

THE GOMPOU

The Kori Bustard SSP Newsletter

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Edited by Dara Girsch

Kori Bustard SSP

Keeper Representative

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If you are interested in submitting an article or information for the 2014 newsletter please feel free to contact Dara or SSP Chair, Sara Hallager at hallagers@si.edu

Kori Chicks at Birmingham Zoo, a Cooperative Effort with Jacksonville Zoo

Cindy Pinger, Curator, Birmingham Zoo

This past season at the Birmingham Zoo has been very Kori Bustard friendly. The bird department was fortunate enough to be able to repurpose an old kangaroo yard into an area for displaying and holding large birds. We have the ability to display our breeding pair and a separate area for chicks. These are large grassy areas and have several large barns for cold weather holding. The Jacksonville Zoo has been undergoing construction and was not able to raise any Kori chicks this year, but they have a female Kori that was laying fertile eggs. Through planning and cooperation, bird staff from Birmingham and Jacksonville were able to transfer eggs. As of right now we have three very healthy Kori Bustard chicks at the Birmingham Zoo. They

are being raised together and are keeping each other very good company.

All photo credits: Cindy Pinger



SSP NEWS AND SUPPORT

Meet the new SSP Education Advisor!

Greetings!

It brings me great excitement to be joining the Kori Bustard SSP as Education Advisor! I graduated from Georgia State University with undergraduate degrees in psychology and sociology, and Zoo Atlanta has been my second home since 2006. While serving in a variety of volunteer roles and part-time Education positions, I saw the impact of conservation education in action. Two years ago, I became Zoo Atlanta's Interpretive Programs Supervisor, creating and, along with my staff, conducting programs for Zoo guests out on-grounds. I am passionate about conservation and wildlife, and am definitely a "bird nerd." I love working with the public and creating the opportunity for those awe-inspiring moments when people make a real, emotional connection to one of the species that we are all striving to conserve.

As the Kori Bustard SSP Education Advisor, my first action will be beginning the update and expansion of our website (www.koribustardssp.org - If you have suggestions for content, please feel free to contact me)! I'll also be reaching out to other organizations that house koris to determine the status of education programs that focus on them, compiling easily accessible program development resources for educators and keepers, and promoting current fundraising efforts in addition looking at new options. I look forward to collaborating with educators and keepers from other institutions, as well as putting some of my fun ideas for raising awareness with the public into action!

Thanks for having me on the team!
Melissa Casteel
Interpretive Programs Supervisor, CI
Zoo Atlanta



Cokes for Koris Fundraiser Update

Katie Bagley, Lead Keeper, Zoo Atlanta

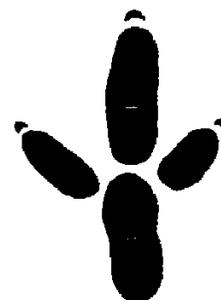
Cokes for Koris just celebrated its two year anniversary at Zoo Atlanta! This is a fundraiser that directly supports the Kori Bustard SSP. Sodas are donated or purchased in bulk and sold for 50¢ to zoo staff. The sodas are stored in bird keepers' break room fridge. Staff and volunteers from all over the zoo know the best place to go for a cold (and caffeinated) beverage. This year we teamed up with the Georgia AAZK chapter to sell cokes at their annual pumpkin carving contest. Participants were able to purchase a bowl of chili and a soda (provided by Cokes for Koris) for \$5. 50¢ from each sale was then donated to Cokes for Koris. Since it started in 2011, this fund raiser has earned \$418. While it doesn't sound like much, it would really add up if every zoo housing kori bustards organized a fund-raiser like this. We're looking forward to partnering up with Georgia AAZK again next year as we continue to support the Kori Bustard SSP.

Believe it or not, but its been 5 years since the AZA Kori Bustard Animal Care Manual was first published and its time to update it! The next edition will expand to cover buff crested bustards.



Don't forget the Kori Bustard SSP sells unique items not found anywhere else including keychains and mini beaded statues made in Zimbabwe.

For details, contact Sara Hallager: hallagers@si.edu



HUSBANDRY NEWS

Phoenix Zoo Houses Kori Bustards to Provide Space for the Kori Bustard SSP

Lisa Murphy, Senior Keeper, Phoenix Zoo



Several years ago, the Phoenix Zoo agreed to help the kori bustard SSP by housing juvenile Kori Bustards in our off-exhibit large bird holding yards until permanent homes can be arranged for them. Our climate is perfect for koris, and they can stay outside without supplemental heating or cooling throughout the year. We have four holding yards, each about 30' x 30'. They can be connected to each other through large (6') gates. Each yard has been planted with native shrubs and grasses which provide the birds with hiding places and shade.

