

Bonobo moms play an active role in helping their sons find a mate

May 20 2019



A young juvenile male bonobo is groomed by his mom in the Kokolopori Bonobo Reserve. Credit: Martin Surbeck

Many social animals share child-rearing duties, but research publishing May 20 in the journal *Current Biology* finds that bonobo moms go the



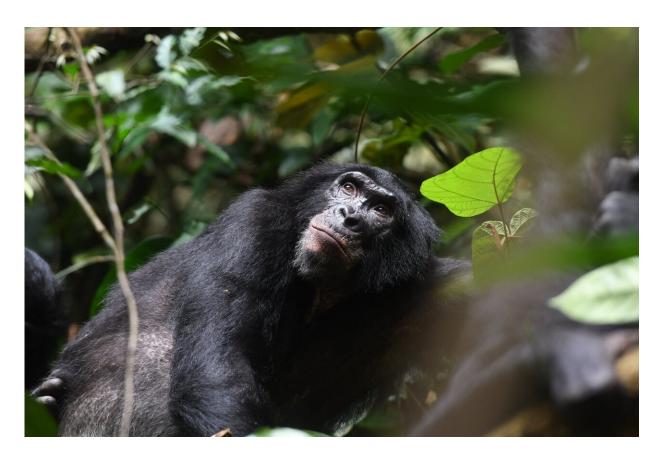
extra step and actually take action to ensure their sons will become fathers. From physically preventing other males from mating to bringing their sons in close proximity to ovulating females, bonobo moms bring new meaning to the notion of being overbearing—but in so doing, they increase their sons' chance of fatherhood three-fold.

"This is the first time that we can show the impact of the mother's presence on a very important male fitness trait, which is their fertility," says Martin Surbeck, a primatologist at the Max Planck Institute for Evolutionary Anthropology. "We were surprised to see that the mothers have such a strong, direct influence on the number of grandchildren they get."

Surbeck and his colleagues observed wild populations of bonobos in the Democratic Republic of Congo, as well as wild populations of chimpanzees in Côte d'Ivoire, Tanzania, and Uganda. They found that while both bonobo and chimpanzee mothers would advocate for their sons in male-on-male conflicts, bonobo moms went the extra mile to aid their sons' copulation efforts. This involved protecting their sons' mating attempts from other males, intervening in other male's mating attempts, and intentionally bringing their sons around fertile females.

The bonobo mothers were also able to use their rank in the bonobo's matriarchal society to give their sons access to popular spots within social groups in the community and help them achieve higher status—and therefore, better mating opportunities. The authors note that these interactions were rare in chimpanzee societies likely because males hold dominant positions over females, making the actions of chimp mothers less influential than those of bonobo mothers.





An adult male bonobo in the Kokolopori Bonobo Reserve Credit: Martin Surbeck

Interestingly, bonobo moms did not extend similar help to their daughters, nor were there any observations of daughters receiving assistance in rearing their offspring. "In bonobo social systems, the daughters disperse from the native community and the sons stay," Surbeck says. "And for the few daughters that stay in the community, which we don't have many examples of, we don't see them receiving any help from their mothers."

Moving forward, Surbeck and his team would like to better understand the benefits these behaviors confer on bonobo mothers. Currently, they think that it allows for an indirect continuation of their genes. "These



females have found a way to increase their <u>reproductive success</u> without having more offspring themselves," he says, noting that the prolongation of the post-reproductive human female lifespan, as well as the early age at which human women can no longer bear children, may have evolved from this indirect method of continuing their genetic line.

Surbeck acknowledges that gathering data on post-reproductive lifespans of females in chimp and bonobo communities will require a long-term, collaborative study, similar to this one. "Without the help and participation from all of the field sites where data were collected, these important interactions could have been overlooked," he says. "Now as the director of a bonobo field site, I'm looking forward to further exploring this topic."

More information: *Current Biology*, Surbeck, M.: "Males with a mother living in their group have higher paternity success in bonobos but not in chimpanzees" www.cell.com/current-biology/f ... www.c

Provided by Cell Press

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