

DISCUSSION GUIDE





Lords of Nature: Life in a Land of Great Predators

Can a wolf grow a forest, or a cougar save a butterfly? Only if we let them. In *Lords of Nature: Life in a Land of Great Predators*, filmmakers Karen and Ralf Meyer capture the story of scientists now discovering our topmost predators as revitalizing forces of nature, and a society now learning tolerance for beasts they once banished.

Narrated by Peter Coyote, *Lords of Nature* journeys to the heart of predator country--from the Yellowstone plateau to the canyons of Zion, from the farm country of northern Minnesota to the rugged open range of central Idaho—to places where the missing wolves and cougars are finding their way back.

In Minnesota, the Meyers visit a land harboring more wolves than any state outside of Alaska. Here they meet farmers raising sheep



and cattle in harmony with their wild neighbors. Here they find deer hunters who welcome their fellow predators with a sense of respect.

In Yellowstone National Park, the Meyers visit a land recently running again with wolves after a 70-year absence, to find a chain of life flourishing with their return. From greening streambanks and recolonizing beavers and songbirds, to leftover wolf food and record-setting gatherings of scavengers, scientists find the flowering of Yellowstone magically coinciding with the return of its wolves.

And in a canyon of Zion National Park, scientists find more of the same, with flowers and trees, butterflies and frogs, all flourishing under the guardian watch of the cougar.

While venturing between these pivotal crossroads of the American predators' return, *Lords of Nature* also traces the path of the legendary wildlife prophet, Aldo Leopold. What Leopold warned sixty years ago, scientists from around the world now confirm: That a land lacking its top predators is a land subject to decay.

For those who have seldom given thought to the great predators so often missing from the web of life, here, in *Lords of Nature*, is a world of reason to think again.

Watch Lords of Nature on the Green Fire Productions website.



The Green Fire Behind the Filmmakers

Twenty-two years ago filmmakers Karen Anspacher-Meyer and Ralf Meyer began their quest of engaging and motivating audiences on the day's most pressing conservation issues. From the beginning, one story above all captured the essence of their ambitions. It was the classic nature essay, "Thinking Like a Mountain," in which the great naturalist Aldo Leopold had a life-altering epiphany in watching the green fire fading from the eyes of a dying wolf. Karen and Ralf therewith dedicated themselves to inspiring modern generations of conservationists as the green fire had inspired Leopold. Thus Green Fire Productions was born.

And so it is, after two decades and more than twenty documentaries igniting green fires in their audiences, that the Meyers find themselves

coming full circle. In their film, *Lords of Nature: Life in a Land of Great Predators*, they are bringing new light to the irreplaceable ecological role of top predators that Leopold himself had evoked more than half a century before.

Lords of Nature was conceived several years ago, when the Meyers caught word of the work of two Oregon State University researchers, Bill Ripple and Bob Beschta, exploring an ecological



phenomenon transforming some of the great national parks of the American West. Ripple and Beschta were uncovering evidence that wolves and cougars, through their powers of predation, could ironically foster a more vibrant array of flora and fauna, from beavers to butterflies, wildflowers to willows—that these top predators could in essence grow forests, repair streams, and revive ailing ecosystems. This was science that the greater public needed to know.

But the story was more complex than just the science. The idea of bringing these big predators back as ecological lynchpins came with broad societal implications. It was this intricate story of science and society that the Meyers have set out to tell in *Lords of Nature*.

"We hope to see traditional wildlife management get away from artificial target numbers for predators, and move towards ecologically effective populations," says Karen Meyer. "We also hope to encourage non-lethal approaches to reducing conflicts. By showcasing ways that livestock producers are living with wolves, we learn that it can be done—that by doing a few things differently, we can live our lives while allowing the great predators to live theirs too."



Questions to Consider

Q: Why did wolves and other big predators disappear over much of the United States over the last century?

A: Settlers pushing westward in the early 1800s killed big predators, as well as bison, elk, and other large grazing animals to clear the land for domestic livestock and farming. Ranchers, bounty hunters, and professional hunters and trappers killed millions of coyotes, wolves, bears, and mountain lions. The federal government officially became involved in lethal predator control efforts in 1915. Agricultural interests pressured Congress to conduct systematic strychnine poisoning campaigns targeting wolves, mountain lions, coyotes, foxes, bears, and eagles on the public domain lands of the West. The Bureau hired hundreds of hunters and trappers to kill predators.¹

¹ Animal Issues, Volume 34 Number 3, Fall 2003

U: Who was Aldo Leopold, and what caused him to switch from killing predators to praising them?

