



## LIVING ON COMMON GROUND

*Sportswomen speak out to save the mule deer, sage-grouse and sagebrush country*

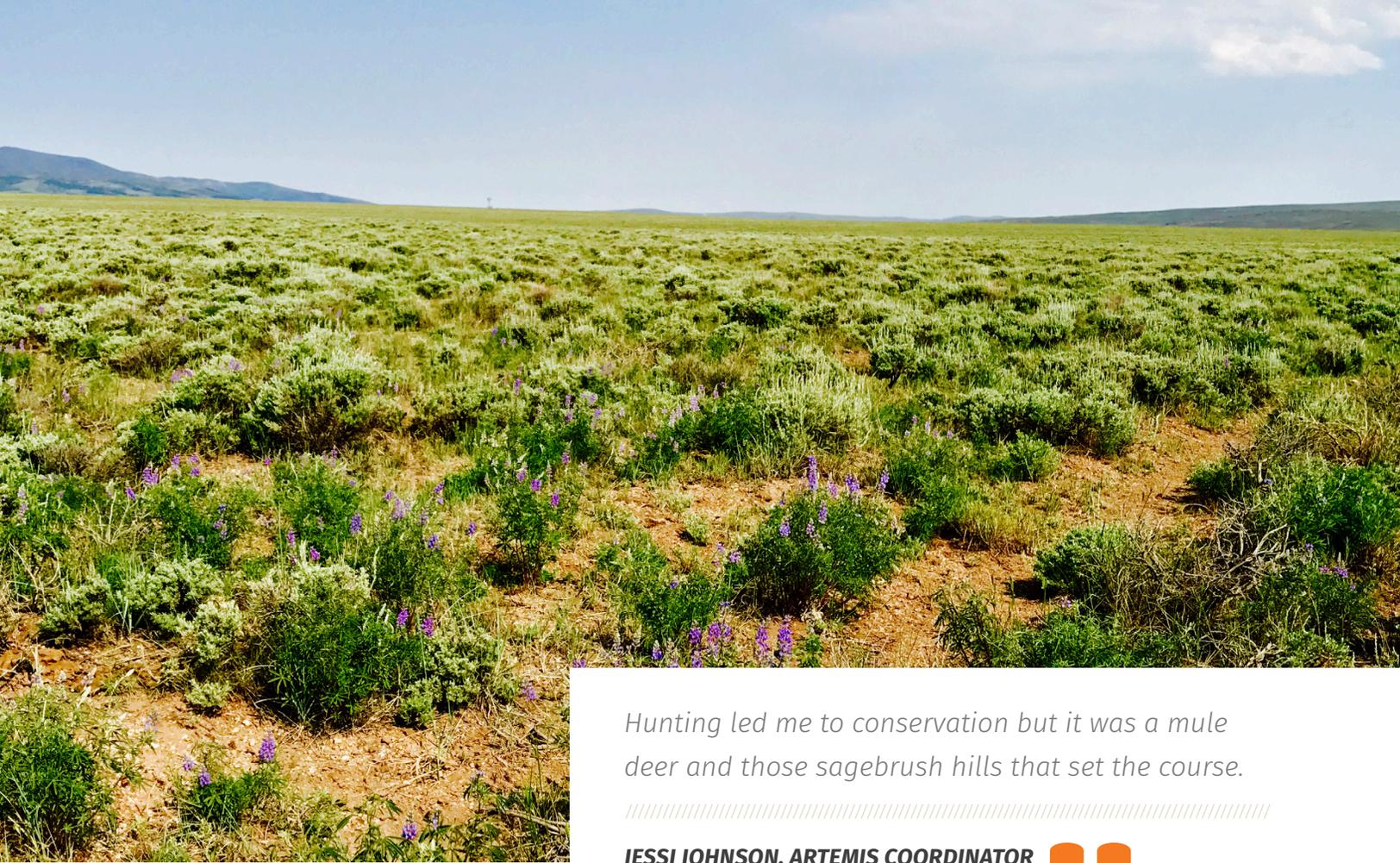


Photo by Aaron Kindle

*Hunting led me to conservation but it was a mule deer and those sagebrush hills that set the course.*

**JESSI JOHNSON, ARTEMIS COORDINATOR** ”

**G**rowing up in western New York, Kathy Hadley went bird hunting with her father. When she moved west in 1979, the Artemis co-founder, Montana businesswoman and rancher, and National Wildlife Federation Board of Directors chair, discovered a countryside with “big, broad landscapes and public lands everywhere.” Hadley also discovered mule deer.

