

## October 2012 Field Update

## **Lion Monitoring: Cub Count Climbs**

Since the beginning of the year, the Lion Guardian team continued to receive good news from several of the Guardians' zones where they've continued locating tiny cub tracks. We have since confirmed six lionesses with a total of 17 new cubs (born in 2012). Just this year, Nimaoi has had two males; Belta has three; Willy and Shiankiki have six new cubs between them, and Nosidan and Nosotua also had six cubs between them. This trend of new cubs continues the boom that started in 2012 across the areas of the Amboseli ecosystem where the Guardians are actively monitoring their lions. The Guardians now have an important role in the lives of these cubs by working with their communities to maintain the safe environment necessary for these new cubs to mature to adulthood.

Another exciting component to the lion population is the budding of the first born 2010 cubs who were sub-adults as of the beginning of this year and are now growing into adults capable of breeding. This week we received our first report that Nenki and Meoshi, the sub-adults of Selenkay and Elikan, were seen mating with Ndelie. This is exciting as these young lionesses were born during one of the toughest times of recent memory for the Amboseli lions. After the severe drought of 2008-09 broke, many lions starved, particularly cubs. This included all of Nenki and Meoshi's littermates. Thus, the news that these young females are now mating and will possibly give birth late this year is very exciting to us. It was a lot of work for the Lion Guardians and other stakeholders to keep these young lions alive to this point. We look forward to the new tide of cubs as the new generation of young lionesses mature into motherhood.

In late June we received some terrible news. While in an area outside Lion Guardians' jurisdiction, male lion Sikiria was speared to death by Maasai warriors in retaliation after killing a cow in the bush. Sikiria's movements, since he was assigned with a GPS collar in 2009, have defied our understanding of Kenyan lions. His range spans further than any other lion recorded on our project, and to our knowledge is comparable only to that of male lion ranges in desert ecosystems. Until his death, he registered 6,884 sq km in a time frame of less than 3 years! This is a truly remarkable movement pattern and is also further proof of the importance of employing Lion Guardians across entire ecosystems. Sikiria did not die without a fight; he attacked and seriously injured three out of the 70 warriors who came to kill him. Sikiria was killed outside of our jurisdiction so no Guardian was able to prevent this tragedy.

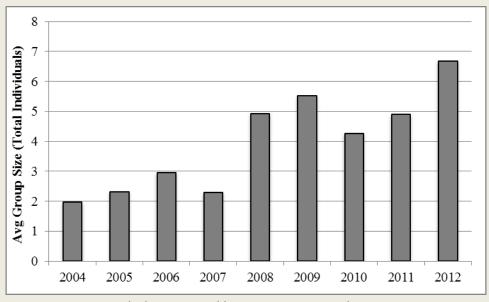
## Research Update: Lion group sizes on the rise

The Lion Guardians not only work hard to help their communities by minimizing conflict and keeping lions alive for increased benefits, they also collect data on the lion population that shares their human and livestock dominated lands. This lion data is collated and passed on to Stephanie Dolrenry who analyzes it. She keeps track of the lion population and demographic trends over the years as well as works to measure how effective the Lion Guardians are at monitoring the lions. We use these results to

implement new strategies for the Guardians' lion monitoring as well as work extra hard to keep important individual lions alive for a sustainable lion population for years to come.

Part of our research in these community areas is looking at lion group sizes (total number of lions found together - adults, sub-adults and cubs). We have been keeping track of how many lions we see together since early 2004. We are very excited to report a rise in the numbers of lions found together across the group ranches. Since monitoring began, lions on the group ranches were usually found alone or in very small groups (average number of total individuals found together was less than two animals). Previously, cubs usually left their mother before they became sub-adults (before two years of age). So the largest groups we encountered were typically a female with a few young cubs; males rarely associated with females other than brief mating sessions. Since the inception of our project in 2004 thru 2007, the average size of observed lion groups was 1.96 – 2.96 individual lions (again, this includes cubs as well as adults and sub-adults).

After the drought of 2009, the lions had a difficult spell and many cubs did not reach sub-adulthood. Consequently, we have been recording very low numbers of sub-adults. Though, a portion of the cubs born just after the drought (late 2009/early 2010) survived and are staying with their mothers. Whilst these cubs are now sub-adults, soon to be promoted to full adulthood, new cubs are also being born by their mothers. With these two generations and their mothers, we are now recording group sizes larger than ever seen before on the group ranches. In 2012 the average number of individuals per group was 6.78. One group consists of 14 individuals and another is totaling 11.

