ZAMBEZE DELTA ECOLOGY

HOLISTIC ECOSYSTEM RESEARCH PROJECT

MONTHLY REPORT

JANUARY 2020

TWENTY FOUR LIONS

*2020 is going to be a significant year for the 24 Lions Project.
It is the year that we will watch our first cubs become subadults and subadults
become adults as the population continues to grow…*

It has been almost one and half years since the release of the 24 lions into the Zambezi Delta. So, we take a look at where we stand today. Unfortunately we have lost five adult lions, but have gained 27 cubs (and counting) along the way. This was largely thanks to the efforts of a local Mozambican male lion. We believe he, on his own, has sired 25 cubs from 5 different prides. Not only has this given the population a great boost in terms of numbers, but it has also preserved what is likely the last remaining local lion genetics from the Zambezi Delta.

So, how does one successfully monitor a large group of lions in a wetland ecosystem on a regular basis? The answer: helicopters. Thanks to the Cabela Family Foundation (CFF), we are successfully able to get visual on each and every lion reintroduced into the Delta on a regular basis. As a result, we are able to follow the life history of all lions, which is important as it helps us understand how these lions (1) adapt to their new environment, (2) move within the landscape and (3) interact with one another.

Our monitoring is done in a Robinson-22 helicopter, which is dedicated to tracking each lion (Fig 1). We are incredibly grateful to CFF, who provide the much-needed aerial support to track our lions on a regular basis.

**Figure 1.** Lion tracking from the CFF R-22 helicopter.

THE MAK PRIDE

The Mak Pride is a pride of 13 lions that occupies an area between Coutada 10 and 11. This is the largest pride in the Zambezi Delta, consisting of 4 adult females and 9 cubs. These are the oldest cubs at 10-12 months of age and are all looking in excellent condition. Their mothers are clearly providing them with regular kills and from now onward they might start to hunt themselves.

What is even more exciting is that soon the pride will grow even larger as the fourth adult female (MAK-F004) started showing signs of cubbing towards the end of December 2019. Watching this pride grow has been a pleasure to watch. We look forward to many more cubs from this pride. Watch this space!

Figure 2. The Mak Pride growing strong.
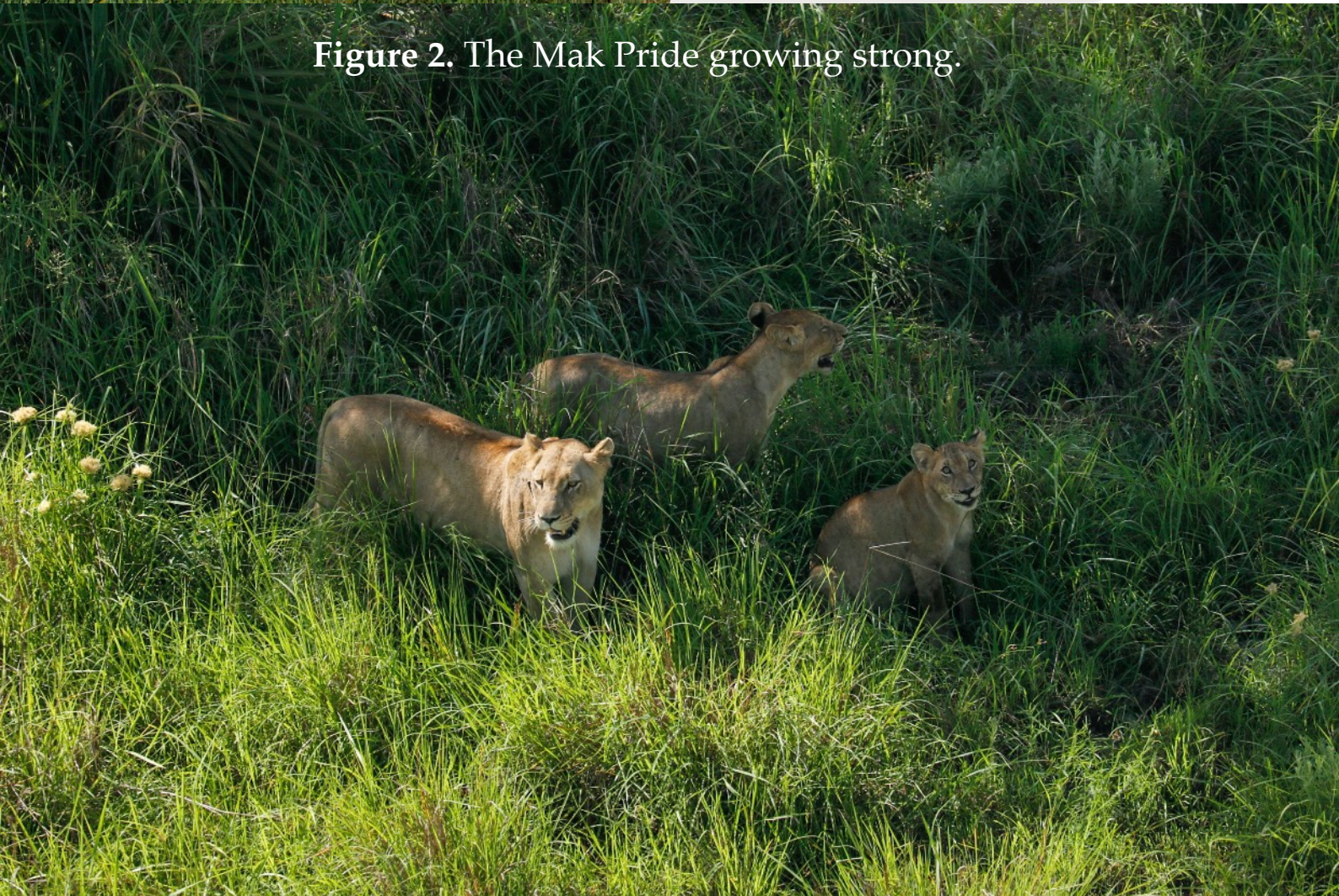
MORE SUPRISES!

