

ANOTHER TO FEED

Hunters in western Montana are feeling the pinch as the growing wolf population takes a bite into deer and elk numbers. By TOM DICKSON

lived in western Montana. The to me the issue is wolves." Missoula-area firefighter hunted 21 days

ast hunting season was Damon not a biologist, and I know I don't have all Almond's worst in the 13 years he has the answers, but what I experienced proves

Almond isn't the only one concerned that during the bow and rifle seasons and failed western Montana's growing wolf population to see, much less kill, a single elk. "A lot of may be reducing deer and elk numbers. In times I get an elk with my bow, and if not, February, dozens of hunters gathered in front then usually during the rifle season," he says. of the Montana Fish, Wildlife & Parks "Last year I tried all my areas"—up and regional office in Kalispell to protest the prodown the Bitterroot and Sapphire ranges, longed delay of Montana assuming managesouth of Missoula, and in the Seeley Lake ment over gray wolves. "Feds and Wolves, out area—"and never even saw an elk. But I saw of control," read one placard. "Wolves are wolves or wolf sign every place I hunted. I'm now the top concern I hear about from

hunters around here," says Craig Jourdonnais, FWP wildlife biologist in the Bitterroot Valley. In the Gardiner area, hunters have for years denounced the federal reintroduction of wolves to Yellowstone National Park, predicting lower elk populations and fewer hunting opportunities throughout the area.

Are wolves killing elk and deer and affecting hunting opportunities in parts of Montana? Definitely, say FWP biologists. But wolves are by no means the only factor driving prey populations and hunting success. What's more, FWP is committed to maintaining wolves on the landscape. That puts the department in the challenging position of trying to work out a fair and sustainable balance for both wild

ungulate and large carnivore populations.

RAPID RECOVERY

Wolves are native to Montana and were commonly seen by early explorers. Market hunting nearly eliminated wolves' natural foods—bison, deer, and elk—in the late 19th century, so the carnivores began preying on sheep and cattle. In response, homesteaders and government agencies poisoned, trapped, and shot wolves under a bounty system. By the 1930s, wolves had been eliminated from Montana. Under protection of the 1973 Endangered Species Act, the carnivores began naturally recolonizing

Tom Dickson is editor of Montana Outdoors.



HOWLING MAD Hunters from across northwestern Montana gathered in Kalispell last winter to protest continued federal control over wolves that they fear are wiping out deer populations.

Glacier National Park from British Columbia. By the 1980s, two packs lived in the North Fork of the Flathead River drainage. In the mid-1990s, the U.S. Fish & Wildlife Service (USFWS) released 66 wolves into Yellowstone National Park and central Idaho to hasten the pace of wolf recovery. Wolves have since spread south from Glacier, north and northwest from Yellowstone, and east from Idaho, filling in available habitat. Wolf restoration has succeeded faster than anyone expected. Montana's population has been growing at what FWP biologists call a "robust" rate, increasing in size from 70 individual wolves in 1996 to a minimum estimate of 497 at the end of 2008. In March 2009, the

USFWS delisted the Rocky Mountain gray wolf in Montana and Idaho, giving those states full management authority.

No one argues that wolves hunt, kill, and

eat deer and elk to survive. Studies in north-

ern Minnesota and southeastern Alaska esti-

mate a wolf kills 19 to 24 deer per year. One Minnesota study found wolves kill roughly 6 percent of the whitetail population where the two species coexist. "Combined with severe winters, habitat degradation, and hunter harvest, wolves definitely can contribute to locally declining whitetail populations, especially in areas that already have low deer densities," says Dan Stark, wolf coordinator for the Minnesota Department of Natural Resources, which keeps tabs on that state's 3,000 wolves. Ken Hamlin, recently retired FWP wildlife research biologist in Bozeman, estimates each wolf in the Greater Yellowstone Ecosystem (GYE) kills from 11 to 35 elk annually, depending on winter conditions and pack size. Studies conducted in the GYE over the past decade by FWP, Montana State University (MSU), and federal agencies found that in areas containing high densities of wolves—such as the upper Gallatin Canyon, Madison River headwaters in Yellowstone National Park, and the park's northern winter range—the carnivores made significant inroads into elk populations, killing up to 20 percent in some areas. "Where you had a high ratio of wolves per 1,000 elk, we found decreased elk calf recruitment and population declines," says

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Hamlin, who led the FWP studies. (Recruitment is the percentage of young elk that survive their first year and add to the population, usually measured as the number of calves per 100 cows counted at winter's end.) The most well known example is the large elk herd in northern Yellowstone National Park, which has dropped from a record high of 19,000 in the mid-1990s to 7,000 today. (High hunter cow elk harvest throughout the late 1990s and early 2000s contributed to that decrease).

