

# Summary of Research



Montana Fish,  
Wildlife & Parks

## Selected Results From a 2006 Survey of Registered Off-Highway Vehicle (OHV) Owners in Montana

RMU Research Summary No. 21

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July 2006

In the last decade, the sale of off-highway vehicles (OHVs) has increased three-fold. Montana is no exception to this trend. Increasingly, Montanans are purchasing OHVs (especially 4-wheelers) for trail riding, working on the farm or ranch, fishing, and hunting. OHVs include, but are not limited to: motorcycles (dirt bikes), quadricycles (also known as ATVs or 4-wheelers), dune buggies, amphibious vehicles, and air cushion vehicles.

The nature of OHV use makes it essential that riders wear protective clothing (especially helmets), and follow responsible use guidelines in an effort to minimize user conflicts and impacts to the environment. With few exceptions, "cross-county" OHV use (e.g., operating a motorized, wheeled vehicle off a road or trail) is prohibited on publicly owned lands in Montana to protect fragile soils, riparian areas, vegetation, and wildlife.

In concert with federal land management agencies and the Montana Trail Vehicle Riders Association, Montana Fish, Wildlife & Parks (FWP) promotes a variety of OHV safety and responsible use information in Montana. The goal of FWP's OHV education program is to reduce future OHV-related accidents and encroachments, and improve ethics of OHV riders.

In 2006, FWP conducted a survey of registered OHV owners in Montana as part of an effort to evaluate the effectiveness of their OHV education program. Mailback surveys were successfully administered to 950 registered OHV owners. Overall, a 47 percent response rate to the survey was achieved.

Survey questions were asked in the following areas:

- *How many OHV owners have had safety training?*
- *How often do OHV owners follow important safety precautions when riding OHVs?*
- *How many OHV owners have seen or heard educational materials that address the topic of OHV safety and responsible use?*

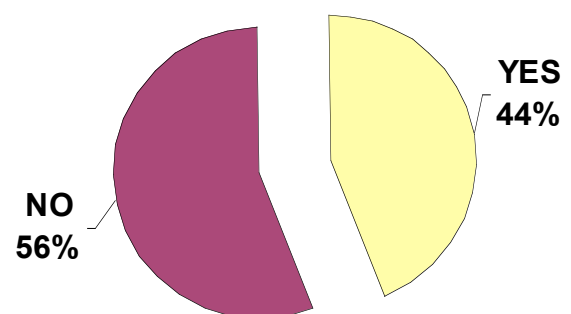
- *How often do OHV owners follow important guidelines for responsible use when riding OHVs, and to what extent do they agree with these guidelines?*
- *How many OHV owners are aware of Montana's general laws concerning OHVs and their use?*
- *How many OHV owners have ever used an OHV when hunting, and how do they typically use OHVs when hunting?*
- *How many OHV owners who have ever used an OHV when hunting have seen or heard educational materials that address the topic of hunting and responsible OHV use?*
- *How many OHV owners who have ever used an OHV when hunting follow important guidelines for responsible OHV use when hunting, and to what extent do they agree with these guidelines?*
- *How many OHV owners who have ever used an OHV when hunting are aware of Montana's hunting regulations concerning OHVs?*

## RESULTS

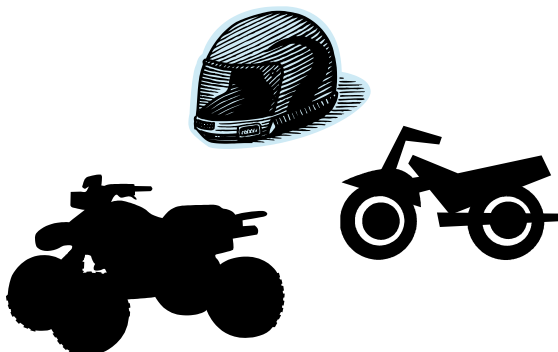
### SAFETY TRAINING

Fifty-six percent of the respondents to the survey reported they have NOT had OHV safety training of any kind (see Figure 1).

