

Photos and Article by Laney Rickman

"bling-bling" lifestyle and worldly riches aren't usually the rewards for most people raising macaws as a business venture. Often, though, there are other incentives which are as varied as all the personalities populating aviculture and valued even more highly by some than any monetary return on investment.

Some breeders become so inured to breeding macaws for passion and not profit that they can accept a business model that readily recognizes the almost certainty of never making a dime's profit from a 24/365 commitment.

Bird Endowment (BE) developed from an abiding commitment to parent-fledging Blue-throated macaws (BTMs) from Founder and Founder-fledged pairs, and doing it for generations on end. This meant holding, feeding and caring for young parent-fledged BTMs for as long as it takes them to breed (as early as five years and some 10 years and counting), and then repeating the process with their offspring.

Also, a key assumption was unknown to BE's original business plan. Extensive experimentation was required to get some Founder Pairs to the point of fledging just one offspring per year. Three of four Founder pairs, where the male bird previously had been in eggpulling programs, were incapable of parent rearing prior to rehabilitation. Therefore, when a pair could fledge one or two offspring from a single clutch in a year, it became an occasion to celebrate success.

With this reality, the only sustainable business model became a non-profit organization that would have the potential to successfully hold these macaws for the long term. That required the participation of other people interested in the survival of the Blue-throated macaw. Part of this included going out on the circuit to convincingly preach a sermon about the necessity of parent-rearing for the continuity of the wild BTM species culture.

Laney Rickman, who is the visionary of Bird Endowment's mission, had earlier volunteered at The Houston Zoo in 1992-1993. Working with the professionals there, she became convinced of the importance of parent-rearing, and preferably parent-fledging, whenever possible to produce birds most viable for whole-species continuity in captivity. She searched widely for additional information and studied long the scant results she found. At this time it had become accepted practice in aviculture to pull eggs and incubate them. They were then handfed by humans in what Laney terms Human Surrogate Parenting or HSP. The procedure could often result in multiple clutches of birds each season.

John Stoodley, who was the early pioneer and developer of Human Surrogate Parenting of psittacines,

encouraged Laney to spread her message. He intended the process of artificially hatching and then hand feeding the parrots with a formula only as an emergency procedure, he said. He realized that it had become a tool for breeders to increase pair productivity.

Change often is resisted, and initially many aviculturists were not receptive to the need for parent-fledging neonates. Today, however, many breeders are allowing young parrots destined for the pet market to remain in the nest box with their parents for two, three, and even more, weeks. Those who hold back future breeders have realized the importance of allowing those birds to parent fledge.

By 1998, Laney had enough people supporting her parent-fledging philosophy for the Blue-throated macaws that the organization of Bird Endowment as a 501 (c) (3) was possible with their participation. In 2001 a large individual donation made possible the acquisition of a third Founder pair as well as the construction of a large isolated habitat for them. By 2002, interest in the Blue-throated macaw project was growing and donations were increasing. By 2003, Bird Endowment was ready to assume ownership responsibility of the birds and all physical assets.

All the while the business – or rather nonprofit business – was taking shape, Laney had continued daily to work with the birds.

The previously extensive experimentations in parentfledging rehabilitation for some Founder pairs were continuing apace the development of the business model.

The first Founder pair started producing in the parentfledging environment that pre-existed Bird Endowment. They were generally successful.

This Founder Pair No. 1 had been in three different locations from the early 1980s through the early 1990s without producing eggs. From them, Laney learned the importance of total visual isolation for mature Bluethroated macaws. Acquired in 1992, they did not calm down and start acting like a pair until put in an area where they could see no other bird. This experience was preparation for later aggression problems with younger F1 and F2 pairs when the male reaches sexual maturity. Without visual isolation, the male becomes very aggressive and physically abusive toward the female.

Also, Founder Pair No. 1 demonstrated the inadequacy of "Breeder" cages which had been built to the industry standard of four by four by eight feet (actually their cage

Caption for article cover, pg 14:

Founder pair #2 chews on trees while their female offspring soars in outdoor flight of their 10' x 10' x 28' habitat.

was ten feet long). This pair and their two-offspringat-a-time demonstrated the unsuitability of a cage this size as a parent-fledging environment.

They were excellent parent-fledgers of their offspring until the male died in March 1998. The necropsy at Texas A&M School of Veterinary Medicine – where he died while being treated – was inconclusive, but indicated old age. His death was a personal devastation, but also a wake-up call; to the fact that no one knows how much time remains to work with the Founder birds.

It was at this point that personal dedication was redoubled, but with the knowledge that what needed to be done on behalf of the imported Wild Blue-throated macaws could not be done alone. This was the start of organizing Bird Endowment as a 501 (c) (3) nonprofit.

From experience with this pair, design work had started in 1996 to devise a prototype habitat for Blue-throated macaw breeders. The first design started from a wants list. It had to have:

• a minimum of 2000 cubic feet of outdoor flight space

• an indoor area with cage and keeper space that could be easily adjusted for the vagaries of South Texas weather

• efficiency for the keeper

A ground level structure was first assumed. This plan failed primarily because of the lack of biosecurity. A ground-level structure did nothing to decrease problems related to control of pests, rodents, vermin, and varmints. It did provide visual isolation but proposed housing three pairs with a common, central keeper pod. That also contributed to abandonment of the plan, after accepting the philosophy of David Phalen, DVM, Ph.D., and then with Texas A&M School of Veterinary Medicine. His feeling is that "the ultimate quarantine lasts for the bird's entire life and anything less is a compromise." He stipulated that breeding pairs should be caged independently and at least 100 feet from any other cage.

