

A 2025 Synthesis of Lion Numbers in Africa and Range States' Capabilities to Conserve their Lion Populations



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Abstract

The LionAid 2025 compilation of lion populations remaining in Africa estimates a total of 13,014 lions in eastern and southern Africa and 342 in western and central Africa where resident lions are highly genetically distinct. This is a substantial decrease for western and central Africa (410 estimated in the previous estimate). It is highly disappointing to note the quality of surveys involved in estimating lion populations. Very few are scientifically rigorous. Some surveys include cubs while others do not. Most lion estimates are still based on “guesses”. Even in areas where there are active lion research programmes, researchers do not seem to prioritise rigorous lion counts. Very many regions that have been surveyed to some extent then used various means of extrapolation to attempt to derive a total number for the area. This lack of standardised survey methods has greatly hindered collection of reasonably accurate lion population data.

Of the 22 nations that were still thought to have lions prior to this analysis, the species is now considered likely extinct in 4, highly fragile in 7, and of unknown status in 1. This compromised status represents over 50% of those 22 nations, a worrying trend. There were formerly 27 of 48 African nations where lions were already considered extinct prior to this 2025 report. There are currently only five individual lion populations in Africa where over 1,000 lions are estimated to occur: Okavango/Chobe in Botswana, Serengeti/Mara in Kenya/Tanzania, Selous/Nyerere in Tanzania, Rungwa/Ruaha in Tanzania and Kruger in South Africa.

Lions are subjected to a diversity of mortality factors. These include retaliation for livestock depredation including the use of poisons, diminution of natural prey because of bushmeat poaching and lion by-catch in snares and gin traps, direct poaching of lions to provide body parts for Asian and even African traditional medicine components, claws and teeth widely marketed to tourists, road kills and unsustainable levels of trophy hunting prevalent in virtually all African nations that allow lions to be hunted. Lions suffer from a diversity of diseases, most lethal being widespread infection by feline immunodeficiency virus, feline parvovirus, etc. More regional threats from canine distemper and bovine tuberculosis are prevalent in some populations. In addition, lions are infected by a great diversity of parasites like hookworm, tapeworm, babesia, theileria, trypanosomes, etc. Microparasites like giardia are also prevalent.

Overall, the situation for continued lion survival in Africa is extremely concerning. The lion is the only large cat not given Appendix 1 protection by CITES and continues to only be listed as “vulnerable” by the IUCN despite all contrary information. Lion conservation is underfunded and conflicted with several

international and local conservation organizations stubbornly promoting trophy hunting as a “conservation” measure. There is very little funding made available for crucial nationwide population surveys conducted to adequate standards. Some nations have seen lions reintroduced to former ranges, including Rwanda and Malawi. While this could be seen as an encouraging development, such reintroduced populations are heavily managed and kept in areas surrounded by fences.

Overall, LionAid would encourage African range states to develop and implement much stronger lion conservation measures. Similarly, we would strongly encourage funding organizations to spend far greater funds on proper lion population surveys, to better fund proven effective programs that reduce the incidence of lion/human/livestock conflict and to work more closely with African wildlife departments to implement practical lion conservation programmes supported by citizens. LionAid would strongly urge CITES to place lions on their Appendix 1 and for the IUCN to move all African lions from their “vulnerable” to their “endangered” category. Such measures would lead to greater awareness of the true status of African lions, enable greater funding and greatly reduce levels of destructive trophy hunting.

Methods and Results

LionAid ranked lion range states according to the following measures:

1. **Gross domestic product per capita.** This is a measure of world nation rankings to determine relative levels of poverty. High levels of poverty mitigate against wildlife conservation. Each country was given a rank of 5=high to 1=low for this score.
2. **Percentage of the population employed by agriculture.** This is a measure that indicates how important agriculture – often subsistence agriculture - is in terms of national statistics. This measure is also an indication of percentage of land that is used for agricultural versus wildlife employment to contribute to citizen income. Each country was given a rank of 5=high to 1=low for this score.
3. **Number of international tourists arriving in the country.** Use of this measure can be criticized as tourist arrival numbers are composed of those visiting family, attending business meetings, going shopping – a great variety of activities not including wildlife tourism. However, we assume that the number of international tourists arriving in a country is proportionate at some level to an overall interest in wildlife tourism. Each country was given a rank of 5=high to 1=low for this score.
4. **The ranking of the lion range state by the Fragile State Index.** The FSI determines the world ranking of a particular state based on a variety of parameters including refugee flows, poverty, lack of public services, unequal development, lack of security, existence of factionalized elites, deligitimization

of the state, etc. The FSI is essentially an evaluation of how well the state functions. Each country was given a rank of 5=high to 1=low for this score.