Lioness KHA-F001 (collar nr. 3204) has proven that she is full of surprises. After her release in August 2018, her initial exploratory movement took her through three concessions, covering an area of almost 900 km², before returning to the release area 8 months later. This was one of the largest movements we observed of the released lions. Today she occupies a relatively small area (33 km²) along the southern boundary of Coutada 11 (Fig. 5).

Recently we found her in her usual area, but this time with 2 cubs! Although we suspected she might have had cubs, we could never confirm it until now. We believe the father of the cubs is the Mozambican male (MOZ-M001), as her movement overlapped with his current range early in June 2019. Given that lion gestation period is about 110 days, that would make these cubs about 3 months old, which coincides with our estimate based on the sighting.

Figure 3. Two cubs of KHA-F001.

Figure 4. KHA-F001 darting through an opening.

KHA_F001
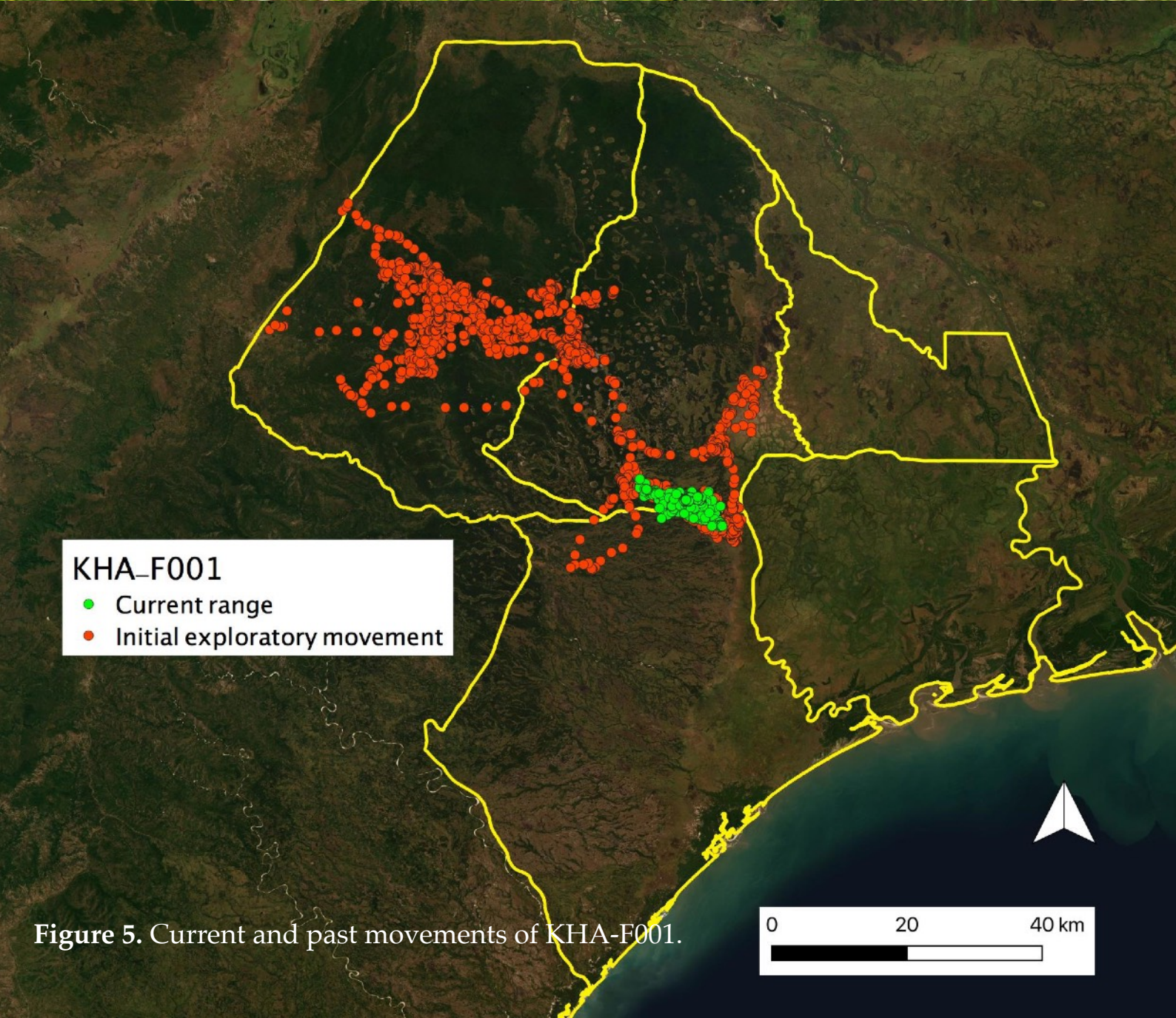- Current range
- Initial exploratory movement

Figure 5. Current and past movements of KHA-F001.

SNARING INCIDENT: MKUZE MALE

Sadly we had to say goodbye to our young male from Mkuze Game Reserve (MKU-M001). He was caught in a cable snare which was set by a poacher to catch reedbuck, a common medium-sized antelope species in the Zambezi Delta. Unfortunately, due to his wide-ranging behaviour, he was caught in one of these snares and died shortly after. As it happened so quickly, we were unable to respond and help him, despite us wishing we could.

The ZDS Anti-Poaching Unit (APU) was able to arrest the poacher and he was put in the Marromeu jail to serve out his sentence. In addition to the lion, the poacher also caught three adult reedbuck. When poachers illegally enter into the Zambezi Delta, they usually set about 20-30 snares. Therefore, it is important for our APU to sweep the entire area to find all the snares and also catch the poacher. Unfortunately, this is the reality of conservation in Africa, but the consistent efforts from ZDS APU has resulted in a significant reduction in poaching, allowing wildlife to increase rapidly throughout the Delta.

INJURY UPDATE: SNARED LADY

We are pleased to report that the Snared Lady, a lioness originally from Karongwe Game Reserve (KAR-F001), has recovered exceptionally well from her wounds sustained during two snaring incidents in 2019. In July she was caught in a snare which wrapped around her waist, while in September a snare was caught on her back right foot. This female spends the majority of her time with the other Karongwe lioness (KAR-F002) and they move between Coutada 11 and 14. This female is alive today thanks to the crucial aerial support provided by CFF to track and monitor these lions.