We decided to try putting all the juveniles together instead of separating them, and this has proven to be a successful method of management them. New birds are kept in one yard with visual access to the others for a couple days before allowing them in with the "flock". We have had 10 juveniles cycle through this area – never holding fewer than four birds at a time since we started receiving them.

Most birds are placed in other institutions before reaching sexual maturity, but we have had a five year old female in with the group with no problems. She did go into breeding season territoriality this summer, but her aggression was limited to guarding a relatively small area around her chosen nest site, and the other birds easily learned to avoid her space. One male came to us as a six year old and never caused any problems within the group in the year and a half he stayed with us.

During the day, the birds space themselves throughout the yards. We rarely see more than three birds together in any one yard, but they all make use of all four of the yards over time. We do see displacement by the bolder birds when feeding, but the meeker birds have plenty of room to hang back in other yards, or behind obstacles, and wait for their turn.

This area also sits along a fairly busy, noisy access road. The birds that have been around longer have learned to ignore the commotion. This lack of nervousness and excitability has been helpful in calming the new birds down so we have seen few injuries.

Managing juveniles in this manner has helped provide more housing options and space for this portion of the population, in support of the Kori Bustard SSP.



Kori Bustard SSP



Blank Park Zoo's Kori Bustard Exhibit

By Shannon McKinney

In the summer of 2013, the Blank Park Zoo entered into the world of kori bustards for the first time in the zoo's history when we received a young pair from the Phoenix Zoo. Their kidney shaped exhibit is 65 feet long with eland and ostrich surrounding the back 2/3 of the exhibit as a back drop [they are not part of the kori yard]. The exhibit is bi-level with each tier measuring approximately 20 feet wide divided by a 3 foot rise. The upper level of the exhibit offers taller 3 foot grasses for the kori's to forage in and be hidden if they choose and the lower level has more of a sand base with short grasses suitable for tortoise and kori's alike. The kori's share their bi-level exhibit with African spurred tortoise *Geochelone sulcata* which are confined to the lower portion of the exhibit. The kori's spend most of their time on the top tier; however they have easy access to both levels of the exhibit. The upper tier contains their holding area with divider stalls for each bird during overnights. The exhibit features various heights throughout the space, adding topography to the visual sight lines for the guests. With the unique exhibit design came unique challenges such as the need for shade structures as summer progressed.

Due to the unique features of this exhibit, various behaviors have been observed. While the kori's spent most of their time in the top level, they have been observed foraging and interacting with the spurred tortoise on the lower tier. Having a strategy to deal with mixed species feedings presented ways to keep the kori's occupied while the tortoises participated in daily training sessions. Managing kori's in this type of exhibit has worked out well and we haven't observed any interspecies aggression. The overnight recall to holding is similar to that used by other institutions with a solid recall taking place each night to decrease stress on the birds. Our hope for the 2014 season is the exhibit matures more and gives the animals and public a more naturalist experience.



Photo credit Blank Park Zoo Staff

The Kids Are Growing Up!

Jenna Curtis, M.S. Candidate, Dept. of Fisheries & Wildlife, Oregon State University

Anyone who works with Kori Bustards recognizes their unique and interesting personalities. Getting to know adult koris can be a treat, but watching them grow up is something truly special. The character of a kori takes time to develop, and years of successive observation can reveal subtle “quirks” possessed by each individual. Keepers and zoo volunteers can begin to identify their birds not only by sight, but also their behaviors: a favorite spot for sunning, a penchant for carrying sticks, or a naturally spunky attitude.

Unfortunately very little is known about how koris mature in the wild. Kori bustards leave the nest their first year, but don’t reach sexual maturity until approximately 3-5 years of age. Where they go and what they do during the interim is shrouded in mystery. Whether subadult koris go on isolated “walkabouts” or interact with other subadults has yet to be firmly established.

Fortunately long-term behavior monitoring programs at places like the Smithsonian National Zoological Park give us a glimpse at what it might be like for a kori to grow up. However, instead of observing patterns of behavior on an open savannah, we learn how subadult koris interact with conspecifics in a captive environment. Understanding subadult group dynamics is key; subadult interactions may influence how individuals will behave together as adults. In many cases, koris are first introduced to each other after maturation, and their success or failure to “get along” is assessed *ex post facto*. It remains to be seen whether raising koris together as subadults will help or hurt their forming a cohesive breeding flock.

