

Bull elephants first come into musth – a heightened state of sexuality and aggression – at about 25–30 years old. Learning in advance to judge the strength of an opponent is critical to ensuring that fights do not escalate.



Bulls show sexual interest from an early age, It is hard to measure feelings, but the witness their full spectrum of emotions lives of more than 900 elephants, and

50

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but tend to be unsuccessful as females prefer more mature bulls that have come into musth.

vet from the Kenya Wildlife Service, who had heavily from a spear wound. We watched as a THE YOUNG BULL was thin and bleeding

Buffalo Springs National Reserves in Northern

than 100 million years, we can still relate to understood. But the other female's switch from that suggests compassion and even grief. fear, lust and love and, occasionally, behaviour their emotions. We empathise with their anger common ancestor with elephants for more state of mind. Though we have not shared a attack to compassion indicated a more complex But how real are our perceptions? At the Save

the ground with a savage blow. Yet before he hit the dirt, she leaned over him and cushioned his to keep him upright. But then, as his legs gave from anger to something more tender. head with her trunk - a lightning transition way, a closely related female knocked him to His mother slid her tusks under him and tried influence, his family rushed to his aid, agitated dart. When the bull staggered under the drug's The matriarch's defence of her son was easily

the Elephants' research centre in Samburu and

each elephant saw Upepo, a young family (we name female from the Winds and its family),

researchers to record the intimate daily Kenya, we work with local field

suddenly

more complex they appear. more we watch the elephants interacting, the

and flight, a balance of anger and fear. this duality suggests a conflict between fight with its head and tail held high. Everything in this manner may suddenly turn and run away ears and charge. Yet an elephant displaying in trumpet and roar, shake their heads, flap their an extremely effective threat display. They Over millions of years, elephants have evolved ANGER AND FEAR

irritated by proximity, may attack other females high emotions, but elephants also show anger sometimes completely unprovoked. We once and fear towards each other. Females, possibly Humans are most often the cause of such the Native Americans – and knock it over. The rest of the Winds, led by matriarch relentlessly, by Mohican. lash out at a calf from a neighbouring herd -

Rommel did not seem to register the jagged Luckily, the researchers were in the front. his tusks slashing through the back seat. then jabbed upwards through the underside thrust his tusks under their vehicle and flipped it onto its side, pounding it with his tusks. He caught sight of our researchers watching from named Rommel. Enraged at losing, Rommel two of our researchers. A resident bull, Abe towards each other and, in the breeding season Lincoln, was overpowering a male we later these combats left an indelible impression on fights can last for hours or even days. One of a car nearby and vented his fury on them. He Bulls can exhibit a more sustained anger

of our researchers watching vented his fury on them. from a car nearby and

they made off, they were pursued slowly, but replaced by fear on the part of her family. As anger shown by Upepo seemed to be swiftly American matriarch, Mohican, retaliated. The Harmattan, acted as if they were all 'guilty' and moved away rapidly before the Native

> definitely have been killed. towards the front cabin. Luckily, Abe crushed, he flipped it back upright and strode Abe's return, the researchers would almost reappeared and chased his foe away. But for smeared over the car. When the vehicle was metal that ripped his skin, nor his blood

and when is it simply a mock charge? And why do elephants sometimes spare their foes, but at closely associated with lust that, for male elephants, aggression is often other times annihilate them, pounding their anger. For example, when is an attack serious bodies into the dust? One thing we do know is We are far from understanding elephant

to the Uaso Nyiro river to mate and socialise elephants' year. They descend in their hundreds drumroll announcing the highlight of the The thunder at the start of the wet season is a

condition called musth-or 'musth-lust' as we adversaries to fight. As elephant scientist Joyce Poole says, "when a bull is in musth, he must!" Utterly single-minded, a musth bull marches around looking for females to mate with or pungent secretion oozes from his swollen through his body, his neck muscles ripple, a readiness to mate. As testosterone courses and utters a distinctive rumble to advertise his call it. A bull in musth exudes a strong scent emples and urine streams down his back legs At this time, mature bulls enter a breeding

HOW TO TRACK ELEPHANTS

choices, protected areas can be better managed to meet the elephants' needs and founded Save the Elephants in 1993. By tracking their movements and lain Douglas-Hamilton has pioneered live-tracking technology since the 1960s



onto his side to ease his breathing. his chest, so the team quickly pull him over dart. This bull, Esidai, has gone down on FITTING A COLLAR To fit a radio collar, the elephant must first be tranquilized with a

The radio-tracking records (red lines) show the THE STORY OF MOUNTAIN BULL

adventurous night-time 'streak' of Mountain Bull



that send hourly updates on an elephant's position through the cell phone network. radio-tracking technology, from old radio-link collars to the latest GSM collars ects 10 years of





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surrounded the corpse. One the dead animal's ear. Silently absorbed, they young bull gently pulled at

Being in musth requires a lot of energy, so bulls need to build up their strength. Just after the rains, there's plenty of food and huge show that he's no threat by striking a casual likely he is to come into musth at this optimum time. A musth bull is often an angry bull, but just one example of the close ties of kinship and protectiveness that exist within a family a large bull attempts to mate with her small, approaching potential mates, he is careful to to find females in oestrus. But when aggregations of females around that are easy to find. The bigger and older a bull, the more possibly underage daughter. This concern is Sometimes a mother may try to intervene if pose with his trunk slung over one tusk. mate, and follows trails of hormone-laced urine present to avoid scaring them. He wants to his aggression is tempered when females are which leads us on to love.

