

**MONTANA FISH, WILDLIFE, AND PARKS
HUNTING SEASON-QUOTA CHANGE SUPPORTING INFORMATION**

Species: Wolf
Region: Statewide
Hunting District: All
Year: 2021

1. Describe the proposed season / quotas changes and provide a summary of prior history (i.e., prior history of permits, season types, etc.).

Background

The Montana Fish and Wildlife Commission is scheduled to adopt final regulations for the 2021 wolf season at their August 20 meeting. The Commission approved a proposal for public comment at their June 24 meeting that included a range of options. These options incorporated legislation from the 2021 legislature. Written public comment was accepted on the proposal for a 30-day period and a virtual hearing to take oral public comment was held on June 30, 2021. More than 25,000 written and 49 oral comments were received, expressing a range of sentiment from support for different options to strong opposition to the proposed regulations. Those comments are summarized in a separate document. Based on these inputs, a new population estimate, and additional staff review, the proposed options have been variously adjusted and are listed below. The Fish and Wildlife Commission will make a final decision on the 2021 wolf regulations, including on the variables in the range of options, at their August meeting.

In addition to other legislative inputs, SB 314, passed into law in 2021, directs the commission to reduce the wolf population, but not less than the number of wolves necessary to support at least 15 breeding pairs. This statutory language does not require the population be reduced to the minimum number of wolves necessary to support only 15 breeding pairs. Indeed, at population numbers near to 15 breeding pairs the flexibility to address conflicts and provide harvest opportunities would become severely restricted. The additional statutory options for wolf management (creating new or emphasizing existing commission authority) are listed below.

- allow the take of the bag limit with a single wolf license (SB314, at commission's discretion),
- increase the individual bag limit on wolves (SB314, at commission's discretion),
- allow for the snaring of wolves during the trapping season (HB224, shall be part of trapping),
- extend the wolf trapping season dates (HB 225, at commission's discretion)
- hunting wolves over bait on private land (SB 314, at commissions' discretion), and
- hunting wolves at night (at commission's discretion).

The current wolf season structure has kept the population mostly static through 2019, but the higher harvest in 2020 (328 vs. the 2012–2019 average of 242) was initially predicted to result in a population decline to approximately 985 wolves. However, the recently completed population estimate for 2020 using iPOM indicates the population has remained stable, with an estimated 1,177 wolves at the end of 2020.

Proposal Options and Increased Harvest Potential

The spectrum of options adopted for public comment has been adjusted based on statutory direction, population estimates, and public comment. Where there are concerns about incidental take of federally

listed grizzly bear and lynx, the recommended options include elements to limit the potential for this take. The commission may select a specific option from Table 1, may mix pieces of the different options, or may adopt alternative approaches for each of the regulation variables listed in Table 1. Unless specifically changed by commission adoption, season elements from the 2020 season are proposed and would remain unchanged.

Increase of Harvest Potential for Each Tool

The specific tools described below represent best estimates for increased harvest of wolves. These differences may variously contribute to the commission's interest to be less or more aggressive in their pursuit of a statutorily required wolf population reduction. While SB 314 speaks to a conditioned reduction of wolves, it does not speak to a specific timeline for that reduction to be achieved nor does it require a particular tool to be used to do so. While some participants in legislative hearings advocated rapid reduction of the wolf population to address concerns about game numbers (particularly in northwest/western MT where wolves are abundant, and some elk populations are below objective), others expressed concern that wolves could be dramatically and quickly reduced and advocated no increased harvest or a more measured approach to increased harvest. That the estimated wolf population has been relatively static for several years suggests increased harvest will result in a population decrease. The commission has the authority to apply different seasons in different areas to address the mandate to reduce populations as some legislative inputs suggest.

Given only six persons filled the 5-wolf bag limit during the 2020 season through hunting and/or trapping measures, *increasing the bag limit* may not generate a significant addition to harvest. Increasing the bag limit while also allowing *a full bag limit on only one wolf hunting license* may add harvest as hunters potentially encounter and take advantage of opportunities to harvest more than one wolf at a time without needing more than one license. Most hunters purchase only one wolf hunting license. Currently trappers may trap up to 5 wolves on their one trapping license.

Acting alone, *season date expansion* likely represents some increased harvest, most likely at the same rate of harvest the current season structure provides. As expanded dates represent more trapping season, they consequently represent increased potential for non-target/non-authorized (incidental) captures of federally listed grizzly bears and lynx as well as other wild and domestic species. In addition to fundamental concerns about non-target/non-authorized captures, any captures of grizzly bears represent human safety concerns such as surprise encounters with incidentally-captured grizzly bears and the difficulties associated with releasing an incidentally-captured grizzly bear.

Hunting over bait, by itself, is not anticipated to account for significant increased harvest. In combination with *night hunting*, harvest of wolves over bait might prove more effective relative to increased harvest in that it represents more opportunity for harvest at a time when wolves may be more available to hunters.

The new tool most anticipated to increase harvest is *snares*. Snares are inexpensive, can be more easily placed in large numbers (compared to jawed foothold traps), and are relatively easy to maintain in weather conditions that might confound other trap types. Snares also generate concerns relative to non-target/non-authorized captures of federally listed grizzly bears and lynx as well as other wild and domestic species. In addition to fundamental concerns about non-target/non-authorized captures, any captures of grizzly bears represent human safety concerns. Opportunities to mitigate these concerns include restrictions in time and space, limits on numbers of snares, and equipment requirements that reduce the potential for capturing and holding non-target/non-target species.