“When I first saw mule deer I thought they were pretty darn majestic,” recalls Hadley, former president of the Montana Wildlife Federation.

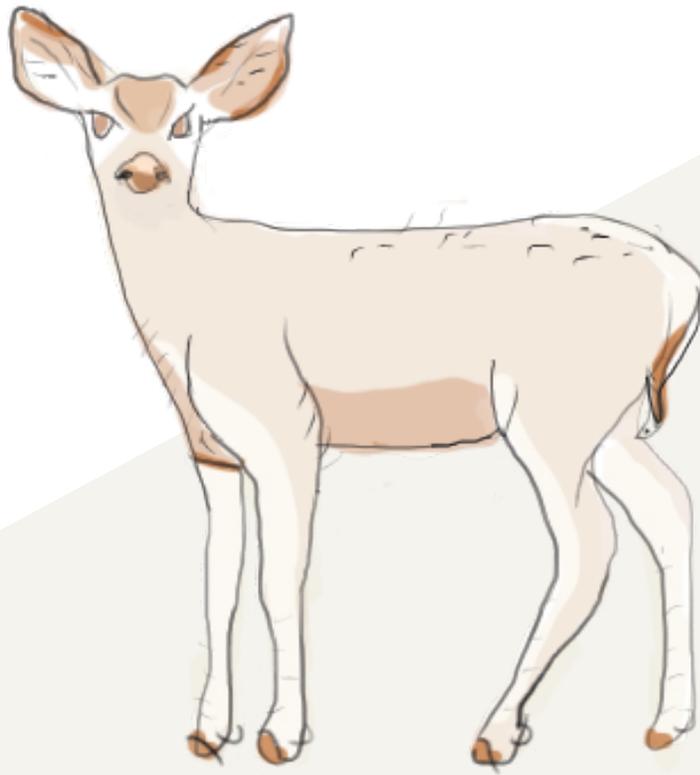
Eastern Montana’s sagebrush lands are one of the places where Hadley now goes to hunt mule deer and enjoy the outdoors away from a lot of people. “The sagebrush steppe is just incredibly diverse and beautiful, and a great place to hunt. You’re in this wonderful place of nature. It’s a place where, if you’re a wildlife lover, you couldn’t ask for more,” Hadley says.

Sagebrush provides important habitat for two of the West’s most iconic species and the futures of these species – mule deer and greater sage-grouse – are inextricably linked. Mule deer, colloquially referred to as “muleys,” are

a cherished symbol of the rugged Western countryside and a cornerstone of rural economies through hunting and tourism. The chicken-sized male grouse, with its big white ruff and fanned-out spiky tail feathers, draws bird-watchers from across the country to the West’s sagebrush country to watch the bird’s elaborate mating dance on leks – or breeding grounds.

Besides being signature Western species, the other thing they have in common is that numbers of both have been dropping for decades as urbanization, energy development, drought, wildfire and invasive species have wiped out and degraded key habitat – the West’s sagebrush steppe.

Too few truly understand the link between mule deer and sage-grouse. However for the sportswomen who roam the sagebrush each fall, the connection is unmistakable and impossible to ignore. For many young Western sportswomen, mule deer are part of the first hunt and experiences that shape a lifetime of outdoor adventures and fuel their passions for conserving wildlife and public lands. These experiences now inspire a call to action to conserve sage-grouse and their habitat.



