

The Deadliest Dozen Counties in the American West

Mapping Wildlife Services' Killing Fields

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A Report from



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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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Front Cover: **Coyote on Fence - Nevada**, Wildlife Services; **Cow - Boulder County Open Space**, Wendy Keefover; **Sheep Graze - eastern New Mexico**, courtesy, Mary Katherine Ray; **Deer - Estes Park**, courtesy, Thomas Gootz.

Back Cover: **"Double Take,"** courtesy, Ray Rafiti, *Wild Faces * WildPlaces*.

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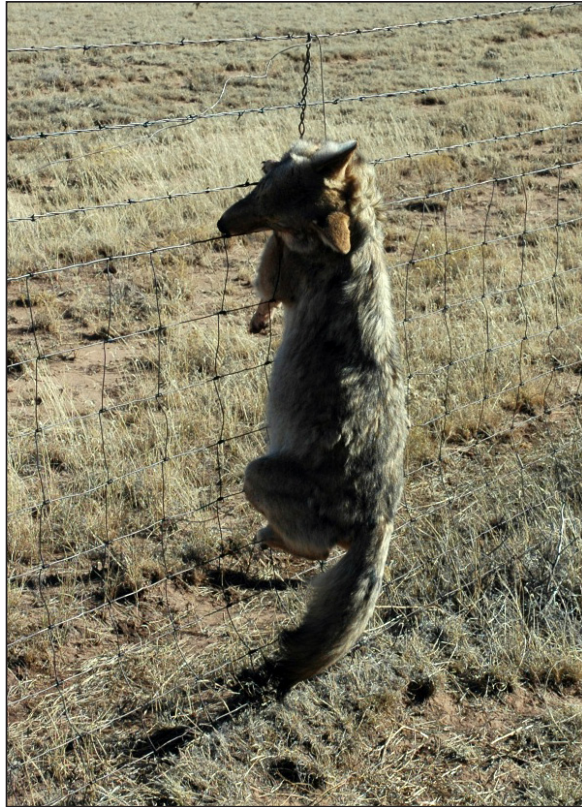
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It was another crucifixion in the West, a hide hung on a barbed-wire fence with a wrangler's prayer: Cows are sacred. Sheep, too. No trespassing allowed . . .

My eyes returned to Jesus Coyote, stiff on his cross, savior of our American rangelands. We can try and kill all that is native, string it up by its hind legs for all to see, but spirit howls and wildness endures. Anticipate resurrection.

~ Terry Tempest Williams (1994) An Unspoken Hunger

Introduction

WildEarth Guardians used GIS data to map the locations of carnivores killed by the U.S. Department of Agriculture's Wildlife Services in the American West. Guardians obtained the data from Wildlife Services for nine native mammalian carnivores species,¹ and organized it by county in the eleven western states for the years 1998 to 2008. The maps depict the twelve deadliest counties in the West; the states and counties where the most—and the least kills—occurred; and where the highest densities of killing took place.²

Each year, over 100,000 of our nation's most charismatic wildlife, including wolves, coyotes, black bears and mountain lions, are poisoned, trapped and gunned down by the federal government as part of an anachronistic, wasteful program that harms wildlife, the environment, wildlife recreationists, and taxpayers. Wildlife Services, an agency within the Animal and Plant Health Inspection Service, a branch of the U.S. Department of Agriculture, may be the most euphemistically named agency in the federal government. In existence since the 1890s under various names and guises,³ the agency's primary purpose is ostensibly to protect agribusiness (both domestic livestock and crops) from wildlife. It has also begun killing for other reasons, for example, to purportedly reduce predation on native ungulates, at the behest of some hunting organizations. Biologists have questioned the purposes of this carnivore-killing program since the 1930s; they contend that the annual level of killing is excessive and not based upon the best available science.

Wildlife Services' actions are also expensive. Between 2004 and 2011, the agency spent approximately \$1 billion to kill nearly 26 million animals⁴ using aerial and ground gunning, poisons, traps, snares, and hounds, representing a direct subsidy to agriculture and other private interests.



Native species such as black bears and bobcats are victims of Wildlife Services' mass-killing programs.
Courtesy, Thomas Gootz.

