

Endangered Classification for West African Lions

The lion species (*Panthera leo*) is classified as **Vulnerable in the IUCN Red List of Threatened Species***, but recent surveys have shown that the lions of West Africa are in serious decline, and so they have now been classified as **Endangered in the Red List**. Details of the classification are as follows:

Lion (*Panthera leo*): Regional population of West Africa
Assessment (2004): EN C2ai
Assessors: Hans Bauer & Kristin Nowell (Cat SG RLA)
Evaluators: Urs and Christine Breitenmoser, Peter Jackson

Rationale

The regional lion population of West Africa is isolated from lion populations of Central Africa, with little or no exchange of breeding individuals (Chardonnet, 2002; Bauer and Van Der Merwe, 2004). The number of mature individuals in West Africa is estimated by two separate recent surveys at 850 (Bauer and Van Der Merwe, 2004) and 1,163 (Chardonnet, 2002). Both esti-

mates are well below the Endangered criterion level of 2,500. Lions in West Africa are grouped into three isolated sub-populations by Chardonnet (2002) and approximately seven by the African Lion Working Group (Bauer and Van Der Merwe, 2004). Chardonnet's (2002) three sub-populations consist of 18 different individual populations, between which there may be some interchange of individuals, although this is unknown. There is disagreement over the size of the largest individual population in West Africa: the African Lion Working Group (Bauer and Van Der Merwe, 2004) estimates 100 lions in Burkina Faso's Arly-Singou ecosystem, while Chardonnet (2002) estimates 404 for the same area (mean 250).

Distribution

Benin; Burkina Faso; Côte d'Ivoire; Gambia [RE]; Ghana; Guinea; Guinea-Bissau; Liberia [RE]; Mali; Mauritania [RE]; Niger; Nigeria; Senegal; Sierra Leone [RE]; Togo.
(*Note: RE = Regionally Extinct)

Current population trend

Decreasing. Chardonnet (2002) estimated that 39% of the individual lion

populations in West Africa are currently declining.

Range and population

Two recent surveys have provided the first detailed estimates of the West African lion population: 850 (Bauer & Van der Merwe, 2004) to 1,163 (Chardonnet 2002). The African Lion Working Group, a network of lion specialists affiliated with the IUCN/SSC Cat Specialist Group, conducted a mail survey and compiled estimates of known individual lion populations. Not included were known lion populations the size of which could not be estimated. They estimated the total number of African lions at 850, with a range of 450-1,300. The second survey was carried out by Philippe Chardonnet and sponsored by the International Foundation for the Conservation of Wildlife and Conservation Force (Chardonnet, 2002). He also compiled estimates for individual West African lion populations, grouping 18 into three isolated sub-populations. His methodology included extrapolation of estimates of known populations into areas where lion status was unknown, and his total figure is larger: 1,163, with a range of 968-1,358. Both surveys

find that West African lions constitute approximately 3% of the Sub-Saharan African lion population. Chardonnet (2002) estimates West African lion range at approximately 121,980 km² (4% of the continent's total lion range). The African Lion Working Group (Bauer and Van Der Merwe, 2004) finds that West African lions are restricted to protected areas (parks and hunting reserves), while Chardonnet (2002) estimates that one-third of the population may be found outside protected areas.

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Habitat and ecology

While the lion has been widely studied in East and Southern Africa, very little research has been carried out in West Africa. Optimal habitat appears to be open woodlands, and thick bush, scrub

and grass complexes, where sufficient cover is provided for hunting and denning (Nowell & Jackson, 1996).

Threats

Participants at a 2001 African Lion Working Group workshop on West and Central African lions identified the following threats: habitat loss to agriculture and timber operations; habitat degradation and fragmentation due to the movements of local pastoralists and their livestock; and poaching of lions to prevent and retaliate against predation, as well as for traditional cultural practices (Bauer *et al.*, 2001).

Conservation measures

P. leo is included in CITES Appendix II. Three West African countries allow lion trophy hunting by tourists: Burkina Faso, Benin and Senegal. Analysis of the CITES trade database kept by UNEP-WCMC for the 1990s shows an average of 18.5 lion trophies per year were exported from the region. Burkina Faso is the primary country for trophy hunting. A stable number of 12 lions per year have been hunted there over the past two decades. While there is good information about the number of lions killed by trophy hunters, there is little data on the number killed as problem animals by local people. Infrastructure for tourism and wildlife viewing are relatively undeveloped in West Africa, although there is good potential for developing this industry in a manner which benefits wildlife conservation (Chardonnet, 2002).

Participants at a 2001 African Lion Working Group workshop on West and

Central African lions made the following recommendations for West Africa: establishment of a low-cost regional lion population monitoring network; raise awareness among donors and decision makers of lion conservation problems; involve and support local communities in management of problems related to lions; build capacity of local managers to conserve lions; organize a training workshop for lion survey methods; and organize lion surveys for priority areas in each country (Bauer *et al.*, 2001).

References

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- Bauer, H., De Iongh, H.H., Princee, F.P.G. and D. Ngantou, eds. 2001. *Status and needs for conservation of lions in West and Central Africa: An information exchange workshop report*. Conservation Breeding Specialist Group (IUCN/SSC), Apple Valley, MN, USA.
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- Nowell, K. and Jackson, P. 1996. *Wild Cats: Status Survey and Conservation Action Plan*. IUCN, Gland, Switzerland and Cambridge, UK. <www.catsg.org>

* www.redlist.org