



COLORADO WOLF & WILDLIFE CENTER

NOVEMBER 2024 · CONSERVATION · EDUCATION · PRESERVATION



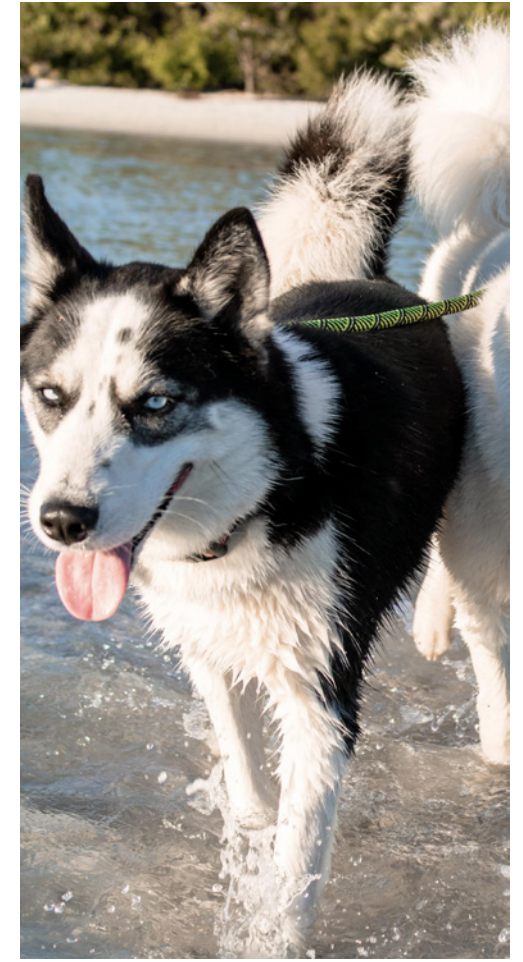


| SOCIAL MEDIA HAPPENINGS |

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We hope to give you something to look forward to every day!



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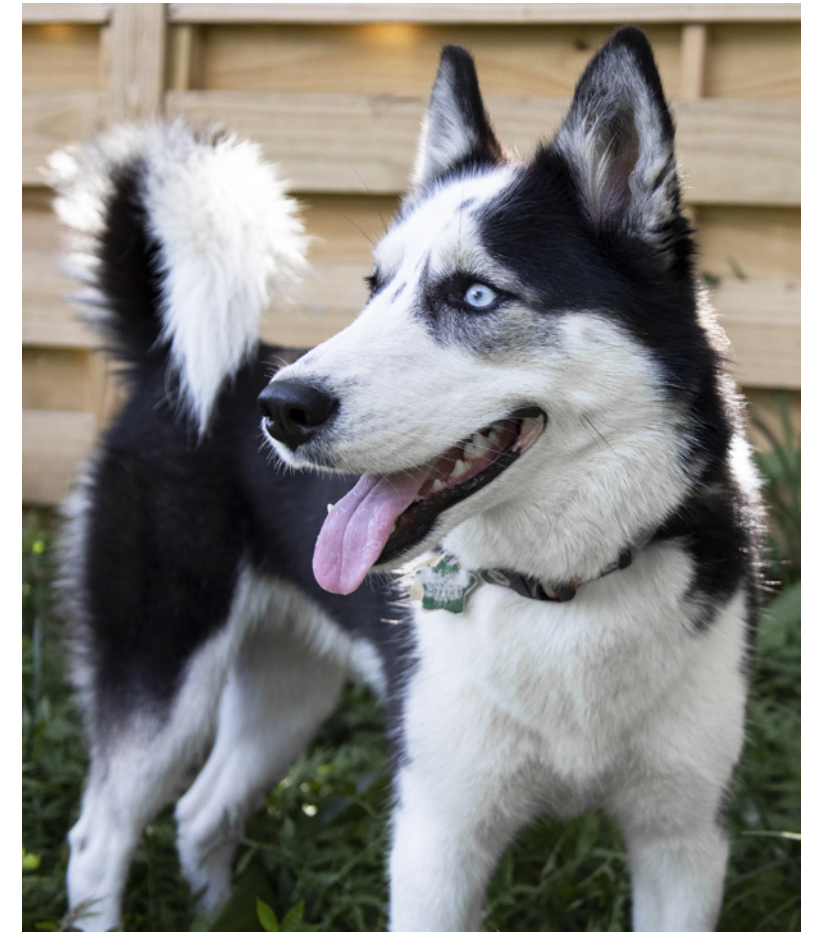
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CONTACT US
tours@wolfeducation.org
PO Box 713 Divide, CO
80814 719.687.9742

