Participation in Deer and Elk Hunting, and Hunters' Attitudes Toward Big Game Management and Hunting Opportunities

Survey Report



Conducted for the Oregon Department of Fish and Wildlife

2020



PARTICIPATION IN DEER AND ELK HUNTING, AND HUNTERS' ATTITUDES TOWARD BIG GAME MANAGEMENT AND HUNTING OPPORTUNITIES

2020

Responsive Management National Office

Mark Damian Duda, Executive Director
Martin Jones, Senior Research Associate
Tom Beppler, Senior Research Associate
Steven J. Bissell, Ph.D., Qualitative Research Associate
Amanda Center, Research Associate
Andrea Criscione, Senior Research Associate
Patrick Doherty, Research Associate
Gregory L. Hughes, P.E., Research Associate
Caroline Gerken, Survey Center Manager
Alison Lanier, Business Manager

130 Franklin Street
Harrisonburg, VA 22801
540/432-1888

E-mail: mark@responsivemanagement.com www.responsivemanagement.com

Acknowledgments

Responsive Management would like to thank the following people of the Oregon Department of Fish and Wildlife for their input, support, and guidance on this project.

Nick Myatt – Project Lead
Tom Thornton – Game Program Manager
Justin Dion – Game Program Assistant Biologist
Jeremy Thompson – District Wildlife Biologist
Melody Henderson – Assistant District Wildlife Biologist
Stuart Love – District Wildlife Biologist
Brian Wolfer – District Manager
Jay Remy – Information and Education Program Manager
Lt. Craig Heuberger – Oregon State Police, Wildlife Division Lieutenant

EXECUTIVE SUMMARY

INTRODUCTION AND METHODOLOGY

This study was conducted for the Oregon Department of Fish and Wildlife (ODFW) to determine resident licensed Oregon hunters' participation in deer and elk hunting, their experiences applying for tags, their interest in hunting in the future, the equipment they use, their locations of hunting, and their attitudes toward various hunting regulations and management strategies. The study entailed a scientific, probability-based survey of licensed Oregon hunters.

The sample consisted of those who had purchased a deer or elk tag, those who had applied for a deer or elk hunt, and/or those who had purchased preference points for a deer or elk hunt for the years 2017 through 2019. The database containing the contacts for these hunters and potential hunters was provided by the ODFW.

The methodology was designed to ensure that every licensed hunter in the database had an opportunity to be selected for the survey, regardless of contact information available for that person—whether that contact information was a telephone number, email address, or postal address. A random sample was pulled for the survey, and hunters were contacted based on the contact information available.

The telephone survey questionnaire was developed cooperatively by Responsive Management and the ODFW. The telephone version of the survey was computer coded for Responsive Management's computer-assisted telephone interviewing process. An important aspect of this process is that the computer controls which questions are asked and allows for immediate data entry. Each telephone survey, however, is administered by a live interviewer. The online version of the survey was coded in the online platform. Responsive Management conducted pre-tests of both versions of the questionnaire to ensure proper wording, flow, and logic in the surveys.

There were three modes of contact: by telephone, by email, and by postal mail. Hunters contacted by telephone were interviewed at that time, or a callback time was scheduled. Those contacted by email were provided a link to the survey to take it online. Finally, those contacted by postcard were given the survey URL and an access code to take the survey online; they were also provided a toll-free telephone number that they could call into if they wanted to take the survey by telephone or for assistance with completing the online survey.

After the surveys were obtained by the interviewers, the Survey Center Managers and/or statisticians checked each completed survey to ensure clarity and completeness. Responsive Management obtained 4,075 completed surveys. The analysis of data was performed using IBM SPSS Statistics as well as proprietary software developed by Responsive Management.

HUNTING PARTICIPATION

Among hunters as a whole, 82% had hunted deer in the previous 3 years, and another 14% had hunted deer at some time, but not in the past 3 years. The remaining 4% had not hunted deer in Oregon, but some of them had applied for a deer tag but not gotten one.

Regarding elk, 65% of hunters overall had hunted elk in the previous 3 years, while 21% had hunted elk at some time prior to the past 3 years. The remaining 14% had not hunted elk in Oregon, but a small percentage of them had applied for an elk tag without getting it.

APPLYING FOR TAGS

Among hunters overall, 42% had at some time applied for a controlled tag to hunt deer but did not get the tag. Eastern Oregon was the region most likely to have an unfilled application. Those who prefer muzzleloader have the highest percentage who applied for an unfilled application, compared to those who prefer rifle or archery.

Among hunters overall, 38% had at some time applied for a controlled tag to hunt elk but did not get the tag. Eastern Oregon was the region most likely to have an unfilled elk application. Those who prefer rifle for hunting elk had the lowest rate of having an unfilled application.

INTEREST IN HUNTING

An overwhelming majority of hunters (90%) want or plan to hunt deer in the future in Oregon. Younger hunters are more likely to want or plan to do so, compared to older hunters, with likelihood diminishing with age.

A large majority of hunters (86%) want or plan to hunt elk in Oregon in the future. Again, younger hunters have the highest percentage who want or plan to hunt elk in Oregon in the future.

Active archery hunters and those who indicated interest in elk hunting in Eastern Oregon were asked specifically about their interest in *archery* hunting in Eastern Oregon: 53% of these hunters are very or somewhat interested.

HUNTING EQUIPMENT

For deer hunting, rifles are the most popular weapon choices: 90% of deer hunters hunt, have hunted, or would hunt deer with a rifle. Meanwhile, about a third (32%) use, have used, or would use archery equipment. The survey also asked about the single type of weapon that is most preferred for deer hunting. Rifle leads the list (at 80%) for deer hunting, while 16% prefer archery.

For hunting elk, rifle is the top choice: 85% of elk hunters hunt, have hunted, or would hunt elk with a rifle. Slightly more than a third (34%) use, have used, or would use archery equipment for elk hunting. The survey also asked about the single type of weapon that is most preferred for hunting elk: 75% of elk hunters prefer a rifle, while 23% prefer archery equipment.

LOCATION OF HUNTING: REGION AND PUBLIC / PRIVATE LANDS—DEER

The large majority of deer hunters had hunted deer in Eastern Oregon (59% had done so), with each of the Western Regions being hunted by about a third of deer hunters (36% in the Western Oregon Coast Range area and 33% in the Western Oregon Cascades area).

When asked to choose *only one* as their most-hunted or the one that they would most like to hunt in, just under half of deer hunters (48%) selected one of the Western Regions, nearly evenly divided between the Coast Range area and the Cascades, while 51% chose Eastern Oregon.

In the Western Oregon Coast Range area, the most popular WMUs are the Trask Unit (#14), the Alsea Unit (#18), and the Willamette Unit (#15). In the Western Oregon Cascades area, the most popular WMUs are the Santiam Unit (#16) and the McKenzie Unit (#19). Eastern Oregon does

not have any one unit that stands out on top like the other regions; the Heppner Unit (#48) and the Ochoco Unit (#37) both are at 4%, but there are then eight WMUs right below that at 3%.

About a third of active deer hunters (31%) hunt both in the Western and Eastern Regions in a typical year. Most of them, if forced to choose only one, would hunt in the Eastern Region.

The active archery deer hunters who hunted deer in the Western Region were asked which of the hunts they participate in during a typical year. Note that they can participate in more than one hunt. A majority hunt in each of them: 54% hunting in the early archery deer season, and 61% hunting in the late archery deer season.

Public land hunting far exceeds private land hunting for deer, with 85% hunting deer on public land (including 68% doing so *mostly* on public land), and 32% doing so on private land (with 15% hunting deer *mostly* on private land).

LOCATION OF HUNTING: REGION AND PUBLIC / PRIVATE LANDS—ELK

Nearly two thirds of elk hunters (65%) had hunted or would like to hunt elk in the Eastern Region. Of the two Western Regions, the Coast Range area is more popular than the Cascades area for elk.

Hunters were then asked to chose *only one* as their most-hunted or the one that they would most like to hunt in. Just over a third of elk hunters (38%) selected one of the Western Regions, more often the Coast Range area than the Cascades, while 60% chose Eastern Oregon.

The Western Oregon Coast Range area's most popular WMUs are the Trask Unit (#14), the Saddle Mountain Unit (#10), the Alsea Unit (#18), and the Wilson Unit (#12). The Western Oregon Cascades area's most popular WMUs are the Santiam Unit (#16) and the McKenzie Unit (#19). In Eastern Oregon, the most popular WMUs are the Heppner Unit (#48), the Starkey Unit (#52), the Desolation Unit (#50), and the Ukiah Unit (#49).

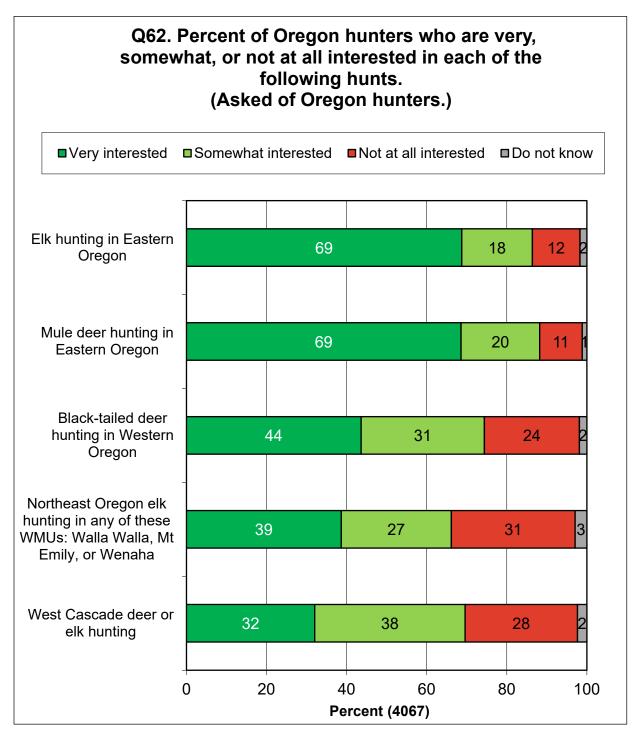
A little more than a quarter of active archery elk hunters (27%) typically archery hunt for elk in both the Eastern Region and Western Region in Oregon. Most of those who typically hunt elk in both the Eastern and Western Regions (65% of these respondents) would choose Eastern Oregon, if asked to select only one.

Active archery elk hunters who had hunted elk in Eastern Oregon were asked to name the single WMU in which they hunt elk most often. The top WMUs are the Desolation Unit (#50), the Starkey Unit (#52), the Ukiah Unit (#49), the Heppner Unit (#48), and the Silvies Unit (#72).

Public land predominates for elk hunting: 86% hunt public land mostly or about equally with private land, while 29% hunt mostly on private land or about equally between the types. Those who prefer rifle for elk have the highest percentage hunting on private land.

OPINIONS ON REGULATORY CHANGES AND MANAGEMENT STRATEGIES

An initial question, asked of active, inactive, and potential hunters of either deer or elk, was intended to allow follow-up questions to be asked only of those to whom the questions would apply. The initial question asked about interest in five types of hunting. The most popular was elk hunting in Eastern Oregon and mule deer hunting in Eastern Oregon as shown in the graph on the following page.



After the question above, nine questions were asked about potential changes to regulations and management strategies. The table on the following page gives the overall results for all of these potential changes. Following the table, each of these potential changes is examined individually. See the body of the report for a full explanation of the information given prior to some of the questions shown in the table, as well as the flow and context of some of the questions.

Regulation / management strategy asked about:	Group that was asked the question:	Percentages
Q66. Would you support or oppose a proposal to establish late season rifle black-tailed deer hunts in Western Oregon?	Active deer hunters who hunted deer in Western Oregon and Oregon hunters who are very or somewhat interested in hunting black- tailed deer in Western Oregon.	Support: 65% Oppose: 15%
Q69. Would you support or oppose a proposal to change archery hunting from a general season to a controlled season for mule deer in Eastern Oregon?	Active deer hunters who hunted deer in Eastern Oregon and Oregon hunters who are very or somewhat interested in hunting mule deer in Eastern Oregon.	Support: 46% Oppose: 29%
 Q76. Which of the following would you prefer for archery elk hunting in Eastern Oregon? 1. Current season with a high number of archery hunters but a guaranteed tag in your preferred unit. 2. A season with fewer archery hunters but without a guaranteed tag every year in your preferred unit. 	Active archery elk hunters who hunted elk in Eastern Oregon and Oregon hunters who are very or somewhat interested in archery elk hunting in Eastern Oregon.	1 st Option: 40% 2 nd Option: 35%
Q83. How much would you like or dislike a proposal to change archery elk hunting from a general season with unlimited tags to controlled hunts in Eastern Oregon?	Active elk hunters who hunted elk in Eastern Oregon and Oregon hunters who are very or somewhat interested in elk hunting in Eastern Oregon.	Like: 51% Dislike: 27%
Q86. How much would you like or dislike a proposal of splitting the archery elk season in Eastern Oregon into two 15-day controlled hunts?	Active elk hunters who hunted elk in Eastern Oregon and Oregon hunters who are very or somewhat interested in elk hunting in Eastern Oregon.	Like: 40% Dislike: 29%
Q87. How much would you like or dislike the first option in which elk season is moved to November and there is no break in deer season?	Active hunters who hunted deer or elk in the Western Oregon Cascades Region and Oregon hunters who are very or somewhat interested in West Cascade deer or elk hunting.	
Q88. How much would you like or dislike the second option in which elk season stays the same, but the deer and elk season overlap?	Active hunters who hunted deer or elk in the Western Oregon Cascades Region and Oregon hunters who are very or somewhat interested in West Cascade deer or elk hunting.	
Q92. Would you support or oppose a proposal to eliminate the first spike-only rifle season in these Units?	Active elk hunters who hunted elk in the Walla Walla, Mt. Emily, or Wenaha WMUs and elk hunters who are very or somewhat interested in hunting elk in these WMUs.	Support: 44% Oppose: 13%
Q95. Would you support or oppose a proposal to decrease the total number of spike-only rifle tags in these Units?	Active elk hunters who hunted elk in the Walla Walla, Mt. Emily, or Wenaha WMUs and elk hunters who are very or somewhat interested in hunting elk in these WMUs.	Support: 49% Oppose: 13%

The questions are now examined individually. Prior to the discussion, the pertinent question is shown.

Q66. Would you support or oppose a proposal to	Active deer hunters who hunted deer in Western Oregon
establish late season rifle black-tailed deer hunts in	and Oregon hunters who are very or somewhat interested
Western Oregon?	in hunting black-tailed deer in Western Oregon.

Nearly two thirds of those who were asked (65%) support a proposal to establish late season rifle black-tailed deer hunts in Western Oregon, while 15% oppose it. In the crosstabulations:

- Those who prefer archery and archery-only hunters are much more likely to oppose it.
- Older hunters are slightly more likely to oppose it.
- Hunters residing in the Western Region are more likely to support it.

The top reasons to support the proposal for late season rifle black-tailed deer hunts in Western Oregon is that it provides additional hunting opportunities, that it provides a better chance of harvest, and that it allows hunting during the rut. Reasons to oppose is that the deer population is felt to be too low, that it is unfair to hunt during the rut, and that hunters do not want the overlap of seasons.

Q69. Would you support or oppose a proposal to change	Active deer hunters who hunted deer in Eastern Oregon
archery hunting from a general season to a controlled	and Oregon hunters who are very or somewhat interested
season for mule deer in Eastern Oregon?	in hunting mule deer in Eastern Oregon.

There was more support (46%) than opposition (29%) to a proposal to change archery hunting from a general season to a controlled season for mule deer in Eastern Oregon. In the crosstabulations:

- Those who prefer archery and those who use archery are much more likely to oppose it.
- Younger hunters are more likely to oppose it, compared to their older counterparts.
- Opposition is slightly higher among hunters residing in the Eastern Region.
- Opposition is higher among those who typically hunt both regions, compared to those who typically hunt only in the Eastern Region.

Reasons for supporting a change to the archery season for mule deer in Eastern Oregon is that it is felt that it would allow the deer population to grow and that archery and rifle should have the same opportunities. Two lesser important reasons are that there is too much hunting pressure and that it is felt that there is too much archery harvest. Top reasons to oppose are that it limits hunting opportunities and that it is harder to harvest with archery and so the season does not need the proposed limit.

Q76. Which of the following would you prefer for archery elk hunting in Eastern Oregon?

- 1. Current season with a high number of archery hunters but a guaranteed tag in your preferred unit.
- 2. A season with fewer archery hunters but without a guaranteed tag every year in your preferred unit.

Active archery elk hunters who hunted elk in Eastern Oregon and Oregon hunters who are very or somewhat interested in archery elk hunting in Eastern Oregon.

The respondents overall (active archery elk hunters who hunted elk in Eastern Oregon and Oregon hunters who are very or somewhat interested in archery elk hunting in Eastern Oregon) were fairly evenly split, with 40% selecting the first option and 35% selecting the second.

In the crosstabulations:

- Those who prefer archery are more likely than those who prefer rifle to select the current season option.
- Younger hunters are more likely to want the current season option, compared to their older counterparts.
- Regionally, there are not markedly different results.

The overriding reason for preferring the current season structure is that hunters want to hunt every year. Also with a substantial percentage is the reason that the hunter is not concerned about crowding by being able to compensate for it. Top reasons for preferring a season with fewer archery hunters are that the hunter wants an uncrowded experience, that it puts less pressure on the animals, and that it allows a better chance at harvest.

Questions 83 and 86 asked about allocation of licenses for elk in Eastern Oregon. However, prior to asking those questions, the survey examined attitudes about elk hunting in Eastern Oregon in Questions 79, 80, 81, and 82. These questions were asked first to examine whether hunters' perceptions agree with the ODFW's assessment of the situation.

In Question 79, asked of all active archery elk hunters who had hunted elk in Eastern Oregon, 67% of respondents indicated that the hunting was *very* or *somewhat* crowded.

In Question 80, active archery elk hunters who hunted in Eastern Oregon more often agree (57%) than disagree (19%) that the density of elk archery hunters on public land in Eastern Oregon is displacing some elk and pushing them onto private lands.

Question 81 again was asked of all active archery elk hunters who had hunted elk in Eastern Oregon. It asked these hunters to rate their level of concern about the high density of archery hunters on public lands and that these hunters push elk onto private lands. Overall, more than half of these hunters (60%) are concerned, either very or somewhat concerned.

In the final lead-in question before Questions 83 and 86, asked of all active archery elk hunters who had hunted elk in Eastern Oregon as well as those very or somewhat interested in elk hunting in Eastern Oregon, 32% agree that elk hunting opportunity is being allocated fairly between weapon choices in Eastern Oregon, but 23% disagree. There is a relatively large percentage in the neither or do not know responses.

Q83. How much would you like or dislike a proposal to	Active elk hunters who hunted elk in Eastern Oregon and
change archery elk hunting from a general season with	Oregon hunters who are very or somewhat interested in
unlimited tags to controlled hunts in Eastern Oregon?	elk hunting in Eastern Oregon.
Q86. How much would you like or dislike a proposal	Active elk hunters who hunted elk in Eastern Oregon
of splitting the archery elk season in Eastern Oregon	and Oregon hunters who are very or somewhat
into two 15-day controlled hunts?	interested in elk hunting in Eastern Oregon.

After these lead-in questions, the survey then asked Questions 83 and 86. Again, note that the body of the report details the information given prior to all the questions and explains the context of some of the questions. Also be aware that Questions 83 and 86 were asked independently. In other words, although perhaps not happening often, an individual respondent could strongly like both proposals.

Overall, 51% of these respondents like the proposal offered in Q83 (to change archery elk hunting from a general season with unlimited tags to controlled hunts in Eastern Oregon), while 40% like the proposal in Q86 (splitting the archery elk season in Eastern Oregon into two 15-day controlled hunts).

The top reasons for liking a proposal to change elk archery hunting from a general season with unlimited tags to a controlled season are that the hunter feels archery and rifle should have the same opportunities and that there is too much pressure on elk by archery hunters. Top reasons for disliking the proposal are that it makes it hard to hunt every year, that it limits archery hunting opportunities, and that it is not necessary because archery hunting is not a problem.

Next, the survey asked about West Cascade elk hunting. Two options for West Cascade elk hunting were proffered, and respondents (active hunters who hunted deer or elk in the Western Oregon Cascades Region and Oregon hunters who are *very* or *somewhat* interested in West Cascade deer or elk hunting) indicated their like or dislike for each. The questions were not mutually exclusive in that a respondent could like both or dislike both.

First, the survey informed respondents that the current West Cascade elk season is 7 days in mid-October and that hunter success in recent years has been less than 5%. The timing of the season causes a break in the Cascade buck deer season. To improve the quality of this hunt, the Department is looking at two options.

The first option is to move the 7-day season to early November, a better time for elk hunting, which would also eliminate the mid-October break in the Cascade buck deer season.

The second option is to keep the West Cascade elk season during the same time period in October but allow the Cascade buck deer season to continue during this time period. This would allow hunters to hunt for deer and elk at the same time if they chose to do so. Deer hunters would not be required to purchase an elk tag.

Q87. How much would you like or dislike the first	
option in which elk season is moved to November and	
there is no break in deer season?	
Q88. How much would you like or dislike the second	Active hunters who hunted deer or elk in the Western
option in which elk season stays the same, but the deer	Oregon Cascades Region and Oregon hunters who are
and elk season overlap?	very or somewhat interested in West Cascade deer or elk
Q89. Which of the two options above would you most	hunting.
prefer: The first where the elk season is moved to	
November, or the second where the elk and deer	
seasons overlap? Or would you prefer no change?	

Overall, 54% of these respondents like the first option, while only 13% dislike it. It is better liked than the second option, for which 45% of respondents like and 26% dislike. A third question in this section then asked respondents which option they would choose if it were one or the other: 41% would choose the first option, while 30% would choose the second option.

Reasons to prefer the first option is that the hunting is better in November and that simultaneous seasons cause crowding. Reasons to prefer the second option are the hunter likes both hunts being together to be able to harvest either or both and that it is less costly to make only a single trip rather than two to hunt deer and elk.

	Active elk hunters who hunted elk in the Walla Walla,
Q92. Would you support or oppose a proposal to	Mt. Emily, or Wenaha WMUs and elk hunters who are
eliminate the first spike-only rifle season in these Units?	very or somewhat interested in hunting elk in these
	WMUs.

The survey asked questions specifically of those who hunted elk or were interested in hunting elk in the Walla Walla, Mt. Emily, or Wenaha WMUs. Overall, support (44%) far exceeds opposition (13%) to a proposal to eliminate the first spike-only rifle season in the given units.

The top reasons to support the proposal to eliminate the first spike-only season is that it allows less crowded hunting and that it is felt to allow bigger elk to grow. The top reason for opposing the proposal is that it limits hunting opportunities.

Q95. Would you support or oppose a proposal to decrease the total number of spike-only rifle tags in these	Active elk hunters who hunted elk in the Walla Walla, Mt. Emily, or Wenaha WMUs and elk hunters who are	
Units?	very or somewhat interested in hunting elk in these WMUs.	

In this line of questioning, the survey again asked questions specifically of those who hunted elk or were interested in hunting elk in the Walla Walla, Mt. Emily, or Wenaha WMUs. Overall, support (49%) far exceeds opposition (13%) to a proposal to decrease the total number of spike-only rifle tags in these units.

The top reasons for supporting a proposal to decrease the spike-only rifle tags is that it is felt to allow for better herd management, that it provides opportunities for other tags, and that it provides a better quality hunt. The overriding reason for opposing the proposal is that it would limit opportunities to hunt.

TABLE OF CONTENTS

Introduction and Methodology	1
Survey Sample	
Questionnaire Design	2
Contact Procedures and Surveying Dates and Times	3
Survey and Data Collection Facilities	
Survey Data Collection and Quality Control	7
Data Analysis	
Sampling Error	
Additional Information About the Presentation of Results in the Report	9
Order in Which Graphs Are Presented	10
Hunting Participation	
Applying for Tags	15
Interest in Hunting	
Hunting Equipment	
Location of Hunting: Region and Public / Private Lands—Deer	37
Location of Hunting: Region and Public / Private Lands—Elk	52
Opinions on Regulatory Changes and Management Strategies	72
Demographic Information	
About Responsive Management	174

INTRODUCTION AND METHODOLOGY

This study was conducted for the Oregon Department of Fish and Wildlife (ODFW) to determine resident licensed Oregon hunters' participation in deer and elk hunting, their experiences applying for tags, their interest in hunting in the future, the equipment they use, their locations of hunting, and their attitudes toward various hunting regulations and management strategies. The study entailed a scientific, probability-based survey of licensed Oregon hunters 18 years old and older.

This is the third phase of the overall project to explore these topics among deer and elk hunters. The first phase of this project was a multi-modal survey of hunters who had purchased a deer or elk tag, those who had applied for a deer or elk hunt, and/or those who had purchased preference points for a deer or elk hunt for the years 2016 through 2018. This survey was conducted in 2019. The second phase of the project was an online public forum that allowed any hunter who wished to provide input to the ODFW to do so. This forum was administered in 2019, as well.

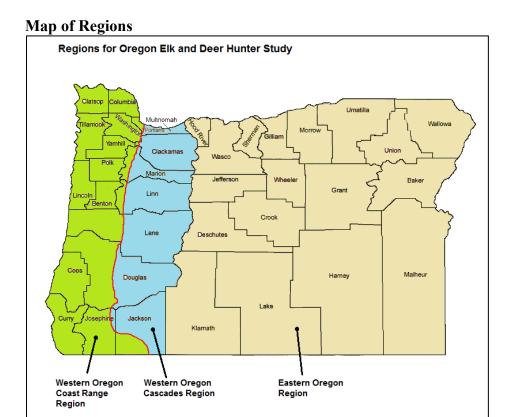
This survey report is the third phase of the project. Specific aspects of the research methodology for this third phase are discussed below.

SURVEY SAMPLE

The sample consisted of those who had purchased a deer or elk tag, those who had applied for a deer or elk hunt, and/or those who had purchased preference points for a deer or elk hunt for the years 2017 through 2019 (note that among those who had applied for a hunt or had purchased points, and were thus in the database, were some who had not yet hunted in Oregon—the survey intentionally included these people). The database containing the contacts for these hunters and potential hunters was provided by the ODFW.

The sample was stratified by region, with a goal that at least 1,000 deer or elk hunters who reside in the Eastern Region would be surveyed and a like number who reside in the Western Region (the two Western sub-regions combined) would be surveyed. (The regions are shown in the map on the following page; the Western sub-regions are divided by Interstate 5. Although the stratification did not use the Western Region divided into its sub-regions, some of the analyses do include the two sub-regions; therefore, the map shows the Western Region divided into its sub-regions. The crest of the Cascade Range divides the Eastern Region and Western Region.)

The methodology was designed to ensure that every licensed hunter in the database had an opportunity to be selected for the survey, regardless of contact information available for that person—whether that contact information was a telephone number, email address, or postal address. A random sample was pulled for the survey, and hunters were contacted based on the contact information available. The sample was pulled in the same proportion as the database in each of the two regions according to the type of contact information available. By pulling the sample proportional to the contact information in the database, no one available contact mode would bias the survey, and every hunter had an opportunity to participate in the survey. Note that for telephone contacts, landline and cell phones were called depending on the number that was included in the database; for this reason, landline versus cell phone was not an issue in this sampling plan.



QUESTIONNAIRE DESIGN

The telephone survey questionnaire was developed cooperatively by Responsive Management and the ODFW, based on the aforementioned 2019 survey, as well as the research team's familiarity with hunting and natural resources in general.

The telephone version of the survey was computer coded for Responsive Management's computer-assisted telephone interviewing (CATI) process. An important aspect of this process is that the computer controls which questions are asked and allows for immediate data entry. Each telephone survey, however, is administered by a live interviewer. The online version of the survey was coded in the online platform. Responsive Management conducted pre-tests of both versions of the questionnaire to ensure proper wording, flow, and logic in the surveys.

In the survey, deer hunters were divided into three groups by avidity, with questions specific to the particular group the hunter was in. The groups were hunters who had hunted in Oregon for deer within the past 3 years, those who had hunted in Oregon at some time for deer but not within the past 3 years, and those who had not yet hunted deer in Oregon but who indicated that they want to or plan to do so in the future. Then the same was done for elk hunters. Of the 4,075 total respondents, 4,034 were classified as an active, inactive, or potential deer hunter (references to "deer hunters" in the report refers to these respondents), and 3,927 were classified as an active, inactive, or potential elk hunter (referred to as elk hunters). Note that 3,894 of them were classified as both a deer and an elk hunter, 140 were classified as a deer hunter but not an elk hunter, and 33 were classified as an elk hunter but not a deer hunter. Only 8 respondents did not meet the criteria to be classified as either an active, inactive, or potential deer or elk hunter.

For the purposes of this report, respondents as a whole are all referred to as "hunters," even those who have not yet actually hunted in Oregon for deer or elk. When it is necessary to distinguish between these three groups, they will be referred to as "active hunters," "inactive hunters," and "potential hunters."

CONTACT PROCEDURES AND SURVEYING DATES AND TIMES

There were three modes of contact: by telephone, by email, and by postal mail. Hunters contacted by telephone were interviewed at that time, or a callback time was scheduled. Those contacted by email were provided a link to the survey to take it online. Finally, those contacted by postcard were given the survey URL and an access code to take the survey online; they were also provided a toll-free telephone number that they could call into if they wanted to take the survey by telephone or for assistance with completing the online survey. Copies of the email and the postcard are shown below and on the following pages. (Note that the postcard shows the name and address of the executive director of Responsive Management as an example to depict where a selected respondent's name and address would appear in the actual postcards.)

Initial Email Sent

Dear Oregon Licensed Hunter,

The Oregon Department of Fish and Wildlife would like for you to participate in a survey about your hunting experiences and preferences to help us better manage deer and elk hunting opportunities in Oregon.

Click Here to Start the Survey

As an Oregon hunter, your answers are very important to this study. You are one of only a small number of licensed hunters and hunters who have applied for tags randomly chosen to participate in this study. To ensure that results truly represent hunters in Oregon, it is important that we hear from you. Your answers will be kept completely confidential and will not be associated with your name or license in any way.

Please note that the survey link in this email is designed to be used only once to prevent multiple survey submissions in order to maintain the scientific accuracy of the study; the survey link cannot be used if forwarded to other email addresses or recipients.

Responsive Management, a research firm specializing in survey research on fish and wildlife issues, is administering this survey for the Oregon Department of Fish and Wildlife. If you need technical assistance with accessing or completing the survey, please contact Responsive Management via email at responsivemanagement.com.

Thank you for your time and willingness to participate.

Sincerely, Nick Myatt Project Lead – Big Game Hunting Review Oregon Department of Fish and Wildlife



Reminder Email Sent

Dear Oregon Licensed Hunter,

Just a reminder that there is still time to complete the survey. ODFW would still like to hear your opinions!

The Oregon Department of Fish and Wildlife would like for you to participate in a survey about your hunting experiences and preferences to help us better manage **deer and elk hunting** opportunities in Oregon.

Click Here to Start the Survey

As an Oregon hunter, your answers are very important to this study. You are one of only a small number of licensed hunters and hunters who have applied for tags randomly chosen to participate in this study. To ensure that results truly represent hunters in Oregon, it is important that we hear from you. Your answers will be kept completely confidential and will not be associated with your name or license in any way.

Please note that the survey link in this email is designed to be used only once to prevent multiple survey submissions in order to maintain the scientific accuracy of the study; the survey link cannot be used if forwarded to other email addresses or recipients.

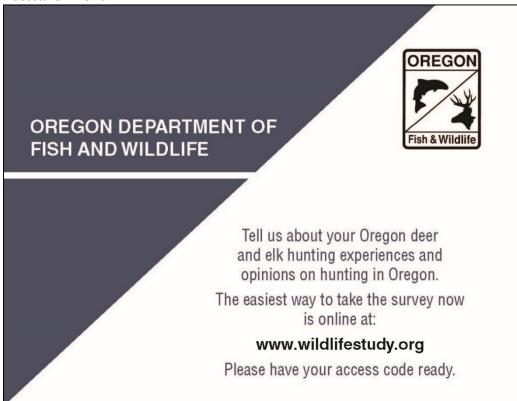
Responsive Management, a research firm specializing in survey research on fish and wildlife issues, is administering this survey for the Oregon Department of Fish and Wildlife. If you need technical assistance with accessing or completing the survey, please contact Responsive Management via email at research@responsivemanagement.com.

Thank you for your time and willingness to participate.

Sincerely, Nick Myatt Project Lead – Big Game Hunting Review Oregon Department of Fish and Wildlife



Postcard Front



Postcard Back

Dear Oregon Hunter,

Public input is important, and we want your feedback on hunting in Oregon. You are one of a small number of licensed hunters randomly chosen to participate in this study. You can take the survey online at www.wildlifestudy.org or call toll free 844-836-9364 to have a professional interviewer ask you the survey questions. You will be asked for your access number, which can be found above your name on this postcard.

Responsive Management, a research firm specializing in natural resource and outdoor recreation issues, is conducting this study for the ODFW. For more information about this study, please contact Responsive Management at: research@responsivemanagement.com.

Oregon Department of Fish and Wildlife c/o Responsive Management 130 Franklin Street Harrisonburg, VA 22801 PRSRT FIRST CLASS US POSTAGE PAID Harrisonburg, VA Permit 75

T1 P1 ********* ALL FOR AADC 230

999999

MARK DUDA 130 FRANKLIN ST HARRISONBURG VA 22801-4017 Telephone surveying times were Monday through Friday from 11:00 a.m. to 9:00 p.m., Saturday from noon to 8:00 p.m., and Sunday from 2:00 p.m. to 9:00 p.m., local time. A five-callback design was used to maintain the representativeness of the sample, to avoid bias toward people easy to reach by telephone, and to provide an equal opportunity for all to participate. When a hunter could not be reached on the first call, subsequent calls were placed on different days of the week and at different times of the day. Telephone calling was started on May 13 and continued to May 19, 2020. Note, however, that hunters, in response to the postcard, still called in after May 19 to take the survey and were administered the survey (or given assistance for the online survey) after May 19. The telephone surveying dates given above refer only to outgoing calling for the survey.

The online survey could be taken at any time, at the convenience of the hunter. Initial email survey invitations were sent on May 14, 2020; a reminder was sent to all who had not yet responded on May 20, 2020. The postcard invitations were mailed on May 18, 2020 (the postcard primarily directed hunters to the online survey, but it included a toll-free call-in number). The online survey was conducted from May 14 to June 4, 2020.

As part of the contact procedures, hunters whose email contact proved to be undeliverable but whose record had a telephone number were put into the telephone portion of the sample to be contacted in that way. Hunters with undeliverable email addresses and no telephone number were put into the postcard sample. This ensured that these hunters without valid email addresses would still be represented in the final data. Additionally, some hunters with invalid telephone numbers were put into the postcard sample to ensure that those without valid telephone numbers would still be represented in the final data. Finally, some hunters with email addresses that were valid but who did not complete the survey online were also put into the telephone portion of the survey to be contacted by telephone. This latter action was done only on *some* of the non-responding hunters with valid email addresses because enough sample had been obtained for the final results without attempting to call all of these hunters.

SURVEY AND DATA COLLECTION FACILITIES

The telephone portion of the survey was conducted by Responsive Management's interviewers. Usually, Responsive Management maintains its own *in-house* telephone interviewing facilities staffed by interviewers with experience conducting computer-assisted telephone interviews on the subjects of hunting, outdoor recreation, and natural resources. However, due to coronavirus distancing, interviewers conducted the surveys from their home locations. Nonetheless, Survey Center Managers were able to remotely monitor interviews in real time and provide rigorous quality control over the interviews and data collection.

To further ensure the integrity of the telephone survey data, Responsive Management has interviewers who have been trained according to the standards established by the Council of American Survey Research Organizations. Methods of instruction included lecture and role-playing. The Survey Center Managers conducted a conference call briefing with the interviewers prior to the administration of this survey. Interviewers were instructed on type of study, study goals and objectives, handling of survey questions, interview length, termination points and qualifiers for participation, interviewer instructions within the survey questionnaire, reading of the survey questions, skip patterns, and probing and clarifying techniques necessary for specific questions on the survey questionnaire.

Responsive Management monitored the progress of the online portion of the survey and downloaded the survey data into its in-house data management facilities. The surveys were checked so that those who took the survey were not sent email reminders.

SURVEY DATA COLLECTION AND QUALITY CONTROL

As previously mentioned, CATI software was used for the telephone data collection. The telephone survey data were entered into the computer as each interview was being conducted, eliminating manual data entry after the completion of the survey and the concomitant data entry errors that may occur with manual data entry. The survey questionnaire was programmed so that CATI branched, coded, and substituted phrases in the survey based on previous responses to ensure the integrity and consistency of the data collection. Note that each telephone survey was administered by a live interviewer; the CATI software only directs the interviewer to the proper questions, depending on previous responses given in the survey, but the interviewer reads the questions to the respondent in the telephone survey.

For quality control, the Survey Center Managers monitored the telephone data collection, including monitoring of the actual telephone interviews, to ensure the integrity of the data. The survey questionnaire itself contained error checkers and computation statements to ensure quality and consistent data. The online data were collected periodically to monitor progress on the survey, as well; the online survey data were obtained in IBM SPSS Statistics.

After the surveys were obtained by the interviewers, the Survey Center Managers and/or statisticians checked each completed survey to ensure clarity and completeness. Responsive Management obtained 4,075 completed surveys by telephone and online.

DATA ANALYSIS

The analysis of data was performed using IBM SPSS Statistics as well as proprietary software developed by Responsive Management. The results were weighted by license type, age, and region so that the sample was representative of Oregon licensed deer and elk hunters as a whole. The tabulation on the following page shows the percentages from the license database (to which proportions were matched) and then the percentages of unweighted data. Weighting by region was necessary because the sample was stratified, with a goal of 1,000 completed surveys from hunters residing in each region; because this equal goal by region does not match actual hunter proportions in each region, weighting by region was necessary.

On questions that asked respondents to provide a number (e.g., days hunting), the graphs and/or tables may show ranges of numbers rather than the precise numbers. Nonetheless, in the survey each respondent provided a precise number, and the dataset includes this precise number, even if the graphs and/or tables only show ranges of numbers. Note that the calculation of means and medians used the precise numbers that the respondents provided.

Variable	Percentages From License Database (Used to Establish Proper Proportions)	Percentages in Unweighted Data
License Held		
Elk	13.2	16.1
Deer	36.3	28.6
Elk and deer	41.0	45.4
Applied, but did not receive tag	9.5	9.9
Age		
65 years old or older	19.2	33.3
55-64 years old	16.8	20.7
45-54 years old	16.7	17.2
35-44 years old	18.7	16.4
25-34 years old	18.4	9.9
18-24 years old	10.2	2.5
Region	·	
Eastern	27.4	48.5
Western - East of I-5	31.2	23.1
Western - West of I-5	41.5	28.4

Some of the questions were open-ended, meaning that no answer set was presented and hunters could respond with anything that came to mind. For the analysis of these questions, each verbatim open-ended response was put into one or more categories. For instance, on the question that asked hunters why they preferred the current season with a high number of archery hunters but a guaranteed tag in their preferred unit, the verbatim response, "At least I get a tag," was categorized as "Guaranteed tag is important / wants to hunt every year, even if not successful," and the response, "it's hard enough to fill a tag as it is, so a guaranteed tag is great," also was put into that category. In this way, each verbatim response was examined and categorized so that the graph could show logical response sets. In total, the analysts categorized the responses to 14 questions, which totaled 11,459 lines of data that were categorized.

