

# Avoiding cheetah hangouts helps ranchers protect calves

December 7 2020, by Christina Larson

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This 2018 photo provided by the Leibniz-IZW Cheetah Research Project shows cheetahs gathering at a tree in central Namibia. New research published on Monday, Dec. 7, 2020, on how cheetahs use the landscape has allowed some ranchers to reduce the number of calves killed annually by 86%, largely by avoiding popular cheetah hangouts. (Leibniz-IZW Cheetah Research Project via AP)

On the dusty savannahs of Namibia, one of the last strongholds of

cheetah populations on Earth, conflicts between cattle ranchers and big cats threaten the survival of the embattled carnivores.

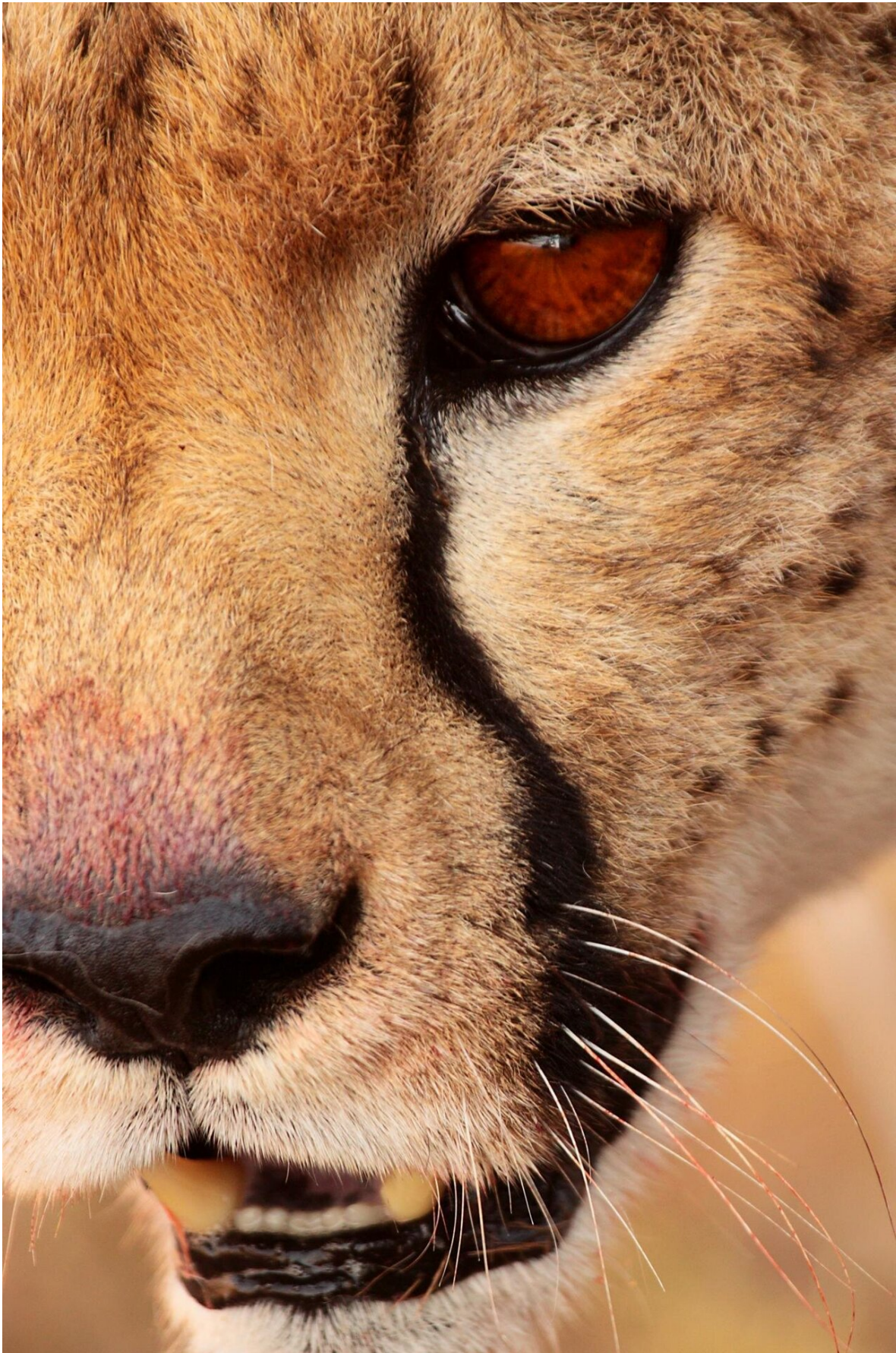
But new research on how cheetahs use the landscape has allowed some ranchers to reduce the number of calves killed annually by 86%, largely by avoiding popular cheetah hangouts.

Cheetahs are the fastest land mammal, capable of speeds [exceeding](#) 60 miles per hour (97 kilometers per hour). But they also hold another distinction: the rarest big cat in Africa, with [fewer](#) than 7,000 alive in the wild.

