

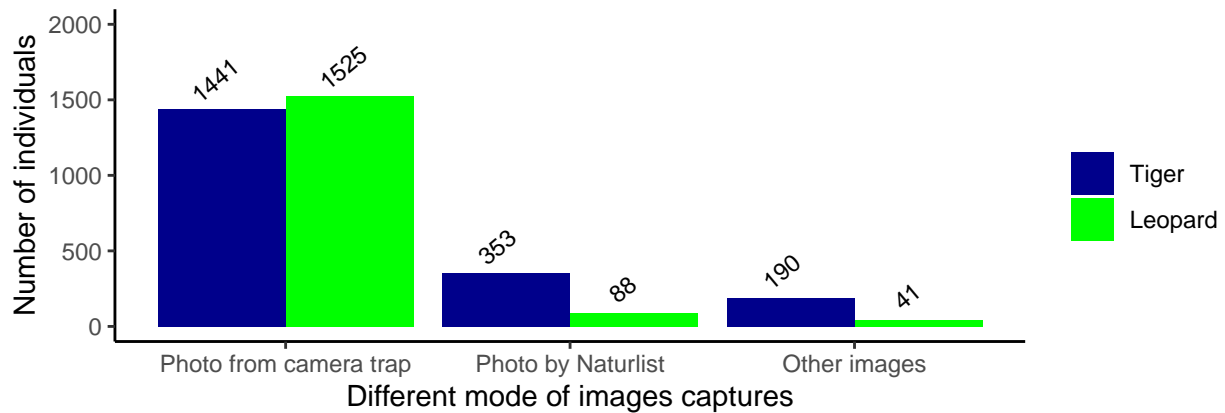
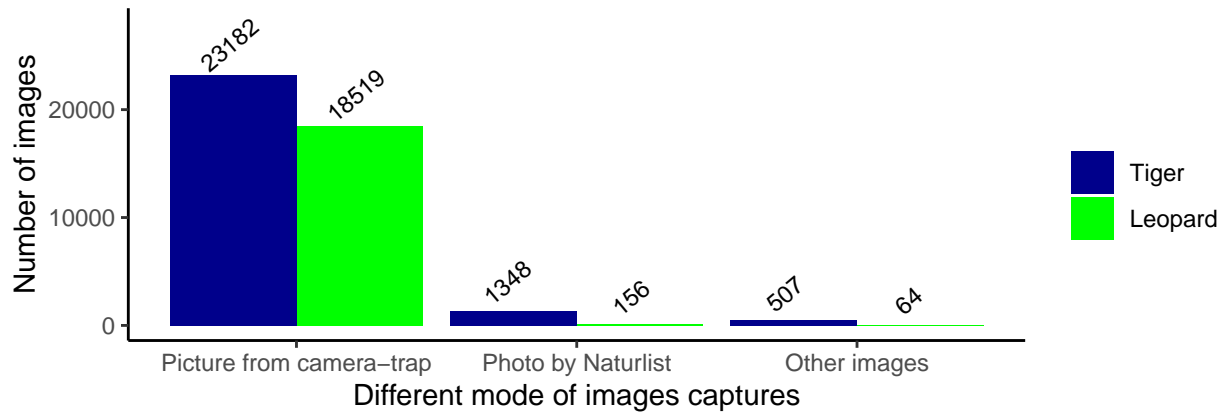
Descriptive summary of Images in the database

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This report is the descriptive result of the tiger and leopard images in the database which we will be using for training the machine learning network.

