2018 Grizzly and Black Bear Management Report Cabinet-Yaak Ecosystem Montana Department of Fish, Wildlife & Parks Region 1



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National Fish and Wildlife Foundation for the funding that keep effective human-bear conflict solutions available for the people and bears of NW Montana.

INTRODUCTION

The Cabinet Yaak Ecosystem (CYE) is a recognized recovery zone for the threatened grizzly bear population in the Cabinet-Purcell Mountain region located in northwest Montana and northeastern Idaho. In 2012, the estimated total abundance of grizzly bears in the CYE was 48-50 bears (Kendall et al, 2015) separated into 2 fragments; the Cabinet Mountains and the Yaak River drainage. With an annual growth rate of approximately 1-2%, the population is now estimated at 55-60 bears (Kasworm et al, 2018). The CYE is one of 6 designated grizzly bear population recovery areas in the lower 48 states.

Montana Department of Fish, Wildlife & Parks (FWP) grizzly bear management specialists have proved successful at fostering public awareness, acceptance and support of grizzly bear management and conservation. The most effective conservation solution for reducing conflict and preventing management related mortality of grizzly bears is to work one-on-one with residents on how they can share the landscape with bears. However, disseminating information on co-existing amicably with bears is only partly effective. Directly helping residents prevent human-bear interactions is the key to reducing conflicts and fostering an acceptance of bears, which in turn may support grizzly bear population recovery efforts. On-the-ground assistance is needed to resolve interactions with bears and find effective long-term solutions on securing attractants that are specific to a situation.

In response to a growing need for on-the-ground grizzly bear management and public outreach, FWP created a grizzly bear management specialist position for the CYE in 2007. Because both grizzly and black bears are found in the CYE region, the CYE grizzly bear specialist also works to reduce and resolve human-black bear conflicts to prevent future human-grizzly bear conflicts.

The primary objective of this program is to place emphasis on human-bear conflict prevention and to provide permanent solutions to those conflicts when they occur.

Main program goals:

- Prevent human-bear conflicts by addressing attractants
- Provide residents with proactive, permanent solutions for securing attractants before conflicts occur
- Quickly, effectively, and permanently address human-bear conflicts as they occur
- Increase public awareness, safety, and understanding of normal bear behavior and life history through information, education and outreach programs
- Maintain support for grizzly bear recovery efforts
- Address conflicts with black bear and grizzly bear equally
- Promote the use of electrified fencing and Interagency Grizzly Bear Committee (IGBC) certified bear-resistant containers as an effective method to secure attractants

A US Fish & Wildlife Service (USFWS) research team, headed by Wayne Kasworm, performed the first grizzly bear research in the Cabinet Mountains in the 1980's. They concluded that a very small population, fewer than 15 grizzly bears, remained in the Cabinet Mountains

(USFWS, 1990). In 1986, the research team also began a population monitoring program that, today, extends throughout the CYE. The research team is stationed at the FWP Libby Field Station and works closely with the CYE FWP bear management specialist.

This position has been funded by a grant from the National Fish and Wildlife Foundation (NFWF) with a 1:1 match provided by Hecla Mining Company (formally Revett Mining Company) since 2006. Hecla Mining Company is a silver and copper company that owns the 3 largest mining claims in the Cabinet Mountains; Troy Mine, Montanore Mine and Rock Creek Mine. NFWF is an independent nonprofit organization that supports conservation efforts throughout the United States and its territories.

MANAGEMENT AREA

Located in northwest Montana, the Cabinet-Yaak Grizzly Bear Recovery Zone encompasses approximately 6,800 km² of northwest Montana and northern Idaho (Figure 1). The Cabinet Mountains constitute approximately 58% of the recovery zone and lie south of the Kootenai River. The Yaak River drainage lies to the north, bordering both Canada and Idaho. Approximately 90% of the recovery zone is on public land administered by the Kootenai, Lolo, and Panhandle National Forests. Weyerhaeuser and Stimson Lumber Company hold a significant amount of private timber land in the area. Residential land ownerships are primarily along the major creeks and rivers. The Cabinet Mountains Wilderness encompasses 381 km² of higher elevations within the recovery area.

