



YELLOWSTONE NATIONAL PARK BISON BY JEFF HENRY/ROCHE JAUNE PICTURES

Buffaloed

Concerned about both its livestock industry and national image, Montana struggles to manage bison spilling from Yellowstone National Park. **BY TOM DICKSON**

AS IF ALAN WASSON DIDN'T have enough to do running a ranch of 350 cows near Whitewater, a few miles south of Montana's border with Saskatchewan, the life-long rancher has also been forced to keep a watchful eye on Yellowstone National Park, several hundred miles to the south.

"If brucellosis shows up in the cattle down there, it will affect every cattle producer in this state," he says.

What concerns Wasson and other cattlemen is the growing number of bison spilling from the park. Yellowstone's population of shaggy ungulates is chronically infected with brucellosis, a disease that causes cows to abort. Montana ranchers maintain that the bison's spread threatens their industry.

State and federal officials agree that Yellowstone's burgeoning bison population requires some type of lethal control. Currently several hundred bison leaving the park are killed each year to prevent the ani-

mals from mixing with cattle grazing on adjacent U.S. Forest Service lands.

"Either we control bison numbers or we allow the population to keep growing and expanding to where it creates an even larger problem down the road," says Keith Aune, head of the Montana Fish, Wildlife & Parks (FWP) wildlife research program and one of the state's bison experts.

Many people don't see it that way, however. Animal rights groups and some federal lawmakers denounce any lethal control of Yellowstone bison. In a recent *National Parks* magazine editorial, West Virginia congressman Nick J. Rahall II called current bison removal efforts a "hysterical overreaction."

Adding to the conflict are plans by Montana to resume, as early as this winter, public hunting for some bison leaving the park. In the 1980s, hunters received a public relations black eye when national media depicted bison hunts as cruel and unsporting.

AMERICAN ICON

Like the gray wolf and grizzly bear, the bison (commonly called buffalo) looms large in the public's imagination. The continent's largest land mammal, it once roamed across much of North America, from Florida north to the Alleghenies and west to the Rockies. The great herds fed predators and scavengers and provided sustenance and material for Indians, explorers, and early European settlers.

Easy to kill and dependent on large tracts of prairie, the continent's estimated 60 million bison were nearly wiped out in the late 1800s. The combination of hunters shooting for the market, railroads bisecting the plains, and cattle competing for range sent bison numbers plummeting to fewer than 1,000 by the turn of the century.

Recovery was led by President Theodore Roosevelt and other conservation-minded



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DANIEL D. LAMOREAUX

MY PARK RUNNETH OVER Numbering more than 4,000, bison have outgrown Yellowstone's carrying capacity and are exiting the park (left). That could put the animals, half of which carry brucellosis, in contact with cattle grazing on surrounding national forest land (right). Ranchers say bison must be controlled to protect their livelihood. Bison activists (above) denounce control measures as an unnecessary overreaction.



DANIEL J. COX

sport hunters, who formed the American Bison Society in 1905. "The [near-] extermination of the buffalo has been a veritable tragedy of the animal world," Roosevelt wrote. The organization pressed Congress to establish herds in Yellowstone National Park and other public wildlife refuges.

The effort succeeded. Today, roughly 8,500 bison exist in the wild along with 500,000 on commercial ranches. The largest wild herds roam Yellowstone National Park (4,000-plus), South Dakota's Custer State Park (1,100), and preserves owned by The Nature Conservancy in Oklahoma (1,500) and Colorado (1,500).

Yellowstone's bison population has been growing steadily since the mid-1960s, when the park decided to let wildlife populations naturally regulate themselves. Though the idea was to allow nature (weather, starvation, and predators) to control bison numbers naturally, that hasn't happened. The park's bison population has grown steadily from 400 (when the new policy was put in place) to more than 2,000 in the mid-1980s.

Tom Dickson is editor of Montana Outdoors.

According to Aune, roughly 4,500 bison will inhabit the park this winter.

