

# Summary of Research



Montana Fish,  
Wildlife & Parks

## Selected Results from Surveys of Elk Hunters & Private Landowners Regarding Elk Management in Montana's Hunting District 204

HD Unit Research Summary No. 37

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**Abstract:** In 2014, Montana Fish, Wildlife & Parks (FWP) conducted surveys of hunters and private landowners regarding elk hunting and elk management in Hunting District 204 located just south and east of Missoula, Montana. Both groups reported general satisfaction with elk management in this district, despite the perception that elk numbers appear to be lower than desired. Survey results also revealed that hunters and landowners have different preferences for hunting regulations. Resident elk hunters prefer less restrictive hunting regulations that do not limit bull hunting opportunity, while private landowners appear to be more accepting of more restrictive regulations that could be used to manage for higher numbers of mature bulls in the area. Last but not least, survey results also demonstrate that there is a perception that elk are being moved to privately owned lands where there is limited hunting pressure. Keeping this in mind, FWP is currently in the process of conducting biological research in this part of the state to learn more about elk distributions and the quality of habitat for elk. This information will be used to better understand what proportions of herds are currently migratory and how elk are currently using the landscape both during the hunting season and at other times of the year. This information, in combination with the survey results presented herein, will be used by FWP to make better informed elk management decisions in this important part of Montana.

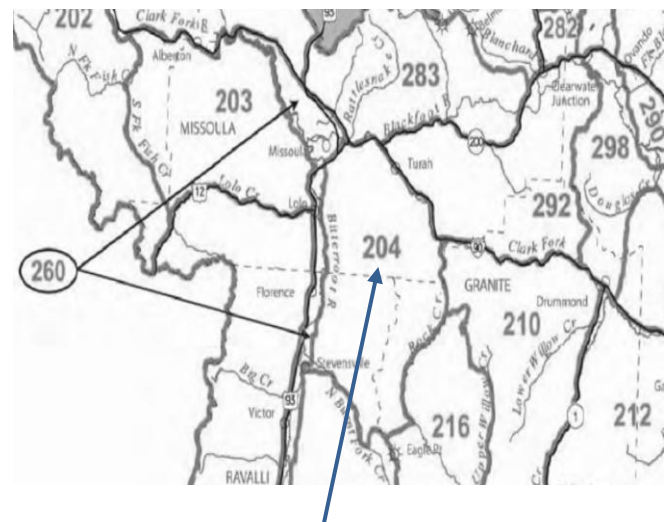
## BACKGROUND INFORMATION

The Sapphire elk herds in HD 204 are located in Missoula's backyard, and as such provide important hunting and recreational opportunities. Recently, landowners and sportspersons from this area have approached FWP with concerns regarding problematic elk distributions, current elk numbers, how hunting should be managed, and hunting access. In response, FWP conducted surveys to gather baseline information from both resident elk hunters and private landowners regarding the following:

1. *Current elk population management objectives.*
2. *Current elk hunting regulations.*
3. *Specific issues related to elk hunting access.*

**Resident Elk Hunter Survey:** In mid-June 2014, surveys were sent out to a randomly selected sample of N=5,000 resident elk license holders who live in Missoula, Ravalli, and Granite counties in Montana. These counties were selected for study sampling based on information from FWP's Hunter Harvest Survey that revealed 92 percent the elk hunters who reported that HD 204 was one of their top three districts to hunt elk in 2012 reside in the geographic area comprising these three counties. In total, surveys were successfully delivered to a total of N=4,442 of the 5,000 resident elk hunters randomly selected for study. A replacement survey was sent out to all survey non-respondents approximately three weeks following the initial mailing of the survey. There were a total of 1,829 respondents which resulted in an overall 41 percent survey response rate. Thirty percent of the survey respondents reported hunting elk in HD 204 at some point in time during the past ten years. These resident elk hunters were the focus of the resident elk hunter survey.

**Private Landowner Survey:** During the same timeframe as the resident elk hunter survey, surveys were also sent out to all (N=78) private landowners identified in Montana's State Cadastral database as owning at least 160 acres in the geographic vicinity of Hunting District 204. In total, surveys were successfully delivered to N=71 of these landowners. A replacement survey was sent out to all survey non-respondents approximately three weeks following the initial mailing of the survey. There were a total of 33 respondents which resulted in an overall 47 percent survey response rate.