We are reaching an exciting stage of research at the SNZP. For the past three years we have enlisted volunteer “kori watchers” to observe three subadult kori bustards. Two of the birds are five-year-old captive-bred females, both offspring of the SNZP breeding male “Noname”. The third is a captive-bred male named Maliki, born at the Dallas zoo and added to the SNZP flock in 2010. Ultimately these three will form the foundation for a new breeding flock at SNZP. In a 2011 Gompou article, we described some of the unusual behaviors these subadults displayed that were not observed in adult birds. One of our goals was to see how these behaviors would develop as the birds matured into adulthood. Another goal was to see if and when Maliki would begin display behaviors.

Well, our kids are growing up! This summer, female “Tatu” laid her first egg. While the egg was infertile, this is a sign she has reached adult reproductive status. Over the past two years, male “Maliki” has also become more and more confident with his display behaviors. What began as rudimentary head tosses or partial balloons has increased over the past two years into frequent actions that we termed “sexual displays”. Most of these displays consist of head tossing or head jerking, partial ballooning and much gulping of air- as if “Maliki” were warming up his esophagus for full-on booming. While “Maliki” still hasn’t mastered the art of booming, this increase in sexual displays during the breeding season suggests he is close to maturation. We are excited to see if he “figures it out” next year!



Interestingly, as “Maliki’s” sexual displays increased, his propensity to emulate the girls in “nest building”-type behaviors (known as “item manipulation” in our ethogram) decreased, and were not reported at all this year. Additionally, the subadult female “Chasi” has proved a fascinating enigma. Unlike her sister, “Chasi” has yet to lay an egg. She still exhibits occasional aggressive behavior towards ‘Maliki’, chasing him away from her preferred heating pad or participating in intense bill-to-bill “face-offs”. There is little substantive evidence to suggest that “Chasi” has become the dominant female in our young flock, but it will be interesting to see how she interacts with “Maliki” when both are fully mature.

There is also evidence our subadults are “settling down”. Less frequently reported are the energetic blends of jumping, flapping, and ruffling they performed in earlier years. Our next goal will be to analyze whether our trio’s activity budgets are beginning to resemble those of adult birds, and when this transition occurred. Getting to know these birds during the past two years, I am both excited and hesitant to have them grow up. Being an adult kori can be a scary business! I trust our three birds are ready to face it as a team, with the rest of us cheering them on every step of the way. [photo credit Lisa Barker].

MEDICAL NEWS

The National Zoo is pleased to say that its breeding male kori "Noname" is doing remarkably well despite having cancer. He even sired a chick in 2013! His treatment was presented by Dr. Samantha Sander at the 2013 American Association of Zoo Veterinarians Conference in Salt Lake City.

Sander, S., Hope, K., McNeill, C., Roberts, J., Boedeker, N. and Murray, S. 2013. Metronomic chemotherapy for sarcoma treatment in a kori bustard (*Ardeotis kori*). American Association of Zoo Veterinarians, Salt Lake City, UT Oct 2013



Egg laying in young female kori bustards

A 3 year old female and a 5 year old female at National Zoo both laid their first eggs this past summer. Both eggs were of normal size. As is often the case with koris, infertile eggs are produced for a few years. Age of first reproduction in female koris has been reported at 3 years although age of first reproduction is typically not until 8-9 years of age.



Dr. Rhea Hanselmann won the 2013 Linda Munson Pathology Manuscript Award for her paper "Causes of morbidity and mortality in captive kori bustards (*Ardeotis kori*) in the United States". This award recognizes the best zoo or wildlife pathological manuscript published each year by a graduate student or resident in either the *Journal of Wildlife Diseases* or the *Journal of Zoo and Wildlife Medicine*. Congratulations to Rhea!!

Hanselmann, R., Hallager, S., Murray, S., and Mazet, J. 2013. Causes of Morbidity and Mortality in Captive Kori Bustards (*Ardeotis kori*) in the United States. *Journal of Zoo and Wildlife Medicine* 44(2): 348–363.

