

2023 Wyoming Grizzly Bear Job Completion Report



**Wyoming Game and Fish Department
Large Carnivore Section
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Observations of grizzly bear females with cubs of the year like this, gathered from a remote camera, are used in annual evaluation of reproduction and estimation of population abundance.

INTRODUCTION

This completion report summarizes grizzly bear work completed by the Wyoming Game and Fish Department's (Department) Large Carnivore Section (LCS) and regional personnel during 2023. This report allows the Department to present information pertaining to grizzly bears in Wyoming in one cohesive document available to all interested parties.

POPULATION MONITORING – CAPTURE SUMMARY

Annual captures of grizzly bears by the Department for population monitoring is similar to the annual monitoring programs for other species. While the methods may differ, the goal is the same; to collect the data necessary to conserve and manage the population. In addition, data collected during annual monitoring have been extremely useful in answering many important questions regarding the Greater Yellowstone Ecosystem (GYE) grizzly bear population. Data on grizzly bear survival and reproduction, biological samples, body condition, and collar locations are vital components of the overall population monitoring program. These data enable us to accurately monitor the grizzly bear population in relation to recovery goals in the GYE.

To maintain a representative sample of marked grizzly bears in the population, capture efforts occur systematically throughout the Demographic Monitoring Area (DMA); an area of biologically/socially suitable habitat where the population is monitored and evaluated consistently to assess demographic criteria for a recovered grizzly bear population. These capture efforts cease by early fall to avoid conflicts with hunters during big game hunting seasons. The following summarizes trapping efforts for the 2023 season.

2023 Grizzly Bear Capture Summary – Grass Creek, Cottonwood Creek, and Gooseberry Creek

Capture efforts began in the area on 16 May 2023 and concluded on 15 June. Nine capture sites were used during monitoring efforts; all traps, baits, scent lures, and other equipment were removed from sites by 19 June 2023. Five individual grizzly bears were captured and radio-collared. All bears received individual identification tags and samples were obtained to gain insight into the overall grizzly bear population.

Table 1. Grizzly bears captured in Grass, Cottonwood, and Gooseberry Creeks of northwest Wyoming, May-June 2023.

Bear ID	Capture Date	Sex/Age Class	Location	Collar
889	5/22/23	Adult male	Upper Hess Creek	GPS collar
1077	5/22/23	Subadult Male	Roach Creek	GPS collar
847	5/30/23	Adult male	Upper Hess Creek	GPS collar
1092	6/7/23	Adult female	Raspberry Creek	GPS collar
700	6/12/23	Adult male	Cottonwood Creek	GPS collar

2023 WGFD Squirrel Meadows Grizzly Bear Capture Summary

Capture efforts began in the Squirrel Meadows area on 7 July 2023 and concluded 30 July, with eight total capture sites used. All traps, baits, scent lures, and other equipment were removed from sites by 3 August 2023. An adult male grizzly bear (GB468), was captured on 21 July near McReynolds Reservoir and fitted with a GPS collar in addition to standard collection of biological samples.

2023 WGFD Wind River Reservation Grizzly Bear Monitoring Summary

In cooperation with the Eastern Shoshone and Northern Arapahoe tribes, camera trap operations began in the Wind River mountain range on the Wind River Reservation on 14 August 2023 and concluded 28 August. Reactionary baiting was used to document site usage and identify potential capture sites (baits were put out to attract grizzly bears and if a bait was visited then trapping at that site was undertaken; this has been used previously on the Wind River Reservation). One grizzly bear was detected at a site on Crow Mountain and another along St. Lawrence Creek but neither detection resulted in a capture scenario. These data will help to inform GYE grizzly bear distribution analyses and also prove beneficial for Wind River Tribal Fish and Game personnel to inform tribal members of grizzly bear activity.



LCS biologists processing immobilized grizzly bear while closely monitoring vital characteristics and gathering samples for analysis.



GRIZZLY BEAR USE OF INSECT AGGREGATION SITES

Army cutworm moths (*Euxoa auxiliaris*; moths) were first recognized as an important food source for grizzly bears in the GYE during the mid-1980s (Mattson et al. 1991, French et al. 1994). Early observations indicated that moths, and subsequently bears, showed specific site fidelity. These sites are generally high alpine areas dominated by talus and scree adjacent to areas with abundant alpine flowers. Because insects other than moths (e.g., ladybird beetles [Coccinellidae family]) may be present and consumed by bears as well, we generally refer to such areas as “insect aggregation sites.” Within the GYE, observations indicate army cutworm moths are the primary food source at these sites.

Since the discovery of bears feeding at insect aggregation sites, numerous bears have been observed at or near these sites. Observability is high because of lack of tree cover and number of bears using the sites. However, complete tabulation of grizzly presence at insect sites is extremely difficult. Only a few sites have been investigated by ground reconnaissance and the boundaries of sites are not clearly known. In addition, it is likely that the size and location of aggregation sites fluctuate from year to year with moth abundance and variation in environmental factors such as snow cover.

Our knowledge of these sites has increased over time, and techniques for monitoring grizzly bear use of these sites have changed. In 2000, we developed a technique that delineates sites by buffering only the locations of bears observed actively feeding at insect aggregation sites by 500 meters; this distance was used to account for errors in aerial locations. The borders of the overlapping buffers at individual insect sites are dissolved to produce a single polygon for each site. These sites are identified as “confirmed” sites. Because these polygons are only created around feeding locations, the resulting site conforms to the topography of the mountain or ridge top where bears feed and does not include large areas of non-talus habitat that are not suitable for moths. Records from the grizzly bear location database from 1 July through 30 September of each year are then overlaid on these polygons and enumerated. “Possible” insect aggregation sites are identified as previously confirmed sites, sites with only one observation of an actively feeding bear, or sites with multiple observations of bears in a single year. These sites are then monitored in subsequent years for additional observations of actively feeding bears, and if so, are added to the confirmed sites list. When the status of a site is changed to confirmed, analysis is done on all data back to 1986 to determine the historical use of that site. Therefore, the number of bears using insect aggregation sites in past years may change as new sites are added, and data from this annual report may not match those of past reports. New observations of grizzly bears actively feeding in previously undocumented areas will be added as possible sites and monitored for future use. In addition, as new observations of actively feeding bears are added along the periphery of existing sites, the polygons defining these sites increase in size and, thus, more overlaid locations fall within the site. This retrospective analysis brings us closer each year to the “true” number of bears using insect aggregation sites in past years.

As with 2022, only one round of grizzly bear observation flights was flown in 2023. Therefore, the number of hours flown over insect aggregation sites was again reduced when compared to pre-2020 flight totals. With the cessation of pandemic limitations related to observer/pilot commingling, most observation flights (86%) were conducted with a secondary observer in addition to the pilot.

Analysis of grizzly bear use of insect aggregation sites in 2023 resulted in 251 observations of actively feeding grizzly bears on previously identified and confirmed sites. In conducting the analyses, we did discover that a previously identified possible site had met the qualifications for being upgraded to a confirmed site in 2017 but that change had not been implemented. Additionally, we determined that a new possible site had been detected in 2017 but again that change had not been implemented. Thus, while there were no new confirmed or possible sites added from our 2023 efforts, assessment of the data now indicates the number of sites is 36 confirmed and 18 possible. Note that associated tables and figures have been upgraded to reflect these changes.

Overall, the number of locations with grizzly bears on insect aggregation sites in 2022 ($n = 354$) was an increase from 2021 and close to the record high in 2021 (Table 2). This number includes all grizzly bear locations from aerial observation flights, telemetry flights, and observations made during flights for other species. The number of grizzly bears documented on sites and the percentage of confirmed sites with documented use by grizzly bears varies from

year to year, suggesting that moth numbers may be greater in some years than others, which may be due to variable snow conditions or the number of moths migrating from the plains (Figure 1). In 1993, a year with unusually high snowpack, the percentage of confirmed sites used by bears and the number of observations recorded at insect aggregation sites were very low (Table 2). In all other years, the percentage of insect aggregation sites used by grizzly bears varied between 47 and 83%.

When we control for the amount of observation effort by including only bears observed during regularly conducted observation flights (see “*Observation Flights*” section below), the number of bears observed using insect aggregation sites per flight hour has shown an overall increasing trend since these flights began in 1997 (Figure 2). Whereas the number of bears observed in 2023 was near the average for the previous 10 years, the number of hours flown was 31% lower than years in which 2 rounds of flights were conducted.



A lone grizzly bear is observed feeding on an insect aggregation site during a fixed wing grizzly bear observation flight in Wyoming.

Table 2. Summary statistics for grizzly bear use of confirmed insect aggregation sites, Greater Yellowstone Ecosystem, 1986–2023.

Year	Number of confirmed aggregation sites^a	Number of sites used^b	Number of aerial telemetry locations	Number of ground or aerial observations
1986	4	2	7	5
1987	5	3	3	17
1988	5	3	11	28
1989	9	7	9	41
1990	14	11	9	77
1991	16	13	13	169
1992	18	12	6	108
1993	19	3	1	2
1994	19	9	1	32
1995	21	12	7	40
1996	23	15	21	68
1997	24	16	17	84
1998	27	22	9	185
1999	27	14	26	156
2000	27	13	49	97
2001	28	18	23	128
2002	30	21	33	256
2003	30	20	9	163
2004	30	16	2	134
2005	32	19	16	198
2006	32	17	15	147
2007	32	19	19	162
2008	32	23	16	181
2009	34	23	12	170
2010	34	18	3	136
2011	35	22	10	165
2012	35	24	20	253
2013	35	23	27	297
2014	35	24	11	343
2015	35	21	13	211
2016	35	20	11	208
2017	36	22	20	280
2018	36	20	18	267
2019	36	30	20	336
2020	36	27	19	325
2021	36	23	30	327
2022	36	24	84	230
2023	36	21	51	303
Total			671	6,327

^a The year of discovery was considered the first year a telemetry location or aerial observation was documented at a site. Sites were considered confirmed after additional locations or observations in a subsequent year and every year thereafter regardless of whether or not additional locations were documented.

