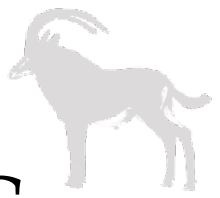




# ZAMBEZI DELTA ECOLOGY

## HOLISTIC ECOSYSTEM RESEARCH PROJECT

LION REPORT  
APRIL 2020



# TWENTY FOUR LIONS

## | BEHIND THE SCENES |

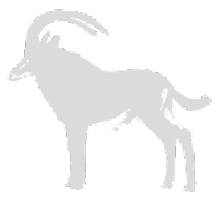
*What does it take to monitor lions in a wetland ecosystem?*

The reintroduction of lions into the Zambezi Delta was a bold move for lion conservation. By bringing lions back into the delta, this project has essentially restored ecosystem structure and function and added one million hectares to the African lion's range.

With all the lions released, the next step was to monitor the entire population. But how does one successfully monitor twenty four lions in a vast, open wetland ecosystem, with seasonally flooded roads and rivers that are impassable for vehicles?

This month's report highlights the two core elements that have been vital to successfully monitoring lions in the delta. These include: aerial support and satellite collars. Thanks to the Cabela Family Foundation's (CFF) consistent and unwavering support, we are able to have collars deployed on many lions to track their movements and constant "eyes in the sky" to check up on them. We now boast with a healthy and growing lion population, which recently exceeded 50 individuals. With this constant support system in place, we are able to fully document the recovery of this lion population, which we believe can contribute significantly towards lion conservation in Mozambique.



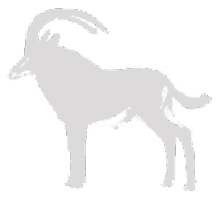


# AERIAL SUPPORT

## DEDICATED LION MONITORING

An important part of monitoring lions post-release is getting regular sightings of the lions to check their body condition, monitor their movements and determine what prey they have eaten. However, this can be rather challenging in a wetland ecosystem. Thanks to the CFF, who generously provide monthly flying hours, successfully monitoring the lions became a reality. A Robinson-22 helicopter (dubbed the “*Dung Beetle*”) was dedicated to lion monitoring and has proved a major asset to success of this project. Thanks to the aerial support, we are able to get on average 35-45 sightings a month, which translates into seeing all prides at least once a week.

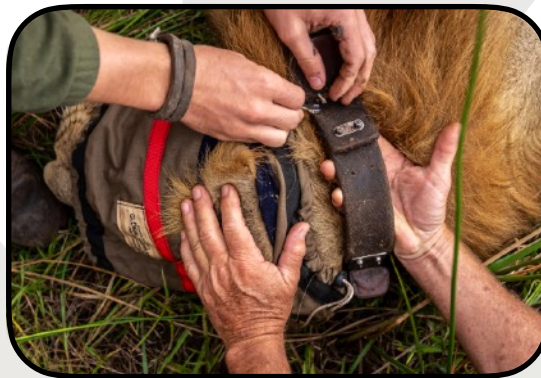


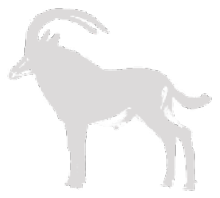


# COLLARING

## TRACKING THEIR MOVEMENTS

After the lions were released they were free to move anywhere within the 1 million hectare expanse which is the Zambezi Delta. Trying to monitor these lions by means of traditional tracking methods would have been a near impossible task due to the nature of the ecosystem and wide-ranging behaviour of lions. However, thanks to modern technology, we are able to fit lions with satellite collars which provide daily GPS locations and have a built-in VHF antenna which allows active tracking within a certain range of the animal. We currently have at least one collar on every pride and coalition in the delta, thus we can monitor lions remotely as well as track them in the field. Together these collars send almost 5 000 locations on a monthly basis.

