

# A new social learning among male Asian elephants

## *Case study from northwest India*

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Adolescent male elephant (with tusks) in Rajaji National Park

**E**LEPHANTS are crucial for maintaining forest ecosystems. There are two distinct types of elephants: the African elephant (*Loxodonta*) and the Asian elephant (*Elephas*). The only living species of Asian elephant, *Elephas maximus*, is found across Asia, from the Indian subcontinent to Southeast Asia. This species is listed as Endangered on the IUCN Red List of Threatened Species. The social structure of elephants is matriarchal, meaning the oldest female typically leads the group. Unlike the females, male elephants start a solitary life as adolescents, dispersing from their natal matriarchal family between the ages of 10 and 15 years. Male elephants leave their natal family units when they are on the threshold of sexual maturity and wander on their own or seek the company of other male elephants. The evolutionary reason for the male's departure from their family may be to avoid inbreeding, and genetic research has shown that males do avoid breeding with close maternal and even paternal female relatives (*Elephant Voices* 2022). According to Raman Sukumar's (renowned Indian ecologist) study, male elephants do not show interest in caring for infants because they cannot recognise their own offspring. During adolescence, they learn how to live a solitary life, physical and social environment, and develop strategies for

new challenges. They also follow with other sub-adult and adult males, which teaches them about their natural ranges.

It was once widely believed that male elephants lived mostly solitary lives after they left their family groups. While studies of African elephants have shown that males also form long-term social groups, this behaviour hasn't been extensively studied in Asian elephants. Older male elephants play an important role in leading all-male groups consisting of sub-adult and adult male elephants, which reflects on a dynamic hierarchical behaviour to some extent and developments in evolutionary strategy.

Unlike female elephants, male Asian elephants travel over large ranges, covering longer distances. This extensive movement allows them to interact with other individuals and gives them new experiences and challenges. According to a study by Poole & Granli, elephants have developed specialised physical and behavioural adaptations that allow them to cover vast distances to fulfill their ecological, social, and reproductive requirements.

In our study, which has been published in the '*Mammalogy Notes*' journal, we observed the behaviour of male Asian elephants during their adolescence stage as well as their social integration in an all-male group. The study area