



Statement on the Separation of Captive Born Elephant Calves from their Mothers

Captive born elephants are frequently separated at a young age from their mothers for management reasons. This practice is highly traumatic both for the calf and the mother and has significant neurological and behavioural implications.

Young elephants are dependent on mother-infant interactions for developing basic social skills and ecological knowledge. Disruptions to this relationship can lead to compromised neural and behavioural development and atypical behaviour. In elephants, mothers and allomothers constitute the formative developmental circle for infant care and the creation of social relationships that persist through life. However, these fundamentals are routinely disrupted in captivity.

For the following reasons, based on fact and science, we at ESAI oppose the separation of captive-born elephant calves from their mothers.

Elephants are extremely intelligent and highly social animals.

Scientific research has shown that elephants display complex cognitive capabilities¹, great intelligence², sentience³, and empathy⁴. Elephants are also self-aware⁵. They have a highly organized social structure involving strong family bonds that can last a lifetime.^{6,7} These highly regarded qualities are in conflict with the inadequate physical and social conditions found in captive environments, resulting in compromised welfare.

¹ Byrne R.W., Bates L.A. & Moss C.J. 2009. Elephant cognition in primate perspective. *Comparative Cognition & Behaviour Reviews* 4:65-70. doi: 10.3819/ccbr.2009.40009

² Poole J. & Moss C. 2008. Elephant Sociality and complexity In: *Elephants and Ethics*. Wemmer C. & Christen C.A. (Eds) Johns Hopkins University Press, Baltimore. pp 69-98.

³ Blattner C.E. 2019. The Recognition of Animal Sentience by the Law. *Journal of Animal ethics* 9(2) : 121-136 <https://www.jstor.org/stable/10.5406/janimaethics.9.2.0121>

⁴ Bates L.A., Lee P.C., Njiraini N., Poole J. H., Sayialel K., Sayialel S., Moss C. J. & Byrne R.W. 2008. Do Elephants Show Empathy? *Journal of consciousness Studies* 15(10-11):204-225

⁵ Plotnik J.M., de Waal F. & Reiss D. Self-recognition in an Asian elephant. *PNAS* 13. www.pnas.org/cgi/doi/10.1073/pnas.0608062103

⁶ Sukumar R. 2003. *The Living Elephants*. Oxford University Press.

⁷ Wittemeyr G., Douglas-Hamilton I. & Getz W. M. 2005. The sociology of elephants: analyses of the processes creating multitiered social structures. *Animal Behaviour* 69:1357-1371.

Female elephants' social relationships are strong and lasting.

Elephants live in a matriarchal society with the mother-offspring bond at the core.⁸ Females stay with their natal herd and mother for the entirety of their lives.^{9,10,11,12} These bonds are crucial for the upbringing of a young elephant who has much to learn, including what to eat; how to make tools¹³; vocal¹⁴, tactile, and olfactory communications¹⁵; social abilities and how to behave in elephant society; mothering and allomothering skills¹⁶, and much more. In captivity, the mother-daughter bond is most often broken by forced separation (versus death of the mother). The strength and importance of that bond is evident if they ever happen to be reunited. In 2020, a mother and daughter were reunited at a German zoo after being separated for 12 years. Video of the event shows that the two elephants remembered and remained bonded to one another.¹⁷ It is not only female offspring that require this bond: Male calves naturally remain with their mother and family until adolescence and separate from them only gradually.¹⁸

Mother-daughter bonds are vital for assisting a young future mother when she has her own calf. Grandmothers play an important role in elephant society, helping care for the calf and teaching the young mother necessary skills.¹⁹ Additionally, juvenile females engage in allomothering, in which they care for calves and gain experience that prepares them for rearing their own offspring. Lee and Moss suggest that without the experience of allomothering, first-time mothers would be “disastrously unprepared, as seen in zoo elephants.”²⁰ This implies that a mother-daughter-family bond should never at any stage of

⁸ Moss C. 1988. *Elephant Memories: Thirteen years in the life of an elephant*. Elm Tee Books, London.

