Commercial Member Veterinarians

Arizona

North Central Animal Hospital Hillary Frank, DVM Phoenix (602) 395-9773

California

The Animal Hospital & Bird Clinic Daphne Hill, DVM Fresno (559) 227-5575

> Drury Reavill, DVM Citrus Heights (916) 725-5100

Maryland

Pulaski Veterinarian Clinic William Boyd, DVM DEPPL, ABVP Baltimore (410) 686-6310

New Jersey

Ridgewood Veterinarian Hospital Dean J. Cerf, DVM Ridgewood (201) 447-6000

New York

Broadway Veterinary Clinic Dr. Laura Wade Lancaster (716) 681-4440

Ohio

Avian Health Clinic Ram Mohan, DVM, PhD Reynoldsburg (614) 755-2273

Tennessee

Collierville Animal Clinic PC Shannon B Mcgee, DVM Collierville (901) 853-8519

Virginia

Potomac Valley Veterinary Hospital Rose Ann M Fiskett, VMD Fairfax (703) 425-7387

Bronze Corporate Sponsor Mazuri The Exotic Animal Feeding Resource

Charter Life Members Gerald and Elizabeth Jennings

Honorary Life Members Robert J. Berry Les Gonda Frank and Mary Kozeluh Wayne E. Smyth

Peregrine Fund

Founders Tom J. Cade, Ph.D. William J. Burnham, Ph.D. Frank M. Bond Robert B. Berry James Weaver

Life Members

Laurie Baker Laura Barwick Marion Beal Diane Martin Bock Susan Boyer Sandi & Martin Brennan Yvonne Catena Janis & Jeff Clark Jim Cobb Bill & Delia Colman Linda L. Compton Belkys Coulter Carmen Daily Delma F. Dickerman Leon Dunlap Bill & Wanda Elder Rev. Susan Kay Ferguson Sharon Garsee Beth & Dwight Greenberg Earl Haga Mark Hagen Lynn Hall Robert Hansard Robert Harrison Sandra Jarmuth Marilyn & Jim Hawley Don Hedstrom Jonathan Higbee Barbara Hill Veta & Bob Hollaway Diana Holloway Jeff Humphries

Sally & Vince Huntington Sandra Jarmuth Melinda Julbert Mitsuo Kuribara Danny Large Tiffany Latino Mary Ellen & Jim Le Page Ralph Lima Perry Little Felicia Lovelett Donna Mallory-Field Ingr Mansoor Thomas C. Marshall Shirley Marshall Douglas L. Martin Noella and Dan McCormic Lisa McManus Keith Mooney Nicholas Mooney Julie Weiss Murad Esther & Ken Ohta Milly Olson Marion Packer Sneha Panholzer David Pesec Louis B. Pieper, Jr., DVM Brenda Piper Luanne Porter Richard Porter, MD Larry & Gayle Saint Cyr Stuart Salenger Mark Sargent Ellen Schrieber, M.D. Katy Secor Nancy Selz Martha Siegrist Kathleen Souter Joe & Nancy Speed Kathleen & J.C. Szabo Michelle Tomerlin Michelle Torrey Richard Towill Dr. & Mrs. Robert G. Travnicek Peter Via Steven & Natalie Weiss Sandra White Laura & Bruce Winter Donald E. & Jan Winter Henry Wojtaniec Gail Worth Jo Anne Wyman

For information regarding Corporate Membership contact the AFA Office • 816-421-2473 • AFAOffice@aol.com



For more testimonials, visit www.kingscages.com



CAGES FOR EVERY BIRD & TO SUIT EVERY NEED Call us today to get the best cages and natural remedies available! Toll-free 866-777-7303 • In NJ 732-698-9800 • Fax 732-698-9806 • www.kingscages.com

Dealer Inquiries Welcome!

375 Old Bridge Turnpike • East Brunswick, New Jersey 08816 • E-mail: kingscages@msn.com

STAINLESS



First F2 produced at BE's Blues Conservatory in 2002 is on left. Her parents were raised by Founder pairs #1 and #3. F1 male on right was raised by Founder pair #2. They chose each other while living in the flock environment.