Many crosstabulations were run of the data for analysis. These include crosstabulations by avidity (active deer/elk hunters, inactive deer/elk hunters, and potential deer/elk hunters), by equipment preference (rifle, archery, or muzzleloader), by equipment used (rifle only, archery only, rifle and archery both), by age (18 to 34 years old, 35 to 54 years old, and 55 years old and older), by region of residence, and by whether the hunter hunts in both the Eastern and Western Regions or just the Eastern Region only.

Additionally, some analyses were conducted on the Wildlife Management Units (WMUs) in which the hunters had gone hunting. For these analyses, some of the WMUs were combined into larger areas, primarily to ensure that enough sample would be present for the analyses to be conducted. Maps of the WMUs are included in the section that discusses hunting locations.

SAMPLING ERROR

Throughout this report, findings of the survey are reported at a 95% confidence interval. For the entire sample of Oregon hunters, the sampling error is at most plus or minus 1.52 percentage points. This means that if the survey were conducted 100 times on different samples that were selected in the same way, the findings of 95 out of the 100 surveys would fall within plus or

minus 1.52 percentage points of each other. Sampling error was calculated using the formula described on below, with a sample size of 4,075 and a population size of 260,711 hunters.

Sampling Error Equation

$$B = \left(\sqrt{\frac{N_p(.25)}{N_s} - .25} \right) (1.96)$$
Where: B = maximum sampling error (as decimal)
$$N_P = \text{population size (i.e., total number who could be surveyed)}$$

$$N_S = \text{sample size (i.e., total number of respondents surveyed)}$$

Derived from formula: p. 206 in Dillman, D. A. 2000. *Mail and Internet Surveys*. John Wiley & Sons, NY. **Note**: This is a simplified version of the formula that calculates the <u>maximum</u> sampling error using a 50:50 split (the most conservative calculation because a 50:50 split would give maximum variation).

ADDITIONAL INFORMATION ABOUT THE PRESENTATION OF RESULTS IN THE REPORT

In examining the results, it is important to be aware that the questionnaire included several types of questions:

- Open-ended questions are those in which no answer set is presented to the respondents; rather, they can respond with anything that comes to mind from the question.
- Closed-ended questions have an answer set from which to choose.
- Single or multiple response questions: Some questions allow only a single response, while other questions allow respondents to give more than one response or choose all that apply. Those that allow more than a single response are indicated on the graphs with the label, "Multiple Responses Allowed."
- Scaled questions: Many closed-ended questions (but not all) are in a scale, such as very interested, somewhat interested, and not at all interested.

Most graphs show results rounded to the nearest integer; however, all data are stored in decimal format, and all calculations are performed on unrounded numbers. For this reason, some results may not sum to exactly 100% because of this rounding on the graphs. Additionally, rounding may cause apparent discrepancies of 1 percentage point between the graphs and the reported results of combined responses (e.g., when "strongly support" and "moderately support" are summed to determine the total percentage in support).

Recall that hunters were divided in the survey into three groups by avidity: hunters who had hunted in Oregon for deer or elk within the past 3 years, hunters who had hunted in Oregon at some time for deer or elk but not within the past 3 years, and hunters who had not yet hunted deer or elk in Oregon but had indicated that they want to or plan to do so in the future. Respondents as a whole are all referred to as "hunters," even those who have not yet actually hunted in Oregon for deer or elk. When it is necessary to distinguish between these three groups, they will be referred to as "active hunters," "inactive hunters," and "potential hunters."

ORDER IN WHICH GRAPHS ARE PRESENTED

The report is organized by theme. For instance, hunting participation is explored in one section, applying for tags is explored in the next section, and so on. The overall results and the aforementioned crosstabulations are presented in the order listed below. Note that every question does not have every crosstabulation.

- Overall.
- By hunter avidity.
- By equipment preferred.
- By equipment used.
- By age.
- By region of residence.
- By region of hunting.

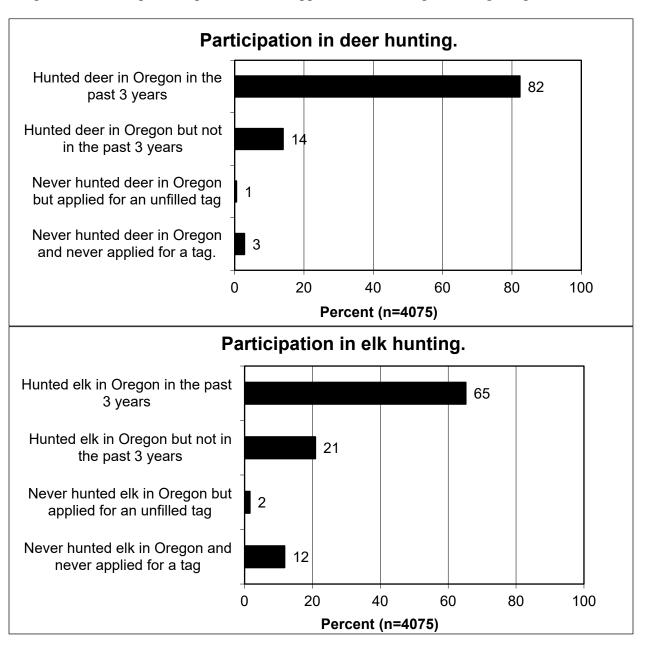
Deer graphs and analyses will be presented followed by elk graphs and analyses, when similar questions are asked concerning both deer and elk.

HUNTING PARTICIPATION

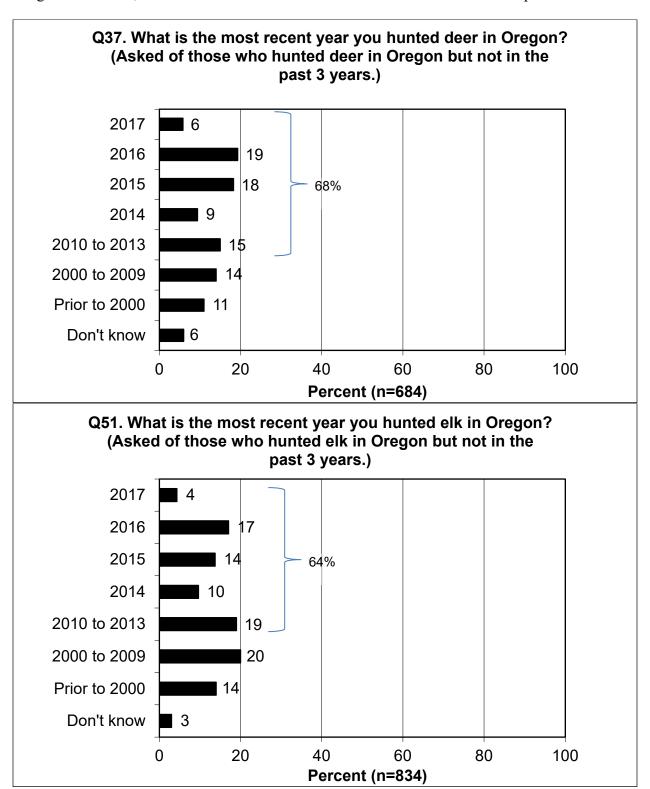
The initial questions in the survey asked about participation in deer and elk hunting in the previous 3 years, as well as participation prior to that (for those who did not hunt in the previous 3 years). This allowed all the hunters to be categorized by avidity: active deer/elk hunters, inactive deer/elk hunters, and potential deer/elk hunters, as described previously.

Among hunters as a whole, 82% had hunted deer in the previous 3 years, and another 14% had hunted deer at some time, but not in the past 3 years. The remaining 4% had not hunted deer in Oregon, but some of them had applied for a deer tag but not gotten one.

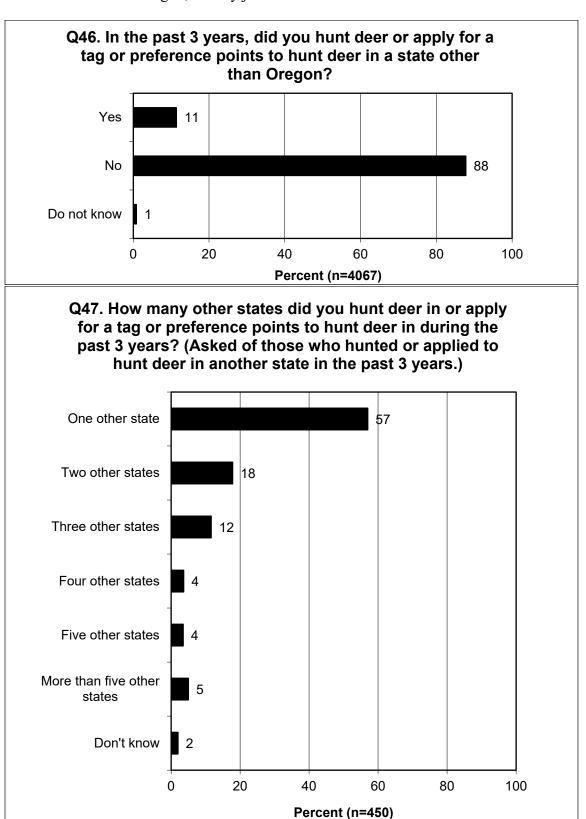
Regarding elk, 65% of hunters overall had hunted elk in the previous 3 years, while 21% had hunted elk at some time prior to the past 3 years. The remaining 14% had not hunted elk in Oregon, but a small percentage of them had applied for an elk tag without getting it.



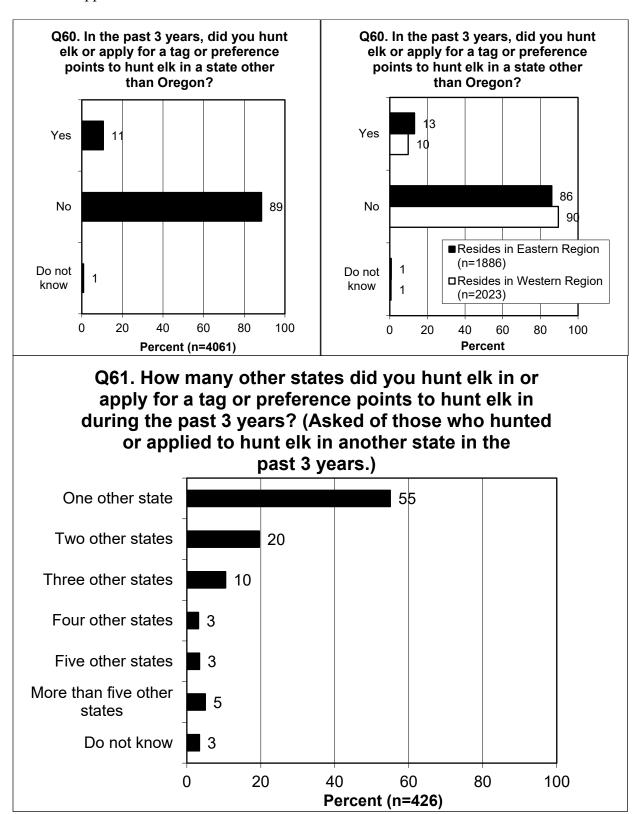
The survey asked inactive deer and elk hunters to indicate the most recent year that they had hunted deer/elk, as shown in the graphs below: 68% of inactive deer hunters had hunted deer in Oregon since 2010, and 64% of inactive elk hunters had hunted elk in that time period.



A small percentage of hunters (11%) had hunted deer or applied for a tag/preference points to hunt deer outside of Oregon, usually just one other state.

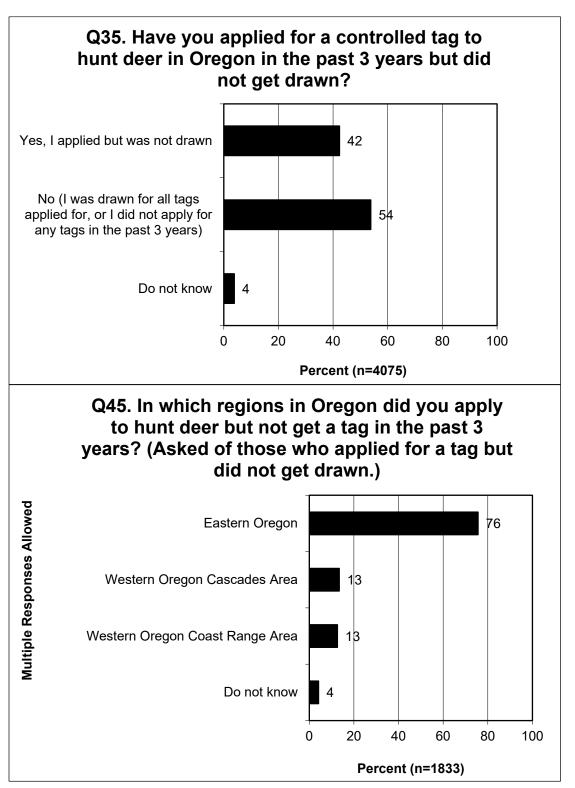


Overall, 11% of hunters had hunted or applied to hunt elk outside of Oregon. The crosstabulation by region of residence does not have large differences in the rate. Typically, hunters had only hunted or applied in one other state.

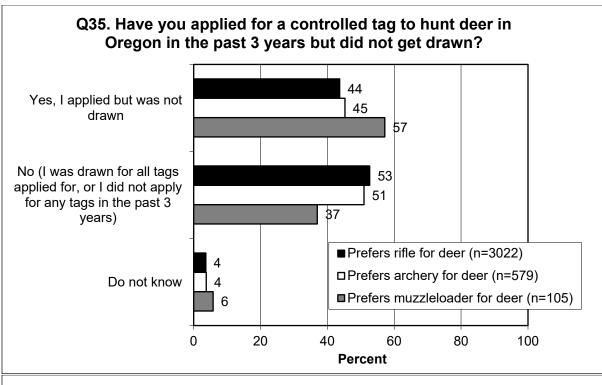


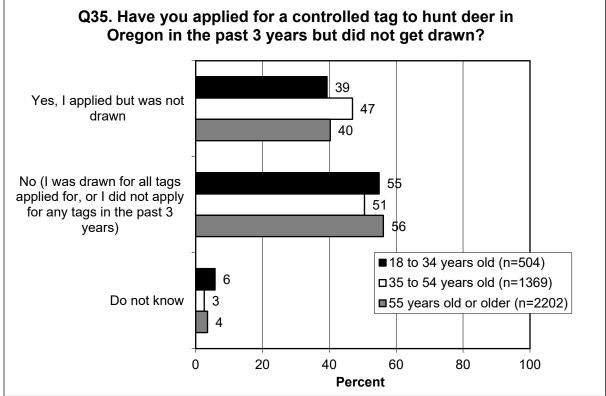
APPLYING FOR TAGS

Among hunters overall, 42% had at some time applied for a controlled tag to hunt deer but did not get the tag. Eastern Oregon was the region most likely to have an unfilled application.

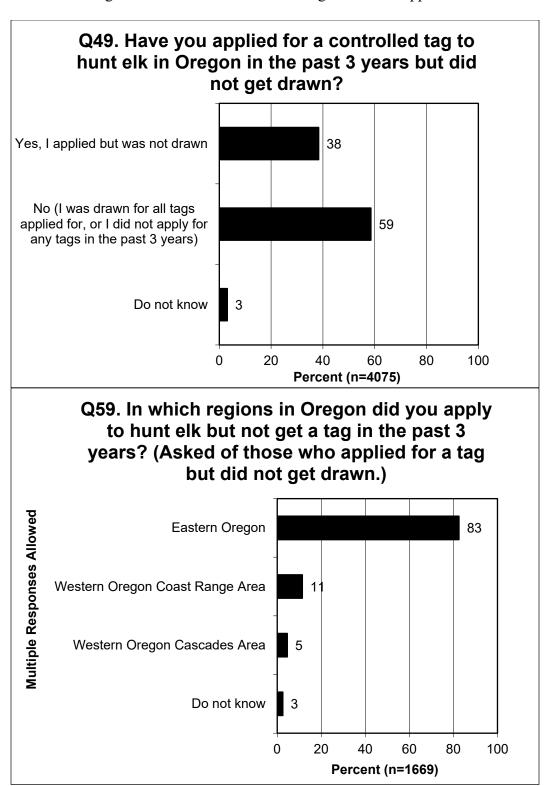


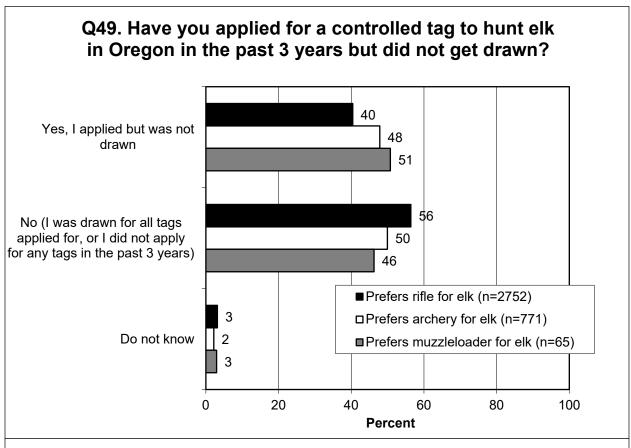
The crosstabulations show that those who prefer muzzleloader have the highest percentage who applied for an unfilled application, compared to those who prefer rifle or archery. The age crosstabulation is shown as well, with the middle age group having the highest percentage applying for an unfilled application.

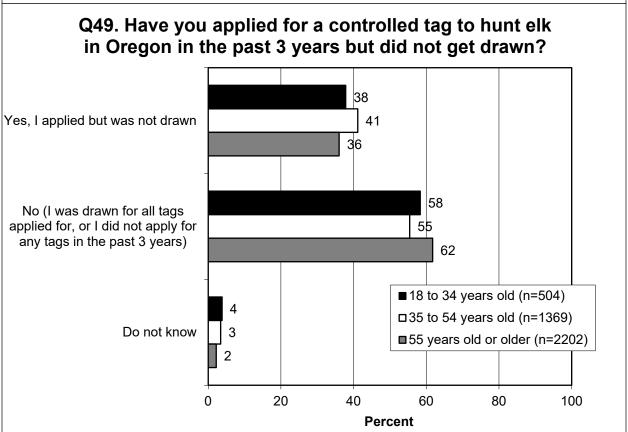




Among hunters overall, 38% had at some time applied for a controlled tag to hunt elk but did not get the tag. Eastern Oregon was the region most likely to have an unfilled elk application. Crosstabulations by weapon preference and age are shown on the next page. Those who prefer rifle for hunting elk had the lowest rate of having an unfilled application.

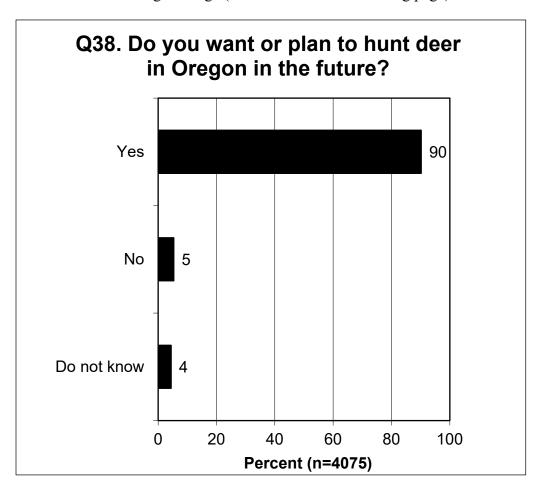


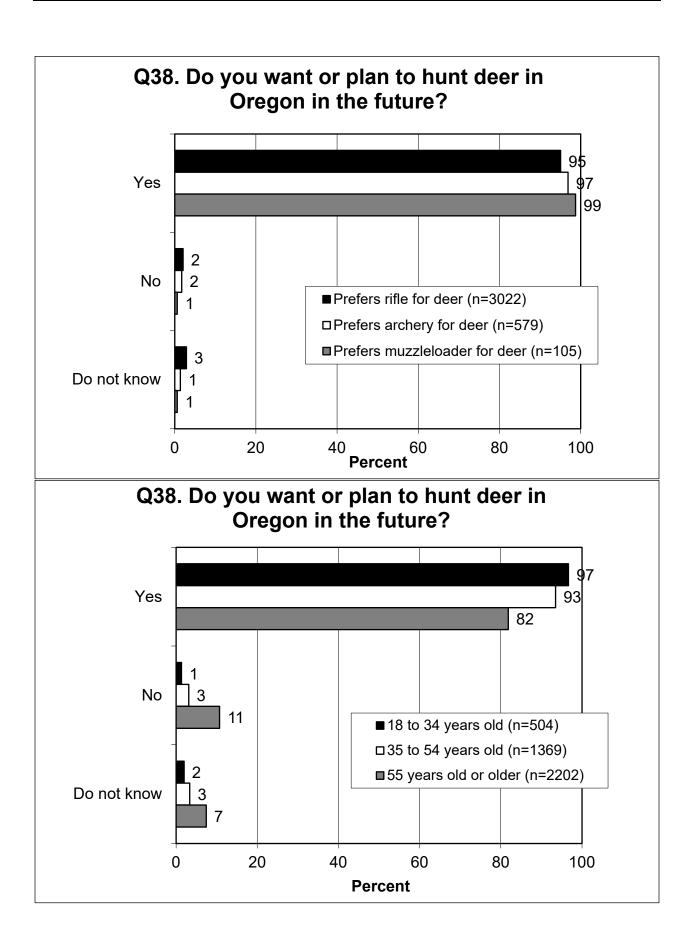




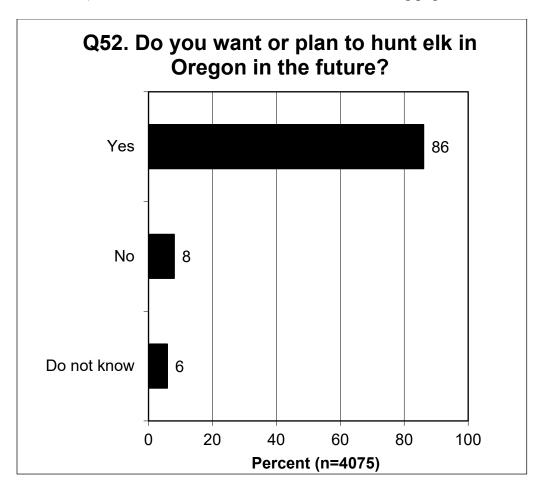
INTEREST IN HUNTING

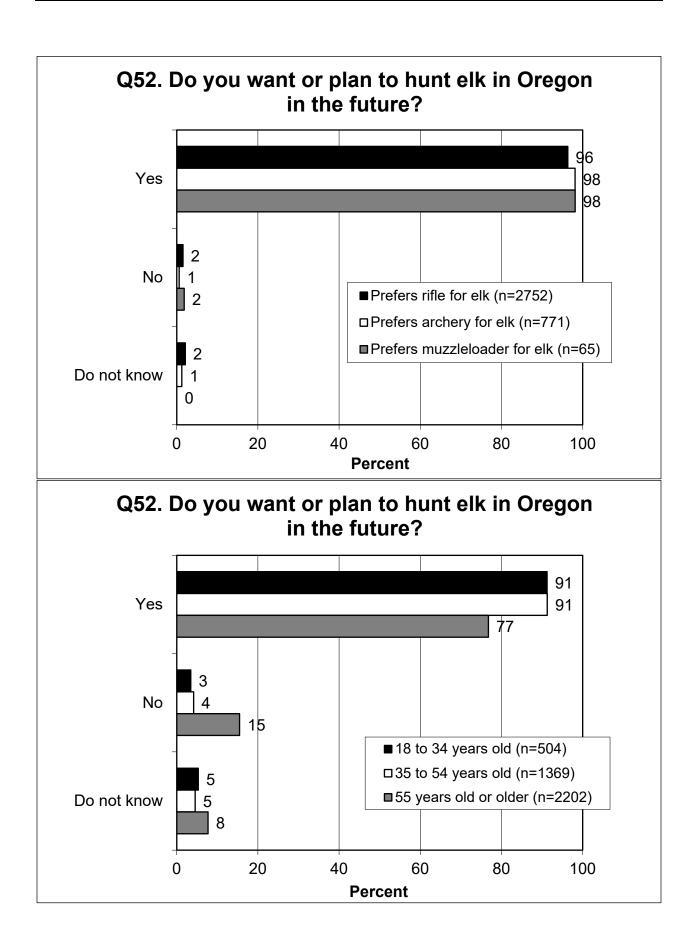
An overwhelming majority of hunters (90%) want or plan to hunt deer in the future in Oregon. On this question, a crosstabulation was run by weapon preference, with no substantive difference between the groups (shown on the following page). The crosstabulation by age shows some marked differences, with younger people being more likely to want or plan to do so, with likelihood diminishing with age (also shown on the following page).





A large majority of hunters (86%) want or plan to hunt elk in Oregon in the future. Again, crosstabulations show that younger hunters have the highest percentages who want or plan to hunt elk in Oregon in the future (the crosstabulation by weapon preference had no marked differences). The crosstabulations are shown on the following page.

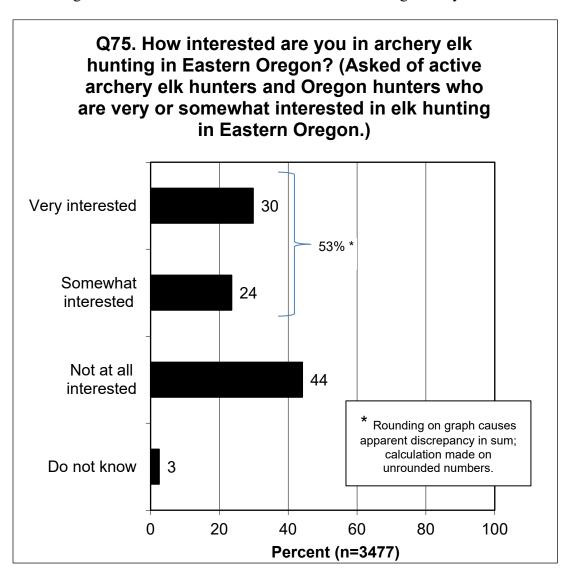


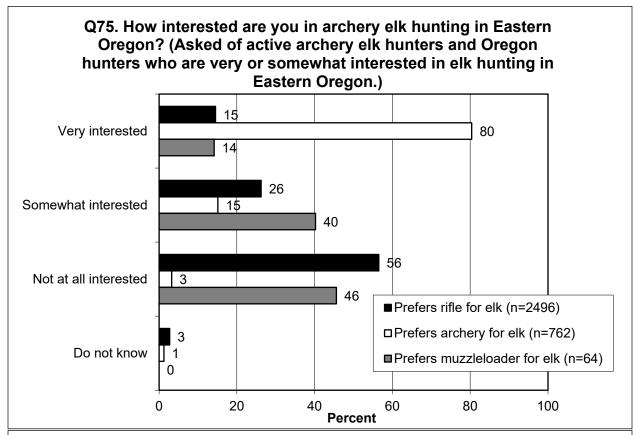


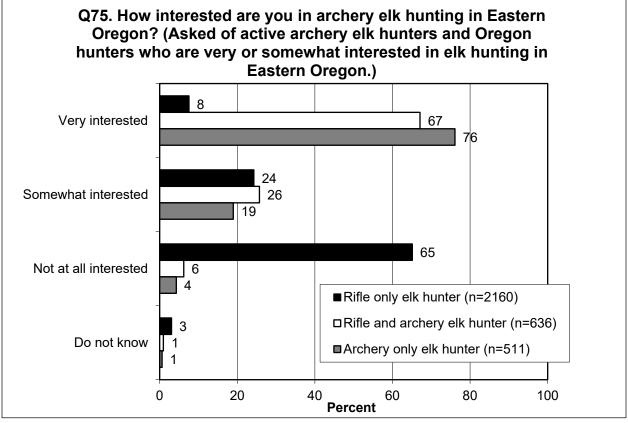
Active archery elk hunters and those who indicated interest in elk hunting in Eastern Oregon were asked specifically about their interest in archery elk hunting in Eastern Oregon: 53% of these hunters are very or somewhat interested.

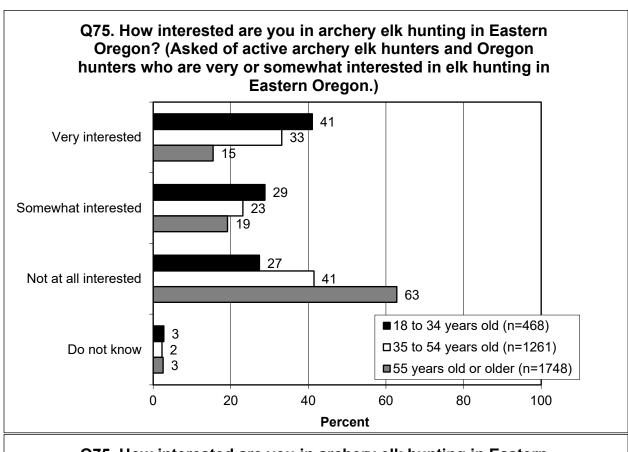
Crosstabulations on the following pages are presented:

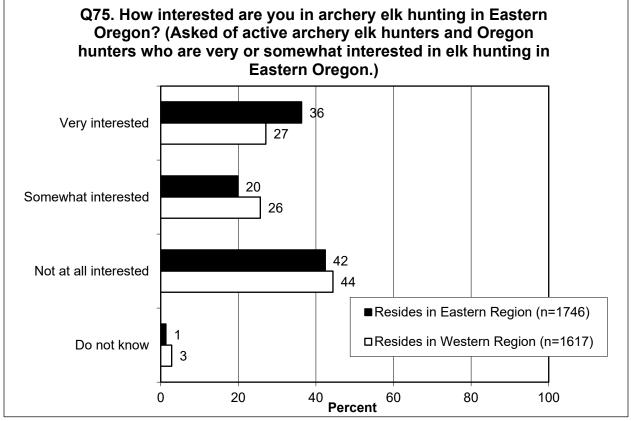
- By weapon preference: Not surprisingly, those who prefer archery have the most interest.
- By weapon use: Those who use archery and rifle have nearly the same interest level as those who use archery only.
- By age: Younger hunters have more interest than older hunters.
- By region of residence: Total interest is about the same between those respondents who live in the Eastern Region and those who live in the Western Region, although being *very* interested is higher among those residing in the Eastern Region.
- By region of hunting: Those who hunt in both the Eastern and Western Regions have higher interest than those who hunt in the Eastern Region only.

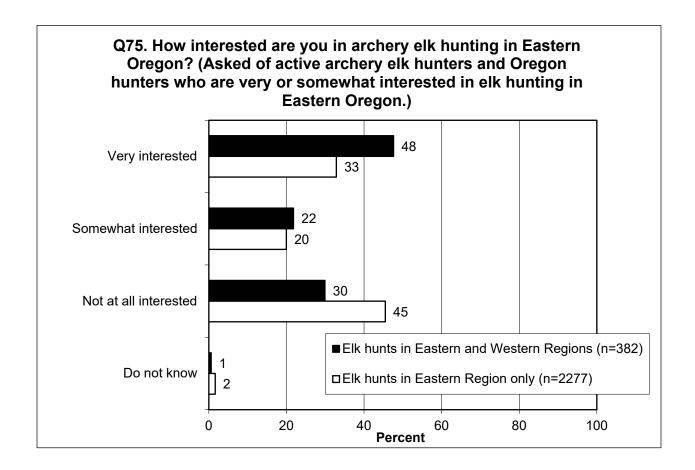






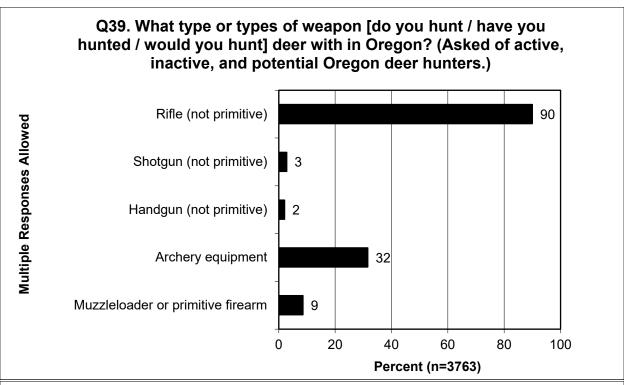


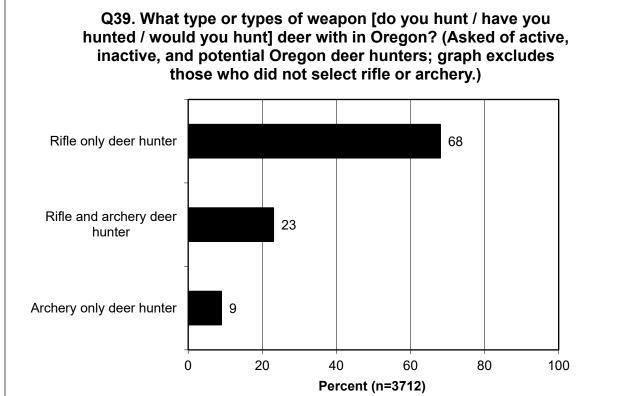




HUNTING EQUIPMENT

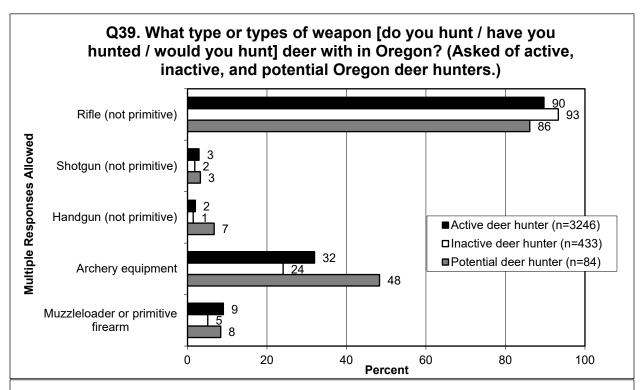
For deer hunting, rifles are the most popular weapons: 90% of deer hunters hunt, have hunted, or would hunt deer with a rifle. Meanwhile, about a third (32%) use, have used, or would use archery equipment. A second graph shows the breakdown between rifle and archery.

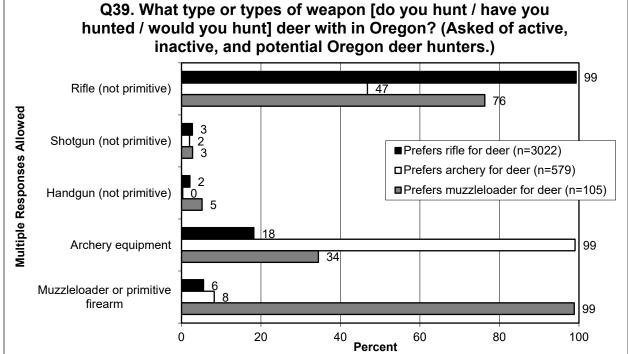


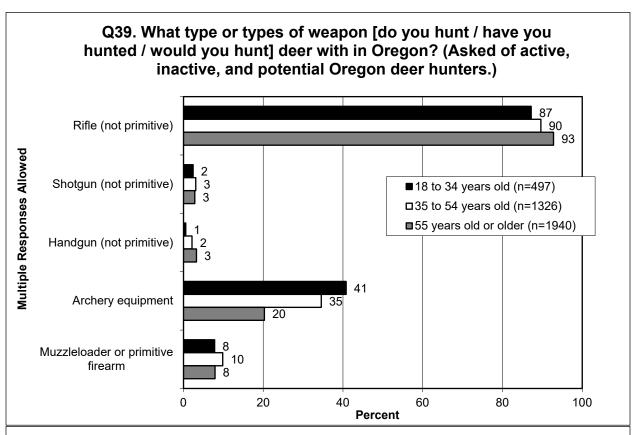


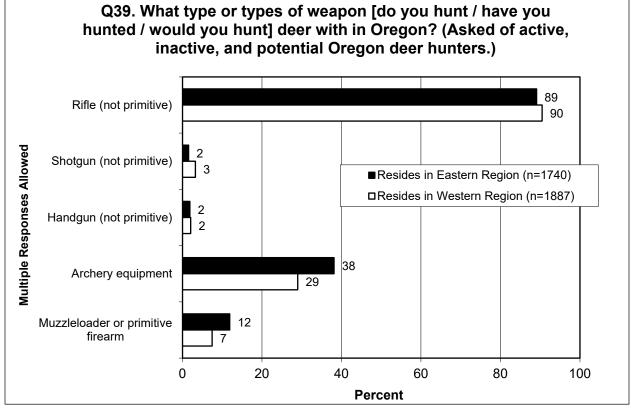
Four crosstabulations follow.

- In the crosstabulation by avidity, potential deer hunters have the highest percentage in the archery selection.
- The crosstabulation by weapon choice contains no surprises.
- Younger hunters are more likely than older hunters to hunt, have hunted, or want to hunt deer with archery.
- Eastern Region residents have the highest in the archery or muzzleloader selections.