5. **The ranking of the lion range state in terms of the Human Development Index.** The HDI is based on the UN Development Programme assessment of life expectancy, literacy, education, standards of living and quality of life. It is therefore an indication of the relative welfare of citizens in a particular country – a low ranking would mean that conservation of wildlife is well below the priority horizon of citizens deprived of basic requirements. Each country was given a rank of 5=high to 1=low for this score.
6. **The ranking of lion range states according to the Global Hunger Index.** The GHI is an accepted ranking by Welthungerhilfe and Concern Worldwide. The level of hunger/malnutrition is directly linked to levels of bushmeat poaching by rural people seeking sources of animal protein.
7. **The ranking of lion range states according to the effectiveness/existence of functional wildlife departments.** Wildlife departments are responsible for the maintenance of protected areas and wildlife populations. Where national wildlife departments are not effective, all wildlife will decline. Each country was given a rank of 2=high to 0=low for this score.
8. **The ranking of lion range states according to the presence of wildlife NGOs.** These organizations can influence government policy to consider the importance of wildlife conservation. In their absence, there is no effective lobby to ensure conservation. Each country was given a rank of 2=high to 0=low for this score.
9. **The ranking of lion range states according to the existence of a National Lion Conservation Strategy.** Range states still without lion conservation strategies called for by the IUCN conferences lack the will to ensure conservation of the species. Each country was given a rank of 2=high to 0=low for this score.
10. **Based on the above 9 evaluation parameters,** LionAid evaluated a **Conservation Perception Rank** for the examined lion range states and their relative rank (5 high, 1 low). Nations that rank between 1 and 3 will have already lost, or will continue to lose lion populations without stronger political will to conserve the species. Nations with a rank of 4 could have hope to maintain lion populations with well-thought-out and carefully considered measures.

	GDP/cap	Agric	ITA	FSI	HDI	WHI	Dept	NGO	Plan	CPR
Angola	158	85	425	52	149	3	1	1	0	2
Botswana	105	70	2145	113	94	2	2	1	1	3
Burkina Faso	207	90	274	37	182	3	1	0	0	2
Cameroon	180	70	99	20	155	3	1	1	0	1

Chad	211	80	87	10	191	5	0	0	0	1
CAF	221	71	10	7	191	5	0	0	0	1
DRC	219	85	100	5	171	5	0	0	0	1
Ethiopia	199	73	518	12	102	3	1	1	2	2
Kenya	172	61	2400	36	100	3	2	2	2	3
Malawi	215	77	871	52	172	3	2	2	2	2
Mozambique	218	74	2023	25	182	4	1	1	1	2
Namibia	146	31	187	109	136	3	2	1	1	3
Nigeria	173	70	5265	15	164	3	2	1	1	1
S. Africa	128	5	3886	80	106	2	2	2	2	4
Sudan	204	80	0	2	176	5	0	0	0	1
Senegal	146	22	1380	74	169	4	1	1	0	2
Somalia	222	26	10	1	192	5	0	0	0	1
Tanzania	154	67	2140	62	165	3	2	1	1	3
Uganda	163	71	473	28	157	3	2	2	1	4
Zambia	189	55	502	50	154	3	1	1	1	2
Zimbabwe	192	68	2239	18	153	3	2	1	1	2
	Low	Low	High	High	Low	Low	High	High	High	High
	=	=	=	=	=	=	=	=	=	=
	=	good	good	good	good	good	good	good	good	good
	good									

Columns:

GDP/capita – CIA World Factbook as primary source

Agricultural employment – CIA World Factbook as primary source

International Tourist Arrivals (x 1000) – World Trade Organization

Fragile States Index – The Fund for Peace

Human Development Index - UNDP

World Hunger Index - Welthungerhilfe and Concern Worldwide

Wildlife Department presence/effectiveness – various assessments

NGO presence – various assessments

Lion action plans – various assessments

CPR – Conservation Perception Rank according to category assessments – rank of 1 = failed, rank of 2 = ineffective, rank of 3 = marginal, rank of 4 = effective, rank of 5 = very effective. The CPR score therefore reflects individual nation lion conservation capability.

Analysis by country

Summary

Based on an evaluation of the scientific literature, limited population surveys, informal reports, wildlife department estimates, credible authority personal communications with researchers and guesstimates, LionAid here provides an overview of the status of lion conservation in African nations that were considered to maintain lion populations. Even where these populations occur, many remaining populations are largely small, scattered and long-term non-viable. This continues to be the real and present danger for lions – if they only exist as a few viable populations, their long-term future is uncertain. Lion populations remaining can be summarised as follows (detailed country reports provided below):

Angola: 30; **Botswana:** about 1,445; **Burkina Faso, Benin, Niger, Mali:** 70-100; **Cameroon:** <120; **Chad:** effectively extinct; **Central African Republic:** <50; **Democratic Republic of Congo:** unknown; **Ethiopia:** <915; **Kenya:** <1,558; **Malawi:** <92; **Mozambique:** <996; **Namibia:** <457; **Nigeria:** <50; **Senegal:** <37; **Somalia:** essentially extinct; **South Africa:** <1,900; **Sudan, South Sudan:** essentially extinct; **Tanzania:** <5,360; **Uganda:** <302; **Zambia:** <1,163; **Zimbabwe:** <814.