Universal Components for Each Proposal

Whatever individual and cumulative tools the commission ultimately adopts, the department recommends the following components be included to reduce human safety concerns, reduce the potential for over-large harvest relative to wolf population objectives, and the potential for non-target /non-authorized captures of domestic and other wildlife species. Captures of federally listed species and species with CITES (Convention on International Trade in Endangered Species) oversight for international trade are particularly concerning in this regard.

Specific season components the department recommends for whatever season package the commission adopts are listed below.

- A harvest of 450 wolves (approximately 100 more harvested wolves than in 2020 season) shall initiate a commission review with potential for rapid in-season adjustments to hunting and trapping regulations. Thereafter the commission shall be similarly re-engaged at intervals of additional 50 wolves harvested, if season adjustments allow for additional wolf harvest.

OR At a harvest of 450 wolves, the season will close unless continued by the commission. Thereafter the season shall be closed, and the commission similarly re-engaged at intervals of additional 50 wolves harvested, if season adjustments allow for additional wolf harvest.
- A non-target capture of one lynx or grizzly bear shall initiate a commission review with potential for rapid in-season adjustments to trapping regulations. Afterwards the commission shall be similarly re-engaged for any additional non-target capture of lynx or grizzly bear.
- All non-target captures shall be reported to the department with 24 hours (as currently required) to include captures from foothold traps and snares.
- Wolf snares include required equipment and setting requirements to minimize the potential for snaring and holding non-target species. Specifically:
 - Snares must be equipped with a loop stop that will close to a loop no smaller than 2.5 inches in diameter (stop placed at no less than 8 inches from end of loop).
 - Snares must have a breakaway device rated at 1,000 lbs. or less installed on the loop end,
 - Snares must be placed such that the bottom of the snare loop is at least 18 inches above the surface.
 - If snares are allowed on public lands, power-assisted (e.g., spring-loaded) snare locks are prohibited on wolf snares on public lands.
 - A relaxing snare lock is required on snares in lynx protection zones (LPZs).
- Wolf and furbearer seasons continue to be set by the commission annually, to allow opportunity for season adjustments between consecutive seasons based upon review of harvest, population size, and conflicts.

Table 1. Proposed wolf regulation options. Commission may treat options discretely, mix tools across options or incorporate other tools/options. Unless specifically changed by commission adoption, season elements from the 2020 season are proposed and would remain unchanged.

Tool	Limited Option	Intermediate Option	Maximum Option
Hunting Licenses (SB 314)	1 license/wolf	1 license/5 wolves	1 license/bag limit
Bag limit (SB 314)	5	10 with not more than 5 from Regions 3-7	10
Trapping/Snaring Season dates (HB 225)	Dec. 15–Feb. 28 statewide	Dec. 15– Feb. 28 in FWP Regions 1 - 3, Region 4 west of I-15, and Region 5 inside Lynx Protection Zone. Dec. 1–March 15 in FWP Region 4 east of I-15, Region 5 outside Lynx Protection Zone, and Regions 6 - 7.	Dec 1 – March 15 except Dec. 15– Feb. 28 on public lands in FWP Regions 1 - 3, Region 4 west of I-15, and Region 5 inside Lynx Protection Zone.
Snaring (HB 224)	Snaring on private lands only consistent with trapping season dates. Number of snares per trapper limited to the bag limit	Snaring on private lands only consistent with trapping season dates.	Snaring on public and private lands consistent with trapping season dates.
Night hunting (SB314)	None	Private lands except in WMUs 110/313/316	Private lands Statewide
Use of baits for hunting/trapping (SB 314)	None	Private lands except in WMUs 313/316 with current wolf trapping bait definition	Statewide with current wolf trapping bait definition
Quota areas (SB314)	Retain current quotas in WMUs 110, 313, 316	Increase quotas in WMUs 110, 313, 316	Eliminate quotas in WMUs 110, 313, 316 but not allow hunting over bait, snaring, or night hunting.

Prior History of Wolf Seasons in Montana

Management of wolves and other large predator populations throughout the western U.S. can be generally described as one of three eras – elimination, recovery, and modern management. Montana may now liberalize wolf harvest because wolf populations are robust and sustainable.

The era of predator elimination primarily occurred during 1860–1960 and resulted in the extirpation of wolves from the western U.S. by about 1925. Although elimination efforts were suspended by 1960, recovery efforts did not initiate for another 20 years. The era of wolf recovery in Montana was relatively brief, occurring over about 20 years. Wolves began recolonizing from the north in the early 1980s and, bolstered by reintroductions in Yellowstone and Idaho in the mid-1990s, the official ESA recovery goal for the Northern Rockies was met by the end of 2002. The recovery goal was defined as 30 breeding pairs in Montana, Idaho, and Wyoming for three successive years. At the end of 2002, there were 43 breeding pairs and at least 663 wolves in the tri-state area, 183 of which were in Montana (USFWS 2003). Although wolves were protected by the ESA during this recovery era, some lawful take did occur. Wolves were lethally removed when involved with livestock depredation. From 1998 to 2004, when minimum counts of wolves in Montana were 49–183 wolves, an average of 15% of the population was removed each year due to depredations. This level of removal still allowed wolf population growth (Fig. 1).

