



TOUCANTALK

A Special Report From Miami Metrozoo After the Devastation of Hurricane Andrew

E X T R A



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In the early morning hours of August 24, Hurricane Andrew blasted across the southern tip of Florida unleashing its terrifying fury in what has been called the worst natural disaster in America's history. Eight of us were at the zoo. Seeking safety inside the animal hospital we didn't believe anything could ever equal the terror we felt as the building began to collapse around us. We were wrong.

Our terror turned to anguish as dawn came and we were able to see the full horrifying impact of Andrew's destruction throughout the zoo. Buildings had been demolished, equipment wrecked, food supplies spoiled, enclosures blown apart, trees uprooted and landscaping ravaged. Later we learned that we had been right in the center of the storm's path, suffering a direct hit by winds estimated at more than 200 mph. What we understood at once was that Metrozoo had been devastated. Our situation was so bad that the zoo could never recover without massive relief efforts.

Our losses were staggering. Our aviary was gone, and many of our rare and beautiful birds gone with it. Huge transport trailers were blown a hundred yards into our black rhino enclosures. The animal food preparation facilities were destroyed. Our diagnostic lab and its lifesaving supplies were shattered. The education building, records and equipment were in ruins.

With many millions in damages we had no choice but to close the zoo temporarily and send many of our animals to other zoos for safekeeping. Each day we were closed, however, cost us even more in lost revenues. We could not reopen until we knew that our animals' health and well-being was assured and that all repairs needed to protect and care for them had been made. One hundred and eighteen days later, we are ready to reopen. But our work has just begun.



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Cover photo of Ron Magill and

newborn yellow-backed duiker

"Andrew" by Bill Frakes.

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El Nuevo Herald.

From The Publisher

This special edition of Toucan Talk was prepared to document the effects of Hurricane Andrew and its aftermath. But it is not about terror and devastation at the zoo. It is about the spirit of a remarkable group of people – the employees, volunteers and members of Miami Metrozoo and the Zoological Society of Florida – who, from the moment they emerged from their storm shelters, made the zoo and its living collection their first priority. The fact that so much energy and assistance has come from people whose own homes were lost has strengthened our faith that, together, we can make it through anything.

Without exception the professionals on our staff faced the rescue effort with heroism and sacrifice. More than half of our zoo staff lost their own homes and yet they were here every day, working hard. Because they did not question their duty, because they devoted all the time required to do their jobs, we have a safe and healthy animal collection and are on our way to recovery.

Our volunteers have also proven themselves to be an even stronger, more caring group than we knew. They have demonstrated a willingness to take on the most physically demanding, menial or odious tasks. They will continue to be appreciated in every aspect of our operation.

Zoo members responded to this catastrophe with true pride of ownership. We know from our zip code records that 70 to 75 percent of zoo members lived in areas destroyed by Hurricane Andrew. This did not deter them from calling in to see how we were doing, nor from responding with substantial financial aid over and above membership renewals. It is clear that zoo membership means more than free admission to the park.

Finally, thousands of individuals across the U.S. shared the sadness of our losses. They made their feelings known through unqualified offers of logistical support and contributions of desperately needed funds.

This special edition of Toucan Talk is dedicated to all zoo members, zoological professionals, and wildlife enthusiasts. Its purpose is to document our recovery, to acknowledge our employees and to thank our community, colleagues and the nation for their generous support. We encourage your continued involvement with Miami Metrozoo, a resilient and vital institution that promises to emerge as one of the great wildlife parks of the world.

Glenn W. Ekey
Executive Director
Zoological Society of Florida

Director Ejecutivo
Sociedad Zoológica de la Florida

Esta edición especial de Toucan Talk fue preparada para documentar los efectos del huracán Andrew y sus consecuencias. Pero no se trata del terror y la devastación en el zoológico sino del espíritu de un grupo extraordinario de personas, los empleados, los voluntarios y miembros del Metrozoo de Miami y de la Sociedad Zoológica de la Florida. Para todos ellos el zoológico y su colección de seres vivos pasaron a ser prioritarios desde el momento en que pudieron dejar los sitios donde se refugiaron durante la tormenta. El hecho de que tanta energía y asistencia ha surgido de gente cuyas viviendas fueron destruidas, ha servido para reforzar nuestra fe de que juntos podemos sobrevivir a cualquier cosa.

Sin excepción, los profesionales en nuestro personal enfrentaron los esfuerzos de rescate con heroísmo y sacrificio. Más de la mitad del personal del zoológico perdió sus viviendas y sin embargo, estuvieron aquí cada día, trabajando duro. Debido a que no tuvieron ninguna duda acerca de sus deberes, que dedicaron todo el tiempo requerido para realizar sus trabajos, poseemos una colección de animales a salvo y saludable y estamos en vías de recuperación.

Nuestro voluntarios también han probado ser un grupo inclusive más fuerte y solícito de lo que creíamos. Ellos han demostrado su disposición para realizar las tareas más tediosas, domésticas o físicamente agotadoras, lo cual continuaremos apreciando en cada aspecto de nuestro trabajo.

Los miembros del zoológico respondieron a esta catástrofe con el orgullo de dueños. Sabemos, basándonos en el código postal, que entre el 70 y el 75 por ciento de los miembros del zoológico viven en áreas que fueron destruidas por el ciclón Andrew. Esto no les impidió llamarnos para ver como estábamos ni responder con ayuda financiera considerable, muy por encima de lo requerido para continuar siendo miembros. Está muy claro que la afiliación al zoológico significa mucho más que entrar al parque gratis.

Finalmente, miles de personas en todo E.E.U.U. compartieron la tristeza causada por nuestras pérdidas. Nos han hecho saber sus sentimientos a través de incalificables ofertas de apoyo logístico y contribuciones de fondos que necesitamos desesperadamente.

Esta publicación la dedicamos a todos los miembros del zoológico, a los profesionales de los zoológicos y a los entusiastas por la vida silvestre. Su propósito es documentar nuestra reconstrucción, expresar nuestro reconocimiento a nuestros empleados y voluntarios y agradecer a nuestra comunidad, colegas y al resto de la nación, por su apoyo generoso. Fomentamos la continuación de su compromiso con el Miami Metrozoo, una institución descollante y vital que promete emerger como uno de los grandes parques del mundo para la vida silvestre.

The Night Of The Storm

There are many beautiful evenings in South Florida, but if you were among the employees at Miami Metrozoo on Sunday evening, August 24, 1992 enjoying the balmy, sweet air after a long, strenuous day, and watching the cool pinks and purples of the sky change to deep blue through the silhouettes of palm trees, you would say it was an exceptional evening. Marvelous.

Then you hear a voice on the radio, "Wherever you are right now in South Florida, sit down and take a good look around you and enjoy what you're seeing because it will never look the same again after tonight." The words pierce through your mind. Hurricane Andrew is hovering off the coast, yet everything about your surroundings denies the fact that a menace is just hours away.

You don't even really know what a hurricane is. To you, things that have to do with wind – hurricanes, tornados, twisters – are all the same thing: heavy winds that blow a lot. Your co-workers know better, but at this moment, feelings of well-being and the group's sense of adventure, override seriousness of purpose. Someone runs out to buy refreshments. It's time to party.

You are at the zoo because your house is in an evacuation zone, your spouse and child are out of town and you don't really want to be alone through your first hurricane. Your neighbors have been cavalier, "Oh, aren't you cute taking all this so seriously as new people often do." But something in the headlines has made an impression on you. "Bigger. Stronger. Closer." So you get permission to stay at the zoo with several others who, because of professional duty or personal necessity, will sit a storm vigil there.

Your companions are old hurricane hands. **Bill Zeigler**, the general curator of Metrozoo, has been in South Florida through several hurricanes including a similar night when Hurricane David blew past Crandon Park Zoo on Key Biscayne. Bill's wife **Cindy Zeigler** and three-year-old daughter **Kelsey** are there. Cindy is deputy director of the Zoological Society of Florida and also experienced with tropical storms. Veterinarian **Chriss Miller** says she's a "navy brat" who's no stranger to hurricanes. Security Guards **Lavongia Henry** and **Dan Pearce**, Zoological Supervisors **Mike Gerlach** and **Alice Gilley** and Zoological Society Executive Director **Glenn Ekey** all convey a sense of knowing about hurricanes. You alone are the neophyte.

As the darkness deepens, everyone packs their gear into the zoo hospital, a formidable structure of solid concrete. You put together a makeshift living room with a black and white television as its focus. Each person picks a spot along the wall or in a corner and sets up their own space with cot, sleeping bag, blankets and pillows all soft, warm and secure.

Soon the refreshments are gone, the toddler is asleep, the news reports become monotonous. You are suddenly tired. Without really saying good night, you drift to your cot, tuck yourself in and think back over the events of the day.

You are struck by the fact that preparing for the storm was a very orderly process. The zoo had an excellent plan and everyone went through the plan step-by-step. They seemed to know exactly what to do. Tie down all objects that could become projectiles. Park vehicles on the lee sides of buildings. Gas up trucks and generators. Fill water tanks. Order extra hay and provisions. Lock up large mammals – elephants, rhinos, giraffes, great apes, bears, lions and tigers – in their concrete-reinforced night houses. Move hoofed mammals out of paddocks and into chain link pens.

Continued on the next page



Before Andrew.

Continued from the previous page



Early Sunday you had called to see if they needed any extra hands and were recruited to help move flamingos. This was a new experience for you. The keepers went about their work as if they cleared flamingos from the lake every day of their lives. They stripped down, got into their water gear, corralled the birds along the shore of the lake, caught them up and passed them right along. You shuttled dripping wet flamingos, one under each arm, from the lake into secure spaces such as restrooms bedded with straw. Hundreds of large birds were cornered, caught, carried and crated that way that day.

The whole preparation process seemed to finish up in perfect time. By evening, all animals were in, everything was finished. There was no chaos. One by one, everyone went home, except for the small group, now resting in silence.

You sleep, dreamlessly. And when you wake up, you hear the voices of your comrades. You hear the television. You hear the wind outside. You lie there sorting the wind sound from the other sounds thinking, "Well, this isn't so bad. The wind's blowing out there, but if this it, no big deal." So you get up, pull on your jeans and wander back into the little living room.

Somewhere, there are airplanes up in the sky, sending TV pictures down. You are all watching the edge of the storm touch the land. There is no more doubt about where it is going to hit. They keep saying it is a very powerful hurricane so you are in for a thrashing. Gradually, the wind becomes louder, faster, fiercer and your tension grows with the power of the storm.

It's still night. Outside it's dark. You listen to the intensity of the wind, to the pelting and pummeling sound of flying debris hitting the building. Huge objects pound the walls

and bounce across the ground. You hear a screeching that sounds like metal being shredded. Occasionally someone walks up to a door and shines a flashlight through its small window. You hang back, afraid, but you fix your eyes on that beam of light cutting through the rain. You can see things flashing through the beam like lightning. What must be happening to the animals?

With an explosion and a crash of shattering glass the wind enters the building. Mike calls out, "There goes our first window," and you're thinking, "What do you mean, our first window? Maybe it'll be our *only* window." But something about Mike's tone of voice communicates experience, so you resign yourself.

Another window explodes, then others. The wind whirls into every part of the building, like a small tornado in every room. Water and leaves are flying in. The hallways begin to flood. In the back of the hospital you see the thick steel doors bowing. The wind feels like a relentless, ferocious, demon. Wherever you are, it will come and get you.

The wind pushes through the roof and the ceilings start to collapse. You hear someone yell, "One of the air conditioners is coming down!" You hear it ripping away from the building. The power goes out and immediately a generator kicks on. In the blackness, red emergency lights are blinking as alarms scream through the entire building. A fire must have started. You are gulping in air, holding your breath, trying to keep breathing, feeling trapped, feeling weak, while others seem to know exactly what to do. They are standing up on chairs checking light fixtures, looking for electrical fires, wrapping towels around the fire alarms to deaden the sound.

The TV is turned up and up so you can hear over the wind and the alarms. They are saying that the storm will last five or six more hours. At that duration and this intensity you are not going to make it. They keep talking about the eye coming, but the storm is too relentless. The building will not hold. If there is a fire, there is nowhere to go.

Mike is on the phone to his girlfriend. She is going crazy at home alone and he is talking her through it. Somehow Cindy and Bill learn that their home has been destroyed. Cindy is holding Kelsey who looks like she's painted across her mother. They are standing between a wall and a large freezer when Cindy's knees buckle. She collapses to the floor crying, "Our house is gone." You put your hand on her shoulder, but you, too, are terrified and have no comfort to give.

You find yourself retreating deeper and deeper into the building, sucking in long, tense breaths, as if filling your chest with air will fend off the wind. In a narrow interior room you can hear gravel shooting through the heating ducts. The generator keeps the TV talking. They say this hurricane is moving faster than normal hurricanes. It feels like forever.

At some point you know the building's not on fire. The alarms are turned off. The storm is quiet by comparison. Your breathing becomes more regular as the roar of the wind diminishes. You start to feel the building will hold. The storm subsides. A hard rain falls. When it is finally dawn, you walk outside and there it is in the grey morning light: the curtain is rising on a tragedy beyond scope. ■

Wings of Asia, the morning after.



The Miracle

Zoo Director Bob Yokel lives three miles north of the zoo. Like a lot of other South Florida residents, he found waiting out the storm like "sitting underneath a locomotive going full speed." Three months later, he reports on the damage and the zoo's clean-up effort.

