

# Spray, don't slay

By Tom Dickson

This past September, two bowhunters looking for elk north of West Yellowstone shot and killed a charging female grizzly bear, then wounded a juvenile grizzly that also came at them.

In July, a man picking huckleberries north of Columbia Falls fatally shot a charging grizzly he had surprised.

And in May, a man shot and killed a grizzly after feeling threatened while antler hunting near Wolf Creek.

I'm glad all these people and others over the years who killed charging grizzlies are safe. I too have been threatened by a dangerous animal—a mother elephant in Zimbabwe, years ago—and still have occasional nightmares from the incident.

But I think—and research shows—there's a good chance that both people and bears would have survived those encounters if bear spray had been used instead of a handgun.

*Tom Dickson is editor of Montana Outdoors.*

The most extensive study to date on bear self-defense shows that bear spray is more effective than firearms at deterring attacks. The 2012 study showed that a well-placed shot from a .44 handgun or large-caliber elk rifle can definitely deter a charging bear. But researchers also found that the odds of injuring yourself and others in your party decrease significantly if you instead deploy bear spray.

That's because bear self-defense using a firearm requires hitting a fast-charging bear in its vital areas of head, heart, or lungs. "It can be like combat shooting," says Tom Smith, a professor of wildlife science at Brigham Young University and co-author of the article "Efficacy of Bear Deterrent Spray in Alaska," published in the *Journal of Wildlife Management*. "It's easy to miss or, even worse, make a wounding shot."

The only thing more dangerous than a mother grizzly defending its cubs is a wounded mother grizzly defending its cubs.

Compare the precision required for a successful firearm defense to spraying a cloud of eye-scalding, nose-burning mist the size of an SUV. The latter stops a charging bear in its tracks and sends it running in the other direction. Even a kid can discharge a bear spray canister.

Smith, Stephen Herrero of the University of Calgary (author of *Bear Attacks: Their Causes and Avoidance*), and two other researchers reviewed 441 incidents of bear attacks in Alaska (grizzly and black).

They found that bear spray was more effective than handguns or long guns in deterring attacks. What's more, the

researchers found that bears inflicted injuries on humans in 56 percent of the incidents involving firearms, mainly due to the lack of time the shooters had to respond.

Tragically, there were 17 human fatalities in cases when firearms were used as defense, whether the victim was killed by the bear or by human partners trying to defend against the attack.

But out of the 441 incidents where bear spray was used, there were zero human injuries or deaths.

And then there are bear fatalities. Bears died 61 percent of the time when people used firearms, while none died from bear spray.

Making those deaths even more regrettable is that most of the time bears are just bluff charging and wouldn't have followed through, Smith says. Also, most bluff charges come from females with cubs, and the young bears often perish later without protection from their mother, adding to mortality numbers.

Even if you're not a big fan of grizzlies, their preventable deaths are no small matter. The U.S. Fish & Wildlife Service tracks human-caused grizzly mortalities in every state where the federally protected species lives. Each grizzly killed here makes it that much harder for Montana to convince the federal wildlife agency—and, in the future, federal judges ruling on inevitable lawsuits—that grizzlies would be well served by state management.

Feel safer in grizzly country packing a handgun? By all means do so. But consider using it as a backup to the more effective and accessible bear canister carried in a harness across your chest, not as your first line of defense. If a bear does charge, you'll be more likely to save yourself, and the bear, from serious injury or death. 🐻



Watch this video to hear from an 80-year-old elk bowhunter who defended himself from an aggressive grizzly using bear spray this past September.



ILLUSTRATION BY STAN FELLOWS