Meeting the federal recovery goal set the stage for removal of ESA protections and transitioning into the era of modern management. This began in 2003, and modern wolf management can be generally characterized as a post-recovery attempt to balance wolf numbers and conservation with goals for livestock depredation and wildlife populations that are affected by wolves. Montana's Wolf Conservation and Management Plan (Alternative 2 of the 2003 Final Environmental Impact Statement, MFWP 2003, Hagener 2004) purposefully did not specify a target number of wolves. Instead, the plan emphasized reaction to several socially important factors, including wolf effects on big game. The plan also established a threshold of 15 breeding pairs above which wolf regulations could become increasingly liberal to address social factors.

The first stage of modern wolf management, from 2003–2008, was a period of legal analyses about ESA status, continued federal protections under the ESA, and continued wolf population growth. During this time, no wolf hunting occurred, and Montana's wolf population increased 256% to at least 653 wolves (Fig. 1).

The second stage, from 2009–2011, was a period of initial sport harvest of wolves. This stage represented the first legal harvest of wolves with initial seasons being deliberately conservative. The first wolf season in Montana had a statewide quota of 75 wolves, a bag limit of 1 wolf per hunter, and a 9-week hunting season. Trapping wolves was not allowed. Hunters took 72 wolves during the first season. After a year of no harvest due to ESA litigation (2010), Montana's second wolf season had a statewide hunting quota of 220, and hunters took 166 wolves. Importantly, wolf populations (Fig. 1) and livestock depredations (Fig. 2) remained at high levels during this stage despite continued wolf removals due to depredation and the legal hunting seasons. Conservative wolf seasons as part of a new and highly scrutinized wolf hunt were not reducing wolf numbers and effects on livestock.

The third stage began in 2012 when a 10-week wolf trapping season was added, bag limits were increased from 1 to 5 wolves per person, and rifle hunting seasons were lengthened from 9 weeks to 24 weeks. Trapping season dates were established to reduce potential for incidental take of grizzly bears by setting dates around grizzly bear den entry and emergence dates when most grizzly bears were in dens hibernating (Fig. 3).

Despite increasing levels of harvest, these 2012–2020 regulations resulted in an estimated 8% initial decline, stabilizing at around 190 packs and 1,150 wolves (Fig. 1). This population level has remained relatively stable for almost a decade in Montana (Fig. 1). It is unknown whether this small decline and stabilization is due to liberalized wolf harvest, wolves having reached carrying capacity, or a combination of these two factors. The average number of wolves harvested by hunters and trappers over the 8-year period 2012–2019 was 242 per year, with 328 harvested in the 2020-21 season.

This current proposal is in response to direction from 2021 Senate Bill 314 and is consistent with the 2004 Montana Wolf Conservation and Management Plan. It is intended to provide increased wolf hunter and trapper opportunity while meeting legislative intent. Details for assessing the effects of increasing levels of wolf harvest are provided below, and the Department believes wolf regulations can be variously adjusted without jeopardizing wolf conservation. Wolf densities and population trends vary by Region, and the Department will continue to monitor these indices.

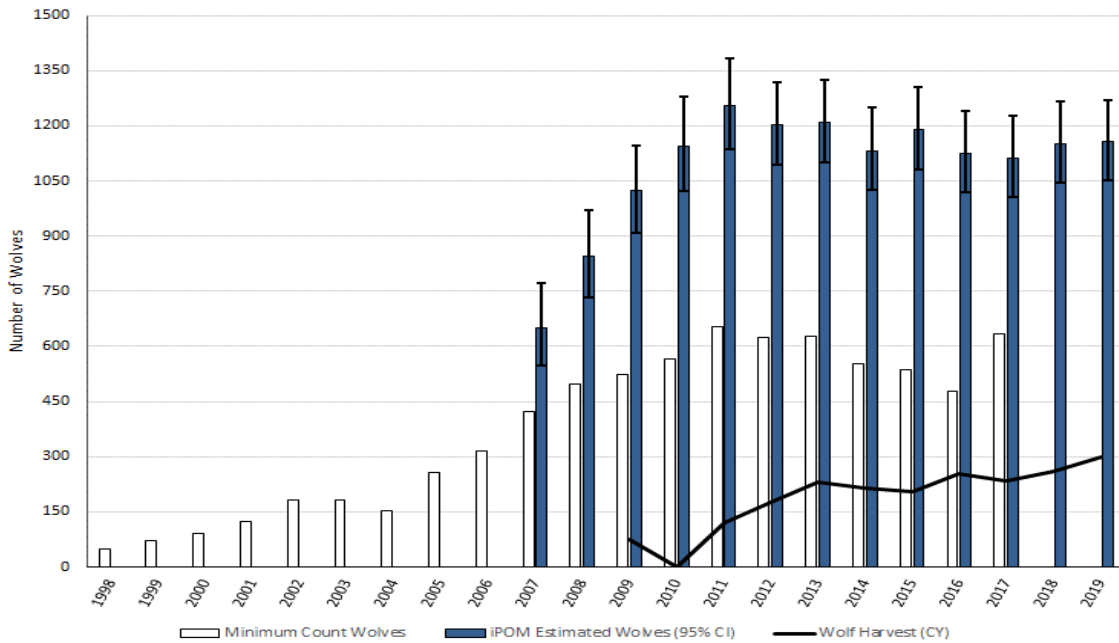


Figure 1. Estimated number of wolves statewide and wolf harvest by calendar year, 1998–2019 where bars indicate 95% credible intervals (Sells et al. 2020).

