

# Overdue

State and federal agencies say it's time to take Yellowstone region grizzly bears off the threatened species list. **By Tom Dickson**

**D**uring a recent late August morning, Kevin Frey drives up Paradise Valley on U.S. Highway 89 toward Yellowstone National Park. Pointing toward mountains surrounding the valley's fields of grazing cattle, irrigated alfalfa, and newly constructed ranchettes, the Montana Fish, Wildlife & Parks bear management specialist says grizzlies in that high country have begun beefing up to build fat reserves for hibernation, less than three months away. The bears consume grass, forbs, berries, roots, ants, moths, small mammals, elk carcasses—you name it. Some follow the natural foods down to the foothills and valley floor, where they encounter apple trees, garbage cans, dog food, and livestock. Most ignore the human-produced temptations, but a few give in. That's when the problems start.

Many people hold strong opinions about grizzlies, from reverence to hostility. But very few, like Frey, actually work with the bears: collaring, tranquilizing, trapping, relocating, and sometimes even having to make the hard decision to euthanize those that pose a severe threat. Frey takes calls from the rancher who lost a calf, or the parents who spotted a grizzly the night before out by the garage. He works in Montana's portion of the Greater Yellowstone Ecosystem (GYE) where grizzlies and people live together, mostly in harmony but sometimes not. His job: Help resolve conflicts and prevent new ones from flaring up.

Tall and soft-spoken, with a mustache grayed in part by job stress, Frey is on the front lines of the current controversy over removing ("delisting") the GYE grizzly bear population from the federal list of threatened species. Environmental groups, Indian tribes, and many scientists, including luminaries E. O. Wilson and Jane Goodall, say it's too soon to end federal protection and give management authority back to Montana, Wyoming, and Idaho. On the other side are federal and state wildlife agencies, with their own highly credentialed scientists, who point out that the current population of at least 717 bears far exceeds the recovery goal of 500, and conservation guarantees for sustained recovery are in place. Delisting, they say, is long overdue.

U.S. Fish & Wildlife Service (USFWS) director Dan Ashe has hailed the Yellowstone grizzly recovery as a "historic success" for wildlife conservation. The population is so healthy, in fact, that bears are now spilling out of the recovery area. As a result, surrounding states say they need more flexibility to respond to new and growing conflicts so that bears and humans can coexist.

Based on studies by state and federal scientists on the Interagency Grizzly Bear Study Team, the USFWS in March 2016 proposed removing the GYE grizzly population from the list of federally protected species. The federal agency, now reviewing public comments on the proposal, has said

**IN GOOD ENOUGH SHAPE?** Delisting opponents say the Greater Yellowstone Ecosystem grizzly population is still at risk. State and federal biologists maintain that the population is healthy and will continue to thrive after delisting.

JAMIE E. USA JOHNSON



“I haven’t been working on bears for 30 years just to sit back and watch them disappear.”

—KEVIN FREY, FWP Bear Management Specialist, in the Paradise Valley north of Yellowstone National Park

it will make its decision soon.

As we drive south toward Gardiner, Frey points to places where he has seen and trapped grizzlies. One bear tore up the upholstery of an SUV parked in a driveway. Another broke into a cabin. Along the Yellowstone River a bold bear pulled a mini-fridge from a building next to a bed-and-breakfast. “Human safety is always on our mind when we deal with bear conflicts,” Frey says. Last June a grizzly broke into a house at night while a couple in their 80s was sleeping upstairs. They were scared but unharmed by the ursine intruder. “We put up electric fence around the house and set traps,” Frey says. “The bear never returned, but I didn’t sleep well for weeks.”

#### DOWN THEN UP

Grizzlies once roamed across the western half of North America from the Yukon to Mexico. Because the large carnivores threatened the tide of livestock and people flowing west, they were shot, trapped, poisoned, and driven into the most remote areas of the United States. By the 1920s, grizzlies were reduced to just 5 percent of their historic range in the Lower 48.

In 1975 those populations were designated as threatened under the new Endangered Species Act (ESA). Then and today, the bears are concentrated in two major

populations. The Northern Continental Divide Ecosystem (NCDE) population is centered in and around Glacier National Park. The GYE population is in and around Yellowstone. At the time of listing, an estimated 200 grizzlies remained in the GYE, which comprises 22.6 million acres across Wyoming, Montana, and Idaho.