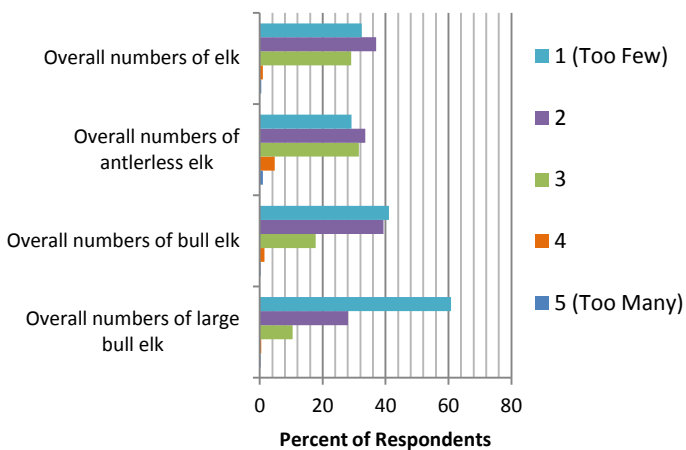
**Hunting District 204 (North Sapphire) is located just south and east of Missoula, Montana.**

# SURVEY RESULTS

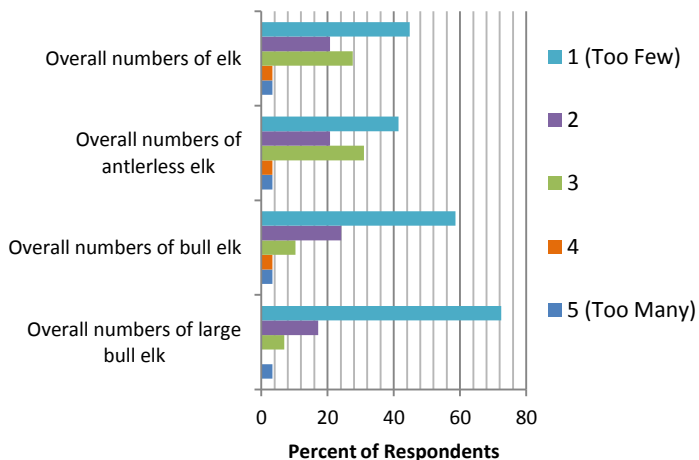
## PERCEPTIONS OF ELK NUMBERS

Hunters and landowners were asked their perceptions of current elk numbers in HD 204 during the hunting season. In general, both groups were in agreement with one another that elk numbers appear to be lower than desirable (see Figures 1 & 2 below). For instance, on a scale from 1 (too few) to 5 (too many), nearly 70 percent of the resident hunters scored overall numbers of elk in HD 204 during the hunting season as being a “1” or a “2”. This compares to 66 percent of private landowners who rated overall elk numbers on their land during the hunting season as being a “1” or “2”.

**Figure 1.** Resident elk hunter response to: “At present (e.g., during the past three years), on a scale from 1 (too few) to 5 (too many), how would you rate the following in HD 204 during the hunting season?”



**Figure 2.** Private landowner response to: “At present, on a scale from 1 (too few) to 5 (too many), how would you rate the following ON YOUR PROPERTY during the hunting season?”



Hunters and landowners were also asked about their perceptions of changes in elk numbers over time. Once again, both groups were in relative agreement with one another that there appears to be fewer elk now compared to the past. It is worth noting that a much higher percentage of hunters reported they believe there are currently fewer elk. For instance, 73 percent of the resident hunters reported they are currently seeing fewer overall numbers of elk in HD 204 during the hunting season compared to the past. This compares to 46 percent of private landowners who reported they are currently seeing fewer elk on their property during the hunting season as compared to the past.