⁹ Poole J. 1996. *Coming of Age with Elephants*. Hodder & Stroughton GB

¹⁰ *Ibid.*, Moss

¹¹ Wittemeyer G., Douglas-Hamilton I. & Getz W. M. 2005. The sociology of elephants: analyses of the processes creating multitiered social structures. *Animal Behaviour* 69:1357-1371.

¹² *Ibid.*, Sukumar

¹³ Kurt F. & Garaï M.E. 2007. *The Asian Elephant in Captivity*. Foundation Books. Cambridge University Press India Pty. Ltd.

¹⁴ McComb K., Reby D., Baker L., Moss C. & Sayialel S. 2003. Long-distance communication of acoustic cues to social identity in African elephants. *Animal Behaviour* 65:317–329.

doi:10.1006/anbe.2003.2047, available online at <http://www.sciencedirect.com>

¹⁵ <https://elephantvoices.org/elephant-communication/chemical-communication.html>

¹⁶ Vidya T. N. C. 2013. Novel behaviour shown by Asian elephant in the context of allomothering. *acta ethol* DOI 10.1007/s10211-013-0168-y

¹⁷ <https://www.dailymail.co.uk/news/article-8658913/Adorable-moment-elephant-touches-trunks-daughter-German-zoo-12-years-separation.html>
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¹⁸ Poole, J.H. and Moss, C. J. “Elephant Sociality and Complexity,” in *Elephants and Ethics: Toward a Morality of Coexistence*, ed. Cristen Wemmer and Catherine A. Christen (Baltimore: Johns Hopkins University Press, 2008), 71.

¹⁹ Lahdenperä M., Mar K U. & Lummaa V. 2016. Nearby grandmother enhances calf survival and reproduction in Asian elephants. *Scientific Reports* 6:27213. DOI: 10.1038/srep27213

²⁰ Lee, P.C. and Moss, C.J. “Calf Development and Maternal Rearing Strategies,” in *The Amboseli Elephants: A Long-Term Perspective on a Long-Lived Mammal*, ed. Cynthia J. Moss et al. (Chicago: University of Chicago Press, 2011) 235-236.

their life be broken through human intervention. Clearly, it cannot be considered humane to separate an elephant calf from her mother.

The mother-offspring bond is vital to neurological and psychological development.

Developmental psychology and neurosciences have concluded: In people, infant-mother relationships are formative structures that shape the regulatory processes of developing offspring.²¹ This means that how an infant learns to perceive and respond to changing conditions in the environment—how to develop and regulate appropriate stress responses—is contingent on attachment quality. Due to the striking similarities in mother-child relationships between humans and elephants, and widely comparative neurobiological anatomy across highly developed mammals, these findings are likely applicable to elephant mother-infant relationships as well.

Separation of young calves from their mothers causes intense trauma.

The disruption of social bonds in wild-living or captive-held elephants is physically and psychologically traumatic for calves, their mothers, and remaining family members, and the negative effects can be severe and lifelong.²² This direct compromise can have a lasting effect on the brain and behaviour, creating vulnerability for later disorders.²³

Conclusion

The sustained presence of a mother is vital for young elephant development of both genders, as well as later in life for her female offspring. Managers should desist from disrupting social processes and structures by separating mother and offspring. Mothers and daughters should be allowed to remain together for life. The consequences of social disruption are long term and immense.

²¹ Schore A.N. 1994. *Affect Regulation and Origin of the Self: The Neurobiology of Emotional Development*. Erlbaum, Mahwah NJ.

²² Bradshaw G.A. & Shore A. N. 2006. How elephants are opening doors: Developmental neuroethology, attachment and social context. *Ethology* 113:426-436. doi: 10.1111/j.1439-0310.2007.01333.x

²³ Bradshaw G.A., Shore A. N., Brown, J.L., Poole, J.H., Moss, C.J. 2005. Elephant breakdown. Social trauma: early disruption of attachment can affect the physiology, behaviour and culture of animals and humans over generations. *Nature*, 433: 807.