

MONTANA FISH, WILDLIFE & PARKS

REGION 1

2023 ANNUAL BEAR AND MOUNTAIN LION REPORT



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INTRODUCTION

Working one-on-one with people is one of the most effective solutions for mitigating conflicts between people and bears. The Montana Fish, Wildlife & Parks (MFWP) bear management specialists directly assist Montana residents and visitors to find effective and permanent human-bear conflict solutions. Because black bears, grizzly bears and mountain lions may be found throughout northwest Montana, we prevent, reduce, and resolve human-bear and human-lion conflicts wherever they occur.

Education and outreach programs are designed to increase public awareness and understanding of black and grizzly bear and lion biology, habitat, management, research, and population status. These programs are also designed to help the public live, work, and recreate safely in bear/lion country, and to prevent human-bear human-lion conflicts on both private and public lands. We attend public festivals, fairs, and events, providing bear and lion themed outreach and informational materials. We attend classrooms, schools, and school events with presentations and interactive programs for students of all ages. We provide presentations, training, workshops and interactive programs for the public, state and federal agency employees, private business employees, clubs, organizations, and non-profit groups. We also offer free public electrified fencing and bear spray safety training workshops. While difficult to statistically measure, the education, outreach and prevention parts of this program have had a positive effect in preventing human-bear human-lion conflicts and increasing public acceptance.

Preventing bears from accessing human-related food resources (attractants) is the key towards eliminating most conflicts between bears and people. Human-bear conflict prevention can include helping people understand bears and their normal behaviors, and providing information and resources for effective prevention tools, such as electrified fencing. Successful resolutions to an existing human-bear conflict should be timely, effective, and reasonable. Contacting and working towards a conflict resolution with a reporting party is important to maintain public trust in MFWP bear management. If conflict resolution is not effective, then conflicts may continue to occur, as there will always be bears present in northwest Montana. If the solution to a conflict isn't economically or physically possible for the reporting party, then it will neither be possible or effective. Solutions to a conflict may include, but are not limited to:

1. Advising the reporting party to secure the attractant:
 - inside a structure or building that has 4 walls, solid roof, and latching, solid door
 - inside an Interagency Grizzly Bear Committee (IGBC) certified bear resistant container
 - behind an electrified fence
2. Loaning the reporting party:
 - an IGBC certified bear resistant container
 - a temporary electrified fence
 - a temporary scare device
3. Assisting the reporting party with building a permanent electrified fence
4. Removing the bear from the location, either through relocation or humane euthanasia

Education, bear-resistant containers, and electrified fencing are the primary tools used to resolve a conflict between bears and people, particularly on private lands. Relocation or permanent removal of a bear may also be used as a tool; however often this is a temporary solution that doesn't directly address the source for the most common cause of a conflict, which is attractants.

The human-bear human-lion conflicts in this report include livestock depredation, building damage, home entry, and generally accessing, or attempting to access, attractants on both public and private lands. The numbers reported here cannot account for all conflicts in Region 1 in 2023, as many people may not have reported their conflicts. Human-bear and human-lion conflicts handled exclusively by MFWP Law Enforcement may not be reported here. Conflicts are reported by location only. Although it might take several visits and/or phone conversations to resolve a conflict at an individual location, only 1 report of a conflict is reported until that conflict has been resolved. Conflicts that occur at multiple locations by a single bear or lion are recorded separately.

The primary goal of bear or lion conflict management in Region 1 is to minimize and mitigate conflicts between bears or lions and people. Our objectives are to:

- Provide quick and effective resolutions to conflicts as they occur
- Provide proactive, effective, and permanent conflict solutions and tools
- Promote the secure storage of human-related food attractants on public and private lands
- Develop positive working relationships with private landowners, local governments, public and private land administrators, not-for-profit organizations, and MFWP's federal partners
- Provide informational and educational outreach to the public, local government, and media

Flathead Management Area

MT FWP Region 1 is split (Figure 1) and covered by 2 bear and lion specialists and referred to in this report as Flathead North and Flathead South. The NCDE is a recognized grizzly bear recovery area and is one of 6 recovery areas designated under the Endangered Species Act and is also within Flathead North and South in Region 1. Currently the NCDE grizzly bear population is estimated at approximately 1,138 (Costello, 2022). The primary area of responsibility for Flathead North extends from Whitefish and Columbia Falls, up the North Fork to the Canadian border, down along the east side of Lake Kootenai and down through the Salish range, and up the Middle Fork to Marias Pass. The primary area of responsibility for Flathead South extends South of Whitefish to the Seeley/Swan Divide, West to McGregor Lake, East of Hungry Horse Reservoir, and the South Fork and Bob Marshall Wilderness Complex to the continental divide.