Before federal listing, most grizzly deaths in the Yellowstone region occurred when park rangers were forced to trap and euthanize bold bears threatening people in campgrounds and picnic areas. After listing, the park eventually reduced mortality by closing garbage dumps and, using the mantra “A fed bear is a dead bear,” teaching campers to keep food locked up. Meanwhile, state biologists worked with ranchers and farmers to bury dead livestock and install electric fencing around calving areas and beehives. They also killed repeat offenders when necessary. “A lot of what we’ve done is help build tolerance among the people who live with bears by responding when they need help,” says Frey. To help reduce bear conflicts with people and livestock, the federal government closed backcountry logging roads and ended sheep grazing allotments in national forests near the park.

Recovery efforts worked beyond anyone’s expectations. Though some grizzly bears that repeatedly attack livestock or pose a threat to

#### The Greater Yellowstone Ecosystem



■ Yellowstone and Grand Teton National Parks  
 - - - - The Greater Yellowstone Ecosystem (GYE) is one of world’s largest remaining intact temperate zone ecosystems. The grizzly population there is the southernmost in North America.

MAP BY LUKE DURAN/MONTANA OUTDOORS. SOURCE: GREATER YELLOWSTONE COALITION

humans are still trapped and either relocated or put down, the GYE population has steadily grown. By the early 2000s, the federal government announced that numbers had reached the recovery goal of 500. In 2007 the USFWS delisted the population. Environmental groups immediately sued the agency. They argued that the bears were at increased risk because increasingly warmer winters had exacerbated an infestation of mountain pine beetles, killing millions of whitebark pines, whose seeds are an important grizzly food. The 9th Circuit Court agreed. It ordered the population put back on the list of threatened species and directed the USFWS to study the effects of climate change and whitebark pine on the population.

While many grizzly advocates cheered the decision, communities and ranchers in the Yellowstone region braced themselves for more bear problems.

#### LIVESTOCK LOSSES

On the Beartooth Plateau in south-central Montana near the Wyoming border, Justin Hossfeld stops his pickup just off the Beartooth Highway, one of the nation’s most scenic routes. During two months in 2015, a female grizzly bear killed at least 11 cows in this one-square-mile area of Scotch Coulee, he says. The bear was eventually trapped and relocated 100 miles away, but recently



**FOLLOW THAT BEAR** Biologists with the Interagency Grizzly Bear Study Team and the National Park Service fit a sedated grizzly bear with a radio collar so they can track its movements with telemetry.

LEFT TO RIGHT: ERIK PETERSEN, INTERAGENCY GRIZZLY BEAR STUDY TEAM



another grizzly moved in from nearby Custer National Forest. “It killed a yearling heifer over there last week, and we’ll probably lose one head per week until hibernation,” says Hossfeld, project manager for Sunlight Ranch Corporation, which operates ten ranches in Montana and Wyoming.

Nearby stands a small house where two bicycles lie beneath a swing set. Hossfeld points toward a brushy ravine 200 yards from the yard. “We’re pretty sure the bear is down there somewhere, sleeping,” he says.

This ranch is one of dozens in the GYE experiencing increasing livestock losses from grizzlies spreading out from their core habitat. Wyoming ranchers reported a 68 percent increase in livestock incidents from 2011 to 2014, from 77 to 130, despite measures taken to reduce conflicts. For his part, Hossfeld says he conducts calving earlier in spring before most bears emerge from hibernation, moves calving from pastures to feedlots with more human presence, and has replaced Angus cattle with a wilder breed better able to fend off predators. Though the preventive measures have helped, bear attacks continue, he says.

Over the past three years, the Montana Livestock Loss Board has paid state ranchers roughly market value for each confirmed cattle loss to a grizzly bear. But that doesn’t cover decreased cow conception rates and weight loss from stress or his increased labor costs, Hossfeld says. “We’ve now got cowboys out riding all night with cattle.” Unlike smaller ranches that lose livestock to bears, Sunlight can absorb the losses. “But at some point, if the cattle operation isn’t profitable, the land will be sold off for other uses,”

Tom Dickson is editor of Montana Outdoors.



—JUSTIN HOSSFELD, Project Manager, Sunlight Ranch Corporation, in an area near Red Lodge where one grizzly bear killed at least 11 cattle in 2015

Hossfeld says. Red Lodge, a popular gateway town to the Beartooth Range, is just ten minutes away. Conversion of this rangeland to new roads and subdivisions would further fragment habitat used by grizzlies and other wildlife.

