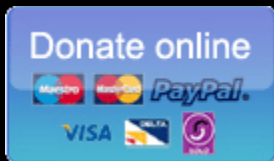




June 2011



The lion: a global cultural icon

Lion statues from Thailand



find your pride @ www.lionalert.org



The Dambwa lions have

been at it again; or more specifically Leya has been once again terrorising the wildebeest population in the Dambwa Forest site.

A mid-May morning encounter for the 4KLs – who were accompanied by some very lucky volunteers – set out with high hopes for some hunting practice for the pride mates ahead of their release later this year. Since the encounter program began in 2005 the lions have achieved an average 36% hunting success rate, but even on those successful hunts it's fairly rare for the human members of the encounter to keep up during a chase and be in the right place at the right time to witness the catch and kill. Ever the exhibitionists though, the KLs decided to put on a bit of a show with Leya literally somersaulting over one wildebeest right in front of the truck and somehow managing to grab on as she flew over.

While Kela and Kwandi raced in to help Leya bring the wildebeest down, sister Loma took off after the rest of the herd and seemingly kept on going for some time not returning to feed from the carcass for 20 minutes. Unsuccessful in her efforts, she joined the rest of group for a well-deserved meal.

A student of Duke University has undertaken an analysis of current lion populations by updating previous estimates with the latest information. The results of this analysis are presented here alongside those from the former studies.

It should be noted that there are differences between the various studies as to which region some populations exist in (e.g. if DRC is in central, eastern or southern or some combination of each) so differences in estimates within regions from one study to another are not necessarily reflective of absolute changes in lion populations, just the way they have been grouped together.

Further, it must be considered that by far the largest numbers of proposed estimates for lion populations are based on guesses with large margins of error. Many of the new estimates used in this most recent analysis are also only guesses, possibly compounding rather than resolving the possible errors in earlier studies.

Where actual counts of lions have been included the new figure may not indicate a rise or fall in the number of lions rather highlighting errors in the original estimates given for those populations.

In 2006 the IUCN workshops resulted in the identification of 86 lion conservation units (LCUs); habitat patches where lions reside and that are distinct from each other, i.e. no natural gene flow occurs between them.

This new analysis, based on more recent information gathered over the past few years, suggests that seventeen (17) of those LCUs no longer exist including some contained within Burkino Faso, Cote d'Ivoire, Ghana, Togo, Nigeria, Congo, Gabon, DRC and Malawi. All were from populations with less than 50 lions in earlier estimates

Some countries no longer have any lions including Congo, Cote d'Ivoire, Gabon and Ghana.

Eleven habitat patches with lion populations (estimated at 611 animals) not previously included in the IUCN list of LCUs have been proposed in Benin, CAR, Ethiopia, Uganda, Tanzania, Zambia and Mozambique.



Region	CH 02	BM 04	IU 06	RI 11
Western	1163	850	790 - 2095	857
Central	2815	950	1760 - 1910	2697
Eastern	15744	11000	17500 - 20112	20083
Southern	19651	10000	8815 -13900	11919
Total	39373	23000	28865 - 38017	35556
CH 02	Chardonnet 2002			
BM 04	Bauer & van der Mwerve 2004 (data collected in 2002)			
IU 06	IUCN Regional Lion Workshops 2005 / 6 (published 2006)			
RI 11	Riggio 2011			

35,000 lions left in Africa!

That sounds quite a lot; so what is all the fuss about?

Let's start by reminding you that this number is a guess, and nothing more. Is it a reliable guess? Maybe, maybe not. But the pure number is not the most important factor to consider here.

African lion populations might exist in theoretical numbers to support their conservation status as "vulnerable" but analyses of population structure, geographical fragmentation, risks from inbreeding depression and subsequent loss of evolutionary potential, and probable/actual disease threats, provide many additional causes for concern for the long-term viability of this species.

Only 27 countries now have lion populations. Of those; only nine potentially contain 1000 lions: CAR, Ethiopia, Kenya, Tanzania, Mozambique, Zambia, South Africa, Botswana and Angola. And eight have less than 100 lions, those being: Guinea, Guinea-Bissau, Malawi, Mali, Niger, Nigeria, Rwanda, Senegal.

