

parrot

LIFE



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Ara chloroptera

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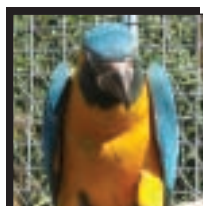
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PARROT LIFE

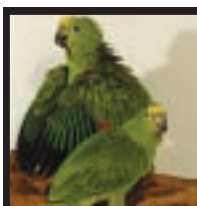
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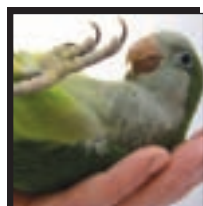
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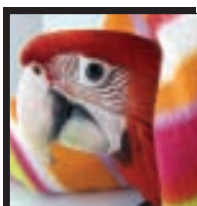
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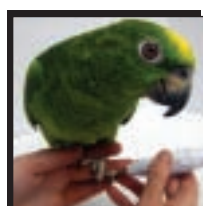
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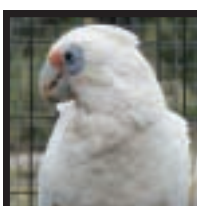
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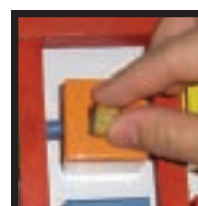
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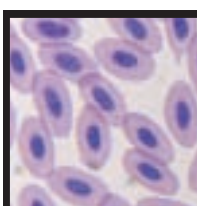
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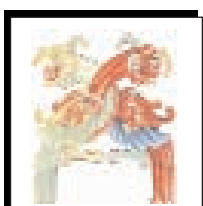
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Cover page art description and acknowledgements

The mask was made from molted feathers from the Hartman Aviaries by Gwen Bennett of Eureka Springs, AR. She is one of 120 of America's finest artists and craftsmen chosen to exhibit at the 27th annual Smithsonian Craft Show. Exemplifying innovation, creativity and technical merit, the Smithsonian Craft Show features superb craft artists from across the country.

Gwen was selected in the fiber, decorative category for her feather work. Using natural colored feathers from birds in captivity, applied to handmade forms she creates elaborately detailed masks evoking ancient and tribal civilizations.

Funds raised by the Craft Show go to the Smithsonian museums and research centers to support cutting edge science, preserve and display national treasures, educate children and adults, and much more.

<http://smithsoniancraftshow.org/ExhibitorContent/DecorativeFiber5/Bennett5.asp>



GWEN BENNETT with her beloved late Rudy. Photo by: John Rankine



EDITORIAL NOTE:

Respect, nurturing and compassionate caretaking of feathered companions is perhaps part of our profound nature. Eight years old Thalia Klinger feeding & nurturing this orphaned wild chick until it can be old enough to fledge back into the wild. The love of birds can come as a surprise at any age.

Note: hand feeding formula combined with mealworms and insects can provide a nutritious diet for orphaned wild bird chicks.

We hope you enjoy this issue of Parrot Life that features numerous behavior topics, training techniques, grooming, health, first aid, and news from the wild & conservation highlights.

Josee Bermingham,
Editor



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- Each batch is tested for quality and guarantees analysis; plus fed exclusively at HARI's nursery before being released. Daily health monitoring including growth rate charts, crop motility feather development and colouration, and weaning progress evaluated by the nursery staff.

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● Optimum nutrient density and gut motility

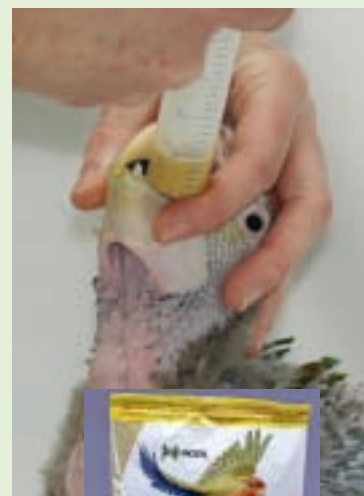
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HARI, under the direction of Psittacine Aviculturist Mark Hagen, M.Ag has fed more than 350 pairs of over 58 different species of parrot since 1985, exclusively on the Tropicana diet.

Our second generation breeding colony has also proven the extent of the quality of this optimum diet.

~IN THE NEWS~



LORO PARQUE FUNDACIÓN NEWS

THE YELLOW-EARED PARROT REACHES A RECORD NUMBER

The critically endangered Yellow-Eared Parrot (*Ognorhynchus icterotis*) disappeared from Ecuador in the mid-1990s, and in 1999 only 81 could be found in Colombia. Since then, the Loro Parque Fundación has supported Colombian NGO Fundación ProAves to bring this species back from the brink of extinction. The project has had great success, reinforced in 2007 with 60 nests producing 132 successfully fledged juveniles, the most ever. This excellent production has raised the global population to a minimum of 724 birds, and ProAves believes it may exceed 850. Although still confined to the central Andes of Colombia, the ProAves team registered two new areas visited by the species, as well as a new roost site, all indicative of an expanding population. The increase is partly due to an increased number of cavities in dead Wax Palms, the tree essential in the ecology of the parrot, but also due to the multiple conservation efforts of the project with local people. These include a nationwide awareness campaign, the negotiation of private protected areas, and the production of 14,155 seedlings for re-forestation of neglected land!

by:
David Waugh
Loro Parque Fundación

Photos:
(Credits: Fundación ProAves/LPF)

International Parrot Convention
In Tenerife, Canary Islands, Spain at Loro Parque.
Runs every four years.
Next one in September 2010
www.loroparque-fundacion.org



One of the 132 juvenile Yellow-Eared Parrots fledged in 2007.



Wax palm forest.



Order your First Aid kit today!

This avian first aid kit was designed in conjunction with the Avian specialists at the OVC Avian and Exotics Clinic to equip you with the basic tools needed to stabilize your bird during an emergency, until your bird is brought to your avian veterinarian. This kit contains a first booklet, professional grade supplies along with a few added bonuses. All proceeds from the sale of ParrotMedics kits will be donated to Psittacine Disease Research at the Ontario Veterinary College.



Compiled by the Ontario Veterinary College, Avian and Exotics Clinic and the Golden Triangle Parrot Club sponsored by HARI, Emerald Feather, Tickle Tickle Designs and the Canadian Parrot Conference.

www.parrotmedics.ca

Kits are available for purchase online at: www.emeraldfeather.com for \$45 each + taxes and shipping. (will ship to any country)

Bird clubs, veterinary clinics and stores who wish to purchase several kits for redistribution.

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Hello Police

Define AVICULTURIST

About fifteen years ago, while transporting a pair of Yellow-Naped Amazons from a fellow aviculturist's farm, I was pulled over for a traffic violation. It was already dark, and since it was easier to transport the napes in their flight cage, I opted to take our rarely used van, of which I had forgotten to renew the license plates. As the glare of the patrol lights came through the back of the van, the napes naturally got excited and started that typical amazon call with their whoops and A-R-R-E-E-B-A-S. After foraging the glove compartment for the essential paperwork, I rolled down the window to discover a patrolman with the most quizzical look on his face at my window, "Ma'am, you realize your license plate is expired...and WHAT is in the back of your vehicle?" He was quickly answered from the back of the van with a very clear, Amazonian "HELLO." It didn't help that he shined his flashlight in the back right on the pair indicating their obviously alerted state-you know the tails flared, the strutting, the flashing eyes. Well, once the officer realized that I was not harbouring fugitives, he proceeded with the citation. The usual information was given, but when the officer asked my occupation, I replied, "aviculturist." After assisting him with the spelling, he then asked, "What in the world is an aviculturist?" I glanced back toward my excessively noisy cargo and replied, "I take care of them," and smiled as I took the traffic ticket. Although perturbed that I had a ticket, the entire incident drove me to check the definition of aviculture when I returned home. I couldn't find it in the Webster's

dictionary. And, with each updated version of Webster's dictionary since, I've made a point of checking for the word "aviculturists." We have amazing new words that reflect our current culture, but "aviculture" is still missing from the widely used lexicon.

Over the years I've asked those who I considered "aviculturists" by my definition to help define the word. The much predicted answer usually consisted of "a person or group of people who studied the care of avian species, and perhaps they bred avian species for either the pet industry or conservation efforts."

Like many things in life, it appears that the definition has indeed evolved. But, that's evolution-change over time due to environment or circumstances. One thing remains the same however; new words like "gigabyte" and "bling" appear in the Webster's dictionary, the word "aviculture" is still missing. What does that mean for an industry that has seen so many changes, positive and otherwise over the years? Perhaps it is still being defined.

One evolution is driven by what should be considered the hallmark of achievement for aviculture in general, education set with more accreditation. And, that's exciting! Aviculturist, pet owners, and pet retailers today are encouraged through various organizations to participate in educational programs that not only boost the breeder to aviculturist, these groups are reaching the pet owner, too! The educational forum that typically separated breeder from pet owner is also narrowing especially with educational forums such as American Federation of Aviculture's "Fundamentals of Aviculture" course. So, perhaps Webster is just waiting for aviculture to be defined.

By: Melanie Allen

MEET U.S. Aviculturists: Sharon Wells, Tomball, TX

Written by: Melanie Allen

Daina Mahone, director of rescue and adoptions
- N.P.R.P.F., Sharon Wells, Midge Gorman

Above all, it's her love of birds that keeps her flock together
Is Sharon Wells a breeder, rescuer or just plain parrot enthusiast?
Well, how about... an emerging aviculturist?

Sharon Wells started her interest in birds, like so many other aviculturists, with a gift. Her husband thought it would be cool to put a Moluccan Cockatoo on lay-a-way and surprise Sharon. They had never had a bird, but Sharon was a pet lover, so it would probably be fine. That was in 1987.

With a dedication that spans a couple of decades, Sharon has observed the changes in how our pet birds are valued and how breeding parrots has taken a more responsible approach. Currently, her breeding collection includes macaws and she has designed special flights and breeding cages for them. "I've seen it all. I started out as a pet bird owner, graduated to a breeder, started my own pet store exclusively for birds and now I have a privately funded sanctuary. Over the years I have seen amazing strides in the way breeders and pet owners have changed for the good of the birds."

The macaw flight was designed as a joint effort by Sharon and George Cook. The project stemmed from George's vision to include the main flight area. Sharon designed the extended breeding flights for her macaws. Her breeding collection of macaws includes a juvenile pair of blue throats.

While Wells does breed macaws, her devotion to parrots has also included many privately funded rescue projects starting with her sanctuary for thirty-five amazons. The amazon flight houses seven species of amazons that will live out their lives in the sanctuary in a specially designed structure that allows them room for flight plus an eight-foot section where the amazons can get exposure to sunlight and rain, if they choose.

"My long-term goal for the sanctuary is to make it possible for birds that have been abused, abandoned or neglected to be able to have a little piece of heaven on earth," says Wells. She is also adamant about keeping the rescued birds out of her breeding collection. Future flights include species-specific designs for Cockatoos and for Eclectus.

Sharon is also the recipient of the 2009 "George" award. Every year, the National Parrot Rescue & Preservation Foundation, a non-profit organization based out of Houston, Texas, presents dedicated members with the "George" award at the annual Parrot Festival Convention. Sharon Wells was awarded the "George" award for her many years of dedicated service to NPRPF.



Melanie Allen

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Loving or Luring?

By: Kevina Williams

Dominance and respect are an on-going controversy in the animal and avian worlds. How far should we go to turn our pet bird into the perfect companion? What if we actually sat down and tried to think of it from a bird's perspective?

Trust and respect are the cornerstones for a lasting and harmonious relationship. As a horse should be taught not to kick, a bird should be taught not to bite. As a horse is born with the ability to kick, a bird is born with the ability to bite. These are natural defences and a form of communication. Yet in nature, they are not allowed to get out of hand. Other flock members will put each other in their place. Each bird respects the space of the other, throughout play pecking order is established and maintained. If we watch birds in nature, we will see that they are fair in their ways; there are physical and vocal warning signs before an actual bite or attack!

Humans, animals and birds need to learn respect in order to co-exist. As a herd member, a horse learns respect at a young age. A herd mare will send a rowdy young colt, out into an open area away from the safety of the herd for a couple of hours. All the while keeping a close eye on him, so no harm will actually come to him. To the colt who stands alone, there is no feeling of safety at this distance. When the mare signals him to return, he will return quietly and respectfully join the herd again. As we do, a horse will continue to learn respect throughout his lifetime. A bird is a flock member in nature and therefore capable of learning respect as its survival depends on it.

A member of our flock.....

If we want our bird to become a member of our human-feathered flock, we must all respect the hierarchy. Establishing trust, a clearly defined understanding of the flock hierarchy, and learning respect are the most important things your bird will ever learn. You need to be able to take your bird out of the cage without fear, his or yours. It should respond to basic commands such as step up and down. It should permit and trust you to inspect its whole body, when necessary, in case of an emergency, or simply learn to mutually enjoy petting and preening sessions. We in turn need to respect what our bird is doing at the time we choose to play or train him. We often forget about the comfort of our bird when he is behaving perfectly. Running past his cage with flailing arms, as we attempt to get a slipper away from the dog, or opening the cage door at midnight to

give your bird a hug. If a bird is fearful of someone or something, he should not be forced to interact without your presence. We must also respect the fact that a Cockatoo might scream at dusk, an Alexandrian will chew excessive amounts of wood and a budgie might never want to be petted in any way that ruffles his feathers.

ENDLESS POSSIBILITIES

Once respect is established, anything is possible. Everyone wishes for their African Grey to impress friends with a wonderful array of words. Others would love their cockatiel to be able to dunk a small ball into a basket on command. There are many different training methods available, your choice could be influenced by the species of bird you acquire and the relationship you have with your bird. Reinforcement training, clicker training, bridge training etc... Nonetheless, all of these methods should follow established trust and respect. The most important part being, whichever method you choose, one rule applies to all...hurting your bird in anyway, mentally, or physically, is unacceptable. Although there are physical warning signs, a bite can come as a very big shock. But striking or shaking your bird is out of the question.

Luring or Rewarding?

Affection and praise are great rewards provided there is a relationship of trust and respect established between and trainer and subject. In some parrot training videos, trainers do not use eye contact, or gentle reassuring words. Instead they use devices such as chopped nuts or sunflower seeds to lure the bird. Is luring actually teaching? Isn't it undermining the parrot's intelligence and potential to learn what is expected of them? Treats are rewarding, assuming the bird has not been denied his regular food, although you can remove your bird's favourite food from his regular food, to be kept for rewards, such as millet for a cockatiel, seeds for a parrot or fruit for a lory. If a bird is either tired or hungry, or just not in the mood, sessions will be much less pleasant and beneficial for both of you. There is no justification for seemingly starving a bird, then luring him with chopped nuts or seeds. It is unethical to withhold food for an undetermined amount of time prior to a training session, in the hopes the bird will be so hungry he will readily accept any treat used to lure him into the desired behaviour. As the hungry bird seems to be willingly following a sunflower seed across a table, he is incapable of noticing his surroundings. The bird is in a trance. He is incapable of thinking at this point. This is both mental and physical abuse. This would make repetition training almost impossible. A starving bird will eagerly follow a sunflower into a dark

Respect



BEHAVIOR

carrying cage he is unfamiliar with. But if proper time is taken to gain the trust of the bird, he would enter with only praise as a reward. Waving a carrot in front of a starving horse and jumping on his back, does not mean he is trained, or even safe to ride, he is simply too hungry to care. When the carrot is gone, the problem persists. Birds are extremely affectionate creatures - some more than others. They are willing to learn, love and be nurtured. Repeated training is very good for your bird. But must be done when the bird is well rested, exercised, in a good mood and NOT starving. Excessive treating and luring is not a good idea, due to the fact that sessions should be kept short, yet be done quite frequently. Treats, such as sunflower seeds, are usually fatty and should not be overfed.

Just as good behaviour is rewarded, bad behaviour must be discouraged with a consistent response and quick reference. If our five-year-old child runs towards the road, must we calmly divert him with a lollipop? Will he assume he gets something fun next time he runs in the road? Negative reinforcement is sometimes necessary. A firm "no," or a sudden "Ah, ah, ah," is usually enough to deter a bird from an unwanted behaviour - provided the fundamentals of respect have been established early on. If a bad behaviour such as biting is allowed to go unpunished, you are jeopardizing your bird's quality of life. Many birds are given away due to lack of respect that usually result in further behaviour problems.

Whether your bird is young or old, newly acquired, or a longtime family member, respect should be established. Refresher training should continue throughout the rest of the relationship as you would continue to teach a child.

Hierarchy, and dominance are natural occurrences in the circle of life. Whether we like it or not, we must be top dog when it comes to our birds. We must make sure we give them absolute guidance, firmly and positively, yet with great care and respect.

Kevina Williams

I have been highly successful training young horses and horses with extremely bad vices, for the past fifteen years. I am now becoming an avid bird hobbyist. At the moment, I have six birds at home, as well as the numerous birds I work with daily at the HARI facility. Hoof or beak, mutual respect is imperative.



GROOMING TECHNIQUES USING THE ROTARY TOOL PART 2

A Rotary Tool Specifically Designed for Dogs & Cats



Peti-Buffer

I was eager to review this rotary tool specifically designed to be used on dogs and cats because it is inexpensive and easy to find in most retail stores

We were concerned to see if a bird's nails would get caught in the plastic shield which has holes designed for dog and cat nail grooming. So we tried it on a green winged macaw and, sure enough, immediately upon barely placing the nail through the hole, it was sucked through between the grinding rotary device and transparent plastic shield.



Caution

It is silent like the salon shaper but the grinding paper is coarse like many found on other rotary devices used for wood, so precautions must be taken to avoid having contact the skin and pressure must be applied lightly because it will grind faster than desired. I cannot recommend its use on birds due to the plastic adapter and the holes are not suitable for long and slim parrot nails.



Salon Shaper

As featured in our previous issue, the Salon Shaper is definitely the safest rotary tool for

grooming bird's nails. It is cordless (battery operated), silent, relatively non abrasive and therefore less likely to inflict injury to a bird or handler if it accidentally comes in contact with skin.



Young birds are intrigued by the device but not frightened by it when properly introduced. We train our young birds by activating this manicure device and gently sweeping it across our fingers when holding the birds, gradually getting closer to the bird's feet and finally letting the device touch the bird's toe nails. When birds are trained to trust their caregivers and the device, restraint is not always necessary.



I recommend that you never attempt to clip a nail with a nail cutter if the bird is not well restrained in a towel. All the positive reinforcement training in the world cannot ensure that the bird will not move when pressure from the nail clipping is felt. A distraction of any kind can suddenly trigger

the bird to move, despite its training history. The bird could get injured or bite the handler if it is afraid or feels pain or discomfort. As seen in this photo, the bird could also lose its balance as the handler is attending to one nail, thus compromising the other foot. Note: all cutters apply

pressure and certainly discomfort to the nail when cut, whether or not the vein of the nail is inadvertently cut in the process. It is also difficult to evaluate the proper length the nail can be safely cut when the bird is not properly restrained. The handler cannot observe the bird's behaviour and predict its reaction while focusing on the task of safely grooming the nail. Accidents leading to physical and psychological trauma can occur when least expected. Minimize all possible risks when performing potentially injury inflicting procedures on your feathered companion. As mentioned in the first part of this grooming article, have the proper first aid materials, such as cauterizing powder or silver nitrate sticks close by in case the nail vein is cut accidentally. Applying consistent yet light pressure with the salon shaper manicure stone will usually cauterize the nail as well.



Caution

Dog-Clipper



Our Parrots. They are cute, cuddly, inquisitive, comical, and an endless source of entertainment. Alternately, they are loud, messy, aggressive, confusing, fearful, and an endless source of hair-pulling frustration. They can even be all of the above in a five-minute span. It doesn't get more alien than that. Sometimes, it can seem almost impossible to understand what our parrots are trying to tell us, or to convey our wishes to our birds. With the myriad of behaviour problems exhibited by most parrots in our homes, it is easy to see how we become fixated on all the things we DON'T want our parrots to do, but what about the things we DO want our parrots to do?

Positive reinforcement is a term for a system of reward-based training born from the science of how every species on the planet learns to adapt to their environment. For many years, it has been adopted by professional animal trainers and child psychologists alike as a means of modifying behaviour. Positive reinforcement is loosely based on Dr. B.F. Skinner's work defining "Operant Conditioning" as a learning method which repeatedly pairs a consequence with a non-associated action or behaviour to create a conditioned and reliable response. In effect, the animal learns to "operate" consistently on its environment to gain a desired consequence, or avoid an undesired one. Animal trainers and pet owners have been able to use this training method to establish a form of rudimentary dialogue with their pets. This scientific principle is more than theory, and countless examples occur in the wild. When a parrot finds a tree laden with fruit, he will modify his behaviour to return to that tree until the food source is exhausted. Once that happens, the lack of reward, or reinforcement will cause the parrot to modify its behaviour again by avoiding the tree. This is the very nature of positive reinforcement.

Although the basic concept of rewarding a pet for good behaviour is, we hope, universally understood, using it as a behaviour modification tool requires a sound understanding of the applications and principles that make this such an effective strategy. Without this, owners can often become confused by the process, and the lack of good results. An understanding of the mechanisms by which this training method works will increase the likelihood of success and help create a stronger, more rewarding relationship between pet and owner.

DEFINITIONS:

Before embarking on a behaviour modification program, it is important to understand the

various ways that behaviour can be changed, and the impact these methods can have on the animal. This understanding will not only allow you to pick the most effective training strategy for your parrot, but will also give you the skills needed to evaluate the benefits or hazards of any training advice you may receive from friends, family, the Internet, and other sources.

Empowering Our Parrots



To Choose Good Behaviour through the Science of Teaching and Training

By: Kristi Flemming

Reinforcer: *Anything that, occurring in conjunction with an act, will increase the likelihood that that act will occur again.*
Punishment: *Any consequence of an action that decreases the chance that behaviour will be repeated.*

Positive: *Something added.*

Negative: *Something taken away.*

With positive reinforcement, the pet repeats any action that helps them gain something they want. You can also have negative reinforcement, with the subject performing an action to lose something they didn't want, i.e. the removal of a negative stimulus. We see this when someone

tries to teach a puppy to sit by pushing the pup's hips down. The puppy repeats the sitting action to avoid the unpleasant feeling of pressure on their hips. Punishment can also be positive (gaining something unpleasant, i.e., spanking, scolding, etc.) or negative (losing something pleasant, i.e., grounding, time-outs, etc.). Since it is easy to get lost in these terms, the two simple questions you need to ask yourself are:

- 1) Am I trying to have my parrot repeat an action more often (reinforcement) or less often (punishment), and
- 2) Am I doing so by adding something as the consequence (positive) or taking something away (negative)?

An understanding of this model helps us understand our parrot's sometimes perplexing behaviour. If our parrots repeatedly do something, regardless of whether we find it pleasant or frustrating, they do so because it is being reinforced. On the flip side, if we see a previously our parrot's established behaviour decrease, such as stepping up, we must assume that something we are doing is either removing reinforcement or punishing the behaviour.

While all four methods can modify behaviour if applied correctly, only positive reinforcement can achieve enthusiastic responses from our parrots, and build a trusting relationship between bird and owner.

THE FACTS ON PUNISHMENT!

Punishment has been so ingrained in our culture, from the way we work with animals, to the way we raise our children, to the way we ourselves were raised, that it is sometimes hard to fight the almost instinctual urge to apply it. Punishment can range from mild (the removal of attention, time-outs) to more severe forms (screaming, hitting, cage rattling, feather pulling, squirting with water, etc.). The problem with punishment as a training method is that it needs to be applied in very specific

ways under specific circumstances in order to achieve behavioural modification.