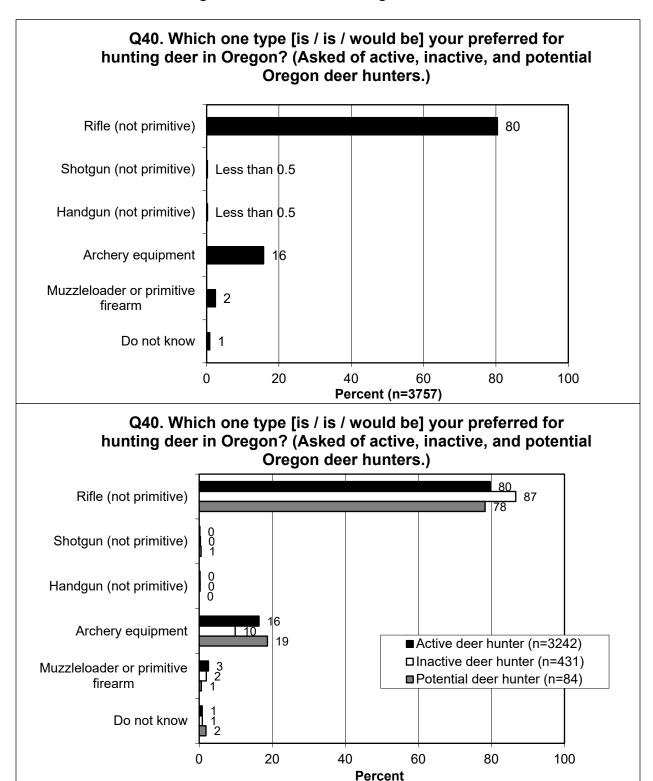


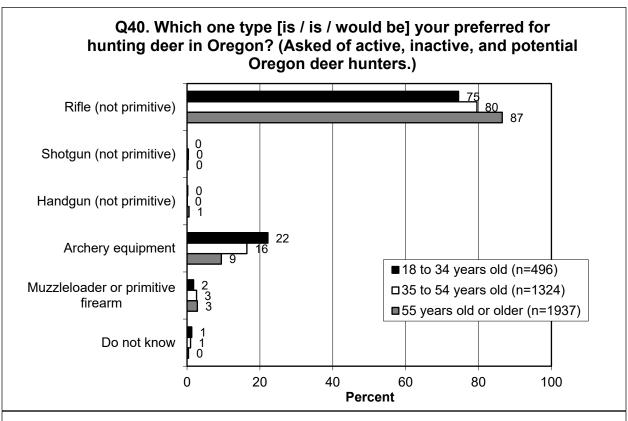


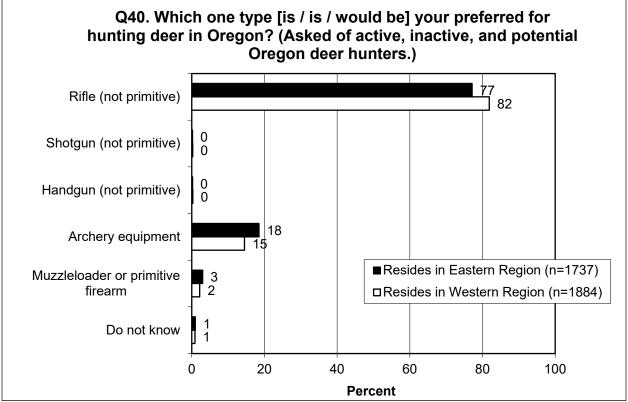




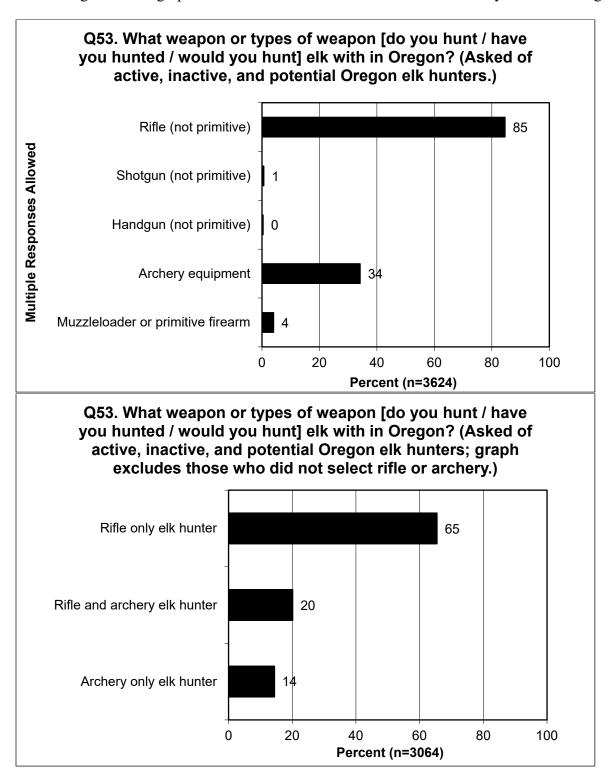
The survey also asked about the single type of weapon that is most preferred for deer hunting. Rifle leads the list (at 80%) for deer hunting, while 16% prefer archery. Active hunters are more likely to prefer archery, compared to inactive hunters. Younger hunters are more likely than their counterparts to prefer archery equipment. Archery is selected just slightly more among hunters who reside in the Eastern Region than in the Western Region.





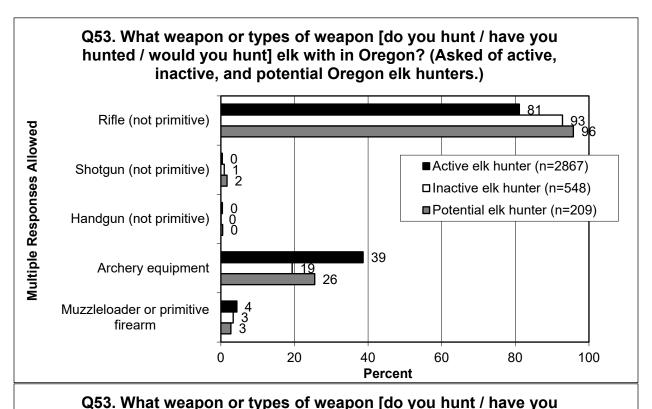


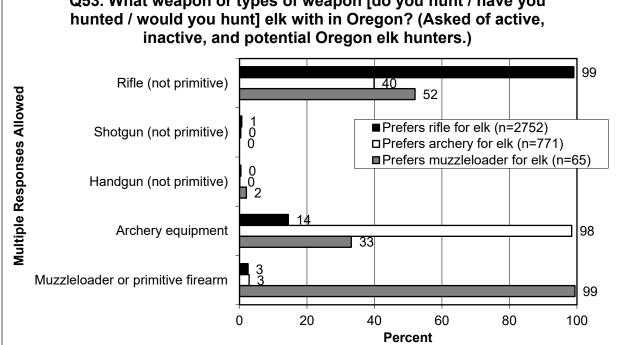
For hunting elk, rifle is the top choice: 85% of elk hunters hunt, have hunted, or would hunt elk with a rifle. Slightly more than a third (34%) use, have used, or would use archery equipment for elk hunting. The next graph shows the breakdown between rifle and archery for elk hunting.

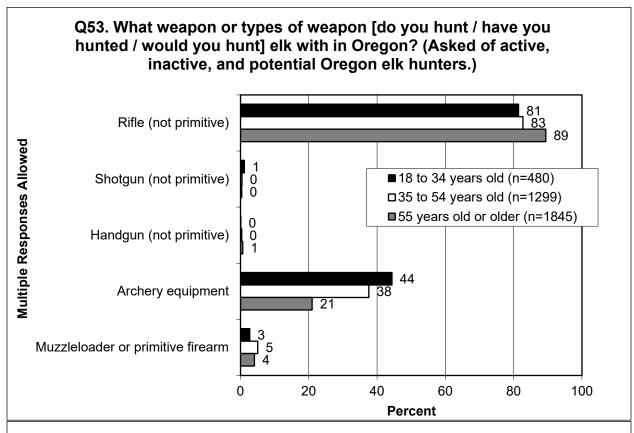


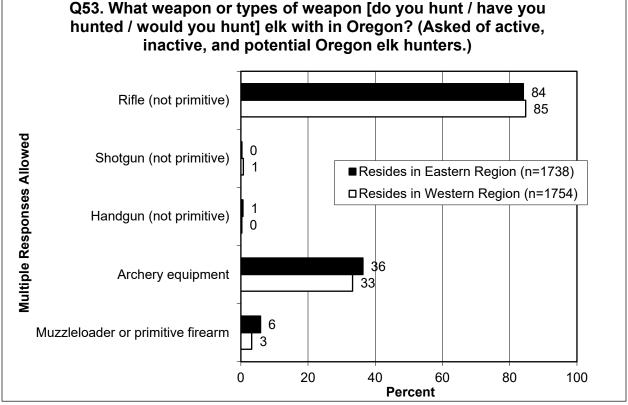
Four crosstabulations follow.

- Avidity was crosstabulated, and active elk hunters have the highest percentage in the archery selection, while potential elk hunters have the highest in the rifle selection.
- The crosstabulation by weapon choice is as expected.
- Younger hunters are more likely than older hunters to hunt, have hunted, or want to hunt elk with archery.
- The regions are almost exactly the same on this question.

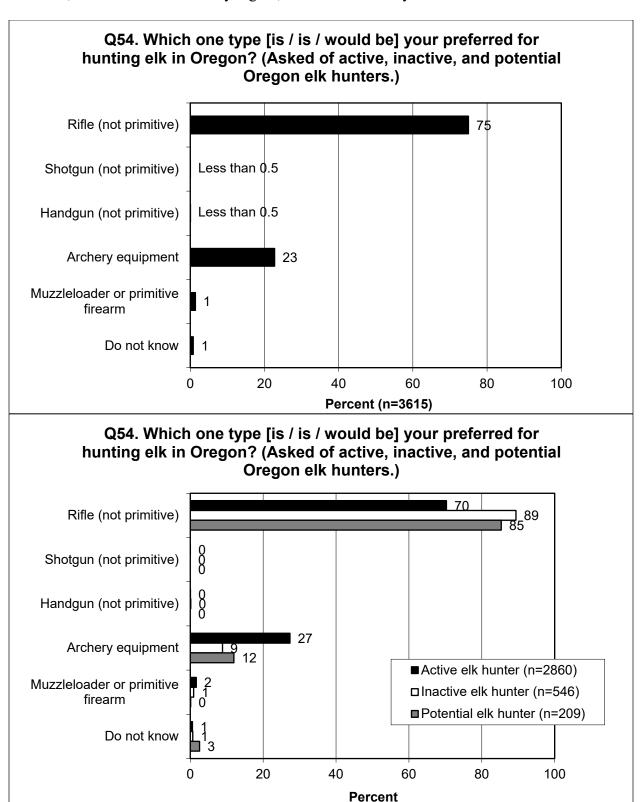


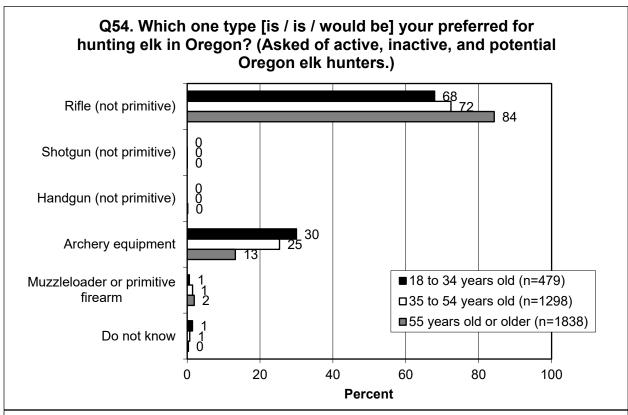


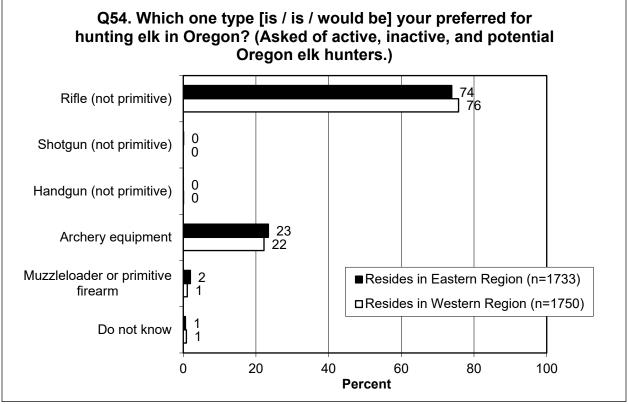




As the survey did with deer, it also asked about the single type of weapon that is most preferred for hunting elk: 75% of elk hunters prefer a rifle, while 23% prefer archery equipment. A preference for archery to hunt elk is selected more often by active hunters and younger hunters. However, in the crosstabulation by region, there were virtually no differences.

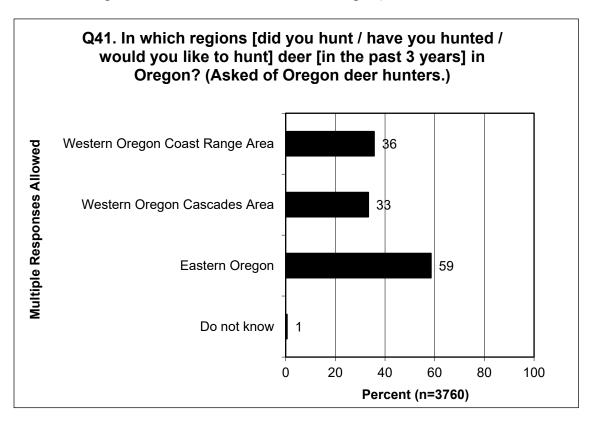






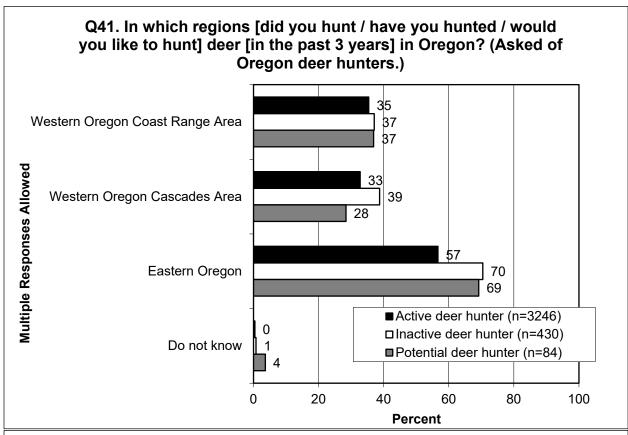
LOCATION OF HUNTING: REGION AND PUBLIC / PRIVATE LANDS—DEER

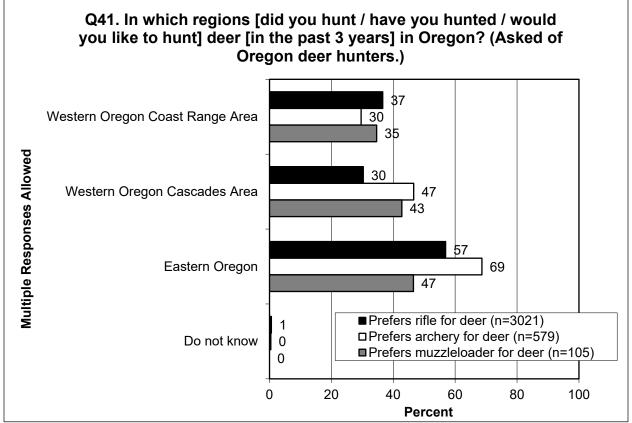
The survey explored the location of hunting, as shown in the graphs that follow. The large majority of deer hunters had hunted deer in Eastern Oregon (59% had done so), with each of the Western Regions being hunted by about a third of deer hunters (36% in the Western Oregon Coast Range area and 33% in the Western Oregon Cascades area). (In these graphs, the regions are shown in the same order, moving left to right across the map as one moves down the graph: the Coast Range, the Cascades, and then Eastern Oregon.)

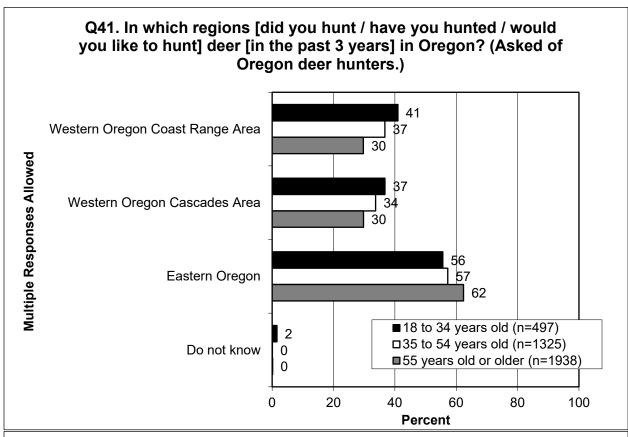


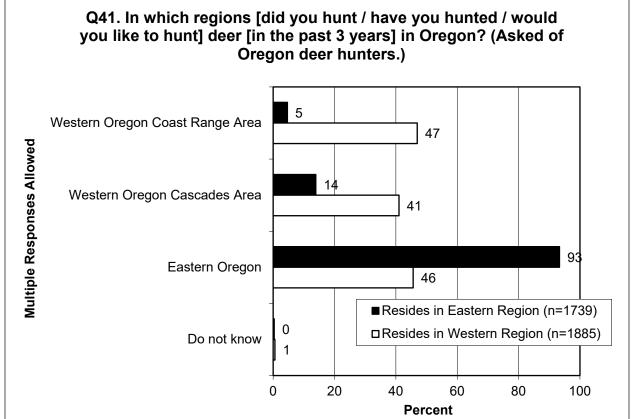
Crosstabulations are presented on the following pages:

- Active deer hunters have a lower percentage having hunted deer in Eastern Oregon, compared to inactive hunters and compared to where potential deer hunters would like to hunt.
- Those who prefer archery have the highest percentage selecting Eastern Oregon in the question, while muzzleloader hunters have the lowest in that region.
- Younger hunters are more likely than older hunters to hunt, have hunted, or want to hunt deer in Western Oregon.
- Finally in this line of questioning, hunters residing in the Eastern Region mostly hunt or want to hunt deer in the Eastern Region, while those residing in the Western Region have a substantial percentage hunting or wanting to hunt deer outside their region of residence.



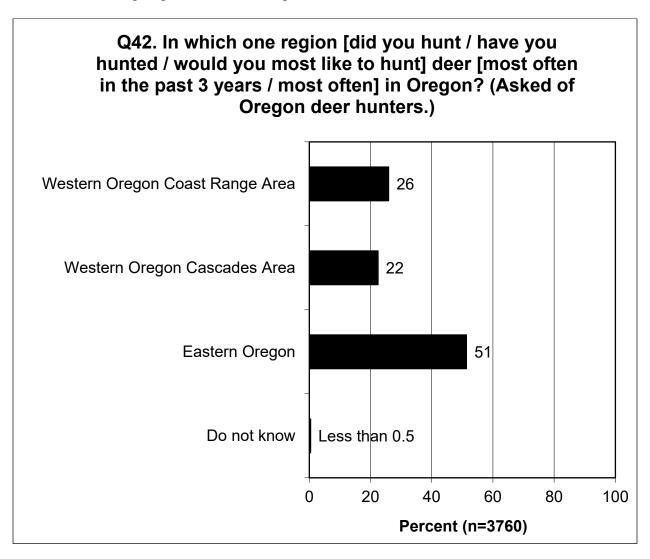


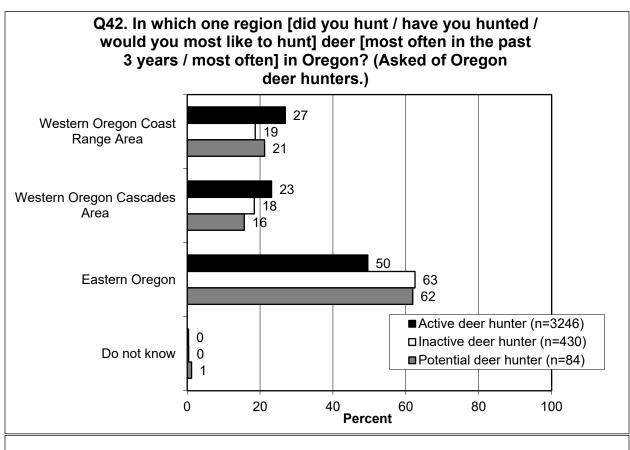


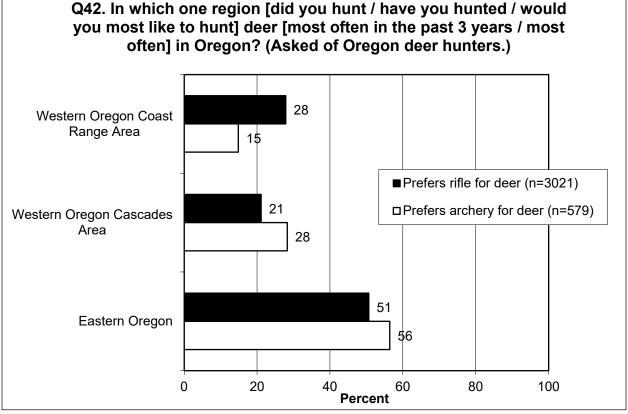


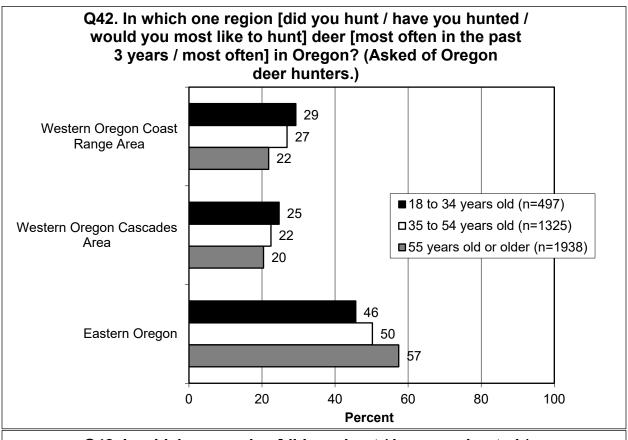
The previous question asked about *all* the regions that the deer hunters had hunted or want to hunt in, while the question in the graph below asked them to choose *only one* as their most-hunted or the one that they would most like to hunt in. Just under half of deer hunters (48%) selected one of the Western Regions, nearly evenly divided between the Coast Range area and the Cascades, while 51% chose Eastern Oregon.

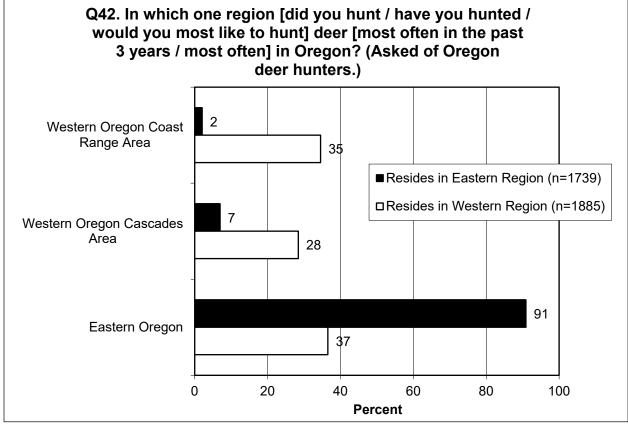
The crosstabulations found that active deer hunters are more likely than inactive and potential deer hunters to select one of the Western Regions. Those who prefer rifle over archery for deer are more likely to have hunted in the Western Oregon Coast Range area. Younger hunters are slightly more likely to select one of the Western Regions. Finally in the crosstabulations, hunters residing in the Eastern Region more often select the Eastern Region; hunters residing in the Western Region are split roughly into thirds, some going to either of the two Western Regions and the final third going to the Eastern Region.







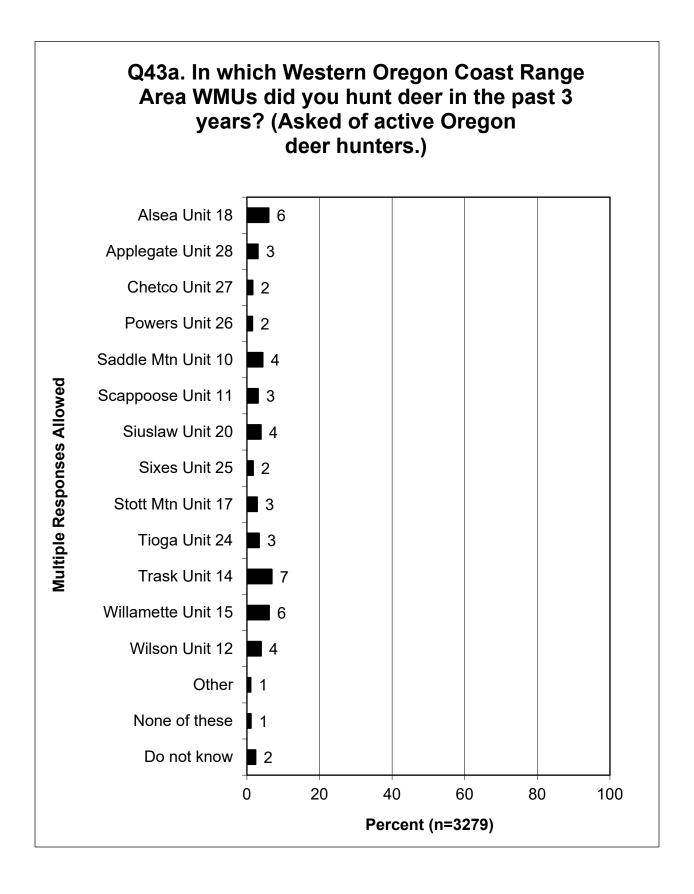


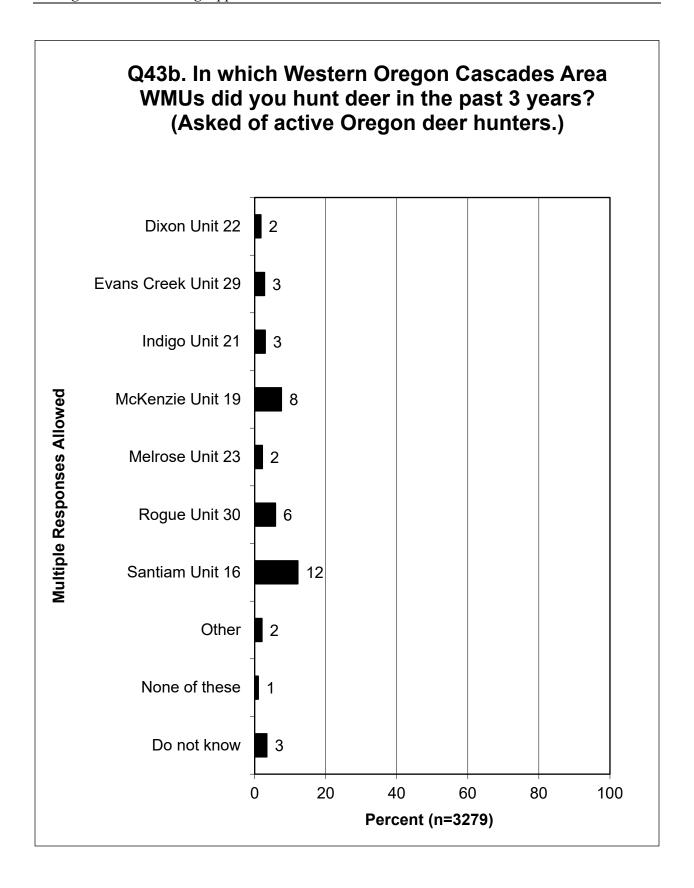


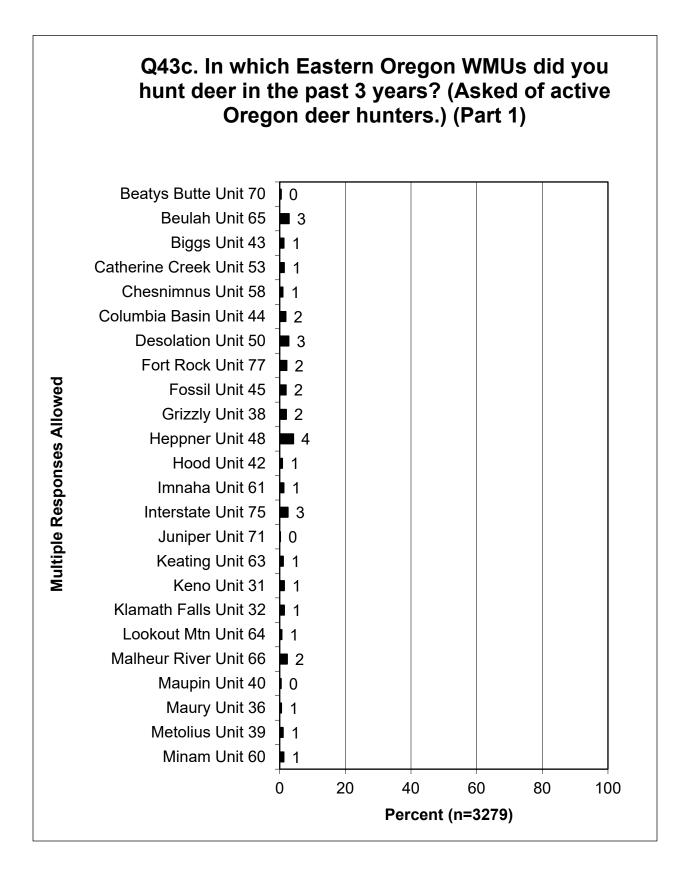
The graphs that follow show the percentages of active deer hunters who hunted in each of the WMUs. The map below, obtained from the ODFW website, shows the WMUs.

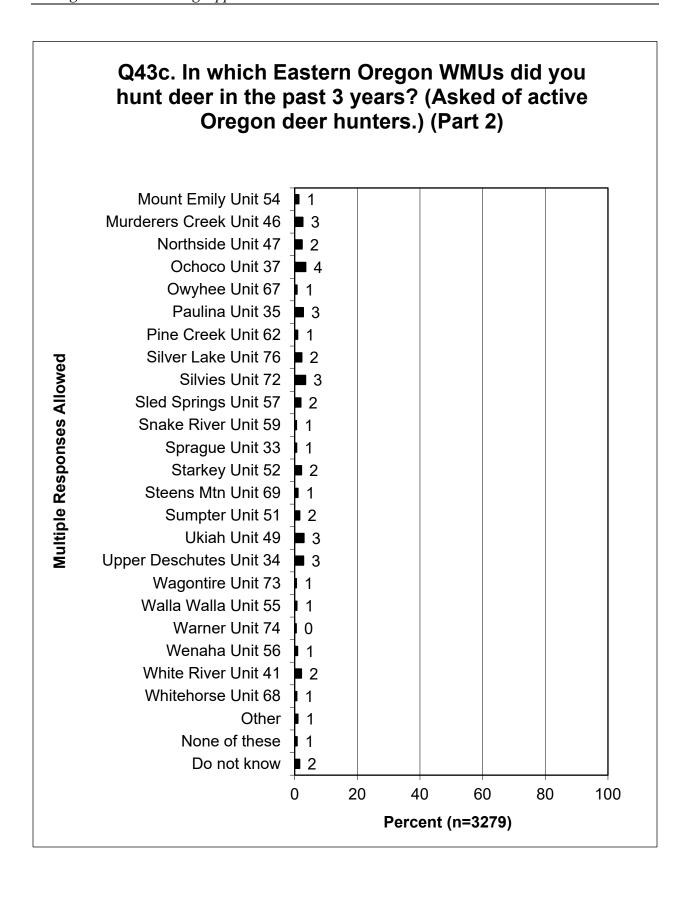


The first graph shows the Western Oregon Coast Range area. Its most popular WMUs are the Trask Unit (#14), the Alsea Unit (#18), and the Willamette Unit (#15). The next graph shows the Western Oregon Cascades area, and its most popular WMUs are the Santiam Unit (#16) and the McKenzie Unit (#19). The WMUs of Eastern Oregon are shown in the two subsequent graphs. It does not have any one unit that stands out on top like the other regions; the Heppner Unit (#48) and the Ochoco Unit (#37) both are at 4%, but there are then eight WMUs right below that at 3%, and the differences in percentages do not exceed the sampling error.

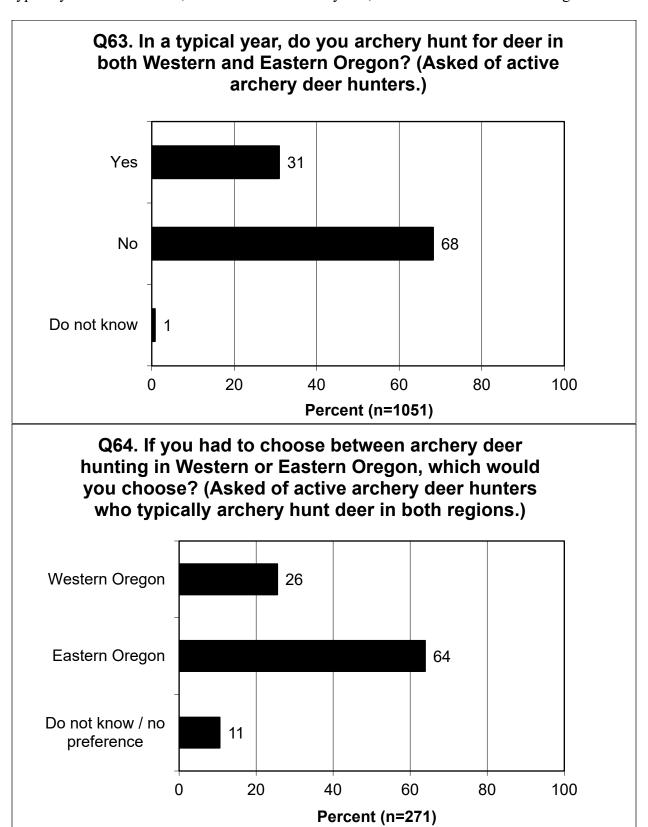




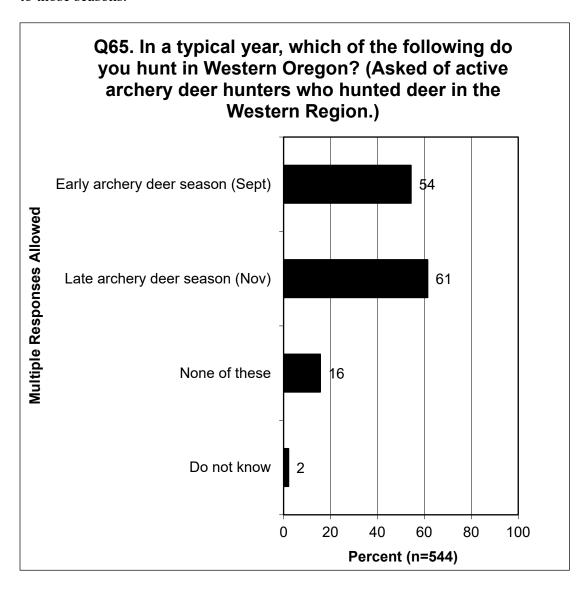




About a third of active deer hunters (31%) hunt both in the Western and Eastern Regions in a typical year. Most of them, if forced to choose only one, would hunt in the Eastern Region.

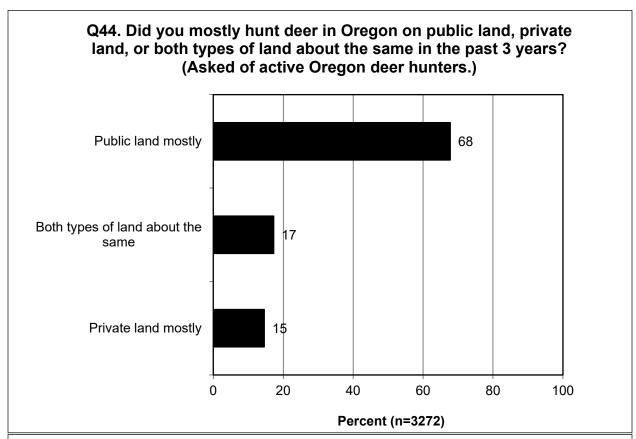


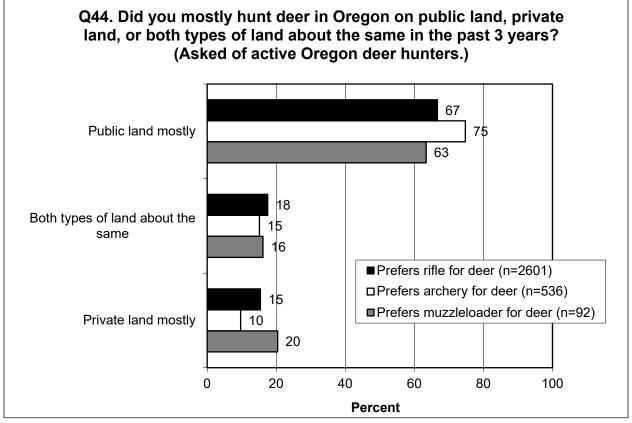
Active archery deer hunters who hunted deer in the Western Region were asked which of the hunts they participate in during a typical year. Note that they can participate in more than one hunt. A majority hunt in each of them: 54% hunting in the early archery deer season, and 61% hunting in the late archery deer season. See the section, "Opinions on Regulatory Changes and Management Strategies," for hunters' attitudes toward the various seasons and potential changes to those seasons.

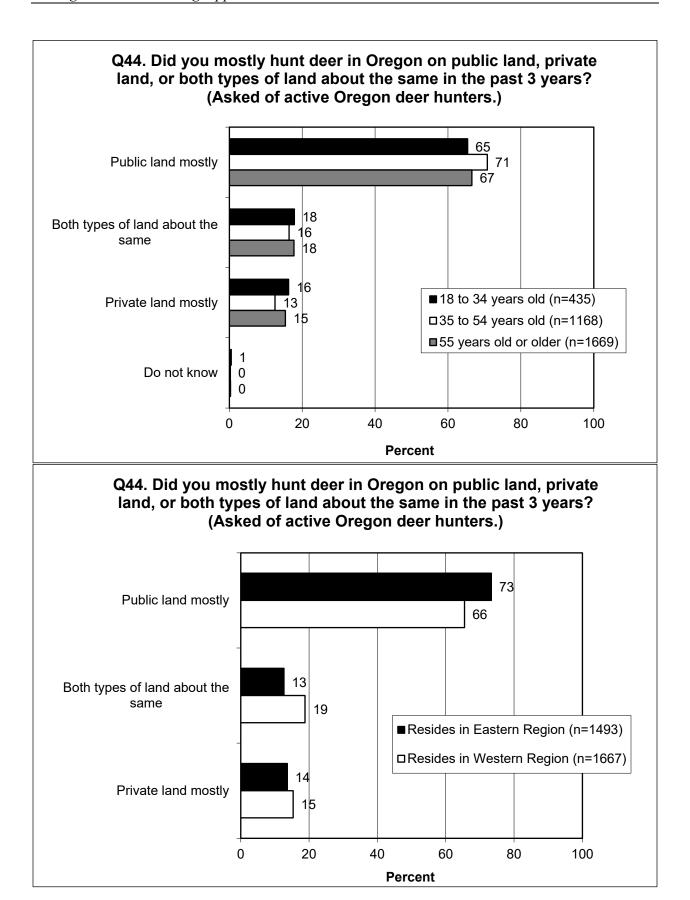


The survey also explored whether hunters had hunted on public land or private land or both. Public land hunting far exceeds private land hunting for deer, as shown in the graphs that follow, with 85% hunting deer on public land (including 68% doing so *mostly* on public land), and 32% doing so on private land (with 15% hunting deer *mostly* on private land).

Crosstabulations show that those who prefer archery hunt public land more often than those who prefer rifle or muzzleloader. Public land hunting is also associated with residing in the Eastern Region. (There were no consistent differences in the crosstabulation by age.)