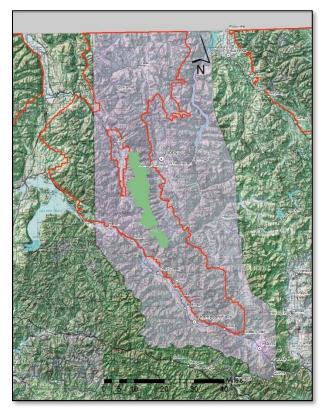


Figure 1. Outlined red area represents grizzly bear recovery zones in NW Montana and northern Idaho. Shaded pink area represents the CYE bear specialist's area of responsibility.

My primary area of responsibility includes all or part of 2 Counties, the CYE recovery zone, and communities adjacent to the recovery zone boundary (Figure 1). This area encompasses approximately 4,600 square miles. Reducing human-bear conflicts in the communities surrounding the CYE recovery zone decreases the risk of human-caused grizzly bear mortalities and benefits grizzly bear population connectivity. The communities are Libby, Troy, Yaak, West Kootenai, and Happys Inn in Lincoln County, and Heron, Noxon, Trout Creek, Thompson Falls, Plains, and Paradise in Sanders County. It is bounded by the Idaho state line to the west, Canadian border to the north, Salish Mountain Range to the east, and the MFWP Region 2 boundary line to the south. I also assist with human-bear conflicts in the Eureka area as needed.

HUMAN-BEAR CONFLICT AND PREVENTION

The following is a summary, with highlights, of the 2018 field season.

Eliminating anthropogenic food resources (i.e. attractants) is the key towards minimizing most conflicts between bears and people. Interactions between bears and people are individualistic in nature therefore the tools used to resolve conflicts are dependent upon the situation. Successful resolutions are both permanently effective, and feasible, for the individual situation. Time spent visiting one-on-one with residents goes a long way towards fostering open-mindedness and/or support for sharing the land with bears. Solutions to a conflict may include, but are not limited to, 1) placing the attractant inside a secure building or structure, a bear-resistant container, or behind an electrified fence, 2) loaning of a bear-resistant container, 3) loaning of/or helping build an electrified fence, and/or 4) removing a bear from the location, either temporarily or permanently.

Education, bear-resistant containers and electrified fencing are the primary tools used to resolve a human-bear conflict. While the relocation or removal of a bear may also be used as a tool, removing a bear without also securing the attractant(s) typically does not permanently resolve the conflict. Relocation or removal of a bear is a temporary solution that does not address the source of the most common conflict (i.e. attractants), and another bear might continue the conflict if attractants remain unsecured.

To help residents understand how to effectively design and use electrified fencing to deter bears, I developed an electrified fencing guide in 2010. The most updated version (2017) of this guide can be found on the FWP website at http://fwp.mt.gov/fishAndWildlife/livingWithWildlife/beBearAware/bearAwareTools.html.

The definition of "human-bear conflicts" are situations where bears were actively engaged in accessing, or attempting to access, human-related attractants, or situations where bears had defensive or predatory encounters/confrontations with people. This includes, but is not limited to, livestock depredation, property damage, and home entry. It *does not include* front/back country sightings, vehicle/train mortalities, or sightings of injured bears. The number of conflicts reported in this summary is not necessarily an accurate representation of the level of human-bear conflicts for a given year or given area; not everyone having a conflict with a bear will report it to FWP or request assistance, and human-bear conflict calls entirely handled by FWP law enforcement are not reported here. Conflicts are recorded by location only; although it might take several site visits or phone conversations to resolve a conflict at an individual

location, only one conflict is recorded. Conflicts at nearby locations, even if caused by the same bear, are recorded individually. The primary attractant is recorded individually, although in some cases it may be difficult to determine the primary attractant when multiple attractants were available.

In 2018 abundant winter snow and adequate spring rains produced a good berry crop at all elevations. While huckleberry production was less than average (Kasworm et at, 2018), other berries (i.e. chokecherries, serviceberries, etc.) were readily abundant. Abundant natural food resources were the likely reason reports of human-bear conflicts, particularly associated with fruiting trees, were lower than usual. Much of the domestic fruit tree production in the area was poor, particularly plums, which helped reduce the number of human-bear conflicts in the fall.

I received a total of 109 bear-related calls in 2018. Of these, 47 were confirmed human-bear conflicts (both species). No bears were captured/relocated/euthanized due to confirmed human-bear conflicts (either species) in the CYE in 2018. There were 39 conflicts with black bears reported and 11 conflicts with grizzly bears reported.