Steve Martin, of Natural Encounters, Inc., states "The timing of punishment is critical to its effect on behaviour."* In order for the association to be made between act and consequence, the pet literally needs to be caught "in the act" at the first incidence of the negative behaviour. Unfortunately, we often only discover our pet's transgressions after the fact, or after several incidences of the pet getting away with the behaviour. Any punishment applied in this instance only leads to confusion on the part of the pet, as to why they're being reprimanded. Even if your pet is caught red-handed (or red-

beaked), the punishment would have to be severe enough to override the pet's motivation for performing the act in the first place, thereby, decreasing the likelihood of it occurring again. All too often, we start by applying a mild scolding, but as our frustration grows, we escalate our efforts. At each step in this all-too-familiar sequence, our birds become desensitized to our methods. In this cycle, birds lack the opportunity to learn alternative reinforcement achieving behaviours. Eventually, we are trapped in a cycle of constant frustration and increasing hostility. Any trust we have established with our birds has been destroyed, and we begin to look at our companion as a burden instead of a blessing. This fundamental erosion of the relationship has led to many birds being relegated to an unused room or basement, or even ending up in rescue facilities or shelters. Punishment can only be considered effective if it actually decreases the target behaviour, but, as we can see from the rules above, this is seldom the case. Unfortunately, in rare instances, punishment sometimes works. Owners will sometimes report that "when they shake their bird's cage, the bird stops screaming (for a short time). While doing nothing to actually eliminate the behaviour (the bird still screams frequently), owners are reinforced by the temporary positive results. This occasional reinforcement for the owner, when coupled with the punisher's inherent feelings of frustration and resentment, makes punishment a dangerously addictive training strategy.

While remaining an inconsistent and difficult method of training due to our poor understanding and inappropriate application, punishment also carries many serious side-effects. According to Susan Friedman, PhD, "Research on the effects of aversive punishment is not new, nor has it been narrowly investigated. On the contrary, this research spans many decades and has been replicated with many different species of animals, including humans."* Researchers have identified four primary side-effects of the application of aversive stimuli as modification tools:

- 1) Escape/avoidance behaviours,
- 2) Overall decreased responding, i.e. apathy,
- 3) Aggression,
- 4) Over-generalization of fear (phobias) (Azrin and Holtz, 1966).*

Our once beloved companion may withdraw from any interaction with us, run or fly away at our approach, or even attack to avoid any negative consequence. These unhappy souls live in a constant state of anxiety, and the long-term consequences of this high-stress state can include feather-picking, self mutilation, severe phobic behaviour or aggression, decreased immune response, and potentially severe medical problems. The future of birds in this state can be bleak.

POSITIVE REINFORCEMENT TRAINING (PRT) - THE ALTERNATIVE SOLUTION!

Unlike the other training methods listed above (negative reinforcement, positive and negative punishment), PRT is the most gentle training method available and, if applied correctly, produces the most consistent and enthusiastic responses from our pets. PRT seeks to capture and reward good behaviour, playing up its importance, while downplaying the importance of negative behaviour.

Behaviour that repeats does so because it is reinforced. Any behaviour that receives no reinforcement whatsoever has a tendency to disappear over time. A parrot that screams for attention will eventually realize that it's not worth the effort if no one rushes up and starts yelling, thus giving him the attention he wanted in the first place. This is known by psychologists as "behavioural extinction," but this is just the first step. Parrots are not designed to sit still. They are thinking, moving, doing creatures. While it is important to make sure we do not inadvertently reward unwanted behaviour, we must also train our parrot's acceptable alternative behaviours. Think of the screaming parrot; how would the situation evolve if, instead of attempting to punish the screaming by shaking the cage, this owner chose to reward silent behaviour or polite vocalizations with attention, treats, and games like contact calling! Provided that the training method is applied correctly and consistently, the reward for behaving well far outweighs any benefits of behaving badly. **CONSISTENCY IS CRITICAL.** In order for the association to be made between action and consequence, the response needs to be the same for all members of the house in all situations. Now think of how much more fun this owner and bird are having playing and interacting according to acceptable and established rules, instead of spinning in frustration.

GETTING STARTED:

CHOOSING THE RIGHT REINFORCER

The first step to successful training is to choose the right reinforcer. These reinforcers, or rewards, need to be of such high value, that our parrots will enthusiastically give us our chosen good behaviour to attain them. As parrot owners, we have many reinforcers available to us. Treats, verbal praise, contact calling, physical contact, baths, favoured toys (reserved for just that occasion) and time out with "the flock" can all be powerful motivators. Start by making a list of all of your parrot's favourite things. Reinforcers fall into 3 basic categories: food, activities and physical contact. Mixing and matching a variety of reinforcers adds an element of "surprise," increasing your bird's excitement and motivation during training sessions. Once you have established a variety of reinforcers (especially food reinforcers), limiting your bird's access to them to training sessions only will ensure that your bird is

excited about training.

Another important element to consider is the context under which a reward is delivered. Asking a pet to work for treats after the pet is sated by a large meal will never work. Offering increased out-of-cage time and play may not work for a parrot that is tired. Access to toys or baths will only succeed in frightening a bird that is fearful (phobic) of such things. Remember that the purpose of reward selection is to create motivation. Finding what motivates your bird at that particular time is essential to success.

How big should the reward be? In the context of a training session, a reward should be small enough to be taken quickly, but large enough to still be motivating to the pet. Larger rewards can take longer to enjoy (especially food), thus breaking up the momentum of the session. Also, a pet can become sated quickly with large rewards. Keepers at the National Zoo were able to train polar bears to willingly move from their enclosure to a transport carrier, using nothing but raisins as their reinforcer. In this context, a whole peanut can seem huge to a parrot. Breaking that peanut into small pieces will allow you to get more behaviour faster from your parrot, and they will learn more in each session. In the initial phases of training, it is important to deliver rewards **IMMEDIATELY** and **CONSISTENTLY** after the behaviour is performed. As training progresses we will be introducing variable reward schedules to spice things up!

CAPTURING GOOD BEHAVIOUR

In order to increase good behaviour incidents, we have two choices; we can either take note of good behaviour our parrots already exhibit at the time it happens (thus increasing the likelihood it will be performed more often), or teach new behaviours, using what trainers call a shaping plan. **YOU CANNOT REINFORCE BEHAVIOUR THAT IS NOT HAPPENING!** This is called bribery. Telling your parrot they will get a treat if they are quiet for 5 minutes is asking them to understand concepts (including telling time!) which lie beyond the here-and-now mental map of the avian psyche. Instead, rewarding your parrot every time he is quiet, using acceptable low-level vocalizations, or playing with toys will teach your parrot alternatives you can both live with. Reinforcing a good behaviour at the precise moment it happens tells the pet **EXACTLY** what it is you are reinforcing. Consistent reinforcement of the action at the right time allows the association between action and consequence to be made by the pet. They learn to perform the action to get a reward, creating a two-way dialogue between pet and owner.

SHAPING

Imagine aliens coming into your home, waving their arms around, speaking to you in their alien language, grabbing your arm, and pulling you towards them. Even if they use a calm and gentle voice, you have no idea whether they want to make peaceful contact with you or

abduct you. This confusion and fear is what our parrots can experience during a training session. Now picture that alien handing you a \$100 bill for taking a step forward, then a second step toward them, then lifting your arm, and finally shaking hands. This is the essence of a shaping plan. The term “shaping” refers to the method of breaking down more complex behaviours into small, logical steps. Think of how you were taught to tie your shoes or ride a bike. This is the technique that should be employed when you want to train your parrot new behaviours.

There are three key components to a good shaping plan. The first is to define your goal behaviour. Think of the goal in physical terms (what does the behaviour look like?). The more clearly you can define the goal behaviour, the better you will be able to convey that goal to the bird. The second is to pick a starting point. While you can train any behaviour starting with your parrot just standing there, the ideal starting point is any behaviour your parrot already exhibits that most closely resembles the goal behaviour. This will help speed the training along. Finally, we need to map out all of the intermediary physical steps that can lead us from the starting point to our goal behaviour. Basketball or bike riding tricks seen in bird shows are actually trained over a period of days, weeks, or even months using this system of approximations. At each stage, the bird must accomplish one extra thing to be reinforced. The steps should be close enough together to allow the animal to discover the solution readily through experimentation. Each stage should be practised frequently until the correct action is performed consistently, and work must be done at the bird's own pace. Going too fast will just lead to frustration. Keep training sessions fun and relatively distraction free to engage the animal's attention for the maximum amount of time.

Shaping can be used to teach complex tricks, or be woven into a behavioural modification regime. The same methods that taught a show bird to play basketball can be used to teach an aggressive companion parrot to accept handling from all members of the family. This plan of action must be in place before the first training session, but should only be used as a guide. If poor performance of a particular step occurs, the trainer must be aware, and flexible enough to either go back a step, or break the sequence down into even smaller steps. **REMEMBER: END ALL TRAINING SESSIONS ON A POSITIVE NOTE**, even if it means going back several steps, or performing a simpler alternative behaviour that the bird does consistently.

BRIDGING

A bridge is any signal which, when given at the exact moment an act is performed, tells the pet that what they just did was correct, and that a reward is coming. Anyone who has seen a marine mammal show will recognize the use of the whistle as a signal to the animal. When a

dolphin is trained to touch a ball, suspended twenty feet above the water, with its nose, it is impossible for a trainer to give the dolphin a reward while they are still in mid air. The dolphin has been trained that every time they hear the whistle, they have done something correct and can return to the pool side for their reward. Using the bridge at the height of the performed behaviour tells the animal exactly what it was you liked. Without a bridge, your pet may do something good, then scratch himself, preen, look out the window, and defecate by the time you can get to him to give him a reward. Now he's not sure what action you were actually trying to reinforce. Although many signals have been used as bridges in animal training over the years, auditory cues tend to be the most practical to apply, and seem readily accepted by birds. Verbal praise, whistles, bells, and the ever popular “clicker” are easily used auditory bridges. The bridge is used as a “secondary reinforcer,” with the reward being the “primary reinforcer.”

In order for a bridge to work, it has to be applied consistently in conjunction with an act, and be followed by a reinforcer every time. In time, the association formed between action/bridge/reward, makes the bridge a very reinforcing signal on its own. In effect, it becomes a primary reinforcer. The power of the bridge to motivate an animal can be diminished if the bridge is used for any purpose outside the context of training sessions, especially if not coupled with a reward. This is a tricky trap when using verbal praise as the bridge. In order for the term “GOOD BIRD” to be effective as a bridge, it should only be given in conjunction with a performed behaviour, and followed by a reward. If you later put your bird to bed while saying what a good bird he is, without giving a reward, he may become confused as to what it was he did right, and wonder why no reward is forthcoming. This may dilute the effectiveness of the bridge. For this reason, animal trainers often say less used phrases, like “that's right” or “yes” as their verbal bridges. Once you have patterned the association between this phrase and the delivery of a reward, you can call your bird a good bird as much as you like without effecting training sessions.

VARIETY IS THE SPICE OF LIFE - USING VARYING REWARD SCHEDULES

Once your pet has mastered the basics listed above, and learned to associate every favourable action with a consistent reward, they can run the risk of losing interest in the task at hand. In time, they may start to perform the desired behaviour at the lowest level possible to get the reward. One way to avoid this pitfall is to introduce variety into your training protocol to spark a new-found interest in your bird. This can be accomplished, as we have stated earlier, by varying the reinforcer you use. The following section will cover other ways to keep your bird's enthusiasm and performance at its peak!

Remember, the following techniques must only be used once you have achieved consistent results with the basic training protocol. Depending on the behaviour you are training, this can take as little as 5 minutes, or may take days or weeks.

JACKPOT!

In addition to varying the type of reward used, we can also increase the “surprise” factor by periodically introducing the JACKPOT. This is an unusually large reward that can be given at random intervals, or saved for that moment when “the light bulb goes on” and the pet makes a breakthrough in a training session. Jackpots should occur often enough for the pet to remember them, but intermittent enough to increase the anticipation of the pet.

INTERMITTENCY

Now that your pet is performing like a superstar, we can introduce the concept of intermittency. Once the behaviour has been reliably trained, it is possible to start reinforcing on a more random schedule. This works like the jackpots and variable reinforcers in keeping the anticipation level and the motivation to perform high. In human terms, we see the same psychology with the popularity of slot machines. If you always won a dime every time you put in a nickel, you'd be making money, but it would get boring quickly. The excitement of gambling comes from not knowing when you'll win, or how much. This excitement is so motivating it can lead to an addiction to performing. Intermittency should be reserved for times, a) when you notice your parrot starting to give rather weak examples of previously well-trained, consistent behaviours, or b) when you want to train duration behaviours to continue on in your absence (i.e. teaching your parrot to play happily with toys while you leave the room, instead of screaming after you).

If used sparingly, your parrot will wonder why a previously reinforced behaviour wasn't reinforced, and try harder next time. You can then reinforce the behaviour at the higher level. If you note a continued decrease in the quality of the behaviour, or frustration on the part of the parrot, return to a review of the shaping steps that attained that behaviour, with continuous reinforcement.

GAUGING SUCCESS AND TROUBLESHOOTING PROBLEMS

The old saying, “The proof is in the pudding,” is true. Reinforcement training, by its very nature, can only succeed. If our target behaviour is not being repeated with increased frequency, then by definition, it is not being reinforced. When difficulty is encountered, one must re-examine the following factors:

- a) Are the rewards reinforcing enough to encourage repetition of the desired behaviour?

- b) Do they overpower any motivation to perform alternative, less favourable behaviour? (i.e. if, at that particular moment, your cockatoo really wants to chew wood, giving him a treat for doing something else may not be a strong enough reward to prevent him from remodelling that antique chair)
- c) Are the steps in the shaping program too far apart to allow for quick movement from each previously mentioned steps.
- d) Is the bridge/reward delivered consistently enough to allow the bird to make the association between action and consequence?
- e) Is my bird getting bored or frustrated with the training? Examining these questions will allow you to pinpoint the area of difficulty and allow you to modify your training regime to achieve your desired results.

BODY LANGUAGE AND TRAINING

All animal trainers must be sensitive to the moods of their animals. As pet owners, we often have vague concepts of how our pets are feeling, but we rarely realize just how many subtle signals our birds give us. In the wild, parrots communicate with each other using a wide variety of body language signals. It is an innate understanding of these signals that prevents frequent aggression among wild parrots. Without an understanding of these signals, we run the risk of teaching our parrots to be aggressive, loud, or fearful to get their message across.

It is important, as owners, to know what our birds actually do with their bodies during different emotional states. Try writing down what your birds do when they feel happy, excited, tired, nervous, and angry. These basic emotional states, when recognized, will help you determine when to train, when to stop training, and when to change your training regimen. How do they hold their wings and tail?

What body posture do they adopt? What position are their body and head feathers held in? What do their eyes say? Do they do anything with their beak? What sounds do they make? How do they hold on to the perch?

The two most important body language signals you need to be aware of when interacting with your parrot are acceptance and avoidance behaviours. Your parrot will lean towards anything they want, and lean away from anything they find unpleasant. This will let you know if your parrot is interested in the reward you are offering, or afraid of something you are introducing to the training regime. Training is a form of two-way communication. While we use signals and rewards to tell our birds what we

want from them, we must take into account what our birds are trying to tell us. As you become familiar with parrot "language," you will be able to react to the minute signals your bird gives you, increasing your training success and allowing you to respect and react to the body language that precedes an episode of aggression, screaming or feather picking.

EXTINCTION BURSTS

If you are using extinction as a training method to eliminate unwanted behaviours like aggression, or screaming, you may experience setbacks. Just when everything was going

perfect, the behaviour not only returned, but got worse. This is the problem with attempting to eliminate unwanted behaviour by ignoring it, without training acceptable replacement behaviours to take their place. Does this mean the training failed and must be abandoned?

Not necessarily. Any negative behaviour that has previously been inadvertently reinforced

may suddenly increase as the pet attempts to gain the reinforcement they got in the past. Screaming can get louder and last longer. Aggression gets more pronounced. This is known by behavioural analysts as a "Behavioural Extinction Burst." This can be a one-time occurrence, or happen occasionally. Provided that the training continues to be consistent, each incidence of extinction bursts will decrease in severity, and be followed by longer periods of peace and quiet. This is called "surfing the extinction wave," and can be the most difficult aspect of dealing with behaviour problems. Extinction bursts, thankfully, don't occur in all cases, and can be circumvented by making sure we teach our parrots alternative behaviours that can gain them the reinforcement they seek.

BENEFITS

So, what is the result of all this methodical work? PRT allows you to spend more time with your bird, and increases the enjoyment of that time. As your bird begins to associate you as the source of rewards, his attention span and focus will increase. As you and your bird learn to communicate, you will become more aware of his body language and moods. Shy birds gain confidence, and extroverted birds learn concentration. The general sense of well-being will spill over into all aspects of your relationship with your pet. Instead of seeking to dominate or control our parrots, choosing this method empowers our parrots to choose good behaviour over bad, and establishes a relationship where our parrots are respected and appreciated for the

intelligent, sensitive, and sentient creatures they are. Positive reinforcement is a universal principle governing all species on the planet. We can use it to train other pets in our house hold, improve our leadership skills at work, or raise our children to be calm, confident adults with good decision making skills. Whether you use these techniques to train fun tricks and games, establish a new lifestyle or routine, or to tackle serious behaviour concerns, the ultimate result will be well worth the effort... a relationship with our parrots that truly can last a lifetime.

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Written by Kristi Flemming, 2009



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Kristi has worked with exotic animals, ranging from hamsters to dolphins, for 14 years. She also has extensive experience as a parrot nursery manager and is currently working as head technician and avian behavior consultant at the Animal Hospital of High Park. Kristi is a professional member of the International Association of Avian Trainers and Educators (IAATE) and the World Parrot Trust (WPT).

Shy birds gain confidence, and extroverted birds learn concentration.

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Macaw Mountain



Local legend has it that Macaw Mountain or Mo' Witz as the Mayans would say, was named by the Mayans more than 1500 years ago. Throughout the 1000-year reign of the Mayan Empire, it was evident in daily life that the Mayans revered the splendour and beauty of the macaw and its habits.

Humans and macaws have always enjoyed a relationship on some level but the Mayans took this relationship to a spiritual level. The ruling elite and the religious community integrated the scarlet macaw into their lives and culture in so many ways that it is difficult to separate myth from reality.

The Mayans explained their creator's eternal existence through the marriage of



the snake and bird in the feathered serpent. The serpent, with a head on each end, and endowed with the birds' ability to fly to and from the heavens, had no beginning and no end. The Macaw Mountain project is a logical extension of the relationship the Mayans had with this land, their most respected creatures and themselves. Macaws are the most common birds represented in Mayan art and architecture.

The macaws and most of the Mayans have moved on from Macaw Mountain. Today a new affiliation between the majestic ara macao and a few concerned individuals has developed a new passionate relationship re-igniting the majestic scarlet macaw with Macaw Mountain and the people of central America.

This story begins in the 1980's when Lloyd Davidson adopted two scarlet macaws left in the lurch when a bank repossessed a resort on Roatan Island. Mandy Wagner, a friend, and also a bird lover and resident of Roatan Island, developed an interest in these birds and began helping with their care. Many local Hondurans have parrots as pets and a few close encounters with other parrots and toucans impassioned her

to begin looking after the unwanted and neglected parrots of Roatan Island. Gradually, Mandy added some amazons to the collection and gained the reputation as "bird lady," and the flow of birds began in earnest.

When Mandy had to unexpectedly leave the Island in 1994, Lloyd became the primary caretaker of the growing collection that now numbered about 35 parrots. By making his hobby open to the public, he soon found that he was, quite by accident, educating the locals and other visitors about the husbandry needs of these personable birds. As the collection grew, a small park developed and was eventually opened to the public.

The park had been open about four months when Hurricane Mitch visited the island in 1998, and changed the destiny of the park's residents. The small park was destroyed; however all the birds were safe. Just prior to the storm Lloyd had moved the now 80+ parrots to his "Flying Fish" warehouse and all were saved. In the process of redesigning and rebuilding the park, Lloyd found that his vision and standards were changing and that the area no longer could provide the environment he desired for his flock.

The character of the island was changing; a once peaceful out-of-the-way place had become a mecca for every type of tourist and recreation associated with coral reefs and beautiful beaches. Not just from fear of another hurricane but from a desire to provide the finest habitat his companions



Miriam Chinchilla, a guide, helps visitors handle fully flighted parrots native to Honduras.



The large bridge over the river doubles as the restaurant's outside eating area.



Reproduction of common macaw wall ornament commonly found in the area

deserved, Lloyd began searching for a more suitable environment.

In his spare time Lloyd began the long process of finding the perfect location. After settling on the general location of Copan, and learning of the legend of Macaw Mountain, the search began in earnest. After months of searching and while driving along a 7-mile-long river valley that began, or ended, on the outskirts of Copan, Lloyd jokingly said to Pat, his business partner who was driving, "Why don't you pull off into that parking lot so we can take a break?" The "parking lot" was nothing more than a grassy



Free ranging scarlet macaw pair.

clearing on the side of the road. As they got out of the car and looked around, they began to get a feeling that this really could be a parking lot. A few minutes later, they discovered that they had happened upon a rare find, a section of uncut old growth primary forest. A few feet from the road they saw a deep secluded valley, a vociferous mountain river, natural springs, a forest of trees hundreds of feet tall and more varieties of native plants and birds than they could have imagined.

For the next few months, Lloyd visited the area every few days. Eventually, he had walked every inch of the valley and over time developed a magical vision of the ultimate parrot community. Utilizing the natural terrain and with the least possible impact on the lush tropical garden that had been growing for thousands of years, the park took shape in his mind. Huge walk-in cages where the birds could fly and visitors could walk through were the foundation of the design. A park developed around the cages. The park was to include several hill side deck-perches for visitors to enjoy the grandeur of the tropics and a restaurant that was actually a bridge over the river. The vision also included a large visitors' centre, a café with a large deck perched over the hillside, a swimming area, and numerous walkways paved with interlocking bricks and wood decking. In the centre of it all is a large handling area where visitors can get up close and personal with macaws, toucans and many other types of parrots.

For those not familiar with parrots, the handling area would offer an excellent opportunity to see and get to know them. At any one time a visitor will handle and

see twenty or more friendly parrots and toucans fly and roam as if they were free. The area would be monitored by several well-trained staff that educate visitors on almost any aspect of the birds in the wild and in captivity.

The next step was to find the owner of the land and strike a deal - not always an easy thing to do in Honduras. The land owner was an older gentleman who had vast land holdings and was well known for having no motivation to sell any of his land. Lloyd arranged a meeting with the owner at the property, and after explaining his well-developed vision for a park, how the project would preserve the natural environment and what it might do for the people of Honduras, the gentleman quoted a very reasonable price, extended his hand, and the deal was sealed with a simple handshake.

Building a park in the middle of a Central American jungle is no easy task. Lloyd had spent his life as a biologist and owner of a commercial fishing business. His fleet of boats supplied the United States with fresh red snapper served in restaurants along the east coast. This background did not supply him with knowledge of parrots, education, park management or construction. He does, however, know how to operate complicated enterprises and his passion for improving the lives of parrots pushed him to conceive a very impressive habitat for his flock and a method for making it happen.

For construction advice, Lloyd turned to his long-time friend and business partner, Pat Merritt. Pat grew up in Alaska, moved to Wyoming as a young adult, settled in as a cattle rancher for 20 years, and eventually



Nest inspection is challenging when parents are fully flighted and the nest is in the middle of the flight.



Lloyd Davidson, park owner, and Steve Hartman. Every enclosure is larger than necessary so the occupants can fly or just hang out.



Visitors can enter most of the large flights and get up close to many parrots.

found his way into the shipping and fishing industry as a boat captain servicing the Caribbean between Honduras and the United States. Each of these areas required a great deal of "jack of all trades" engineering and construction savvy. As it turned out, this partnership provided the combination of most of the skills necessary to make this dream come true.