^b An aggregation site was considered used if ≥ 1 location or grizzly bear observation was documented within the site during July–September of that year.

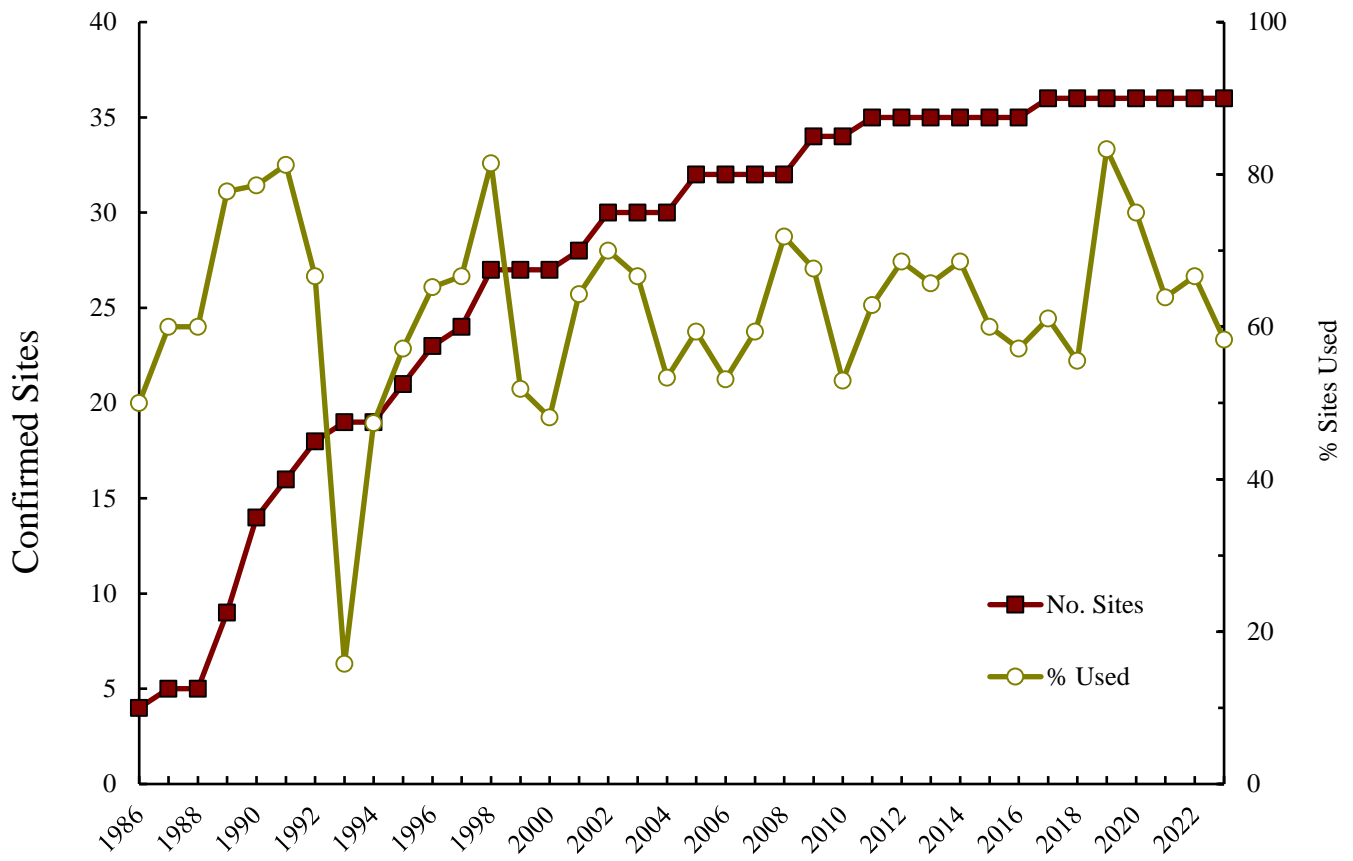


Figure 1. Annual number of confirmed insect aggregation sites and percent of those sites at which telemetry relocations of marked bears or visual observations of unmarked bears were recorded, Greater Yellowstone Ecosystem, 1986–2023.

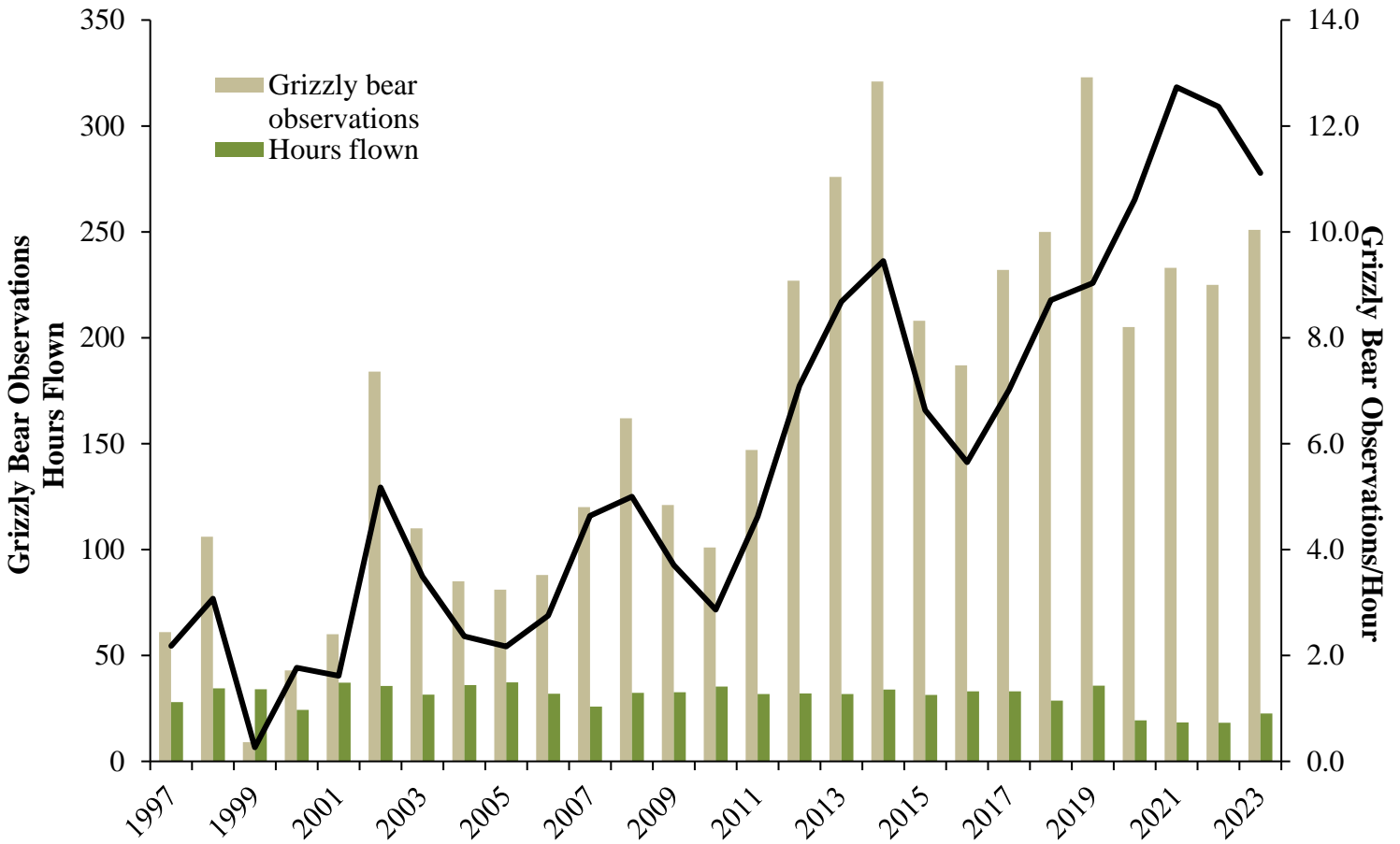


Figure 2. Number of grizzly bears observed (tan bars) on insect aggregation sites during observation flights only, survey hours (green bars) for these bear management units (BMU), and grizzly bear observations per survey hour (black line) during observation flights of BMUs containing all known insect aggregation sites, Greater Yellowstone Ecosystem, 1997–2023.

GRIZZLY BEAR OBSERVATION FLIGHTS

Fifty-four Bear Observation Areas (BOAs) were established in 2014 (Figure 3). In 2023, one round of observation flights was conducted with 36 BOAs surveyed from 6 Jun–16 Aug. Total duration of observation flight time was 78 hours; average duration of individual flights was 2.2 hours (Table 3). Excluding dependent young, 317 bear sightings were recorded during observation flights. Of the 317 sightings, 7 were radio-marked bears (2 females with young, 4 females without young, and 1 male), 253 were solitary unmarked bears, and 58 were unmarked females with young. Our observation rate was 4.04 bears per hour for all bears. A total of 110 young (57 cubs, 49 yearlings, and 4 two-year-olds) were observed (Table 4). Observation rates for females with dependent young were 0.75 females with young per hour and 0.37 females with cubs per hour.