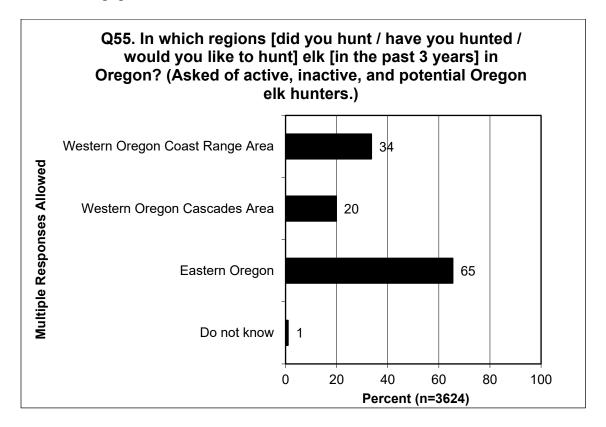






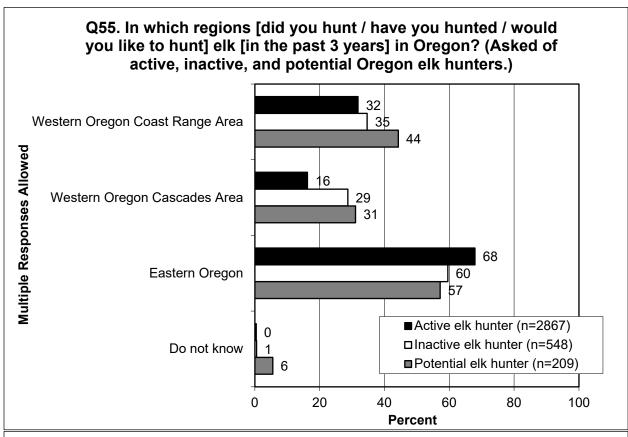
LOCATION OF HUNTING: REGION AND PUBLIC / PRIVATE LANDS—ELK

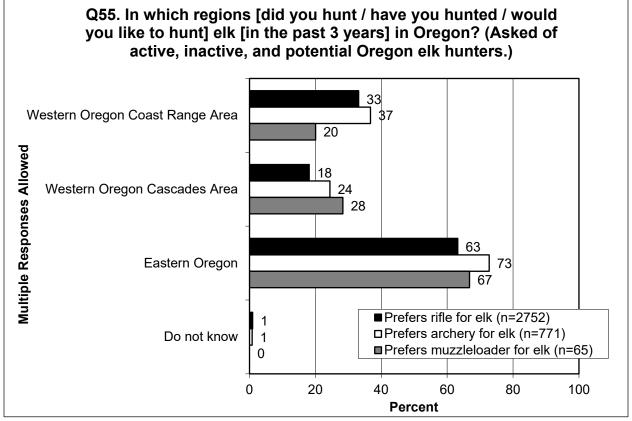
All of the questions asked of deer hunters regarding location of hunting were also asked of elk hunters, shown in the graphs in this section. Nearly two thirds of elk hunters (65%) had hunted or would like to hunt elk in the Eastern Region. Of the two Western Regions, the Coast Range area is more popular than the Cascades area for elk.

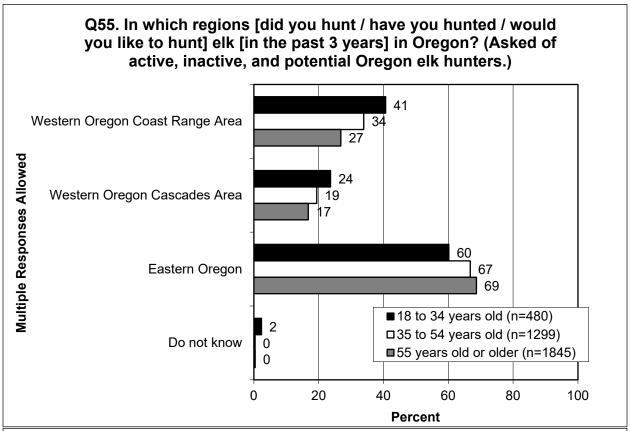


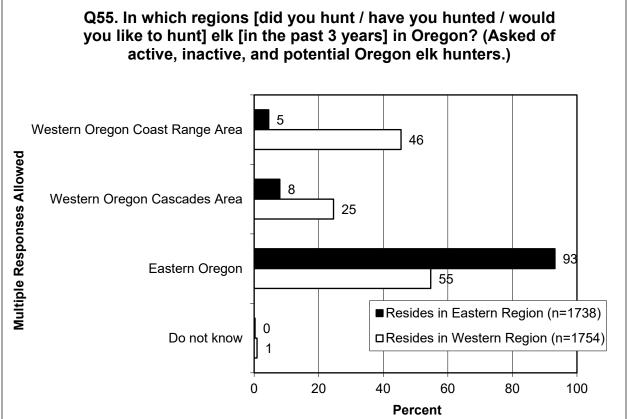
Crosstabulations are presented on the following pages:

- Active elk hunters have a higher percentage having hunted elk in Eastern Oregon and lower percentages in both of the Western Regions, compared to inactive hunters and compared to where potential elk hunters would like to hunt.
- Those who prefer archery have the highest percentage selecting Eastern Oregon and the Western Oregon Coast Range area in the question.
- Younger hunters are more likely than older hunters to hunt, have hunted, or want to hunt elk in both Western Oregon Regions.
- Lastly in these crosstabulations, hunters residing in the Eastern Region mostly hunt or want to hunt elk in the Eastern Region, while those residing in the Western Region have a substantial percentage hunting or wanting to hunt elk outside their region of residence.



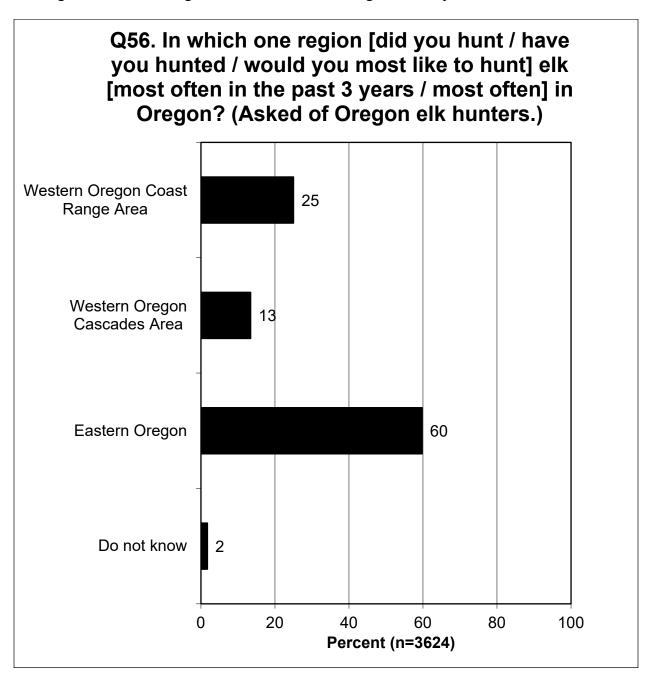


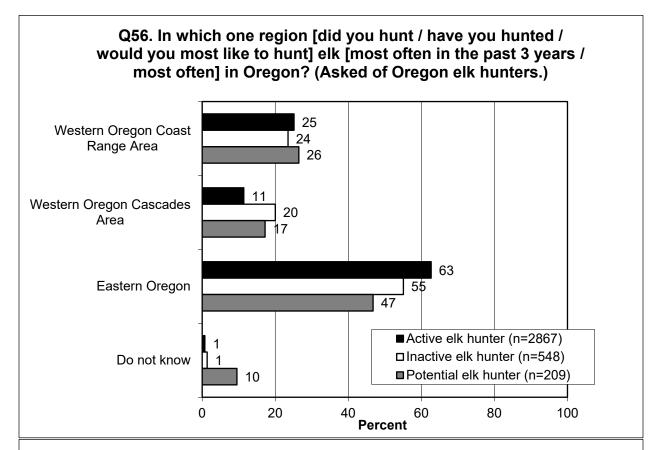


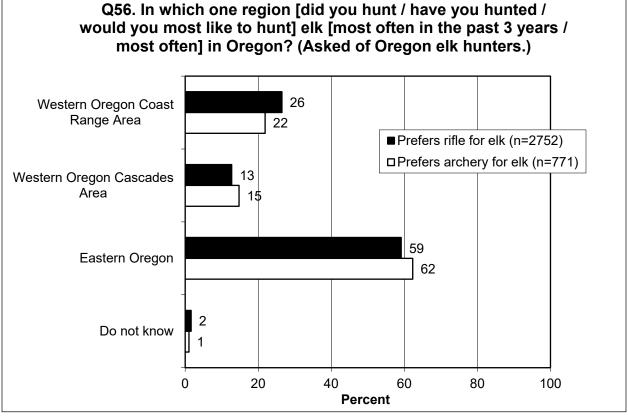


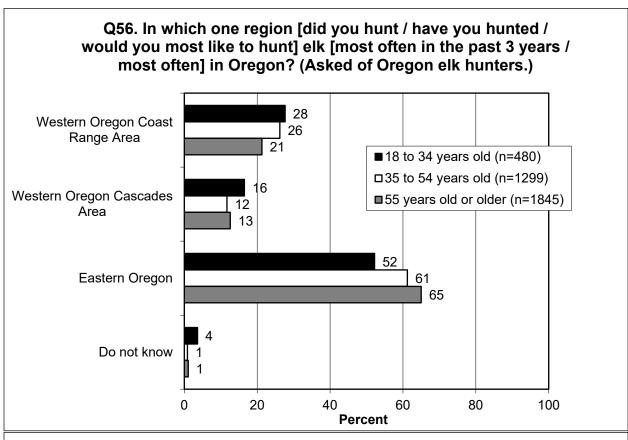
The previous question asked about *all* the regions that the elk hunters had hunted or want to hunt in; in the following graph, they chose *only one* as their most-hunted or the one that they would most like to hunt in. Just over a third of elk hunters (38%) selected one of the Western Regions, more often the Coast Range area than the Cascades, while 60% chose Eastern Oregon.

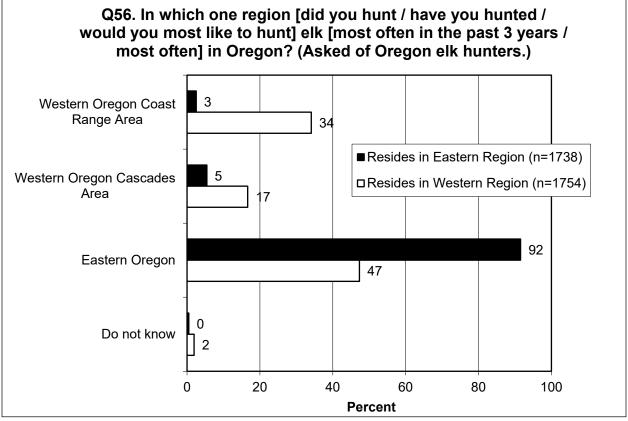
Crosstabulations found that active elk hunters were more likely than their counterparts to select the Eastern Region on the question. There was no marked difference between those who prefer rifle and those who prefer archery for elk. Younger elk hunters are more likely than older hunters to choose one of the Western Regions. Finally, the crosstabulation by residence finds Eastern Region hunters more often hunting there; however, the most common selection for elk among those who live in the Western Region is actually the Eastern Region—nearly half of elk hunters residing in the Western Region selected the Eastern Region in the question.







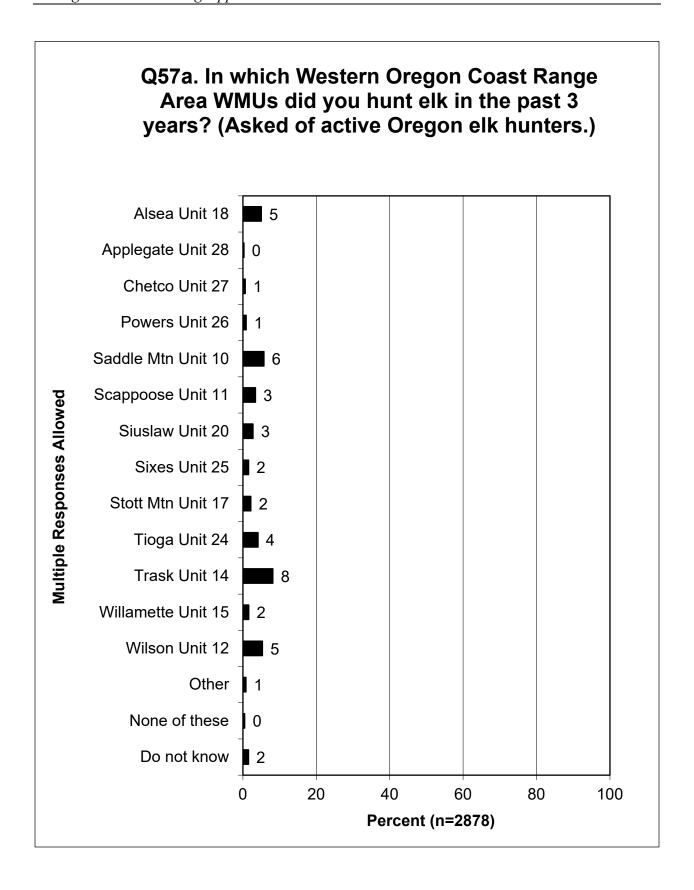


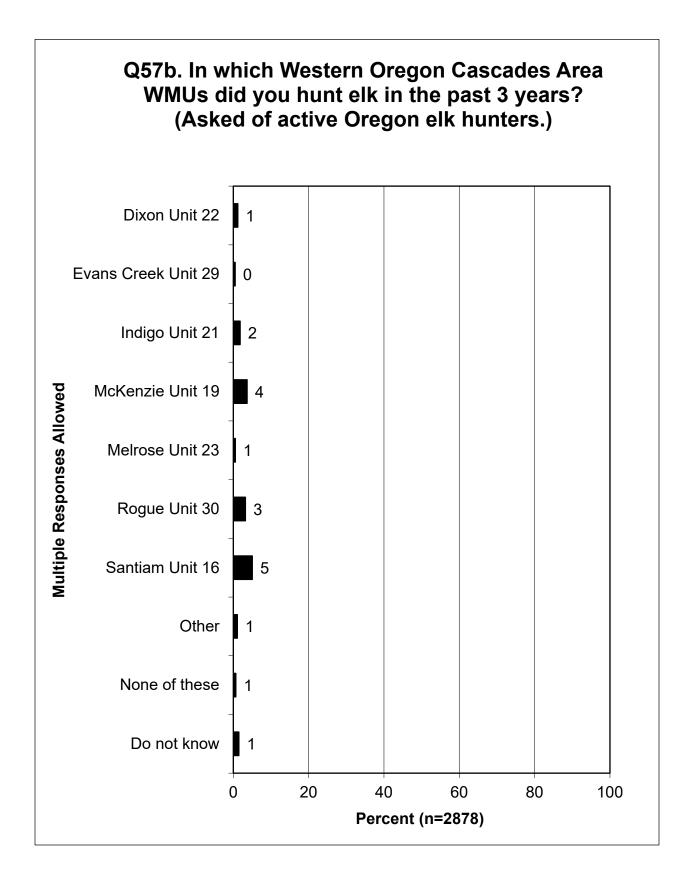


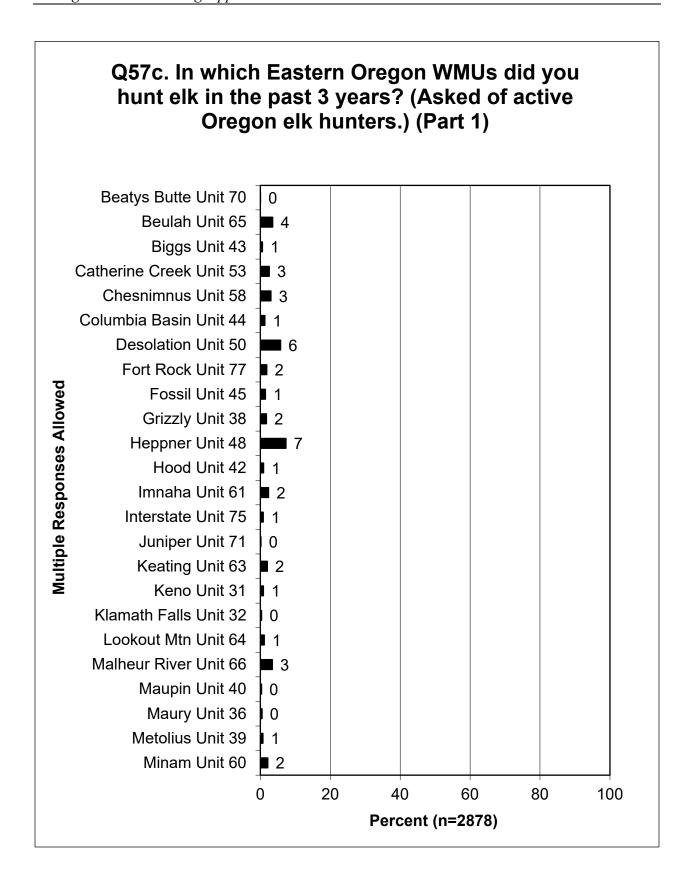
The graphs that follow show the percentages of active elk hunters who hunted in each of the WMUs. The map is again included for the reader's convenience, obtained from the ODFW website.

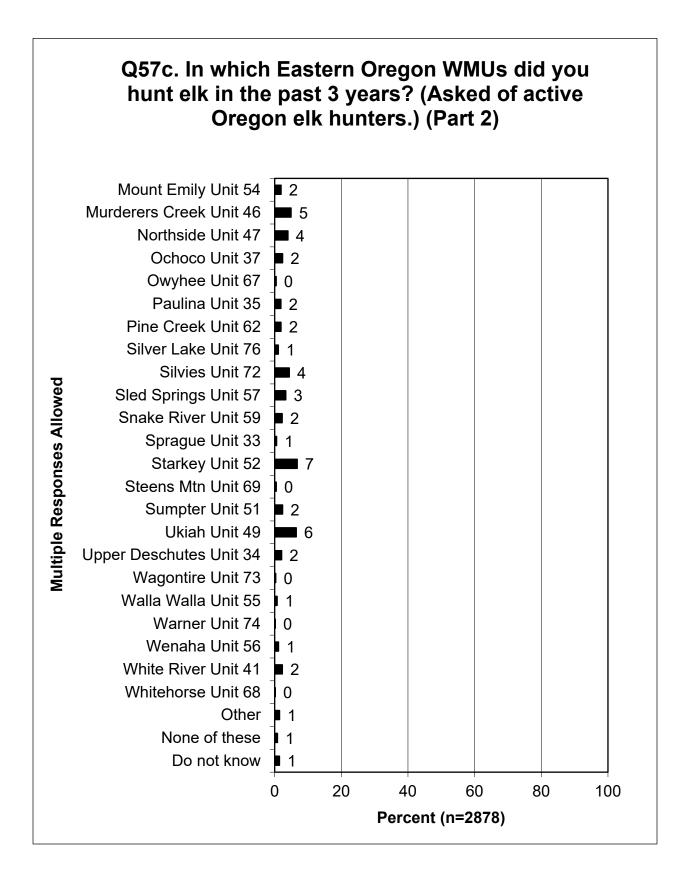


The first graph shows the Western Oregon Coast Range area. Its most popular WMUs are the Trask Unit (#14), the Saddle Mountain Unit (#10), the Alsea Unit (#18), and the Wilson Unit (#12). The second graph shows the Western Oregon Cascades area, and its most popular WMUs are the Santiam Unit (#16) and the McKenzie Unit (#19). The subsequent two graphs (Parts 1 and 2) show Eastern Oregon. Its most popular WMUs are the Heppner Unit (#48), the Starkey Unit (#52), the Desolation Unit (#50), and the Ukiah Unit (#49).





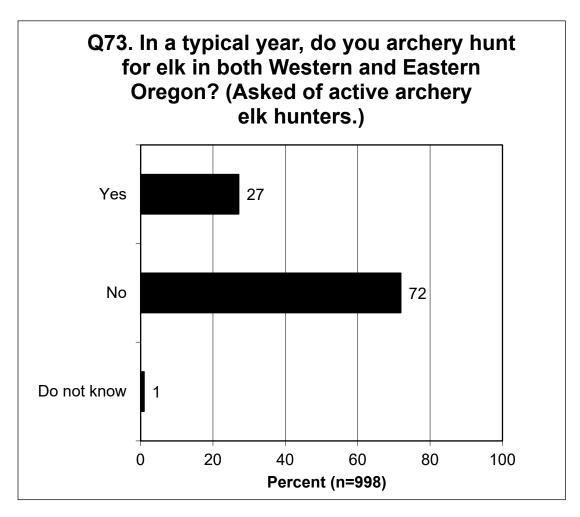


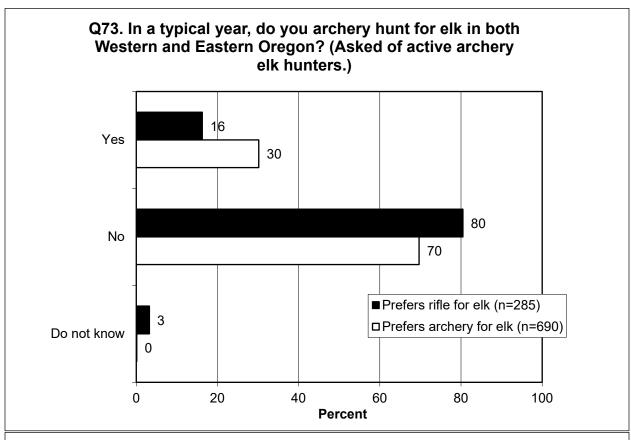


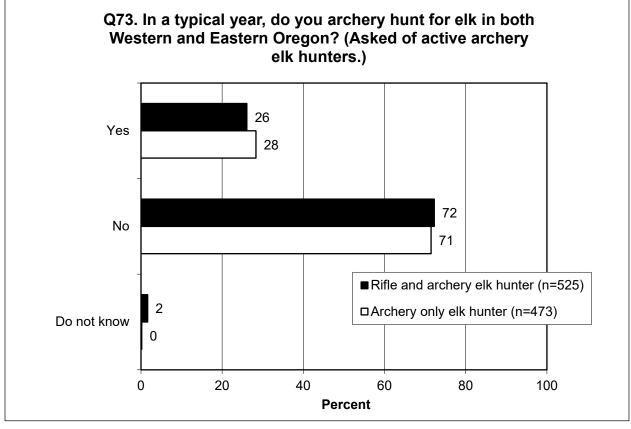
A little more than a quarter of active archery elk hunters (27%) typically archery hunt for elk in both the Eastern Region and Western Region in Oregon.

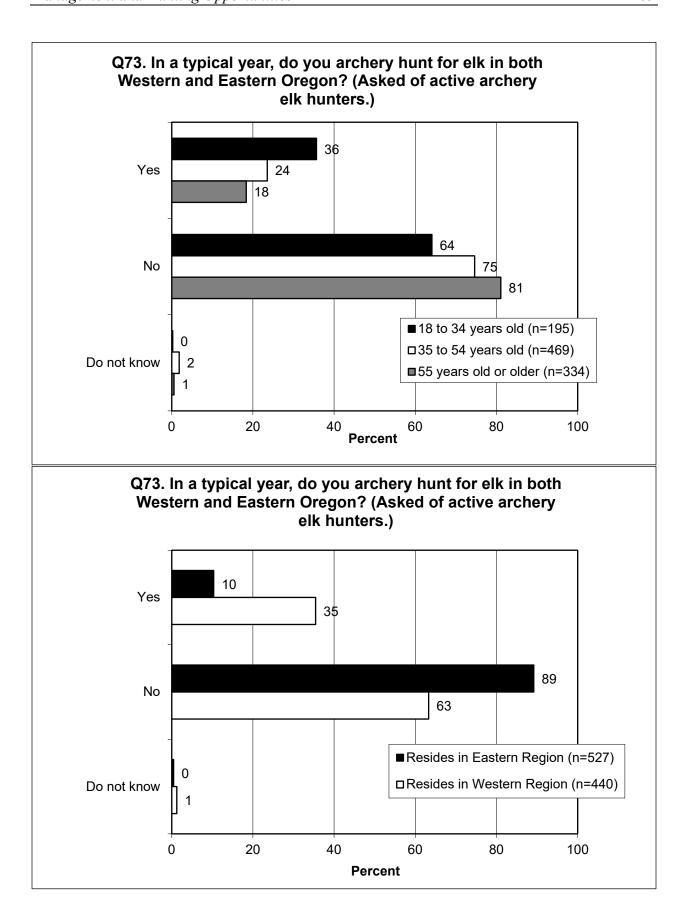
Crosstabulations (note that this is among active archery elk hunters) on this question show:

- Those who prefer archery for elk, compared to those who prefer rifle, are more likely to hunt both regions.
- However, in looking at actual use rather than preferred weapons, those who used rifle and archery and those who used archery only are about the same in hunting both the regions.
- Younger archery elk hunters are more likely to archery hunt elk in both regions, compared to older hunters.
- Hunters who reside in the Western Region are more likely to archery hunt both regions for elk.

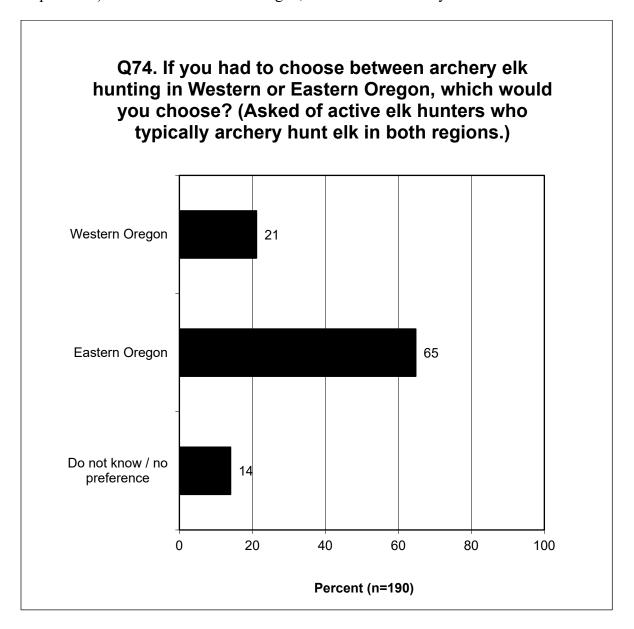




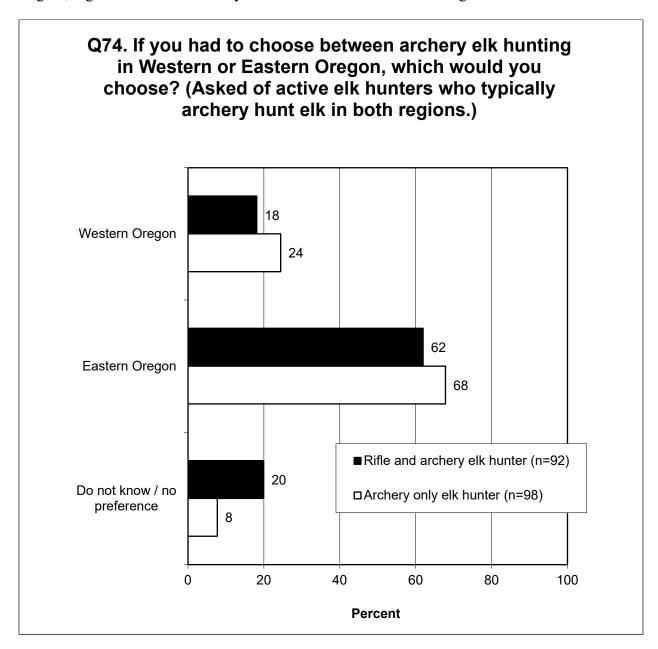


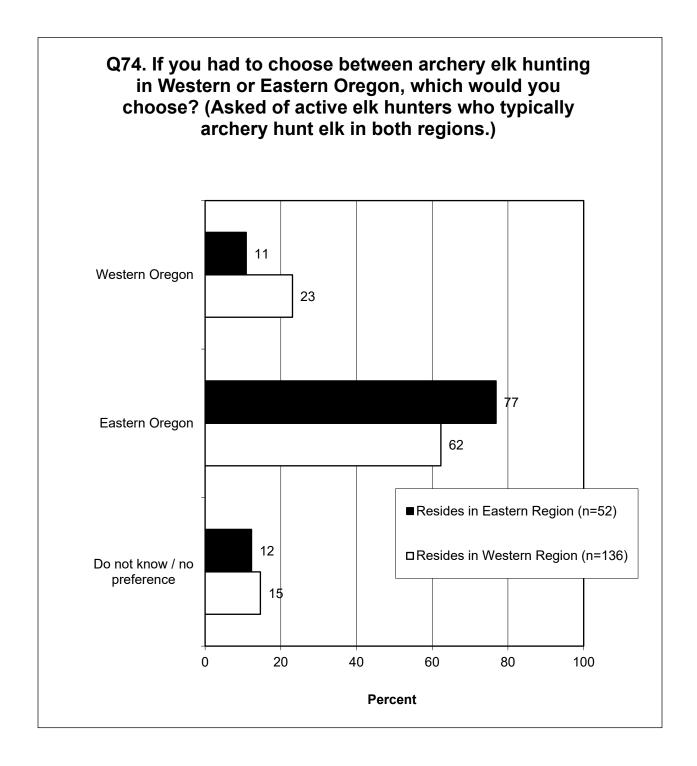


Most of those who typically hunt elk in both the Eastern and Western Regions (65% of these respondents) would choose Eastern Oregon, if asked to select only one.

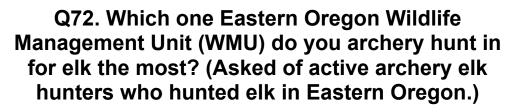


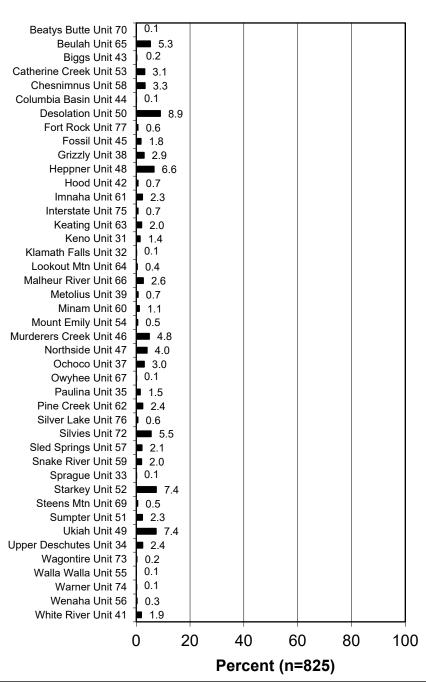
Crosstabulations of the choice question show no great differences between archery only hunters and rifle/archery hunters. Another question shows that hunters would likely choose the Eastern Region, regardless of whether they live in the Eastern or Western Region.



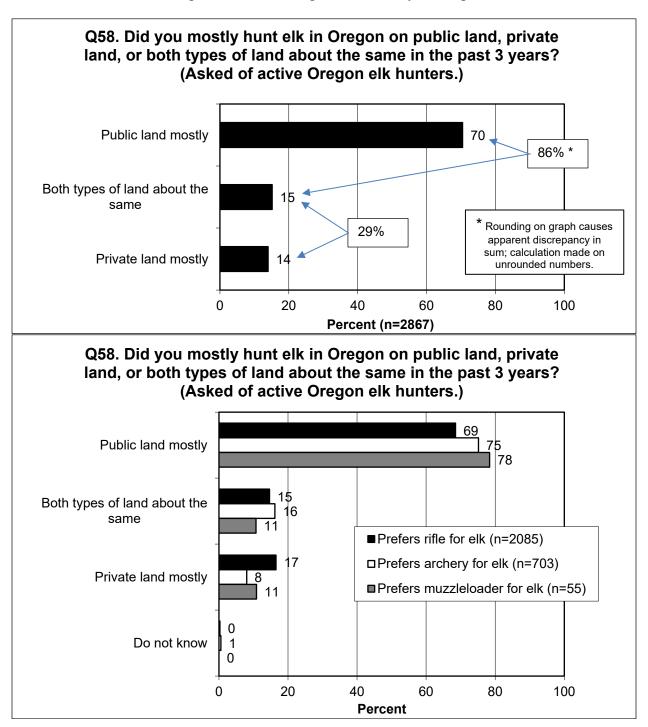


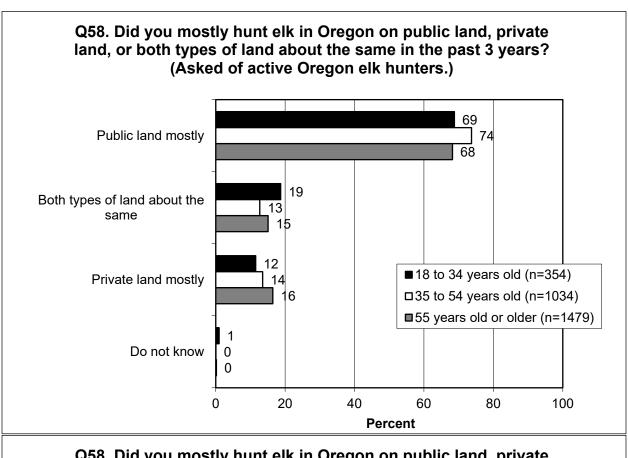
Active archery elk hunters who had hunted elk in Eastern Oregon were asked to name the single WMU in which they hunt elk most often. The top WMUs are the Desolation Unit (#50), the Starkey Unit (#52), the Ukiah Unit (#49), the Heppner Unit (#48), and the Silvies Unit (#72).

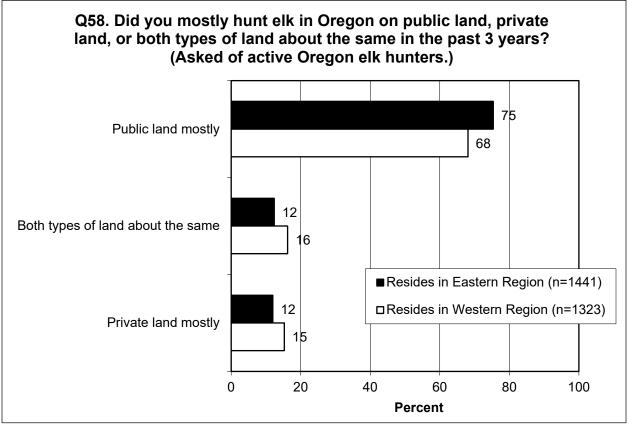




The final graphs in this section look at elk hunting on public land and private land. As with deer hunting, public land predominates for elk hunting: 86% hunt public land mostly or about equally with private land, while 29% hunt mostly on private land or about equally between the types. Those who prefer rifle for elk have the highest percentage hunting on private land. Crosstabulations are also included by age, with no marked differences, and by region of residence, with Western Region residents being the most likely to use private land.

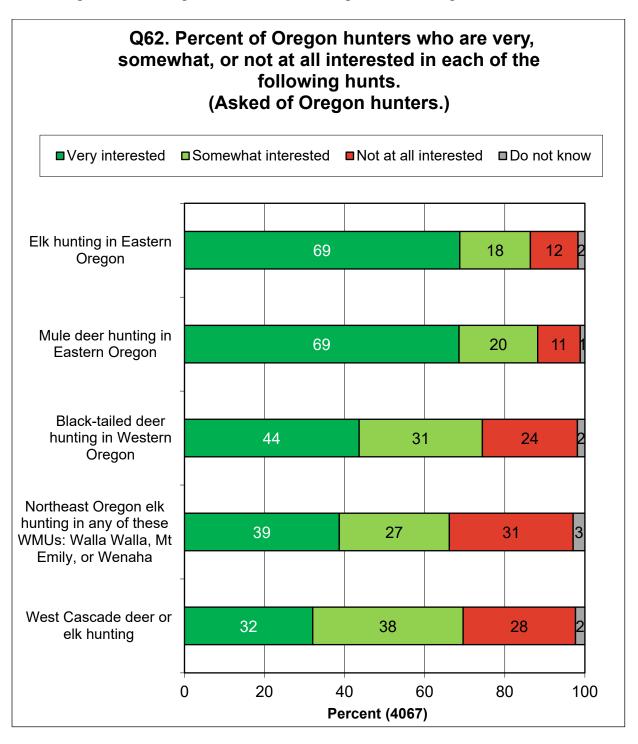






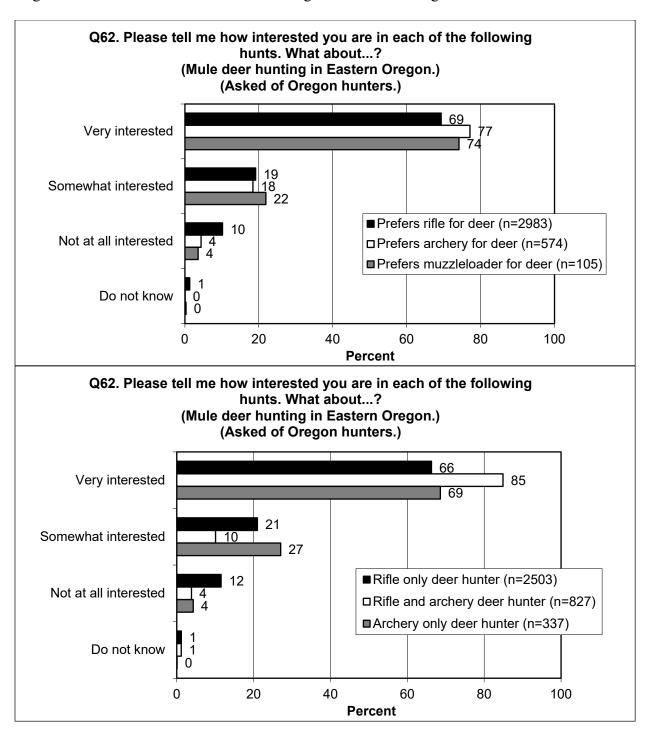
OPINIONS ON REGULATORY CHANGES AND MANAGEMENT STRATEGIES

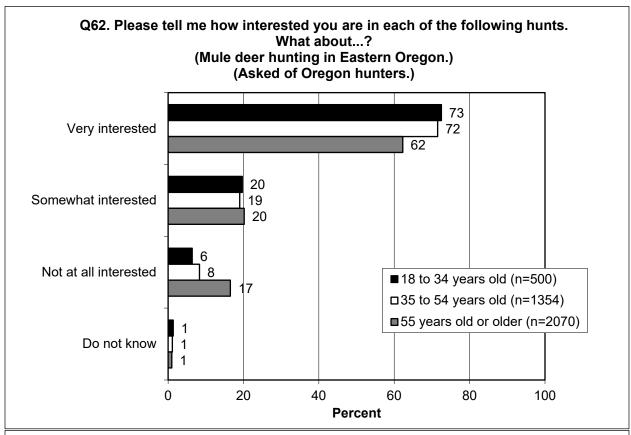
An initial question, asked of active, inactive, and potential hunters of either deer or elk, was intended to allow follow-up questions to be asked only to those to whom the questions would apply. The initial question asked about interest in five types of hunting. The most popular was elk hunting in Eastern Oregon and mule deer hunting in Eastern Oregon.

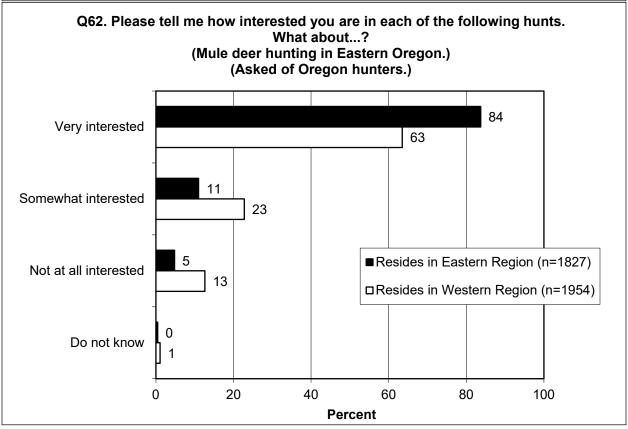


All of the Eastern Region graphs are presented first (mule deer, then elk in the Eastern Region and elk in the Northeast), followed by the graphs pertaining to the Western Region (black-tailed deer and then deer or elk in the West Cascades).