Wolves also may contribute to localized ungulate declines elsewhere in Montana. In northwestern Montana, where regional wildlife manager Jim Williams says the number of wolf packs has more than doubled in recent years, whitetail harvest this past fall dropped 18 percent. "We're hearing loud and clear the concerns of hunters seeing more wolves and tracks," he says. Mike Thompson, FWP regional wildlife manager in Missoula, says that in the Bitterroot, calf recruitment this past spring dropped sharply to a record

LICKED? Studies in the Greater Yellowstone Ecosystem show that a wolf will kill 11 to 35 elk each year, depending on winter conditions and pack size. In isolated areas, that has equaled up to 20 percent of the elk population in some years.

low. He is concerned that some isolated elk populations, such as those in portions of Mineral and Ravalli counties, may not rebound to historic averages. "We have to be open to the possibility that wolves could prevent recovery in some areas—even if we end antlerless elk harvest, which we've had to do in some hunting districts," he says.

Though the effects vary widely, wolves can indeed make it harder for hunters. Research

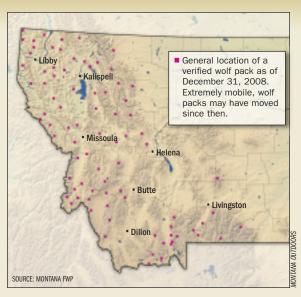
in the GYE found that elk grow more vigilant with wolves nearby and in some areas spend less time in the open. Biologists also know that wolves move deer and elk short distances and keep prey moving more often. "Elk are smart, and in places they've learned to timber up more than they were and not come out as much in early morning and late evening," says Hamlin. "Hunters may have to learn how wolves affect elk behavior where they hunt and use that to their advantage." What's more, the addition of wolves to other factors affecting deer and elk numbers—such as weather, hunter harvest, and other natural



Montana's statewide wolf pack distribution

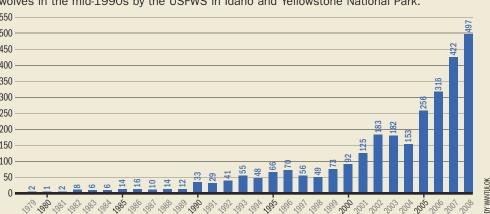


By the 1930s, wolves had been eliminated from all of Montana. Packs from Canada moved into the Glacier National Park area in the 1980s, grew, and spread south. Packs from federal reintroductions in the mid-1990s have spread north and northwest from Yellowstone National Park and east from Idaho. The latest minimum count (December 2008) is 497 wolves in 84 verified packs scattered across Montana's western third. Run-ins with livestock have slowed eastward expansion.



Statewide wolf population 1979–2008

Wolf numbers in Montana began a rapid increase following the reintroduction of 66 wolves in the mid-1990s by the USFWS in Idaho and Yellowstone National Park.





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VENISON EATERS Wolves aren't the only carnivores pursuing wild ungulates. Cougars kill more deer, and bears more elk fawns, than wolves do in some areas. Human hunters also take their share.







predators—means that FWP must be more conservative in some cases when allocating antlerless deer and elk permits.

Adding to the frustration of hunters and state wildlife officials are the years of federal protection that limited Montana's ability to manage the carnivores. "What really irritates so many hunters is that the wolf has been singled out for protection, no matter what happens to elk and deer," says Thompson. "We manage elk, deer, lions, bears, and hunting for a balance, but so far we haven't been able to do that with wolves because we've had one hand tied behind our back."

OTHER FACTORS AT PLAY

All this doesn't mean the presence of wolves automatically sends deer and elk populations tumbling. Hamlin says it's unlikely the presence of wolves will completely wipe out deer and elk anywhere. "Wolves have no ecological incentive to eliminate their food source," he explains. Kelly Proffitt, who filled Hamlin's position and continues to work on elk distribution studies, says that the predators appeared to have little effect (killing just 1 to 4 percent) on elk numbers in some study areas with low ratios of wolves to prey (less than 3 per 1,000 elk), such as the lower Madison, Gravelly-Snowcrest Mountains, and Paradise Valley. Areas have different wolf:elk ratios in large part due to the presence or absence of livestock. Some wolves learn to prey on sheep and cattle and have to be killed to prevent further depredation,

which keeps wolf densities low in many agricultural areas.

More significant than predators to most prey populations is winter severity. "In our region, winter conditions and the availability of thermal cover drive deer populations more than anything," says Williams. He notes that an abnormally warm and snow-deprived hunting season, poor fawn recruitment following the harsh 2007-08 winter, and a high doe harvest the previous two years contributed greatly to the recent white-tailed deer harvest decline.

