Release for Restoration: Blue-throated and Scarlet Macaws, African Grey Parrots

May 2013
**from the director**

We first heard their screams from high over the rainforest canopy, then saw the flashes of red, blue and yellow as a dozen Scarlet Macaws careened in to the Mayan ruins at Copán just last month. It was the early morning sound of boisterous birds goofing around and it was also the sound of recovery – of these spectacular birds roaring back to their rightful place in the skies of Central America. In many ways, this never should have happened. We never would have dreamed that these macaws could survive in a developed-yet-impoverished area like western Honduras (see “A New Generation”, page 14). But there they were, thriving, flying strongly around the valley, feeding well on wild foods, and with several pairs already on eggs this season!

We’ve learned a great deal from this project and the dozens of other releases of confiscated and captive bred birds not just in Central America, but also in the Caribbean, South America, Africa, India, and Indonesia. We’ve learned about how to get the job done and about what really matters in creating successful outcomes. But perhaps more importantly, because of these release projects, we are developing an increasingly effective tool which allows us to reliably start new parrot populations in places where they’ve become locally extinct. That, in turn, has allowed us to see our task of saving rare parrots from extinction in a whole new and empowering light, and also to redefine the role captive birds may play in the future of wild parrot recoveries.

Throughout this issue we’re celebrating releases for restoration and discussing the complex issues to be considered in the process. We’re also celebrating a huge WPT milestone as we prepare to release six captive bred Blue-throated Macaws that we have successfully repatriated to Bolivia (articles beginning on page 3). This project would not have been possible without the support of numerous individuals and organizations. In particular we would like to acknowledge Steve Martin and his Natural Encounters Conservation Fund. Starting over a decade ago, Steve began breeding Blue-throats for this specific purpose and has raised tens of thousands of dollars in support of the program. The first birds to make their way home to Bolivia were from Paradise Park in Cornwall, UK where WPT was founded back in 1989. Soon, members of the Natural Encounters flock will also be making a bit of history of their own. Stay tuned!

Jamie Gilardi  
Director
We’ve learned in example after example that released birds don’t just survive, they thrive.

EXACTLY A DOZEN YEARS AGO, I WROTE A PsittaScene ARTICLE CALLED “Breeding Parrots for Conservation.” In it, I reviewed how likely it was that captive bred parrots would make a direct contribution to the conservation of parrots in the wild. In a nutshell, the conclusion in May 2001 was that yes, it’s possible, but only in very exceptional cases. Re-reading the piece today, I’m relieved that it wasn’t entirely off the mark, but I’m also impressed by two fundamental things we’ve learned in the intervening years – one a bit disconcerting and the other very encouraging.
First, the sad news: Time and again, researchers are finding that parrots they thought were doing fine in the wild aren’t nearly so well off as had once been believed. In some cases there was just no information; in some cases counts weren’t terribly accurate. In others, what was thought to be one species turned out to be two, with one of the two turning out to be quite rare. For very familiar birds like Sun Conures, Timneh Grey Parrots, Thick-billed Parrots, Citron-crested Cockatoos, Yellow-naped and even Mealy Amazons, the real numbers of known birds in the wild are proving to be surprisingly and disturbingly low. To make matters worse, the remaining birds are often spread out over large areas in severely fragmented habitats. Life history can add other challenges. Many parrots take a long time to start breeding, not all adults breed each year, and they are notoriously picky about selecting mates. All things considered, the reality is that while several hundred birds in the wild might look like a healthy population, in reality, it equals a small number of productive breeding pairs. Offspring may or may not be able to find (and accept) suitable mates, essential to new breeding and eventual recovery.

So what’s the good news? In the past decade, we at WPT have learned that starting new parrot populations where they’ve been driven to extinction is proving to be, not just possible, but far easier than we had ever imagined. Of course, it depends on appropriate planning, coupled with careful selection and preparation of the birds. How did we learn this? Honestly, as a result of trade itself. One of the great ironies of the trade in wild parrots is that this otherwise tragic tradition has helped us learn how best to utilize release for restoration. Thousands of parrots of dozens of species have been confiscated from trade. Those birds have opened our eyes to just how successful releases can be. We’ve learned in example after example that released birds don’t just survive, they thrive, adapting quickly to wild local foods and going on to breed successfully to start new and growing populations.

With hindsight it’s easy to see examples which were pointing in this direction all along. The most obvious are cases of birds which have been accidentally introduced well outside their historic ranges… birds now referred to as “feral” parrots. While many of these are common species like Monk and Ring-necked Parakeets, others are endangered in their native habitats such as Lilac-crowned Amazons, Yellow-crested Cockatoos, and even Congo African Greys. The fact that they survive and breed despite their accidental introduction into absolutely inappropriate habitats tells us a lot about the prospects of carefully planned releases of select, well-conditioned birds into their natural range.

Thankfully, the past twelve years have brought important lessons. We’re now delighted to include confiscated and captive bred birds in conservation efforts more broadly than expected. In this issue alone, you can see applications of this tool to the restoration of Scarlet Macaws in Honduras, the repatriation and planned release of Congo Greys in Uganda, and most thrilling for us, the first transfer of captive-bred Blue-throated Macaws back to Bolivia to aid the recovery of this critically threatened species.

In the end, it was the release of confiscated birds which helped us refine the key components of this new tool and forced us to ask ourselves the following question: if we can successfully release common birds from trade, why not apply the same tool for seriously threatened birds as well? Clearly the answer is that we can, we should, and we are!
There were only a few hundred birds left by the time wild Blue-throated Macaws (Ara glaucogularis) were protected from trappers in the early 1990’s. Their location in the wild was relatively unknown to researchers during the 1970’s and early 1980’s when over a thousand birds were likely captured for the pet trade. To this day, the population remains severely compromised with between 115 and 125 individuals known to exist in the wild making this stunning Bolivian species one of the most endangered birds in the world.

Starting in the late 1990’s several organizations began working to assess the species’ wild status, to determine factors limiting population recovery, to raise public awareness, to protect the macaws’ habitat, and to take action to save the species. The World Parrot Trust’s Blue-throated Macaw fieldwork began in 2002 and remains one of our core projects today. We initially focused on determining the location of every known individual, understanding the species’ ecology and habitat use, assessing its nesting habits and determining the factors limiting its recovery in the wild.