The plan for the next breeding season utilized the same hatching strategy. However, this time the plan was to put two hatchlings back into the nest. After the experience of raising one offspring, it was hoped they would be ready for a try at two. Remember, the goal was for them eventually to be able to rear naturally, without human intervention.

In 2001, they laid three fertile eggs. Two were going back into the nest. Instead of raising the third by HSP, serendipity presented an opportunity to parent-fledge it. The surviving female from the successful Founder Pair No. 1 laid eggs on the same schedule. Of course, they were infertile.

A decision was made; one of the rehab pair's fertile eggs was removed and replaced with a dummy. The fertile was swapped for one of the infertile eggs in the lone female's nest. The widow bird then hatched and raised the chick alone until well after it fledged.

Meanwhile, the plans for Founder Pair No. 2 proceeded like clockwork. They successfully raised a male and female, who remained with them as a family unit for a year.

As the 2002 season approached, parental attitude signaled that it was time to remove the yearlings. They were relocated

to the flock habitat, where they were joined by their biological clutchmate. Probably just coincidence, but they accepted each other immediately.

In July, the next phase of rehab was initiated when the pair laid three eggs. After two years of successfully fledging – first one and then two – it was time to see how successful the rehab had been. Unfortunately, it was back to square one. The first hatchling was found dead and mutilated. Egg number two was clear and the third was dead in shell.

They recycled. The rehab program was reactivated. Two hatchlings were successfully returned to the nest. This time, however, the parents stopped feeding the older one after about six weeks. It was pulled and handfed. The second one fledged in the parent habitat.

June 2003, the rehab routine was repeated and two chicks were put back into the nest. Nine days later the older one was found dead. Necropsy indicated an accidental death because it had food in its crop and appeared otherwise healthy.

Soon thereafter chick number two had to be pulled when the parents were upset by the direct blow of Hurricane Claudette. The pair had survived the 1992 devastation from Hurricane Andrew in South Florida.

They recycled and had two more chicks in mid-September. Those had to be removed from the nest in less than a week. The chicks were fed but were found chilled and over-preened.

That episode had positive consequences. Bird Endowment forged an exclusive arrangement for Wendy Craig to take our failed attempts at parent rearing and hand feed them into special pet birds. The chicks are banded with Bird Endowment bands and recorded in the studbook as coming from our facility for bloodline purposes. Wendy's Parrots is located near Dallas/Ft. Worth.

In 2004, the Proto '97 outdoor flight was retrofitted with a cage wire skin because of concern that wild birds were disturbing the BTMs. The wild birds were able to enter through the original 2 by 4 inch openings. The cage wire skin has 1 by 1 openings to keep out unwanted visitors. Founder Pair No. 2 produced three chicks that summer. Unfortunately they hatched a few days before the AFA convention in San Francisco. The only keeper skilled in this procedure was to operate the Bird Endowment booth at the convention. The risk putting any back into the nest was determined too great with the circumstances. The chicks went to Wendy. These would be the last offspring of Founder Pair No. 2.

In a monumental loss to Bird Endowment and the conservation of Blue-throated macaws in general, both of these important birds died within several months of each other early in 2005.

The female died of chronic renal failure which was suggested to be old-age related. The male died just months later from what was presented by an ABVP diplomate as a benign medical procedure.

They are the most represented bloodline in The Blues Conservatory's program.

As mentioned earlier, in 2001, Bird Endowment acquired a third Founder pair with a grant that included funds to build the second free-standing, permanent-quarantine habitat for the pair. The building is similar to Proto '97. Overall it is eight feet wide by eight feet high by 28 feet long, all standing six feet above ground. This pretty much puts them up in the trees, about 200 feet from their nearest macaw neighbor. As compared to Proto

'97, there were size reductions in both the outdoor flight area and in the indoor protected nest box area. Some of this was driven by cost savings, but approved only because of observations on usage made in Proto '97.