**Figure 1.** Response to: "Have you had off-highway vehicle (OHV) safety training?"



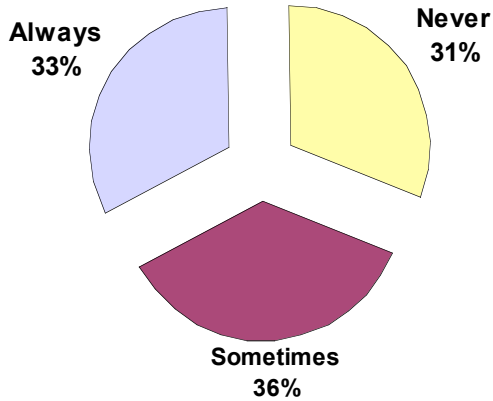
About a third of the respondents who have had training reported they have attended a certified OHV safety education course. Seventy-six percent reported they simply watched a safety video at an OHV dealership or manufacturer.



## SAFETY PRECAUTIONS

Only a third of the respondents reported they always wear a helmet when riding OHVs (see Figure 2). A little less than a third of the respondents reported they never wear a helmet.

**Figure 2.** Response to: “When riding OHVs, how often do you wear a helmet?”



Thirty-eight percent of the respondents reported they always wear other safety equipment (e.g., gloves, goggles, chest protectors, shin guards, and/or boots) when riding OHVs. Fourteen percent reported they never wear these types of safety equipment.

Most of the respondents (81 percent) always inspect and prepare their vehicle(s) before riding. And, a strong majority (77 percent) reported they always let someone know where they will be riding and when they will return from riding.

## INFORMATION ADDRESSING THE TOPIC OF OHV SAFETY AND RESPONSIBLE USE

Eighty-three percent of the respondents reported they have seen written materials (e.g., brochures, posters, articles, etc.) that address the topic of OHV safety and responsible use. Only 13 percent reported they have taken the time to read a lot of the materials they have seen. Eight percent said they have read none of the materials they have seen. Written materials were most often seen at the following places:

- OHV dealership or manufacturer (77 percent)
- Newspaper or magazine (55 percent)
- Montana Fish, Wildlife & Parks (39 percent)
- U.S. Forest Service (33 percent)
- Hunting regulations (31 percent)
- Fair or outdoor show (30 percent)

In addition to written materials, 76 percent of the respondents reported they have seen or heard advertisements on the television or radio that address the topic of OHV safety and responsible use (and/or noxious weed prevention related to the use of OHVs).

## GUIDELINES FOR RESPONSIBLE USE WHEN RIDING OHVs

Registered OHV owners were asked how often they follow important guidelines for responsible use when riding OHVs, and to what extent do they agree or disagree with these guidelines (see Table 1 below for selected survey results).

Table 1. Response to: →	How often do you do follow this guideline?			Do you agree with this guideline?				
	Never	Sometimes	Always	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
<b>Selected guidelines for responsible OHV use in general:</b>								
It is important that OHV users seek out information on vehicle use regulations for the area(s) they intend to ride before riding.....	4.6%	22.9%	72.5%	2.4%	3.1%	12.1%	48.2%	34.2%
It is important that OHV users carry travel maps that show land ownership and travel restrictions .....	15.0%	41.6%	43.8%	1.4%	4.8%	21.9%	45.4%	26.2%
OHV users should closely follow all trail, road, and area restrictions that are put in place to protect natural resources, wildlife, and provide non-motorized opportunities.....	1.2%	15.1%	83.7%	3.1%	5.9%	7.8%	34.4%	48.7%
To minimize impacts to the environment, OHV users should avoid riding cross-country or shortcutting the main route when riding on trails or roads.....	3.0%	20.4%	76.6%	1.7%	6.6%	11.1%	35.3%	45.3%
To minimize impacts to the environment, OHV users should avoid riparian areas and wetlands.....	2.8%	25.6%	71.6%	1.4%	4.5%	13.9%	31.7%	48.5%

## MONTANA'S GENERAL LAWS CONCERNING OHVs AND THEIR USE

Nearly all of respondents (greater than 95 percent) were aware of the following laws in Montana:

- ▶ *ATVs, 4-wheelers, and motorcycles used off-road on public lands in Montana must be registered with the Montana Department of Justice, Motor Vehicle Division, as Off-Highway Vehicles (OHVs).*
- ▶ *With few exceptions, OHVs must be registered as motor vehicles to be used on public roadways in Montana.*

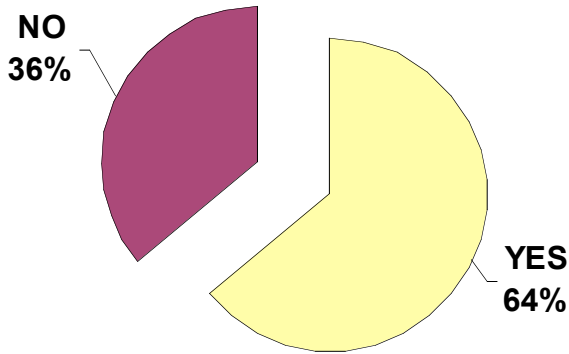
However, 18 percent of the respondents were NOT aware that:

- ▶ *ATVs, 4-wheelers, and motorcycles used off-road on public lands in Montana are required to have U.S. Forest Service approved spark arrestors.*

## HUNTING AND OHV USE

Nearly two-thirds of the respondents reported they have used an OHV while hunting (see Figure 3).

**Figure 3.** Response to: "Have you ever used an OHV while hunting?"



The top three uses of OHVs when hunting were as follows:

- 1) Recovering/retrieving harvested game (reported by 80 percent of the respondents)
- 2) Traveling to and from hunting areas (79 percent)
- 3) Scouting out potential hunting areas (57 percent)

## INFORMATION ADDRESSING THE TOPIC OF HUNTING AND RESPONSIBLE OHV USE

Two-thirds of the respondents who have used an OHV when hunting reported they have seen written materials (e.g., brochures, posters, articles, etc.) that address the topic of hunting and responsible OHV use. Only 18 percent reported they have taken the time to read a lot of these materials. Six percent said they have read none of the materials they have seen. Written materials were most often seen at the following places:

- Montana Fish, Wildlife & Parks (69 percent)
- Hunting regulations (57 percent)
- Newspaper or magazine (49 percent)
- U.S. Forest Service (39 percent)
- OHV dealer or manufacturer (31 percent)
- Bureau of Land Management (22 percent)
- Fair or outdoor show (23 percent)

In addition to written materials, 55 percent of the respondents reported they have seen or heard advertisements on the television or radio that address the topic of hunting and responsible OHV use.

## GUIDELINES FOR RESPONSIBLE OHV USE WHEN HUNTING

Registered OHV owners who have used an OHV when hunting were asked how often they follow important guidelines for responsible OHV use when hunting, and to what extent do they agree or disagree with these guidelines (see Table 2 below for survey results).

Table 2. Response to: →	How often do you do follow this guideline?			Do you agree with this guideline?				
	Never	Sometimes	Always	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
<b>Selected guidelines for responsible OHV use while hunting:</b>								
To minimize impacts to other hunters, OHV users should access the area they intend to hunting on legal routes and then hunt on foot.....	0.4%	21.1%	78.5%	1.5%	3.7%	13.7%	31.9%	49.3%
To minimize impacts to the environment, OHV users should NOT Travel off legal routes to retrieve harvested game.....	6.5%	51.6%	41.9%	12.6%	21.1%	21.2%	19.6%	34.2%

## MONTANA'S HUNTING REGULATIONS CONCERNING OHVs

Nearly all of respondents (greater than 93 percent) were aware of the following hunting regulations pertaining to OHV use in Montana:

- ▶ *It is illegal to shoot from any motorized vehicle including OHVs. An exemption exists for disabled hunters with the proper permits.*
- ▶ *Hunters may not use OHVs to concentrate, drive, rally, stir-up, corral or harass wildlife.*
- ▶ *Hunters are prohibited from shooting on, from, or across the right-of-way of a publicly maintained road open to vehicular traffic. The right-of-way includes road, shoulders, berms, and barrow pits and generally extends from fence-line to fence-line.*

## DISCUSSION

This survey is the first of its kind in Montana, and is intended to provide baseline information to be used by FWP to help evaluate the effectiveness of their OHV education program over time.