We have implemented a number of direct conservation actions over the past decade, many of which focus on assisting wild pairs at their nests, where predation, poor nest quality and extreme weather events have conspired to limit reproductive success. In good years only 10 to 12 pairs attempt to breed, and raise 5 to 9 offspring in total, and this is only when the nests are protected and the chicks directly supported by field staff. When left unmanaged, nearly all nests fail due to predation and environmental factors. During prolonged droughts food availability can be disrupted, most notably Motacú Palm fruit, a key food source for the macaws. In such “bad” years (3 of the last 9), all breeding attempts have failed, and no new birds are added to the population.

Suitable habitat is readily available in much of the Blue-throat’s historic range, an area estimated to be over 35,000 km² (13,500 mi²). Unfortunately, it appears that the species’ population density is too low to allow for healthy recruitment and recovery. For years we have anticipated this reality and have been making careful contingency plans. In early 2012, the Bolivian Government approved our proposal to encourage population restoration through a breeding and release program in Bolivia utilizing Blue-throated Macaws currently held overseas. In a ground-breaking effort, we are currently working to repatriate birds held in the UK and the USA.

The first of these birds arrived in Bolivia in March 2013. This is their story…
On 23rd September 1992 I saw a Blue-throated Macaw for the first time. We received six young captive bred birds, then known as Caninde Macaws (*Ara caninde*) at Paradise Park in Cornwall, UK.

The character and charm of these wonderful birds immediately endeared them to staff and visitors alike. As they matured we set them up into pairs and attempted to persuade them to breed. However, it was not until February 2004, almost twelve years after they arrived at the park, that we had our first egg. Eventually, after some adjustments to our program, the birds produced beautiful chicks and raised all themselves.

During those early years, the dire fate of the wild Blue-throat population was coming to light. The World Parrot Trust, founded and headquartered at Paradise Park, was building a field conservation program in Bolivia at about the same time our first chicks were hatching. Our dream was to one day return Blue-throated Macaws to Bolivia to be free. In those days such a notion wasn’t without controversy. Many believed it could not be done. Still, we actively managed the birds to minimise any risks that could compromise our ambitions. In their breeding aviaries they had no direct contact with any other species. All chicks were housed in large enclosures and mixed only with their parents or with other young Blue-throated Macaws.

Fast forward to 29th August 2012, a really important day – the day we received confirmation that the Bolivian government had accepted the World Parrot Trust’s plan to repatriate birds back to the country. Import permits would be issued for seven birds from the UK. Now our work had really begun.

First, we had to select the seven birds that would be the initial cohort to be returned to Bolivia. We chose six birds that had been housed together as a group since November 2011. The seventh bird was a 2012 chick that was still with its parents and two siblings in the aviary in which it was bred.

Next we had to apply to the UK CITES office for export permits for the seven birds. Not only did we have to provide complete details of the birds themselves, (age, sex, microchip numbers etc.) but we also needed to submit details of their parents as well. The UK CITES office turned our application around very quickly and we soon had export licences in hand.

Now we needed health certification required by the Bolivian Ministry. However, there was no officially recognised avian health documentation agreed between the UK and Bolivian Governments. Turns out, no one had ever sent birds back to Bolivia from the UK. We had to create a document for this purpose and have it approved and recognised by the Bolivian Ministry. After a lot of emails over a period of several weeks that too was done. Whilst all this paperwork was being sorted, the birds started their obligatory 60 day quarantine period and the accompanying barrage of testing.

Now we had to arrange the flights. Pretty straightforward? No chance! Like so many things we discovered in this endeavour, we were breaking new ground here too. As the Heathrow Airport shipping agent so succinctly put it, “Bolivia is not the easiest place to get live animals to, but we won’t be beaten!” Our ideal flight plan would have been Heathrow to Miami to Santa Cruz, Bolivia. However, that particular aircraft was not an option due to technical and logistical reasons which meant little to us. Thankfully, the shipping agents were a godsend. They explored every option and eventually managed to get two airlines to Inter Line (I had no idea what this meant either! Basically...
it means to work together). The route was eventually confirmed – Heathrow to Madrid to Santa Cruz. This routing did throw up another potential hitch as the birds would now not be leaving the EU in London but in Madrid. We now needed to apply for additional health paperwork (called a TRACES certificate) for the European leg of the journey.

So, with all the preliminary tests on the birds coming back clear, CITES permits in place, health certificates in the works and transport crates prepared, all was progressing to plan, with a departure date set for 23rd January 2013.

Enter Bolivian rainy season! Some of the access roads to the release site were impassable. We had to bump the transport date back a month to February 20th 2013, rebook the flights, rearrange the vet visit and reapply for the time sensitive TRACES certificate.

What next? It was around this time that we were told that the Heathrow to Madrid aircraft only had tie down spots for six crates, not seven. We could either let two birds share one crate or send only six birds in individual crates. Due to the length of the journey, the only sensible decision was to send six birds in individual crates. We would hold the 2012 chick back with its parents and siblings but continue the quarantine and testing of these birds in case there was an issue with any of the six.

From the outset, it was our intention to have someone accompany the birds on their entire journey. With a stop off in Madrid we thought it best to have a Spanish speaker as their chaperone. José Antonio Díaz Luque, part of the Bolivian field team, was just the person for the job. We arranged for José to travel to Paradise Park, spend a few days working with the birds and the staff and then travel with the birds from Cornwall to London to Madrid to Santa Cruz and on to the release centre.

Ahhh. All set! Well, not quite. Five days before departure I had an email from the shipping agent. An impending handling agent strike in Madrid was scheduled to take place from 18th to 22nd February – great! We could not risk sending the birds on the 20th February as every indication was that once they got to Madrid they were stuck until the strike was over. The only option was to reschedule for one week later – 27th February. Of course that meant… you guessed it… rebooking the flights, rearranging the vets visit and reapplying for that time sensitive TRACES certificate – again!