Abstract: The kori bustard (*Ardeotis kori*) is a popular avian resident of zoos and wild animal parks throughout North America and Europe. As this species' numbers continue to decline throughout its native African range, the need for its successful captive management becomes increasingly apparent. To this end, an understanding of the factors causing morbidity and mortality in the captive kori bustard population is critical. Here, the demographics, husbandry practices, and causes of morbidity and mortality of 94% of captive kori bustards (198 individuals) housed in zoos throughout the United States between 1988 and 2008 are described, and suggestions for captive management targets in this species are presented. The most common clinical and pathologic findings observed were lameness (48 cases), gastrointestinal parasitism (45 cases), and wing integumentary trauma (32 cases). Trauma was a very common cause of morbidity (135 cases) and was the most common cause of mortality (53 individuals, 40% of deceased animals). Considering the high prevalence of traumatic injury and death observed in this population, captive management of kori bustards should focus on developing strategies that minimize opportunity for injury. Priorities include preventing exposure to potentially hostile exhibit mates, decreasing stress associated with human interactions, and researching the effects of diet on skeletal development of young birds.

Third Case of West Nile Virus Confirmed in US Kori Bustard Population

Kyle Loomis, Keeper I - Birds and Program Animal, Zoo Atlanta

The city of Atlanta, as well as the entire southeast, experienced one of the wettest summers in recent history this year. These conditions created perfect conditions for an increase in the local mosquito population. Keepers were required to be extra vigilant due to the issues these insects could cause our bird collection. Such was the case for “Snake” and “Tuza”, Zoo Atlanta’s Kori Bustard pair. “Snake”, our 6-year-old male, had been proudly displaying and booming across the zoo all summer. Even as the time drew near for his breeding condition to decline, keepers still had to utilize the secondary shift area on exhibit. Otherwise, servicing the birds and their exhibits would be a less than ideal situation.

On July 6, I arrived at their exhibit around mid-morning to begin the normal routine. Instead of “Snake” patrolling the walls of his exhibit, I found him sitting in a corner. He did not rise to his feet when I approached him from the opposite of the fence and would not acknowledge my presence. He refused to shift into his secondary yard to receive his diet for the morning, showing little interest in food. Needless to say this was not the proud, energetic bird I had come to know.

I quickly notified our Lead Keeper, Katie Bagley. While she was in route to my location, I noticed flies seemed to be irritating “Snake”. We both feared he had injured himself overnight and the decision was made to catch him up for a vet staff exam. Unfortunately, our concerns were warranted as he had a few cuts and abrasions ventrally and dorsally near his cloaca and the base of his retrices. While the wounds appeared superficial in nature, our vet staff conducted a thorough examination of his entire body. This led to the discovery of an enormous amount of maggots that had filled the wounds.

The cause of these injuries still remains a mystery, though due the fragile nature of Kori Bustards, a few logical assumptions can be made. One possibility came from the fact that mites were also found around the wounds. “Snake’s” issues could have been self-inflicted by the over-preening of his feathers. Another theory could be fecal soiling, arising from the fact that his most recent fecal had been noticeably loose. The close proximity of the wounds to the cloaca makes this a viable option.

What ensued was a lengthy procedure to clean and treat the wounds of a sedated “Snake”. Afterwards, he was placed back on exhibit, owing to the fact that familiar surroundings and being with his mate might help in the recovery process. He showed little to no signs of improvement, with a still suppressed appetite and abnormal behavior. Despite all our best efforts, he also incurred a limp most likely from one of the previous catch-ups. The actual limp seemed mild in nature, however this created another problem that required further monitoring and management. There are always inherent risks when having to catch-up a Kori Bustard, so it best to consider all options of treatment to determine the best and safest strategy for the bird.

After a long department meeting and consulting with our vet staff, the decision was made to move him to our propagation center. This would allow the keepers and vet staff easier access to him for exams, observations, and any necessary medications, as well as, removing him from the elements. On the heels of his move to the center came more bad news from his blood work. “Snake” had contracted West Nile Virus, making him only the third known case in the captive population.

“Snake’s” already concerning condition had become bleaker than we had expected. West Nile Virus, like all viruses, is not something that can be cured. Once an individual has contracted a virus, the risk of reoccurrence will always be a threat. “Curing” a virus comes from the proper treatment of its resulting symptoms and supportive care. A major part of treating this virus is use of anti-inflammatory medication. This is due to the fact that West Nile can cause inflammation to occur in various parts of the body, particularly the nervous system. Additional measures were taken by our vet staff, such as routine force feedings. There was also the risk of dehydration to consider, so he had to endure occasional subcutaneous fluids for a short period of time. Antibodies were given to fight off his infected skin wounds, as well as, any other secondary infections that might occur. A healthy dose of vitamins, particularly Vitamin E for the treatment of capture myopathy, were included to speed up his recovery.

Our department drew hope from the fact that the other two confirmed cases had survived. The precautions our staff had taken might have already saved his life. “Snake” spent the next couple of months recovering in one of our larger enclosures in the prop center, with no access to the outside. Slowly but surely, he became more active and his appetite significantly improved. However, that was not end of his journey to a full recovery.