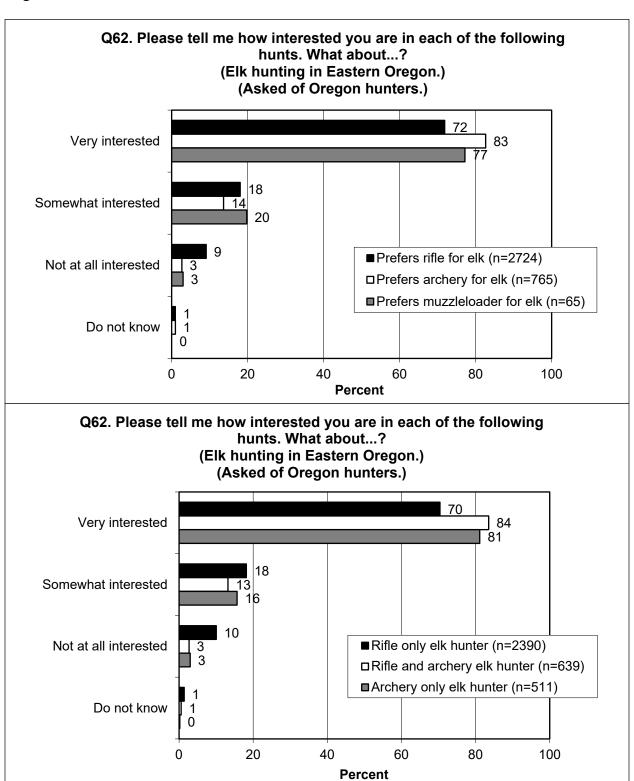
Regarding mule deer hunting, those who prefer rifle for deer have the highest percentage not at all interested in mule deer hunting in Eastern Oregon. Those who are archery and rifle hunters of deer have the most interest in mule deer hunting in Eastern Oregon. Younger hunters show more interest than older hunters. Finally in the mule deer graphs, hunters residing in the Eastern Region show more interest than those residing in the Western Region.

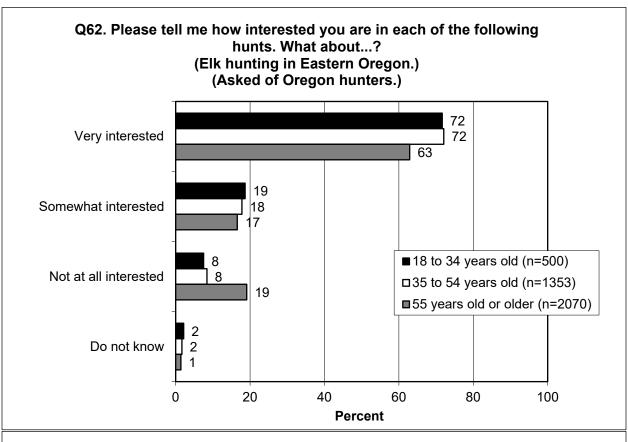


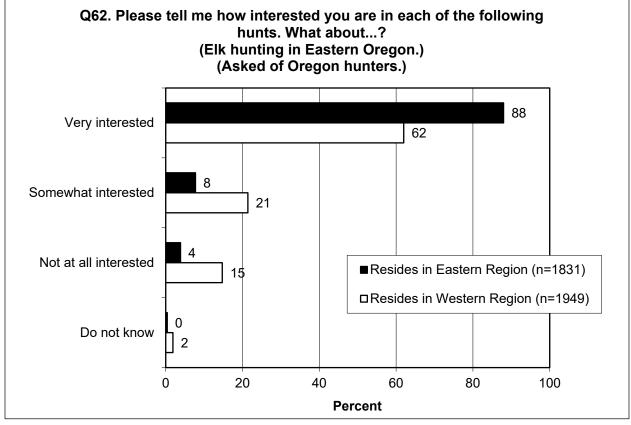




Interest in elk hunting in Eastern Oregon was the next type of hunting explored in the analysis. Those who prefer rifle for elk hunting, as well as rifle-only elk hunters, have the lowest interest in elk hunting in Eastern Oregon. Older hunters are the least interested of the age groups. Elk hunters residing in the Eastern Region have more interest than those residing in the Western Region.

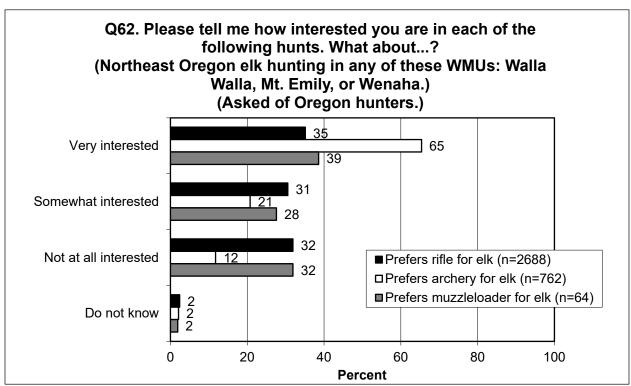


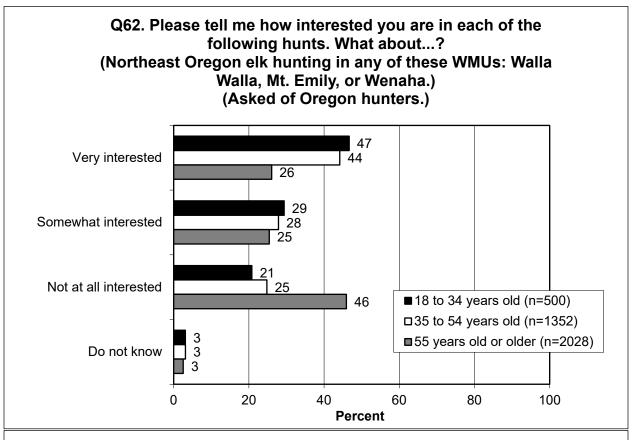


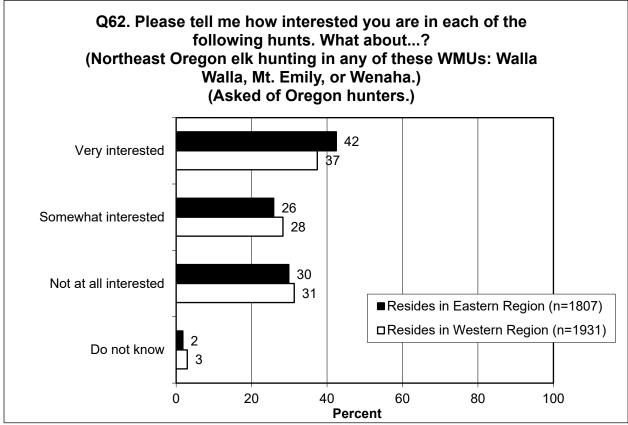


The next analysis concerned elk hunting in any of three WMUs in the northeastern part of Oregon, outlined in the map below: the Walla Walla, Mt. Emily, and the Wenaha Units. Those who prefer archery for elk have the highest interest in hunting in one of these WMUs. Younger elk hunters show greater interest than older elk hunters. Interest is about the same between Eastern Region and Western Region residents.

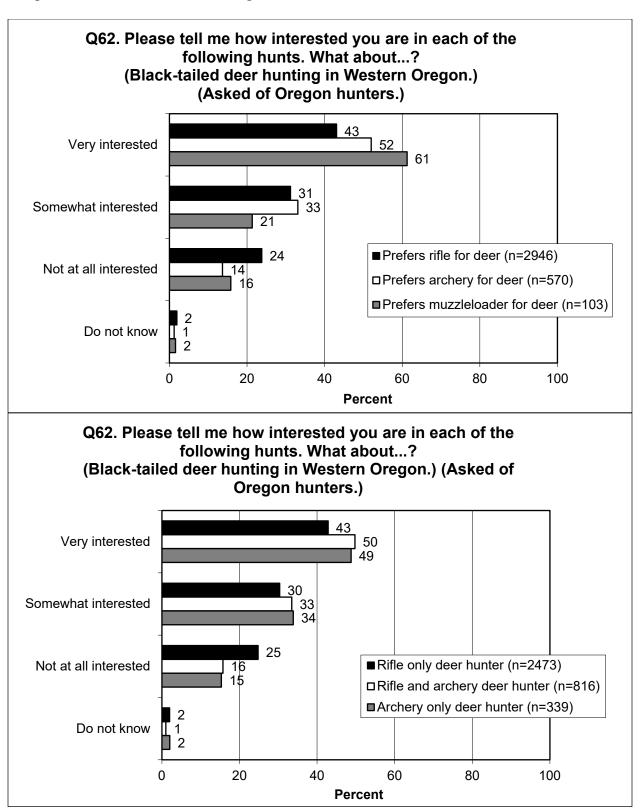


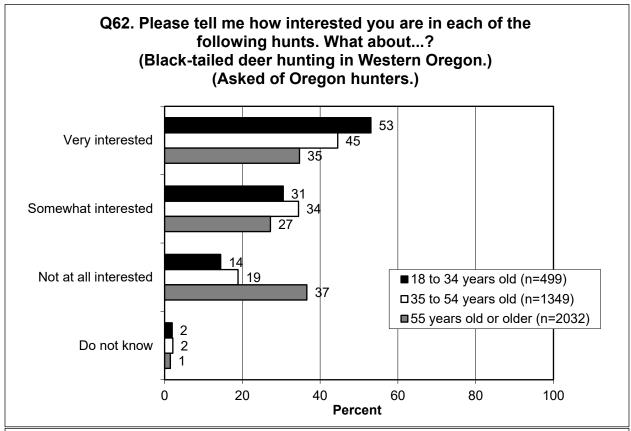


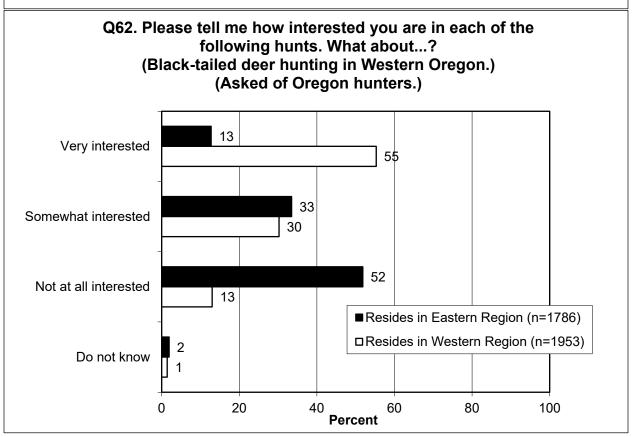




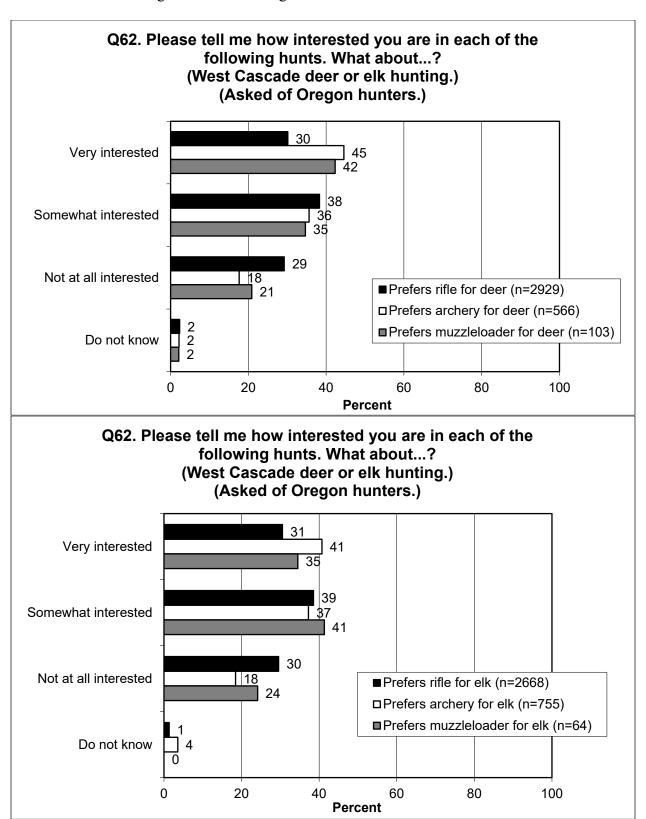
The survey explored interest in black-tailed deer hunting in Western Oregon. Both archery and muzzleloader hunters show more interest than do rifle hunters. Younger hunters show more interest than do older hunters. Hunters residing in the Western Region also have higher interest, compared to residents of Eastern Oregon.

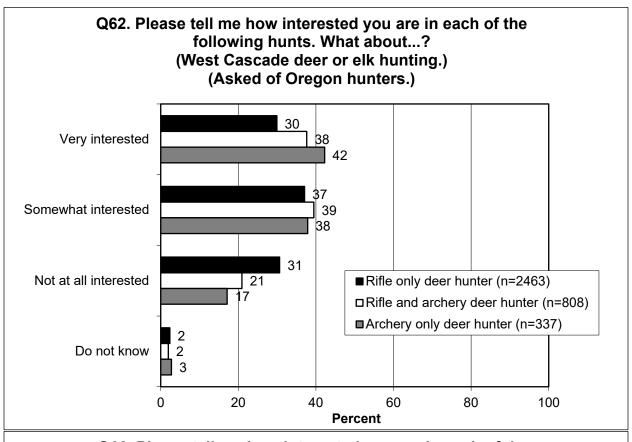


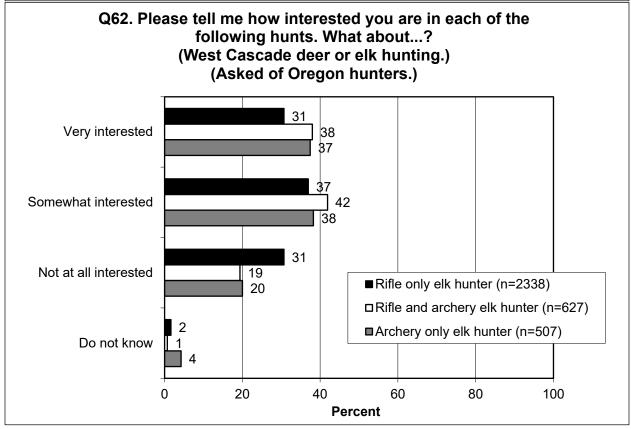


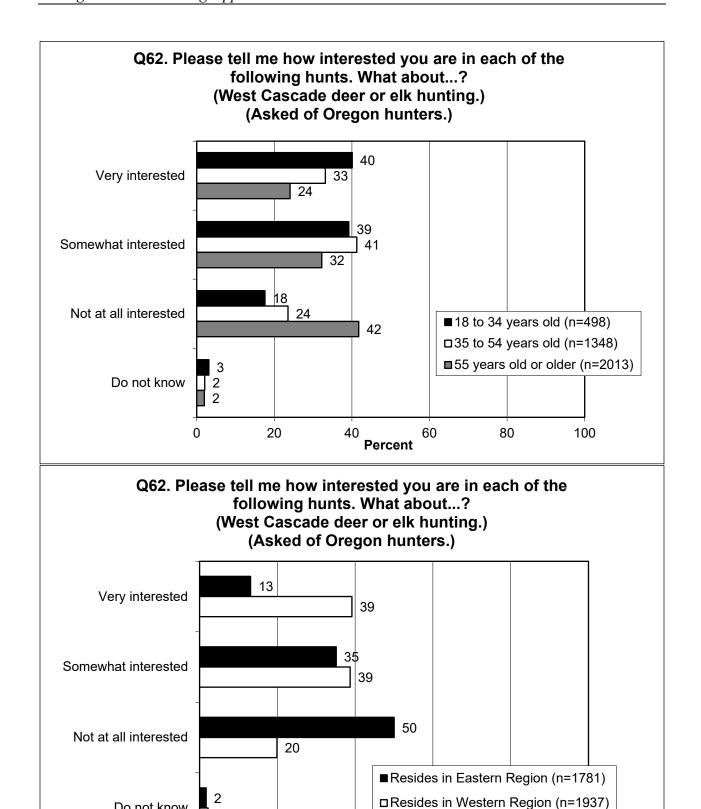


The last of the hunts examined is West Cascade deer or elk hunting. Archery and muzzleloader hunters show more interest in this compared to rifle hunters. Younger hunters show greater interest than do older hunters. Also, hunters residing in the Western Region show greater interest than do hunters residing in the Eastern Region.









Do not know

20

40

Percent

80

100

In total, nine questions were asked about potential changes to regulations and management strategies. The table below gives the overall results for all of these potential changes. Following the table, each of these potential changes is examined individually, including the information in the survey that was given about the potential change, the overall results, and the results of all the crosstabulations.

Regulation / management strategy asked about	Group that was asked the question	Percentages
Q66. Would you support or oppose a proposal to establish late season rifle black-tailed deer hunts in Western Oregon?	Active deer hunters who hunted deer in Western Oregon and Oregon hunters who are very or somewhat interested in hunting black- tailed deer in Western Oregon.	Support: 65% Oppose: 15%
Q69. Would you support or oppose a proposal to change archery hunting from a general season to a controlled season for mule deer in Eastern Oregon?	Active deer hunters who hunted deer in Eastern Oregon and Oregon hunters who are very or somewhat interested in hunting mule deer in Eastern Oregon.	Support: 46% Oppose: 29%
 Q76. Which of the following would you prefer for archery elk hunting in Eastern Oregon? 1. Current season with a high number of archery hunters but a guaranteed tag in your preferred unit. 2. A season with fewer archery hunters but without a guaranteed tag every year in your preferred unit. 	Active archery elk hunters who hunted elk in Eastern Oregon and Oregon hunters who are very or somewhat interested in archery elk hunting in Eastern Oregon.	1 st Option: 40% 2 nd Option: 35%
Q83. How much would you like or dislike a proposal to change archery elk hunting from a general season with unlimited tags to controlled hunts in Eastern Oregon?	Active elk hunters who hunted elk in Eastern Oregon and Oregon hunters who are very or somewhat interested in elk hunting in Eastern Oregon.	Like: 51% Dislike: 27%
Q86. How much would you like or dislike a proposal of splitting the archery elk season in Eastern Oregon into two 15-day controlled hunts?	Active elk hunters who hunted elk in Eastern Oregon and Oregon hunters who are very or somewhat interested in elk hunting in Eastern Oregon.	Like: 40% Dislike: 29%
Q87. How much would you like or dislike the first option in which elk season is moved to November and there is no break in deer season?	Active hunters who hunted deer or elk in the Western Oregon Cascades Region and Oregon hunters who are very or somewhat interested in West Cascade deer or elk hunting.	Like: 54% Dislike: 13%
Q88. How much would you like or dislike the second option in which elk season stays the same, but the deer and elk season overlap?	Active hunters who hunted deer or elk in the Western Oregon Cascades Region and Oregon hunters who are very or somewhat interested in West Cascade deer or elk hunting.	Like: 45% Dislike: 26%
Q92. Would you support or oppose a proposal to eliminate the first spike-only rifle season in these Units?	Active elk hunters who hunted elk in the Walla Walla, Mt. Emily, or Wenaha WMUs and elk hunters who are very or somewhat interested in hunting elk in these WMUs.	Support: 44% Oppose: 13%
Q95. Would you support or oppose a proposal to decrease the total number of spike-only rifle tags in these Units?	Active elk hunters who hunted elk in the Walla Walla, Mt. Emily, or Wenaha WMUs and elk hunters who are very or somewhat interested in hunting elk in these WMUs.	Support: 49% Oppose: 13%

Nearly two thirds of those who were asked the question (65%) support a proposal to establish late season rifle black-tailed deer hunts in Western Oregon, while 15% oppose it. In the crosstabulations:

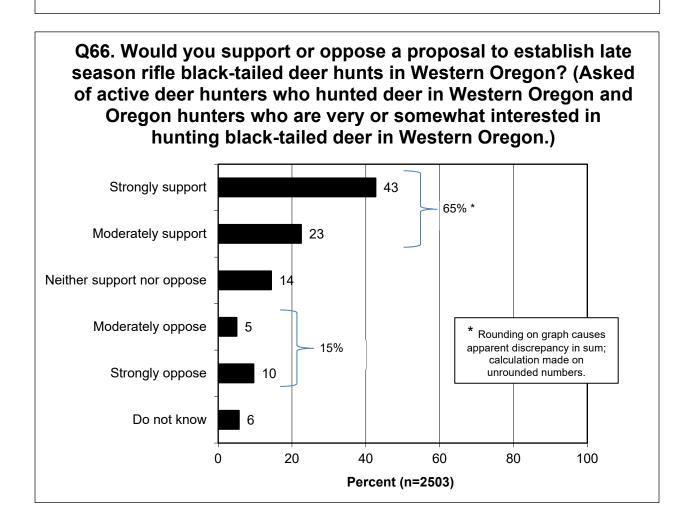
- Those who prefer archery and archery-only hunters are much more likely to oppose it.
- Older hunters are slightly more likely to oppose it.
- Hunters residing in the Western Region are more likely to support it.

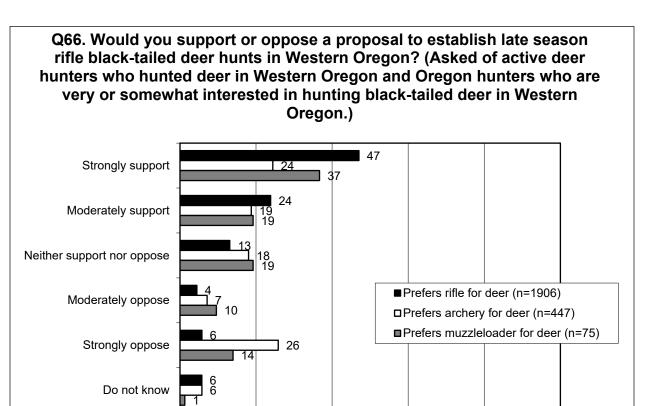
INFORMATION GIVEN PRIOR TO Q66

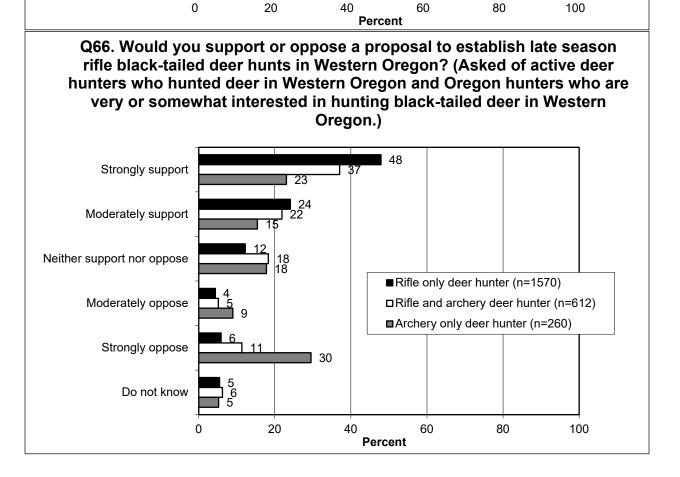
Right now, almost all opportunity for late-season rifle deer hunting is in Eastern Oregon. The Department is considering proposing some new late-season black-tailed deer hunts in Western Oregon. These would be any-legal-weapon seasons where hunters can use **RIFLES**. These hunts would have low tag numbers and would likely take quite a few preference points to draw.

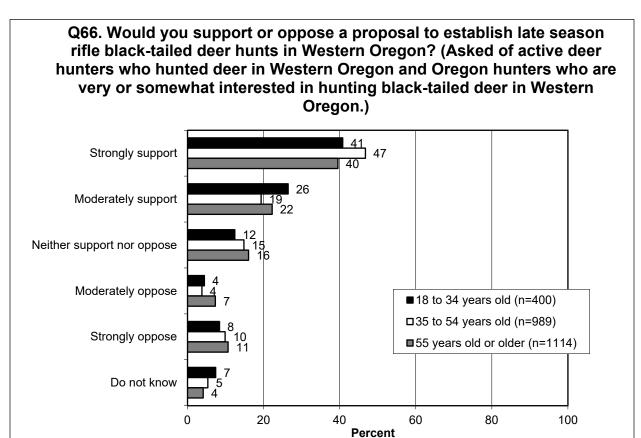
QUESTION ASKED OF

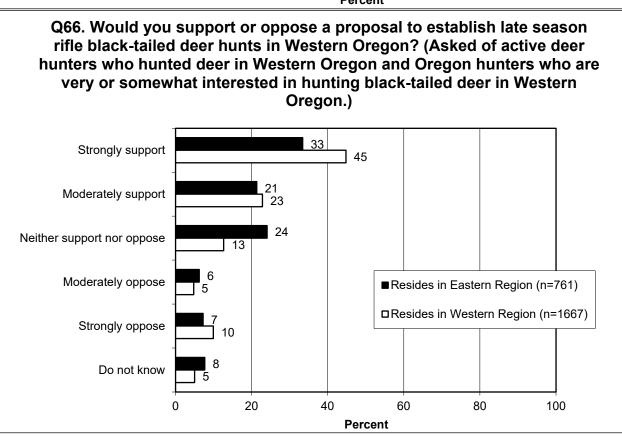
- Active deer hunters who hunted deer in Western Oregon.
- Oregon hunters who are very or somewhat interested in hunting black-tailed deer in Western Oregon.



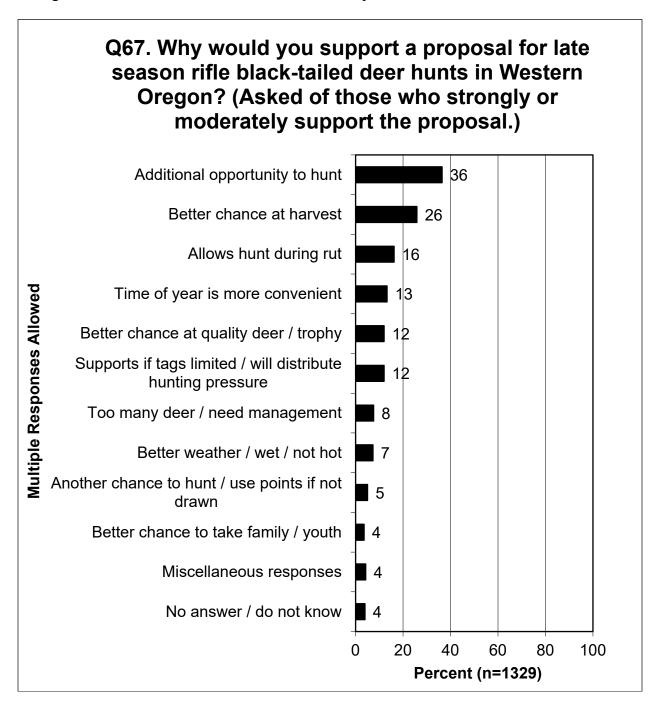


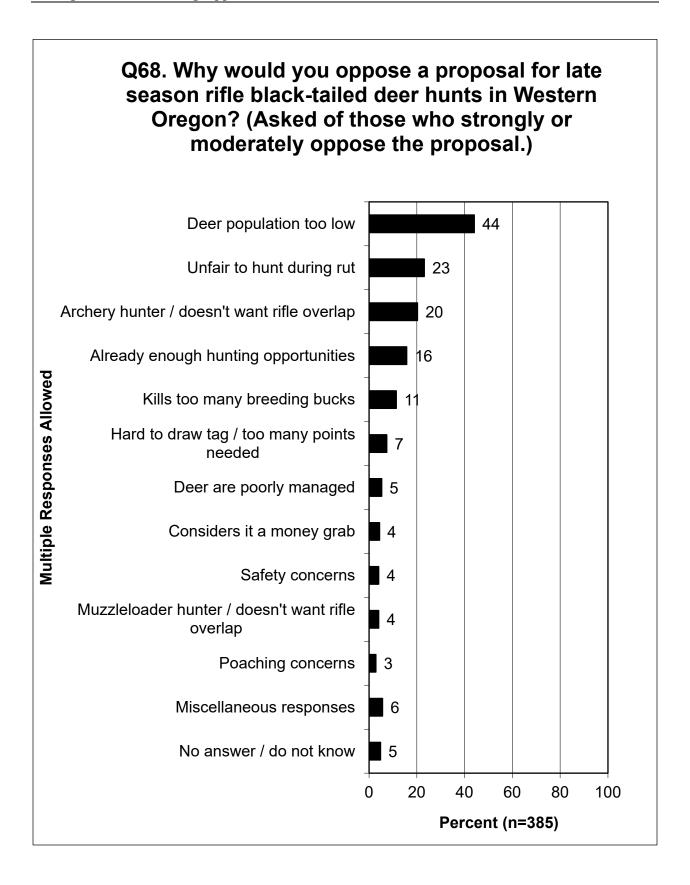






The top reasons to support the proposal for late season rifle black-tailed deer hunts in Western Oregon is that it provides additional hunting opportunities, that it provides a better chance of harvest, and that it allows hunting during the rut. The graph shows the full range of reasons given. Reasons to oppose is that the deer population is felt to be too low, that it is unfair to hunt during the rut, and that hunters do not want the overlap of seasons.





There was more support (46%) than opposition (29%) to a proposal to change archery hunting from a general season to a controlled season for mule deer in Eastern Oregon. In the crosstabulations:

- Those who prefer archery and those who use archery are much more likely to oppose it.
- Younger hunters are more likely to oppose it, compared to their older counterparts.
- Opposition is slightly higher among hunters residing in the Eastern Region.
- Opposition is higher among those who typically hunt both regions, compared to those who typically hunt only in the Eastern Region.

INFORMATION GIVEN PRIOR TO Q69

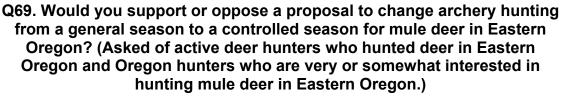
Although there are many factors contributing to the decline, hunter harvest of bucks is not the cause. In order to meet harvest objectives, managers need to be able to control harvest across all seasons. Nearly all mule deer seasons are controlled where tags are limited, with archery being the only general opportunity with unlimited tags.

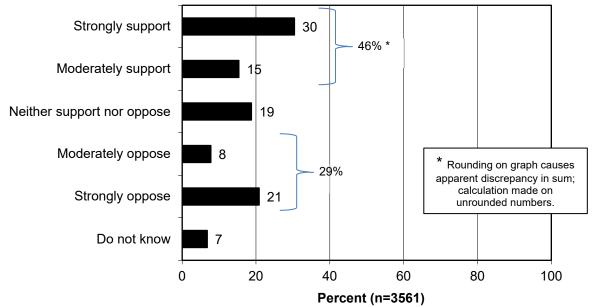
To manage harvest on these declining mule deer populations, the Department is considering proposing a change to archery hunting for all Eastern Oregon Wildlife Management Units from general archery seasons, which have unlimited tags, to controlled archery seasons, which have limited tags.

The archery season dates and length would stay the same. Western Oregon would remain a general deer season.

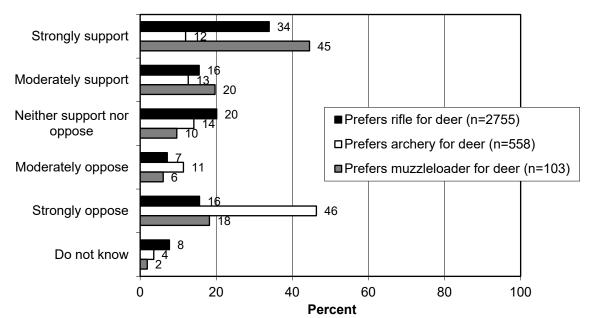
QUESTION ASKED OF

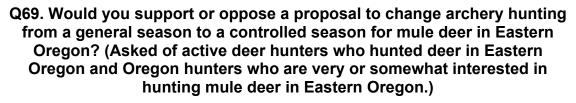
- Active deer hunters who hunted deer in Eastern Oregon
- Oregon hunters who are very or somewhat interested in hunting mule deer in Eastern Oregon.

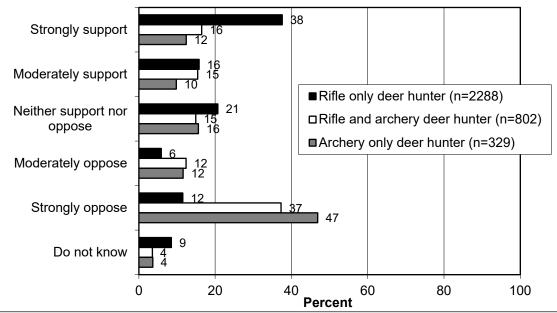




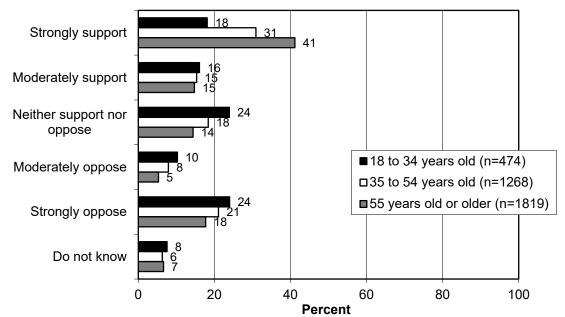
Q69. Would you support or oppose a proposal to change archery hunting from a general season to a controlled season for mule deer in Eastern Oregon? (Asked of active deer hunters who hunted deer in Eastern Oregon and Oregon hunters who are very or somewhat interested in hunting mule deer in Eastern Oregon.)

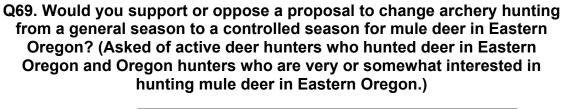


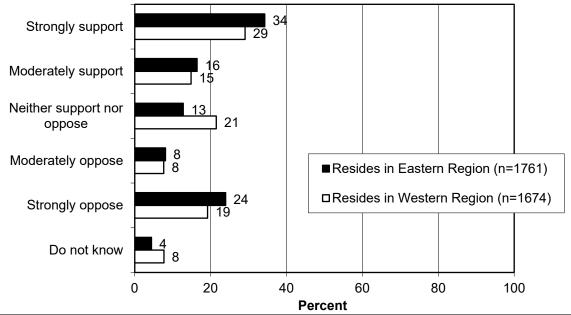




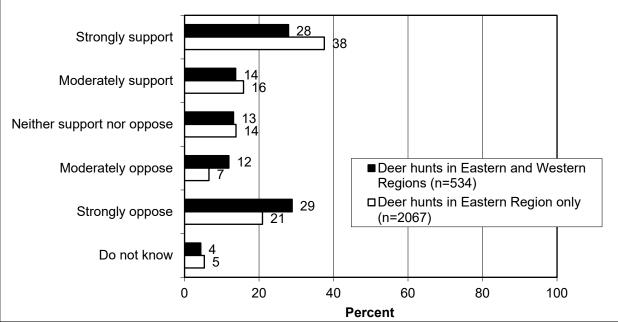
Q69. Would you support or oppose a proposal to change archery hunting from a general season to a controlled season for mule deer in Eastern Oregon? (Asked of active deer hunters who hunted deer in Eastern Oregon and Oregon hunters who are very or somewhat interested in hunting mule deer in Eastern Oregon.)







Q69. Would you support or oppose a proposal to change archery hunting from a general season to a controlled season for mule deer in Eastern Oregon? (Asked of active deer hunters who hunted deer in Eastern Oregon and Oregon hunters who are very or somewhat interested in hunting mule deer in Eastern Oregon.)



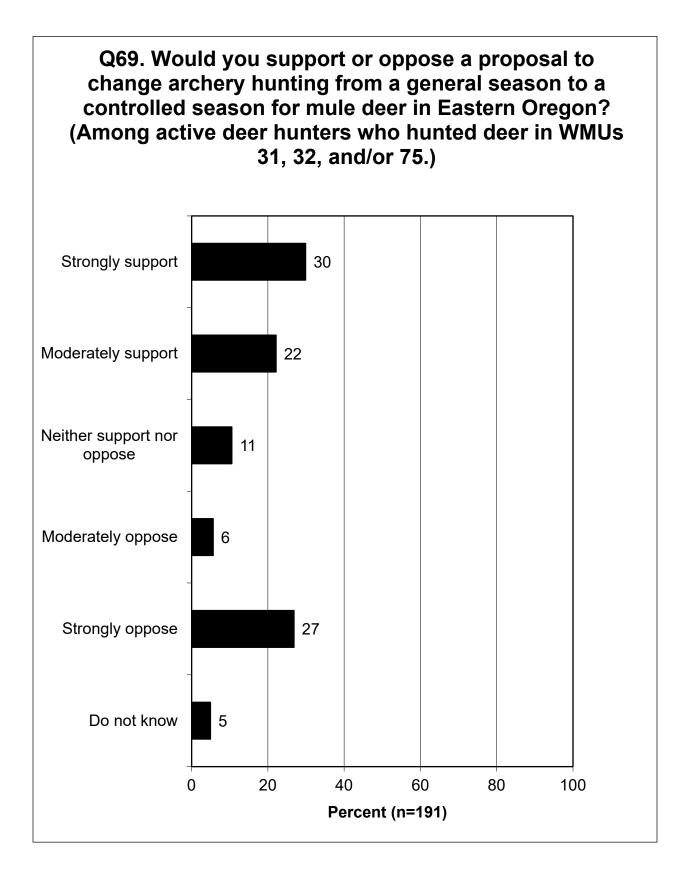
On this question, results were run among those hunters who had hunted various WMUs. The WMUs were grouped so that the sample size would be large enough for statistically valid results (see map below).

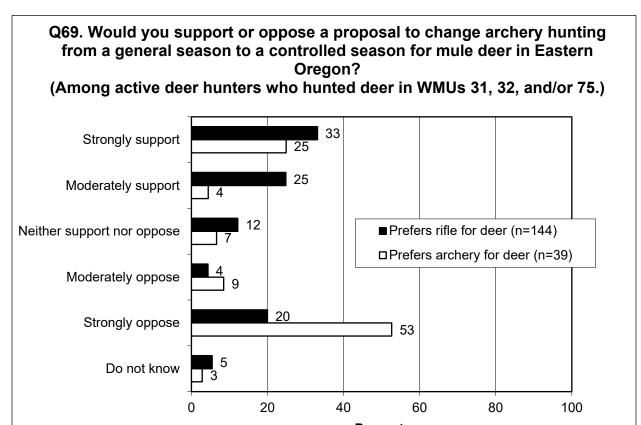
The groupings and results overall are as follows:

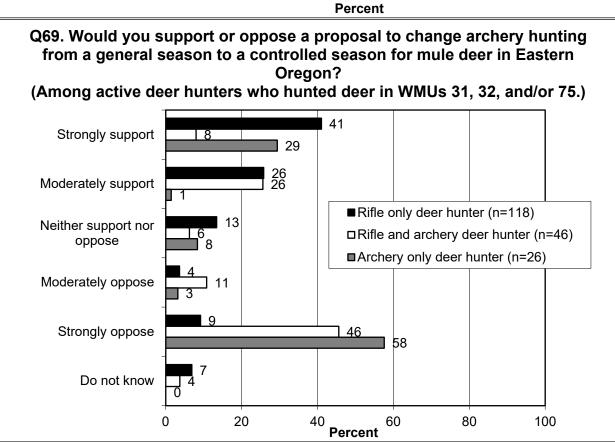
- WMUs 31, 32, and 75: Support 52%, opposition 32%.
- WMUs 34, 35, and 77: Support 51%, opposition 30%.
- WMUs 37, 46, and 72: Support 52%, opposition 36%.
- WMUs 48, 49, and 52: Support 42%, opposition 40%. This grouping is markedly different from the others, with much less support.