Angola

CPR (conservation perception rank: high = good) = 2. Assessment- Angola is a dark horse in terms of lion conservation. Years of civil strife likely had a strong negative impact on survival of wildlife populations. A recent ground survey in one of

Angola's largest protected area returned an estimate of **30** lions while many hundreds had been guesstimated before. Angola is developing rapidly with income from mineral and oil reserves, but distribution of such income to citizens is inequitable. Large wildlife reserves seem to remain gazetted, but very little information about wildlife populations in such reserves is available. Angola does not seem to have a national lion conservation plan.

Botswana

CPR = 3. Assessment – Botswana has a very low human density/ land area, and has designated large areas to protected wildlife areas. Botswana's Department of Wildlife and National Parks needs to do much better in terms of conservation planning, implementation and ensuring that personnel in high positions are qualified and able to progress wildlife conservation, and become much less political in terms of decision making. Botswana has historically decided on livestock cultivation as a major form of land use and the country is criss-crossed by veterinary cordon fences that have had a greatly negative effect on wildlife. Despite a considerable income from tourism to Botswana's GDP, there is still a disconnect between Government support of livestock versus wildlife, and re-institution of elephant and leopard hunting that is having a negative effect on numbers of wildlife tourist bookings. Total wild lion population is considered to be about **1,445** lions. No comprehensive lion survey has been conducted since 2001, and that only included the northern parts of the country.

Burkina Faso, Benin, Niger, Mali

CPR = 2. Assessment - Burkina Faso, Benin, Mali and Niger are relatively small western African states that allowed a high level of lion trophy hunting. The Wildlife Department is not well staffed with qualified personnel and there is no indication that wildlife conservation is important to the people and Governments of these states. Recent civil strife and armed insurrection by jihadists, who even occupied national parks have impacted greatly on wildlife conservation. Large numbers of internally displaced people have caused increased levels of wildlife poaching, directly affecting lion prey numbers. While no reputable scientific surveys have ever been conducted, all three nations have been downgraded in terms of the numbers mentioned in the LionAid 2020 report. The total wild lion population is considered to be **between 70 and 100** lions largely located in Burkina Faso.

Cameroon

CPR = 1. Based on estimates and very limited surveys, the total wild lion population of Cameroon is estimated at **<120** animals. Only in Bouba Njida National Park is there considered to be a somewhat viable population of about 60 animals. Human/lion/livestock levels of conflict are high as is bushmeat poaching.

Chad

CPR= 1. Assessment – Chad is a highly fragile state. There is no effective Wildlife Department and levels of commercial poaching are extremely high. There is little to no interest by citizens or Government to conserve wildlife. The total lion population is considered to be **effectively extinct**.

Central African Republic

CPR = 1. Assessment – Central African Republic is close to being a failed state. Over 66% of the population is living below the international extreme poverty line of USD 2.15 per day. There is no effective Wildlife Department and levels of commercial poaching are extremely high. There is little or no interest by citizens or Government to conserve wildlife. A guesstimate places about **50** lions in the Chinko Nature Reserve.

Democratic Republic of Congo

CPR = 1. Assessment – DRC has seen a very high level of civil strife over the past decades. Since the toppling of dictator Mobutu Sese Seko, the country has been subjected to internecine and neighbouring country battles over territory and resources. As there is no effective Government control over vast areas, wildlife conservation will be non-existent. The lion population is **unknown**.

Ethiopia

CPR = 2. Assessment – Ethiopia has a strong commitment to wildlife conservation at the Federal Government level. This does not translate to the level of the Provinces that are highly autonomous. Large areas of land are being sold off to foreign investors for agricultural purposes. Protected areas are not well demarcated, and land sales could include national park land. Ethiopia does have a very strong federal commitment to lion conservation and ensuring that lions are nationally protected, but this does not translate to provincial measures. But displaced persons, especially from civil wars in Sudan and South Sudan have increasingly crossed the border with negative impacts on wildlife in western Ethiopia. Based on some simplistic surveys, extrapolations and guesstimates, Ethiopia's lion population is presumed to stand at **915** individuals, but is likely much lower.