So with everything in place for the third time we were now set to go. On 26th February our official veterinarian handled the birds for the final time in their pre-export health checks and to verify all the health requirements had been fulfilled and that the birds were healthy and fit for travel. They were then placed in their travel crates and loaded into the vehicle ready for the journey to Heathrow Airport.

We arrived at the shipping agents at Heathrow later that evening and handed over the birds into their care for the night, to await embarkation onto the flight to Madrid at 4 AM the next day. There was nothing more for me to do except to hand over all the required paperwork. We couldn't celebrate yet though as José still had a long few days ahead of him. He needed a good night's sleep before joining the birds on the flight to Madrid.
From: Jamie Gilardi
Sent: Friday, March 01, 2013 7:05 PM
To: WPT Staff and supporters
Subject: Bluebeards Ahoy!

I wanted to send a fun photo and let you know that the Blue-throats arrived safely in Bolivia yesterday after a long slog of a journey (snow in Madrid) from Cornwall - something like 50 hours all told.

That’s Igor on the left, José in the middle, and André on the right. They picked up the birds at the airport at about 3 a.m. and then drove 7.5 hours to the conservation center, and transferred the birds into the flights to start their three week quarantine period. If they look a little exhausted but happy, I’m guessing that’s about right.

It’s hard to imagine that moving six birds could take so much effort and patience and endless headaches, but we’re hopeful that this first group will be the hardest. I think all of us at the WPT should feel proud we were able to make it this far. The birds are doing great, and are already beginning to learn to enjoy the new food plants from the area!

All best wishes,
Jamie

P.S. It sure would be nice to know what these birds are saying to one another ... probably something like “we sure as heck aren’t in Cornwall anymore!”

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It was an amazing day when the six new arrivals finally ate the Motacú palm nuts. One of the most important parts of their adjustment to life in Bolivia is learning the wild foods and eating them readily. Motacú is a key food source for wild Blue-throated Macaws and wild these birds will soon be!

Food and more food

Much of our time and attention over the first two weeks after the birds arrived was spent gathering wild foods, preparing them in a variety of ways for the birds and also tracking everything each individual bird tried. We have slowly transitioned them from the parrot pellets and fruits that were their staples to the wonderful variety of wild foods available in the area of the Centre where they will be released. We have offered food in dishes, on branches, in the morning and afternoon, whole and peeled, sliced, mixed and mashed. In fact, we have tried offering these new foods in every shape and presentation anyone can think of and, I’m happy to say it is working. Each day we have been able to decrease the old foods we are offering and increase the new. We have also made our presentation of the foods more like what the birds will find naturally.

The Motacú nuts have been an interesting challenge. At first we offered them unpeeled and none of the birds tried them at all. They would move them and drop them to the floor and occasionally manipulate them without eating (sound familiar?). Then we began offering peeled motacú with tiny pieces of brazil nuts and a paste we made with motacú and walnuts. It worked! From there they began eating motacú slices and finally after 17 days, they began eating the whole nuts properly, just like wild Blue-throats. It was such a great moment.
Social life
The birds are adjusting well in other ways too. They are incredibly active during the mornings and late afternoons. It’s unbelievable how they are communicating with the wild macaws. Everyday we see Blue and Gold (Ara ararauna), Chestnut-fronted (Ara severus), Golden-collared (Primolius auricollis) and several species of parakeets flying above the center. The Blue-throats start to call really loud, replying to the calls of the wild parrots. Just before dark, when the wild parrots are going to roost, the Blue-throats start to fly like crazy birds inside the cage, screaming and screaming. It’s unbelievable and I’m glad to have the opportunity to see it. It reminds me of when we released the two Blue-throat chicks (PsittaScene 23.2, May 2011) and they decided to roost with the wild macaws from the first day!

Safety and security
These birds are extremely important world travellers and are very well protected. We have an electric fence around the perimeter of the property and two camera traps around the flight cage.

We have not seen any potential predators in the area or on the images from the cameras. The only species caught on camera were Ibis and Passerines walking and foraging in the area. We have also built a low plastic wall all the way around the flight cage to protect it from snakes. In addition, we have an ingenious snake trap formed by the plastic walls themselves. We have installed metal around all the trees adjacent to the cage so it is impossible for a rat, snake or mammal to climb the trunk and have access to the cage. We also have a 24 hour surveillance camera system in place.

Inspectors from the government agency called SENASAG have come to the Center three times. Their first visit was on the day the birds arrived. The second was almost 2 weeks into their 3 week quarantine. The inspectors were happy with all of our work and really impressed with how we are managing the birds, the food and the bird’s safety. What we are doing here is something really incredible for them. Their impression of our work and the project is very positive. They came to visit one last time when the birds cleared their quarantine. It was very satisfying to allow them to see a project of this nature that is so positive for the wildlife of their country.

Stay tuned for more news as these six birds get ready for freedom.

Best wishes from the land of the Blue-throated Macaws. Eternal life to the wild parrots.

Six rare Blue-throated Macaws (top) repatriated to Bolivia soon learn to eat a variety of native foods: Whole Motacú Palm Nuts (A), Ficus (B), Totaí (C), Motacú peeled (D) and Motacú strips (E).
History was made on February 28th, 2013, when a group of six rare Blue-throated Macaws travelled from England to Bolivia, as part of an international project to breed and restore wild populations of the species in the country. The birds had been raised specifically for this purpose at Paradise Park in Hayle, Cornwall, UK, to support a 10-year long project being led by the World Parrot Trust (WPT).

Years of planning and careful consideration of countless questions and issues has prepared us for this next phase of Blue-throated Macaw (BTMA) conservation. Here we clarify some of the criteria used to guide this process.

IUCN Criteria: For the development of the release project, we have used criteria established by the IUCN Reintroduction Specialist Group. This organization is part of the Species Survival Commission, and is an interdisciplinary group whose primary purpose is to promote the reintroduction of viable populations of animals and plants back to their natural ecosystems. The group deals with reintroduction efforts not only for birds but for a variety of taxa including reptiles, amphibians, mammals etc.

