REDUCING HUNTER-RELATED GRIZZLY BEAR CONFLICTS

Big game hunters are now one of the leading causes of grizzly bear mortality in the Greater Yellowstone Ecosystem. As whitebark pine and cutthroat trout, two former grizzly bear staples, have collapsed due to climate change and invasive species, bears are seeking out more meat. Run-ins with hunters are increasing, often with bad consequences for bears. Many conflicts can be avoided, as government agencies have been saying for forty years.

What follows are recommendations for reducing hunter-caused grizzly bear conflicts, along with some areas of additional research and inquiry. The recommendations capitalize on the theme of good governance, including fairness, inclusiveness, accountability, and transparency. They also include some very practical steps. Most come from the agencies themselves.

These recommendations rely on information in reports cited below. Links to the original documents can be found on Grizzly Times at http://www.grizzlytimes.org/#!killing-grizzly-bears/c80v.

Problem: Agencies lack adequate personnel in the field to meaningfully educate hunters on a one-on one basis, and to deter bad behavior. Also lacking are agency commitment, funding, and support for law enforcement efforts.

It makes sense that all of the agencies have placed this recommendation at the top of the list of possible remedial activities, going back decades. You can't replace boots on the ground with signs, bear poles, or advertisements. Equipment can facilitate food storage and ads and articles can serve as reminders, but actual learning happens in the context of personal interaction. And, people tend to learn better about outdoor behaviors outdoors.

The agency conflict reports show that the easy stuff in terms of education and outreach "in town" has been done. (See Appendix 1 of the Interagency 2009 Mortality report). The biggest opportunities to make a difference are in reducing hunter conflicts are in the field.

Field personnel are needed to ensure compliance with food storage requirements, proper management of carcasses, prohibitions on salting and baiting, etc. In the field, staff can develop personal relationships and gather important intelligence on what bears are up to, where the problems are, and how people are orienting to and responding to them. Although agencies are increasingly relying on volunteers for fiscal reasons, volunteers are typically less well suited to working with hunters and outfitters, who can be tough customers.

Field personnel must include some with a law enforcement background. (Again, agency recommendations have prioritized this since 1982). Forest Service enforcement, especially

of outfitter permit requirements (e.g., no salting, no wastage) has been notoriously lax, as with state and Fish & Wildlife Service (FWS) law enforcement, as pointed out in 2001 by Bob Jackson, long-time ranger in the Thorofare area along the southeast boundary of Yellowstone NP. This is almost certainly still the case, but no one is brave enough to talk about it.

Bob also made the case for better institutional backup for those personnel involved in investigations and citations. Those agency personnel who seek to enforce the law are certainly not being rewarded, especially when agency leadership is currently so ardently promoting delisting. (See no evil...)

The more remote the country is, the more agency field presence matters. There is, and has long been, a lot of illegal and problematic activity going on in places like the Thorofare. With so many dead bears "under investigation" this year, it makes sense to have more people in the field, to help deter some of the bad behavior.

Funding is a big part of the problem. In 2009, the agencies said "declining budgets are a concern for efforts to provide field personnel on the forests during hunting season" (p. 46). Almost certainly, funding for field personnel has gotten worse since then, and will only decline further after delisting.

A lot of taxpayer money is being spent on "in town" education/outreach. There is a legitimate question of proper deployment of resources given changing circumstances. That is, even with a huge amount of conventional education programs, mortalities are still increasing at the same time that cattle and hunter numbers are declining; and at the same time that the grizzly bear population has plateaued or even decline. As currently executed, outreach does not seem to be working.

Solutions: agencies should redouble commitment to ensuring adequate field presence during hunting season, even if it comes at the expense of some press releases, ads, and other in-town activities, which seem to have maxed out their effectiveness. Agency leadership must provide needed backup for staff to enforce the law, issue citations, investigate cases, etc.

2. GRIZZLY BEAR CONFLICT AND MORTALITY DATA MUST BE FULLY ANALYZED AND MADE PUBLICLY AVAILABLE.

Problems: Analyses of conflicts and mortalities by government agencies are outdated and incomplete. And, it is impossible for those outside government to comprehensively and

accurately diagnose the problems of grizzly bear conflicts and mortalities without access to the raw data.