Kenya

CPR = 3. Assessment – Kenya has struggled to ensure protection of wildlife in the past, to some degree because the Kenya Wildlife Service is an organization that receives little political support. The Kenya Wildlife Act was passed in 2014, but the nation still struggles with compensation in cases of wildlife damage. Community conservancies are increasing, but all but a few have consistent income. It is estimated that 70% of wildlife occurs outside protected areas to the detriment of communities living with wildlife. Kenya urgently needs to decide a comprehensive formula for effective wildlife conservation that integrates national rather than NGO priorities. A recent “progress report” was compiled by the Wildlife Research and Training Institute and the Kenya Wildlife Service (based on data gathered in 2020) and estimated a lion population of **2,489** animals. However, **901** of these lions (mainly residing in poor lion habitat in northern Kenya) were estimated by guesses, and are therefore here discounted, leaving Kenya's lion population at **1,588**.

Malawi

CPR = 2. Malawi's lion population has largely resulted from re-introductions from South Africa. The current population is estimated at **92** animals, mainly in the southern Majete Wildlife Reserve. Growth of that population caused considerable concern to managers, fearing depletion of prey animals and possible increased human lion conflict. NGO African Parks decided to implement a contraceptive programme in 2022, resulting in zero births in 2024. LionAid was reluctant to include this Malawi population in wild lion estimates, as the lions are heavily managed and occur in fenced areas. More on this below in the section on South Africa's lions. Nevertheless, these Malawi lions have been included, largely to perhaps convince Malawi wildlife authorities to rely less on South African management schemes to better conserve lions.

Mozambique

CPR = 2. Assessment – Mozambique has experienced a long and drawn out civil war in past years. Militias invaded protected areas to both provide food for the troops and ivory to fund ongoing military activities. Despite a high population density of impoverished citizens, there remains a will by Government to ensure survival of the little wildlife that remains. Some national parks like Gorongosa (privately run) report lion population increases, but there has never been conducted a comprehensive lion survey and large parts of the north are suffering armed insurrections involving a diversity of radical Islamic groups. Recent threats by these jihadists caused the US State Department to strongly caution against all travel to Niassa Province. Total lion numbers (except perhaps in Gorongosa) are questionable as no dedicated surveys have been undertaken. There is considerable bushmeat poaching caused by displaced people and commercial poaching conducted by organized gangs. Mozambique's lion population is estimated at **996** animals, a highly dubious figure as 800 of these lions are thought to occur in Niassa Province.

Namibia

CPR = 3. Assessment – Namibia is a conflicted nation in terms of effective lion conservation. Despite a considerable increase in the number of community conservancies that combine trophy hunting and tourism as primary income streams, there are still major issues to be addressed, not least because of considerable wildlife declines in conservancies. Namibia, together with Kenya, was charged in 2011 to deliver to the CITES Animals Committee a “Periodic Review” of the status of lion populations in Africa. Namibia delayed this delivery and the initiative is now listed as “invalid”. Trophy hunting of lions is not sustainable, especially for the desert-adapted population in the north of the country, which has declined to about 57 adults. Human-lion conflict also plays a role, with about 27 lions either being killed between 2021 to mid-2023 – with lions being thought to be responsible for at least 512 livestock deaths (Heydinger et al, 2024) – and declining to a density of 0.11 lions/100km². The only significant lion population occurs in Etosha National Park, which could contain about 400 lions. Namibia lion population: **457**.

Nigeria

CPR = 1. Nigeria's lion population is becoming non-viable. Lions only occur in two widely separated protected areas - Kainji Lake National Park and Yankari Game Reserve. The low number of surviving lions is attributed to depletion of their natural prey base due to hunting and habitat loss, human population growth and agricultural expansion causing an unprecedented influx of nomadic livestock into protected areas. Nigeria lion population is estimated at **<50** individuals and therefore considered highly vulnerable.

Senegal

CPR = 2. Lions in Senegal and Guinea occur exclusively in Niokolo-Koba National Park. That population is slowly increasing in number to an average of 42 animals. Cubs were subtracted from this total delivering an average of **37 adult and sub-adult lions**. This population is considered highly important to the survival of western African lions, which are highly genetically distinct from eastern and southern African lions (more related to Indian lions). 37 lions is considered a highly fragile population.

Somalia

CPR = 1. Assessment – Somalia tops the Fragile States Index, and has seen a succession of territorial battles between militias and armies sent by the African Union. There is no wildlife department, no interest in wildlife conservation. Lions in the country are **essentially extinct**.