Release Defined: Of particular note is the Group’s definition and classification of reintroduction programs. While the term “release” is used for a variety of techniques it is important to clarify our approach in this case. What we are proposing with the Blue-throats is a Reintroduction which is defined as: “…the intentional movement and release of an organism inside its indigenous range from which it has disappeared.” The last part is of particular importance for evaluating risk. “Reinforcement” (adding birds to an existing population) is often confused with the term “Reintroduction” (adding birds where they no longer exist).

Disease Risk: The World Parrot Trust has engaged in conservation, rescue and release programs for more than 50 parrot species in over 30 countries over the past 20+ years. The threat of disease is taken very seriously and all responsible approaches are made to minimize or eliminate any potential disease risks.

Individual birds for this transfer were sourced from a closed flock which we have worked with for a long period of time. The bird’s history and health was well known and well documented. The birds were kept isolated from other birds and underwent intense screening for a variety of common infectious diseases. They were quarantined and vet checked prior to transport. Upon arrival in Bolivia, they were quarantined again, held in isolation where there are no other captive birds and then eventually released into areas where BTMAs no longer exist.

Because of the size of the BTMA habitat (35,000 km² /13,500 mi²), the incredibly small size of the wild population (115-130 birds), and our familiarity with the movements of the wild birds after having 10+ years of studying them in the field, we can say with a fairly high level of confidence that for the foreseeable future, all releases will be reintroductions, and that contact with any wild Blue-throats is unlikely to occur soon after release.
Survivability: Some well-intended publications have raised questions regarding the survivability of captive-raised parrots if returned to the wild. During the past 10 years, a great deal of new release work for psittacines has been undertaken and largely demonstrates that successful releases of captive-raised parrots is feasible, but also that survivability of the birds can be very high with proper acclimatization and support for individual birds.

For our part, the WPT first became involved in reintroduction work in the early 1990’s through our efforts to support the Echo Parakeet conservation program on the island of Mauritius, where the wild population in the late 1980’s was reduced to only 12 birds. Thankfully the Echo has now recovered to over 580 individuals. More recently, though our FlyFree program, we have been directly involved in the release of literally thousands of parrots in 13 different countries (mostly developing nations), albeit with formerly wild-caught birds that have been held in captivity for varying periods of time, which in some cases exceed 5 or more years. Concurrently, the WPT has also been supporting and advising on the release work of other organizations, such as the ARA Project, who have successfully released 150+ captive bred (hand-reared and parent-reared) Scarlet and Great Green Macaws, reintroducing the birds into areas where they are regionally extinct (a scenario identical to the BTMA releases). In the case of the ARA Project their releases have occurred over the past 8 years and the survivability of the released birds ranges from 78-92%. In subsequent years many of the released birds have started to breed in the wild.

Additionally, WPT is supporting and guiding efforts to release other captive bred Scarlet Macaws in Honduras, Great Green Macaws in Ecuador, and other breeding and release programs for other parrot species in Brazil. Given the approach the WPT has taken and the protocols put into place, no risk of disease to wild populations from captive-bred birds has been shown to occur. Looking beyond the scope of the WPT, others have also been involved and had varying success with the reintroduction of other species of macaws (Scarlets in Honduras, Blue and Gold Macaws in Brazil, Trinidad and Tobago), a number of Amazon parrots in several locations, and a variety of other species of parrots and parakeets.

Technique: In almost all cases, where a thoughtful approach is given and “soft-release” techniques are followed (gradual acclimation to local foods, environment, and post-release supplementation) then survivability of the birds is quite good to excellent. In rare cases where survival of released parrots was low, that outcome appears to be related to using a “hard release” technique (abrupt release followed by little to no support post release).

The reintroduction activities being implemented here have been successfully used in a number of other programs for different species of parrots and macaws. The project also has the full support of all regulatory agencies involved in the process that have reviewed and approved this methodology.
Ngamba Island is a chimpanzee’s dream. Orphaned chimps from Uganda have been finding sanctuary on this Lake Victoria island paradise since 1998. Now, African Grey Parrots are finding respite there as well.

Their story began three years ago. In April 2010, the NGO Animals Lebanon announced that 108 African Grey parrots shipped from Lebanon had been seized by Customs at the Sofia Airport in Bulgaria. The CITES permits for the shipment were not valid, not to mention that since 2005 wild-caught birds cannot be imported in Europe (See PsittaScene 17.4 November 2005).

Upon learning of this confiscation, the WPT immediately contacted the authorities in Bulgaria to advocate for returning the birds to one of their range countries in Africa for rehabilitation and release. The parrots were being held at the Sofia Zoo pending the Court case that would determine if the government could confirm the legality of the confiscation. At the time, we didn’t know where in Africa the parrots could be reintroduced. It was not clear where they had been trapped. We just knew they needed a safe release area within their range where trapping was not allowed.

In the fall of 2011 the court case was settled and authorities cleared the parrots for reintroduction purposes. We could finally work to organize their return to Africa. Sadly, during this long wait, many of the Greys had died due to the very poor conditions in which they had originally been found.

We contacted wildlife authorities in several countries including the Uganda Wildlife Education Centre (UWEC), our FlyFree partner in Uganda. We had worked together for the release of over 200 African Grey Parrots (see PsittaScene 23.4 November 2011). We also reached out to the Uganda Wildlife Authority (UWA) who generously agreed to reintroduce these birds in Uganda. There was still a lot of work to be done. A suitable and safe release site had to be identified, import and export permits had to be issued, the parrots needed a thorough health screening, travel containers needed to be built, and the travel arrangements had to be made.

In October 2011 Dr. Gino Conzo flew from Italy to Sofia to examine the parrots, take samples, and apply leg bands. Dr. Conzo has extensive experience with wild Grey parrots having worked on behalf of the WPT on large numbers of confiscated Greys in Cameroon and in the Democratic Republic of Congo. He found the birds in good health, a finding later confirmed by the test results.

Meanwhile, the UWEC was researching the possibility of releasing the birds on Ngamba Island, home to the Ngamba Island Chimpanzee Sanctuary. Ngamba is close to several other islands that are regularly visited by wild Grey parrots. An aviary was built for the quarantine and rehabilitation of the parrots.

In the fall of 2011 the court case was settled and authorities cleared the parrots for reintroduction purposes. We could finally work to organize their return to Africa. Sadly, during this long wait, many of the Greys had died due to the very poor conditions in which they had originally been found.