As August drew to a close, “Snake” had improved so much that our vet staff felt comfortable releasing him back into his exhibit. *(continued on next page)*



For those who have worked with Koris, we all know how easily frightened these large birds can be. On the day he was due to move back home, "Snake" had suffered a broken wing from thrashing against the enclosure walls. The walls had been lined with soft white board anticipating such occurrences, but he had still found a way to injure himself. This resulted in a wing surgery we were not expecting, further increasing his stay in the prop center. During surgery, our vet staff discovered an unusual amount of calcification around the break point. This suggests that "Snake" had a previous injury or break in the past which we were unaware of at the time.

Despite all he had been through, "Snake" finally returned home to this exhibit in mid-September. He had beaten his original injuries, West Nile Virus, and broken wing. Ironically, "Tuza", our female, seemed to have enjoyed her alone time and took a few days to adjust to having a roommate again. Now, both our magnificent birds are happily back together, proudly patrolling their territory as if they had never been apart. "Snake" still has a slight limp, but this is being managed through proper medication and monitoring. He is currently taking Cosequin for joint supplementation and Metacam, an NSAID, to ward off inflammation. These medications will most likely be required for the remainder of his life. "Snake's" journey had been a long, tiring process for both bird and keeper alike. We are thankful and proud of our staff who helped restore our big male back to full health.



Kori Bustard by Bird Artist Kim Diment

Sustaining Kori's Through Kooperation, Kollaboration and Koordination

Dan Maloney, Deputy Director of Conservation and Education
Jacksonville Zoo and Gardens



Each year, Jacksonville Zoo and Gardens' Kori Bustard pair Umat & Eva, consistently produces good eggs, but she's never successfully sat and incubated. So last summer our Bird Department was faced with a dilemma; how do we hatch their eggs, raise their offspring and contribute to the dwindling North American population when our bird rearing facility was in the midst of a massive, and much needed renovation?

You call your friends and colleagues and tap into the amazing AZA network of talented, caring and dedicated professionals, that's how. After consulting with Sara Hallager, SSP coordinator and the Kori's greatest friend, we reached out via the general curators' list serve. We offered our eggs and the response was immediate. Mike Mace of San Diego Global and Jeff Pribble from Birmingham Zoo were both very interested, and then super zoo man Pribble went a huge step further- Birmingham Zoo would incubate, rear and ship the chicks!

Together, we hatched a viable plan of action. JZG Bird Supervisor, and intrepid road warrior, Mark DeLong would drive half-way to Birmingham. Our Alabama Ally would cover the balance from the north. A Waffle House, Arby's or some similar landmark along the way, would serve as a satisfactory rendezvous point.

Three eggs made the journey in September and one in October. Two excursions, 4 eggs, 1700 miles, and two very weary animal managers, produced 2.1 new birds for the population!

Bottom-up, old fashion resourcefulness and determination was the key to our productive "Kori Konnection". It's a terrific example of what makes our profession so remarkable; people coming together, stepping-up and sacrificing all for the sake of individual animals and species sustainability.

2013 was a good year for bustards. Next year could be even better. Jeff and Mark's engines are revving, they've got full tanks, they're wearing shades and they're armed with unlimited Starbucks' refill gift cards. All they need are the eggs.



Everyone, cross your fingers for Eva and Umat in 2014!

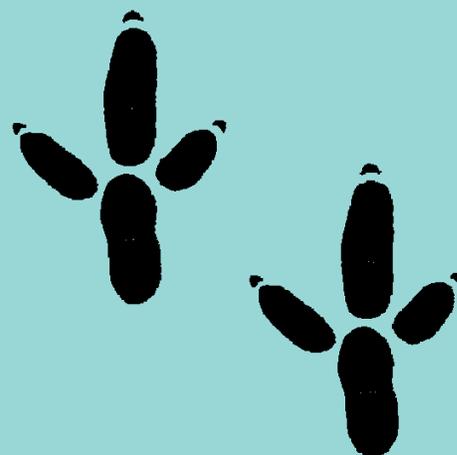


Photo credit Donna Bear-Hull

CONSERVATION NEWS

Kori Bustard (*Ardeotis kori*): uplist to Near Threatened?

Kori Bustard *Ardeotis kori* has an extensive African range. It is thought to be experiencing range-wide decline (Collar *et al.* 1986, Collar 1996), owing to ongoing habitat destruction and unsustainable levels of hunting (del Hoyo *et al.* 1996). Nevertheless, it is currently listed as Least Concern because perceived population declines were not thought to meet the threshold of a 30% decline in three generations (47 years in this species), or approach any of the other thresholds for Vulnerable under any of the IUCN Red List criteria.

