

# The case for large predators

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By [The Oregonian Editorial Board](#)

## New research adds insight to the debate in Oregon over wolves and cougars

A new international study of the ecosystem consequences of killing off large predators deserves attention in a state where livestock owners, hunting groups and others continually seek to reduce the number of cougars and fight the reintroduction of wolves.

A paper in a recent edition of the journal *Science* reveals that the human inclination to exterminate the so-called apex predators atop the food chain causes a cascade of unintended and poorly understood ecosystem changes.

Twenty-four researchers, including [William Ripple, a professor of forestry at Oregon State University](#), found the decline of predators such as lions, wolves and sharks is much greater than previously understood and affects habitat loss, pollution, wildfire, climate, invasive species and the spread of disease. "We now have overwhelming evidence that large predators are hugely important in the function of nature, from the deepest oceans to the highest mountains, the tropics to the Arctic," said Ripple.

You'd never know that listening to the seemingly endless debates in the Oregon Legislature over proposals to again release the hounds on cougars or allow ranchers to shoot on sight the few wolves that have re-entered Oregon over the past several decades.

Oregon's far from alone. As the researchers note, historically there has been little appreciation of how the removal of large predators not only affects other species, but also causes larger ecological disruptions. The scientists document several examples around the world, including how the destruction of lions in Africa resulted in an explosion in the baboon population. Over time, the diseases carried by these primates soon crossed over and began infecting humans.

A closer and more relevant example is the research done at OSU on the impact of wolves at Yellowstone National Park. When wolves were removed, elk populations ballooned and elk behavior also changed. No longer pursued by wolves, elk lounged in and heavily browsed thickets of aspen and riverside willows, affecting stream ecology and plant communities. Now that wolves again roam Yellowstone, elk are having to move, aspen and willow are recovering and streams are returning to health.

The key point in the study is that humans have consistently failed to understand the consequences of removing top predators. The researchers argue persuasively that the burden of proof should now shift to an assumption that top predators have major effects on ecosystems until proven otherwise.

Clearly, the research suggests that the raging debates in Oregon over cougars and wolves have been too narrow. For years now the argument has focused almost solely on what cougars and wolves take in their daily existence -- deer and elk, occasionally some livestock. The new evidence suggests that top predators such as cougars are an integral part of a complex ecological relationship. In other words, without them, Oregon would not be Oregon.