Finally, everything was set. The permits had been issued, the travel containers were ready and the flights were booked. On 8 March 2013 thirty-three Grey parrots accompanied Dr. Conzo from Sofia, Bulgaria bound for Entebbe, Uganda on Qatar Airways. Upon arrival they were

African Grey Parrots confiscated in Bulgaria are repatriated to Uganda. On a private island in Lake Victoria, they will get a second chance to be free.
greeted by the Uganda Minister of Water and Environment and by the UWEC staff. A few hours later the parrots reached their new temporary home on Ngamba Island. Despite their long journey, they all started eating, drinking and settling down within the hour.

Dr. Conzo spent a few days on Ngamba Island to ensure that the parrots were all adapting well. The birds are now familiarizing with their surroundings and are being encouraged to fly so that their muscles will be well developed for their release.

So, why is this project important? Every confiscation of illegally traded birds acts as a deterrent for trade. But, when threatened parrots are involved we can contribute even more to their conservation by reintroducing them to help start new populations where the species is no longer found. Parrots confiscated in Europe have never before been sent home to be released. While feeling very proud to have achieved this result we also hope that more countries will follow this example when dealing with confiscated birds.

We are very thankful for the cooperation and the help received from several people and institutions without which this project would not have been possible: Stefan Avramov, Bulgarian Biodiversity Foundation; Yana Velina and Valeri Georgiev, Bulgarian Ministry of Environment and Waters; Irina Sahatchieva, Sofia Zoo; Dr. Gino Conzo, DVM; James Musinguzi, Uganda Wildlife Education Centre; Dr. Andrew Seguya, Uganda Wildlife Authority; Lilly Ajarova, Ngamba Chimpanzee Sanctuary.

A big thank you also to Qatar Cargo and to Svilen Stamatov, Bulgarian Animal Transport, for their generous contribution.

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A New Generation

By Joanna Eckles

Bird Park and Nature Reserve in Copán, Honduras. Just down the road at about the same time, Ricardo, an archaeologist, was unraveling the ancient culture of Copán, one of the Maya’s most important cities.

Both men developed an interest in the macaws and together they set forth to improve the conditions for the existing birds and to tell the story of their long history with Mayan culture. What they didn’t realize is that they were in the process of creating a model release program utilizing captive-raised and confiscated birds to repopulate a species where it once thrived. They also did not plan the host of other benefits that flowed naturally from there.

Key changes to the macaw’s care and diet helped get those existing birds off the ground and behaving naturally – flying, foraging and stunning visitors around the park. From there, the vision was to add to their numbers by releasing birds that came to Macaw Mountain either through donation or confiscation or their own captive breeding efforts.

For technical help on the management of the birds for release, WPT sent José Antonio Díaz Luque (see page 8) for a visit to Copán. Jose helped to unite and excite the international team of partners. They realized, perhaps for the first time, that what they were attempting had global significance and could really serve as a model for others working to restoration elsewhere.

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On my flight home from Guatemala I made customary small talk with my seatmates as we all settled in for the trip. From their first brief comments though, it was clear that we had much in common. The couple had spent the previous three weeks exploring some of the richest ecological sites in Central America. I listened as tales of magnificent sights unfolded, including lots of birds, and I smiled to myself as I probed them for details. I asked if they had seen any parrots. They replied enthusiastically ‘Not many, but there was one amazing place where we saw the most incredible Scarlet Macaws.’ They proceeded to describe a Mayan archeological site in Honduras called Copán. There Scarlet Macaws fly free over the excavated Mayan pyramids, a glimpse back in time.

- Jamie Gilardi, WPT Director

As it happened, Jamie was on his way home after visiting a series of World Parrot Trust projects throughout Central America, including Copán. Part of his trip had included Honduras where he was checking up on those very birds. Once common in the region the sacred “sun-birds” are represented prominently on many stone sculptures in the Copán Ruinas Archeological Park. The Scarlet Macaw (Ara macao) is now the National Bird of Honduras, but sadly, after generations of trapping for the pet trade, it is near extinction and is now seldom seen in the wild.

Thankfully, with financial sponsorship provided by clothing brand BOSS Orange, an effort to save the species was initiated by the Macaw Mountain Bird Park and Nature Reserve, the Copán Association, the Honduran Institute of Anthropology and History (IHAN), the Institute of Forest Conservation (ICF), and the World Parrot Trust (WPT). Together we launched a multi-year plan starting in 2010 to return Scarlet Macaws to the Mayan Ruins of Copán, a national park and UNESCO World Heritage Site.

The unsolicited testimonial on the plane reinforced the impact of this project on so many levels.

For decades Scarlet Macaws had a presence at Copán but the resident birds displayed behavior more akin to roaming peafowl than the royalty they were. Fortunately, two forces were on their side. One was Lloyd Davidson and the other was Ricardo Agurcia. Lloyd got hijacked by parrots some 30 years ago and now runs Macaw Mountain.
Years ago, a few Scarlet Macaws scoured the ground for handouts at Copán Ruinas Archeological Park in Honduras. Now, they bring joy to the classroom and transformation to a community. A rich collaboration between two bright minds, Lloyd Davidson (L, above) and Ricardo Agurcia (R, above) has resulted in a model program of macaw rescue, release (top) and education.

(Left) Beautiful graphic displays help bring the messages taught in schools to the whole community.
Soon, the macaws of Copán were no longer a novelty, but a spectacle. The tour guides were modifying their schedules and their messages to include the macaws, starting tours early by popular request. The birds had become a highlight for tourists, making this an up and coming bird-watching destination. At the same time the macaws began rejuvenating pride in the local community as a symbol of the mythology that formerly guided day-to-day life.

Now in its third year, the release program at Copán (Guaras en Libertad la Belleza Regresa) is a huge success. BOSS Orange has provided international advocacy for the World Parrot Trust (WPT) through marketing efforts utilizing social media along with on-site activities in various fashion retail locations. The clothing giant produced special edition T-shirts which has helped draw attention to the need to save parrots.

Now, not only are the birds back, healthy and breeding in an ever-wider radius around the park, but their presence is rippling through the community and culture of Honduras.

