



RODNICK BILJON



Above A healthy Cape Parrot launches itself off a wild plum tree. These trees play an important role in the parrots' recovery after the period of food scarcity in February and March when Cape Parrots are at their weakest.

Opposite A sick Cape Parrot picked up by a member of the public and handed into the King William's Town SPCA. It is still alive and receiving specialist care to overcome the ravages of malnutrition and beak and feather disease.

The Cape Parrot *Poicephalus robustus*, South Africa's only endemic parrot, is restricted to a long spine of afro-montane forest patches spaced widely across the Amathole region of the Eastern Cape, the former Transkei near Umtata, southern KwaZulu-Natal and the southern Soutpansberg in Limpopo Province. Until 300 years ago, these forests were not only larger, but were dominated by majestic 40-metre-tall Outeniqua yellowwoods that towered above a lower canopy of trees such as sneezewood, ironwood, wild plum, wild olive and stinkwood. The healthy forest ecosystem was a virtual Eden and it supported, among many other animal species, thousands of Cape Parrots that specialised in feeding on yellowwood fruits and nesting in old yellowwood snags.

Unfortunately, most of the large hardwoods and almost all the tall yellowwoods have been felled during the past three centuries to produce railway sleepers, mining and construction timber, and furniture. More than 100 large yellowwood trees are still harvested – legally and illegally – in South Africa each

year, despite the fact that the practice is neither sustainable nor ethical, undermining as it does the regeneration of these magnificent forests. Today the country's afro-montane forests are degraded and seem empty, even when they echo with the screeching of Cape Parrots flying in to roost in surroundings their ancestors would barely recognise.

Pioneering work done by the late Olaf Wirminghaus in a relatively intact yellowwood forest in southern KwaZulu-Natal in the late 1990s demonstrated a close yet sensitive link between Cape Parrots and yellowwoods. In fact, the parrot, together with the samango monkey, can be considered a keystone species for the last remnants of this kind of forest.

Yet today Cape Parrots can no longer rely on yellowwoods as a year-round source of food (if at all) and they struggle to find yellowwood snags in which to nest. As a result, they now appear to breed less successfully in less suitable nest cavities and they have had to switch to more reliable and abundant, and often domesticated, food sources. The likes of apples, plums, cherries, acorns, pecan nuts, jacaranda pods and

syringa and wattle seeds may not be good for their health: cherries, plums and apples carry dangerously high levels of cyanide; pecans and acorns contain tannins at a level toxic to the birds; and the fat and sugar content of the fruits are usually far too high. Factor in outbreaks of disease and a low genetic diversity resulting from a population collapse in the 1980s and you have a species that is under stress and heading towards extinction. This is Africa's most endangered parrot and one of South Africa's most endangered birds.

And now another threat is looming. Since early 2009, the Cape Parrot Project has been monitoring the incidence of the psittacine beak and feather disease (Pbfd) virus in wild Cape Parrots in the Amathole region. In the first six months of our research we received more than 30 reports and photographs of wild parrots with advanced symptoms of Pbfd infection. By April 2010 we had the necessary permits to trap Cape Parrots in mist-nets to take blood and feather samples for testing; over the next three months we caught 16 birds, eight of which were Pbfd-positive. Preliminary work on the DNA has revealed that this seems to be a unique strain of the disease and different from that identified in a wild-caught Cape Parrot in southern KwaZulu-Natal.

Between March and July 2010 the average flock size declined significantly after each cold snap and the indications were that up to 20 per cent of the feeding flock had died as a result of Pbfd infection by the end of that period (although we found only three carcasses). The shocking findings in 2009 and 2010 prompted us to take blood and feather samples from wild Cape Parrots in King William's Town, Stutterheim and Alice in the Eastern Cape and in Magoebaskloof

in Limpopo, where an isolated population of 40 to 60 birds persists. Preliminary results revealed a 100 per cent infection rate in the Eastern Cape at all capture sites. In addition, nine Cape Parrots that were unable to fly were handed in by members of the public (this is probably more a case of the efficacy of our PR campaign than an increase in the mortality rate, as local people are more aware of the need to get sick parrots to specialist care). An avian veterinarian who specialises in rehabilitating wild birds has been able to accommodate all the parrots in warm boxes, administer antibiotics and care for the survivors for up to 10 weeks. Of the nine handed in, four are still alive and progressing well each day. The next step is a flight aviary and a more natural diet before they will be released back into the wild, complete with radio transmitters that will enable us to find them again.

In the Limpopo population, which we had assumed was disease-free, the results of samples taken by Dr Rowan Martin in April this year have come back as Pbfd-positive. The finding is shocking, but goes a long way to explaining why population levels have remained so low and been so volatile over the past decade. In May, participants in the annual Cape Parrot count, organised by Prof. Colleen Downs, sent us photographs of birds with significant feather loss on the rump and head, which is an early sign of Pbfd infection. The stark reality is that high levels of Pbfd probably exist in all the remaining Cape Parrot populations and is halting any recovery.

What is sustaining this outbreak? There are two possibilities that may be responsible for a greater susceptibility to infection: either the lack of genetic variability in founding populations, or the radically different diet the birds now have to follow across their range.



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Our ongoing research is examining both options. Additional variables are the secondary infections (for example, pseudomonas and avian TB) we have found in dead parrots and the possibility that a new and more virulent genotype of the Pbfd virus has been unleashed on the wild population as a result of capture for the wild-caught bird trade and subsequent release, for whatever reason.

The Cape Parrot Project works every day to save the species from extinction. When people ask about the welfare of Cape Parrots, I can only reply, 'We are really lucky to still have these intelligent, industrious parrots flying high above the last of the yellowwood forests. It is only because of their ability to adapt – to new food items, to the risks of persecution and capture by humans, and to the ravages of deforestation and climate change – that we can still enjoy their company in these forests. Yellowwood forests without Cape Parrots are like an ocean without waves.'

STEVE BOYES



MAKE A DIFFERENCE

Spread the word Talk to your friends about the issues facing Cape Parrots. Visit the Cape Parrot Project on Facebook for daily updates and the opportunity to voice your support and opinions.

SMS 'parrot' to 38774 to donate R10 to Cape Parrot conservation. These funds will be used to plant thousands of yellowwood trees (our national tree) and erect hundreds of artificial nest boxes for Cape Parrots (our national parrot).

Sponsor a Cape Parrot nest box for R600 and provide a safe home for Cape Parrots. Contact Steve Boyes on steve@wildbirdtrust.com

Sponsor the planting of a yellowwood grove (R1 000 for 50 trees). In addition to providing habitat for Cape Parrots, you will be leaving a legacy by perpetuating the existence of our national tree. Contact Steve Boyes on steve@wildbirdtrust.com