For Adoption to a Loving Home

Sapphie is a 4 year old Siberian Husky, and seeking a family that's ready for a life full of adventure and laughs! Having been lucky enough to know and love Sapphie for the last 4 years makes writing this hardest thing I've ever had to do. Sapphie is truly one of the most incredible dogs our family has ever known. We always joke that she does *everything* 1000%, and that includes her affinity to love, make us laugh, and be a loyal friend. However, we are seeking a new home for Sapphie because we feel she would be happiest and thrive in a home without small children or other dogs. Sapphie currently lives with another husky, a cat and a 1 year old, and the cat is by far her favorite roommate. She sometimes experiences anxiety in new situations, but is generally a very confident dog. She's wicked smart and learns new behaviors quickly and easily. She's potty and kennel trained, and a great listener with a wide repertoire of basic behaviors (ex: sit, stay, come, kennel, down, place, heel, off, leash walking and recall). She's not as talkative as most huskies, but will vocalize when she gets excited or riled up while playing. In our home, she demonstrates resource guarding behaviors toward our other dog for things like food and attention, and they have been in a few fights because of this. She also isn't predictable with other dogs outside of the home - sometimes she gets along great with others, and sometimes that's not the case. So, to be confident she'd feel comfortable, we think being an only dog would be best for her. As far as comfort around children, she had met and spent time with other young kids prior to us having a baby, and never demonstrated any aggressive tendencies. However more recently with our little one becoming more mobile and Sapphie's history of resource guarding, we just can't take the risk. Removing these two situational stressors will help Sapphie to let her true self shine, which is an incredibly loving, playful, intelligent and adventurous companion. She LOVES being outside, cuddling, traveling, rough-housing, and learning new things. We know she will bring so much joy and laughter to her next lucky family. If you think Sapphie may be a perfect fit for you, please let us know. We will require a fee and background check. She is currently based in Florida, but distance is not an issue - we just want the best fit for her. Please don't hesitate to reach out to us with any questions. It absolutely breaks our heart to make this decision, but know this is the best choice for our family, and for Sapphie. Thank you!

Cassie Wegeng
(817) 713-3393



Colorado wolf advocates launch \$50,000 anti-poaching reward

Chase Woodruff | Colorado Newline | November 22, 2024



Colorado Parks and Wildlife officials release 1 of 5 gray wolves onto public land in Grand County, Dec. 18, 2023. This wolf is known as 2302-OR. (Courtesy of Colorado Parks and Wildlife)

A nonprofit that advocates for the restoration of gray wolves in Colorado said this week that it will begin offering a reward of up to \$50,000 for information on acts of illegal wolf poaching as the state moves forward with its voter-mandated reintroduction plans.

The announcement of the Rocky Mountain Wolf Project's anti-poaching reward comes after a year of tension between advocates, wildlife managers and ranchers over last winter's release of the state's first 10 reintroduced wolves, and just ahead of the arrival of another 10 to 15 animals in the state wildlife agency's 2024-25 "release season."

Hunting gray wolves, an endangered species, is illegal in most cases under federal and Colorado law, and a state anti-poaching program, Operation Game Thief, offers rewards of up to \$1,000 for information leading to the arrest or citation of poachers.

But Courtney Vail, chair of the Rocky Mountain

Wolf Project, said the group's new reward, which is supported by pledges from a range of private donors and advocacy organizations, will "enhance incentives to bring perpetrators of crimes to justice."

"While enforcement of, and imposition of penalties under, the law (i.e., fines, revocation of hunting privileges, or jail time) are probably the most effective deterrents to illegal activities, we believe that rewards may incentivize the public to 'say something' if they 'see something' regarding wolf poaching," Vail said in a written statement. "By establishing and announcing the Wolf Reward, we hope to preempt those seeking to harm wolves as reintroduction unfolds and as wolves navigate their future among Colorado's public and private landscapes."

It's been a turbulent first year for Colorado's wolf reintroduction program, which is mandated by a statewide ballot measure, Proposition 114, narrowly approved by voters in 2020. The

state's first established wolf pack following reintroduction — consisting of a male and a female who were among the first 10 wolves released in Grand and Summit counties in December 2023, and their four pups — was rounded up by Colorado Parks and Wildlife agents in August after a series of livestock depredations. A short time later, the pack's adult male died in captivity of what officials said was a preexisting injury.

State and federal wildlife officials said earlier this month that a different reintroduced wolf found dead in Grand County in September had died in a fight with another wolf, but also disclosed that the animal had an "old, healed gunshot wound to its rear leg." Since the reintroduced wolves, captured last year in Oregon, underwent health screenings at the time, CPW officials say the wolf was likely shot in Colorado.

The Rocky Mountain Wolf Project says measures like the anti-poaching reward are necessary to "preempt targeted violence towards wolves during the initial stages of the reintroduction process to support law enforcement efforts."

The standing \$50,000 incentive will be awarded for "information leading to formal charges against anyone who illegally kills a wolf in Colorado," the group says, and it will work in conjunction with the state's existing anti-poaching tip hotline.