The facility at this time was disease free, but important additional Founder pairs were contemplated. A plan emerged for single pair enclosures with a minimum spacing between them of at least 150 feet. Also, for the new plan, called Proto '97, the large flight and keeper indoor requirements were maintained along with controllable ventilation. However, the entire building was placed on iron legs five feet above ground. An article by Laney Rickman more fully describes this building in the November/December 1998 issue of the *AFA WATCHBIRD*, beginning on page 30.

The building was completed for the acquisition of Founder Pair No. 2 in 1997. They had been excellent parents, hatching and raising their offspring when with the original owner in the 1980s. They were acquired from that owner after having been on loan for several years to a large pet bird production facility in Florida. During the Florida period, all of their eggs were pulled for HSP, as was commercial practice at the time.

Founder Pair No. 2, as the first pair to occupy the large habitat design (10 feet by 10 feet by 20 feet) were a pleasure to spy on from a distance as they flew about and destroyed (by chewing, not flying) whole 8-inch diameter mesquite trees placed in the habitat. There was great anticipation and expectation of their contribution to the developing Saving the Blues commitment.

Anticipation and expectation crashed head-on into the folly of egg-pulling when the pair nested for the first time in 1999. Everything seemed fine; three fertile eggs developing on schedule. Then on the first due date, things went terribly wrong. The first chick was only halfway out of the shell, mutilated and dead. It was removed and the parents were given the benefit of the doubt; something could have been wrong in the first shell. Two days later it was a repeat performance with the second egg. Talk about devastation of expectation!

The third egg was removed and fostered to a Scarlet pair. It hatched perfectly and thrived. The problem had to be with the once perfect parents.

Later in 1999, Founder Pair No. 2 went to nest again, but laid only two eggs this time. Hoping against hope, they were given still another chance. Same input, same output. They killed the first hatchling. The second went into HSP and survived.

Box access was closed and thinking caps were donned. Various vets, breeders, college professors, etc. were consulted without getting the least positive feedback, much less an actionable plan.

The lethal mutilation appeared in each instance to be a case of a parent trying to assist a hatchling still in process of exiting the egg. It seemed to be an anxiety to get the chick out and hide it before the egg was taken away.



Wild-caught male feeds his four month old male offspring in outdoor flight.

The following season, a rehabilitation plan was ready. With a positive nest lock-out system excluding the parents and protecting the eggs and the keeper, it was possible to check the eggs whenever needed. As part of the plan, three infertile Scarlet macaw eggs were used to make plaster of Paris-filled substitutes.

When the 2000 breeding season arrived, all the components of the rehab plan were in place. Founder Pair No. 2 laid three fertile eggs. Well before pip time, the substitute eggs were placed in a brooder and kept at nest temperature. The nest box was inspected at a regular time once every 24 hours. When egg number one first started to pip externally, it was carefully switched out for a warm plaster-filled egg. This transaction was not viewable by the parent birds due to the important lock-out system. The hinge-point of a successful rehab plan was that the nesting pair never realize that their eggs were being stolen again, if that was indeed the root of this problem. The objective was to change their perception about the security of their nest box as a way to calm their deadly anxieties. Thus, the warm dummy eggs.

It was considered a stretch that the pair could raise even two chicks at this stage of rehab. The plan, therefore, called for the first two eggs to be hatched in the brooder and HSP-raised and the replacement dummy eggs would stay in the nest until the birds abandoned them. It was hoped that they would think the eggs simply failed to hatch. The third egg would be hatched in the same manner, but the hatchling would be returned to the nest.

The third pipping egg, just as the two before, was covered and carefully transported back to the brooder on a bed of small seed in a bowl. Outdoor air this time of the year rivals the nest brooding temperature. The egg in the brooder was monitored.

Then came the test of convictions. There's now a hatchling in the brooder that can be successfully raised with the HSP process. The point of all this, however, is to enable parent-fledging. Conviction won out, and the hatchling – well rested and Pedialytehydrated for 12 hours – was swapped out for the dummy egg, once again with the parents unaware of the switch.

Perhaps the most nerve-jangling aspect of the rehab plan came next; not looking in the nest box until the next regular 24-hour inspection. A long-day's night seemed like a week, but finally it came time to check. A beautiful, full hatchling was propped up on the two dummy eggs.

The plan had worked. Step One of our parentfledging rehab experiment was a success. The first of the two HSP birds, now lives in Colorado with Gabriele Alexander and works to educate people about Blue-throated macaws and the Blues Conservatory. The second one visits schools in New Mexico as part of Carolyn Newell's "Exotics of the Rainforest" education program.

The third chick stayed with her parents for almost a year. The plan had been to leave her indefinitely so she could observe the parents raising the next clutch. That part of the plan did not work. As breeding season approached, the male parent started chasing the juvenile away from the protected nest box area of the habitat. She was moved into the conspecific flocking cage where she would later select a mate.