## THE HERD

**Mule deer**, “muleys,” like greater sage-grouse are a signature species of the West, not found anywhere else.

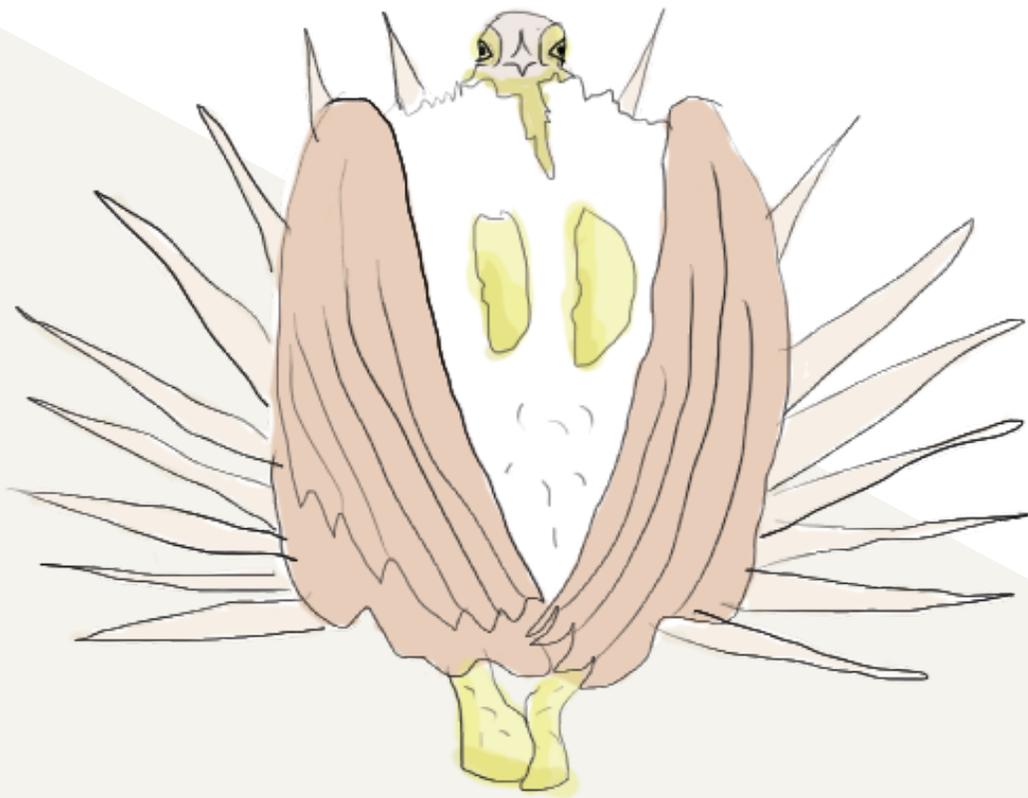
**DESCRIPTION:** Their defining characteristic are their large ears, which are about three-fourths the length of the head. In summer, mule deer are tannish-brown and in winter brownish-gray. They have a white rump patch and a small white tail with a black tip. When running, they bound in a motion called “stotting,” in which all four hooves push off the ground at the same time.

**SIZE:** Mule deer range from 3-3.5 feet tall at the shoulder, 4.5-7 feet long and have a tail that is 5 to 8 inches long. They weigh between 130-280 pounds. The female deer are smaller than the male.

**DIET:** They are browsers, feeding on herbaceous plants and the leaves and twigs of woody shrubs. Mule deer are selective feeders. Instead of eating large quantities of low-quality feed like grass, they must select the most nutritious plants and parts of plants. Nutrition during gestation is key to fawn health and predetermines how large buck antlers can grow, further highlighting the need for healthy sage steppe ecosystems as sage brush is a key winter food source

**LIFESPAN:** Mule deer usually live 9-11 years in the wild.

**HABITAT:** Mule deer are adapted to arid, rocky environments. They’re distributed throughout western North America.



## THE BIRD

The **greater sage-grouse** is a large, round-winged, ground-dwelling bird with a long, pointed tail.

**DESCRIPTION:** Males are larger than the females and have a white ruff around their necks in addition to the typical mottled brown, black and white plumage. They have yellow air sacks on their breasts, which inflate and make popping sounds during their mating dance on breeding grounds called leks. Females are mottled brown, black and white.

**SIZE:** Typically 30 inches long and up to 2 feet tall. Males often weigh in excess of 4-5 pounds and hens weigh 2-3 pounds.

**DIET:** Eats mainly sagebrush, some other soft plants, and insects.

**LIFESPAN:** 1-1.5 years, but have been found to survive up to 10 years in the wild.

**HABITAT:** The breeding habitat for the greater sage-grouse is sagebrush country in the western U.S. and southern Alberta and Saskatchewan. They nest on the ground under sagebrush or grass patches and live in elevations ranging from 4,000 to over 9,000 feet. They cannot survive in areas where sagebrush does not exist.

# Mule Deer and Sage-Grouse Share the Same House

## How Important is Sagebrush to Muleys?

The sagebrush habitat that sustains greater sage-grouse is what mule deer depend on in the winter when snow blankets the vegetation in the foothills and mountains. "Sagebrush is the mainstay of their diet in the winter," says Steve Kilpatrick, field scientist for the Wyoming Wildlife Federation. "They've evolved to highly depend on it." In Wyoming alone, mule deer and sage-grouse share over 22 million acres of important sage-grouse habitat.