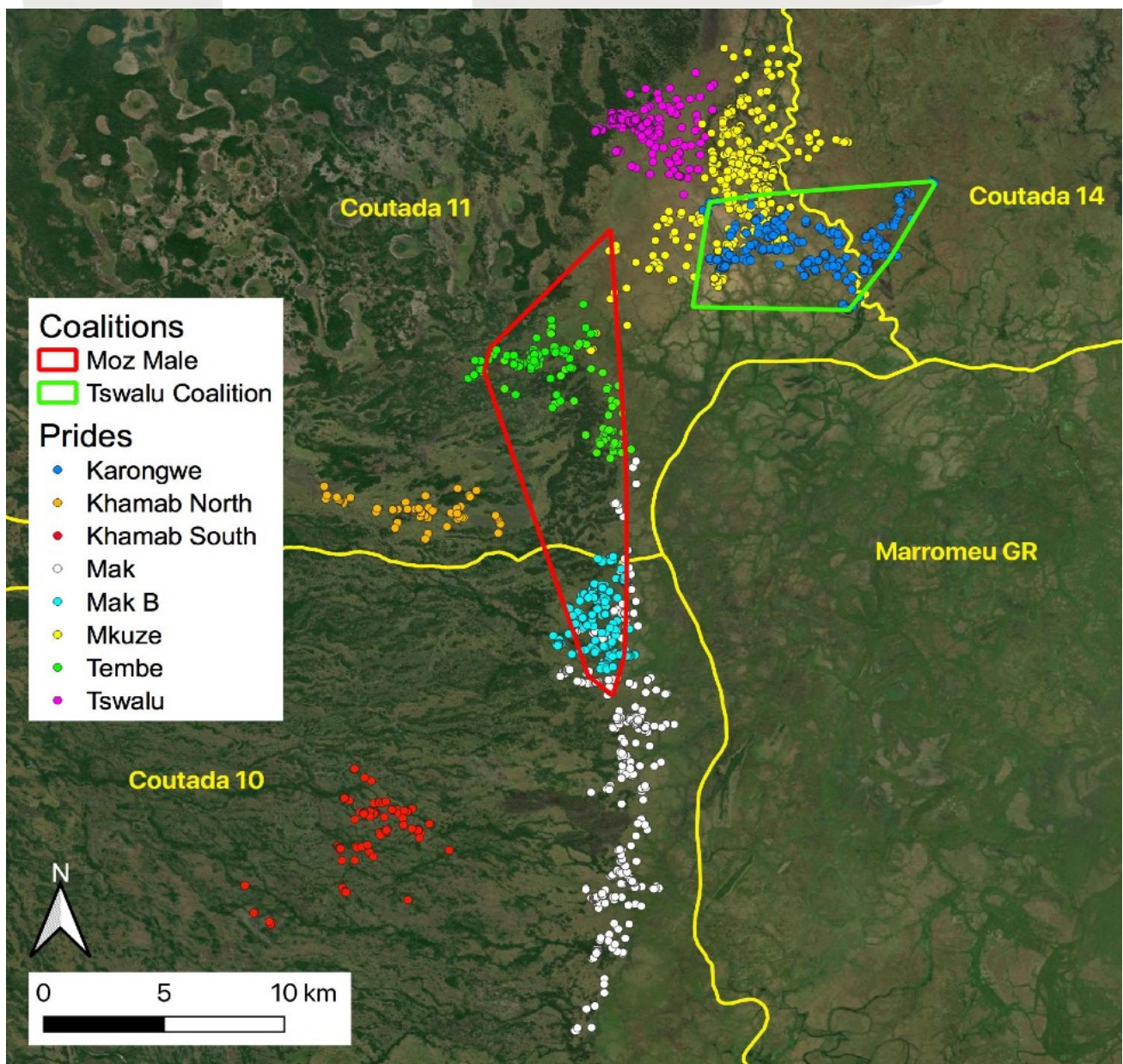




# LION MOVEMENTS

## APRIL 2020

The map below shows all pride locations and all coalition home ranges for April 2020. The good news is that lions continue to display fixed ranges, although there was more overlap in April compared to March - this was due to roaming behaviour (by Mkuze pride), range shift (by Karongwe pride) and range expansion (by Mak pride). With the Delta receiving less rain this year compared to 2019, lions have utilised the open floodplain more frequently due to the high density of prey in this area. Males continue their tenure over the same prides, with no territorial interactions between males. Lion home range size was 31 km<sup>2</sup>, which is comparable to previous months this year.





# LION FAMILY TREES

