**AFA Visits . . .**

**The Macaw Project**

**Aviaries of Nancy & Benny Gallaway**

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This issue of *Watchbird* focuses on building an aviary for commonly kept birds. In the narrowest sense, an aviary is the structure that encloses birds. I prefer to use the broader definition, however, in which “aviary” is much more than a frame covered with wire. It is a very complex combination of property, enclosures, birds, caretakers and an established regimen for feeding, watering, propagating, raising young, weaning, etc., etc. An aviary is not built overnight and it initially sucks money out of your pocket like a hungry vacuum cleaner. Believe me!

With the nomenclature taken care of, I’d like to share a 10 year experience I’ve had watching an aviary (in the fullest meaning of the word) develop. The first chapter appeared in the Aug/Sept 1984 *Watchbird* under “AFA Visits...” but the condensed version is as follows.

It began in April 1983. Dr. Benny Gallaway and his wife Nancy (neither of whom had owned a bird before) anxiously awaited the first birds ever to be put into their care. They had gotten a number of parlor-type bird cages from the local pet store, had a couple of grocery bags of apples and even had a 50 lb. bag of commercial bird seed. All was ready in the garage.

At 11:00 p.m., the truck arrived and unloaded 126 huge macaws. Viola! The aviary was born. Dear friends, even now, 11 years later, one can still see the indelibly etched lines of panic on Benny Gallaway’s face.

By the time I arrived, about a year later, the Gallaways had regained some of their balance, had designed and built some good breeding and holding cages and had gotten Robert J. Berry (then Curator of Birds at Houston Zoological Gardens) to serve as advisor. Bob Berry got the Macaw Project (the official name of this new aviary) on track and the Gallaways began learning about macaws at an accelerated pace.

I have kept in touch with the Macaw Project (now also known as the Nancy and Benny Gallaway Aviaries) over the years and feel it is time for another “AFA Visits.”

The Macaw Project is located on a wooded 45 acre tract near Bryan/College Station, Texas. It is privately owned but the birds are available to the Texas A&M University’s College of Veterinary Medicine for study and health research.

As its name implies, the Macaw Project focuses on macaws. At my July 1994 visit, it held 10 of the 17 existing species of macaws including Green-winged, Scarlet, Blue and Gold, Hyacinth, Bolivian Military, Red-fronted, Blue-throated (Caninde), Illiger’s, Severo and Yellow-collared Macaws. The 11 years of development have resulted in an outstanding bird farm with a large number of extremely well designed and built aviaries spread out over several acres, usually in the shade of the large trees that cover the grounds. I got the sense of walking through the woods and coming upon banks of breeding cages in this clearing and that glen. The effect is very pleasing. I didn’t ask, but the investment has had to have been enormous.

Not far from the house is the aviary’s operations center, a 2,400 square foot, climate controlled building that is divided into three main parts — a modern food preparation and storage area with lots of stainless steel and refrigeration; an all-important isolation/quarantine area served by its own entrance and with shower facilities; and a 1,600 square foot bird-holding area. Because the Macaw Project is essentially a closed aviary, i.e., new birds are not constantly entering and leaving the facility, the quarantine facility isn’t often used — but it’s available if necessary.

The nursery is a 1,200 square foot, climate controlled brick building attached to the Gallaway home but separated by the garage (not the same garage where this all started — the whole project was relocated and rebuilt on this 45 acres of woods). The nursery is completely self-contained with the kitchen and bath being central. There are two connected brooding rooms and one larger socialization room where fledged youngsters can fly around and learn to be birds.

Because Dr. Gallaway’s work as a wildlife biologist and president of several companies occupies much of his time, Nancy Gallaway is, in effect, the manager of the aviary. She has become a master aviculturist and an extremely good handfeeder of baby macaws. In principle, she prefers that the parent birds feed their own babies for 10 days or so but there has been many a time when she has had to pull a baby the first day. No eggs are pulled for artificial incubation but occasionally eggs are switched around and put under foster birds.