1 Black bears (*Ursus americanus*), grizzly bears (*Ursus arctos horribilis*), bobcats (*Lynx rufus*), coyotes (*Canis latrans*), red foxes (*Vulpes vulpes*), gray foxes (*Urocyon cinereoargenteus*) mountain lions (*Puma concolor*), wolves (*Canis lupus*), and Mexican gray wolves (*Canis lupus baileyi*).

2 Density refers to the numbers of individuals relative to a space, and in this instance, the numbers of animals killed per square mile in Western counties.

3 In its century-long history, Wildlife Services held a variety of names including the "Bureau of Biological Survey," "Predatory Animal and Rodent Control," and "Animal Damage Control." Read about the history of the agency at www.wildearthguardians.org/site/PageServer?pagename=priorities_wildlife_war_wildlife_timeline.

4 This total comprises over 300 species, including birds (mostly nonnative starlings).

WildEarth Guardians has written extensively about Wildlife Services elsewhere—describing the agency’s mission; its wide array of killing techniques; and the extensive harms it causes to the environment, wildlife, recreationists, and taxpayers (Keefover 2012; Keefover-Ring 2009; Keefover-Ring 2010; WildEarth Guardians 2012). This report specifically describes where carnivore killing occurred. But even these data may not reflect the actual amount of killing conducted by the agency.

The accuracy of Wildlife Services’ kill data is questionable. The agency, notoriously secretive, uses undisclosed data collection techniques and is politically motivated to undercount the number of animals their agents kill. A former Wildlife Services trapper, Gary Strader, stated that: “[g]uys who kill non-target animals don’t report it. There’s not a fraction of the non-target kills reported by the guys in the field.” Wildlife Services also refuses to allow members of the public or the media to accompany their agents in the field (Knudson 2012).⁵

As unreliable as the data may be, they at least provide an indication of where the most (and least) killing transpired. Wildlife Services’ activities are often driven by money and contracts, with involvement of governmental and non-governmental entities alike. While Wildlife Services announces its annual budget each year, it fails to reveal to the public and even to Congress where the money comes from and how it is allocated.⁶

Wildlife Services appears loath to divulge to the public and to Congress how its budget works, but the agency’s annual statements do reveal that approximately one-half of its funding comes from what it terms as “cooperators.” Besides state, tribal, county, and municipal entities, these cooperators also include the livestock industry, the timber industry,⁷ and hunting organizations.

WildEarth Guardians has litigated over Wildlife Services’ budget since 2010 because the agency refuses to disclose to the public what it spends on what it does. In 2012, Guardians again sued the agency for refusing to analyze the environmental consequences of its actions for almost two decades. We also alleged that the agency has violated the Wilderness Act for shooting coyotes, wolves, and other wildlife from low-flying helicopters and airplanes in designated wilderness areas.

Congress should immediately investigate and reform Wildlife Services. We hope the following tables and maps will help inform those efforts.

Mapping Wildlife Services’ Killing Fields

Wildlife Services annually issues reports on its activities, including data on more than 300 species it kills in the United States. The agency commits a large amount of resources to killing native carnivores in the American West. We mapped the total numbers of nine carnivores killed, by county, in the eleven western states. (Table 1 shows the total numbers of species killed by state as an overview.)

5 Tom Knudson of *The Sacramento Bee* writes, as part of a recent exposé on Wildlife Services: “And while even the military allows the media into the field, Wildlife Services does not. ‘If we accommodated your request, we would have to accommodate all requests,’ wrote Mark Jensen, director of Wildlife Services in Nevada, turning down a request by *The Bee* to observe its hunters and trappers in action.”

6 In May 2011, Wildlife Services evaded a specific request from four Congressmen for information concerning the agency’s expenditures; it responded instead with vague generalities.

7 Wildlife Services kills hundreds of black bears in Oregon on commercially grown timber stands. The timber industry complains when black bears peel back the bark of young trees (grown in enticing rows of even-aged stands) to find natural sugars in the springtime after they emerge from hibernation.



