment. In other words, if a parrot suddenly screams, lunges or tries to escape from a hand that it had stepped up onto hundreds of times previously, then SOMETHING must have happened to cause the parrot to form a negative association with it.

I had my first, hands-on experience doing this kind of detective work a number of years ago when my Timneh African Grey, Barnaby, who previously would have been very happy spending his entire day with his face pressed against mine (with occasional play breaks), suddenly 'panicked' when he stepped onto my arm. He screamed a blood-curdling scream, breathed heavily and then took off flying back to his cage and running to the back. It was heartbreaking for me to have been suddenly thrust into a role of some evil monster, without even knowing why.

Every time it occurred, I had to go through a systematic desensitization plan to help rebuild a positive association with my arm. Because Barnaby had a history of receiving a lot of positive reinforcement from me for his behavior, we were able to work through it fairly quickly, but my education taught me there had to be a reason why this sporadically happened.

Applied Behavior Analysis (ABA) is a systematic approach to solving behavior problems that involves looking at the very specific behavior (such as a bird biting or screaming) and the related environmental context that signals and reinforces it. We ask, "What happened *immediately* prior to the behavior (*antecedent*) to set the whole ball rolling?" And, "What happened *immediately* after the behavior to reinforce it (*consequence*)?"

With my ABA hat on, I began the process of evaluating Barnaby's environment surrounding those 'phobic' behaviors. This is what I determined:

There is a window in the birds' room that faces the street. On sunny days, when a car drove past, the light that reflected from the metal and glass made a brilliant pass from one wall to the next. If my neighbor parked her car in a certain spot at a certain time of day and Barnaby happened to be perched way up high, that same evil light hovered. Each time that Barnaby jumped on my arm, only to be terrified, that same 'trigger' light just happened to be coming from the street.

So, Barnaby's fear with being on my arm in the afternoon really was not out-of-the blue after all! Purely based on my poor timing, in Barnaby's mind, I appeared to be associated with all of those evil, scary lights coming from outside his window.

Barnaby was exhibiting two types of behaviors. One was an automatic, involuntary response to a bright light (panic scream, escape). In scientific terminology, this is called an *unconditioned* or *respondent behavior* because it wasn't something that Barnaby had learned that generally meant only good things would follow. On the other hand, his stepping up behavior is most definitely learned. Scientists call that *operant learning*.

Now, think of the use of a clicker (a small mechanical noisemaker to mark the behavior being reinforced.) The clicker in and of itself is meaningless to an animal. It only acquires value to that animal when a good trainer repeatedly pairs the sound with a treat – a *reinforcer*. Then the click acquires reinforcing value.

This same type of association had been going on with Barnaby, only it was a negative one. Being on my arm – something that had always given him positive reinforcement in the past – was being paired with that fear response. Just as the words 'good boy' came to be associated with safflower seeds, his being on my arm had become associated with that scary light.

With that analysis done, my behavior modification solution was not that difficult. I used *antecedent arrangement* (I like to think of it as 'prevention') strategies. I tried to remember to close the shade at certain times of the day, and on days when I couldn't or forgot to do that, I did not offer him my arm at that time. Instead, he learned to go inside his cage at that time of day.

That small adjustment meant the difference between a parrot who became instantly phobic of my arm, to one that continued to be my shoulder companion instead.

Always keep in mind that with living beings, there will always be either environmental or health issues that at any given time can impact behaviors. Taking a systematic look at analyzing it will help you to come up with the most positive, least intrusive solutions for you and your parrot.

About the Author

Lisa Desatnik, CPDT-KA, CPBC, is a certified parrot behavior consultant through the International Association of Animal Behavior Consultants (IAABC). She is a pet trainer (working mostly with dogs, but also offers parrot behavior consulting) in Cincinnati, Ohio. She has been a student of positive behavior management and Applied Behavior Analysis since meeting and being inspired by her first teacher, Dr. Susan Friedman, Ph.D., professor emeritus, Psychology Dept. at Utah State University. Lisa is also a member of the Association of Professional Dog Trainers and the Pet Professional Guild.

Read Lisa's behavior blog at www.SoMuchPETential.com.

