

# Summary of Research



Montana Fish,  
Wildlife & Parks

## Hunting Access Management on Private Lands in Montana: Selected Results From a 2008 Landowner Study

RMU Research Summary No. 27

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In 2008, Colorado State University (CSU), the Western Association of Fish & Wildlife Agencies (WAFWA), and Montana Fish, Wildlife & Parks (FWP) partnered to conduct a statewide survey of private landowners in Montana regarding hunting access management on private lands and views about fish and wildlife. The overall purpose of this collaborative study was to better understand how private landowners manage hunting access on the lands they own in Montana. The study also included an assessment of landowner values toward wildlife and wildlife management.

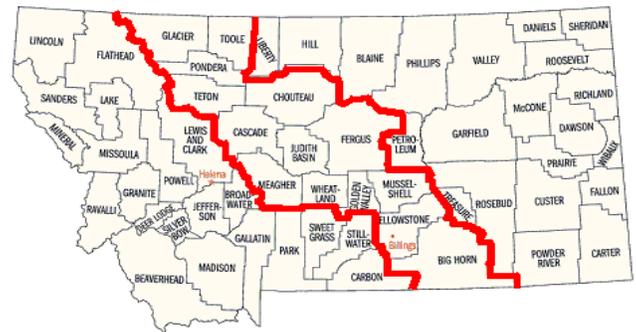
This study is the first of its kind to be conducted in Montana, and is intended to provide baseline data that can be used to document trends in private land hunting access management over time. Study results will enable FWP to better understand how hunting is currently managed on private lands in the state, and help the agency determine implications and develop plans for working with private landowners in the future on issues related to hunting access and wildlife management.

The primary objectives of the study were as follows:

1. To investigate the extent to which hunting occurs on private lands in Montana for deer, elk, antelope, and upland game birds<sup>1</sup>.
2. To understand which systems landowners are currently using to manage hunting access on their lands. The eight different types of management systems evaluated in the survey included:
  - Block Management Hunting Access Program.
  - Non-Block Management hunting without a fee involving mostly hunters who are family/friends.
  - Non-Block Management hunting without a fee involving mostly hunters who are NOT family/friends.
  - Outfitting by the landowner.
  - Outfitting by a licensed outfitter other than the landowner.
  - Lease agreement with a non-outfitting business that markets hunting opportunities.
  - Lease agreement with a hunter or group of hunters.
  - Access fees (non-lease) charged per hunter or group of hunters.

The target population for this study was private landowners in Montana, with a focus on those who own *at least 160 acres*. Data were collected via a mail-back survey administered to a randomly selected sample of 3,000 landowners during the summer of 2008. Sampling was stratified by region to ensure relatively equal representation of landowners across three major areas of the state—west, central, and east.

Figure 1. West, central, and east regions of Montana.



## RESULTS

This research summary provides selected results from this survey. Detailed study results (including results by species, region of the state, and size of landholdings) are available in a comprehensive project report (McCoy, Teel, & Lewis; 2008).

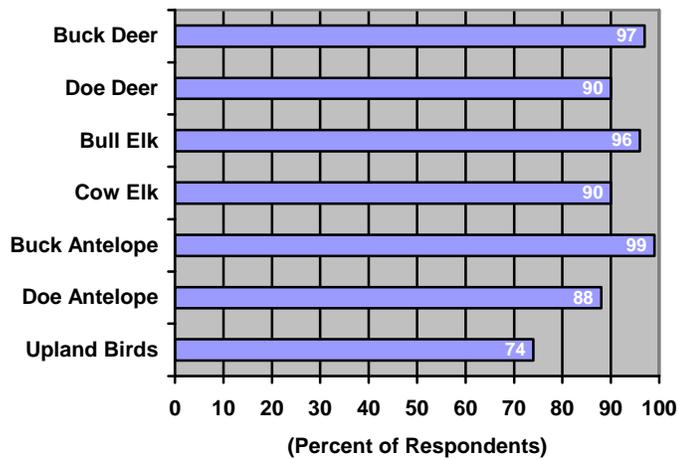
A total of 1,418 landowners provided input, resulting in a 47 percent response rate to the survey. Findings reported for the state as a whole (as opposed to by region) are based on data that has been weighted to accurately reflect the true proportion of landowners found in each region of the state. In addition, data reported at the state level as well as by region were weighted to accurately represent the true distribution of landowners across three land size categories of interest for this study (less than 2500 acres, 2500-6400 acres, and greater than 6400 acres).