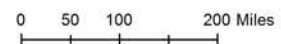
FIGURE 1. Wildlife Services' Kills by County
Deadliest Dozen Counties for Total Carnivores Killed



Deadliest Dozen Counties for Carnivores Killed (1998-2008)



Cartography: Kurt Menke, GISP
 Birds Eye View
 Date: November 29, 2011
 Data Sources: USDA Wildlife Services



Reducing or eliminating subpopulations of animals—as Wildlife Services has done in the deadliest counties in the West—can have deleterious effects on whole populations. Subpopulations together are called “metapopulations.” When subpopulations are extinguished, it can harm the metapopulation, which create genetic bottlenecks and reduce species’ resilience.

Understanding the maps’ colors is essential. Dark green shows where the least amount of killing by Wildlife Services happened, while dark red shows the highest level. Gradations of these colors, from light green to orange, are presented in the color keys at the bottom of each map.

As the *Deadliest Dozen Counties for Total Carnivores Killed* map (Figure 1) shows, most of the deadliest counties in the West were located in Wyoming and Nevada. In the 11-year period from 1998 to 2008, Wildlife Services reported it killed 40,089 animals in five counties in Wyoming, and 35,151 animals in three counties in Nevada. Elko County, Nevada, merits special recognition as the single most deadly county in the West with almost 18,000 reported kills in an 11-year span. The remaining deadliest dozen counties in the West were found in California, Colorado, Oregon, and Utah (Figure 1, Table 2).

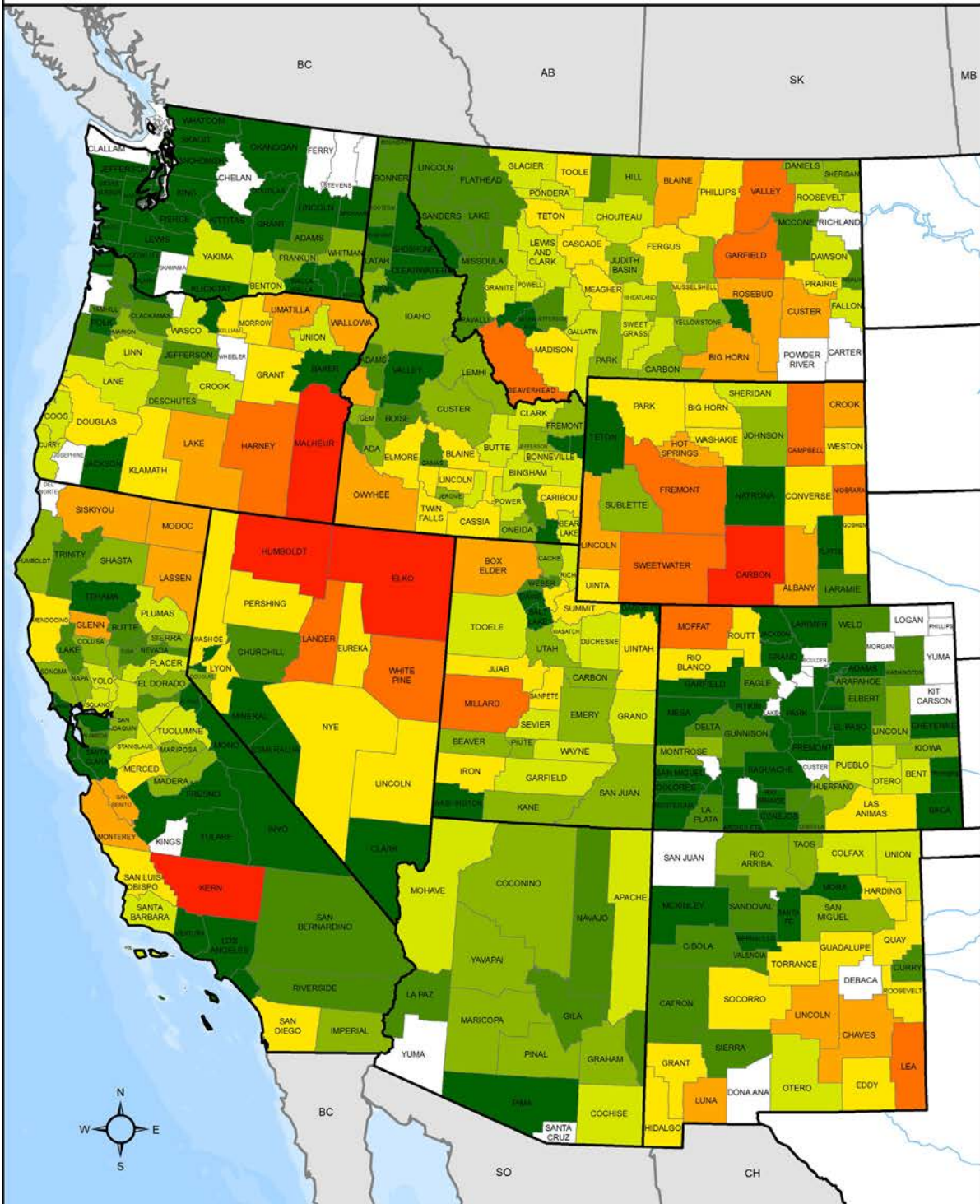
As depicted in the *Total Carnivores Killed* map (Figure 2), Nevada’s Elko (17,805 square miles) and Humboldt (9,814 square miles) Counties, Oregon’s Malheur County (9,932 square miles), Wyoming’s Carbon County (7,947 square miles), and California’s Kern County (8,157 square miles) are the deadliest-most counties in the West. Wildlife Services’ carnivore killing also reached high levels in other states: Wyoming, Montana, Nevada, Utah, California, Colorado, and New Mexico. Also, as the Total Carnivores Killed map depicts, parts of Washington, Colorado, Arizona, California, and Idaho show the lowest levels of killing.