During the parks construction, word spread quickly and the idea was well accepted by the locals and the government. Before the parks completion in 2003, additional birds began to show up. There were even cases where concerned citizens purchased birds from neighbours so they could be given a more comfortable life. At the time of this article, the park houses over 130 birds of at least 20 native species. The park's success has already prompted plans for expansion to handle additional rescues and a breeding facility for some of the rarer species like the buffons macaw and the yellow lord amazon.

During the construction process, Lloyd had the fortune to meet Dr. Jennifer Ahlfeldt who has a PhD in art history from Columbia University. She was there working on a project, through Harvard University, to reassemble sculptures that have deteriorated and fallen from the facade of several temples in Copan.

Dr. Ahlfeldt is an expert on Mayan culture and religion and developed an interest in the educational aspects of the park. She has developed a great deal of information on the relationship the Mayans had with the scarlet macaw and other birds, and has put together a collection of Mayan art that is to be displayed at the park. The collection consists of 6 large pictorial reproductions and some carved stone reproductions of the glyphs depicting the macaws in Mayan life. A fifty-foot-long outdoor art pavilion circles the handling arena. Along with the incredible Mayan art is highly informative text explaining the relationship not only to outside visitors but to the local population as well. Even though the primary mission is education to make life better for captive parrots, there are no warnings or admonishments about what not to do as a parrot owner. The park educates by setting a good example. As the saying goes "a picture is worth a thousand words," and Macaw Mountain paints an incredible image of macaws and other parrots thriving in a natural habitat. This picture wakens pet bird owners' sense of responsibility and provides awareness of just what is necessary to truly meet the needs of these intelligent creatures.

The Honduran Department of Natural Resources has recognized the park's reputation and impact on the area and has asked for assistance in managing a population of semi-tame free ranging scarlet macaws. This flock of 20 or more scarlet macaws spends most of their time near the entrance to the Copan Ruins park where they enjoy free meals and gladly pose for photographs.



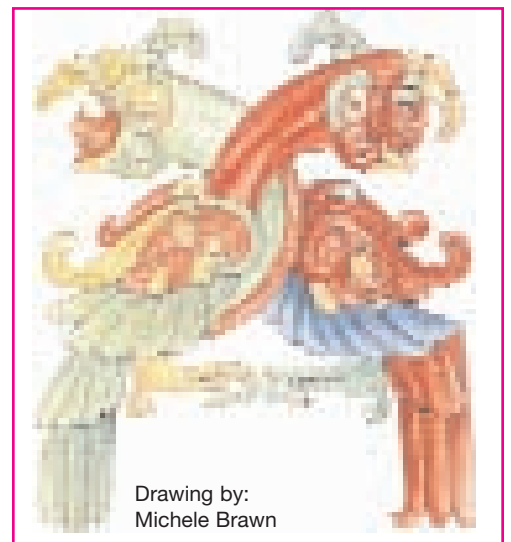
Lloyd inspects a 7-week-old conure. Notice that the parents have over preened the ear area.

If you find yourself in the area and have an interest in parrots, butterflies, lush tropical jungles, the sound of mountain spring water cascading through a mountain valley, or just want to spend a little time in paradise, you will not want to miss Macaw Mountain.

For more information visit MacawMountain.com

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A note of thanks from Parrot Life to Steve Hartman for donating \$2,000.00 to the Smithsonian Museum to purchase the Feather Head Dress that is gracing this cover of our Parrot Life Magazine.



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|---|------------------------------|
| A) Living World Junglewood Small Skewer With Wood | #81158 |
| B) Jungle Gems Multi-coloured 3 Ring Tower | #81075 |
| (not shown) Living World Jungle Gem MultiCol. Roller w/3 Bells | #81036 |
| C) Living World Guinea Pig Bottle, 16 oz. w/hanger | #61540 |
| D) Perches - Cotton | #81362, #81370, #81372 |
| E) Aviator Harness | #88103 X-Small, #88104 Small |
| F) Living World Mineral Block for cockatiels, "Pear shaped" | #82190 |
| G) Living World Prime, 20g / 1oz | #82102 |
| H) Living World Pedi-Perch, Small | #80905 |
| I) Tropimix Small Parrot Super Pre. Form. 860g / 1.9lb | #80640 |
| J) Tropicana Life. Cockatiel Granules, 820g / 1.8lb | #80520 |
| K) Millet Living World Spray Millet, 200g / 7oz | #82474, #82472 |
| L) Dogit Stainless Steel Bowl, 400ml / 13.5oz | #73511 |
| (not shown) Living World Stainless Steel Parrot Cup, Small | #80750 |
| (not shown) Living World Outside Hood. Seed or Water Cup, Smoke | #81896 |



HARI (Hagen Avicultural Research Institute) is a major contributor to Parrot Conservation Projects around the world and by buying this cage you support these efforts.



LIMITED EDITION PRINTS

For Customers of HARI Bird Foods; Tropican, TropiMix and Prime Vitamins.

“Limited Edition Illustrations”

by artist Von G. Mützel
where found in the
German book “Bird’s
From the Wild Zones”
authored by
Ant. Reichenow in
Berlin Febuary 1883,
will soon be made
available for HARI Bird
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Look for a special
promotion coming soon
to a Pet Store near you.



*Represented here are 4 of 32 wonderful
prints found in this amazing book.*

Translation from the original German forward in the book “Bird’s from the Wild Zone”

When adopting the concept of bird illustrations for our bird friends, it was the intention of the author to present illustrations and descriptions of live parrots encountered on a fairly regular basis. With the increased popularity of exotic cage birds and consequent importation of live birds by the trade, the fact that during the publication of this atlas there were constantly new parrots coming onto the market, lead me to expand the presentation of selected species and finally to decide on a completely new parrot overview (guide).

The present atlas is based on thorough studies and a recently conducted systematic review of this bird group by the author using the latest discoveries in the parrot field and differs in

many ways from older monographic presentations on this bird species. When looking at the previous and latest chart descriptions you may notice that the position of the author changed from several viewpoints. This stems from, and is supported by new realizations gained from my own studies or research by others in recent times. The corresponding findings based on present day knowledge can be found at the end under “Corrections”. Unfortunately we had to abandon illustrating all parrot species in order not to exceed the intended volume of the atlas. However, the missing species appear separately as an addendum, where possible with reference to the illustrations, so that even less versed readers can easily identify them.



Hagen Avicultural Research Institute

Breeding Breakthrough At The Hagen Avicultural Research Institute

UPDATE

by Mark Hagen, M. Ag.



Yellow-fronted amazon fledgling getting his first misting

They say that myths are made to be broken. "It was widely believed that Yellow Crowned Amazons wouldn't reproduce if they were raised exclusively on a formulated diet," said Mark Hagen, the Research Director of HARI, who holds a Master of Agriculture from the University of Guelph with a specialization in Psittacine Aviculture. "The general theory was that since captive Yellow Crowned Amazons fed formulated diets didn't have to forage or remove hulls from seeds, their instinctive behaviour would be diminished, and hence they wouldn't reproduce. The birth of our two Yellow Crowned chicks to parents raised on Hagen Tropicana Granules disproves that theory."

Although captive bred generations of Quaker Parrots that were fed Tropicana Granules exclusively have been breeding for over 20 years at HARI, Yellow Crowned Amazons presented a tougher challenge, because they are infrequent breeders, only breeding during a few weeks twice per year. The Yellow Crowned Amazons in the HARI study had 2 chicks. Both chicks will be kept at HARI, with plans to be bred further, due to their good-natured characteristics.

"The future of aviculture is dependent on sweet, well-behaved companion

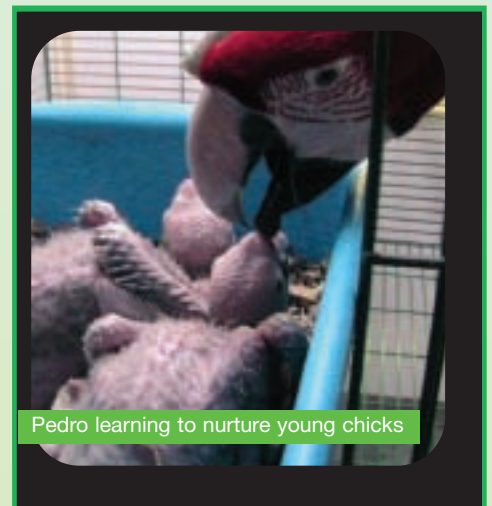


Blue-fronted amazon parents with fledgling chick

birds being bred in captivity," said Hagen.

HARI's other newest chick, from Blue Front Amazon captive bred parents, might also lead to new understandings about companion birds. Wild birds are "taught" how to be birds by the members of their flock, but as Hagen explains, "In captivity, birds are often unable to raise their own offspring because they did not receive the educational aspect of natural rearing and education from the flock." Parent-raised birds are better parents themselves, because they have learned the correct ways to care for their offspring.

To help teach the parrots how to be good parents, HARI has them observe the nursing of other offspring in residence. "Pedro, a Green-Wing Macaw juvenile, was raised in our nursery with a Yellow-Naped Amazon for the first year and a half. They both participated in the preening of the chicks in the nursery and observed the hand feeding process as well. We believe they will also be able to raise their chicks when the time comes," says Josse Bermingham, Veterinary Technician at HARI. "However, even if the birds need a bit of help, or for birds that haven't witnessed nursing, they may still make good parents. Breeders must have patience with inexperienced



Pedro learning to nurture young chicks

parents. Assisting the newborns through assisting hatching and supplemental feeding in the nest sometimes will allow these pairs to start rearing properly."

Specialization and Pair bonding

Amazons are a unique group of pet quality parrots who will always be in demand.

By the end of 1993, imported amazons for unrelated breeding stock were no longer available for Canadian aviculturists to work with. To be a successful Amazon breeder modern avicultural techniques must be utilized including safe surgical sexing of birds,

formulated diets or supplements, disease prevention using screening tests, vaccines for Pacheco's efficient safe housing, banding and microchip identification, and computer assisted record keeping of breeding stock. Now is time for us to work together to set up professionally managed stud books of these parrots and ensure their survival into the next generation. There are many management benefits by specializing in selected species and building up numbers of the same species rather than having only one pair of each of many species. Simply placing a pair of sexed bird into a flight is not recommended. Compatibility is no guarantee when you place a male with a female. Pairbonding or letting each bird choose their mate is the best method, as it dramatically increases the chance of getting a compatible pair. Placing at least four mature birds (two of each sex) of the same species into a large cage should result in at least one compatible pair. It may be especially noticeable when a nest box

two individuals of the same sex can act as a true pair, indicating the need for sex identification markers.

HARI has been flocking all captive bred juvenile Double yellow headed Amazons (acquired through various Canadian aviculturist and chicks from each of HARI's breeding pairs) for the past 6 years. They are now being monitored by a camera to help us identify pair bonding, which will then allow us to successfully select the future breeding pairs.

Breeding

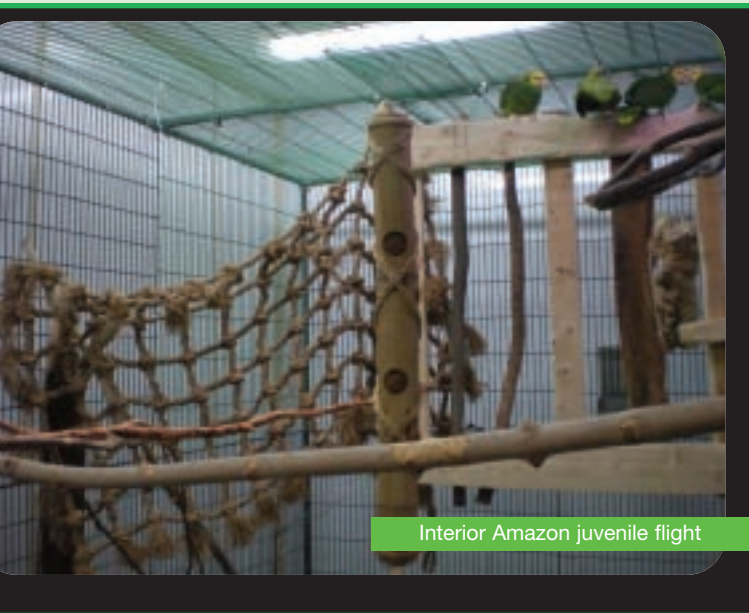
Reproduction in birds is discontinuous and is triggered by a complex repertoire of behaviour patterns and environmental stimuli. Important factors are; temperature and humidity (thermal), calls and behaviour of mate and other con-specifics in the immediate area (auditory), territory and nest site (visual), nest and allopreening (tactile), food and energy (gustatory) and light acting by

between breeding cages & are removed after the breeding season until the commencement of another cycle the following spring. Timing is important so that the stimulatory behaviour of other birds does not preoccupy the male.

ECO-Friendly approach to Husbandry

We have for the past 3 years stopped using disinfectants in our bird rooms at the facility. A specially designed eco friendly non toxic enzymatic soap with added tee tree oil and grapefruit extract is now used routinely on flight cages, floors in the breeding rooms and natural branches. The use of traditional antibiotics and antifungal medications has also been replaced with holistic & natural alternative treatments almost exclusively for the past 3 years, for our nursery chicks and breeding colony. Twice per year, a 21 day clay milk preventive treatment is offered to our breeding colony. Clay

therapy combined with hydrotherapy has been exclusively used for wound management for the past years as well. Health benefits and breeding success could be attributed to these new alternative regimens, although research is still



Interior Amazon juvenile flight



induction (photic). Little research has examined these parameters and their role in parrot breeding in the past. Amazons have a

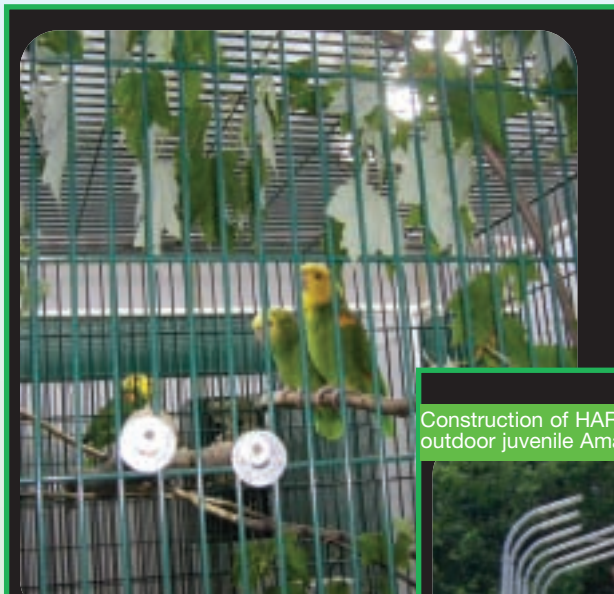
higher degree of infertility than macaws or cockatoos. Obesity may be one reason for this higher level of infertility but I don't think it's the major one. The defense of territory is perhaps another key component in stimulating reproduction in male amazons. Flocking the birds during the non-breeding season is being used by several leading US breeders and was attempted several years ago a HARI, although pairs were flocked in groups of 6-8 birds, pairs remained faithfully bonded. Visual barriers are now being used in

underway to evaluate the actual therapeutic benefits of these on our specific research group. The Life Glo II fluorescent lighting is changed yearly in our breeding rooms. We have removed all of our automatic water systems that used to provide drinking water to our breeding colony, as the hygienic maintenance of this system was too laborious and bacterial contamination difficult to prevent (which proliferated under the nipple part of the system). We have now returned to the stainless steel water bowls and fresh water is replenished twice per day.

The research fields covered by HARI include disease control, pair bonding, nutrition and the influence of temperature, humidity and light cycles on breeding. As a result of the work

is placed within the group. When the dominate pair take over the nest box or chase away other birds, remove the others and leave the bonded pair. When working with younger birds, it may take months or years to observe serious pairbonding. But this method enables the aviculturist to get compatible pairs that are most likely to breed earlier.

Amazon pairs develop strong bonds and will remain together, usually with their bodies in actual contact. Much of this time is spent allopreening. By nature they are very affectionate and



Breeding cage with cavity nest front for Double- yellow headed Amazons



done at HARI, dozens of papers relating to egg incubation, oil and nutrition, husbandry, cage design and formulated diets have been published, expanding the knowledge and information available about birds, both in the wild and as companions.

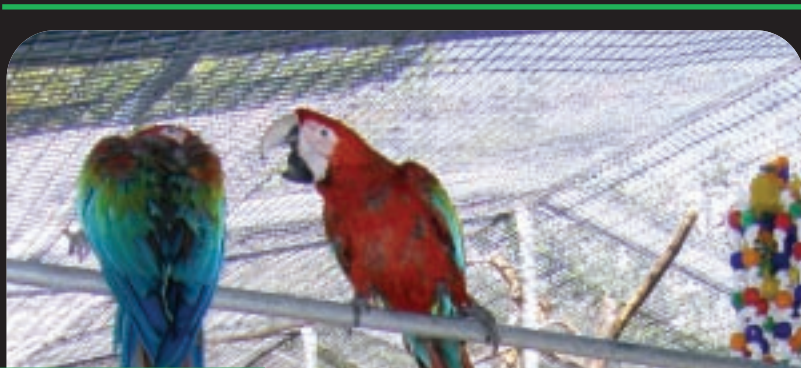
For more information, visit:

www.hagen.com/hari

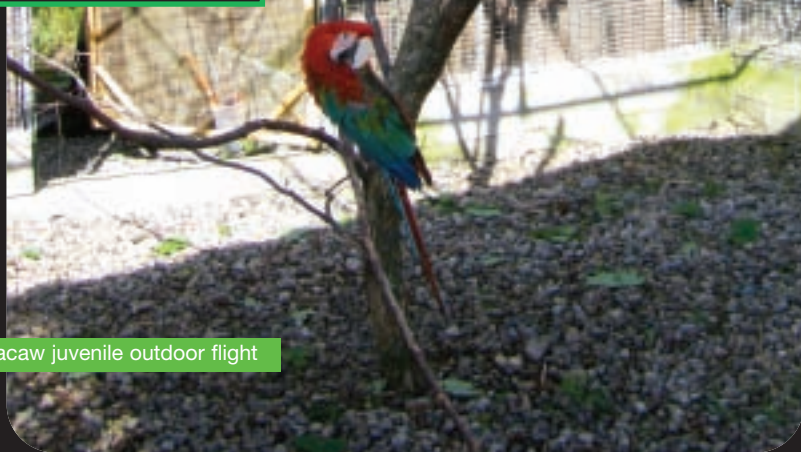
The HARI website features bird care sheets, articles on companion birds, and papers on many of their findings.



**The Hagen Avicultural
Research Institute**



Construction of HARI's new outdoor juvenile Amazon flight



Macaw juvenile outdoor flight



Macaw chicks raised with many clutchmates

Event Calender

AUGUST 2009

American Federation of Aviculture

In Houston, Texas
- August 5-8, 2009
www.afabirds.org

Aves International Parrot Convention

In Grafton, Queensland Australia every second year.
Next One - Thursday 13th through Sunday 16th
- August 2009
www.parrotconvention.com/

Eastern Canada Avicultural Association Gala

Moncton, New Brunswick
- August 22, 2009
www.ecavianassociation.com
narich@nbnet.nb.ca

OCTOBER 2009

2009 Parrot Lover's Cruise

Ft. Lauderdale, Florida, USA
- October 24, 2009
www.parrotloverscruise.com
A \$50.00 per passenger donation will be made to the World Parrot Trust



Parrot Life Seminar

- October 26, 2009 is the date set in Kissimmee FL.
Contact: Melanie Allen, Avian Product Specialist.
Rolf C. Hagen (USA) Corp. 305 Forbes Blvd.
Mansfield, MA 02048
Toll Free: 888 BY HAGEN (888-294-2436)
Or Customers can contact the US Customer Service Department at Rolf C. Hagen (USA) Corp.
Telephone: 800-724-2436

NOVEMBER 2009

CPC Canadian Parrot Conference

at the Holiday Inn, Guelph, Ontario
- November 13-15, 2009
www.canadianparrotconference.ca

JANUARY 2010

Parrot Festival 2010.

Texas, United States.
11th Annual Educational Conference.
- January 22, 23, & 24 2010
Presented by: The National Parrot Rescue & Preservation Foundation
www.parrotfestival.org
713-557-BIRD(2473)
or Email cherylrose2000@yahoo.com
(979)234-7869

MAY 2010

Canadian Parrot Workshop 2010.

The Art & Science of Training Parrots.
- May 1 & 2, 2010
Holiday Inn and Conference Centre, Barrie, Ontario, Canada. www.canadianparrotworkshop.org
Speakers:
Steve Martin - The Art & Science of Training Parrots
Steve Milpacher - speaker at the fund-raising banquet

Canadian Parrot Symposium

Western Canada
It is held each year on the Victoria Day long weekend in Victoria, BC. www.parrotsymposium.com

Parrots International Symposium

At the Omni Hotel, San Diego, CA.
- May 21-23, 2010
Focus on parrot conservation and field research.
Presentations on wild and companion parrots.
www.parrotsinternational.org/symposium_info.html

AUGUST 2010

Parrots society, Australia

In Brisbane, Queensland
- August 2010
Every second year in August.
www.parrotsociety.org.au

SEPTEMBER 2010

International Parrot Convention

In Tenerife, Canary Islands, Spain at Loro Parque.
Runs every four years.
Next one in September 2010
www.loroparque-fundacion.org



Step-By-Step Towel Restraint Techniques for Large Parrots

Despite the information presented in past issues regarding techniques used to properly restrain your companion bird, it remains an exercise that many caregivers (companion parrot guardians and aviculturists) are not confident practicing. Many have confided that their reluctance is based on fear that the human companion bond will be broken. Others fear they will not be able to safely restrain the bird and that someone will inevitably get bitten or injured.

Unfortunately, the step-by-step photos presented here are not as useful as having someone demonstrate this technique in your presence with your own bird. Especially since every bird has a different personality, degree of training and has established different relationships with various individual caretakers. Nonetheless, these photos should serve as a guide to demonstrate the technical use of the towel to master a safe restraint. This will be achieved without applying pressure or direct contact with your hands on the bird, as the snugly wrapped towel restrains the bird's body almost by itself. Ask your avian veterinarian to demonstrate this technique with your bird during your next visit.

Practice this technique with a stuffed material parrot prior to attempting to wrap the towel around your bird. You must be confident with your approach. Instinctively, your bird will be defensive and reluctant to cooperate if you are unsure or hesitant. Practice this technique in a neutral zone, with dim lighting and away from distractions. **(#10, 11, 12)** Sit on the floor with your bird when introducing activities using the towel. Hide treats, weaning biscuits or rattling foot toys under the towel and discover them together. You can also cover your head and your bird's head under a towel, and pique your bird's curiosity by playing hide and seek and peek-a-boo **(#11)**. Throughout the training, always communicate reassurance, either verbally or with eye contact. This is the best positive reinforcement reward you can offer your bird.

Although these steps are repeated from the restraint techniques for smaller birds featured

in *Issue 3 of Parrot Life* (pages 26-27), I thought it best to repeat them:

- **Towel:** Should be at least two to three times the size of the bird (evaluate size with full wing expansion). A padded material should be used to lie the bird on its back when restrained in the towel. The bones protruding from the wings (equivalent to our elbows) of large birds can get bruised when restrained without padding **(#9, 6)**

- Select a towel without holes of a material that does not feel too slick or easily unthreads, because you want to make sure the bird will fit snugly and not slide or get its nails, feet or wings caught or entangled.

