A Vision for Wolves in the Southern Rocky Mountains

WildEarth Guardians
A FORCE FOR NATURE

A Report from WildEarth Guardians

By Rob Edward

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Mission Statement
WildEarth Guardians protects and restores the
wildlife, wild places and wild rivers of the American West.

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Photos: Front and back covers, Ray Laible, 2007.

Executive Summary

In 1994, at the behest of Congress, the U.S. Fish & Wildlife Service (FWS) completed a study of the feasibility of restoring wolves to the seven National Forests in western Colorado. The results of that study, released just before the initiation of wolf reintroduction projects in Yellowstone National Park and central Idaho, were astounding. In short, Colorado's federally managed forestlands could support more than 1,000 wolves. A concurrent study of public opinion demonstrated solid public support for wolf reintroduction in Colorado, with 71% of the state's residents supporting the idea, including 65% of citizens living west of the continental divide (i.e. the areas where wolves would be restored).

Lizard Head Pass in the San Juan Mountains of southwestern Colorado. ©Anne Edward, 2009.

Since that time, scientists have published two separate papers regarding the capacity of the Southern Rocky Mountains, which includes much of western Colorado, to support wolves. These peer-reviewed studies corroborate the FWS study, but go even further, identifying the best remaining habitat for wolves in the region. Further, a second, independent poll in 2001 showed that support for wolf recovery in the region still stands at over two thirds.

In the years following the reintroduction of wolves to Yellowstone, science has illuminated dramatic evidence demonstrating that wolves are tremendously important to the living organisms they share the land with—so important, in fact, that without wolves many plants and animals risk local extinction. Interestingly, the restoration of wolves to Yellowstone also ignited a dramatic economic boom for the region, bringing in over $35.5 million each year in tourism related income.

Here, in the Southern Rockies, managers at Rocky Mountain National Park know well the consequences of wolves being exterminated in the early 1900s: aspen and willow trees are withering under the browsing pressure of the Park's sedentary elk herds. Yet, the FWS has steadfastly refused to move ahead with restoring wolves to the Southern Rocky Mountains, despite their ecological importance, and despite the fact that *wolves have been restored to less than five percent of their range in the lower forty-eight states*.

WildEarth Guardians has a vision for the Southern Rockies. We imagine wolves roaming the region in numbers sufficient to keep elk and deer alert and moving in a more natural fashion. We imagine a landscape that has recovered from the prolonged absence of wolves. We imagine a citizenry excited about the prospects of tourism related to watching wolves in their natural environment.

The time has come to repatriate wolves to the hunting grounds of their ancestors in the Southern Rockies. The time has come for managers at Rocky Mountain National Park to heed the examples from Yellowstone, to heed the need for wolves. Most importantly, the time has come for the FWS to admit that the job of wolf recovery is not complete, and that restoring wolves to the Southern Rocky Mountains is a vital step in fulfilling the agency's commitment to recovering the species. Citizens, members of Congress, policy makers and conservation leaders all have a role to play in rekindling the federal commitment to wolf recovery. Future generations are counting on us to do the right thing.

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Wild at Heart

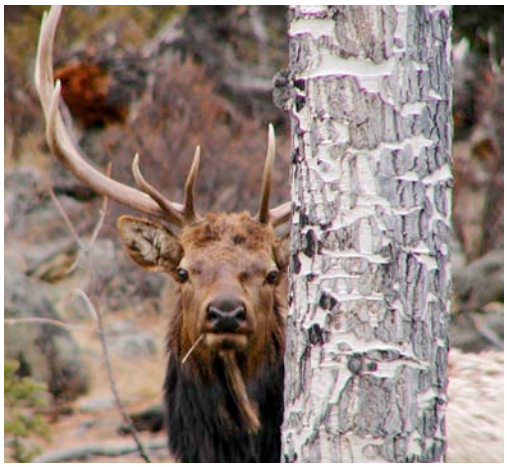
The rough crags and pinnacles of the Southern Rocky Mountains are, for many people, the first natural features that they associate with this region—a region that includes most of western Colorado, and parts of southern Wyoming and northern New Mexico. Many also associate the Southern Rockies with abundant populations of elk. However, there's another, equally majestic icon, a dynamic counterpoint to the elk, which once roamed the Rockies and the plains: the gray wolf.