**CRITICS' CONCERNS**

U.S. Geological Survey senior research biologist Frank van Manen has led the Interagency Grizzly Bear Study Team (IGBST) since 2012. At his office just off the Montana State University campus in Bozeman, he pulls out a file of reports he and other team members have written on Yellowstone region grizzlies in recent years. A past president of the International Association for Bear Research and Management with a PhD in ecology and statistics, van Manen is considered

one of the world’s foremost experts on bear population dynamics. He has answers to delisting critics’ three main concerns.

One concern is the decline of two important grizzly bear nutrient sources. “In the last decade, climate change has decimated the Yellowstone grizzly’s most important food, the whitebark pine nut,” wrote Doug Peacock, noted grizzly bear book author, in a widely publicized letter to President Barack Obama this past June denouncing the delisting proposal. Indeed, 40 to 75 percent of cone-producing whitebark pines in the GYE have died since the early 2000s. Another increasingly rare grizzly food is the Yellowstone cutthroat. The trout live in Yellowstone Lake and spawn in tributaries, where they provide a protein boost each spring to local eagles and bears. Cutthroat numbers have

declined by 95 percent following the illegal introduction of predatory non-native lake trout into the lake in the mid-1980s.

Loss of these foods, delisting opponents maintain, makes the GYE grizzly population more vulnerable and thus in need of continued federal protection. They point out that the population has not been increasing as quickly as it was two decades ago. The growth rate between 1983 and the late 1990s ranged from 4 to 7 percent per year, but has since slowed to 0 to 2 percent annually. Critics claim the lack of high-protein food is slowing population growth and accounts for grizzlies spreading farther from their core habitat.

Yet the IGBST discovered that grizzlies have found plenty of alternative foods to eat without having to leave their normal home range, van Manen says. Highly adaptable, grizzly bears consume more than 260 different food sources and historically thrived in arid environments as far south as Mexico. Whitebark pine nuts and cutthroat trout can be important foods, but when supplies dwindle grizzlies easily switch to other protein sources.

So what accounts for the population growth slowdown? Increased cub and yearling mortality, says van Manen. IGBST scientists found lower cub survival in areas of highest bear densities, indicating the population has become so dense that some adult males may be killing cubs. As for the continued spread of grizzlies, it appears the prime habitat is at capacity, forcing males to seek out new territory.

**GENETICALLY HEALTHY**

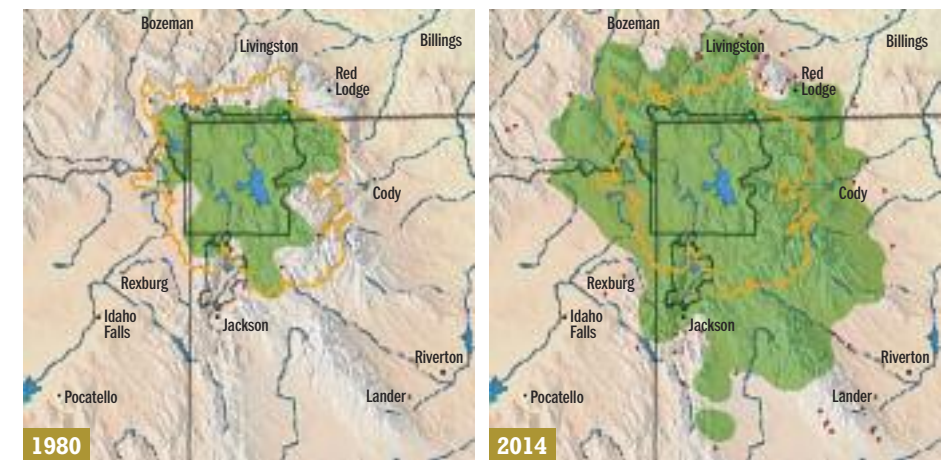
Delisting critics also worry about the GYE population’s genetic isolation, which leads

to inbreeding and the need for new blood. The concerns are not warranted, says van Manen. His study team recently documented only a 0.2 percent decline in genetic diversity over the past 25 years, indicating no evidence of inbreeding. “Sure, it would be desirable if the GYE grizzlies and, say, the NCDE grizzlies were connected genetically, but it’s not essential,” he says. According to van Manen, the Yellowstone population’s genetic health will likely be fine for several hundred years if population levels remain steady. “And we can always introduce bears from other populations to enhance genetic diversity if need be,” he says. The research biologist adds that grizzlies are now showing

up between the GYE and NCDE populations, like in the upper Big Hole and the Elkhorn Mountains this year, indicating that genetic mixing may soon occur naturally.