"It's not really working," says Aune of natural regulation. "Grizzly bears, wolves, and other predators don't take enough bison to keep numbers down, and when the weather gets bad, the bison just leave the park."

And that's where the conflicts begin.

BRUCELLOSIS BROUHAHA

Common to cattle, bison, elk, and other ungulates, *brucellosis abortus* is a contagious disease that causes females to abort. The disease concerns wildlife managers, but it petrifies cattle ranchers. Over the past 40 years, the federal government, states, and livestock growers have spent several billion dollars to eradicate brucellosis in cattle. Currently, all but a few states have been designated by the U.S. Department of

Agriculture (USDA) as brucellosis free. Montana cattle have been without the disease since 1985.

Wild bison and elk are the last remaining reservoirs of brucellosis in the United States, and the most significant concentration of these infected wildlife live in and around Yellowstone and Grand Teton

national parks. Though never proven to be transmitted in the wild from bison to cattle (due perhaps to efforts to keep bison away from cattle), studies have confirmed transmission between captive bison and cattle.

"The risk is not huge, but it's also not zero," says Aune. "It's significant enough that a state could lose its brucellosis-free status."

That's no idle speculation. In 2004, the USDA revoked Wyoming's brucellosis-free certification after two separate herds of cattle, likely infected from elk concentrated at winter feeding grounds near Jackson Hole, were found with the disease. Steve Pilcher, executive vice president of the Montana Stockgrowers Association, says the revocation means Wyoming ranchers must test all the cattle they sell to other states to prove the animals are not infected.

"It's a huge time and cost burden," Pilcher says. "Montana stockgrowers don't want to go there."

Not everyone buys the brucellosis scare, however. "From November to June, there are no cattle in much of the West Yellowstone area, because the winters are too harsh for cattle, so there is no risk of brucellosis transmission," says Dan Brister, project coordinator with the Buffalo Field Campaign. The West Yellowstone-based group was formed to stop federal and state agencies from killing and harassing bison leaving the park. Brister says the U.S. Forest Service should close grazing allotments for the 2,000 or so cattle that graze in summer around Yellowstone National Park to reduce overlap between the livestock and



JUDY WANTULOK

CENTER STAGE Yellowstone, which contains North America's largest bison herd, sits at the center of the animal's historic range and the controversy over how bison should be managed.



MONTANA OUTDOORS

BOS BISON: AN AMERICAN ICON

Depicted on U.S. currency and even the Interior Department's logo, the bison has grown to symbolize the unspoiled West as well as the American Indian's lost way of life. Among those who fought to save the species from extinction in the early 1900s, were sport hunters such as President Theodore Roosevelt (right). Lacking predators, bison numbers have increased since then to 500,000 in domestic herds and 8,500 in wild herds (far right).



YNP PHOTO ARCHIVES



DIANE HARGREAVES

bison. "We want buffalo to have access to public lands like elk and other wildlife," he says. "The way things stand now, cattle have precedence on public land, and that's not right."

LIMITED MANAGEMENT OPTIONS

Allowing bison to continue expanding unchecked from the park is an option but probably not a realistic one. Even if grazing allotments on Forest Service land were restricted, the bison would eventually make their way to private cattle range, housing developments, roads, and other areas where they could create problems.

And yet, it would be just as unrealistic to test and then kill all infected bison in Yellowstone to eliminate the disease, as some ranchers demand. For nearly a century, the charismatic animal has been iconic of Indian and American cultures, appearing on the nickel and the U.S. Department of the Interior logo. What's more, Yellowstone National Park is considered hallowed ground. National public outcry would likely halt attempts to kill large numbers of bison within the park. Containment would not work, either, because few people would tolerate an 8-foot-tall woven-wire fence surrounding the park.