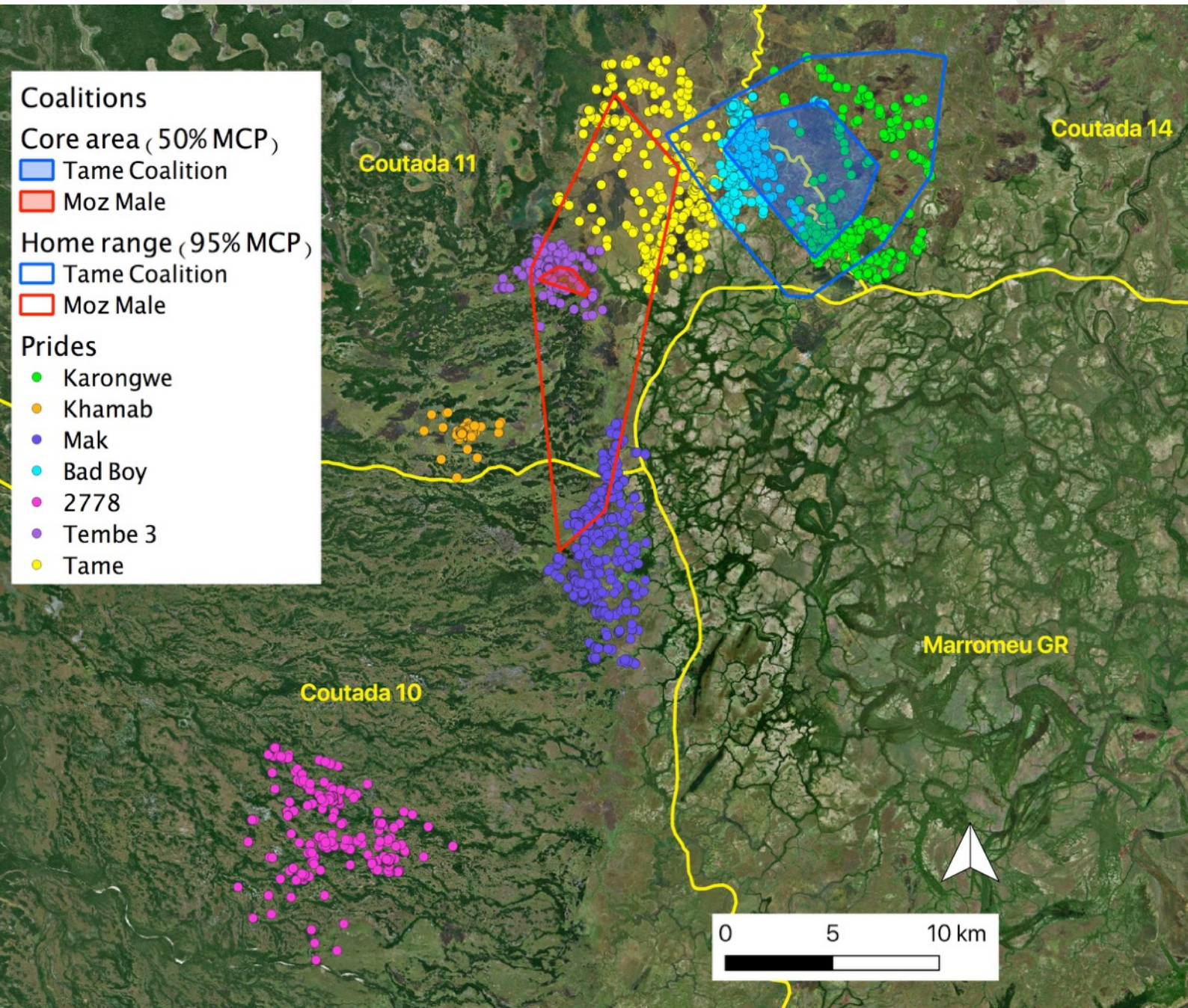July 2019: Shortly after the snaring incident

January 2020: 6 months later

LION MOVEMENTS

JANUARY 2020

Figure 6. Map showing the core (50% MCP) and home ranges (95% MCP) of male coalitions as well as GPS locations of lion prides across the Zambezi Delta for January 2020.

Figure 6 shows the area occupied by the coalitions (males) and the GPS locations of all lion prides (females and their cubs). Movements in January where relatively normal, although 2778 (TEM-F001) is starting to show increased movement as her cubs are now 6-months old. The Tame Coalition covers the north-eastern lion range (including two prides), while the Moz Male covers the central lion range (including 3 prides).