## HUNTING FOR DEER, ELK, ANTELOPE, AND UPLAND GAME BIRDS

The majority of landowners who responded to the survey reported that hunting occurs for the species that were present on their lands (see Figure 2 on the next page). Landowners in the eastern region of the state reported the highest levels of hunting occurrence on their lands across species, except for elk which had higher percentages reported for the western and central regions (where elk are more prevalent in Montana). For ungulate species (deer, elk, and antelope), hunting tended to occur more often for male species.

<sup>1</sup> For the purposes of this study, upland game birds were defined to include pheasants, Hungarian partridge, and sharp-tailed grouse (mountain grouse, sage grouse, and turkeys were excluded from the upland game bird classification used in the study).

Figure 2. Percent of landowners reporting that hunting occurs on their land for deer (buck versus doe), elk (bull versus cow), antelope (buck versus doe), and upland game birds—as reported by landowners who indicated they have these species on their land.



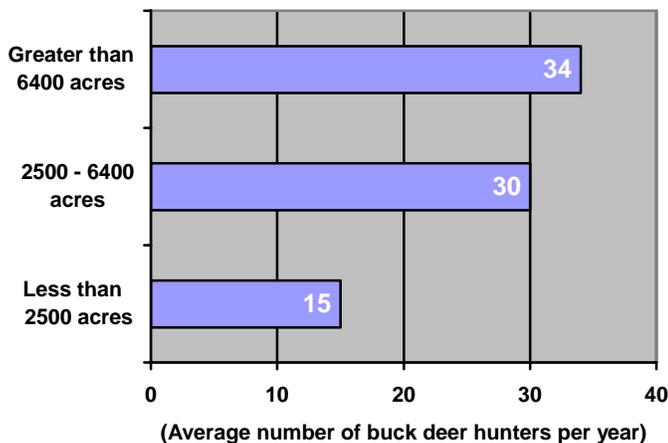
For landowners who reported that hunting occurs on their land, the average number of hunters per year was highest for upland game birds and lowest for antelope:

**Average Number of Hunters Per Year:**

Buck Deer	18.1
Doe Deer	17.7
Bull Elk	18.3
Cow Elk	18.5
Buck Antelope	12.9
Doe Antelope	13.1
Upland Birds	19.9

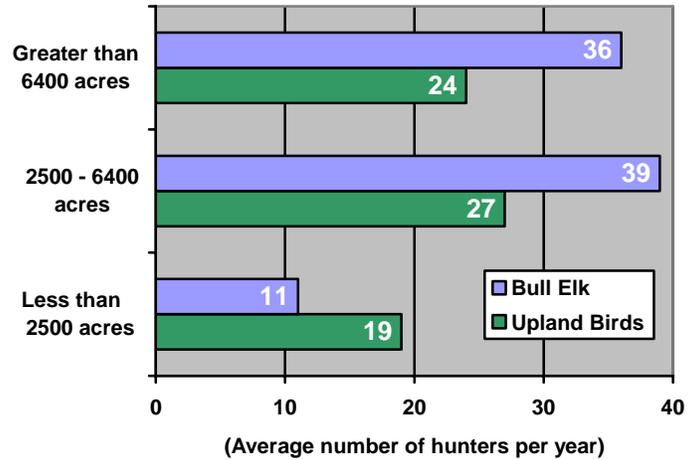
As expected, there were significant variations in hunter numbers by size of landholdings, with the highest average number of hunters per year being reported for larger landholdings (e.g., landowners who reported they own more than 6,400 acres). Figure 3 illustrates this pattern for buck deer hunting.

Figure 3. Average number of buck deer hunters per year by size of landholdings—as reported by landowners who indicated that hunting occurs on their land for buck deer.



Two exceptions to this trend were noted—for bull elk and for upland game birds, where landowners with 2500-6400 acres reported a higher average number of hunters compared to landowners with greater than 6400 acres (Figure 4).

Figure 4. Average number of bull elk hunters and upland game bird hunter per year by size of landholdings—as reported by landowners who indicated that hunting occurs on their land for bull elk or upland game birds.