Viable populations

Only 11 locations have been proposed as having populations with long-term genetic viability; defined as having 100 prides with an average of five breeding individuals (= 500 total lions) and that location being a formally protected area.

This number is open to debate however due to differences in assumed average pride sizes between studies.

This new analysis assumed an average pride size of five adults (lion population estimates not giving age-class splits), whilst Bjorklund (2003) produced the need for 100 prides basing pride sizes averaging 11.1 individuals (3.4 female, 2.4 male, 5.3 cubs) = \pm 1000-1100 lions required with the \pm 500 mark being only genetic viability in the absence of negative, external pressures.

Therefore if we look at Tsavo-Mkomazi, and remove the 47% of lions there that are likely to be cubs and then divide that by 5.8 breeding adults we get a number below the needed threshold for genetic viability. On this basis **it is possible that only six of Africa's remaining lion populations are viable.**

Location	Country	Lions*
Selous	Tanzania	4953
Serengeti Mara	Kenya-Tanzania	3516
Okavango-Hwange	Botswana-Zimbabwe	2300
Ruaha-Rungwa	Tanzania	2235
Greater Limpopo	Mozambique-South Africa-Zimbabwe	1951
Niassa	Mozambique-Tanzania	1080
Kgalagadi	Botswana-South Africa	500-1000
Tsavo-Mkomazi	Kenya-Tanzania	820
Luangwa	Malawi-Zambia	426-835
W-Arly-Pendjari	Benin-Burkina Faso-Niger	500
Mid-Zambezi	Mozambique-Zambia-Zimbabwe	351-650
Total		18632 - 19840
* Includes lion in protected areas only		

To read the original report [click here](#). To download the original pdf article (7.8mb) [click here](#)
For reaction to this new study by ALERT scientific advisor Dr Pieter Kat, please [click here](#)



Starvation Island in Lake Kariba has the potential to live up to its name this year.

The island was given its name after hundreds of animals died there during the building of the Kariba Dam.

Following two successive seasons of above average rainfall in the Zambezi Catchment area water levels have risen to unprecedented levels. The islands and lakeshore have been so thoroughly besieged by the rising water levels that the usually vast floodplains of nutrient rich *Panacum* grass have largely disappeared.

As a predominantly sand-based landmass, Starvation Island does not support much edible vegetation. As water levels continue to rise its inhabitants of 80 waterbuck and some 300 impala are struggling to find food. The satellite images below show the extent to which grassland has been lost.

Bumi Hills Safari Lodge received the Green Trophy in 2010 from the Association of Zimbabwean Travel Agents for efforts to avert a similar crisis last year. The Bumi Hills Anti-Poaching Unit has created a wish list based on 2010's efforts of resources which they hope will not only help avert major crisis to the island's population, but also to cover other affected islands on Lake Kariba:

- 30 tonnes of hay bales, 15 tonnes of maize, 5 tonnes of game cubes, 200 game blocks
- 2,000 litres of petrol (to deliver feed)
- Transport of goods from Harare and across the lake to drop-off locations.

Lion Encounter and Antelope Park have already donated feed and monetarily to this project, and if you are able to give your support contact conservation@bumihills.co.zw or you can donate directly using the following banking details:

Account name: BHAPU
Account number: 0240065296002
Beneficiary bank: Stanbic Bank Zimbabwe Limited

SWIFT code: SBICZWHX
Branch name: Belgravia
Branch sort code: 3103.



The Daily Pride

Computers
for schools



INTERN 2012 [click here](#)

ALERT Communities Trust [ACT] at work in Gweru

Community programs at our Antelope Park project site have been expanded to include The Children Hope Centre.

The centre is home to 14 children and was identified a month ago by project staff as in need of urgent assistance. The electricity was recently switched off after funds were unavailable to pay the bill whilst the children have no mattresses to sleep on and only threadbare blankets. Resources only stretched to provide the children with one meal a day. As the region moves into a harsh winter, such conditions are unimaginable. Since committing aid the project has contributed towards settling the outstanding electricity bill and replaced the old blankets with newer, warmer ones.

Perhaps most importantly [volunteers](#) have provided weekly groceries. As the centre's assets continue to grow the next job is to construct a security fence around the centre to secure them.