Colorado's last wild-born wolf was killed in the San Juan Mountains near New Mexico in 1945, at the end of a 70-year campaign to eradicate the species on behalf of livestock interests. The demise of that wolf heralded the ruin of an ecological process as profoundly important as wildfire: wolf predation. Only recently have we begun to appreciate the implications of extinguishing that process. Without wolves chasing elk, wetland trees wither under intense browsing by sedentary elk. As go the willow and aspen, so go the beaver that rely on those trees. As go the beaver, so go the wetlands, and so on. In short, removing wolves from Colorado's wild places has cascaded into a slowly building ecological disaster.

The Southern Rocky Mountains covers a vast expanse of land, falling mostly in the state of Colorado. The ecoregion stretches roughly 500 miles from southern Wyoming to northern New Mexico, and extends 250 miles from east to west at its widest point. The ecoregion covers roughly 63,654 square miles (40,721,141 acres) in total land area, an area nearly the size of the New England states of Maine, New Hampshire, Vermont, Connecticut, Rhode Island, and Massachusetts combined.

The Last Best Place

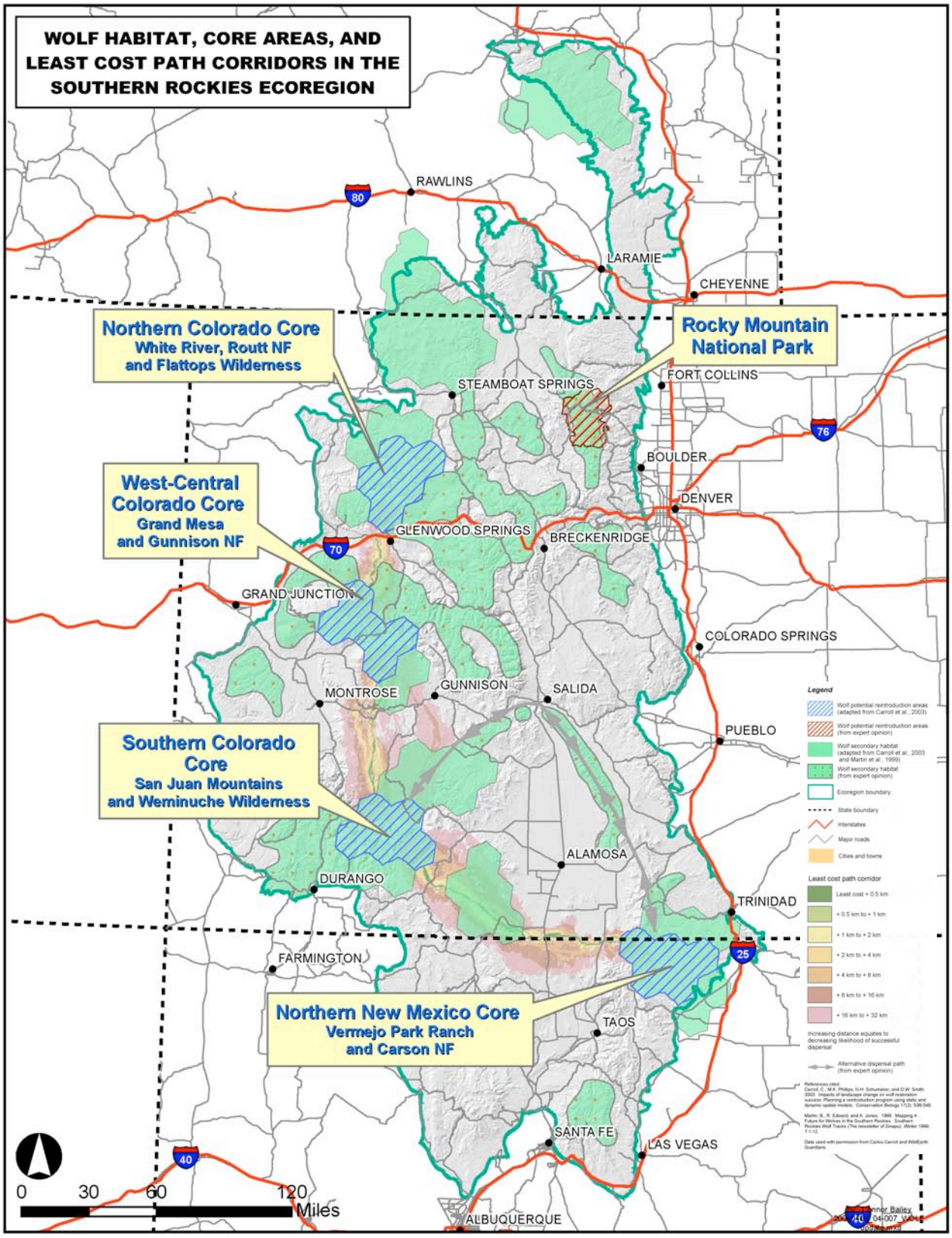
The Southern Rocky Mountains need wolves, and wolves need the Southern Rockies. Notably, three separate studies by scientists have shown that the region could again support over 1,000 wolves (Bennett 1994; Carroll et al. 2003 and 2006). Colorado hosts the largest elk population in North America, and one of the largest deer herds. As Mike Phillips, wolf biologist and Executive Director of the Turner Endangered Species Fund said, "The Southern Rockies are a mother lode for wolves."