Traditionally, the root of the Scarlet Macaw’s problem has been people – trapping for the pet trade, hunting for meat and destroying habitat. Therefore, it was imperative that this new generation of wild macaws be welcomed by a new generation of people – a community that knows, understands and values the birds as their Mayan ancestors did naturally.

Education is the key to making this change. With construction of the release facility underway at Copán and discussions about which birds to transfer taking place at Macaw Mountain, a ten-month education program was crafted for teachers of 1st – 6th graders in the community funded through the Copán Association. In 2011 the first educational module was presented. Each month, a new module was issued to teachers and covered a different aspect of Scarlet Macaw biology, conservation and history. Teachers received special training to present the lessons and the children got a special treat when live macaws from Macaw Mountain visited their classrooms. Over 4,000 children got a chance to see a macaw and touch a parrot or have one sit on their shoulder. Many family members also visited the schools when word of the macaw visits got out.

Throughout the community, educational signs have been posted in strategic locations – the local market area, hardware stores and on paths throughout the valley. These messages reinforce the training the children receive in the schools and spread the word about macaws through multiple generations.

At Copán Archeological Park permanent educational signs were installed to teach the more than 100,000 annual visitors about the birds. Additionally the “Festival de las Guaras” (Macaw Festival) has been held for the past two years in the town's Central Plaza and it has now been deemed an annual event. Scarlet Macaws from Macaw Mountain Bird Park are brought to the Central Plaza area where hundreds of local area children, adults and travelers gather to enjoy the birds, the sights and the festivities.

Better management of existing birds and releases of both captive bred and confiscated birds are having a visible impact. As of April 2013 there were three newly hatched Scarlet Macaws chicks and seven eggs located throughout the Archaeological park. Nine additional artificial nests are being installed (funded by World Parrot Trust) and pairs of macaws have been spotted in outlying areas investigating natural tree hollows. Within the next several years experts estimate that the flock will grow to dozens of Scarlet Macaws in the Archaeological Park and the surrounding Copán Valley. The feeding stations are also attracting many other bird species into the site and it is becoming a destination for bird watchers, creating an additional attraction to Copán.

The Scarlet Macaw release program at Copán is truly becoming a highlight for other release programs in Central America. This is the only release program where Scarlet Macaws are being released in such close proximity to a populated area. The Copán Valley has over 15,000 inhabitants benefiting from the program, and it is an exciting additional attraction for the many visitors to the area but more importantly, a source of pride for the local community – everyone uniting to bring back the National Bird of Honduras.
By the numbers

8 macaws released from Macaw Mountain in 2 separate events join 14 original macaws living free at Copán Ruins Archeological Site—those original birds are now in great health and flying well.

14 chicks (at least) have hatched in the wild throughout Copán Archaeological Park and macaws are being sighted outside of the park as exploratory forays are beginning.

10 monthly Scarlet Macaw educational modules presented during the school year for children in grades 1 through 6. Written in Spanish, the modules are available for free online.

4,000 students in 50 local schools have now taken part in this program, now in its 3rd year. Overseen by the Asociación Copán, the educational components have been funded for 3 years by their sister organization in the USA, Copan Maya Foundation.

120,000 visitors per year to Copán to view the ruins and marvel at the wild, free flying macaws

100 free-flying macaws predicted within the next 5-7 years.

> see www.psittascene.org for links

(top) Children’s art is displayed at the annual Macaw Festival. Area visitors not only have a chance to see the birds in this magical setting but may also take part in community celebrations like this, honoring the revered birds and the effort to bring them back.
Wild parrots get their beaks into all sorts of foods and their tastes change from day-to-day, and season-to-season. During my graduate work in the early 1990's, I had the privilege of studying large parrot communities in southeastern Peru near the now-famous clay licks along the Manu and Tambopata Rivers. My work specifically focused on what sorts of foods the 17 parrot species we observed (from parrotlets to macaws) consumed in both dry and wet seasons. Having recently published those findings with my former advisor, Catherine Toft (see www.psittascene.org) it seemed an opportune time to explore how wild diets can inform our approach to feeding captive parrots. To add depth to the discussion we've called upon EB Cravens as well – he graciously offered his thoughts on this topic from his decades of successful natural parrot care.

What did we learn from hours in the canopy watching wild parrots eat and hours in the lab testing the nutritional components of those foods? First, let’s talk about specialists and generalists. While there are really interesting parrots in the specialists category - species like the Red-bellied, Lear’s and Hyacinth Macaws (Orthopsittaca manilata, Anodorhynchus leari and A. hyacinthinus) which eat just one or two types of foods – they are generally the exception. The vast majority of parrots studied to date are the latter. They eat a highly diverse diet including virtually all plant parts like seeds, fruits, and nectar, but also flowers themselves, buds, bark, wood, and leaves. Many species venture beyond the Plant Kingdom, consuming insects and their larvae, and in some cases aquatic snails. There is even a New Zealand parakeet that has been observed pulling seabird chicks from their underground burrows and eating them live!

For Peruvian parrots of all sorts, we found that nearly all species eat a wide variety of foods, but mostly seeds in varying stages of ripeness. Not surprisingly, the parrots preferred plant parts which are high in protein and fat. What impressed us however, was just how rich some of these foods were when tested back in the lab - some nearing 50% protein and some over 50% fat - that’s getting into pine nut territory!

The other piece of this puzzle we found intriguing was just how impervious these birds were to chemicals in their food items which are generally quite toxic to other birds and mammals. We tested various aspects of toxicity and found that parrots ate high quality foods whether they tested high in these toxicity measures or not. It turns out this diverse group of parrots comprises a marauding bunch of seed predators, flying miles around the rainforest and eating pretty much every nutritious seed or fruit they can sink their powerful beaks into. But aside from their role as consummate seed predators, how does this knowledge help us better provide for our parrots back home?