Currently, bison distribution is managed with a combination of hazing and removal. In 2000 the National Park and U.S. Forest services, Montana's Fish, Wildlife & Parks and Department of Livestock, other state and federal agencies, Indian tribes, and citizens developed a management plan. The

goal of the multi-agency management agreement is to reduce the risk of brucellosis transmission from bison to cattle by keeping the animals away from each other. Bison are allowed to exit the park into certain areas except in summer and early fall, when cattle are grazing on nearby Forest Service land.

In other areas, snowmobilers or horseback riders haze the bison back into the park. When hazing doesn't work, and the population exceeds the park's carrying capacity of 3,000 animals, bison leaving the park may be killed. The bison are captured and sent to slaughter or are shot by staff from the Montana Department of Livestock, FWP, or Yellowstone National Park. The meat and hides are then donated to Indian tribes.

Because the bison population has continued to grow, an average of 250 bison have been killed under the management plan each year since the winter of 2001-02.

WHY NOT LET HUNTERS TAKE PART?

Some hunters and Montana lawmakers maintain that hunting could be used to help control bison numbers, as is done with other wildlife species.

"If we have to kill bison to avoid a massive winter die-off, which no one wants to see, then we ought to let hunters pay for the opportunity rather than pay state and federal agents to do it," says Montana Senator Gary Perry, who sponsored a bill passed in 2003 authorizing the FWP Commission to set a

public hunting season for the first time since the legislature banned the practice in 1991. "Hunting is a regulated management tool used for elk, deer, and other big game. There's no reason it can't be used for bison."

Except, say some, that bison are different. Though limited sport hunting was allowed on bison leaving the park as far back as 1953, hunts tried in recent years have been met with angry public protest. The worst fallout came in the winter of 1988-89, when Montana allowed hunters to shoot hundreds of bison exiting the park,

the largest buffalo hunt since the late 19th century. The Yellowstone fires the previous fall, along with deep snows and cold, forced a mass exodus of more than 3,000 bison from Yellowstone. Reporters from national TV news networks as well as publications such as the *New York Times* and the *Wall Street*



NPS PHOTO

THE 2000 PLAN Currently, YNP bison are managed by hazing the animals back into the park, or killing those that test positive for the disease.



JEFF HENRY/ROCHE JAUNE PICTURES

COWED BY BRUCELLOSIS

Like mad cow disease, the fear of *brucellosis abortus* keeps ranchers awake at night. Nearly eradicated from domestic cattle herds at a cost of several billion dollars, the contagious disease can cause cows to abort. Brucellosis is now limited to wild elk and bison, particularly in the Greater Yellowstone Ecosystem. Montana livestock producers say the loss of brucellosis-free status would seriously damage the state's cattle industry. That's what happened to Wyoming, which lost its brucellosis-free certification in early 2004 when two separate cattle herds near Grand Teton National Park tested positive for the disease.



ROEMMERS LABORATORIES



KEITH WELLS/USDA ARS

Journal descended on the park to cover the spectacle of hunters lining up to shoot the emerging bison. “A Firing Squad for Buffalo: Montana-Style Hunting” read a *Newsweek* headline over the picture of a grinning hunter and his blood-drenched trophy. An article in *Time* referred to the hunt as a “public relations disaster.” Protesters attacked hunters with ski poles, and TV cameras filmed hunters approaching to within 20 feet of bison before firing point blank at the grazing animals. Said one hunter quoted in *People*: “This is the most exciting hunt of my life!”

It was not hunting’s finest hour.

“The big question for Montana is whether providing these relatively few bison hunting opportunities is worth the negative national publicity that’s likely to occur,” says Larry Peterman, FWP operations chief. “From a wildlife management standpoint, hunting makes sense, because the most realistic way to manage the growing population is to reduce the number of bison, and it shouldn’t matter if it’s sharpshooters, hunters, or slaugh-

terhouses. But from a social standpoint, hunting bison seems to be a huge deal.”

The Humane Society of the United States, Buffalo Field Campaign, and other animal rights groups have begun marshalling forces to protest the hunts, which could be held this winter. That concerns

Ron Aasheim, chief of FWP’s Conservation Education Division. He remembers how media coverage of the late 1980s bison season created a national backlash against hunters.