Years in which black bear conflicts were high do not appear to parallel the years in which grizzly bear conflicts were high. This might be a reporting variable rather than a food or weather variable; where some types of conflicts are only reported by some people. See Appendix D for the yearly number of conflicts and subsequent management captures. A list of all bears relocated for management, statewide, is always available on the FWP website at: http://fwp.mt.gov/fishAndWildlife/livingWithWildlife/relocation/

Since 2008 (when human-bear conflict data in the CYE started being recorded) garbage continues to be the primary cause of human-bear conflicts. Although conflicts were lower in 2018 than they have been in recent years, unsecured household garbage remained the primary attractant. Domestic fruit trees and small livestock were a close second (Table 1.)

Black Bears						
Garbage	Freezers					
Fruit Trees	Hives					
Poultry	Human foods					
Songbird feeders	Hogs					
Goats						
Grizzly Bears						
Goats	Harvested game					
Poultry	Bird feeders					
Hogs	Dog food					

Table 1. Primary attractants identified in human-bear conflicts during 2018

The Montana Outdoor Legacy Foundation (MOLF), Defenders of Wildlife (DOW), and the USFWS donated electrified fencing materials and IGBC certified bear-resistant containers for residential use in the CYE. Electrified fencing materials are used to temporarily secure attractants during a conflict, or are loaned out to residents to secure attractants prior to a

conflict. The bear-resistant containers are loaned out to residents that do not have a secure location to contain their garbage containers, cannot afford to purchase their own bear-resistant container, or want to try a container prior to purchase. Beginning in 2016, Kootenai Disposal, the privately-owned business that provides waste services for all of Lincoln County, provides IGBC certified bear-resistant garbage containers and dumpsters to their customer. Butte Services in Sanders County also provides IGBC certified bear-resistant garbage containers of both Lincoln and Sanders Counties can purchase IGBC certified bear-resistant garbage containers through several local businesses as well.

Temporary electric fencing was used at 20 locations as the primary tool to resolve a conflict in 2018. Since 2009, when the temporary electrified fencing program began, the number of electric fences set to resolve human-bear conflicts has been increasing, particularly after 2015 when low elevation food failures caused a high number of conflicts with black bears. In 2018, I also assisted 3 residents with permanent electrified fences to secure their small livestock.

Of the 180 electric fences set since 2009 (Table 2.), only 2 were ineffective at eliminating a conflict with a bear. One, in 2017, was due to a flaw in the initial design of the fence, where a grizzly bear disabled the fence without getting shocked to access grain in a barn. The other, in 2015, were black bear cubs of the year (COY) willing to take a full jolt from a, well-designed and properly maintained, electrified fence to access a fruit orchard several times a week. Interesting, as witnessed by the landowners, the mother and a sibling of those COY only touched the electrified fence once and never attempted to access the orchard again. All the electrified fences set in 2018 were 100% effective at eliminating a conflict with a bear and no further management action was required.

Year	# of E-fences	Year	# of E-fences
2009	8	2014	17
2010	6	2015	40
2011	17	2016	23
2012	12	2017	25
2013	12	2018	20

Table 2. Number of electrified fences set from 2009-2018 in the CYE.

On March 17, 2018 a resident in the Troy area had a grizzly bear walk on the hood of the pickup truck he was using to block access to a garbage trailer. That night, the bear also pushed in 2 windows on the garbage trailer, flattened several rabbit cages (releasing all the rabbits), and possibly killed one of the 100+ free-ranging chickens roosting near the rabbit cages. The resident saw the bear again a few days later, but didn't report either the initial incident or the subsequent sighting at the time they occurred. Once the landowner contacted FWP, I visited and set a temporary electrified fence around his goat pen, as the goats were known to regularly escape it. However, in subsequent evenings 3 goats escaped their pen and the temporary electrified fence (by jumping over it). All were killed elsewhere on the property, and 1 was confirmed to have been fed on by a bear and grizzly bear tracks were found in the melting snow nearby. A trap and several trail cameras were set. The bear avoided the trap but was seen once on camera walking near the temporary electrified fence. FWP, USFWS, and

the landowner came together within several days of the initial event to set a permanent 7-line electrified fence around his livestock. Once the permanent electrified fence was in operation, all depredation ceased. Additionally, the goats could no longer escape their enclosure or the surrounding electrified fence.