A bull elk in Rocky Mountain National Park standing behind an elk-gnawed aspen tree. ©Anne Edward, 2007.

In analyzing the capacity of the Southern Rocky Mountains to support a wolf population, scientists examined several factors: 1) The density and distribution of elk and deer; 2) Road density (expressed as miles of road per square mile), where lower densities scored as better habitat; 3) Land ownership status (where public lands scored better than private lands); and protected area status (where wilderness lands scored better than less protected areas). Colorado has the largest elk population in North America, and one of the largest deer populations—and over 60 percent of the Southern Rockies is federal public land. Add it all up, and you get the map that appears on page 3, a map that demonstrates that Mike Phillips is right-on-the money.

Although individual wolves from the Northern Rockies have travelled to the Southern Rockies, scientists do not believe that wolves will naturally repopulate the Southern Rocky Mountains. In short, they'll need help to get here. ©Ray Laible, 2007.



This map shows four distinct areas within the Southern Rockies that scientists have identified as key areas for wolf reintroduction, plus a fifth—Rocky Mountain National Park—that the National Park Service has indicated is suffering ecological degradation due to the absence of wolves.

Rocky Mountain National Park

Sitting roughly 40 miles northwest of Boulder, Colorado, Rocky Mountain National Park includes approximately 265,770 acres of spectacular mountain habitat. Although not originally identified a primary core recovery area for wolves, Park officials have indicated that deteriorating ecological conditions within the Park are rooted in the nearly seventy-year absence of wolves from the Park and surrounding forests. In short, Rocky Mountain National Park needs wolves to keep the burgeoning elk population on the move—without them, the Park's aspen and willow trees will slide into local oblivion.

Young aspen and willow trees in Rocky Mountain National Park don't stand a chance against the Park's sedentary elk herd. Without wolves to keep the elk moving around, they can browse the young trees into oblivion. ©Anne Edward, 2009.

