



**A short compilation of facts on
Why elephants should NOT be kept in captivity?
and
The solutions for the captive elephants' problems**

Published by Elsa Foundation
India

Copyright @ Elsa Foundation

First Limited Edition: June 2024

About us:

Elsa Foundation is a non-profit charitable trust that focuses on the conservation of biodiversity, prevention of cruelty to animals and animal rights issues of both domestic and wild animals. It opposes keeping wild animals in captivity.

We have travelled to several countries to study the best practices and implement them in India.

The foundation supports various government bodies, in informed policy-making and decision-making on critical issues impacting biodiversity and the rights of animals.

Our work areas are research, advocacy, awareness, publication, support in policy and decision-making.

Website: www.elsafoundationcharity.org

SECTIONS

Section 1: A three-page table comparing the life of wild elephants with captive elephants

Section 2: Physical and psychological trauma of captive elephants – Scientific facts documented by multiple elephant scientists

Section 3: Why elephants should be kept in the forests?

Section 4: The solution to the problem - Rehabilitation in a sanctuary Photos of a sanctuary in Kolar, Karnataka

The contents of this document were extracted from the book “**Elephants Slavery**”, published by the foundation.

For more information, read the book available at the below link:

<https://elsafoundationcharity.org/category/elephants-research/>

Section 1

***A three-page table
comparing the life of
wild elephants
with
captive elephants***

Wild Elephant (Table 1 of 3)	Temple, Private Elephant
Social life: Female elephants live their entire life along with their natal herd. Male elephants live with their herd till the age of about 15 years (i.e. till they reach adulthood)	Denied an opportunity to live with its natal herd
Reproduction: Elephants' reproduction cycle regular	Opportunity for reproduction denied.
Conservation of keystone species done. Elephants calve only once in 5 years leading to a very slow reproduction, so allowing elephants to live in the wild is very important for conservation.	Goes against the conservation of keystone species, as no reproduction happens.
Contagious Disease: Chances of getting infected with such diseases are very rare	There is a high chance of elephants getting infected by humans. For example, TB spreads from humans to elephants. This leads to the risk of life for the animal
Mud bath: Elephants do regular mud baths to remove the parasites on their body and to cool their body	The opportunity to do a mud bath is prevented as the majority of them don't have access to freshwater sources.
<p>Musth: Musth is a condition in male elephants that occurs for about 3 months every year. During this period the elephants have a very high level of testosterone and are highly aggressive.</p> <p>Liquid secretion at the temporal gland is observed. Musth is a sign of a healthy male elephant.</p> <p>Musth is an indication of mating season.</p>	<p>During musth, the male elephants are chained on all four legs and made to stand like a statue for several months.</p> <p>Mating is denied</p> <p>This causes serious damage to the physical and psychological well-being of the elephant.</p>
Learning: Elephants learn various aspects of their life by imparting knowledge from their natal herd. For example, the species of plants to feed, migratory routes, water hole locations, predators, alternate forests for feeding etc.	An elephant kept in the temple is completely denied this learning opportunity.
Human control: As the elephants roam free, they are completely free of human interference.	<p>Elephants are tamed in a kraal for several months with brutal attacks to obey the command of the mahout (elephant keeper).</p> <p>Every time a mahout is changed, the brutal attack repeats to instil a sense of fear in the elephant, to obey the new mahout.</p> <p>In several places post musth, brutally attacking the male elephant, is a procedure followed every year, as the mahouts think the elephant will not obey them after musth.</p>
Diet: Elephants in the wild consume more than 100 species of plants. This gives them all the necessary nutrients needed for their physical health	Temple elephants' diets are restricted to just 2 (or) 3 species of plants. Manmade artificial food is also fed. All the above lead to severe malnourishment