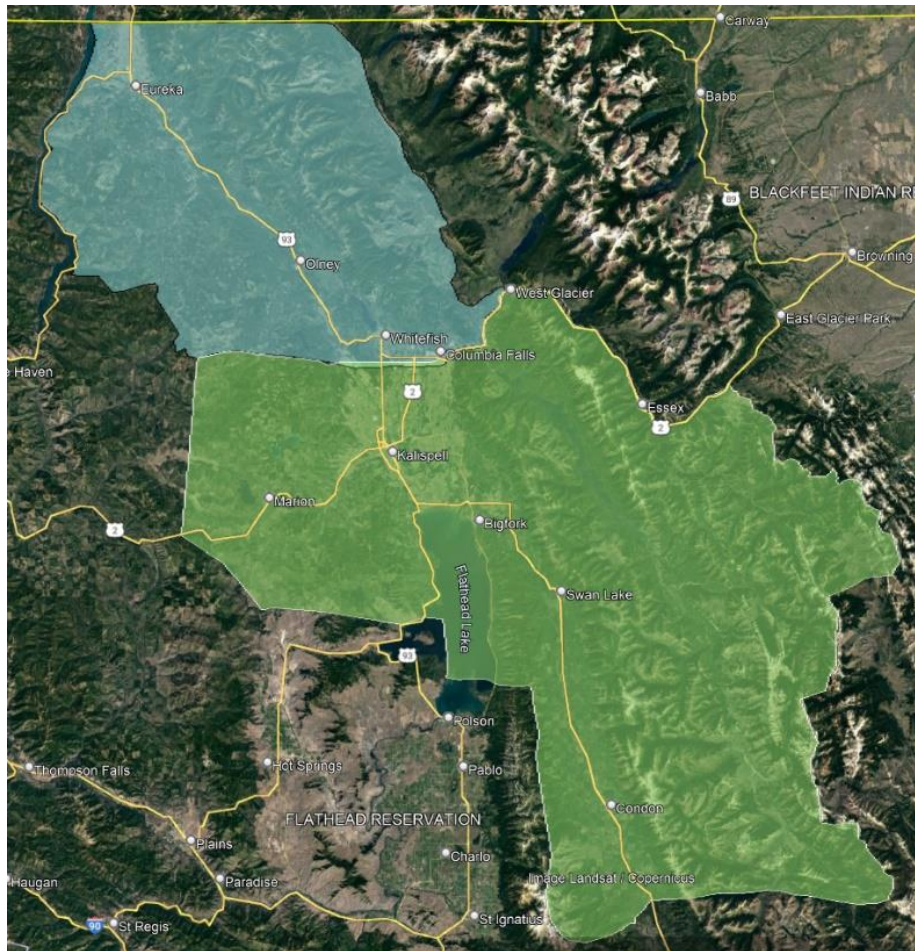


Figure 1. Flathead North (blue) and Flathead South (green).

Information and Outreach

Flathead North

We provided multiple bear aware presentations to local 4H groups in Kalispell, The Whitefish Legacy Foundation in both Kalispell and Whitefish, Forest Service employee training in Eureka, the Forloh store in Whitefish, Glacier Institute day camp, County Road Crews in Whale Creek, and an employee training with Polebridge Bear Smart for North Fork employees. We attended Rendezvous days in Eureka, Columbia Falls Farmers Markets, and the Forestry Expo in Columbia Falls where we had educational booths set up. We also hosted a meeting for the North Fork to give updates on multiple bear conflicts that occurred. We also presented our end of the season updates at the IGBC NCDE subcommittee meeting in Polson.