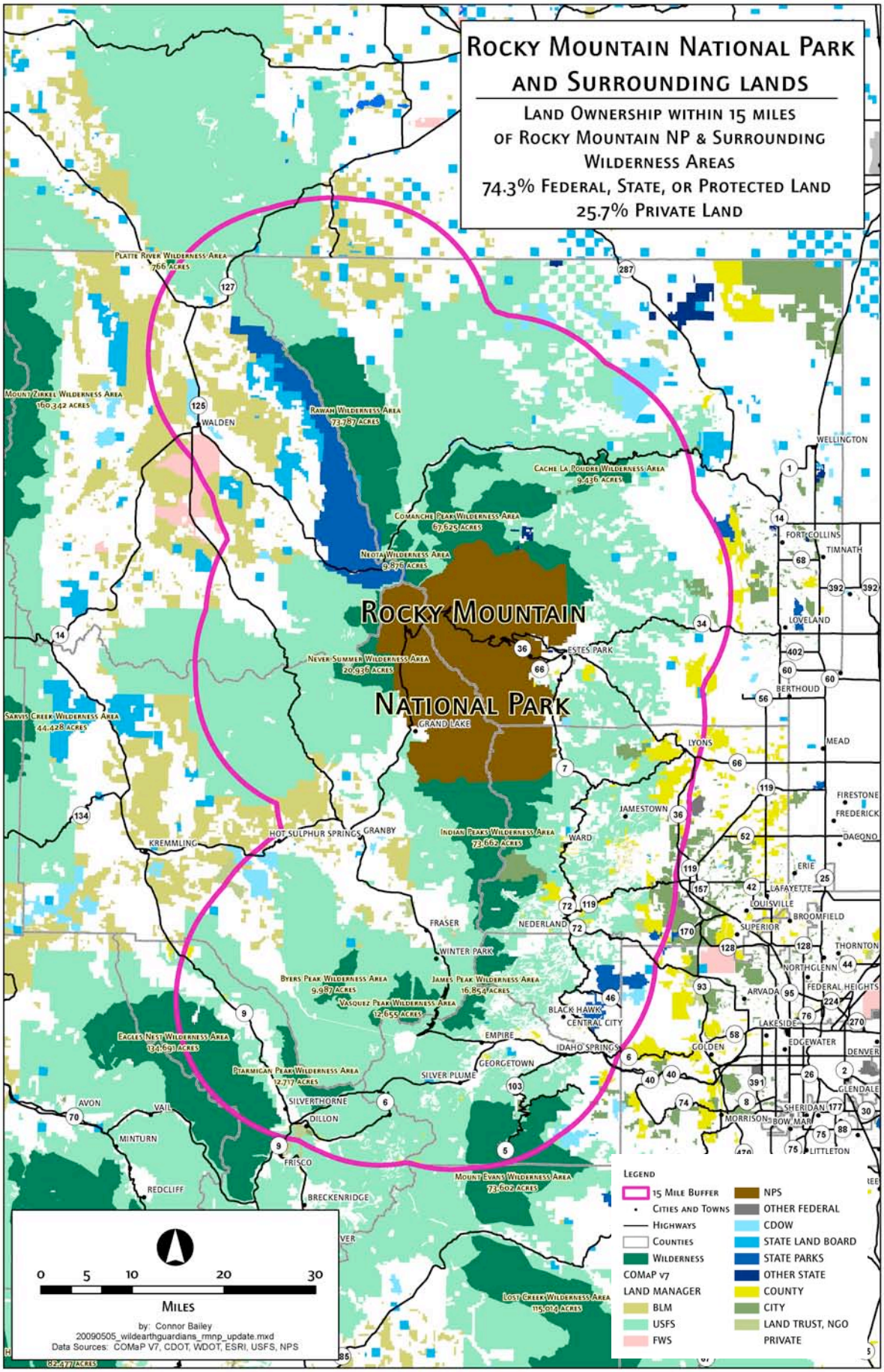
As of 2009, the National Park Service had begun to implement a multi-decade plan to cull elk within Rocky Mountain National Park—rather than calling for wolf reintroduction. While the agency admits that the Park hosts enough elk to support wolves, they argue that the Park is too small for wolves. The Park, however, when combined with adjacent National Forest lands, could easily support a population of wolves that, while small, can be part of a larger population extending onto contiguous public lands.

As the map on the page 5 indicates, when combined with National Forest lands within a 15 mile radius of the Park boundary, the total acreage of contiguous public land totals over 2.1 million acres. Notably, wolf reintroduction into the Park and surrounding National Forest lands could foster a full-scale regional recovery effort—if only the National Park Service would act.