A recent study by Senyatso *et al.* 2012 examined the use of incidental occurrence records to assess the range-wide conservation status of this widespread, low-density species. Results showed that overall range sizes (measured as EOO [Extent of Occurrence]) did not decline during the period 1863-2009. Although the analysis was unable to examine if more recent range contractions have occurred, further contraction is unlikely to have exceeded 30% over the past three generations (from the period 1965-2010), given the spatial similarity of post 1990 atlas records to those from 1960's and 1970's and qualitative evidence from survey respondents (Senyatso *et al.* 2012). However, this study did reveal extensive qualitative evidence for an overall population decline, with considerable pre- and post-1970 population declines in all range states except Zambia and Angola, as well as ongoing changes in the internal characteristics of this species's range, at least since the early 20th century. If this information is confirmed, and the rate of population decline is suspected to approach 30% over 48 years (three generations), this species could warrant uplisting to Near Threatened, approaching the threshold for Vulnerable under criterion A2b+3b+4b.

Further information is required on this species's population trends, distribution and the severity of potential threats.

<http://www.birdlife.org/globally-threatened-bird-forums/2013/02/kori-bustard-ardeotis-kori-uplist-to-near-threatened/>



In Situ Conservation Concerns

Dara Girsch, Wild Animal Keeper, Wildlife Conservation Society/Bronx Zoo

I was lucky enough to visit South Africa this past October, and my personal 'Big Five' I hoped to see included the Kori Bustard. However, they are not naturally located in the region I was, the northeastern Gauteng province, south of Kruger National Park. The game reserve I stayed at, Dinokeng, which purchased most of the animals to live on reclaimed land, did not have any species of bustards. At the National Zoological Gardens in Pretoria, which housed an impressive collection of birds, I did not see any bustards on display. In fact, only two institutions in Africa hold Kori Bustards (both of which are in South Africa). This leads me to question, how important is the conservation and education of Kori and other bustards alike to a country and continent where they occur naturally? As an organization, should the SSP concentrate more efforts on *in situ* conservation, education and breeding? These questions, I believe, should be considered over the coming years, but everything will lie on the continued support from the institutions that participate in the SSP.



Zubi- Kori Bustard
June 24, 2005- December 3, 2013
Cheyenne Mountain Zoo



This picture is of Zubi, who we recently lost at Cheyenne Mountain Zoo. Zubi was an amazing bird who came to us several years ago with some special qualities. Before he came to us he suffered some injuries and had to have both of his wings amputated and although we dubbed him our wingless wonder he had as much fight as any other Kori out there. He did very well here for many years and then became the first documented case of a Kori getting West Nile. There were many days when we thought we would lose him to this virus but he amazed us all, and pulled through. Then early this month he suddenly passed away. During his time here he was part of our Wings of Africa Bird Show and thousands of guests got to see him and through him we were able to share the fly tying program that our Zoo supports. Most of his feathers were sent in to make fly ties for the fishermen who support the program. Our hope is that his strength will live on through his feathers and be prosperous for the fly fishermen. Zubi was an enduring bird with outstanding strength and was an inspiration to us all.

Roxanna Breitigan
Animal Care Manager, Cheyenne Mountain Zoo



http://themaxefiles.blogspot.com/2010_05_01_archive.html

News of Other Bustards



There are 25 species of bustards and many are poorly understood. News of a few species is as follows:

Great bustard *Otis tarda*: follow the exciting news of the species reintroduction into the **United Kingdom** at <http://greatbustard.org/>. And also, be sure to check out the great bustards in **Mongolia** at www.AsianGreatBustard.org. The project, begun in 2006, is the largest research and outreach effort on Central Asian Great Bustards thus far. The program is expanding scientific knowledge of poorly understood populations of the Great Bustard in remote Central Asia with an emphasis on gathering information with concrete conservation implications. It engages local people in the research process and promotes awareness of the species in local communities, especially through programs focused on schoolchildren. Using satellite transmitters, researchers found that Mongolian Great Bustards are traveling long-distances – twice as long as has previously been recorded for European Great Bustards – to overwinter in central China <http://www.asiangreatbustard.org/tracking.html>



Mongolian great bustard, photo by Mimi Kessler



South Africa's bustards and korhaans are in trouble, with six of the country's ten species listed in "The Eskom Red Data Book for Birds of South Africa, Lesotho and Swaziland". Populations of Ludwig's Bustard and Denham's Bustard are in decline due collisions with the cables of power-lines. Another bustard in trouble is the South African endemic blue Korhaan. It is severely threatened by afforestation, crop farming, overgrazing, burning, urbanization and mining. The white-bellied Korhaan is threatened by human population pressure and inappropriate farm management.

