

MONTANA FISH, WILDLIFE & PARKS
HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION

Species: Moose
Region: 3
Hunting District: HD 324
Year: 2023

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

Description of proposed change - Eliminate Wise River-Grasshopper Portion in Moose HD 324 and associated Either-sex license HD 324-20. Within quota increase of Antlerless license 324-00 from the current 1 antlerless moose to 2 valid in HD 324. This would result in comparable harvest pressure in the district.

The proposed change would entail a boundary change in the elimination of the Wise River-Grasshopper portion, described on page 38 of the 2022/2023 Hunting District Legal Description. The entire entry for this portion would be eliminated along with the following text:

~~*Portion of HD 324 Grasshopper Drainage: That portion of HD 324 west of the following boundary: From the intersection of U.S. Highway 278 and Buffalo Creek, then north on said creek to Grasshopper Creek, then east on said creek to Dyce Creek, then north on said creek to the East Fork of Dyce Creek, then north on said creek to the Grasshopper Creek Divide at Baldy Mountain, then north on said divide (between the Grasshopper Creek drainage and Rattlesnake Creek, Birch Creek, Wise River drainages) to the Grasshopper Creek - Big Hole River Divide*~~

Prior history - The Grasshopper Portion of Moose HD 324 was established historically to concentrate additional harvest in the area to reduce game damage complaints. The last known game damage issues occurred in 2012 and in response the quota was increased from 1 to 2 moose in 2013. In 2017 the license was again reduced to 1 moose because of concerns about recent moose mortality, a perceived lack of moose numbers by moose hunters and some residents of Polaris. Since this time, hunter success has been low with an estimated 50% of moose hunters holding the 324-20 permit successful.

Along with the Wise River-Grasshopper 324-20 Either-sex permit, the district provides antlered moose hunting under the 324-50 permit and antlerless hunting under the 324-00 permit. Note that these permits are valid in the Wise River-Grasshopper portion and an estimated 17% of successful 324-00 permit holders and 23% of 324-50 permit holders harvested their moose in the portion since 2014. Currently, the quotas are set at 1 antlerless moose with the 324-00 permit and 4 antlered moose with the 324-50 permit. There has been a consistent reduction in opportunity since 2015 when permits were at a high of 16 for the district. This reduction has occurred because of concerns over high moose mortality, including vehicle strikes along the Wise River Scenic Byway, and relatively low hunter success (<80%). Overall hunter success has been estimated at 71% for all of HD 324 in the past 10 years.

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 current change is proposed to increase overall satisfaction of moose hunters in HD 324 by eliminating hunter frustrations concerning the difficulty of accessing hunting areas in the Wise River-Grasshopper portion. This area is predominately private land which is increasingly being subdivided resulting in limited hunting access for moose. Since 2017 only one 324-20 license has been offered and since this time hunter success has remained low (approximately 50% success).

Overall opportunity will remain comparable with additional availability of permits valid throughout the entire district without restricting hunters to a portion. This additional flexibility could help improve the harvest success in the district towards the objective of $\geq 80\%$ harvest success.

In addition, the proposed change is intended to reduce the potential for conflicts between residents of Polaris and moose hunters attempting to access moose on their land. There has been some contention in the past between residents and moose hunters, including a petition from residents to the Department in 2005 to eliminate moose hunting in the area.

The current change also accords with the simplification of regulations initiated in 2021 by eliminating a portion and an additional LPT.

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

Elimination of the Wise River-Grasshopper specific license is expected to increase overall hunter success in HD 324 and increase hunter satisfaction. An increase in hunter success will be measured based on harvest statistics gathered during annual moose hunter surveys and communication with moose license holders. Hunter satisfaction will be indicated by a reduction in hunter calls expressing difficulties in finding a suitable area to hunt.

A consistent increase in game damage complaints, that cannot be addressed by directing moose hunters to specific lands in the Grasshopper, will trigger a re-evaluation of the changes proposed here.

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).

Moose population surveys are not routinely conducted in Hunting District 324, due to extensive timber cover in most habitat types and no formal management plan exists for moose. The objective for the district is to maintain at least 80% success across all license types while monitoring the effort required to harvest a moose, within the context of the individual hunters desires. Overall hunter success in HD 324 has been approximately 71% over the past 10-years. This success rate is negatively influenced by the low (50%) success of hunters holding the 34-20 license.

