

Fun Facts Friday: How Elephants Avoid Inbreeding

Male elephants leave the family herd during adolescence, but they travel widely and may encounter natal family members again, so avoiding inbreeding likely involves more than dispersal alone.

A young male knows his maternal family because he grows up with them. He learns their scent, calls, and social identities over years of close contact, and that familiarity likely helps reduce mating with mothers, sisters, and other female kin.

In a wild African elephant study in Amboseli National Park, Kenya, males exhibited fewer sexual behaviors and sired fewer calves with close genetic relatives, including non-natal kin such as paternal half-sisters in other families, suggesting that elephants may be able to identify relatives beyond those they simply grow up with.

One explanation for how elephants might recognize unfamiliar relatives is phenotype matching, the idea that an elephant may use traits learned from known family members, such as scent or vocal qualities, to help assess whether an unfamiliar individual could be kin. This has been proposed as a possible explanation, but has not been demonstrated directly.

Sources

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Moore, J. (2007). *Phenotype matching and inbreeding avoidance in African elephants*. *Molecular Ecology*, 16(20), 4156–4157.

Photo: A mature bull with a female herd in Amboseli.

