



African Elephant (*Loxodonta africana*)

Further Details on Data Used for the Global Assessment

For the 2004 assessment, current generation data were obtained from the African Elephant Status Report 2002 (Blanc *et al.* 2003; hereafter referred to as **AESR 2002**). For this assessment, current population data were obtained from the African Elephant Status Report 2007 (Blanc *et al.* 2007; hereafter referred to as **AESR 2007**).

Approximately one elephant-generation (25 years) before 2002, a comprehensive attempt at a continental estimate was presented in the African Elephant Action Plan (Douglas-Hamilton 1979; hereafter referred to as **AEAP 1979**). This document and the references cited therein were used extensively for the 2004 assessment in order to determine the status of the species one generation prior to 2002, and to provide the basis for comparison with **AESR 2002** estimates for that assessment.

In order to make the figures from the two time periods as comparable as possible, it is important to understand the nature of the different data types presented in the **AEAP 1979** (Douglas-Hamilton 1979) and the **AESR** (Blanc *et al.* 2003, 2007).

Estimates in the **AESR** are broken down into four mutually exclusive categories of certainty – namely Definite, Probable, Possible and Speculative – using transparent and objectively defined rules, as described in Blanc *et al.* (2003, 2007). These rules are such that an estimate can be split into one or more of the above categories. It is important to note, however, that all figures in the **AESR** were determined by some form of actual ground-based estimate of the area concerned – be it a systematic count or a guess. No extrapolations into unassessed range are included in the **AESR**.

The **AEAP 1979** presents two kinds of data, namely estimates and extrapolations. Estimates were pooled from a wide range of first-hand sources which used a wide variety of methods - ranging from standardized, systematic population surveys to plain guesswork.

No attempt was made in the **AEAP 1979** to classify estimates in terms of quality or reliability, but for the purposes of this assessment, and based on the estimation methodologies, these data are taken as comparable to the cumulative speculative estimates (i.e. the sum of Definite, Probable, Possible and Speculative figures) found in the **AESR**.

The extrapolations included in the **AEAP 1979** provided elephant population estimates for all areas of assumed elephant range not covered by estimates. Such extrapolations were arrived at by multiplying assumed elephant densities by the assumed areas of elephant ranges. The **AEAP 1979** thus includes a category of estimate not included in the **AESR**. For the purposes of this assessment, the additional extrapolations presented in the **AEAP 1979** are not used in the comparisons between the two time periods.

In both the **AEAP 1979** and the **AESR** the estimates used for comparison cover approximately 50% of estimated elephant range, with the rest of the range remaining effectively unassessed.

In addition, there are three important points to note on how figures were used:

1. Use of alternative sources. In a number of cases, to estimate numbers in the late 1970s, alternative sources were used instead of the estimates provided in the **AEAP 1979**. This was done in a systematic fashion, always following the guideline that *where an alternative estimate was available, it was only used if it was higher than that reported in the AEAP 1979, even if the alternative estimate was dated as more recent than 1979*. This was viewed as more conservative, as it was widely agreed in the assessing group that the number of African Elephants has probably declined in the past 25 years.

2. Removal of underestimated national figures. *In cases where a national estimate in the AEAP 1979 was lower than those in the AESR 2007 and there were no alternative sources, the country was completely removed from the analysis.* This was the case for two countries, namely Gabon and Liberia.

3. Data for Sudan. Elephant population surveys were conducted in a number of areas of South Sudan after the publication of the **AESR 2007**. The estimate used for South Sudan in this assessment was taken from the recent surveys (Elkan and Grossmann pers. comm.) and not from the **AESR 2007**.

Regional Assessments

The status of African elephants varies considerably across the species' range. These differences broadly follow regional boundaries, and are partly a result of the different historical trends. To better reflect this variation in status, it was decided to include in this assessment regional-level listings for the four African regions in which elephants occur (see Figure 2). The methodology and criteria used in these regional assessments is identical to that used for the global assessment, but employing only the relevant subsets of data. An exception to this rule is West Africa, where a more precautionary listing was obtained through the application of a different Red List Criterion. The results of the regional assessments are described below.

Table 1: Summary of regional and global Red List assessments for the African Elephant.