Despite the fact that most OHV owners in Montana have been exposed to a variety of safety and responsible use information, it was learned from this survey that the majority of owners:

- Have had little or no formal safety training, and...
- Most do not always wear important safety equipment such as helmets when riding OHVs.


Furthermore, some OHV owners do not always follow important guidelines for responsible use when operating OHVs. For instance, about a third of the respondents who have used an OHV when hunting disagree or strongly disagree that "OHV users should NOT travel off legal routes to retrieve harvested game". Only 42 percent of the respondents who have used an OHV when hunting reported they always follow this guideline. Nearly 7 percent reported they never follow this guideline. And, 52 percent reported they follow this guideline sometimes.

These results speak to the importance of FWP's OHV education program, and the need to continue promoting a variety of OHV safety and responsible use information in effort reduce future OHV-related accidents and encroachments, and improve ethics of OHV riders. Along those lines, in the near future FWP intends to explore the following:

1. Work with its partners to develop more and better OHV maps that provide information about the many roads and trails where people can legally ride OHVs across the state.
2. Explore sending direct mailings of OHV safety and responsible use information to registered OHV owners.

3. Make use of more television ads that are informative, interesting, entertaining, and tap into the values of OHV owners across the state.
4. Do a better job of providing safety and responsible use information at places where people go to ride OHVs.
5. Work with its partners to do a better job of enforcing Montana OHV laws, rules, and regulations.

It is anticipated that FWP will replicate this survey in the future as part of evaluating its OHV education program and the effectiveness of these and other strategies over time.

More OHVs are being sold today than ever before. And, riding an OHV is one of the many important recreational activities pursued by Montanans across the state. FWP recognizes this and is working hard to serve the needs of all Montanans, including those who enjoy riding OHVs in our great state. 

## ABOUT THE AUTHORS

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## TO OBTAIN COPIES OF THIS SUMMARY

Contact the Responsive Management Unit of FWP by phone at (406) 444-4758.



**GRANT PROGRAMS FOR OHV TRAILS.** FWP administers two programs which provide grant money for the rehabilitation and maintenance of OHV trails and riding areas.

**(1) Montana OHV Grant Program.** Funding for this program is provided through OHV registration fees and 1/8 of 1% of state gas taxes. Grants are awarded annually.

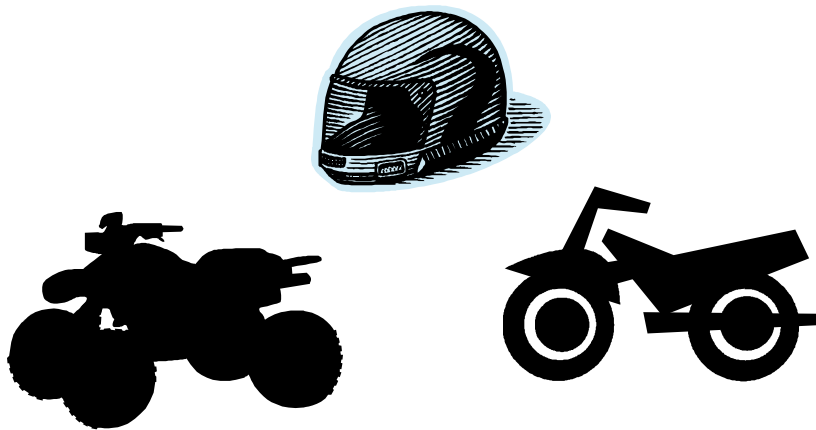
**(2) Recreational Trails Program Grants.** Federal funds to enhance, develop and maintain trails come through the Recreational Trails Program. The program provides that each year 30% of the money for use in Montana be earmarked for motorized trails.