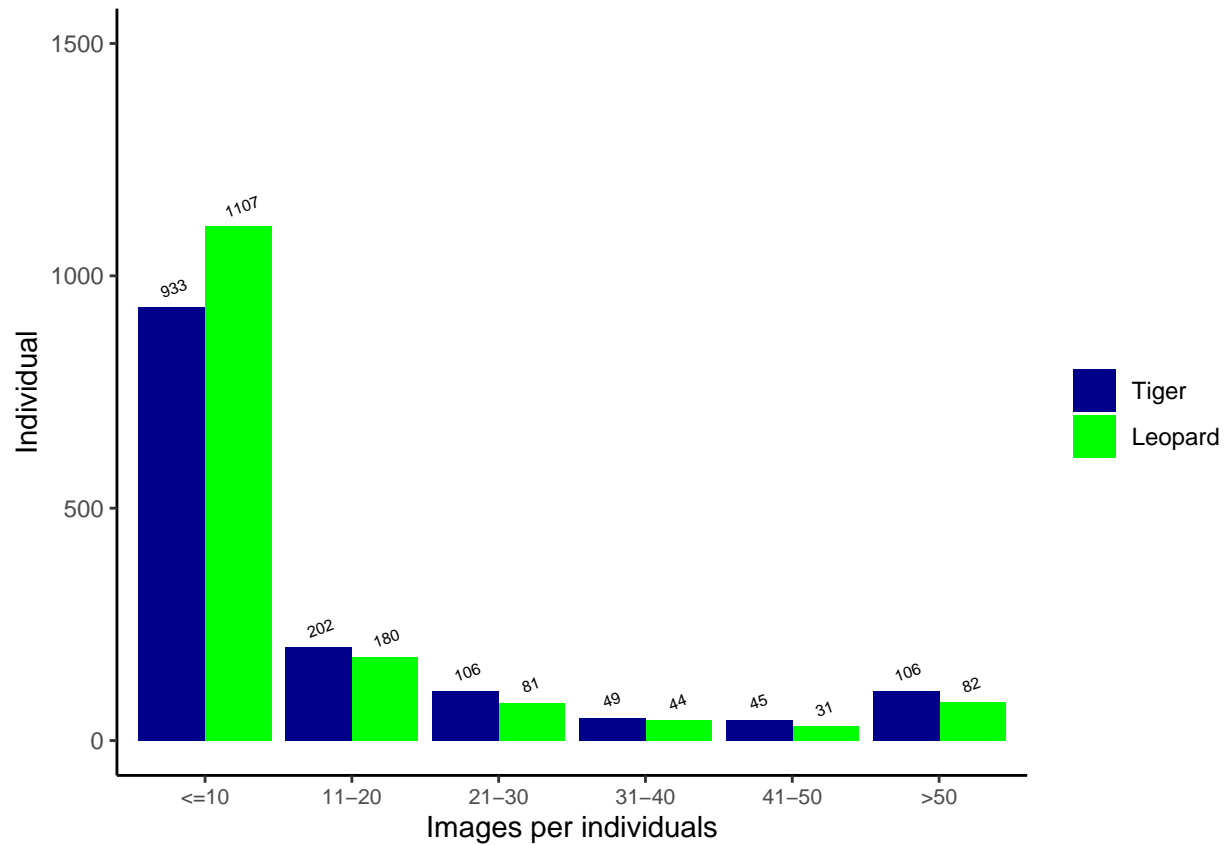
Number of tigers and leopards in different capture mode.

There are total 43781 images belonging to 3367 individuals taken in 20 different sites. Among these animals there are 25041 images for 1749 tigers and 18740 images belonging to 1618 leopards. However, the images in the database consist of camera traps, photo from naturalist, dead tigers, pelted skin etc. The following graph provides a summary of this.



Histogram of number of image per individuals.