Region (and list of countries included in the assessment)	Status	Comments
<p>Central Africa (Cameroon, Central African Republic, Chad, Congo, Democratic Republic of the Congo and Equatorial Guinea)</p>	EN	Although available figures for Central Africa yield a listing of EN under criterion A2a, it is important to note that data for this region, both for the 1970s and the present, are incomplete and unreliable.
<p>Eastern Africa (Eritrea, Ethiopia, Kenya, Rwanda, Somalia, Tanzania and Uganda)</p>	VU	Eastern Africa was the region with the largest number of elephants in the 1970s, but also the one that experienced the worst poaching episodes in that and the following decade. While there are signs of recovery in some of the most important elephant populations, the growth of human populations in the interim has been considerable. If these human growth trends continue, it is unlikely that elephant numbers will reach the peaks of the 1970s.
<p>Southern Africa (Angola, Botswana, Malawi, Mozambique, South Africa, Zambia and Zimbabwe)</p>	LC	In the late 1970s, Southern Africa's elephant populations were recovering from historical lows in the early 20 th century. That recovery has continued, and elephant numbers in this region are now considerably higher than they were in the late 1970s, and indeed higher than in any other African region.
<p>West Africa (Benin, Burkina Faso, Côte d'Ivoire, Ghana, Guinea, Guinea Bissau, Mali, Niger, Nigeria, Senegal, Sierra Leone and Togo)</p>	VU	Elephant numbers were already comparatively low in West Africa in the 1970s, and are not believed to have declined considerably in the period up to the present. As a result, an assessment under criterion A2a results in a listing of Near Threatened. However, as the current population of mature individuals is believed to number less than 10,000, this regional population is listed as VU under criterion C1. The region has the highest human population pressures and the highest levels of habitat fragmentation. Yet, as elephant range in West Africa extends over 175 000 km ² , it does not qualify for listing under the habitat reduction and fragmentation criterion (B).

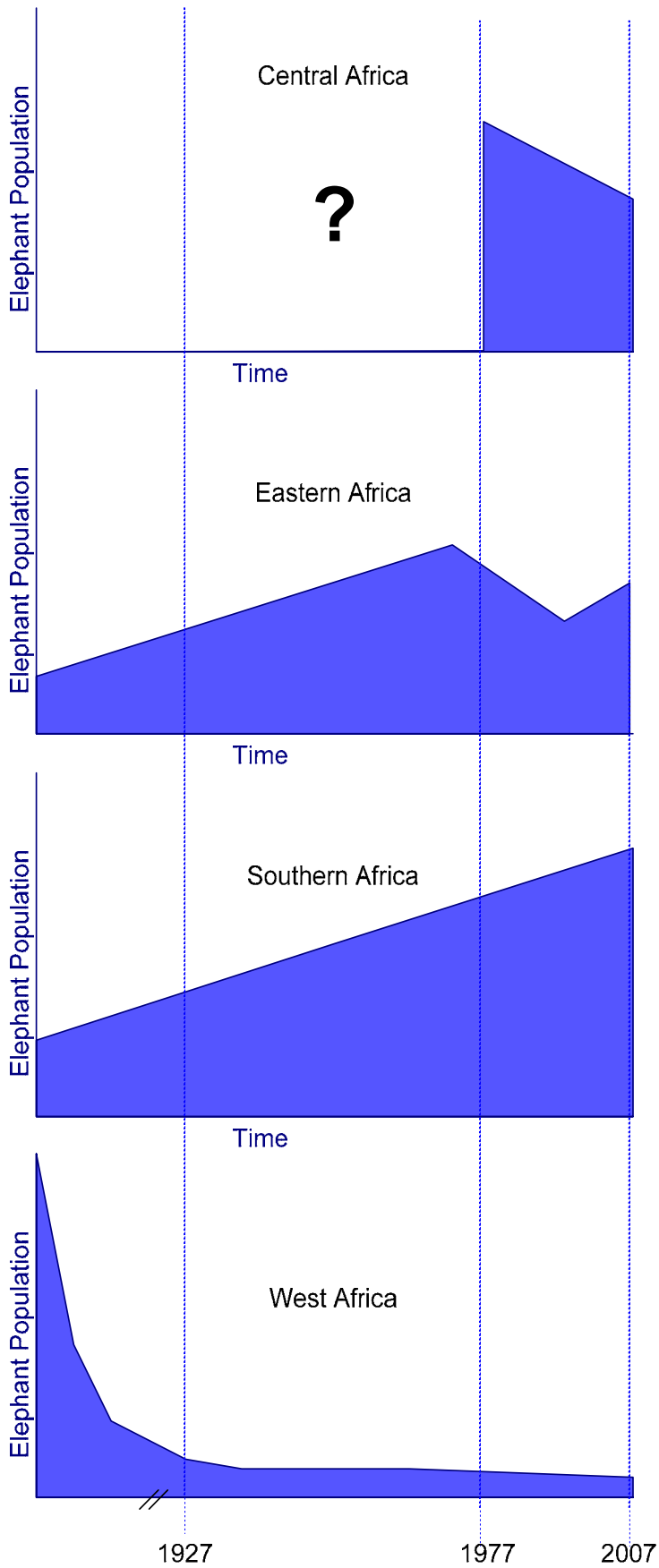


Figure 1. Speculated sub-regional trends in elephant populations in the 20th century (not to scale).

