

Tracking Namibia's Most Endangered Species: The Cape Griffon Vulture

The Rare & Endangered Species Trust (REST) works with the critically endangered Cape Griffon Vulture (*Gyps coprotheres*) of Namibia, Africa. These vultures nest on the cliffs of the Waterberg Plateau near Otjiwarongo, in north central Namibia, and have declined from an estimated population of 500 in 1939, to only eleven birds in 2004. In 2002, REST initiated a supplementary feeding scheme on the ranch, African Wilderness Trails, as the first step towards our goal to fit satellite telemetry equipment on the remaining Cape Griffons.

After extensive research it was decided to use the PTT-100 Argos/GPS transmitter produced by Microwave Telemetry, Inc. Our first purchase consisted of 3 units. Cost was an obvious consideration, so we also rehabilitated five H-module SB2 VHF radio transmitters using two AVM LA-12 receivers and two three-element yagi antennas. We fitted the radio transmitters onto White-Backed Vultures *Gyps africanus* (WBVs). After 9 months of data collection, we have ex-



A White-Backed Vulture coming in to land.

Photo courtesy of Maria Diekmann

perienced problems tracking vultures with VHF radio telemetry due to the extreme distances flown by the birds. In addition, if one computes the cost of driving to triangulate radio signals plus the research time spent acquiring the data, there is no doubt about the efficiency and value for money with the satellite unit. The satellite unit provides us with approximately 8-10 plotted points on each of our birds per day. To decrease expenses, we receive our data every third day. Due to the complete success of the first 3 units, we have now purchased an additional two PTTs. Before the latest purchase, we considered trying to reduce Argos costs by only receiving our data every 7 days, but decided that the data is too valuable to have such delays.

A case in point is that of the second bird that we fitted with a PTT. He, or another bird, managed to break through his harness. We specifically designed it so that it would slide off from the front of the bird so as not to entangle him. Our first indication of a problem was that the data showed the PTT as not moving. We located the coordinates, compared them with the GIS mapping, contacted the landowner and went in by foot, as there was no road access. We managed to find and retrieve the undamaged PTT hanging from a tree branch within a 3-meter radius of the GPS coordinates.

In order to fit our vultures with PTTs, three capture operations have been performed, in

January, March and April 2004. We used a capture and release aviary designed by REST, and captive CGVs as decoy birds to lure the wild birds. During the three operations, a total of 291 vultures of various species were captured. The beauty of this capture technique is that the capture mechanism is only released once you



Photo courtesy of Trish Cooper

Mike Scott, Ann Scott, Tim Osborne and Maria Diekmann identifying a possible hybrid vulture.

determine which bird you would like captured. In January, Sky Banker, sponsored by the Commercial Bank of Namibia, was the first CGV in the world to receive a satellite transmitter. In March, both Emperor, sponsored by Steve Martin's Natural Encounters, and Tea Bag, sponsored by Ned and Diana Twining received their PTTs. In April, Sky Banker was recaptured to check his harness attachment and immediately released. Altogether 259 of the captured birds were ringed. All vultures handled were documented photographically, while a full set of mensural and other data was taken for 36 birds, and sex estimations done for 164 birds. No losses were sustained, and the first marked birds returned to the restaurant and into the capture aviary the very next day after the capture. We believe that the almost instantaneous return of birds into the capture aviary was due to the long preparations made to get the birds used to feeling safe at the feeding site.

The amount of information that we have discovered and confirmed in less than a year is amazing. One of my colleagues made the observation that we have collected more concrete data on this species in the last 9 months than the previous 30 years of observations. Traditionally, the CGV is a very hard species to study due to: its high nest cliff dwellings, our inability to easily determine the difference between the sexes, high altitude and long distance flights, and shy behaviour around people. Rather than



Photo courtesy of Gerhard Verdoorn

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