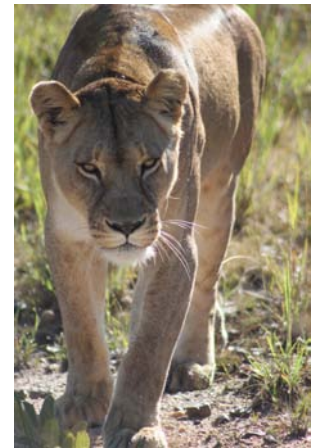
Thanks to a huge fundraising effort by Katy Fairweather who visited the project as a volunteer, over £6000 has been made available for a range of ACT programs in communities near our conservation area

Winter settles over the Ngamo release area



Mid May and the first stirrings of winter are starting to settle upon the Ngamo release site. But a more pressing concern was that of the status of Ashanti. Having mated with Milo several times since the pride's release she had failed to conceive; but her last mating was over the Valentine period of 14th-22nd February and we were now entering a full-term pregnancy without her coming back into oestrus as she had previously.

The earliest possible birth date has already passed, but she could cub-down any time up to 22 June. The lioness Phyre may also be pregnant with a cub-down date up to 25 June.



Confirming a lioness' pregnancy is incredibly difficult until the last few days; if at all. But as time has gone on Ashanti often appears restless and uncomfortable. Is it cubs or too much zebra? We'll have to keep watching to find out.



We'd like to say a **big thank you to the staff of Primark in Wigan**, who raised funds and awareness for ALERT holding a Lion Day in the store. The team sold cakes and also handed out 1,500 donation pledge forms.

Ambassadors for lions

Many of the program's lions have captured our supporters' hearts; but perhaps none more so than Livingstone lion Rufiji (below) did when Dan Matthews first walked with her on his volunteer placement.



To raise awareness for the Rehabilitation & Release into the Wild Program Dan's created *Rufiji* in honour of his favourite girl; as modelled below! Adorned with the ALERT, African Impact and Antelope Park logos, *Rufiji* – the bike – will be appearing in the coming months at a number of events in the UK to raise awareness and support. Dan plans to auction the bike at the end to raise funds for ALERT.



Past volunteer, Michaela Channing explains why she's taking to the skies for the lions she met earlier this year: *"On the 3rd August 2011 I'm going to demonstrate my commitment and support of ALERT, by doing a tandem skydive!"*



I'm absolutely terrified but I hope that thinking about the lions I worked with during my volunteer placement in April this year at Livingstone will help to ease the fear as I plummet towards the earth at a speed I don't even wish to contemplate. So why am I doing this? My time on the project was the most amazing privilege; being able to walk with these animals, interact with them and observe their progress was so humbling. ALERT is an inspiring project, and their passion about the conservation of lions gave me the motivation to go from volunteer to fundraiser. Please donate as much as you can, every little counts and is very much appreciated!"

If you can support Michaela, please visit her fundraising page [here](#)

Ngamo cont... With two litters potentially on the cards over the coming month this means one thing; new playmates for AT1! Now four-months old, since the loss of her siblings and Kenge's litter earlier this year the lone cub has had to make do with the adults to keep her entertained.

Dad Milo is a favourite target for AT1's energies, and while he isn't known for his amiable temperament he does seem to have endless patience for his little girl. Most of the time. Daddy's little princess recently learnt that even she can go one step too far and isn't above being put in her place. After several bouts of chase between father and daughter Milo had exhausted all energy sources and was ready for a powernap; AT1 wasn't and when the next game of chase turned a little more serious AT1 suddenly realised she wasn't quite ready to challenge dad's will. But maybe Narnia is, and it was she who stepped in to put a stop to the discord.

But you can only rely on your aunts for so long, and it seems AT1 is growing bolder still. On the 4th June a kill on a zebra saw the pride gorge themselves into near obscenity. However, there was no sign of the pride's cub. It's not been uncommon for Athena to tuck the youngster away during a hunt or kill to remain out of harm's way until the pecking order has been established around a carcass.



The best part of the day passed with the adults continuing to feed, but with still no signs of AT1. Eventually, Athena moved away and began to call and after a time a rustle of grass indicated the cub was on her way and bounded out to greet mum enthusiastically. Following Athena back to the carcass, AT1 then greeted Milo and began to gnaw on some ribs.