It wasn't the howling or the whistling of the wind. It was not knowing. The wind was like an engine grinding on and on and on. You prepare in your mind for a hurricane of 120 maybe 140, 150 mph winds. But when you find out that the coast guard weather station equipment blew away at 192 mph, you really start to get concerned about what you're going to find when it's over.

People came in fully expecting the worst: a lot of dead animals, animals shredded through chain link fences. But when we began to find that the collection was in very good shape, spirits rose. We'd walk into an enclosure and see only a pile of rubble. Then we'd get down and start pushing some shrubbery and debris and a pair of eyes would greet us. The animals were there, hunkered down. They had survived underneath all that. How, I don't know.

Heaviest Losses

Half of our bird collection, almost 300 specimens, was contained in the Wings of Asia, a free flight aviary. It was an acre and a half under steel mesh net. And this is where we suffered the most animal losses.

The landscape has been ruined. We lost more than 5,000 trees and our hedges, shrubs, ground covers, sod, eucalyptus grove, and irrigation systems.

Destroyed and damaged structures include our administration building, hospital, education facility, zoological society offices, gift shop, koala exhibit, children's zoo, amphitheater, warehouse, animal kitchen, monorail barn, giraffe barn, African elephant barn, crocodile breeding facility, brooder hatchery, perimeter fence, walkway fencing, picnic shelters, monorail track, animal holding pens and night houses, signage and graphics, vehicles, water fountains, shade structures, animal transport trailers, guard houses, even our flag pole.

Cleaning Up

We started at the front entrance of the zoo and worked



"When you find out that the coast guard weather station equipment blew away at 192 mph, you really start to get concerned about what you're going to find when it's over."

Photo: Daniella Wooddell

shock. Many people weren't sure where they would spend the next night, but they came in to work to help get everything back in order. Everyone at the zoo suffered losses at home, but there wasn't any question in their minds about coming in to get the animals and the zoo back on track. ■

our way through. It was basically a chain saw and heavy equipment job at first: cutting eight foot sections of trees, getting them into payloaders and hauling them away. We got the major debris out of the way so that we could begin to work on walkway and animal fencing. All the animals were back out in their displays as soon after the storm as possible. We needed to get them out of holding facilities, give them exercise and get them back into a normal routine.

We pruned back and uprighted about 500 trees that we think are salvageable. Of course, what appears to be a healthy specimen may die two years from now, but we believe most will make it. That's not to say they're going to look like trees in the next year or so. But within the next three years they will start to take on some of their original shape and form.

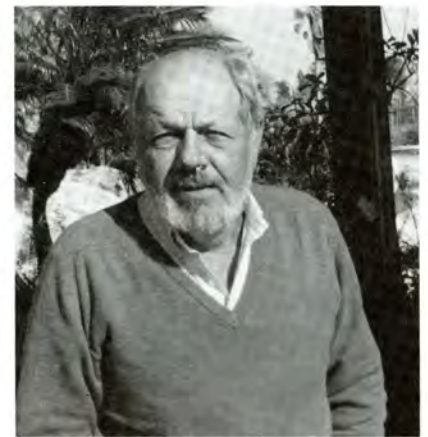
In three and a half months, we have been able to make the zoo accessible and safe enough to reopen, although construction vehicles will be a part of the scene for quite some time. The landscaping project will go on for about two years.

Andrew's Cost

The cost estimate is \$14 million. The value of the landscape is inestimable because of the time that it took to grow. We are covered by private insurance and we're eligible for funds from the Federal Emergency Management Administration (FEMA). We hope this will cover a little over half of the cost to rebuild--not to improve the facilities--just to make us whole again.

The Staff's Role

Out of everything I experienced, the most inspiring was my staff. There was a lot of emotion in the aftermath of Andrew--anger, frustration, pain, sorrow,



Bob Yokel

Counting the Losses

Deaths:

1 impala
1 onager
1 Grimm's duiker
1 gibbon
1 dik-dik
1 ostrich

Missing or declared dead:
120 birds

Landscape destruction:
5,000-6,000 trees
Eucalyptus grove
Hedges
Shrubs
Ground covers
Sod
Rock work
Irrigation

Damaged or destroyed structures:
Office buildings and trailers
Hospital
Classrooms
Gift shop
Koala exhibit
Children's Zoo
Amphitheater
Warehouse
Animal night houses
Breeding facilities
Perimeter fence
Walkway fencing and gates
Signage
Vehicles
Quarantine facilities

Checking In With The Vet

Zoo Veterinarian Chriss Miller spent the night in the zoo hospital waiting for Andrew. She describes her reactions and the zoo today.

Q: What were some of your responsibilities as veterinarian prior to the hurricane?

A: I didn't do much as a veterinarian. I spent a lot of time bringing in supplies: not animal food, people food, drinking water, batteries, flashlights. Then we started making room in our hospital quarantine areas for animals that we needed to get out of the open spaces. We freed up a lot of cages for birds, put some animals together to make more stalls available; brought in some monkeys that had been in outdoor enclosures. We pretty much started battening down the hatches.



Miller

Greg Hark

What was your experience during the storm? What was going on in your mind?

It never dawned on me that I was in significant danger. I mean, even though the building was coming down around us, I really didn't expect that I was going to be killed. I kept hearing things crashing into the walls. I could see streaks of things fly by the windows, whole trailers flying past. And all I could think of was that the animals were going to be dead, that they were never going to be able to handle it. I was in despair. I kept wishing that the eye of the storm would come so we could run out and see at least some of the animals close by. If we could just take care of them. If we could just get them to shelter. But the eye never came. The wind just shifted and we

had to wait until the storm was over. All I could think of was I wanted to get out there. I wanted to get those animals that I knew were in trouble. I was sure it was a gruesome nightmare of dead animals and dying animals. That sounds gross, but that's what I was worried about.

Would you describe the scene you found when you went out after the storm?

Immediately after the storm broke, small groups of people went out into the zoo. We didn't wait for the last of the rain to stop. We got out there as soon as it was light and safe to go out without debris flying into us and decapitating us.

I'm so pleased that two of our security personnel, Lavongia Henry and Dan Pearce, stayed because we really needed them. If it had been a milder storm, they would have been watching for looters. But the devastation was so overwhelming they weren't needed for security, they were needed as people who knew the zoo very well. While we were out looking for animals, they knew

where keys were, where to find things and how to keep radios in operation, for example.

Our very first priority was to make sure that none of the carnivores, including the bears, big cats, and great apes were out. Once we accounted for all of them, and knew they were all secure and in good shape, we relaxed a little and started checking the other animals. We split the zoo in two and fanned out, checking exhibit by exhibit. As we marched from pen to pen, I couldn't believe that animals were alive and okay.

In most cases we simply counted the animals. As we counted we made sure no animals were wandering about. Other than birds, not a single animal left the grounds. Although there were places where they could have gotten out, they just didn't leave.

The birds are another story. The aviary was trashed and there was nothing we could do about that. Before the storm, we had brought in all the big paddock birds, knowing that they wouldn't be able to deal with the wind. But there really wasn't any good way to bring all the little birds out of the aviary. We didn't have time to catch all of them because often it takes a couple of days to get your hands on them. Unfortunately, many had to go it on their own.

We saw hardly any birds that first morning. They were still hiding from the rain, tucked under bushes. As soon as they got hungry and were content that the storm was over, they started popping up looking for food. After the second day, birds that had flown and blown away started flying back.

When you say flying back, is it a homing instinct that brought them back?

Absolutely. Many of them were born in that aviary or had lived there a good portion of their lives. It is home to them. They had been fed there, gotten mates there, done everything that a bird does in that aviary. No matter how devastated it looks, it was the territory they would return to. The slash pine forest that surrounds the zoo is not what a lot of the Asian birds are accustomed to. They were not likely to have found food very quickly there and were more likely to be successful finding food at the zoo.

After you had made sure that all the carnivores were secure, did you do your rounds in the sequence you do as a veterinarian?

For the most part, "veterinarian" went out the window that day. If more animals had died or been injured, I would have been acting as a vet. And when we first went out we fully expected to find animals bleeding and dying. It was amazing that we found the animals standing there, just standing there, with rubble all around them. We didn't find too much to work on medically, so I was acting as a keeper. What the animals needed most were water, shelter and security.

As you worked your way through the rubble, how did the animals react to you?

I don't know if they even recognized that we were there. Some of them were a little spooky. But for the most part they were just standing there. It didn't register with them that their pens were wide open, that the storm was over, nothing. They were detached from their world in a lot of ways. What we saw were glassy stares.

What did you learn from your examinations of the dead animals?

I looked only briefly at the animals that died because it was fairly obvious the causes of death were related to the storm. The impala that died was the oldest impala out there and whether she died because of the stress of the hurricane or because she had been hit with debris, I don't know. She had no serious external wounds.

The dik-dik that died had trees down in her pen. I didn't see any significant trauma to her. But again, she was an animal that had some health problems in the past and it was possible that she couldn't handle things coming down around her. It's possible that she was hit and knocked unconscious, but she had no serious wounds.

You also had some births during the storm.

Yes. Our yellow-backed duiker gave birth and is fine. We had a giraffe deliver a week later. We knew the giraffe was due and we were very concerned about her. But they're both fine.

What kinds of things are you dealing with now that the immediate emergency has passed?

The animals are generally more spooky and less secure in their pens, but they are fairly well established into a new routine. They see the same keepers every day who deliver their food at a certain time. They come off their paddocks into a holding pen at the same time every day.

The problem that we're having since the storm is that a lot of them don't have the tree cover and the security around them that they were used to. Instead of having a nice hedge that protected them from the public walkway and the pen next door, they are looking through their chain link at front-end loaders going by and

chain saws dropping trees. We can put up shade tarps, but we can't give them the green, cool, lush shade that they used to have. So their coats are bleaching and some of the animals whose natural habitat is the deep forested area are suffering a little bit. Generally, the animals are more skittish than usual.

Is there anything else that you would particularly like to say to our readers?

It's been very moving to see that so much of the community supports the zoo. We didn't even have to ask and they were volunteering. I don't think it was ever a given fact that the zoo would reopen. But it was the community's support that

convinced us that we could and would reopen. ■

"The animals were detached from their world in a lot of ways. What we saw were glassy stares."



Extraordinary Folks

At 7:30 a.m., in a hard rain with wind gusts of 45 to 50 mph, electrician **Fernando ("Fred") Galan** amazed one and all by being the first person to cut his way into the zoo.

"I knew the power would be off and the water pumps need power. I knew the animals would need fresh water. So I had to get to the zoo," said Galan. He hadn't even checked his own home, and he'd left his wife in an evacuation shelter. (Thanks to **Mrs. Galan** for sparing her spouse under such trying conditions.)

Before he became internationally famous in the photograph featured on our cover, "Andrew," the yellow-backed duiker, was rescued from his rubble ridden birth place by keeper **Barbara Judd**. On Tuesday, August 25, a pregnant female yellow-backed duiker was missing. The only clue to her whereabouts was something resembling afterbirth that had been noticed earlier in the duiker exhibit moat. Judd located the mother wandering the moat and managed to return her to the exhibit. She continued to search for the reported afterbirth, but did not find it. Instead, under a large fallen tree she found a male duiker kid. He was bleeding a little, but strong enough to kick and nip at her as she climbed with him out of the moat. Judd took him straight away to the zoo hospital where they encountered photographer Bill Frakes of the Miami Herald.

Encountering the dead.

Fortunately, few mammals died.



Zoos To T

"I'd gladly give \$1,000 if I could, but I'm 86 years old and have only Social Security to live on."

"This money was collected by our elementary school. We hope it will help in some small way."

The Zoo World Responds

\$145,500 Received From AAZPA Zoo Crisis Fund

Even before Metrozoo's situation was known, zoo people were wondering and worrying about colleagues, friends and the animal collection at Miami Metrozoo. News reports exceeded everyone's worst imaginings. A flood of offers to help came in, but the zoo was overburdened by the emergency.

"The day after the storm we had one telephone line. It was hard to find out what resources were available until we got through to the American Association of Zoological Parks & Aquariums," said Zoo Director Bob Yokel. "We asked the AAZPA to act as a clearing house for people who could not get in contact with us, try though they may."

On Friday, August 28, the AAZPA announced the establishment of the Zoo Crisis Fund to aid Miami area zoological facilities damaged by Hurricane Andrew. Miami Metrozoo received the majority of these funds. Parrot Jungle and Gardens and Monkey Jungle also received aid.

In announcing the Zoo Crisis Fund, AAZPA executive director **Sydney Butler** stated, "We cannot always prevent the war, human expansion or disease that destroy animals' habitats. But here we can help, not only the animals and their caretakers, but the people who visit the zoo every year. The animals need both immediate and long-term support of an interested and caring public." Within a month Metrozoo received more than \$100,000. An additional \$45,500 followed.

According to AAZPA education coordinator **Nancy Hotchkiss**, who assisted with project administration, "One hundred percent of the fund has benefited the recipient organizations." Hotchkiss also pointed out that the Fund was not intended to be permanent. Money was disbursed as soon as received and the account will be closed once all funds are gone. However, checks continue to come in, even now.

Cathy Tompson, curator of education for the Baltimore Zoo volunteered her time to help process checks. "A really impressive thing about the Zoo Crisis Fund was the number of big checks from small zoos," she said, "The rest came from zoo members, docents, employees and animals lovers

in checks of five to 10 dollars. It was an incredible outpouring of support."

