

Dances with cranes

Though several have come close, no Australian has yet won one of the world's most prestigious awards for environmental, cultural and scientific achievement – a Rolex Award for Enterprise.

Julian Cribb reports on the achievements of a young conservationist who has, by marshalling a continental-scale rescue effort for the majestic cranes of Africa and their dwindling wetlands.

AS A CHILD, Lindy Rodwell heard the haunting cry of the blue cranes as they flew high overhead on their nomadic trek from one wetland to another across southern Africa. It seemed to her to embody something uniquely African.

Today the blue crane is winging towards extinction and Rodwell has responded to its cry for help, leading what must rank as one of the most herculean among the myriad of tasks of worldwide conservation: to save not only the cranes but also their wetland habitat which straggles across 11 of the world's most profoundly troubled lands.

Rodwell, a zoologist, has devoted the past decade to preserving the cranes of Africa, whose magical presence is woven into her childhood memories and the cultural fabric of her native South Africa. With their wetland habitats vanishing, the

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wattled crane and blue crane are critically endangered. As the birds' distribution across the continent obeys no human boundaries, Rodwell is building a conservation network which combines the efforts of volunteers and experts in the 11 'wattled crane states' of central and southern Africa, to try to protect the wetlands on which the cranes – and many people – depend.

'All over the world cranes are enmeshed in culture,' she says. 'They are symbols of longevity, they are symbols of lifelong fidelity, they are symbols of royalty and power.' It isn't hard to see why. At up to 1.7 metres tall, these regal and elegant birds mate for life, with both parents sharing the incubation of eggs and the rearing of the

young. All 15 species worldwide practise an intricate courtship dance, bowing and leaping into the air as they whirl around one another. The male presents the female with gifts – pieces of vegetation. The ceremony ends with a clamorous 'unison' call, announcing their partnership.

Dedication to securing the future

For Rodwell, the thought that the crane's call should no longer be heard in Africa was almost inconceivable. After huge efforts in South Africa over the past 11 years, the future for both the blue crane (*Anthropoides paradiseus*) – the country's national bird – and the wattled crane (*Bugeranus carunculatus*) is at last beginning to look more secure.

But beyond its borders, wattled cranes range across Namibia, Zimbabwe, Malawi, Botswana, Zambia, Mozambique, Tanzania, Angola, Ethiopia and the Democratic Republic of Congo – countries beset by civil war, drought and vast human pressure on natural resources.

Working with the International Crane Foundation, Rodwell has assembled a network of 90 conservation volunteers in eight countries to try to ensure that the birds and their habitat are protected across the continent. Its mission is simple and direct: healthy wetlands for the coexistence of cranes and people in Africa. In 2002 her work gained international fame when she was chosen as a Laureate in the Rolex Awards for Enterprise.

Lindy Rodwell's defining moment came when, during her first job in a wildlife park, she realised she had to get out of captive breeding and into the seemingly impossible task of rescuing the cranes' habitat, wherever it lay.

Today, more than ever, she is convinced that entire wetland systems used by the cranes must be protected. For example, the Zambezi River system and its associated

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Above: Since 1994, Lindy Rodwell has been dedicated to crane conservation in Africa, working with local farmers who need to be directly involved in protection measures.

Top right: Rodwell demonstrates how this captive-bred wattled crane is totally imprinted, i.e. the bird completely identifies with humans.

Bottom right: A wattled crane. Cranes are a litmus test of the state of wetlands, which suffer a variety of ecological threats.



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Vital ecosystem indicators

Wattled cranes are scientifically important as an indicator of the state of wetlands under siege from agriculture, urbanisation, dams and drainage schemes. 'Cranes are the flagship species for an ecosystem on which we are very dependent,' says Rodwell. 'Southern Africa is semi-arid country, and where we've destroyed wetlands, we've got a major problem with water supply. So there's a direct link between the health of the birds, the sustainability of these wetlands and the health of the people.'

Since 1994 Rodwell has been involved in every aspect of crane conservation in South Africa, from captive breeding to satellite tracking. She started projects to raise awareness among farm workers and landowners whose conservation efforts are recognised with a 'Crane Custodian' board on farm gates. Many landowners now report sightings of the birds, and so help monitor their numbers.

'In ten years, Lindy Rodwell achieved what government conservation agencies, with larger budgets and greater resources, were unable to do: to make crane conservation a people's issue and motivate local communities to be responsible for their cranes,' says the SA Endangered Wildlife Trust's president, Dr John Ledger.

Africa-wide action

In 2001 Rodwell launched herself on her largest undertaking yet – the Africa-wide effort to save the wattled crane. The species is on the Red Data List of the IUCN (World Conservation Union) as critically endangered in South Africa and endangered in Africa. The biggest and most wetland-dependent of Africa's cranes, it is sensitive to the smallest alteration of its habitat. It is highly territorial, easily disturbed and raises only one chick per breeding attempt.