Bear-resistant garbage containers were used at 9 locations as the primary tool to resolve a conflict. The containers were 100% effective at resolving conflicts at these locations and no further management action was required. All 123 containers loaned since 2007 (Table 3.) were effective at eliminating conflicts with bears. There are 23 containers that remain out on a permanent or long-term loan.

Year	# Containers	Year	# Containers
2007	2	2013	16
2008	7	2014	18
2009	3	2015	10
2010	7	2016	15
2011	7	2017	11
2012	18	2018	9

Table 3. Number of bear-resistant garbage containers loaned from 2007-2018 in the CYE.

Traps were used at 6 locations to resolve a conflict, and zero bears, of either species, were captured at these locations. At 3 of these locations, either electrified fencing or bear-resistant containers were also used, ultimately resolving the conflict. A black bear COY was captured in the spring by hand and humanely euthanized due to its extremely poor condition.

Of the 109 bear-related calls I received, 41 were non-conflicts. These calls were regarding bears seen near homes, front-country or back-country sightings, track sightings, vehicle or train mortalities, injured bears, bears up non-fruit bearing trees, questions or concerns, and reports of possible bear-related illegal activity. Even though these calls were not conflict related, conflict prevention and normal bear behaviors were discussed with each caller. The number and type of non-conflict related calls vary widely from year to year; from a low of 5 in 2008 to 128 in 2015.

I received 16 calls from residents requesting help to prevent conflicts with grizzly bears and/or black bears. These residents specifically reached out for assistance on how to prevent conflicts with bears prior to having a conflict. Assistance ranged from a discussion on their needs, a site visit, and/or helping them design/construct a permanent electrified fence. Calls specifically requesting prevention assistance vary from year to year, and may be a reflection on the level of conflict the area the year prior, or whether the caller experienced a conflict with bears in the past (Table 4.).

Year	# Calls	Year	# Calls
2007	2	2013	15
2008	4	2014	15
2009	4	2015	32
2010	14	2016	23
2011	16	2017	22
2012	31	2018	16

Table 4. Number of requests for prevention assistance 2007-2018 in the CYE.

On May 17, 2018 a USFWS seasonal employee was attacked and injured by an adult male grizzly bear while working in Poorman Creek, a drainage in the Cabinet Mountains. While walking to a pre-designated DNA rub tree site, she was suddenly confronted by a grizzly bear, 15-20 feet in front of and to her left. She turned her back on the bear and crouch down before it touched her. While being injured, she deployed her bear spray on the bear, which resulted in it letting her go and retreating. She used her In-Reach device to call for help, hiked back to her truck, and drove to meet a waiting ambulance. The FWP Region 1 Wildlife Human Attack Response Team (WHART) investigated the incident and determined the incident was defensive in nature and the result of a surprise encounter. No management action was taken against the bear.

SANITATION

I continue to coordinate with Lincoln and Sanders Counties to secure the public waste transfer sites and make them bear-resistant. My primary role is to help the counties identify funding for materials to secure sites, and to help design effective and affordable bear-resistant fences. Since 2007, a combination of chain link fence and electrified wires were installed to secure the following County run transfer sites: Yaak, Fourth-of-July Creek, Yaak Hill, Troy Mine Road, Savage Lake, Highway 2 South, Trego, Pinkham Creek, and Glen Lake. Securing these sites has been 100% effective at preventing bears from accessing garbage. The County has plans to secure the sites at West Kootenai and Fortine in 2019, leaving only Rexford, McGinnis Meadows and Happys Inn unsecured. The Lincoln County landfill manager designed drive-over electrified mats as an alternative to traditional swing gates. Eliminating gates at these rural sites allows them to be electrified and in operation 24 hours per day, instead of the 12 hours per day the gated sites operate under.

In 2015, Sanders County completed the construction of an electrified fence around the public waste transfer site at the bottom of Rock Creek off Highway 200. The remaining public waste transfer sites in Thompson Falls, Trout Creek and Heron will be updated and similarly secured over the next few years as planned by Sanders County.