One place to start is to take note of the fact that there are some dramatic differences between wild parrots and captive parrots in terms of their food needs, especially their need for total energy intake. Wild parrots spend a portion of their day in flight, sometimes covering tens of kilometers at a stretch. Flying is expensive, roughly 10-15 times what it costs to sit on a perch! So if wild parrots are more or less the equivalent of olympic athletes they should eat comparably. Our captive birds on the other hand are, well, let’s face it, couch potatoes by comparison. With that in mind, it’s helpful to focus on two key aspects of the wild birds’ diets which might provide useful guidance in the captive setting: diversity and toxins.

Wild parrots clearly indicate that dining diversity is good. But while we may strive to provide a variety of novel and diverse food items, the reality is that it can be hard to get parrots to eat them. Here in northern California, we adopted two African Grey Parrots last year. They’re now entering their third and fourth decade of life, and are pretty set in their ways, especially around the food dishes. We’ve found that introducing new foods takes a combination of persistence and...
patience. And very often, just about when we’re giving up on a new item, they suddenly get interested and start eating it with vigor.

When thinking beyond seeds and pellets, an easy and safe place to start is with human foods. Just about anything in the produce section is safe and worth trying with the possible exception of avocados (although feral Amazons in Los Angeles apparently love them). Much like their wild brethren, it’s likely your birds will also prefer fatty or protein-rich selections, especially when they’re first introduced. Sometimes hanging items whole from a string or wire (carrots, celery, apples, pomegranates) turns them into destructible “toys” which may, with time, be worth eating. Leftovers from our own table are also an easy and safe way to expand the birds’ diets. We too are omnivorous, so as long as you’re offering healthy foods - items you might happily feed a toddler, for example - they should be both safe and stimulating.

The toxin question is more complicated, both because wild plants themselves are generally loaded with complex chemistry, but also the degree to which different parrots experience these chemicals as toxic is hyper-variable as well. With those caveats in mind, one thing is absolutely clear: wild parrots evolved over millions of years, thriving on wild foods which nearly all contain a bewildering array of chemicals. Only when humans domesticated plants did most of the plant parts we think of as “food” come along. As we manipulated plants through selective breeding, we eliminated nearly all their chemical complexity. So, how do we translate the science into useful and safe guidance for feeding our captive charges? Here are two approaches which might be worth trying.

One option is to offer small amounts of (unsprayed) fruits, flowers, and nuts from your garden or neighborhood to gauge their interest. Keep an eye out for what wild birds in your area are feeding on, and offer these in small amounts to determine your own birds’ level of interest and moderate if necessary. With our greys, we’ve had some luck with privet fruits, very ripe olives, and some Pittosporum fruits. Interestingly, when offered branches of these items and others, the birds will often peel the bark off the branches, sometimes ignoring the fruit entirely. This brings me to the second option.

We often think about the term “browse” as fresh branches provided to birds with an aim to give them something to chew on, providing them both enrichment and a workout for their jaw muscles and conditioning for their beaks. You may find that your birds are not only chewing, they’re actually consuming them as well. Large branches provide access to bark, wood, leaves, buds, fruits and seeds. You may discover that such branches provide a variety of benefits to your birds, possibly expanding their diets in new and interesting directions. And while most parrots are likely able to tell friend from foe, always identify the plants you’re thinking of offering them. Avoid anything that’s well known to be toxic to other animals and humans. There’s no need to offer mistletoe, oleander, castor bean, hemlock, or anything else with “poison” or “deadly” in the name as there are thousands of other, safer options.

We can certainly learn a lot from wild parrots, and with a bit of forethought, their guidance can help us provide more diverse, enriching, and healthy options for our captive birds. Take it slow, see what’s working, ask your parrot-loving pals about their successes, and of course, share yours with others.
The only sure way to adequately reproduce a wild parrot diet with a captive psittacine would be to live in the bird’s native range, and release it daily to feed with others of its own kind. Rather impossible for most pet owners, right?

That being said, it is quite possible to make solid attempts at mimicking wild bird feeding tendencies with our domestic cagebirds. In doing so, we must first recognize that what we are seeking is not so much a “wild” diet, but a “natural” diet. Feeding a natural diet means that every effort has been made to eliminate severely processed foods from the food bowl. Not all such items are banished of course since proper nourishment (with occasional relished people treats!”) is the ultimate goal with any parrot. But where possible, it is best to replace processed substances with raw, natural foods.

First of all, we should consider just how most parrots and parakeets eat. Have you ever watched an African Grey or Sun Conure consume a shelled walnut? They hold the nut in a foot (or bend down over the dish in the case of species such as Eclectus or Regent’s Parrot) and slowly masticate the nut into a fine powder, consuming some, wasting much, and seeking out the important essential fats and oils. Unless they’re in a hungry hurry or feeding ravenous chicks, few parrots will take food or nuts in big chunks. Instead they chew and chew, deriving nourishment and moisture from the juices, oils, mineral-rich crumbs, chlorophyll, plant enzymes and the like. That is precisely why there is often so much detritus to be observed falling from a tree where groups of wild parrots are feeding. A softbill or non-seed-cracking bird will ingest a whole guava seed. A psittacine will grind it to a pulpy mess. It’s almost as if parrots prefer “blenderized” fare to a regular chunky meal.

Certainly most hookbills I have observed prefer soft foods – flowers, buds, young shoots, larvae, fruit pips, unripe seeds, etc. The whole desiccated extruded pellet concept along with dry commercial agricultural seeds inside hulls seems rather foreign to the evolved parrot digestive system. In order to work adequately, the birds would have to drink much more water than they are customarily programmed to do.

This is a main reason April and I cook the grains and sprout seeds along with all the natural raw foods we feed our flock. It softens them. In the late afternoon our birds get a measured helping of dry seed mix to tide them over until the next day’s breakfast.

Now, whenever we contemplate a rough copy of wild bird feeding habits, we pay attention to what the wild birds in our region are eating. If springtime blossoms are on the menu, we like to go out and clip flowers from budding trees, cut daisies or marigolds, asters, snapdragons, flax or fruit tree buds and offer sprigs to our birds along with their daily feeding. Often the parrots will seek out these fresh items first to munch upon.