LOVE AND JEALOUSY

him any serious harm. protective, guarding her daughter against all dangers and reassuring her with touch. But rounded on him, attacking violently enough to protect her new calf and teach her elder son a attention for six years. Now, he constantly tried to push the baby away. Eventually, Harmattan newborn. Harmattan had lost her last calf and so Buster had enjoyed his mother's undivided Buster, her older son, appeared jealous of the matriarch of the Winds, demonstrated this lesson he wouldn't forget, but without doing when she gave birth to Breeze. She was always love of a mother for her baby. Harmattan The strongest bond in elephant society is the

danger to protect other members of their family, with the matriarch making a stand Elephants will also expose themselves to

close in around her, each reaching out its trunk to touch and reassure her, emitting thunderous

bellows, summoning all of her kin, and they most striking reactions. The waking animal

growls and loud trumpets to express their

concern and solidarity.

GRIEF AND MOURNING to pay attention to their dead. We Elephants have long been known

Colombine of the Flowers family observed this behaviour when But it's when the prone elephant is resuscitated that the Royal family exhibit their

scattering them over a distance

off the targeted animal to keep our team safe. the other's defence. We have to quickly screen collaring a delicate operation, as each rushes to assistance makes darting them for radiotogether like glue. The strong bond of mutual years of tracking data, we've found that two adult females, Cleopatra and Anastasia, stick close bonds of affection are most obvious. From one of the more dominant families, that the while her kin escape. It is among the Royals,



dropped dead by a riverbank from unknown picking up and tasting her bones, then visited her skeleton, touching, smelling, ear. Several months later, other elephants at the end, one young bull gently tugged at her the corpse, none daring to touch it until, right investigate. Silently absorbed, they surrounded and confused. Then another family - the Royals causes. Her calves stayed by her body, silent - arrived and, one by one, came over to

her own, her trunk swollen and dragging on the ground. When she collapsed at dusk, Grace, left and darkness had fallen. to raise Eleanor until long after the Virtues had over again. Grace bellowed and kept on trying elephant to her feet. Eleanor teetered and fell her trunk and foot (left), and lifted the dying the matriarch of an unrelated family, the the First Ladies, Eleanor, staggering around on indication of stress. She touched Eleanor with streaming temporal gland secretion, an Virtues, approached with her tail held high and A few years ago, we found the matriarch of

elephants arrived, the Biblical Towns. They then sniffed, touched and tasted the tip. She removed Eleanor's tusks to keep them from straddled it, rocking to and fro. Later, rangers nudged the body, stepped over and then who was now dead, pulled out her trunk and Hawaiian Islands family approached Eleanor, The next day, others came. Maui from the

> pushed away. Unweaned, it later died. body even after the rest of its family had been to suckle. The infant remained by its mother's six-month-old calf nuzzled the corpse, trying stood with Eleanor for a long time as her

this same behaviour towards dead strangers. be more than mere curiosity. Compassion is question of kinship, as elephants also display often enough to know that it is not only a certainly evident. We have seen this interest ailing and pay attention to the dead seems to The compulsion of elephants to help the

SELF-AWARENESS

of social complexity. that, along with humans, great apes and some In recent experiments, elephants were able to long-lived, contemplative creatures, with recognise themselves in a mirror. This suggests powerful memories, that exhibit a high degree cetaceans, they have self-awareness. They are

or 'grieving', it seems that they may have a the purpose in their long-distance movements and their rich repertoire of emotions, including have the mental tools for a stream of reflective sense of their own mortality. This, along with consciousness not unlike our own. empathy, would suggest that elephants may When we see elephants fascinated by bones



coming soon to BBC1. Check Radio Times for details. The Secret Life of Elephants is

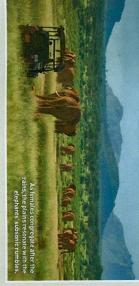


SAMBURU: ELEPHANT HEAVEN

is an elephant paradise - and more. Samburu National Reserve in Kenya

out their full range of emotions without fear amid a east to west. It is a place where elephants can still play river that winds through sculpted hills running from panoply of East African mammals, birds and reptiles 104km² are dominated by the mud-brown Uaso Nyiro RINGED BY tall acacias and doum palms, Samburu's

from Grant's gazelles and cheetahs to Nile crocodiles. education and health throughout the district. earns important revenue that helps to finance The reserve is owned by the local people and



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53