



Amboseli Elephant Research Project

Amboseli Trust for Elephants

P.O. Box 15135

Langata 00509, Nairobi, Kenya

Tel: +254 20 891191

info@elephanttrust.org, www.elephanttrust.org

Statement on Elephant Culling

We, the undersigned, comprise a group of elephant researchers working together to study elephants and promote their conservation and welfare. Our combined experience represents over 200 years of work with free-ranging, wild African elephants. We are acknowledged leading experts in the field.

It is our considered opinion that killing elephants to reduce local population density ('culling') is unnecessary, unimaginative and inhumane. Culling is also, in most situations, either ineffective or retrogressive in achieving ecosystem management objectives.

Management of nature by killing animals is the solution of a command-and-control mindset. This outdated view assumes the 'natural' state of ecosystems is a stable equilibrium and conditions must be kept constant in this perceived 'desirable' state to conserve biodiversity. This may work in closely managed agricultural or artificially landscaped systems, but is inappropriate for most natural ecosystems, particularly in semi-arid regions.

Contemporary ecological thinking, supported by a growing body of knowledge, holds that nature – including systems with people as actors – is *about* change. Ecosystems are driven by variation in weather, climate, soils and hydrology, and modified by interactions between species. Change occurs at different scales of geography and time, in varying manifestations, over years, decades or millennia. Under this view, biodiversity is maximized by promoting spatial patchiness and temporal variation. The alternative is a futile struggle against natural processes to force nature 'to behave'.

We concur with this 'non-equilibrium' interpretation of ecosystem functioning, which favors minimal intervention and a landscape-level approach; all evidence suggests that it is more likely to succeed in conserving diverse ecosystems, such as those in which elephants play a crucial role.

Declaring an ecosystem to be 'overpopulated' by elephants usually occurs because of concern over the fate of a small number of plant and animal species in a particular area. If the ecosystem in question is viewed in the 'bigger picture' of a network of protected areas, then the 'problem' usually goes away, since the species in question are often thriving in other areas.

Undoubtedly, after reasoned consideration of cause and effect, situations may arise that call for control of elephant density in selected areas in order to protect defined landscape elements. For such cases, there are ways of controlling elephant density – other than culling – that may be considered:

- Increase the size of the protected area or design and maintain a 'meta-population' with dispersal linkages to other sanctuaries. This is best achieved in co-ordination with local land users' communities;
- Manipulate access to water sources in the priority areas, since elephants require water every two to three days and this concentrates their habitat use near water;
- Manipulate burning regimes, either to remove or encourage attractive food plants such as grasses;

- Fence selected areas;
- Employ deterrents, such as noise, lights or chemical means, and encourage local communities to adopt low-cost, appropriate measures;
- Translocate adult males or family units to suitable, low-density habitats; and
- Employ contraception, such as the injection of porcine *zona pellucida* serum using projectile darts.

Culling is a rapid-response, but unimaginative, option that at best will only provide a temporary solution to the perceived problem. On the contrary, it may well exacerbate the situation in the medium term. Artificially maintaining elephant populations at low levels relative to plant resources in effect removes the environmental constraints that drive natural population self-regulation. The result is birth and survival parameters encouraged artificially to levels commensurate with rapid population growth. Over a period of months or years following a localized cull, elephants may move back into the area of reduced population density, defeating the purpose of the intervention.

Culling elephants over a large area is likely to have unanticipated consequences, as it eliminates their ecological role – as architects of open habitat patches and agents of seed dispersal, for example. Maintaining an elephant population at an artificially constant level runs counter to the idea of conserving ecological processes, could disrupt long-term patterns of habitat change and renewal, and could actually result in the loss of some species dependent on elephant-maintained plant communities.

Removing individuals is disruptive to elephant social order; even culling entire groups is likely to leave behind fragments of family units and will certainly upset their complex levels of association. Elephants can detect distress calls over large distances and will be fully aware when their fellows are being killed. Regular, periodic culling harms both the elephants and their relations with people; it creates a troubled, traumatized elephant population that becomes more dangerous for local communities and unfavorable for tourists.

Our research and the work of many colleagues clearly show that elephants are intelligent, highly social animals with a complex system of communication and a sophisticated behavioral repertoire that includes strong affiliative bonds between family members. Killing such remarkable animals, simply to achieve a utilitarian outcome while alternatives exist, cannot be ethically defensible.

We believe that such exceptional, socially complex and long-lived animals should be treated with respect and empathy, and we know that our science-based view is shared by a rapidly growing group of enlightened conservationists.

In summary, we believe that culling is, from an ecological point of view, unnecessarily destructive and invariably unjustified and from a social, behavioral and cognitive point of view, unethical.

Elephant Experience:

Cynthia Moss, Director	38 years
Joyce H. Poole, Scientific Director	30 years
Harvey Croze	37 years
W. Keith Lindsay	27 years
Phyllis C. Lee	23 years
Norah Njiriani	20 years
Soila Sayialel	19 years
Catherine Katito Sayialel	14 years
Total	208 years