Rocky Mountain National Park is considered one of the crown jewels in the National Park system. Why should the Park not lead the way in restoring one of its most important ecological players, and lead the way to wolf restoration in the rest of the region? That's what Yellowstone National Park did for the Northern Rocky Mountains in 1995; Yellowstone's insistence on restoring wolves to the Park sparked a wolf reintroduction plan that included both Yellowstone and central Idaho.

Wolves test their prey for vulnerabilities that might not be obvious to the casual observer. In selecting elk or deer to chase, wolves must wander through the herds—and their presence keeps the herds vigilant and on the move. This intricate dance between wolves and their prey thus provides native plants with some much needed respite from grazing. Indeed, the presence of wolves is integral to the balance of Nature.

Photo: ©Tim Springer, 2007.


ROCKY MOUNTAIN NATIONAL PARK AND SURROUNDING LANDS
LAND OWNERSHIP WITHIN 15 MILES OF ROCKY MOUNTAIN NP & SURROUNDING WILDERNESS AREAS
74.3% FEDERAL, STATE, OR PROTECTED LAND
25.7% PRIVATE LAND
ROCKY MOUNTAIN NATIONAL PARK
PLATTE RIVER WILDERNESS AREA 766 ACRES
MOUNT ZIRKEL WILDERNESS AREA 160,342 ACRES
RAWAH WILDERNESS AREA 73,787 ACRES
CACHE LA POUDRE WILDERNESS AREA 9,436 ACRES
COMANCHE PEAK WILDERNESS AREA 67,625 ACRES
NEOTA WILDERNESS AREA 9,676 ACRES
NEVER SUMMER WILDERNESS AREA 20,936 ACRES
SARVIS CREEK WILDERNESS AREA 44,428 ACRES
INDIAN PEAKS WILDERNESS AREA 73,662 ACRES
BYERS PEAK WILDERNESS AREA 9,987 ACRES
JAMES PEAK WILDERNESS AREA 16,854 ACRES
VASQUEZ PEAK WILDERNESS AREA 12,655 ACRES
EAGLES NEST WILDERNESS AREA 134,691 ACRES
PTARMIGAN PEAK WILDERNESS AREA 12,717 ACRES
MOUNT EVANS WILDERNESS AREA 73,602 ACRES
LOST CREEK WILDERNESS AREA 115,014 ACRES
WALDEN
WELLINGTON
FORT COLLINS
TIMNATH
LOVELAND
ESTES PARK
BERTHOUD
GRAND LAKE
LYONS
MEAD
FIRESTONE
FREDERICK
DACONO
ERIE
LAFAYETTE
LOUISVILLE
BROOMFIELD
SUPERIOR
THORNTON
NORTHGLENN
FEDERAL HEIGHTS
ARVADA
LAKESIDE
EDGEWATER
GOLDEN
GLENDALE
SHERIDAN
MORRISON
BOW MAR
LITTLETON
DENVER
JAMESTOWN
WARD
NEDERLAND
FRASER
WINTER PARK
GRANBY
HOT SULPHUR SPRINGS
KREMMLING
BLACK HAWK
CENTRAL CITY
EMPIRE
IDAHO SPRINGS
GEORGETOWN
SILVER PLUME
SILVERTHORNE
DILLON
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LAND TRUST, NGO
PRIVATE

Northern Colorado Core

Scientists have identified the Flat Tops Wilderness and surrounding parts of the White River and Routt National Forests as one of four primary areas for wolf reintroduction and recovery (Carroll at al. 2003 and 2006). Located due north of Glenwood Springs, Colorado, this core recovery area encompasses over 623,000 acres. The heart of the area, the 235,214-acre Flat Tops Wilderness, was the inspiration for the creation of the wilderness system and is Colorado's second largest wilderness area.

The open meadows of the Flat Tops Wilderness provide excellent summer habitat for one of Colorado's sizeable elk herds. Photo: U.S. Forest Service.

