







Wattled Cranes, Wetlands, and Water:

THE PROGRAM FOR SOUTHERN AFRICA

Vulnerable Wattled Cranes are among the tallest and rarest birds of Africa, ranging across eleven countries from Ethiopia to South Africa. More than 80% of the world's Wattled Cranes occur on five enormous floodplains—the Kafue Flats, Liuwa Plains, and Bangweulu Swamps of Zambia; the Okavango Delta of Botswana; and the Zambezi Delta of Mozambique and across the smaller wetlands of the Drakensberg region in South Africa. These floodplains and wetlands provide fishing, farming, and grazing lands for hundreds of thousands of rural villagers and support a stunning diversity of wildlife, including some of Africa's most important concentrations of elephant, buffalo, and hippo.



Photo by Ian Corbut

Wattled Cranes are excellent indicators of healthy wetlands and watersheds. They require large expanses of undeveloped floodplains, where seasonal floodwater fluctuations serve to protect eggs and chicks from predation and fire and stimulate production of spike rush (Eleocharis) tubers, their primary food source. Wattled Cranes are found near large herds of herbivores that graze and trample the rank grasslands of these floodplains. This allows the cranes to access the nutritious tubers that lie beneath. For example, in the Kafue Flats, Bangweulu Swamps, and Okavango Delta, Wattled Cranes follow large herds of lechwe antelope as floodwaters recede. On the Liuwa Plains they feed alongside wildebeest herds.

Habitat changes can affect the ability of Wattled Cranes to meet their breeding and feeding needs. Large dams, water diversions, and drainage projects alter the natural timing, depth, and spread of floodwaters across floodplains. Mining and intensive agricultural development projects drain and degrade wetlands. Invasive species displace natural vegetation. These changes also harm many other species and the diverse plant and animal communities that flourish on healthy floodplains and wetlands. They also impair the vital ecosystem benefits and services that natural wetlands provide, including fisheries, grazing areas, and fresh water for drinking, cleaning, bathing, and household uses.

OUR IMPACT

The International Crane Foundation/Endangered Wildlife Trust Program for Southern Africa addresses the range of conservation needs for Wattled Cranes, wetlands, and water across the region.

We lead seven field conservation projects in the eleven range countries, closely monitoring the Wattled Crane's status, distribution, and threats. Five of these projects focus on the large floodplains that sustain most of world's Wattled Cranes and provide immense economic and biodiversity value. The other two focus on key wetlands for Wattled Cranes at the edge of their range in Ethiopia and South Africa. These include major projects on Zambia's Kafue Flats and Liuwa Plains, Mozambique's Zambezi Delta, and South Africa's Drakensberg wetands. We adhere to the Open Standards for the Practice of Conservation for the planning, implementation, and adaptive management of our projects, and for measuring our conservation impact.

Restoring the Kafue Flats, Zambia

The vast (6500 km²) Kafue Flats of Zambia include two national parks surrounded by a Game Management Area. The area is designated a *Ramsar Wetland of International Importance*. The Kafue Flats provide critical habitat for many birds and mammals of conservation concern, including endemic Kafue Lechwe antelope and the world's largest population of Wattled Cranes. The flats are densely inhabited with subsistence fishers and cattle herders whose livelihoods depend on the



Photo by Rich Beilfuss

abundant land and water resources of the open floodplain. A hydroelectric dam operated upstream of the Kafue Flats has cut off floodwaters from the upper floodplain, while backwaters from a downstream dam have permanently inundated the lower plains. This has resulted in widespread habitat loss and the spread of invasive plant species. Land development for industrial mining is an increasing threat across the flats. Climate change, projected to increase water stress across much of the range of Wattled Cranes, and expanding human settlements across the floodplain, will exacerbate these impacts.

- We work with water authorities, dam operators, government agencies, private sector water users, universities, and non-government organizations to promote and plan environmental flows (improved timing, magnitude, duration of water) to benefit Wattled Cranes, Kafue Lechwe, and other rare and endemic wildlife species, and to enhance fishing and grazing and climate-change resilience for floodplain communities.
- We oversee the use of physical and biological techniques to remove more than 10,000 hectares of the noxious invasive shrub Mimosa pigra, restoring core floodplain areas and access to grazing lands.
- We generate conservation-friendly employment and help communities invest their project income in rural savings and microfinance opportunities.

- We raise awareness about the important ecosystem services of the Kafue Flats, including water purification, agricultural pest control, food security, and carbon sequestration. This encourages government and local communities to value the flats and promotes decision-making that considers alternatives to deleterious mining and uncontrolled settlements.
- We support the Zambian National Parks and Wildlife Service in developing its General Management Plan for the Kafue Flats and implementing key management actions.

