MONTANA FISH, WILDLIFE & PARKS Region 7 Bear Quota Justification

Unlike the western and central portions of the state, Region 7 has had a relatively smaller population of black bears throughout history, but that population has grown enough to allow for some harvest in the recent decades. The first Region 7 black bear season was implemented in 2006 with a spring quota of 2 and a fall quota of 2. Since then, the fall quota has incrementally increased to 12 (Table 1), and the spring quota has increased to 4 (Table 2) as we have observed the frequency of sightings, noted reproduction, and harvest distribution grown and expand. Throughout this time the regional management objectives are to optimize sportsmen harvest opportunity and maintain social tolerance of black bears by proactively addressing private property damage and livestock depredation through hunter harvest.

Since the implementation of a black bear season in 2006, there has been a continual increase in the frequency and spatial extent of black bear observations, property damage reports, and landowner complaints. What was once a relatively rare occurrence on or surrounding the Ashland Ranger District of the Custer National Forest now includes regular observations extending north to Miles City, Cohagen, Terry, and Forsyth, east to Hammond and northeast to Ekalaka. Local reproduction is occurring, and bears are not just immigrating from other sources as evidenced, for example, by spring 2012 reports of a sow with three cubs near Birney and a sow with two cubs south of Ekalaka. With this being the case, area bear populations are anticipated to increase in the future and management quotas will be adjusted to align with this anticipated growth while continually tracking age and sex ratios to prevent overharvest of the Region's black bear population and promote long-term stability. Region 7 has used May 31st as the closing of its spring black bear season, unlike many areas in western Montana, since the region observes earlier snow loss equating to earlier vegetation green up and emergence of bears for harvest. Running the spring season later may have a negative impact on the population as more females are present later in the spring. Even though the current quota levels initiate the closure of the spring season before the end of May, if the quota were to continue to increase as we see distribution and reported numbers increase, then the potential for additional female harvest would increase with a later closing date.

Since initiating a black bear season in Region 7 through 2021, 106 bears have been harvested; eightyone (76%) during fall seasons (Table 1) and twenty-four (23%) during spring seasons (Table 2). Seventy-four (70%) were male and thirty-one (30%) female. To optimize harvest while sustaining black bear populations at a regional level, quotas are set while the region monitors harvest to make sure that female harvest does not exceed male harvest for 3 consecutive years.

Quota History:

Table 1. Region 7 fall black bear quotas and harvest, 2006-21.

Year	Quota	Harvest	Male	Female	Season Close
2006	2	0	0	0	none
2007	2	0	0	0	none
2008	2	2	2	0	2-Oct

2009	2	1	1	0	none
2010	4	4	3	1	19-Oct
2011	4	4	2	2	27-Nov
2012	4	4	2	2	13-Oct
2013	8	3	3	0	none
2014	8	4	4	0	none
2015	8	8	4	4	30-Oct
2016	8	5	3	2	none
2017	8	9	6	3	24-Oct
2018	8	8	6	2	29-Oct
2019	8	9	8	1	17-Oct
2020	8	5	4	1	none
2021	12	15	9	6	24-Sep
Totals	96	81	57	24	

Table 2. Region 7 spring black bear quotas and harvest, 2006-21.

Year	Quota	Harvest	Male	Female	Season Close
2006	2	0	0	0	none
2007	2	1	1	0	none
2008	2	0	0	0	none
2009	2	1	1	0	none
2010	2	1	1	0	none
2011	2	1	1	0	none
2012	2	1	1	0	none
2013	2	2	2	0	16-May
2014	2	2	1	1	21-Apr
2015	2	1	1	0	none

2016	2	2	1	1	10-May
2017	2	2	2	0	25-May
2018	4	1	1	0	none
2019	4	1	1	0	none
2020	4	4	2	2	11-May
2021	4	4	2	2	20-May
Totals	40	24	18	6	

Sixty-five harvested bears between 2007 and 2019 were aged using cementun annuli analysis (Table 3). Forty-two (65%) were <3 years old, 14 (21%) were aged between 3-5 years, and 9 (14%) was >5 years old (Table 3). Although a small sample and short trend, this indicates that Region 7 has an established population, but annual age structure is skewed towards the sub-adult class with no old adult age class (>10 years) being harvested. These current data, although limited compared to other regions in the state, are below or near the harvest criteria for median age of harvested bears (i.e., >6 for females and >4 for males; Black Bear Harvest Research & Management in Montana – 2011 Final Report). This requires constant assessment of metrics as quotas are adjusted to maintain population integrity. Ages from 2020 and 2021 harvests will not be available until summer 2022.

Table 3. Region 7 harvested black bear ages, 2006-19.

Season	Number Aged	1-2 years	3-5 years	≥6 years
2006	0	0	0	0
2007	1	0	1	0
2008	1	1	0	0
2009	2	2	0	0
2010	4	2	2	0
2011	4	2	1	1
2012	4	3	1	0
2013	4	2	1	1
2014	6	3	2	1
2015	9	8	0	1
2016	6	4	1	1

2017	8	2	4	2
2018	9	7	0	2
2019	7	6	1	0
Totals	65	42	14	9