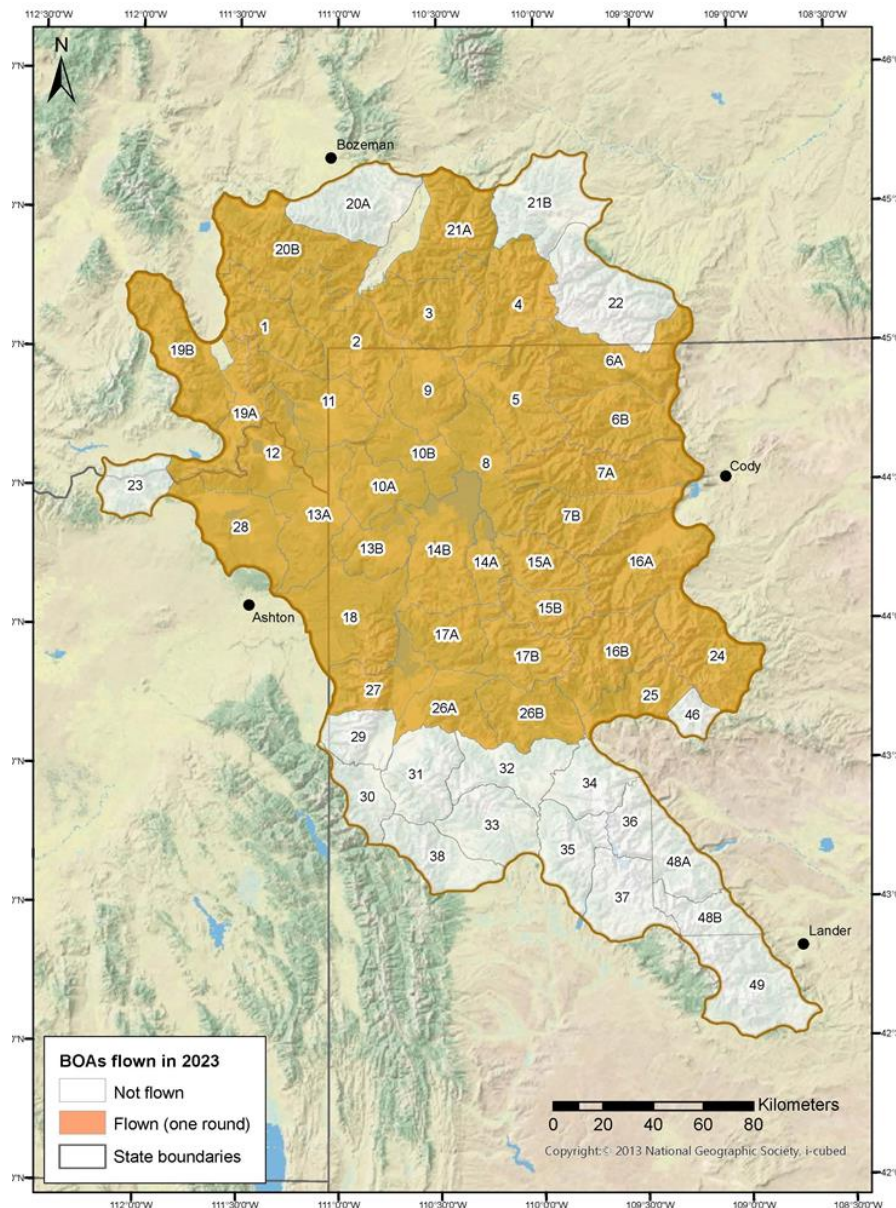


Figure 3. Grizzly bear observation areas for aerial surveys, Greater Yellowstone Ecosystem, 2023. Areas in orange were surveyed in 2023, areas in white shading were not surveyed. Numbers represent the 54 BOAs, with several larger areas split into 2 subsections (A and B). Base map source: 2013 National Geographic Society, i-cubed, Washington, D.C.

Table 3. Annual summary statistics for grizzly bear observation flights, Greater Yellowstone Ecosystem, 2009–2023.

Year ^a	Observation period	Total hours	Number of flights	Average hours/flight	Bears seen					Observation rate (bears/hour)		
					Marked		Unmarked		Total number of groups	All groups	With young	With cubs
					Lone	With young	Lone	With young				
2009	Round 1	90.3	47	1.9	1	0	85	21	107	1.2		
	Round 2	93.6	47	2	2	0	157	34	193	2.1		
	Total	183.9	94	2	3	0	242	55	300	1.6	0.3	0.2
2010	Round 1	101.1	48	2.1	0	2	93	22	117	1.2		
	Round 2	93.3	46	2	0	0	161	41	202	2.2		
	Total	194.4	94	2.1	0	2	254	63	319	1.6	0.3	0.2
2011	Round 1	88.9	47	1.9	2	1	153	31	187	2.1		
	Round 2	71	35	2	4	0	109	23	136	1.9		
	Total	159.8	82	1.9	6	1	262	54	323	2	0.3	0.2
2012	Round 1	95.4	48	2	4	2	178	35	219	2.3		
	Round 2	73.7	35	2.1	2	1	117	30	150	2		
	Total	169.1	83	2	6	3	295	65	369	2.2	0.4	0.2
2013	Round 1	97	48	2	2	1	152	44	199	2.1		
	Round 2	72.8	35	2.1	4	1	171	48	224	3.1		
	Total	169.8	83	2.1	6	2	323	92	423	2.5	0.6	0.4
2014	Round 1	104	52	2	2	2	170	47	221	2.1		
	Round 2	88.6	43	2.1	3	1	188	60	252	2.8		
	Total	192.6	95	2	5	3	358	107	473	2.5	0.6	0.3
2015	Round 1	104	52	2	4	1	126	34	165	1.6		
	Round 2	88.6	44	2	1	2	142	41	186	2.1		
	Total	192.7	96	2	5	3	268	75	351	1.8	0.4	0.2
2016	Round 1	106.8	53	2	5	3	133	36	177	1.7		
	Round 2	86.5	42	2.1	1	2	95	32	130	1.5		
	Total	193.3	95	2	6	8	228	68	307	1.6	0.4	0.2
2017a	Round 1	105.5	54	2	7	2	153	36	198	1.9		
	Round 2	79	40	2	8	2	127	36	173	2.2		
	Total	184.5	94	2	15	4	280	72	371	2	0.4	0.3
2018	Round 1	105.8	54	2	6	3	185	58	252	2.4		
	Round 2	73.6	40	1.8	1	1	105	35	142	1.9		
	Total	179.4	94	1.9	7	4	290	93	394	2.2	0.5	0.3
2019	Round 1	107.8	54	2	7	4	183	56	251b	2.3		
	Round 2	91	42	2.2	9	1	188	43	242c	2.7		
	Total	198.8	96	2.1	16	5	371	99	493	2.5	0.5	0.2
2020	Round 1	78.5	36	2.2	7	2	222	72	303	3.9		
	Round 2											
	Total	78.5	36	2.2	7	2	222	72	303	3.9	0.9	0.5
2021	Round 1	69.9	33	2.1	8	4	214	71	297	4.3		
	Round 2											
	Total	69.9	33	2.1	8	4	214	71	297	4.3	1.1	0.6
2022	Round 1	75	36	2.1	12	2	240	71	299	4		
	Round 2											
	Total	75	36	2.1	12	2	240	71	299	4	0.79	0.43
2023	Round 1	78.4	36	2.2	5	1	258	59	317	4		
	Round 2											
	Total	78.4	36	2.2	5	1	258	59	317	4	0.75	0.37

^a Dates of flights (Round 1, Round 2): 2006 (5 Jun–9 Aug, 30 Jun–28 Aug); 2007 (24 May–2 Aug, 21 Jun–14 Aug); 2008 (12 Jun–26 Jul, 1 Jul–23 Aug); 2009 (26 May–17 Jul, 8 Jul–27 Aug); 2010 (8 Jun–22 Jul, 10 Jul–24 Aug); 2011 (15 Jun–17 Aug, 21 Jul–29 Aug); 2012 (29 May–30 Jul, 9 Jul–23 Aug); 2013 (6 Jun–25 Jul, 7 Jul–20 Aug); 2014 (10 Jun–25 Jul, 7 Jul–29 Aug); 2015 (1 Jun–21 Jul, 1 Jul–31 Aug); 2016 (2 Jun–24 Jul, 7 Jul–28 Aug); 2017 (1 Jun–31 Aug, 4 Jul–28 Aug); 2018 (12 Jun–13 Aug, 10 Jul–29 Aug); 2019 (4 Jun–6 Aug, 4 Jul–28 Aug); 2020 (10 Jun–16 Aug, not flown); 2021 (11 Jun–15 Aug, not flown); 2022 (26 Jun–23 Aug, not flown); 2023 (6 Jun–16 Aug, not flown).

^b Includes observation of 3 cubs of the year without adult female present.

^c Includes observation of 2 cubs of the year without adult female present.

Table 4. Size and age composition of grizzly bear family groups seen during observation flights, Greater Yellowstone Ecosystem, 2009–2023.