Detailed information and applications are available on the web at [fwp.mt.gov/parks/grants.asp](http://fwp.mt.gov/parks/grants.asp) or call the FWP Trails Program Coordinator at (406) 444-4585

**Results from the:**

# **Survey of Registered Off-Highway Vehicle (OHV) Users (2006)**

“On the Right Trail” Program Evaluation



**Montana Fish,  
Wildlife & Parks**

## **About the survey:**

**Montana Fish, Wildlife & Parks (FWP) conducted a survey of registered off-highway vehicle (OHV) users in 2006 as part of “On the Right Trail” Program Evaluation. Mailback surveys were successfully administered to 950 registered OHV users. A single follow-up postcard was mailed to nonrespondents. Overall, a 47 percent response rate to the survey was achieved. This document provides responses to each of the survey questions.**

**June 5, 2006**

## **Off-Highway Vehicles (OHVs) include:**

**4-Wheelers**

**ATVs (All-Terrain Vehicles)**

**Dirt bikes (motorcycles)**

1. Have you had off-highway vehicle (OHV) safety training? (check only one)

55.6% [ ] NO

44.4% [ ] YES.....If yes, what kind of training? (check all that apply)

75.7% [ ] Watched a safety video at an OHV dealership or manufacturer

32.3% [ ] Attended a certified OHV safety education course

11.8% [ ] Other

2. When riding OHVs (e.g., 4-wheelers, ATVs, dirt bikes), how often do you do the following?

Circle only one number for each item below.

	Never	Sometimes	Always
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Wear a helmet.....31.1% 35.9% 33.0%

Wear other safety equipment (e.g., gloves, goggles, chest protectors, shin guards, boots, etc.) ..13.5% 48.1% 38.4%

Ride alone.....19.5% 60.2% 20.2%


Let someone know where you're going and when you will return from riding..... 3.9% 18.9% 77.2%

Seek out information on potentially adverse weather conditions before riding.....17.7% 36.2% 46.1%

Inspect and prepare your vehicle(s) before riding..... 1.8% 16.9% 81.2%

3. Have you ever seen written materials (e.g., brochures, posters, articles, etc.) that address the topic of OHV safety and responsible use? (check only one)

17.2% [ ] NO

82.8% [ ] YES.....If yes, this next question has two parts 

a. Where did you see these written materials? (check all that apply)

15.8% [ ] Family and/or friends

54.6% [ ] Newspaper or magazine

15.3% [ ] On the Internet

16.9% [ ] Certified OHV safety education class

77.3% [ ] OHV dealership or manufacturer

13.9% [ ] OHV club or organization

39.1% [ ] Montana Fish, Wildlife & Parks

32.3% [ ] U.S. Forest Service

15.8% [ ] Bureau of Land Management

12.6% [ ] County Treasurer's Office

4.1% [ ] Hunter harvest check stations

31.2% [ ] Hunting regulations

30.3% [ ] Fair or outdoor show

6.3% [ ] Classroom or other educational program

3.8% [ ] Other

b. On a scale from 1 (none) to 5 (a lot), how many of these written materials have you taken the time to read? (circle only one number below)

(none)	1	2	3	4	5	(a lot)
	8.0%	20.6%	36.8%	21.4%	13.2%	

4. Have you ever seen or heard advertisements on the television or radio that address the topic of OHV safety and responsible use (and/or noxious weed prevention related to the use of OHVs)? (check only one)

24.2% [ ] NO  
75.8% [ ] YES

5. Below are guidelines for ethical and responsible OHV use in general. This question has two parts:

- a. When riding OHV's, how often do you follow these guideline? Please answer this question as honestly as possible, knowing that your responses will remain anonymous. **Circle only one number under COLUMN A to indicate how often you follow each guideline.**
- b. To what extent do you agree or disagree with each of these guidelines? **Circle only one number under COLUMN B to indicate your level of agreement with each guideline.**

