# Psittacine Beak and Feather Disease (PBFD) in wild Cape Parrots in the Amathole region

**SOUTH AFRICA — May 2010 —** Since getting our permits and ethical clearance (Thank you: Mark Anderson (BirdLife South Africa), Sonja Meintjies (DWEA) and Alan Southwood (DEDEA)) we have caught several wild Cape Parrots in a pecan orchard using mist-nets. Blood spots, feather samples, body measurements, weights, and photographs were taken for each Cape Parrot before release back to the circling flock (with the minimum of stress). Surgical spirits, viricides, latex gloves, and a use once policy for all supplies (e.g. pillowcases and gloves) were used to avoid healthy parrots getting infected. We urgently sent these samples to the University of Cape Town for PCR tests to confirm the incidence of Psittacine Beak and Feather Disease (PBFD) infection in this wild population. A photograph of the first Cape Parrot we caught is posted on the Cape Parrot Project wall. As you can see, this parrot is in very poor condition with fissures in the beak, black mouth and tongue, a blackened cere, poor feather condition, and excessive feather dust. All the parrots we have caught are under-weight, some looking like a very thin person in a suit that is too big for them. 50% of our samples tested POSITIVE for PBFD and 25% are suspected to be positive negatives (will update you based on subsequent tests). It seems that we may be catching the weaker Cape Parrots in the mist nets, as these fly away last when disturbed and dive down out of the tree to take off, as opposed to launching up like the healthier Cape Parrots. Hopefully, this is the case?

Two months ago, well before we started with the mist-netting we would observe up to 30 "sick" Cape Parrots (i.e. Cape Parrots with darkened beak and cere, poor feather condition, and yellow feathers) in a single pecan tree after all the healthy parrots had been disturbed by flying doves or raptors. In the last week or so, we have been seeing only one or two Capes remaining behind due to being in poor condition (never more than 5). Finding the carcass of a Cape Parrot in poor condition a few days ago below one of their roosts confirmed one of our worst fears, establishing that wild Cape Parrots are dying from this debilitating condition. It appears that PBFD is causing symptoms in juveniles and adults, which is also of great concern, as the parrots are meant to develop immunity during adolescence. As the cold winter in the Amathole region approaches we can’t expect parrots in this condition to survive? Can we? Note that the first time we noticed advanced symptoms of PBFD infection in a wild population was here in the Amathole region about 18 months ago. Since then we have received reports and photographs from throughout the region. This is a NEW development and we need to get to the bottom of it…

Did PBFD cause the local extinction of Cape Parrots in the Knysna/ Tsitsikamma forests? Are we at the point at which Cape Parrots are losing condition at population level due to poor (or forced) choices in food resource, long flight distances between food resources, and the added stress of finding food with Cape Parrots are lower densities in their natural habitat? Have we degraded their natural habitat so much that exotic food resources on our farms and in our gardens are more viable food resources? Are pecans the savior or villain in this saga? What can we do to save these infected parrots? Remove sick Capes from the wild until rehabilitated (possibly over winter)? Embark on an indigenous tree planting scheme throughout their distributional range? Attempt to develop a vaccine and use it on nestlings in nest boxes? We need to decide and act fast…

We still don't know a lot about this virus and its activity in the population. We will be doing DNA work on the virus to establish whether it is endemic to the wild population OR a new, possibly more virulent genotype of the disease that has entered the wild population. We are also gathering samples of new exotic food resources that have entered their diet (e.g. pecans, plums, apples, cherries, acorns, etc.) to test their nutritional content, and look for compounds, deficiencies and/or toxins that may be harmful to Cape Parrots (if their diet consists exclusively or predominantly of this food resource). For example, the pecan shuck (green fleshy cover over the nut) is very high in tannins (turns your finger brown and dries them out when de-shucking), and contains myotoxins and aflotoxins that are linked to liver disorders. Pecans also have a fat content that far exceeds sunflower seeds and peanuts which are known to be harmful to parrots in captivity. Again this causes liver problems? Now wild parrots get a lot more exercise than captive parrots, so the same rules may not apply?

We are doing our best to get to the bottom of this problem, but now need your assistance in the form of ADVICE and EXPERTISE via this group, and CHARITABLE DONATIONS via the World Parrot Trust web pages and/or the "Let's Help Save the Cape Parrot of South Africa" causes page (http://www.causes.com/causes/463389).

Right now, we need to create awareness around this developing situation and work together to solve it. We need to get this story in the news, onto the radio and television, and into the minds of South Africans and parrot enthusiasts around the world. Cape Parrots are national treasures, items of global natural heritage, and symbol of free flight, wilderness, and beauty. These "green and gold" ambassadors to the last-remaining intact Afromontane forest patches in South Africa are in trouble and NEED YOUR HELP. This is the time to act and continue acting for many years to come. If we want to save this species from extinction, we need to work together on new ways of counting them in the different regions, new ways of managing and coordinating the Cape Parrots being bred in captivity, new ways of monitoring and ending the illegal capture of Cape Parrots for the wild-caught bird trade, and new ways of finding and protecting active nest cavities. Use your contacts to get as much publicity for the species as possible. The World Cup is just about to start! What an opportunity to let the world know about the Cape Parrot - AFRICA'S MOST ENDANGERED PARROT AND ONE OF SOUTH AFRICA'S MOST ENDANGERED BIRDS.

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