Gray wolves are native to Colorado and other

Rocky Mountain states, but were hunted to near-extinction by settlers and ranchers in the late 19th and early 20th centuries. Conservationists and ecologists have backed reintroduction efforts like the one pioneered in Yellowstone National Park in the 1990s, while ranching and hunting interests have fueled a new backlash to reestablished wolf populations.

A formal reintroduction plan approved by the Colorado Parks and Wildlife Commission last year calls for the capture and release of 10 to 15 wolves per year in the program's first three to five years, with an initial target of a stable population of at least 50 animals within the state. Under Proposition 114, ranchers who lose livestock to confirmed wolf depredations are eligible for compensation from the state, while the federal government has granted a special exemption to the Endangered Species Act that allows for lethal control, as well as "injurious nonlethal" methods and "intentional harassment," against wolves who threaten livestock.

Ranchers have formally petitioned CPW commissioners to delay the second round of wolf releases scheduled for this winter. CPW announced in September that the agency had reached an agreement with wildlife officials in the Canadian province of British Columbia to capture up to 15 gray wolves there and release them in Colorado between December and March.



These photos and the cover page photo of Raven are by Kelly Murphy

Calls for dairy industry to stop killing healthy calves for milk production

Pip Courtney | ABC News | November 23, 2024



The calf of a dairy cow bred to a beef bull. (ABC News: Pip Courtney)

Victorian dairy farmer Roisin Powles says farmers do not like killing newborn bobby calves on farms or sending them to abattoirs.

But she says it has long been the only option.

"The whole idea of this little calf, a week old, going through the yard process, going on that big long truck ride, through the abattoir, it's just not pretty from any angle," Ms Powles said.

"Nobody likes it. I think they just see it as the only solution."

Bobby calves are the unwanted young of dairy cows, which are removed from their mothers from as young as one-day-old and either killed instantly or in the coming days.

Cows must get pregnant to produce milk for the dairy industry but less than 20 per cent of female calves are required as replacement milkers.

In Australia, between 200,000 and 500,000 bobby calves are killed annually.

Dairy Australia's Sustainable Animal Care manager, Andy Hancock, said that was up to 40

per cent of the number of dairy calves born each year.

He said with the public opposed to killing healthy calves, doing nothing wasn't an option.

"In Tasmania, an abattoir got shut down after some footage was released at the end of last year.

"We need to show the community and regulators we're doing something, that we're moving the needle on this."

Dairy Australia is supporting a 10-year industry goal to find more humane ways of dealing with bobby calves, considered a living waste by-product.

However, the 2035 date has been criticised as unambitious and a threat to the industry's social licence.

Calves destined for early slaughter

RSPCA's Natalie Roadknight said the public generally reacted negatively when they found out what happened to bobby calves.

"That tells you that the current practices on

dairy farms are out of step with community expectations," Dr Roadknight said.



Healthy bobby calves are killed because there is no other use for them for the dairy industry. (ABC News: Pip Courtney)

Beef-dairy cross calves prolong life

Calves destined for meat production grow for at least two years before being processed.

Retailer Gerry Harvey was an early beef-on-dairy pioneer.

He invested in Wagyu beef 23 years ago and when he didn't have enough Wagyu females, he set up the Dairy Beef Alliance (DBA) business.



Calves are sent to contractors who rear them until they are three months old. (ABC Landline: Pip Courtney)

DBA offered to buy dairy calves if farmers got some of their milking cows pregnant to his Wagyu bulls.

The calves then became valuable to both the dairy farmer and DBA.

Northern Victorian dairy farmers Merv and Bonita Koch started supplying calves to DBA 16 years ago and said it helped them build their Holstein herd from 250 to 750.

"We reared the Wagyu-Holstein cross calves for 12 weeks and were actually able to sell those animals and purchase an in-calf [pregnant] milking cow for that money, Mr Koch said.



Merv Koch says crossbreeding has been a win for them. (ABC News: Pip Courtney)

"It was definitely a win-win for us."

The Kochs bottle-feed the calves for seven days before they pass them onto contract calf-rearer Tracy Todd, who raises them for three months.

At peak times, she feeds 500 calves.

She wants Australia's beef-on-dairy industry to grow so more calves can live longer, high-welfare lives.

When you see them on the truck, it's not a nice sight, but doing it this way they're surviving.



Tracy Todd says contract rearing gives the calves a longer life span. (ABC News: Pip Courtney)

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They're growing up," Ms Todd said.

The three-month-old calves move to a grazing property for nine months and then to a feedlot for 400 days.

The Holstein-Wagyu cross beef is sold to premium markets in 30 countries.

About 250 dairy farmers supply 10,000 calves a year to DBA.

Bias dairy cattle doesn't produce good meat

DBA's general manager, Peter Wilkinson, said the dairy-beef cattle achieved high-quality meat marble scores with 70 per cent of the cuts scoring at least seven out of nine.



