# Exotic Birds Survive Hurricane INIKI 

by Patrick Shawn Dunn Weimar, California

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## The Warning

t was 5:30 A.m. September 11th on the third day of shooting on the set of Steven Spielberg's Jurassic Park. As the first Civil Defense sirens sounded throughout the island everyone knew this was for real.

Prop master Jerry Moss gave the signal to break set. Crews scrambled at three locations, including one very remote accessible only by helicopter. I released 70 doves and set out to finish securing my own bird collection with my wife Mary at home and then to the Zoo to do the same in the seven or so hours we had remaining before this Hurricane "Iniki" would collide with our little island of Kaua'i.

Most Hawaiian hurricanes parallel the island chain coming up from the south where they almost always head directly for the big island before they veer to pass Oahu and Maui but as this one approached Kaua'i it suddenly turned sharply right and headed directly for the island. Although we had been preparing for several days, it was only a few hours away so we had to make the best possible use of the time


A bank of suspended aviaries separated by lush foliage (before burricane).
we had remaining.

## Preparing

## The Bird Farm

Mary and I had been up all night building and organizing crates and securing materials and holding area for the 200 or so birds on our farm. Our operation would be based out of a 600 square foot hurricane resistant building bolted to a cement slab with double-truss roof and hurricane clips created for this purpose.

We decided we would wait until this time to catch up the collection. We managed to get every bird contained without incident and positioned each crate the safest way we could. This was stressful for the birds that had not been caught-up since the last hurricane 10 years ago.

It was 9:00 A.m. now though the sky was very dark and the atmosphere was


The suspended aviaries bcfore the burricane.
completely still. I had to leave for the Kaua'i Lagoons Zoological Gardens (where I served as zoological director) while Mary continued to work steadily throughout the morning in the brooder, incubator room, house, and bird holding building.

## Kaua'i Lagoons Zoo

The National Guard was already attempting to control the streets. I had to make sure if I went through they would let me back through to get home. A military officer said I had three hours to do what I had to do. I had eight miles to go, when I finally arrived, keepers knew the job we where about to face was going to be delicate, but also must be done quickly. The animal inventory is exhibited on seven islands within a 50 -acre lagoon so all of our work would be done by boat.

During the architectural planning of the Zoo in 1986 I designed underground shelters below the water surface with independent water and lighting systems on each island. In very natural settings, compatible animal and bird species roam freely as visitors cruise the mile of waterways in handcrafted Italian Venetian launches, for a 45-minute narrated tour. There are some 260 Zoo animals and birds throughout as well as 10 miles of carriage and footpaths.

We shifted all the animals we could into their holding areas, transported two of our four llamas who would ride the boat from their exhibit to our stables where I am also responsible for forty head of Clydesdale, Belgian and


The destroyed aviaries with the totalled house in the background - not a pretty picture.

Percheron draft horses.
We used the Llama shelter on isle \# 6 to contain our group of 40 Chilean Flamingos. Kangaroos were locked underground, Wallabys were caught up and stored in my office that has block wall construction. I felt gazelles were better off out in their 1-acre exhibit, also shared by Grant's Zebra, Ostriches, and Tortoises. The Colobus monkey group couldn't be captured or shifted, they ultimately would end up riding out the storm in the crowns of seventy-foot coconut palms. Waterfowl would have to fend for itself.

Between my bird farm and the Zoo we have 30 cranes of four species. Many were caught up and at least three pair were on eggs including a
pair of Sarus - hopefully this would keep them on the ground.

## The Hurricane

At last report the outside of the storm was only one hundred miles off the coast and heading for landfall on the west side of the island. This system was 250 miles wide with an eye 20 miles across, winds sustained were 150 mph and gusting to 160 to 170 mph our island was only 35 miles across.

The eye would pass directly over us. The zoo is located on 800 acres on the east side of the island. Security wanted all persons out by 11:00 A.m. We kept in close radio contact so no one would be locked in. The staff and I double-checked what we had done,


The suspended aviaries after the burricane.
wished each other luck and headed for our homes.