Growing numbers of other predators also dine on deer and elk. One Yellowstone study showed that black and grizzly bears kill more newborn elk calves each spring than wolves do. In the northwest, more whitetails die from cougars than from hunters or wolves.

And while wolves are killing thousands of deer and elk in Montana each year, many of those animals would not necessarily have shown up in hunters' rifle sights. Hamlin explains that some deer and elk would have died anyway of other natural causes before hunters had a shot at them. Others are killed by wolves in areas that many hunters can't reach, such as leased private land or remote mountain ranges. "Just because an elk dies from predation or starvation or even falling off a cliff doesn't mean it otherwise would have been available to a hunter," says Hamlin.

Even with wolves present, many factors determine whether hunters fill their tags

SPOTTED FWP wildlife officials say reports of previously unknown packs by hunters have been essential in helping the department make the case for federal delisting.

each fall. Opportunity, weather during the season—particularly the presence or lack of snow—a hunter's individual skill and effort, and plain old luck all contribute to hunter success. "We've always had years when hunters and biologists were left scratching their heads, even before wolves arrived on the scene," says Thompson.

Though certainly a loss for hunters, there can be ecological benefits to having wolves and other predators reduce overabundant prey populations. Harvest by hunters and predators prevents deer and elk populations from overgrazing natural forage. For instance, though the northern Yellowstone elk herd is down more than 60 percent from its historic peak, biologists say the herd size is now in better balance with the landscape. One study in the park showed that as elk numbers declined, willows and other streamside vegetation that had been browsed to the dirt are now thriving.

Then there's the fact that for some hunters, like Michael Lukas of Missoula, the return of

another predator enhances their hunting experience. "The presence of wolves makes the areas where I hunt seem wilder, and that wildness is a large part of what I crave when I go hunting," Lukas says.

WORKING TO REGAIN STATE CONTROL

What has FWP done in response to growing wolf numbers? "Along with landowners, hunters, and others, the department has repeatedly fought hard for federal delisting," says Quentin Kujala, head of the FWP Wildlife Management Section. He adds that the department's five wolf specialists in west-

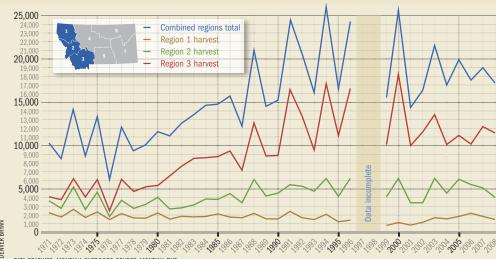
ern Montana investigate reports of wolf sightings and conduct aerial surveys of radio-collared wolves every four to six weeks. Carolyn Sime, FWP statewide wolf coordinator, notes that the department asks hunters to help monitor wolf numbers and distribution by reporting sightings or tracks at hunter check stations and the FWP website. "Hunters are very aware of their surroundings, and they've helped discover many packs previously unknown to us," she says. "That's been essential information for making the case that wolves are fully recovered and should be delisted."

With the wolf now under full state control and management, FWP has initiated a regulated wolf hunting season (see sidebar on page 14) similar to those for lions, black bears, bighorn sheep, and other game species. State wildlife officials believe the

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Regions 1, 2, 3, and combined elk harvest, 1971-2008



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Combined regions

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Regions 1, 2, 3 combined whitetail harvest, 1971-2008

LONG-TERM INCREASE, BUT FOR HOW LONG?

Both elk and white-tailed deer harvest in all three western Montana FWP regions increased over the past several decades. The total annual elk harvest in Regions 1 2, and 3 combined averaged 12,500 in the 1970s and around 19,000 during the past decade. The annual whitetail harvest in the three regions combined grew from an average of 8,500 in the 1970s to 30,000 in the past decade. No one can be certain how the presence of wolves will affect harvest in the future. "We've managed deer and elk without wolves for 80 years," says one FWP biologist. "Now we're learning how to manage them with wolves. It's a whole different ball game.'

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hunting season could help reduce animosity toward the wild canids. "I think hunters will feel a lot different about wolves if they have a wolf tag in their pocket," says Williams.