Male home ranges are normally much larger than those of females as they must patrol larger areas to defend their range and their pride(s). In the case of Zambezi Delta's lions, the two male groups (Tame Coalition & Moz Male) each cover 2-3 prides, thus having to move large distance between prides. Figure 7 clearly shows this difference in area use between males and females.
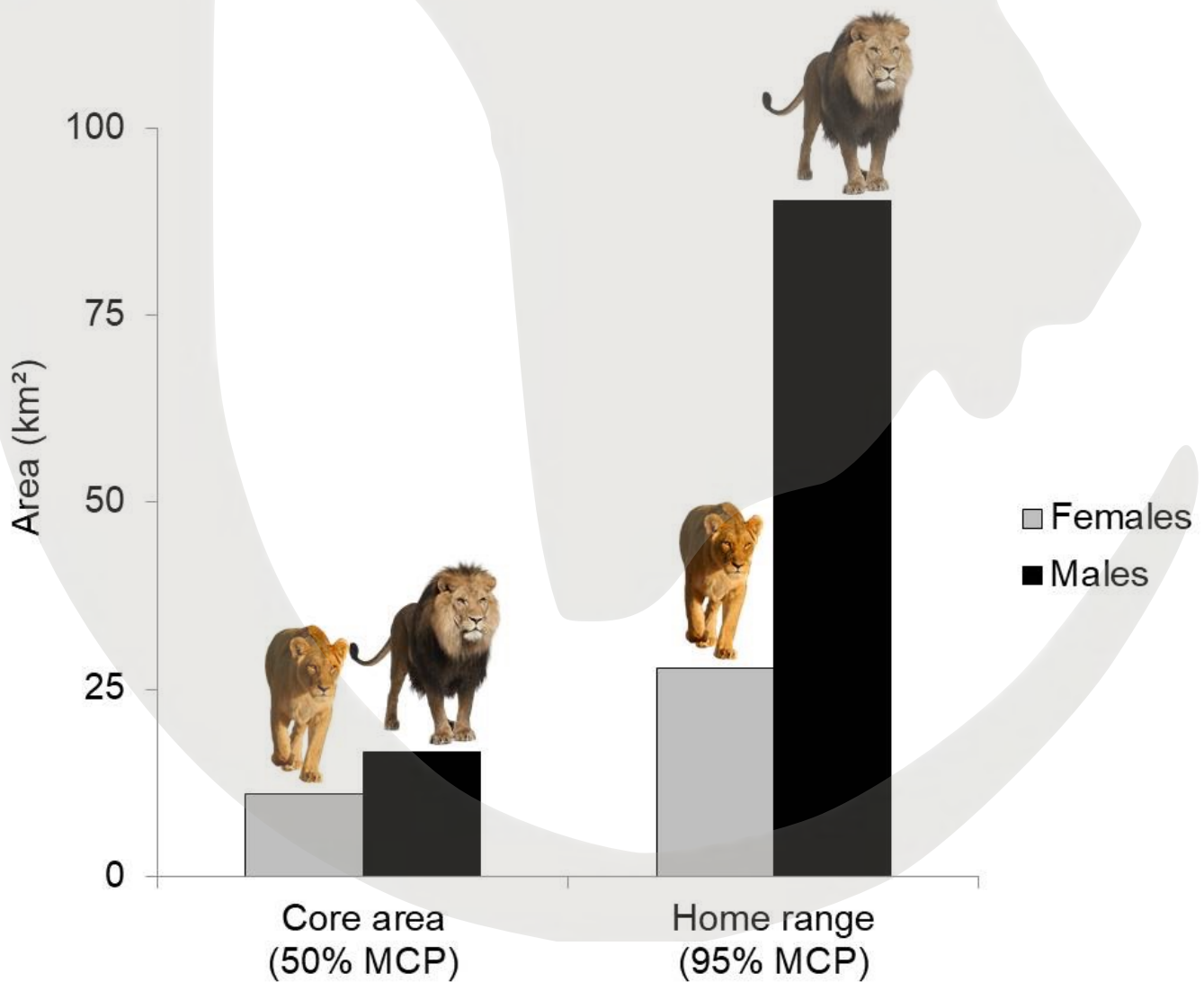
Figure 7. Core (50% MCP) and home ranges (95% MCP) compared between male and female lions in the Zambezi Delta for January 2020.

GOALS FOR 2020

COLLAR AN UNCOLLARED LIONESS

RE-COLLAR LIONS WITH FAULTY COLLARS

#24LIONS