South Africa

CPR = 4. Assessment – South Africa allowed lions to be placed in private hands and captive breeding largely supplied the trophy hunting industry. There are now an estimated 8,000 -12,000 lions in such breeding programmes. With trophy hunting rates of captive bred lions falling due to criticism from both conservation and hunting organizations, South Africa allowed exports of bones by captive breeders to supply

highly dubious “Traditional Chinese Medicine” suppliers. TCM spans borders into Laos, Vietnam at least. “Canned” lion hunts were recently banned, as was the trade in lion bones. There has been little progress in formulating reasonable solutions to eliminate or reduce the large remaining number of lions in private hands. Wild lions occur in only two locations – Kalahari/Gemsbok National Park in the far northwest and Kruger National Park in the east. Kruger is estimated to contain about 1,500 lions, but recent surveys via the Endangered Wildlife Trust has seen lion populations in the north of the park (26% of Kruger’s area) decline to 105 individuals. Causes of decline are by-catch in snares set for other wildlife as well as being directly poisoned for body parts. The Kalahari/Gemsbok National Park (shared with Botswana) was estimated to contain about 140-261 individuals. South Africa also contains lions in private reserves but these were not considered here as such populations occur in relatively small, fenced areas and are heavily managed. South Africa wild lion population: **1,900**.

Sudan and South Sudan

CPR = 1. Assessment – South Sudan was long engaged in a war with Sudan and only recently gained some measure of independence. Now, different factions within South Sudan are engaged in armed confrontations, resulting in considerable displacements among the civilian population. In Sudan, a civil war has been raging for several years, again resulting in many civilian mortalities and population displacement, including to Ethiopia. Whatever lion populations remain are threatened by lack of prey due to bushmeat poaching at least. Neither country has a functioning wildlife department and wildlife conservation is practically non-existent. It is thought that about 30 lions occur in Dinder National Park in Sudan. Lion population in Sudan and South Sudan: **essentially extinct**.

Tanzania

CPR = 3. Assessment - Tanzania is recovering a will to conserve wildlife, but past damages linger. Lion trophy hunting has been ongoing for many years and is still practiced at highly unsustainable levels given that there has never been a comprehensive lion survey in trophy hunting concessions or even in nationally

protected areas. The government continues to publish their own baseless lion population estimates of over 16,800 lions in Tanzania. Human lion conflict is high, as is resulting lion mortality. Still, Tanzania is considered to harbour the largest lion population in Africa, largely in Serengeti/Mara, Selous Game Reserve/Nyerere National Park and Ruaha/Rungwa. Tanzania estimated lion population based on guesses, extrapolations and some limited surveys with minimally acceptable techniques: **5,360**.

Uganda

CPR = 4. Assessment - Uganda recently banned all trophy hunting after a brief engagement. A high human population density leads to considerable human/lion conflict and other causes of lion mortality due to bushmeat poaching and direct lion poaching for body parts. These threats have resulted in a declining lion population. Lions mainly occur in the widely separated Queen Elizabeth, Kidepo and Murchison Falls National Parks. The survey in Queen Elizabeth NP was undertaken with some of the most rigorous techniques. The lion population in Uganda: **302**.

Zambia

CPR = 2. Assessment – Zambia has very high levels of poaching which in the past has virtually eliminated all rhinos and a great number of elephants. Zambia has suffered great declines of lion populations in protected areas, and the underfunded Zambian Wildlife Department has not instituted a comprehensive lion conservation plan. Lion trophy hunting stands at high levels despite little relevance of hunting quotas to lion population numbers. Lions mainly occur in Kafue, Luangwa, and Lower Zambezi, and a population has been introduced to Liuwa Plains. The largest population occurs in Luangwa National Park but has not been properly surveyed. Zambia lion population: **1,163**.

Zimbabwe

CPR = 2. Assessment - Zimbabwe has allowed very high levels of lion trophy hunting in concession areas and right on the borders of national parks. Zimbabwe has not

engaged to facilitate a national lion count and researchers have not conducted them in their areas either. Bushmeat poaching is at high levels as poverty levels increase and the national economy continues to collapse. Lions mainly occur in Hwange National Park, with smaller populations residing in Mana Pools and Gonarezhou. Lions in the fenced and privately owned Bulyebe Valley Conservancy are heavily managed and maintained largely for trophy hunting – these lions are not included here. Estimated Zimbabwe lion population: **814**.

Lion population status in 48 African continental nations

1. List of continental African countries where wild lions are extinct:

Algeria
Burundi
Chad
Cote d'Ivoire
Djibouti
Egypt
Equatorial Guinea
Eritrea
Gabon
Gambia
Ghana
Guinea Bissau
Lesotho
Liberia
Libya
Mauritania
Morocco
Somalia
Sudan
South Sudan
Republic of the Congo
Sierra Leone

Swaziland

Togo

Tunisia

Western Sahara

Subtotal = 26 (54%)

2. List of continental African countries where wild lions only exist as highly vulnerable small, scattered populations or might already be extinct in 2025:

Angola

Benin

Burkina Faso

Cameroon

Central African Republic

Democratic Republic of the Congo

Guinea

Malawi

Mali

Niger

Nigeria

Senegal

Subtotal = 12 (25%)

3. Continental African countries where some wild lion populations exist

Botswana

Ethiopia

Kenya

Mozambique

Namibia

South Africa

Tanzania

Uganda

Zambia

Zimbabwe

Subtotal = 10 (21%)