Tompson said that many children sent their allowances, a Girl Scout troop in Ohio donated proceeds from a recycling drive, individuals collected door-to-door in their neighborhoods, and many made contributions in memory of family pets.

Passionate expressions of sorrow and support accompanied the donations.

A Bethesda, Md. couple wrote, "Our hearts go out to the people managing the Miami Zoo who are coping with frightened and disoriented animals."

The fifth graders of Grandview Elementary School in Bellvue, Ky. sent their donation saying, "This money was collected by our elementary school. We hope it will help in some small way."

From Dover Foxcroft, Maine came this note, "I wish I could send more because I feel so sorry for poor animals that cannot fend for themselves, just as I do for the many humans hurt so terribly by that hurricane. I'd gladly give \$1,000 if I could, but I'm 86 years old and have only Social Security to live on."

A Tulsa, Okla. teen expressed herself this way, "I am an active environmentalist. When I heard about Hurricane Andrew, I thought of all the animals fleeing the fury of the storm. I was desperate to help. So, when I heard on the news of a fund that was being raised to benefit the animals, you can imagine I was ready to send a check then and there. Please use the money enclosed to help the homeless animals." ■



Busch Gardens housed and cared for hundreds of dazed birds.

The Rescue!

And It's Remarkable!

Zoos From Around The World Answer The Call For Help

No one responded more quickly or with more empathy to our situation than zoo professionals around the country. The AAZPA Conservation Center in Baltimore became a communications hub and 67 chapters of the American Association of Zoo Keepers (AAZK) stood ready to assist. Busch Gardens, 266 miles away in Tampa, became the staging area for the relief effort in which truckloads of provisions were dispatched and a number of Metrozoo animals were relocated to other zoos for safekeeping.

Gerald Lentz, vice president of zoological operations at Busch Gardens, summarized the reaction, "A tragedy such as this could happen to any of us. We are glad that our geographic location allowed us to be of some assistance in providing relief to the devastated Miami facility." Other Florida zoological institutions involved in the relief project were **Sea World**, **Lowry Park Zoo** in Tampa, **Discovery World** at Walt Disney World and **Cypress Gardens**.

Many zoos responded with fundraising efforts. **Maria Baker**, director of **The Sacramento Zoo**, echoed Mr. Lentz's sentiment. "There is a strong feeling that it could have been us," she said. "Here in California, it could have been an earthquake." Baker had initially hoped to send zoo staff to Miami, but couldn't due to budget restrictions. Instead, she approached the **Sacramento Zoological Society** executive board with a dollar figure in mind for a donation. They approved, and raised

her request. "Sending money for this purpose meets our mission of supporting wildlife conservation," Baker said. "I'm proud of our board for approving a large donation. We're happy to help in any way we can."

Beardsley Zoological Gardens in Bridgeport, Conn., passed the hat among guests at their annual fundraising gala in early September. They also contributed one month's income from their spiral wishing wells, said **Lisa Tryon** of the **Connecticut Zoological Society**.

When **Jeff Brown**, of the **Cincinnati Zoo and Botanical Garden Education Department**, saw the CNN coverage from Miami, he wanted to go down to Miami with supplies for the animals or the keepers. "Everyone said wait, wait, wait. But I'm an impatient person, I had to do something," said Brown. So he made 12 collection boxes featuring the slogan "Give A Buck, Help A Zoo," and arranged for 12 Cincinnati Zoo volunteers to staff collection spots over Labor Day weekend.

Toledo, Ohio music promoter **Susie Devine** took a musical approach. With support from **The Toledo Zoo**, she organized a free concert where proceeds from food, beverages, raffles and games benefited Metrozoo. Five Toledo-based bands donated their talents for the event.

Burnet Park Zoo featured Metrozoo on the cover of its November newsletter reaching 12,000 households in the Syracuse, N.Y. area. They also inserted a self-addressed envelope for

members' contributions to the Zoo Rebuilding Fund. **The Friends of Burnet Park Zoo** will match all funds dollar-for-dollar, thereby doubling the amount that members donate.

Sandy Brown of the **John Ball Zoological Society** in Grand Rapids, Mich. organized a collection for Metrozoo at **John Ball Zoo** members night. And **Clint Fields**, director of the **Friends of National Zoo** put the word out to 1,000 attendees of their annual meeting.

We're sorry we couldn't list every zoo that responded, but they have our deepest thanks. We hope they'll never need us, but if they do, we'll be there to help! ■



Dolora Jung, foreground, and Ron Johnson on bird patrol. Luring birds with food, then netting them, was a big part of the post-Andrew effort.

Susan Stocker/©1992 The Sun Sentinel

Here's a recap of the emergency relief effort coordinated by Busch Gardens right after the storm.

Tuesday, August 25

Three koalas and a yellow-backed duiker are airlifted from Metrozoo to Tampa. Cypress Gardens arranges for the transport through the Florida Training Center of Ft. Lauderdale Executive Airport. A semi-trailer loaded with animal food and provisions from Busch Gardens and the Lowry Park Zoo departs for Miami.

Wednesday, August 26

Two more trailers and three Busch Gardens zoo keepers depart for Miami to evacuate 136 large exotic birds and return them to Tampa for care. Other zoological facilities, as well as animal transport dealers, also dispatch vehicles to assist in the evacuation.

Thursday, August 27

Approximately 125 birds, including flamingos, secretary birds, storks, cranes, Andean condors, ibis, koribustards, ducks and geese arrive at Busch Gardens from Miami Metrozoo. None are lost in transport, but many are injured and treated immediately by Busch Gardens veterinarians. Sea World is contacted to assist with care of these birds. Busch Gardens curators who made the trip to Miami report heavy damage, but Metrozoo curators state that, with koalas and birds in other facilities for safekeeping, they can manage the remainder of the collection.

Friday, August 28

AAZPA conducts press conference to announce formation of the Zoo Crisis Fund.

Monday, August 31

Koalas evacuated from Miami Metrozoo to Tampa are doing well. Yellow-backed duiker born during Hurricane Andrew is listed in critical condition. Of birds transported Tuesday, all survived except two. One American flamingo suffered back injuries during the storm and could not be saved; one wattled crane died of long term illness that preceded the storm. Approximately 28 large birds are transferred to other zoological facilities.

Tuesday, September 1

Nineteen additional birds are shipped out by Busch Gardens to White Oak Plantation in North Florida and to St. Catherine's Island Wildlife Survival Center near the Georgia coast.

On September 10, 1992, when he was still fairly shaken by the experience of Hurricane Andrew, Curator of Birds Ron Johnson recorded his thoughts for the bird curators meeting at the national AAZPA conference. Ron agreed to share with us this personal account of his experience.

Good morning fellow bird curators. Sorry I can't be there for the meeting. I wanted to take this opportunity to do a little reflecting on the last 17 days.

I really want to thank all those from Busch Gardens and AAZPA who coordinated the effort when we had no communications here. We had a good game plan on August 23, the Sunday before the storm, before Andrew changed the lives for everybody down here. Three times before we've caught birds up, put them in crates, put them in bathrooms, stored them properly, went through and cleaned the park of things we thought would blow away. But we had never been through what to do when it really hit. And that's where you folks came in. From the bottom of my heart, thank you very much.

And I also want to thank my staff. The day before Andrew, when we were catching birds up, a lot of staff who lived in the evacuation zone stuck with it right up until dark. We moved over 250 birds that day. Afterward, all of us were somehow affected; 90 percent have major damage to their homes. I don't want to go into those details, but I do want to tell you about how important life is and that this profession pulls together to help each other. In the time of need, the heroics of staff who were sleeping in their back yards, was unbelievable. They had nothing, but came back in here and were catching birds. When the material things in life leave you, you realize that they're not as important as a lot of the other things. I really want to thank everybody who hustled and pulled together and got trucks down here and placed birds.

Wings of Asia is gone and there's no doubt about it. The center tower is down, there is no netting up. Every tree is

"Good
Morning
Fellow
Bird
Curators"

busted off or tipped over, but birds did survive. So we'll put it back together again someday.

Dave Thompson, director of Lowry Park Zoo, came down here, picked up a chain saw and for three days worked as a laborer side by side with us. A lot of other people were communicating back and forth and handling things, making things work. Thank you very much, the staff really appreciates it and we're more than happy to be able to get birds out of here and help them survive.

I've been told that Metrozoo will reopen. It may be a long time before I bring back the softbills, pheasants, doves and all the rest of the birds. So please

look at spaces that you have and what you can do to get birds paired up. Because of the way birds were caught, one animal went one place and the other's leaving today for somewhere else. One's here and one's there. If you could work towards getting breeding pairs together, I think that would be great. I would like to continue with as many of the breeding programs as possible.

As I'm standing here recording this message, a pair of blue bearded bee eaters has come down. The beehive has made it. There's about two tons of netting sitting on top of it, but the bees are coming and going and these bee eaters are fat and sassy and happy. Heck, they'll probably go breed someplace, but we will catch them up eventually. The sounds that you hear in the background are helicopters. If there are any Vietnam or Korean vets out there it's like being in Danang after it got bombed out. We have 5,000 troops sitting in our parking lot and that's quite an experience for anybody who's been through that.

I've had a lot of people call and say that they heard I was hurt. I wasn't, I'm fine. A little mental anguish but a lot better than most. A storm of 220 miles per hour can bend and break and you feel pretty fragile, but we're doing all right and the cleanup has started. We're working paddock to paddock, inch by inch. It's gonna come back and we're gonna rebuild. ■

Metrozoo's Susan Kong carries flamingos to be transferred to Busch Gardens. They had been moved to the restrooms for safety during the storm.



Loren G. Hosack/©1992 The Palm Beach Post

Aviary Report

Curator of Birds Ron Johnson describes what happened in the zoo's hardest hit department.

I live two miles straight east of the zoo. Because of the amount of flying debris hitting my home during the storm, I knew that the zoo was going to sustain a lot of damage. It took me four to five hours to dig out with a hand saw so it wasn't until early afternoon that I arrived at the zoo.

On site, the buildings were so severely damaged that my immediate concern was to find out if the personnel had survived. I made radio contact with them and they were very concerned about me. They had tried to call my house and let me know about conditions at the zoo but hadn't been able to get through.

I could see from some distance that the Wings of Asia, where half of our bird collection had been housed, was virtually non-existent. The outside poles were standing but there was no netting on them. After I got closer, I realized that we had done everything right prior to the storm, as far as collecting up every bird that we humanly could. But once the damage was done we had absolutely no place to put birds that had blown free. So for the first two and a half hours I set out to feed everything that I could. There was no power and the walk-in coolers had been blown away so finding food and feeding was a bit of a chore that first day.

After feeding, I walked through the aviary and realized that, even with all the damage, birds were still alive. The hornbills came down looking for food and I could see some of the pheasants and storks walking around. They were as much in disarray as I was. Birds were perched on broken tree limbs, obviously not contained by anything, and they came down looking for food. There were no leaves on any trees. Everything was just like a barren stick and there was absolutely no food available for them.

We put out an emergency call to AAZPA and Busch Gardens, and requested that trucks, crates, nets, everything needed to collect and transport live birds be sent as soon as possible. Everyone responded beautifully showing up here on August 26 with equipment and personnel to start shipping birds out.

On the day before the storm, Sunday, August 23, 1992, we had a total of 573 birds on site; approximately 280 were housed in the Wings of Asia exhibit. That day we collected between 200 and 250 large birds off the paddocks and removed 30 to 35 birds, mostly flamingos, from the Wings of Asia. All the birds that were collected before were



Johnson at work in the lake.

Dolora Jung

alive in their respective holding areas the next day. But the birds that were in the Wings of Asia were either blown free or killed. We have recovered approximately 140 of the birds that were blown free. We have shipped out 375 birds to other institutions. That leaves us with a little over 70 birds on site.

Right after the storm we recovered about 20 bodies. Since then we have officially declared dead 120 birds. It's been very difficult to piece our records back together because during our emergency shipments, band numbers were not recorded as

diligently as they normally would have been.

Fortunately, we have both a hard copy record system and computerized records through the International Species Inventory System (ISIS). ISIS records are duplicated in Minnesota at the ISIS main office, so even if we had totally lost our records here, we would have been able to get a backup. It shows the importance of having a redundant system with multiple copies at several institutions.

Our hard copies – over 5,000 individual records – were in a filing cabinet that got blown through a trailer out into the open where it sat for eight days without anybody realizing it. Those records are very moldy and wet. The computers were wet too, but we did get them back on line and were able to regenerate an inventory. We had enough information about each bird shipped, including band color and band number, to trace back our steps and determine the exact location of every individual bird. It took a month to piece this puzzle together. ■



"When the aviary was green and lush, some of the trees and palms would have been available for food. But there was nothing there for the birds and they were hungry."

"The Wings of Asia is gone and there's no doubt about it."

Students "Draw" Attention To The Zoo

The zoo is the focus of the Larger Than Life Billboard Contest this year, thanks to Ackerley Communications and Dunn Productions. Art students throughout Dade County entered the contest in October by designing billboards around this year's theme: "Be A Zoo KEEPER". Judging is scheduled for February, 1993. The winning artwork will be displayed on billboards throughout Dade County for approximately one year. An essay contest and fund-raising events will be tied to this project. Several teacher groups and parent-teacher organizations in Dade County schools have already organized fund-raising projects to benefit the zoo.