Over the past 10 years the average age of bull moose for which hunters have submitted tooth samples has been 5.1 years-old. The objective will be to maintain an average age of harvested bulls of ≥ 5 years-old into the future.

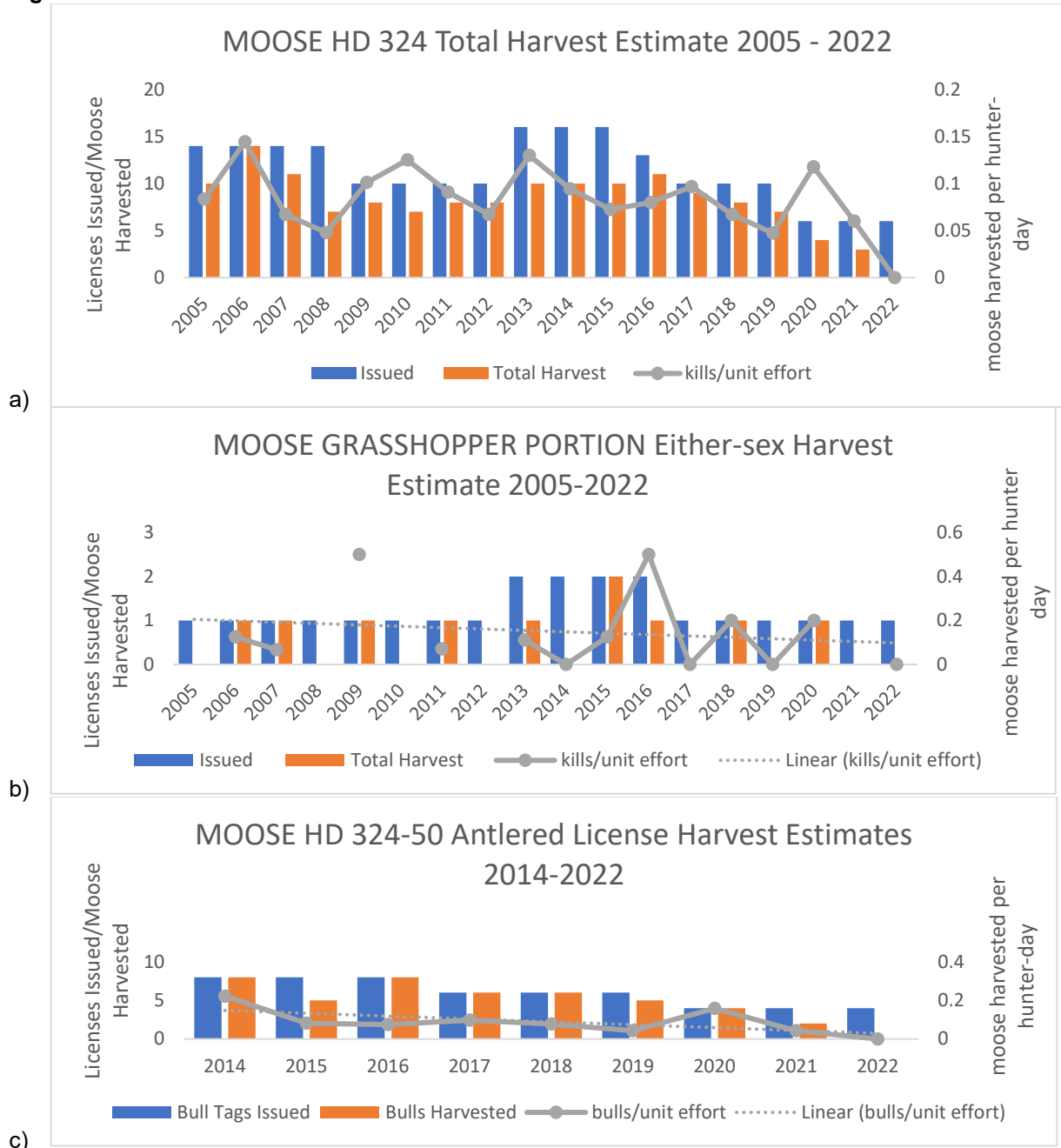
5. Provide information related to any weather/habitat factors, public or private land use or resident and nonresident hunting opportunity that have relevance to this change (i.e., habitat security, hunter access, vegetation surveys, weather index, snow conditions, and temperature / precipitation information).