Founder Pair No. 3 appeared pleased with the new arrangement. In late November, very dark droppings were noticed. The female was taken to Dr. David Phalen and his Texas A&M team. A multi-disciplined team of practitioners, researchers, and professors worked with her for three long weeks. Over protestations of the genetic value of this individual bird, Dr. Phalen's position became that the only humane course was euthanasia. Necropsy determined stomach cancer.

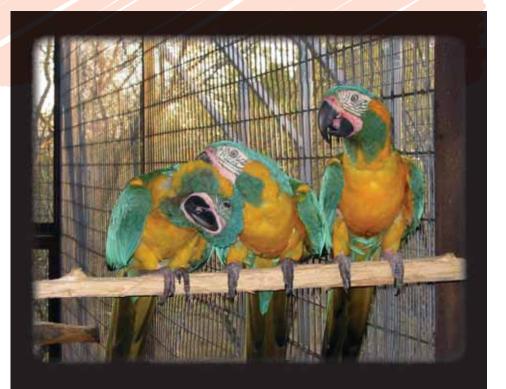
This was another devastating loss, both financially and emotionally. The silver lining in this dark cloud was that the survivor was a male. There was still the surviving female from Founder Pair No. 1. In February 2002, that female joined the male from Founder Pair No. 3 in the Broillet Aviary and they became Founder Pair No. 4.

They had two perfect hatchlings in July, but both were later partially mutilated and could not survive. A raccoon had been noted in the area. Suspecting that may have triggered the mutilation, it was trapped.

In 2003, the same problem occurred. There was no raccoon. There was no nest mutilation in the female's history. The problem had to be the male.

The habitat was modified before their next clutch in June. The objective was to give the adult birds as much interaction as possible but to restrict the male's access to the nest box. The decision was to restrict the male to the outside flight and keep the female in the protected inside cage with the nest box.

A weather covering was added atop the flight and an additional feeding station served the flight area but was serviceable from the keeper space inside the protected area. The pair laid a clutch of eggs. The male was left inside until just before hatch time. He was lured into the flight and the door between the two areas was closed and secured.



Wild-caught male on right stands guard while wild-caught female preens their male offspring.

The female hatched two eggs, but the second nestling dies the day after hatching; probably more than the hen could handle alone.

Shortly, a flaw in the plan became apparent. It was the separating door between the inside, protected area with the nest box with the female, and the flight with the male. It had a solid metal skin, which was designed to be closed only in case of extra cold weather. It made the interior extremely hot in July and August. A pedestal fan was placed in the keeper aisle aimed at the nest box. Something more was needed. The solid metal nest box inspection door was replaced with a wire barrier. That did the trick for reducing heat in the nest box.

Since the male had been able to hear, communicate and watch somewhat all along, he probably recognized the young bird as his offspring.

The next step about five months after the hatch was to open the separating door where all could be rejoined. It was hoped they would be okay as a family until the next breeding season.

However, the separated pair was so thrilled being reunited that they were not paying attention to the fledgling. In fact, the male was scaring her away from the hen as he monopolized his mate's attention.

Almost immediately the fledgling was removed and placed with a special nanny BTM, who was HSP raised, is tame with the keeper, and gets along well with all the birds. It is a transition for birds going from the parents' cage into the flock habitat.

A decision was made to modify the Broillet Aviary before 2004 hatching time. As previously mentioned, the solid metal door which separated the two areas made it very hot inside during the summer months. The metal skin was removed and the door frame was covered with 1x2 cage wire. It made a huge difference. Not only was the temperature more comfortable, the isolation factor was addressed as well.

In 2003 Bogie was only able to see inside from the door at the end of the keeper aisle where his feeding station was mounted. A large portion of the indoor cage could not be viewed and he could only see the back side of the nest box.

The closest the hen could get to him was the cage wall which runs perpendicular to his door. She spent a lot of time sitting on the end of the perch there.