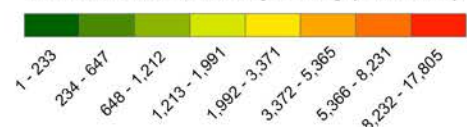
Three coyotes caught in leghold traps. The coyote in the foreground is being attacked by three dogs.
Photo, Wildlife Services.



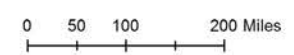
FIGURE 2. Wildlife Services' Kills by County
Total Carnivores Killed, 1998-2008



Total Carnivores Killed by County (1998-2008)



BIRD'S EYE VIEW GIS
 Cartography: Kurt Menke, GISP
 Birds Eye View
 Date: November 29, 2011
 Data Sources: USDA Wildlife Services



Wildlife Services reported that the top three Western states where it killed mammalian carnivores (the majority of which are coyotes) during the years 1998-2008 were Montana, Wyoming, and California (Tables 1 and 3).

In the *Density of Carnivores Killed per Square Mile* map (Figure 3), we also analyzed the total number of the nine carnivores that Wildlife Services killed per square mile. Those data may be more important for certain species as the intensity of killing could indicate where subpopulations have been eliminated or reduced to the point where it affected metapopulations. The highest level of kills occurred in Wyoming (11 counties); California (10 counties); Montana (9 counties); Idaho (7 counties); Oregon (4 counties); Utah (4 counties); Colorado (3 counties); New Mexico (3 counties); and Nevada (2 counties).

That map also shows that the highest levels of killing occurred in two regions, the Northern Rocky Mountains (including Oregon, but not Washington) and in an area covering parts of California, Nevada, New Mexico, and Utah. The least amount of killing occurred in most of Colorado and Washington, but also in parts of California, Idaho, and Montana.



Wildlife Services' "Killer Bee" aircraft. Each wolf-paw decal represents a wolf shot from the sky by this plane. Photo, Wildlife Services.



June 2007, Wildlife Services' aerial-gunning plane crash in Utah. Two mortalities sustained. Photo, National Transportation Safety Board.