EDUCATION, OUTREACH AND MEETINGS

Education and outreach programs are designed to increase public awareness of grizzly bear behaviors and biological needs. When possible, public workshops are offered on the effective use of electrified fencing to deter bears. I attended local fairs, festivals, and agency meetings and provide information about bear behavior, biology and safety. I am also the IGBC

Information, Education & Outreach (IEO) subcommittee chair, as well as the IGBC Selkirk/Cabinet-Yaak Ecosystem IEO subcommittee chair. The following list contains fairs, festivals, and agency presentations and programs in 2018.

Kootenai National Forest; Libby District Bear Awareness/Spray Training Kootenai National Forest; Three Rivers District Bear Awareness/Spray Training Kootenai National Forest; Cabinet District Bear Awareness/Spray Training Kootenai National Forest; Fire meetings and Team Leader meetings Lolo National Forest; Plains District Bear Awareness/Spray Training Army Corp of Engineers; Libby Dam Wildlife Days Libby Middle School STEM program KNF Campground Host training KNF 5th Grade Tour Troy Apple Festival Lincoln County Fair Angel Island Homeowners Association Lincoln County Commissioner meetings Sanders County Commissioner meetings IGBC CYE Subcommittee and Executive Committee meetings

HUMAN-CAUSED GRIZZLY BEAR MORTALITIES

Grizzly bear mortalities are classified as "known human-caused" if it was determined that humans, or their activities, caused the death of a grizzly bear within the Montana portion of the CYE. See Appendix C for a list of all known grizzly bear mortalities, human-caused or otherwise, within the MT portion of the CYE from 2007-2018.

On April 1, 2018 a trail camera on private land along Pine Creek captured a video of a grizzly bear dragging it's back legs. The bear appeared to be paralyzed from its shoulders back. I tracked the trail where the bear had dragged itself through the snow and was able to find multiple clumps of hair. Through DNA analysis, the bear was identified as 821, a sub-adult male previously identified by USFWS in 2017. While the remains of the bear were not found, due to the nature of the bears condition on the video, the bear is presumed dead. The circumstances of how the bear became paralyzed are unknown, but given the proximity to private land and homes, and the bears previous history of visiting residents for attractants in the spring, the bears injuries may have been human-caused.

In late April 2018, a young grizzly bear was seen multiple times around residences on the eastern side of McGregor Lake in Flathead County. The bear was likely the same grizzly bear seen for several days around the McGregor Lake RV Park in late 2017, and likely the same bear seen walking the Thompson River Road in April 2018. The FWP grizzly bear specialist for the Flathead area, Tim Manley, worked with landowners and made the decision to capture and relocate the bear away from the area. A long-distance relocation was determined to have higher probability of success than a short-distance relocation. On April 30, 2018 the bear was captured and relocated to the west side of the Koocanusa Reservoir in Big Creek. Over the next 3 weeks the bear walked extensively, and was seen several times by different residents in the greater Troy and Libby areas. Most sightings were of the bear just walking from one place to another. The bear was found deceased under unknown, but human related, circumstances,

in the Bristow Creek area on May 21, 2018. The case remains under investigation by USFWS law enforcement.

A study evaluating the effectiveness of conflict prevention actions, detected a reversal of the declining mortality trend in the CYE post-hiring of the FWP CYE grizzly bear conflict specialist. Prior to 2009, the mortality trend was increasing, but a significant decrease was detected after 2009. This was accompanied by an increase in the grizzly bear population in 2013, reversing a decades-long trend (Proctor et al, 2018) (Kasworm et at, 2017).

CABINET MOUNTAINS GRIZZLY BEAR AUGMENTATION PROGRAM

In 1987, the USFWS proposed a plan to augment the Cabinet Mountains portion of the population with female bears from outside the area. This approach involved transplanting adult or sub-adult female grizzly bears, captured from remote areas with similar habitat to the Cabinet Mountains, that had no history of conflicts with humans (USFWS 1990, Servheen et al. 1987). Between 1990-1994, the USFWS selectively captured 4 young female bears from the Canadian portion of the Northern Continental Divide Ecosystem (NCDE) grizzly bear population and transplanted them to the Cabinet Mountains. This initial test of the augmentation program was determined successful. In 2005, FWP partnered with USFWS on this program and it was expanded to include sub-adult males. See Appendix B for a list of all grizzly bears augmented into the Cabinet Mountains from 1990-2018.