By following movements of 106 GPS-collared cheetahs from 2007 to 2018, researchers from Germany and Slovenia gleaned new insights into cheetah social structure, which they shared with ranchers.

Unlike most African felines, cheetahs hunt by day, covering vast distances. Some males team up to hunt and defend territories, but other males and all females lead largely solitary lives.

Even a loose-knit society needs a way and place to communicate. Within core areas of their territories, some male cheetahs leave scent marks by urinating or defecating in prominent locations, typically on trees, termite mounds or rocks. Other cheetahs come to these areas to sniff around and learn who's passed by recently, and who may be ready to mate or fight.



This undated photo provided by the Leibniz-IZW Cheetah Research Project in December 2020 shows a cheetah in central Namibia. New research published on Monday, Dec. 7, 2020, on how cheetahs use the landscape has allowed some ranchers to reduce the number of calves killed annually by 86%, largely by avoiding popular cheetah hangouts. (Leibniz-IZW Cheetah Research Project via AP)

"You can think of these landmarks as the most popular bar in town," said Joerg Melzheimer, an ecologist at the Leibniz Institute for Zoo and Wildlife Research, and co-author of a [study](#) published Monday in the Proceedings of the National Academy of Sciences. "It's the main address for all the boys and girls looking for partners to go. It's a communication hub."

And these hubs are enduring. Through interviews with ranchers, Melzheimer learned that some trees marked by cheetahs in his study were also used by cheetahs 80 years ago. "They go back generations and generations," he said.

Using GPS tracking data that recorded locations every 15 minutes, the researchers calculated that cheetah activity around these hubs is about 20 times higher than elsewhere.

"This is an extraordinary data set demanding a huge amount of work and the authors have used state-of-the-art statistical methods to analyze the data thoroughly," said Tim Caro, a biologist at the University of California, Davis, who was not involved in the study.



In this 2019 photo provided by the Leibniz-IZW Cheetah Research Project, a farmer looks over his cattle in central Namibia. New research published on Monday, Dec. 7, 2020, on how cheetahs use the landscape has allowed some ranchers to reduce the number of calves killed annually by 86%, largely by avoiding popular cheetah hangouts. (Jan Zwilling/Leibniz-IZW Cheetah Research Project via AP)

The hub areas are the most dangerous for calves, which are vulnerable to cheetahs during the first six months of their lives.

In 2008, researchers convinced the first rancher to move herds to avoid cheetah hubs during calving season. The team initially wasn't certain whether the big cats would follow the herds, or simply prey more on wildlife such as grazing oryx in and around the hubs. The latter

happened.

As word got out, other ranchers joined the experiment. The scientists collected data on cheetah kills before and after herding routines were changed for six ranches. Other ranchers also changed their routines.



In this 2019 photo provided by the Leibniz-IZW Cheetah Research Project, a cheetah preys on cattle calf in central Namibia. New research published on Monday, Dec. 7, 2020, on how cheetahs use the landscape has allowed some ranchers to reduce the number of calves killed annually by 86%, largely by avoiding popular cheetah hangouts. (Jan Zwilling/Leibniz-IZW Cheetah Research Project via AP)

The average number of calves lost to cheetahs per year went from 15 to two, the researchers found. The trend held for a decade, indicating it wasn't just happenstance.

The study shows cheetahs "are only opportunistically targeting livestock, not selecting them," said Elizabeth Naro, a conservationist at African People & Wildlife, who works on carnivore monitoring in Tanzania and was not involved in the study.



This 2019 photo provided by the Leibniz-IZW Cheetah Research Project shows a cheetah in central Namibia. New research published on Monday, Dec. 7, 2020, on how cheetahs use the landscape has allowed some ranchers to reduce the number of calves killed annually by 86%, largely by avoiding popular cheetah hangouts. (Jan Zwilling/Leibniz-IZW Cheetah Research Project via AP)

"What the authors found is exciting because it shows that cheetahs rely on activity centers, where predation is simply incidental," said Christine Wilkinson, a University of California, Berkeley researcher who studies carnivore conflict in Kenya and was not involved in the study. "The researchers realized the focus should be on 'problem areas,' not 'problem individuals,' for cheetahs."

Keeping calves away from cheetah communication hubs can help mitigate conflict with ranchers, said Vincent Van Der Merwe, a biologist at the Endangered Wildlife Trust's Cheetah Metapopulation project in South Africa.

"This is not a complete solution, because cheetahs still roam a larger landscape," added Van Der Merwe, who was not part of the study. "But it can make a big impact."

**More information:** Joerg Melzheimer et al., "Communication hubs of an asocial cat are the source of a human–carnivore conflict and key to its solution," *PNAS* (2020).

[www.pnas.org/cgi/doi/10.1073/pnas.2002487117](http://www.pnas.org/cgi/doi/10.1073/pnas.2002487117)

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Citation: Avoiding cheetah hangouts helps ranchers protect calves (2020, December 7) retrieved 26 April 2024 from

<https://phys.org/news/2020-12-hotspots-cheetah-key-cheetah-farmer-conflict.html>

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