There was much less anxiety in 2004 when the male was locked outside in the flight. With the new wire

door, he could view the entire indoor area and watch every move his mate made. They were able to interact through the door as well.

It is typical for the Blue-throated male to guard the nest hole. Even though this male could not perch right outside of it, he could sit just outside the wire door and monitor activities inside. Also, when the hen was incubating eggs or brooding chicks, she could look out the nest hole and see the male protecting the building. She spent more time in the nest than the previous year.

On June 4, the first egg hatched and the hatchling was well fed. On June 5 number two hatched. This was a breakthrough because the hen continued to care for the first one and fed the new hatchling for two days. As soon as it became evident the hen was focusing on the first hatchling, the second chick was pulled. It went to Wendy Craig (under the previously explained arrangement) to become someone's pet.

The hen did a fantastic job raising the number one 2004 hatchling, which left the nest for the first time when she was 3 months old. She was fascinated with the male and spent a lot of time interacting with him. Sometimes the whole family-group would hang on the wire door together.

Other times they would bring food from their bowls and eat it in front of each other. It appeared that the male was teaching the fledgling how to fly from perch to perch and land properly, even though they were separated. The hen rarely flies but the male is an ace. When the fledgling made clumsy attempts, the male parent would fly away from the door and then circle back to land right in front of her. It was a joy to watch their training exercises.

Mid December, the wire door separating the two areas was opened. It was funny because immediately the hen and fledgling rushed outside where the male had been and he hurried inside to the area from which he had been excluded. The fledgling flew several laps around the flight until winded. Finally all three gathered together, rather nonchalantly.

This 2004 success was due to a couple of things. Foremost, was the alteration made in their environment? Granted, it isn't an ideal situation to start with. But if the male must be locked out in order to achieve one parent-reared offspring per year, there now is a model that works.

The fledgling remained with her parents until just shy of her first birthday. She was removed in May 2005 and

the nanny was employed to perform her usual routine prior to making a transition into the flock.

Founder Pair No. 4 laid eggs in June and just before hatch time the male was locked out in the flight.

One egg hatched on July 12. The hen did a fantastic solo job again. She was helped as usual by the keeper supplying food in the nest so she could focus her energy on feeding the chick.

This time the hen was feeding the chick often but this was a big boy. The keeper worried about the hen being old and thin and didn't want her to be stressed. So at age 6 weeks, supplemental feedings were begun in the nest. The hen was locked out and the chick was fed through the inspection door. At first she was anxious about what was going on and frantically chewed on the lock-out door. So one time the chick was placed in a tub with the keeper sitting on the floor next to the cage. The hen could watch the chick being fed. The chick was placed back in the nest. When the hen was let back into the nest she found him full and sleepy. After that she almost seemed relieved and when locked out she either went to the food bowls or to visit with her mate at the wire door.

A 60 cc syringe was prepared with a mix of food similar to what she fed him – ground pellets, nuts and sweet potato cooked with water into thick warm mush. He took right to the routine. Paper towels protected the shavings to prevent leaving a mess. He allowed food to be slowly squirted into his beak. This continued once a day for eight weeks. The volume was gradually tapered off until he was eating on his own and no longer wanted the supplemental support.

The chick wanted the food but did not want to be handled. That was fine since the objective was merely to assure that his nutritional needs were met in order for him to grow up strong and healthy without being too much of a burden on his single parent. He quickly learned how to cooperate. His beak could be wiped very quickly afterward, but only as long as that was the only touching.

In case you may be wondering whether hand-feeding results in tame chicks, think again. The feeding itself is only part of the equation. Cuddly pets are that way because of the attention they receive from humans according to Laney Rickman.

After the fledgling was flying well enough to get around indoors and eating pretty well on his own, the familygroup was united. All three adjusted as if they were never separated. The male was so happy to be with his mate again. She was happy to be with him too, and also delighted to be able to go outdoors again.

The best news is that the male was a very attentive father. It was as if he felt it was his turn to take care of the offspring.