No significant differences in survey responses were noted when comparing the average number of hunters per year by sex of the animal (within species). However, differences were noted by region for numbers of upland game bird hunters—a lower number of hunters was reported for the western region of the state (an average of 9 hunters per year, compared to an average of 24 in the central region and 20 in the eastern region).

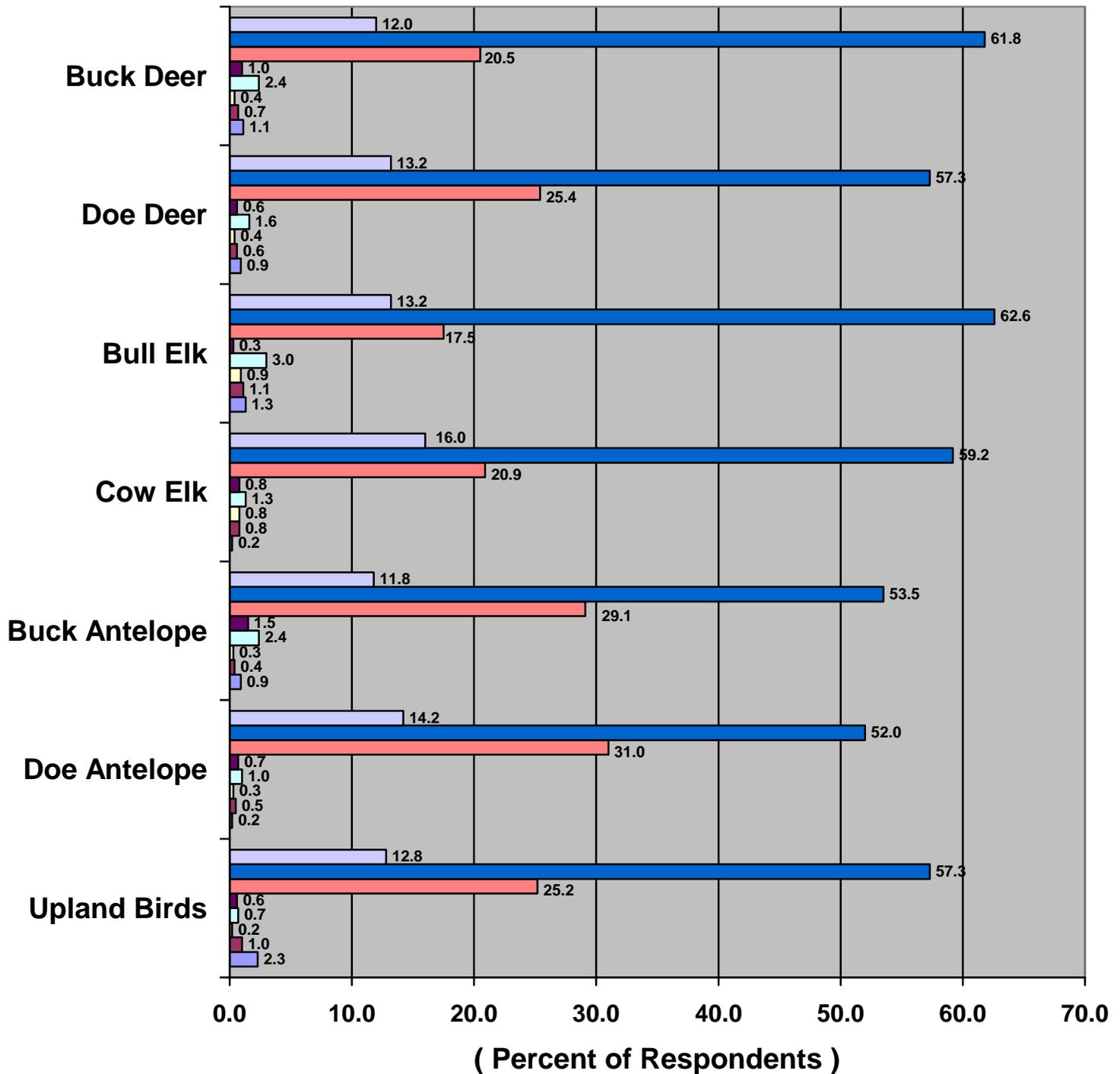
**HUNTING ACCESS MANAGEMENT SYSTEMS USED BY LANDOWNERS**

Landowners who reported that hunting occurs on their land were asked to report the ONE SYSTEM that best represents how they manage hunting access on their lands. The three management systems selected most frequently by landowners were: (1) non-Block Management hunting without a fee involving mostly hunters who are family/friends, (2) non-Block Management hunting without a fee involving mostly hunters who are NOT family/friends, and (3) the Block Management Hunting Access Program (Figure 5).

