## Project Update: March 2020

## Camera trap surveys:

To date, a 90-day camera trap survey has been successfully completed in Kariega Game Reserve. Brown hyaenas were captured on a few of the cameras, but due their low population density, recaptures were low. Despite the low captures and recaptures, occupancy analyses can still be run to determine spatial dynamics and activity hot spots, which will help in determining where to focus our efforts when looking for paste markings. Cameras are currently set up in Lalibela Game Reserve and will be taken down at the end of April 2020. Cameras in Lalibela were checked in February 2020 and all photos captured downloaded. From these initial photographs, it seems like a sufficient number of brown hyaena captures and recaptures will be caught to allow for reliable density estimates in addition to occupancy analyses. Following the survey in Lalibela, a camera trap survey will be conducted in Amakhala Game Reserve.



Figure 1: Photographs of brown hyaena captured at Lalibela Game Reserve.

## Collection of paste markings:

Currently, 34 brown hyaena paste markings (Figure 2) have been collected across three reserves (Kariega Game Reserve, Lalibela Game Reserve and Addo Elephant National Park. When cameras are set up in Amakhala Game Reserve in May 2020, paste markings will be collected at the same time. Additionally, paste markings will be collected in Kwandwe Private Game Reserve and Mountain Zebra National Park in the coming months. The paste markings will be used to determine the population genetics (e.g. gene flow) of brown hyaena both within and between reserves in the Eastern Cape, South Africa.



**Figure 2**: An example of a brown hyaena paste markings found on a plant alongside the road in Addo Elephant National Park.



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