Total number of continental African nations where lions are extinct, effectively extinct or highly vulnerable – 38 (79%)

African Nations That Allow Trophy Hunting; Number of Lion Trophies Exported 2020-2023 (CITES Trade Database)

- 1. Zimbabwe 139**
- 2. Tanzania 113**
- 3. Zambia 83**
- 4. Mozambique 59**
- 5. Namibia 29**
- 6. Cameroon 9**

Notes: South Africa was not considered in this group, despite being the country with the most net exports of lion trophies (340 during the period). This is because we considered only trophies of lions in the “wild” category, and South Africa plays fast and loose with this category. For example, North West province allow lions to be “considered wild” after releasing captive bred lions into a fenced enclosure for 96 hours. South Africa also allows hunters to shoot female lions while the other African nations listed above only allow hunting of males. Botswana is also missing as a ban on lion trophy hunting was instituted in 2008. While elephant trophy hunting was re-instated in 2019, no lions have been hunted so far.

Lion Conservation Units

The IUCN published two reports in 2006 based on regional meetings on lion conservation for western and central African lion range states held in Cameroon, and eastern and southern African lion range states held in South Africa. Delegates considered reports by Chardonnet and Bauer & van der Merwe and then were asked

to identify Lion Conservation Units – LCUs – areas of possible lion range considered an ecological unit important in lion conservation. For each LCU delegates estimated numbers of lions within, and rated the LCUs according to threat levels and viability. Population numbers in 2006 were decided by delegates with little actual information – for example the Niokolo-Guineé Lion Conservation Unit population was estimated at 500-1000, but subsequent actual ground surveys estimated a population of about 16 lions...

Overall, 2006 lion numbers were estimated at 2995-4005 for western and central Africa and 26,995-32,440 for eastern and southern Africa for an overall total of 29,900 – 36,445 for the continent. As mentioned, few of the LCUs had any actual lion counts based on any level of information, and thus the vast majority of the LCU populations were determined by guesstimates.

Following the 2006 reports a number of on-the-ground studies were performed to assess accuracy of the guesstimates. Henshel et al (2010) surveyed 15 western African LCUs and only found any lion presence in two. Croes et al (2011) revised numbers for Cameroon. A 2012 LionAid conference gained better information from Senegal, Nigeria, Cameroon, Malawi, Ethiopia, Kenya and Mozambique. Since then, forming the basis for this 2025 update, more data has become available from limited ground surveys, individual researcher contributions, scientific publications and internet publications, interviews with wildlife officials, NGO representatives, etc. Lion Conservation Units have been abandoned in this LionAid report as they are considered rather useless for lion conservation goals and data is considerably out of date.

Survey reliability

It is highly disappointing to note the quality of surveys involved in estimating lion populations. Very few are scientifically rigorous. Some surveys include cubs while others do not. Most lion estimates are still based on “guesses”. Even in areas where there are active lion research programmes, researchers do not seem to prioritise rigorous lion counts. Very many regions that have been surveyed to some extent use various means of extrapolation to attempt to derive a total number for the area. This lack of standardised survey methods has greatly hindered collection of reasonably accurate lion population data. LionAid included some guesstimates of lion populations in this report, likely resulting in overestimates of numbers actually

present.

In terms of population survey reliability those with the best quality ratings will always be based on individual identification of lions in the region surveyed. This is labour-intensive, requires patience and skill, a diversity of equipment, considerable support staff and is costly. Surveyors need to work at night, and can usually complete only three survey stations per night. But the data gathered by cameras, trail cameras and possible use of radiocollars prevents double counting and allows for the use of mark-recapture statistical analyses. LionAid recommends at least two surveys to be undertaken to count lions in a particular area, at most two years apart.

Surveys that do not identify individual lions are much less reliable. Many surveys have relied on spoor counts on road transects and these are generally considered unreliable. As substitutes for actual surveys, guesses are considered largely worthless, even if provided by so-called “experts”.

Causes of lion mortality

Lions are subjected to a diversity of mortality factors. These include retaliation for livestock depredation, diminution of prey because of bushmeat poaching and lion by-catch in snares and gin traps, direct poaching of lions to provide body parts for Asian and even African traditional medicine components, claws and teeth widely marketed to tourists, road kills and unsustainable levels of trophy hunting prevalent in virtually all African nations that allow lions to be hunted. Lions suffer from a diversity of diseases, most lethal being widespread infection by feline immunodeficiency virus, feline parvovirus, etc. More regional threats from canine distemper and bovine tuberculosis are prevalent in some populations. In addition, lions are infected by a great diversity of parasites like hookworm, tapeworm, babesia, theileria, trypanosomes, etc. Microparasites like giardia are also prevalent.

