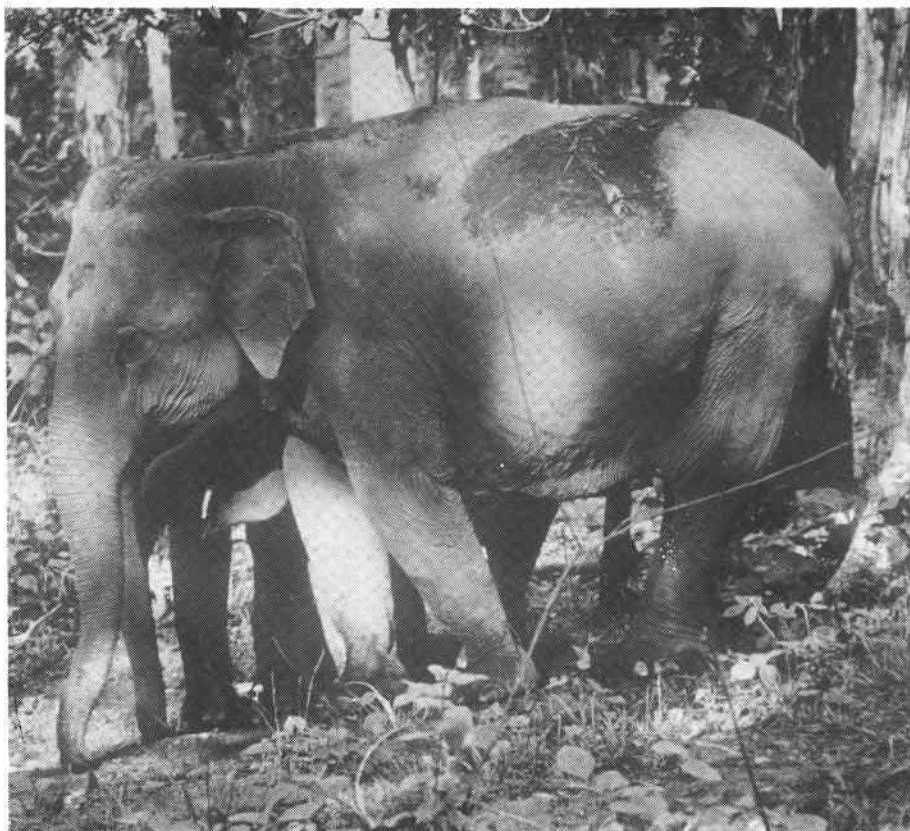


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1. To highlight the plight of the Asian Elephant.
2. To promote the conservation of the Asian Elephant, and
3. To provide a forum for communication amongst the members of the Asian Elephant Specialist Group.

The Editors of *GAJAH* welcome manuscripts and communications dealing with all aspects of Asian Elephant conservation and management, for consideration for publication. All original papers will be reviewed by referees. Contributions should be typed, double spaced, on one side of A4 paper, or submitted on disks (WordPerfect 5.1). All material may be reprinted unless it has been used in *GAJAH* from an identified source publication, in which case, no reprint is authorised except upon permission of the source publication. Reprinted material should bear the author's name and credit to *GAJAH* should be given. The Editors would appreciate copies of any material so used. The articles published in *GAJAH* do not necessarily reflect the views or opinions of the Asian Elephant Specialist Group (AESG), Species Survival Commission (SSC), World Conservation Union (IUCN), World Wide Fund for Nature (WWF), Editorial Board or the Editors.

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AN ACTION PLAN FOR THE CONSERVATION AND MANAGEMENT OF ELEPHANT (*Elephas maximus*) IN SRI LANKA

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INTRODUCTION

The Asian elephant (*Elephas maximus*) is the largest terrestrial megaherbivore in Asia. It occurs in 13 countries from the Indian subcontinent in the west to Indo-China in the east including islands such as Borneo, Sumatra and Sri Lanka. In Sri Lanka, the elephant is so much a part of the island's history, religion, myth, culture and even politics that it would be difficult to imagine Sri Lanka without its elephants. Its aesthetic value arouses public emotions and attracts strong support for its conservation. Furthermore, as a super keystone species in the ecosystem, the elephant plays a very important ecological role by creating and maintaining biological diversity across a vast area.

Unfortunately, the elephant in Sri Lanka has declined by almost 85% since the turn of the 19th century (McKay, 1973). Today, between 2,500 and 3,250 elephants are estimated to occur in the wild. While the human population has increased from 2.5 million at the turn of the century to 17 million at present, the forest cover during the time has declined from 70% to less than 24% (Geiser & Sommer, 1982; Erdelen, 1988). If the present trends in deforestation and human population growth continue unchecked, then the elephant in Sri Lanka, like the Blue whale and the Black rhino will be on the fast track to extinction. Already, the elephant in Sri Lanka finds itself with its back against the wall as a result of continuous contraction of its habitat and escalating land-use conflicts with man. The species has already been extirpated from some parts of its former range in Sri Lanka and the remaining isolated and fragmented populations remain extremely vulnerable to further poaching and habitat encroachment and degradation.