The role of the zoo's garden is not unlike the role played by the Earth's great forests. Trees, shrubs and ground covers exchange carbon dioxide for oxygen, cool the air, shade the ground, provide shelter and privacy for the animals, help retain moisture in the soil and prevent erosion. Taken all together the landscape provides a context for the animals, mimicking natural habitats and completing the visitor's experience of exotic wildlife. Flora offers the comfort of texture, the surprise of color, the suggestion of scent from jasmine, eucalyptus or pine, and an undercurrent of green noise. Habitat is the picture, animals are the details.

Of all the damage wreaked by Hurricane Andrew, the loss of the landscape may be the worst. Structures, fences, gates, walkways, plumbing and lighting can be rebuilt as soon as funding and materials are available. We expect to complete this in six to 12 months. But mature trees with spreading canopies can only be bought with time.

Since the zoo opened in 1980, 290 acres have been planted with more than 6,500 trees and shrubs, eight miles

To Rebuild, We Must Replant

of hedges and acres of ground cover. The surrounding acreage includes large stands of indigenous trees such as palmetto and slash pine. The plant collection included several hundred plant species. More than 80 percent of this was lost.

"Most of our specimen trees were severely damaged if not completely destroyed by the storm, and the sad thing is you cannot make up that time," says assistant zoo director **Al Fontana**. "We might be able to find additional specimens of the same species of trees. But will they have the size? Will they have the impact that the other trees were beginning to have? How long will it be before the new trees begin to

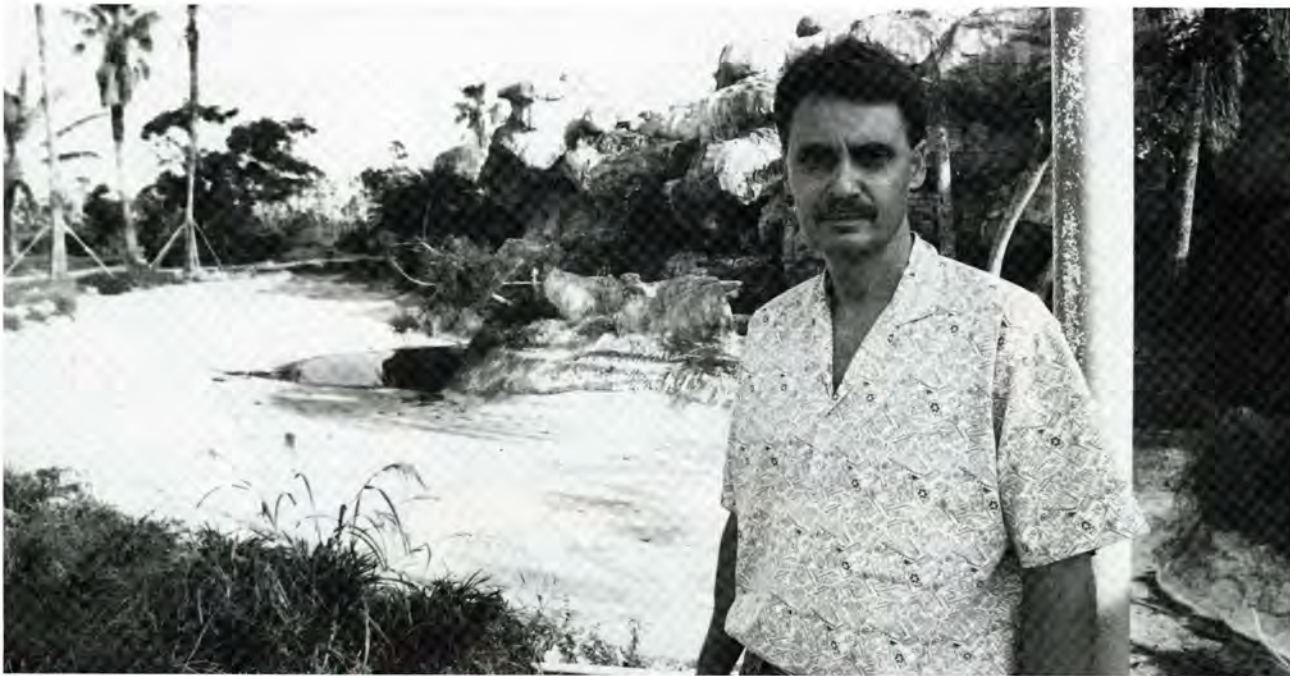
provide shade again? How do you make up that time? How do you make up twelve years?" Getting new plantings established is the first step.

"Geologically speaking, we sit on rock," says Fontana. "We have very little top soil. Certainly we have an advantage over many other zoos because of our sub-tropical climate. But because of the rock and shallow top soil, it takes longer for trees to establish themselves here."

In assessing the landscape damage, zoo officials are



Andrew stripped the trees of all leaves.



Metrozoo Assistant Director Al Fontana

Greg Hark

estimating canopy coverage in addition to actual numbers of trees. It will take two to three times the number of trees lost to begin to approximate the foliage canopy that existed before Andrew. Zoo officials hope to replace each mature tree with a minimum of two young trees. Most replacement trees will be in the 14- to 18-foot range.



“The zoo is a unique facility in the park system,” says **Paul Kerry**, supervisor of the landscape architecture section of the Dade County Park and Recreation Department. “We have other parks that are unique in different ways but they don’t have the same level of diversity that the zoo has. I guess that’s really the key. The zoo has far

more varieties of species and a much more extensive use of shrubs and ground covers.”

At the zoo, landscape designers have attempted to create gardens that coincide with the geographic origins of animal species. In cases where those plants were not commercially available, they substituted similar plant species. In doing replacements now, there may be an opportunity to improve on the previous plantings and create a better match to natural habitats. This will depend on what is affordable and commercially available.

“It’s going to be a long struggle to get the zoo landscape back to its former state,” says Zoo Director Bob Yokel. “The older areas of the zoo had been planted for a long time and we were achieving a canopied walkway that was very important, especially during hot weather. It’s going to take a long, long time for that canopy to regenerate itself.” ■

Facts About Metrozoo

Worldwide, some 20,000 acres are devoted to zoos. At 740 total acres, Miami Metrozoo represents four percent of the entire landmass devoted to zoos. By area, it is the second largest zoo in the U.S.

The average size of a zoo in the U.S. is 55 acres. Our zoo is over five times larger than the average. With all 290 developed acres open and operating, we have more space open and available to the public than any other U.S. zoo.

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Miami’s first zoo was Crandon Park Zoo, opened on Key Biscayne in April, 1948.

The Zoological Society of Florida is a private, non-profit organization established in 1956 to support the Crandon Park Zoo. Its members campaigned for the zoo to be included in the Decade of Progress Bond Issue approved by Dade County in 1972.

In 1980, the zoo was moved to its present location and renamed Miami Metrozoo. It is owned and operated by the Dade County Park and Recreation Department and is the single largest operating facility within that department.

Post Andrew, Metrozoo’s animal collection (including animals in Miami and those housed temporarily at other institutions) includes 231 species. That’s 62 species of mammals, 131 species of birds, 37 species of reptiles and 1 amphibian species.

Miami Metrozoo is a member of, and accredited by, the American Association of Zoological Parks and Aquariums. It participates in the AAZPA Species Survival Plans (SSP) for 17 endangered species and maintains animal records on the International Species Inventory System (ISIS). SSP and ISIS are cooperative resources shared by zoos throughout the U.S.

More than 150 docent volunteers serve as interpreters, tour guides and ecology theater presenters at the zoo. They also bring the Animal Encounters Program to area schools and organizations.

Your zoo regularly functions 24 hours a day. It is open to the public every day of the year from 9:30 a.m. to 5:30 p.m. The ticket booth closes at 4 p.m. daily. Zoo members are admitted free of charge.

We Still Need Your Help!

I want to help continue the rebuilding effort with a contribution to the Zoo Rebuilding Fund. Enclosed is my donation of \$ _____

Name: _____

Address: _____

City: _____ State: _____ Zip: _____

Telephone: _____

Form of Payment: Check MasterCard Visa American Express

Charge Card # _____ Expires: _____

Signature: _____

Make checks payable to:
Zoological Society of Florida
12400 S.W. 152 Street
Miami, FL 33177-1499