This area is likely one of the first to be discovered by the occasional lone wolf dispersing from Yellowstone, due to its proximity to likely pathways from the north. The roadless wilderness area is surrounded by relatively low road density forestlands and hosts an extremely robust herd of elk.

West Central Colorado Core

Uncompahgre Peak. Photo: U.S. Forest Service.

Situated northwest of Crested Butte, Colorado, the West Central Colorado Core area encompasses 621,363 acres of the Grand Mesa, Uncompahgre and Gunnison National Forests. Scientists also identified this area as high quality habitat for wolf reintroduction, and wolves reintroduced here would serve as a source population for west-central Colorado. With the Grand Mesa at the heart of the area, wolves will find themselves well situated to earn their keep amongst the resident elk and deer herds.

Southern Colorado Core

Northeast of Durango, Colorado, the Southern Colorado Core area represents one of the most genuinely wild places left in Colorado. The area includes 623,170 acres of high quality wolf habitat, including the stunning Weminuche Wilderness (490,000 acres) and surrounding parts of the San Juan National Forest. The area is also the site of Colorado's successful reintroduction program for Canada lynx, underscoring the wilderness qualities of the landscape. It was just south of here, near the border with New Mexico, that Colorado's last native-born wolf was killed in 1945.

Weminuche Wilderness. Photo: U.S. Forest Service.

Northern New Mexico Core

Vermejo Park Ranch. Photo: Turner Endangered Species Fund.

Forming the southern boundary of the wolf reintroduction areas identified by scientists, the 621,291-acre Northern New Mexico Core area is the only area of the four identified that consists primarily of private land. Yet, this region may hold the highest potential for hosting a robust population of wolves and serving as a source population for other areas in southern Colorado and northern New Mexico.

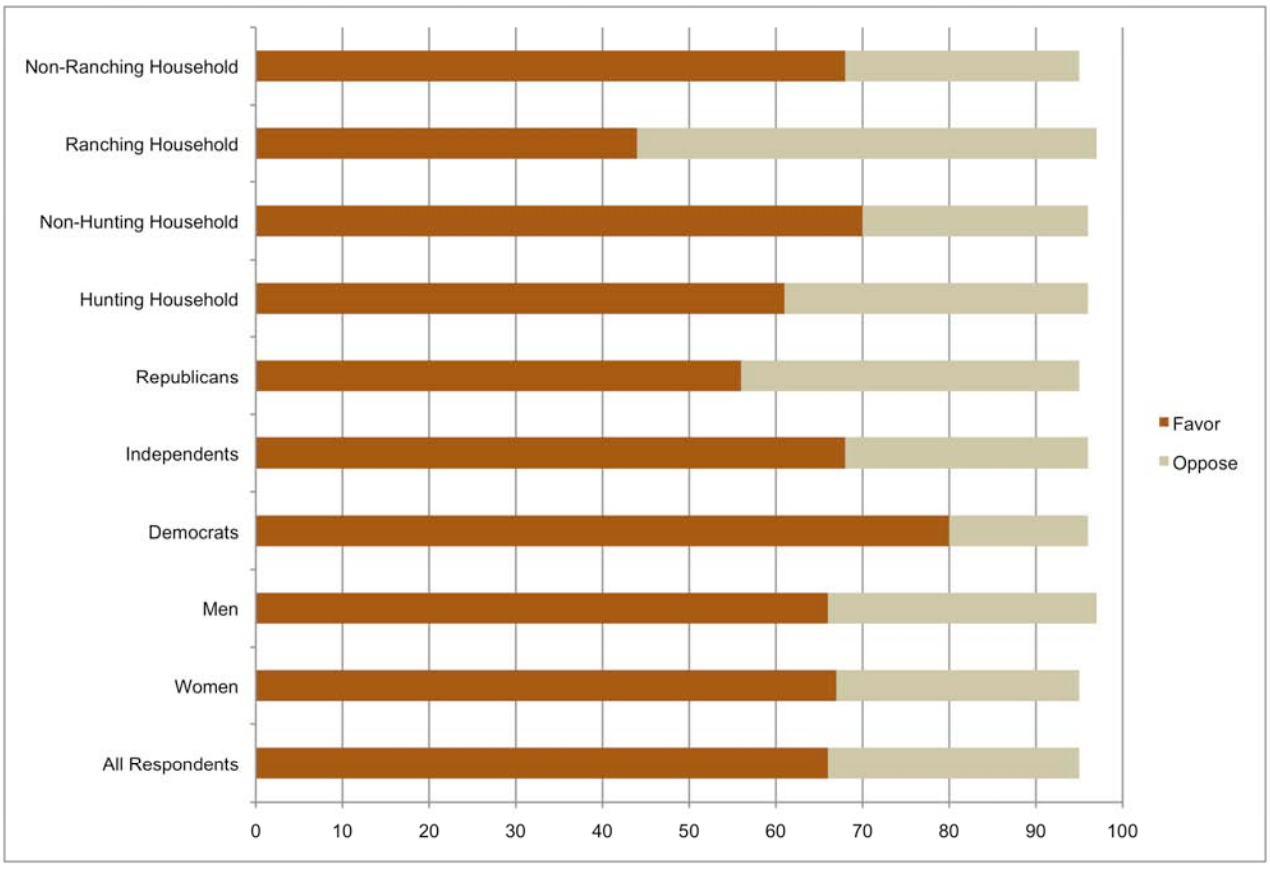
Situated due west of Raton, New Mexico, this area is centered on the 588,000-acre Vermejo Park Ranch, owned by Ted Turner. The ranch and the adjacent Valle Vidal Unit of the Carson National Forest are prime wolf habitat, supporting a large resident population of elk. The ranch owner has indicated a willingness to host wolves on the property, and the Turner Endangered Species Fund is well prepared to assist in the daily operations of managing a resident wolf population.