Mr Koch (left) and Dairy Beef Alliance general manager Peter Wilkinson. (ABC News: Pip Courtney)

"There's marbling that comes in from Holsteins that people don't realise is there," Mr Wilkinson said.

"They also bring a lot of frame and volume into the animals we produce, and, obviously, those forequarter cuts are the higher value cuts, and they're bigger in that area."

Mr Wilkinson said most of DBA's beef was exported for higher prices than what Australian buyers would pay because there was a bias that dairy cattle didn't produce high-quality beef.

But if the dairy industry's 2035 deadline was to be achieved, the RSPCA's Dr Roadknight said that must change.

"If there's going to be a pathway for these bobby calves, then it's going to be both industries working together because they do become beef animals," she said.

"So they're part of both the beef and the dairy industry."

Beef processor Greenham has 150 dairy farmers in Tasmania and Victoria supplying beef-dairy cross calves for its grass-fed beef-on-dairy brand.

Greenham welfare manager Sarah Bolton said about 90 per cent of the beef was exported, mostly going to the United States, which, unlike Australia, has a thriving beef-on-dairy sector.



These livestock are the product of dairy cattle crossed with a beef breed. (ABC News: Cam Lang)

"Our product actually meets the same specifications as what a purebred beef animal does," she said.

A joint trial between the Queensland Department of Agriculture and Fisheries (DAFF) and the University of Queensland is gathering data on the performance of dairy and beef-on-dairy cattle.

DAFF extension office Mark Bauer said Holstein and Holstein-beef cross animals easily reached weight and quality targets after following feeding advice from the US.

"It's fantastic news, which means people [dairy farmers] have got a product they can actually do something with," Mr Bauer said.

Mr Bauer said the cattle's eating quality earned UQ a place in Queensland's top 100 beef producers list last year.

"You think about the level of discrimination, you always hear about dairy-derived animals [but] the consistency and the level of the improvement over the standard probably was surprising."

Earth Has Tilted 31.5 Inches. That Shouldn't Happen.

Tim Newcomb | Popular Mechanics | November 23, 2024

- When humans pump groundwater, it has a substantial impact on the tilt of Earth's rotation.
- Additionally, a study documents just how much of an influence groundwater pumping has on climate change.
- Understanding this relatively recent data may provide a better understanding of how to help stave off sea-level rise.



Water has power. So much power, in fact, that pumping Earth's groundwater can change the planet's tilt and rotation. It can also impact sea-level rise and other consequences of climate change.

Pumping groundwater appears to have a greater consequence than ever previously thought. But now—thanks to a study published in the journal *Geophysical Research Letters*—we can see that, in less than two decades, Earth has tilted 31.5 inches as a result of pumping groundwater. This equates to .24 inches of sea level rise.

"Earth's rotational pole actually changes a lot," Ki-Weon Seo, a geophysicist at Seoul National University and study lead, says in a statement. "Our study shows that among climate-related causes, the redistribution of groundwater actually has the largest impact on the drift of the rotational pole."

With the Earth moving on a rotational pole, the distribution of water on the planet impacts distribution of mass. "Like adding a tiny bit of weight to a spinning top," authors say, "the Earth spins a little differently as water is moved around."

NASA research published in 2016 alerted us to the fact that the distribution of water can change the Earth's rotation. This study in *Geophysical Research Letters* attempts to add some hard figures to that realization. "I'm very glad to find the unexplained cause of the rotation pole drift," Seo says. "On the other hand, as a resident of Earth and a father, I'm concerned and surprised to see that pumping groundwater is another source of sea-level rise."

The study included data from 1993 through 2010, and showed that the pumping of as much as 2,150 gigatons of groundwater has caused a change in the Earth's tilt of roughly 31.5 inches. The pumping is largely for irrigation and human use, with the groundwater eventually relocating to the oceans.

In the study, researchers modeled observed changes in the drift of Earth's rotational pole and the movement of water. Across varying scenarios, the only model that matched the drift was one that included 2,150 gigatons of groundwater distribution.

Surendra Adhikari, a research scientist at NASA's Jet Propulsion Laboratory who was involved in the 2016 study, says the additional research is important. "They've quantified the role of groundwater pumping on polar motion," he says in a news release, "and it's pretty significant."

Where the water moves from—and to—matters. Redistributing water from the midlatitudes makes the biggest difference, so our intense water movement from both western North America and northwestern India have played a key role in the tilt changes.

Now that the impact of water movement is known for such a short—and relatively recent—time, digging through historical data may help show trends and provide greater depth to the understanding of groundwater movement effects.

"Observing changes in Earth's rotational pole is useful," Seo says, "for understanding continent-scale water storage variations."

These wolves are the first known carnivores to ‘enjoy’ sweets

Andrew Paul | Popular Science | November 20, 2024



Less than 500 Ethiopian wolves are known to exist in the wild. Credit: Adrien Lesaffre

The Ethiopian wolf, also known as the red jackal, is one of the world’s rarest canines as well as Africa’s most endangered carnivore. But ongoing conservation efforts for the coyote-like predator might not only help maintain local wildlife populations—their penchant for sweet snacks may also pollinate plants.