Healthy habitat is key for healthy wildlife populations, according to Kilpatrick, who was a biologist with the Wyoming Game and Fish Department for more than 30 years. While there are 13 different species and subspecies of sagebrush in Wyoming, mule deer's diet in winter consists mostly of *Artemisia tridentata* ssp. *wyomingensis*, or

Wyoming big sagebrush. Or, as Kilpatrick calls it, the meat and potatoes of the deer's diet.

Access to that sagebrush diet is reflected in mule deer populations and hunter success. In the Wyoming Range, for example, many of the Boone and Crockett-sized bucks exist because their mothers had access to nutritious and abundant forage among the sagebrush lands in southern Wyoming and along their up-to-150-mile migration path during pregnancy. In Colorado, many of the game units with consistently high success rates are in the northwest portion of the state, home to some of Colorado's most important sage-grouse habitat.

### COMMON GROUND - IMPORTANT MULE DEER AND SAGE-GROUSE HABITAT

- **OVERLAPPING HABITAT**
- **GREATER SAGE-GROUSE HABITAT**
- **MULE DEER IMPORTANT HABITAT**

Important habitat for mule deer is summer and winter range for 90% of deer as mapped for the Western Association of Fish and Wildlife Agencies (WAFWA).

Greater sage-grouse habitat is general and priority habitat defined by the Bureau of Land Management (BLM).

Data Sources:  
BLM, Esri, USGS, Utah State University for WAFWA

Map Prepared by:  
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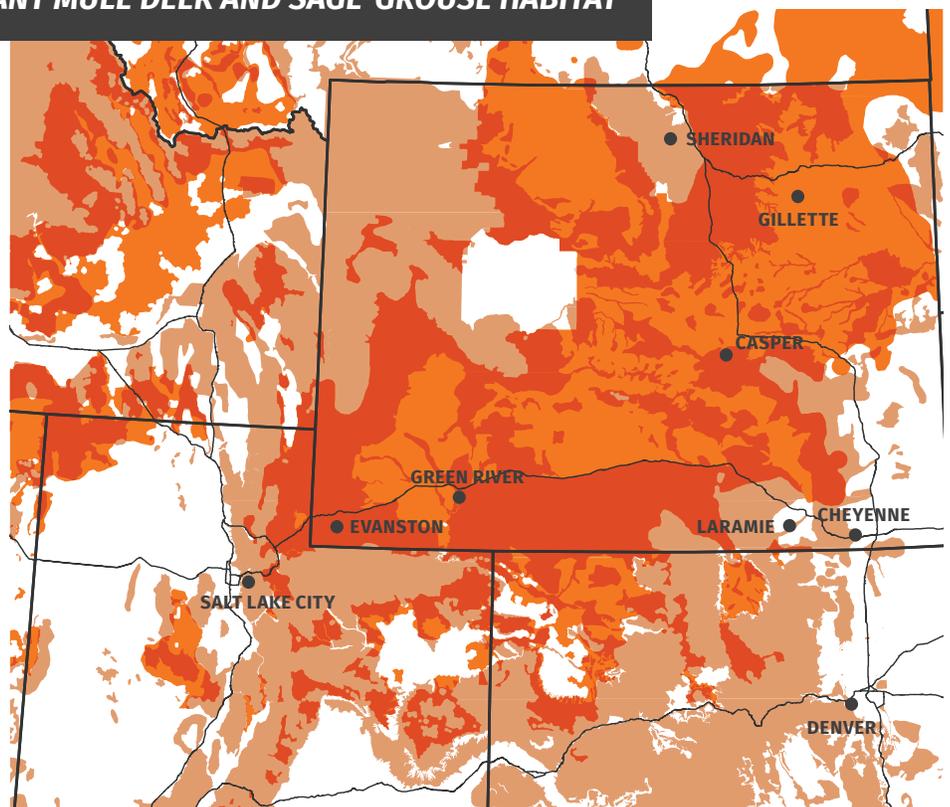




Photo by Josh Metten

*As an avid hunter of mule deer on public land, I know it's of the utmost importance that their habitat and feeding grounds are maintained and protected.*

**CINDI BAUDHUIN, ARTEMIS CO-FOUNDER** ”

## **Habitat on The Decline**

*Development pressures contribute to declining populations*

“I’ve noticed big changes in mule deer populations. There is no simple answer and the problems are west-wide. Ex-urban development, oil and gas exploration, fire suppression, concentrated human activity, improper grazing practices, and drought have degraded habitat and placed the species under stress,” says retired wildlife biologist Reg Rothwell. “With development, we are slowly nicking away at the robustness of these wildlife populations.”