Safeguarding wetlands of the Liuwa Plain, Zambia

Liuwa Plains National Park (3660 km²) in western Zambia supports 20% of the world's Wattled Cranes. The park also supports many other species of conservation concern, including **Endangered Grey Crowned Cranes and** Vulnerable Slaty Egrets, and the largest wildebeest migration in southern Africa. These species depend on the hundreds of shallow wetland "pans" scattered across the open floodplain to provide suitable habitat through the long dry season. Liuwa is home to the Lozi people, whose livelihoods are intricately linked to the fertile pans, where they graze livestock and harvest fish—vital sources of protein and income. The human presence across



Photo by Rich Beilfuss

the park places acute pressures on wildlife populations in the form of fires, poaching, chick and egg theft, and disturbance of nesting, roosting, and feeding grounds.

- We work with local communities to reduce the impacts on Wattled and Grey Crowned Cranes and other threatened species, and support the management efforts of the African Parks Foundation.
- We study the seasonal movements and requirements of cranes and other rare species and their relationship to large mammal migrations.
- We work with the governments of Angola and Zambia, under the Ramsar Convention, to link the Liuwa Plain with the vast Bulozi Plain of Angola as a transboundary *Ramsar Wetland of International Importance* and a vital corridor for species movement.

Securing waters for the Zambezi Delta, Mozambique

Since 1995 the International Crane Foundation has been a conservation leader in the Zambezi Delta of Mozambique, raising awareness about its global significance and promoting conservation that benefits people and wildlife. The Delta features abundant wildlife, including African elephant, buffalo, Sable antelope, Lichtenstein's Hartebeest, a unique zebra sub-species, and the largest concentration of breeding and wintering waterbirds in Mozambique. The area supports regionally rare plant communities considered "biodiversity hotspots," including moist evergreen forests, extensive mangroves, and coastal dune systems. The Zambezi Delta is severely degraded by lack of water

inflows from the regulated Zambezi River, and by roads and embankments that obstruct the spread of water from the river across the delta. Other threats to the sustainable management of the Delta include commercial logging and charcoal production, uncontrolled fires, shifting agriculture associated with expanding human settlements, and proposed drilling for oil and natural gas. We were instrumental in establishing the Zambezi Delta as Mozambique's first and most important *Wetland of International Importance*. Going forward, our work in the Delta builds on our achievements.

- We conduct key ecological and socio-economic research that documents the relationship between natural flood regimes, increased productivity of Wattled Cranes, African Buffalo, and other wildlife, and improved local livelihoods based on fisheries, grazing, and flood-recession agriculture.
- We coordinate multi-disciplinary studies that demonstrate the economic importance of regular, annual flood releases from Cahora Bassa Dam for downstream users, showing how this and other ecosystem services exceed the water's value when used strictly for hydropower production.
- We work to advance the General Management Plan for the Zambezi Delta, which we developed in cooperation with the government of Mozambique and key partners, based on more than twenty years of research and conservation action.
- We continue to build on our nationwide public awareness campaigns (television, radio, printed media, and public presentations) to advance the sustainable development of the Lower Zambezi Valley and Delta for biodiversity, livelihoods, and climate resilience.

Protecting the Drakensburg, South Africa

The healthy wetlands of the Drakensberg region of South Africa are rich in biodiversity, supporting critical populations of Vulnerable Wattled Cranes, Endangered Grey Crowned Cranes, Vulnerable Blue Cranes, and many other rare and threatened species. The Drakensberg is also a major source of water and listed as one of South Africa's Strategic Water Source Areas. More than 50% of South Africa's wetlands have been lost due to agricultural conversion and mining, and only a small fraction of the remaining wetlands are formally protected. Our project focuses on cranes as flagship species for the protection and restoration of key wetlands in Drakensburg, and promotes sustainable management of water source areas that are vital to the country.



Photo by Griffin Shanungu

- We apply innovative approaches to habitat protection, such as the Biodiversity Stewardship Programme, Conservation Servitudes, and Conservation Agreements to expand the Protected Area network across this region.
- We work with communities in productive landscapes to improve local capacity to better manage wetlands and surrounding grasslands.

- We restore wetlands important for cranes and people within the Drakensburg region in partnership with Working for Wetlands and others.
- We identify priority corridors for climate change resilience and ecological infrastructure as buffers to unsustainable land use practices and development.

WE NEED YOUR SUPPORT

The International Crane Foundation/Endangered Wildlife Trust Program for Southern Africa is working to safeguard some of the most important wetlands on Earth - places that are home to iconic wildlife species, including most of the world's Vulnerable Wattled Cranes and Endangered Grey Crowned Cranes, millions of other waterbirds, and huge populations of African elephant, buffalo,

hippopotamus, and lechwe. These wetlands also support fishing, grazing, and other natural resource-based livelihoods and prosperity for millions of people. We are the partner of choice for governments, private businesses, academic institutions, and other nonprofit organizations seeking innovative solutions to conservation challenges across Southern Africa. Through the charisma of cranes, we bring people together to protect and restore these vital places. And by doing so, we find new pathways to sustain our waters, lands, and livelihoods.



Please join us in safeguarding heathy wetlands and watersheds for wildlife and local communities in Southern Africa.

FOR MORE INFORMATION CONTACT:

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