In several of the reports containing recommendations for conflict reduction, the agencies recommended regular and complete appraisals of conflicts and mortality, so as to refine management actions. They simply have not done it, and what was done involved only one partial interpretation of the data.

There are no incentives for the agencies to take on the considerable task of a comprehensive evaluation of the data, which will undoubtedly raise issues at a time when the agencies are consumed with their delisting agenda. Still, it is the government's job to reduce grizzly-human conflicts where possible, and changing conditions demand different approaches.

Nothing appears to have been done by the agencies (other than simple reporting on conflicts/mortalities in the annual reports) to assess conflicts since 2009, the time when whitebark pine loss was at its maximum. It is time to reevaluate the conflict/mortality data.

The data must also be released to the public so that researchers, reporters and others can better understand the dynamics that lead to specific conflicts, and engage in discussions about ways to most effectively intervene and reduce conflicts.

Recent Freedom of Information Act Requests to the federal government for release of data have been denied. Even Jackson News and Guide reporter Mike Kosmrl only got a small portion of what he asked for on hunter-related grizzly bear deaths. State open documents requests have been also denied. (MT left a door open if \$3000 were made available).

Overall, requests for data have been fiercely denied since the 1990's, despite the fact that taxpayers paid for the data. The excuses used to block release are lame. Van Manen of IGBST has said (on film) that he won't release the data because his career and opportunities to publish papers would be jeopardized. FWS has said that they can't release the data because people may use it to go out and poach bears. But people more or less know where bears and the conflicts are anyway. Plus, if the population is as robust as agencies claim, release of this kind of data should not be a concern.

The process of scientific inquiry relies on a healthy debate about what the data show. A monopoly by agencies with a clear political agenda does not serve the public interest.

Solutions: Agencies should update the conflicts analysis and make all relevant conflict and mortality data available to the public, preferably online, as was suggested years ago by IGBST director Chuck Schwartz.

IGBST should pursue a model-based spatial analysis of conflicts looking at explanatory factors such as distribution of people, roads, trails, jurisdictions, livestock, hunters, and bear habitats. This could help managers focus on areas where interventions would likely have the greatest payoff and clarify what measures might be most effective.

This would be very easily accomplished with all the data compiled for the recent density analysis.

3. AGENCIES NEED TO EVALUATE THE EFFECTIVENESS OF ITS OUTREACH AND EDUCATION PROGRAMS

Problem: The agencies recommended evaluating the effectiveness of their education/outreach efforts. (2009 report, p. 32). This has not been done.

This is a really important task that has yet to be undertaken. The government could be wasting a lot of time and resources on efforts that make no difference and underutilizing those measures that are more effective – such as efforts in the field.

Solutions: Agencies should undertake this work as soon as possible, well before next year's hunting season.

4. PRACTICAL STEPS, IN THE CATEGORY OF NO BRAINERS

A. Pepper spray should be carried in grizzly habitat by agency employees and contractors.

Problem: There have been two people killed in two years who were federal contractors, one in Yellowstone Park and one on the Shoshone Forest. They were hiking alone and did not have bear spray.

Questions:

a. Clarify requirements for agency contractors. There are different stories about what is being done that should be nailed down. Does the Forest Service now requires contractors to be carry bear spray? If so, in what area does this requirement apply? (Ideally, it should apply in all occupied and suitable habitat; but it would be easier to manage forest-wide, which would help with black bear conflicts as well).

Also, how are federal managers getting the word out to contractors that it is a bad idea to hike alone? The requirement that contractors hike in groups could also be part of their permits.

Are all Park Service employees who work in the field required to carry bear spray? What about contractors?

- **b.** Clarify requirements for Forest Service employees. The 2009 report appendix (p. 44) said that some forests require employees to carry bear spray, implying that some do not. All FS employees working in grizzly bear habitat should be required to carry bear spray.
- **c.** Clarify requirements for state employees and contractors, and Wildlife Services. WS matters because they are mixing it up with bears and are all about killing things.

B. Agencies should require that bear pepper spray be carried by outfitters in grizzly habitat.

Problem: grizzlies are turning more to eating meat and getting tangled up increasingly with big game hunters. Agency folks and pretty much everybody agrees that hunters and outfitters should carry bear spray, but agencies are reluctant to require it.

