SURVEYING CROSS-BORDER ELEPHANT POPULATIONS IN SOUTHERN AFRICA

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SUMMARY OF PRESENTATION

Proposals to downlist and manage southern African elephants have prompted criticism of the population estimates, particularly on the grounds that populations which cross international borders have not been surveyed as a unit.

Census methods assume that everything is counted simultaneously so that animals within the sample will not be missed and none will be counted twice. Some violation of this assumption is inevitable but it becomes a serious problem if parts of the same population are estimated by surveys separated by weeks or months, as could happen with populations divided by international boundaries.

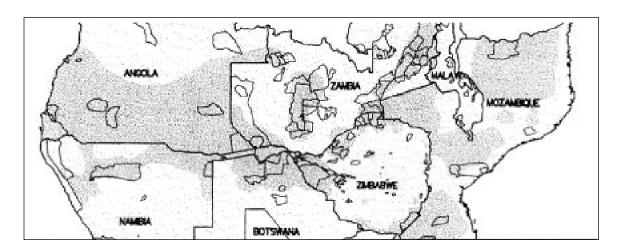
Mindful of this potential source of error in their elephant estimates, southern African wildlife management authorities conceived the ELESMAP project to improve the level of co-ordination among southern African states. Under this initiative Namibia, Botswana, Zimbabwe and Malawi receive European Union funding. South Africa is not funded but is associated with the project.

The key cross-border population in the region, numbering over 100,000 elephants, is found in the area

comprising north-west Zimbabwe, northern Botswana and parts of the Caprivi strip in Namibia (see map below). It is the largest single contiguous population in Africa and proper co-ordination of surveys of its national components is critical.

Co-ordinated surveys of this population carried out in the dry seasons of 1994 and 1995 demonstrated the usefulness and necessity of international co-operation. The population was surveyed by systematic reconnaissance flights over Botswana and Namibia's Caprivi strip at the same time as the adjacent part of Zimbabwe. The agencies involved standardised methods to permit the combination of results, and improved them where necessary to conform to the standards of information required by the African Elephant Database. The planning and analysis has been automated and a database of results has been set up under the ELESMAP project.

It was clear from the results that the main cross-border survey problem is along the Namibia/Botswana international border which cuts straight through the main population concentrations. Simultaneous surveys in this area are therefore vital. It is envisaged that this co-operation will continue indefinitely even after termination of the ELESMAP project.



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