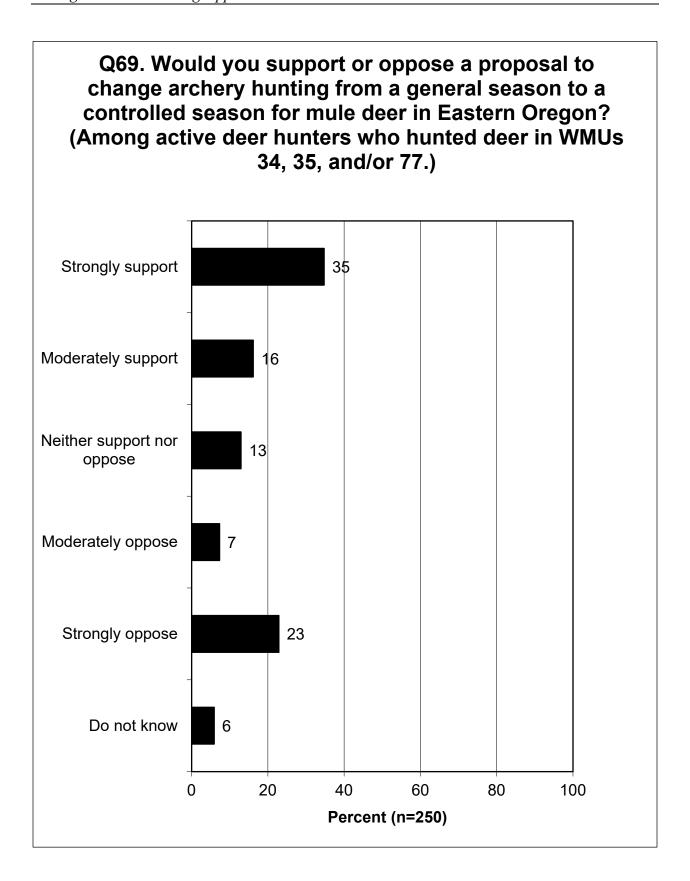
Crosstabulations were also run on each of those groupings by rifle/archery preference and use.

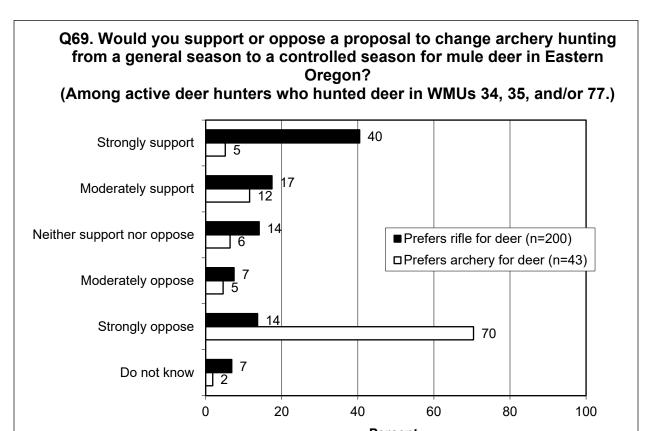


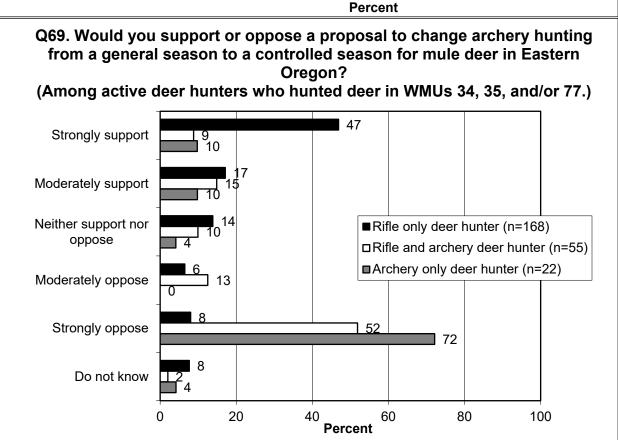


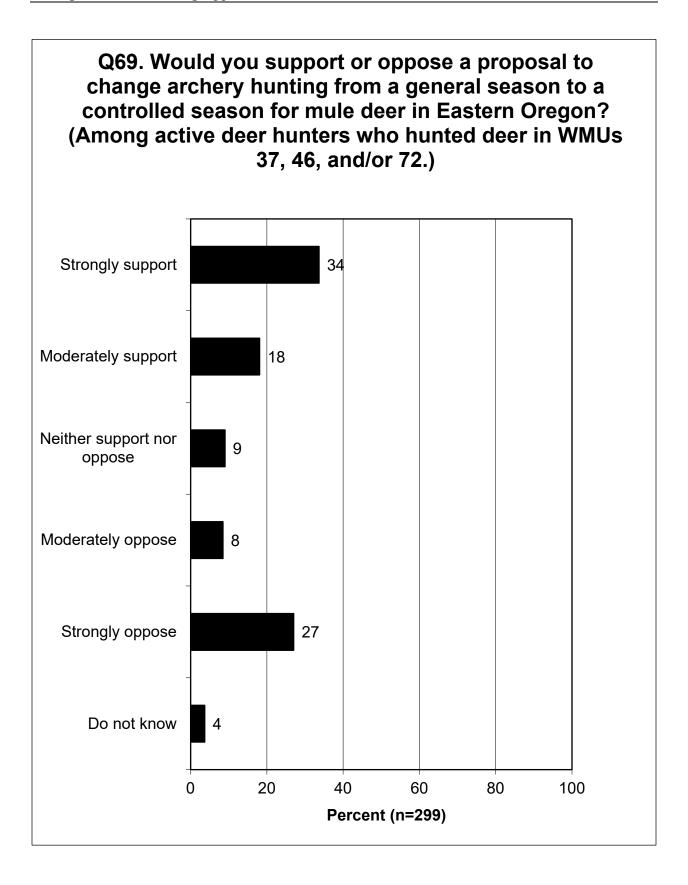






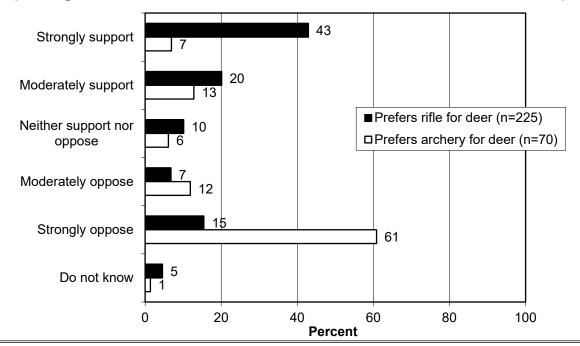






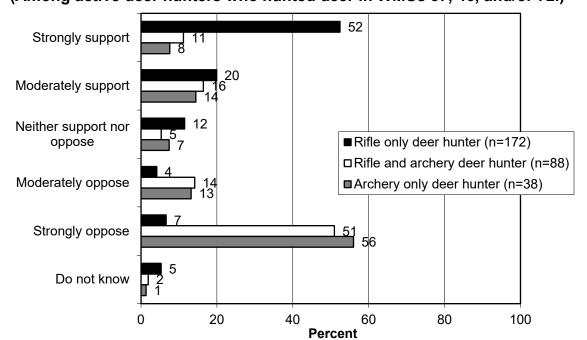
Q69. Would you support or oppose a proposal to change archery hunting from a general season to a controlled season for mule deer in Eastern Oregon?

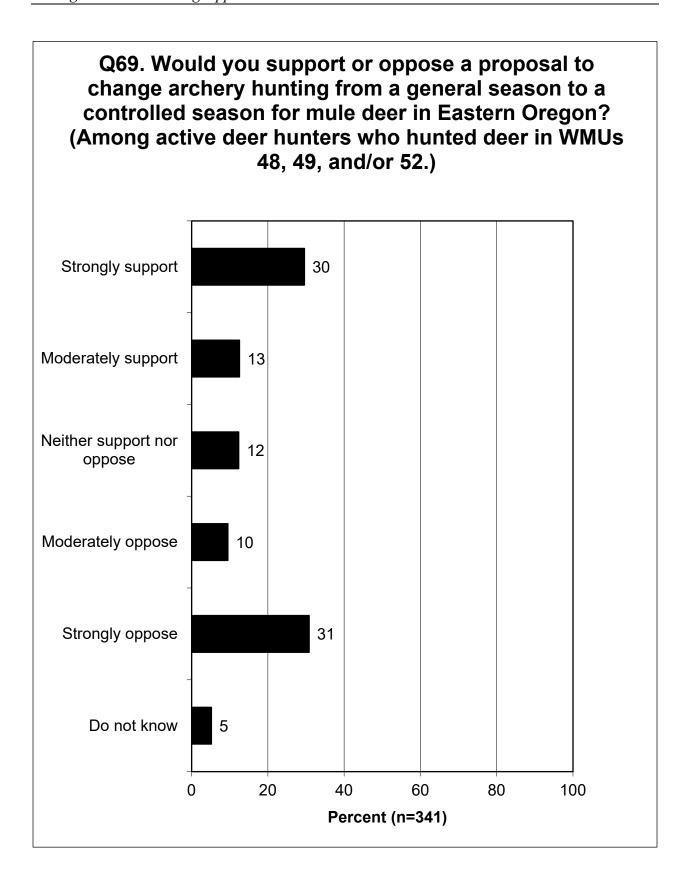
(Among active deer hunters who hunted deer in WMUs 37, 46, and/or 72.)

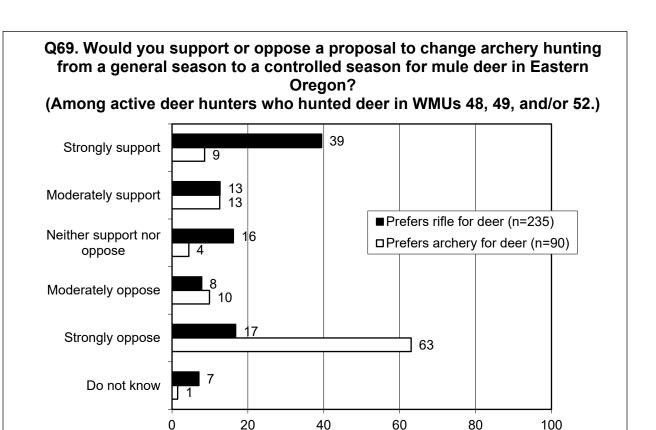


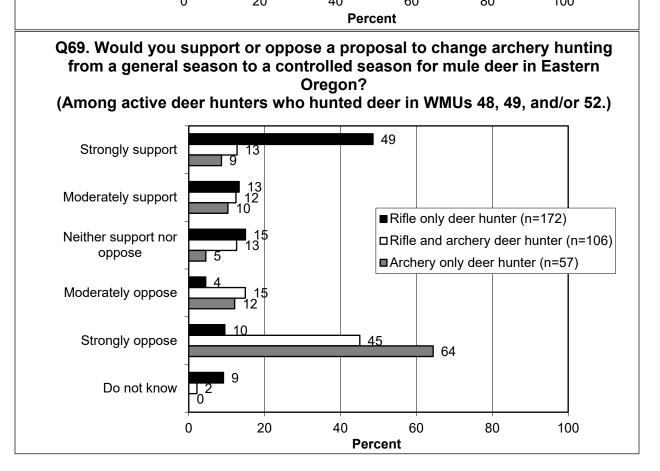
Q69. Would you support or oppose a proposal to change archery hunting from a general season to a controlled season for mule deer in Eastern Oregon?

(Among active deer hunters who hunted deer in WMUs 37, 46, and/or 72.)

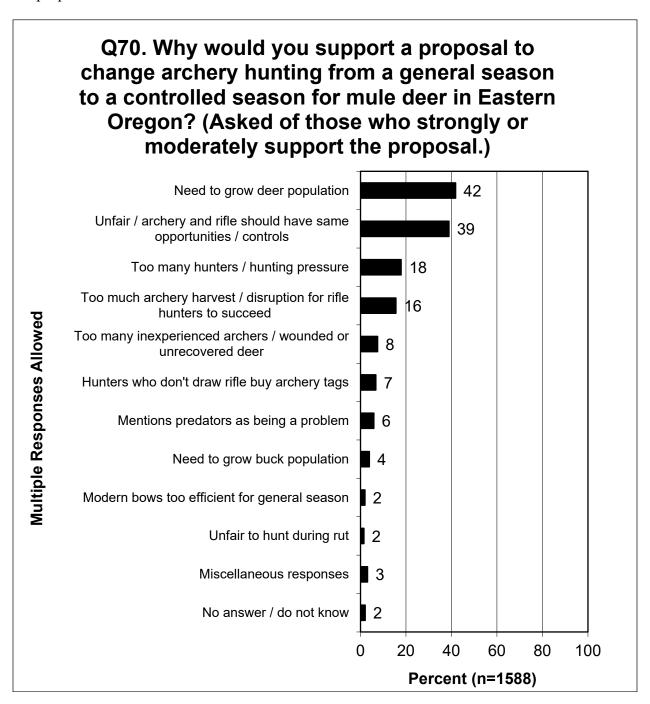


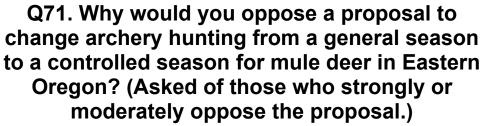


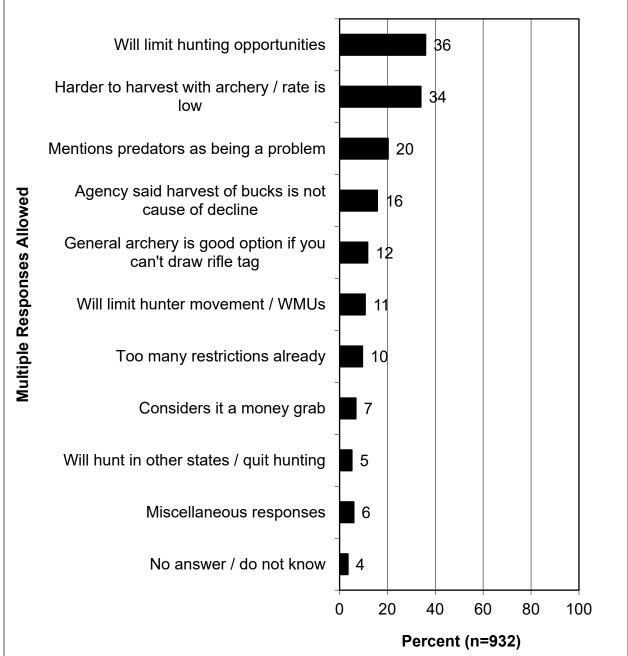




Reasons for supporting a change to the archery season for mule deer in Eastern Oregon is that it is felt that it would allow the deer population to grow and that archery and rifle should have the same opportunities. Two lesser important reasons are that there is too much hunting pressure and that it is felt that there is too much archery harvest. Top reasons to oppose are that it limits hunting opportunities and that it is harder to harvest with archery and so the season does not need the proposed limit.







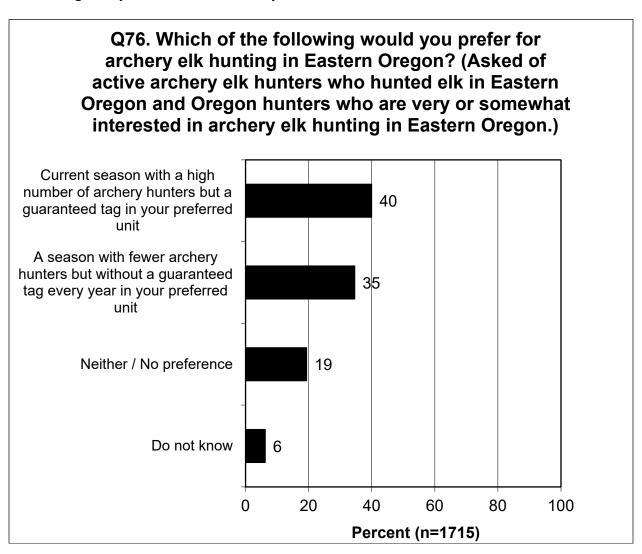
The survey presented two options for elk hunting in Eastern Oregon:

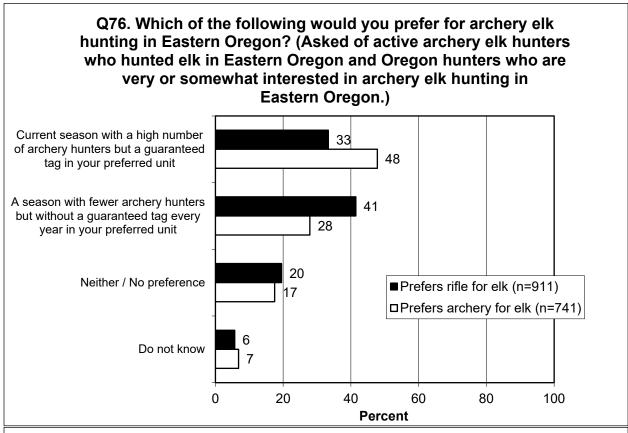
- The current season structure with a high number of archery hunters but a guaranteed tag in the hunter's preferred unit. (Referred to as the "current season option.")
- A season with fewer archery hunters but without a guaranteed tag every year in the hunter's preferred unit.

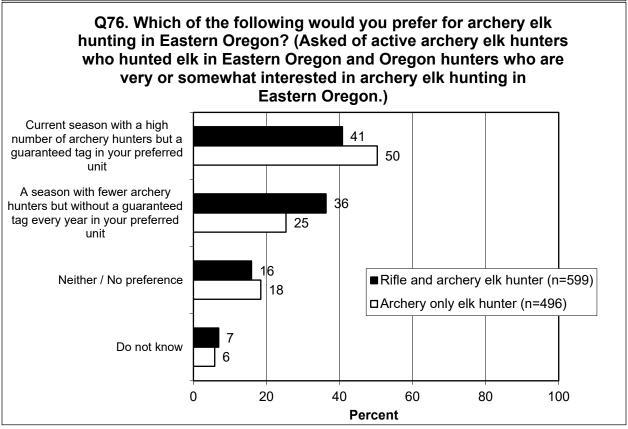
The respondents overall (active archery elk hunters who hunted elk in Eastern Oregon and Oregon hunters who are very or somewhat interested in archery elk hunting in Eastern Oregon) were fairly evenly split, with 40% selecting the first option and 35% selecting the second.

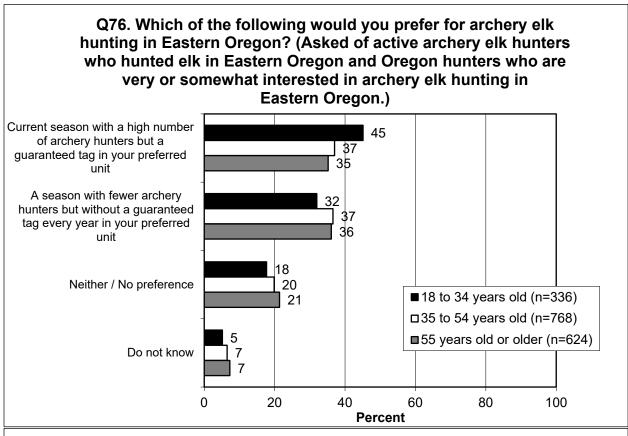
In the crosstabulations:

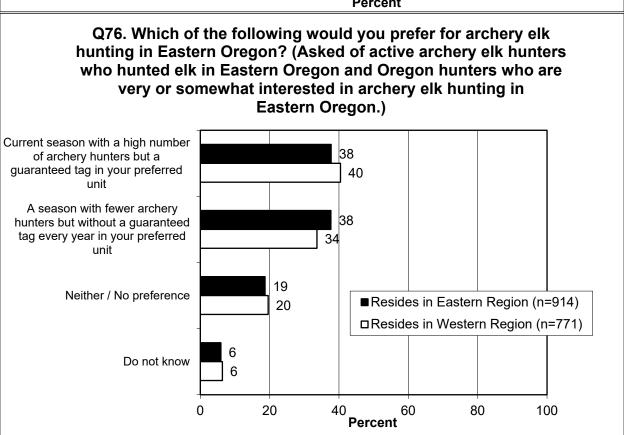
- Those who prefer archery are more likely than those who prefer rifle to select the current season option.
- Younger hunters are more likely to want the current season option, compared to their older counterparts.
- Regionally, there are not markedly different results.

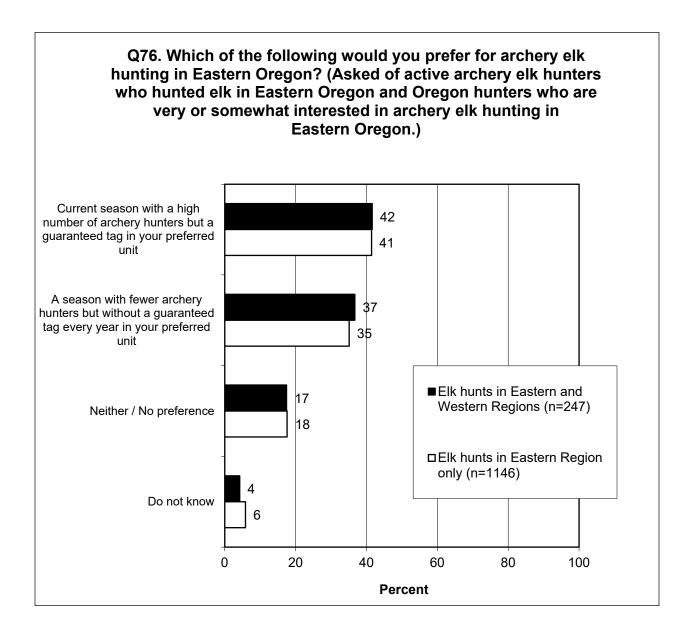








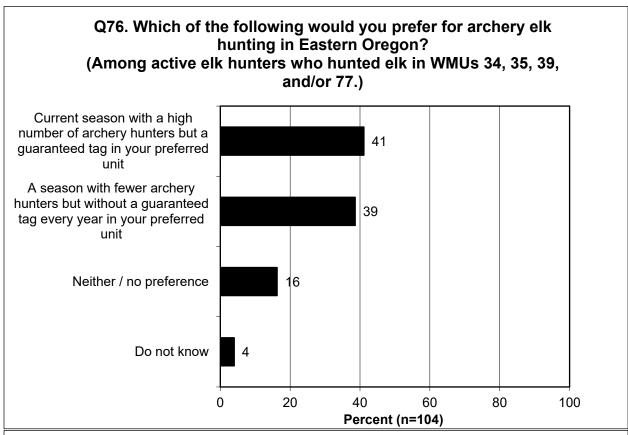


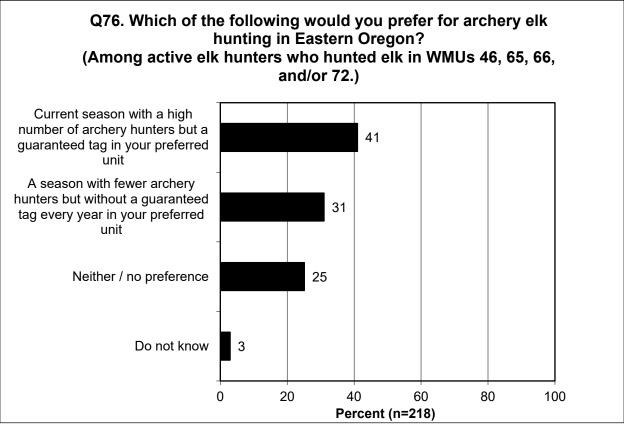


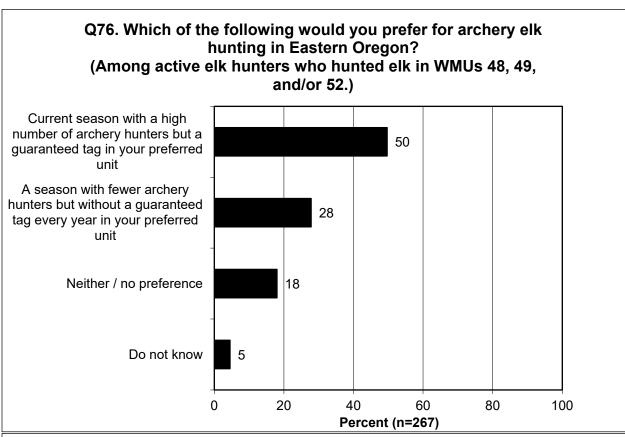
This question also had results run among hunters who had hunted in various WMUs. The groupings were done so that the sample sizes would be large enough for statistically valid results (see map below).

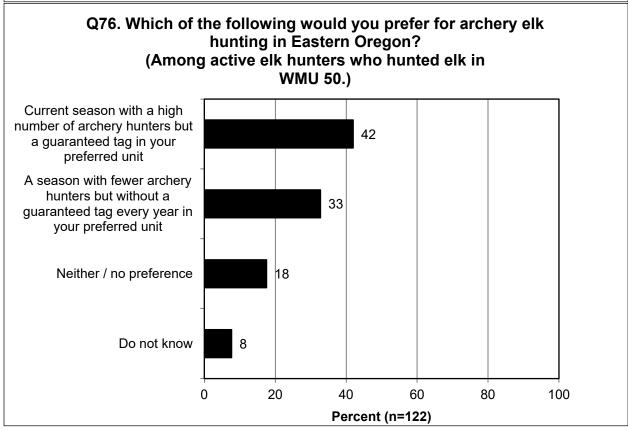
- WMUs 34, 35, 39, and 77: Current season option 41%, fewer archery hunters/no guaranteed tag 39%.
- WMUs 46, 65, 66, and 72: Current season option -41%, fewer archery hunters/no guaranteed tag -31%.
- WMUs 48, 49, and 52: Current season option -50%, fewer archery hunters/no guaranteed tag -28%. This grouping has the most support for the current season option over the other option.
- WMU 50 by itself: Current season option 42%, fewer archery hunters/no guaranteed tag 33%.



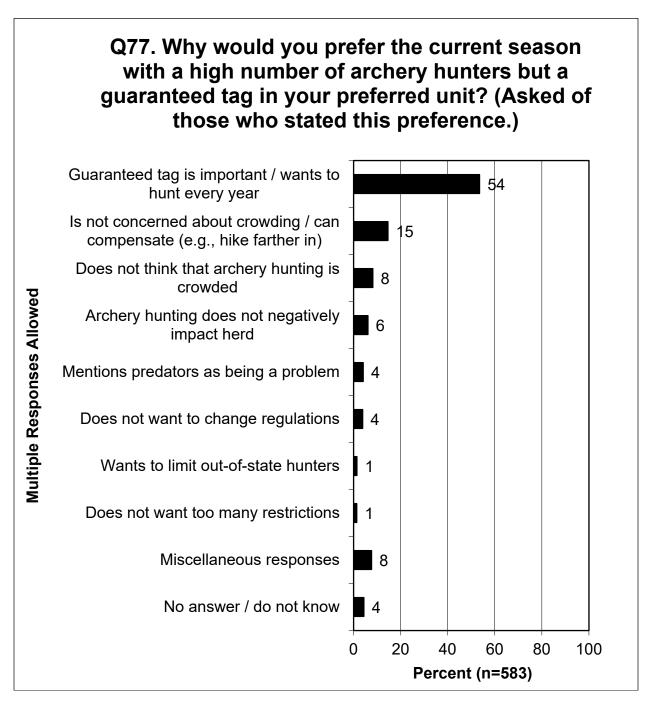


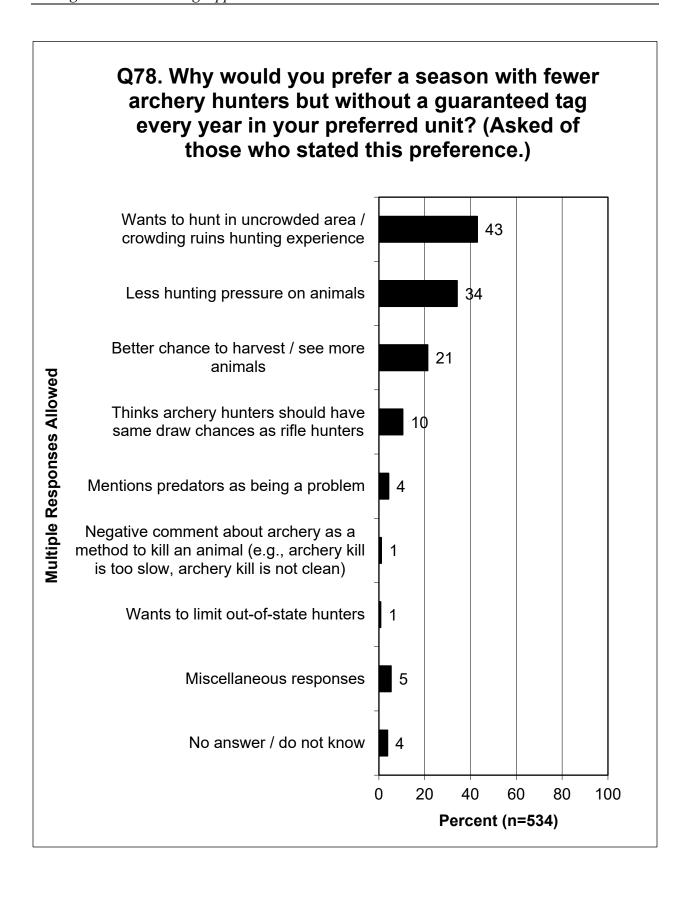






The overriding reason for preferring the current season structure is that hunters want to hunt every year. Also with a double-digit percentage is the reason that the hunter is not concerned about crowding by being able to compensate for it. Top reasons for preferring a season with fewer archery hunters are that the hunter wants an uncrowded experience, that it puts less pressure on the animals, and that it allows a better chance at harvest.





Questions 83 and 86 asked about allocation of licenses for elk in Eastern Oregon. However, prior to asking those questions, the survey examined attitudes about elk hunting in Eastern Oregon in Questions 79, 80, 81, and 82. These questions were asked first to examine whether hunters' perceptions agree with the ODFW's assessment of the situation. The questions and information for this section are shown below.

FOUR QUESTIONS WERE FIRST ASKED

Q79. How would you describe the number of other archery hunters where you typically archery hunt for elk in Eastern Oregon?

Q80. Do you agree or disagree with the following statement? The density of elk archery hunters on public land in Eastern Oregon is displacing some elk and pushing them onto private lands.

Q81. How concerned are you about the high density of archery hunters on public lands in Eastern Oregon pushing elk onto private lands?

Q82. Do you agree or disagree that Eastern Oregon elk hunting opportunity is being allocated fairly between weapon choices?

INFORMATION WAS THEN GIVEN PRIOR TO Q83 AND Q86

The Department is collecting public input on how **ELK** hunting opportunity should be allocated fairly in **EASTERN** Oregon units where most archery tags are unlimited and rifle tags are controlled.

A recent survey showed that 75% of Oregon resident elk hunters prefer to hunt with a rifle, 21% prefer to hunt with a bow, and 3% prefer a muzzleloader.

The Department is concerned that the current allocation of opportunity in some areas does not reflect these hunter preferences. Over time, the number of general season archery hunters has increased, which has led to decreased controlled rifle bull tags in some units. In some popular units, archery harvest of branch antler bulls is now equal to or greater than rifle harvest of branch antler bulls.

To improve the ability to allocate hunting opportunity fairly, the Department is considering a potential change to archery elk hunting from unlimited tags to controlled hunts in Eastern Oregon. Impacts of this change would be a reduction in non-resident archery hunters, lower density of archery hunters in popular units, and the potential to increase rifle bull tags in the future.

THE SURVEY THEN ASKED Q83.

Q83. How much would you like or dislike a proposal to change archery elk hunting from a general season with unlimited tags to controlled hunts in Eastern Oregon?

AFTER THIS QUESTION, MORE INFORMATION WAS GIVEN.

An alternative, which would be in the most popular units, is to split the current 30-day archery elk season in Eastern Oregon into two 15-day controlled hunts. This alternative would allow more hunters the opportunity to hunt in their preferred unit, but for a shorter amount of time.

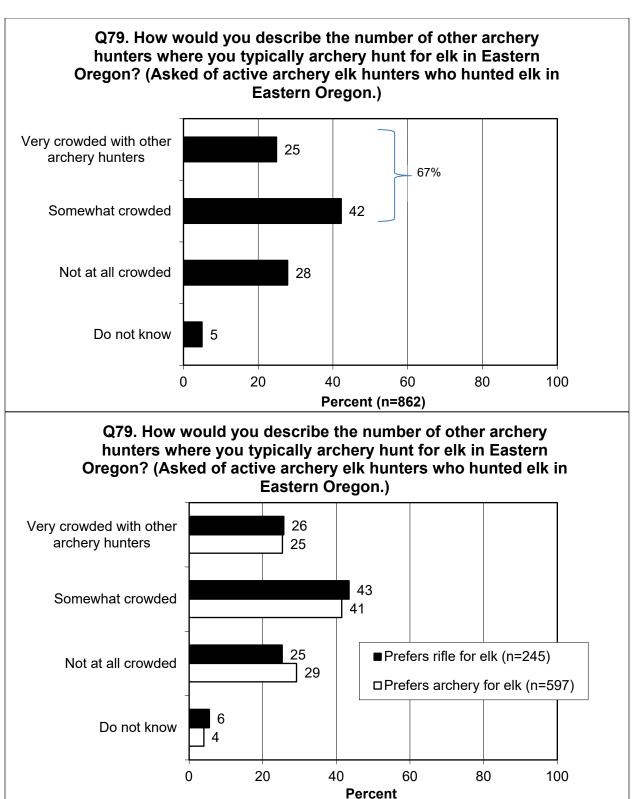
THE SURVEY THEN ASKED Q86.

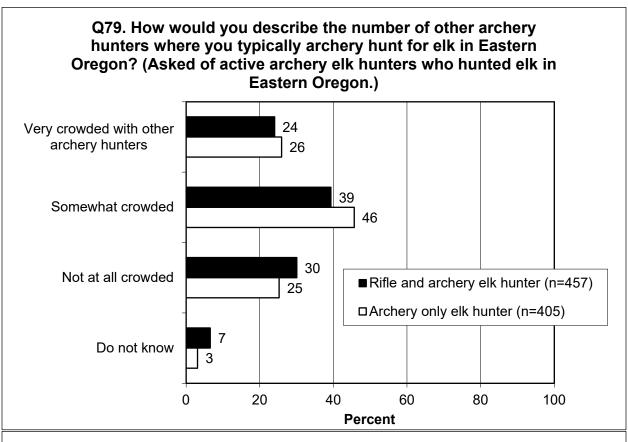
Q86. How much would you like or dislike a proposal of splitting the archery elk season in Eastern Oregon into two 15-day controlled hunts?

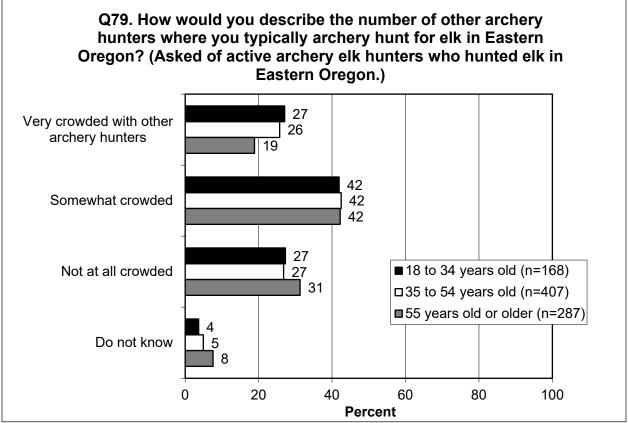
QUESTIONS 83 AND 86 WERE ASKED OF

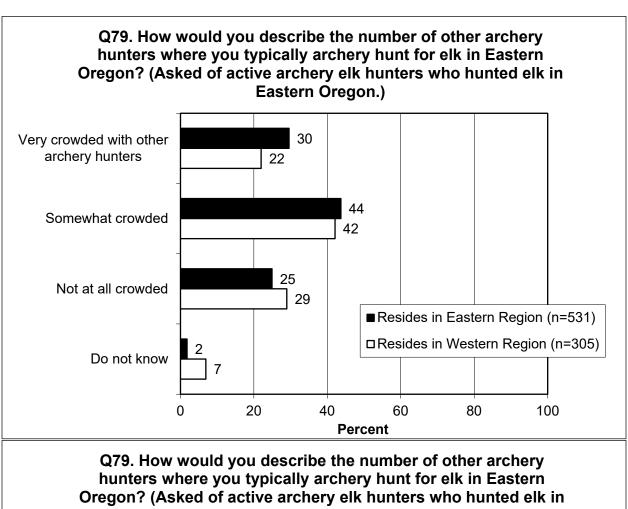
- Active elk hunters who hunted elk in Eastern Oregon.
- Oregon hunters who are very or somewhat interested in elk hunting in Eastern Oregon.

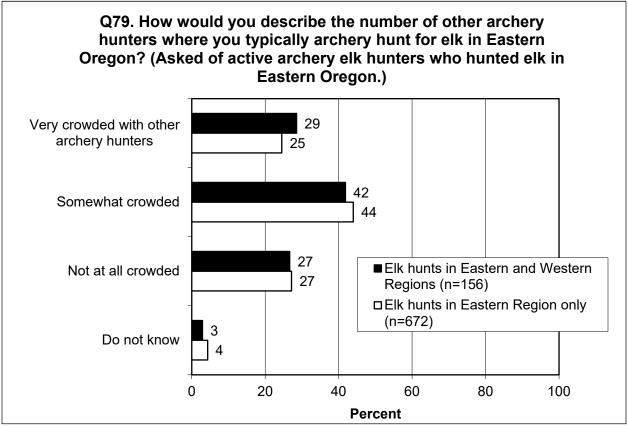
In the first question in this section, asked of all active archery elk hunters who had hunted elk in Eastern Oregon, 67% of respondents indicated that the hunting was *very* or *somewhat* crowded. Crosstabulations are then included by weapon preference and use, by age, by region, and by Q76 that was discussed previously.