A Bustard Working Group has been formed under the auspices of BirdLife South Africa. The group has several aims, but focuses on disseminating information about bustards to the relevant authorities and stakeholders, prioritizing research needs, and determining urgent conservation interventions.

STATUS OF THE WORLDS BUSTARDS IUCN 2013. IUCN Red List of Threatened Species. Version 2013.2.

<www.iucnredlist.org>. Downloaded on 22 December 201

Ardeotis arabs (Arabian Bustard)

Status: **Near Threatened**; **Pop. trend: decreasing**

Ardeotis australis (Australian Bustard)

Status: **Least Concern**; **Pop. trend: decreasing**

Ardeotis kori (Kori Bustard)

Status: **Near Threatened**; **Pop. trend: decreasing**

Ardeotis nigriceps (Great Indian Bustard)

Status: **Critically Endangered**; **Pop. trend: decreasing**

All *Ardeotis* are decreasing



Chlamydotis undulata (Houbara Bustard)

Status: **Vulnerable**; **Pop. trend: decreasing**

Eupodotis afra (Black Bustard)

Status: **Vulnerable**; **Pop. trend: decreasing**

Eupodotis afraoides (White-quilled Bustard)

Status: **Least Concern**; **Pop. trend: stable**

Eupodotis caerulescens (Blue Bustard)

Status: **Near Threatened**; **Pop. trend: stable**

Eupodotis gindiana (Buff-crested Bustard)

Status: **Least Concern**; **Pop. trend: stable**

Eupodotis hartlaubii (Hartlaub's Bustard)

Status: **Least Concern**; **pop. trend: stable**

Eupodotis humilis (Little Brown Bustard)

Status: **Near Threatened**; **Pop. trend: decreasing**

Eupodotis melanogaster (Black-bellied Bustard)

Status: **Least Concern**; **Pop. trend: decreasing**

Eupodotis rueppellii (Rueppell's Bustard)

Status: **Least Concern**; **Pop. trend: stable**

Eupodotis ruficrista (Red-crested Bustard)

Status: **Least Concern**; **Pop. trend: stable**

Eupodotis savilei (Savile's Bustard)

Status: **Least Concern**; **Pop. trend: stable**

Eupodotis senegalensis (White-bellied Bustard)

Status: **Least Concern**; **Pop. trend: decreasing**

Eupodotis vigorsii (Karoo Bustard)

Status: **Least Concern**; **Pop. trend: increasing**

Houbaropsis bengalensis (Bengal Florican)

Status: **Critically Endangered**; **Pop. trend: decreasing**

Neotis denhami (Denham's Bustard)

Status: **Near Threatened**; **Pop. trend: decreasing**

Neotis heuglinii (Heuglin's Bustard)

Status: **Least Concern**; **Pop. trend: stable**

Neotis ludwigii (Ludwig's Bustard)

Status: **Endangered**; **Pop. trend: decreasing**

Neotis nuba (Nubian Bustard)

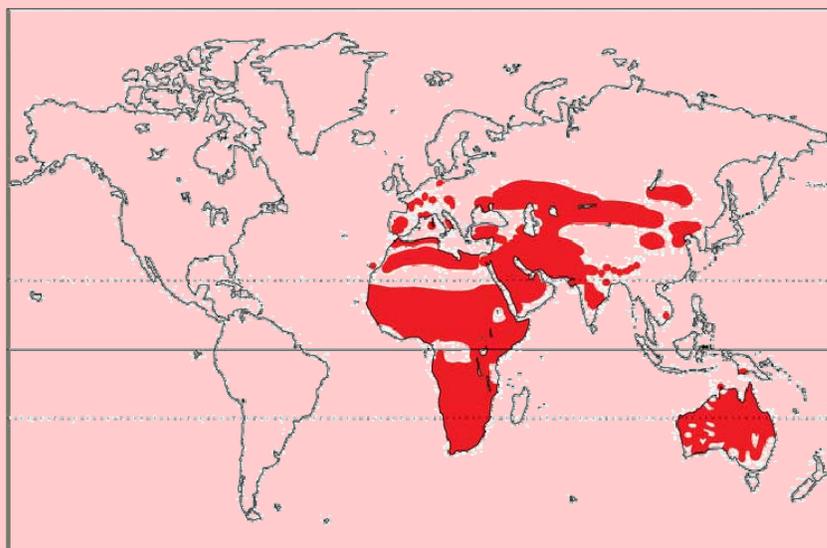
Status: **Near Threatened**; **Pop. trend: decreasing**