Wild Elephant (Table 2 of 3)	Temple, Private Elephant
Chaining: This scenario does not prevail. The animals roam freely.	Elephants are chained 24 hours a day. This is an extremely cruel way of keeping an animal.
Psychological well-being: The animals live a natural life leading to excellent psychological well-being	Cruel practices, lack of proper diet, artificial atmosphere, lifelong separation from family and brutal taming methods lead to serious psychological stress on the animal. The animal becomes insane and exhibits stereotypic behaviours such as continuous head bobbing, body swaying etc.
Bathing: The elephants have the opportunity to bathe in a river or pond with fresh water. Showering, using their trunks and immersing their whole body in water to subside the heat, is done.	In most cases, the animals are denied an opportunity to get access to a lake or river. They are bathed using a hosepipe.
Drinking water: The animals have an opportunity to access fresh water from a lake or river	In many temples, water is given in a bucket (or) using a hosepipe. Also, water is given at the discretion of the mahout not when the elephant really needs it.
Physical exercise-Walking: Elephants on average walk 20 km every day for food and water. This gives enormous physical exercise needed for such a large mammal	Except for a small walk near the temple, the elephants are chained 24 hours a day denying the opportunity for any form of physical exercise that leads to serious problems such as arthritis, obesity etc.
Neck exercise: Wild elephants frequently browse on leaves on tall trees by lifting their head and it gives exercise to their neck	Temple elephants never get this opportunity and lack neck exercise which is vital for their health.
Lack of sleep and rest: This scenario does not arise	Temple elephants, when kept inside the shed are chained on two opposite legs (or) three legs. This prevents them from lying on the ground and sleeping (which is the method for long-duration sleep) (or) even sitting on the floor. Elephants with serious arthritis problems also are denied an opportunity to rest by lying down (or) sitting, leading to a prolonged painful life. This is very cruel.
Danger to human life: This scenario does not arise except in accidental close encounters with humans in which the animal attacks for self-defence.	Multiple instances of captive elephants attacking people that resulted in fatalities are recorded. This includes incidents in Tamil Nadu, Kerala, a Jain temple pontiff in Maharashtra etc.
Foot infection: As the elephants walk in mud, the scope for foot infection is absent.	As the elephant is kept on hard concrete surfaces 24 hours a day, the animal gets frequent, serious foot problems (see photos)
Browsing and grazing: The opportunity for browsing and grazing is plentiful.	Browsing and grazing opportunities are completely denied.
Health condition ignored: This scenario does not apply to wild elephants	Health condition is ignored in several cases. Sick elephants are forced to work and are subjected to enormous cruelty

Wild Elephant (Table 3 of 3)	Temple, Private Elephant
<p>Complexity in medical treatment: This scenario does not arise, except on very rare occasions of treating a wild elephant that was affected due to natural causes</p>	<p>Unlike cats (or) dogs, providing medical treatment to the largest land mammal is very complex. Any damage caused in its body might lead to a fatal end due to the complexity of the healing process. Proper medical devices, accessories, equipment etc. are not available for treating elephants. For example, a broken leg of a dog can be analysed with an x-ray and further treatment can be attempted. In the case of elephants such options are very rare at present.</p>
<p>Body temperature regulation problems: Elephants have a very weak thermoregulatory system owing to very minimal sweat glands (only around toenails) and due to intra-abdominal testicles, which are otherwise external in the case of most mammals. The body temperature of elephants is 37 degrees Celsius and their comfort zone is 22-25 degrees Celsius. In the dense forest, this temperature (22-25 degrees) prevails even during peak summer ensuring the animal is not affected by heatstroke. Also, the presence of lakes, rivers, and wet mud baths ensures temperature regulation for elephants.</p>	<p>Heatstroke is a major problem in captive elephants. In the cities temperature easily go above 40 degrees Celsius in summer. Also, most of the captive elephants are kept in a tin-roofed / asbestos-roofed shed. Such sheds retain the heat and produce the effect of a burning oven. Without any provision of the river (or) lake (or) wet mud bath to cool down, constrained inside a burning shed the animal undergoes immense suffering.</p>
<p>Work like a machine: This scenario does not arise</p>	<p>Temple elephants are forced to bless devotees and beg for alms from them for several hours a day. They are forced to work like machines with nonstop trunk movement to accomplish the above activities. This money begged is the main source of income for mahouts, so the animals are mercilessly made to beg despite their illness (or) injuries to their legs and feet. (see photos)</p>
<p>Biodiversity exposure: Wild elephants are on constant travel in search of food and water. They travel several hundred kilometres every year. On this journey, they encounter a wide variety of ecology (plain grasslands, mountains, dense rain forests, lakes, rivers, ponds etc.) They are also exposed to a rich variety of species such as tigers, deer, bison, bears etc. This exposure gives immense knowledge about interacting with various components of biodiversity.</p>	<p>Captive elephants are completely denied this wide spectrum of exposure and they are kept in appalling conditions leading to mental insanity.</p>
<p>Biodiversity protection: Elephants are keystone species that protect various forms of life (both plants and animals). Their presence is extremely important in a forest</p>	<p>Converting wild elephants into captive elephants destroys biodiversity.</p>