THE ZOO REBUILDING FUND
Saving our most natural resource™

The Devastation

Equipment and Vehicles
\$145,000



Trees, Landscaping, Irrigation
\$5,000,000



Animal Exhibits
\$215,000



Animal Holding Facilities
\$279,000



Monorail Track, Cars, Barn
\$2,450,000



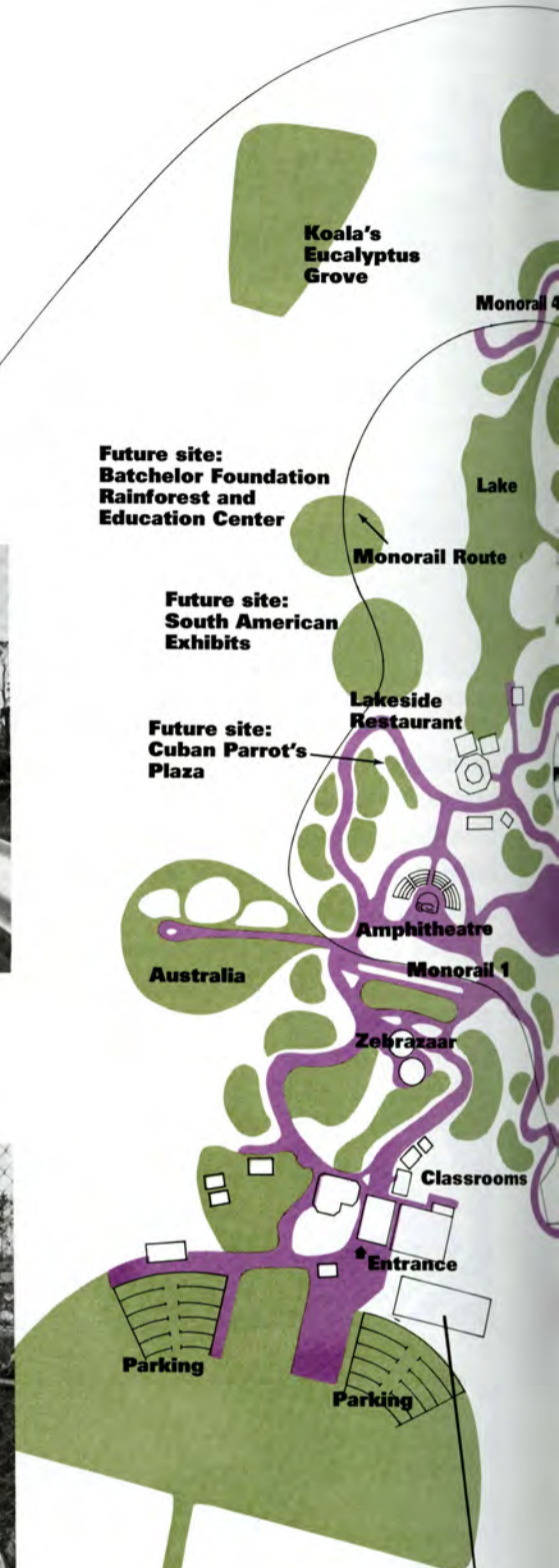
Perimeter Fence and Gates
\$499,000

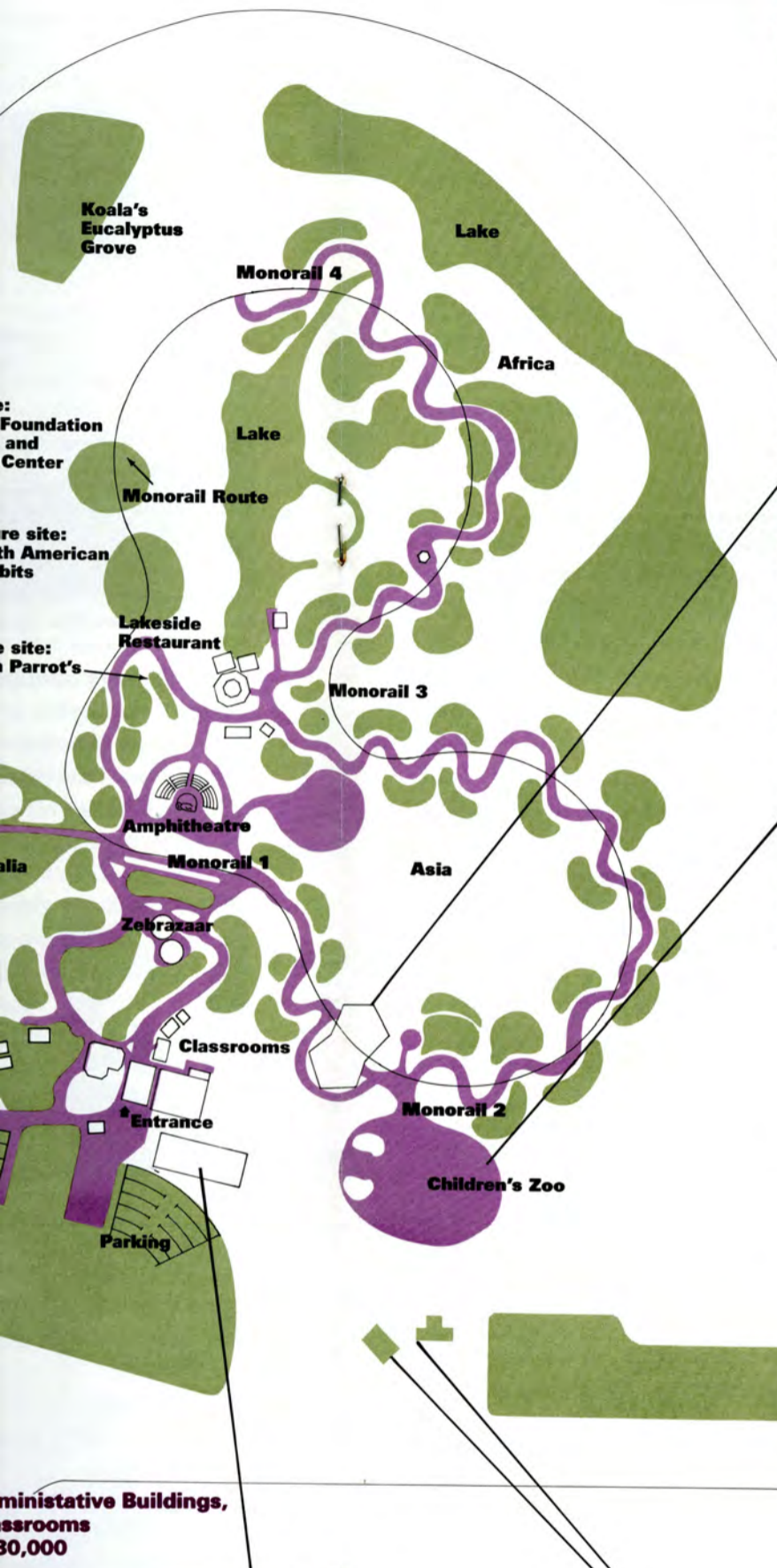


Visitor Amenities
\$436,000



Administrative Buildings, Classrooms
\$630,000





Wings of Asia
\$3,000,000



Children's Zoo
\$1,000,000



Quarantine, Breeding Facilities
\$244,000



Zoo Hospital, Zoo Kitchen
\$155,000



740 Total Acres

Wish List

Zoological Society Building	\$300,000
Administration Building	175,000
Entrance/Exit Gates	75,000
Gift Shop	50,000
Classroom	50,000
Trailer Offices	30,000
Zebrazaar Umbrellas	35,000
Amphitheatre	55,000
Picnic Shelters	10,000
Picnic Restrooms	5,000
Wings of Asia	3,000,000
Zoo Kitchen	70,000
Warehouse	50,000
Zoo Hospital	85,000
Quarantine Building	5,000
Brooder Hatchery	10,000
Florida Panther Pens	5,000
Shipping Pens	30,000
Children's Zoo	1,000,000
Monorail 1 Restroom	10,000
Perimeter Fence & Gates	484,000
Walkway Fencing	30,000
Holding Pen Fencing & Gates	60,000
Quarantine Pens & Gates	200,000
Monorail Stations	40,000
Monorail Barn	900,000
Monorail Guideway Column	1,500,000
Rest Areas	30,000
Trees	4,267,000
Shrubs	480,000
Ground Cover	60,000
Sod	13,000
Irrigation	180,000
Bird Quarantine	2,000
Primate Quarantine	2,000
Balem Cages	100,000
Signs & Graphics	150,000
Water Fountains	6,000
Shade Structures	30,000
Giraffe Barn	45,000
Koala Building	65,000
African Elephant Barn	25,000
Generators & Pumps	20,000
Animals	80,000
Vehicles	25,000
Otter Water Conditioner	5,000
Otter Night House	25,000
Clouded Leopard Roof	3,000
Crocodile Breeding Facility	25,000
Reptile Trailer	10,000
Eucalyptus Grove	25,000
Animal Shade Structures	20,000
Animal Transport Trailers	20,000
Lion Night Houses Doors	2,000
Chimp Night Houses Doors	2,000
Gorilla Night Houses Doors	2,000
Electrical Wiring	20,000
Guard Houses	15,000
Reed Fencing	20,000
Flag Pole	15,000
Total	\$14,053,000
10% Contingency	1,405,300
Grand Total	\$15,458,300

The Media Gets In The Act

Media donations to date include full pages – at no cost – in the following national publications:

American Birds
Audubon
Buzzworm
SportsAfield
Wildlife Conservation
ZOOLIFE

Commitments to the local campaign have been made by the following media:

Los Diarios Americas
The Miami Herald/
El Nuevo Herald
Miami Mensual
Selecta
WLVE-TV
WLYF-FM
WMRZ-AM
WPLG-TV
WSCV-TV
WSVN-TV
WTMI-FM

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Getting The Word Out

Charles Crispin is a self described “plant freak” who at one time planned to be a veterinarian. He was serious enough about that aspiration to work in a veterinary office during junior high and high school. As an adult, however, his career has taken a much different path. With partner **Chuck Porter** he heads one of the strongest and most creative advertising agencies in the U.S. Now **Crispin & Porter Advertising** has added the zoo to its impressive list of regional and national accounts.

“We are honored that Crispin & Porter has agreed to contribute services to the Zoological Society of Florida,” said Glenn Ekey, ZSF executive director. “Crispin & Porter is well known for creativity, great thinking and media planning. Most important is their true commitment to the challenges faced by wildlife managers and conservationists today.”

“The zoo is a vehicle for people to embrace and better appreciate their environment,” says Crispin. “Fortunately, this feeling is shared by all our staff. The zoo is a meaningful project we can all wrap ourselves around.”

The agency’s first assignment was to produce local and national campaigns

“The word ‘zoo’ says where it is. The word ‘rebuilding’ says that the zoo was destroyed and that it’s being rebuilt. The word ‘fund’ says that we need financial help in this rebuilding effort. In sum, the name Zoo Rebuilding Fund lets us tell a fairly complex story in three words. And the simpler the message, the better our response will be.”

*Chuck Porter
 Chairman and creative director*

to promote the Zoo Rebuilding Fund. “The campaign will be produced to the same values as any national client we represent,” said Crispin. “A campaign of this depth and quality would cost well over \$100,000 to produce. We anticipate that total costs to produce the campaign will be less than \$5,000.” Elements of the campaign include a series of black and white and four-color ads for national magazines. For the local effort, television, radio, print, outdoor and point-of-sale displays will also be used.

Because the zoo cannot afford to purchase newspaper or billboard space, nor buy radio and TV commercial time, two committees have been organized to ask local and national media for donated space and time. **Bill Barkell** and **Sam Verdeja** are co-chairs of the committee to develop local media. Sharing local media responsibilities are **Lynn Cambest, Ron Esserman, Sam Getz, Jim Hartenstein, Frank Hawkins, Barbara Ibarra, Hank Luria** and **Ron Magill**.

Patti Ragan heads the national committee which includes **Doug Falk, Lester Goldstein, Sherrill Hudson, Jeff Murphy** and **Pat Kelly**. ■



THE ZOO REBUILDING FUND

Saving our most natural resourcesm

Businesses Pitch In

Many businesses have stepped forward with projects to benefit the zoo. Here’s a brief summary:

Steinhauser Inc., a Newport, Ky. printer that works with many zoos around the country, contributed 10,000 special brochures that became the zoo’s first fund-raising tool after the storm... Zoo supporter **Jean Kislak** is developing a fund raising party at Saks Fifth Avenue... Automobile dealer

Ron Esserman held a month-long promotion to raise donations to the Tree Campaign... **Mega Banks Kendall Branch** held a zoo safari to benefit the zoo... **Bal Harbour Shops** and **Miami International Mall** have made space available for a display and spiral wishing well to benefit the Zoo Rebuilding Fund... **Sawgrass Mills** held a Zoo Safari in early December and is contributing proceeds from its train ride to the zoo... **Sazingg**

Jewelry Store held a holiday sale and donated a percentage of purchases.

Howard Tendrich, a member of the zoological society board of trustees and owner of **Heritage House**, a men’s and boy’s apparel shop in Suni-land Shopping Center, is offering a 10 percent discount on every purchase and is also donating 10 percent of every purchase through Dec. 24 to Metrozoo. ■

A Hot, Sweaty, Filthy, Disgusting Job... And Somebody Volunteered To Do It

Like some sort of psychotic chef, Andrew ravaged the zoo kitchen in short order. He blew down a cement block wall of the barn and soaked all the hay and grain. He collapsed the ceiling of the large freezer leaving hundreds of pounds of meat to thaw. Then he picked up dozens and dozens of eggs and smashed them against what was left of the walls, floor and equipment. Andrew braised this all in a torrent of rain and left the disastrous casserole to bake in the swelter that followed the storm.

Cleaning this mess was the yukkiest thing the zoo docents, our trained volunteers, have ever volunteered to do. But volunteer they did. And this was only a small part of their total contribution to the clean-up effort.

Docents – 150 of them – are an essential part of zoo education programs. Normally, they interpret zoo exhibits for visitors, present programs in the amphitheater and do outreach work in the community. While many are anxious to resume these more pristine, intellectual duties, the docents have willingly accepted Andrew's rewrite of their job description.

Bringing their own equipment, food, water and, presumably, nose plugs, volunteers scraped up dried eggs, discarded rotting meat and grain, hauled cement blocks and, so the story goes, got the

kitchen facility – what was left of it – cleaner than it has ever been. They put in long days doing work that heavy equipment couldn't do, raking debris, clearing shrubbery and sweeping walkways.

Volunteers became reinforcements for the Zoological Society's reduced staff. They continue to help process the more than 1,000 pieces of mail that have arrived each day since early September. Most of these contain gifts that are acknowledged. Volunteers hand address each acknowledgement and write personal notes on each thank you card. They are also keeping the gift shop going in a satellite location.

While juggling all these duties, the docents did not neglect their responsibilities to a collection of small, non-exotic animals maintained by ZSF. These animals needed immediate attention following the storm. Reptiles such as snakes and skinks remained at the zoo where docents fed and cleaned on a daily basis. Mammals needed to be moved to an air conditioned site so a volunteer turned her Florida room into a temporary animal care facility.

Whenever a need arose, our docents looked for ways to help solve problems. Whether it was cooking for the zoo staff, bringing in old newspapers and supplies for the zoo animal clinic or arranging for a generator to be donated

to the Animal Resource Center, docents were there. They made sure that the zoo remained in the public eye by staffing booths at malls, environmental fairs and stores. They answered hundreds of questions about Andrew's effect on the zoo. They visited tent cities on "cheer up" missions for the children hit hardest by the storm.

The zoo docents proved to be as vital to each other as they are to the zoo. As soon as their phones were up, they began calling each other to see who was okay, who was in need. They did not stop until everyone was accounted for. Most volunteers called the zoo to check in and ask what needed to be done. Through their well-developed telephone network, they recruited and organized volunteer work teams.

"Other organizations have taken second place in their volunteers' minds, or lost their volunteers for the time being," said **Melanie Calvo**, volunteer coordinator. "But this has not been the case here. Many of our docents have suffered incredible personal loss yet make time to help. The zoo is a second home for many of them. They truly are the heart of the Zoological Society."

A catastrophe like this really shows what an organization is made of. The zoo docents are a strong, caring group of people who will do whatever it takes to get the job done. ■

Whatever Talent You Have, We Need You!

Something that the hurricane taught us is that we need a wide variety of volunteers and can utilize almost any talent. Right now we have an urgent need for people to help out in areas related to fund raising: gift shops, special events and clerical work. These activities contribute to the millions we must raise to rebuild the zoo and to provide future funding for education.

If you want to volunteer once for just a few hours, give us a try. If you have a few hours a week to spare, that's great. Or if you want to be a regular part of our creative process, helping to develop new programs or events, we welcome your skill and energy. We are especially interested in recruiting bilingual volunteers who can help us to organize volunteer training and programs in Spanish. Call Melanie Calvo at 255-5551 for more information.

Becoming a zoo volunteer makes you an important part of our regrowth. You will work for a popular and important community resource in a pleasant, social atmosphere at a beautiful park (yes, we will be beautiful again). You will bask in the undying respect and gratitude of an adoring staff, and have the peace of mind that comes from knowing you are playing a positive role in wildlife conservation. And, we promise, we'll never, ever make you scrape rotten eggs off of the furniture!



Docent Linda Crutchfield on K.P.

Barbara Crutchfield

Geographic breakout of contributions to AAZPA Zoo Crisis Fund. This does not include contributions from all 50 states that were sent directly to the zoo.

STATES:	
CALIFORNIA	491
DELAWARE	32
DISTRICT OF COLUMBIA	65
FLORIDA	183
MINNESOTA	71
MARYLAND	389
NEW JERSEY	252
NEW YORK	96
OHIO	56
PENNSYLVANIA	257
TEXAS	20
VIRGINIA	87

CITIES:	
CHICAGO	5
CINCINNATI	44
DULUTH	2
LOS ANGELES	21
MINNEAPOLIS	16
NEW YORK CITY	2
ST. LOUIS	4
SAN DIEGO	15
SAN FRANCISCO	49



One-half million donor dollars are already at work to rebuild Miami Metrozoo. Left to right, Sherrill Hudson, Glenn Ekey, Cindy Zeigler, Bob Yokel and Frank Hawkins, Jr.

Sergio Alsina

Fund-Raising Priorities Change

Like everything else at the zoo, Hurricane Andrew turned fund raising upside down, too. The building that houses the Zoological Society of Florida (ZSF) offices was severely damaged. Roof, doors and windows were blown away, files and computers were smashed and drenched and many records were unrecoverable. Staffing cut-backs were necessary to help offset the cash-flow crisis, which left fewer hands and minds to face the challenges that followed.