The effects of these parasites and viruses are most prevalent among cubs. Young lions have limited life expectancy – it is estimated that between 60 to 80% of lions die before they reach 2 years old. Such mortality is also caused by predators like hyenas and leopards, infanticide by male lions, neglect by lion mothers and starvation. This is why including young lions as part of population results is not recommended as it can result in large fluctuations in repeat lion counts.

History

In 2012, LionAid published a review of lion numbers across Africa. Based on an evaluation of the scientific literature, limited population surveys, informal reports, wildlife department estimates, credible authority estimates and personal communications, LionAid estimated then that a total of **645-795 wild lions** remained in western and central African Lion Conservation Units (LCUs) and that **14,450 wild lions** remained in eastern and southern African LCUs - for a continental total of **15,244 wild lions**.

That was 58% lower than the 2006 IUCN estimates of lion populations in LCUs that were populated optimistically and in many cases without actual information. Of 20 western and central African lion locations identified in 2006, LionAid and others estimated in 2012 that lions were already extinct/nonviable in 13 areas. Of 66 eastern and southern African LCUs identified in 2006, LionAid estimated in 2012 that lions were already extinct/nonviable in 21 areas.

Using the same methods of gathering information in 2020, LionAid estimated significant further declines in Africa's continental lion population. Western and central populations in LCUs were estimated to have declined to **410 wild lions** (a decrease of 43% since 2012) and eastern and southern African LCUs were estimated to have declined to **9,200 wild lions** (a decrease of 37% since 2012). This would mean a continental total of **9,610 lions** remained in African continental LCUs. Of the 20 western and central African LCUs LionAid estimated that populations were extinct/nonviable in 15 areas. Of the 66 eastern and southern African LCUs LionAid estimated populations were extinct/nonviable in 21 areas and 23 had severely threatened populations.

The reasons for these declines were varied. In western Africa, the largest remaining lion population (in the W-Arly-Pendjari protected area) was severely threatened by civil strife, with armed insurgents causing thousands of civilian deaths over the years. In eastern and southern Africa, similar strife was causing/has caused considerable upheaval in Sudan and South Sudan (involving movements of refugees to western Ethiopia), Somalia (involving border areas of Kenya), northern Mozambique, northern Democratic Republic of Congo, etc. Bushmeat poaching, either to feed local populations or for commercial purposes, increased dramatically across lion habitats – decreasing natural prey for lions and causing mortalities for lions caught in

poachers' snares for example. Subsistence agriculture, livestock invasions, human settlements have expanded across many lion areas. Many African lion range states experienced high levels of elephant poaching for the illegal ivory trade. The Selous Game Reserve and several other Tanzanian national parks experienced very heavy elephant poaching that doubtless negatively influenced lion population numbers. The Kruger National Park (a lion stronghold) experienced high levels of rhino poaching. Lions involved in "retaliation" killings for preying on livestock increased greatly in eastern Africa. The use of poisons to kill lions was at an all-time high. And between 2020 and 2025 we saw many incidences of lions poached for their teeth, claws and bones – marketable commodities in the illegal wildlife trade. Finally, surveys showed increasing spread of diseases with domestic animal origins (bovine tuberculosis, canine distemper) as lions increasingly came in contact with livestock and unvaccinated domestic carnivores.

Even more worrisome was that very many of these remaining lion populations were small, scattered and long-term unviable. This remains the continuing real and present danger for lions – if they can only cling to a few viable populations, what is their long-term future?

LionAid acknowledges that lions are the only large cat species not given adequate protection status by international organizations like CITES and the IUCN. LionAid acknowledges and strongly disagrees with some major conservation organizations which still believe that trophy hunting of lions can contribute to this species' conservation. LionAid has long insisted that lion conservation will need equal attention to that awarded tigers and rhinos for example. Perhaps with this publication of realistic lion population numbers in Africa there will be a change in present complacency towards this species' conservation needs.

Results of the 2025 LionAid assessment of lion populations in Africa

A lion population assessment conducted in 2020 by LionAid found that there were likely about 9,610 lions remaining in African Lion Conservation Units identified by the

IUCN, a significant difference from the 2006 IUCN estimate of 36,400. The 2025 analysis took a different approach, considering a diversity of data available from lion population numbers assessed in nations that still perhaps maintain lion populations. Such assessments are of variable reliability. For example, recent estimates of total numbers of lions in Kenya included 901 individuals in northern Kenya (based on guesses) scattered over 318,000 km². A similar reliance on guesstimates pertained to populations in Cameroon, Central African Republic, Chad, Ethiopia, Niassa in Mozambique, Nigeria, Kruger in South Africa, Serengeti and Selous/Nyirere in Tanzania, Hwange in Zimbabwe and Luangwa in Zambia. Some of these populations are extremely important to be able to assess the long-term viability of African lions. Consequently, LionAid would strongly advocate for proper surveys to be undertaken in these areas. LionAid did not consider lion populations in fenced reserves in South Africa - these populations should not strictly be considered "wild" as numbers are heavily managed.