The third concern is hunting. Under the delisting proposal, all three states—Montana, Wyoming, and Idaho—would allow some sport hunting of grizzly bears (see sidebar, page 22). Opponents fear that hunters would shoot bears near Yellowstone and Grand Teton National Parks. That would deprive visitors of seeing the popular attractions and in turn reduce tourism revenue in local communities. “Grizzlies’ rarity has made them valuable assets, economically worth far more alive than as a

**Grizzly bear distribution within the GYE 1980-2014**



- The Grizzly Bear Recovery Zone, established by the U.S. Fish & Wildlife Service as part of the first grizzly bear recovery plan in 1982.
  - Grizzly bear distribution (occupied range)
  - Confirmed sightings of grizzly bears outside their occupied range
- Numbering roughly 200 in 1975, the GYE population grew under federal protection. By the early 2000s, the population had reached the recovery goal of 500. Today it's estimated at between 700 and 1,000 bears. As the occupied range expands, grizzlies are now seen near towns and ranches far outside the original recovery zone.

MAP BY LUKE DURAN/MONTANA OUTDOORS. SOURCES: NATIONAL PARK SERVICE; YELLOWSTONE ASSOCIATION; U.S. FISH & WILDLIFE SERVICE; INTERAGENCY GRIZZLY BEAR STUDY TEAM

**TIMELINE: Grizzly Bears in Montana**

**Late 1800s:** Grizzlies are widely persecuted as pioneers and livestock spread west.

**1850 Grizzly distribution** (Yellow map)

**1920 Grizzly distribution** (Orange map)

**1942:** The Montana Fish and Game Department adopts the grizzly as its agency logo.

**1975:** The grizzly bear is listed as a federally threatened species, which requires recovering the species to self-sustaining populations.

**1982:** In a statewide vote, Montana schoolchildren choose the grizzly bear as the state's official state mammal. In 1983, Governor Ted Schwinden signs the Montana grizzly designation bill into law.

**1993:** The federal government issues a revised grizzly bear recovery plan with three specific recovery goals that have to be met for six consecutive years.

**2003:** Recovery goals are met for the sixth year in a row.

**2007:** The USFWS removes the Greater Yellowstone Ecosystem population from the threatened species list. Several groups file lawsuits challenging the decision.

**2011:** The 9th Circuit Court rules the grizzly bear should remain on the threatened species list. It says the U.S. Fish & Wildlife Service did not sufficiently address potential effects from reduction of whitebark pine and other foods.