Flathead South

Educational presentations on living and recreating safely in bear country were conducted for the Many Lakes Homeowners Association, Flathead Valley Search and Rescue and North Valley Search and Rescue and provided training for the Northwest Montana Trappers Association. We also presented at the Swan Valley Bear Fair, Swan Valley Spring Bear Wake-Up, 3 meetings with Bear Aware Bigfork, the Condon Community Meeting, Flathead Lake Lodge employee orientation, and the Family Forestry Expo. We also presented our end of the season updates at the IGBC NCDE subcommittee meeting in Polson.

Human-Bear Conflicts; Prevention and Resolution

Flathead North

We received a total of 353 (192 black bear and 161 grizzly bear) bear-related calls in 2023. Of these, there were 94 black bear conflict calls and 97 grizzly bear conflict calls. Of the 353 total calls received in Flathead North, there were 98 black bear and 64 grizzly bear non-conflict calls, sightings, or other types of reports. Non-conflict calls consisted of bears observed in either front-country or back-country settings, reports of bear tracks, vehicle or train mortalities, sightings of injured bears, and general questions or concerns. Even though these calls were not conflict related, conflict prevention and typical bear behavior were discussed with each caller, as applicable. The number and type of these non-conflict calls will vary widely from year to year. Not all calls require an onsite visit as many can be addressed via phone. The need for onsite visits is evaluated on a case-by-case basis based on the type of conflict that is occurring. These may be reoccurring bear visits (despite attractants being secured), unusually aggressive-type bear behavior, and attractants may not be easily or quickly secured. In the northern portion, there were 42 onsite visits for black bear conflict calls and 66 onsite visits for grizzly bears.

Flathead South

In the southern part of the region, we received a total of 380 (191 black bear and 189 grizzly bear) bear-related calls in 2023. Of these, there were 126 black bear and 128 grizzly bear conflict calls. There were 22 black bear site visits in the southern portion and 41 grizzly bears onsite visits (Table 1).

Table 1. Calls & actions taken by area and species.

North						
Species	Calls	Info/Other	Conflicts	On Site Visits	Preventative Actions (efence)	Bears Captured
BB	192	98	94	42	6 (10)	8
GB	161	64	97	66	15 (19)	8
Total	353	162	191	108	21 (29)	16
South						
BB	191	65	126	22	14 (3)	6
GB	189	61	128	41	22 (16)	5
Total	380	126	154	61	36 (19)	12

BB = black bear GB = grizzly bear

Typically, there are seasonal peaks to these calls, first in the spring when food resources are developing (green up) and the second in the fall, when bears are entering and continuing hyperphagia in the fall (Tables 2-5, Figures 2-5).

Table 2. North black bear calls etc., by month.

Black Bear	Calls by Month				
	Info/Other	Conflict	Response	Caps*	E-fence
January	0	0	0	0	0
February	0	0	0	0	0
March	3	1	1	0	0
April	4	2	1	0	0
May	10	13	9	2	3
June	19	15	7	3	0
July	3	6	1	0	0
August	10	6	2	0	4
September	23	28	9	1	2
October	21	23	12	2	1
November	5	0	0	0	0
December	0	0	0	0	0
Total	98	94	42	8	10

Table 3 North grizzly bear calls etc., by month.

Grizzly Bear	Calls by Month				
	Info/Other	Conflict	Response	Caps*	E-fence
January	0	0	0	0	0
February	0	0	0	0	0
March	0	0	0	0	0
April	8	2	1	0	0
May	7	1	1	0	0
June	14	14	10	0	6
July	10	5	3	0	2
August	3	10	3	2	0
September	9	39	28	4	7
October	8	24	18	1	3
November	5	2	2	1	1
December	0	0	0	0	0
Total	64	97	66	8	19