In October 2001, with the help of local flying associations, Rodwell and her colleagues carried out the first-ever coordinated aerial surveys of wattled crane populations in southern Africa.

floodplains extend across four countries. The cranes move between these wetland areas, sometimes hundreds of kilometres apart, without regard for national borders. If one part of the river system or floodplain is damaged or degraded, it impacts on other parts of the system. For Rodwell, the wattled crane is important in itself, but it is also symbolic of the urgent need to conserve fragmented ecosystems across vast areas – a challenge facing Africa and Australia alike.

The Rolex Awards

The Rolex Awards for Enterprise were initiated to encourage human endeavour by former Chairman of Rolex, André Heiniger, in 1976, the 50th anniversary of company's famous Oyster chronometer.

The new Rolex Awards award cycle, which begins in 2004, offers a fresh opportunity to put an Australian environmental achievement on the global map. The awards offer financial support and recognition to outstanding individuals whose ground-breaking achievements and projects are marked by bold initiative.

More information:
www.rolexawards.com

The news was grim: historical guesstimates had put numbers at between 13–15 000, but her team's count came out close to half that number, and she urgently began to assemble her 11-country network of conservationists and volunteers.

'Participants in each country work at different levels,' she explains. 'For example some, like hydrologist Richard Beilfuss, work at a river basin level doing research into the impact of large dams on floodplains and lobbying at a national and international level for timed water releases that mimic the natural floods.'

'Over the past two years we've placed a major emphasis on population surveys of crane and other large water-bird species to demonstrate that populations are declining as a result of habitat degradation.'

'Some countries are working with local wetland communities to promote the conservation and sustainable use of the wetlands and finding out what impact wetland degradation has had on their livelihoods.'

'Here in South Africa we work with the Mondi Wetland Programme who are



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Rodwell, David Nkosi (left) and Samson Phakathi discuss the status of wetlands across the whole of southern Africa.

Profile



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Rodwell attends an educational session given by her two co-workers to the Nkosi family. The blue crane pictured is a teaching model.

promoting the harvesting of wetland products to encourage the making of baskets, mats, lampshades and so on for sale, so that the communities can benefit directly from the wetland.'

Inspiring community efforts

Her network includes people like researcher Carlos Bento who regularly travels on foot into the Zambesi delta where, living off lizards, fish and the occasional leftovers of a lion kill, he studies the relationship between the delta's flooding patterns and the wattled crane's breeding habits.

Rodwell says Bento is just one of the

many extraordinary people in central and southern Africa who, through sheer determination, have risen above civil war, poverty, lack of resources and formal education to champion the cause of crane and wetland conservation. She is ensuring these people meet and share their experiences. 'It is so important to let people sit around the fire at night and talk and develop the feeling that this is an African team,' she says.

Every step of the work presents huge stumbling blocks which, somehow, she manages to surmount. Foremost is the eternal question of funding: 'A programme

of this nature across 11 countries relies on people who all need to be employed and supported. They need vehicles and infrastructure to function effectively and this translates into a huge amount of money to be raised annually – and a tremendous responsibility if the participants have families and dependants,' she says.

Her second set of problems is political instability, as in the Democratic Republic of Congo, lack of cooperation or indifference from African governments. Though the program works at grassroots level, it sometimes needs government permission to get things like aerial surveys or water releases done – and every country has its own unique governmental maze.

Balancing this, people at the grassroots, like the Congolese game scouts, are often so desperate for anyone who shows an interest in their work, that they make enthusiastic volunteers, so 'out of chaos comes a glimmer of hope,' she says.

The third problem is simply the lack of well-trained conservationists, ornithologists, hydrologists and zoologists in Africa – and the desperate need to build local capacity rather than rely on expats.

Nevertheless, Dr George Archibald, founder of the International Crane Federation and a long-standing source of inspiration, is confident that Rodwell has the drive to succeed in the end in creating one of the world's great continental-scale conservation programs.

'Every project Lindy touches becomes a golden project,' he says.

Queensland – Smithsonian Fellowships 2004

Queensland Government Fellowships will be awarded for 3 Queenslanders to undertake research at the Smithsonian Institution in the United States of America.

Applications are open to Queenslanders working in any area of mutual interest with the Smithsonian eg museum studies; education; science; environmental and conservation biology; folk culture; anthropology; history.

Applications close Wednesday 24 December 2003

For information, application forms, guidelines and selection criteria visit: www.premiers.qld.gov.au/awardsevents/

or contact the Queensland – Smithsonian Secretariat on 07 3405 5620 or International.Collaborations@premiers.qld.gov.au



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