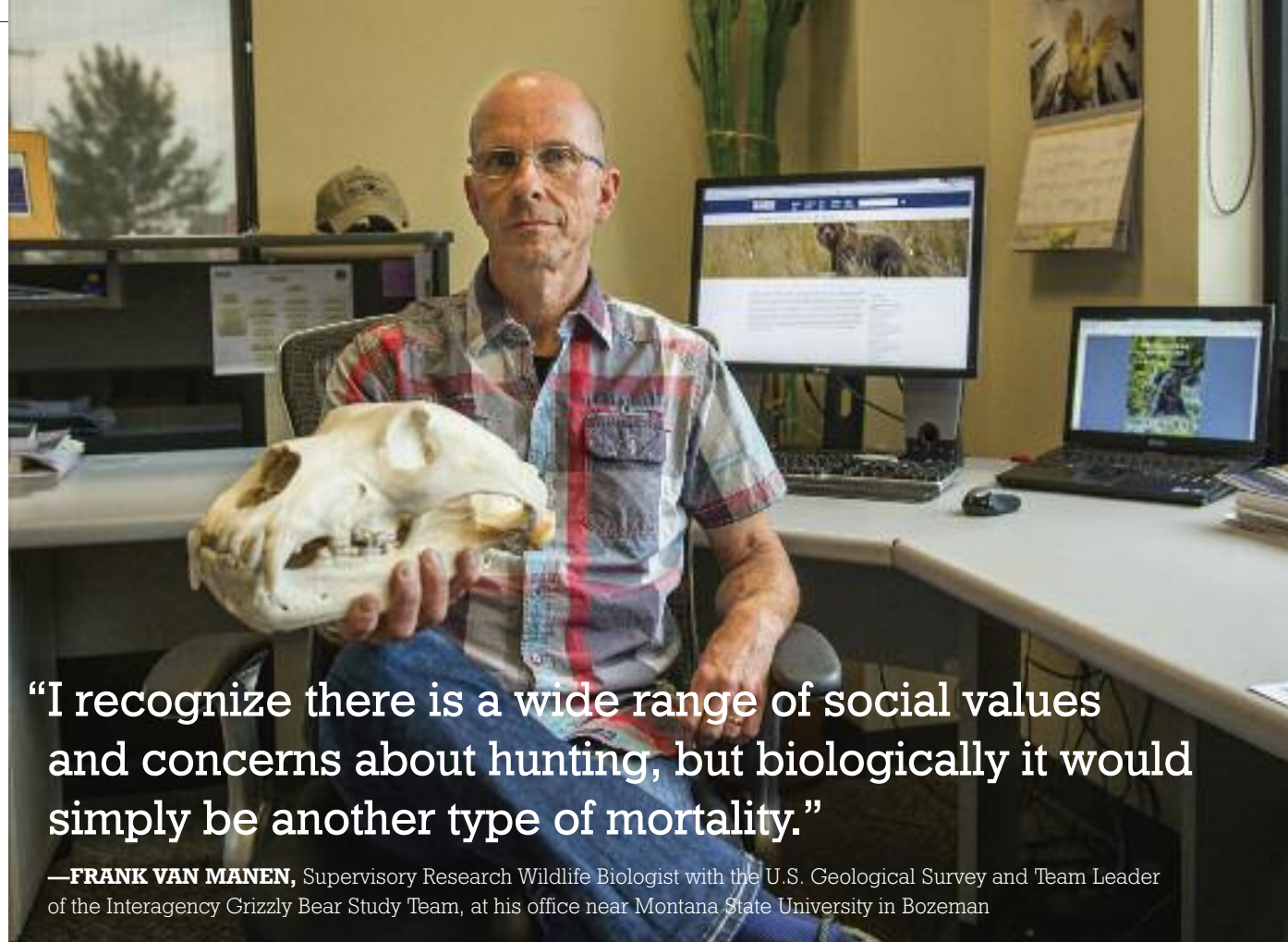
**2013:** The Yellowstone Ecosystem Subcommittee, and Interagency Grizzly Bear Committee recommend that grizzly bears be removed from the threatened species list because alternative foods are available and the reduction of whitebark pine is not significantly affecting bears at this time.

**2016:** USFWS again proposes to delist the GYE grizzly.

Historically, the large carnivore is viewed by many Indian tribes as a symbol of strength and good luck.

Pre-European settlement: The grizzly bear ranges from the Yukon to Mexico and from the Pacific Coast to the Mississippi River.





**“I recognize there is a wide range of social values and concerns about hunting, but biologically it would simply be another type of mortality.”**

—FRANK VAN MANEN, Supervisory Research Wildlife Biologist with the U.S. Geological Survey and Team Leader of the Interagency Grizzly Bear Study Team, at his office near Montana State University in Bozeman

person’s rug or trophy,” writes Todd Wilkinson of Bozeman in an opinion piece on the *National Geographic* website.

State wildlife agencies concede that some highly visible bears might be killed. But they are confident hunting will not hurt the overall grizzly population and will increase acceptance of bears by locals. The states have agreed to maintain a population of at least 674 grizzlies, the average of the study team’s

population estimates from 2002 to 2014, in an area comprising roughly 70 percent of the GYE known as the Demographic Monitoring Area. Highly regulated hunting would remove especially bold bears, increase grizzly wariness around humans, and reduce the number of bears visiting rural homes and communities. “As was the case with wolves, we believe that when we have a regulated hunting season, local animosity toward

grizzlies will decline,” says Ken McDonald, head of the FWP Wildlife Division.

For van Manen, hunting is a matter of public policy, not biology. “I recognize there is a wide range of social values and concerns about hunting, but biologically it would simply be another type of mortality,” he says.