Sneak Peek

Parrots OF THE Wild

A pair of Orange-fronted Parakeets, *Eupsittula canicularis*, perch atop a tree.
© Hans D. Dossenbach

"My travels to the pristine rainforests deep inside the Amazon River Basin in the 1970s gave me a glimpse into what my native continent of North America must have been like before the arrival of European explorers in the fifteenth century…In another moment of insight in my career as a naturalist, I visited the old-growth hardwood forests of the Congaree River floodplain, in South Carolina, in the early 1970s, when its ownership was still in private hands.

With a reverence normally reserved for cathedrals, my doctoral advisor John Terborgh, his colleague and fellow plant ecologist Egbert Leigh Jr., and I found our way into the bottomland majesty of this forest. This never-logged tract was an exceedingly rare remnant of the forest that once covered vast areas of eastern North America...the moments of wonder and heartache that I experienced that day in the Congaree have never left me. My disquiet has continued because of the silence of the forest and the absence of animals that should have been there. Among other denizens, the environs of the Congaree River bottoms should have been filled with the chatter and flash of busy parakeets browsing, exploring, playing, and tousling."

- Author Catherine A Toft, PhD
Parrots of the Wild: A Natural History of the World's Most Captivating Birds

This remarkable passage clearly reflects co-author Cathy Toft's grief at the loss of biodiversity in the world's forests. Her unease at these discoveries helped spark her resolve to fight for the natural world, and for parrots in particular. *Parrots of the Wild* was one way for her to reach people about the lives of wild parrots and to celebrate these wonderful birds. Please enjoy the following excerpt from her book - perhaps it'll spur you on to help them as well. – *Editor*

Chapter Excerpt: Parrots as the Most Human of Birds Pages 261 - 263

The research on wild parrots related in this book weaves a rich story of their biology, ecology, and evolution that resounds a common theme. Parrots represent a particular adaptive syndrome that they share with few other animals.

In the big scheme of life, parrots, regardless of their size, are relatively long-lived; reproduce slowly, raising only a few offspring every once in a while; care for their altricial young most often as life-long-monogamous parents; learn much of what they need to know from their parents and cohorts using their extra-large brains; engage in play, often beyond their youth; communicate using sounds that they invent and copy; live socially in small groups; and depend on locally abundant but widespread, variable, and unpredictable resources.

Parrots share this adaptive syndrome with some primates (monkeys, apes, and humans), cetaceans (whales and dolphins), elephants, and corvids (crows and ravens), to greater or lesser degrees[...] The match seems especially good between parrots and one particular species—our own. We humans converge on this suite of adaptive traits with parrots by a mixture of descent from a common ancestor (homology) and convergent evolution by natural selection (analogy).

Recall that natural selection is the process by which the traits of organisms are molded in response to a given environment, so that these organisms may function as best they can. Thus one can say that parrots are the most human of birds, backed by strong support from science. Wait, you might say. Is not such a statement blatantly anthropomorphic? The label of anthropomorphism is thrown around quite a bit these days in many quarters. In this epilogue, it is fitting to put anthropomorphism in an appropriate context, as the bulk of scientific studies on parrots point to these evolutionary parallels with humans. Anthropomorphism may be defined as the error of incorrectly attributing human traits to other species.

Many scholars now take the position that the past focus on avoiding anthropomorphism creates an unacceptable barrier to study, thought, and discussion that harms progress in many fields. We are all the poorer in our understanding of both human and nonhuman animals for this past bias[...]

Turning back to parrots, we are therefore not being anthropomorphic when we recognize that parrots share certain traits with humans. Although a few of these traits, such as basic brain structure (chapter 4), follow from our common vertebrate heritage, most have arisen by convergent evolution, as discussed throughout this book. Natural selection has molded parrots and people in response to the environments in which our ancestors lived. We share large brains and dependence on learning because we are social animals, adapted to solving problems in groups of individuals rather than striking out on our own.

