

IBMP Subcommittee Assessment of Bison Carcass Removal in Beattie Gulch Area

7/29/2020

Citizens in the Gardiner area brought concerns to the IBMP regarding the bison hunt. High numbers of bison carcasses accumulate in Beattie Gulch in years when large numbers of bison migrate out of Yellowstone National Park. Citizens have proposed solutions including bison carcass removal. IBMP discussions demonstrated uncertainty in understanding problems and differing opinions of whether problems exist. Potential problems raised to date included human safety, bear mortality, impacts to recreational use of the area, and impacts to nearby residents and businesses. At the December 2019 IBMP meeting a subcommittee formed to define the problems and discuss solutions, specific to effects of bison carcasses and not to concerns regarding hunter safety, bison distribution or other related issues. The following discussion is a product of this subcommittee.

Problem Statement: Carcasses left on the landscape from bison harvest in the relatively small area of Beattie Gulch contributes to grizzly bear related concerns for human safety, possible grizzly bear mortalities, lead poisoning of scavengers, area aesthetics, and other negative impacts to nearby residents and businesses.

The subcommittee noted that the term “carcass” has two parts, the guts, including stomach and organs and the remaining skeleton, including bones, attached meat, and any remaining hide. The subcommittee identified these problems.

- Human Safety: Carcasses attract scavengers, including grizzly bears, to Beattie Gulch where people walk, specifically along the county road, USFS trail #302 and Beattie Gulch Road #3240. Bears emerge from their dens in mid-March and are known to use the Beattie Gulch area into mid-May.
- Bear Mortality: Carcasses attract bears to this area increasing the possibility of human encounter and bear mortalities. Bear mortalities can occur in the shooting of a bear in self-defense situations or through management actions at human occupied areas.
- Lead Poisoning: High concentrations of carcasses containing lead bullets expose scavengers, including eagles, to the risk of lead poisoning.
- Area Aesthetics: Concentration of carcasses negatively impact areas views, aesthetics, and local tourism businesses.

The subcommittee identified potential solutions for the above problems:

- Human Safety:
 - Remove carcasses from Beattie Gulch. Complete or partial removal and rumen dispersal.
 - Establish carcass collection sites or bins.
 - Close hiking trails during times of bear use in Beattie Gulch, likely during the mid-March to mid-May period, in years with high concentration of carcasses.
 - Expand hunting closures to provide wider buffers near hiking areas and homes.
 - Close or intermittently close Beattie Gulch to bison hunting.
 - Continue to enforce current clean zone restrictions and setbacks created by the USFS.
 - Enforce and adhere to current USFS food storage restrictions.
 - Educate hikers of dangers.

- Bear Mortality:
 - Remove carcasses from Beattie Gulch. Complete or partial removal and rumen dispersal.
 - Establish carcass collection sites or bins.
 - Close hiking trails during times of bear use in Beattie Gulch, likely during the mid-March to mid-May period, in years with high concentration of carcasses.
 - Expand hunting closures to provide wider buffer near hiking areas.
 - Close or intermittently close Beattie Gulch to bison hunting.
 - Continue to enforce current clean zone restrictions and setbacks created by the USFS.
 - Enforce and adhere to current USFS food storage restrictions.
 - Do not transfer carcasses into area from other locations.
 - Educate residents to minimize bear attractants.
- Lead Poisoning:
 - Remove carcasses from Beattie Gulch. Complete or partial removal and rumen dispersal.
 - Establish carcass collection sites or bins.
 - Use non-lead bullets
 - Close bison hunting in Beattie Gulch
- Aesthetics:
 - Remove carcasses from Beattie Gulch. Complete or partial removal and rumen dispersal.
 - Establish carcass collection sites or bins.
 - Expand hunting closures to provide wider buffer near homes, roads and hiking areas.
 - Close Beattie Gulch to bison hunting.
 - Continue to enforce current clean zone restrictions and setbacks created by the USFS.

Solution Summary: Common to all sets of solutions is the removal of carcasses from Beattie Gulch. Removal could include the entire carcass, including guts and skeleton. Another option provided by the subcommittee was to require removal of the meat, head, hide and skeleton but leave the guts, stomach and organs at the site, and open the stomach. The expectation is that scavengers other than bears will consume the organs prior to bear emergence, reducing the attractants and likelihood that bears remain in the area. Carcass removal could be required of the hunter or conducted by a contracted group or by tribal and government agents. Additional suggestions include providing a dumpster for hunters to deposit carcasses, and tribal and government agent cleanup days after the hunts and prior to bear emergence.

Also common to all sets of solutions is the closure of Beattie Gulch to bison hunting. At this time, this solution is not expected to be acceptable to most hunt agencies.

Common to both human safety and bear mortality was the idea of trail or area spring closures to human use of Beattie Gulch when carcasses or bears are present. Similar but not likely as effective is the idea to widen the no hunting areas. Likewise, education was identified to help but not expected to largely reduce risks. Similarly, enforcing and adhering to USFS food storage restrictions would improve conditions, however only for activities occurring after the March beginning date and would not affect the number of carcasses previously left in the area.

Moving forward toward acceptance and implementation of solutions: At the December 2019 IBMP meeting, some of these solutions were discussed with varied support by IBMP partners and other tribal hunt agencies. Recently, subcommittee members have observed hunters removing full carcasses and opening and dispersing rumen contents once informed of the problems identified. This has occurred without a coordinated effort to inform hunters.

At this time, the subcommittee recommends a voluntary and educational approach to implementing solutions. If accepted, hunt agencies could inform their hunters and encourage removing carcasses, properly disposing of carcasses, opening and separating the rumen from the other organs, and dispersing the rumen contents. Bones, head and hides could be removed from the site. These actions would greatly reduce the problems identified by the subcommittee, residents, and hunters.

A related solution is to provide a waste collection bin at Beattie Gulch for hunters to dispose of carcasses. A large dumpster type canister would facilitate carcass collection and improve compliance with the USFS food storage requirements. This may be an option for the 2020-2021 hunting season. Logistical uncertainties, including type of dumpster, location, costs and carcass disposal site, will need to be resolved. There are concerns and legalities of spreading the bacterial disease *Brucella abortus* by transporting potentially infected tissues. If a collection bin was to be used and permitted to transport bison remains to an authorized refuse site, it may be limited to skeletal bones, hides, heads and legs, thus requiring or encouraging opening the rumen, spreading the contents thus separating it from other organs to minimize the grizzly bear attractant concerns and maximize use by smaller scavenger species. If the situation developed that the collection of internal organs and reproductive tracts was deemed necessary, consultation and permission from the acting Montana State Veterinarian would be required and likely those organs would need to remain within the Designated Surveillance Area for Brucellosis. Discussion and agreement on timing and use is needed before a refuse bin could be placed on site in the Beattie Gulch area.

The subcommittee identified a third solution but recognized that implementation would be as needed, likely not an annual mitigation event and not a preferred solution. This idea is a coordinated clean-up day by representatives of the hunt and land management agencies and interested groups, likely occurring in late March or early April. This approach would not be solely relied upon for removal of most carcasses, but instead as needed to supplement the voluntary hunter effort. This type of solution requires a committed agreement between participants due to the numerous people and motorized equipment needed to accomplish the task.

Questions to be posed to hunt agencies, tribal and state, include is there acceptance of a voluntary and educational approach of encouraging carcass removal by hunters? If so, what measures would be needed to make this approach effective?