## Fighting Back

I arrived home at 11:45 and reviewed things with my wife. We felt we had done all we could. Would the building hold? We waited. By 1:00 P.m. the first winds picked up; they were right at 80 mph . At 1:20 we witnessed our first aviary tumble then another and another. Trees began snapping and our house began to shake. We watched our bird building closely; the wind was over 100 mph now and suddenly one of the two 10 -foot doors flew open slapping back and forth wildly against the building. Then the other door! Our hearts sank as we watched the first Vari Kennel being pulled out!

We looked at each other and without decision flew down the stairs running together the 60 or so yards to the building, with debris flying all around us we barely made it inside, we quickly began trying to close the heavy doors. I could not get a good hold on the door to nail it closed. Mary tried to hold the door as I hammered twentypenny spikes anywhere I could.

The inside of the doors had a wide bookshelf on it with $90^{\circ}$ shelf brackets that thrashed at Mary like large knives as the opposite door slammed closed then open. One bracket narrowly missed impaling her in the chest while another deeply punctured her palm. We could barely communicate now, as 60 macaws screamed and clouds of wood chips, glass, and debris flew all about the building.

Then the front door flew open filling the building with wind blowing out all the windows. I wildly hammered two spikes into the front door, ran to the bathroom, ripped off the door and nailed it across the main large window then crawled to Mary. It seemed impossible to keep the crates still; we began stacking them on top of one another in the bathroom, then resumed trying to nail the large doors shut.

The roar was so loud we could not hear ourselves. It sounded as though an army of helicopter were right outside. I peeked out a window facing the aviaries and saw a tornado about two hundred or more feet high coming right
at the bird building! I yelled at Mary to jump in the bathtub shower and I dropped to the floor. The whole building wrenched and twisted in' and out. Now I really felt any second it was going to give and that this may be the end for the birds and us. Over and over we screamed for the wind to stop .

The building held as the tornado passed but still moaned. It had only been one hour; we were not even experiencing the peak yet! We decided at that point to go back to the house in between gusts, we were afraid to cross the property again, but we knew the house with its 12 inch by 12 inch beams and poles bolted was safer. We raced for our house.

Between the time we left our house and the short time we were gone to the bird room, my neighbor's second story building, some 150 yards away was swept up and over our bird building and across our property landing in the middle of our living room exactly where we had been standing!

With two thousand square feet of roof gone, we found later that half of it traveled over 200 yards to destroy my neighbors garage, up near the main road.

Caught in the middle of our farm with nowhere to go, we hurried to the laundry room, there we were protected by two walls, a double set of 4 inch by 14 inch stair stringers and appliances. We remained there for two and halfhours. I could see a Rhea across the pasture crouched near an orange tree.

It seemed like it would never stop, between the blasts of material and powerful wind gusts I would peer out to see if the bird building was still there. Suddenly a large wooden pallet flew by! Our ears constantly pop. Huge pieces of lumber $4 \times 6$ beams, apparently rafters from another roof, kept bombarding our walls, and some came through double walls.

We held each other close and wished for it to stop, we yelled for it to end. Finally it slowed, within minutes it was completely calm. We looked out in awe; we could hear a few birds. Everything else was quite; you could see what was left of our library all about the property. Many first edition and signed rarities. My insect collection, that


The egg collection before the hurricane.


Egg collection after "Iniki." If you look through the boles in the wall you can see the egg collection case serenely in its place without any damage.

I started when I was seven years old, was completely gone from the room that was entirely devoted to it. Rare bird art such as an original John Gould bird of paradise hybrid that had only been described and painted once by him was ruined; it was over 150 years old. A 200-year-old painting of a Black Palm Cockatoo. A 100 species of cowry shells all cataloged and mounted, gone - the same for a cone shell collection.

One amazing sight was our egg collection mounted on a wall in an oak case. It had not moved and neither had any of its contents! It was an amazing sight considering the state of the house that surrounded it.

## The "Eye"

Soon we could hear a neighbor and his son calling to us across the pasture. They found us only to tell us we were in the "eye" of the storm and that within minutes it was going to come back just as strong only in the opposite direction! They stayed only a few minutes then ran back to their house as the winds picked up once again - it had only been 12 minutes.

We held our dog and retreated back into the laundry room. We lay huddled for the next two hours, every few minutes we would hear loud crashes or what seemed like explosions. I checked each time expecting the bird
building to be gone. This structure had been through hurricane "Iwa" 10 years before but "Iwa" was a force one storm, this storm was a force five, 160170 mph .