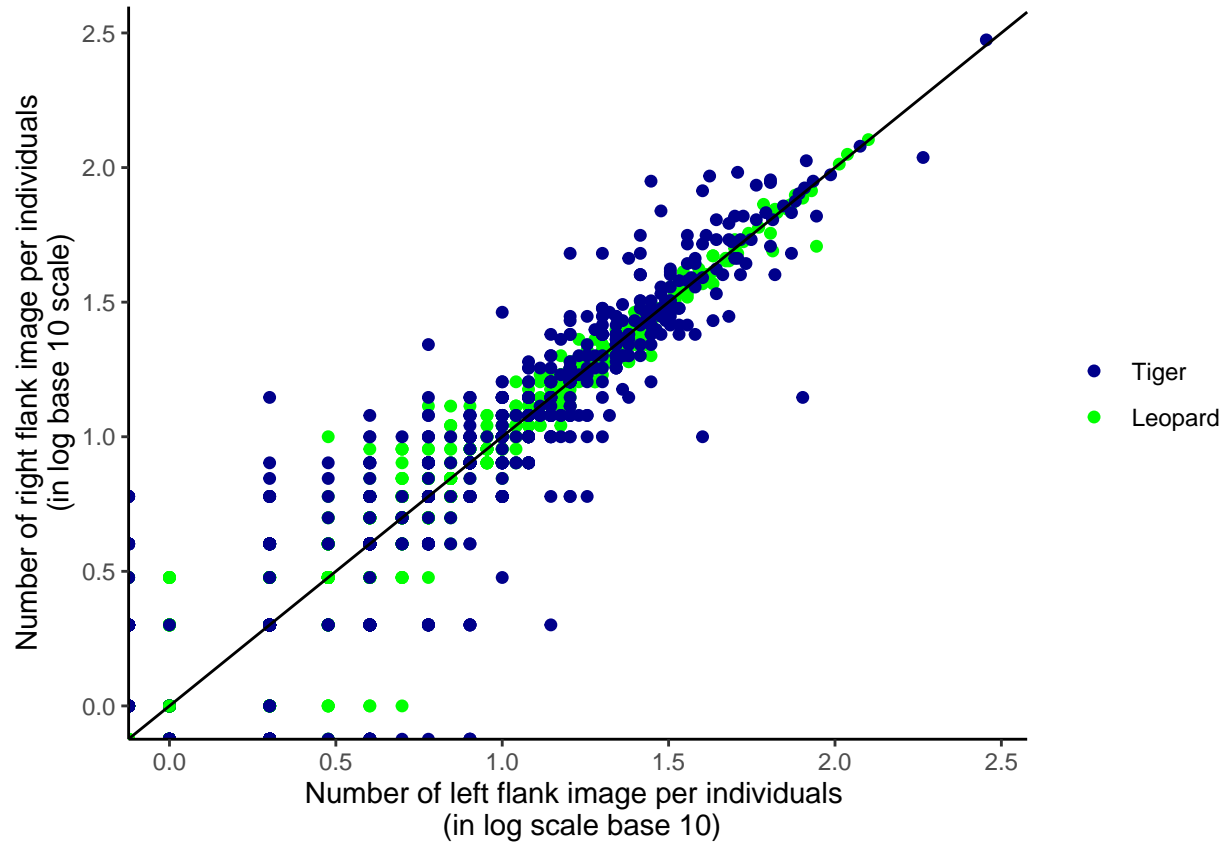
It is clear that **99%** leopard and **93%** Tigers images are from camera trap. Therefore we will only be using the image that were capture using camera traps.



Form the above graph it is clear that 1107 leopards and 933 tigers have 10 or less number of images. Moreover over 1443 out of 1525 leopards and 1335 out of 1441 tigers individuals fall in the range of less that 50 images.