Year ^a	Round	No. of females with cubs by litter size			No. of females with yearlings by litter size			No. of females with 2-year-olds or young of unknown age by litter size		
		1	2	3	1	2	3	1	2	3
2009	Round 1	0	6	4	2	3	1	3	1	0
	Round 2	6	11	1	3	7	1	4	1	1
	Total	6	17	5	5	10	2	7	1	1
2010	Round 1	2	7	2	2	6	1	4	0	0
	Round 2	10	10	7	5	4	3	1	4	3
	Total	12	17	9	7	10	4	5	4	3
2011	Round 1	4	8	3	3	6	1	2	2	3
	Round 2	2	8	4	2	2	1	1	3	0
	Total	6	16	7	5	8	2	3	5	3
2012	Round 1	5	19	1	2	3	4	0	2	1
	Round 2	5	9	0	4	6	2	1	3	1
	Total	10	28	1	6	9	6	1	5	2
2013	Round 1	8	20	4	1	5	0	3	4	0
	Round 2	11	21	3 ^c	2	7	0	0	5	0
	Total	19	41	7 ^c	3	12	0	3	9	0
2014	Round 1	8	17	3	6	14	0	1	0	0
	Round 2	1	15	8	11	18	3	2	2	1
	Total	9	32	11	17	32	3	3	2	1
2015	Round 1	6	18	15	2	20	6	0	2	0
	Round 2	9	22	12	2	24	6	2	0	4 ^d
	Total	15	40	27	4	44	12	2	2	4 ^d
2016	Round 1	3	16	2	5	8	1	2	2	0
	Round 2	8	11	6	2	4	1	1	1	0
	Total	11	27	8	7	12	2	3	3	0
2017	Round 1	6	14	3	4	7	2	0	2	0
	Round 2	5	20	2	5	3	0	1	1	1
	Total	11	34	5	9	10	2	1	3	1
2018	Round 1	7	24	10	5	7	2 ^b	3	3	0
	Round 2	5	8	4	6	11	2	0	0	0
	Total	12	32	14	11	18	4	3	3	0
2019	Round 1	11	10	2 ^c	9	16	5	6	0	1
	Round 2	2	14	3	8	14	2	0	1	0
	Total	13	24	5	17	30	7	6	1	1
2020	Round 1	10	29	1	12	18	2	0	2	0
	Round 2									
	Total	10	29	1	12	18	2	0	2	0
2021	Round 1	10	21	10	9	21	3	1	0	0
	Round 2									
	Total	10	21	10	9	21	3	1	0	0
2022	Round 1	11	18	3	8	16	2	0	1	0
	Round 2									
	Total	11	18	3	8	16	2	0	1	0
2023	Round 1	5	11	5	7	12	2	2	1	0
	Round 2									
	Total	5	11	5	7	12	2	2	1	0

^a Dates of flights (Round 1, Round 2): 2006 (5 Jun–9 Aug, 30 Jun–28 Aug); 2007 (24 May–2 Aug, 21 Jun–14 Aug); 2008 (12 Jun–26 Jul, 1 Jul–23 Aug); 2009 (26 May–17 Jul, 8 Jul–27 Aug); 2010 (8 Jun–22 Jul, 10 Jul–24 Aug); 2011 (15 Jun–17 Aug, 21 Jul–29 Aug); 2012 (29 May–30 Jul, 9 Jul–23 Aug); 2013 (6 Jun–25 Jul, 7 Jul–20 Aug); 2014 (10 Jun–25 Jul, 7 Jul–29 Aug); 2015 (1 Jun–21 Jul, 1 Jul–31 Aug); 2016 (2 Jun–24 Jul, 7 Jul–28 Aug); 2017 (1 Jun–31 Aug, 4 Jul–28 Aug); 2018 (12 Jun–13 Aug, 10 Jul–29 Aug); 2019 (4 Jun–6 Aug, 4 Jul–28 Aug); 2020 (10 Jun–16 Aug); 2021 (11 Jun–15 Aug, not flown); 2022 (26 Jun–23 Aug, not flown); 2023 (6 Jun–16 Aug, not flown).

^b Includes 1 female with 4 yearlings.

^c Includes 1 female with 4 cubs.

^d Includes 1 female with 4 young of unknown age.

GRIZZLY BEAR CONFLICT MANAGEMENT

Human-grizzly bear interactions and conflicts in Wyoming are typically a result of grizzly bears seeking unnatural foods in association with people and property, close encounters with humans, or when grizzly bears kill livestock. The number and location of human-bear conflicts is influenced by unsecured unnatural attractants (e.g., human foods and garbage), natural food distribution and abundance, grizzly bear numbers and distribution, as well as human and livestock use patterns on the landscape.

The management technique of capturing grizzly bears in areas where they may come into conflict and relocating them to remote locations is a common practice throughout their range. Relocating bears achieves several social and conservation functions: (a) reduces the chance of property damage, livestock damage, or human interactions in areas where the potential for conflict is high; (b) reduces the potential for grizzly bears to become food conditioned and/or human habituated which often results in destructive and/or dangerous behaviors; (c) allows grizzly bears the opportunity to forage on natural foods and remain wary of people; and (d) could prevent removing grizzly bears from the population which may be beneficial in meeting population management objectives.

The Department relocates and lethally removes grizzly bears as part of routine management operations. The decision to relocate or remove a bear is made after considering a number of variables including age and sex of the animal, behavioral traits, health status, physical injuries or abnormalities, type of conflict, severity of conflict, known history of the animal, human safety concerns, and population management objectives. Grizzly bears are relocated in accordance with state and federal law, regulation, and policy.

In 2005 the Wyoming Legislature created Wyoming Statute §23-1-1001 as follows:

- (a) Upon relocating a grizzly bear or upon receiving notification that a grizzly bear is being relocated, the department shall provide notification to the county sheriff of the county to which the grizzly bear is relocated within five (5) days of each grizzly bear relocation and shall issue a press release to the media and sheriff in the county where each grizzly bear is relocated;
- (b) The notice and press release shall provide the following information:
 - (i) The date of the grizzly bear relocation;
 - (ii) The number of grizzly bears relocated; and
 - (iii) The location of the grizzly bear relocation, as provided by commission rule and regulation;
- (c) No later than January 15 of each year the department shall submit an annual report to the Joint Travel, Recreation, Wildlife, and Cultural Resources Interim committee. The annual report shall include the total number and relocation area of each grizzly bear relocated during the previous calendar year. The department shall also make available the annual report to the public.

Subsequently, the Commission promulgated Chapter 58 Notification of Grizzly Bear Relocation Regulation to further direct the implementation of W.S. §23-1-1001 as follows:

Section 1. Authority. This regulation is promulgated by authority of W.S. §23-1-1001.

Section 2. Definitions. Definitions shall be as set forth in Title 23, Wyoming Statutes, Commission regulations, and the Commission also adopts the following definitions:

- (a) “County Sheriff” means the County Sheriff’s Office in the county where a grizzly bear is relocated.

(b) "Location of the grizzly bear relocation" means the proper name of the drainage in which a grizzly bear is relocated and the estimated number of miles from the relocation site to the nearest municipality, topographical feature or geographic location.

(c) "Provide a press release" means the Department shall provide to the County Sheriff and the media in the county in which a grizzly bear is relocated, a press release including the location of the grizzly bear relocation, number of grizzly bears relocated, date of the relocation and the reason the grizzly bear was relocated.

Section 3. Notification of relocation. Upon relocating a grizzly bear or upon receiving notification that a grizzly bear is being relocated, the Department shall notify the County Sheriff of the date, number of grizzly bears relocated, the location of the grizzly bear relocation and the reason of the relocation via direct telephone conversation, written or electronic correspondence, or personal contact within five (5) days of the date of the relocation. The Department shall provide a press release to the County Sheriff and the media in the county where a grizzly bear is relocated of the date, number of grizzly bears relocated, the location of the grizzly bear relocation and the reason of the relocation within five (5) days of the date of relocation of any grizzly bear.

WYOMING GAME AND FISH COMMISSION

By: _____
Mike Healy, President

Dated: January 22, 2014



CONFLICT MANAGEMENT – CAPTURE, RELOCATION AND REMOVAL

During 2023, the Department captured 23 individual grizzly bears in an attempt to prevent or resolve conflicts (Table 5, Figure. 4). Of the 23 individual captures, 7 were female (4 adults, 2 sub-adults and 1 two-year old) and 16 were male (10 adults, 2 sub-adults, 2 two-year olds and 2 yearling) grizzly bears.

Of the 23 capture events, 11 captures were a result of bears killing livestock (cattle, sheep, and chickens), and 12 were captures involving bears that obtained food rewards (pet, livestock food, garbage, fruit trees), or were frequenting developed sites or human populated areas unsuitable for grizzly bear occupancy. Of the 23 capture events, 16 (69%) were in Park County, 3 (13%) were in Hot Springs County, 3 (13%) were in Sublette County, and 1 (5%) was in Teton County (Table 5).

Of the 23 capture events, there were 9 relocation events (Table 5, Figure 5). All of the relocated grizzly bears were released on U.S. Forest Service lands in or adjacent to the Primary Conservation Area/Recovery Zone. Of the 9 relocation events, 4 were conducted in Park County (45%) and 5 (55%) in Teton County.

Grizzly bears are removed from the population due to a history of previous conflicts, a known history of close association with humans, or if they are deemed unsuitable for release into the wild (e.g., orphaned cubs, poor physical condition, or human safety concern). Of the 23 grizzly bears captured, 14 bears were removed from the population. Of these 14 removals, 6 (43%) were outside of the Demographic Monitoring Area, which is the area considered suitable for the long term viability of grizzly bears in the GYE.