The Wise River Byway area along Grasshopper creek has experienced substantial ex-urban residential development. This has increasingly constrained access to hunting in the area.

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).

This proposal was presented public scoping in meetings in Bozeman, Helena, Townsend, Livingston, Whitehall, Butte and Dillon. No concerns were raised during these meetings. This proposal was also discussed with Craig Fager, the former Dillon Wildlife Biologist who has extensive experience in managing moose in the area. It has also been discussed with 2 landowners in the Grasshopper area.

Figures:



Figures show the number of licenses issued (blue bars) and number of moose harvested (orange bars) along with the estimated number of moose harvested per hunter-day of effort (gray lines) for a) all moose hunting in HD 324, b) Grasshopper portion specific either-sex moose hunting, and c) antlered moose hunting only across HD 324. Note that the small number of hunters and imperfect response rate to surveys limits inferences on moose populations based on hunter success and kills per unit effort.

Submitted by: Jesse Newby

Date: 5/15/2023

Approved: _____
Regional Supervisor / Date

Disapproved / Modified by: _____
Name / Date

Reason for Modification:

**MONTANA FISH, WILDLIFE & PARKS
HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION**

Species: MOOSE
Region: 3
Hunting District: 326 AND 327
Year: 2024

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

- Create antlerless moose license 326-00 with a quota of 1 and range of 1-4.
- Create antlerless moose license 327-00 with a quota of 1 and range of 1-4.

Hunting Districts 326 and 327 are located in the upper Big Hole Valley and support some of the highest densities of moose in Montana. From 2003-2011, 2-19 antlered moose licenses were offered across both districts (Table 1). Antlerless moose licenses were eliminated in HDs 326 and 327 in 2012 due to increased wolf presence and predation in the Big Hole Valley along with several years of high hunter harvest. In recent years moose quotas have been adjusted to more appropriate levels and wolf density in the Big Hole Valley has been significantly reduced through management removals and hunter/trapper harvest. Subsequently, moose populations have increased to pre-wolf levels and licenses quotas have been held at more sustainable levels based on annual assessments.

Table 1: Number of antlered and antlerless moose licenses offered in HDs 323 and 327, 2003-2022. Antlered=A+, Antlerless=A-

YEAR	326-00	327-00
2003	7	10
2004	12	7
2005	12	7
2006	12	7
2007	12	7
2008	8	5
2009	6	3
2010	1	1
2011	1	1

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 objective of this proposed action is to increase harvest opportunity commensurate with sustainable moose populations and wildlife watching opportunities and minimizing game damage complaints.

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

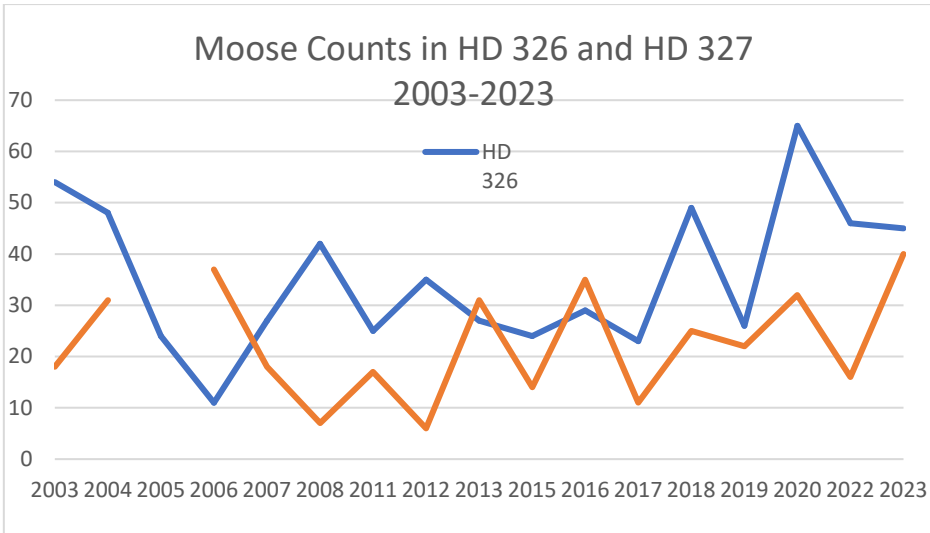
The effects of this proposal will be measured according to these three management objectives, using 2025 population data and LY2024 harvest data, in comparison with previous years' data.