Both private landowners and resident elk hunters reported similar reasons for why they believe elk numbers appear to be decreasing. The most frequently mentioned reasons reported by respondents were as follows (listed in order of magnitude received):

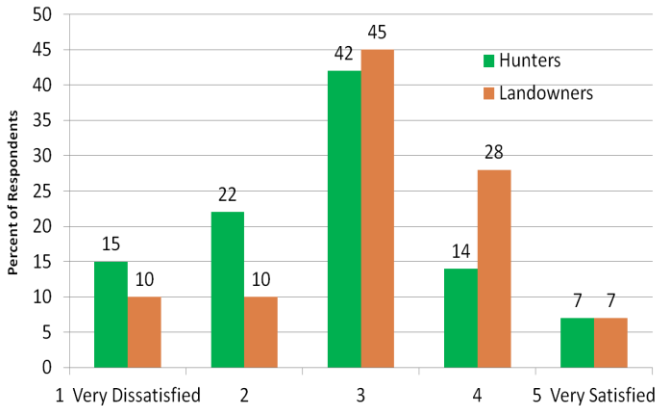
- *Wolves.*
- *Too much hunting pressure; the area is over hunted.*
- *Concerns about predators in general (e.g., wolves, bears, mountain lions, etc.).*
- *Weather/climate change.*

## PERCEPTIONS OF ELK HUNTING REGULATIONS AND OVERALL ELK MANAGEMENT

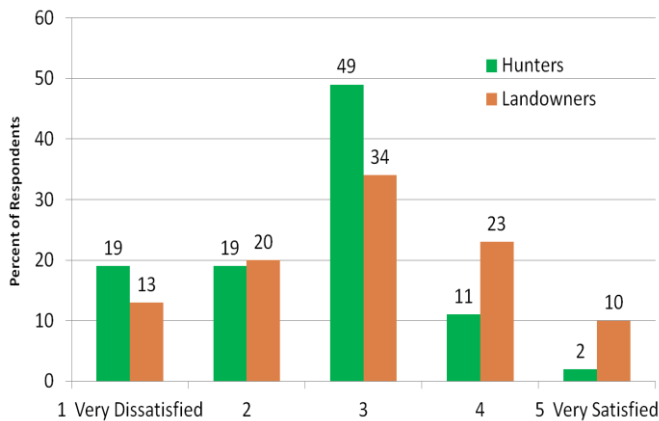
In total, 63 percent of the respondents to the resident elk hunter survey and 80 percent of the respondents to the private landowner survey reported general satisfaction with the current elk hunting regulations in HD 204 (see Figure 3 on the next page). *At the time of the survey, current regulations were as follows: Brow-tined bull or antlerless elk during the archery only season. Brow-tined bull during the general rifle season (with the exception of antlerless elk for youths only ages 12-15). Additionally, there are 30 antlerless elk B licenses available by drawing for this hunting district.*

About 62 percent of the respondents to the elk hunter survey and 67 percent of the respondents to the landowner survey reported general satisfaction with current elk management HD 204 (see Figure 4 on the next page).

**Figure 3.** Resident elk hunter and private landowner response to: “On a scale from 1 (very dissatisfied) to 5 (very satisfied), how satisfied are you with the current elk hunting regulations in HD 204?”



**Figure 4.** Resident elk hunter and private landowner response to: “On a scale from 1 (very dissatisfied) to 5 (very satisfied), how satisfied are you with the current elk management in HD 204?”



Respondents to both the elk hunter and landowner surveys provided numerous comments regarding current elk hunting regulations and elk management in general. The most frequently received comments were as follows (listed in order of magnitude received):

- *Concern about wolves and their effect on the elk population in the area.*
- *Concern about predators in general.*
- *Concerns about “harboring” and that elk are located primarily on privately owned land that offers little or no hunting access.*
- *Concerns about declining elk numbers.*

## PREFERENCES FOR ELK HUNTING REGULATIONS

Managing for higher numbers of mature bull elk (e.g., bulls 4-5 years of age or older) may require implementing more restrictive hunting regulations. With this in mind, both elk hunters and landowners were asked the following forced-choice question to help assess how restrictive elk hunting regulations should be in HD 204.

*Given only ONE CHOICE, which of the following would be most favorable to you in HD 204?*

**58%** *The opportunity to hunt bull elk every year in this hunting district (with a lower probability of harvesting a mature bull elk)*  
**46%**

**-OR-**

**42%** *The opportunity to hunt bull elk once every several years in this hunting district (with a higher probability of harvesting a mature bull elk)*  
**54%**

**Green color = hunter response**

**Tan color = landowner response**

## ELK HUNTING ACCESS

Two-thirds of the respondents to the landowner survey reported they allow elk hunting on a least a portion of the property they own in the HD 204 area. Thirty percent of those landowners reported they do not allow cow elk hunting. Ten percent of those landowners reported they do not allow bull elk hunting.

