

Meat-eaters versus carnivores: Is your diet killing wolves?

Most large land carnivore populations are in decline. A report from Oregon State University suggests that livestock production is partly to blame.

By [Fabien Tepper](#), Staff writer / January 10, 2014



A gray wolf poses for a photo at the Wildlife Science Center in Forest Lake, Minn., in 2004. Twenty-three wolves were killed in the Upper Peninsula during Michigan's first wolf hunt in four decades, the state reported on Jan. 1, 2013. Dawn Villella/AP/File

The world's fanged animals are [rapidly losing ground to humans](#), reports a study in the journal Science, thanks in part to the spread of livestock farming.

Of the 31 largest species of land carnivore (including the Giant panda, a rare herbivore in the Carnivora order), 23 are in population decline, the authors report. One, the red wolf, is critically endangered, and eight more are considered likely to go extinct throughout all or most of their natural range.

"Globally, we are losing our large carnivores," says William Ripple, an [Oregon State University](#) ecologist who was the paper's lead author.

Human infringements on these animals are numerous – including the fur industry and many forms of traditional medicine – but the report gives a special nod to "human carnivory." To support a global rise in per-capita meat-eating, livestock farming continues to expand, shrinking and fragmenting natural habitats in the process. And when cramped predators adapt by preying

upon livestock, some ranchers go to extreme measures to keep them away, such as strapping pouches of neurotoxins to the necks of grazing lambs, or calling upon the [United States Department of Agriculture](#) to shoot down predators from government helicopters.

"Global livestock production continues to encroach on land needed by large carnivores, particularly in the developing world, where livestock production tripled between 1980 and 2002," reports the study.

But if our very food production brings us to blows with other meat-eaters, surely we need the land at least as much as they do. Why should we privilege wolf and puma habitat over farmland?

"Human tolerance of these species is a major issue for conservation," says Mr. Ripple. "We say these animals have an intrinsic right to exist, but they are also providing economic and ecological services that people value."

According to these scientists, there is every reason to protect carnivores – and not only the species, but the individuals themselves. For one thing, animals' intrinsic value may dwell in individuals' capacities for pain, pleasure, learning, and social relationships, all qualities which these megafauna have in spades.

"Because we're aware and self-aware, we have a well-being that can be helped and harmed by our actions," explains [Bill Lynn](#), a research scientist at [Clark University](#)'s George T. Marsh Institute, who is an expert on ethics and predator management. "With respect to carnivores, they too are aware and self-aware. They, too, have a well-being that can be helped or harmed by our actions."

"Thus," adds Mr. Lynn, "how human beings relate to wildlife and the environment, are of direct moral concern."

Many large carnivores are also considered to be keystone predators, who play crucial roles within their ecosystems – roles that are shaped by the size, metabolic demands, sociality, and hunting tactics, of each individuals.

"Each one of them becomes more important because there's fewer of them," explains Ripple.

The gray wolf, for example, whose fate has become the subject of ongoing policy debates after its extirpation from much of Western Europe, the [US](#), and [Mexico](#), is the top US predator of deer, after humans. In [North America](#)'s now-wolfless areas, deer populations are nearly six times higher than elsewhere, which has led to drastic changes in plant communities, as well as increases in automobile collisions. And sea otters have been shown to keep North American kelp populations healthy and well distributed, by limiting the growth of sea urchin colonies.

Both of these ecological functions – protecting woodland foliage and aquatic kelp – are vital for keeping the earth's carbon sequestered safely in plant tissues (and out of the atmosphere), notes the study, suggesting that charismatic carnivores actually play a vital role in keeping global warming at bay.

In view of this and other important "ecosystem services," the authors have called for the creation of a Global Large Carnivore Initiative modeled after an existing European initiative which aims "to maintain and restore, in coexistence with people, viable populations of large carnivores as an integral part of ecosystems and landscapes."

Such a body could establish carnivore reserves, suggests Ripple, and improve the enforcement of international wildlife laws.

"Ideally, discussions regarding potential decreases in both human fertility rates and per-capita meat consumption would be part of a long-term strategy for overcoming these concurrent challenges," suggests the report. "It will probably take a change in both human attitudes and actions to avoid imminent large-carnivore extinctions."

"These are some of the world's most revered and iconic species. Ironically, they are also some of the most threatened," says Ripple. "I think in the end, to preserve these large carnivore species, it comes down to humans having tolerance to live with them."