Originally, Nancy Gallaway made her own baby formula but she now uses KT Exact, a commercially available powdered product that is mixed with water. She augments the formula with vitamins, minerals, calcium and vegetable oil and the macaws do very well on it. Nancy has outstanding growth success using the KT Exact and it stores well, is easy and quick to prepare — an important matter when there could be 20 to 40 babies to feed at once.

The Macaw Project babies are fed with syringes rather than spoons or gavage needles. It seems to be quicker and more natural. Nancy prefers to feed smaller amounts more often rather than to really stuff the babies and feed less often. In the end, both methods seem to bring the babies to
Individual cage units of Flight C measure 6 ft. wide x 6 ft. tall x 8 ft. long. Metal panels provide visual separation from other pairs. Nest boxes are suspended inside the cage at the back corner.

The standard breeding cage design at the Macaw Project is called the "condo," short for condominium. The suspended cages are of galvanized steel and 1", 10-gauge chain link wire construction measuring 6 ft. tall, 12 ft. long and 6 ft. wide. The back 4 ft. is covered by exterior metal shelter area and the entire cage is roofed. Inside the cage, an "L" shaped aluminum partition and Dutch doors are used to subdivide a safety-cage entry area at the back of the structure.

Flight "D" is of steel and wire-mesh construction, partially covered by an awning roof. The flight is located in a secluded area to be used for shy pairs such as the Red-fronted and Caninde Macaws.

One of Dr. Gallaway's companies (LGL Animal Care Products, Inc.) manufactures cages for zoos and the primate research industry. Shown here is a Rhesus Monkey cage design which also serves well as a breeding cage for Hyacinth Macaws. The cage, called the penthouse, is 12 ft. tall with an octagon floor plan. Construction material is a research-grade aluminum alloy.

Dr. Gallaway provides a toast to Ralph and Alph, residents of the penthouse. Alph is a male on breeding loan from the Riverbank Zoo. Safety cage entry and feeding area is at lower left, on top of which sits the nest box. Nest box can be inspected and entered from the outside of the cage. Plastic panels provide shade and protection from inclement weather.
The four-foot-wide aisle in Flight C provides a safety cage area for feeding and inspection of the nest boxes. Nancy shows the assortment of fresh fruit and seed/feed mix fed daily.

Flight "D" at the Macaw Project houses three suspended "apartment" cages designed to house the intermediate-sized Red-fronted Macaws. At present, they are being used to house young, bonded pairs of large macaws awaiting construction of new condos. These cages are 4 ft. wide x 8 ft. long x 4 ft. tall and are of aluminum rod and polypropylene plastic construction. Entry and feeding doors are on the side with a nest box attached to the back.

Nancy and Benny Gallaway check up on two Hyacinth and two Blue and Gold babies that were hatched in Flight C during the July visit.

Entry and feeding doors of the "apartment" cages in Flight D. The swivel feeding door enables protection to the caretaker.
their proper weight but the babies at the Macaw Project seem to have fewer problems when fed more often. Nancy told me she had not lost a baby bird for the past seven years — and I truly believed her.

The operations center and the nursery are fairly close to the main house. The aviaries, however, are found in integrated complexes that are scattered about the grounds. They are all within an easy walk in the woods. There are two 1,000 square foot, roofed buildings made of steel and welded wire that serve as safety cages and shelter. Each building contains 12 walk-in aviaries that are 4' wide x 8' long x 6' high. These are some of the earliest cages built and are now used primarily to breed the smaller macaws and as holding pens for sub-adult pairs in the bonding process. The cages are on concrete slabs, sloped to facilitate hosing down.

Down the path a bit is a 600 square foot building that is elevated four feet or so above ground. It is entered via a stairway. The building is roofed and shelters 10 large breeding units, five on each side of the center aisle. The feeding and nest observation are done from the aisle.

Around the corner, one finds a smaller roofed building (500 square feet) that contains three suspended breeding units reserved for Red-fronted Macaws.