<b><u>Guidelines for responsible OHV use in general:</u></b>	<b>a.</b>			<b>b.</b>				
	<b>How often do you do follow this guideline?</b>			<b>Do you agree with this guideline?</b>				
	Never	Sometimes	Always	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
It is important that OHV users seek out information on vehicle use regulations for the area(s) they intend to ride before riding.....	4.6%	22.9%	72.5%	2.4%	3.1%	12.1%	48.2%	34.2%
It is important that OHV users carry travel maps that show land ownership and travel restrictions .....	15.0%	41.6%	43.8%	1.4%	4.8%	21.9%	45.4%	26.2%
OHV users should closely follow all trail, road, and area restrictions that are put in place to protect natural resources, wildlife, and provide non-motorized opportunities.....	1.2%	15.1%	83.7%	3.1%	5.9%	7.8%	34.4%	48.7%
To minimize impacts to the environment, OHV users should avoid riding cross-country or shortcutting the main route when riding on trails or roads.....	3.0%	20.4%	76.6%	1.7%	6.6%	11.1%	35.3%	45.3%
To minimize noise, OHV users should keep their machines tuned and running smoothly.....	1.2%	8.6%	90.2%	1.0%	2.1%	10.7%	34.0%	52.3%
To help reduce noise, OHV users should avoid excessive speeds and unnecessary throttling while riding on trails.....	6.9%	36.3%	56.7%	5.2%	7.3%	19.9%	32.9%	34.8%
To minimize stress to wildlife, OHV users should avoid approaching too closely to wildlife.....	1.2%	14.4%	84.5%	0.9%	2.4%	8.7%	32.2%	55.8%
To minimize impacts to other outdoor enthusiasts, OHV users should ride slowly around camps, campgrounds, and on trail sections where other trail users are likely to be encountered.....	1.2%	6.3%	92.6%	0.7%	0.7%	2.6%	25.8%	70.1%
To minimize impacts to the environment, OHV users should avoid riparian areas and wetlands.....	2.8%	25.6%	71.6%	1.4%	4.5%	13.9%	31.7%	48.5%



6. Below are Montana's general OHV laws.

**Before receiving this questionnaire, were you aware:**

**(check only one for each law below)**

- ATVs, 4-wheelers, and motorcycles used off-road on public lands in Montana must be registered with the Montana Department of Justice, Motor Vehicle Division, as Off-Highway Vehicles (OHVs)..... [  ] NO [  ] YES **3.0%** **97.0%**
- With few exceptions, OHVs must be registered as motor vehicles to be used on public roadways in Montana..... [  ] NO [  ] YES **5.0%** **95.0%**
- ATVs, 4-wheelers, and motorcycles used off-road on public lands in Montana are required to have U.S. Forest Service approved spark arrestors..... [  ] NO [  ] YES **17.9%** **82.1%**


7. Have you ever used an OHV while HUNTING? (check only one)

- 35.7%** [  ] NO.....**If no, please go to question 14**  
**64.3%** [  ] YES

8. How do you typically use OHV's when HUNTING? (check all that apply)

- 79.2%** [  ] Traveling to and from hunting areas **36.3%** [  ] Road/trail hunting  
**31.0%** [  ] Setting up a hunting camp **79.5%** [  ] Recovering/retrieving harvested game  
**57.2%** [  ] Scouting out potential hunting areas **2.8%** [  ] Other

9. Have you ever seen written materials (e.g., brochures, posters, articles, etc.) that address the topic of HUNTING and responsible OHV use? (check only one)

- 33.6%** [  ] NO  
**66.4%** [  ] YES.....If yes, this next question has two parts 

a. Where did you see these written materials? (check all that apply)

- 13.3%** [  ] Family and/or friends  
**48.9%** [  ] Newspaper or magazine  
**13.3%** [  ] On the Internet  
**7.4%** [  ] Certified OHV safety education class  
**30.9%** [  ] OHV dealership or manufacturer  
**10.6%** [  ] OHV club or organization  
**68.6%** [  ] Montana Fish, Wildlife & Parks  
**38.8%** [  ] U.S. Forest Service  
**21.8%** [  ] Bureau of Land Management  
**6.9%** [  ] County Treasurer's Office  
**12.2%** [  ] Hunter harvest check stations  
**57.4%** [  ] Hunting regulations  
**22.9%** [  ] Fair or outdoor show  
**4.3%** [  ] Classroom or other education program  
**3.7%** [  ] Other

b. On a scale from 1 (none) to 5 (a lot), how many of these written materials have you taken the time to read? (circle only one number below)

- (none)    1    2    3    4    5    (a lot)  
**6.0%**    **15.2%**    **28.8%**    **32.1%**    **17.9%**