On July 20, 2018, a sub-adult male grizzly bear was released in the West Cabinet mountains above the Spar Lake area. He was captured specifically for the augmentation program by FWP in the Whitefish Range. The young male, 927, traveled south into the lower Clark Fork river valley and spent the remainder of the summer and fall among private lands. The bear utilized low elevation natural food resources between Clark Fork, Idaho and Heron, Montana. In early September, Idaho Department of Fish & Game (IDFG) received a complaint from a resident that a collared grizzly bear was visiting and eating bait at a legal black bear baiting station. IDFG set a trap and requested that FWP assist them in the relocation of 927 back to the main Cabinet Mountains. The bear was captured, recollared, and released on September 5, 2018. Within a week, 927 walked back to the valley between Clark Fork, Idaho and Heron, Montana. The black bear bait site in Idaho had been removed by then, and, while the bear continued to remain among private lands, I did not receive any calls reporting sightings or conflicts that could be attributed to 927. The bear denned in the west Cabinet Mountains near Ross Creek.

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APPENDIX A: Grizzly bear captures due to human-bear conflicts in the CYE 2007 – 2018

- 2010							
		S					KNOWN FATE (at
		E					end of
DATE	ID			DEACON	CADTUDE		
DATE		X	AGE	REASON	CAPTURE	RELOCATE	2018)
9/18/2007	772	F	8	Fruit Trees	Pilgrim Creek,	SF Marten	Unknown
					Noxon	Creek, KNF	
9/18/2007	791	М	COY	Fruit Trees	Pilgrim Creek,	SF Marten	Unknown
					Noxon	Creek, KNF	
9/18/2007	789	F	COY	Fruit Trees	Pilgrim Creek,	SF Marten	Unknown
					Noxon	Creek, KNF	
8/30/2010	1374	Μ	2	On porch, in garbage	Young Creek,	Spread	Deceased
					West Kootenai	Creek, KNF	
7/11/2011	724	Μ	4	Killed pigs	Graves Creek,	Devils Club	Unknown
					Thompson Falls	Creek, KNF	
10/27/2011	732	Μ	3	Dug up buried dog	Yaak River,	Lookout	Deceased
					Yaak	Creek, KNF	
10/05/2015	726	Μ	6	Depredated on beehives	Granite Creek,	Bear Creek,	Alive
					Libby	KNF	
9/29/2016	722	Μ	18	Killed young pig	Seventeen Mile	Pete Creek,	Alive
					Creek, Troy	KNF	(recollared)
10/10/2016	922	Μ	3	Livestock feed	Yaak River,	Spread	Deceased
					Yaak	Creek, KNF	
06/20/17	1026	F	2	Grazing in yards	Yaak River,	Hidden	Unknown
					Yaak	Creek, KNF	
06/20/17	1028	F	2	Grazing in yards	Yaak River,	White	Deceased
					Yaak	Creek, BC	
						Canada	
4/30/18	McGregor	Μ	3	Digging up voles in yards	McGregor Lake	Big Creek,	Deceased
						KNF	

APPENDIX B: Cabinet mountain grizzly bear augmentation program; bears augmented to the Cabinet Mountains 1990 – 2018

