

1: The Living Elephants - Raman Sukumar - Oxford University Press

The Living Elephants Evolutionary Ecology, Behaviour, and Conservation Raman Sukumar. This book pulls together the available information on both Indian and African elephants, synthesizing the biology, ecology, behavior, evolution, and conservation of elephants and covering the history of human interactions with elephants.

Elephas Proboscidea phylogeny based on Shoshani Only when Elephas disappeared from Africa did Loxodonta become dominant once again, this time in the form of the modern species. Elephas diversified into new species in Asia, such as E. The skull grew larger, especially the cranium, while the neck shortened to provide better support for the skull. The increase in size led to the development and elongation of the mobile trunk to provide reach. The number of premolars, incisors and canines decreased. Only in the last million years or so did they return to a diet mainly consisting of C3 trees and shrubs. Some proboscideans developed tusks from their lower incisors. Some DNA studies suggest Mammuthus is more closely related to the former [54] [55] while others point to the latter. Dwarf elephant Skeleton of a Cretan dwarf elephant Several species of proboscideans lived on islands and experienced insular dwarfism. This occurred primarily during the Pleistocene when some elephant populations became isolated by fluctuating sea levels, although dwarf elephants did exist earlier in the Pliocene. These elephants likely grew smaller on islands due to a lack of large or viable predator populations and limited resources. By contrast, small mammals such as rodents develop gigantism in these conditions. Dwarf proboscideans are known to have lived in Indonesia, the Channel Islands of California, and several islands of the Mediterranean. Other descendants of the straight-tusked elephant existed in Cyprus. Dwarf elephants of uncertain descent lived in Crete, Cyclades, and Dodecanese while dwarf mammoths are known to have lived in Sardinia. This species reached a height of 1. The average male African bush elephant is 3. Asian elephants are smaller, with males being 2. African forest elephants are the smallest extant species, on average being 2. African elephants have 21 pairs of ribs, while Asian elephants have 19 or 20 pairs. The back of the skull is flattened and spread out, creating arches that protect the brain in every direction. These cavities give the inside of the skull a honeycomb-like appearance. The cranium is particularly large and provides enough room for the attachment of muscles to support the entire head. The lower jaw is solid and heavy. A durable nictitating membrane protects the eye globe. Like all mammals, an elephant can raise or lower its temperature a few degrees from the average in response to extreme environmental conditions. The ear flaps, or pinnae, contain numerous blood vessels called capillaries. Warm blood flows into the capillaries, helping to release excess body heat into the environment. This occurs when the pinnae are still, and the animal can enhance the effect by flapping them. Larger ear surfaces contain more capillaries, and more heat can be released. Of all the elephants, African bush elephants live in the hottest climates, and have the largest ear flaps. It contains up to, separate muscle fascicles, with no bone and little fat. These paired muscles consist of two major types: The former are divided into dorsals, ventrals, and laterals while the latter are divided into transverse and radiating muscles. The muscles of the trunk connect to a bony opening in the skull. The nasal septum is composed of tiny muscle units that stretch horizontally between the nostrils. Cartilage divides the nostrils at the base. The muscles work both with and against each other. A unique proboscis nerve—formed by the maxillary and facial nerves—runs along both sides of the trunk. The Asian elephant has only one, and relies more on wrapping around a food item and squeezing it into its mouth. One elephant has been observed to graze by kneeling on its front legs, raising on its hind legs and taking in grass with its lips. Unlike most mammals, which grow baby teeth and then replace them with a single permanent set of adult teeth, elephants are polyphyodonts that have cycles of tooth rotation throughout their lives. Teeth are not replaced by new ones emerging from the jaws vertically as in most mammals. Instead, new teeth grow in at the back of the mouth and move forward to push out the old ones. The first chewing tooth on each side of the jaw falls out when the elephant is two to three years old. The second set of chewing teeth falls out at four to six years old. The third set falls out at 9–15 years of age, and set four lasts until 18–28 years of age. The fifth set of teeth falls out at the early 40s. The sixth and usually final set must last the elephant the rest of its life. Elephant teeth have loop-shaped dental ridges, which are thicker and more diamond-shaped in