A small flock of Blue-headed Parrots (*Pionus menstruus*) in southern Pará, Brazil.
© Carlos Yamashita

Parrots and humans (and other primates, and cetaceans, corvids, and elephants) are social and intelligent because the resources on which they depend are locally abundant but scarce and unpredictable on larger spatial and temporal scales. Harvesting such resources efficiently is aided by a good memory, flexible social interactions, and perhaps the sharing of information about resources. Corollaries to sociality and dependence on learning are long lives and infrequent reproduction. In this way, a few offspring can be carefully attended so that they acquire sufficient skills and knowledge before they become independent.

Parrots also happen to share our inventive use of vocalizations, presumably as a more flexible way to communicate in this social environment. After thinking long and hard about why parrots evolved vocal learning, I have arrived at the hypothesis that humans first evolved vocal learning for similar reasons. I doubt that humans evolved vocal learning in anticipation of building great civilizations and libraries—evolution does not work that way. Rather, I believe that humans evolved vocal learning to enhance their use of song, and therefore some aspects of music, for the same reasons that parrots added vocal learning to enhance their communications.

Because of the many evolutionary parallels between humans and parrots, I hypothesize that human songs and music were first used to woo mates and establish group identity and cohesion. Copied sounds are used primarily for these purposes in other animals with vocal learning, and human songs still fulfill these functions to this day. Recent studies establish that parrots are able to synchronize with a beat, that is, entrain their movement to music, as reported in several articles cited in the notes. In these publications, the authors support the hypothesis that musical ability and vocal learning are intimately tied in both parrots and humans.

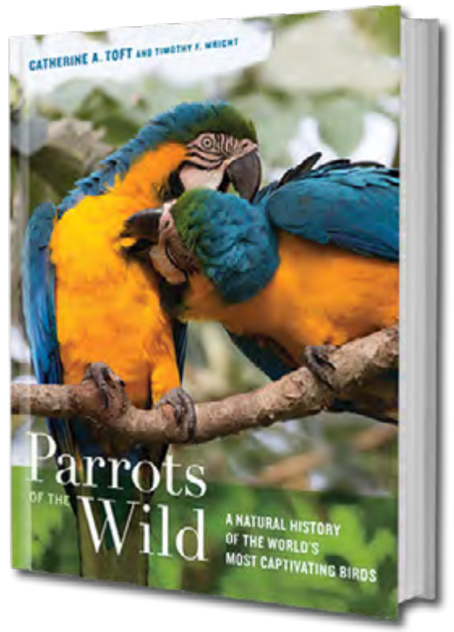
Thus, vocal learning may well have evolved and had the same original functions in humans as we know it to have in parrots. Once vocal learning was in place in humans, it could then be co-opted for flexible communication among group members to solve problems. This same process I hypothesize to be in play in parrots, albeit to a vastly simplified degree compared to this trait in humans. Parrots of some species in particular seem capable of using copied sounds as labels and connecting these labels syntactically, as best exemplified in Grey Parrots.

A lesson I therefore hope to share from the threads woven though this book is that one group of birds, the parrots, shares much in common with our own species. This conclusion arises from a solid body of rigorous scientific study. It is not anthropomorphism to so conclude but rather poses an insightful instance of evolutionary convergence. To say that humans are the most parrot-like of mammals would be equally correct. We humans love parrots and are fascinated by them because they are like us, and we are like them. My final hope is that this love and fascination can be transformed into providing better lives for them both in captivity and in the wild.

Excerpted from *Parrots of the Wild*,
published by University of California Press.
ISBN: 9780520239258

CO-AUTHOR INTERVIEW

Recently we had a chance to chat with Dr. Tim Wright, co-author with Dr. Cathy Toft of Parrots of the Wild: A Natural History of the World's Most Captivating Birds. *Both took on the mammoth task of consolidating research data on wild parrots for the book. Sadly, Cathy was stricken by illness just as she was completing the final draft and did not live to see the book go to print. Fortunately Dr. Wright, her colleague, research associate, and friend took up the cause for Cathy and was able to finish. Below we present an excerpt from the interview with Dr. Wright.*



Q The book presents a great deal of information about what is known now, but also poses many questions. For example, there is a lovely line that ends a discussion on parrots eating fruit - which are carbohydrate rich but low in proteins - that confronts an unsolved mystery of how fruit-eating parrots can be so large. Where do you think we are in terms of what we know about parrots?