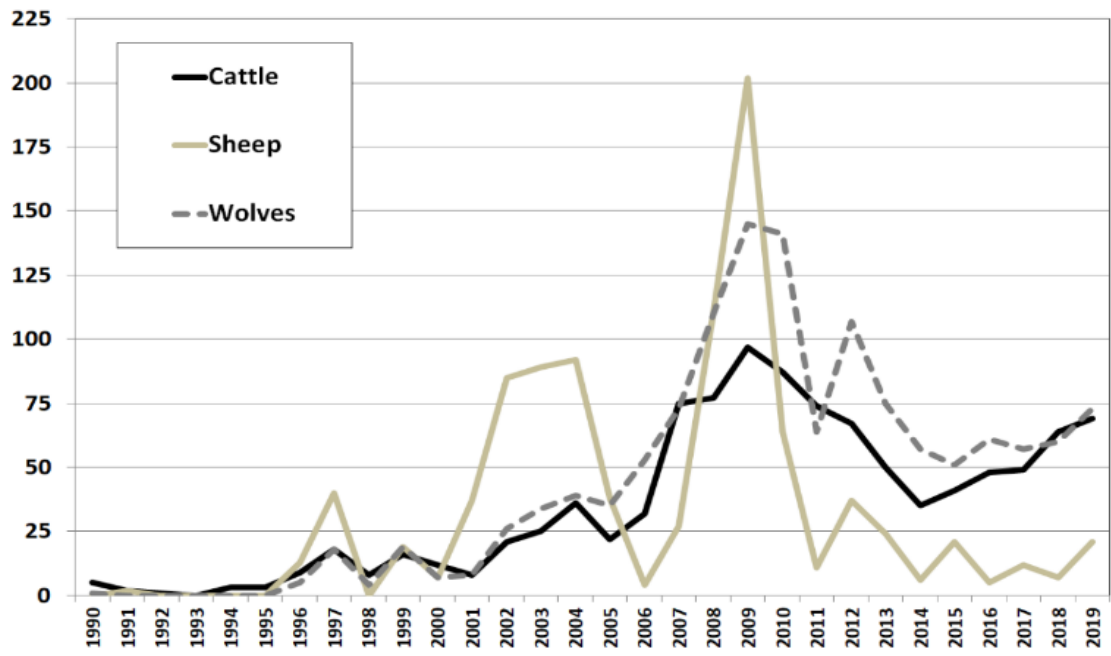
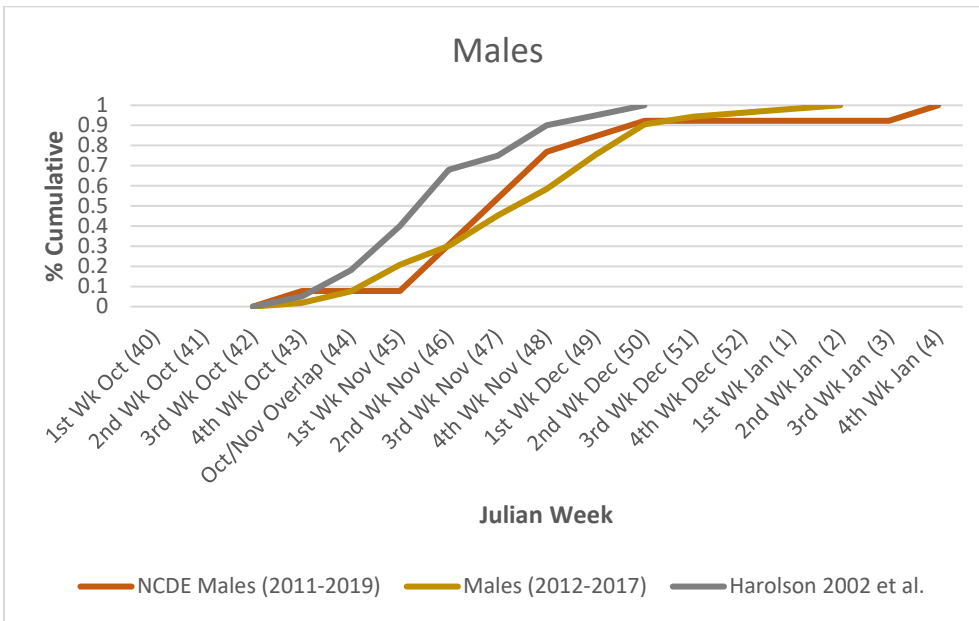
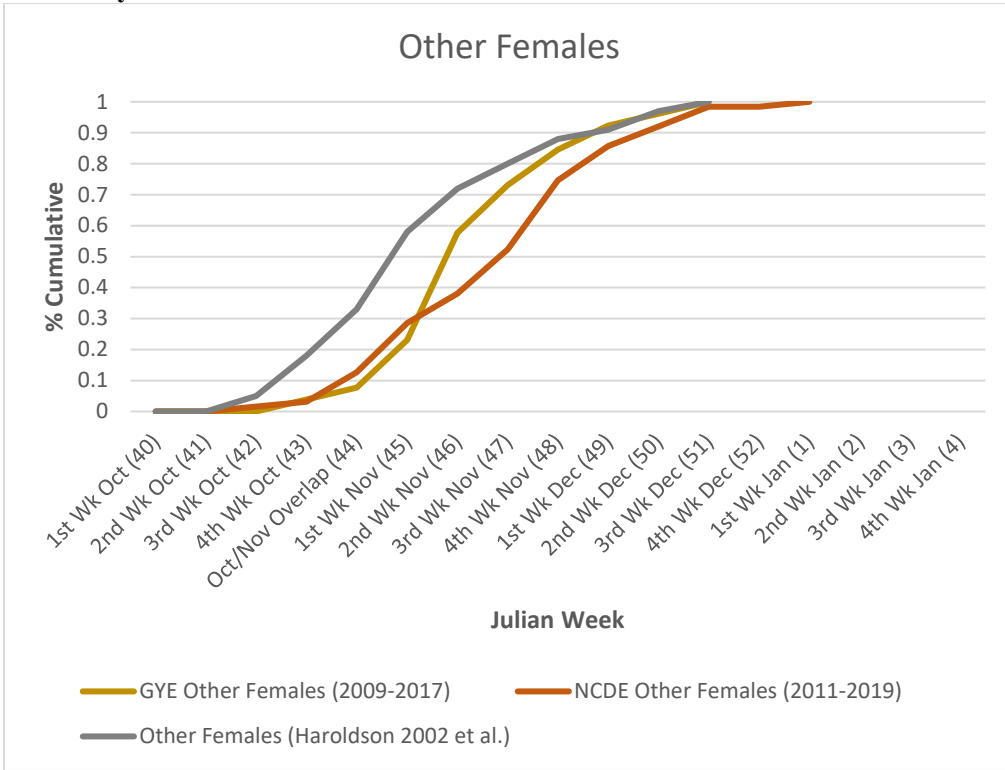