As grizzly bears have expanded beyond remote mountainous terrain of the GYE there are more attractants available and unfortunately higher conflict potential.

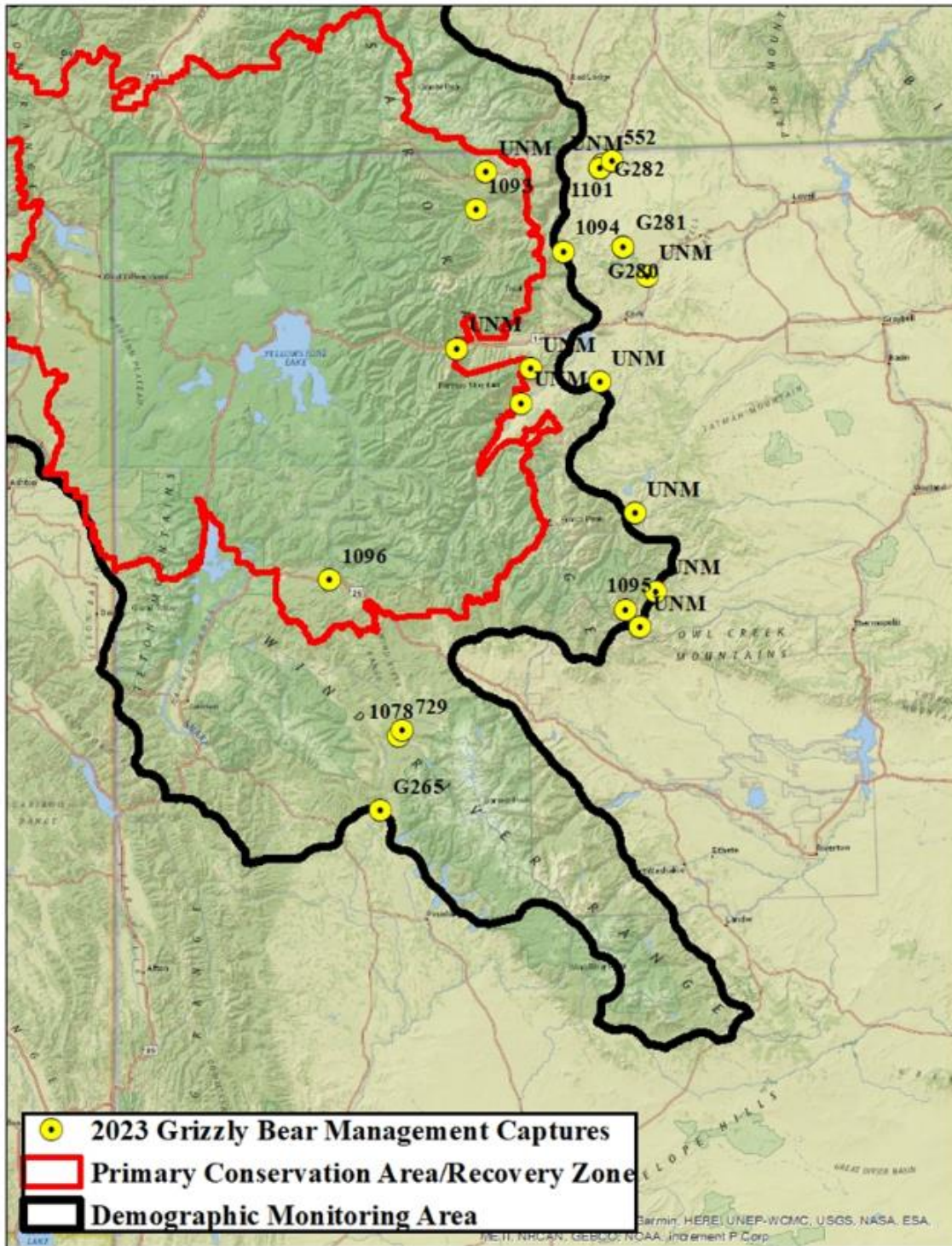


Figure 4. Capture locations ($n = 23$) for grizzly bears captured in conflict management efforts in the Wyoming portion of the Greater Yellowstone Ecosystem, 2023. Because of the mapping scale, some locations are combined at one symbol. A complete list is provided in Table 5.

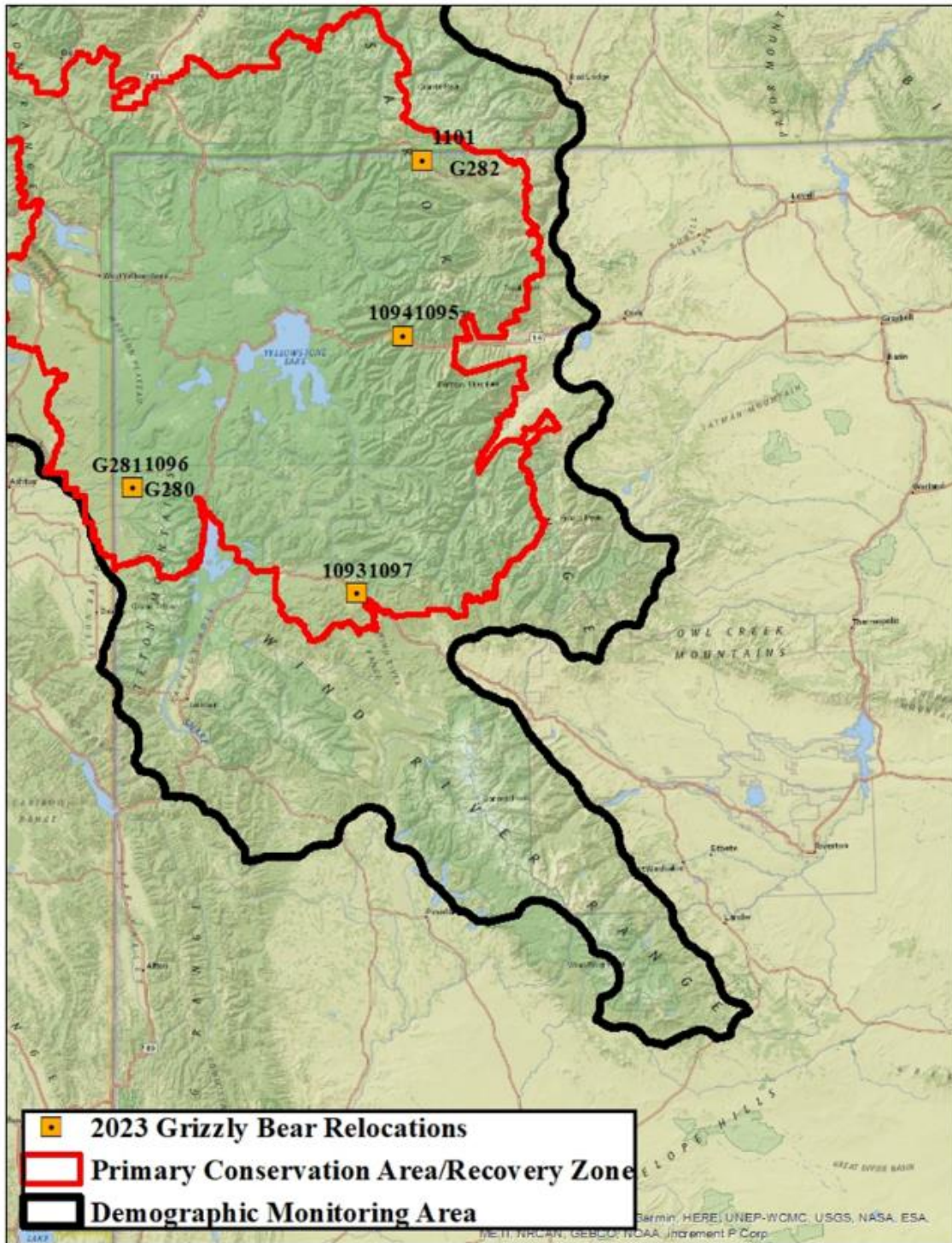


Figure 5. Release locations (n = 9) for grizzly bears captured, relocated, or released on site in conflict management efforts in Wyoming portion of the Greater Yellowstone Ecosystem, 2023. A complete list is provided in Table 5.

Table 5. Capture date, grizzly bear identification number (ID), capture county, relocation site, release county, and reason for capture for all 2023 grizzly bear conflict management captures ($n = 23$) in Wyoming. Grizzly bear ID labeled as “N/A” were grizzly bears removed from the population without being given a chronological capture number.