As the females headed to the waterhole for a drink the cub remained with dad and while he has shared most meals willingly with his daughter the growls began to rise. Refusing to back down AT1 continued eating but Milo wasn't in a sharing, caring mood and gave the cub a warning nip on the head. Instead of turning tail and running for cover behind one of the females, the youngster stood her ground and gave dad a good clip around the snout whilst ferociously spitting. Eventually a truce was called and great and small fed peacefully together.

Now starting to hold her ground against dad, AT1 is in a prime position to turn into something of a bully. At the least she'll have a good four months age and size on any subsequent cubs born to the pride meaning as they're raised over the next few years she'll have the pick of the pride's resources over and above any other cubs.

But such allowances are not made for all members of the pride when it comes to dinner time. Nor does past performance in providing for the pride seem to count for much; as Nala recently found out. As the sun went down on the 3rd June, Ashanti and Athena caught the scent of something of interest and began a right flank as they slipped into the swaying grass. The pair reappeared briefly on Route 66 before slipping silently back into the mixed woodland on the other side of the road.

As the light continued to fade no lions or prey were visible. With no suitable after-dark monitoring equipment, the team prepared to leave the lions to their nocturnal activities. But then a shrill cry pierced through the growing gloom. Racing along Route 66 the team caught site of six dimly-lit members of the pride huddled around an impala carcass.



But superstar hunter Nala was missing...

Despite having caught countless meals for the pride over their time together that counted for next to nothing when she finally emerged through a thicket; being met with a barrage of growls and snarls as she tried to edge her way around the table.

Waiting to one side patiently, Nala held out hope for that her pride mates might leave her a scrap – but no, the six made short work of the antelope leaving nothing but bones for the latecomer.



Quail anyone?

Twelve-month old Chundu (who you may remember as one of the youngest cubs from series two of Lion Country) has made his first kill. Chundu, who is now based at the Victoria Falls stage one program, made the kill on a quail on the 1st June; the 3Cs' first birthday!



Kwandi

One day you're top of the food chain happily munching on a wildebeest; the next you're in big trouble. A fact Dambwa Pride member Kwandi can attest to when she was bitten at the end of May by a puff adder; going by the scientific name of *Bitis arietans*.

An immediate course of antibiotics was prescribed and the swelling to her face (which can be seen in the photo above) began to subside.

Being the fighter that she is within a matter of days she was back to her old self and appears to be suffering no ill effects.



Ngamo cont... An impala between six will only go so far however, and the next morning on the 4th June found the pride – including Nala this time and Milo – feasting on a sub-adult zebra. But Nala lost out once more as Milo chased most of the females from the carcass, dominating the latest meal but letting AT1 have a meal.

As with the previous night's impala kill, there was at the zebra kill one member of the pride missing; Kwali.

Being one of the most sociable members of the group it's very rare for Kwali to isolate herself from her pride mates for any length of time.

A herd of six flustered zebra up on Route 66 was the first clue towards her location and the reason for their distress quickly became apparent. Not much further along Kwali was huffing and puffing over a huge zebra kill. Given Kwali's obvious exhaustion and the carcass still being whole it's very likely that the kill had been made just moments before the team arrived.

The carcass was that of an adult female zebra, weighing an estimated 300kg. At a trim 125kg, it's no wonder Kwali was so exhausted having overpowered the zebra by herself. After a few minutes to catch her breath, the lone hunter got stuck in. Keep following the pride [here](#).



A collaboration

between Zimbabwe's National Park's & Wildlife Management Authority and our program in Victoria Falls; Insect Baseline Study for Masuwe, is now well underway.

The data collected will provide a platform for further research investigating the role of different vegetation types in attracting various insects.

Further, the hope is to look at how the destruction of certain vegetation affects these insect communities and the knock on effects to the eco-system as a whole.

So far 15 random plots of 20 square metres have been worked on; the goal is to locate 60.

Every Friday morning traps are set for both crawling and flying insects. Twenty minutes of swatting for flying insects also provides valuable extra data; as well as an amusing sight!

Vegetation type is recorded as well as insect species and the GPS of the plot with all data handed over to Parks' research team.



The [internship](#) program has proved more popular than anyone could imagine; at present we have three interns at Livingstone and two at Antelope Park in areas from research, to project management and animal welfare to medical.