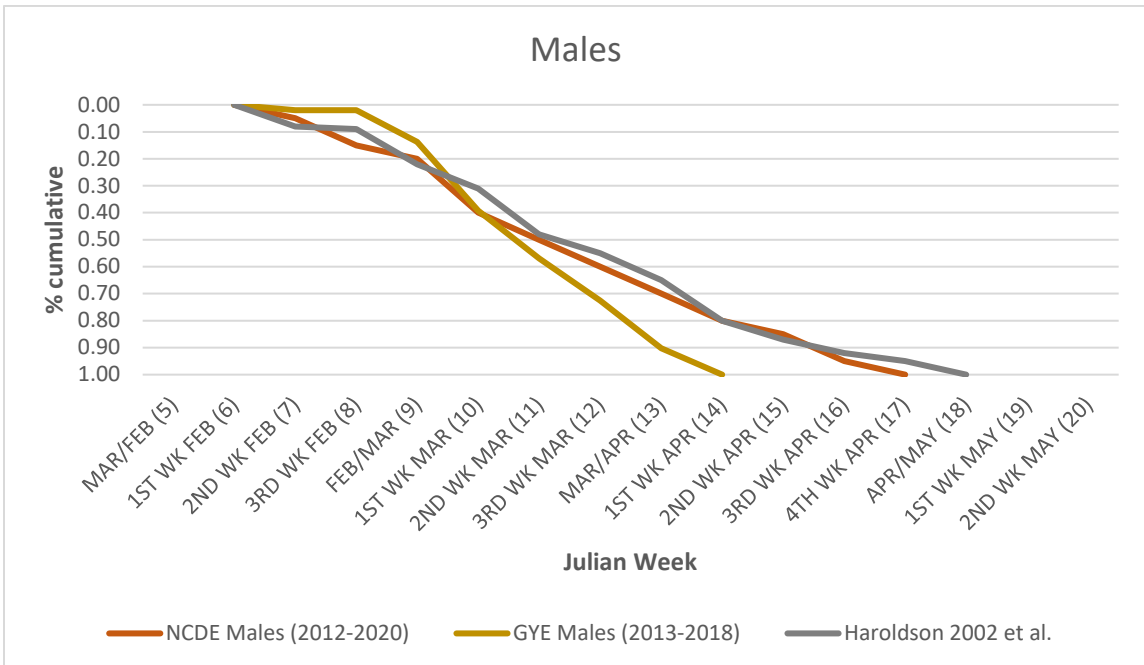
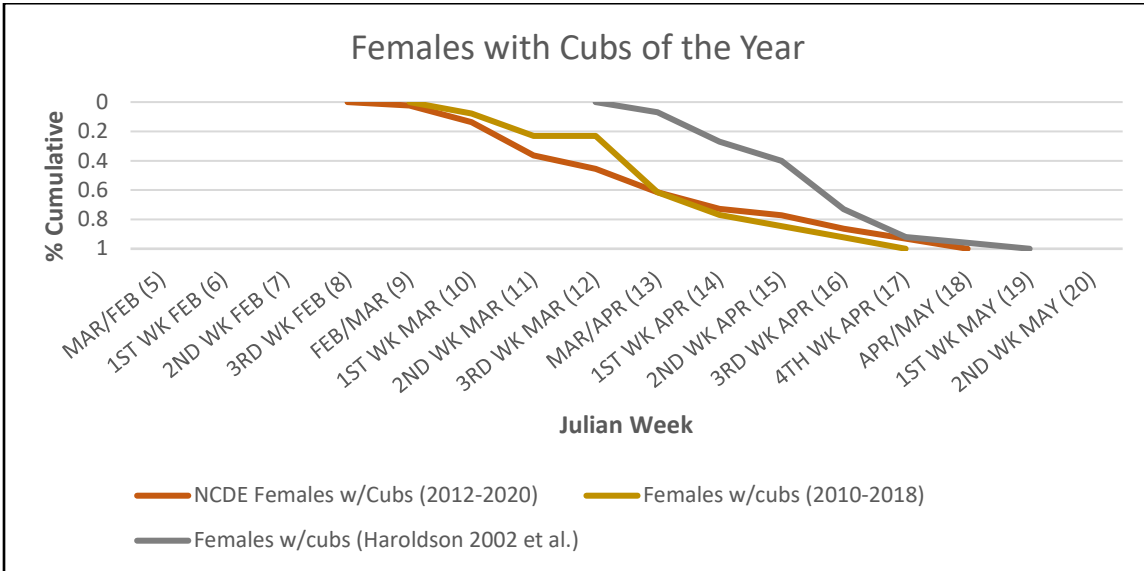
Figure 2. Livestock depredations and wolves lethally removed, Montana, 1990–2019.