Of those landowners who allow cow elk hunting, 69 percent reported they primarily manage antlerless elk hunting using a non-Block Management system (without fees) that involves mostly hunters who are family and/or friends. Of those landowners who allow bull elk hunting, 81 percent reported they primarily manage bull elk hunting using a non-Block Management system (without fees) that involves mostly hunters who are family and/or friends. None of the landowners who allow elk hunting reported they outfit, lease hunting opportunities, or charge hunters access fees to hunt elk on their property.

With respect to the hunter survey, 85 percent of the respondents reported they primarily hunt on publicly owned land in HD 204. Only two percent reported primarily hunting on non-Block Management private land (without a fee) that is not owned by their family, relatives, a close friend, or friends of family/relative.

## CHARACTERISTICS OF THE SURVEY RESPONDENTS

### Private landowners:

- Nearly 70 percent of the respondents reported that their primary motivation (or reason) for owning property in the HD 204 area was for wildlife related reasons (e.g., viewing, wildlife habitat, conservation), recreation, land conservation, and/or preserving open space. Thirty percent of the respondents reported agriculture or livestock production as the primary motivation for owning land in the area.
- Forty-nine percent of the respondents reported owning 160-319 acres; 24 percent reported owning 320-1279 acres; 15 percent reported owning 1280-2559 acres; and, 12 percent reported owning 2560 or more acres in the HD 204 area. On average, respondents reported owning their property in the HD 204 area for 27 years.
- The average age of respondents was 60 years. Seventy-nine percent of the respondents were male; 21 percent female.

### Resident elk hunters:

- Sixty percent of the respondents reported elk hunting in HD 204 is important or very important to them. Fourteen percent reported elk hunting in this district is unimportant or very unimportant to them.
- The most frequently mentioned motivations reported by respondents for hunting elk in the HD 204 area included the following: *It's close to home, to obtain meat/food, for recreational purposes, and hunting heritage/familiarity with the area.*
- Twenty percent of the respondents reported they primarily hunting elk in HD 204 during the archery elk season; 63 percent reported hunting primarily during the general rifle season; and, 17 percent reported hunting an equal amount of time during the archery and general rifle seasons. On average, respondents reported hunting elk about nine days per year in HD 204.
- The average age of respondents was 48 years. Ninety-two percent of the respondents were male; eight percent female.

## DISCUSSION

Survey results suggest that both hunters and landowners are in agreement with one another in a number of areas. There appears to be general hunter and landowner satisfaction with elk management in HD 204, despite the perceptions of both groups that elk numbers may be lower than desired. The biggest concerns expressed by survey respondents revolved

around topics such as wolves (and predators in general), over-hunting, and a perception that elk are typically found on privately owned lands with little or no hunting access during the hunting season.

On the other hand, hunters and landowners appear to be in less agreement with one another regarding their preferences for elk hunting regulations in HD 204. Nearly 60 percent of the respondents to resident elk hunter survey prefer less restrictive elk hunting regulations that do not limit bull hunting opportunity. This compares to 42 percent of the respondents to the private landowner survey.

Not unlike many other locations in Montana, survey results also demonstrate that gaining access to hunt elk on privately owned land in HD 204 may be challenging if hunters do not have a direct connection to a landowner. That's not to say that there isn't considerable opportunity for hunting elk in HD 204 on publicly owned land and private land enrolled in Block Management. But are elk located on these lands during the hunting season? Results from the hunter survey hint that elk may moving to privately owned land where there is less hunting pressure. To help answer this question, FWP is currently in the process of conducting biological research in this area to learn more about elk distributions and the quality of habitat for elk. This information will be used to better understand what proportions of herds are currently migratory and how elk are currently using the landscape both during the hunting season and at other times of the year. This information, in combination with the survey results presented herein, will be used to FWP to make better informed elk management decisions in this important part of Montana. 🌍

## ABOUT THE AUTHORS

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