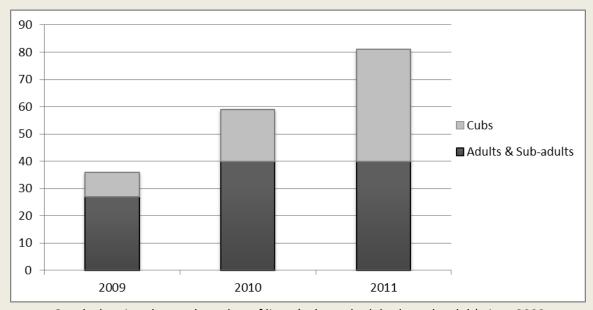


Graph showing total lion group size over the years

For the first time since monitoring began, we are observing lion prides!



In addition to the 17 cubs born so far this year, we also observed a cub boom in 2011 (a total of 28 cubs born). The current lion density for our area of operations (Mbirikani, Eselenkei and Olgulului group ranches) stands at  $0.013/\text{km}^2$  for adults and sub-adults combined. This is the equivalent to 1.3 lion for every  $100\text{km}^2$ . If cubs are included, the number increases to  $0.026/\text{km}^2$  or 2.6 lions per every  $100\text{ km}^2$ . If the majority of the cubs from the 2011 boom survive to adulthood, we will see a steep increase in the lion population, as can be seen by the chart below.



Graph showing the total number of lions (cubs and adult plus sub-adult) since 2009

## Amboseli Crisis:

During the summer months, the Amboseli ecosystem was in a state of upheaval because of community dissatisfaction with the Kenya Wildlife Service (KWS), which manages Amboseli National Park. This dissatisfaction led to political unrest and large protests, which in turn resulted in a killing spree of wildlife across the entire area. Whilst the killing spree was continuing by Maasai communities, our Lion Guardians and other stakeholders tried desperately to prevent innocent wildlife from being killed, whilst not to placing themselves in the line of danger – a very thin line to navigate. On the evening of one of the most important resolving political meetings, a report from a livestock herder shook us to our core: a

group of six lions (Nooldoinyo's family) had killed two cows in the bush. This incident placed the lions is severe danger, and the warriors, still in protest mode, were ready to embark on a hunt to kill the lions the next morning.

Parkesian, the Guardian from that zone, requested immediate back-up. We travelled to the scene well before sunrise to start our defense process against the warriors, who would appear at first light to kill the lions. The scene where the two cows laid close to each other was a sight to behold with the lions still feeding on the dead cows! The lions scattered on our approach; they seemingly sensed that they had done wrong in killing the cows and were fearful of retaliation.

At sunrise, warriors arrived on foot to the site with spears in hand. On seeing the dead cows and feeling the loss inflicted upon them, many collapsed to the ground and their bodies erupted into emotional seizures. The other warriors had to react quickly to stabilize the uncontrollable body movements of their friends, and to protect them from injuring themselves with their lethal spears. We left them for some moments to cool down.

We then intervened and agreed together that we would remove the carcasses and transport them in our vehicle to the owner's homestead. This suggestion was warmly received but we realized the warriors' anger was not yet stifled and they were still intent on retaliating on the culprits. We quickly dropped the half eaten cows back to the homestead, and then rushed back to the bush to locate the hunting party, which had now multiplied in numbers. We confronted them again, and after a lot of heated discussions and much pleading together with Guardian Parkesian, we managed to talk them down amid tears and persuaded them to leave the lions alone.

We assisted by squeezing all of the warriors into our vehicle to bring them home, including about seven in the rear truck compartment, along with all of the spears. As we slowly drove back, we suddenly came across another two warriors. These warriors, on seeing that the hunt had collapsed and their fellow warriors were being returned, reacted angrily. This in turn set off the warriors in our vehicle to have seizures again. The situation instantly became dangerous as the warriors in the back of the truck were having seizure whilst enclosed and exposed to the spears! We rushed to open the rear doors to release them from the bed of the truck and the danger of the spears. Luckily, we acted in time and nobody was injured. After the 45 minutes it took to calm the warriors down, we proceeded, but with the warriors on foot, so as to not repeat the same incident again!

Once back home, the warriors appreciated our patience and diplomatic approach to the conflict and respected our mitigation tactics. And thankfully, the lions lived to see another day.