Then, on the return path, rather near the operations center, there are 10 free-standing, elevated breeding cages of most excellent design. Each cage has about 70 square feet of floor space, and the top of the flights are from 9 to 12 feet above ground. The nesting areas are very spacious and secure. I got the feeling that the birds were extremely happy in these units and their breeding records seem to bear that out.

At one end of the row of the above units is the pièce de résistance, the showpiece of the place. This exhibition cage is made of a stainless aluminum alloy, is 12' tall with a floor space of over 100 square feet. It contains a marvelously designed nest box and provides lots of room for the resident Hyacinth Macaws to fly up, down and round and round. I was present when the birds were first released into the cage. They took to it instantly, entered the nest box almost immediately and became very possessive within hours. It is the most extraordinary bird cage I've ever seen. You can order one just like it for a mere $15,000. Just contact the Macaw Project; they'll make arrangements.

The above described enclosures have been built over a period of 11 years. Some of the earliest cages have been abandoned as unsuitable, while other early models are still serving well. Newer designs show constant improvement, however, regarding feeding and watering convenience, security and enhanced environmental conditions for macaws. Dr. Gallaway pointed out a number of improvements yet to be made. His mind is creative and I'm sure he'll be experimenting with innovations and inventions until he, himself, goes to the big cage in the sky. This is a disease that afflicts certain aviculturists.

The sole purpose for all these enclosures is, of course, to contain the birds. For 11 years, the colony has been sorted, re-sorted, shaken down, culled and formed to finally reach some stability in its present makeup. There are 19 breeding pairs which form the foundation stock. These pairs produce over 50 babies each year, from which another 17 pairs of unrelated birds have been held back for future breeding.

The breeding emphasis has been on Green-winged Macaws, partly because 11 years ago few people were successfully breeding the species and also because there is something about the Macaw Project that is conducive to breeding Green-wingeds.

The other species are kept and bred for a variety of reasons including marketing for income to help fund the project, as well as for teaching and genetic research studies. The goal is to maintain a minimum of three pairs of each species other than the Green-wingeds.

One blessing in specializing in one group of birds — macaws, in this case — is that, generally, all the birds eat the same diet. The basic food used at the Macaw Project is a commercial, large-parrot seed mix manufactured by L/M Animal Farms. To it is added monkey chow and high protein dog food as well as assorted nuts (walnuts, almonds, Brazil nuts, pecans, etc.). The seed and nut mixture is supplemented with daily (or every second day) feedings of various fruits including apples, oranges, bananas, grapes and cherries. Broccoli, beets, celery and carrots are also fed on a regular schedule. The exact combination of these ingredients vary according to the species and even certain individual birds. The Hyacinths, for instance, get fresh coconut and a higher percentage of large nuts than the other species.

The entire property is fenced and cross-fenced. There are about six or seven very ugly dogs that have run of the place and provide excellent security. All of the birds are high enough off the ground and secure enough in their enclosures that the dogs don't seem to bother them. There is much more work than Nancy Gallaway can do alone so there is an excellent hired crew. Also living on the grounds are a daughter and son-in-law who are very skillful working with the birds and absorbing some of the work during peak seasons.

During the past 11 years, the Gallaways have had a chance to really think about aviculture and why they're involved. Their objectives include:

• to successfully propagate macaws in a profitable manner, adhering to and improving professional standards for the industry.

• to provide a teaching and research resource to the Veterinary College of Texas A&M University.

• to contribute in a meaningful way to the conservation of wild macaw populations.

• to develop genetic-based management plans for domestic/captive and wild populations of macaws.

These are lofty objectives but I believe that the Macaw Project is very serious about them and will eventually realize all four. Indeed, I've never seen an aviary that held higher professional standards. The Gallaways are involved in the Model Aviculture Program, are in the process of getting their birds registered in the AFA Exotic Bird Registry and have contributed time and money to the AFA Recovery and Management Plan for the Red-fronted Macaw — a project that really excites me.

In my editorial in this issue, I said the times are a-changin'. In aviculture, the change is in the direction that the Gallaways have taken. The Macaw Project is an outstanding aviary in the fullest sense of the word — an aviary to be emulated.