If you're considering an internship at any of our project sites we've asked a couple of the new team members for their impressions of their placements so far:

Vicky Lalumiere: Research, marketing and fundraising intern

"I'm only one month into a six month placement, but so far... so great! I've learnt so much already in my first month here in marketing, fundraising and elephant and lion research; it's been a busy few weeks. As well as getting to grips with all my tasks, of course I've got to know all the lions here in Livingstone; which has been amazing.

The highlight so far has to be the encounter I was lucky enough to go on when Leya caught a wildebeest, helped by Kela and Kwandi. That's something that will stay with me for a long time and was just incredible to witness. I really can't wait to see what the next five months bring."



Vicky with a Zambia Wildlife Authority scout taking ID photos of the herds for the Elephant Monitoring program



David Hollingworth: Project management intern

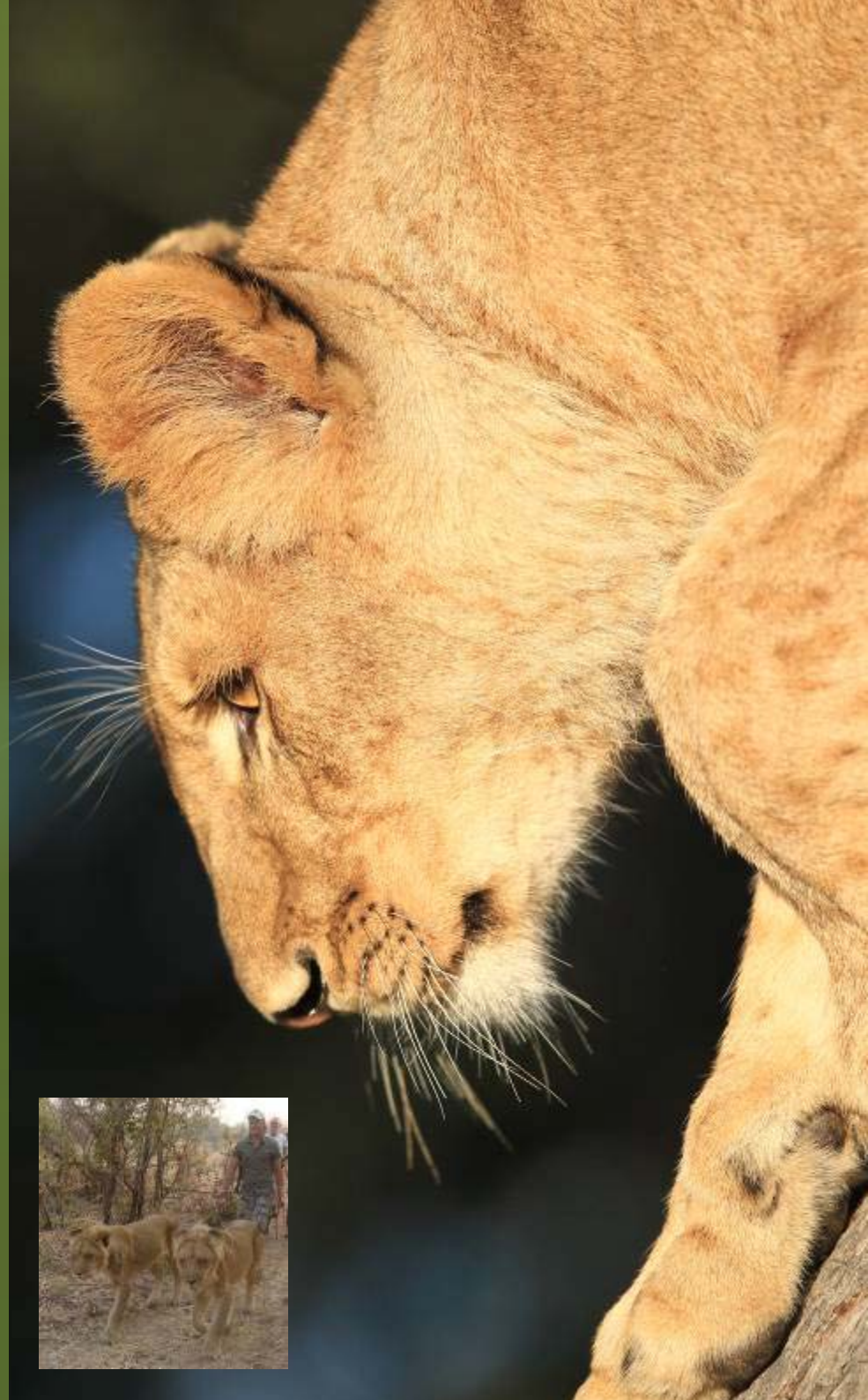
"I was excited that the time had finally come for me to head to Livingstone and start to my time as an intern. It had seemed a long time since I made the commitment to work for three months. My first week was a bit of a blur - getting to know the staff, orientation and becoming familiar with the lions. Refreshingly the staff had a very pragmatic and objective attitude to these lions - but without doubt everyone has the passion and conviction to make this project succeed.