African elephants. The tusks of an elephant are modified second incisors in the upper jaw. A newly developed tusk has a smooth enamel cap that eventually wears off. The dentine is known as ivory and its cross-section consists of crisscrossing line patterns, known as "engine turning", which create diamond-shaped areas. As a piece of living tissue, a tusk is relatively soft; it is as hard as the mineral calcite. Much of the tusk can be seen outside; the rest is in a socket in the skull. At least one-third of the tusk contains the pulp and some have nerves stretching to the tip. Thus it would be difficult to remove it without harming the animal. When removed, ivory begins to dry up and crack if not kept cool and moist. Tusks serve multiple purposes. They are used for digging for water, salt, and roots; debarking or marking trees; and for moving trees and branches when clearing a path. When fighting, they are used to attack and defend, and to protect the trunk. The dominant tusk, called the master tusk, is generally more worn down, as it is shorter with a rounder tip. Female Asians have very small tusks, or none at all. Hunting for elephant ivory in Africa [81] and Asia [82] has led to natural selection for shorter tusks [83] [84] and tusklessness. The skin around the mouth, anus.

2: Elephants - The Elephant Sanctuary in Tennessee

Official Website for Living With Elephants Foundation - a non-profit in Botswana that supports Jabu the Elephant and Morula the Elephant. Jabu and Morula are educational ambassadors and teach the world about elephant conservation.

Currently under care are Jabu and Morula, two rescued elephants, saved from culling operations in which they were orphaned. Jabu and Morula cannot yet be released fully to the wild due to their traumatic starts in life and chronic injuries. Doug and Sandi Groves have dedicated nearly 30 years to providing world-class care and refuge to these orphans. The elephants thrive in a loving supportive environment and are provided with specialized care. Jabu and Morula live in expansive natural elephant habitat, which offers freedom for exploration, natural behaviour and wildlife interactions. Morula has a troubled past, and when Doug and Sandi met her at age 17 she was destined to be shot. Female elephants generally stay in the herds they are born into and their relationships with other females are life long. Since the only way to be part of a breeding herd or elephant family is to be born into one, Morula lives and thrives in her unique interspecies herd. Although Morula cannot join a wild herd, the long-term plan is to create a herd, with other orphaned females, to which she can belong. Once established, it is hoped the herd can be safely released together. Morula is a sweet elephant and is sure to steal your heart. Jabu, an orphaned bull elephant, was attacked and injured by a wild bull elephant in a conflict for status. Due to his resulting joint injuries, Jabu requires individualised and innovative veterinary care and therapies. Currently, top international vets are working on stem cell therapy and other cutting-edge options for Jabu to help with his osteo-arthritis and the angulation in his wrist. Follow Jabu on his blog and Instagram to learn more about his progress and his life in the bush. Low volumes of visitors to Sanctuary Retreats are given the rare opportunity to visit Jabu and Morula in the heart of the Okavango Delta. During their walk with the elephants, guests witness private moments as they forage, mud wallow and amble through the bush. This is an intimate and highly educational bush walk where you will learn about the status of the African Elephant, their role in the eco-system and conservation in general. Doug and Sandi are renowned specialists in elephant biology, eco-systems and natural history. Your visit helps support the wellbeing of rescued elephants and conservation overall.

3: Elephant - Wikipedia

The Living Elephants is the authoritative resource for information on both Asian and African elephants. From the ancient origins of the proboscideans to the present-day crisis of the living elephants, this volume synthesizes the behavior, ecology and conservation of elephants, while covering also the history of human interactions with elephants.

