

Hunting Behaviour in Chimpanzees

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Why Hunt?

Chimpanzees are not obligate hunters (Watts and Mitani, 2015). With this being said it is harder to classify why chimpanzees hunt, coupled with the fact that many different communities of chimpanzees demonstrate different hunting behaviours.

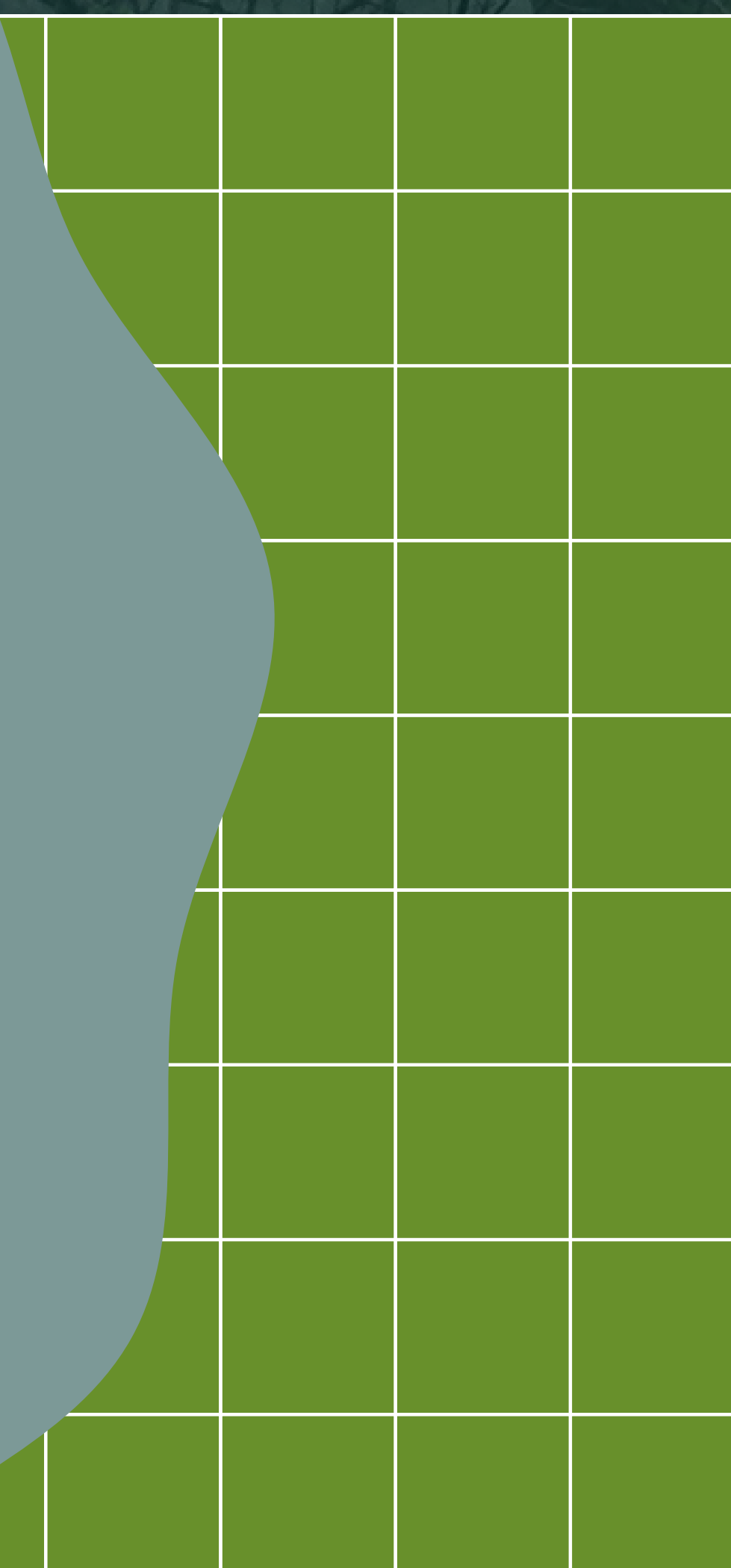


General Hypotheses

1. Hunting correlates to reproductive benefits in which males hunt to gain access to mates (Mitani & Watts, 2001).
2. Males use the meat from hunting as a social tool to form coalitionary bonds with other males (Mitani & Watts, 2001).
3. The nutritional shortfall hypothesis and the nutritional surplus hypothesis which correlates to times of reduced or increased caloric intake (Klein et al., 2021).