Otis tarda (Great Bustard)

Status: **Vulnerable**; **Pop. trend: decreasing**

Tetrax tetrax (Little Bustard)

Status: **Near Threatened**; **Pop. trend: decreasing**



Distribution of the Worlds Bustards

AROUND THE ZOO

VOLUNTEER CORNER

Andrea Schutz, Kori Behavior Watcher, Smithsonian National Zoological Park

The most intriguing part of the “Kori” story for me as a first time watcher has been Noname’s cancer battle and his ability to father a chick in the process. It is quite inspiring. I also enjoy observing and appreciating the behavioral differences between Tanzy and Tufani. Tufani has a quirky personality and she really cracks me up sometimes!

Suzanne Picard, Kori Behavior Watcher, Smithsonian National Zoological Park

Empty nests were on my mind when I decided to volunteer at the National Zoo. My second of three children was about to leave for college. How would I fill my days after he fledged? During my interview with the volunteer coordinator, I learned which Behavior Watch programs needed help: Asian elephant, octopus, Andean bear, and a few birds with exotic-sounding names. Fantastic, I thought -- I can’t go wrong. Before leaving the zoo that day, I wandered over to the Bird House and its outdoor exhibits to check out the species I hadn’t known about -- including the world’s largest flighted bird.

“Oh, wow!” I laughed out loud when I saw my first Kori bustard. These birds have charisma and beauty! I watched them strut around their yard, peck at the ground, and cock their heads to the side to get a good look at the sky. A week or two later, when asked to rank the Behavior Watch programs in order of interest, I first wrote, *I like them all*, then found myself scrawling, *but have a slight preference for the Kori bustards*.

Now a seasoned volunteer of several months, I often find myself contemplating the changing roles of zoos, especially as I walk from the parking lot past the Panda House and on toward the bird area. I think how tough their transition will be from places of entertainment, of simply housing “fun” animals that everyone wants to see -- tigers, elephants, and of course, pandas -- to places of refuge and last resort for so many endangered species. But if I feel at all discouraged when I arrive with my clipboard in front of Maliki, Chasi, and Tatu, these Kori adolescents quickly change my mood. They might bathe in the dust, wander around their yard, pant from the heat, settle on the ground with a wing outstretched, ruffle their neck feathers, or “kiss” -- face each other while elongating their necks and then pecking each other’s beaks.

And always, they elicit a *wow*, *check out this bird*, from a happily surprised visitor, lucky enough to be seeing them for the first time.



From top to bottom: photo credits

Tanzy: Sara Hallager

Noname: Jessie Cohen

Tufani: Jim Jenkins



Smithsonian
National Zoological Park

JUST FOR FUN

KORI BUSTARD TRIVIA [do you know the answers?!]

- What does the word 'bustard' mean?
- What is the Kori Bustard known as in South Africa?
- Historically, what was the largest bird capable of flight and how much did it weigh?
- How many species of bustards are there?
- How many institutions around the world exhibit Kori Bustards?
- What other species of bird benefits from the Kori Bustard walking and stirring up insects on the ground?

FUN FACTS

- Kori bustards are known to eat the gum of acacia trees.
- Kori bustards do not have a hind toe or a preen gland.
- Kori Bustards are able to drink with a sucking motion, instead of scooping water like many other birds.
- The male Kori Bustard is able to inflate his neck up to four times its original size for a balloon display.

Heard at the Zoo "LOOK AT THE....."

[AKA KORI BUSTARD]

- mini ostrich
- tall eagle
- Emu
- Ostrich
- Caracara
- Roadrunner
- Owl
- Tawny frogmouth
- Vulture
- Secretary bird
- Crane



Kori Bustard SSP Steering Committee

- Sara Hallager, Chair, Smithsonian National Zoological Park
- Katie Bagley, Vice Chair, Zoo Atlanta
- John Sills, Phoenix Zoo
- Mike Mace, San Diego Zoo Safari Park
- Chris Brown, Dallas Zoo
- Donna Bear-Hull, Jacksonville Zoo

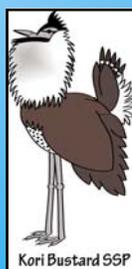


Photo Alfredo Flores