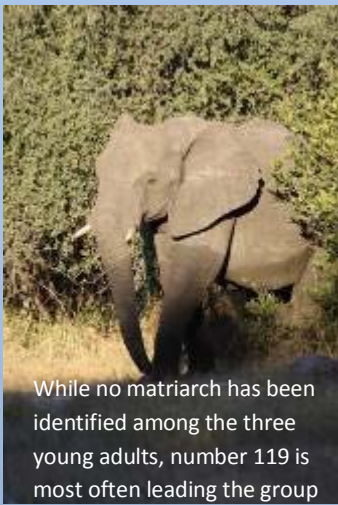
My role is to assist with the management of the [volunteer](#) program. This involves a lot of work behind the scenes, and an element of supervision and assistance on all of the activities such as lion walks, feeding, cleaning and maintaining enclosures, snare sweeps, amongst others.

The project also works directly with local communities to build a strong working relationship with the project on a long term basis. The volunteers are very important - not only as a source of revenue for the project, but also as an essential resource in terms of manpower.

The management have an open door policy and are very accessible in terms of suggestions for ways in which any of the processes can be improved. Volunteers are also a valuable resource in terms of their skills and knowledge. This makes this program such a strong win-win situation for all parties. It is important that our volunteers not only work hard, but also have an unforgettable experience, so that they will return and also act as our ambassadors for the future.

My time here is passing too fast - I can see the young lions growing before my eyes every day! The project is as much about people as it is lions. I can highly recommend spending time here as an intern or a volunteer - for a truly unforgettable experience; actively being involved in an innovative and unique project for one of the most world's iconic animals - the African lion."





While no matriarch has been identified among the three young adults, number 119 is most often leading the group



The group's youngest calf, 120 – with mum, 122.



The two oldest calves, 123 and 124; male and female 4-5 year olds who are never very far from one another.



132; the group's 4th calf

Distant relations?...



21 and 53; both ID'd last year and both seen with our new herd over this year



The herd's third adult; 118

It's getting to the time of year again when Livingstone braces itself for a huge influx in the elephant population. As the Zambezi River drops now the rains have stopped more and more cross from the Zimbabwean side of the river and come to the Mosi-oa-Tunya National Park.

Over the month of May alone we've seen an 82% increase in sightings on the previous two months; and it's only the start of the busy season.

But one herd in particular has dominated this year's research so far. A breeding herd not previously known from past year's data made up of three young females and their four calves. Of all the sightings made this year so far more than 40% have been of this young group. While they may not be on 2010's records some of the other elephants they've been seen associating with are.

There was a bit of a fashion last year for the breeding herds to meet up in larger family groups and it's entirely possible that the herd was present but remained unidentified by the end of the year, but since April they've been sighted at least once every week "mugging" for the cameras.

On a number of occasions they've been seen in the company of males; some known to us, others not, and also twice in close association with two older females we did identify last season. This leads us to conclude that given the young ages of all three adult females they are likely the oldest daughters to one or more of the elder members of their maternal herds and have broken away to form a sub-group.

While they've been seen cavorting with a number of males, no signs that the females have entered oestrus or that the males were in musth were evident; but with the oldest calves of the herd being approximately 4-5 years old it would be the right timeline for a mother to produce her next offspring.

We'll have to hope this herd continues to be as high profile for the remainder of this season and into future ones so that we can monitor their progress along with any new additions.