*Caps=Captures

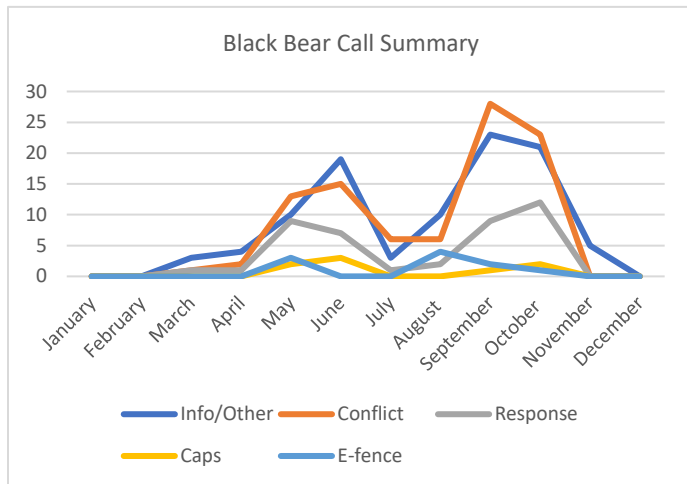


Figure 2. Graph of black bear calls etc., by month, North.

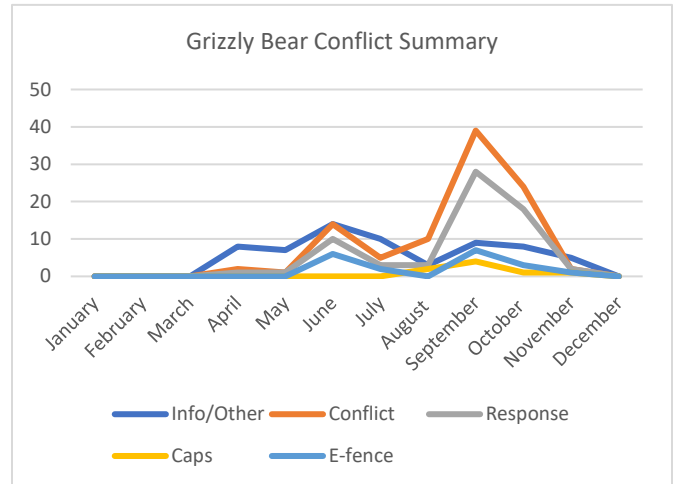


Figure 3. Graph of grizzly bear calls etc., by month, North.

Table 4. South black bear calls etc., by month.

Table 5. South grizzly bear calls etc., by month.

Black Bear	Calls by Month					Grizzly Bear	Calls by Month				
	Informational	Conflict	Response	Caps*	E-fence		Informational	Conflict	Response	Caps*	E-fence
January	9	0	1	0	0	January	0	0	0	0	0
February	2	0	0	0	0	February	0	0	0	0	0
March	7	0	0	0	0	March	0	0	0	0	0
April	12	8	1	1	0	April	1	2	1	0	0
May	9	11	4	1	0	May	16	15	7	1	2
June	6	23	5	1	1	June	7	13	4	1	3
July	1	6	2	1	1	July	3	13	4	1	3
August	7	5	0	0	0	August	7	19	7	1	3
September	6	44	6	1	1	September	5	32	7	1	4
October	5	25	1	1	0	October	10	31	9	1	1
November	1	4	2	0	0	November	7	3	2	0	0
December	0	0	0	0	0	December	5	0	0	0	0
Total	65	126	22	6	3	Total	61	128	41	6	16

*Caps=Captures

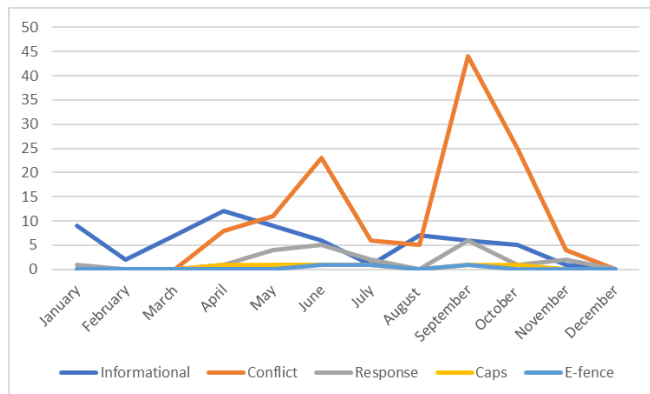


Figure 4. Graph of calls etc., by month, South.

