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## Wild Things

Animals, Conservation

## How killing wolves to protect livestock may backfire

By Sarah Zielinski 12:25pm, March 2, 2016



Lone wolves are more likely to go after goats and other livestock than wolves living in packs, a new study finds.

A couple of years ago, biologists from Washington State University found that killing a wolf to rid a threat to livestock actually increased the chances that cattle or sheep would be killed in the following year. Only eliminating a quarter or more of the wolves in a state resulted in declines in wolves killing livestock.

Ranchers have long killed wolves to protect their animals, but the study's results seemed to show that the practice might not be as productive as they'd like. Now a new study of wolves in the Italian Alps shows why keeping packs together could be a good move for ranchers.

Camille Imbert of the University of Pavia in Italy and colleagues wanted to know why wolves kill livestock instead of wild prey. Sheep or cattle might look like an easy meal to us, but that may not be true for wolves. And even if a goat was easy to catch, that might not be a wolf's sole consideration when looking for something to eat.

The researchers studied a population of wolves in Liguria, in northwest Italy, one of the few European wolf populations that has managed to survive into the 21st century and is now starting to expand its range due to new laws and efforts to restore its habitat. From 2008 to 2013, the team collected 1,457 samples of wolf scat and determined which wolf had left the poop behind and what it had eaten. The scientists also figured out whether or not the wolf had belonged to a pack, which consist of a pair of adults and their offspring.

Wolves that belonged to packs tended to eat <u>more wild boar and roe deer and less goat</u> and other livestock than did single wolves, the researchers report in the March *Biological Conservation*. Lone wolves — either young wolves that are moving to new territory or the former members of a pack that has been broken up (say, when the leaders were killed) — may not know as well what prey is available in an area as the resident pack and may therefore hunt whatever is available, Imbert and her colleagues write. Packs, it seems, can be pickier and go for wild prey when it's available.

Not that a pack of wolves won't hunt livestock. Pack wolves did eat goats and other domestic animals. But it seems at least a little blame can be put on Italian herders, who let goats roam unguarded and free in the mountains. And wolves will readily eat young calves born in open pastures; when birthing is done closer to home, cows tend to be safe from wolves.

To keep livestock from being eaten by wolves, the researchers make a few recommendations: Institute a few more protections for domestic animals. Promote a rich community of wild animals that the wolves can eat. And don't kill wolves and break up packs. "Removal measures do not solve the problem in the long run," they write.

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