Westerners Want Wolves

Don't believe everything you read in the paper. Residents of the rural West are not solidly against wolf reintroduction, and people in western cities are not all wolf huggers. Wolves are a passion-inducing subject, surrounded by centuries of myth and (only lately) a growing body of ecological science. Fortunately, the science is beginning to break down the myths that shroud wolves, and people are largely beginning to understand the importance of wolves to the American West.

A poll conducted in 1994 for the U.S. Fish & Wildlife Service showed that 71 percent of Colorado citizens—including 65 percent of residents living on the Western Slope—supported restoring wolves to the state. In 2001, a separate poll showed that two-thirds of voters in Colorado supported wolf restoration, including 44 percent of farmers and ranchers.

Initial Position on Restoring Wolves to the Southern Rockies



Source: Decision Research, 2001.

Natural Migration versus Reintroduction

In 2004, a female wolf from Yellowstone National Park was killed on Interstate 70, near Idaho Springs, Colorado. The wolf, which was wearing a radio-telemetry collar, had dispersed from her natal pack and travelled nearly 300 air miles southward over the course of several weeks, before meeting her unfortunate end along a stretch of highway known as the "Berlin Wall for Wildlife." Despite the demise of the wolf, the incident sparked the imagination of many who support having wolves in the Southern Rocky Mountains again. Many began to believe that it was likely that wolves would soon return to Colorado on their own, travelling southward from the Greater Yellowstone Ecosystem.

Two years later, a Colorado Division of Wildlife officer in northern Colorado, near Walden, videotaped a black wolf-like canid. Although the animal clearly appeared to be a wolf, scientists cannot confirm the identity without DNA evidence. Nonetheless, this incident raised, again, the possibility that wolves were travelling to Colorado from Yellowstone.

Most recently, a wolf from southern Montana wearing a satellite telemetry collar travelled a winding, 3,000 mile plus route to northern Colorado in 2009. That wolf was later found dead, of causes yet undetermined.

Although individual wolves from the Northern Rockies have travelled to the Southern Rockies, scientists do not believe that wolves will naturally repopulate the Southern Rocky Mountains. In short, they'll need help to get here. ©Ray Laible, 2007.