Influences on Hunting

- Overall hunting party size
- Number of adult males
- Seasonality of hunts
- Types of prey available (Watts and Mitani, 2015 & Mitani and Watts, 1999)
 - Red columbus monkeys are the preferred prey choice (Stern & Goldstone, 2005)
- Canopy structure (Watts and Mitani, 2002 & Boesch, 2002)
 - Broken canopies allow chimpanzees to catch prey easier
- Learning how to hunt (Boesch, 2002)
 - upwards of 10 to 20 years of practice
- Social and Cultural differences (Hobaiter et al., 2017)



Meat Sharing

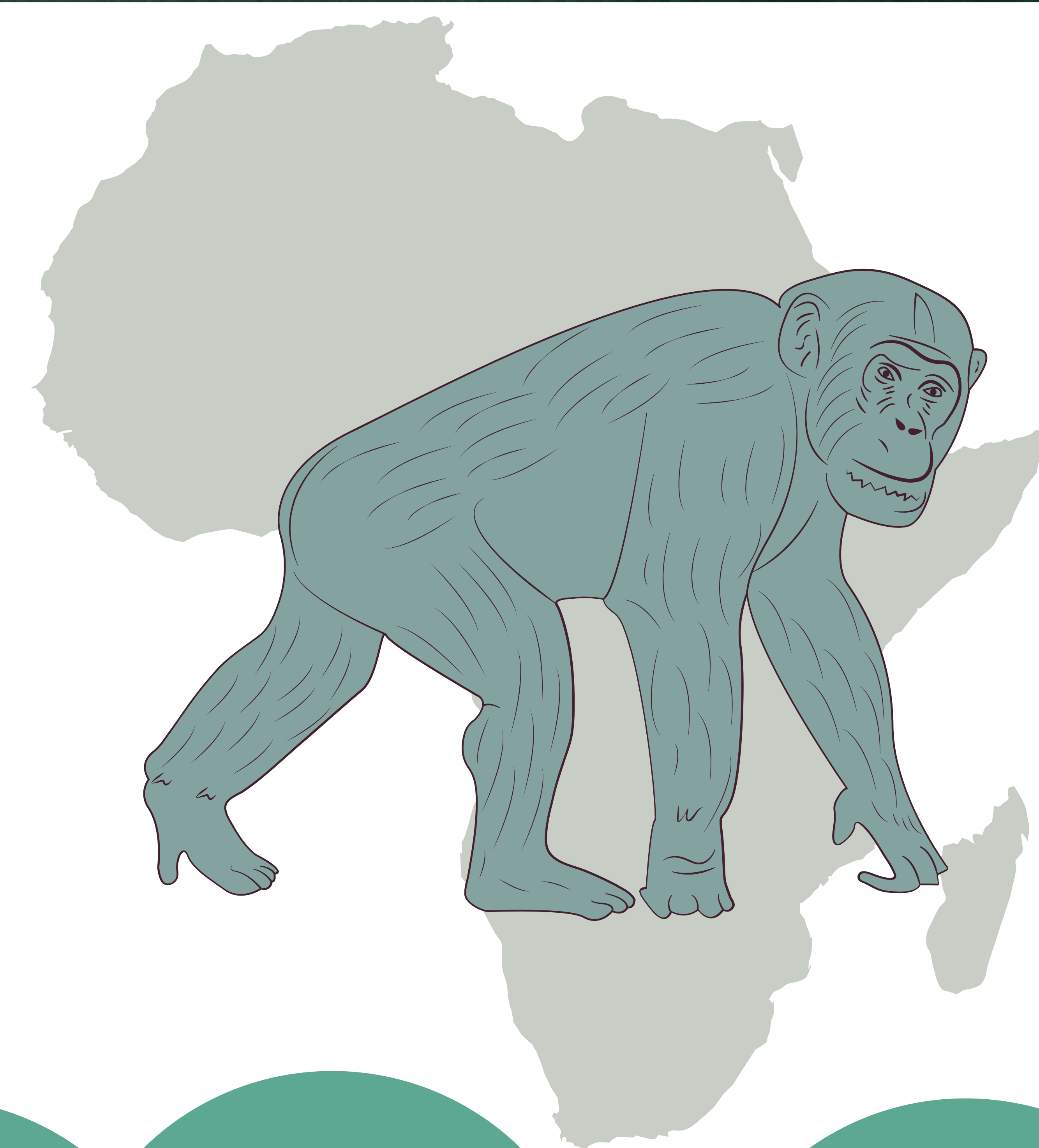
Acquisition of meat is influenced by three main factors:

- Hunting skill
- Meat sharing
- Theft

All of these factors ultimately correlate with the rank of the individual (Mitani and Watts, 1999).