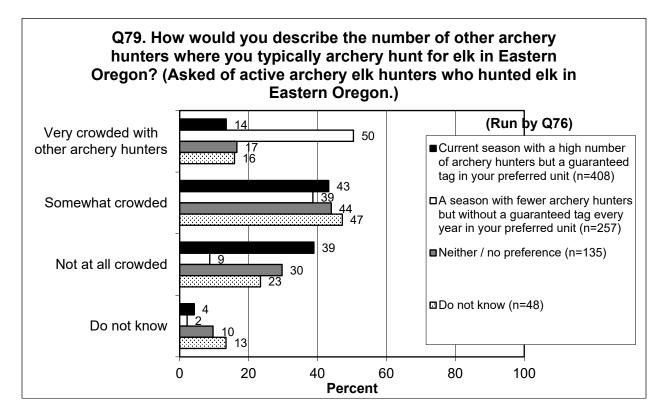








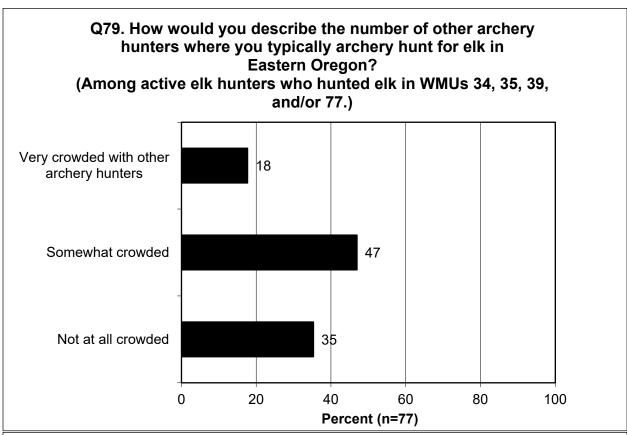


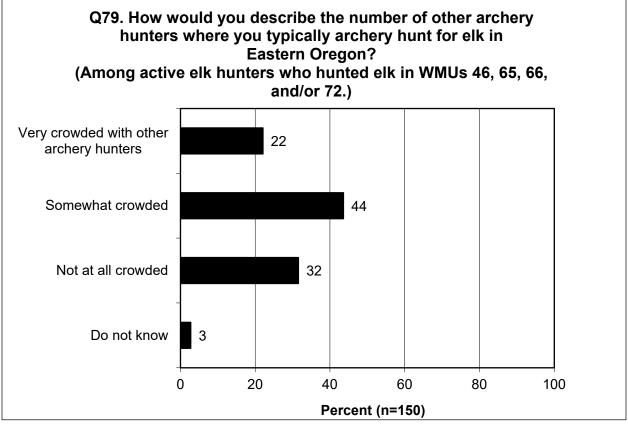


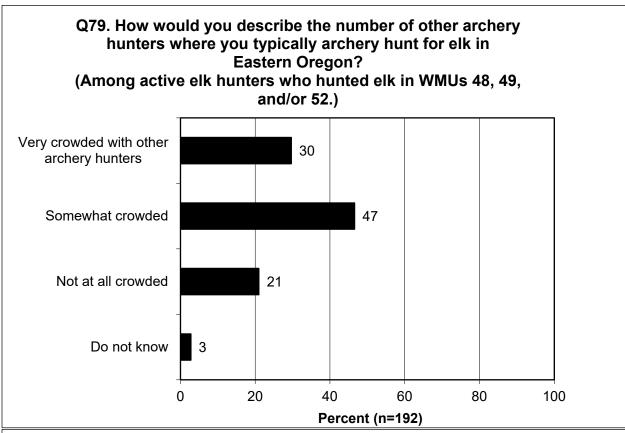
This question's results were run among hunters who had hunted in various WMUs. The groupings were done so that the sample sizes would be large enough for statistically valid results (see map below).

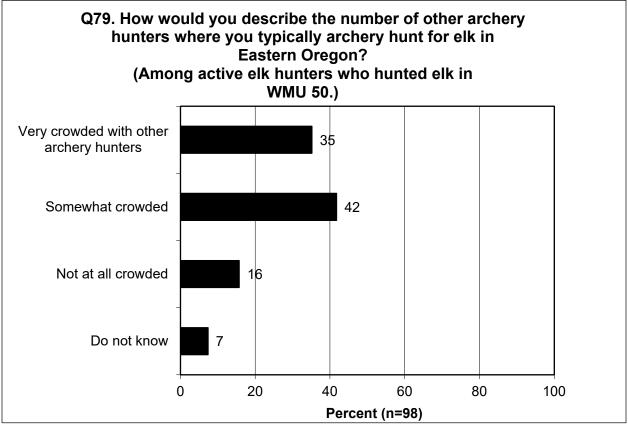
- WMUs 34, 35, 39, and 77: Very crowded: 18%; somewhat crowded: 47%.
- WMUs 46, 65, 66, and 72: Very crowded: 22%; somewhat crowded: 44%.
- WMUs 48, 49, and 52: Very crowded: 30%; somewhat crowded: 47%.
- WMU 50 by itself: Very crowded: 35%; somewhat crowded: 42%.



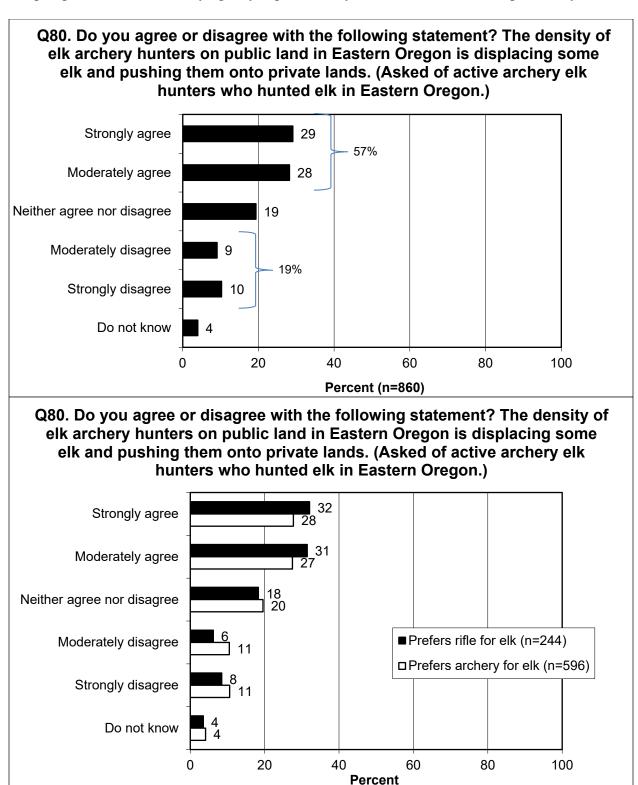


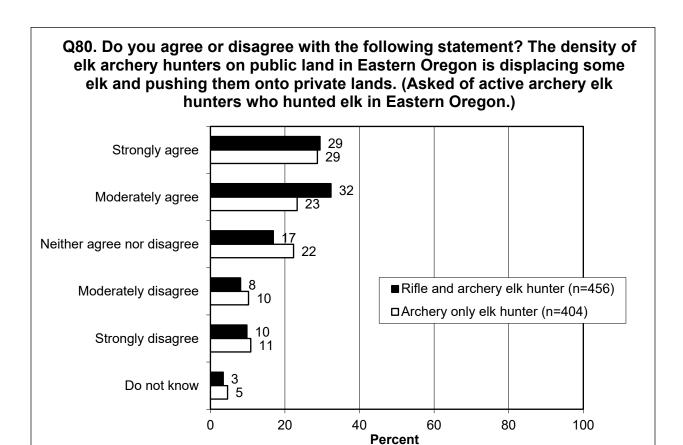


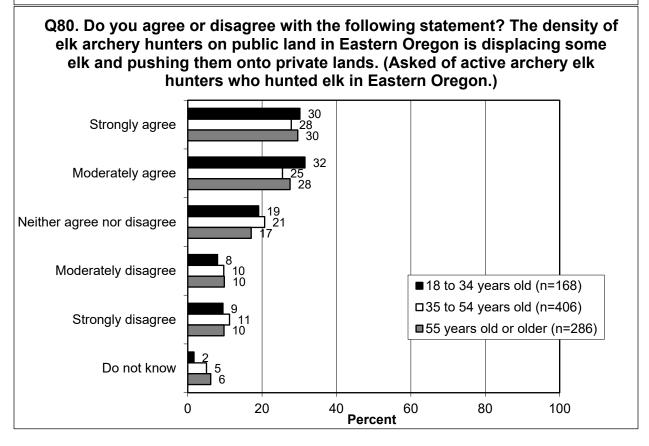


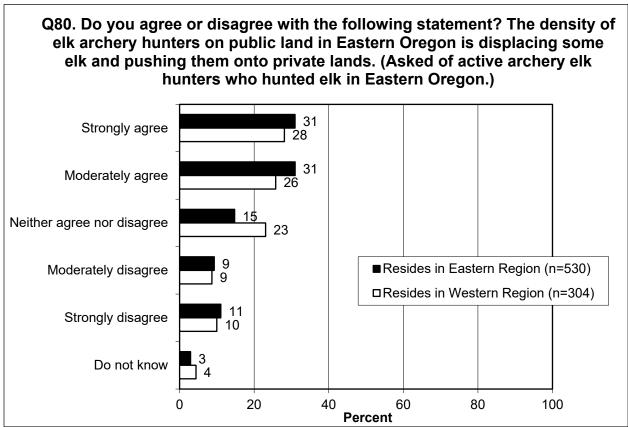


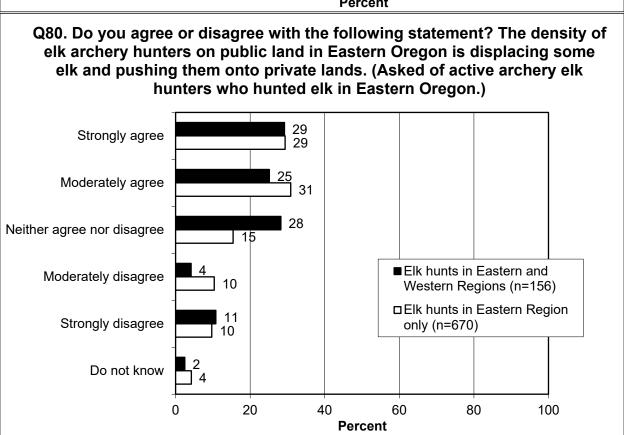
Overall, active archery elk hunters who hunted in Eastern Oregon more often agree (57%) than disagree (19%) that the density of elk archery hunters on public land in Eastern Oregon is displacing some elk and pushing them onto private lands. Crosstabulations are then included by weapon preference and use, by age, by region, and by Q76 that was discussed previously.

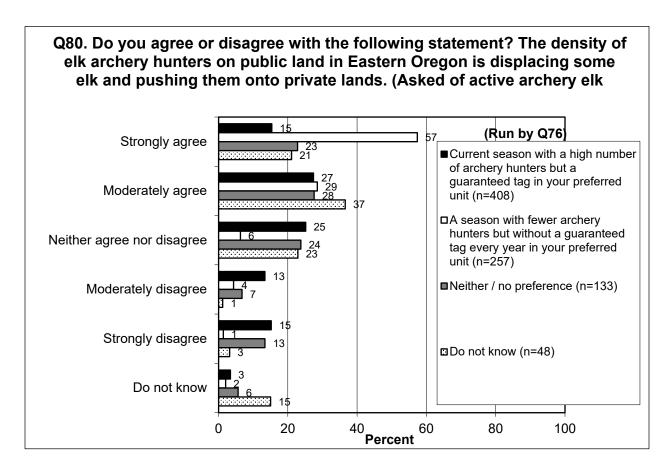








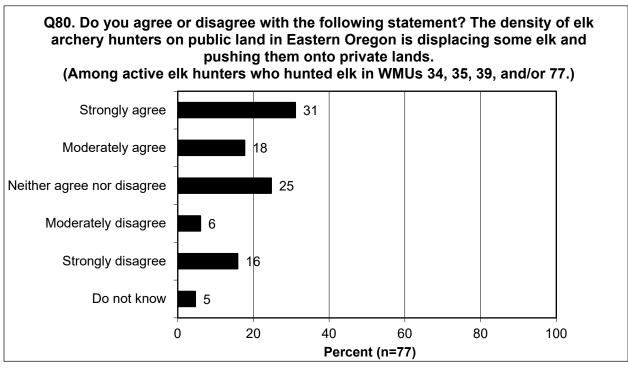




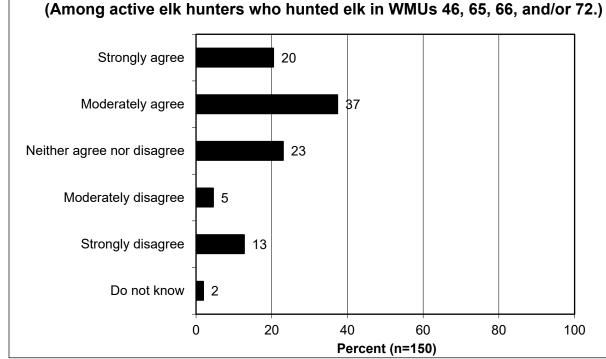
This question's results were run among hunters who had hunted in various WMUs. The groupings were done so that the sample sizes would be large enough for statistically valid results (see map on the following page).

- WMUs 34, 35, 39, and 77: Agree: 49%; disagree: 22%.
- WMUs 46, 65, 66, and 72: Agree: 58%; disagree: 17%.
- WMUs 48, 49, and 52: Agree: 58%; disagree: 19%.
- WMU 50 by itself: Agree: 57%; disagree: 18%.



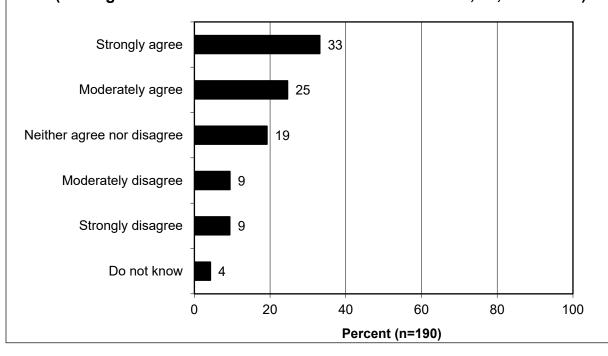


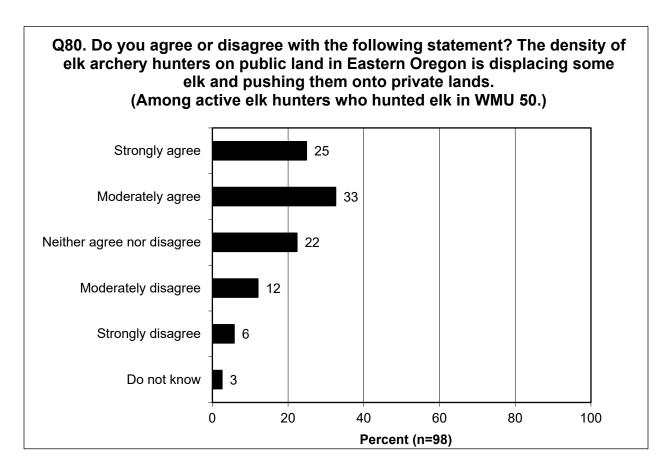
Q80. Do you agree or disagree with the following statement? The density of elk archery hunters on public land in Eastern Oregon is displacing some elk and pushing them onto private lands.



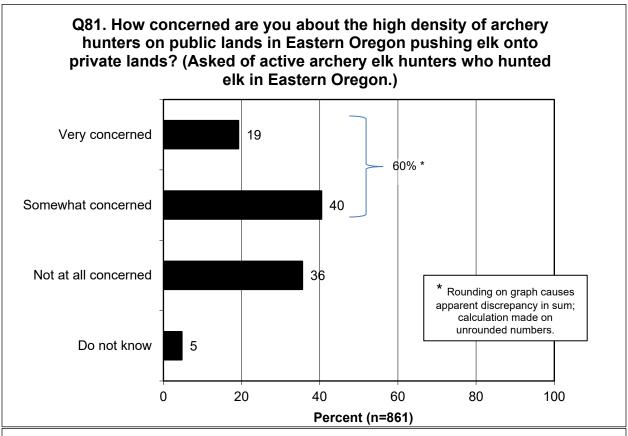
Q80. Do you agree or disagree with the following statement? The density of elk archery hunters on public land in Eastern Oregon is displacing some elk and pushing them onto private lands.

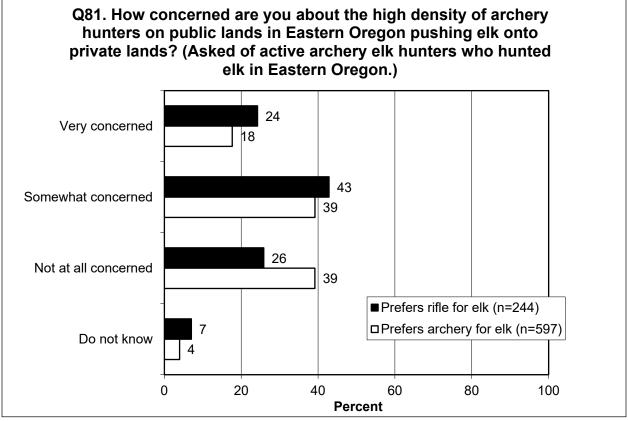
(Among active elk hunters who hunted elk in WMUs 48, 49, and/or 52.)

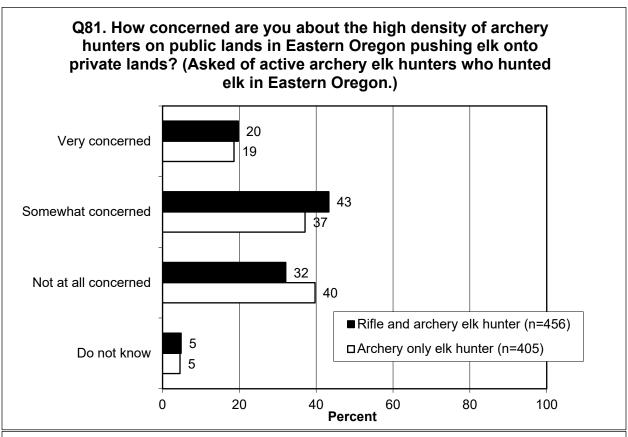


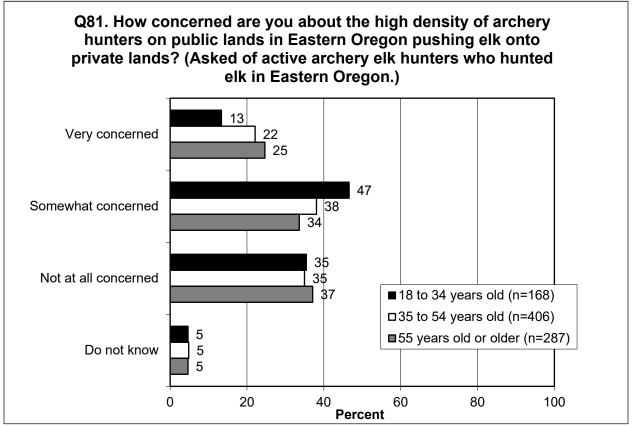


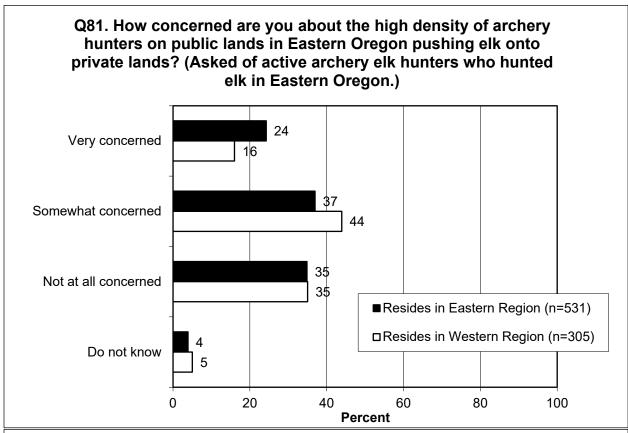
The next question in this section again was asked of all active archery elk hunters who had hunted elk in Eastern Oregon. It asked these hunters to rate their level of concern about the high density of archery hunters on public lands and that these hunters push elk onto private lands. Overall, more than half of these hunters (60%) are concerned, either very or somewhat concerned. Crosstabulations are then included by weapon preference and use, by age, by region, and by Q76 that was discussed previously.

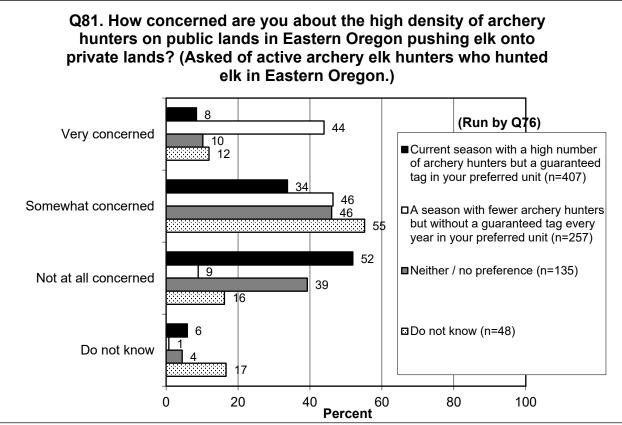








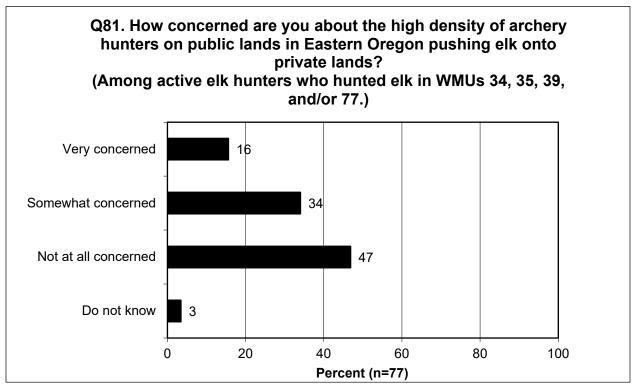


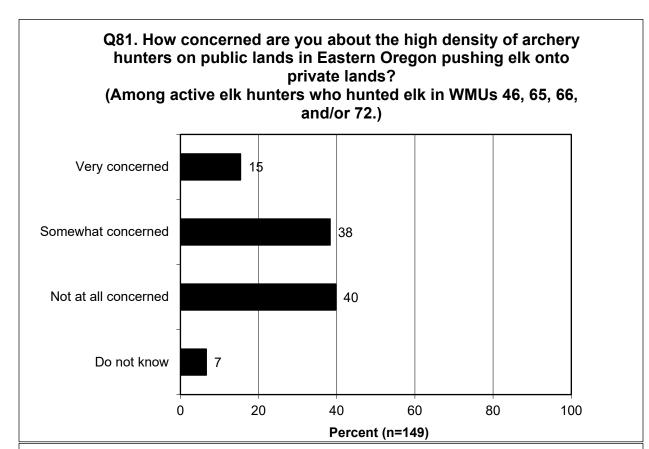


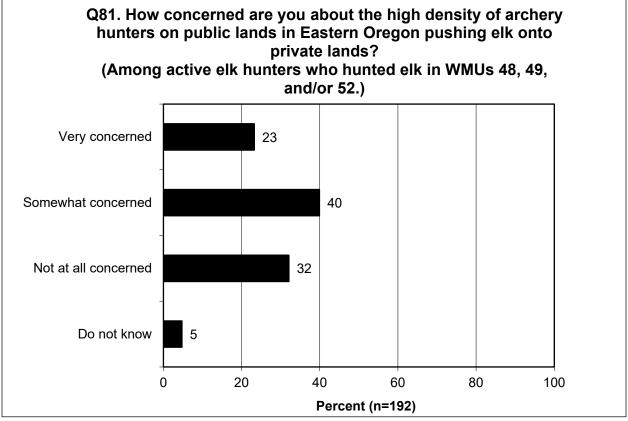
This question's results were run among hunters who had hunted in various WMUs. The groupings were done so that the sample sizes would be large enough for statistically valid results (see map below).

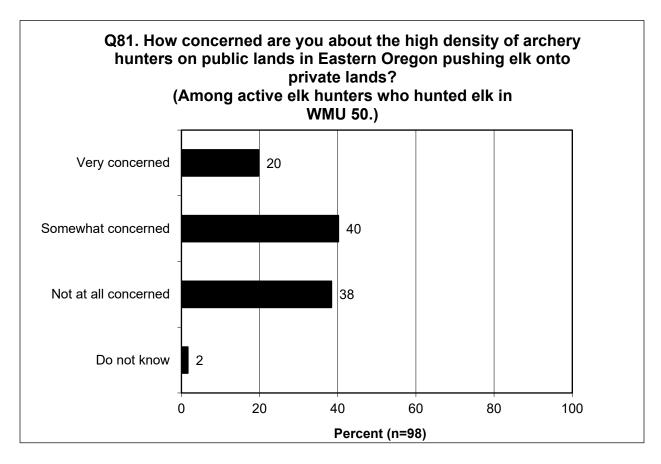
- WMUs 34, 35, 39, and 77: Very concerned: 16%; somewhat concerned: 34%.
- WMUs 46, 65, 66, and 72: Very concerned: 15%; somewhat concerned: 38%.
- WMUs 48, 49, and 52: Very concerned: 23%; somewhat concerned: 40%. This grouping has the highest concern.
- WMU 50 by itself: Very concerned: 20%; somewhat concerned: 40%.





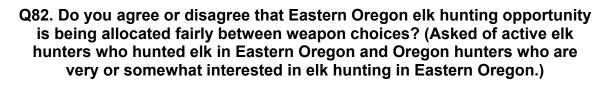


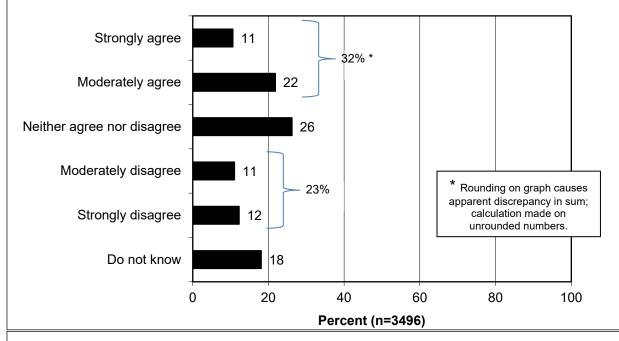




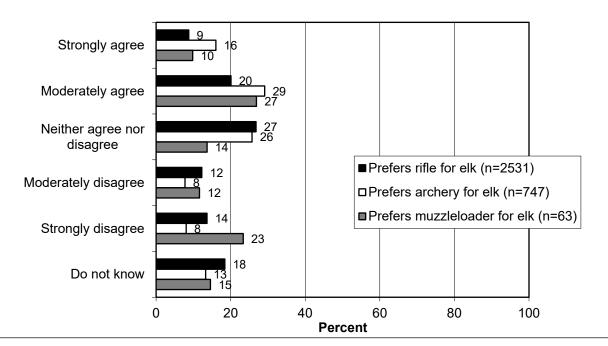
In the final lead-in question before Questions 83 and 86, asked of all active archery elk hunters who had hunted elk in Eastern Oregon as well as those very or somewhat interested in elk hunting in Eastern Oregon, 32% agree that elk hunting opportunity is being allocated fairly between weapon choices in Eastern Oregon, but 23% disagree. There is a relatively large percentage in the neither or do not know responses.

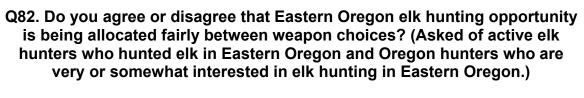
Crosstabulations are then included by weapon preference and use, by age, and by region. For this question, results were also run on one WMU grouping: those who hunted WMUs 48, 49, and/or 52.

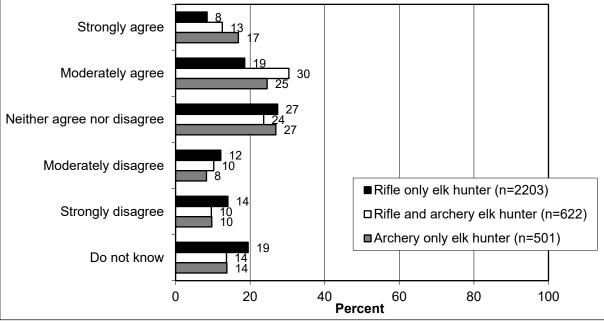




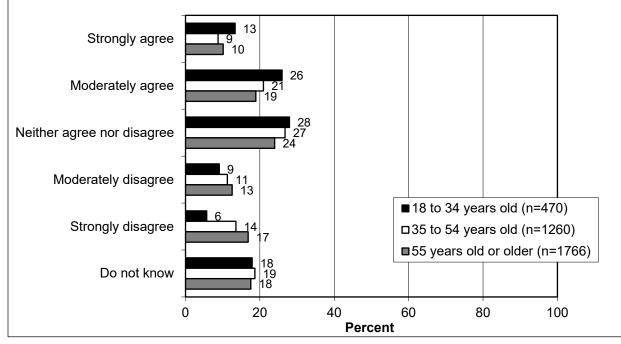
Q82. Do you agree or disagree that Eastern Oregon elk hunting opportunity is being allocated fairly between weapon choices? (Asked of active elk hunters who hunted elk in Eastern Oregon and Oregon hunters who are very or somewhat interested in elk hunting in Eastern Oregon.)

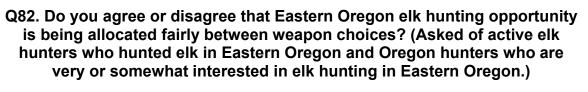


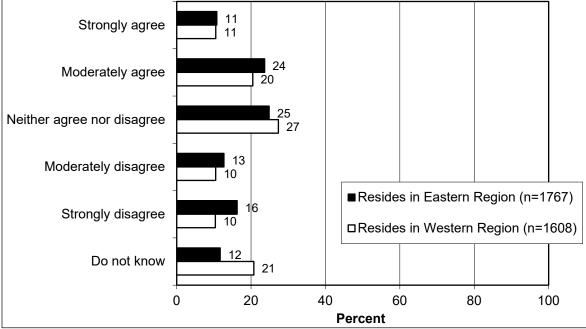




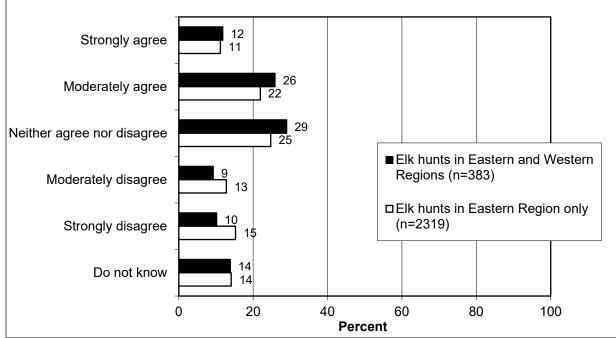
Q82. Do you agree or disagree that Eastern Oregon elk hunting opportunity is being allocated fairly between weapon choices? (Asked of active elk hunters who hunted elk in Eastern Oregon and Oregon hunters who are very or somewhat interested in elk hunting in Eastern Oregon.)

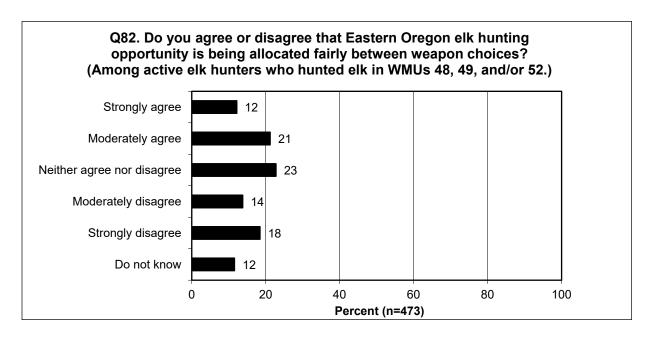






Q82. Do you agree or disagree that Eastern Oregon elk hunting opportunity is being allocated fairly between weapon choices? (Asked of active elk hunters who hunted elk in Eastern Oregon and Oregon hunters who are very or somewhat interested in elk hunting in Eastern Oregon.)





After this question, the survey then asked Questions 83 and 86. For the reader's convenience, the information given prior to this question is again presented.

INFORMATION GIVEN PRIOR TO Q83 AND Q86

The Department is collecting public input on how **ELK** hunting opportunity should be allocated fairly in **EASTERN** Oregon units where most archery tags are unlimited and rifle tags are controlled.

A recent survey showed that 75% of Oregon resident elk hunters prefer to hunt with a rifle, 21% prefer to hunt with a bow, and 3% prefer a muzzleloader.

The Department is concerned that the current allocation of opportunity in some areas does not reflect these hunter preferences. Over time, the number of general season archery hunters has increased, which has led to decreased controlled rifle bull tags in some units. In some popular units, archery harvest of branch antler bulls is now equal to or greater than rifle harvest of branch antler bulls.

To improve the ability to allocate hunting opportunity fairly, the Department is considering a potential change to archery elk hunting from unlimited tags to controlled hunts in Eastern Oregon. Impacts of this change would be a reduction in non-resident archery hunters, lower density of archery hunters in popular units, and the potential to increase rifle bull tags in the future.

THE SURVEY THEN ASKED Q83.

Q83. How much would you like or dislike a proposal to change archery elk hunting from a general season with unlimited tags to controlled hunts in Eastern Oregon?

AFTER THIS QUESTION, MORE INFORMATION WAS GIVEN.

An alternative, which would be in the most popular units, is to split the current 30-day archery elk season in Eastern Oregon into two 15-day controlled hunts. This alternative would allow more hunters the opportunity to hunt in their preferred unit, but for a shorter amount of time.

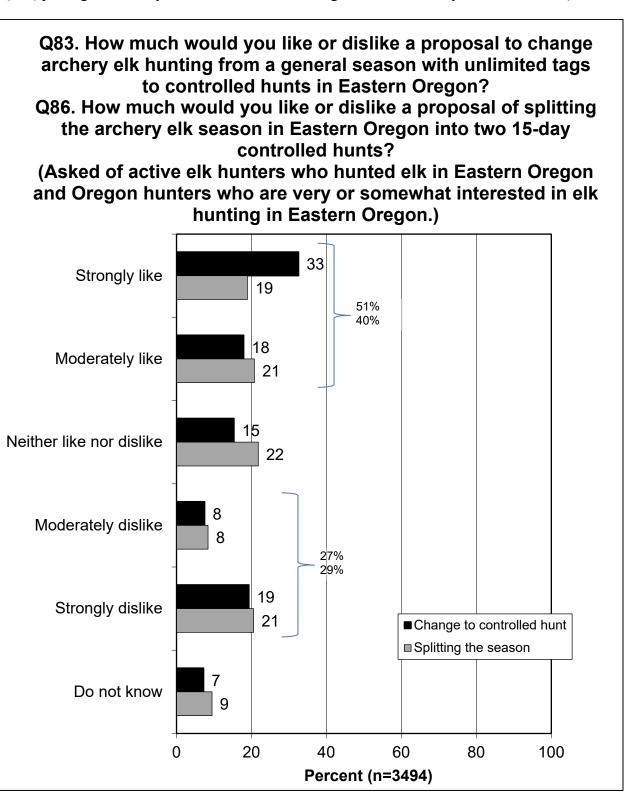
THE SURVEY THEN ASKED Q86.

Q86. How much would you like or dislike a proposal of splitting the archery elk season in Eastern Oregon into two 15-day controlled hunts?

QUESTIONS 83 AND 86 WERE ASKED OF

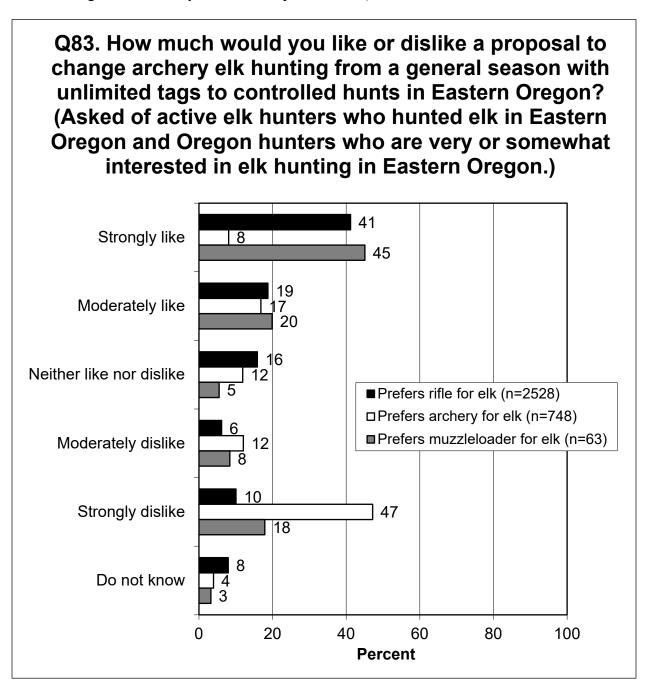
- Active elk hunters who hunted elk in Eastern Oregon.
- Oregon hunters who are very or somewhat interested in elk hunting in Eastern Oregon.

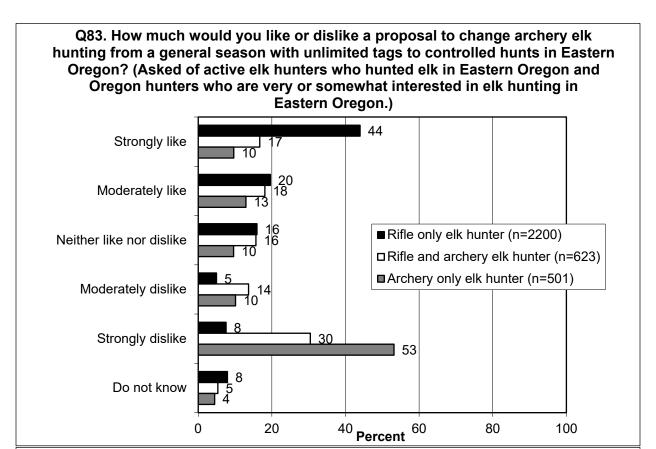
Questions 83 and 86 were asked independently. In other words, although perhaps not happening often, an individual respondent could strongly like both proposals. Overall, 51% of these respondents like the proposal offered in Q83 (to change archery elk hunting from a general season with unlimited tags to controlled hunts in Eastern Oregon), while 40% like the proposal in Q86 (splitting the archery elk season in Eastern Oregon into two 15-day controlled hunts).