Date	ID	Capture county	Relocation site	Release county	Reason for capture
5/13/2023	N/A	Park			Captured and removed for cattle depredation
6/28/2023	G280	Park	Boone Creek	Teton	Captured and relocated for frequenting agricultural and developed areas
6/28/2023	G281	Park	Boone Creek	Teton	Captured and relocated for frequenting agricultural and developed areas
7/3/2023	G265	Sublette			Captured and removed for cattle depredation
7/8/2023	N/A	Park			Captured and removed for cattle depredation
7/9/2023	1093	Park	Blackrock Creek	Teton	Captured and relocated for cattle depredation
7/14/2023	N/A	Park			Captured and removed for habituated and food conditioned behavior on roadside and in campgrounds
7/20/2023	1078	Sublette			Captured and removed for cattle depredation
7/25/2023	729	Sublette			Captured and removed for cattle depredation
7/29/2023	N/A	Park			Captured and removed for damaging a chicken coop and obtaining food rewards
8/6/2023	1094	Park	Five Mile Creek	Park	Captured and relocated for cattle depredation
8/6/2023	N/A	Park			Captured and removed for cattle depredation
8/12/2023	N/A	Hot Springs			Captured and removed for cattle depredation
8/15/2023	1095	Hot Springs	Five Mile Creek	Park	Captured and relocated for sheep depredation
8/17/2023	N/A	Hot Springs			Captured and removed for cattle depredation
8/26/2023	1096	Teton	Squirrel Meadows	Teton	Captured and relocated for habituated roadside behavior
8/29/2023	N/A	Park			Captured and removed for frequenting agricultural areas and human safety concerns
9/1/2023	552	Park			Captured and removed for crop and apiary damage
9/5/2023	1097	Park	Blackrock Creek	Teton	Captured and relocated for crop damage and close proximity to human occupied areas
9/10/2023	N/A	Park			Captured and removed for frequenting agricultural areas and crop damage
9/20/2023	1101	Park	Fox Creek	Park	Captured and relocated for crop damage and close proximity to human occupied areas
9/20/2023	G282	Park	Fox Creek	Park	Captured and relocated for crop damage and close proximity to human occupied areas
9/30/2023	N/A	Park			Captured and removed for multiple food rewards and property damage

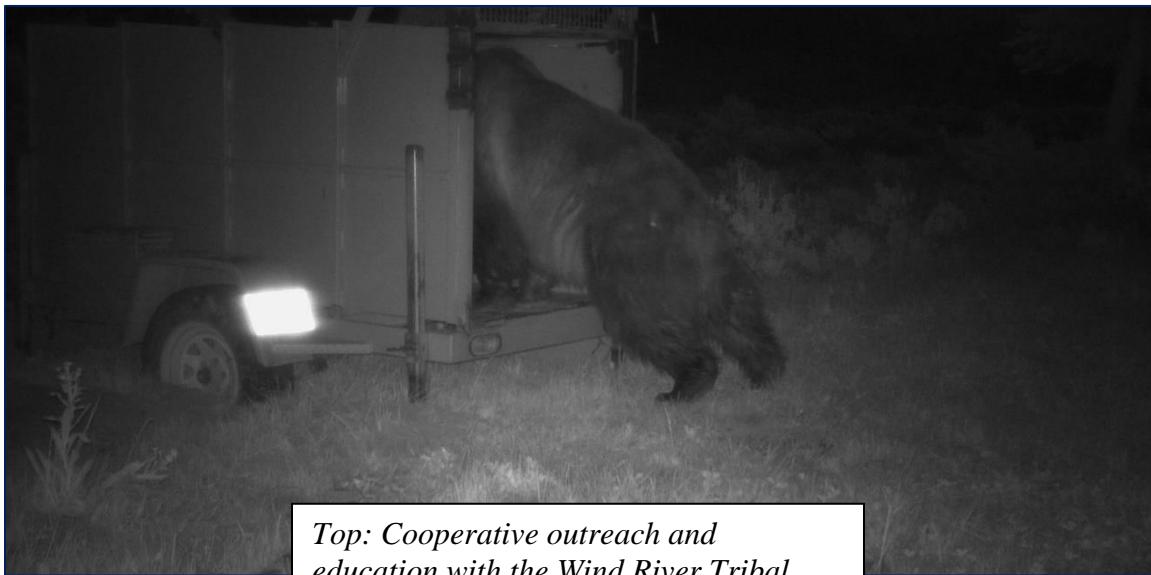
CONFLICT MANAGEMENT – CONFLICT VERIFICATION AND REPORTING

Department personnel investigated and recorded 192 human-grizzly bear conflicts in 2023 (Table 6, Figure 6). As a result of persistent education and conflict prevention efforts, the general pattern of conflicts is relatively steady within currently occupied habitat (Figure 7). The lower number of conflicts in 2023 was likely a result of abundant natural foods and localized social tolerance of grizzly bears. However, as occupied grizzly bear range has expanded, conflicts continue in areas farther from the Grizzly Bear Recovery Zone (GBRZ) and outside the Demographic Monitoring Area (DMA), often on private lands. In areas where grizzly bears have not been present in recent history, bears are increasingly in more human dominated landscapes, resulting in more conflicts with bears in these areas outside the DMA, causing significant damage to standing crops and sometimes making routine activities in working landscapes potentially dangerous. Although the joint efforts of the WGFD, USFS, non-governmental organizations, and particularly the public, have resulted in reducing conflict potential through education and attractant storage in many areas, the distribution of grizzly bear conflicts in Wyoming continues to expand with the population. Cattle depredation was the most frequent type of conflict documented in 2023 (80% of all verified conflict). Although the annual variation in most human-bear conflicts are correlated with natural food abundance (years with low natural food abundance correlated with increased conflicts), the numbers of cattle and sheep killed annually do not follow the same pattern. The WGFD continues to explore and use multiple options to reduce grizzly bear-livestock conflicts and expand our education and outreach efforts (see Bear Wise Wyoming Report).

Thirty-eight (38%) percent of the grizzly bear conflicts in Wyoming occurred on private lands and the majority were outside of the GBRZ. The increasing distribution of grizzly bears is reflected in the annual documentation of conflicts farther from suitable habitat and continued expansion outside the DMA. As bears expand and occupy habitats commonly used by humans, there is a greater potential for conflicts to occur. Education and conflict-prevention efforts are used anywhere bears and people coexist, and management actions will be a function of human values and effects on the grizzly bear population in those areas.

Long-term trends in the number of conflicts are likely a result of grizzly bears increasing in numbers and distribution and expanding into areas used by humans, including livestock production, on public and private lands as well as increased human-use of grizzly bear habitat in recent years. There is also a growing interest in roadside bear viewing. Some people engage in unethical wildlife viewing practices, often resulting in habituated or food-conditioned grizzly bears. Bears are also anthropomorphized on social media, where some bears are elevated to celebrity status. These situations focus on individuals instead of all grizzly bears in the population and continue to present difficult challenges for bear managers. Based on evidence of density-dependent effects in the early 2000s (van Manen et al. 2016, Corradini et al. 2023), the GYE grizzly bear population may have reached or exceeded its biological carrying capacity in portions of the ecosystem. Meanwhile the successful recovery of GYE grizzly bears results in more bears dispersing into less suitable habitat beyond the DMA. Therefore, bears are more likely to encounter food sources such as garbage, pet food, livestock and livestock feed, and myriad other attractants, resulting in increased property damage and threats to human safety. Conflict prevention measures such as attractant storage, deterrence, and education are a priority for the WGFD. Nevertheless, conflict management is often reactive. Even with the most stringent food and attractant control, the increasing and expanding grizzly bear numbers will lead to increased conflict potential between bears and people. These scenarios further emphasize the importance of bears remaining wary of people and not becoming conditioned to human foods and other attractants, thus avoiding the need to be relocated or euthanized.

In general, there is less social tolerance and biological suitability for bear occupancy in areas farther from the GRBZ because of development, land use patterns, and various forms of recreation. Although prevention is the preferred option to reduce conflicts, each situation is managed on a case-by-case basis with education, securing of attractants, relocation or removal of individual bears, or a combination of applicable methods for long-term conflict resolution and conservation of grizzly bears. Our annual evaluation of the grizzly bear population provides detailed insight in GYE grizzly bear population dynamics. It is worth noting there is no scientific evidence that human-caused mortalities resulting from conflicts has had or will have a negative impact on the long-term growth and viability of the grizzly bear population in Wyoming.



Top: Cooperative outreach and education with the Wind River Tribal Fish and Game, Wyoming Game and Fish and US Fish and Wildlife Service; Below: A previously captured grizzly bear inspects a trap before committing to enter.

Table 6. Type and number of human-grizzly bear conflicts in the Wyoming portion of the Greater Yellowstone Ecosystem, 2023.

Conflict type	Number	Approx. Percent (%)
Cattle	153	79.69%
Pet-Livestock-Birdfeed	9	4.69%
Property Damage	9	4.69%
Animal Death	5	2.60%
Garbage	4	2.08%
Sheep	3	1.56%
Animal Injury	2	1.04%
Other	2	1.04%
Beehive	2	1.04%
Poultry	1	0.52%
Aggression Toward Humans	1	0.52%
Human Injury	1	0.52%
Grand Total	192	100

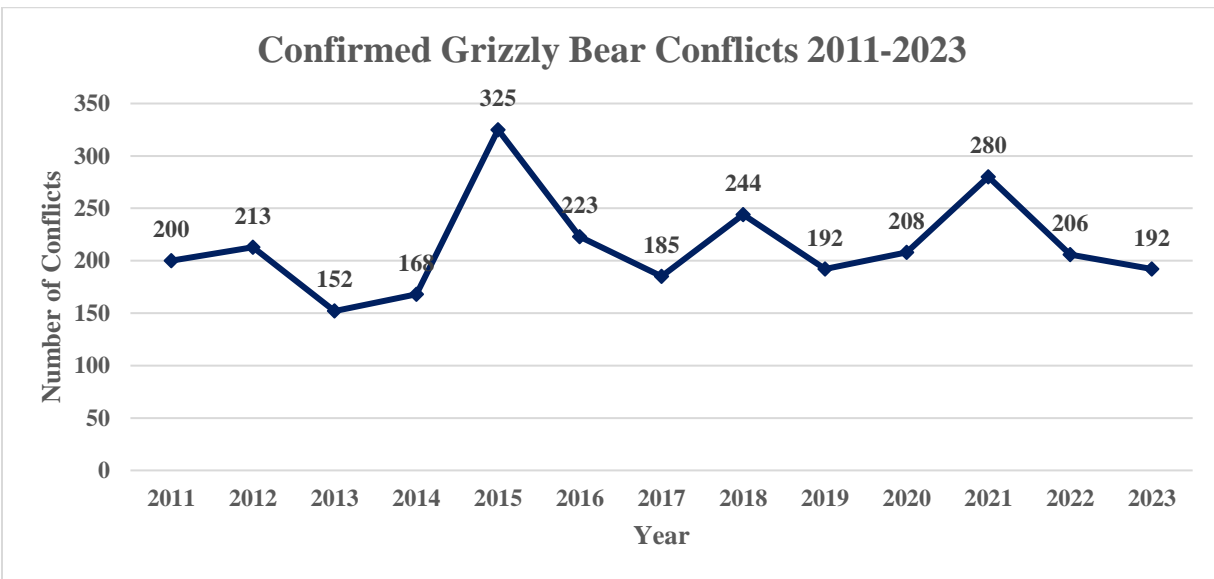


Figure 6. Number of human-grizzly bear conflicts in the Wyoming portion of the Greater Yellowstone Ecosystem, 2011-2023.