So, what is to be made of these individual wolf sightings in the Southern Rockies? Do they confirm the idea that wolves will naturally repopulate the region? Not likely, even within the next 200 years, say scientists (Carroll et al. 2003). Habitat characteristics (open sagebrush steppe with low prey density) in southern Wyoming are a significant barrier to natural recolonization, which requires pairs of wolves to find each other and successfully mate. Thus far, what we have seen is individual wolves dispersing into Colorado—which means that we at least have some level of connectivity to northern wolf populations that would allow for genetic exchange once wolves are re-established in the Southern Rockies.

In order to rekindle a population of wolves in the Southern Rocky Mountains, we must reintroduce them. We have plenty of prey, and great habitat—we just need to relocate some wolves to the core areas indicated on the map on page 3.

Wolves and Economics

Wolves were extirpated from their historic range in the lower forty-eight states primarily to accommodate a single economic interest: livestock production. Today, the primary threat to wolf recovery remains conflicts with livestock—although public records from the National Agricultural Statistics Service (www.nass.usda.gov/) and the FWS indicate that the actual number of livestock killed by wolves annually is less than one in ten thousand (in the counties that have wolves). Many more livestock are killed in those same counties each year by weather than by wolves.

Wolf watching is big business in Yellowstone National Park.
Photo: National Park Service, Jim Peaco.

On the flip side, economists studying the impact of wolves on the economy of the Greater Yellowstone region have found that wolves are big business. Wolf related tourism in the region brings in over $35.5 million dollars directly to the local economy (Duffield et. al 2008). Clearly, the new West has a different perspective on wolves.

Comeback Wolves

In 2005, several dozen western writers, poets and activists collaboratively published *Comeback Wolves: Western Writers Welcome the Wolf Home* as a collective call to action on behalf of wolf recovery in the Southern Rocky Mountains. Senator Mark Udall of Colorado (then a Congressman representing Colorado's second Congressional District) wrote the foreword to the book, speaking eloquently of the role that wolves can and should play in the delicate balance of nature in the West. In his words:

> I believe that the human soul is stirred when a hawk's high-pitched chirp echoes down a river canyon, when the crack of horn-butting Rocky Mountain bighorn sheep sounds off the granite walls of a high mountain valley, or when trout ripple the surface of a still lake.
>
> The call of a wolf used to evoke similar respect for our natural world. We can experience that again, and we need not fear the wolf's return. It can remind us of the West as it once was and as we hope to see it become, a West where opportunities are endless, where the human spirit can be uplifted and rejuvenated, and where human development and habitation can coexist with nature in its wildest forms.
>
> — Congressman Mark Udall, from the Introduction to *Comeback Wolves: Western Writers Welcome the Wolf Home*.

Conclusion

Few places in the contemporary American West define "wild" like the Southern Rockies. Yet, after wolves were eradicated from the region in the early 1900s, the region's ecological fabric began to slowly degrade. Fortunately, the experiences of wolf restoration in Yellowstone have demonstrated that restoring wolves is biologically easy, as long as there is enough wild prey and enough human tolerance. Moreover, the Yellowstone experience has demonstrated that the impact of wolves on local economies can be profoundly positive, while the impact upon ranching remains relatively minor.

The science is clear. The public will is strong. The land's yearning is palpable. It is time to weave wolves back into the landscape of the Southern Rocky Mountains. What is necessary now is political and citizen action to dislodge the FWS from their moribund position that enough has been done for wolves. The Southern Rocky Mountains need wolves, and wolves need the Southern Rockies. Will you join us in this important endeavor?

Gray wolves presently occupy less than five-percent of their original ranges in the lower forty-eight states—even after successful reintroduction programs in central Idaho and Yellowstone National Park. Given their ecological importance, it is imperative that we expedite their recovery into the Southern Rocky Mountains, considered one of the best remaining places for wolves in the West. The region has plenty of habitat, prey, and public good will. It's time for us to act on behalf of wolves. Photo: ©Tim Springer, 2007.

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