Figures 3a-d. - Grizzly Bear Den Entry and Den Emergence Dates

Den Entry



Den Emergence



2. What is the objective of this proposed change? This could be a specific harvest amount or resulting population level or number of game damage complaints, etc.

The primary objective of this proposal is to describe a wolf harvest opportunity consistent with the legislative direction in SB 314 to reduce the wolf population, but not below the number of wolves necessary to support at least 15 breeding pairs. The legislative intent for the passage of SB 314 and other wolf-related bills was characterized in large part during legislative hearings as a response to concerns expressed by some members of impacts by wolves to wild ungulate populations (particularly in northwest/western MT). Again, FWP does not interpret this statutory language to require the population be reduced to the minimum number of wolves necessary to support only 15 breeding pairs.

The average number of wolves harvested by hunters and trappers over the 8-year period 2012–2019 was 242 per year. This level of harvest occurred during the third stage of modern management and represents the period with the most liberal wolf regulations to date in Montana. This resulted in a stabilized statewide wolf population averaging 1,150 wolves using the improved patch occupancy modeling (iPOM) estimate. Despite increased harvest, the 2020 iPOM estimate indicates the population remains stable, with an estimated population at the end of 2020 of 1,177 wolves in 197 packs. There were 328 wolves harvested in the 2020 wolf season.

3. How will the success of this proposal be measured? This could be annual game or harvest surveys, game damage complaints.

The proposal will be considered successful if:

- The 2021 statewide wolf population estimated with iPOM (Sells et al. 2020) shows a population decrease but not less than the number of wolves necessary to support at least 15 breeding pairs.
- Any resulting decreased population reduces conflict concerns with other wildlife species and livestock.
- Any resulting decreased population is large enough to maintain adequate flexibility for conflict response and harvest opportunities.
- Non-target captures are effectively minimized with no negative consequences to human safety or state management of wildlife.

4. What is the current population’s status in relation to the management objectives? (i.e., state management objectives from management plan if applicable; provide current and prior years of population survey, harvest, or other pertinent information).

Wolf Population Objective

Montana has committed through its Wolf Management Plan to maintain at least 150 wolves and 15 breeding pairs. Additionally, in the 2009 delisting rule (USFWS 2009), the United States Fish and Wildlife Service states, “To ensure that the NRM wolf population always exceeds the recovery goal of 30 breeding pairs and 300 wolves, wolves in each state [MT, WY, ID] shall be managed for at least 15 breeding pairs and at least 150 wolves in mid-winter.” The 2009 delisting rule also states, “Three scenarios could lead us to initiate a status review and analysis of threats to determine if relisting is warranted including: (1) If the wolf population for any one State falls below the minimum NRM wolf population recovery level of 10 breeding pairs of wolves and 100 wolves in either Montana, Idaho, and Wyoming at the end of the year; (2) if the portion of the wolf population in Montana, Idaho, or Wyoming falls below 15 breeding pairs or 150 wolves at the end of the year in any one of those States

for 3 consecutive years; or (3) if a change in State law or management objectives would significantly increase the threat to the wolf population.

Montana's 2004 Wolf Conservation and Management Plan does not specify a wolf population objective in terms of numbers of wolves. Instead, the plan indicates that wolf population influences on important human social considerations such as livestock conflicts and effects on deer and elk herds will drive management actions. The plan states that a threshold of 15 breeding pairs will be used to trigger increasingly conservative liberal management strategies:

“The wolf program will be based on principles of adaptive management. Management strategies and conflict resolution tools will be more conservative as the number of breeding pairs decreases, approaching the legal minimum. In contrast, management strategies become more liberal as the number of breeding pairs increases. Ultimately, the status of the wolf population itself identifies the appropriate management strategies. A minimum of 15 breeding pairs, according to the federal recovery definition (an adult male and an adult female with at least two pups on December 31) will be used as a signal to transition to more liberal or conservative management tools, whichever the case may be. This adaptive management trigger is not intended to be a minimum or maximum number of wolves “allowed” in Montana. FWP does not administratively declare an upper limit or maximum number of individuals of any wildlife species in the state in the sense of a “cap.” Instead, FWP identifies population objectives that are based on landowner tolerance, habitat conditions, social factors, and biological considerations. Wildlife populations are then managed according to the objectives and current population status, using an array of management tools.”

Additionally, the objectives below have been consistently applied in previous wolf season proposals and are applicable in this 2021 proposal as well.