From Mike Kosmrl's article in the Jackson New and Guide and IGBST analyses, it is clear that many outfitters in WY don't carry bear spray and yet are involved in a LOT of grizzly bear deaths. The dead bear data points the finger at outfitters, especially in WY.

Ensuring that outfitters, their employees and clients to carry bear spray has been recommended in various agency reports over the last 15 years. The FS has authority to permit outfitters, and can make bear spray a condition of the permit.

The Forest Service doesn't want to require that outfitters carry bear spray for fear of backlash. Claims that liability concerns prohibits the agency from requiring bear spray are crap. Disclaimers are widespread these days. The Dillon District of BLM required bear spray for outfitters in grizzly bear habitat, and the outfitters in the Gravelleys were fine with it. Grand Teton Park did the same with all elk hunters.

Solution: Forest Service should bite the bullet and require outfitters to carry bear spray as the Dillon District of the BLM has.

C. An online video on bear behavior should be made for hunters in bear country.

Problem: Hunters clearly need to know more about bear behavior to avoid problems.

Having said that the limits of education have been reached, there is one additional idea that seems worth pursuing: a decent video on bear behavior for hunter and backcountry users.

In 2001, 2004 and 2009, the agencies suggested that hunters need more education on bear behavior (2009 report, p. 22). More needs to be done to help hunters understand why

shooting late in the day and leaving carcasses especially overnight is a bad idea, why hunting with a buddy makes sense, why bugling for elk alone (as bow hunters do) is dangerous, why hiking in the dark is not smart, why bears are getting aggressive around carcasses, etc. Hunters need to take basic precautions or choose to hunt in areas without grizzly bears.

A video on hunting in bear country was recommended in 2009 (p. 30). This is a good idea and it has not been pursued. Some have recommended that viewing the video could be tied to getting a discount on bear spray, another good idea.

The video would be online and hunters and backcountry users would be encouraged to see it. A version could be made for general backcountry users as well. The online black bear/grizzly bear id test that the agencies developed has been well received and seen by a lot of people.

Solution: agencies should develop, post and promote this video well before next hunting season, including it in hunters' education classes, living in bear country workshops, etc.

5. ADDITIONAL RESEARCH QUESTIONS

A. Carcass management

Problem: there are lots of conflicts over big game and livestock carcasses.

The 2004 and 2009 reports recommend that more work be done to define "proper handling of carcasses". But this problem does not appear to be pursued in a systematic way, and there is still much confusion especially about the disposal of dead cows.

Questions:

What do the data show are common situations/dynamics around carcasses and where/when? Of course, access to the data would be key to answering this question.

What are the policies and best management practices around handling game and livestock carcasses, and do they vary throughout the ecosystem? Do some seem to be working better in some areas and why?

What is the story on the Alaska Kodiak situation and Alaska Game & Fish's rules to prevent carcasses being left overnight? How well does the system work? Have other parts of AK or BC instituted similar systems?

B. Changing opening dates for elk hunts

Problem: There are lots of hunter-bear conflicts early in elk hunting season south and southeast of Yellowstone Park as grizzly bears follow elk exiting from the Park in late summer/fall; opening date is the first week of September or so. Hunters and bears are on top of each other, both after elk.

The idea of delaying opening dates to lessen conflicts has come up a lot over the years, but has been routinely shot down by the states for obvious reasons. The 2009 report suggested a "test area" (p. 24) for the idea of changing opening dates. It does not appear as if anything has been done.

Question: What about mapping the locations of hunter-related conflicts and mortalities and looking at timing relative to opening dates? Of course, this gets back to availability of data.

C. Mistaken Id killings

Problem: each year, at least one bear, sometimes more, is killed due to a hunter mistaking a grizzly for a black bear.

In 2015, it seems as if 2 grizzly bears were killed (under investigation) in the spring black bear hunt. Contributing factors include poor light and weather conditions and hunters not knowing the difference.

Questions:

What are the circumstances of these incidents?

Have the involved hunters taken the online id test and still made a mistake?

Is bait a factor or could it be a factor as grizzly bears distribution has expanded?

Again, access to the data is essential.