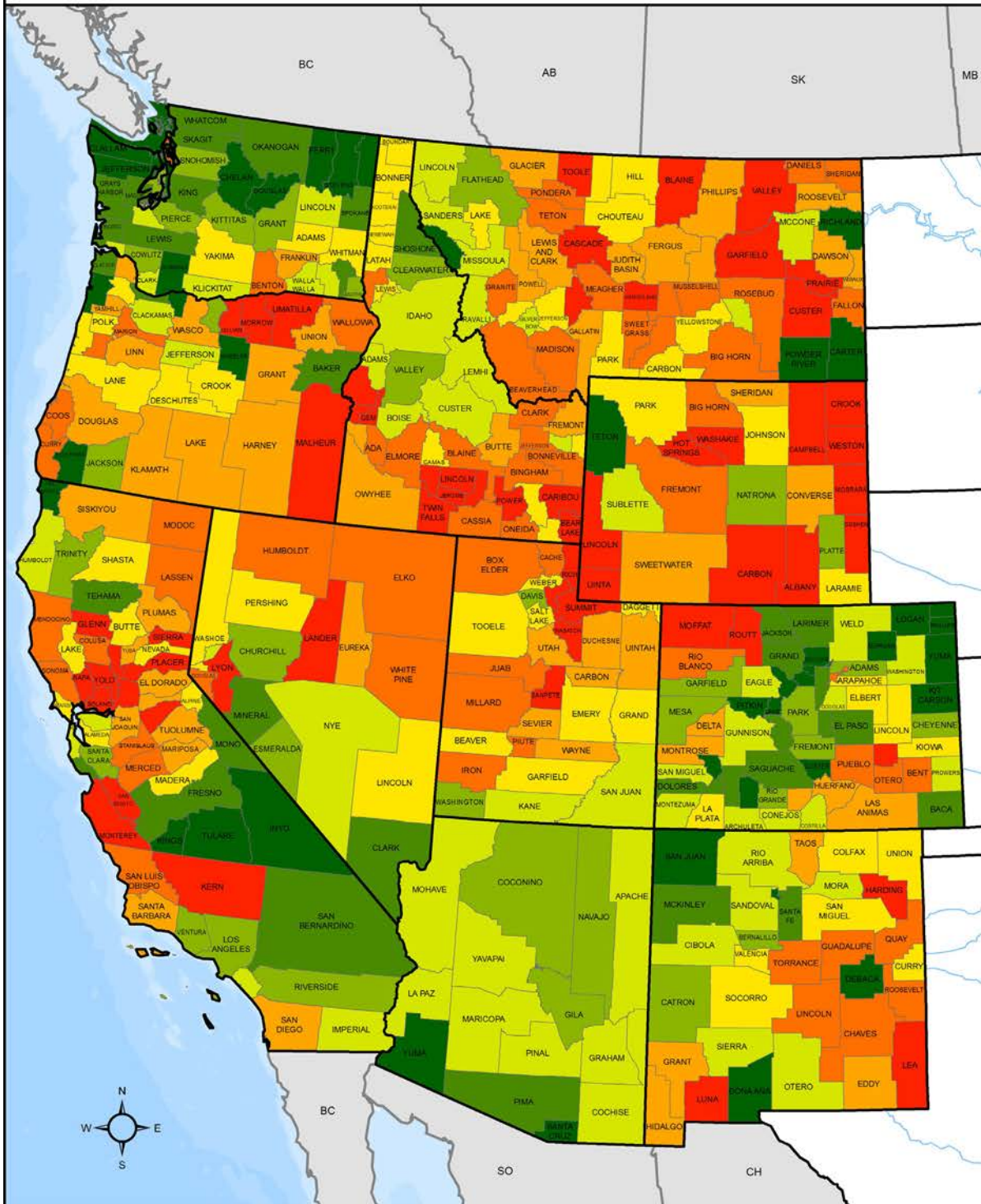
Wildlife Services kills massive numbers of native carnivores purportedly to protect domestic livestock in the West, including on hundreds of millions of acres of public lands.