1. *Maintain a viable and connected wolf population in Montana.*
2. *Gain and maintain authority for State of Montana to manage wolves.*
3. *Maintain positive and effective working relationships with stakeholders.*
 - 4a. *Reduce wolf impacts on livestock.*
 - 4b. *Reduce wolf impacts on big game populations.*
 - 4c. *Maintain sustainable hunter opportunity for wolves.*
 - 4d. *Maintain sustainable hunter opportunity for ungulates.*
5. *Increase broad public acceptance of sustainable harvest and hunter opportunity as part of wolf conservation.*
6. *Enhance open and effective communication to better inform decisions*
7. *Learn and improve as we go.*

Wolf Status in Relation to Objective

Montana has been above the threshold of 15 breeding pairs since 2005, and wolf numbers have been 6–8 times that threshold from 2009 to present (Sells et al. 2020; Fig. 1). The wolf population peaked during 2011 at an estimated 187 packs and 1,254 wolves. Harvest of wolves from 2011–2014 coincided with an 8% decline in wolf numbers, but for the last seven years, since 2014, the wolf population has remained relatively stable at about 190 packs and 1,150 wolves (Fig. 1).

Wolf numbers and trends vary by FWP Region (Fig. 5). Region 1 holds about 45% of the state's wolf population and the trend appears to have stabilized at near peak levels of 80 packs and 500 wolves. Region 2 holds about 25% of the population and has declined slightly to stabilize at around 50 packs and 300 wolves. Similarly, Region 3, which holds about 20% of the population, has declined slightly

over time and stabilized at around 35 packs and 215 wolves. A map showing wolf density in relation to elk density is provided in Fig. 6.

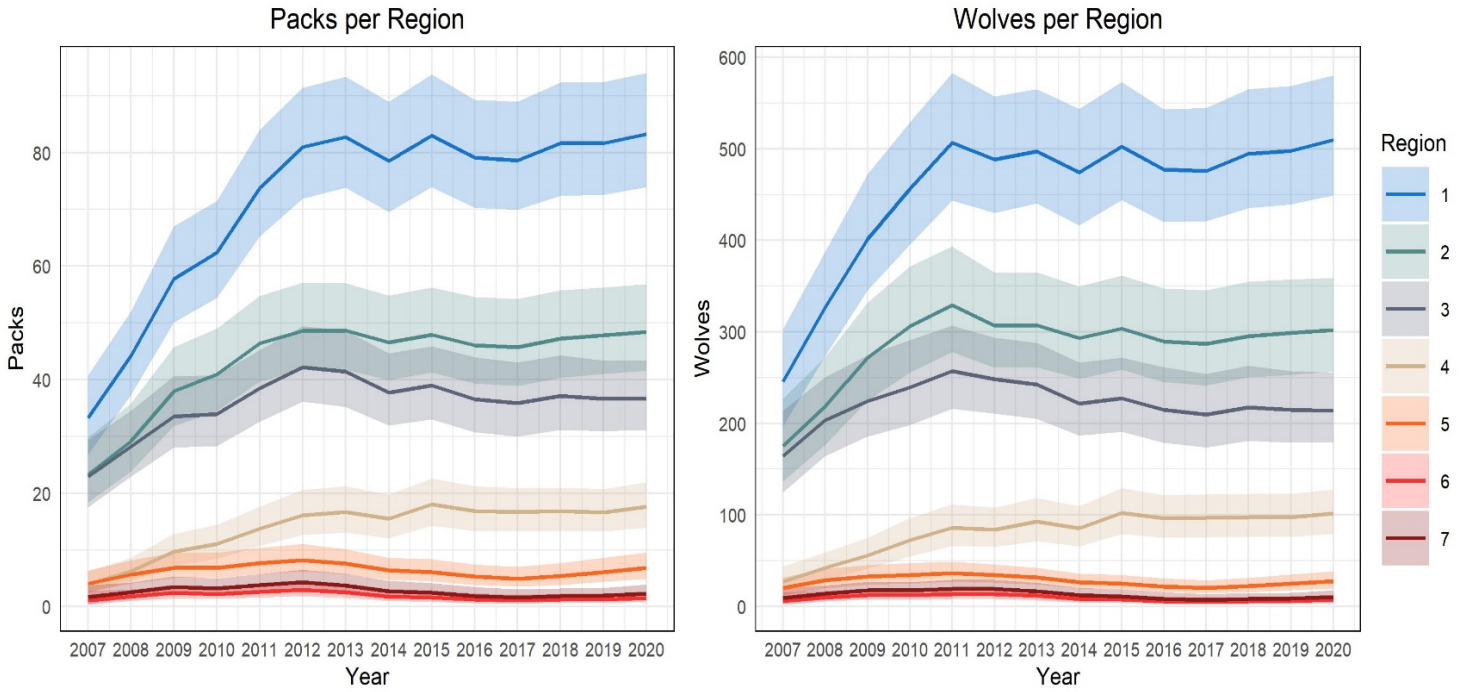


Figure 5. iPOM estimated number of wolf packs and wolves by FWP Region, 2007–2020. Ribbons indicate 95% credible intervals.