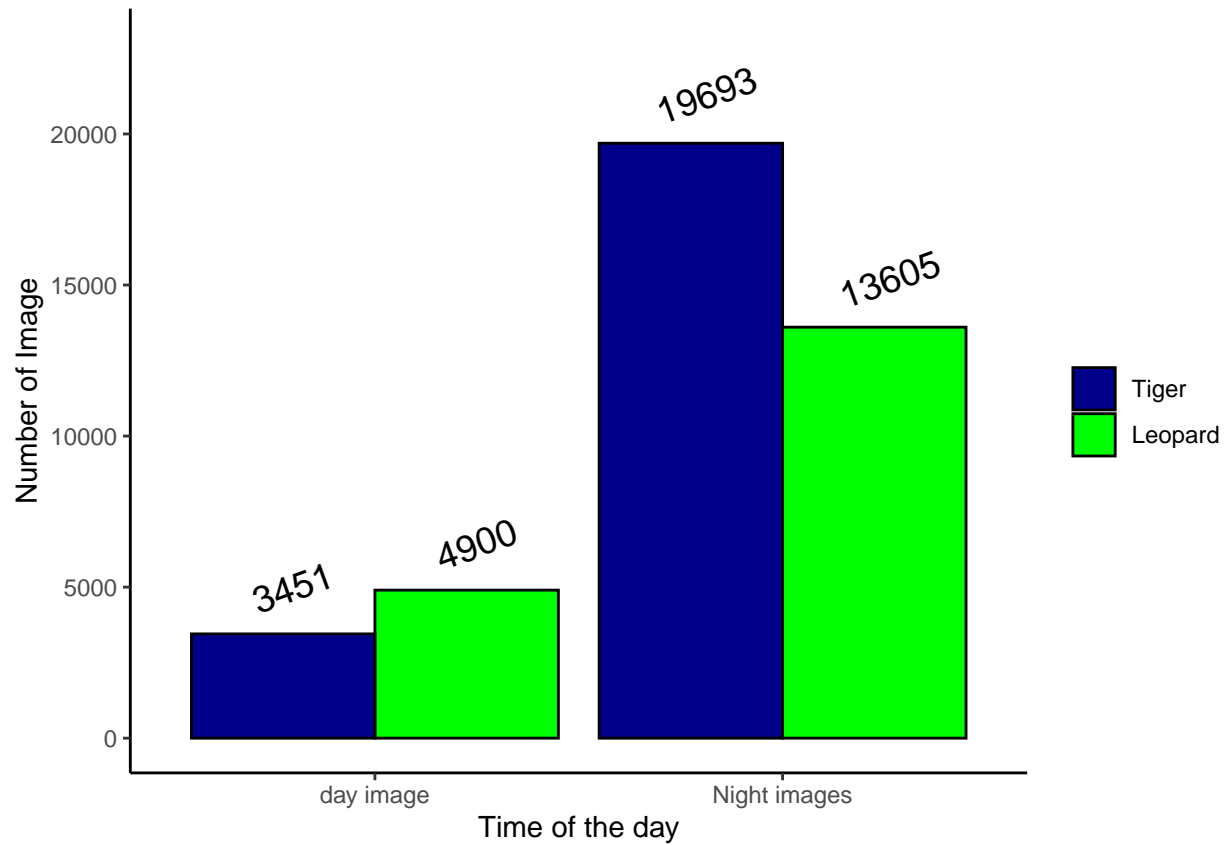
Number of camera trap images on different flanks

Further camera trap images are take in left and right flank. The number of left and right flanks might not be same for all the tigers.



Camera trap images at different times of the day

As from the discussion it was clear that night and day image was important in classification of the image. It is also important which training the network



The discrepancy in the total number of image in above graph and the first graphs is due to fact that for some camera trap images the timing are missing. To be exact, there are 57 camera trap images that do not have time associated with it

