THE SURVEY OF ELEPHANTS IN SRI LANKA: A REVIEW

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As opposed to the 1970s and early 1980s when a number of pioneering publications on the Asian elephant came from Sri Lanka, there has been relative calm on the elephant front in the country during the past decade. It was thus especially heartening to read this report on wild elephants in the island country based on a survey carried out during 1993 by the Department of Wildlife Conservation.

The survey was carried out over a six day period during June 1993 by 800 personnel including volunteers from NGOs in five regions, namely, Northwestern, Mahaweli, Eastern, Central and Southern, where political conditions permitted field work. The method used was to divide each region into several smaller blocks and assign a party of five persons to perambulate each block. The elephants encountered were sexed and classified into one of four age classes (calf, juvenile, sub-adult and adult) whenever possible. Distinguishing marks on elephants were noted in order to avoid double counting within a block.

The survey revealed that a minimum of 1967 elephants inhabit the above five regions (there could be some more elephants in the northern region which could not be covered). More important than this the report presents some impressive data on the sex ratio and population structure of the Sri Lanka elephants. With about 93% of the males being tuskless (and therefore immune to ivory poaching), the adult sex ratios of male to female ranging from 1:1 to 1:2.9 are among the least skewed anywhere in Asia. This is therefore not an issue at all Sri Lanka.

There are also interesting data on the numbers of calves in the population; such data can potentially be translated into crude estimates of fertility if they are expressed as proportions of the mature female segment of the population (this may not exactly correspond to the "adult" class in the report as some of the "sub-adult" females may also have reproduced).

If the report had mentioned the total area in each region that was covered in the survey, the population estimates could have been converted to densities. I have the following suggestions for surveys in future years:

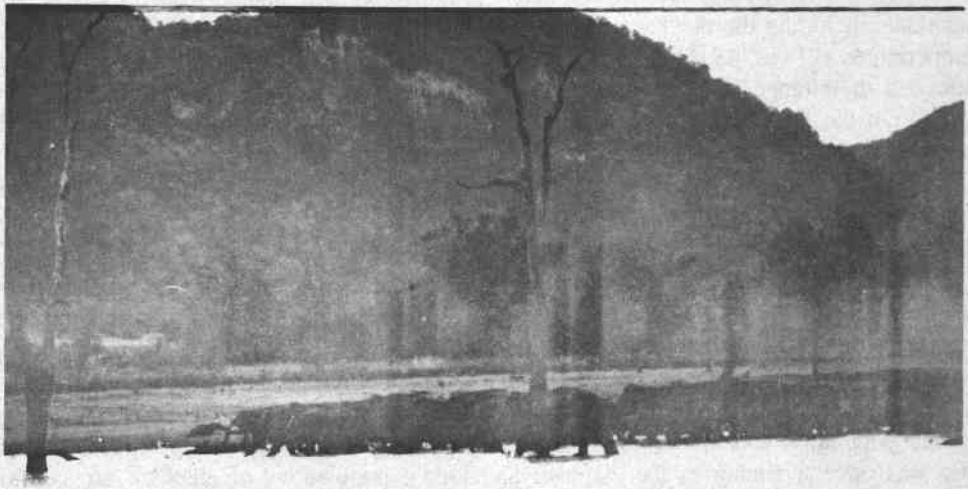
a) Such exercises can be carried out during two seasons so that seasonal shifts in elephant populations can be documented. Such data may be useful in understanding crop raiding behaviour for instance.

b) Location of elephant groups marked on maps can be computerised (only latitudes and longitudes need be entered along with group size) and printed in order to get a qualitative picture of elephant concentrations on the island.

c) The surveys can be supplemented with estimates of elephant "densities" using both direct and indirect methods in selected areas. This would provide an objective basis for population estimates that can be compared with the minimum estimates.

d) If such surveys are continued for at least 3 to 4 consectutive years, the population structure data such as number of calves can provide useful insights into the demography of the populations in different regions;

The 1993 survey is hopefully the beginning of a more sustained effort in future years in documenting Sri Lanka's elephant populations. This could evolve into a national data base that would be invaluable in planning for the management and conservation of elephants and their habitats.



Elephants in the Handapanagala Lake
(Photo: Anouk Ilangakoon)