

# Giving the Poor a Financial Stake in Preserving, Not Poaching, Endangered Species



People who kill predators don't get much sympathy, and they don't generally deserve any either. But there's an exception: impoverished herders and pastoralists whose animals are being killed by lions, tigers, wolves, or other large carnivores. These people are often caught in a bind: Kill a protected animal and risk fines or imprisonment, or watch their livestock vanish and their families go hungry.

In Sweden, the government has

been trying to ease this dilemma with an innovative strategy that aims to encourage coexistence. It rewards herders as local carnivore populations increase—and a [new study](#) says it works.

In the Arctic regions of northern Scandinavia, the Sámi people, also known as Lapps or Laplanders, live by herding semi-domestic reindeer. But they share the landscape (and often the reindeer) with wolverines—big, bear-like weasels with ferocious

personalities. (Their aggressiveness has made wolverines a popular team mascot, generally among people who have never actually met one.) To defend their livelihood, Sámi herders often end up killing wolverines, which are a protected species.

The usual remedy to reduce that kind of herder-carnivore conflict—and this is true from Wyoming to Nepal to Australia—is for governments or conservation

groups to compensate the herders every time a predator takes one of their animals. But it's a cumbersome process, usually requiring an onsite inspection, and it frequently does not work. Compensation schemes can also create perverse incentives encouraging herders to neglect their animals, in effect allowing them to be killed. These types of compensation programs also "don't seem to increase tolerance for the wildlife in question," said

Adrian Treves, founder of the **Carnivore Coexistence Lab** at the University of Wisconsin-Madison, who was not involved in the new study, "and if you don't increase tolerance for the wildlife, it's difficult to reduce poaching."

So instead of rewarding herders when things go wrong, why not design "Conservation Performance Payments" to reward them when they go right?

That's the approach in Sweden.

Since 2002, herders there have earned extra income every time new wolverines are born in their area. The idea is to give the herders an incentive to keep the wolverine population strong, a disincentive to kill them, and some money to replace any reindeer that the wolverines take.

But given the deep and bitter antagonism toward predators, can that sort of scheme work? The [new study](#) from the Grimsö Wildlife Research Station in

Sweden says yes. Researchers there looked at long-term data from radio-collared wolverines and from a national population monitoring program.

The study, published online in *Conservation Letters*, found that poachers have predictably continued to kill some wolverines. But since the new scheme went into effect, they have killed far fewer females than males. The Sámi are not stupid: Females are of course responsible for giving



birth to wolverine pups, and compensation is based on those births. But the effect on populations has been substantial. While populations had been slowly increasing since Sweden first protected wolverines in 1969, the population began to grow dramatically as a result of the new compensation scheme, up from 57 registered births in 2002 to 125 in 2012.

It's possible that more males ended up being killed because of

differences in behavior between males and females. But the researchers didn't find any evidence of that. Rather, they concluded, "the lower poaching rate for females is actually an effect of the payment made to the reindeer herding communities," according to [Guillaume Chapron](#), one of the paper's coauthors.

But there is a potential hitch, or what scientists call a "confounding factor," according to Treves. The new compensation scheme

required active monitoring of wolverines to determine the actual numbers of new litters. So “we’re not actually sure if the payments reduced poaching, or if the monitoring and verification reduced poaching,” said Treves. Further studies to sort out those effects would be useful. For now, though, this type of payment appears to work: “Poaching can be reduced,” said Treves, “by a careful application of some sort of monitoring or enforcement, as

well as an incentive for the poachers or their communities to see value in the endangered species.”

Treves thinks that many endangered carnivores around the world could benefit from the Swedish method of “paying for live carnivores rather than for dead reindeer,” as he put it, from wolves in Wisconsin to lions in Tanzania. Each region would need to tweak the compensation scheme to fit local conditions, but

“I don’t think that’s an insurmountable obstacle,” he said.

The livestock versus carnivore conflict is an ancient battle, and the carnivores have almost always ended up on the losing end of the deal, with many now facing extinction in the wild. Altering that deadly dynamic has proved almost impossible up to now. But biological studies over the past few decades have also taught us that these big scary predators are the driving force that keeps

ecosystems healthy. That means we have to learn to live with them if we want any other wildlife to flourish.

Sweden's bid to get beyond the old shoot-shovel-and shut-up psychology to one where herders and carnivores celebrate a happy event more or less together could thus be our best way forward.

*Geoffrey Giller contributed reporting for this column.*