Images and individual at different sites

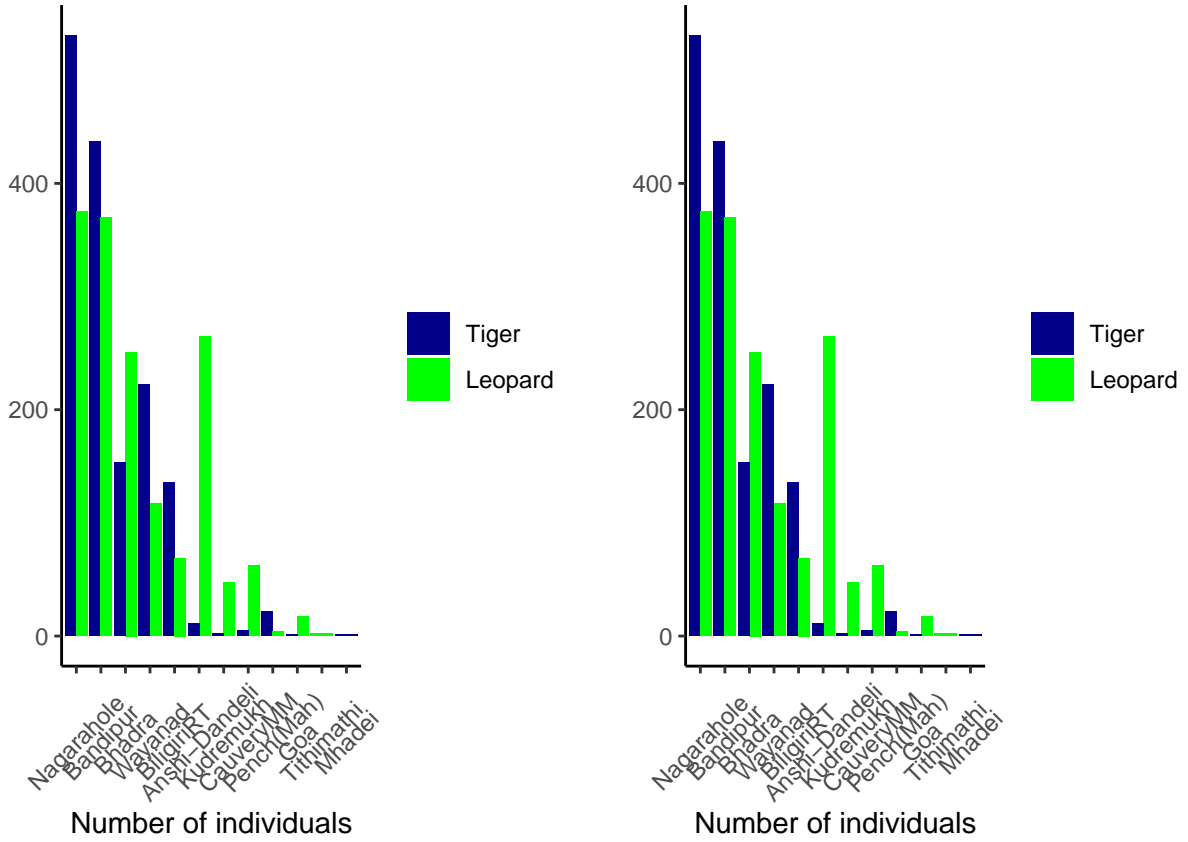


Table 1: Tiger images

Camera trapsites	Speceis	number of images	number of individuals
Nagarahole	Tiger	8201	531
Bandipur	Tiger	6517	437
Bhadra	Tiger	2863	153
Wayanad	Tiger	2816	222
BiligiriRT	Tiger	2190	136
Pench(Mah)	Tiger	223	22
Anshi-Dandeli	Tiger	159	11
Kudremukh	Tiger	112	2
CauveryMM	Tiger	56	5
Mhadei	Tiger	4	1
Goa	Tiger	3	1

Table 2: Leopard images

Camera trapsites	Speceis	number of images	number of individuals
Bandipur	Leopard	5103	370
Bhadra	Leopard	4865	251
Nagarahole	Leopard	4818	375
Wayanad	Leopard	1024	117

Camera trapsites	Speceis	number of images	number of individuals
Anshi-Dandeli	Leopard	872	265
Kudremukh	Leopard	793	47
BiligiriRT	Leopard	638	69
CauveryMM	Leopard	332	62
Goa	Leopard	36	17
Pench(Mah)	Leopard	17	4
Tithimathi	Leopard	7	2

The final out come from the data is that most of the individuals have 1-10 pictures, while most of the images are from camera trap data.