Without timely action, backed by strong political will and local understanding and financial support, the elephant population is at risk of becoming locally extinct in a number of areas in Sri Lanka. It is with this sense of urgency that the Department of Wildlife Conservation (DWLC) requested the preparation of an Action Plan for the Conservation and Management of the elephant in Sri Lanka. The Action Plan is designed to help the DWLC to adopt strategies that would ensure the long-term survival of the elephant in the wild in Sri Lanka. The success of any Action Plan will however depend on how well it is implemented subsequently. Such implementation will require high levels of cooperation

and collaboration between the Department of Wildlife Conservation, other Government Departments and Non-Government Organizations both within Sri Lanka and abroad.

The Action Plan has three main sections. In the Introduction (Section I), the status of the elephant in Sri Lanka is assessed, together with reasons for its decline. The Conservation Strategy (Section 2) establishes the basic principles and priorities required to achieve the objective, i.e. to ensure the long-term survival of the elephant, in its natural habitat in Sri Lanka. The strategy notes that it would be impossible to conserve large numbers of elephant in Sri Lanka as long as the human population continues to grow and deforestation continues indiscriminately. Implicit in this observation is the knowledge that it may not be possible to preserve elephants in all habitats where they presently occur. The Action Plan (Section 3) itself outlines the specific actions needed to ensure some measure of success in the conservation and management of elephant in Sri Lanka.

Taxonomy of the Elephant in Sri Lanka

The Sri Lankan elephant (*Elephas maximus maximus*) is the nominate subspecies. It has been shown to be genetically distinct from the subspecies found in the Indian mainland (Shotake *et al.*, 1986). Ellerman & Morrison-Scott (1951) list two subspecies of *Elephas maximus* from Sri Lanka, equating *E. m. maximus* L. with *E. m. vilaliya* Deraniyagala (sensu Deraniyagala) and accepting *E. m. ceylanicus* Blainville as the elephant inhabiting most of the island (McKay, 1973). According to McKay (1973) however, *E. m. vilaliya* represents no more than a few extremely large individuals in a highly variable population and he considers it to be synonymous with *E. m. maximus*.

Status of the Elephant in Sri Lanka

The elephant is a protected species in Sri Lanka and has enjoyed some degree of protection since the 12th century A.D (Wikramasinghe, 1928). It is listed in Appendix 1 by the Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES). This measure bans trade in a species threatened with extinction. The elephant, was given full legal protection in Sri Lanka as early as 1937. However, legislation alone could not prevent the decline in its number and range across the island as a result of sport hunting (in the past), poaching and human encroachment on its habitat. While the African elephant's misfortune is its tusks, the elephant in Sri Lanka is being threatened more by habitat loss and fragmentation as a result of escalating human population than by poaching for ivory, given that more than 85% of the bulls have no tusks (Deraniyagala, 1955). Poaching is therefore not the terminal threat to the elephant in Sri Lanka.

Number of Elephants in Sri Lanka

During the period of British Colonial rule, the number of elephants in the wild in Sri Lanka declined from about 10,000 to 2,000 animals (Schultz, 1984). It was squeezed out of the hill country and became associated with the low country dry zones. One problem

for conservationists is that figures on the number and distribution of elephants are difficult to collect. The animals do not oblige demographers by staying in one place, or even in one province. They cannot always be counted in the dense and tangled vegetation that they inhabit. So estimates of elephant numbers in the past have been largely guesses though based on experience. Today, much of the elephant censuses are being based on counting heaps of dung. Mr A. B. Fernando, an experienced (now retired) Wildlife official, puts the total number of elephants in the wild in Sri Lanka as anything between 2,800 and 3,250 (Santiapillai & Jackson, 1990). A more recent survey of the elephants carried out by the Department of Wildlife Conservation in Sri Lanka in June 1993 estimates a minimum of about 2,000 animals in the five regions surveyed in the island excluding the northern, north western and north eastern regions (Hendavitharana *et al.*, 1994). Norris (1959) posed three questions before he attempted to survey the elephant situation at that time. They were:-

- (1) How much land is available for them?
- (2) How much country do they need, remembering their seasonal movements?
- (3) How many elephants do we want to keep?

The long-term survival of the elephant as a wild species in Sri Lanka will depend on how wisely we address these questions and arrive at the answers.

The key question is not just how many elephants Sri Lanka has at present, but how many elephants will Sri Lanka be able to support by the middle of the 21st century, when given the current rate of growth, its human population has doubled to 34 million, and the forest cover has declined to say, 14%? It must be clear to everyone concerned that unless we are prepared to combine good science with strong population control and political will, the future for *Elephas maximus* in Sri Lanka will be grim.

CONSERVATION STRATEGY

The conservation strategy aims to ensure the long-term survival of as many *viable populations of elephant* in Sri Lanka as possible in as wide a range of their habitat as is practical by preventing or controlling conflicts with man (Parker, 1981). The emphasis is therefore on accommodating elephants and human beings rather than simply protecting the elephants in their habitat. Man and elephant in Sri Lanka have to live together by mutual adjustment.

Rationale

Project Elephant therefore differs from its conservation philosophy from that of the Project Tiger of India, which was based on the broad principle of establishing "core and buffer" areas giving absolute protection to the former and exploitation of the latter. This principle will not work in the case of the elephant characterised by large home ranges.