Objective # 1- Maintain calf-to-adult ratios $\geq 20:100$ as observed from winter aerial surveys.

Objective # 2 - Sustain moose populations at such a level so that days per hunter is less than or equal to the long-term average for at least two of the past three years.

Objective # 3 - Sustain moose populations at such a level as to offer high-quality harvest success of ≥80% for at least two of the past three years.

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).**



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).**

Hunting Districts 326 and 327 contain very good moose habitat with large expanses of willow bottoms and swamps. In addition, stackyards and cattle feed lines supplement moose diets during the winter. Typically, 1-3 moose game damage complaints are received from these hunting districts annually. Access to hunters is typically very good. Many landowners allow moose hunting on their property. Access is very good on public land.

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).**

This proposal has been circulated amongst many interested parties via the Butte area wildlife biologist’s distribution list as well as vetted through the FWP biennial scoping process.

Submitted by: Vanna Boccadori

Date: 23 May 2023

Approved:

 Regional Supervisor / Date

Disapproved / Modified by:

 Name / Date

Reason for Modification:

**MONTANA FISH, WILDLIFE & PARKS
HUNTING SEASON / QUOTA CHANGE SUPPORTING INFORMATION**

Species: Moose

Region: 7

Hunting District: Region 7 (DEA HDs 700, 701, 702, 703, 704, and 705)

Year: 2024

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

FWP is proposing to create a new general hunting season, license, and hunting district for moose in Administrative Region 7. FWP proposes the creation of one, either-sex licenses valid from September 15th and closing concurrent to the general season, which would be valid throughout all Administrative Region 7 (see legal description below).

Moose have been observed across Region 7 for decades, but there has not been an established season for them due to their typically transient nature, widespread distribution, and low abundance, which is typically common for moose across their range but to a lower extent in the region as the population was not well established. Recently though, data has been gathered providing some insight to moose within Region 7. As part of the "Vital rates, limiting factors and monitoring methods for moose in Montana" research that FWP embarked on over a decade ago deer and elk hunters have been queried for moose sightings for the 2012 – 2016 seasons and then again starting in 2021 to current. Moose sightings from the queried deer and elk hunters have ranged from 11 – 75. Through the data collected during those survey efforts moose have been observed in all deer/elk hunting districts within Region 7 and the highest number of observations has come from the 2021 season. Additionally, FWP staffed have recorded observations over the recent years of moose spread out across the region that includes mature and immature bulls, adult cows, yearling cows, and cow: calf pairs. The latter observations show that moose have become established within the region and are successfully breeding within the area. Landowners along the Yellowstone River are also beginning to experience crop depredation due to moose numbers increasing along the riparian habitat. The creation of a hunting license and season in Region 7 would provide hunting opportunity for the moose that appear to be increasing in numbers and provide a management tool for landowners dealing with the growing moose population in agricultural areas.

700 Region 7: Those portions of Big Horn, Carter, Custer, Dawson, Fallon, Garfield, McCone, Musselshell, Prairie, Powder River, Richland, Rosebud, Treasure, Yellowstone and Wibaux Counties lying within the following described boundary: Beginning at the Musselshell River Bridge near Mosby on State Route 200, then north down the Musselshell River to the Missouri River, then east and north down the Missouri River to the Fort Peck Powerhouse, then south along the east shore of the Fort Peck Reservoir to Big Dry Creek, then south up Big Dry Creek to Little Dry Creek, then up Little Dry Creek to State Route 200, then west on State Route 200 to Brockway, then northeasterly along said route through Sidney to the Montana-North Dakota border, then south along said border to its intersection with the Montana-South Dakota-Wyoming junction, then west along the Montana-Wyoming border to the east boundary of the Crow Reservation, then north along said boundary to the Northern Cheyenne Reservation boundary, then east along said boundary to the Tongue River, then north down said river to the northeast corner of the Northern Cheyenne Reservation boundary, then west along said boundary to the east shore of the Bighorn River, then northerly along said east shore to its junction with Interstate 94, then west along said interstate to its junction with the Custer-Melstone Road at Custer, then north along said road to its junction with US Highway 12 at Melstone, then east on said highway to the Musselshell River, then north down said river to its intersection with State Route 200 near Mosby, the point of beginning.