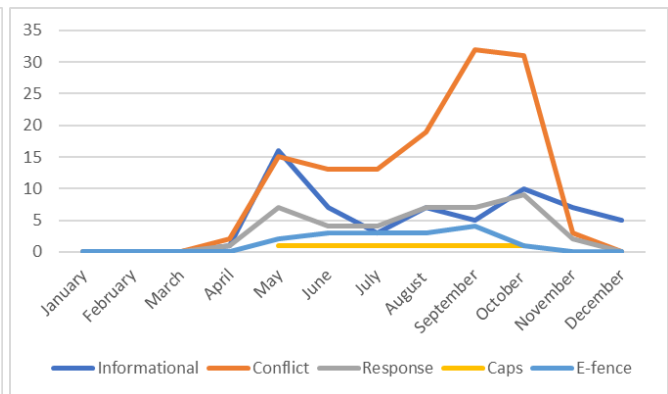


Figure 5. Graph of calls etc., by month, South.

Temporary, portable electrified materials are loaned to residents to prevent a conflict from occurring and to resolve a conflict after one has occurred. Electrified fences, mats, and screening are an effective and safe way to secure outdoor items from bears that cannot be secured in another way, such as fruiting trees, livestock and poultry. Motion sensor alarms (i.e., Amtek’s Critter Gitter, Margo Supplies Gadfly) are an effective preventative, but temporary, tool used to deter bears. We also loan residents throughout the Flathead Valley IGBC certified bear resistant containers. Electric fence is used as the primary tool to resolve, or prevent, a conflict.

In 2023, the northern portion loaned out and/or constructed 29 temporary electrified fences and/or electrified fencing materials, and did 21 other preventative measures as a result of conflict. However, we also received 33 calls in regards to people wanting electric fence construction advice. Of those 33 calls, we went to 10 sites to help give landowners advice on how to construct their specific electric fence. In response to conflict, we loaned out 18 motion sensor alarms, and 3 IGBC certified bear resistant containers.

The southern portion loaned out 19 temporary electrified fences and/or electrified fencing materials, 23 motion sensor alarms, 7 IGBC certified bear resistant containers, and built 2 permanent electrified fences. In addition, we received 24 calls seeking 'how to' advice from landowners building electric fences on their own.

Culvert-style bear traps and Aldrich snares are used, when necessary, alongside other management tools, to resolve human-bear conflicts. Of the 16 total bears captured in the northern portion, 8 of those were grizzly bears and 8 of those were black bears. Of the 12 bears captured in the southern portion, 6 of those were black bears and 6 were grizzly bears. An additional 7 black bears were captured as part of a University of Montana research program looking at black bear population in Montana.

Bear Mortalities

Human-caused mortalities of female grizzly bears can have a significant influence on the recovery of a grizzly bear population. By preventing and reducing human-bear conflicts, we hope to reduce the number of grizzly bears that are euthanized in a management action by MFWP. We only discuss here the grizzly bears known to have died in the Region 1 portion of the NCDE and the surrounding area in 2023. For a more comprehensive discussion of grizzly bear mortalities in the NCDE, please refer to Cecily Costello's 2023 annual report (Costello, 2023).

In 2023, 11 grizzly bears were known to have died or been removed from the Ecosystem in the northern portion of the Flathead Valley. Of these, 2 bears were killed by trains and 6 were removed (humanely euthanized or sent to a zoo) in an MFWP management action. Three bears were shot in self-defense and are still under investigation. Two of the removals were grizzly bear cubs of the year. These cubs were sent to Zoo Montana as they were deemed too food conditioned to remain on the landscape.

Seven black bears were known to have died in the northern part of the region due to non-hunting mortalities. One black bear was removed for conflict management, one was killed by a train, two cubs were hit by vehicle, and three were euthanized due to poor health conditions. One of the removals was a black bear exhibiting unusual behaviors of fatigue and tremors and had remained in the same spot for days. The toxicology report came back inconclusive. One bear removed showed physical characteristics of being struck by a vehicle, and the other bear removed exhibited symptoms of being poisoned.

Three black bears were known to have died in the southern portion of the region. One sub-adult female was removed in an MFWP management action. Two black bears were killed by vehicles (adult male, sub-adult male). Two grizzly bears were known to have died in the southern portion of the Flathead Valley. Of these, an adult male was shot and remains under investigation and a sub-adult male was removed by MFWP in a management action (Table 6).

Overall, 2023 natural food production was robust and widespread, especially in the fall, resulting in a reduction of both black and grizzly bear conflicts. This is particularly true in the southern portion of Region 1 where fruit trees are more abundant. However, even during years of abundant natural foods there are bears that are introduced to anthropogenic foods, either by accident or with intent. With these circumstances, there will always be some level of human-bear conflict.

Table 6. Bears removed or recovered by species and area.

North			
Species	Bears Captured	Bears Removed	Carcasses Recovered
BB	8	4	3
GB	8	6	5
Total	16	10	8
South			
BB	6	1	3
GB	6	1	2
Total	12	2	5

BB = black bear GB = grizzly bear

Wildlife Human Attack Response

There were three incidents that required the WHART (Wildlife Human Attack Response Team). On July 12 the remains of a man that had committed suicide were found to have been consumed and cached by a bear on Tepee creek in the North fork. DNA results showed that the bear that had consumed the remains was an adult female with no prior known history of both research and conflict. Opportunistic hair samples from this bear had been found on a tree from 2020 in the North Fork on private property. No management actions were taken as the person was an opportunistic food source and there is no evidence that bears will seek humans as food once they have consumed humans.

On August 26 two men were scouting for archery season in the Whitefish range and one hunter accidentally shot the other hunter while trying to shoot a female grizzly in self-defense. The grizzly was killed and had 3 cubs of the year with her that remained on the landscape. There was no contact made between the bear and men. The one man was injured but survived.

On October 1, a male grizzly attacked a North fork landowner on Trail Creek in a surprise encounter while she was at the creek with her husband and dog. The woman did have injuries but survived. On October 2, nearby landowners had a bear on their property digging around, it dragged a dog bed off the deck and proceeded to shred it, and that same day their dog went missing. On October 10, on Trail Creek a landowner opened his front door to see a grizzly bear was outside and began to charge towards the landowner. He slammed the door, but one of his dogs was tied up outside and the bear mauled and killed the dog. The landowner shot several rounds and was not sure if he hit the bear. Blood collected at the scene confirmed the bear had been hit. The bear never came back for the dog, and we received no other reports, conflicts, or sightings after so there is no way to confirm if that bear is dead or just injured. DNA at each of those three sites confirmed it was the same adult male grizzly bear. This bear had no prior detection in the US but had been detected in Canada on 7 rub trees dating back to 2013 so we can conclude he was at least 10 years old. He had no known conflict or research capture history.

Mountain Lion Conflict Management

In northwest Montana, many areas with the highest densities of lions are also areas with expanding human population. This is related to the concentration of deer and elk in their winter and summer ranges at the edges of the valleys where a growing human population causes continued expansion of the urban interface. This subsequently causes subdivision of both agricultural lands and prime natural white-tailed deer winter range which puts people in proximity with deer and elk at times of the year when lions concentrate near the valley floors. With the influx of human inhabitants into ungulate and lion habitat, we can expect to see conflicts between lions and humans to continue. Calls regarding lion conflicts have remained relatively stable, with a slight decrease through time. The decreasing trend is attributed to information and education programs, aggressively responding to public safety issues involving lions, and having liberal lion harvest structures in place for the Flathead Valley area. The reproduction cycle typical of lions in northwest Montana results in juvenile dispersal occurring in 2 pulses, with the first being in February and March when the prey base (primarily white-tailed deer) are winter-stressed and congregated on winter range. This congregation increases the chance of hunting success for young lions with limited skills. The second pulse occurs in July through September when prey is robust and widely distributed which makes hunting for young lions more difficult. This is further exacerbated by juveniles forced to lower elevation in effort to avoid strife with adult male lions. These factors can result in juvenile lions seeking out easier domestic prey putting them in conflict with humans. Nearly 80% of conflicts involve lions less than 2 years of age. Although lion conflicts occur year-round, this period (July-September) that has a higher level of reported conflicts.

In April in Flathead North there was a sub-adult female mountain lion that was found dead under a deck in Whitefish. Injuries were found to be consistent with being struck by a vehicle. In May a sub-adult male mountain lion was shot by a landowner in Rexford after it had killed one of his goats (Table 7).

In the southern portion a sub-adult male was found and removed from under a house and appeared to have starved to death. Two lions in separate incidents were struck and killed by cars and one adult female was shot and killed by a landowner after it killed a lamb (Table 8).

Table 7. Flathead North lion calls by month.

Month	Info/Other	Conflict	Response	Capture/Carcass Recovery (R) and Cause
January	0	0	0	0
February	0	0	0	0
March	3	0	0	0
April	3	0	2	1 R dead under house
May	2	3	2	1 R L.O. shot
June	7	4	0	0
July	2	4	0	0
August	4	1	0	0
September	2	1	0	0
October	3	0	0	0
November	1	0	0	0
December	0	0	0	0
Total	27	13	4	0

Table 8. Flathead South lion calls by month.

Month	Info/Other	Conflict	Response	Capture/Carcass Recovery (R) & Cause
January	0	4	0	0
February	0	1	0	0
March	0	1	0	0
April	2	7	1	0
May	4	5	4	1 R dead under house
June	4	18	2	2 R Car hits
July	2	5	0	0
August	4	1	0	1 R L.O. shot
September	0	2	0	0
October	0	0	0	0
November	1	5	0	0
December	1	0	0	0
Total	18	49	7	0

In addition to the public safety calls and conflicts Region 1 FWP personnel responded to, USDA Wildlife Services agent Ted North responded to 9 livestock losses and lethally removed four lions (Table 9).

Table 9. USDA Wildlife Services response to livestock depredations.

Number of and Livestock type involved	Lion Removed
1 Llama	No
1 Llama	No
2 Goats	Yes
2 Lambs	No
1 Goat	Yes
1 Lamb	Yes
1 Goat	Yes

Libby Management Area

The CYE is a recognized recovery area for the federally threatened grizzly bear. Located in the Cabinet-Purcell Mountain region in northwest Montana and northeastern Idaho, the population is estimated at approximately 60 bears (Kasworm et al, 2022). The CYE is largely comprised of public lands managed by the Kootenai, Lolo, and Panhandle National Forests. The Cabinet Mountain Wilderness encompasses 381km² of higher elevations within the recovery area. The primary area of responsibility for the CYE Bear and Lion Specialist extends west to the Idaho border, north to Canadian border, east to McGregor Lake and Lake Koocanusa, and south to the edge of Sanders County.



Figure 6. Libby Management Area

Information and Outreach

Due to personnel changes, specific information on public outreach efforts is not available for the CYE. Several school programs, community events, and agency trainings were conducted.

Human-Bear Conflicts; Prevention and Resolution

Due to changes in personnel during the summer, specific information on bear/human conflicts is not available. Of note, human/bear conflicts in 2023 were low with few conflicts reported. Temporary electric fences, wildlife scare devices, and bear-resistant containers were loaned out to mitigate reported conflicts.

Captures:

Black Bear 6/11/2023 released (collared for research)

Black Bear 10/5/2023 released (nontarget)

Black Bear 10/20/2023 released (cub of year from Montana Wild)

Bear Mortalities

Black bear 9/16/2023 euthanized (management)

CONCLUSION

Northwest Montana's human population continues to grow annually, and this expansion of residential and recreational areas predominately occurs where bears are most likely to come into conflict with humans. The area where the home ranges of humans and bears overlap, known as the wild-land urban interface, continues to expand. Therefore, the need has never been greater for wildlife managers to have the tools and resources to prevent human-wildlife conflicts from occurring, and to be able to effectively address those conflict when they do occur. We will continue to work towards our goal of serving the public through minimizing and mitigating conflicts between humans and bears, and to meet the goals of the Region 1 bear management program as effectively as is possible.

LITERATURE

Costello, C.M., L.L. Roberts, and M.A. Vinks. 2023. Northern Continental Divide Ecosystem Grizzly Bear Monitoring Team Annual Report, 2022. Montana Fish, Wildlife & Parks, 490 N. Meridian Road, Kalispell, MT 59901.