- **(#5)** Care must be taken never to apply pressure on the bird's body. The bird's air sacs are found throughout the body, compressing the lower body (above the hips) can be suffocating. The towel itself will achieve proper restraint if tucked properly (not necessarily tightly). **(#15)** Only the tips of the fingers are applied at various pressure points on top of the towel and not directly on the bird's body.

- A Velcro strip **(#5, 6)** can be used to keep the towel wrapped around the upper body-but be extremely careful that it is not too tight. Never leave the bird unattended while it is wrapped up!

- **(#13, 14, 15)** Try not to apply bare hands to restrain the head, especially under the head, lower beak and nostrils. Double-fold the towel to make a comfortable padding. **(#13)**

- If the bird shows signs of hyperventilation (rapid breathing and hot feet), release it immediately. Weak, overweight, young birds that might have full crops, or individuals suffering from respiratory difficulties or debilitating health conditions should ideally only be restrained by an avian veterinarian or experienced handler.

Wetting the towel can facilitate restraint in case of an emergency. It can also help regulate the bird's temperature on a hot day.

Note: the bird will then be wet and therefore care must be taken to provide a basking lamp (if needed) and a draft-free environment.

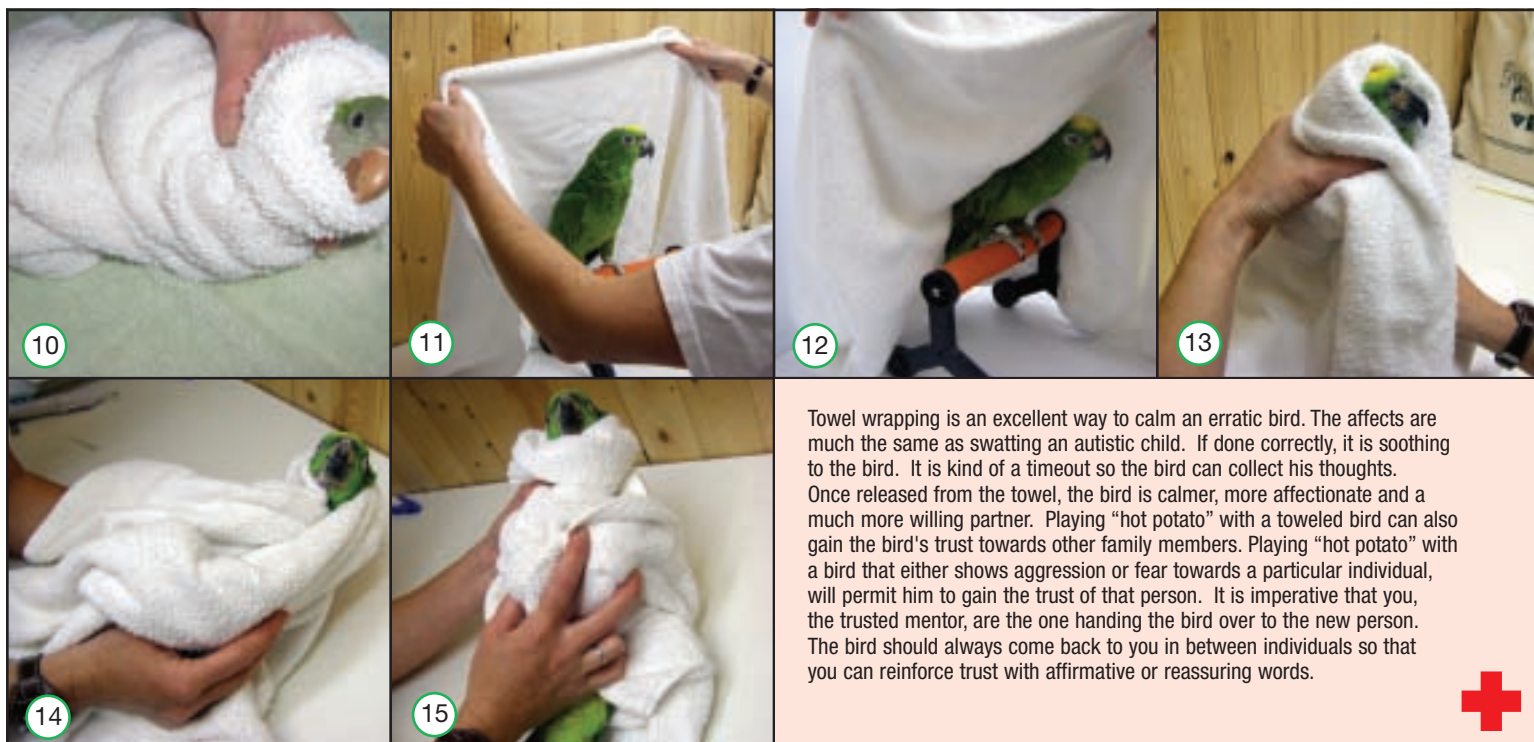
You might need to find creative and entertaining ways your bird can relate to the towel, even when restrained in it for a short period of time (such as preening activity, playing the hot potato game, or take the time to listen to African or upbeat percussion rhythms with your bird). Self-determination and practice will contribute to your success.

Towel training should be part of every companion bird's education. It is the most valuable training exercise you will invest in and could play a vital role in the event of an emergency. **(# 8)** Reinforcing towel restraint training can facilitate grooming, medication administration and treatments, the veterinary exam or simply reaffirm your confidence that you have mastered the technique... thus making you a responsible caregiver!

This practice establishes mutual respect and trust with your parrot during crucial juvenile and sometimes challenging years towards sexual maturity. Without a doubt, birds that have been initiated to this exercise at a young fledgling age will demonstrate less resistance and stress than birds that must be towel trained for the first time at an older age.


The justification to persist training despite the challenges this technique may present is obvious to anyone who has had the misfortune of having to deal with an emergency or trauma (i.e. bleeding blood feather, broken beak or nail).

Note: There should be no dilemma regarding the ethical practice of restraining birds in towels, providing the technique is well mastered, the approach is respectful and motivated by a compassionate desire to be trained for an emergency or re-establish respect and positioning within the flock hierarchy-which is often the reason why so many parrots lose their homes! We can ruffle the feathers of this controversial debate in the next issue!



Towel wrapping is an excellent way to calm an erratic bird. The affects are much the same as swatting an autistic child. If done correctly, it is soothing to the bird. It is kind of a timeout so the bird can collect his thoughts. Once released from the towel, the bird is calmer, more affectionate and a much more willing partner. Playing "hot potato" with a toweled bird can also gain the bird's trust towards other family members. Playing "hot potato" with a bird that either shows aggression or fear towards a particular individual, will permit him to gain the trust of that person. It is imperative that you, the trusted mentor, are the one handing the bird over to the new person. The bird should always come back to you in between individuals so that you can reinforce trust with affirmative or reassuring words.





Note: The author does not promote free flight outdoors without extensive training. All pet birds should be harness trained so they can safely go with you when you leave the home.

Thinking On the Wing

by Steve Hartman of The Parrot University at Hartman Aviary

At the first hint of danger, a bird normally takes flight. During the hundreds of defensive short flights flighted birds take each day, they are quickly assessing potential dangers and deciding if they need to keep flying to avoid a real danger. These short flights require immediate and appropriate decision-making abilities. We call this process “thinking on the Wing.”

The Parrot University has spent 20 years researching what makes a parrot “a parrot.” Our 20-year flighted parrot experience includes over 800 flock oriented pet parrots, and over 4,000 flighted baby parrots from more than 50 species. Cumulatively this amounts to over 7,000 bird

years of hands-on experience. As a result, we have found the number one characteristic that defines a “parrot” is its ability to fly. Flight is fundamental to every component of a parrot's mind and body.

Learning to fly well is the most complicated and important task a parrot can learn. Flighted parrots are healthier, more active, more coordinated and have much better vision. Flying promotes higher intelligence, self-confidence, self-esteem and ultimately makes a more social long-term companion.

Serious preparation for flight for the average parrot begins at about three or four weeks of age.

Neuropathway development in the coordination centre (cerebellum) of the very young parrot is the first step in preparation for flight. This process begins the first time the baby starts to move around in the nest and is substantially complete by six months. Every new type of physical activity programs more neuropathways in the cerebellum.

The cerebellum, which is at the bottom of the back of the brain, stores the program for coordination and ultimately supplies motor skills for flight. Neuropathways are the brain's electrical connections that allow information to be transferred throughout the body. Since more experiences and activities lead to better motor coordination by creating more neuropathways, it makes sense that learning to fly adds an incredible number of neuropathways in the cerebellum.



Can a parrot,
designed by nature for
millions of years, be truly
mentally and physically
healthy without flight?

brain meets a minimum threshold of learning. Low functioning individuals that are unable to “think on the wing” often use compensating networks. One of the most common is the “bite first, ask later” compensating manoeuvre.

Six main areas where flight is important to a parrot

Sight

The pea-sized visual cortex in a human is very tiny compared to the size of our brain. Our visual cortex is comparable to a warehouse that collects visual inputs, sorts them, and then distributes them to be processed in appropriate parts of the brain. A parrot's visual cortex is huge compared with the bird's brain, and works more like a drop-shipping distribution centre than a warehouse. Multiple major visual neuro connections throughout the parrot's brain continually sorts and redirects information without the delay of sitting around in a warehouse. This significant dedication of brain power to vision is necessary because, as a prey animal on many predators' lunch menus, parrots need to respond to visual stimuli much quicker than humans.

Information received through the eyes travels over many different neuro-highways to many different parts of the brain simultaneously. The more these pathways are used and reinforced through experience, the quicker the overall response to visual stimuli will be.

Proper response to visual stimuli should take as little as a few thousandths of a second, but the process is delayed when compensatory networks intervene and may take several seconds to sort out or process.

Parrots with poor visual skills take longer to assess visual stimuli which may force the bird to react aggressively until the information is processed. For instance, a new person entering the room or someone reaching out to touch may provoke a “bite first, ask later” response while the circumstances are being processed.

Flying birds quickly learn to process visual inputs faster as they develop and reinforce new and improved pathways for routing visual stimuli at high speeds in a three-dimensional manner. This educational process cannot take place without flight.

Defence

A parrot's primary means of defence is flight. Any time a parrot even suspects danger, he takes to flight while sorting out the facts (thinking on the

Babies learn best when multiple senses are stimulated simultaneously (i.e.: sight, sound, taste, touch and smell). The best opportunity for a parrot to learn is when a combination of senses are experienced at the same time. The senses of sight, sound and touch take on a very different nature during flight. When a particular skill is being developed or experienced by different senses at the same time, a different neuropathway is reinforced for each sense, creating a much stronger neurocircuitry for that skill or knowledge being learned. Flying offers a greater variety of situations that parrots need to utilize for optimal mental and eventual social development.

The parrot brain develops on a pre-determined schedule that has been finely tuned by evolution for millions of years. Each one of the senses, as well as mental and physical skills, develop over a period of time, but not at the same time. Some of the development phases are symbiotic, meaning they need information being developed in another area of the brain for their own optimal development. For example, vision develops best when the baby can move around and see things from different angles and distances. Conversely, coordination develops best when the visual cortex can provide information on distance and perspective. Without this symbiotic relationship of vision and coordination, it is difficult to develop three-dimensional vision.

Two of many important brain functions required for flight are coordination and vision.

Coordination and vision develop in different parts of the brain, but are essential for the other's optimal development and critical for flight skills.

Coordination develops in the cerebellum at the back of the brain as the baby moves around and repeatedly tries new and progressively more complicated activities. The parrot's visual cortex, which is quite different from ours, connects with virtually every part of the avian brain. A baby's vision, at hatching, is a jumble of blurred shades, shapes and movements. Babies have the basic program to recognize these light rays entering their eyes, but they need to learn how to interpret the basic images so they can be directed to the

appropriate part of the brain for interpretation.

In some ways, motor skills and vision are so integral to each other that it is difficult to separate the two. As a baby flies towards a tree, he will begin to associate the visual changes with the closing of the distance between him and the object. As his motor skills develop, he will begin to anticipate an impending crash and learn how to slow down. The faster he flies, the faster the visual ability needs to be and the faster the brain learns to process the information, and the faster he will be able to fly. Teaching the brain to process information faster and on higher levels, promotes faster decision-making and fewer mistakes in all areas of mental, physical and social competence. This combination of skills is significantly more important in parrots since they are a prey species and constantly need to be ready to “think on the wing.”

Compensating networks

Now that we understand how important symbiotic neuropathway development is, we can look at how other areas of development and personality are affected when normal brain development is interrupted.

When the brain is not able to process information fast enough it creates “compensating networks.” Compensating networks develop to make quick decisions when education and experience are not sufficient to quickly produce an educated decision.

Basically, when a situation calls for a quick decision, there are usually several variables that need to be considered. Highly functioning individuals quickly analyse every variable and make an educated decision. Lower functioning individuals often use compensating networks to jump to conclusions when they cannot think fast enough. This often occurs for two reasons: the bird wants to bypass a frustrating situation or, for defence reasons, does not have the time to work on the problem.

“Applied learning” is the ability to utilize accumulated knowledge to figure out new situations. This ability only occurs after the bird's

Thinking *on the Wing*

wing). Parrots fly away so freely and readily that they rarely feel scared in the wild.

Feeling threatened or concerned, and being scared are two distinctly different emotions. As humans, we can feel threatened by standing in the middle of a highway; however we need not be scared since we can easily walk to the side of the road to avoid danger. This is how parrots experience threats. They can easily fly away and rarely ever feel scared.

Because they can be someone's lunch at any time, they become VERY scared when they cannot immediately avoid threatening situations. Flightless parrots quickly lose the ability to choose between flight or fight (flight or bite in a parrot's world). When a parrot cannot remove himself from a threatening situation, he will default to the second line of defence: BITE. Parrots with no ability to escape danger, or even perceived danger, become paranoid and tend to develop the "bite first, ask later" method of defence. Their defence response system operates so fast, they respond automatically when scared and often unexpectedly bite their owner by accident. Ultimately, most of these adult birds become unpredictable and lead very restricted lives.

Flight is necessary for the "retreat and re-approach" behaviour that is very important for baby birds. When concerned, and unable to retreat from a possible threat, babies become scared and unable to learn during those episodes.

Safety

No parrot ever jumped out of the nest in the wild and knew how to fly. Babies fly into the side of trees, miss their landing sites and end up in a bush or worse. At The Parrot University, we have watched thousands of babies use these same experiences to learn how to fly well. By experiencing these near tragedies as developing babies, they have honed all of their senses and will automatically avoid those situations in the future. A juvenile that learns the limits of his physical body, and how to stay out of trouble, will be more confident and easily learn to fit into a domestic human-bird flock as an adult.

"Flightless parrots are safe parrots" is the advice often given by less experienced bird behaviourists. Our 20 plus years of experience working with over 4,500 flighted parrots at The Parrot University have proven that hazards are significantly greater for flightless birds because they are less able to avoid dangerous situations. Not only can they not get out of harm's way when necessary, they rarely know where danger lies because they have very limited life experience.

Some common arguments in favour of clipping wings include:

- ***In a multiple-bird household, when a bird flies onto another bird's cage, he will get into a fight.*** Birds in a natural situation rarely get into fights. At the first thought of danger, one of the birds backs down and flies away. A clipped bird that accidentally ends up on another bird's cage will often get hurt because neither bird has the option to back down. It is very easy to teach parrots to get along and respect each other's space in a multi-parrot household, if they can fly.

- ***Flighted birds can get to the floor and get stepped on or eaten by the dog.***

When a flighted bird accidentally finds himself on the floor, he can easily fly to a safe position. You must watch clipped birds very closely because they can only walk when they want to go somewhere and often fall off the perch. It is common for dogs, cats and human feet to injure birds that cannot fly.

- ***Clipping wings will make a parrot easier to handle.***

This has some truth to it. If a bird was not raised properly when young, and becomes an unruly adult, rendering him flightless will limit his retreat and approach options. This eliminates the ability to get away and can result in dependency on the owner.

Flightless parrots are constantly exposed to situations where they feel afraid and out of control. With no control over their life, parrots often develop paranoid schizophrenic behaviours. These individuals lack the ability to trust others. This syndrome is a significant factor in the development of the one-person bird.

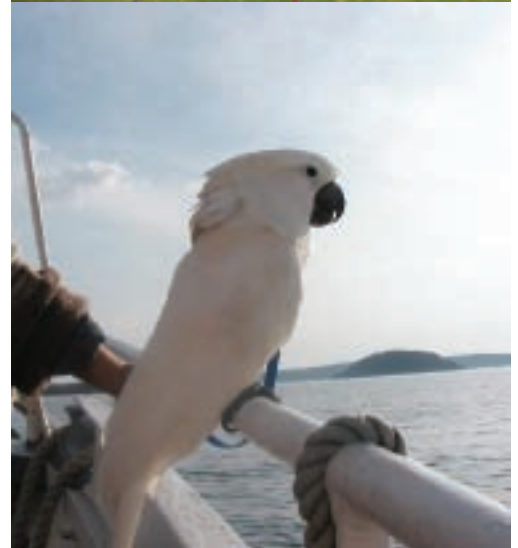
- ***Birds are unable to learn not to fly into windows and walls.***

All young birds and children walk/fly into walls and windows, but not forever. Flighted baby parrots learn very quickly. In the middle of Hartman Aviaries' indoor nursery hangs a large window for the babies to practice flying through. It takes a maximum of 72 hours for a baby parrot learning to fly during their "sensitive period" of flight development to realize they can see through but cannot fly through glass. This "sensitive period" occurs when the average parrot is 8 to 10 weeks old.

Most parrots that are rendered flightless as a juvenile end up regrowing enough feathers to gain lift. These uneducated birds repeatedly fly into windows and consistently crash land because clipped birds are unable to develop flight motor coordination during the sensitive period of the cerebellum development. These disabled parrots are generally unable to "think on the wing" and perpetuate the myth that parrots are too stupid to learn to fly in a home. This lack of coordination causes a knee-jerk reaction by many humans to clip even more of the wing and worsen the problem.

Exercise

A parrot in flight for just a few minutes receives



more exercise than an active flightless parrot receives all day. A healthy wild parrot does not pant after flying a long distance, yet very few pet parrots can fly across the room or aggressively flap their wings without an extended period of panting.

We all know the mental and physical benefits of exercise on all aspects of life. If a parrot is healthy, it can concentrate and focus its attention, learn faster, is more easily trained and will probably live longer. Young parrots must gain the maximum advantage from exercise to assemble billions of neuropathway synapses and achieve their potential IQ to become high-functioning adults while their bodies and brains are still developing.



Relative amount of energy used for different activities.

Sleep	1 unit
Awake	1.5 units
Playing in place	3 units
Moving and playing (getting into trouble)	6 units
Aggressively flapping wings	12 units
Flying	18 units

Self-confidence and social ability

High levels of self-confidence and self-esteem are the by-product of a well-educated, fearless individual. Confident individuals present and interpret body language accurately and easily learn to fit into the flock or household. A paranoid anti-social bird will not be able to maintain high levels of any basic social skills.

Intelligence

Every parrot is born with a genetically determined maximum intelligence level. Achieving this maximum IQ requires the individual be supplied with necessary environmental stimulæ during each development phase. The brain is very adaptable and can compensate for some missed experiences. However, a flightless parrot may

miss out on as much as 50% of the physical and mental experience required for proper development. Currently, there is no way to tell just how much damage this shortfall causes. It could be as much as 10% or 20% of an individual's potential intelligence.

Conclusion

In my opinion flightless parrots lack the great abundance of life experience that their flighted friends enjoy. At minimum, flight is a significant factor in proper parrot development. Learning is a life long process, but 90% of the neuropathways a parrot will use as an adult are programmed in the first six to eight months of

life. The remaining 10% develop as the adult learns how to use the information learned before adolescence. Following this rule of thumb, we can see that a baby who only builds 80% of his potential neuropathways before adolescence will at best top out at 88% of his potential as an adult. This amounts to more than a 10% IQ deficiency.

Rendering a parrot flightless should not be an acceptable substitute for spending time raising him to be a well-behaved and responsible adult. Most parrot owners believe their pet to be smarter than a dog, but we do not see dog owners cutting off their legs to keep them out of trouble and make them submissive.

"Thinking on the wing" is the most complicated activity in which a parrot can be involved. Given that the symbiotic development of each part of the brain is maximized during flight, no area of the parrot's brain can develop to its maximum potential without achieving fine-tuned flight.

Spread the word and help every pet parrot thrive and enjoy life the way nature intended.



Steve Hartman, owner of The Parrot University at Hartman Aviary.

1978 Graduate of The Ohio State University, College of Agriculture, Department of Natural Resources B.Sc.

Started Hartman Aviary with 25 blue and gold macaws in 1984. Goal was to selectively breed parrots for domestic temperament to increase long-term pet potential. To date he has worked directly with over 800 flighted adults and 4,000 flighted baby parrots from over 50 species. HartmanAviary.com

The Parrot University was started in 1992 to provide outpatient clinical

training for veterinary students at The Ohio State University to obtain significant avian experience. To date over 120 students have trained in the accredited course at the facility clinic.

Information developed at The Parrot University has been presented internationally at over 25 conventions and in multiple magazines and journals.

In 2003, after working with many free flighted pet birds, Steve invented The Aviator Harness, Flight Line and Yard Perch to enhance the life experience of pet birds worldwide. TheParrotUniversity.com

The AVIATOR HARNESS & LEACH

by the Parrot University
<http://www.theparrotuniversity.com/aviator.php>





AUSTRALIA

OBSERVATIONS OF THE LITTLE CORELLA IN CAGE AND AVIARY

John McGrath, Yass, NSW Australia Copyright remains with author Jane McGrath

Introduction

I wrote this article some time ago and I hope it is of interest to the readers of Parrot Life. In Australia, we would keep birds under completely different climatic conditions to you in Canada. Also, as Canadians you probably call this cockatoo a Bare Eyed Corella! I also imagine that they would be a reasonably rare cockatoo in your country.

The Little Corella (*Cacatua sanguinea*) was the first Australian parrot observed by European man, in this case, William Dampier, who described it in his book *Voyage to New Holland*, as a "type of white parrot" when he saw them on the northwest coast of Western Australia on the August 22, 1699. As European settlement increased and more parrot species became known, New Holland became known as *Terra Psittacorum* or the Land of Parrots.

The Corellas are only one part of the "White Cockatoo" group that interests me and I have enjoyed their company both as aviary birds and in field sightings. I have also captive-bred several of the Corella subspecies after having purchased my first pair of Little Corellas 37 years ago in 1968 for \$18.00. At that stage, I held two thirds of the captive Little Corellas in the Yass district with the other third (one bird) owned by Bruce who had organised the purchase for me. But shortly after Bruce's death in 1975, I had the good fortune of acquiring the third bird as well. This turned out to be a female – clearly evident through the production of a couple of eggs. As she was half of a long-time bonded pair with a Sulphur Crested Cockatoo hen (that also laid eggs), I passed them onto a person who wanted them as pets. The point I am making here is that you should be careful in splitting "bonded pairs" due to physiological problems that could arise from either or both birds.

Description

When asked by someone unfamiliar with this bird, my description is that it resembles a white Galah – the Galah (*Eolophus roseicapillus*) being a much

more familiar species to the average Australian. The plumage of the Little Corella is mostly snow white with some red feathering between the bill and the blue periophthalmic ring, although this red marking can vary between individuals. The white plumage is suffused with lemon-yellow, which is more evident when the bird has its wings and tail outstretched in a threat pose or when it is in flight. Some birds also possess a secondary red underdown on the chest area and a distinguishing feature of the Little Corella is that it is an excellent exhibition bird owing to the fact that it is nearly always in perfect feather condition. The feet are grey in healthy birds owing to the production of powderdown and the bill is horn-coloured.