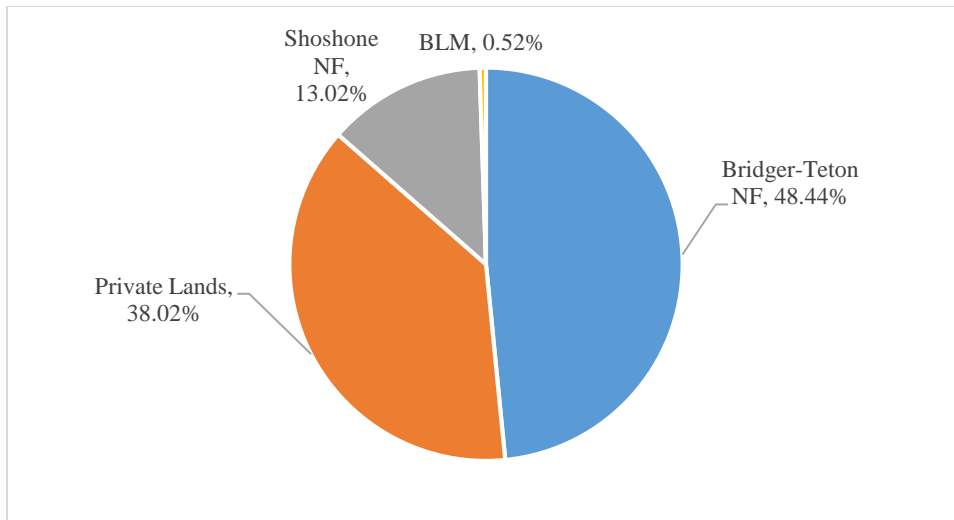


Figure 7. Percent of human-grizzly bear conflicts on private and public lands in the Wyoming portion of the Greater Yellowstone Ecosystem, 2023.



Grizzly bears exhibiting habituated roadside behavior with a proclivity for remaining close to state highway systems continue to be a challenge for many agencies as the public pushes to photo, video and harass bears.

2023 BEAR WISE WYOMING PROGRAM UPDATE

Introduction

The Bear Wise Community Program is a proactive initiative that seeks to minimize human-bear (black and grizzly) conflicts, minimize management-related bear mortalities associated with preventable conflicts, and to safeguard human communities in northwest Wyoming. The overall objective of Bear Wise is to promote individual and community ownership of ever-increasing human-bear conflict issues, moving toward creating a social conscience regarding responsible attractant management and behavior in bear habitat. This project seeks to raise awareness and proactively influence local waste management infrastructures with the specific intent of preventing conflicts from recurring. Strategies used to meet the campaign's objectives are: 1) minimize accessibility of unnatural attractants to bears in developed areas; 2) employ a public outreach and education campaign to reduce knowledge gaps about bears and the causes of conflicts; and 3) employ a bear resistant waste management system and promote bear-resistant waste management infrastructure.

This report provides a summary of program accomplishments in 2023. Past accomplishments are reported in the 2006 - 2022 annual reports of the Interagency Grizzly Bear Study Team (IGBST) and in the 2011-2022 Annual Job Completion Reports of the Wyoming Game and Fish Department (WGFD).

Background

In 2004, a subcommittee of the IGBST conducted an analysis of causes and spatial distribution of grizzly bear mortalities and conflicts in the Greater Yellowstone Area (GYA) for the period of 1994–2003. The analysis identified that the majority of known, human-caused grizzly bear mortalities occurred due to agency management actions in response to conflicts (34%), self-defense killings, primarily by big game hunters (20%), and vandal killings (11%). The report made 33 recommendations to reduce human-grizzly bear conflicts and mortalities with focus on 3 actions that could be positively influenced by agency resources and personnel: 1) reduce conflicts at developed sites; 2) reduce self-defense killings; and 3) reduce vandal killings (Servheen et al. 2004).

To address action number 1, the committee recommended that a demonstration area be established to focus proactive, innovative, and enhanced management strategies where developed site conflicts and agency management actions resulting in relocation or removal of grizzly bears had historically been high. Spatial examination of conflicts identified the Wapiti area in northwest Wyoming as having one of the highest concentrations of black bear and grizzly bear conflicts in the GYA. The North Fork of the Shoshone River west of Cody was then chosen as the first area composed primarily of private land to have a multi-agency/public approach to reducing conflicts at developed sites.

In 2005, the Department began implementation of the Bear Wise Community Program. Although the program's efforts were focused primarily in the Wapiti area, the Department initiated a smaller-scale project in Teton County to address the increasing number of black and grizzly bear conflicts in the Jackson, Wyoming area. For the last 18 years, the Bear Wise Community Programs in Northwest Wyoming have deployed a multi-faceted education and outreach campaign in an effort to minimize human-bear conflicts and promote proper attractant management. Although a wide array of challenges remain and vary between communities, many accomplishments have been made and progress is expected to continue as Bear Wise efforts gain momentum. In an effort to broaden the scope of the program, this work was rebranded as the Bear Wise Wyoming Program.

Cody Area Update

The Cody Bear Wise Community Program continues to utilize radio, television and print media, mass mailings, and the use of signing on private and public land to convey the educational messages surrounding human-bear conflict prevention. Conflict prevention information is also disseminated through public workshops and presentations and by contact with local community groups, governments, the public school system, and various youth organizations. To compliment educational initiatives, the program uses an extensive outreach campaign that assists the community in obtaining and utilizing bear-resistant products and implementing other practical methods of attractant management. Ongoing efforts and new accomplishments for 2023 are as follows:

- The Carcass Management Program continues to provide a domestic livestock carcass removal service for livestock producers located in occupied grizzly bear habitat within Park County, Wyoming. The program has been traditionally funded by the Park County Predator Management District and Wyoming Animal Damage Management Board. In addition to those donors, the program received contributions from Bureau of Land Management and the National Fish and Wildlife Foundation. The program provides livestock producers and owners with an alternative to the use of on-site carcass dumps, which are a significant bear attractant and indirectly contribute to numerous human-bear conflicts. Since June 2008, more than 2,000 domestic livestock carcasses have been removed from private lands.
- Large Carnivore Section personnel maintained and built many new permanent electric fences. The fences are around bee apiaries that have been in the same place long term. These projects were completed in cooperation with USDA Wildlife Services. for livestock conflict prevention.
- Numerous informational presentations were given that focused on human-bear conflict prevention to students at the following schools: Powell High, South Side Elementary, Cody high, middle, and elementary schools, Basin Library, the 8th grade expo for all Basin schools, Riverside Middle/High, Worland Elementary School, Meeteetse School District, Burlington Middle, and Northwest College in Powell, WY.
- A total of 700 canisters of bear spray and 200 canisters of inert training spray were purchased with funding from the American Bear Foundation, and Safari Club International Foundation. After a short training session with the inert spray and mechanical charging “Robobear” (see below), the cans of live bear spray were given free of charge to hunters, anglers, and the general public in March, April, and August. A total of 7 giveaways were held; twice in Jackson and Lander and once in Cody, Dubois, and Pinedale.



- The “Working in Large Carnivore Country” workshops were conducted for the Park County Weed and Pest District, Powell Recreation District Outdoor Kids Event, the Town of Dayton, Buffalo Bill State Park, Medicine Lodge Kids Outdoor Day, Park County Search and Rescue, and Rocky Mountain Power.
- A permanent electric fence was erected in 2018 at the Park County Landfill. To ensure the fence is in good working order WGFD personnel spent several days repairing and maintaining the fence in 2023. The partnerships with Wyoming Outdoorsmen, BLM, Park County Commissioners, Western Bear Foundation, and Greater Yellowstone Coalition were vital in making this project a reality.
- Regional hunters education classes, and numerous other public outreach events were held in Cody, Powell, Meeteetse, Thermopolis, Wapiti, Burgess Junction, Newton Lakes, Basin, and Sunlight.
- Planning in conjunction with Safari Club International Foundation has begun for a large-scale advertising project. The goal is to put out Gas Pump TV ads across the state that promote bear safety to hunters throughout the hunting season. The project has the potential to reach many residents as well as hard to target demographics such as out of state hunters and seasonal residents. A second project will focus on bear safety through video advertising in airport terminals in Yellowstone Regional Airport and potentially Jackson Hole Airport.

Lander Area Update

- LCS personnel participated in a biannual Bear Spray Giveaway program, giving away 200 cans of bear spray and interacting with hunters, anglers, hikers, recreationists and people with general interest of grizzly bear ecology and management.



- LCS personnel provided numerous educational workshops and training events including the Gannett Peak Elementary “Lights On” after school/summer program, Baldwin Creek Elementary, Wyoming Outdoor Wildlife Day, Teton Valley Ranch Youth Camp, and Lander Child Development Services.

- LCS personnel participated in hunter education classes that emphasize hunting safely in bear country and worked on curriculum for the classroom. Personnel also provided hunter safety in conjunction with Wyoming Catholic College in Lander, WY.



- LCS personnel conducted safety training for Shoshone National Forest Trail Crew, Fremont County Weed and Pest, National Audubon Society, Wyoming Catholic College and seasonal Wyoming Game and Fish Employees.
- LCS personnel conducted multiple radio and television interviews regarding bear safety and being Bear Wise in Wyoming that was timed in accordance with den emergence, spring/summer human use activities and hunting seasons. Section personnel continued to promote resources to the public such as the LCS educational video which demonstrates how to properly deploy electric fences to secure attractants.
- LCS personnel provided comment and information for numerous news releases for local, statewide, national and international media outlets.

Pinedale Area Update

In 2011, a Bear Wise Community effort was initiated targeting residential areas north of Pinedale, Wyoming where the occurrence of human-bear conflict has increased in recent years. Accomplishments for the Pinedale area in 2023 are as follows:

- Hunting in Bear Country presentations were given to hunter safety classes throughout the region in an effort to educate future sportsmen and women and increase safety potential.
- LCS personnel provided range rider safety training to local cowboys and ranches that have a high potential of encounters with grizzly bears and livestock.

- Bear safety presentations were given to the U.S. Forest Service as well as education and safety training for seasonal personnel working in grizzly bear occupied areas in Sublette County.
- LCS personnel provided training for local Sublette County Conservation District employees.
- LCS personnel conducted the bear spray giveaway in Pinedale, WY for the second year and gave out 100 cans of bear spray while interacting with members of the public and talking about grizzly bear ecology and conservation.
- LCS personnel provided large carnivore safety training to the local Bureau of Land Management Field Office.



Objectives for 2024 include continued expansion of the program into other areas of the state where human-bear conflicts continue to be a chronic issue, as well as the continuation of current educational and outreach efforts in the Cody area with specific focus on areas that have not adopted proper attractant management methods. LCS personnel are working with land management agencies to provide additional bear proof and bear resistant infrastructure to reduce conflict potential for black and grizzly bears for recreationists throughout the Wind River and Wyoming Range mountains.

The Wapiti and Pinedale area Bear Wise Community programs face the ongoing challenges of: 1) the absence of ordinances, regulations, or laws prohibiting the feeding of bears; 2) limited educational opportunities and contact with portions of the community due to a large number of summer-only residents and the lack of organized community groups and; 3) decreased public tolerance for grizzly bears due to record numbers of human-bear conflicts and continued federal legal protection. The future success of the Bear Wise program lies in continued community interest and individual participation in proper attractant management.

Jackson Area Update

The Bear Wise Jackson Hole program continues educational and outreach initiatives in an effort to minimize human-bear conflicts within the community of Jackson and surrounding areas. In 2023, the program's public outreach and educational efforts included the use of signage, public workshops and presentations, distribution of

informational pamphlets, promoting awareness about bear spray, carcass and fruit tree management, and utilizing our bear education trailer.



- Public service announcements were broadcast on local radio stations in Jackson throughout the spring, summer, and fall of 2023. The announcements focused on bear safety and conflict avoidance and advertising for a Large Carnivore workshop conducted in Jackson.
- Numerous educational talks were presented to various groups including homeowner's associations, guest ranches, youth camps, Jackson residents, tourists, school groups, Heart Six Ranch, Jackson Gun Club and local government employees.
- An educational workshop focusing on bear ecology and situational awareness was held at the Jackson Outdoor Day as part of the larger Bear Spray Giveaway event in April.
- A second Bear Spray Giveaway was held in August in which 100 cans of spray were given to the public free of charge.
- A considerable amount of time was spent removing ungulate and livestock carcasses from residential areas and ranches in the Jackson Region.
- LCS personnel continued to work with a Jackson catering company, Roots Kitchen & Cannery. They have been involved in picking apples from trees that have been identified as a source of bear conflict by WGFD.
- LCS personnel assisted hunting outfitters with the installation and maintenance of electric fence systems around their field camps located in the Bridger-Teton National Forest. Annually, personnel meet with hunters and outfitters to reduce conflict potential between humans and grizzly bears.

- LCS personnel worked extensively with Teton County and the City of Jackson, WY on Land Development Regulations (LDRs) stressing the critical importance of compliance and enforcement due to a county-wide bear resistant infrastructure regulation.
- Signage detailing information on hunting safely in bear country, bear identification, recent bear activity, and proper attractant storage were placed at USFS trailheads and in private residential areas throughout Teton County, including extensive work on Togwotee Pass to deal with habituated roadside grizzly bears.



Objectives for the Bear Wise Jackson Hole program in 2023 were focused on supporting Teton County and local waste management companies with projects that will help disseminate information and achieve compliance with the recently adopted Teton County Bear Conflict Mitigation and Prevention LDR. In addition, more work will be done to identify areas within the city limits of Jackson and Star Valley communities where better attractant management and sanitation infrastructure is needed.

The recent implementation of the Teton County Bear Conflict Mitigation and Prevention LDR has greatly reduced the amount of available attractants on the landscape and is a tremendous step forward for the Bear Wise Jackson Hole program. The new challenges faced by the Department will be achieving full compliance with this regulation, even in years with low conflict when it may appear the conflict issues are resolved. The Bear Wise Jackson Hole Program will convey the importance of compliance and strive to maintain public support for the LDR through public outreach and education projects. In order for the Jackson program to be successful, the program must continually identify information and education needs within the community while being adaptive to changing situations across different geographic areas. This will require the Department to coordinate with other government agencies and local non-government organizations working across multiple jurisdictions to develop a uniform and consistent message. If this level of coordination is achieved, the Department will be more effective in gaining support and building enthusiasm for Bear Wise Jackson Hole, directing resources to priority areas and reaching all demographics.

INFORMATION AND EDUCATION

2023 Accomplishments

- Electronic and Print Media
 - As per Wyoming Statute, grizzly bear relocation from one county to another must be announced through local media and to the local sheriff of the county into which the bear was relocated ($n = 9$ for 2023). Each announcement is posted in a timely fashion to the web page.
 - Personnel issued multiple educational news releases throughout the season informing readers and listeners of bear safety, behavior, conflict avoidance, food storage and natural food availability.
- Grizzly Bear Management Web Page
 - The new Grizzly Bear Management and *Bear Wise Wyoming* web page are now live on the WGFD website and have been maintained and updated on a regular basis in order to provide timely information to the public regarding grizzly bear management. Accessibility to the Grizzly Bear Management and Bear Wise web pages has been dramatically improved. Both web pages can now be accessed in only one click from the WGFD homepage.
- Hunter Education
 - Every hunter education class in Wyoming is required to discuss how to hunt safely in bear country. To assist instructors, most have been provided inert bear spray canisters for demonstration purposes and DVD's entitled "Staying Safe in Bear Country." A section on bear safety is included in the student manual. Approximately 5,000 students are certified each year.
- Bear Spray Giveaway
 - We had a successful year training recipients on how to use bear spray at our seven bear spray giveaway events. Public participation continues in our community events where bear spray giveaways occur and also give our personnel an excellent opportunity to talk with the public about bear ecology and safety and other wildlife issues throughout Wyoming.

Publications

The primary link to other publications, annual reports, and peer reviewed literature for the Yellowstone population of grizzly bears is summarized on the United States Geological Service web site at <https://www.usgs.gov/science/interagency-grizzly-bear-study-team>

For information specific to the Wyoming Game and Fish Department's grizzly bear management program; including links to publications, reports, updates, and plan visit: <https://wgfd.wyo.gov/wyoming-wildlife/large-carnivore/grizzly-bears-wyoming>

GRIZZLY BEAR MANAGEMENT EXPENDITURES BY THE DEPARTMENT – FISCAL YEAR 2024

The Department's Fiscal Year 2024 (FY24) occurred from July 1, 2023 – June 30, 2024. During the course of FY 24, the Department conducted annual population monitoring, responsive conflict management, Bear Wise Wyoming programs, and other statutory and regulatory obligations in regards to damage compensation and law enforcement for grizzly bears. During FY 24, the Department directed \$2,085,460.19 of funds toward grizzly bear conservation and management. Program expenditures are reported by primary work activities conducted during FY 24. The figures reported below do not represent all Department expenses incurred during this fiscal year:

- Conflict prevention: \$320,621.20*
- Annual monitoring (population and habitat evaluations): \$509,608.39
- Additional information and Education including Bear Wise Wyoming: \$174,409.40*
- Season setting and regulations: \$6,904.08
- Law enforcement and investigations: \$58,637.16
- Management planning and reporting: \$10,526.10
- Damage compensation for verified loss: \$702,791.64

**Proactive Bear Wise Wyoming activities are represented both in “conflict prevention” and “additional information and education” categories.*

In addition to the direct expenditures, a total of \$2,944,822 was allocated to grizzly bear management during FY 24 through shared expenditures and overlapping activities including overhead that involve grizzly bears, other Wyoming wildlife, and Departmental responsibilities.

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