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.

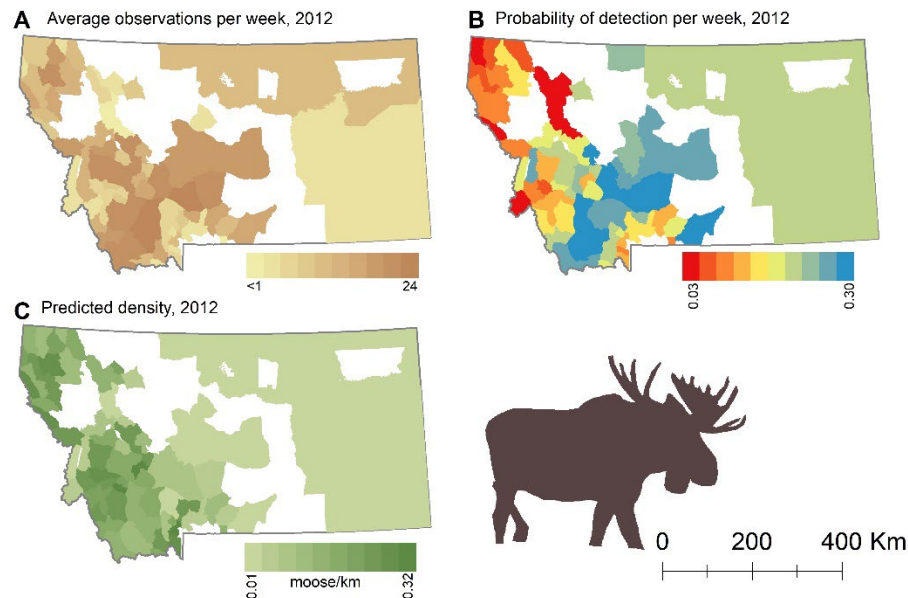
The objective for this proposal would be to provide a new hunting opportunity to sportsmen to hunt moose in Region 7 where moose are known to occur.

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

The success of the proposal will be measured in the harvest success of those hunters that successfully draw the licenses. Information will be measured through a voluntary hunter data card that would be sent to the license holders and would gather information on whether the applicant was successful in filling their license, location of kill, sex of moose, antler spread for a bull moose, and the total amount of moose observed while hunting. Additionally, data gathered from the queried deer and elk hunters about moose observations will also be tracked for long-term monitoring over space and time (Federal Aid in Wildlife Restoration Grant W-157-R-7 Annual Report, 2022). FWP will continue to track moose observations throughout the region. These data will be used in conjunction with each other to assess success of the season and how future season quotas and license structure would be adjusted to ensure the long-term viability of moose within Region 7.

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).

There is currently no population status or management objective for moose in Region 7. Based on observations from queried deer and elk hunters and observations of FWP staff, moose appear to be expanding and successfully breeding in the Region and the goal is to maintain this success while providing some limited hunting opportunity. Success of license holders and moose observations will be assessed to determine future management objectives.



North Dakota reports moose have been increasing on the western side of the state since the mid-2000s, primarily along the Upper Missouri River. Wyoming’s moose population in the Bighorn Mountains is stated to be stable to slightly increasing. These population sources along the Region’s boundaries are potentially providing the individuals that not only move through the area but have also taken up residence in the area.

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).

There appears to be sufficient moose habitat along the Yellowstone River, with a majority of the landownership being private land that provides suitable security cover for moose. Hunter access may be limited along the riparian habitats where moose have been frequently observed, but there are multiple WMAs and other access points that can provide access opportunities. Hunters may need to contact private landowners for additional access opportunities.

Recent drought and winter weather have not appeared to have had an impact on the moose in the region as no mortalities due to these weather conditions have been reported.

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).

We have engaged with landowners and members of the public over the recent year about this proposed opportunity and support was expressed by all contacted. During recent season setting meetings support was again received for the proposal and comments related to the proposal was also supportive. There has been interest expressed in providing an opportunity for hunters, as well as assistance to landowners that occasionally deal with crop depredation issues from moose. The public has also expressed that hunting opportunity should be managed appropriately so that the population does not experience negative impacts that would produce a long-term decline.

Submitted by:

Date:

Approved:

Regional Supervisor / Date

Disapproved / Modified by:

Name / Date

Reason for Modification: