



Fifty years ago our National Bird, the Blue Crane, was a common sight in South Africa's grasslands, today it is rare. The KZN Crane Foundation, was formed to understand why and find ways to reverse this trend.

The KZN Crane Foundation



(Photo Thanks to Daniel Dolpire)

By the year 2000, the number of Blue Cranes in the grasslands of the Eastern Cape, KZN, the Free State, Gauteng, and Mpumalanga, had declined by 90%. Their breeding requirements are, however, flexible and they have been able to adapt to new habitats in the Karoo and the wheat-lands of the Southern Cape and the total national population appears, for now, although greatly reduced, to be stable.

Wattled Cranes (our largest and most regal species), unlike Blue Cranes, are much more specific about their nesting requirements (needing wetlands) and have been unable to adapt to other habitats. Like the Blue Cranes their population plummeted during the Nineteen eighties and nineties and by the year 2000, only 80 breeding pairs remained, an almost unsustainable level. At the time, their extinction seemed inevitable.

In light of this, in 1989 concerned conservationists, under the leadership of the then Natal Parks Board, formed the KZN Crane Foundation with the aim of understanding and reversing this decline.



Are Cranes Important?



Cranes are ancient birds whose elegance and beauty have long captured man's imagination, with references to them in the bible and the mythologies of many cultures, as symbols of peace, fidelity, and longevity.

South African legend has it that Shaka wore Blue Crane feathers in his head-dress and decreed that feathers of these magnificent birds may be worn only by kings.

The elegant courting rituals of cranes are built around evocative dances, exchanges of nesting material and their haunting call. These rites are the precursors to lifelong partnerships, with crane pairs seldom losing sight of one another over the span of their long lives (which can exceed 30 years).

Crane fossils predate those of humans by many millions of years and are older, by half, than the earliest remains of most living species of birds.

Thus, their appeal lies not only in their grace, stateliness, and fidelity, but also in their antiquity. Some may argue that these issues are sentimental notions and if the birds die out, it's all part of the natural passage of evolution.

There is, however, a far more pragmatic reason for alarm over the decline in the number of these beautiful, iconic birds. Cranes are visible indicators of the health of the vital water catchment area of our country, the grassland biome. The presence or absence of cranes gives us an immediate understanding of the health of this important habitat.

The looming threat of climate change, coupled with any degradation of our vital grasslands, should sound alarm bells about the future of water security in our dry country.



Japanese Haiku

in spring mist
three pines, two cranes
husband and wife

Why are Cranes Disappearing?



South Africa has the special privilege and responsibility of being home to three of the world's fifteen species of cranes: the Blue Crane, which is endemic to our region and our National bird, the Wattled Crane and the Grey Crowned Crane.

As their custodians, we should all be concerned to see the decimation of these unique birds, particularly when we understand that we are the primary cause of their decline.

Our needs compete with theirs and we have changed the habitat of the eastern and central areas of the country. We've turned the grasslands into exotic plantations, monocultures of exotic grains, intensive livestock grazing lands, and concentrated urban, industrial, and mining centres.

This change has resulted in a 60% loss of this crucial biome and has robbed cranes of their traditional nesting and foraging sites. Coupled with this, electricity power lines crisscross the landscape, presenting a constant hazard to flying cranes. Cranes are also poisoned either deliberately or inadvertently by farmers using pesticides intended for crop pests.

Unlike endangered terrestrial species, cranes cannot be confined to reserves and managed in a controlled environment. Their habitats are widespread and situated mainly on privately owned farm lands. Their fate therefore lies in the hands of landowners.

The Importance of Wetland and Grassland Habitats

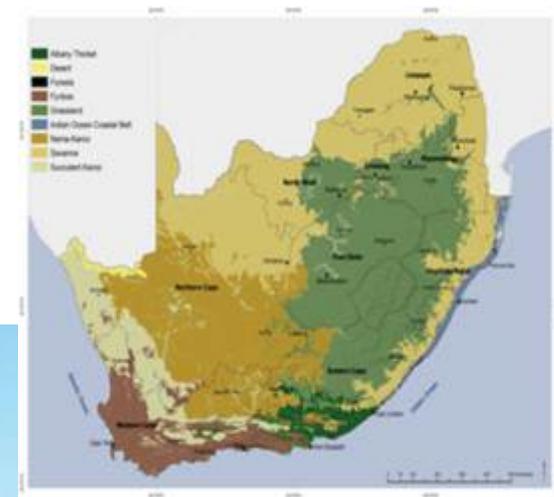
The grassland region, which covers a third of South Africa, is the country's largest biome. Its level of biodiversity is second only to the Cape Floristic Region and, from the perspective of human existence, it is our most important area. The grasslands act as a huge sponge which traps and stores rain water, which is then slowly released, to form the source of most of our river systems. Wetlands are an essential part of this and their importance in this biome is globally recognised in the region's five Ramsar registered wetlands.

The area is home to 45% of South Africa's endemic mammals and 10 globally threatened birds (including Wattled Cranes), and has over 3,500 plant species (of 80 different vegetation types) of which 60% are listed as endangered or vulnerable.

There is, however, a major conflict between the long-term sustainability of the grasslands and human needs. The area is South Africa's economic heartland, and supports the cultivation of 60% of our commercial crops, 44% of our cattle, and 32% of our sheep. Over 40% of all mining activity, 92% of commercial plantations, and 40% of the country's human population are to be found in this region. The area also produces 70% of our electricity, and hence the bulk of our CO₂ footprint.

It is the most at-risk of South Africa's biomes, in that more than 40% of it has already been irreversibly modified (and it continues to change at a rate of 1.2% per annum). Of the remainder, 60% is considered to be threatened and less than 3% is under formal protection. The biome's river ecosystems, are similarly under threat, with 83% ranked as threatened, and 48% critically endangered.

The grassland biome is our most vulnerable area to the potential impact of climate change.



Is the Cause Winnable?

For the KZN Crane Foundation, our sponsors, donors and partners, a fundamental question has been 'Can we reverse the trend and save the cranes?' The evidence of international crane conservation programs and now the evidence of our own program is that it can be done. It's an achievable goal!

The Great Crane Project

Four hundred years ago, many of Britain's wetlands were drained, robbing cranes of their nesting sites. This resulted in the loss of cranes, as breeding birds, to the region.



The Great Crane Project aimed to bring them back by harvesting eggs from viable populations in Germany and hatching and rearing them in England for release into the wild. Seventy seven birds were reared and released, with a survival rate of 82%. The first birds reared, have now reached maturity, and are beginning to pair.

Wattled Cranes

In the 1800s Wattled Cranes occurred from Swaziland, down through the central and eastern parts of South Africa as far south as the Western Cape. However, their numbers and range retreated in the face of the advance of commercial agriculture and forestation. By 1982, only 360 birds remained in the region, mainly in the midlands of KwaZulu-Natal. The next decade saw a catastrophic decline in the population, to under 200 birds. Since then, the Wattled Crane Recovery Program has helped stabilise the population, and over the past few years, there has been a gradual increase in numbers, to over 300 birds.



Whooping Cranes

The population of Whooping Cranes in the central and South Eastern States of America dropped from an estimated 10,000 birds before European settlement, to about 1,400 birds by 1870. By the middle of the last century, they were on the brink of extinction, with only 21 birds left in the wild. The managed recovery of this population, to around 599 birds today, is one of conservation's most inspiring success stories.



The Path towards a Richer Future

The precipitous decline in crane populations brought about a realisation that the legacy of our generation would be poorer than that which we inherited. This prospect motivated a group of concerned individuals to act. They set out to determine a path towards a richer future, and in 1989 the KZN Crane Foundation was formed.



The founders of the KZN Crane Foundation realised that the challenge of saving cranes was complex, involving diverse stakeholders and vested interests and that the store of local expert knowledge and access to funds was limited. With limited resources, the key to success lay in their role as facilitators. They would have to pull together stakeholders and draw on local and global knowledge.

The key stakeholders were, the landowners and the sources of expertise were conservation organisations; The NPB (now Ezemvelo KZN Wildlife), EWT (Endangered Wildlife Trust), Birdlife SA, WESSA, and ICF (International Crane Foundation).

The first major initiative was to create awareness amongst landowners of the plight of cranes and of their vital role as custodians of these birds. The second, based on the insight that long-term success could only be assured through the acceptance of the project by local communities, was the Education Program.

Engagement with landowners through the 'Crane Custodian' program, is now seen as the turning point, which halted the decline in crane numbers.

An unintended benefit of this program was that the awareness it created resulted in the primary funding of the Foundation. Firstly, in the form of a substantial bequest from the estate of Lady Usher and secondly, through the acquisition of our home at the Usher Conservation Centre.

The first goal of the KZNCF was to stabilise the crane populations. With this achieved, the aim now is to facilitate the growth of the population beyond the danger of its decimation in a single catastrophic event. From there we will look to restoring the birds to other areas of their former range. These objectives are ambitious and will require patience, commitment, and substantial long-term resourcing.

The Way Forward

Human population growth is the greatest threat to the survival of our grasslands, wetlands, and hence cranes. Our strategy recognises this and seeks to minimise its impact by focusing our endeavours on four key initiatives, Landowner engagement, Community engagement, Habitat security, and Gene Pool security.

Landowner Engagement

The stabilisation of the Wattled Crane population over the past decade may be attributed largely to Farmers, only landowners can secure the habitat necessary for the survival of our cranes.

The highest priority of the KZN Crane Foundation is, therefore, to ensure that farmers understand their role as stewards, and are equipped, supported, and recognised in this endeavour.

Landowners have become increasingly aware of the decimation of our crane populations and the imperative to preserve wetlands. They now take pride in their role as guardians of these precious resources.

This change in attitudes was triggered by the 'Crane Custodian' program and the ongoing work of our partners: EWT and Ezemvelo KZN Wildlife.

Our task is to:

- Re-invigorate the Crane Custodian program with EWT and help maintain awareness of the crucial role that farmers play as stewards.
- Provide farmers with information about cranes and their habitat.
- Share successes achieved by farmers, using habitat friendly practices.
- Recognise participating farmers and encourage others to emulate them.
- Work with organised agriculture, other conservation bodies (globally) and the agri-chemical industry to find ways to ameliorate crop damage by cranes.
- Use feedback from farmers to better understand flock movements and crane habits.
- Endeavour to develop a more crane-friendly environment, by association with Farmers unions, conservancies, the forestry industry and environmental agencies such as EWT, PAAZA and Ezemvelo KZN Wildlife.



Community Engagement

The future of cranes and their habitat can only be ensured by communities that understand their importance and appreciate their beauty and significance. Our aim is to develop such a culture in our children, through our community engagement and education programs.

'Cranes in the Classroom' was developed by our education team. Aimed at grades 1 to 6, it seeks to provide an understanding of the environment and the fine balance of ecosystems. The program is CAPS (Curriculum Assessment Policy Statement) supportive, which puts it in line with the national curriculum, we are working towards its full inclusion in the national curriculum.

The program was first introduced to schools in the Nottingham Road area, but our aim is to reach schools throughout the grassland biome.

A second initiative which complements 'Cranes in the Classroom', is our **Beautiful Nature Club**. This program exposes children to the beauty of the grasslands and their biology, through structured but fun activities and visits to the Bill Barnes Crane and Oribi Nature Reserve.

We aim to use the teachers and children, who have been through the 'Cranes in the Classroom' program, as ambassadors, with the goal of spreading the message of conservation within their communities.



Habitat Security

Human population growth and the insidious impact of climate change means that more and more of South Africa's threatened grassland biome is lost with each passing year. Unless ways can be found to contain this loss, in another generation, there will not be sufficient habitat for cranes to survive in the wild. Our task is to explore creative ways to conserve and expand the available habitat and ensure that our legacy includes a healthy viable wild crane population.

The Bill Barnes Crane and Oribi Nature Reserve (BBCONR)

In 2001, the KZNCF established its headquarters at the Usher Conservation Centre, near Nottingham Road and joined forces with three conservation-minded adjacent landowners to establish the BBCONR. The reserve protects 450 ha of Drakensberg Moist Foothill Grassland and was one of the first proclaimed under the KZN Biodiversity Stewardship Program in 2009. Today, KZNCF's vision is to leverage this unique resource by encouraging other landowners to commit themselves to biodiversity stewardship on their lands.

We aim to explore all possible avenues to encourage and facilitate the preservation and expansion of crane friendly grasslands and wetlands, by:-

- Making the BBCONR a model for the concept of responsible land stewardship through harmonising the needs of conservation and farming.
- Promoting the adoption of the BBCONR stewardship model by land owners throughout the grassland biome.
- Engaging appropriate government departments and agencies with the aim of better understanding and influencing government policy where it impacts on the grassland biome and the crane's habitat.

Exploring the potential for protecting and expanding wetlands through land acquisition or special arrangements with landowners and securing special government concessions or tax breaks for such initiatives.



Gene Pool Security

Despite the stabilisation of the Wattled Crane population, their habit of congregating in floater flocks makes them vulnerable to single catastrophic events, such as a major hail storm, which could, reduce the population by half in an hour. Should such an event occur, it may leave the remaining population unviable and beyond recovery through natural means.

Our task is to gain scientific knowledge, as insurance against such a catastrophic event. We aim to understand the requirements of breeding and raising captive birds and develop the necessary protocols and methodologies for successfully integrating captive raised birds into the wild flock. This we need to do to ensure that captive reared birds are able to pair with wild birds, breed, and become established members of a new generation.

The Wattled Crane Recovery Program (WCRP)

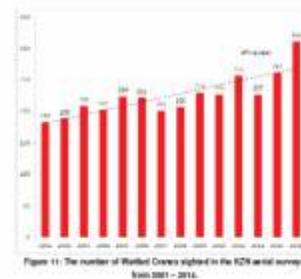
The WCRP was a collaboration between EWT, Ezemvelo KZN Wildlife, PAAZA, the Johannesburg Zoo, and the KZN Crane Foundation, aimed at better understanding the population dynamics, habits, and causes of the decline of the wild crane population. Part of the program included the captive breeding and rearing of Wattled Cranes. This involved generating a population of captive birds for scientific study and gene pool insurance.

Another element was the rearing of chicks, hatched from incubated eggs. The KZNCF built a specialised crane rearing facility at the Usher Conservation Centre in Nottingham Road. In 2014, we successfully hatched and raised three Wattled Crane chicks at the centre and gathered a great deal of data pertaining to their habits, behaviours, diet, and growth-rates. The eggs were harvested by EWT and Ezemvelo from nests of wild birds. Wattled Cranes often lay two eggs, but raise only the first chick to hatch, abandoning the second egg. It was these abandoned second eggs that were used in this program.

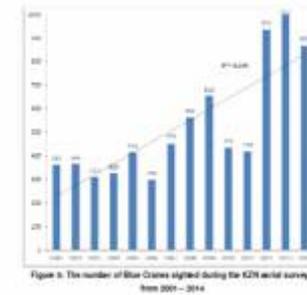
The WCRP together with the other programs run by The KZN Crane Foundation, EWT and Ezemvelo KZN Wildlife, has resulted in a steady recovery of all three of our crane species since the year 2000.



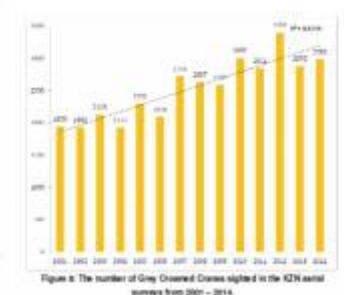
GREY CROWNED CRANES



BLUE CRANES



WATTLED CRANES



KZNCF Rearing Facility

Looking like giant iQukwane (Zulu beehive huts) the KZNCF's crane chick rearing facility was opened at the Usher Conservation Centre in Nottingham Road in May, 2014, just in time to host its first three 'guests'.

The facility includes incubation and hatching rooms, a brooder room, and individual indoor night pens, to accommodate up to seven chicks per breeding season.

A naturalised outdoor enclosure, adjoining the rearing facility, allows the chicks to explore their surroundings in safety. A second large dome is a predator proof exercise pen, containing pools and wetland plants, to allow the chicks to learn to forage on appropriate natural food.

The chicks are reared by volunteer care givers or "Chick Mums". To prevent the chicks from imprinting on humans, the Chick Mums wear crane like costumes and use hand puppets (in the form of adult crane heads) to feed the chicks. Accommodation for the Chick Mums, who have to care for the newly hatched chicks round the clock, is provided at the facility.



The Sentinels

The photograph on the left was taken by Daniel Dolpire, as were most of the Crane photos in this brochure as part of a project he has embarked on, to produce the definitive photographic record of South Africa's Cranes.

The KZN Crane Foundation fully supports his initiative. We believe it will introduce many to the grace and elegance of cranes and help spread the word about the desperate need to conserve these iconic birds and their habitat.

If you would like numbered copies of any of the photos in this brochure, stretch mounted on canvass (1000 X 1500 or 660 X 1000). Or if you would like to contribute towards the publication of what promises to be a collector's item, please contact us on contactus@kzncrane.co.za



Friends of the Crane Trust

With a view to securing the long-term financial sustainability of the KZNCF, George Archibald, the founder of the International Crane Foundation, proposed the establishment of the Friends of the Crane Trust, as a means of growing a long-term capital base to fund the operations of the KZNCF.

He became the founder donor of the trust and established its initial capital. This seed funding has since been supplemented by a part of the Lady Usher bequest.

Our aim is to increase this base, through capital growth and by attracting bequests and non-project specific donations. We invite you to become part of the long-term survival of our cranes by donating, or leaving a bequest, to this important cause.



A Cause Worth Supporting

Since 1989, the KZNCF has worked with farmers and conservation bodies in finding ways to preserve a precious heritage. This work has been largely responsible for the 55% increase in the number of these elegant birds in the wild and their recovery from the edge of extinction.

The work is not complete, for it to continue, we need your support. We are funded only by members and donors. Most of our work is done by volunteers whose motivation is a determination not to leave a legacy poorer than that which they inherited.

If you are concerned about the future of our environment and the prospect that future generations will grow up in a world poorer than that which you inherited, where water resources have dwindled and our graceful cranes have disappeared, please support the KZNCF by:-

Becoming a member.

Becoming a volunteer.

Leaving a bequest.

Joining the Crane Custodian program.

Becoming a Donor.

Supporting us on social media.

If you would like to support the Cranes and their habitat contact us on contactus@kzncrane.co.za today.



Our Partners



Contact Details:

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Check our Website: <http://www.kzncrane.co.za>

Or our members only intranet site, The Floater Flock on www.kzncf.org
Or find us on  KZNCRANE and  @actualname

Banking Details

Account Holder : KwaZulu-Natal Crane Foundation
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Branch : Cascades
Branch Code : 134325
Account Number : 1343031338