"It's such a small world when you are affected by a disaster," said Cynthia Zeigler, deputy director of ZSF. "It's incredible how staff has pulled together to get the zoo back on its feet. And I would never have believed the kind of support that has come from our donors and our membership. They really care about the people at their zoo. People all over the United States, who don't even know us, care."

Damage to the zoo is estimated at \$14 million. Private insurance and FEMA payments are expected to cover just over half of this amount. ZSF has promised to raise any and all additional funds necessary to rebuild, a minimum of \$5 million. This figure could change depending on the level of FEMA and insurance reimbursements, and on how new building codes affect costs.

Zeigler has primary responsibility for development. She says that "a disaster flips the traditional sequence of events for fund raising. In this case broad-based public support is preceding larger gifts." Thousands of checks were sent directly to the zoo from zoo members, citizens of South Florida and animal lovers in all 50 states.

Three Phases To Rebuilding

Creating the Metrozoo Crisis Relief Fund was the first phase of fund raising. This project encompassed the thousands of donations received from throughout the country. Now the Metrozoo Crisis Relief Fund is being phased out and supplanted by the Zoo Rebuilding Fund.

The Zoo Rebuilding Fund is the campaign to raise all funds needed to replant the zoo and restore the Wings of

Asia. Its goal is to raise at least \$5 million.

The Tree Campaign is the largest component of the

Rebuilding Fund. Shade trees need to be replanted for animals in exhibits and equally important are shaded walkways and seating areas for visitors throughout the zoo. The Tree Campaign will do this and more. It will also create an endowment for tree care, garden maintenance and propagation of plant materials. It will eventually allow the addition of a full-time horticulturist to the staff to oversee and develop the botanical collection.

The committee heading the Tree Campaign is made up of members of

the former Rain Forest Committee. Under the leadership of co-chairs **Mike Greif** and **Diane Sepler**, they have developed an exceptional idea for donor recognition. They are planning an Avenue of the Giants, a tree-lined entry to the zoo sponsored by major donors.

"Over the years, this will grow into a stately entry way," said Sepler. "The Avenue of the Giants will lead into beautiful botanical gardens that continue throughout the zoo."

For more information about the Zoo Rebuilding Fund and Tree Campaign, call 305-255-5551.

Rain Forest, New Projects Have To Wait

Due to the hurricane emergency, the Rain Forest Project, and Capital Campaign, including the Cuban Amazon Parrot's Plaza, have been put on hold. This and other new projects will probably not resume until 1994.

As of late August, about \$2.5 million of the \$6 million needed to construct the rain forest exhibit had been pledged. All donors to the project are being given the option of transferring their gifts to the Rebuilding Fund or having their gifts held until it is possible to proceed with the rain forest project. Numerous community groups have been providing valuable design, horticultural and educational expertise on the Rain Forest Project and their patience is appreciated. ■



The koala exhibit roof, walk-in coolers and climate control system must be replaced in order for the animals to return.

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A Salute To The Media

Often national celebrities are less-than-grateful for attention lavished on them by the media. In the wake of a rough presidential campaign, for example, some highly placed political figures have expressed resentment toward journalists who observe, investigate and report on their every action. Now that Miami Metrozoo has been catapulted into the national spotlight, we find ourselves in sharp disagreement with this attitude.

Over the years, the zoo has developed strong, positive relationships with members of the South Florida media. We have always appreciated the time and effort they put into coverage of the zoo. But following Hurricane Andrew, the media became more than the eyes and ears of our publics. They were a lifeline to our survival.

"The coverage went beyond normal reporting," said **Ron Magill** who handles media relations for the zoo. "I was able to get on the air hourly on some stations to talk about our need for special assistance and supplies. I just cannot say enough about how well they came through for us."

Before long, the whole nation was aware of our story and moved to help.



Donations began pouring in.

"We did not ask for money," said Magill. "We were simply reporting on the situation at the zoo. But thousands in unsolicited funds started to come in. The Today Show coverage generated so many calls to the network that NBC asked us for an address where people could send donations." This is how the Metrozoo Crisis Fund got started.

Although funds were solicited, it was possible to broadcast requests for special supplies and services. This is how a pilot and plane were found to transport the koalas to Busch Gardens.

Since Andrew, the power and influence of the mass media have combined with the sympathy and generosity of readers, listeners and viewers to produce the unprecedented support that will ensure the zoo's survival. ■

Burson-Marsteller/Miami To Contribute Services

Burson-Marsteller/Miami, a division of one of the world's preeminent public relations firms, has agreed to donate its services to the Zoological Society of Florida.

"As public relations professionals, we are proud and enthusiastic to be working with such a fine team and expect to produce some of our best work on this account," said **Eileen Marcus**, senior vice-president and general manager of Burson-Marsteller/Miami. "As residents of Miami, we are grateful for the opportunity to give something back to our families, friends and neighbors by helping to restore Metrozoo."

Account manager **Tammy Rubin**, who transferred to the Miami office from New York, brings valuable experience with zoo and environmental programs. She was part of Burson-Marsteller teams that worked on communications for the New York Zoological Society and the United Nations Environment Program. The team, which also includes media

specialist **Carmen Ojala**, will be responsible for orchestrating public relations support for specific projects such as the zoo reopening, Zoo Rebuilding Fund, Jungle Jog and Feast for the Beasts. Burson-Marsteller/Miami will also provide general public relations counsel to ZSF.

The partnership with Burson-Marsteller was initiated by **Bob Paul**, a ZSF board member and attorney who works with Burson-Marsteller on behalf of a client. "Burson-Marsteller is generally regarded as outstanding," Paul said. "Their expertise in crisis management will help the zoo get through the crisis caused by Hurricane Andrew."

Burson-Marsteller/Miami is the only international public relations and public affairs agency in South Florida. It is a bilingual communications agency with a professional staff of 18 that serves its parent company as U.S. Hispanic Marketing Center and regional headquarters for Latin America. Burson-Marsteller Worldwide has 55 offices

in 27 countries. The Burson-Marsteller network includes specialists in public affairs, corporate communications, consumer marketing, media relations, crisis management and many other communications disciplines.

"We are deeply grateful to Burson-Marsteller for their help," said Glenn Ekey, ZSF executive director. "Our goal is to become a world class organization; we want to work with other world class organizations. Burson-Marsteller is clearly one of them." ■



The Media Was There

The first news crew to arrive at the zoo after the hurricane was **WTVJ**, an NBC affiliate that simulcast coverage on **Y100** radio. With **WTVJ's** assistance, the *Today Show* picked up the story. Through **WSVN** affiliation with Fox and **CNN**, including coverage on *Sonya Live*, more national and international audiences were reached. **WPLG** and **ABC Good Morning America** and **WCIX** and **CBS This Morning** also covered the Metrozoo crisis.

Radio stations **WLVE/Love 94** and **WIOD AM** provided coverage throughout the weeks following the disaster.

Coverage from print media has also been outstanding. Photographers **Marice Cohn-Band** and **Bill Frakes** of the **Miami Herald/El Nuevo Herald**, **John Pemberton** of the **Florida Times Union**, **Loren G. Hosack** of the **Palm Beach Post** and **Maya Bell** of the **Orlando Sentinel** were just a few of the journalists who captured unforgettable images of the zoo after Andrew. Excellent reporting in these daily newspapers was carried nationwide by **Associated Press** and **United Press International**. Coverage in publications such as **People Magazine** and **The New York Times** has also been invaluable.

**Zoological Society
of Florida
Board of Directors,
1992-1993**

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Glenn W. Ekey,

Zoological Society of

Florida Executive

Director



Armstrong



Bloom



Cherry



Cobb



Sepler



Sanson



Soto

Come And See For Yourself Zoo Reopening Friday, December 18

After a long, arduous clean-up, Miami Metrozoo reopens to the public Friday, December 18. All 290 acres are accessible, including the children's zoo. Hundreds of animals are on display and most exhibits are open. Notable exceptions are the koala exhibit, and Wings of Asia. Of the favorite large mammals, only the Asian elephant is absent. The zoo gift shop is up and running as are zoo concessions and rides, except for the monorail.

"Visitors will see a much different zoo than they saw before. We still have lots of animals, but many structures are destroyed and landscaping is practically nonexistent," said ZSF Deputy Director Cynthia Zeigler. "Visitors will see why we are still in such desperate need of assistance."

First Week Free For All

To thank the community for its outstanding support, admission will be free for the first week. Then starting Dec. 26, reduced admission prices will be in effect: \$5/adult and \$2.50/child age 12 and under. The price reduction

will remain in effect until mid-1993. Zoo hours are 9:30 a.m. to 5:30 p.m. daily. The ticket booth closes at 4 p.m. For information call 305-251-0400.



Zoo Members' Commemorative Poster

Zoo Members Receive A Special Gift

Zoo members who visit the zoo during the reopening weekend and present their membership card, receive a free commemorative poster. This memento is for members only and must

be obtained in person at the zoo.

"Our members have been especially important to us during this rough period," said Ms. Zeigler. "We want to give them a gift that honors their involvement and commitment during a historic period of our existence."

Funding Still Badly Needed

Closing the zoo has cost thousands of dollars in lost revenue. Reinstating admissions income is an important part of the rebuilding process, but it will not be enough to restore the zoo. It is hoped that seeing the zoo will inspire people to become members, volunteers and donors.

"We want the community and our members who have been so supportive during this crisis, to have a good opportunity to view the zoo and our exhibits in their current condition," said Zoo Director Bob Yokel. "We hope they'll appreciate the intense effort that has gone into the clean-up so far, but at the same time we want them to see how much farther we have to go. We still need lots of time and money to bring the zoo back to what it was." ■

New Faces On The Board Of Directors

Leaving no aspect of our operations untouched, Hurricane Andrew also affected our board of directors. We bid farewell to **Frank Baiamonte**, who served as a ZSF director for eight years and was scheduled to assume the role of president on October 1. Due to the loss of his home, however, he has relocated to Orlando.

Sherrill W. Hudson is immediate past president having served as leader of the board during Hurricane Andrew and the demanding period that followed. Hudson commented on the efforts of zoo staff during this emergency: "The board of directors has been thoroughly impressed with the dedication and back-breaking effort of the Metrozoo employees during this crisis. They have proved themselves more than worthy of our heartfelt gratitude and support. As a board, we are inspired to redouble our fund-raising efforts to give this great staff the resources to rebuild and create an even better Miami Metrozoo."

Frank N. Hawkins, Jr. has agreed to become president and will serve in that position through September, 1993. Hawkins is vice president, corporate relations and planning for Knight-Ridder Inc. He has been a director since 1989.



Hawkins

Seven new directors have joined our board. Together they represent a spectrum of specialties from law and finance to travel and tourism.

Karine L. Armstrong is vice president of marketing for Royal Caribbean Cruise Lines.

Mark D. Bloom is head of the bankruptcy department at

the law firm of Greenberg, Traurig, Hoffman, Lipoff, Rosen & Quentel. **Gerald C. Cherry** is general manager, operations at Texaco's Latin America/West African division headquarters. **Sue M. Cobb** is vice president of Cobb Partners, Inc. **Eugenio Sanson** is managing partner of the CPA firm of Sanson, Kline, Jacomino & Co. He initiated and serves as committee chair for the Cuban Amazon Parrot's Plaza project. **Diane S. Sepler** is founder and president of Diane S. Sepler Interiors Inc. She is chair of the Tree Campaign to replant the zoo. **Edward Soto** is a litigation partner in the firm of Baker & McKenzie. ■

And The Feast Goes On

Throughout last summer, a committee headed by **Jackie Levy** was finalizing committee rosters, planning invitations and decor, recruiting volunteers and developing a list of more than 40 Miami-area restaurants to cater the zoo's biggest annual fund-raising event. Fortunately, Hurricane Andrew did not undo all this important planning. With some adjustments, including a new name, the Feast for the Beasts sponsored by **American Express** will be held, as originally scheduled, on Friday, March 5, 1993.

Like all of our fund-raising efforts now in progress, the 1993 Feast will benefit the Zoo Rebuilding Fund. Net income from this event typically exceeds \$100,000, so it will be an important part of our rebuilding effort. The 1993 Feast will be an elegant, black tie affair held at the zoo. The theme of rebuilding will be reflected in the decorations, with back hoes, cranes and fork lifts in the background.

Committee heads **Beverly Assmar, Carmen Frick, Jacki Gran, Julie Heller, Pam Liberman** and **Rose-marie Twinam** are working closely with zoo staff and over 50 additional volunteers to assure that the event



will be as successful as ever. The cost is \$150 per person or \$500 per person for V.I.P. "Beastkeepers." For more information about the 1993 Feast for the Beasts, call **Leslie Cohen** at (305)255-5551. ■

Staff Stuff

Earlier this year the Zoological Society of Florida (ZSF) welcomed a new executive director, **Glenn Ekey**. He oversees membership, fund raising, education and volunteer activities. Ekey has a long record of success in zoo management, marketing, public relations and development, having served as executive director of the Rhode Island Zoological Society at Roger Williams Park Zoo in Providence, and director of marketing and public relations for the Cincinnati Zoo and Botanical Garden. Ekey is an excellent strategic planner and administrator, with a passion for graphic design and photography. He has a personal commitment to tropical rain

forest preservation. We welcome Glenn, his wife **Diane** and their daughter **Lauren**, age 4.