10. Have you ever seen or heard advertisements on the television or radio that address the topic of HUNTING and responsible OHV use? (check only one)

45.0% [  ] NO  
 55.0% [  ] YES

11. Below are guidelines for ethical and responsible OHV use while HUNTING. This question has two parts:

- a. When using OHV's and HUNTING, how often do you follow these guideline? Please answer this question as honestly as possible, knowing that your responses will remain anonymous. **Circle only one number under COLUMN A to indicate how often you follow each guideline.**
- b. To what extent do you agree or disagree with each of these guidelines? **Circle only one number under COLUMN B to indicate your level of agreement with each guideline.**

	<b>a.</b>			<b>b.</b>				
	How often do you do follow this guideline?			Do you agree with this guideline?				
	Never	Sometimes	Always	Strongly disagree	Disagree	Neither agree or disagree	Agree	Strongly agree
<b><u>Guidelines for responsible OHV use while HUNTING:</u></b>								
To minimize impacts to other hunters, OHV users should access the area they intend to hunt on legal routes and then hunt on foot.....	0.4%	21.1%	78.5%	1.5%	3.7%	13.7%	31.9%	49.3%
To minimize impacts to the environment, OHV users should NOT travel off legal routes to retrieve harvested game.....	6.5%	51.6%	41.9%	12.6%	21.1%	22.2%	19.6%	34.2%

12. Below are regulations for OHV use and HUNTING in Montana.

**Before receiving this questionnaire, were you aware:**

(check only one for each regulation below)

It is illegal to shoot from any motorized vehicle including OHVs. An exemption exists for disabled hunters with the proper permit.....	6.8%	93.2%	[ <input type="checkbox"/> ] NO	[ <input type="checkbox"/> ] YES
Hunters may not use OHV's to concentrate, drive, rally, stir-up, corral or harass wildlife.....	2.9%	97.1%	[ <input type="checkbox"/> ] NO	[ <input type="checkbox"/> ] YES
Hunters are prohibited from shooting on, from, or across the right-of-way of a publicly maintained road open to vehicular traffic. The right-of-way includes road, shoulders, berms, and barrow pits and generally extends from fence-line to fence-line. ....	0.4%	99.6%	[ <input type="checkbox"/> ] NO	[ <input type="checkbox"/> ] YES

13. Do you belong to a hunting club or organization in Montana? (check only one)

79.5% [  ] NO  
 20.5% [  ] YES

14. What do you think is the BEST POSSIBLE WAY for Montana Fish, Wildlife & Parks or other agencies to effectively promote public awareness about OHV safety and responsible use in Montana?

**A strong majority of the respondents (64 percent) provided ideas related to this particular question. Below are the most frequently mentioned responses. See Appendix A for a complete listing of the responses to this question.**

- **Advertise via:**
  - Television or radio (90 responses)
  - Brochures, maps, pamphlets, posters (53 responses)
  - Hunting and fishing regulations, and as part of the hunting and fishing licensing process (45 responses)
  - At OHV dealers
  - As part of the OHV licensing process (27 responses)
  - State and local newspaper articles (26)
  - At sporting goods stores, gas stations, etc. (14 responses)
- **Increase the enforcement of rules/regulations (30 responses)**
- **Provide information at roads, trailheads, trails, and other OHV areas (30 responses)**
- **Set up educational booths at fairs, agricultural shows, boat shows, and other outdoor recreation shows (29 responses)**
- **Affordable training courses and safety seminars (20 responses)**
- **Include training as part of hunting safety education (16 responses)**
- **Send information to registered owners (15 responses)**
- **Educate youth at schools and via training and awareness classes (12 responses)**

15. What types of OHVs do you ride off-road in Montana? (check all that apply)

- 19.6% [  ] Motorcycles
- 96.1% [  ] ATVs or 4-wheelers
- 6.8% [  ] Other

16. Do you belong to an OHV club or organization in Montana? (check only one)

- 91.7% [  ] NO
- 8.3% [  ] YES

17. What is your age? \_\_\_\_\_ years **Mean = 49.6 years; median = 50**

18. What is your gender? [  ] Female **24.9%** [  ] Male **75.1%**