

Project Update: March 2017

Identifying adult Cape vulture roosting sites

The Cape vulture (*Gyps coprotheres*) is a central place forager that often uses roost sites. These roost sites can be used both during the day and at night as sleeping localities, as an area to rest until ideal flying conditions become available or an area for social information to be exchanged. Identifying favoured roosting sites may be beneficial to the species, as it will inform the placement of wind turbine installations to these areas.



Figure 1: Cape Vulture in flight

Nine Cape vultures were tagged with GPS tracking devices from four locations in the Eastern Cape and southern KwaZulu-Natal (KZN). Data collected from these devices were used to identify roosting sites based on the bird's movement mode. By using two consecutive movement points at either the last point of the day, or at the first point of the day, roost sites were identified. By actively seeking out these roost sites and verifying the roost sites identified in this way as active, we hope to test whether this is an accurate method of identifying roosting sites. It is for this reason that close to two weeks was spent travelling and locating sites in the Eastern Cape and southern KZN. Close to 40 sites were visited, where specific characteristics were recorded. These characteristics include cliff features such as height and the width of the cliff face. "Area of use" was also identified by the presence of vultures, mounds or any obvious indications that vultures used the area, and similar measurements were taken. The surrounding land use practices, topography, distance to nearest man-made structure and the prevailing wind conditions are to be ascertained using GIS layers. Cape vultures appear to have adapted to using power lines as roost sites so power lines were also considered as possible roosts. Of the total identified roost sites visited, power lines constituted 24% while feeding sites were also identified and contributed only 16%.



Figure 2: Cape Vultures perched on an electricity pylon in the Eastern Cape

A similar assessment method will be used to determine the roosting sites of juvenile Cape vultures and a comparative study will be conducted for the two age classes. The primary focus of this study will be to determine how roosting behaviour may influence the Cape vulture's vulnerability to wind energy development.