“We’re not opposed to bison hunting, but hunters need to be aware that this could be used against them and have long-term implications for hunting in Montana and nationwide,” Aasheim says.

But the new hunt, say supporters, will avoid the mistakes of previous ones. “It will be conducted just like those we

have for moose, sheep, and elk,” says Perry. “It’s right there in the law.” Hunters won’t be escorted to the bison as before, but will have to find and stalk the animals on foot away from roads. And resident and nonresident hunter numbers will be restricted to

promote “fair chase” standards maintained for other game animals. Hunt supporters also point out that bison hunts have been held for years without public protest on public herds in several provinces and states, including Yellowstone National Park bison venturing into Wyoming.

Bison hunting is allowed under the 2000 multi-agency management agreement. For the first year of Montana’s new hunting season, the FWP Commission has authorized only a handful of licenses, though in future years numbers could be increased. Bison hunting limits will be regulated to maintain a healthy bison population of at least 3,000 animals in the park.

A CHANCE FOR RESTORATION?

While wildlife managers, ranchers, hunters, and protesters keep a sharp eye on the bison in and around Yellowstone National Park, a new research project is under way to explore the possibility of expanding brucellosis-free bison beyond park boundaries.

“This agency and the people of Montana have an opportunity and an obligation to begin talking about where we go from here,” says Chris Smith, FWP chief of staff. “Is it possible to move beyond the stalemate at Yellowstone and see disease-free, free-ranging herds of bison elsewhere in Montana and other Great Plains states and provinces?”

The task would be difficult. Of foremost concern is finding bison completely free of brucellosis that would pose no threat to the cattle industry. Currently FWP is working with the USDA Animal and Plant Health Inspection Service to study the feasibility of finding and isolating disease-free bison leaving Yellowstone National Park. The park’s bison are among the continent’s most genetically diverse.

The idea behind the \$4 million, two-year study is to strictly quarantine, for several years, Yellowstone bison calves that test negative for brucellosis. These animals and their young, if free of the disease, could then become the stock for restoration projects in other parts of the bison’s historic range.