Cynthia Zeigler returns to ZSF as deputy director. She most recently held the position of executive vice president at Parrot Jungle and Gardens. Before that, she had served six years as associate director of ZSF. Zeigler has more than 15 years of fund-raising experience for various charities. She was associate director of CARE Inc., the overseas relief organization, and has worked in television promotions for Channel 6 and in public affairs for Channel 10 in Miami.

Like many businesses in the area, Metrozoo experienced a cash-flow crisis immediately following Hurricane Andrew. Admissions, gift shop and concession income ceased when the

zoo closed. Development and membership proceeds were all directed into the rebuilding effort. So severe was this problem that it was necessary to lay off 26 employees of the Zoological Society of Florida. This sad and painful decision was absolutely essential to maintain our financial stability. There were no layoffs of zoo personnel employed by Dade County Park and Recreation Department, including maintenance, animal sciences, security and administration.

Most difficult for us was laying off our education staff. We place a high value on the zoo's role as an educational resource and plan to recruit a new director of education as soon as it is feasible to resume a regular schedule of public programs. ■

We're Talking Shop

The zoo gift shop is open for business as of Friday, December 18 when the zoo reopens. Meanwhile, Dadeland Mall is contributing space for a satellite shop, which will be open through Jan. 15, 1993. Zoo members receive a 10 percent discount at the satellite shop just as they do when they shop at the zoo.

According to **Marlene Hawkins**, general manager of the zoo shops, the gift shop building withstood the hurricane fairly well. The shop at the children's zoo was badly damaged, however, and the gift kiosk near the koala exhibit was destroyed.

"We were able to safely store quite a bit of the merchandise prior to the

storm," Hawkins said. "About 80 percent of the merchandise was untouched. The remaining 20 percent was ruined." Inventory is being supplemented with seasonal merchandise.

Animal lovers will welcome top quality gifts that reflect their love of wildlife and help the zoo at a time when the need has never been greater! ■

Feast Fare

Feast on goodies from these great restaurants and many others at Feast with the Beasts, March 5, 1993.

Big City Fish
Bijan's
The Bistro
Cafe La Llave/
Gavina Coffee Co.
Cafe TuTu Tango
Capitano's Tuscan Grille
Casa Juancho
Casa Rolandi Ristorante
Chef Allen's
Christy's
Cisco's Cafe
Creative Tastes Catering
The Dining Galleries
El Novillo
Godiva Chocolatier
Haagen Dazs Ice Cream
Hooligan's
Liquor Locker
Hooligan's Pub
and Oyster Bar
John Martins's
Little Palm Island
Los Ranchos Restaurant
Parrot Jungle
and Gardens
Restaurant St. Michele
Ristorante Giacosa
Valenti's
Victor's Cafe

Beverage providers are:

Beverage Cannors
Hiram Walker
Island Oasis
The House of Seagram
Silver Eagle
Southern Wine
and Spirits



First-Hand Report

General curator Bill Zeigler was one of a handful of people who stayed at the zoo during Hurricane Andrew's siege. An Indiana native, Zeigler has experienced hurricanes in his 17 years in Florida. He stayed at the Crandon Park Zoo when Hurricane David passed over Key Biscayne. But David was nothing like Andrew. Excerpts from an interview tell of activities following the long night of the storm.

22

When the winds were down to approximately 60-65 mph we went out. I just can't describe it, the whole place was literally torn apart. The volume of damage done by the storm was beyond comprehension. We were relieved that it was over, that we were all okay, but we were really numb. We knew we had a job to do and we went about it without saying much.

We started going from area to area making sure that we either found a dead animal or a live animal still in the enclosure. We had radios and as we went around the zoo we called back into the hospital to let them know where we were, what was alive and dead and that we were okay. We were prepared in case we found something dangerous and had to decide whether to dispatch it or not. That took about two hours.



Bill Zeigler

Greg Hark

Two or three hours after daylight, we saw this person walking into the zoo. Nobody in his right mind would be up moving around, but here came our electrician, Fred Galan, who had made his way in. Together we went around trying to restore power and make sure water pumps were up and operating.

The next task was to make the zoo approachable. With Fred in front checking for hot wires, I took the largest forklift and started clearing trees. When

we got to the gate our director, Bob Yokel, showed up. From there we cleared all the way out to the highway, went back and cleared a road to our administration building. Then the staff started coming in.

At about 2:30 in the afternoon, Cindy, Kelsey and I went home to see what was left. We found that our home was lost. We didn't go in to work the

next day because we were trying to make some sense out of what we had to do to take care of ourselves. But there just wasn't a whole lot we could do except try to secure a dry place to sleep at night and protect what we had left. So we began to go back to work every morning.

Every night I was dead tired from moving animals or cutting trees all day long. And then I'd go home and try and do something there without electricity.

A horse trailer tumbled several hundred yards into the rhino enclosure.



John Pemberton/© 1992 The Florida Times Union

We sent Kelsey to her grandparents because it was too dangerous at home with all the nails and sharp objects lying around. We spent the next week or so trying to decide what we could save and couldn't save. We began eating with the neighbors at a different house every evening, cooking what food had lasted from our freezers. We set up guards all night because of looters in the area. We worked during the day at the zoo, coming home to what was left at night.

The funny thing about work was that, once I began to assess the priority for the animals and decide what needed to be done, it was fairly easy to do because everybody was so deeply involved. They came in and they worked their tails off. I had people working seven days a week and we finally had to stop them.

Then I began to realize what we were doing. We worked so much because at least at the zoo we had a direction. We had something to accomplish and could see results. At home, for those who lost our homes, there was no direction. Every night was a question mark about what to do, where to sleep, how to stay dry if it rained. That made us work even harder at the zoo because it gave us our only clear course of action.

Four or five weeks later, people finally began talking about their personal experiences and what they went through: what they did during the storm, what they felt, how scared they were – and we were all scared. After that we began to slow down and take a more logical pace. We put people on schedules and we made sure they got out early and were able to get back home and deal with insurance people and whatever.

The other odd thing was that the animals did basically the same thing, although their time frame was much shorter. In the week after the storm we had animals with other species they'd never mixed with before and there weren't any conflicts. There had been a big enough change in their routines and environment that they were confused and rather numb. As we got back into a routine, their personalities re-emerged and the normal behaviors began to reappear.

We could only guess at how they behaved during the storm. Normally,

animals will turn their backs to the wind and lie down to present the least amount of wind resistance and the smallest target for flying material. That's probably what our stock did. The giraffes were locked in their barn. Part of the wall had caved in, but nobody was hurt. I guess they're just quick

enough not to get hit by flying material. We found no signs of panic in the animals and didn't see any bruised animals. Even the animals we found dead showed no signs of trauma. As to the surviving animals, everybody seems to be doing well. But it's still a long way back to normal at the zoo. ■



Ron Magill



©Marice Cohn-Band, The Miami Herald/El Nuevo Herald

LIFE GOES ON

ZOO BIRTHS

August 25 - November 7

Yellow-backed duiker <i>Cephalophus sylvicultor</i> Male	Aug. 25
Nyala <i>Tragelaphus angasi</i> Male	Sept 4
Reticulated Giraffe <i>Giraffa camelopardis reticulata</i> Female	Sept.7
Black and white colobus <i>Colobus polykomos angolensis</i> Sex undetermined	Sept. 7
Grevy's zebra <i>Equus grevyi</i> Female	Sept. 17
Greater kudu <i>Tragelaphus strepsiceros</i> Male	Oct. 18
Sable antelope <i>Hippotragus niger</i> Male	Oct. 24
Gerenuk <i>Litocranius walleri</i> Male	Oct. 31
Nyala <i>Tragelaphus angasi</i> Male	Nov. 7

Carnivores such as Bengal tigers remained safe and secure in their night houses throughout the storm. Exhibits were severely affected though.



Volunteer Training To Resume In Spring

Our popular eight-week volunteer training course will be offered again next spring. The course will be free and open to the public. Dates, times and locations will be announced in future editions of Toucan Talk.

Volunteer training covers zoo operations, customer relations and animal biology. After completing this course, volunteers are able to work in a variety of areas, including membership, special events, outreach and information services. A special Gift Shop volunteer training program will also be offered. This will be a shorter course for those who have an interest in sales.

To Our Members: You Are The Greatest!

The last thing we expected after Andrew was for zoo members living in storm wrecked areas to call us, ask how we were doing and offer to make donations. But enough of these kinds of calls came in that we decided to notify zoo members of our status in a general mailing.

Being sensitive to the human situation, we sent the message "We are still here, we sustained major damage, and we need help. The best way to help would be to renew your zoo membership when it comes due." We provided a return envelope for those who might want to make an immediate contribution. To our amazement, we received over \$17,000 dollars from our members in the four days following that mailing. To date over \$45,000 has been received. The majority of these receipts were donations, over and above membership renewals.

With the donations came letters of sympathy, sorrow and encouragement:

"The zoo and its animals and birds mean so much to all of us in Miami. We live in Deerwood and share the loss as we also lost our new home."

"For a number of years my sister and brother-in-law have spent many happy and fulfilling hours as docents at Metrozoo. I can't tell you of the enjoyment and added depth it brought to their lives, nor the grief and sorrow they've expressed at the devastation Andrew wrought. They especially loved working in the aviary. I regret that my contribution can't be ten times the enclosed."

"I would be very sad if my favorite place suddenly wasn't there. My thoughts and prayers are with you. My love to the tigers. Also the turtles. I hope all the animals are O.K."

Kind words like these have helped to sustain us through long hours of hard work in horrible working conditions. We thank our members for all their support and ask that they continue to assist us spiritually and financially over the long rebuilding process.

Extra Benefits From Area Merchants Enhance Zoo Membership

Membership continues to be one of the best ways to support your zoo. Your favorite animals have never needed you more. We are working with area businesses to provide extra incentives and benefits for zoo members. These will include discounts and premiums on retail merchandise, services and entertainment. To find out more, call us during business hours at (305)255-5551.

All members enjoy the following benefits for a full year:

- Free Admission to the zoo and 125 other U.S. zoos
- Official Membership Card and Auto Decal
- Free Subscription to *Toucan Talk*, our bimonthly newsletter
- Invitations to Members Only events
- Discounts on Zoo Boat Rides and Gift Shop Purchases
- Discount admission to other Florida attractions

Additional benefits accrue to members at the \$75 level or higher. Depending on your level of membership you can receive one or more of the following: a free subscription to ZOO LIFE magazine, a commemorative gift, free guest passes, invitations to V.I.P. events, a special behind-the-scenes tram tour, invitations to sneak previews of new animal exhibits, your name on our "Commitment to Wildlife" board, or an invitation to serve on our board of trustees. ■

Yes! I want to be a zoo member at the level checked below.

- | | |
|--|--|
| <input type="checkbox"/> Individual - \$30
Annual membership for one adult | <input type="checkbox"/> Senior: Dual - \$35
Annual memberships at reduced prices for adults age 62 and over. Proof of age required. |
| <input type="checkbox"/> Dual - \$40
Annual membership for two persons living at same address | <input type="checkbox"/> Supporting - \$75 |
| <input type="checkbox"/> Family - \$50
Annual membership for two adults and all children 18 years and under living at same address | <input type="checkbox"/> Contributing - \$125 |
| <input type="checkbox"/> Senior: Individual - \$25 | <input type="checkbox"/> Sustaining - \$250
Annual Supporting, Contributing and Sustaining memberships can be Individual, Dual or Family |

- ZOOLIFE MAGAZINE** - \$11.95/year
Optional with Individual, Dual, Family and Senior Memberships. Free with supporting levels and above.

Discount Guest Passes

Discount guest passes are available to members only. Call us during business hours at (305)255-5551 for more information.

Total Amount Enclosed: \$ _____
Method of Payment: Check MasterCard Visa American Express
Charge Card # _____ Expires _____

Signature: _____
Members: _____ **Children (Age 18 and younger)**
Adult #1 _____ Name: _____ Age: _____
Adult #2 _____ Name: _____ Age: _____
Address: _____ Name: _____ Age: _____
City: _____ State: _____ Zip: _____
Daytime phone: _____

Mail completed membership form with your payment to:
The Zoological Society of Florida
12400 S.W. 152 Street
Miami, FL 33177-1499

How Can We Thank You?

It is hard to find words to express our feelings after such a traumatic event, but most of us use words to this effect:

"We have been **overwhelmed** by the phenomenal **outpouring** of sympathy, **generosity** and support from our **members** and **volunteers**, our **community** and from animal lovers all across the country. We have been **heartened** by people's **commitment** to our **rescue** and **rebuilding**. It's also important to let everyone know how **grateful** we are for the incredible spirit, **courage** and **endurance** of the zoo's staff. They are truly **amazing**, **remarkable**. There's really no way to thank everyone enough for their support except to say that we are **inspired** to build an even **greater** zoo than before. We hope everyone will **share** our **optimism** and take an active role in our future growth and **success**."

Y A D N P Q B O F S S E I A L U F F N X
 G J N E S M W A R Q L W A V P J U Y A X
 B S E I M M P E M G G U I R C J I B J I
 F I Z C K L E T A A D E F M E Q E O L B
 Y A V T O T E P E R Z E N E M B Y Y T A
 P O K V N M F H E O T I N E T E M P W I
 B O I U Z C M M W N O R N E R A T E S C
 K J L K P I A U E R M U S G T O R Y M M
 S O H S G R Q M N B E D T F O R S G J B
 V Q V U K L T A U I O V E P N O A I X Y
 J N Y A G T G E J X T E O R O Z C E T I
 P F B P I O Q N R C X Y C X I U S P H Y
 G L C M R S P L I A O J I N F P R M D N
 E R M L U E U T R D H U T F A W S I F A
 D O E E G F S C I R L S R I S R H N N J
 C U B A J F Q C C M X I D A H P U T I G
 R R M Z T J P T U E I E U C G V G D O Q
 G H X L T E D H O E S S O B L E R X N I
 B F N B E A R O U T I S M Z E W V O Y E
 E Q C B B L S J W A X A K G A R Q C V R

Maybe you can find the words, too. There are 20 words in the puzzle.