The real threat to the grizzly population, says van Manen and other grizzly experts, is growing human development in the region

that increases the likelihood that bears will threaten people and need to be killed—in numbers that would far exceed the limited hunting harvest. The Yellowstone region is one of the fastest-growing rural areas in the United States. According to a new Montana State University study, the number of private land tracts with one home per 40 acres in the GYE increased 328 percent from 1970 to 2010, says Andy Hansen, director of the university’s Landscape Biodiversity Lab.

#### OTHER LARGE CARNIVORES THRIVING

For many people, the delisting issue comes down to whether they trust the states to do right by grizzlies. Some claim federal officials are rushing delisting under pressure by state wildlife officials eager to open hunting seasons so they can generate “big bucks” and drive populations down. “That’s simply not the case,” says McDonald. “In fact, *total* revenue from the relatively few licenses we’d sell would only be about \$1,000 per year. And we have no desire to see the grizzly population substantially lower than it is today.”

According to McDonald, managing grizzly bears in Montana now costs FWP \$650,000 per year.

McDonald points to Montana’s management of black bears, mountain lions, and wolves, all healthy big game species managed with regulated hunting seasons. Montana is also home to the even larger NCDE population, whose grizzly numbers have grown so robust that bears are spilling east onto prairie ranchlands and into towns.

What’s more, says McDonald, “everything we’ve done to recover grizzlies, we’ll keep doing to keep them recovered.” Under an agreed-upon GYE Grizzly Bear Conservation Strategy, state and federal agencies will continue to monitor populations, food supplies, habitat threats, and bear mortality. The agencies have also designated a six million-acre Primary Conservation Area containing the highest grizzly densities where mining, logging, and energy development will remain severely constrained.

All three states have also agreed to jointly manage the GYE population as one population. “None of us can go rogue, off on our own,” says McDonald. If any state reneges on the agreement or if grizzly numbers drop below 500, the USFWS could quickly relist

the bears on an emergency basis.

If the states don’t want to drive the GYE population down and won’t profit from hunting, why the push for delisting? A big reason, says McDonald, is that it would boost the credibility of the ESA, already under attack by conservative members of Congress. “Keeping a species listed even after it greatly exceeds recovery goals undermines the Endangered Species Act itself and weakens local support and cooperation for listing other species,” he says. Frey thinks delisting would give people who live in grizzly country more ownership. “With ownership comes responsibility, and I think people here accept that,” he says. “But

year that don’t create conflicts,” he says. Responsiveness builds tolerance. Yet Frey often can’t quickly settle grizzly issues because federal regulations require time-consuming procedures and approvals. “After delisting, we should be able to resolve conflicts much faster,” he says.

The bear management specialist says he can’t imagine the states ever allowing the grizzly population to reach a point where federal agencies would need to step back in. “I haven’t been working on bears for 30 years just to sit back and watch them disappear,” he says. Hundreds of bear-proof garbage cans in Big Sky, Red Lodge, Gardiner, and other



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—KEN McDONALD, Wildlife Division Administrator, Montana Fish, Wildlife & Parks

## Hunting and bear populations

Montana’s black bear population, estimated at 13,000 animals, continues to thrive even as the game species is managed with regulated hunting.

The same would be true for grizzly bears. A certain number of grizzlies die each year from natural factors such as predation and disease, and human causes like vehicle collisions, self-defense, and lethal removal. The limited and highly regulated hunting seasons proposed by the states following delisting would not, when added to other mortality, be allowed to threaten recovery goals.

Under the GYE Grizzly Bear Conservation Strategy signed by the states, hunting would be allowed only if all other forms of mortality stayed below a certain percentage of the population necessary to keep it stable at a target of 674 bears, the average number from 2002 to 2014. (Hunting would never be allowed in Yellowstone or Grand Teton

National Parks, though lethal removal by park rangers would continue if necessary.) If the population exceeded 674, more liberal hunting harvests would be allowed. If it fell below 674, hunting harvest would be severely curtailed. If numbers dropped below 600, no hunting would be allowed in any state.



Now that Yellowstone region grizzlies are recovered, hunting becomes a state concern, not a federal one, says Ken McDonald, head of the FWP Wildlife Division. He maintains that the intent of Congress in writing the Endangered Species Act was to address threats that drive a species toward extinction—not to forever dictate all the nuances of how a population might be managed. “Whether or not bears are hunted

is way beyond the scope of the ESA, as long as the overall threat to the existence of the population is addressed,” McDonald says. “And that is definitely the case with the protections, including overall mortality thresholds, that will be in place after delisting.”