If summer brings Virginia creeper, thornapple, fig, mulberry, plum or acorn into fruiting, these nourishing items are added to our diet. Back in Santa Fe, NM, I used to clip boughs of young Russian olive, chamisa, quince or juniper and feed them to my amazons and lories. For the vegetable realm, we concentrate on stems and buds, items with crunch and nutritious fluids for psittacines to extract. Discarded tops of carrot and beet are a classic example of kitchen veggies that can provide browse for cagebirds. Broccoli or radish that has bolted and formed yellow or pink flowers and small green pods is an excellent example of things birds like to eat, just as seeding grasses and pods are consumed by wild flocks.

Farmers’ markets, health food and grocery stores offer many fresh produce possibilities for persons wishing to expand their pet bird’s...
eating variety. We concentrate on fruits and veggies that produce green and ripe pips—guava, papaya, fig, pomegranate, passion fruit, tart green apples, organic peas, beans, and sprouted pulses. Leftover birdseed can be germinated and grown in the garden until it flowers and sets pods for parrots to eat. Safflower, sunflower, rape, millet, buckwheat, hemp, etc. are just a few; and they tend to be nearly irresistible to even picky parrots that do not partake of regular veggie chunks.

If dry seeds from the farm feed store or health food market are soaked for 24 to 48 hours and rinsed often, they will germinate or “pop” and change their nutritional spectrum to resemble green seeds birds seek out in nature. (see Sprouting for Parrots, PsittaScene 24.4 November 2012).

Don’t forget about edible bamboos, palms, orchids, and herbs. Renowned amazon parrot expert, the late John Stoodley of England, used to write about adding cut stems and barky shoots to his feeding dishes every day. He believed it aided in digestion and provided browse for his psittacines’ chewing needs.

Jamie is very correct when he states that greenstuffs in parrot feeding need to be offered every, every day! Parrots eat in phases and spurts. They do not seek out the same things in August as they do in March; they want different consumables on rainy low pressure days, than on dry sunny mornings; their bodies cry out for special nutrition when hormonal and in breeding fettle, when moulting, when feeding young chicks, or when “resting up and overwintering” as days are shorter and darker. If your pet discovers a raw food item that is good for it and it desires strongly, feed it frequently until that phase passes.

One last note. It is true that psittacines in the wilds like to uncover high protein and fat morsels to consume since they burn off so much energy living and flying. Captive bird owners should also think in terms of calorie burn off for their flock. Pets kept in too warm and cloistered an environment are a case in point. Cooler temperatures, outdoor wind, rains and sunshine, awareness and observation of other birds, hopping, climbing, hanging upside down, and foraging, noisemaking, etc. all help parrots remain active and burn off energy. Such activity is going to increase the appetite of pets, and help to channel their eating habits towards a diet that makes them feel sprightly, fit and emotionally alert.

We all may not be able to duplicate wild bird diets for our charges as much as we like, but in the end I believe that a green bud is a green bud, a watermelon or cantaloupe, or squash seed is still a delectable seed, and a coconut morsel is akin to a palm nut centre. Try to learn to think like a parrot, and your food choices for you flock will expand immeasurably…

A Red-lobed Parrot living in a wild flock in California (USA) forages in a Chinaberry, a common street tree in some US cities.
parrotevents

Lory Meeting
June 23, 2013
Yorkshire Wildlife Park, Doncaster, UK
The annual Lory meeting, organized by Rosemary Low and Ventura Events, is open to anyone interested in Lories and Lorikeets.

Susan Friedman workshop
October 19-20, 2013
Seattle Parrot Expo, Washington, USA
Susan Friedman Ph.D will present a two-day Behavior +Works LLA workshop at the Seattle Parrot Expo. Saturday and Sunday from 9-5.

Paradise Park Parrot Pampering
July 27-28, 2013
Cornwall, UK
Come together to celebrate parrots, enjoy the amazing birds of Paradise Park Cornwall UK, follow the quiz trail and make a remarkable array of enrichment toys.

5th annual Parrot Lover’s Cruise
October 26 - November 2, 2013
Departing from San Juan, Puerto Rico
Speakers include WPT Director Jamie Gilardi, Aviculturist EB Cravens and Enrichment Specialist Robin Shewokis. Destinations include Puerto Rico, St. Croix, St. Kitts, Dominica, St. George’s and St. Thomas.

moreonline

Enjoy extra content and convenient links to sites referenced in this issue:
- Years of Blue-throated Macaw articles and photos.
- More information on efforts to save and re-release confiscated Grey Parrots all over Africa.
- Scarlet Macaw photos and related articles.
- Links to all the websites in our articles, news and events.

www.psittascene.org

LANGUAGES AVAILABLE: Dutch, German, Italian, Portuguese, Spanish and Swedish
Malcolm Ellis
died unexpectedly on
February 8th at age 72. The world-
famous bird illustrator, author and
bird-keeper had just returned from five
weeks of birding in Australia.

WPT Trustee and Paradise Park
Curator David Woolcock shared this
tribute via Cage & Aviary Birds (February
27, 2013):

Malcolm was invaluable to the
World Parrot Trust in its formative
years. His stunning artwork gave our
informational signs the WOW factor
that not only caught the eye but also
elicited funds from so many people.
These boards have been distributed
all over the world and have led to
invaluable donations which have
directly helped parrot conservation.
Malcolm also illustrated signs such
as one in St. Vincent promoting the
conservation of its national bird, the
St. Vincent Amazon.

Malcolm was a generous and gifted
artist. I can well remember visiting him
to collect artwork that he had produced
for the WPT, and desperately trying
to persuade him to charge us more!
He was more concerned to know that
his work was to be used to save the
birds in the wild than to receive its true
financial worth.

Malcolm was a gentleman, and one
who, in his quiet unassuming way,
did more to help the conservation
of parrots than many would realise.
At the WPT we know the scale of
his contribution and will be forever
grateful.

Parrot Display Donations

The Tropical Butterfly House Wildlife & Falconry Centre in Sheffield, South
Yorkshire, UK is a paradise for animal lovers. The park has a variety of daily animal
counters including parrot shows. Last year this attraction spread the word about
the World Parrot Trust and collected donations from their visitors totalling £1,782
for the Trust. Thank you Butterfly House and visitors!

(above) Head Keeper Heather Scott with Green-winged Macaw “Ruby”.

thankyou

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