Section 2

***Physical and psychological
trauma of captive elephants
- Scientific facts documented
by multiple elephant
scientists across the globe***

CONSEQUENCES OF PROLONGED CHAINING AND STANDING ON HARD SUBSTRATES

Scientific facts documented by various elephant scientists across the globe

The forefeet of elephants have a digit-grade structure and hind feet are semi-plantigrade (Mikota et al, 1994) implying weight-bearing by the digits of the forelegs and sole & digits of the hind legs. Thus, an elephant that is severely restricted in its movement due to chaining cannot have a choice in its decision to shift weight from the fore/ hind legs by assuming suitable postures such as lying down/spreading its feet to a suitable distance to distribute weight uniformly.

Kurt and Garai (2007) suggest the formation of deformed limbs to be a consequence of abnormal postures caused by chaining on uneven substrates. Restricting movement and/or keeping the elephant on cold, damp concrete surfaces is thought to lead to degenerative joint diseases in elephants (Mikota, et al., 1994).

Abrasions caused by continuous chaining can result in skin cracks and wounds which are difficult to heal in elephants; chain scars occur more on the hind feet as chains exert pressure when pulled by the elephant (Kurt and Garai, 2007).

Overgrown nails/cuticles and excessive footpad growth, are linked to inadequate exercise leading to poor wear and tear of the feet, necessitating regular feet trimming procedures such as the trimming of the pad, filing of the cuticle/ nails (Mikota, et al., 1994).

According to Varma (2009) and Buckley (2008), captive elephants in natural habitats— large spaces with earthen natural substrate— required little foot care. According to the authors, joints stiffen in elephants made to stand for long periods on concrete; in a confined environment and also liquid waste from the elephant is difficult to remove, which can lead to infection. The rocking/ swaying stereotypic movements exhibited by elephants result in pressure on feet and nails with consequent tissue damage and thin footpads.

Non-human animals such as elephants undergo trauma in close confinement captive situations: such situations include loss of control by the elephant over its life, deprivation in the form of social isolation, chaining and restricted movement, among other features. Trauma is described as a form of stress in which the animal experiences a physical/ psychological event that is perceived to be life-threatening. Manifestation of such stressors includes behavioural expressions such as stereotypy, increased aggression, etc. (Bradshaw, 2007).

Increased frequency of stereotypic behaviour was observed among elephants that were chained (both fore and hind legs) as compared to the same elephants being let loose in a fenced place (penned) (Friend, et al., 1999).

The rear feet of “penned” elephants (free to move inside a fenced sanctuary) were cleaner and healthier as the elephants’ excreta (dung/ urine) did not accumulate around their feet (Friend, et al., 1999).

Severe and chronic cases of foot/leg problems in elephants in zoos have led to euthanasia of some elephants: of the sixteen captive Asian elephants euthanised in a span of ten years (1977-1987) in the U.S., nine were euthanised due to severe pododermatitis (Mikota, et al., 1994).