## Iniki Passes

With monitored gusts on Mt. Waialeale of over 200 mph (before the station was destroyed) would it hold?

Yes it did! How lucky the birds and we were. Instead of the wind stopping very quickly as it had during the eye, it tapered off over a period of time until it finally ceased. We slowly ventured out, as did others to witness the devastation before us.

## The Aftermath

As we looked around a huge pile of lumber lay only a few feet from a female Sarus Crane incubating two eggs, her male lying nearby - both safe. We could see a crowned crane about 100 yards away with a badly broken leg. Beyond it there is a fourstall horse trailer tangled in chain link fence that isn't mine. Entire banks of aviaries twisted together in large piles, a 50 -foot Royal palm snapped at its crown, farm animals wandering about. Our electric entrance gate smashed, debris piled high against it. Every utility pole on the main road down. A whole line of 6 by 12 heavy gauge suspended chain link aviaries snarled off their foundations.

For those of you who might say (and I have heard from folks) "well the next time you will do things a little differently" I am here to tell you it would not matter how you were set up. A hurricane is a hurricane and until you have been through one or two you will not ever experience such a force.

We have heavy gauge chain link units, concreted in the ground two feet, on six inch diameter galvanized pipe. There was not a single aviary standing out of one hundred after it was over. At least two of the large units traveled over one thousand feet and landed on the main road. Each and every bird would have escaped or more than likely expired if left in its unit.

As we walked through the farm towards our bird building we could
only guess at what was going on inside.

I feel the reason our bird building held and buildings only a short distance away were totally destroyed, was a result of the varying size and number of super-violent tornados and their debris caused by the hurricane. There were many reported.

Even though our entire farm and home were destroyed, without thinking we started immediately to rebuild like ants in a disturbed nest. Our first and most important concern was the birds. We did not go near the house for several days. Birds were in Vari kennels and must be transferred as quickly as possible.

We went to work salvaging cage material and erecting enclosures. Slowly we returned birds to their same location in as close to as possible the same living conditions they had before the storm.

After days of hog ringing and wire twisting our hands were very sore and cut. Help finally arrived! My brother Chuck and good friend Roy Toft from the San Diego Wild Animal Park brought supplies and much needed energy.

Each was amazed they got flights to the island. The military was running operations now and any movement to and from the island was strictly controlled. It was a miracle they got in because no one after them was allowed in. Military transport was the only way on and off the island. The army spent the first two days getting


Patrick Dunn with the Kaua'i Lagoon Zoo in the background.
the tourists out. A large Navy supply ship along with a coast guard ship was stationed off the coast.

The Zoological Gardens borders the airport so we witnessed the activity on a daily basis. Transports of troops, water, fuel, and equipment poured in. Several huge double-rotor helicopters with large cargo nets ferried supplies to and from the harbor at Nawiliwili. Huey and Blackhawk helicopters came in to the coast by the dozen evacuating people from remote areas of the island.

There was no water, no telephones, and no electricity. We used bottled water for the collection at home until we could not get it anymore. We found a faucet at a friend's house that had a large cistern where we were able to fill large trash cans, for almost two weeks. Because all the spare utility poles had been shipped to Florida as a result of hựricane Andrew, only eight days earlier, more had to be created and transported from as far as Canada and Alaska. We were with out electricity for three months. There were 7,000 poles down. It would be a while before we would enjoy something cool to drink. To top this off, one of our pairs of Hyacinth Macaws chewed their way out of the crate they were in and then out of the building.

They were at liberty for nine days and we were very lucky to have recovered them. In this case it took police intervention. Six other birds escaped but were later captured and 10 other birds expired due to post-hurricane stress over a three-month period. Some two dozen chicks from the brooder room also expired.

Although every specimen at the zoo survived, the exhibits were destroyed. The dedication of the animal care staff to show up the next morning - even when some lost their homes - is commendable.

The island recovered slowly. But life in Hawaii has always been slow and not even a hurricane could change that.
[Patrick Dunn and his wife Mary bave relocated and moved their birds to California - opting to take their chances with earthquakes rather than burricanes. SLDJ