The sexes are alike (i.e. monomorphic) but once you get to know your Corella pair, you will come to observe subtle differences between the cock and the hen. Veterinary intervention however is the most accurate method of sexing and is particularly relevant if you are setting up two birds of unknown origins as a pair for the first time. DNA sexing is also available as an alternative to the surgical sexing mentioned above. I prefer surgical sexing as the veterinarian can give your bird an internal health check while he's in there with his endoscope!

Voice

The call of the Little Corella (or any Corella for that matter) does not make them ideal close neighbours to some. All Corellas possess a voice that is defiantly silence-piercing and in the case of the Little Corella, this is a series of high-pitched shrieks or screeches which differ for the purpose intended. For example, a contact call (often emitted at night and especially if it is moonlight, or if the Corellas' surroundings are illuminated by street lighting), is emitted as a long drawn-out quavering note which can be heard distinctly for up to one kilometre away; an adaptation that would not sit well with residents close

by but that has been very necessary for this species as they seek to keep contact with their flock as they travel across the vast interior of Australia. In fact, this call is so effective that a car alarm manufacturer decided to emulate it for one of the siren choices of his anti-theft model and I believe it proved to be quite popular!

Some years ago, as I was feeding my "combination flock" of Eastern Long Bill Corellas (*Cacatua tenuirostris*) and Western Long Bill Corellas (*Cacatua pastinator butleri*), they seemed extra noisy even to my accustomed ear. Upon looking at the sky, I saw 16 feral Little Corellas circling overhead who were eliciting these back-forth greetings – unbelievably deafening! I do not live within the normal range of this cockatoo, and sometimes the aviaries are visited by some small flocks descended from escapees and releasees.

Distribution and Field Observations of Out of Range Corellas

Many subspecies of Little Corella are distributed over a vast area of inland Australia as well as in our tropical north on offshore islands and New Guinea. They can be found in flocks of up to 1000 individuals while at other times, one will just see a single pair either in flight or feeding together. This flock size can decimate an almost-ripe crop of grain, which results in many being killed or legally trapped for the local bird trade.

I do not live in the "normal range" of the Little Corella, as above, so my first sighting of them in the wild was while in SW Queensland, but in the last decade (last century now January 1975) this species has moved into this district and beyond, whether flocks



appearing near my aviaries, as described earlier, are natural or escapees. Several birds have also been spotted on a pine tree on our property and I have also witnessed small flocks flying past the house on numerous occasions. A well-established flock also appears to have made a home for themselves on the Yass River toward Yass from where I live and I have witnessed them feeding on Saffron Thistle in harmony with a flock of Galahs and Sulphur Crested Cockatoos. There is another flock to the north along the Boorowa River and some have witnessed flocks flying over Braidwood with the coast being the assumed destination.

Narrabundah also appears to have a flock of Little Corellas that roost on Redhill and come off to feed at daylight on the Fyshwick flats, and medium strips along Canberra's thoroughfares as well as around the shores of Lake Burley Griffin. There appears to be 2 distinct feral populations in Canberra/ACT – one that I had witnessed and one further west in Belconnen. One pair also fed together each morning in the switch yard of the Trans Grid Substation Canberra, a little further West again, and after feeding take off afterwards in the direction of the Murrumbidgee River. Other small local flocks can be spotted on the Barton Highway between Canberra and Yass where the local horse stud provides food for both horse and opportunistic cockatoos. The large eucalyptus trees that abound in the area are also very suitable for them to breed and of course this smorgasbord of food is a large attraction for them – a bit like the effect the Golden Arches have on the human animal!

One particular flock at one stage caused major havoc with power lines and transmission substations in the Broken Hill (New South Wales) area as a feedlot had been set up for them alongside the substation, but unfortunately it was not only the food that these Corellas were interested in.

As well as opening drain valves on the smaller transformers, they were chewing the exposed control cables and causing power failures, owing to both the escaping insulation oil, and the shorts and failures in

the chewed cables — after all, this species is also known to undo nuts and open cage doors to facilitate escape and they never seem to forget how to do this once they've worked it out the first time. This is all part of the natural play behaviour of Corellas.

City-type populations abound in Sydney, Gosford and Brisbane as well and usually these are mixed flocks of Little Corellas and Eastern Long Bills with some hybridisation occurring between these two species periodically. Tasmania also has mixed flocks of Little Corellas. In this case Little Corellas and Galahs live near the East coast town of Bicheno and again, hybridisation can occur in these in these flocks. This time, with the mixing of Corellas and Galahs, you can see their multi coloured offspring flying with the "white" and "grey" parents!

My assumptions regarding the flocks I have observed that are not in their natural ranges is that these are feral birds and this may be true particularly for the city population because many of this species were trapped in the late 60's and early 70's and passed off to the unscrupulous as ideal pet birds that are easy to tame. Captivity for these Corellas was more often than not, short-lived owing to the fact that buyers were not skilled and patient enough to tame wild-caught birds and because of the noise these birds emitted. Also, once the pet trade became saturated, which it very quickly did 30 to 40 years ago, the excess birds were most probably mass released around the city areas. I do, however, wonder about the isolated introduced populations in the country and think that these could prove to be the salvation for their species in general, if still persecuted on their "home turf" and particularly if isolated from Psittacine Beak and Feather Disease (PBFD).

It is well documented that many of our native parrot species have moved to other areas over the last few decades and that they arrive as drought-induced vagrants, so why not the same for the Little Corella? What I am implying is that we may well be witnessing the initial stages of the south-east migration of the Little Corella.

Little Corellas as Pets

Many people keep this bird as a family pet and if well cared for and given the right attention, will be rewarded with a bird that is interesting, intelligent, playful and confiding (and like all cockatoos, messy!). They easily learn to talk and

whistle proficiently and may perform basic tricks, especially if the trick is an extension of a normal behavioural trait (e.g. rolling over and over). Hand-raised pets are often allowed semi-freedom and will return on call to their owner/handler if properly trained. As a kid, I remember one such bird that belonged to a pet shop in Canberra that was allowed to roam freely in the car park. It spent a lot of time under the motor vehicles and so ended up covered in grease by the end of the day. It was a dirty grey/brown Corella but it was a happy Corella, always ready to greet the shop's customers by popping out from under a car. I also know of a Western Long Bill Corella that had its origins in my aviaries and that is afforded the same freedom — it flies free and returns from its tree roost once called. Hand-reared cockatoos often become imprinted on humans and may form a pair bond with a human of the opposite sex. Often however, frustration to the point of self-mutilation occurs when attention is not given to this bird when required. People need to be aware of this fact and if intending to hand-rear a cockatoo, be committed to the mental needs of the resultant product. Ideally, a hand-reared bird should at least be raised partially with its own kind so that it has some idea of its roots.

Aviary Set-up

Little Corellas make excellent aviary subjects and prove to be successful and dedicated parents. An ideal aviary for these birds would measure: 6 m L x 1.2-1.8 m W x 2.1 m H (18 feet long X 7 feet high X 4 feet wide). Concrete floors facilitate cleaning and hence reduce worm infestation and rodent entry. The concrete also prevents the cockatoos from digging out while solid walled partitions not only elicit privacy for the pairs but also reduce the loss of toes and mandibles as fights break out among neighbouring pairs. (These Little "White" Cockatoos are very proficient appendage removers) The back 1.8 m should be covered and in this section, the nest log can be placed. The open sections of the flight should be covered in a durable, galvanised mesh of about 2-3 mm in diameter with squares of 25 x 25 mm to exclude avian vermin such as sparrows. Steel tube frames are almost mandatory and, if galvanised, should cut down on time-consuming maintenance, however metal poisoning in birds is often associated with galvanisation and care should be taken if this is considered. If this



material is preferred, it should be ideally scrubbed down with vinegar and left to oxidize over a few days prior to inclusion in the aviary. The front of my flights are a full-size door and I mount a mesh shelf on the inside for greens and fruits as well as a coop cup for soaked and sprouted seed. Lately, I have been considering relocating this coop cup to the outside of the door with a hole cut in the mesh so that the birds can get their heads through to eat. This has been practised by various aviculturists here as it affords the opportunity of feeding the birds without direct confrontation during the breeding season when some cockatoos become very aggressive! Also, some individuals will tip the coop cup onto the aviary floor, making for a time-consuming retrieval process when one is in a hurry and also possibly being attacked by aggressive breeding individuals. The main advantage of having the receptacle in the walkway is the time saved when feeding sprouts. Nowadays, pairs of swinging door coop cups are commercially available!

I secure a natural, solid branch at either end for a perch and supply water in either an enamel or glazed ceramic dish which has a capacity in excess of 10 litres. The hard seed is supplied in a garbage can lid which has been turned upside down and mounted about one metre off the floor under the shelter. Bird grit is provided in the form of a shovelful of gravel which is spread on the aviary floor. (Update, I now use joist hangers (available from hardware stores) to hold my perches, and use Stainless Steel mixing bowls for water. [I used to suspend perches with wire but have lost birds getting their leg caught between wire and perch])

A good set of electronic scales are essential for accurate aviary management for reasons mentioned above but also for weighing birds at drenching time. The bird can be caught and placed in a previously-weighed shoe box or something similar to prevent rolling around on the scale. This should be placed in its entirety on the scale and the bird's weight calculated from the total

weight reading minus the weight of the empty shoe box.

Worm control is done via crop needle

with a combination of Benzelmin (a horse drench) and Ivomec Sheep Drench; the latter diluted 10 to 1 in water and used immediately. The Benzelmin is bought for ready use from an avian vet. Both are administered at the rate of 0.2 ml per 100 g body weight. (commercial worming formulas are now available) These days I use Vetafarm Worm Out Gel!

I find that housed as described above, my cockatoos seem happy and willing to breed and will spend the hottest part of a summer's day sitting on the rear perch of their nest log either preening, working their nest or sleeping alongside each other while at night the pair camp side by side in the open on the front perch all year round, albeit covered in frost in the winter.

Food

In captivity, I find that Little Corellas are omnivorous and eat foods varying from fruits, vegetables, garden weeds (milk thistle, cape weed, clovers, etc), sprouted seed, wholegrain bread and various nuts to chicken and mutton chop bones (raw or cooked) and even small cubes of cheese. The sprouted seed is usually made by simply using their basic seed mix but I will also add sunflower, wheat and legumes like lupins, mung beans, pigeon peas, etc. I do however avoid sprouting whole oats with the husk on as these become sludgy very quickly after being soaked and may then more readily become contaminated. Towards the breeding season, I usually increase the sprout content. (commercial sprouting mixes are now available)

Of course, nothing stops these birds from supplementing their diet themselves from time to time as I observed once with one of my pairs which chased and killed some sparrows and mice that entered their flight. The use of toxins for mice-control is not an ideal solution considering the very real possibility of this being spread to the bird either directly or indirectly, and causing death. I do not bait for this reason! Earthworms are also an option in terms of providing the much-needed protein for these birds, and mealworms, although often accepted, do not provide as much nutrition.

Compatibility and Breeding Notes

Never having known the exact age of the Little Corellas I have bred from, I would estimate that they commence their breeding activities between 3 and 5 years of age, which is in line with the other smaller white



Endoscope examination surgical sexing

cockatoos of which I have had more accurate records. Having a pair of Corellas or 2 birds together of the opposite sex by no means is an indication that things are going to be rosy. Even if they are incompatible, things will seem fine for some time but death will soon come to the bird that is subversive of an incompatible pair and often one hour is all it takes for a relationship to deteriorate. Decapitation can occur or at the very least scalping with flesh also torn from the back and shoulders. The remaining bird will often prove to be a good breeder with a compatible partner but this takes time, patience and perseverance on your part! This aggression will also be displayed between 2 birds of the same sex and often compatible siblings that are raised together develop into incompatible adults where the dominant bird will drive the underling from food and water and may pursue the underling to the point of death. I have experienced this with a pair of Long-Billed Corella cocks and also sibling second-year hens of the same species.



If you are unable to find a compatible pair, then it is best to buy several immature birds (first year birds being optimal) and have them sexed as mentioned earlier before marking them on different parts of the body using a coloured vegetable dye. Then record the sex against the position marked and select for yourself the birds that sit together and preen each other before identifying them as a pair. Be careful not to execute this



during the moulting season for obvious reasons, (numbered split stainless steel rings are now used if birds are not closed rung). Then, once you have selected the birds you wish to keep, you can sell the surplus at least with a gender guarantee, before sitting back and waiting for your youngsters to breed (all compatibility, etc., going well!)

The log that I find most useful for this species is the same as for the majority of my cockatoos – around 800-900 mm high with an internal diameter of 200-300 mm and filled with wood dirt to the top. The birds are then free to clean out the dirt to a level that suits them. I nail a piece of flat iron to the bottom and the log is usually accepted either mounted vertically or at an angle but whichever angle you decide upon, ensure that you are able to see and reach the nest. My cockatoos do not have the luxury of selecting from a variety of nest logs but I haven't had complaints yet!

Since the original writing of this article, I have commenced using PVC nest logs for these birds with the utmost success breeding a total of eleven Little Corella chicks in them in 2007/2008.

Observation of breeding pairs closer to the breeding season shows them mating more frequently which in turn made the sexes much easier to identify.

Little Corellas share the incubation of the eggs and the early brooding of the chicks with the hen doing the longer night shift from around 4 pm-8 am and the cock the remainder. The change around with some mutual preening and the outgoing partner goes off to feed. The cockatoo eggs are weighed, measured and dated on the day they are laid (labelling the shell with a lead pencil causes no harm to the chick inside) which enables accurate monitoring of the incubation period for each egg. All of the above is recorded in my diary as well as the projected date of hatch, after which I attempt to measure and record both daily weight gain and the general progress of each chick. I also try to photograph chicks at various stages of development.



In my diary notes, I recorded that the original breeding pair that I had, laid 3 eggs on 30/09/81 and on 05/10/81. Corella eggs are conical compared with those of the Galah, which are oval, with Corella chicks hatching (like all cockatoo species) with a yellow down. By 24/10/81, two of the chicks were ready for closed banding (either stainless steel or aluminium) with the third a little later (i.e. 29/10-31/10). One chick was out of the log on 05/12/81 and by the 11th of that month, all 3 had left the nest. On 29/12 I noticed that one of the birds had broken one of its legs and the following day the other one, necessitating euthanasia. This I put down to carelessness on my part as the fencing wire I used to suspend the perch did not have the loose end turned down, which resulted in the bird getting its leg band caught and hence a broken leg. The birds were also calcium deficient which is a problem I now overcome by administering Calcium Sandoz to the crop or by sprinkling calcium carbonate over the sprouted seed. Cuttlefish bone and shell grit are also good supplementary sources of calcium used in conjunction with the above.

The same Corella pair above produced many chicks over a 20-year period!



A second pair of Little Corellas which I received from Western Australia produced one egg on 23/09/83 and another two on 25/09/83, and had commenced incubation. Two of the chicks hatched in the afternoon of 21/10/83, with one noticeably larger than the other and both covered with a lemon-yellow down. The third egg had disappeared. One young Corella disappeared on 22/10/83 and the following day, the remaining young Corella was chewed up by its parents. Very disappointing, to say the least! Incubation had thus taken 27-28 days and the normal clutch appears to be 3 eggs in my experience although I have observed 2 eggs frequently being laid and usually every second day.

I hope you enjoyed reading these observations as well as my experiences and thoughts. My aviary management has been successful for me and may merely be a guide for you but whatever you may take away from this, here's wishing you all the best with your breeding of these wonderful birds.

Other Hybrids

Hybrids other than the Galah/Eastern Long Billed mentioned above, I have witnessed Little Corella crosses between Sulphur Crested Cockatoos (C.galerita) and Major Mitchells (C.leadbeateri), and Western Long Billed Corella (C.pastinator butleri) and Stan Sindel reports the hybridisation of a Little Corella and a Gang Gang Cockatoo in a natural wild situation in his book Australian Cockatoos.

For further reading, the following are good sources of information

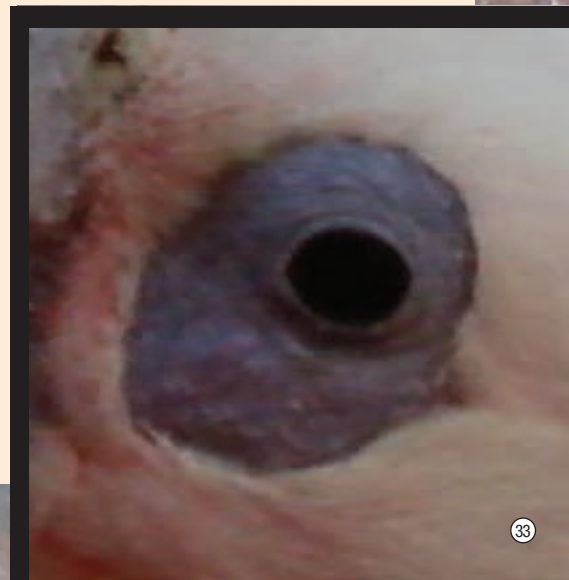
Videos

- White Cockatoos-Land of Parrots set (as well as the derivative cockatoos of Australia)
- Geo production available from ABK publications

Books

- A Guide To White Cockatoos - Chris Hunt-ABK Publications
- Australian Cockatoos – Stan Sindel and Robert Lynn
- Australian Parrots – Joseph M. Foreshaw
- Parrots of the World – Joseph M. Foreshaw
- The World of Cockatoos – Karl Diefenbach
- Parrots: Their Care and Breeding – Rosemary Low

I wish to thank Linda Adam from Sydney NSW for rewriting/editing this article for me from text form, during 2005, apparently in flight to "George Bush Land!"



BLOOD

What we can learn from it?



Written By: Diane Noël
D.V.M., I.P.S.A.V.

As early as 2500 BC, Egyptians were already looking at blood and searching for ways to combat illness. The first animal-to-animal transfusion was accomplished in the 17th century.

Despite the numerous dissections by the first anatomists, the human and animal body were only being explored and discovered by the naked eye.

In 1658, Jan Swammerdan, a 21-year-old Dutch microscopist finally went to the soul of blood and observed the first red blood cell. This cell was described later to be 25,000 times smaller than a fine grain of sand.

Today we have a better understanding of the complexity and intelligence of the circulatory system. This transportation circuit serves every single cell of the avian body, delivering necessary substances such as oxygen and nutrients, and at the same time getting rid of cell metabolism waste products.

Insults to the body such as an infection, a trauma or a cancer, will lead to a reaction from numerous blood components. Most often this defense reaction is what we will be able to observe and interpret. The microscopic study of blood will not only reveal information about the reparation phenomenon but also may expose directly the responsible agent such as a parasite, a bacterium or even a cancer cell.

This article will focus on two of many blood studies: hematology and biochemistry. The first step towards a successful blood evaluation is the

collection. Blood may be collected from various areas of the avian body, venipuncture should be the method of choice. The right jugular vein remains the preferred site for most avian species. Other choices of veins such as the basilic vein (wing vein) and the medial metatarsal vein located above the tarsometatarsal joint (hock) are also used for adequate blood sampling. Toenail clipping is not recommended for hematologic studies, abnormal cell distributions, cellular debris and contamination problems may interfere with results, again venous blood provides the best sample.

Approximately 6 to 12 ml/100g is the total blood volume in a bird. This amount is variable depending on the species. The maximum safe volume that can be collected is 1% of the bird's body weight (10% blood volume).

HEMATOLOGY

Blood contains cells suspended in a liquid called plasma. The avian blood cells are classified into 3 types.

- 1) Red blood cell (RBC)
- 2) White blood cell (WBC)
- 3) Thrombocyte

1) The RBC (also referred to as Erythrocytes) is the most numerous. It is mainly produced by the bone marrow, is elliptic in form and unlike the mammalian RBC, it has retained its nucleus. As mentioned earlier, its main role is to transport oxygen and nutrients to different parts of the avian body. RBCs are evaluated in 2 ways: quantity and quality

Quantity

Most of the time, RBC quantity is determined in percentage. In well-equipped laboratories, RBCs are counted and hemoglobin is measured. This information provides clues to help assess if the bird is normal, dehydrated or anemic. A dehydrated bird will have a higher percentage of RBCs. When the RBC value is lower than normal, anemia causes are to be considered. Anemia is not a diagnosis but rather a reflection of a background problem. Anemia is also classified in 3 groups.

- a) Hemorrhage (loss of RBC)
- b) Hemolysis (RBC destruction)
- c) RBC production failure

Hemorrhage may be provoked by trauma, coagulation problems or bleeding gastric ulcers. RBC can be destroyed by bacteria, parasites or zinc intoxications. Chronic inflammation, folic acid deficiency, lead intoxication, bone marrow cancer are all possible causes for a bone marrow failure.

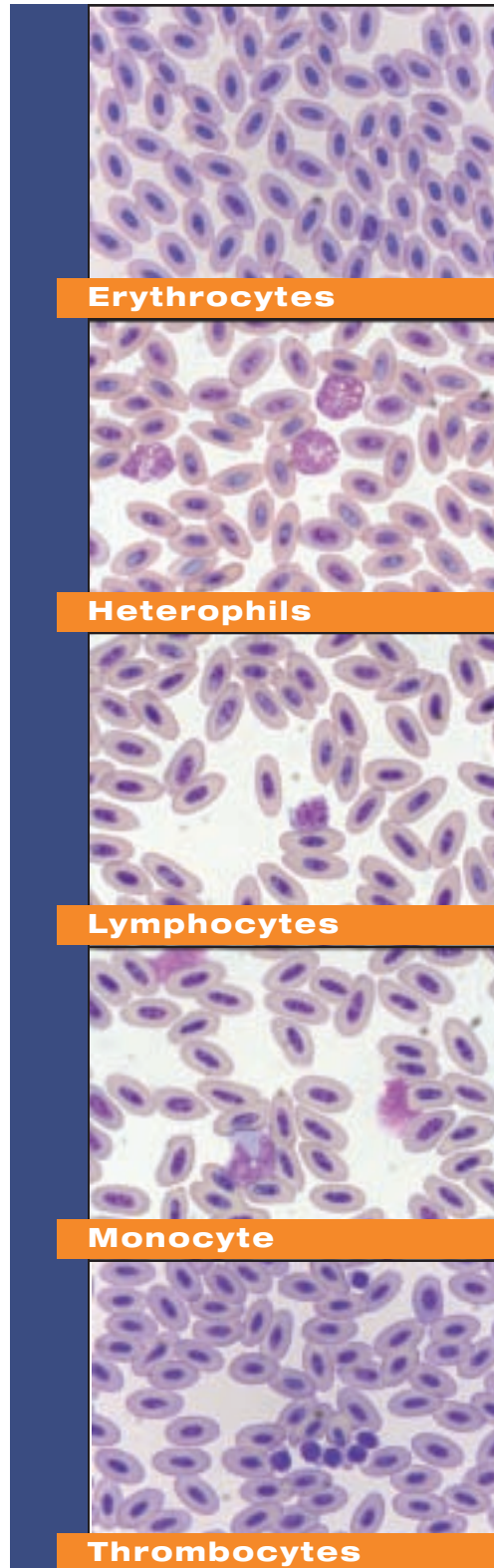
Quality

RBCs are examined on a smear to identify specific details such as variable cell sizes (anisocytosis), variable cell colour (erythrocytic polychromasia), variable cell shapes (poikilocytosis) and erythrocyte ballooning.

Anisocytosis is usually characterized by younger, larger and rounder RBCs. This observation signals an attempt to correct anemia. Polychromatic erythrocytes are similar in size to the normal cell, however they have a weak basophilic

cytoplasm. A high percentage of polychromatic cells can also indicate a regenerative response to anemia. Minor poikilocytosis is considered normal. A marked poikilocytosis can signify a troubled or accelerated cell maturation.

Erythrocyte ballooning is a frequent finding in lead toxicosis, similar findings are also observed in other conditions like the conure bleeding syndrome.