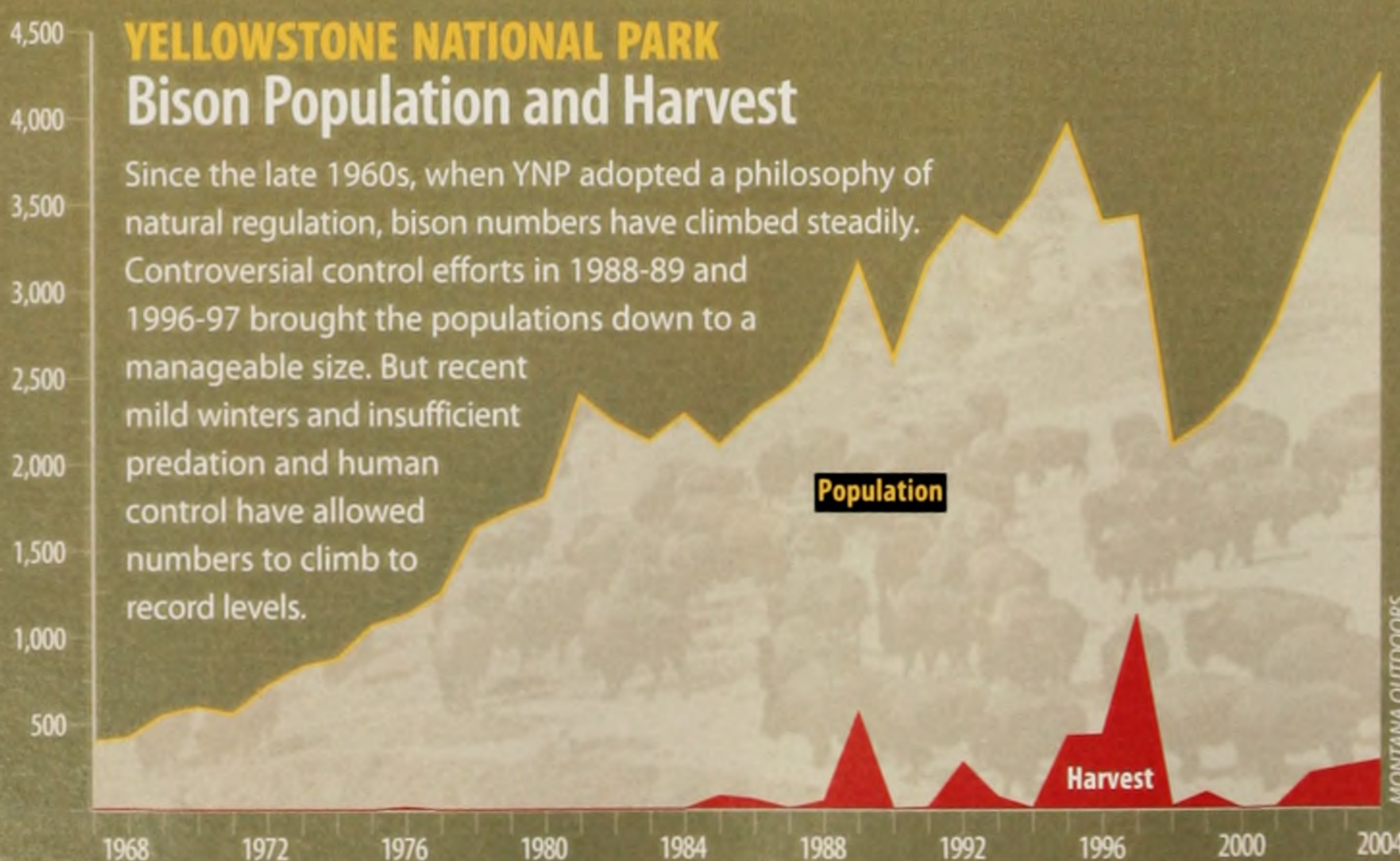
“What we’re trying to do with this study,” says Aune, “is determine whether it’s possible to take bison from a diseased



BUFFALO STAKES? Protesters say bison hunts are unethical; hunters call it the thrill of a lifetime.



MONTANA FWP



herd, successfully screen and establish disease-free individuals, and capture their genetics to establish other herds to restore bison elsewhere in North America.”

According to Aune, the study has been supported and reviewed by federal livestock and animal disease agencies as well as the Montana Department of Livestock. And FWP and the USDA have been discussing the idea with many other state and federal agencies as well as private organizations, Canadian provinces, and Indian tribes.

“This may crack the door open into a new way of thinking about Yellowstone bison, one that focuses not just on containing infected bison in the park but on exporting disease-free bison out of the park to other selected sites,” Aune says.

Besides launching a restoration effort, the quarantine process could also help relieve pressure on Yellowstone’s burgeoning bison population.

“It could be another management tool for removing bison, but in this case the animals would remain alive and be put elsewhere,” Aune says.

Senior FWP officials note that much work still needs to be done before any

bison are transplanted to new sites. And Smith points out that “nothing will happen without further input from the livestock and farming community.”

But he also stresses that, with all the attention bison are getting lately, “this may be a great opportunity for Montanans to begin discussing how disease-free, free-ranging bison might be restored to select parts of their native range.” 🐃

BEYOND YELLOWSTONE? A new study is looking at the feasibility of quarantining disease-free YNP bison for transplant elsewhere in the U.S. and Canada. Sanctioned by federal livestock and disease agencies and the Montana Department of Livestock, the project takes bison calves that test negative for the disease and quarantines them outside the park. Those animals and their offspring, if they also test negative, could then become the genetic stock for restorations on parts of the bison’s historic home range. In addition, the quarantine–transplant program could become another management tool, along with hunting and other control measures, for relieving the pressure of too many bison in YNP.



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