Ethiopian red hot poker flowers are perennial flowers of the *Kniphofia* genus native to African nation that typically bloom between May and October. Each year, pollinators such as birds, insects, and small mammals visit the plants to drink from their large amounts of nectar. But while the Ethiopian wolf’s diet is largely composed of rodents, a new study published on November 19th in the journal *Ecology* confirms that the red jackals also frequently forage for Ethiopian red hot poker nectar themselves.

The evidence gathered by the study’s authors at the

University of Oxford’s Ethiopian Wolf Conservation Programme (EWCP) marks the first known documentation of large carnivores purposefully feeding on nectar. Researchers tracked the habits of a group of wolves over one bloom season, and noted that individual wolves visited as many as 30 blooms at a time. And it’s not just the adults that make trips to the flowering fields—the study also notes juvenile wolves appear to learn how to harvest the nectar from their parents and other pack members

Each wolf’s muzzle often is coated in fine, yellow pollen after their nectar snack. While not directly confirmed, researchers believe it highly likely that the predators’ subsequent migrations help spread the flowers much like other traditional pollinators.

“I first became aware of the nectar of the Ethiopian red hot poker when I saw children of shepherds in



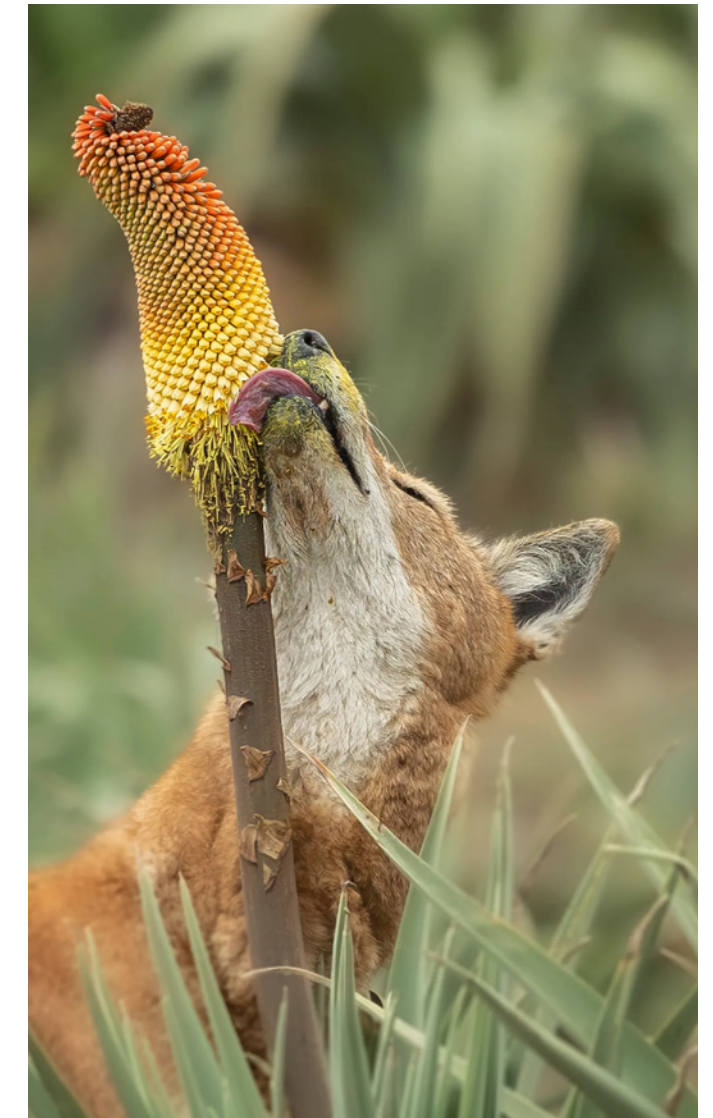
Ethiopian wolves mostly subsist on a diet of small rodents. Researchers documented the canines visiting up to 30 flowers at a time. Credit: Adrien Lesaffre

the Bale Mountains licking the flowers,” explained EWCP’s director and co-founder, Claudio Sillero, who described the nectar’s flavor as “pleasantly sweet.”

According to the EWCP’s November 20th study announcement, locals in the Oromo community also use the nectar for honey, as well as coffee sweetener.

“When I later saw the wolves doing the same, I knew they were enjoying themselves, tapping into this unusual source of energy,” Sillero continued. “I am chuffed that we have now reported this behavior as being commonplace among Ethiopian wolves and explored its ecological significance.”

This unique ecological partnership, however,



is under threat of eradication. The EWCP says less than 500 Ethiopian wolves still exist in the wild, spread across 99 packs restricted to six enclaves in the region’s highlands.