2) **WBCs** are the national defense of the organism. They are mainly produced by the bone marrow. Five types of WBC are identified with each a different role.

Heterophils
Monocytes
Lymphocytes
Eosinophils
Basophils

Heterophils are the first cells at the front of the enemy line. The monocytes arrive later to clean and also participate in the defense. Lymphocytes will mainly work to complete the fight and prepare the organism against future invasions. Quantity and quality of WBCs are also very important in their evaluation. A total WBC count is done followed by a percentage count of each cell type. Most of the cells are examined under the microscope in search of abnormalities. A higher number of WBCs is an indication of inflammation. The severity of the inflammation is determined according to cell type, number and special characteristics.

WBC parasites such as leukocytozoan and atoxoplasma can be detected upon examination of the blood smear.

3) **Thrombocytes**

These cells are the equivalent of platelets in mammals. They are small, round-to-oval nucleated cells. It is difficult to obtain an actual count of the thrombocytes because they tend to clump. Their quantity is reported by estimates from the blood smear. Hemostasis is their main role, which is forming clots to prevent hemorrhage. It is also believed that thrombocytes have a similar role to monocytes such as cleaning.

BIOCHEMISTRY

Biochemistry is a blood analysis done entirely by machine. Biochemistry interpretations will not be discussed in this section because more than one observation and result of the bird's examination is necessary in order to arrive at a final diagnosis. Starting with a basic panel, organs such as the kidney or liver and muscles are evaluated.

The integrity and function of the kidneys are evaluated by measuring the uric acid in urinary waste. This value is to be judged in concert with the bird's hydration status. Uric acid may be falsely elevated if

the blood sample was collected from a toenail clipping due to an environmental contamination. Other parameters measured to evaluate the kidneys are proteins, phosphorus, potassium and sodium.

The liver is investigated by looking mainly at its enzyme AST (aspartate aminotransferase). In addition, bile acid and proteins both participate in this interpretation.

Creatine kinase is a muscle enzyme used along with the AST to help determine if there has been muscle damage or not.

Calcium is also part of the basic panel. This parameter will allow a better understanding in the failure of other organs, such as the reproductive system, the renal system, the endocrine system and the digestive system. As for glucose, it can fluctuate for different reasons. Stress, glucocorticoids, diabetes, malnutrition, liver failure and septicaemia are all possible reasons for an abnormal glucose value. Potassium, sodium and phosphorus all contribute to evaluate the kidneys, the liver, the digestive system and the endocrine system.

Birds are champions at hiding any signs of illness. Disease may be present for some time before symptoms are noticed and in some cases it is too late to treat the bird. A blood sample may detect early signs of disease.

Even though avian medicine has made remarkable advances, reference ranges in avian laboratory are still very large. Each individual bird is unique in its blood parameters. Therefore a blood sample should not only be taken when the bird is sick, comparing a basic reference of healthy status is fundamental. Hematology and biochemistry can help establish a treatment plan and will facilitate the follow up treatment or surgery.

Blood analysis is complementary to the bird's history and physical exam. Results of these investigations can guide us toward other more specific or sophisticated tests such as x-rays, protein electrophoresis, bacterial cultures, gram stains, DNA tests, antibody and antigen tests.



APPLE CIDER VINEGAR

Uses in Aviculture and Avian husbandry



Apple cider vinegar has been used to remedy various illnesses throughout the ages of humanity. Nowadays, it is considered a natural alternative for curing numerous diseases and

conditions. Many animal owners favour apple cider vinegar over pharmaceutical products, due to its natural and organic nature. It is used increasingly by bird caretakers in many situations, such as in the detection of papillomas, the treatment of a sour crop or in the disinfection of aviaries. This article will discuss the components and properties of apple cider vinegar and its therapeutic uses in the avian world.

Apple cider vinegar is the result of unpasteurized apple cider fermentation. It contains multiple vitamins and minerals, such as phosphorus and potassium, but also profitable enzymes and bacteria (Omega Nutrition, Bragg 1999). The gelatinous layer that can be found in the bottom of an unpasteurized vinegar container is called the "mother of vinegar." The mother contains the acidifying bacteria used to ferment the liquid. In organic apple cider vinegar production, the mother of vinegar of mature vinegar is transferred to new batches to stimulate the fermentation. These beneficial bacteria are not dangerous for humans or animals, and are even edible (Omega Nutrition). However, they are destroyed during the pasteurization process and for that reason unpasteurized apple cider vinegar is preferred. The vinegar must be kept at room temperature in a dark glass bottle to avoid oxidation and breakdown of nutrients that could be caused by light (Omega Nutrition).

Apple cider vinegar is used to detect papillomas on the cloaca of a bird (Romano 2003, Branson et al. 1994). The application of apple cider vinegar around the cloaca of a suspect bird will generate a reaction between

the papillomas and the vinegar, and will result in effervescence similar to hydrogen peroxide on a wound, and turn the papillomas white. Using vinegar on the cloaca as a method of detection for papillomas could be painful for the bird (burning sensation if there is irritated tissue), therefore we recommend rinsing afterwards.

Apple cider vinegar can also be effective for the prevention and management of crop infections, such as the common yeast infections caused by *Candida albicans* and Avian Gastric Yeast commonly known as megabacteria. These infections often lead to crop disorders, stasis and sour crop. Dr. Colin Walker recommends (2002) diluting 10 ml of apple cider vinegar in 1 L of water and serving it as drinking water.

Cockatiel chicks are prone to crop distensions and yeast infections.



The vinegar will create an acidic environment in the crop, which will prevent the yeast from proliferating and help restore the normal intestinal flora (Samour 2008). The vinegar also lowers the pH of the droppings, which creates a poor environment for bacteria to proliferate. This water can also be served to a new bird entering an aviary, as a preventive treatment during quarantine.

Vinegar is a popular alternative to store-bought cleaning products. It is cheaper, safer for human and animal health, and less harmful to the environment (www.apple-cider-benefits.com). All vinegars can be used as disinfectant agents for water bowls, toys or floors of a nursery, however, the "mother" having beneficial properties for medicinal treatments is irrelevant for disinfection. An

apple cider vinegar containing the mother is often made from an organic manner, and the retail price is greater than regular white vinegar. Less valuable apple cider vinegar can be used with the same proportions and releases a nicer smell.

Caution: This water dish has not been properly cleaned.



To disinfect toys and bowls, a recommended dilution is one part vinegar to one part water. When using such strong proportions, it is very important to rinse the objects before giving them back to the birds (www.valcompanies.com). Apple cider vinegar is a common antimicrobial and antifungal in water containers. For example, it is recommended to clean automatic watering systems, dilutions of equal parts vinegar and water can be used every four months, and every month during hot weather. Here again, it is very important to flush all the vinegar solution from the pipes before using the system on birds again (www.valcompanies.com).

CAUTION NOTICE

Despite its natural composition, apple cider vinegar is still acetic acid and can cause respiratory and skin irritations. If using pure vinegar or strong concentration for cleaning or disinfection, make sure to be in a well-aerated room away from birds, and rinse well afterwards.

Numerous aviaries use galvanized wire cages that release toxic zinc in the birds' environment. A common belief states that vinegar can be used to remove the zinc from the galvanized wire of the cages. It is true that the acidity of the vinegar removes the

loose zinc powder on the wire, but it does not remove the zinc plating that remains (www.chopperstoys.com)

In equine husbandry, some caretakers add apple cider vinegar to the horse's grain. When the horses ingest the vinegar, their coat takes the vinegar smell, which repels the flies. A very useful tip to get rid of fruit flies is to place a small dish filled with undiluted vinegar in it (www.vinegartips.com). To unblock aviary drains, use 1/2 cup of baking soda, 1/2 cup of salt and 1/2 cup of vinegar. Mix the baking soda with the salt, pour in the drain, add the vinegar, and wait 3 hours before flushing the drain with hot water (Wallace 2003). The reaction between the vinegar and the baking soda releases CO₂, which unclogs the drain.

In conclusion, apple cider vinegar is the result of the double fermentation of unpasteurized apple juice, and must contain the mother of vinegar for it to release its therapeutic properties. It can be used to detect subtle papillomas and treat yeast infections, and is also an alternative to commercial cleaning products. Nowadays, the rediscovery of all

the beneficial properties of apple cider vinegar is allowing us to use it for much more than as a delicious salad dressing!

To get more information on the different vinegars and on all the uses of apple cider vinegar, I recommend reading *The Healing Powers of Vinegars*, by Cal Orey and *Vinegar: A Natural Approach to Avian Management*, by Wanda Barras.



Gabrielle Laurent's biography

Gabrielle is a soon-to-be graduate from the Wildlife Biology program at McGill University. For most of her teenage years, she had a small cattery with her dad, raising American Shorthair, and actively participating in the Club Félin de Montréal. Now living on a dairy farm, she is becoming more and more knowledgeable about the dairy industry. Furthermore, Gabrielle is an animal caretaker and nursery technician at H.A.R.I.

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Use of Apple Cider Vinegar	Prevention	Alternative Treatment	Oral	Topical	Cleaning	Suggested Dilutions
Detection of papilloma				x		Pure
Treatment/prevention of crop diseases	x	x	x			10 ml ACV* in 1L water
Treatment/prevention of yeast infections	x	x	x			10 ml ACV* in 1L water
Cleaning toys/bowls					x	
Cleaning automatic watering systems					x	1 part ACV* in 1 part water
Remove zinc from galvanized wire	MYTH				x	1 part ACV* in 1 part water
Repel flies						Pure(Pure ACV* in a bowl)
Unblock drains					x	1 ACV* : 1 salt : 1sodium bicarbonate

*ACV - Apple Cider Vinegar



www.parrots.org/arpilleras

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www.exoticpetvet.net/avian

Dr. Wissman is a Board Certified Avian Specialist who has an exclusive avian and exotic animal practice in Wesley Chapel, Florida. She works with several pet retailers and many bird and reptile breeders. She writes the popular "Causes and Cures" column for Bird Talk magazine. She is active in the Association of Avian Veterinarians and lectures world-wide on avian and exotic animal topics.

This is a excellent site for avian vets, vet technician, pet store personnel, aviculturists and companion bird caretakers.

Understanding The Personality Schema of our Birds

By: Sylvie Aubin

In our lifetime, we will establish many relationships, some last but many will have a different fate. As human beings, we are perhaps inherently programmed to think we can change others according to the ideal we've imagined for them; how they should or shouldn't be and how we can help them change. I often reflect on a famous scene from the movie "The Way We Were," which illustrates this perfectly. Robert Redford is annoyed at Barbara Streisand for always trying to change him: "You push too hard. There's no time to ever relax and enjoy living." She responds: "If I push too hard, it's because I want things to be better. I want you to be better. Sure I make waves, and I'll keep making them till you're everything you should be and will be."

Of course we all know and understand why that particular relationship was doomed...

But when bird-human relationships fail, one can very well search until the end of time why it has not worked. Perhaps the bird screamed too much, bit, was messy or time consuming, etc. But perhaps all of these reasons are only the symptoms of the underlying reality. A much deeper and honest assessment could reveal that the right species selection for the compatible companion had not been made.

I could go on and on about different problems, solutions and techniques to solve or alleviate these problems. But instead, I have chosen to tackle the underlying problem that is generally at the root of all other problems. We are perhaps disillusioned to believe the chosen one will become what we wished it could be.

Regrettably, the scenario is often like this:

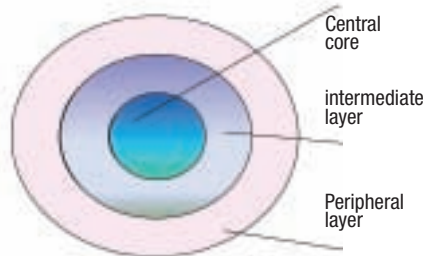
- (1) Buying the bird on impulse.
- (2) Honeymoon period: everything is peachy; the bird is usually very young, gentle and tame. The family and caretakers are ecstatic about the bird.
- (3) Somewhere between 6 months and a year (the onset of the juvenile age), the bird begins to bite, scream and generally does not seem well adjusted to its surroundings. The foundation of mutual trust, respect and training has not been established.
- (4) In desperation, the caretaker either starts to search for help, sells the bird or gives it away.

Aviculturists, pet stores and refuges are challenged with the increasing reality of companion bird abandonment. Numerous conscientious bird breeders question

themselves as to whether they are breeding the right species for the companion market. What species should we breed for long lasting relationships? I personally don't think that this question relies solely on the breeders choosing the right species to breed, but mostly in the way future caretakers choose their companions.

Too often I have consulted with bird owners or future bird owners who believe that their own particular way of raising the bird will make it into something it is not. They think that if they raise their Cockatoo the same way they raised their African Grey, the Cockatoo will grow up to be more like a Grey. They believe that their Cockatoo will not have the same affection and attention needs as a "regular" Cockatoo since they will have taught it to behave like a Grey. I firmly believe this is a mistake. It is crucial when selecting a bird that one understands precisely the profound nature of that particular species - the central core of its personality. This simply means what the bird is fundamentally, forever representative of its species.

To illustrate this unarguable fact, we are going to learn about the personality schema with its three components: the central core, the intermediate layer and the peripheral layer. To analyze this perspective more concretely, I will use my own Umbrella Cockatoo, Toby, as an example.



The central core

Toby as a representative of the Umbrella Cockatoo species.

Evidently, for birds, some characteristics are common to individuals of a same species, including: courtship, their capacity to create and use tools, their capacity to learn to talk or vocalize, their screaming pitch, their gregarious nature, etc. This means, Umbrellas share many personality traits with other individuals of the same species. We

are talking here about their genetic and hereditary baggage. But even if some traits are common to a particular group, each individual has its own unique way of developing them. Therefore, no two Umbrellas share exactly the same traits to the same degree.

In spite of physical and social environmental influences to which your bird has been exposed, every bird develops a central core of personal traits that are resistant to change. It's the strength of that core, joined to the vital strength of the individual bird that gives it the capacity to become itself (an Umbrella Cockatoo) and remain faithful to its species.

The core is the internal centre, instinctive and intrinsic of the personality. It's in this internal center that is located the fundamental needs, the capacities and all anatomical and physiological data for this particular species.

In short, you can read all the behavior modification books, try every positive reinforcement trick until you feel nauseous, and your bird will stay faithful to what it truly is, in spite of all the multiple influential tricks you will challenge it with. Meaning that a cockatoo will always be a cockatoo, a Lovebird a Lovebird and a Grey a Grey, despite what you wish for it to become. This does not mean that you are wasting your time and energy when trying to modify or eliminate undesirable behaviours in your companions. Far from it! One has to make the difference between an undesirable behaviour that can be modified and an innate and unavoidable behaviour!

To illustrate this notion, let's look at one of the Umbrella Cockatoo's personality traits: their unquenchable need for affection, petting and preening. It's a common belief that they seem to need more affection than most other parrot species. This particular trait can be attractive for a new caregiver or completely incompatible with one's personality or lifestyle, family dynamics, etc. It is a trait that will require you to raise this bird to be as independent as possible, to reduce the unfavourable behaviours that can result from a bird that cannot thrive without having his feathers ruffled and caressed at every moment. It is not a bad behaviour that one needs to change. However, if this is not the kind of relationship you are comfortable with, then an Umbrella Cockatoo is really a bad choice for you.



The intermediate layer

Toby as an individual

The intermediate layer is less resistant to changes than the central core. Each bird tends towards the full growth of its capacities and dormant potentials because of its profound nature.

Each personality is unique because it is different from all others in the manner that it organizes the traits that define it as well as strength given to each one of those traits. This means that the personality is a very complex ensemble of characteristics that gives each being its own particular colour. One's personality is a phenomenon never repeated and the individuality of it is your bird's major characteristic. Therefore, Toby is different from any other Umbrella Cockatoo while also exhibiting many traits that are typical to the Umbrellas.

We have just seen that the central core is resistant to changes in order to stay faithful to its genetic and hereditary baggage. One could say that it's the central core putting up resistance toward external attack: when one attempts to "redress" the bird's behaviour. Because of this internal resistance, that individual strength, the bird reacts to its environment and all the external stimulus on its own. By doing so, its unique individuality grows. As soon as the bird hatches, one can see its uniqueness in the way it adapts to the environment. This uniqueness shows in the way it feeds, moves and vocalizes. The more the bird reacts and learns from the human provider,

the more the human feels the desire to be available for the bird and care for it. Inversely, the less the bird reacts or shows interest in the human caregiver, the less the human wants to care for the bird or be available for it.

The peripheral layer

Toby, MY Umbrella Cockatoo

This is the only layer of the three in which you will have an influential role. It's the social and environmental fabric that surrounds the bird and that can modify some actions and reactions. The immediate environment and actions of people with whom it interacts, especially people who provide love, care, respect and education influence each individual bird.

The peripheral layer is the most superficial and ephemeral one. Each action, each change in the bird's environment will touch this layer and possibly modify it.

If you do your job well and provide your companion with a stable, stimulating and safe environment, combined with training and supervised with a clear framework of boundaries and limitations, its peripheral layer will reflect the education that you provided. Therefore, your bird will be an entirely unique being, showing typical and intrinsic traits of its species, while respecting the limits you've established and reinforced. The reward will be a stable foundation for a mutual bond to grow.

The Problem

Inevitably and regretfully when the human does not respect the central core of the bird trying to impose behaviours that do not belong to its respective species, big problems arise.

You are expecting certain behaviours and traits from your "Toby," and perhaps he wants to please you by trying to change his natural behaviours towards the ideal model you have in mind. At the same time, "Toby's" central core is trying to fulfill his needs and to make him act along with his inherent "programming" that belongs to his species. We are then talking about conflicts between the real self of the bird and the human's ideal self of the bird.

As a result, Toby lives in a constant state of stress and discontentment since he cannot reach the ideal self that you are asking of him. The more he is confronted with different models of what he should be, the more "Toby" becomes anxious, nervous and problems start to accumulate one after the other. Biting and screaming is often most frequent, which is intolerable and disturbing for you and your family.

The Solution

The problems must be dealt with at the roots - this means before they appear. Educate yourself about the profound nature, the central core of each species of bird you are considering adopting as a companion. Read, get informed and do research. More



importantly, accept that each species has its own particular traits that differentiate it from any others and that you can't do anything about! Personally, I always thought it was strange that people could understand that a herding dog would never become a hunting dog. This kind of rationale should not be different for companion birds, nor should it be difficult to accept. Perhaps we should start categorizing birds into groups accordingly to their abilities and personalities like we do with dogs: working group, herding group, etc. We could give certain guidance to people in helping to select the right species. We could have these categories made for the human caregivers as well as for affectionate people, trick- training people and the group for rowdy and destructive people, etc.

Before attempting any kind of "work" with your bird, start by asking yourself these questions: The particular trait I want to change in my bird's behaviour, is it a natural behaviour for its species or is it a problem that has developed as a reaction to its environment, relationship or education? Could it be a health related discomfort resulting in an undesirable behaviour? Are my objectives and hopes realistic with regard to its species, gender and age?

Evidently, all birds can benefit from time invested to make them educated, socially adjusted and well-balanced beings. If you take pleasure training your bird to perform tricks, you and your bird will only benefit from the quality time spent together. But, and this is an important but, remember that no bird loses its home just because he doesn't know enough tricks! And knowing tricks can't save a bird that is unbalanced and a misfit with a human's household flock. A bird that bites and screams will most surely lose its home, even if it knows how to roller-skate and play basketball... have the determination, patience and imagination to integrate mutual respect and establish guidelines for living within your human and feathered flock.

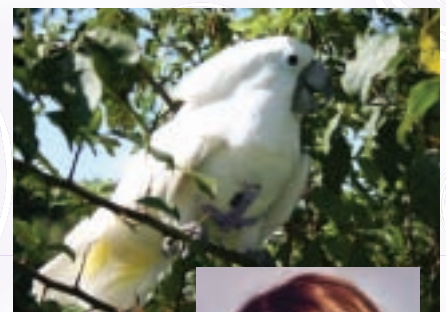
Without degrading the virtues of positive reinforcement, it cannot be solely relied upon to provide a structured and nurturing framework for education. It is an excellent tool to teach birds to perform tricks, especially show birds. But teaching tricks to your bird and raising your bird to live harmoniously in your home are two different things. It is crucial for any animal companion to be properly raised, otherwise they risk losing their home. Reputed dog trainers and child psychologists agree about the limited use of positive reinforcement and

warn dog owners and parents: it is usually not fast enough or efficient enough when used alone to raise a dog or child properly. Despite the fact that children, dogs and birds are very different, the same logic applies. I've read numerous articles and heard conferences from very well-known bird behaviourists stating that one should never use the word "no" with one's parrot. I, for one, disagree completely with that! I'm sorry but "no" is the very first word any living being in my house that can walk, fly, jump or climb will learn. Their life and well-being can very well depend on it! It can prevent my dog from being run over by a car, my parrot from being stepped on while chasing someone's feet or my child from jumping out of the window.

In fact it can be very positive to say "no!"

It's a dangerous myth to believe that if we succeed to break down in self-explaining bits and pieces the mechanics of the personality, we would then be able to solve or modify the bird's behaviours and actions. This magical thinking leads us into believing that birds' behaviours can be modified on the whim of any good avian behaviourist. It's false to believe that with positive reinforcement you will make something else out of your bird than what its profound nature tells it to be. You can click your clicker as much as you want to, use all the "bridges" and "jackpot" rewards you want, a Cockatoo will never be anything other than a Cockatoo. It should be respected for what it is.

We could gain from learning to let go of the uncontrollable things, to accommodate one's existentialist conditions, while being awed by difference, its multiple contrasts and its richness.



Sylvie Aubin



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Alternating with the Tropicana Lifetime formula is recommended for the out of breeding season and periods of lower energy expenditure. Weight monitoring is recommended at least twice per year to evaluate the dietary needs and prevent obesity.

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Are you ready for an emergency evacuation? Should there be crises such as a sudden evacuation of your home or a change of lifestyle whereby you are forced to relocate and your companion bird must live in a transport cage during the move. Is your transporter ready? The transition and change of environment will be easier for your feathered companion if it has been periodically accustomed to spending time in this transporter.

Your transporter should be stored near the day or night cages, easily accessible, clean, equipped with a stable perch, feeding dishes and newspaper bottom, safely adapted for each species' individual comfort.

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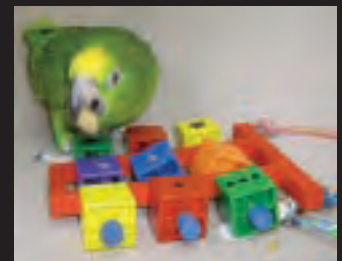
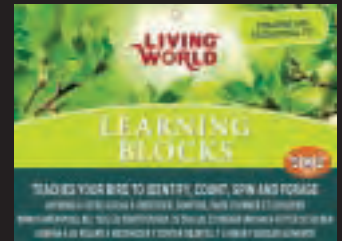
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BACK ISSUES

parrot LIFE

For those who have chosen to become guardians to these wonderful feathered creatures, Parrot Life Magazine strives to provide you with the most accurate and updated facts and recommendations on responsible parrot care and husbandry.

Our unwavering determination to promote awareness for the preservation and conservation of wild and captive parrot species echoes throughout our pages—because their plight is our concern.

Parrot Life features quality reports, reviews, valuable and practical chronicles on topics such as psittacine behaviour, versatile living quarters, trends and advancements in aviculture, health and nutrition, and conservation efforts.

This truly interactive magazine is undated and should be conserved for future reference. Parrot Life is now available through avian specialized pet stores and parrot conventions internationally where its sale has contributed to fundraising for various foundations and research projects.

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Parrots International Benefits Parrots Everywhere

Parrots International is a 501(c)(3) tax exempt, not-for-profit, organization with the goal of benefiting parrots everywhere by promoting and fostering international cooperation.

