

HOW TO IDENTIFY INDIVIDUAL LIONS & LEOPARDS IN Gorongosa National Park

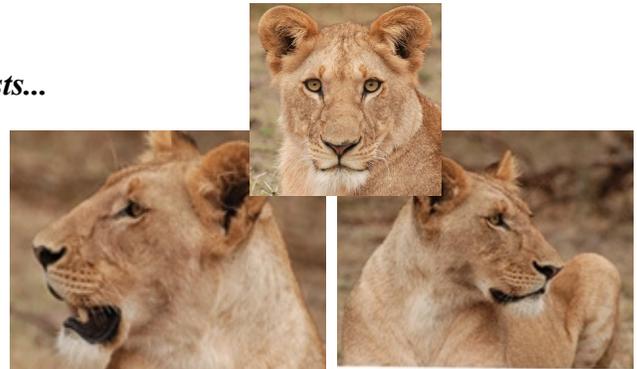
Here are some key tips for identifying lions & leopards for *Projecto Leões da Gorongosa...*

Just like our individual fingerprints are unique, each lion has a unique pattern of whisker-spots, and leopards have unique coat patterns, that can very reliably be used to tell individuals apart. A fast and relatively easy way to capture the info we need to ID individuals is to photograph lions and leopards when we encounter them. In absence of a camera, a pair of binoculars, pencil and notebook can suffice.

Here are a few good photo tips to share with your guests...

Good photos will be hi-resolution, clear, close-up shots of:

- ≡ the whole lion or leopard – **full body shots, left and right side** if possible
- ≡ **both sides of the face**, left and right
- ≡ each set of lion **whisker-spots**, left and right side of the head (see below)
- ≡ full frontal photo of the **head**, including **ears**
- ≡ good photo of the **front of the nose** – showing patterns of pink and black
- ≡ photos of any additional **unique markings**, short/no tail, ear clips, scars.

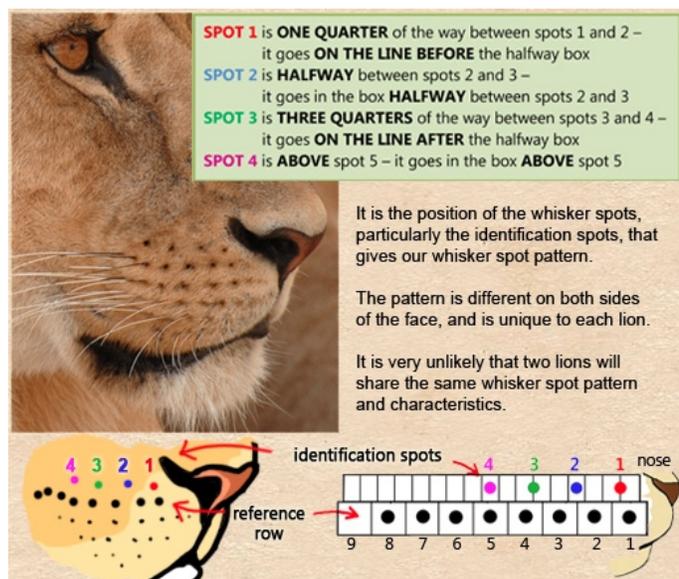


Sometimes we don't have the luxury/time of taking all these different photos, just do your best without disturbing the animals. Soon, *Projecto Leões da Gorongosa* will have a photographic field album of all lions and leopards we know of in GNP, and the photos you and your guests take can be matched up against this album to positively identify individuals, habitat use and range, pride and coalition structures, and survival.

HOW RESEARCHERS USE WHISKER SPOT & NOSE PATTERNS TO IDENTIFY INDIVIDUALS.

We use two rows of whisker-spots, the **reference row** and the **identification spots**:

- ≡ The **reference row** is the **top complete row of whisker spots**
- ≡ The **identification spots** form an **incomplete row above the reference row**. There may be **up to 5 spots**



Photos courtesy of the Mara Predator Project

When a lion is born, it has a pink nose. As it ages, small, black spots appear. These grow in size and number until the nose is completely black, usually after 8 years.

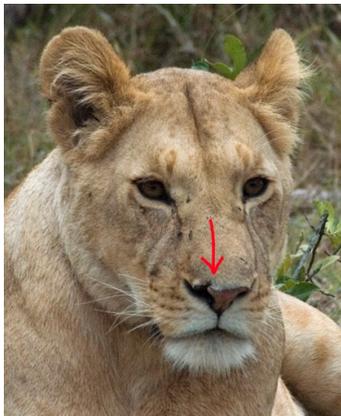
Nose pigmentation can be highly variable, but is usually as follows:



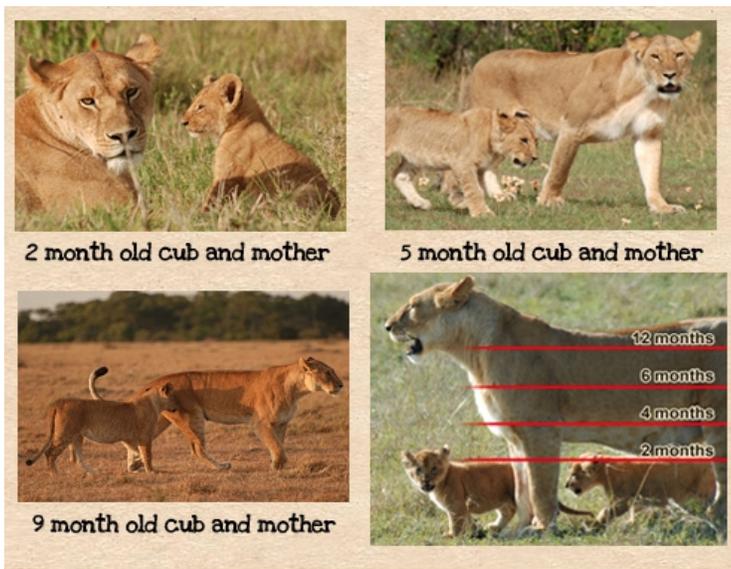
- ≡ **Pink nose = cubs, sub-adults and young adults**
- ≡ **Spotted nose = young adults to mid-adults**
- ≡ **Patchy nose (large spots) = mid-adults to old adults**
- ≡ **Black nose = old adults**

Because the spots **remain in the same place** and only grow bigger, we can sometimes use a **recent** picture of our lion's nose to **compare the pattern of spotting** and thus help us identify it.

Several additional characteristics are very useful for identification. These include **permanent scars, broken or missing teeth, short or missing tails, cut nose, cut ears, and age**



Photos courtesy of the Mara Predator Project



Finally, spotting cubs is worth gold! A quick photo-guide (left) will help you roughly age cubs if you encounter them. Tips for photographing adult lions are just as valuable for cubs...focus on whisker-spots, nose etc. Age and photo all cubs present if possible.

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