The study by Friend et al., (1999) observed penned elephants (free to move inside a fenced sanctuary) appearing to be more relaxed— a previous study (Delmeier, et al., 1985) on confined calves (Holstein bulls) showed such calves performing increased locomotor behaviours as compared to those which were left free in a yard.

In a study of foot problems, the most number of foot ailments, considered to be major, were observed in elephants in temples of Tamil Nadu (Subramaniam et al., 2010). The same authors suggest the practice of keeping elephants on hard substrates to be a cause for foot ailments which initially appear as minor problems, if neglected, lead to major ailments of the foot.

Unhygienic/ unsanitary conditions of the tethering site were said to be one of the predisposing factors for foot ailments such as pododermatitis/ abscesses/foot rot (Subramaniam et al., 2010).

Section 3

Why elephants should be kept in the forests?



WHAT IS BIODIVERSITY?

The presence of multiple species of plants and animals in a habitat that is perfectly suitable for them. The habitat (mountains, forests, lakes, rivers etc.) that provides plenty of food and water for their living - all these components as a whole is called biodiversity. It has three components 1. Ecosystem diversity. 2. Species diversity 3. Genetic diversity.

WHAT IS ECOLOGY?

Ecology is a science that studies how plants, animals and their environment (collectively called an Ecosystem) are interdependent for their survival. Their interactions and their relationships.

Ex.: The elephants' dung is carried by dung beetles and stored underground in small holes. For dung beetles, dung is the food. After consuming a portion of food, the leftover dung becomes natural manure for the forest plants and grass. This dung nurtures the plants and grass growth in the forest. These plants and grass are in turn consumed by deer, buffalo, zebra and other herbivorous animals.



ELEPHANTS' ROLE IN BIODIVERSITY AND ECOLOGY

Elephants play a major role in conserving biodiversity and maintaining an ecosystem balance. Several species of plants and animals depend on elephants for their survival.

Dung piles and puddles generated by elephants act as a small ecosystem / microhabitat supporting various small organisms such as insects, lizards and frogs