Parrots International's ambition is to promote the conservation of endangered parrot species and to improve the lives of companion parrots.

We work in cooperation with other conservation organizations, donors, field research teams, responsible aviculturists and parrot clubs to propose, develop and fund conservation projects throughout the world. We support conservation via aviculture and emphasize "in situ" conservation with the premise that:

"Conservation Happens in the Wild."

Additionally, we promote the education of the public and parrot owners on the proper care and unique requirements of healthy, happy companion parrots.

Parrots International works in concert with international governmental agencies and conservation organizations. Parrots International is honored to serve, by official invitation, in the following international capacities:

- A member of the Working Group for the Spix's Macaw
- A member of The International Committee for the Management of the Lear's Macaw
- A member of The Hyacinth Macaw Group of Brazil
- An official fundraiser for the USFWS Puerto Rican Parrot Recovery Project

Parrots International Projects By Mark and Marie Stafford

We endeavor to generate continuing awareness of parrots throughout the world by supporting international conservation efforts to help maintain and preserve parrots in their natural habitat. We work to create strategic partnerships to accomplish effective parrot conservation for each project.

In addition we support captive breeding programs that are tied closely to maintaining wild captive bred populations of endangered parrots.

Parrots International is active in supporting conservation programs in the field.

"Conservation Happens in the Wild."

Following is a list of species work, in situ conservation projects, and responsible aviculture projects that Parrots International supports and promotes:

The Spix's Macaw School Project
Curaça, Brazil

The Spix's Macaw Project, Habitat Purchase and Restoration
Gangorra Farm, Curaça, Brazil
Cyanopsitta spixii

The Lear's Macaw Corn Subsidy Project
Jeremoabo and Canudos, Brazil
Anodorhynchus leari

The Lear's Macaw Conservation Program
Bahia, Brazil
Anodorhynchus leari

The Hyacinth Macaw Project (Projeto Arara Azul)
The Pantanal, Brazil
Anodorhynchus hyacinthinus

The Bahama Parrot Project
Abaco & Inagua, Bahamas
Amazona leucocephala bahamensis

Puerto Rican Parrot Recovery Program
El Yunque, Puerto Rico
Amazona vittata

The Military Macaw Project
Oaxaca, Mexico
Ara militaris

The Great Green Macaw Project
Costa Rica
Ara ambiguus

The Blue-throated Macaw Project
Amonia, Beni, Bolivia
Ara glaucogularis

The Blue-fronted Amazon Project
Pantanal, Brazil
Amazona aestiva

Yellow-eared Parrot
ProAves, Colombia
Ognorhynchus icterotis

The Alternative Headdress Project
Beni Department, Bolivia

Licuri Palm Project
Jeremoabo and Canudos, Brazil
Anodorhynchus leari

The Pfrimer's Conure Project
Central Brazil
Pyrrhura pfrimeri

The Slender-billed Conure Project
Southern Chile
Enicognathus leptorhynchus

You can also join or donate online at
www.parrotsinternational.org

Parrots in the Wild Videos



Parrots International currently has 3 Parrots in the Wild DVDs. The videos are available in full screen, high resolution & broadcast quality. All proceeds help support projects that are supported by Parrots International.

Get one of the Parrots International Parrots in the Wild DVD for a \$55 donation (includes shipping)

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Please Include your shipping information and email address for confirmation.

Send a DVD as a gift. Provide a name and address and we'll mail it for you!

<http://parrotsinternational.org/main-videos.html>



Parrots International

provides continuing donations and support to the Military Macaw Project

in Oaxaca Mexico to fund Carlos Bonilla-Ruz and his continuing work. The largest known population of Military Macaws (*Ara militaris*) live in

Sabino Canyon, a narrow steep 750 foot deep canyon. Sabino Canyon is located in the foothills of the Sierra Madre Mountains.



<http://parrotsinternational.org>



The Dream: A photo montage of the last known Spix's Macaw nest, located on the Gangorra Farm, and two Spix's Macaws now residents of the captive breeding program at Lymington Foundation.

The Spix's Macaw Project Habitat Purchase & Restoration

Gangorra Farm, Curaça, Brazil

The Spix's Macaw, *Cyanopsitta spixii*, has been extinct in the wild since the last solitary male disappeared from the Melancia Creek watershed south of Curaça, Brazil in October 2000. The future of the Spix's is now

determined by ICMBio, the Working Group for the Recovery of the Spix's Macaw, and the approximately 77 Spix's held within the cooperative breeding program spread across the globe in Qatar (AWWP), Germany (ACTP), Spain (Loro Parque Fundación), and Brazil (Lymington Foundation and the Sao Paulo Zoo).

These organizations have unequivocally demonstrated their desire to see the future reintroduction of the Spix's to its historical habitat. Parrots International serves as a consultant to the Working Group for the Recovery of the Spix's Macaw, dedicated to the return of the Spix's Macaw to its historical habitat.



<http://parrotsinternational.org>

Abaco and Inagua,
Bahamas Amazona
"leucocephala bahamensis"



The Bahama Parrot Project

The Bahama Parrot on Abaco differs because it's the only known parrot that nests in the ground in the Western Hemisphere and has adapted to fire and hurricanes. This little Amazon Parrot faces pressures from predation and fierce hurricanes. Over the

years Parrots International has donated more than \$30,000.00 to help protect the Bahamian Parrot. These funds have provided predator control, nesting studies, demography studies, post hurricane studies, and annual censuses for the Bahama Parrot.

Additional donations have been made by Parrots International to The Bahamas National Trust to help Caroline Stahala with her study of the nesting ecology of Bahama Parrots on the Island of Inagua.



<http://parrotsinternational.org>



Where the Wild Work is Done...

By Nathalie Lemieux

Wild Life



RESEARCH

Amazing Wildlife Researchers

We all look at photos of wild parrots in awe and wonder how amazing it would be to see them first hand. Have you ever stopped to think what was involved in getting the opportunity to get close enough to see these amazing birds in their natural habitat? Photographers require an enormous amount of patience and dedication as they wait patiently to take that perfect photo. In turn, many of these photographers meet up with wildlife biologists so they can more easily gain access to

wildlife in remote areas.

Let's think about what life is really like for those devoted biologists who spend all their time in the field tracking and gathering information about wildlife first hand.

I recently had the opportunity to witness firsthand these amazing researchers at work in the field as I was given the chance to live a dream of mine, to work with parrots in the wild. This was made possible by Hagen, who sponsored my trip and Dr. Mark Stafford from Parrots

International, who coordinated our adventure down to Chile.

I spent several days assisting in the field with research on the Slender-billed Conure. These parrots are one of the three most southern species of parrots in the world and little is known about their basic biology and ecology.

Suzan Payne, Mark and Marie Stafford and I spent over a week in Chile in January of 2009. I'd like to share my experience and what I learned about the dedicated field biologists.



Slender-billed Conures
Enicognathus leptorhynchus

© Above photo by
M Stafford Parrots
International
Left photo by
NR Lemieux



So How Did the Research Begin?

Every research project, whether it be physics or biology, always begins with a question. Dr. Tom White from the US Fish and Wildlife Service attended an ornithological



Dr. Tom White (US Fish and Wildlife Services) and Dr. Mark Stafford (Parrots International) with the first adult ever captured for science and the first ever fitted with a radio collar.

© Photo by M Stafford PI

conference in southern Chile when he took note of the parrots flying around outside. After asking many questions about these species of parrots, he had few answers. This sparked interest with other researchers and so the project was initiated.

Once proposals were written, a research plan was set and funding obtained. Field work began in October 2008 with graduate student Ana Bertoldi and Dr. Jaime Jimenez of the Universidad de Los Lagos in collaboration with Dr. White.

Transmitters were donated by Dr. Janice Boyd

from "Amigos de las Aves US." Receivers were donated by the USFWS and all the required climbing gear was provided by Parrots International.

The first step was to determine how to capture adult birds and fit birds with the radio collars.

This task proved to be very challenging especially when dealing with such highly intelligent creatures. Mist nets were set up in hopes of catching adults but most birds would just bounce off the nets. They even witnessed one of the birds warning the flocks as they flew towards

the nets. These flocks would manage to change course at the last minute causing them to completely miss the nets.

Many days were spent without a single bird in hand. After a dozen days of failed attempts, a flock with predictable behaviour was identified by the Staffords. This predictability along with the assistance of a local bird of prey, the Chimango Caracara, led to the successful capture of two adult birds. They were fitted with collars and led the researchers to a roosting site of over 100 birds, making the days of hard work a success.

Finding and Accessing the Nest Cavities

Have you ever tried following birds as they fly from tree to tree? Now imagine trying to follow flocks of parrots in hopes of finding their nesting cavities. Now these conures tend to nest in Nothofagus trees (Coihue) trees that average over 30 m in height. The nesting cavities themselves were on average at least half way up the trees. This left the researchers with the challenge of not just locating the nesting cavities but the difficulty of

accessing the nests themselves.

So after many days of trying to locate nests, it was decided to obtain assistance from some of the local poachers. They were quickly able to share their knowledge of known nesting sites and assist with accessing the young birds.

It is important to take into account everyone and everything that interacts with wildlife species, such as the predators, competitors,

parasites and so much more. This would include finding ways to work with local poachers in hopes of benefiting both the species and the project.

The project received donations of climbing gear but they needed at least two individuals and the proper skills to tackle their way up and down the tree safe and sound. Now on the other hand the local poachers easily outdid the high-tech gear that was acquired and they

promptly demonstrated how quickly they were able to climb these trees with the use of yellow nylon ropes while wearing rubber boots!



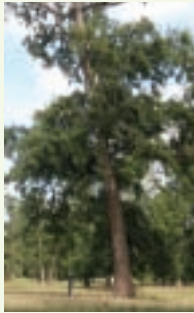
Mauricio, former poacher now assisting with the project demonstrating his amazing tree climbing skills.

© Photo by
SE Payne

In the Field



ABOVE:
Suzan adding
a sign to one of
the nesting trees.



RIGHT:
Ana looking up
at tree in search
of nesting
cavities

© Photos by
NR Lemieux

Once it was finalized that we would be heading down to Osorno, Chile, to assist in the field, we started receiving regular updates and photos about the project. This caused a lot of excitement about our future adventure.

Our visit was coordinated around the time that the young birds would start fledging so we could maximize our efforts during our time there.

The trip from Canada down to Chile involved 3 separate flights and driving another hour to get to our final destination. This took over 17 hours of waiting in lines and sitting on airplanes. Our trip was mostly uneventful except

for the luggage not making it to our final location.

Field work often involves trekking out into remote areas, living in tents, dealing with biting insects and always being on alert for encounters with the not-so-safe wildlife species.

This particular field project was situated in a much friendlier environment with no real pests or potentially dangerous critters. Our only main concerns were insuring we had enough water on hand, plenty of sun protection, packing lunches and snacks and having tissues for those required pit stops in the woods.

Our drives into the field sent us on a lot of off-roading routes onto farmland so that we could get close to the nesting sites. On a few occasions we had to climb over or under fences (mostly barb wire). One site involved leaping over a 6-foot deep ditch, some more skilled than others.

Over all, a lot of time was spent waiting as climbing gear was set up and someone tackled their way up the tree while the rest of us ended up suffering from kinked necks as we tried see the nests from down below.

The Fledglings

The most exciting part of our trip was the hands-on work. Many of these nests had three or four chicks and we had the opportunity to assist as each bird was weighed, measured and banded. One or two of the oldest birds from each nest was fitted with a radio collar so they could be tracked once they fledged.

One of the nests had obviously been a poaching site for many years. It had a wedge cut out in the tree just below its opening. This piece would be removed to provide easy access to the young birds.

There were also remnants of a makeshift ladder nailed to the tree. Luckily this site managed to stay out of harms hands this year and we were very delighted when Mark found a total of 6 chicks in the nest.

Unfortunately, this was not always the case. Another nest that previously had five chicks was down to one. This is when we learned that poachers always left one chick in the nests they visited. This insured that the parents deemed it a successful nest and would return to the nest site again next year.

Jaime talked about a local festival and known location where poachers sold young birds. We took a side trip to see if we could see it first hand but had no success. We did meet up with a vendor that had an adult conure trained to retrieve your fortune.

All in all, fifty young birds were banded and twelve received collars during our stay there. It was great to help!

ABOVE RIGHT: Three conure chicks from a nest of 6 young. The one on the left is sporting his new radio collar.

RIGHT: Mark replaces the tree wedge below the nest cavity.

© Photos by NR Lemieux



What does the future hold for the Slender-billed Conure?



Ana carefully records all of her data.
© Photo by NR Lemieux

These conures are only found in Chile and their numbers appear to be declining. Factors threatening these birds are the increasing conflict with farmers who shoot them when they are found foraging in their grain fields, habitat loss as more and more trees are cut down for pastures and nest poaching.

Ana will be spending the next few years gathering data about these conures. She will be following the collared birds so they can understand their habitats, diet, and nesting habits. Trees and nest cavities will be measured. The surrounding habitat will be documented and many hours in the field will be logged.

Hopefully with a better

understanding of the bird's ecology, plans can be implemented to help protect them. Projects such as replenishing the Coihue trees used by these birds and public education can increase the appreciation of these amazing endemic wild parrots, all made possible by the dedicated wildlife biologists.

Nathalie Lemieux is one of the directors of the Canadian Parrot Conference and the President of the Golden Triangle Parrot Club. She graduated from the University of Guelph with a biology degree and currently works full time at the Ontario Veterinary College as the Support Service Technologist in the Department of Pathology. She worked at the Mostert Aviaries for 7 years during her university years and currently lives with six feathered friends (B & G Macaw, 2 Congo Greys, 1 Timneh Grey, a Quaker and an Alexandrine), four daughters and her husband.



Nathalie with Slender-billed Conure chick. © Photo by SE Payne

On the road

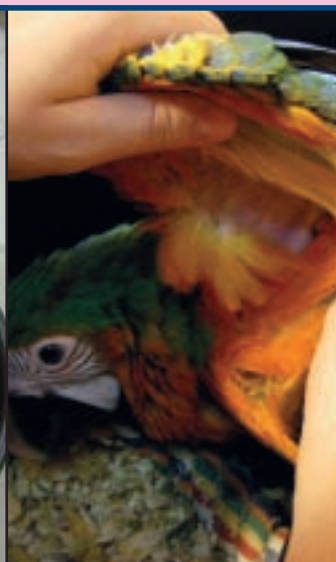
Familiarizing chicks to various stimuli, environments, training and physical activities is the responsibility of the fledglings' caretakers. These are examples of how chicks are raised at HARI facility. We recommend all chicks be introduced to-ideally before leaving-in order to enter their new lives as companions.



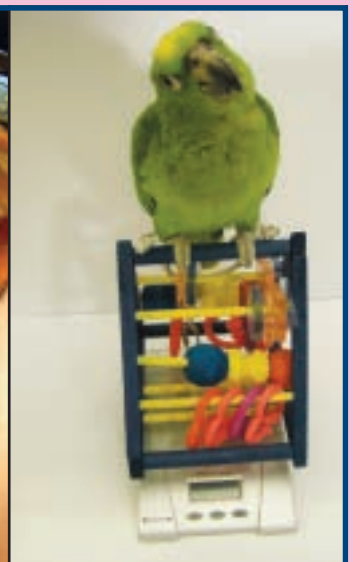
1. Early socialization with other clutch or cage mates



2. Preening activity and introduction to weaning



3. Petting the chick under the wings to teach the fledgling to enjoy and have complete confidence with human touch



4. Training to step up and step down from the scale



5. Introduce daily misting to encourage natural preening. This is the best time to expose the chick to various musical compilations



6. Familiarizing the chicks with various interventions practiced during a physical exam. Note using a stethoscope on the top of the head in the nursery to help detect respiratory difficulties sometimes is associated with slight food aspiration.



7. Familiarizing the chick with nail grooming



8. Familiarizing chicks to fresh natural branches to perch and chew

to companionship

The transition to this new lifestyle will be easier for the bird. Basic commands will have been understood, a code of respect established, independence encouraged and stimulated; the building blocks for a healthy and structured foundation for a long lasting companion relationship with

its future guardians, and possibly others to come. Some activities and training have been repeated from previous articles, although we stated they should be all featured together to reinforce the notion that they are all equally important, and possible to initiate while spending quality

time (educational time) with the chicks raised in your nursery. The future of the parrot species for human companionship depends on aviculturists' determination to raise chicks to be prepared to live with a human /feathered flock.



9. Chicks becomes accustomed to towels



11. Inspection of the oral cavity without restraint



12. Basic training on perch



13. Flight exercise to promote healthy muscle development and cardio activity



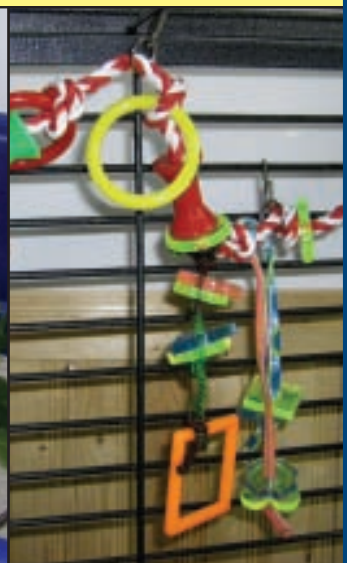
14. Harness training



15. Speech training



16. Familiarize chick with avian transporter



17. Introduce various activities, foraging and educational toys of different materials, colours and shapes

Weaning techniques

The educational process of weaning is the foundation for a healthy nutritional life. Chicks should not be rushed into the weaning process, which will extend throughout the chick's late fledgling age, until juvenile maturity for the larger parrot species.

Starvation weaning is definitely not encouraged. Abundance weaning is a more ethical and successful technique, ensuring proper physical and psychological nurturing. Sally Blanchard wrote years ago, "Parrots who have been abundantly weaned with nurturing techniques are clearly more secure and contented, and have much greater pet potential than chicks force weaned with deprivation." A starving chick is not able to relate its starvation to the presence of food. Hand-feeding formula, either syringe or spoon fed, prior to spoon-feeding soaked granules or offering dry granules, will be a far more successful technique. The chick will not be in a starvation trance throughout weaning education sessions, such as the spoon-feeding or assisted foraging activity.



1

1 We recommend that the weaning process start at the fledgling age (when feathers start to emerge from the shaft). It is at this developmental stage that the crop has reached maximum potential and will now start to reduce in size. Weight gain has reached a platform at this developmental growth stage. From this point on, a maximum weight loss of 10 % is permitted until the end of the weaning process. Birds should be weighed daily until you are confident that they have successfully weaned; then every other day following this stage and weekly for weaned juveniles.

Chicks in the wild are fed regurgitated seeds and nuts at a few days of age. In captivity, we strive to raise chicks that will be weaned onto a 100% formulated extruded diet. Chicks must start digesting foods of more solid consistency to prevent the GI tract from getting lazy. Crop tonus and motility are enhanced when feeding soaked granules, ideally of the same formulation as the hand-feeding diet at this age (high performance formula). Introductory food sampling will gradually begin when the chick is

eating enough formulated granules on their own to maintain a healthy and stable body weight. Offering a cafeteria-style buffet of various foods before the chick is weaned will compromise your success in weaning your chick onto a healthy diet. This can also jeopardize your chick's healthy eating habits for the future as well.



2

2 At this age the chicks are syringe-fed and supplemented spoon-fed warm soaked granules.



3

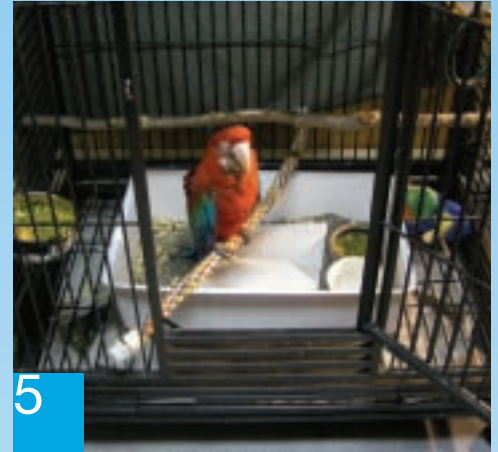
3 Warm soaked granules can be supplemented with warm hand feeding formula. Note this soaked food must be discarded after 1 hour to prevent bacterial contamination.



4

4 A bowl of dry granules of various shapes and sizes, as well as strands of spray millet are offered during the day in the chick pen, to take advantage of

the fledgling's curiosity. Millet is visually stimulating for a weaning bird, and when offered to them triggers the foraging behaviour and encourages independent foraging activity.



5

5 Adding a clutch mate that has achieved a further stage of weaning will greatly increase the learning process. Unfortunately, this chick was alone throughout the beginning of the weaning process and the weaning cage selected was too big, thus compromising the success of our efforts.



6

6 These macaw chicks were successfully weaned and learned to preen each other quite early as they engaged in their foraging curiosity together.

- Nursery caretakers use an opportunistic moment to introduce dry foods while preening the chicks. While you have the devoted attention of your pupil, nibble on dry granules yourself! Positively reinforce with nurturing attention, sweet soft vocal praises throughout the preening session create a precious bond.

- The next three (3) pictures (7, 8, & 9) show that it is important that all feeding from this stage on be done in the fledgling pen and weaning cage, and not on the counter top as the chick must learn that the fundamental food source will come from within its cage. Pretend to nibble of the soaked pellets from the spoon as well.



7



8



9



10

10 A cardboard box or plastic den for small animals is placed in the chicks' pen when the chicks are retrieved from the breeding pairs and placed into the nursery. These dens offer a comfortable retreat which shelters them from harsh light and distractions. Chicks must be well rested to engage in the weaning process.



11

11 These dens offer a comfortable retreat which shelters from harsh light and distractions.



12

12 This Exoterra terrarium is an excellent unit for smaller parrot species transitioning to their weaning cage. Recycled newspaper pellets make an excellent substrate for this preliminary weaning stage.



13

13 This stage also coincides with the introduction to the aviator flight harness. Once again an opportunistic moment to offer dry or soaked granules to nibble on while petting under the wings and praising the chick.



14

14 The chick's pen is then introduced into the weaning cage when the feather stage is almost finished. The weaning cage should be the smallest size possible to offer limited but comfortable movement, yet not too big to allow distraction from the principle activity the chick must focus on, eating.

All perches should be cotton ropes, preferably installed very low over the chick's pen to offer maximum grip, to accommodate the stability of the fledgling, and prevent irritation on the delicate fledgling's feet. A towel covers the weaning cage, preferably on 3 sides, to minimize distraction, promoting a well-rested bird and aiding in a gradual transition from the nursery environment.

Paper liners at the bottom of the weaning cage are changed at every feeding time (whether the chick has been fed by you or not), as this will allow easy monitoring of the feces, indicative of the consumption of food ingested. Some chicks appear to be eating when they are actually nibbling on their food. Don't let this behavior fool you, they might not be consuming food by themselves.



15

15-16 Assisted foraging between the caretaker / mentor and the fledglings will help the weaning by providing a stimulating activity to satisfy their curiosity and encourage independent foraging. An ideal occupational therapy for his lifetime.

Weaning techniques

continues



16



17

17 Large biscuits are a great treat to help wean chicks.

Note: nails should never be groomed at this age. Grooming nails too short or too smooth compromises the natural eating behaviour, which is dependant on such dexterity and balance required to hold food in one foot.



18

18 Training to step up and step down onto a scale for weight monitoring is an integral part of the weaning process. Chicks should not be lured onto a scale; they are intelligent creatures and can be trained to stepping up onto a scale perch.

HOW TO SPOT A HUNGRY BIRD....