Along these lines, it should also be noted that by far the largest percentage of lions occur in isolated regions with no connection between them and no ability of lions to disperse into, or out of, such areas. This is due to increasing use of previously "wild" lands for human settlements, spread of subsistence agriculture, livestock invasion, and in some countries irrigation projects and commercial farms/plantations being established. The pan-African total of lions is in no small degree made up of adding up small remnant populations across this very large continent.

Of the 24 African nations assessed, 14 (58%) either had lion populations of <100 individuals, where lions were considered non-viable or already extinct, or where no data was available. Of those same 24 African nations, five had a national population of over 1,000 lions (Botswana, Kenya, South Africa, Tanzania and Zambia) albeit mostly resulting from addition among populations scattered across these nations. Five individual populations had over 1,000 lions: Okavango/Chobe in Botswana, Serengeti/Mara in Kenya/Tanzania, Selous/Nyerere in Tanzania, Rungwa/Ruaha in Tanzania and Kruger in South Africa. LionAid would strongly recommend a comprehensive survey to be conducted in Selous/Nyerere in Tanzania where the current population estimate is largely based on extrapolations from weak survey data and guesstimates.

The LionAid assessment for 2025 estimates 13,014 lions remain in Africa. This might seem as a 27% growth in African lion numbers since the 2020 assessment. These numbers should be considered with caution, as the 2025 assessment used a

different methodology than the Lion Conservation Unit estimates used in 2020 and is now based on conservation regions in the African nations with lion populations. The highly endangered and genetically distinct western and central African lion populations are of considerable conservation concern, declining to 342 lions in 2025 from a population estimate of 410 lions in 2020, largely due to national instabilities caused by civil strife caused by jihadist militias. LionAid calls for stability to return to national regions where lion populations still occur, specifically the W-Arly-Penjari national parks where militias have invaded.

Conservation consequences and a future for lions

Western and central African lions are highly genetically distinct from their eastern and southern African counterparts – in fact analyses have shown that western and central African lions are more closely related to remaining lions in India. Their alarming decline has not received the highly dedicated corrective conservation attention needed from any major conservation agency. These lions could be extinct within the next 5 years, especially as they currently exist in small and highly isolated populations, and their main population in W-Arly-Pendjari is significantly threatened by significant civil strife.

Eastern and southern African nations have largely remained complacent about remaining lion populations, perhaps lulled into a false sense of security by lion “surveys” conducted by vested interest (read pro-trophy hunting) groups. Indeed, Tanzania – a major destination for trophy hunters – still estimates over 16,800 lions remaining in the country instead of the more reasonable estimate of 5,360 discussed here. Without doubt Tanzania is highly crucial for the survival of the species. Yet there seems little will on the part of Tanzanian decision makers to ensure the survival of this species – they seem more concerned with milking whatever profit can be made from consumptive use. Zambia and Zimbabwe, among many other nations, have no effectively implemented national lion conservation plans. Botswana instated two hunting moratoria on lions – one from 2002-2005 and the second from 2008 to present. Nevertheless, lion populations are decreasing due to problem animal control, loss of natural prey, and diseases like canine distemper in Chobe National

Park. South Africa has overall done well for wild lion conservation but the biggest population – Kruger National Park – is infected with bovine tuberculosis and feline immunodeficiency virus. Also, high levels of rhino poaching and the consequent encounters of poachers with lions has surely had negative impacts. Across the border in Mozambique, the Limpopo National Park has a very low lion density and high levels of bushmeat poaching, and the Niassa Reserve suffers great instability due to jihadist militias. Namibia is not paying adequate attention to the decline in lion populations in desert habitats.

Overall, the situation for continued lion survival in Africa is extremely concerning. The lion is the only large cat not given Appendix 1 protection from CITES and continues to only listed as “vulnerable” by the IUCN despite all contrary information. Lion conservation is underfunded and conflicted with several international and local conservation organizations stubbornly promoting trophy hunting as a “conservation” measure. There is very little funding made available for crucial nationwide population surveys conducted to adequate standards.

The tragedy is that ALL wildlife is in serious decline across Africa – some range states seem to have little will, few financial resources, ineffective governments and/or civil strife, high levels of bushmeat poaching and few implemented plans to ensure the future for what has to be seen as a greatly valuable natural resource. Wildlife tourism not only creates significant employment but also constitutes a substantial proportion of African nations’ GDP and foreign exchange earnings. Apart from that, citizens are beginning to realize the great importance of wildlife to their culture, heritage, ethnicity and history. The loss of lions will therefore greatly impact societies at very many levels and without a realistic assessment of the danger, lions will continue to disappear.