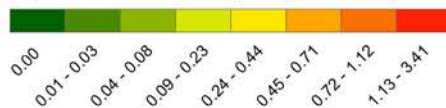


FIGURE 3. Wildlife Services' Kills by County

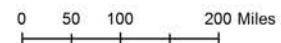
Density of Carnivores Killed per Square Mile, 1998-2008



Density of Carnivores Killed per Square Mile (1998-2008)



Cartography: Kurt Menke, GISP
Birds Eye View
Date: November 29, 2011
Data Sources: USDA Wildlife Services



Conclusion

As these data show, Wildlife Services kills native wildlife across the American West, but the killing is also concentrated in certain areas, where it likely has severe effects on populations and ecosystems. It conducts this wasteful killing at great expense, but with neither oversight nor meritorious purpose, and in opposition to the best available science (Keefover 2012; Keefover-Ring 2009; Keefover-Ring 2010; WildEarth Guardians 2012). The sheer amount of killing should cause Congress to reconsider funding the Wildlife Services' program. WildEarth Guardians calls on decision makers to defund or reform Wildlife Services in order to preserve our native wildlife and protect the environment for current and future generations.



Each year, Wildlife Services kills tens of thousands of coyotes and foxes in the American West. Coyote (left) and red fox (right) in snow, courtesy Ray Rafiti, *Wild Faces* * *Wild Places*.

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Table 1
Nine Species of Mammalian Carnivores Killed
by Wildlife Services
in the Western States, 1998-2008

| | Black Bears | Grizzly Bears | Bobcats | Coyotes | Gray Foxes | Red Foxes | Moun- tain Lions | Gray Wolves | Mexican Wolves | Total |
|--------------|--------------------|----------------------|----------------|----------------|-------------------|------------------|---------------------------------|--------------------|-----------------------|----------------|
| AZ | 104 | 0 | 37 | 9,384 | 61 | 0 | 432 | 0 | 0 | 10,018 |
| CA | 933 | 0 | 713 | 70,919 | 1,421 | 924 | 1,200 | 0 | 0 | 76,110 |
| CO | 320 | 0 | 36 | 30,124 | 4 | 804 | 50 | 0 | 0 | 31,338 |
| ID | 82 | 0 | 39 | 49,708 | 0 | 1,643 | 30 | 239 | 0 | 51,741 |
| MT | 214 | 6 | 23 | 89,240 | 0 | 4,208 | 93 | 330 | 0 | 94,114 |
| NV | 12 | 0 | 125 | 58,029 | 13 | 56 | 226 | 0 | 0 | 58,461 |
| NM | 37 | 0 | 1,325 | 54,549 | 407 | 15 | 162 | 0 | 8 | 56,503 |
| OR | 1,732 | 0 | 826 | 54,241 | 118 | 1,196 | 760 | 0 | 0 | 58,873 |
| UT | 339 | 0 | 52 | 43,925 | 9 | 2,711 | 307 | 0 | 0 | 47,343 |
| WA | 4 | 0 | 4 | 6,753 | 0 | 1 | 9 | 0 | 0 | 6,771 |
| WY | 8 | 4 | 243 | 77,685 | 0 | 4,355 | 11 | 241 | 0 | 82,547 |
| Total | 3,785 | 10 | 3,423 | 544,578 | 2,033 | 15,963 | 3,280 | 810 | 8 | 575,946 |

Table 2
The Deadliest Dozen
The West's Most Deadly Counties,
1998-2008

| State | County | Carnivores Killed |
|--------------|-------------------|--------------------------|
| NV | Elko County | 17,805 |
| OR | Malheur County | 11,099 |
| WY | Carbon County | 10,260 |
| NV | Humboldt County | 9,814 |
| CA | Kern County | 9,639 |
| CO | Moffat County | 8,231 |
| WY | Campbell County | 8,009 |
| NV | White Pine County | 7,532 |
| WY | Sweetwater County | 7,382 |
| WY | Niobrara County | 7,359 |
| WY | Fremont County | 7,079 |
| UT | Millard County | 6,868 |

Table 3
Ranking the Western States:
Wildlife Services Kills,
1998-2008

| State | Carnivores Killed |
|--------------|--------------------------|
| MT | 94,114 |
| WY | 82,547 |
| CA | 76,110 |
| OR | 58,873 |
| NV | 58,461 |
| NM | 56,503 |
| ID | 51,741 |
| UT | 47,343 |
| CO | 31,338 |
| AZ | 10,018 |
| WA | 6,771 |

The Deadliest Dozen Counties in the American West: Mapping Wildlife Services' Killing Fields

By Wendy Keefover • WildEarth Guardians • June 2012