Meat Sharing is influenced by three social factors (Hobaiter et al., 2002):

- Harassment levels
- Theft
- Presence of oestrus females



How Do Chimpanzees Hunt?

Hunting Patrols (Mitani and Watts, 1999 & Watts and Mitani, 2002)

- Scan of the territory prior to the hunt
- Can last upwards of several hours
- Hunting calls can be used

Roles of the Hunt (Boesch, 2002)

- Chimpanzees are able to switch roles
 - Chaser
 - Driver
 - Ambusher
 - Blocker

Group Hunting

Chimpanzees in the wild most frequently hunt in groups, however solitary hunting has been observed in some groups and as well as captivity (Videan et al., 2007)



Hunts can last anywhere from a few minutes to hours (Mitani and Watts, 1999).

Tool use has been observed in one community of Chimpanzees (Pruetz et al., 2015).



References

- Boesch, C. (2002). Cooperative hunting roles among Tai chimpanzees. *Human Nature*, 13(1), 27–46. <https://doi.org/10.1007/s12110-002-1013-6>
- Hobaiter, C., Samuni, L., Mullins, C., Akankwasa, W. J., & Zuberbühler, K. (2017). Variation in hunting behaviour in neighbouring chimpanzee communities in the Budongo forest, Uganda. *PLOS ONE*, 12(6), e0178065. <https://doi.org/10.1371/journal.pone.0178065>
- Klein, H., Bocksberger, G., Baas, P., Bunel, S., Théleste, E., Pika, S., & Deschner, T. (2021). Hunting of mammals by central chimpanzees (*Pan troglodytes troglodytes*) in the Loango National Park, Gabon. *Primates*, 62(2), 267–278. <https://doi.org/10.1007/s10329-020-00885-4>
- Mitani, J. C., & Watts, D. P. (1999). Demographic influences on the hunting behavior of chimpanzees. *American Journal of Physical Anthropology*, 109(4), 439–454. [https://doi.org/10.1002/\(SICI\)1096-8644\(199908\)109:4<439::AID-AJPA2>3.0.CO;2-3](https://doi.org/10.1002/(SICI)1096-8644(199908)109:4<439::AID-AJPA2>3.0.CO;2-3)
- Mitani, J. C., & Watts, D. P. (2001). Why do chimpanzees hunt and share meat? *Animal Behaviour*, 61(5), 915–924. <https://doi.org/10.1006/anbe.2000.1681>
- Pruetz, J. D., Bertolani, P., Ontl, K. B., Lindshield, S., Shelley, M., & Wessling, E. G. (2015). New evidence on the tool-assisted hunting exhibited by chimpanzees (*Pan troglodytes verus*) in a Savannah habitat at Fongoli, Senegal. *Royal Society Open Science*, 2(4), 140507. <https://doi.org/10.1098/rsos.140507>
- Stern, M., & Goldstone, R. (2005). Red colobus as prey: The leaping habits of five sympatric old world monkeys. *Folia Primatologica*, 76(2), 100–112. <https://doi.org/10.1159/000083616>
- Videan, E. N., Fritz, J., & Murphy, J. (2007). Hunting and occasional consumption of prey items by chimpanzees at the primate foundation of Arizona. *International Journal of Primatology*, 28(2), 477–481. <https://doi.org/10.1007/s10764-007-9126-8>
- Watts, D. P., & Mitani, J. C. (2002). Hunting behaviour of chimpanzees at Ngogo, Kibale National Park, Uganda. *International Journal of Primatology*, 23(1), 1–28. <https://doi.org/10.1023/A:1013270606320>
- Watts, D. P., & Mitani, J. C. (2015). Hunting and prey switching by chimpanzees (*Pan troglodytes schweinfurthii*) at Ngogo. *International Journal of Primatology*, 36(4), 728–748. <https://doi.org/10.1007/s10764-015-9851-3>