Younger birds, in or just after the weaning stage, show signs of hunger quite soon after a meal is late. They sit in a crouched position with their head tipped slightly back, feathers ruffled upwards. They have a dazed look in their eyes. They also weave backwards and forwards quite apparently. Another obvious sign of hunger is when the bird leans to one side sporadically flickering the wing shoulder.

Babies will not try to eat on their own at this point because they are far too hungry to remember where the food source is or how to get to it. Droppings of chicks that have not eaten have characteristically vivid green faeces when these fledglings are fed natural formulated diets. Normal faeces would be brownish beige when food is being digested. Droppings should be monitored for consistency on a daily basis. Paper lining on the weaning cage bottom should be changed at every feeding to monitor the faeces.

Note: Fully weaned birds can easily un-wean due to food deprivation, a change in their environment or a stressful event. An un-weaned baby may also show no typical sign of bobbing without stimulus. When bobbing stimulation is set off accidentally by touching the sides of the beak, the bird lunges forward. The bird may also start screaming loudly, hoping someone will nurture and feed him. Sally Blanchard refers to starving fledglings as having excessive frenetic, and even aggressive energy.



Chicks should be fed inside the weaning cages and not on top of the cages, training perches or counter tops as they must understand that their food source will come from within their cage.



Chick Information File

For nursery management

Species: _____
Scientific Name: _____
Suspected date egg laid: _____
Hatch Date: _____
Size of band _____ Date banded _____
Band # _____
Microchip # _____
Sexing: ☐ male ☐ female
Polyoma vaccination 1st ☐ booster ☐
Chick order /# chicks in clutch : ____/____
Raised with clutch mates: other chicks: Yes/No
Clutchmates ID _____, _____,
_____, _____, _____

Parents: Cage # _____
F _____, M _____
of days raised by parents _____
Evaluation of parental care: _____

Fostered: yes/no if fostered Cage # _____

Incubation
Natural # days _____
Fostered # days _____
Artificial # days _____

**if Artificially, incubated attach egg wt chart*

Hatching: Natural / Assisted
Date & time chick 1st piped: _____
Time hatched: _____
Malpositioning: yes/no
Type: _____
Egg yolk absorbed at hatching: yes
if no, when _____

Egg yolk absorbed in abdomen before
1st feeding yes /no ?

Iodine on umbilicus: yes/no

Newborn Nutrition (duration: # days fed)

Water : **duration** _____
Lactated ringers solution: **duration** _____
100 % hand-feeding formula: **duration** _____
Neonatal formula (10 % gastrolyte in handfeeding
formula) **duration** _____

Aviculturist: _____

Tel #: _____

Contact person: _____

Medical Observations:

Note: Attach medical file if treatments were administered

- 1 Parental mutilation
- 2 Difficult hatch
- 3 Hyperthermia
- 4 Hypothermia
- 5 Dehydration
- 6 Crop motility problems
- 7 Crop impaction
- 8 Pendulant crop
- 9 Burnt crop
- 10 Sour crop
- 11 Fungal or yeast infection
- 12 Bacterial infection
- 13 Foul droppings
- 14 Stunting- slow weight gain
- 15 Splayed legs
- 16 Constricted toe syndrome
- 17 Crooked toes
- 18 Beak deviation,
- 19 Beak prognathism
- 20 Eye openings abnormal
- 21 Crooked neck syndrome
- 22 Food aspiration suspected
- 23 Ear openings abnormal
- 24 Flaky skin
- 25 Respiratory concerns--wheezing
- 26 Coughing
- 27 Regurgitation
- 28 Abnormal feather coloration
- 29 Puffed feathers, beady eyes, lightweight,
- 30 non responsive
- 31 Stress bars
- 32 Aggressive lunges or bites
- 33 Clutch mates sick Clutch mates died

Other _____

Raised for future Captive Breeding : Yes / No
Companionship: Yes / No

Departure from nursery to vendor/owner

Date _____
Feeding schedule at departure
Weaned partially weaned
Syringe fed: _____ml _____x per day
Spoon fed : # _____tea sp. _____x per day

Last weight recorded at the nursery _____g

[illegible]

Lot: _____
Expiration Date: _____

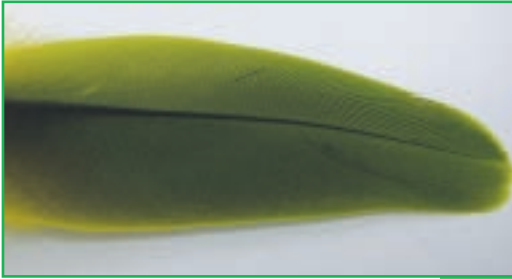
Feather Quiz



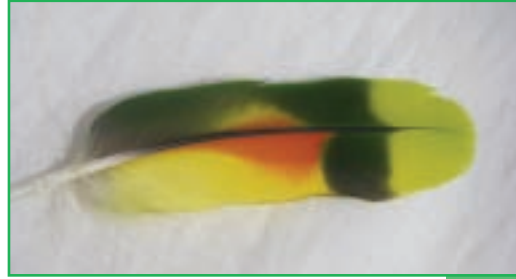
Answers

- # 1 Yellow-naped Amazon, Amazona aurocollaris
- # 2 Double Yellow-headed Amazon, Amazona ochrocephala oratrix
- # 3 Blue-fronted Amazon, Amazona aestiva
- # 4 Alexandrine Parakeet, Psittacula eupatria
- # 5 Blue and Yellow Macaw, Ara ararauna
- # 6 Green-winged Macaw, Ara chloroptera
- # 7 Orange-winged Amazon, Amazona amazonica
- # 8 Patagonian Conure, Cyanoliseus patagonus
- # 9 Umbrella Cockatoo (White Cockatoo), Cacatua alba
- # 10 Scarlet Macaw Ara macao, abnormality in feather structure observed is the presence of stress bars

- 1) Can you guess what species molted the feathers below?
- 2) For a bonus trivia challenge can you identify which feather reflects a potential health concern?



1



2



3



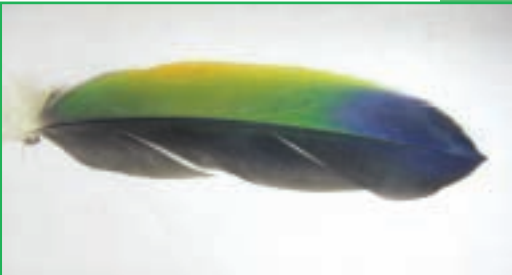
4



5



6



7



8



9



10



A World Parrot Trust Retrospective

Introduction

In today's world, a charity that works for twenty years has achieved a great deal. In the case of the World Parrot Trust, founded in 1989 by Mike and Audrey Reynolds, veterinarian Andrew Greenwood, Rosemary Low and Paradise Park curator David Woolcock - a lot has been accomplished including efforts in conservation, research, welfare, sustainability, education - ideas were barely touched on by animal charities twenty or thirty years ago. Now not only are these ideas commonplace in the ongoing efforts of conservation and welfare groups, they're also vital. For two decades, the Trust has worked hard to implement them all.

As WPT matured, it has consistently put the needs of parrots first. This concept has become the basis of all of the Trust's decision making, its prioritization and its choice of strategies and tools to fight the loss of parrot species. And never has the need for putting the parrots first been greater than it is now. As ever, the Trust will lead the way in parrot conservation and welfare through its quick action, creative ideas and holistic solutions.

Conservation

Crafting the Parrot Action Plan: 2000 - 2004

The enormous task of creating a **Parrot Action Plan** fell to the some of the most accomplished and contrasting minds in the parrot world. Underwritten, organized and published by WPT and IUCN in 2000, this publication profiles the world's rarest parrots, identifies the issues facing their survival, and provides recommendations for their conservation. Proposals for each species were provided and included information on the causes of species decline not previously or carefully studied. The use of innovative solutions to aid conservation needs were encouraged including: advocating for the use of parrots as flagship species (a species chosen to represent an environmental cause, such as ecosystem protection), calling for the end of the wild bird trade and encouraging the development of ecotourism and environmental education programmes in areas where parrots are found. The plan has helped researchers and conservation managers to design suitable strategies to save parrots globally.

Saving the World's Most Endangered Wild Macaw: 2001- present
The **Blue-throated Macaw** is now the world's rarest wild macaw. Wild



populations are limited to a total of 200 birds, therefore saving these birds from extinction is an essential project for the Trust. This urgent conservation work began in 2001 by a team of various international field biologists. This research is now headed by Dr. Igor Berkunsky. WPT has provided yearly financial support to enable research and direct conservation efforts through improving nest sites and chick survivability. This work has been achieved by actively protecting nesting areas and nest holes from humans and animals alike, building artificial nest cavities to encourage breeding, and studying every aspect of the macaws' lives. The Trust has also arranged for meetings with local groups, non-governmental organizations and other interested individuals to plan for the macaws' recovery. More recently the WPT has been working with the Natural Encounters Conservation Fund to develop both wild bird conservation and captive breeding efforts to help rebuild the wild macaw population.

Hope Restored for the Echo Parakeet: 1991 - present
By the 1980s the worldwide population of the **Echo Parakeet** had been

Twenty Years of

reduced to less than 10 birds. Enter Carl Jones and his dedicated team at Black River Aviaries on Mauritius, and with the financial backing of the Trust and others, his team was able to raise the population to about 330 individuals in ten short years through captive breeding, research efforts, and veterinary care via WPT Trustee Andrew Greenwood, D.V.M. Their heroic actions enabled the species to be down listed from a critically endangered to an endangered status, an astounding feat and the first for any species of parrot.

Working to save Mexico's treasure, the Thick-billed Parrot: 2002 - present

WPT has supported translocations, radio tracking, conservation planning, and supplying of nest boxes for the endangered **Thick-billed Parrot**. These activities have been conducted for many years by a team from ITESM (Monterrey Tech University) in Mexico. Their work has shed light on the problems facing this beleaguered species at risk in the Sierra Madre Occidental Mountains in Mexico, and has helped focus current and future efforts to save this parrot from extinction.

Too many to count: 1989-present

Since its inception in 1989, the Trust has also supported vital conservation and research programs aiding:

Conures: Patagonian, Golden-plumed, White-necked, Yellow-eared, and Cuban;



Macaws: Red-fronted, Lear's, Hyacinth, Great Green, Spix's, Scarlet, and Blue-winged;

Amazons: Mealy, Black-billed, Lilac-crowned, Yellow-billed, Yellow-headed, Yellow-naped, Green-cheeked, Mealy, Cuban, Red-spectacled, Red-necked, Red-tailed, Imperial, St. Lucia and St. Vincent;

Lorikeets: Kuhl's, and Ultramarine; Red-vented;

Cockatoos: Red-tailed Black, Goffin's, Citron-crested and Moluccan;

Other parrots: Yellow-faced, Cape, Red-faced, Meyer's and Grey, and the flightless Kakapo.

Research

Lora the Caribbean's Gem: 2004-present

The **Lora**, or **Yellow-shouldered Amazon**, survives with small groups on four Caribbean islands and small populations on the adjacent mainland of Venezuela. Since 2004 WPT has supported biologists Sam Williams and later Rowan Martin in their research on this vulnerable parrot on the island of Bonaire. Their Ph.D. level studies, which have focussed on the reproductive success and failures of this little-known Amazon, will greatly aid its survival. Threatened by intense poaching and drought pressures the WPT has supplied the "Happy Healthy Parrot" brochures in Dutch to island residents and ID rings for captive birds, to create an awareness program highlighting the plight of the Lora.

The Vibrant Palm Cockatoo: 1996 - 2000

A rare and flamboyant parrot, the **Palm Cockatoo** is found in Queensland and New Guinea. Beginning in 1996, the Trust began to fund research by Steve Murphy to assess population, diet preferences, reproduction and man-made threats faced by this species. Ground-breaking studies with all-day nest watches and in-nest, infra-red video surveillance found that the Palm Cockatoo to be a highly specialized feeder with a low breeding frequency, compared to other parrots in the same area.

A Golden Opportunity: 1998 - present

The **Golden Conure** is a stunning and uniquely social species that is threatened by poaching for the pet trade and habitat loss in the eastern state of Amazonas in Brazil. With the support of the WPT, biologists Carlos Yamashita, and later Toa Kyle and Thiago Orsi conducted conservation research on this species, which revealed insight on Golden Conure behaviour, and the many threats to its survival. Carefully mapping nest sites, observing and documenting group behaviour, and analysing blood samples to determine the degree of relatedness among members of small flocks were all conducted to aid our understanding of the species' social biology. The Trust has supported this work by establishing the Golden Conure Survival Fund, set up in 1998 by WPT-USA Administrator Glenn Reynolds. To date, it has raised over \$100,000 US to date for Golden Conure research and conservation work.

Further research: 1989 - present

WPT has also supported the studies of various parrots from Africa and nearby Madagascar including the Black-cheeked Lovebird and Seychelles Black Parrot,

Saving Parrots



as well as searches for populations of reportedly extinct species like the Glaucous Macaw and Red-throated Lorikeet elsewhere. Sadly, a 1998 survey by Dr. Charles Munn found the Glaucous Macaw to be extinct in the wild, and extensive searching for the Red-throated Lorikeet turned up no new sightings. New insight was gained through these searches, particularly the Glaucous Macaw work, into how a particular parrot species may become extinct - and much was learned on how to prevent further loss. Most recently, the WPT has assisted with surveys on Lear's and Hyacinth Macaws and supported biologist Toa Kyle, with his efforts to study the elusive Blue-headed Macaw in the heart of its range in the rainforests of Peru.

Sustainability

Encouraging local people to protect their parrots: 2000 - current

The WPT firmly supports innovative ideas to protect parrots and aid people who share their environments. Sometimes local inhabitants may rely on trapping parrots for the pet trade as means of supporting their meagre, if only, income. This effort is almost always unsustainable and when the wildlife disappears from a certain area, both people and ecosystem are drastically affected.

In Guyana where local peoples trap and sell parrots into the pet trade they also



make elegant **parrot sculptures** out of locally produced natural rubber. The figurines, carved from natural balata, or latex, stand three to four inches tall and four to six inches in length and are precisely detailed. WPT has sold the sculptures online and at conferences around the world, helping to support a sustainable industry to help replace the income trappers and their families formerly derived from harvesting wild parrots.

More recently the Trust embraced a project in Peru in partnership with a local organization to help indigenous people protect their parrots and their forests. With Peru Verde, WPT supports the creation of **Arpilleras** (appliquéd fabric wall hangings) made by over 100 trained local indigenous artisans. The hangings, marketed and sold by WPT to the international parrot community, depict life in the rainforest for both man and animal. The concept is simple, yet effective: the community is encouraged to protect their local parrot clay licks in exchange for Peru Verde buying crafts from the community's artists. They are also educated to understand the importance of the clay licks to macaw populations.

Education

Creating awareness for local populations...

The distribution of educational materials about wild parrots to local peoples has been central to the Trust's efforts and has taken a wide variety of forms. This work began with the creation of the four Parrot Education busses in Central America from 1992 to 1997.

The original idea came from Paul Butler of RARE, a leading conservation group, who asked if the Trust could provide an educational bus for the Caribbean island of St. Lucia. This bus was to travel all over the island, visiting schools and other locations, telling the story of the endangered St. Lucia parrot (*Amazona versicolor*) and what had to be done to save it from extinction. WPT's team at Paradise Park, led by David Woolcock and Nick Reynolds, refurbished an existing bus and fitted it out with working models, video programmes and other educational facilities, then shipped it out on a banana boat, and handed it over to staff of the island's forestry department. It was a great success, and resulted in similar buses being provided for the neighbouring islands of Dominica and St. Vincent, and also for use in Paraguay.

This achievement resulted in Paradise Park and the World Parrot Trust being chosen by BBC Wildlife Magazine as winners of the 'Zoo Conservation Award for Excellence'.



A World Parrot Trust Retrospective



...And education for parrot caregivers everywhere.

The World Parrot Trust also distributes education worldwide with online, multimedia and print materials. WPT's main publication PsittaScene was launched in 1989, the Trust's inaugural year, and is included with each membership. Now in its 20th year, parrot researchers and enthusiasts worldwide utilize it to stay informed about the latest research, projects and news from the parrot world. Thousands of copies of the Trust's "Healthy Happy Parrot" brochure, a short and snappy guide for new and aspiring parrot owners, have been distributed worldwide. Most recently came a free online newsletter, Flock Talk and the launch of the Trust's brand-new 7000-page educational website at www.parrots.org. Combined, these electronic and print resources enjoy a readership of more than 250,000 people per year.

Advocacy

Power to the people (and parrots)!

Over the last twenty years WPT has led many successful campaigns and educational initiatives designed to bring awareness of issues affecting parrots. In Mexico, the Trust partnered with Defenders of Wildlife to launch an educational programme featuring posters and paintings that depicts endangered species and aids local communities in helping to halt the trade in wild parrots. WPT also supports as kid's educational awareness programme developed to aid efforts to stop the wild parrot trade in northern Costa Rica.

The Trust chose the spring Bank Holiday, May 31st for **World Parrot Day** in London in 2004. This day of quiet demonstrations, banners and the antics of Superparrot (aka Nick Reynolds, of Paradise Park) culminated in a march from Trafalgar Square to Downing Street to hand in a 33,000 signature petition calling for a ban on the importation of wild caught birds into the European Union. The petition's signatures would eventually reach 40,000, and would play an integral part in influencing the powers that be in their decision to enact a prohibition. Eventually over 230 other non-governmental

organizations and thousands of individuals would lend their names to the fight - a feat of international cooperation that has helped spare the lives of millions of birds each year.

Welfare

Saving millions of birds

Realized in July 2007, the Wild Bird Trade Ban in Europe was the zenith of six years of effort. The ban has achieved the happy result of saving about four million wild birds annually and has dramatically reduced the risk of avian diseases entering the importing countries. WPT Trustee Cristiana Senni suggested this campaign in late 2000 due to significant concerns for parrot welfare both in the wild and in captivity. The unsustainable harvests, transmission of disease and high mortality of birds in the trade spurred the Trust on to work feverishly to the ban's triumphant conclusion. Having realized this goal, the WPT has now shifted its trade work to a country-by-country basis. The Trust is in the process of developing important working relationships with regional organizations in **Southeast Asia, Mexico, Africa and South America**. By targeting key markets accountable for much of the remaining bird trade, the Trust hopes to end this cruel and destructive practice in the few remaining locations where it still occurs.

Singing the Blues

The trade in wild caught **Blue-fronted Amazons** has had a devastating effect on the species and its ecosystem. Since 1981 when it was listed on CITES Appendix II, 413,505 wild caught individuals have been recorded in international trade. WPT has informed officials in the US and the UK that these numbers are not sustainable, refuting previous claims. Through research conducted by WPT biologists it was uncovered that governing practices regarding the collection of these parrots are frequently violated. The Trust will continue to support the gathering of clear documentation of the practices of the trappers involved, providing importing countries with up-to-date, accurate and independent information.

Cockatoos Too

In 1992 WPT was made aware of the plight of a group of wild caught **Goffin's Cockatoos**. A television crew returning from filming on the Indonesian island of Tanimbar reported to the Trust that over 500 Goffin's Cockatoos were languishing in cages, held by trappers. WPT supported the care of these birds by contributing funds to their rescue. Once rescued and rehabilitated, over 300 of the cockatoos were released back into the forest near Saumlaki, Tanimbar, Indonesia.

For the Greys

The **Save the Greys Fund** was begun in 2008 to achieve the following: to end the trade in wild caught African parrots, to encourage sustainable alternatives to parrot trapping, to rehabilitate and release confiscated birds, to re-establish wild populations in suitable areas of their former ranges, and to raise awareness of the plight of African parrots.

In Cameroon, **Grey Parrots** are a special focus in the illegal trade in wildlife. In 2008, WPT was informed of possible illegal exports of this bird from the area, and with the help of local wildlife organization the Last Great Ape Organization (LAGA) the authorities acted to apprehend and convict the two men responsible. The trappers had caught over twelve hundred wild African Greys and were preparing to send them out of the country to Bahrain, in the Middle East. In the first days of the crisis, the Trust supplied emergency funds and veterinary help to Limbe Wildlife Centre, where the Greys had been taken to recover. Though the following difficult weeks of rehabilitation, treating sick and injured birds and watching the weakest ones die were difficult to experience, in the end more than seven hundred birds were deemed well enough to be released back into the wild.



Enriching lives

Created with behavioural stimulation and education in mind are the DVDs **Pollyvision I** and **II** and **Where the Greys Are**, some of the Trust's most popular items. Designed for parrots and featuring a wide variety of videos of parrots in the wild, the DVDs are as educational and enriching as they are entertaining to parrots and humans alike.

Continuing on...

Through two decades the World Parrot Trust continues to accomplish much in the world of the parrot - through considerate and consistent conservation, education and advocacy the Trust achieves lasting results for the preservation of parrots, people and ecosystems. It will continue these efforts for as long as they are needed.



A World Parrot Trust Retrospective

Busy Year for Canadian Branch of WPT



The last 12 months have been a busy period for the Canadian branch of the World Parrot Trust (CWPT) with conservation work on two parrot species and the pending launch of an online learning center. With support from the Donner Canadian Foundation, CWPT trustee Steve Milpacher traveled to Mexico to gather information about the Thick-billed Parrot (*Rhynchopsitta pachyrhyncha*) and review conservation and nest supplementation efforts. This work is being conducted by Mexican biologists from Monterrey Technical Institute (ITESM), a group of scientists deeply committed to saving the species. As these birds have suffered greatly from habitat loss over the past several decades CWPT is seeking ways to further assist with efforts to save the species. Based on the positive initial outcomes being generated by ITESM's efforts, the CWPT and its funding partners will provide additional assistance for research, conservation and education programming in the forth-coming year.

Assessing the impacts of Hurricane Ike on the Bahamas Amazon (*Amazona leucocephala bahamensis*) was initiated in the past 12-months thanks to the generous support of Mark Hagen and the Hagen Avicultural Research Institute. Located on the small island of Inagua, this genetically unique population appears to have suffered dramatic population declines as a result of the hurricane. Understanding its impact on the birds, their habitat, food, and nest availability has been a key focus for this study. Rounding out the efforts has been the initiation of work to develop an online seminar series for parrot enthusiasts, funded with support from the Donner Canadian Foundation. Intended to bring the world's top parrot experts to aviculturists, companion parrot care-givers and enthusiasts everywhere, this resource will provide an interactive environment for learning about the latest information on parrot care, conservation and welfare. Development work on the technology and curriculum is well underway. Stay tuned for more news on this exciting new technology

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provides concise descriptions on the personality
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strong encouragement that you choose a bird
that compliments your own personality and
household. She also covers a broad range of
valuable subjects for bird owners such as
creating a good environment, habitat
improvement and proper nutrition.

Dr. Lupu's (DVM, AVBP, Avian) professional
commitment to bird owner's education is
demonstrated in her successful 25+ year avian
veterinary practice in Montreal, numerous
international speaking engagements, her two
DVD's and an upcoming book.

Partial proceeds of all of Dr. Lupu's educational
products go to the World Parrot Trust - an
international organization dedicated to the
protection of rare wild parrot species.

This sequel to the 1st DVD "A positive Approach
to Parrot Behavior", should perhaps be viewed
prior to the acquisition of your first avian
companion. The various topics presented are
without a doubt essential for the proper
husbandry and care taking for all parrot
guardians.

ACQUIRING A PARROT CHOOSING THE RIGHT BIRD HABITAT ENVIRONMENT NUTRITION

References to these various topics are clearly
demonstrated through live bird demonstrations.
This is a useful DVD for avian caretakers in retail
stores and novice veterinarian technicians as
well, as it enumerates the basic yet fundamental
aspects for responsible caretaking in a simple
yet comprehensive fashion.

<http://www.parrots.org/>

For more information or interview with Dr. Lupu
please contact: Richard Cohen, Corico Education,
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