Special People, Special Happenings

Rita Magill fielded over 400 calls following the storm. "I was five weeks from my due date and Ron didn't want me to do anything, not even sweep the house. But I was sweltering at home with no power, no air conditioning and I needed something to keep my mind off that. I felt so sorry for the zoo and they had no phones so I kept that going. I didn't really do anything. Other people did a whole lot more."

An anonymous donor from Country Walk came to the zoo a few days after the storm to present a donation. Our staff member who accepted the gift asked why the donor was giving money to the zoo when she'd lost her home. She responded that if the zoo wasn't here, she wasn't sure she would want to rebuild her home. We are honored to know that our contribution to the quality of life is so valued.

Suitcase for Survival is an educational unit to help zoos teach about endangered species. It's prepared by the AAZPA Education Department, which packages a curriculum along with zoological artifacts in suitcases donated by American Tourister. During Hurricane Andrew, our education facility was flooded and virtually destroyed. But our four Suitcases For Survival and their contents came through unscathed!

1-800-362-5800 is our new toll free line, set up immediately following the hurricane to respond to offers of donations from around the country. The number is being used in our national and local advertising.

Share The Zoo With Your Friends!

Gift Memberships are great for birthdays, holidays, anniversaries, prizes and incentives. Use the form below to give a gift membership. If you need additional applications, photo copy the form or call us during business hours at (305)255-5551.

You Bet! I'd like to give zoo membership as a gift.

Fill in the information requested below and send it to us with your payment. We'll forward membership information to the recipient with a card that names you as the giver.

Gift From:	Gift To:
Name: _____	Name: _____
Address: _____	Address: _____
City: _____	City: _____
State: _____	State: _____
Zip: _____	Zip: _____
Daytime phone: _____	Daytime phone: _____

If you are giving a Family Membership, please include the names and ages of recipient's children (age 18 and younger).

Gift Membership Level

- | | |
|---|--|
| <input type="checkbox"/> Individual (\$30) | <input type="checkbox"/> Senior Dual (\$35) |
| <input type="checkbox"/> Dual (\$40) | <input type="checkbox"/> Supporting Membership (\$75) |
| <input type="checkbox"/> Family (\$50) | <input type="checkbox"/> Contributing Membership (\$125) |
| <input type="checkbox"/> Senior Individual (\$25) | <input type="checkbox"/> Sustaining Membership (\$250) |

Method of Payment: Check MasterCard Visa American Express
 Charge Card # _____ Expires _____
 Signature: _____

Mail completed membership form with your payment to:
The Zoological Society of Florida
 12400 S.W. 152 Street
 Miami, FL 33177-1499



In Memoriam

We grieve the loss of a valued friend and volunteer, Naomi Browning, age 12, who was killed by Hurricane Andrew.

Naomi completed volunteer training and served as a teenage volunteer last summer. One of our brightest and most committed of our young volunteers, Naomi was selected to assist program leader Damien Kong with animals in the classroom.

"Naomi was a good kid," Kong said. "She had lots of initiative and was very focused. She wasn't afraid of anything, not insects, not cleaning up after the animals." Naomi was what zoo folks might call a "true animal person."

According to her mother, Naomi's only fears the night of the hurricane were for the animals. "Her mom said she was more worried about the animals than about her own situation," reported Kong.

To memorialize this exceptional young woman, and to honor all children who love the zoo, the white tiger exhibit was rededicated as the Naomi Browning Tiger Temple on December 5, 1992.

Epilogue

Across South Florida, the signature of Hurricane Andrew was everywhere. But Andrew's effect, like that of most hurricanes, was very far reaching. In our region it was human lives and habitation that suffered the brunt of Andrew's fury. On its Louisiana land fall, the storm track missed big cities but destroyed some of the most productive marshland in the nation, according to Dr. A. Lee Foote of the National Wetlands Research Center/U.S. Fish and Wildlife Service, Lafayette, La. In a 60- to 70-square-mile area of the Atchafalaya Basin, a large floodway that spurs off from the Mississippi River, 80 percent of the timber was laid down horizontally and every fish was killed. Andrew is estimated to have accelerated Louisiana's coastal marsh loss rate from 25 square miles a year to 100. One in 10 deer in Lower Terrebonne Parish, La. was killed in the storm, which also went right through some of the highest densities of southern bald eagle.

But take the global perspective, as if perched on a star gazing down at our little blue planet. From there, hurricanes take on another importance. Scientists speculate that tropical storms are a pressure release between the tropics and the temperate zone and that these cyclonic winds actually help stabilize the atmosphere. Once they have calmed to extra tropical status, hurricanes can be beneficial to distant ecosystems. A high pressure system can stop a hurricane short, but low pressure draws the storm like a magnet.

It makes sense to believe that the force of a hurricane is meant to propel the elements somewhere else. While Andrew blew away our homes, our possessions and the livelihoods of hundreds of thousands of people, how did our native wildlife fare?

Compared to Louisiana, Florida's wildlife was not as badly hit. Everglades National Park, Biscayne National Park and Big Cypress National Preserve sustained minimal damage according to the National Park Service. Most of the animals in these major parks were only slightly affected by Andrew. All the radio-tagged Florida panthers, black

bears and snail kites survived. Only 10 percent of the wading bird rookeries in South Florida were in the path of the hurricane. The storm missed the majority of our bald eagles by passing north of their main nesting area. Manatees did well, too. Only one white tailed deer was found dead after the storm.

Adult alligators seem unaffected, but yearling and nest sites may have been damaged. Red cockaded woodpeckers were seriously affected because almost all their cavity trees were destroyed. Until nesting surveys can be done for both alligators and woodpeckers, their exact status will not be known.

Just as at the zoo, the major impact of Andrew was defoliation. Richard Curry, resource management specialist for Biscayne National Park, says that all of the barrier islands in the park were

Photo: Dr. Thomas Emmel



Blown to extinction? The Schaus swallowtail.

completely defoliated. While he expects a 70 percent recovery, he is concerned about some champion trees (the largest or best specimens of their species in the U.S.) which may not survive. Other habitat loss at Biscayne includes about 30 percent of the coral reefs, damaged by debris.

While most South Florida vertebrates survived, tiny invertebrates were very hard hit. Hurricane Andrew's defoliation of wild lime and torchwood on barrier islands from Elliot Key to north Key Largo could mean extinction for an already endangered butterfly. These plant species are the main food of the Schaus swallowtail caterpillar. Dr. Thomas Emmel, professor of zoology at the University of Florida, Gainesville has been studying this swallowtail. In June, 1992, he and his team removed 100 eggs to be raised in the lab. Of these, 31 survived and are now pupae.

After Andrew, the U.S. Fish &

Wildlife Service asked Emmel to resurvey populations of certain endangered invertebrates, among them the Schaus swallowtail. Finding only a few survivors, and only on north Key Largo, Emmel realizes that his captive colony will likely form the nucleus for future reintroductions of this species.

Dr. Emmel's team is in a similar species survival role for the Stock Island tree snail, a creature that became extinct on its native island only last year. The last known remaining population was an introduced group located in the parking lot at Monkey Jungle, a south Florida park set in a natural hardwood hammock. Dr. Emmel was able to collect 463 snails which are doing well and have already produced eggs.

Signs of hope such as those Dr. Emmel has given us are the product of skilled scientific endeavor and solid good luck. Nature also has developed systems for survival. For example, researchers have observed that the mean hurricane frequency in any particular spot in the Caribbean is about 20 to 24 years, a timespan that closely matches the 20 to 25 years it takes a mangrove community to reach maturity. Though not completely understood yet, this is thought to be an adaptation to life amid tropical storms.

Some survival mechanisms bring wonder in the midst of disaster. The National Park Service reports that many defoliated wild trees started to releaf within a few days after the storm. Bill Robertson, a research biologist for Everglades National Park Research Center, observed that more plants were flowering after the hurricane than he has ever seen in the park. This is a natural post-trauma response for many plants. Bloom. Seed. Survive.

South Florida's wildlife has had thousands of years to prepare for hurricanes. Humans haven't had that advantage. But a drive for survival and success — embedded in our nature? — was everywhere evident when Hurricane Andrew challenged our basic physical resources as they had never been challenged before. Human interdependence has flourished though we may have thought it extinct. ■

A LOT OF THINGS BREAK IN 200 MPH WINDS.
SPIRIT ISN'T ONE OF THEM.

The zoo staff sat huddled in a maintenance building as Hurricane Andrew tore the structure apart around them. As the winds ripped up a circuit breaker, an electrical fire started. The members faced a surreal choice. Sit in a burning building, or go out into one of the worst storms in human history. Fortunately, the torrential rains, which were pouring into the building through fresh gouges in the roof, extinguished the flames.

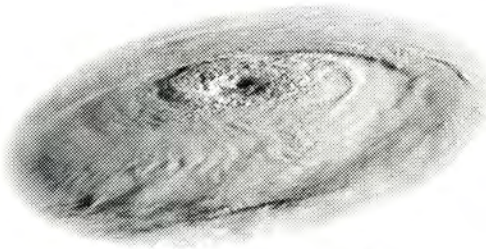
After a few hours, the storm subsided and the staff members stepped out to survey the damage. It was worse than anything they imagined. The former Metrozoo, the nation's second-largest zoo and home to 38 endangered species, was unrecognizable.

Part of what they found: the 300-bird Asian aviary, animal hospital, educational facilities, animal housing, children's petting zoo, perimeter fence, visitors' monorail, and informational signage were all partially or totally destroyed. And although the animal losses were thankfully small, some were hard to take. Like 24 African crocodile eggs, among the first ever bred in captivity, all lost.

To some, this might seem like the place to quit. Curiously, this thought never occurred to the staff.

Immediately the talk centered on the opportunity to build a new zoo from scratch, taking into account everything that had been learned about animals, zoos and people in the years since the zoo was first built. An idea surfaced. Not just a new zoo, but the world's greatest zoo.

Fortified by this vision, the staff began to focus on the task at hand. Because in addition to the losses mentioned above, the zoo lost nearly 5,000 trees, an essential shade canopy for the animals. This foliate cover, if you're wondering, and by now we hope you are, is where we must begin the rebuilding. And by now you must have also realized that we need your help.



Andrew, the most devastating hurricane in U.S. history.

All contributions will go for the immediate reforestation of the land. > \$25 plants a seedling. > \$100 plants a Sabal palm. > \$500 plants an oak tree. However, any donation will help, and a gift of > \$50 or more makes you a member of the Zoological Society of Florida.

Send your tax-deductible contribution to The Zoo Rebuilding Fund, 12400 Southwest 152nd Street, Miami, Florida 33177. Or call 1-800-362-5800.



THE ZOO REBUILDING FUND
Saving our most natural resource™

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Zoological Society of Florida
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Calendar Of Zoo Events

Friday, December 18, 1992

Zoo Reopens to the Public

Admission: FREE through Friday, Dec. 25

9:30 a.m. - 5:30 p.m.

All 290 acres reopen to the public. All exhibits, shops, rides and concessions open except koala, Asian elephant and Wings of Asia and monorail. (See story on page 20.)

Friday, December 18 through Sunday, December 20

Zoo Member Thank You Days

All zoo members receive a complimentary commemorative poster. For members only.

Saturday, December 19

"Hurricane At The Zoo"

7:00 p.m. - WTVJ TV, Channel 4

This one-hour special tells our story from Aug. 24 to our reopening. Watch local TV listings for national broadcast dates.

Saturday, December 26

Reduced Admission Prices Go Into Effect

Reduced admission rates of \$5/adult and \$2.50/child age 12 and under will remain in effect until mid-1993. (Subject to change without notice.)

Sunday, January 10, 1993

Jungle Jog

Registration: 7:00 a.m. Race: 8:00 a.m.

Florida International University

Cost: \$15 (includes T-shirt for first 2,000 who register)

5K run through campus is sponsored by **Baptist Hospital, Happy Balloons** and **Miami Airport Marriott**. For information call: 255-5551

Thursday, February 11, 1993

Gorilla Golf Classic

Key Biscayne Golf Course

A sporting way to support the Zoo Rebuilding Fund. Call Melanie Calvo at 255-5551 for details.

Friday, March 5, 1993

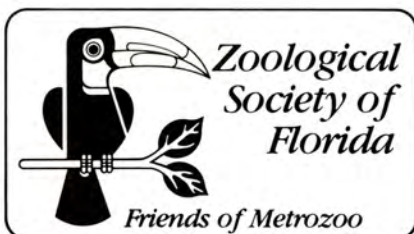
Feast With The Beasts

Sponsored by American Express

8 p.m. at the Zoo. \$150/person \$500/"Beastkeeper"

This black tie affair is the zoo's biggest annual fund raiser, so save the date. For information call: 255-5551. (See story on page 21.)

Fun and fund raising are par for the course at the annual Gorilla Golf Classic. The February 11, 1993 outing will benefit the Zoo Rebuilding Fund.



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