

Active participation in group-hunts earns wild chimpanzees meat access

September 10 2018



Prey catchers shared more frequently with hunters than non-hunters. Credit: Liran Samuni, Tai Chimpanzee Project

Wild chimpanzees of the Tai National Park, Ivory Coast, hunt in groups to catch monkeys. By observing group-hunts and meat sharing, an international team of researchers from the Max Planck Institute for

Evolutionary Anthropology in Leipzig, Germany, found that chimpanzee hunting behavior is a cooperative act that earns participants a fair share of the prey.

"Chimpanzee hunting success increased when more [chimpanzees](#) participated in the hunt or in joint prey searches prior to the start of a hunt", says Liran Samuni of the Max Planck Institute for Evolutionary Anthropology and first author of the study. "The sharing of [meat](#) following successful hunts encouraged hunt participation, as prey catchers shared more frequently with hunters than non-hunters, despite similar begging attempts."

Furthermore, the researchers found that chimpanzee hunting behavior was associated with the activation of oxytocin, a neuro-hormone established as a facilitator of cooperative behavior in humans and other animals. Oxytocin activation during chimpanzee hunting is a potential mechanism facilitating cooperative hunting. "Our new study provides strong support for the cooperative nature of hunting behavior in some [wild chimpanzees](#), likely facilitated by neuroendocrine and behavioral mechanisms", says senior author Roman Wittig.

Like with humans, hunting success is likely motivation and performance dependent, with little guarantee that the effort invested in hunting will pay off. A mechanism in which active hunt participants that did not catch the [prey](#) are still rewarded with meat, a highly valuable food source, supports future cooperation to potentially increase performance.

The sharing of meat ensures a more predictable meat accessibility throughout the year, which could have shaped human brain development and life history traits. If cooperation in [hunting](#) and meat accessibility have shaped humans' life history traits, this study indicates that similar selection pressures may also operate in shaping life history traits in chimpanzees, say the researchers.

More information: Liran Samuni et al, Reward of labor coordination and hunting success in wild chimpanzees, *Communications Biology* (2018). [DOI: 10.1038/s42003-018-0142-3](https://doi.org/10.1038/s42003-018-0142-3)

Provided by Max Planck Society

Citation: Active participation in group-hunts earns wild chimpanzees meat access (2018, September 10) retrieved 19 April 2024 from <https://phys.org/news/2018-09-group-hunts-wild-chimpanzees-meat-access.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.