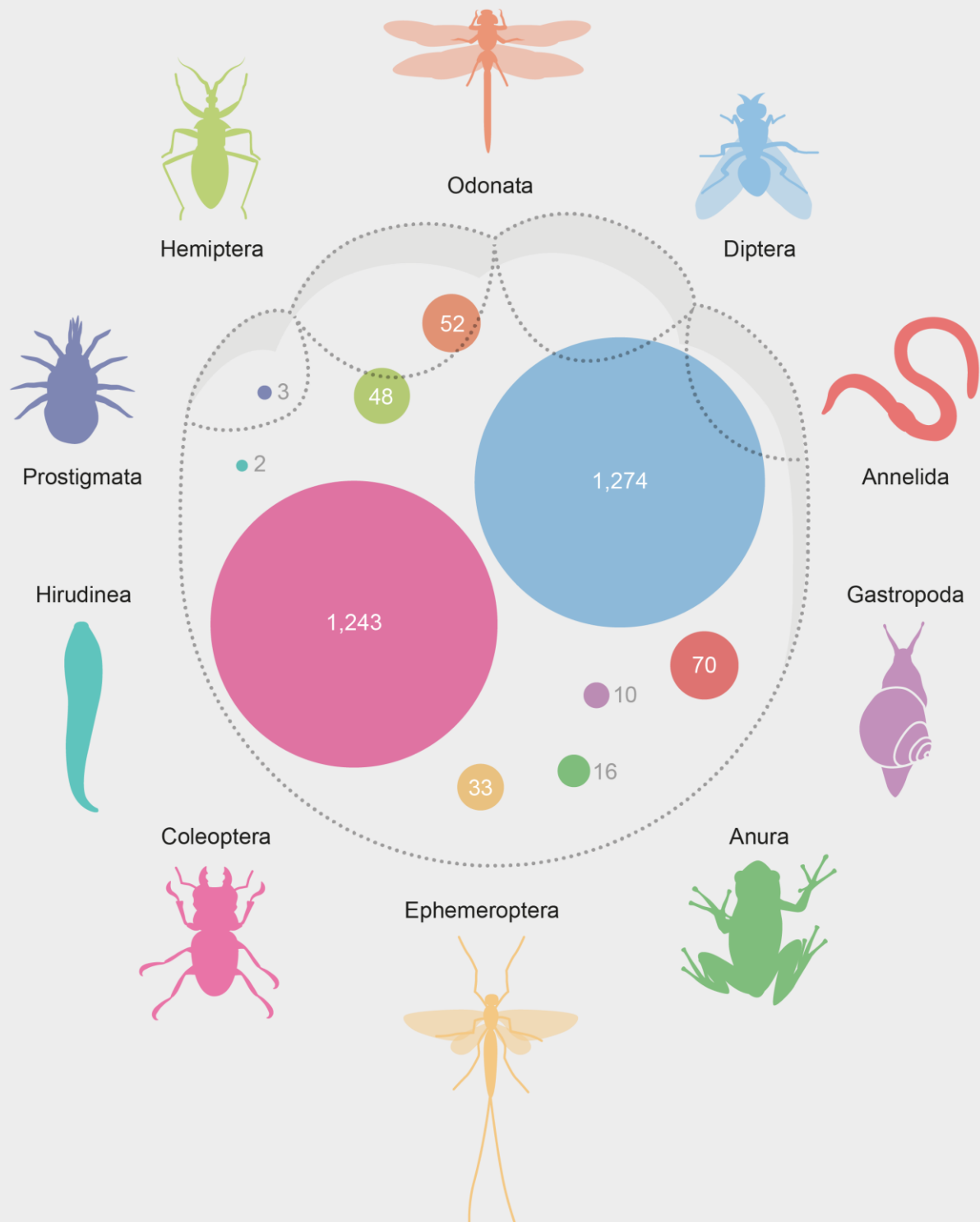
“Aside from these frogs, I also found a broad array of invertebrates including beetles, termites, ants, spiders, scorpions, centipedes, and crickets in many of the elephant dung piles, suggesting that a dung pile can become a small ecosystem on its own.” (Ahimsa Campos-Arceiz; 2009)