We still have more to learn, and part of it is developing new tools and new ways of thinking about how and why animals in the natural world work. To answer the question directly, I think we are sort of scratching the surface. I think what the book does is a nice job of sketching the basic outline of a parrot: intelligence, communication, cognitive abilities, mating systems. We go through and talk about the general patterns we already know, but those are based on relatively few of the 350+ species of parrots.

Parrots have evolved on all four corners of the earth and in a wide range of habitats, so we should expect that there's going to be a diversity of evolutionary responses to these different habitats over millions of years. That's going to lead to a lot of interesting differences between species. I think the next generation of work on parrots will be to try to take these topics and start comparing them between closely related species in different habitats, how is that evolutionary time impacted, and how they respond to the environment.

Q Does that mean that there's going to be the need for much more study in the field or can this be done with laboratory birds?

I think the two styles of study can be very complementary, particularly when we are getting new tools to study. One of the reasons why we are a little bit behind with parrots compared to some other types of birds is that they are challenging animals to study. They are often very strong flyers, so they move long distances, they may live in big flocks, and so following individuals around and understanding how they are relating to other individuals can be difficult and requires technology like radio collars or GPS telemetry units. Because of this I think there can be a lot learned from working with captive populations as long as that work is done within the context of trying to understand how it relates to the wild animals. For example, we do work with captive Budgerigars, trying to recreate social context that we might see in the wild and understand how that impacts their learning of vocalizations.

Q You mentioned Budgerigars, they are an interesting species, aren't they? They are extremely well known in captivity, but actually very little is known about how they live and behave in the wild.

Budgerigars are a huge challenge in the wild because they are nomadic, they are living in parts of central Australia, where it's very dry and so they are following rainfall and they are doing so in flocks of a million; you can find these magnificent pictures on the Web of superflocks of Budgerigars. Trying to follow an individual around in that sort of setting is well beyond the tools we have at our disposal now.

Q I am going to pull another line out - a fascinating summary of the book as a whole and it arrives at the conclusion that humans are the most parrot-like of mammals. I thought that was a wonderful inversion of the usual anthropocentric view that animals are like us rather than the other way round. It's a very big question, but if we were to think of wild parrots in those terms - that we are the most parrot-like of mammals - do you think we might treat them a little better?

I would certainly hope so. I think this has been an underlying motivation for me as a teacher in general is that if we can help people come to a better understanding of the natural world around us, we can have more empathy for that world and treat it better, and in a way that's more sustainable. Thinking about humans perhaps as more parrot-like can really teach us a little bit about what we are and how we came to be. I think some of my work on vocal learning is really trying to understand what it is about parrots that led to the evolution of this relatively rare ability, and to what extent similar circumstances were present in our own ancestors, and drove the evolution of vocal learning that underlies our own language.

Q That's something you studied with Yellow-naped Amazons in Costa Rica; can you tell us a little bit about that?

So now we are onto my own special passion, understanding why parrots are such incredible mimics - why parrots have evolved the ability to learn vocalization. Parrots have formed a relatively rare phylogenetic ability, meaning they have evolved multiple times in different lineages. And these lineages are not each other's closest relatives, suggesting that this ability to modify vocalizations based on social experience has evolved multiple times and the neural capacity - the brain machinery that underlies this ability - has evolved multiple times. For me, that's been a really interesting puzzle throughout my career.

Q I thought that was an absolutely fascinating section of the book, though I have to admit I found them all fascinating! I was approaching this book as someone who loves parrots anyway, but my personal background is as a general birder, and I realize how much I was getting from it as a birder; I think anyone interested in birds *per se* will take a lot away from this book.

Thank you, I would certainly like to think so. I think any scientist likes to believe their work is broadly interesting beyond their narrow circle of people who might be interested just in parrots or in vocal learning in parrots. Parrots really are extraordinary in many ways, so I think they have a lot to teach us about the natural world and about how evolution has worked to solve problems of making our way in this world.

Q A percentage of sales from the book is going to support the work of the World Parrot Trust; that's a very generous gesture. Was that something that Cathy decided right from the start?