	1		1			
YEAR	ID	SEX	AGE	CAPTURE	RELOCATION	KNOWN FATE by end of 2017
1990	218	F	5	NF Flathead River, BC, Canada; NCDE	EF Bull River, KNF; CYE	Dropped collar 1991, observed July 1992
1992	258	F	6	NF Flathead River, BC, Canada; NCDE	EF Bull River, KNF; CYE	Deceased in 1993
1993	286	F	2	NF Flathead River, BC, Canada; NCDE	EF Bull River, KNF; CYE	Dropped collar at den 1995, detected via DNA 2004-2009, killed November 2009
1994	311	F	3	NF Flathead River, BC, Canada; NCDE	EF Bull River, KNF; CYE	Dropped collar 1994, recaptured October 1995 near Eureka, MT, released in EF Bull River, collar signal lost November 1995
2005	A1	F	8	NF Flathead River, FNF; NCDE	Whoopee/Hiatt Creek, KNF; CYE	Dropped collar 2007
2006	782	F	2	SF Flathead River, FNF; NCDE	Whoopee/Hiatt Creek, KNF; CYE	Dropped collar 2008; DNA detected in 2012 by USGS study
2008	635	F	4	Fitzsimmons Crk, Stillwater SF; NCDE	EF Bull River, KNF; CYE	Killed by train near Noxon, MT October, 2008
2008	790	F	3	Swan River; NCDE	EF Bull River, KNF; CYE	Illegally killed near Noxon, MT October, 2008
2009	715	F	10	Big Creek, FNF; NCDE	Whoopee/Hiatt Creek, KNF;CYE	Returned to FNF May 2010, dropped collar
2010	713	М	3	Dead Horse Crk; FNF, NCDE	Whoopee/Hiatt Creek, KNF, CYE	Dropped collar in Cabinet Mountains in 2011
2010	714	F	3	Spruce Crk, FNF; NCDE	Silver Butte Pass, KNF; CYE	Returned to FNF July 2010, dropped collar
2011	723	М	2	Stryker Ridge, FNF; NCDE	Whoopee/Hiatt Creek, KNF; CYE	Dropped collar in Cabinet Mountains June 2012
2011	725	F	2	Puzzle Crk, FNF; NCDE	Whoopee/Hiatt Creek, KNF; CYE	Walked to GNP and denned 2011; walked to WNP, returned to West Cabinets to den in 2012; walked to GNP and WNP in 2013, returned to West Cabinets August 2013; lost collar October 2013
2012	918	М	2	Upper Whitefish Lake, Stillwater SF; NCDE	EF Bull River, KNF; CYE	Dropped collar in Cabinet Mountains in 2014
2013	919	М	2	Cola Crk, FNF; NCDE	Whoopee/Hiatt Creek, KNF; CYE	Dropped collar in Cabinet Mountains in 2014
2014	920	F	2	Dead Horse Creek, FNF; NCDE	Whoopee/Hiatt Creek, KNF; CYE	Dropped collar in Cabinet Mountains winter of 2016
2014	921	F	2	Dead Horse Creek, FNF; NCDE	Whoopee/Hiatt Creek, KNF; CYE	Bear died of natural mortality in June of 2015
2015	924	М	2	Stryker Basin, FNF	Whoopee/Hiatt Creek, KNF; CYE	Bear illegally killed by black bear hunter in Idaho on 9/30/15
2016	926	М	3	South Fork of Flathead, Sullivan Creek	Whoopee/Hiatt Creek, KNF; CYE	Dropped collar in Cabinet Mountains 2017
2018	927	М	2	Stryker Basin, FNF	Whoopee/Hiatt Creek, KNF; CYE	Collared; Denned in West Cabinets November 2018

APPENDIX C: Known human-caused grizzly bear mortalities within the Montana portion of the CYE 2007 – 2018

DATE	ID	SEX	AGE	REASON	LOCATION
9/22/07	354	F	11	Self-defense	Canuk Creek
9/24/08	None	Unk	3	Unknown	Fishtrap Creek
10/20/08	635	F	4	Train	Noxon, Lower Clark Fork River
10/20/08	790	F	3	Illegal	Noxon, Lower Clark Fork River
11/1/09	286	F	18	Self-defense	East Fork Bull River
10/11/10	None	М	Adult	Unknown	Pine Creek
9/16/11	None	М	Adult	Mistaken ID	Faro Creek
11/13/11	799	М	4	Mistaken ID	Cherry Creek
11/24/11	732	М	3	Self-defense	Pipe Creek
2012	342	М	19	Unknown	Little Creek
10/26/14	79575279	М	6	Self-defense	Little Thompson River
5/24/15	None	М	Unk	Illegal	Yaak River
4/1/18	821	М	4	Unknown	Pine Creek
5/21/18	McGregor	М	3	Unknown	Bristow Creek

Appendix D: Conflicts and captures of bears in the CYE 2007 - 2018

	Reported Black Bear	Captured Black Bears	Reported Grizzly Bear	Captured Grizzly Bears
Year	Conflicts	for Conflict Resolution	Conflicts	for Conflict Resolution
2007	60	4	2	3ª
2008	31	4	1	0
2009	36	9 ^b	2	0
2010	99	11	4	1
2011	81	5	18*	2
2012	93	16 ^c	10*	0
2013	45	4	4	0
2014	63	4	1	0
2015	293	39 ^d	4	1
2016	103	3	8	2
2017	75	4	19	2
2018	39	0	11	0

* Majority of calls due to 1 bear

^a Adult female with 2 COY

^b Includes 1 family group with 2 COY

^c Seven bears captured at 1 location

^d Multiple family groups, 12 COY total