Elephant Range in Africa

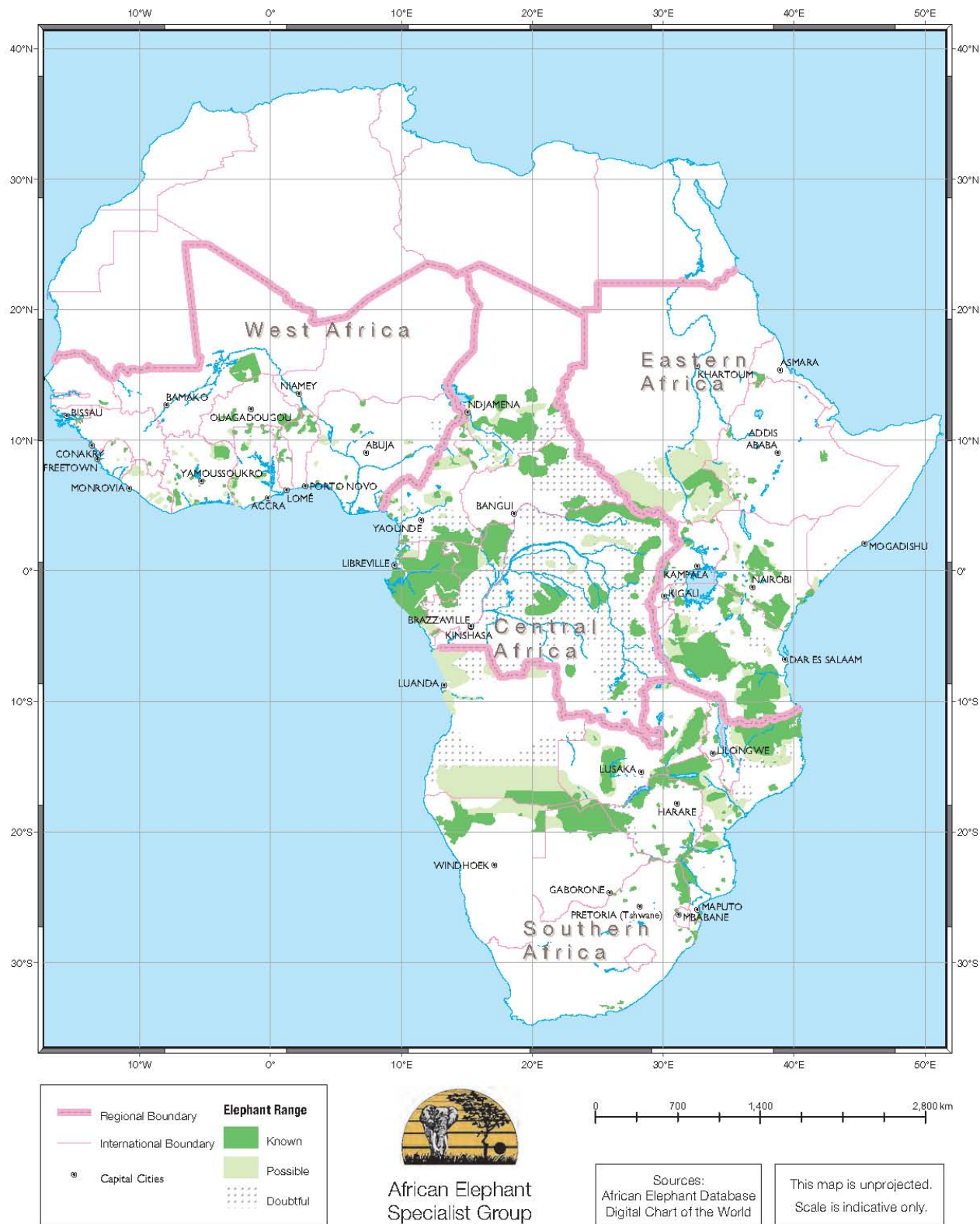


Figure 2: Range of the African Elephant.

Bibliography

- Blanc, J.J., Barnes, R.F.W., Craig, G.C., Dublin, H.T., Thouless, C.R., Douglas-Hamilton, I. and Hart, J.A. 2007. *African Elephant Status Report 2007: An update from the African Elephant Database*. SSC Occasional Paper Series 33. IUCN, Gland, Switzerland.
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