A: Leopold was a naturalist and writer, who in the 1940s noticed overpopulations of deer and elk in the absence of their chief predators, and the damages those herbivores were inflicting on the land.

U: What law stipulated that wolves be restored its former haunts in the United States, including Yellowstone National Park?

A: The Endangered Species Act

Q: Why do researchers believe that the recent resurgence of the aspens, willows, and cottonwoods of Yellowstone National Park are likely linked to the return of the wolf?

A: The researchers discovered that these trees had stopped reproducing 70 years ago, and the only major events that coincided with their early demise, and their recent recovery, was the disappearance and return of the wolf.

U: How do the scientists believe the wolves are helping trees grow?

A: By reducing elk browsing on the young trees, either by reducing elk populations through predation or by scaring them away. This 'Ecology of Fear' is a powerful natural force that has aided the regrowth of streamside vegetation.



Questions to Consider (cont.)

Q: Name some animals directly benefiting from wolves killing large animals, like elk.

A: Grizzly bears, black bears, foxes, ravens, crows, magpies, eagles, and vultures—all animals that scavenge the leftovers of wolf kills.

Q: Name some plant communities that benefit from the ability of wolves to reduce browsing pressure.

A: Willows and cottonwoods along streams as well as aspen on uplands.

Q: Beaver and pronghorn antelope are two other animals that appear to be thriving in the presence of Yellowstone's wolves. Why might this be?

A: Beaver eat willow, which have grown since the wolves' return. And pronghorn are losing fewer fawns to coyotes, which have declined in some areas since the wolves' return.



Q: How can a pack of wolves, or the presence of cougars, translate to more fish in a stream?

A: By an ecological chain reaction, or trophic cascade, that begins with the wolf or cougar keeping their prey—the deer or the elk—from eating all the streamside vegetation, which prevents erosion and provides food and cover for insects and other small wildlife, creating a more diverse and fertile aquatic ecosystem, in which fish can better live.

Q: Describe several measures a livestock owner can take to protect livestock in predator country.

- A: Increase human presence
 - · Fence flocks at night with electric wires and fladry
 - Employ trained guard dogs
 - Scare the predators, using devices such as a starter's pistol, strobe lights, or air horn
 - · Keep livestock away from the vicinity of wolf denning areas
 - Seek alternative grazing allotments if there is an abundance of predator activity in the area
 - Encourage calving during the day, when wolves may be less bold
 - Bury livestock carcasses



Thinking Like a Mountain

- What did you learn? What surprised you?
- Why are people so disinclined to want predators around? What makes us fear them? How can we overcome this? Do you know of other examples of people successfully coexisting with top predators?
- Top predators are increasingly being revealed as vital contributors to the diversity and balance of life. What if they were not? Would that change your mind about supporting their conservation?
- Why would a grizzly bear family benefit or suffer for sharing their territory with wolves?
- Do you think big predators, such as wolves and grizzly bears, should be allowed to roam outside our national parks?



- How would you feel if you heard the howling of wolves or found the track of a mountain lion on your property? What would you do?
- Should people hunt big predators, like wolves and cougars, to protect deer and elk? Why?
- Should people hunt wolves and cougars to protect themselves? Why?
- How might shooting wolves backfire as a means of protecting a flock of sheep?
- Why haven't the wolves of Yellowstone eaten all the elk, or the wolves of Wisconsin eaten all the deer? And what would happen if they did?
- U.S. government agents and private citizens have killed millions of predators over the last century, for sport, and for reasons they say are to protect livestock, people, and game animals. What do you think would happen if they stopped the killing?
- Explain how fear can grow an aspen tree.
- Aldo Leopold once wrote, "I now suspect that just as a deer herd lives in mortal fear of its wolves, so does a mountain live in mortal fear of its deer." What do you think Leopold meant by this?



Learn More

- Trophic cascades information center: http://trophiccascades.forestry.oregonstate.edu
- "Where the Wild Things Were: Life, Death and Ecological Wreckage in a Land of Vanishing Predators", a book by Will Stolzenburg: <u>http://willstolzenburg.com</u>
- "Livestock and Wolves: A Guide to Non-lethal Tools and Methods to Reduce Conflict". A comprehensive guide outlining effective non-lethal methods to reduce livestock losses to wolves: www.greenfireproductions.org
- Coexisting with predators information: <u>https://defenders.org/promoting-coexistence/overview</u>
- Wolf fact sheet: <u>http://www.defenders.org/gray-wolf/basic-facts</u>

Host a Community Event

Show *Lords of Nature* to your family, friends, neighbors and colleagues. Watch the film on the <u>Green Fire Productions</u> website or on <u>YouTube</u>.

Questions? Contact us at greenfireproductions.org/contact.