Explore more from this episode [More A forest elephant](#). Sprawled across this continent are vast savannahs, seemingly endless deserts, and impenetrable rain forests. Each region is dotted with a unique array of wild animals, from elusive leopards to the delicate, gazelle-like bongo. However, roaming throughout every African ecosystem is one constant: Researchers have determined that the smaller forest elephants, *Loxodonta africana cyclotis*, are a distinct subspecies from their savannah cousins of East Africa, *Loxodonta africana africana*. However, the data suggest that desert elephants are actually savannah elephants who have adapted to the rugged lifestyle of the barren desert. An adult male savannah elephant is the largest land mammal in the world weighs about 12,000 pounds and stands roughly 10 feet tall at the shoulder. The smaller forest elephant weighs 10,000 pounds at most. But while their skin may be durable, elephants still need protection from insects and the hot African sun. Wallowing in a mud bath cools down an elephant as well as provides an extra layer of cover. Regardless of where elephants live, their social behaviors and social structures remain largely the same. Cynthia Moss has dedicated her life to understanding the biology, ecology, and society of the herds that roam the savannahs of Amboseli National Park in Kenya. Here, in the open landscape, biologists can spot a group miles away and approach by car to observe. From their vehicles, Moss and her colleagues in East Africa have unlocked the mysteries of how these enormous animals learn as youngsters, raise their young, survive as adults, and communicate with family members. Elephant females guard the young. An elephant calf is usually born into an extended family, headed by an older female elephant who serves as matriarch. Families are cohesive groups of females and their young. The mother is responsible for providing the newborn with milk. But when it comes to caretaking and protecting babies from predators, the whole herd pitches in. The mother receives help from aunts, sisters, and cousins who serve as nannies. After five years of rearing this young elephant, the mother gives birth to a new infant, weaning the now adolescent calf at the same time. By then, the young elephant weighs nearly a ton and has learned how to forage on available vegetation. Males tend to leave their mothers earlier than females, with young bulls beginning to wander beyond the protective family circle at the early age of six. As a young elephant grows, it learns how to become independent by watching and mimicking others. A calf will begin to experiment with its trunk, using it to grasp grass and other solid food, at about four months of age. [More from The Elephants of Africa 2.](#)

4: The Elephant Men | Living Gods | Nature | PBS

In India, which hosts 60% of the global Asian elephant population, nearly two-thirds of the elephant population lives either close to or within human-dominated landscapes [25] [26].

Loxodonta adaurora fossil, may belong in *Mammuthus* Female bush elephants in Tanzania: Females usually live in herds. Play media video An African elephant at a zoo in Japan Bush and forest elephants were formerly considered subspecies [16] of *Loxodonta africana*. As described in the entry for the forest elephant in the third edition of *Mammal Species of the World MSW3*, [17] there is morphological and genetic evidence that they should be considered as separate species. Note the shorter and wider head of *L.* Much of the evidence cited in *MSW3* is morphological. The African forest elephant has a longer and narrower mandible, rounder ears, a different number of toenails, straighter and downward tusks, and considerably smaller size. With regard to the number of toenails: *MSW3* lists the two forms as full species [1] and does not list any subspecies in its entry for *Loxodonta africana*. It merely assesses the two forms taken together, as vulnerable. Forest elephants were found to have a high degree of genetic diversity, perhaps reflecting periodic fragmentation of their habitat during the climatic changes of the Pleistocene. Each family unit is made up of around ten closely related females and their calves and is led by an older female known as the matriarch. After puberty, male elephants tend to form close alliances with other males. Elephants are at their most fertile between the ages of 25 and 35. The calves are cared for by their mother and other young females in the group, known as allomothers. Elephant mating rituals include the gentle entwining of trunks. Elephant cognition Scratching on a tree helps to remove layers of dead skin and parasites African elephants are highly intelligent, [29] and they have a very large and highly convoluted neocortex, a trait they share with humans, apes and some dolphin species. African elephants show sexual dimorphism in weight and shoulder height by age 20, due to the rapid early growth of males. By age 25, males are double the weight of females; however, both sexes continue to grow throughout their lives. Female African elephants are able to start reproducing at around 10 to 12 years of age, [39] and are in estrus for about 2 to 7 days. They do not mate at a specific time; however, they are less likely to reproduce in times of drought than when water is plentiful. The gestation period of an elephant is 22 months and fertile females usually give birth every 3 to 6 years, so if they live to around 50 years of age, they may produce 7 offspring. Females are a scarce and mobile resource for the males so there is intense competition to gain access to estrous females. Post sexual maturity, males begin to experience musth, a physical and behavioral condition that is characterized by elevated testosterone, aggression and more sexual activity. Males sire few offspring in periods when they are not in musth. During the middle of estrus, female elephants look for males in musth to guard them. The females will yell, in a loud, low way to attract males from far away. Male elephants can also smell the hormones of a female ready for breeding. This leads males to compete with each other to mate, which results in the females mating with older, healthier males. However, females are not guarded in the early and late stages of estrus, which may permit mating by younger males not in musth. Males over the age of 25 compete strongly for females in estrous, and are more successful the larger and more aggressive they are. Male reproductive success is maximal in mid-adulthood and then begins to decline. However, this can depend on the ranking of the male within their group, as higher-ranking males maintain a higher rate of reproduction. Twenty-two long observations showed that age and musth are extremely important factors; "older males had markedly elevated paternity success compared with younger males, suggesting the possibility of sexual selection for longevity in this species. Males usually stay with a female and her herd for about a month before moving on in search for another mate. Less than a third of the population of female elephants will be in estrus at any given time and gestation period of an elephant is long, so it makes more evolutionary sense for a male to search for as many females as possible rather than stay with one group. Elephant mating ritual African elephants mating in Tierpark Berlin The social behavior of elephants in captivity mimics that of those in the wild. Females are kept with other females, in groups, while males tend to be separated from their mothers at a young age, and are kept apart. According to Schulte, in the s, in North America, a few facilities allowed male interaction. Elsewhere, males were only allowed to smell each other.