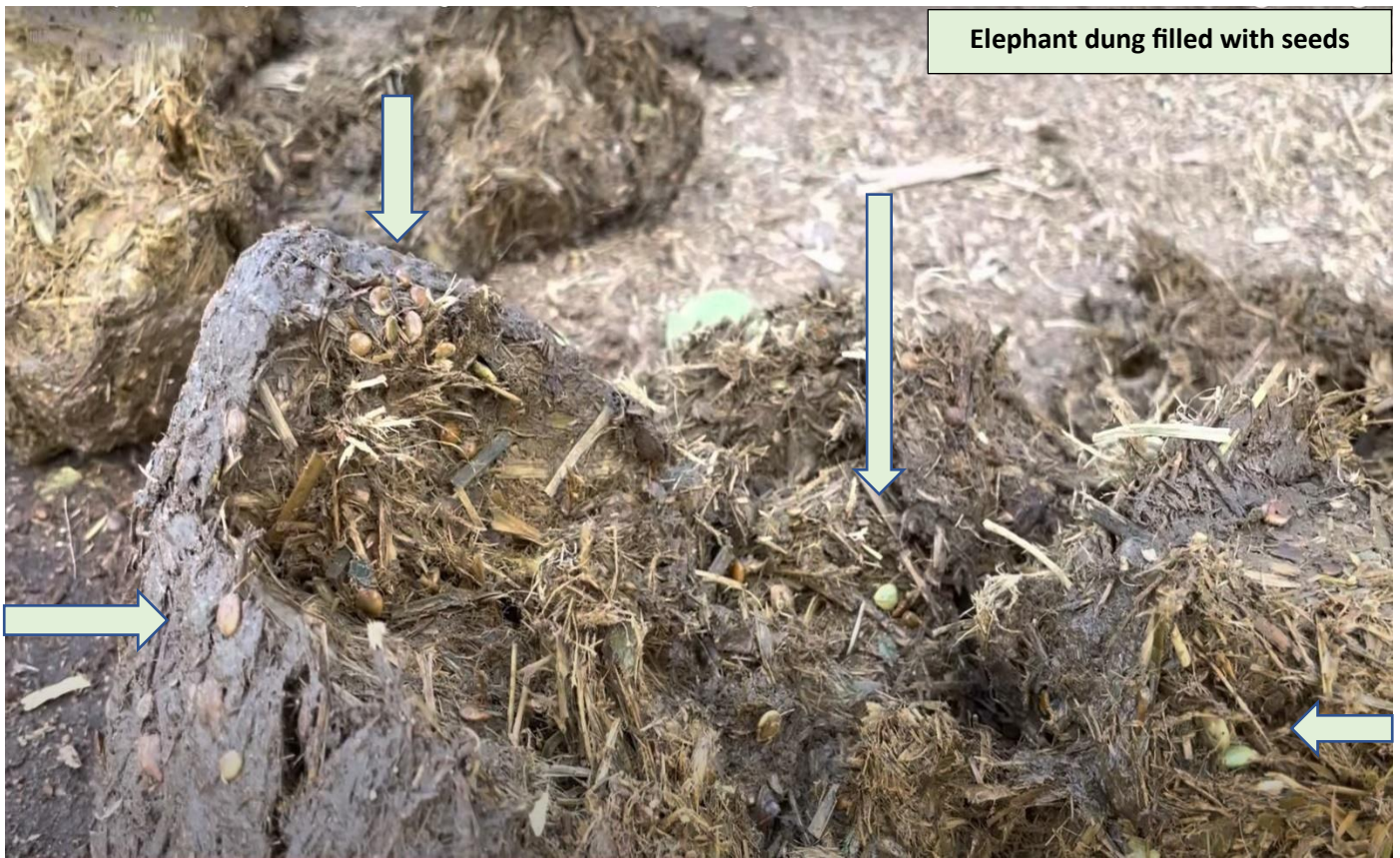
Footprints serve as frog nurseries

The Pool Party in a Pachyderm Print

Thousands of animals were found in 30 elephant footprints. Animals represented in the data below are grouped by order.



Amanda Montanez; Source: "Elephant (*Loxodonta africana*) Footprints as Habitat for Aquatic Macroinvertebrate Communities in Kibale National Park, South-West Uganda," by W. Remmers, et al., in *African Journal of Ecology*; August 2016.



Elephant dung filled with seeds

Large quantities of seeds are spread through elephant dung. Dung nurtures the growth of seeds and trees.

Elephants are classified as **Keystone Species** and as **Ecosystem Engineers** due to their enormous contribution to biodiversity and ecology