“These findings highlight just how much we still have to learn about one of the world’s most-threatened carnivores,” said Sandra Lai, study lead author and a senior scientist at the EWCP. “It also demonstrates the complexity of interactions between different species living on the beautiful Roof of Africa.”

Colorado Parks and Wildlife to award up to \$50,000 for initiatives that promote the Born to Be Wild special license plate

DENVER — Colorado Parks and Wildlife is pleased to announce the Born to Be Wild License Plate Grant Program. The program will provide up to \$50,000 in funding for initiatives that raise awareness and promote the Born to Be Wild special license plate, educating the public about its importance and ultimately increasing sales to further support gray wolf conflict mitigation efforts. The application deadline is Dec. 15, and awardees will be announced in early March 2025.

Administered through CPW, the Born to Be Wild License Plate Grant Program awards funding to selected nonprofit organizations, educational institutions and government agencies for projects focused on innovative and creative marketing strategies and solutions that increase participation in this license plate program.

Additional information including applicable projects, eligibility requirements and application details are available online.

"The Born to Be Wild license plate will help Colorado continue reducing human-wildlife conflict and supporting education and awareness around our great state. I appreciate the work of the legislators who made this possible and look forward to seeing the impact of this important funding," said Gov. Jared Polis.

The Born To Be Wild special license plate was established by HB23-1265 to raise funds for non-lethal means of mitigating conflict with gray wolves. The bipartisan bill was sponsored by Reps. Meghan Lukens and Elizabeth Velasco, along with Sen. Janice Marchman and then-Sen. Perry Will. Gov. Jared Polis signed the bill into law in May 2023.

"Our ranchers are on the frontlines when navigating wolves on the Western Slope, and this grant program

signifies that the State of Colorado is invested in decreasing livestock depredations and supporting our ranchers," said Rep. Lukens. "There is more work to be done to decrease wolf-livestock conflict, and the Born to Be Wild License Plate Grant Program is a component of these vital conflict mitigation efforts."

"I am proud to support ranchers and cattlemen here in the Western Slope," said Rep. Velasco. "This effort was made possible by folks from the ranching industry, the sportsperson caucus, conservationists and wildlife biologists who were able to come together and agree on a project that meets everyone's needs, acknowledging that we must continue to foster trust and collaboration on the ground. We are looking forward to seeing the funds put into action and to have a real impact for our community."

"This bipartisan effort passed by Western Slope and Front Range legislators helps to bridge the urban-rural divide in Colorado by giving Coloradans who support wolves the ability to assist the agricultural community and those directly impacted by the reintroduction effort," said County Commissioner-Elect Perry Will. "I support all efforts to provide landowners and producers with the assistance they need to be successful in the face of change brought by a growing wolf population in the state. I'm glad to see the plate's initial success, and hope that this next round of grants will spur the plate's popularity so it can continue to provide meaningful wolf conflict reduction resources to rural Colorado."

"The Born to Be Wild license plate program shows how Coloradans can come together across party lines to find creative solutions," said Sen. Marchman.

"Working with Senator Will and our House colleagues, we designed this program to provide



a sustainable funding source for our ranching communities. Every time someone chooses this special plate, they're helping build a bridge between wildlife conservation and agricultural interests in our state. I encourage organizations to apply for these grant funds and help spread the word about this innovative program."

"This special license plate allows Colorado residents to support ranchers impacted by wolf depredation by providing funding for non-lethal conflict minimization tools such as turbo fladry and scare devices," said CPW Director Jeff Davis. "The Born to Be Wild License Plate Grant Program is important to wolf advocates, and the hope is that it will get the public engaged and increase overall sales of the license plate, in turn reducing impacts with livestock so that both ranchers and wolves can thrive and coexist together in Colorado."

This grant cycle, the minimum award amount will be \$5,000 with a maximum of \$50,000. The amount awarded will be determined based on the project's alignment with program priorities and the availability

of funds. Partial funding may be provided. Annual award amounts will vary each cycle depending on revenue generated from license plate sales. Applications must be submitted by Dec. 15, 2024. Applicants should email any questions about the Born to Be Wild License Plate Grant Program to Amy Brandenburg at amy.brandenburg@state.co.us.

Should We Have Wolves or Livestock on Public Lands?

Erik Molvar | Counter Punch | November 22, 2024



Photo by Hans Veth

In the American West, the vast majority of public lands are leased to ranchers to graze their livestock. The ranchers can't seem to get along with any of the wild inhabitants. Coyotes, ravens, eagles, mountain lions, prairie dogs, grizzly bears, beavers are all targeted for elimination by the livestock industry, for its sole convenience. Ranchers carry rifles in their pickup trucks, and coerce state legislatures and game agencies to classify native wildlife as varmints so they can be killed in unlimited numbers. And ranchers have federal, state, and local government agencies as their private wildlife-killing death squads to roam the landscape, snuffing out wild species at their request. But the livestock industry has a special hatred for the wolf.