The future of Blue-throated macaws as a continuing, viable species most likely will be determined by the success of parent-rearing in captivity.

Much work remains to be done to assure the BTM's survival even in captivity. Successful F2 - second generation - parent hatchings of this species have been very limited.

The first F2 success Bird Endowment is aware of was in 2000 at The Houston Zoo. Their F1 male spent some time with his parents. Their F1 female was fully parentreared at the St. Catherine's facility. Their first F2 male remained with his parents almost a year. That bird is now at The Blues Conservatory. He and a female raised by Founder Pair No. 1 selected each other while living in the flock during 2001 and now have their own breeding habitat.

The Houston Zoo pair raised two other offspring in 2001, but the mother died when the chicks were about eight months old. However, the offspring remained with the father until July 2002. The F2 male went to St. Catherine's. The F2 female is now at The Blues Conservatory. She and her older male sibling are important additions to the Saving the Blues breeding program because of their learned behavior and their excellent potential.

The next milestone in the Saving the Blues program occurred in the spring of 2002. A female raised by Founder Pair No. 1 and a male from Founder Pair No. 3 produced The Blues Conservatory's first F2 chicks.

For being young and inexperienced, they did a great job. The chick was always fed abundantly. However, the second one hatched three days later and the parents seemed unable on this first attempt to consistently feed more than the first chick.

Assisted nest box feeding was attempted, followed by pulling and feeding over night and placing it back in the nest early the next morning - every trick known to the keepers and others contacted for advice.

Finally, the second chick was fostered to a Scarlet hen. Her own eggs were starting to hatch but she managed to feed the BTM and her own three for three weeks.



Founder pair #4, by indoor area, watches their seven month old offspring practice her landing skills in outdoor flight of their 8' x 8' x 28' habitat.

The keeper weaned the BTM. She now accompanies Diane Bock in California to educational events to teach about the importance of preserving endangered species.

The first F2 hatch at The Blues Conservatory, moved in with the young flock for a while and then selected an F1 male raised by Founder Pair No. 2 as her mate. They now have their own breeding cage.

In February 2003, the same F1 pair produced two more chicks. A male from this clutch is now paired with the F2 female from Houston Zoo. High hopes are riding on this pair as The Blues Conservatory works to facilitate the hatching of F3 offspring.

An additional F1 pair with very promising potential is another male from Founder Pair No. 3 and his mate, the first offspring of Founder Pair No. 2 that was parent-fledged at The Blues Conservatory. They selected each other while living in the flock environment during 2001. In 2002 they moved into their own habitat. The flock of conspecifics is a socializing effort. The young birds have an opportunity to learn from their peers even as they start pairing up. The size has varied from 7 to 3 birds depending on various situations.

Current flock members include the nanny, a female from Founder Pair No. 4, and an unrelated nine-year-old hen that had been paired with a 10-year-old male raised by Founder Pair No.1. After years together it became apparent that they wanted a divorce. So in spring 2005 this hen moved into the flock and a Founder Pair No. 2 female left the flock and moved in with the older male. This F1 pair also has excellent potential.

Another female offspring (2002 hatch) from Founder Pair No. 2. chose a male raised by a wild-caught pair in 2004 at Wendy's Parrots. He is a new bloodline for The Blues Conservatory. They chose each other in the flock and later moved into their own breeding habitat adjacent to the flock.

Fighting the odds on the old Founder BTMs and shepherding the offspring through the long nonproductive years is a challenge for Bird Endowment's executive director Laney Rickman, who also functions as The Blues Conservatory's primary keeper.

When she is asked why she seems to think that it is her personal mission in life to save the Bluethroated macaws, she recalls Eric Clapton.

Eric was on the Scorsese PBS documentary series about The Blues music. Eric said his mission in life became saving the Blues in its purist form.

"Why you?" he was asked.

Eric answered with words that Laney says would be identical to her own, "I don't know. But if I don't do it, who will?" ■