

## Appendix 1

**Table 1 – Overview of Sub-population Numbers – Africa (IUCN 2015 Assessment)**

Country	1993 Est. (1)	2014 Est. (1)	% Change 1993 – 2014	Current Government Guesstimate of Total Population	EU Assess. (2015) approx.	Expected Government Quota (2016/17)	Possible Quota % of Remaining Population	Notes	Assessment
Benin	25	108	+332%	?		5 (2009)  “Off-take” 2±0.4 (2007 - 2009)	5%?  “Off-take” age restrictions still pending.	Also see Burkina Faso.	Small population < 500
Botswana	2,235	1,663	-26%	?		No Trophy Hunting 2001 – 04 2008 - present		3 pop. considered, 1 declined.	Retaliatory killings highlighted in the past.
Burkina Faso	76	63	-17%	?		6 (2015/16) 20 (2014/15)  “Off-take” 13.3±1.45 (2006 - 2009)  > 1 lion per 2,000 km <sup>2</sup>	10%?  “Off-take” age restrictions still pending.	1 pop. considered, overlapping with Benin and Niger.	
Cameroon	322	220	-32%	?		No Trophy Hunting		2 pop. considered,	

								2 declined.	
Central African Republic	-	-	-	?		31 (2009)  “Off-take” 13.7±6.9 (2008 – 2011)	?		
Côte d’Ivoire	265	0	-100%	?		No Trophy Hunting			
DRC	-	-	-	?		Lion Hunting Legally Permitted			
Ethiopia	-	-	-	?		Dangerous Animals Only Legally Permitted			
Ghana	131	0	-100%	?		No trophy Hunting			
Kenya	748	449	-40%	2,280 (2004 est.)		No Trophy Hunting	N/A	7 pop. considered, 5 declined.	Habitat and prey loss apparent.
Mali	-	-	-	?		Lion Hunting Legally Permitted			
Malawi	-	-	-		34 <sup>(6)</sup>				
Mozambique	339	1,235	+264%	?		42 – 60 (2013)  “Off-take” 19.2±7.3 (2008 – 2011)	5%  < 1 lion per 2,000 km <sup>2</sup>	1 pop. considered.	

							Males $\geq$ 6 years old introduced, but full conservation strategy commitment due.		
Namibia	514	725	+41%	?		15 (2010) "Off-take" $14.0 \pm 3.2$ (2008 – 2011)  > 1 lion per 2,000 km <sup>2</sup>	2%	3 pop. considered, 1 declined.	Population too close to minimum 500 thresholds for sustainability?
Nigeria	284	32	-89%	?	34 <sup>(6)</sup>	No Trophy Hunting			
Senegal	201	16	-92%	?	16 <sup>(6)</sup>	No Trophy Hunting			
Somalia	-	-	-	?		Lion Hunting Legally Permitted			
South Africa	1,946	2,074	+7%	2,000 - 2,500		No Wild Lion Hunting Quotas Set  "Off-take" 'Canned' lions 400 est.		10 pop. considered, 1 declined.	However, Trophy Hunting of 7,000 'canned' lions permitted.

						(2014)			
South Sudan	-	-	-	?					
Sudan (prior to secession of S Sudan)	-	-	-	?					
Tanzania	1,787	608	-66%	16,800 (3)? (2010)	608 (2)	250 – 300 (2013/14) 50 (2013) 315 (2012)  “Off-take” 165 (2008) 42 (2014)	>2%  Current total lion population unknown	5 pop. considered, 4 declined.	Current total lion population unknown, but -66% sub-population decline noted.
Togo	-	-	-	?		Lion Hunting Legally Permitted			
Uganda	577	209	-64%	?		Dangerous Animals Only Legally Permitted		2 pop. considered, 2 declined.	
Zambia	139	100	-28%	1,500 – 2,500 (4)	307 – 465 (5)	50 (2013) Lion Trophy Hunting to be re-introduced for 2016/17 season.  24 (2016)	>= 8%?  Current total lion population unknown	1 pop. considered.	Decline evident and no science behind hunting quota setting.

						No age limit restriction evident.  > 1 lion per 2,000 km <sup>2</sup>			
Zimbabwe	52	703	+1252%	?		50 (2015) 101 (2014)  "Off-take" 42.5±7.5 (2008 – 2011)  > 1 lion per 2,000 km <sup>2</sup>	7%  Males ≥ 6 years old now introduced	5 pop. considered.	Is hunting quota still too high?  Population too close to minimum 500 thresholds for sustainability?

Notes:

(1) IUCN Red List Information, <http://www.iucnredlist.org/details/full/15951/0>

(2) Based on five monitored sub-populations (Ngorongoro Crater, Katavi, Matambwe (Selous GR), Serengeti and Tarangire) – Noted by Bauer et al. (2015) noted "that these study subpopulations do not necessarily represent total site populations."

(3) The Tanzanian Ministry of Natural Resources and Tourism, chose to cite to UNEP-WCMC a 2006 (Ikanda and Packer) estimate of total population of 17,564, but the Tanzanian Wildlife Division 'accepted' the estimate of 16,800 (Mésocina et al., 2010), or a 5% decline between 2006 and 2010. So, it is assumed that this latter 'estimate' is the Tanzanian Governments' current 'belief.' This 'belief' is also based, in-part on "operators" with a vested interest in setting lion population estimates and "offtake" quotas high. The actual "offtake" cited by the Ministry of

Natural Resources and Tourism to UNEP-WCMC, 2015, was “168 in 2008” and “42 in 2014” the reduction “possibly” due to continued population declines (Lindsey et al., 2103; Nelson et al., 2013).

(4) The Zambian Government/Authorities failed to reply to UNEP-WCMC on how they had arrived at their ‘estimates,’ but it should be noted that quotas are based, in-part on operators’ recommendations – not verifiable science, but on “operators” with a vested interest in setting lion population estimates and “offtake” quotas high.

(5) The EU assessment of Zambia’s lion population in Kafue (Midlane et al., 2015), South Luangwa (Rosenblatt et al., 2014) and Lower Zambezi (Becker et al., 2013).

(6) LionAid

**Table 2 – Application of Regional Trends to Two Sets of African Lion Population Estimates**

Region	Estimated Lions in 2002		Estimated Lions in 2014 applying regional trends data (IUCN Table 2) (Note 1)	
	Bauer and van der Merwe (2004)	Chardonnet (2002)	Bauer and van der Merwe (2004)	Chardonnet (2002)
Southern Africa*	9,946	15,251	10,385	15,925
Eastern Africa**	11,112	20,144	7,345	13,316
West Africa***	835	1,163	406	406
Central Africa***	950	2,815	590	1,748
<b>Total lions</b>	<b>22,843</b>	<b>39,373</b>	<b>18,726</b>	<b>31,395</b>

Notes:

1. <http://www.iucnredlist.org/details/full/15951/0>

\*Although Mozambique's Niassa subpopulation is excluded from the regional trend calculation, estimates of its population size are included in both 2002 inventories.

\*\* Chardonnet included estimates for several large areas where Bauer and van der Merwe did not, due to lack of information. The most substantial are Tanzania's Lion subpopulations of Ruaha and Tarangire, estimated by Chardonnet at 5,244. Tanzania's Selous subpopulation was originally grouped with Southern African Lion subpopulations by Chardonnet, but moved here to East Africa to maintain consistent regional groupings by country.

\*\*\* Trend applied to Central Africa only, West Africa totals from Henschel et al. (2014).