There is plenty of evidence that livestock and wolves can coexist on public lands, but most ranchers seem stubbornly opposed to coexistence. In light of those who refuse to coexist, let's examine the comparative merits of having wolves versus having livestock on public lands.

First there's the question of public safety. While most of us grew up with fairytales about the "big bad wolf," there is precious little evidence that North American wolves are dangerous to people. Yellowstone National Park has multiple packs of wolves, and gets 4.7 million visitors every summer. Yellowstone tourists are famous for stupid human tricks, and there are plenty of incidents of visitors killed by bison or other wildlife. But although

wolves are the most popular attraction in the Park, the number of wolf incidents in Yellowstone is zero. Alaska is a state with an abundant wolf population, yet humans coexist with wolves, and problems are few, and rare. I studied moose in the Alaska Range for several years, and once found myself between a wolf pack and its pups at a range of 30 yards on either side. I was never in any danger. Contrast this with cattle, which kill, on average, 22 people in the United States every year. Wolves, on the other hand, kill and average of — wait for it — zero.

Advantage wolves.

Western public lands are popular destinations for sport hunters. This demographic, like many, has a lunatic fringe, and the sportsmen's loonies have a bloodthirsty hatred for wolves, claiming wolves kill all the game that hunters want for themselves. Let's compare wolves and livestock for their impact to game species.

Wolves live in a dynamic equilibrium with their prey species. While prey species can reproduce rapidly and tend to fill up the landscape to the point that they become food-limited, wolves limit themselves through territoriality to population levels far below the number that could be sustained by the number of elk, deer, and other herbivores based on food availability. Wolves cannot limit prey populations except under unusual circumstances. In Alaska, where wolves are abundant, it was once thought that wolves were responsible for major caribou declines, but science later debunked this assertion. The State of Alaska had an on-again-off-again policy of aerial gunning of wolves, but when this policy was subjected to scientific scrutiny, it was found that the wolf-killing program had no effect on either prey populations or hunter success. Despite Alaska's abundant wolf population, the state is considered a "lifetime dream hunt" destination. This experience has been repeated in the West with the Northern Rockies wolf reintroduction of 1995; elk in Montana, Wyoming, and Idaho are equally or more numerous today than they were before wolves were reintroduced to these states.

Now let's consider the impact of cattle and sheep on big game species. Prior to the EuroAmerican settlement of North America, there were an

estimated 10 million elk, 55 million bison, 10 million mule deer, 35 million pronghorns, and 1.5 to 2 million bighorn sheep. At the same time, there were an estimated 380,000 wolves in the western United States and Mexico. Today, thanks in significant measure to the livestock industry, we are down to an estimated 1 million elk, 31,000 wild bison, 3.4 million mule deer, 750,000 pronghorns, and 70,000 bighorn sheep. The removal of wolves from most of the West hasn't limited prey populations; livestock have.

According to a U.S. Department of Agriculture report, each cow-calf pair eats enough forage to support two elk or five mule deer. Five sheep eat an equivalent amount of forage. The Bureau of Land Management authorizes 12 million Animal Unit Months (AUMs) of public lands grazing each year, equal to 1 million cow-calf pairs foraging for 12 months a year. The Forest Service authorizes an additional 9.9 AUMs, or 825,000 cow-calf pairs all year. Assuming an equal boost to elk and mule deer, the removal of cattle and sheep from western public lands would support 1.825 million more elk and 4.563 million more mule deer if all the cattle and sheep were shipped back to private lands. Then there's the impact of livestock diseases on game species. Domestic sheep carry pneumonia pathogens deadly to bighorns, and these are the primary reason that bighorn sheep — both in the mountains and the deserts — are a scarce remnant of their original populations.

So, from the perspective of hunters (not to mention the far-more-numerous wildlife viewers), western public lands would be far better off with abundant wolves than with cattle and sheep.

And consider the consequences from streams and rivers, the desert oases so important for western biodiversity. Cattle are especially hard on waterways because they congregate along streams, grazing heavily in the bottomlands, impoverishing these rich and important wildlife habitats. Streamside overgrazing denudes the woody vegetation that would otherwise shade the water, and causes heavy erosion that silts in and smothers the spawning gravels required by trout and salmon to complete their reproductive cycles. As a result, most native subspecies of trout in the West are dwindling toward

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extinction, salmon runs are depleted in grazed areas, and opportunities for recreational anglers and commercial fishers based on these stocks are badly degraded.

Conversely, wolves rebalance the distribution of native wildlife to the benefit of streams and rivers. An overwhelming body of scientific evidence from Yellowstone National Park shows that the return of wolves caused a redistribution of elk and other herbivores on the landscape, pushing them out of valley bottoms and into the timbered hills. The result was a resurgence of willows and aspens in key streamside areas, which supported a rebound of songbirds, beavers, and other wildlife, even helping to restore the stream channels themselves. That's why a team of scientists recently recommended that the best way to restore native ecosystems in the West was to remove domestic livestock and bring back the wolves and beavers.