WOLVES ARE HERE TO STAY

Though FWP advocates a wolf harvest, as well as abundant deer and elk numbers, FWP Wildlife Bureau chief Ken McDonald makes it clear that the department will also

work hard to maintain a healthy and viable wolf population. "We intend to make sure wolves continue moving among the subpopulations in the three recovery zones [the Greater Yellowstone Ecosystem, northwestern Montana, and central Idaho] to maintain genetic connectivity," McDonald says. He explains that allowing animals from the three zones to intermix enables wolves to function as a single large population rather than three

smaller, isolated populations, resulting in more diversity and resilience. McDonald adds that the state will continue to move conservatively when it comes to anything that could endanger the long-term health of the state's wolf population. "Wolves just got off the endangered species list. We need to move slowly and prove that Montana won't do anything that would cause them to slip back to where they could be listed

DEER - ELK - PROW

COMMISSION SETS MONTANA'S FIRST MODERN WOLF HUNTING SEASON

On July 9, the FWP Commission approved a quota of 75 wolves for the fall 2009 hunting season. Biologists had said as many as 207 wolves could be harvested without dropping below the state's current-but-growing population. The commissioners opted for a smaller quota the first year so the department can learn how the hunting season affects the wolf population as well as to maintain genetic connectivity. "This is all real new, and we want to proceed conservatively," says Ken McDonald, FWP Wildlife Bureau chief. "We don't know how many hunters will apply for licenses or how effective they'll be." The commission also decided that no more than 25 percent of the harvest can come during December when wolves are dispersing, which is important for maintaining genetic mixing and overall long-term population health.

Wolves in Montana, Idaho, and Wyoming were removed from federal authority in March 2008, but four months later a federal judge reinstated endangered species protection, citing a lack of evidence demonstrating genetic exchange among wolf subpopulations. In March 2009, the U.S. Fish & Wildlife Service (USFWS) again delisted the Rocky Mountain gray wolf, this time in Montana and Idaho only, allowing the two states to proceed with state management plans that include carefully regulated hunting seasons.

Montana currently has three times as many wolf packs as the federal recovery goal originally called for. FWP officials say hunter harvest will help manage wolf numbers in areas where livestock depredation has been high or predation on ungulate populations is especially severe.

Many state and national hunting and conservation groups, including the Montana Wildlife Federation, support the hunt. But Lisa Upson of the Natural Resources Defense Council says her organization and other wildlife protection groups believe a hunt in 2009 is premature. "We're close to recovery overall in the region, but we're not there yet," she says.

McDonald says he's not surprised by the diverse opinions. "We listened to a range of viewpoints and came up with what we believe is a well-reasoned, conservative quota for this first wolf season," he says. "Wolves are fully recovered, and they are here to stay. Montanans have worked hard to integrate them into the state's wildlife management programs, which has always been the promise of the Endangered Species Act. This department has been sorely disappointed by the delisting delays over the past few years. We're real pleased that, as promised under the ESA when an endangered species finally recovers, the wolf is again under state management."

McDonald adds that skeptics of Montana's wolf management proposals need only review the state's track record of managing other large carnivores. "Look at mountain lions and black bears. Both continue to have strong and healthy populations, and we see that happening with wolves, too," he says.

A Montana wolf hunt proposed in 2008 was blocked after several wildlife protection groups successfully filed for an injunction. A similar injunction could postpone this year's hunt. McDonald says FWP would again join the USFWS in opposing the injunction and defending the delisting decision in court, as it did last year.

We need to prove that Montana won't do anything that would cause wolves to slip back to where they could be federally listed again."

again under the Endangered Species Act," he says. "Then we'd be right back to where we were, with wolf management under federal control."

How many wolves will Montana eventually hold? McDonald says no one knows for certain. "But given the current knowledge of wolf population dynamics, along with our commitment to maintaining genetic connectivity, statewide wolf numbers likely won't be all that different from what we're seeing today," he says. "At the same time, we'll have the flexibility and tools to deal with local situations when conditions warrant. That may mean increasing wolf hunt-

ing season quotas in certain areas. But the hard truth is that elk and deer numbers in some areas could end up lower than they were before wolves returned."

While wolf packs may spread into eastern Montana, their numbers likely will be limited as the animals venture into agricultural areas. "Based on what we've seen so far, many will encounter livestock on private land and run into trouble," says McDonald. Last year a record 110 wolves were killed in Montana under permits authorized by FWP to reduce livestock conflicts, and an additional 45 wolf deaths were documented from other causes. Even with these fatalities,

Montana's wolf population grew by 18 percent from the previous year.

One thing for certain, says Kujala, is that wherever wolves occur, they become a factor in how Montana manages big game species. "They're again part of the natural mix of the state's wildlife," he says. In some areas, that can create significant changes, with wolves taking big bites out of deer and elk populations. In others, wolves hardly make a dent in prey numbers or human hunting opportunities. But in all cases, the return of wolves means one more element-along with weather, habitat, social concerns, and others—that must be taken into account when the state manages wildlife. "What Montana will do now that wolves are back is the same as it did before," says Kujala, "which is to find a fair and ecologically sustainable balance among all the state's large carnivore and wild ungulate species."