Yes, that was Cathy's wish. She first started discussing this book with Jamie Gilardi, the Executive Director of the WPT who was her graduate student many years ago. It was always conceived of as a partnership, and it was Cathy's wish from the outset that her portion of the sale profits would go directly to support conservation efforts of the World Parrot Trust. It's a very fitting way for her work to live on.

About the Authors

Dr. Catherine Toft was a professor at the University of California, Davis. She was an evolutionary biologist and lover of parrots, both wild and companion. Writing '*Parrots of the Wild*' was a labour of love for Cathy. It was her final wish to use the proceeds of this book to help conserve parrots worldwide.

Dr. Tim Wright is an Associate Professor at New Mexico State University. Research in the Wright lab focuses on the function and evolution of vocal communication in parrots.

Hear the Interview ➲

Go online to hear the full interview with Dr. Tim Wright: **www.parrots.org/potw**

Get the Book ➲

Parrots of the Wild, A Natural History of the World's Most Captivating Birds is published by University of California Press and is available for purchase through the WPT online at:
www.parrots.org/potw

News

Genome sequencing for Kakapo

In a first-of-its-kind project a species will have its entire wild population genome sequenced. The Kakapo *(Strigops habroptila)* now numbers 125 adults in the wild. Over many decades researchers from the NZ Dept of Conservation and volunteers have worked to save the Critically Endangered parrot, using a variety of means such as hand-raising young, supplemental feeding, health monitoring and fertility testing.

Now comes a new measure: genome sequencing. The analysis will provide much-needed data on fertility and susceptibility to disease, and which birds are closely related (to avoid inbreeding). As the results are studied further scientists hope to winkle out more answers to questions about this enigmatic bird.

Read more online:
tinyurl.com/kakapo125


© Scott Mouat


© Brent Barrett

Western Ground Parrots manage an escape from bushfires

The Western Ground Parrot *(Pezoporus wallicus flaviventris)*, whose range is has been limited to Fitzgerald and Cape Arid National parks, is at risk for extinction in the wild. Numbers are down to as little as 140. Last year, severe brushfires in the Cape Arid area were thought to have affected the wild population further. Recently, Department of Parks and Wildlife Western Australia staff, assisted by volunteers from Friends of the Western Ground Parrot, heard and sighted the birds in Nuytsland Nature Reserve, near to Cape Arid, for the first time since 2006.

This was a huge relief to conservationists working on the species' behalf, as the ecology of these birds is still somewhat of a mystery. What is known is that these birds spend the majority of their lives on the ground, feeding on a variety of seeds, leaves, shoots and small insects. They likely breed between July and October, and can fly long distances to foraging areas. They are threatened by loss of habitat for agriculture, introduced predators and frequent bushfires.

Read more online:
tinyurl.com/WGPfire

Opportunities

Belize Bird Rescue

Looking for a chance to work with parrots in Belize?

Belize Bird Rescue is looking for interns and volunteers who are passionate about wildlife and want to use their skills to help return wild birds back where they belong. The Belize Bird Rescue is a non-profit rescue, rehabilitation and release centre for indigenous birds of Belize. Contact them to learn more and find out what you can do to keep birds flying free:

belizebirdrescue@gmail.com
belizebirdrescue.com

Echo and Ara Project - call for volunteers

WPT partners **Echo** and **Ara Project** are carrying out important work for parrots, in Bonaire and Costa Rica respectively, and they always need volunteers to help! If you have time to spare, take a look at their ongoing opportunities by following the links below, and see if you fit the bill.

Volunteer at Echo:
echobonaire.org/volunteer

Volunteer at Ara Project:
thearaproject.org

EVENTS


Mulga Parrot © Keith & Judy Humphreys

2016 Avian Discovery Tours off to distant birding locales in Australia

Avian Discovery Tours has set out its 2016 itinerary! This year's birding destinations include Alice Springs in the Northern Territory, Bowra Reserve & O'Reilly's Retreat in rural Queensland, Cairns, and the wet tropics including the Great Barrier Reef! Adding on Adelaide and surrounds, Gluepot and Grampian Mountains makes this an extraordinary parrot trip.