Sage-grouse used to number in the tens of millions across the West, but today the estimated population is 200,000 to a half-million. Conservation and restoration financed largely through fees and taxes paid by hunters rebuilt the deer herds that were decimated by the start of the 20th Century due mainly to unregulated hunting. However, many of the same factors driving down sage-grouse populations today, including development, drought and invasive species,

are driving down mule deer numbers again across the West. A new study by Hall Sawyer and others that uses 17 years of data found that disruptions to mule-deer habitat from oil and gas development have resulted in a nearly 40 percent drop in herd size in the Pinedale area of northwest Wyoming. The study’s opening sentence gets to the heart of the matter: “Habitat loss and fragmentation are among the most influential factors affecting species distribution and population viability.”

Many hunters see sage-grouse as the bellwether species when it comes to the viability of sagebrush lands. And they see sage-grouse conservation plans developed by the states, Bureau of Land Management and the Forest Service as a way forward for mule deer.

# What Can The Hunting Community Do?

## Sportswomen Rally for Sage-Grouse Conservation Plans

For Artemis member and Wyoming native Sara Domek, the ebbs and flows of the sagebrush sea are defining features of life in the Upper Green River Valley. According to Domek, as winter turns to spring, “Mule deer and pronghorn move steadily upriver towards the greening mountains, sage-grouse return to still snow-covered lek sites, welcoming the lengthening morning sunlight with the male’s ritual strut and popping calls, and by July or August wildlife is settled to their summer home.”

Domek is one of the many hunters who joined with the sporting community, landowners and elected officials, including most Western governors, to shape and support strategies empowering Westerners to restore greater sage-grouse populations. These strategies include the conservation plans adopted by the Forest Service and BLM. These plans are the best tools we currently have to safeguard sage-grouse habitat on the West’s public lands. They will also benefit mule deer as well as hundreds of other wildlife and plant species.

“Sage-grouse and mule deer are the canaries in the coal mine for the sage steppe health. If we fail to listen to the warnings they are giving us with their dwindling numbers we will lose not only two iconic Western species but a host of dependent flora and fauna and the very essence of what makes our Western lives so special,” says Jessi Johnson, Artemis coordinator and Wyoming Wildlife Federation public lands coordinator.

This multi-year conservation effort was unprecedented. Westerners came together knowing full well that the beneficiaries go far beyond sage-grouse. Mule deer, elk, and pronghorn, our most cherished big game species, stand to benefit as well as the local economies that depend on hunting and outdoor recreation dollars. Mule deer and sage-grouse are important economic drivers throughout the West. Each fall, hunters from around the nation lucky enough to pull a tag for a popular mule deer unit experience one of the most rewarding and challenging hunts the region offers. And Westerners venture out on public lands each year as part of a family tradition that is a way of life. A 2014 study found recreation on public sagebrush lands in 11 Western states generates \$1 billion for the economy annually.

But the fate of all the work and collaboration to save greater sage-grouse and the habitat that helps sustain 350 other species, including some that can’t survive anywhere else, is uncertain as the Trump administration considers major changes to the conservation plans. These plans helped convince the U.S. Fish and Wildlife Service that sage-grouse didn’t need to be added to the endangered species list. The consequences could be dire for sage-grouse, mule deer and hunters if the habitat loss and degradation continue. Sage-grouse could end up being listed and activities on public lands could be severely restricted.

“Despite repeated warnings of wildlife professionals about the plight of these species, we continued to reduce and degrade their habitats. We’ve neglected the sound management of these species for too long and action is needed now to turn things around,” Rothwell says. “We really need to take the long view when it comes to sage-grouse and mule deer conservation, and these plans are a step in the right direction.”

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*As hunters, anglers and wildlife conservationists, now is the opportunity to work to ensure these populations exist for future generations. Sustaining and enhancing seasonal movement corridors and stay-over habitat of wildlife need to be a priority, and the conservation plans provide tangible measures to protect mule deer and sage-grouse habitat.*

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**SARA DOMEK, ARTEMIS SPORTSWOMAN** ””

Western governors have said dramatic changes to the conservation plans aren't needed. They have voiced support for managing sage-grouse habitat as the right approach to rebuilding the bird's population. This stands in contrast to some, including Interior Secretary Ryan Zinke, who have suggested that captive breeding and setting population objectives should be the focus. Population focused management is not supported by science.