Finally, there is the question of what's in the public interest. The livestock industry has long had a stranglehold on western public lands: The Bureau of Land Management currently rents out an astonishing 83% of the lands it manages to private livestock operations, authorizing the cattle and sheep to take out 50 to 65% of the edible forage that will grow for the entire year. That level of overgrazing has led to serious land health problems – according to the agency's own assessments – on half of western public lands. And our fieldwork indicates that the ravages of overgrazing are far more widespread than federal officials are admitting. The result has been infestations of flammable, invasive cheatgrass across hundreds of millions of acres of public land. The consignment of public lands to private profit not only degrades native ecosystems and decimates native wildlife, but also ruins the recreational value of public lands by splattering it with cow manure, contaminating the water with fecal coliform, a major human health hazard, and depleting native wildflowers (including desert "superblooms").

Now that we've examined the costs, let's not neglect the benefits. Ranchers like to claim benefits to soils and carbon balance, but researchers have

found a steep climate deficit for cattle production, steepest on public lands with their low-quality forage. Then there's the mirage of food production, jobs, and economic aspects of public lands ranching. Researchers found that only 1.6% of beef production happens on public lands, so consumers wouldn't notice any changes at the grocery store or the hamburger stand if cattle and their impacts disappeared from public lands. Owners of western ranches typically have to get jobs in town to supplement their income anyway, so there are no real job benefits. The National Cattlemen's Beef Association commissioned an economic analysis to quantify the financial impact of public-land ranching in three western states. When the economic output was compared to state economies, though, it ranged from a paltry one-half of one percent in Wyoming to a low of two-hundredths of one percent of the Oregon state economy. Thus, the employment and economic contributions of public lands ranching are miniscule, and the only real benefit of leasing public lands for private livestock production is, well... Nothing comes to mind.

In the final analysis, the renters are trashing the premises. If it comes down to a choice between wolves and livestock on western public lands, the clear winner is wolves. Let's extend the benefits all across the American West. The case for leasing public lands for livestock production? That's a tougher sell.

Winter Wonderland

WITH THE WOLVES

Join us for a
special holiday
celebration on
SUNDAY
DEC 22nd
from 9 to 11am

**FESTIVITIES
INCLUDE:
breakfast burritos
with the wolves**

\$40 · 12 and older
\$20 · ages 6-11
Reservations Required



Colorado Wolf & Wildlife Center
Space is Limited · RSVP 719.687.9742 · wolfeducation.org

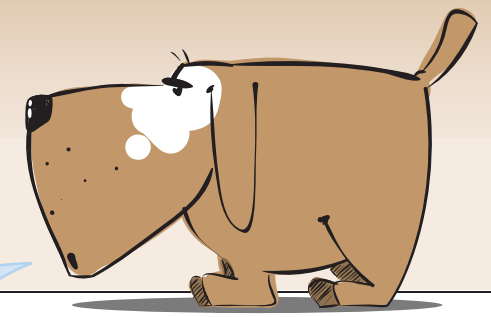
Adoption corner

TCRAS

Teller County Regional Animal Shelter
tcrascolorado.org · 719.686.7707

SLVAWS

San Luis Valley Animal Welfare Society
slvaws.org · 719.587.woof (9663)



[NOTE - Our shelter is still open for adoptions, but we are asking that you call ahead and make an appointment before coming in to the shelter - 719-686-7707.]

GRYFF »

Hello there! My name's Gryff! I'm a big boy, but I'm full of love! I'm super sweet and I love to get lots of attention. I'm also a bit silly and have a really big personality. I love to be outside and go for hikes and be in nature. I would do best with a home that will give me all the attention they can, sometimes I am not good at sharing the spotlight. My big wish is to be in home of my own for Christmas.



« COSMO

Hello new friend! My name is Cosmo. I'm a rather handsome fella if I do say so myself! I love to be pet and scratched and bask in the warm sunshine. I'll watch the toys you show me with some interest...I might play with them...I might not...I am a cat after all!

WHISTLES »

Whistles is a sweet & timid "low rider" who takes life at her own pace. With her big, soulful eyes and little wagging tail, she seems a little shy at first but has a heart full of love just waiting to be discovered. She does well with other dogs and children. She is a bit of an observer preferring to watch the world around her before joining in. Fully vetted.



« CUDDLEBUG THOMPSON

Dog friendly. Crate trained. House trained. Walks well on leash. Loves to ride in cars. Indifferent with cats Loves PB Kongs, chew bones. A little shy when meeting new people. Rescued from a kill shelter. Fully vetted.

SLVAWS
Colorado Springs Adoption Fairs
Every Saturday 10AM - 3PM
Check www.slvaws.org
for locations.