An exception to this overall, statewide trend was noted for the central region of the state with respect to elk hunting, where Block Management was the second most commonly used management system reported by landowners. Differences were also noted by size of landholdings. In particular, Block Management was the second most common response for each of the following: *buck deer* (for landowners with >6400 acres) and *bull/cow elk* (for landowners with 2500-6400 acres).



Figure 5. Percent of Montana landowners selecting the management system corresponding to the ONE SYSTEM that best represents how hunting access is managed on their lands (by species).



- Block Management Hunting Access Program
- Non-Block Management hunting without a fee involving mostly hunters who are family/friends
- Non-Block Management hunting without a fee involving mostly hunters who are NOT family/friends
- Outfitting by the landowner
- Outfitting by a licensed outfitter other than the landowner
- Lease agreement with a non-outfitting business that markets hunting opportunities
- Lease agreement with a hunter or group of hunters
- Access fees (non-lease) charged per hunter or group of hunters

# DISCUSSION

This study is the first of its kind to be conducted in Montana, and is intended to provide baseline data that can be used to document trends in private land hunting access management over time. Prior to this study, FWP and others could only provide educated guesses about the extent to which hunting is occurring on privately owned property and how that hunting is being managed by private landowners. From this study it was learned that most private landowners allow some level of hunting for deer, elk, antelope, or upland game birds (if these species are present on their lands). How that hunting is managed varies by species, region of the state, and size of landholdings. For instance:

- Landowners in the eastern region of the state reported the highest levels of hunting occurrence on their lands across all species, except for elk which had higher percentages reported for the western and central regions (where elk are more prevalent in Montana).
- For ungulate species (deer, elk, and antelope), hunting tended to occur more often for male animals.
- The average number of hunters per year was highest for upland game birds and lowest for antelope.
- Numbers of hunters varied by size of landholdings, with generally more hunters being reported for larger landholdings.
- The three management systems most commonly used by landowners were: (1) non-Block Management hunting without a fee involving mostly hunters who are family/friends, (2) non-Block Management hunting without a fee involving mostly hunters who are NOT family/friends, and (3) the Block Management Hunting Access Program. An exception to this overall, statewide trend was noted for the central region of the state with respect to elk hunting, where Block Management was the second most commonly used management system reported by landowners.

While the primary goal of this study was to learn more about how hunting is managed on private lands in Montana, another goal of the study was to develop and implement clearly defined terminology that can be used to describe the various management systems currently being used by landowners to manage hunting on their lands. Eight different management systems were evaluated in this study, defined as follows:

1. Block Management Hunting Access Program.
2. Non-Block Management hunting without a fee involving mostly hunters who are family/friends.
3. Non-Block Management hunting without a fee involving mostly hunters who are NOT family/friends.
4. Outfitting by the landowner.
5. Outfitting by a licensed outfitter other than the landowner.
6. Lease agreement with a non-outfitting business that markets hunting opportunities.
7. Lease agreement with a hunter or group of hunters.
8. Access fees (non-lease) charged per hunter or group of hunters.

It is hoped that this terminology will be carried forward in future discussions concerning private land hunting management in Montana. Ultimately, it is believed that the consistent use of this terminology will minimize the potential for confusion and misunderstanding among landowners, hunters, outfitters, and others who have an interest in the topic of private land hunting management.

This information, as well as additional information provided in a detailed project report for this study, will assist FWP to better understand how hunting is currently managed on private lands in Montana, and help the agency determine implications and develop plans for working with private landowners in the future on issues related to hunting access and wildlife management. 🌍

## REFERENCE FOR THE DETAILED PROJECT REPORT

This research summary provides selected results from this survey. More detailed study results (including results by species, region of the state, and size of landholdings) are available in a comprehensive project report:

McCoy, C., Teel, T. L., & Lewis, M. S. (2009). *Findings from a research project entitled: "Hunting Access Management on Private Lands in Montana."* (Project Report No. 82). Project Report for Montana Fish, Wildlife & Parks. Fort Collins, CO: Colorado State University, Department of Human Dimensions of Natural Resources.

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