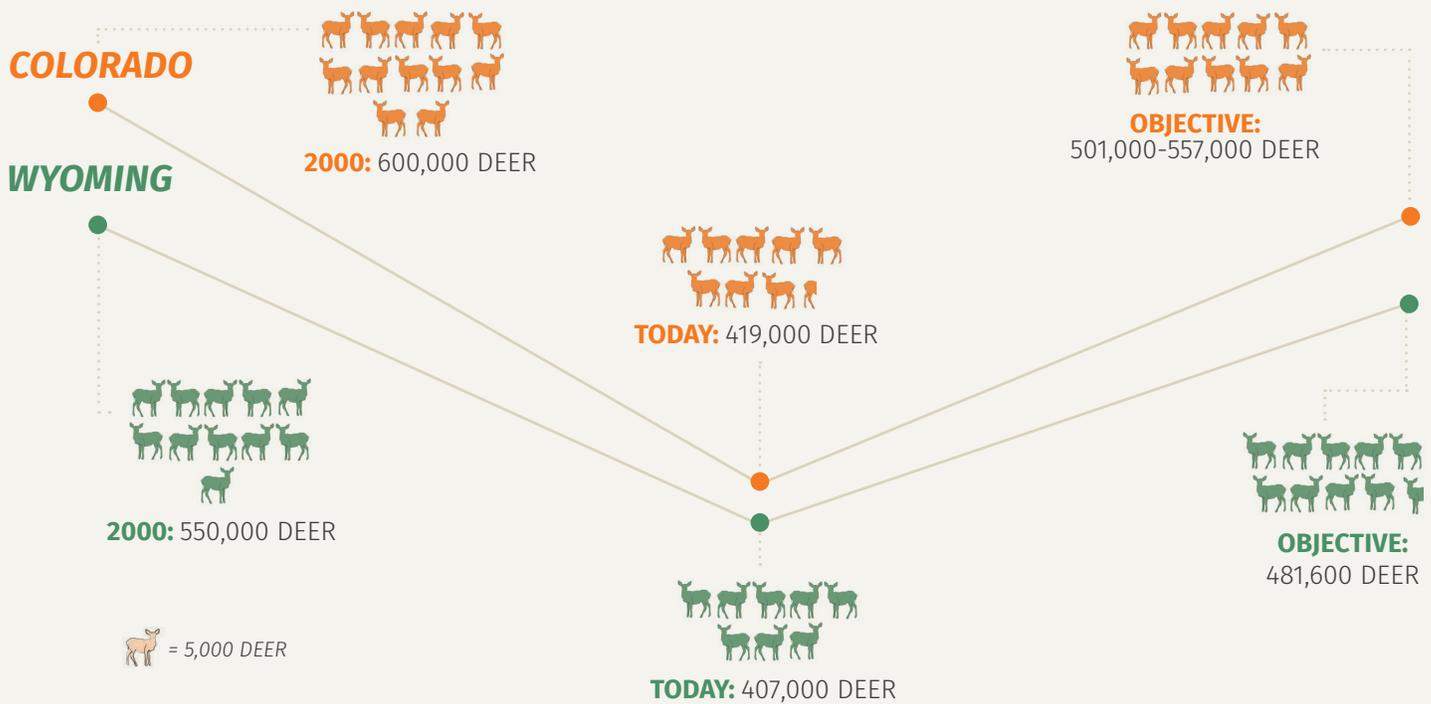
"It's hard to raise sage-grouse in captivity. We know that," Kilpatrick says. "You can't spend all this time counting sage-grouse and then do nothing about conserving habitat. That does no good in the long run."

For Artemis sportswomen like Kathy Hadley, Jessi Johnson, Cindi Baudhuin and Sara Domek, failing to protect the habitat that sustains the wildlife they love isn't an option. And they are hoping every hunter out there who knows the magic of stalking muleys will join with them to ensure that the natural ebbs and flows of this sea of sagebrush remain intact, starting with the effort to safeguard greater sage-grouse.

**Your voice will help ensure we are on the right path to protect these lands. Let's give the plans a chance to work.**

### MULE DEER POPULATIONS ON THE DECLINE: BY THE NUMBERS

Since the latter third of the 20th century, mule deer numbers have been declining throughout western North America. The Western Association of Fish and Wildlife Agencies formed a mule deer working group in 1998 to find solutions. Wyoming and Colorado, both long renowned for their impressive mule-deer herds, have not been immune to the downturns.





# TAKE ACTION

## HELP BY SENDING YOUR MESSAGE TODAY



Western governors are key to keeping plans to protect the sagebrush ecosystem for the greater sage-grouse, mule deer, and wildlife across the west. Don't miss your chance to defend the places and wildlife we hold dear, take action today.

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