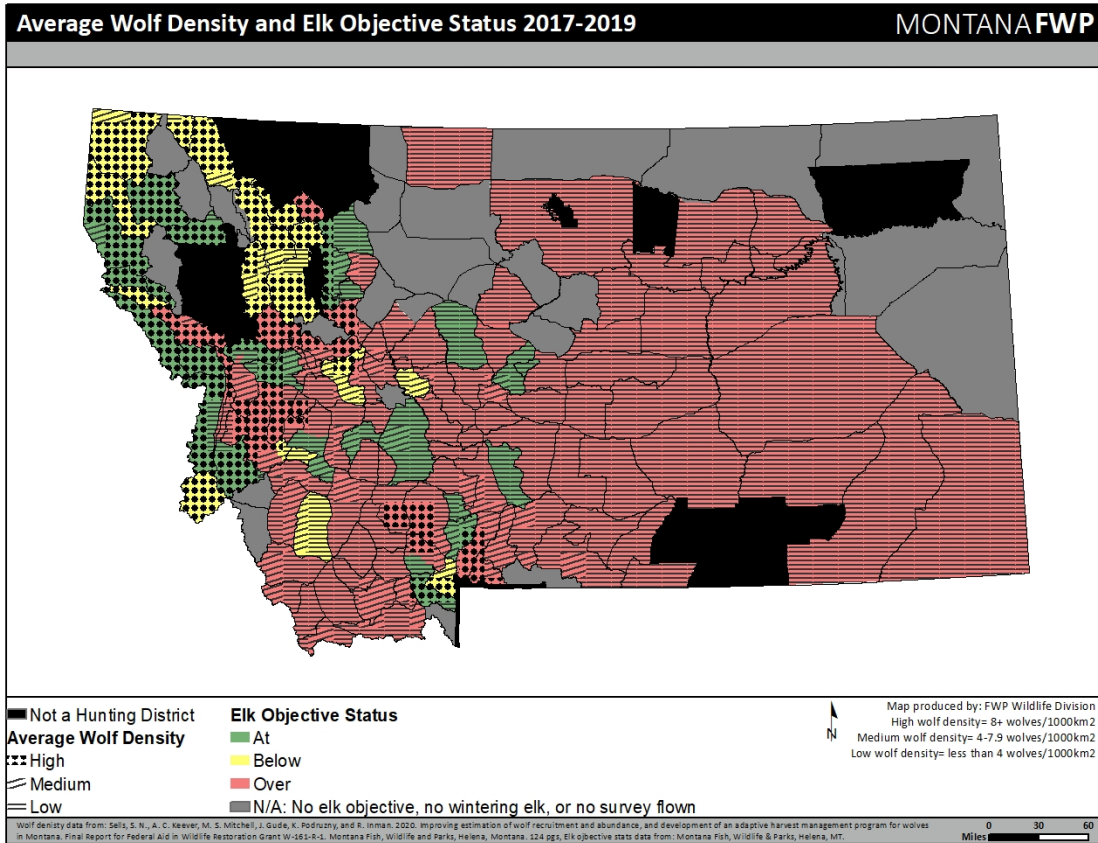


Figure 6. Map of mean 2017–2019 wolf density (low [<4 wolves/1,000 km²], medium [4–7.9 wolves/1,000 km²], and high [≥ 8 wolves/1,000 km²]) overlaid on elk population objective status (above, at, or below objective).

5. **Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature-precipitation information).**

Extensions of wolf trapping and snaring season dates increases the potential to capture grizzly bears. Season date changes should carefully consider the potential for public safety issues and potential impacts to ESA grizzly bear incidental take relative to trapping.

Weather conditions affect wolf trapping success, but snares are less susceptible to malfunction during severe winter conditions. As another trapping device, the use of snares has potential to increase non-target captures of other wild and domestic species, including federally listed grizzly bears and lynx.

6. **Briefly describe the contacts you have made with individual sportsmen or landowners, public groups or organizations regarding this proposal and indicate their comments (both pro and con).**

The wolf proposal which included a suite of options for different regulation variables, was put out for public comment between June 26 and July 26, 2021. At the close of the public comment period, the final count on comments was approximately 25,000, of which approximately 19,000 were form

letters from various NGOs, most of which expressed opposition to hunting and trapping of wolves. The majority of non-form comments (+90%) were in opposition to the hunting and trapping of wolves in general and/or support for only utilizing the limited new tools. Comments supporting the intermediate & maximum new tools, calling for FWP to follow legislative intent, along with general support for increased wolf take were in the minority. Where comments were provided that addressed the proposal and options, those were captured and included in a separate “summary of comments” document.

Montana’s wolf management goals were described in the 2003 Wolf Conservation and Management Plan (MFWP 2003, Hagener 2004). This plan initiated as a 2002 draft plan based on the work of Governor Racicot’s Montana Wolf Management Advisory Council. The Council was composed of 12 volunteers from around the state who represented a variety of interests including tribal, agriculture, hunting, and wildlife conservation. The Council was asked to advise MFWP as it prepared to assume wolf management responsibilities and to consider input from Montana citizens and other interested parties. The Council's draft plan was subsequently adapted into a draft and then a final environmental impact statement (EIS) with five alternatives (MFWP 2003). Alternative two was selected but was soon amended to a selection of alternative five (Hagener 2004) until wolves were federally delisted (alternative five was the same as alternative two except for those actions that could not be undertaken while wolves were still federally listed). This 4-year long process initiated with a governor’s council representing a broad spectrum of stakeholders and included an EIS process that held 14 community work sessions around Montana and accounted for an additional 5,500 comments on the draft EIS.

During its 2021 session, the Montana’s State Legislature passed several wolf-oriented bills intended to allow more opportunity for take of wolves and to reduce the overall population size.

Many ungulate hunters and most trappers are likely to support the increased opportunity to take wolves with new techniques and tools.

Individual experienced trappers have expressed concerns over allowing the snaring of wolves by people who have not been trained to avoid non-target animals. They have stated opposition to allowing use of snares on public lands prior to establishing a class to certify people to use snares. However, FWP lacks the authority to mandate a specific snare education class. FWP will incorporate responsible snare use into trapper education classes, but the Department cannot require this of trappers who do not meet the requirements for having to take trapper education beginning in 2022, established in SB 60 (2021).

Concerns about non-target captures of dogs and other wildlife in snares will also be a significant issue.

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