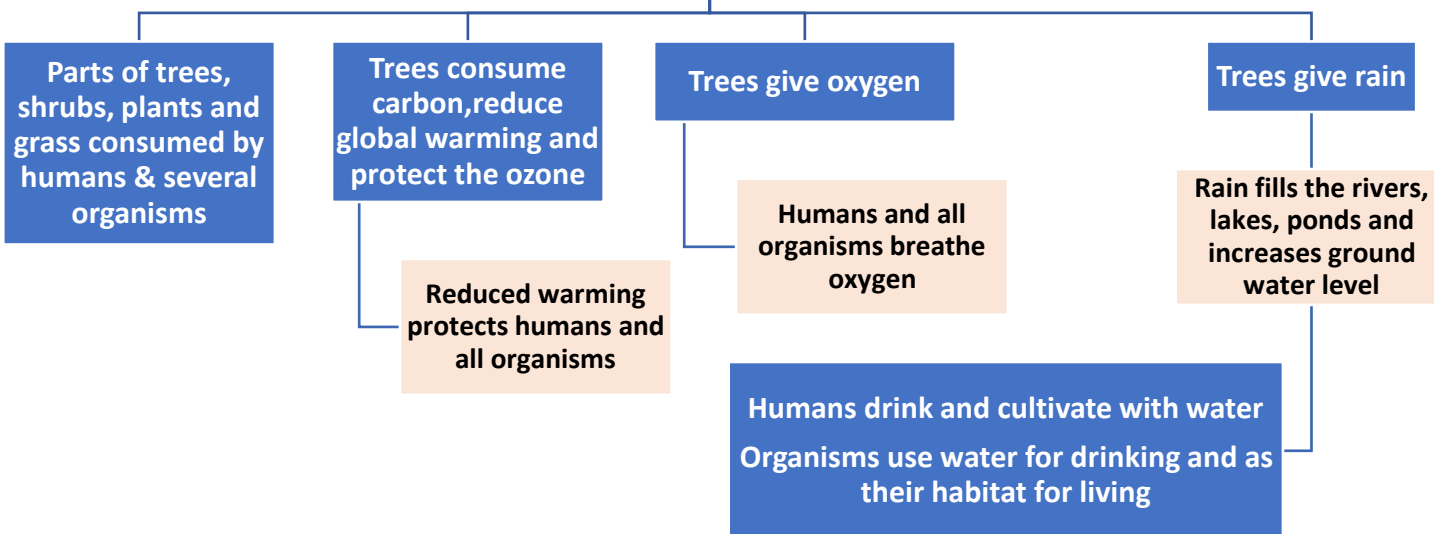


Three species of frogs were discovered to live in the dung pile:

- *Ornate narrow-mouthed frog *Microhyla ornata*,
- *Narrow-mouthed species *Microhyla rubra*
- *Species in the *Sphaerotheca* genus.

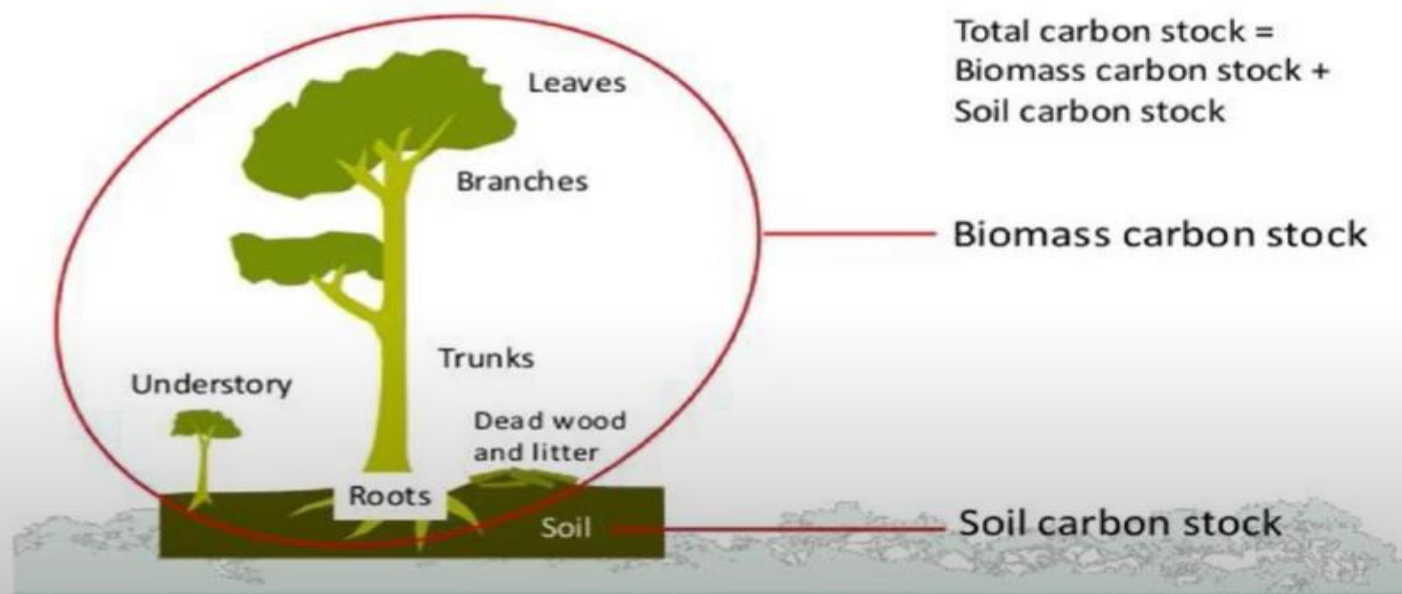
HOW DO HUMANS AND ALL OTHER LIVING ORGANISMS BENEFIT FROM ELEPHANTS?