Males and females were allowed to interact for specific purposes such as breeding. In that event, females were more often moved to the male than the male to the female. Females are more often kept in captivity because they are easier and less expensive to house.

5: Living With Elephants Foundation | Jabu the Elephant | Official Website |

Living With Elephants Foundation, Maun, Botswana. 11K likes. Living With Elephants Foundation is a Botswana based non profit organisation dedicated to.

6: Blog-Living With Elephants Foundation | Jabu the Elephant | Official Website |

The elephants move quietly through the gathering darkness, but Tumisi "Shorty" Tlale can hear them. "Listen," he says, his head cocked to one side as he tries to get a fix on their position. "They're coming." A farmer in the eastern panhandle of Botswana's Okavango Delta, Tlale's.

7: Extinct and Living Elephantsâ€™™ Genomic History Sequenced | The Scientist MagazineÂ®

The Elephant in the Living Room thoughtfully explores proper placement of the line between wild animals and people. But make no mistake, this isn't a scholarly tome. The filmmakers will take you on an emotional journey that will shake you--at times pleasantly and at times not.

8: The Living Elephants: Evolutionary Ecology, Behaviour, and Conservation by Raman Sukumar

The Elephant Sanctuary in Tennessee provides captive elephants a safe haven dedicated to their well-being. Learn more.

9: The Elephant Sanctuary in Tennessee

Living with Elephants Finding ways of preventing this is key to developing a more tolerant relationship between elephants and man. As a pioneer in tracking and GPS technology, STE began by trying to deal with known notorious elephants, changing their habits one at a time.

You and Me ABC (Jordan, Denise. You and Me.) Euro Dim Pre/Ser Lang Teacher (Triangle S.) Tantric Sex for Women Chinas multilateralism and regional order Michael Yahuda Methods of Protein Microcharacterization Farmers Almanac, 1995-95 Copies Part II Resource Papers For richer, for danger Ne and other tales From Bureaucracy to Hyperarchy in Netcentric and Quick Learning Organizations (PB (Research in Public Man Ghosts of James Bay 6. Beyond the party. The spy in question Making good : prisons, punishment and beyond A century of ferns President Wilsons great speeches and other history making documents Profiteering in a Non-profit Industry Understanding quantum physics a users manual vol 1 3.1 Ritual Specialization Day 26 : a virtuous defense Visual basic create ument William H. Brown. The Egg Thief (Muddy Toms Wacky Adventure) 3ds max cloth modifier tutorial Categorical definitions and further usages Health priorities for the older adult Judging in black white Dragons wrath brent roth A summer like turnips Harry potter first edition printing code Community virtues Tool time: iPhones tools for organizing your life Connecting the interior and exterior Transformative collaborations : professionals and minority community power Andrew L. Barlow Visions of innocence Pt. 1. Introduction to chronic pain The Black Image in the White Mind Visiting Miss Pierce Order in music offers harmony in life Lewis Eiler. Claims transmitting a copy of the findings of the court in the case of Lewis Eiler against t