Parrots regularly seen on this trip include Budgerigars and Double-eyed fig parrots, Major Mitchell's and Gang-gang cockatoos, and several species of lorikeets - up to 30 parrot species in all. Guests will be provided with comfortable means of transportation, great accommodation, and expert guides. Trips are comprised of varied durations making it affordable and exciting for everyone. As always, a portion of the proceeds from each trip goes towards the World Parrot Trust's conservation programmes.

Find out more and book your spot:
aviandiscoverytours.com


David Woolcock @ Paradise Park

Think Parrots 2016

On June 19th the ever-popular *Think Parrots* will celebrate its fifth event for those who are passionate about parrots and want to provide the best care for their birds. A wide diversity of exhibitors will be there, from food vendors to travel specialists, including the World Parrot Trust. The show will again feature the UK's most knowledgeable experts to discuss the important topics concerning companion and wild parrots.

This year David Woolcock, Trustee of the World Parrot Trust and Curator at Paradise Park, Cornwall, will be giving a masterclass focusing on enrichment and training for parrots. There will be parrot-friendly plants for sale, including easy to grow nasturtium and buddleia. Most parrots love freshly sprouted, vitamin-rich, wheat grass and there will be free samples of the seeds to take home and grow, plus lots of ideas and advice for making safe toys at home.

Get your tickets:
www.thinkparrots.co.uk

PSITTASCENE
2015 INDEX

27.1 SPRING

- From the Director: Steve Milpacher
- **Orange-bellied Parrot**: Searching for Answers
- **"Parroting" in the Wild**: Vocal Imitation in Conures and Galahs
- Thank you - **WPT Donors of 2014**
- **Book Review:** Understanding Parrots - Cues from Nature
- Parrots in the Wild: **Galah**

27.2 SUMMER

- From the Editor: **Desi Milpacher**
- Quest for the **Drumming Cockatoos:** Understanding the elusive Palms
- Pet Pages: **The Parrot that Screams**
- **Back to Brazil**, Part 1: Stories of conservation in South America
- Parrots in the Wild: **Mitred Conure**

27.3 AUTUMN

- From the Director: **Steve Milpacher**
- Phillip Island: Future haven for **Tasman Parakeets**
- **Back to Brazil**, Part 2: Stories of conservation in South America
- Tribute to a Master Painter of Birds: Legacy of **William Cooper**
- An Overlooked **Parrot Trade Hotspot:** North Moluccas, Indonesia
- Parrots in the Wild: **Eastern Rosella**

27.4 WINTER

- From the Chairperson: **Alison Hales**
- **Sacred Valley of the Macaws**: Interview with Lloyd Davidson
- Hidden Lives: An Intimate Glimpse - **Puerto Rican Amazons**
- Return of a Giant: **Red-and-green Macaws**
- Progress Report: **African Parrots**
- Parrots in the Wild: **Scarlet Macaw**

ACCESS PAST ISSUES AT: PSITTASCENE.ORG

WPT CONTACTS

WEB
parrots.org
psittascene.org
facebook.com/WorldParrotTrust
twitter.com/parrottrust

PsittaScene Editor
Desi Milpacher
dmilpacher@parrots.org

WPT Members:
Join: parrots.org/join
Renew: parrots.org/renew

MAIN — UK & World
Karen Whitley
uk@parrots.org

USA
Glenn Reynolds
usa@parrots.org

AFRICA
Rowan Martin
africa@parrots.org

AUSTRALIA
Nicholas Bishop
australia@parrots.org

BENELUX
Ruud Vonk
benelux@parrots.org

NETHERLANDS
Ria Vonk
netherlands@parrots.org

BELGIUM
Ronald Coens
belgium@parrots.org

BRAZIL
André Saidenberg
brazil@parrots.org

CANADA
Michelle Kooistra
canada@parrots.org

INDIA
Avin Deen
india@parrots.org

ITALY
Cristiana Senni
csenni@parrots.org

JAPAN
TSUBASA
japan@parrots.org

SWEDEN
Maria Rogstadius
sweden@parrots.org

PERU / SPAIN / CENTRAL AMERICA
Rosa Elena Zegarra
centralamerica@parrots.org

Languages Available:
Dutch, German, Italian, Portuguese, Spanish, Swedish