Elephants grow trees, shrubs, plants, grass and also develop micro-habitats



Carbon stocks of forests

- Mg C/ha
- Tons of C/ha



The carbon stock refers to the amount of carbon stored in forests in the form of biomass, soil, deadwood and litter.

More the carbon stock, the higher would be the forest's capacity to absorb and sequester carbon dioxide (CO₂), the main harmful greenhouse gas in the atmosphere, through photosynthesis

How much is one forest elephant worth?

The carbon value of a single forest elephant is \$1.75 million

Major threats
Poaching
 Centuries are required for forest elephants to recover to their historic population level of **1.1 million** from their current population of **100,000**

Elephant Biomass Carbon
 The amount of carbon on each elephant is equivalent to **2.64 metric tons** of carbon dioxide

2.64 TONNES

Elephant Forestry Increase
 Each forest elephant can stimulate a net increase in carbon capture in central African rainforests of **9,000 metric tons** of carbon dioxide per km²

Major threats
Deforestation
 Deforestation in Africa is happening **4x** faster than the global rate, resulting in an average loss roughly of **40,000** square kilometers per year

Source: African Wildlife Foundation 2015

GRID-Arendal 2020

Carbon stocks in central African forests enhanced by elephant disturbance

[Fabio Berzaghi](#) , [Marcos Longo](#), [Philippe Ciais](#), [Stephen Blake](#), [François Bretagnolle](#), [Simone Vieira](#), [Marcos Scaranello](#), [Giuseppe Scarascia-Mugnozza](#) & [Christopher E. Doughty](#)

[Nature Geoscience](#) **12**, 725–729 (2019) | [Cite this article](#)

Abstract

Large herbivores, such as elephants, can have important effects on ecosystems and biogeochemical cycles. Yet, the influence of elephants on the structure, productivity and carbon stocks in Africa's rainforests remain largely unknown. Here, we quantify those effects by incorporating elephant disturbance in the Ecosystem Demography model, and verify the modelled effects by comparing them with forest inventory data from two lowland primary forests in Africa. We find that the reduction of forest stem density due to the presence of elephants leads to changes in the competition for light, water and space among trees. These changes favour the emergence of fewer and larger trees with higher wood density. Such a shift in African's rainforest structure and species composition increases the long-term equilibrium of aboveground biomass. The shift also reduces the forest net primary productivity, given the trade-off between productivity and wood density. At a typical density of 0.5 to 1 animals per km², elephant disturbances increase aboveground biomass by 26–60 t ha⁻¹. Conversely, the extinction of forest elephants would result in a 7% decrease in the aboveground biomass in central African rainforests. These modelled results are confirmed by field inventory data. We speculate that the presence of forest elephants may have shaped the structure of Africa's rainforests, which probably plays an important role in differentiating them from Amazonian rainforests.

Section 4

***The solution to the problem:
"Permanent rehabilitation of
the captive elephants in a
sanctuary"***

***Follows: Photos of captive elephant
rehabilitation sanctuary "Elephant
Care Facility (ECF)" run by Karnataka
Forest Department and the NGO
"Wildlife Rescue and Rehabilitation
Centre" (WRRC) in Kolar, Karnataka.***

***The ECF mimics the natural habitat of
the elephants***







**A short compilation of facts on
Why elephants should NOT be kept in captivity?
and
Solution to the captive elephants' problems**

Elsa Foundation

Animal & Biodiversity Charity