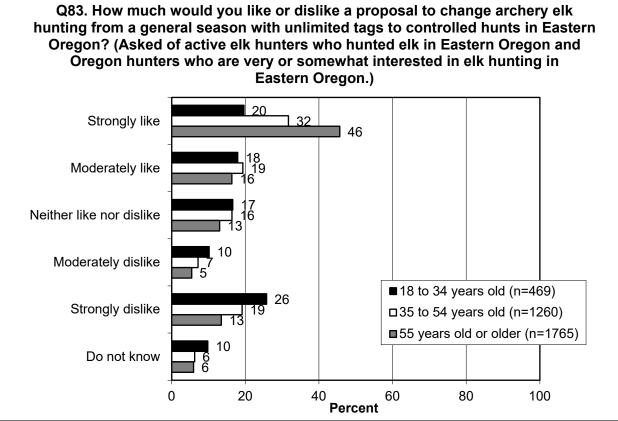


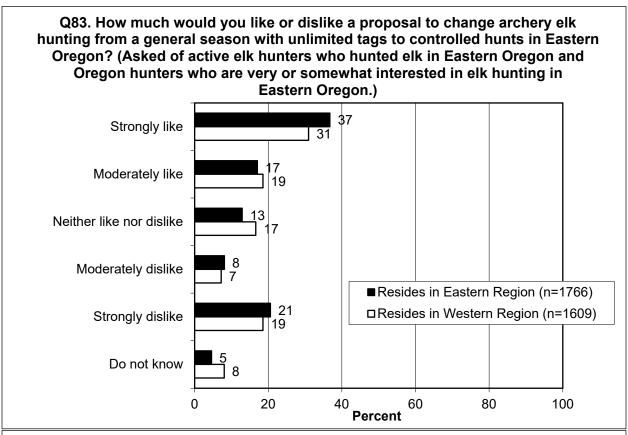
Crosstabulations were run on Q83 by the following:

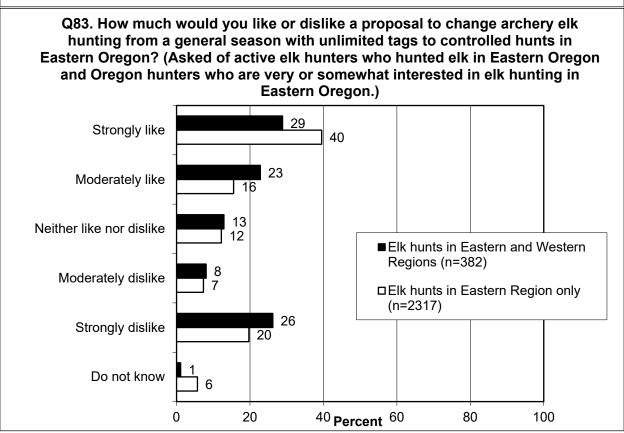
- Weapon preference.
- Weapon use.
- Age.
- Region resided in.
- Typically hunting in both regions versus typically hunting in the Eastern Region only.
- Question 82 (Do you agree or disagree that Eastern Oregon elk hunting opportunity is being allocated fairly between weapon choices?).

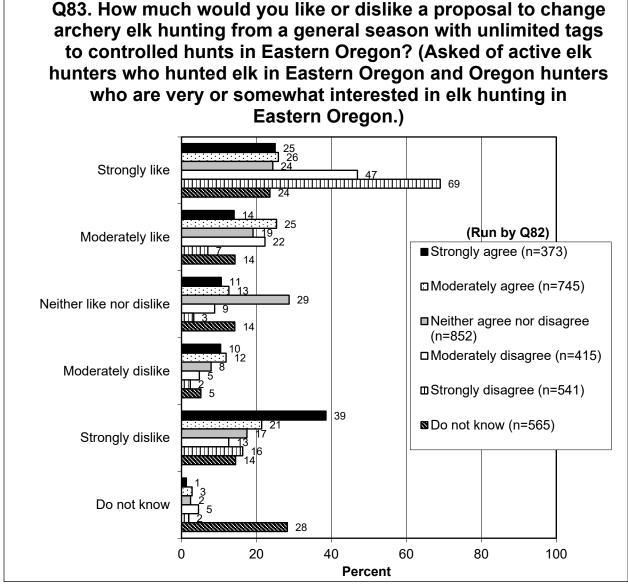












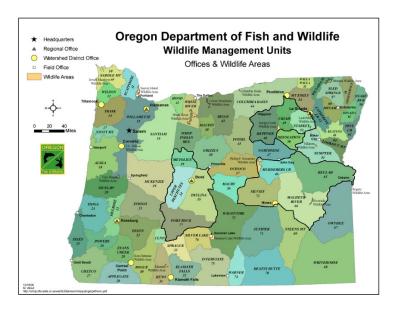
Q82. Do you agree or disagree that Eastern Oregon elk hunting opportunity is being allocated fairly between weapon choices?

This question's results were run among hunters who had hunted in various WMUs. The groupings were done so that the sample sizes would be large enough for statistically valid results (see map on the following page).

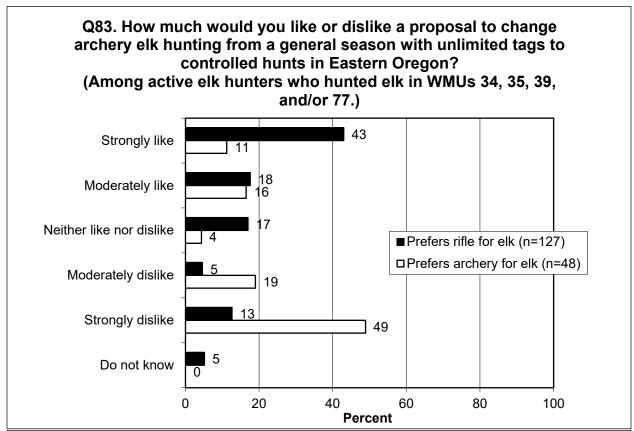
The groupings and results overall are as follows:

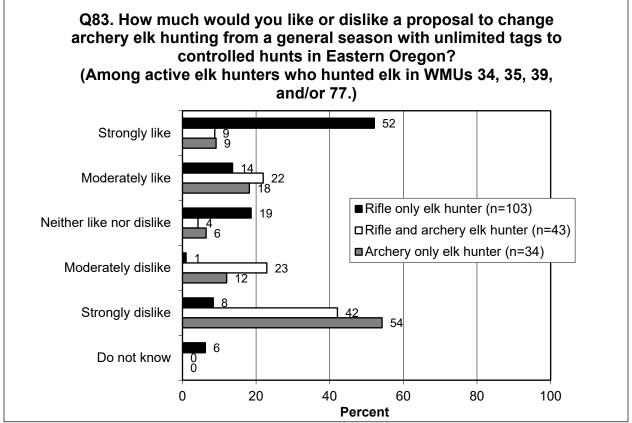
- WMUs 34, 35, 39, and 77: Like: 49%; dislike: 34%.
- WMUs 46, 65, 66, and 72: Like: 53%; dislike: 33%.
- WMUs 48, 49, and 52: Like: 49%; dislike: 38%.
- WMU 50 by itself: Like: 41%; dislike: 43%.

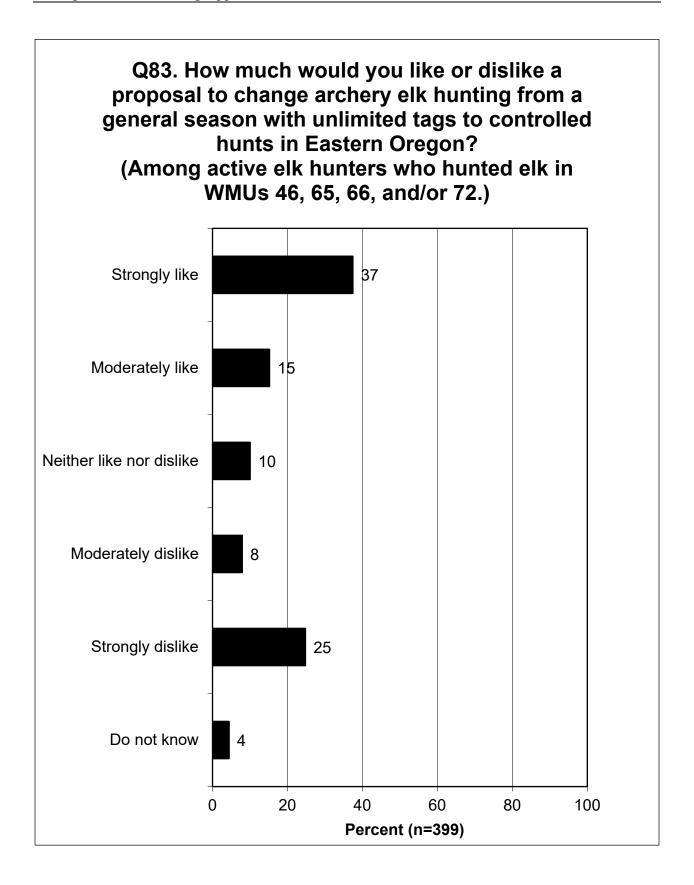
Crosstabulations were also run on each of those groupings by rifle/archery preference and use.

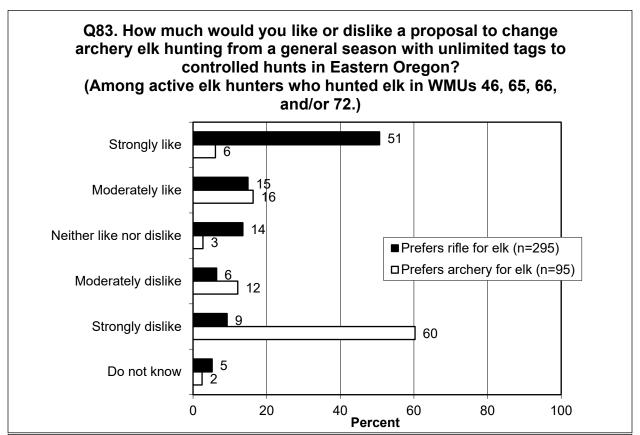


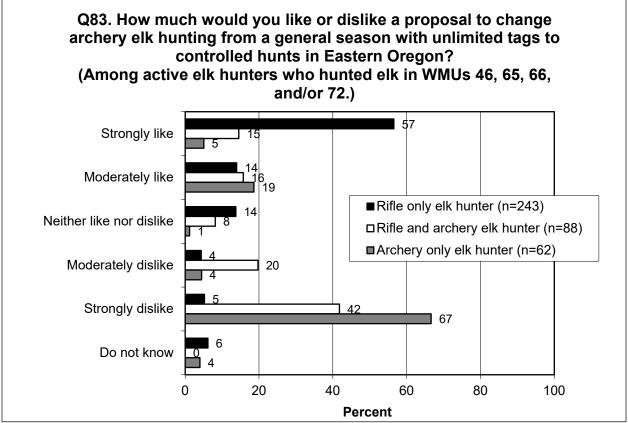
Q83. How much would you like or dislike a proposal to change archery elk hunting from a general season with unlimited tags to controlled hunts in Eastern Oregon? (Among active elk hunters who hunted elk in WMUs 34, 35, 39, and/or 77.) Strongly like 33 Moderately like 16 Neither like nor dislike 13 Moderately dislike 10 Strongly dislike 25 Do not know 20 40 60 80 100 Percent (n=187)

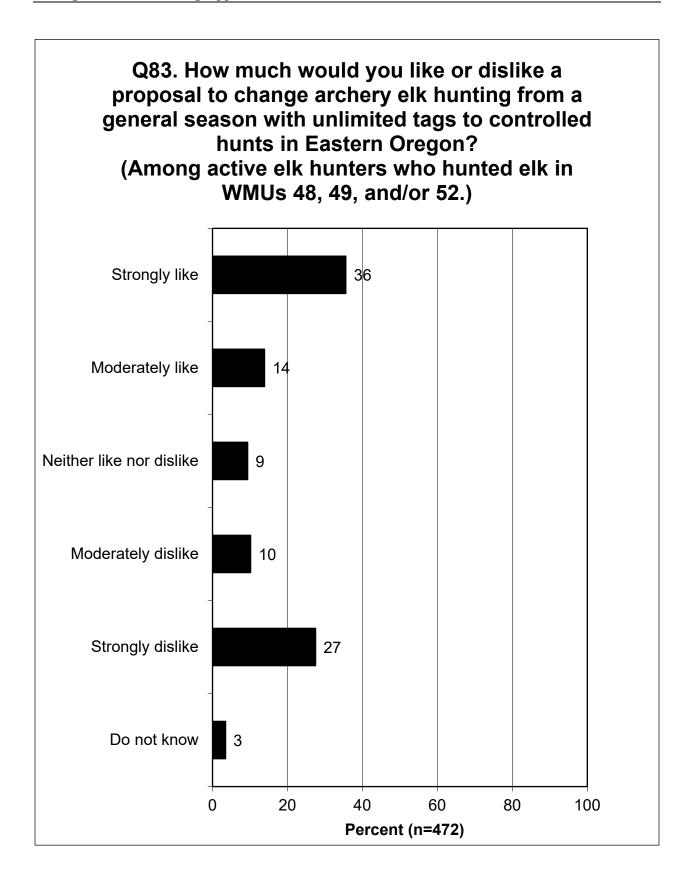


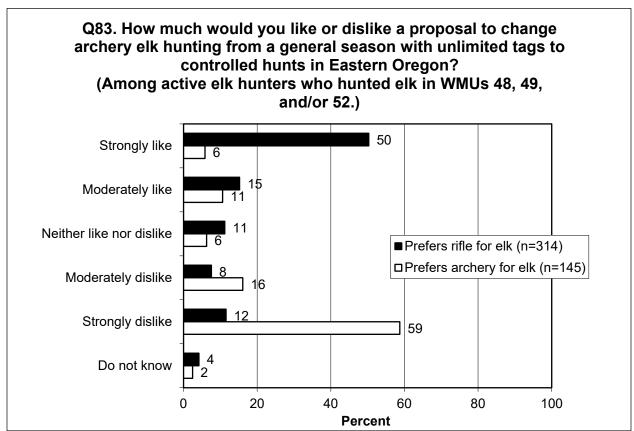


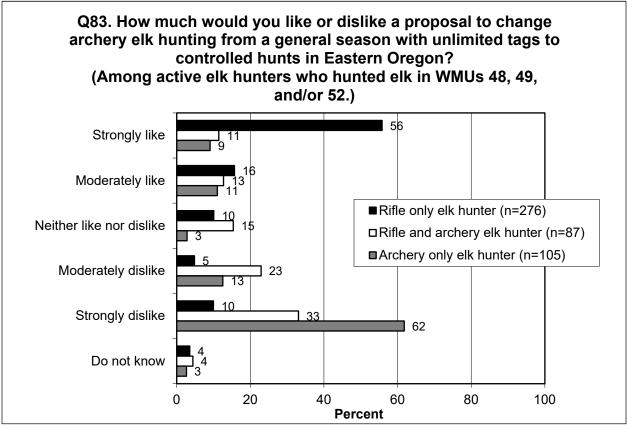


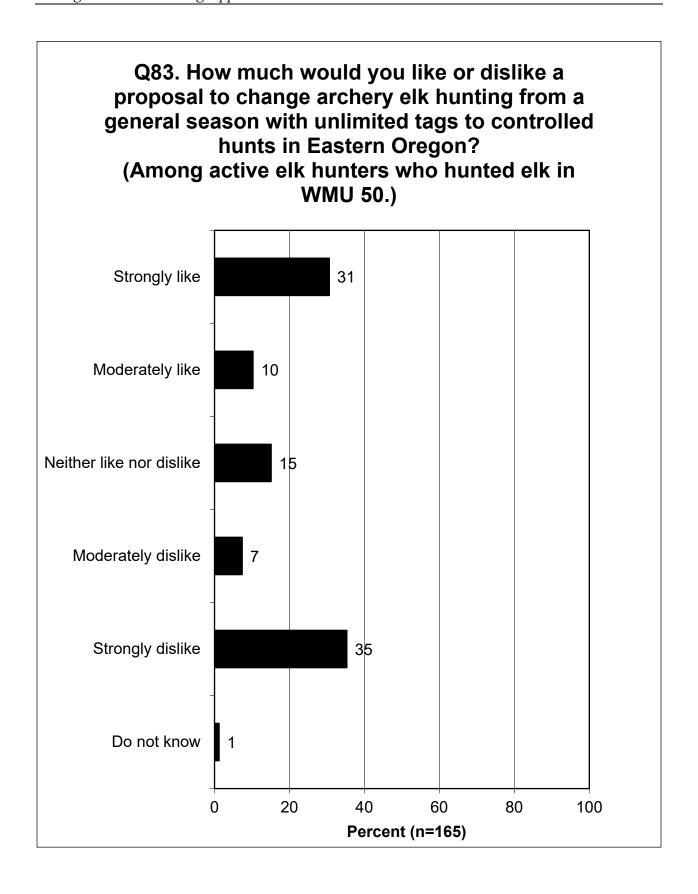


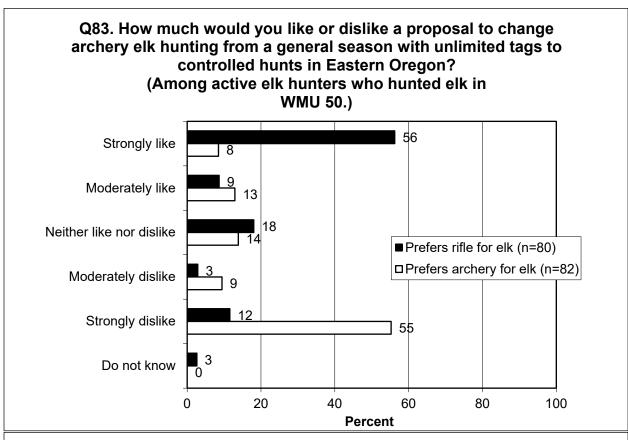


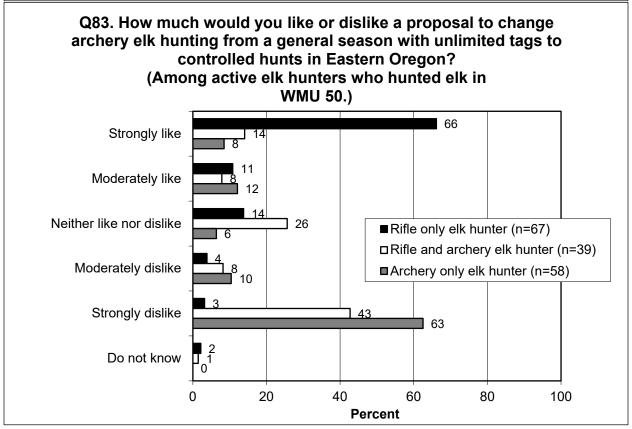




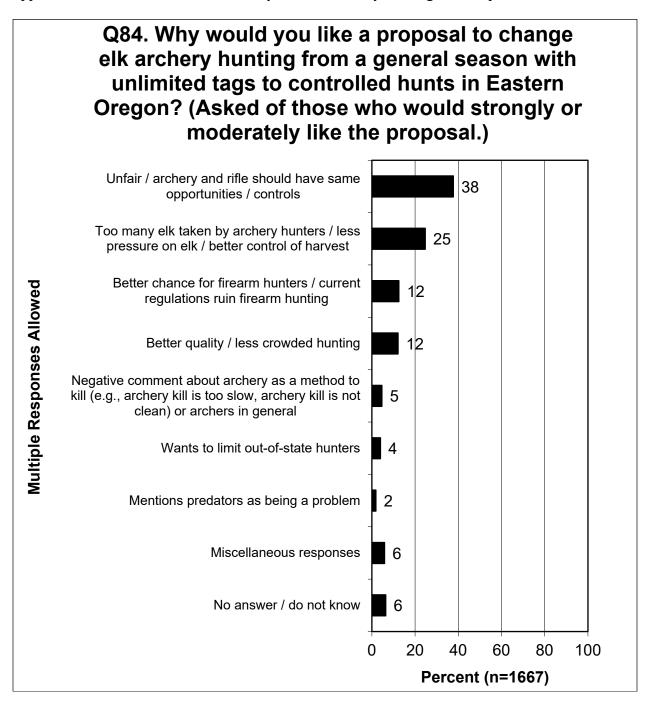


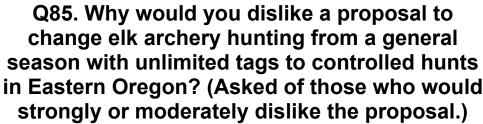


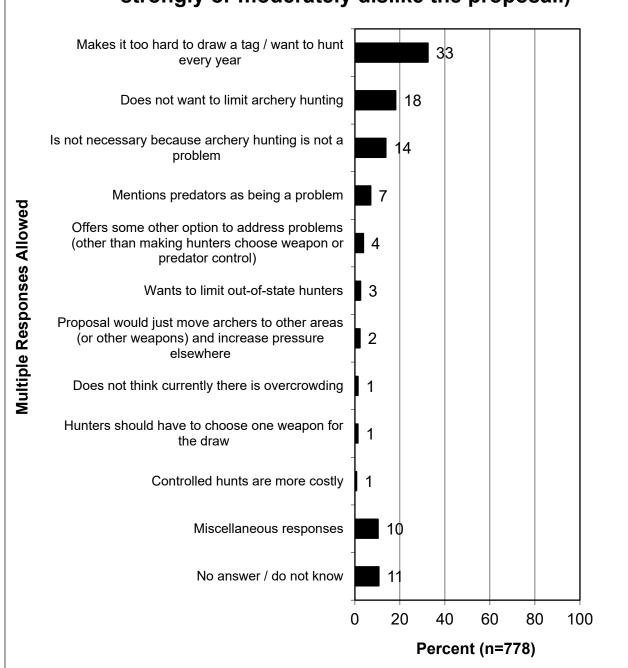




The top reasons for liking a proposal to change elk archery hunting from a general season with unlimited tags to a controlled season are that the hunter feels archery and rifle should have the same opportunities and that there is too much pressure on elk by archery hunters. Top reasons for disliking the proposal are that it makes it hard to hunt every year, that it limits archery hunting opportunities, and that it is not necessary because archery hunting is not a problem.

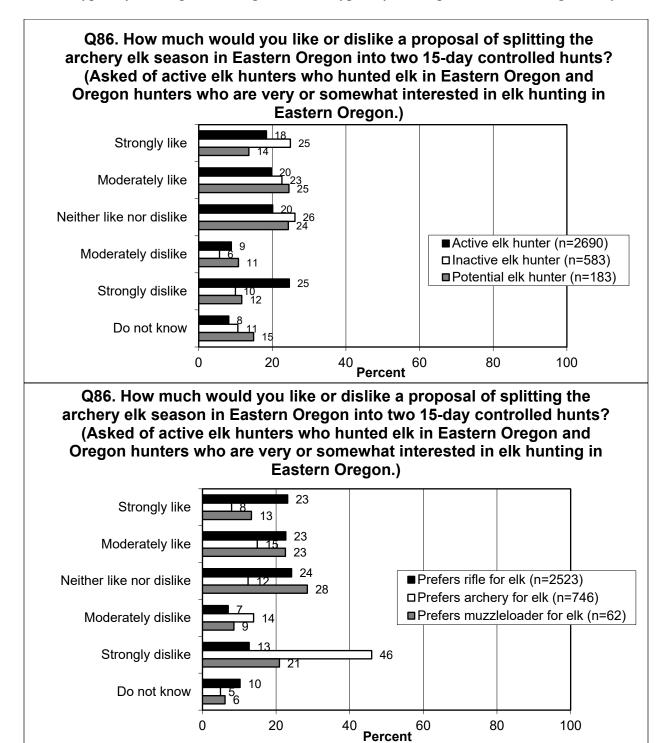


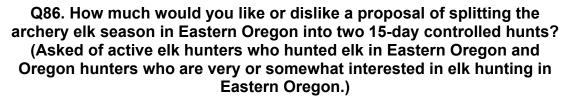


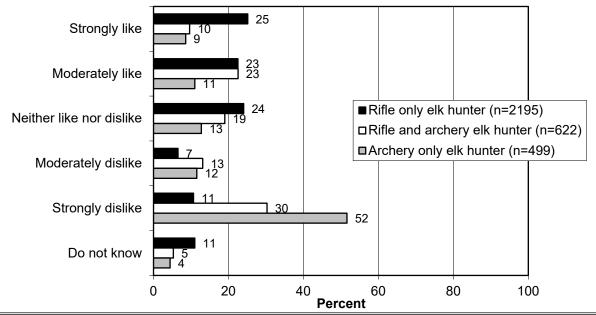


Crosstabulations were run on Q86 by the following:

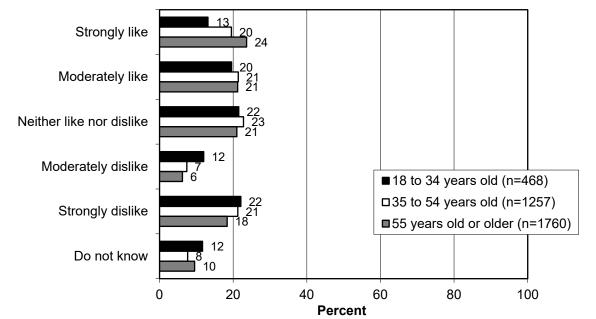
- Hunter avidity.
- Weapon preference.
- Weapon use.
- Age.
- Region resided in.
- Typically hunting in both regions versus typically hunting in the Eastern Region only.

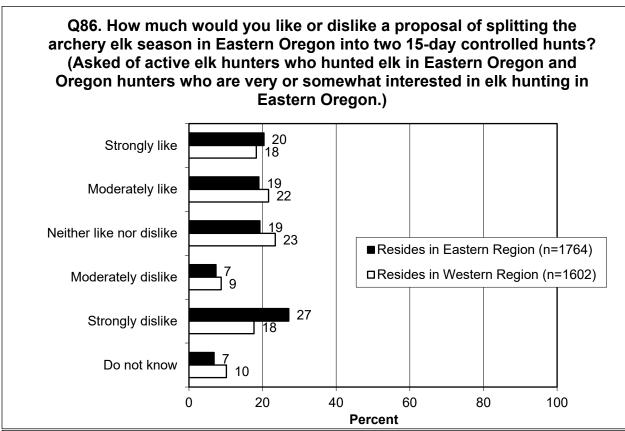


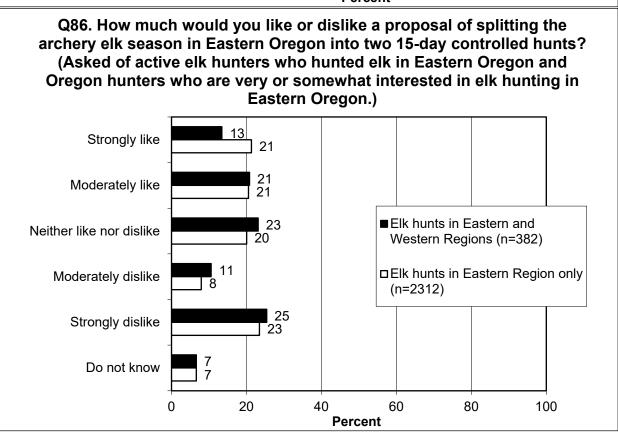




Q86. How much would you like or dislike a proposal of splitting the archery elk season in Eastern Oregon into two 15-day controlled hunts? (Asked of active elk hunters who hunted elk in Eastern Oregon and Oregon hunters who are very or somewhat interested in elk hunting in Eastern Oregon.)







Two options for West Cascade elk hunting were proffered, and respondents (active hunters who hunted deer or elk in the Western Oregon Cascades Region and Oregon hunters who are *very* or *somewhat* interested in West Cascade deer or elk hunting) indicated their like or dislike for each. The questions were not mutually exclusive in that a respondent could like both or dislike both.

Overall, 54% of these respondents like the first option, while only 13% dislike it. It is better liked than the second option, for which 45% of respondents like and 26% dislike. A third question in this section then asked respondents which option they would choose if it were one or the other: 41% would choose the first option, while 30% would choose the second option.

These questions had crosstabulations run on them by hunter groups categorized as a deer hunter only, a deer and elk hunter, or an elk hunter only. The second option is preferred at a slightly greater rate by deer only hunters, compared to deer/elk and elk only hunters.

INFORMATION GIVEN PRIOR TO Q87 AND Q88

The current **WEST CASCADE** elk season is 7 days in mid-October. Hunter success in recent years has been less than 5%. The timing of the season causes a break in the Cascade buck deer season. To improve the quality of this hunt, the Department is looking at two options.

The first option is to move the 7-day season to early November, a better time for elk hunting, which would also eliminate the mid-October break in the **CASCADE** buck deer season.

The second option is to keep the **WEST CASCADE** elk season during the same time period in October but allow the **CASCADE** buck deer season to continue during this time period. This would allow hunters to hunt for deer and elk at the same time if they chose to do so. Deer hunters would not be required to purchase an elk tag.

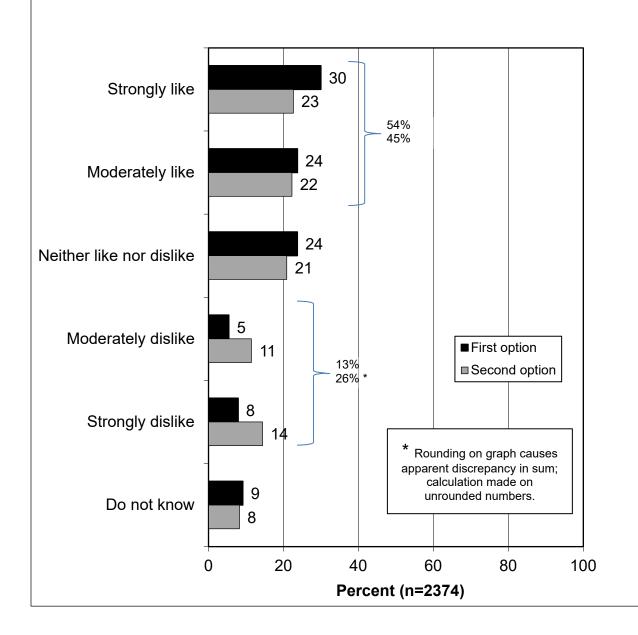
QUESTION ASKED OF

- Active hunters who hunted deer or elk in the Western Oregon Cascades Region.
- Oregon hunters who are very or somewhat interested in West Cascade deer or elk hunting.

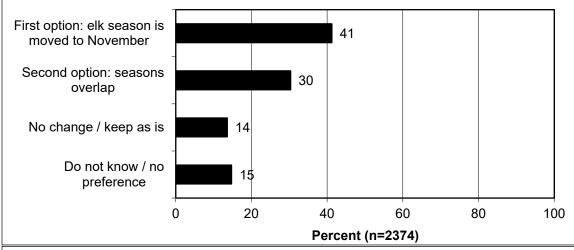
Q87. How much would you like or dislike the first option in which elk season is moved to November and there is no break in deer season?

Q88. How much would you like or dislike the second option in which elk season stays the same, but the deer and elk season overlap?

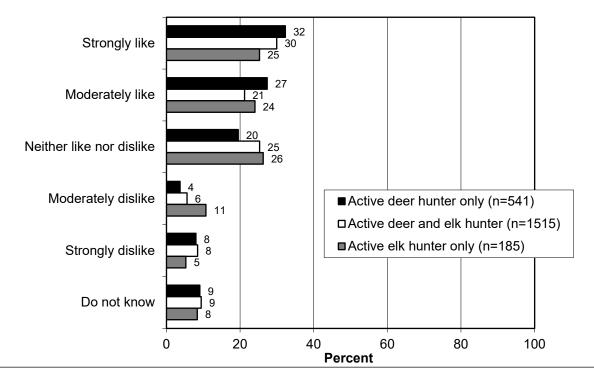
(Asked of active hunters who hunted deer or elk in the Western Oregon Cascades Region and Oregon hunters who are very or somewhat interested in West Cascade deer or elk hunting.)

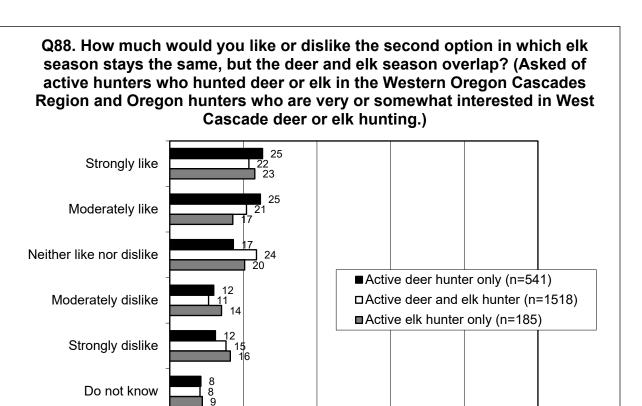


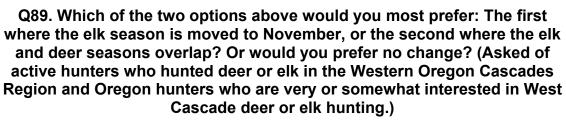
Q89. Which of the two options above would you most prefer: The first where the elk season is moved to November, or the second where the elk and deer seasons overlap? Or would you prefer no change? (Asked of active hunters who hunted deer or elk in the Western Oregon Cascades Region and Oregon hunters who are very or somewhat interested in West Cascade deer or elk hunting.)



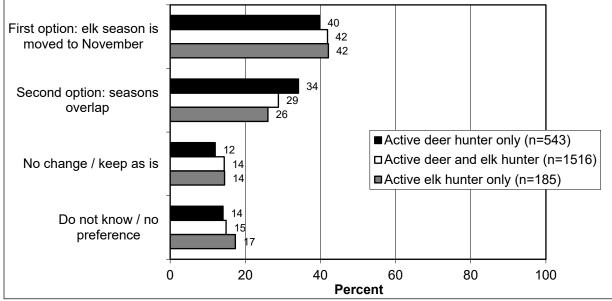
Q87. How much would you like or dislike the first option in which elk season is moved to November and there is no break in deer season? (Asked of active hunters who hunted deer or elk in the Western Oregon Cascades Region and Oregon hunters who are very or somewhat interested in West Cascade deer or elk hunting.)



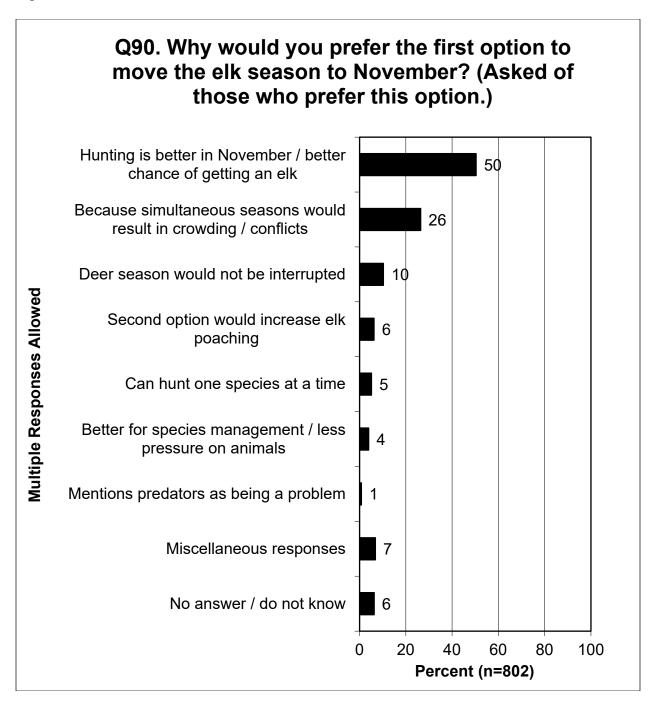


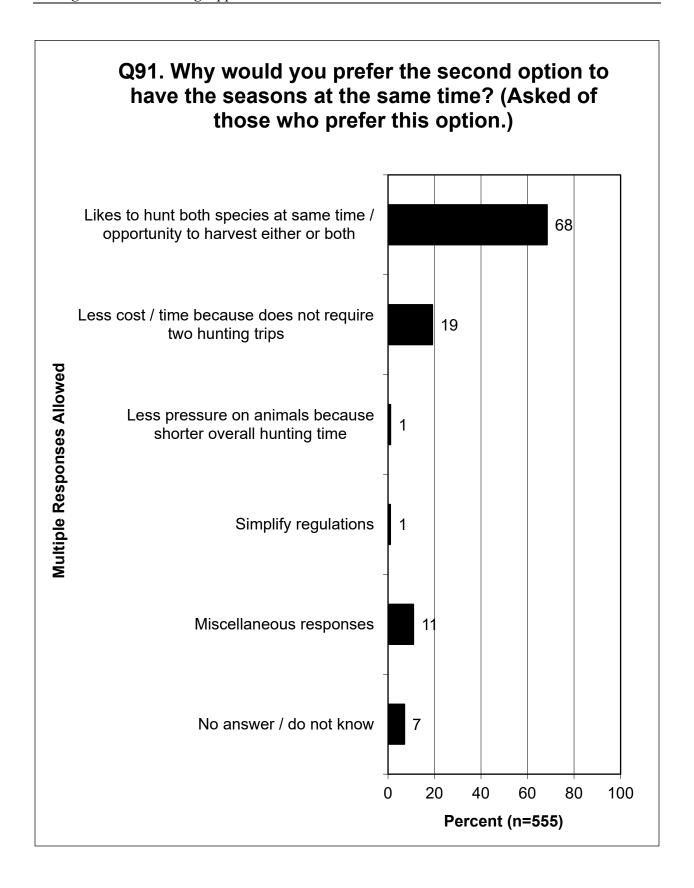


40 Percent 60



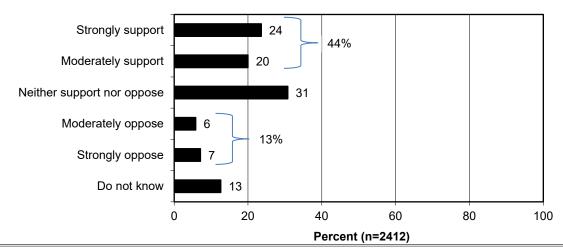
Reasons to prefer the first option is that the hunting is better in November and that simultaneous seasons cause crowding. Reasons to prefer the second option are the hunter likes both hunts being together to be able to harvest either or both and that it is less costly to make only a single trip rather than two to hunt deer and elk.



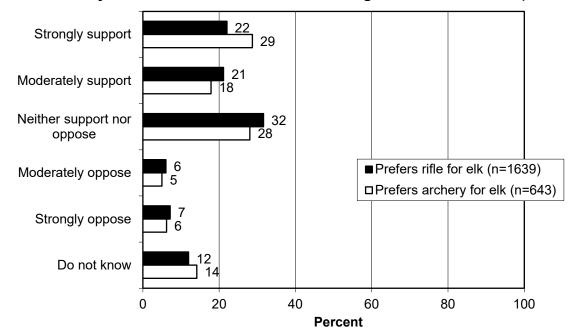


The survey asked questions specifically of those who hunted elk or were interested in hunting elk in the Walla Walla, Mt. Emily, or Wenaha WMUs. Overall, support (44%) far exceeds opposition (13%) to a proposal to eliminate the first spike-only rifle season in the given units. This question was then crosstabulated by weapon preference, age, and residence.

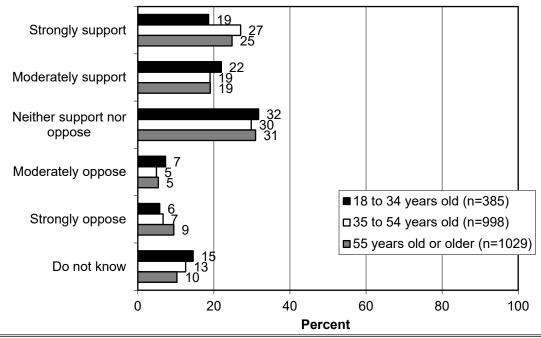
Q92. Would you support or oppose a proposal to eliminate the first spikeonly rifle season in these Units? (Asked of active elk hunters who hunted elk in the Walla Walla, Mt. Emily, or Wenaha WMUs and elk hunters who are very or somewhat interested in hunting elk in these WMUs.)



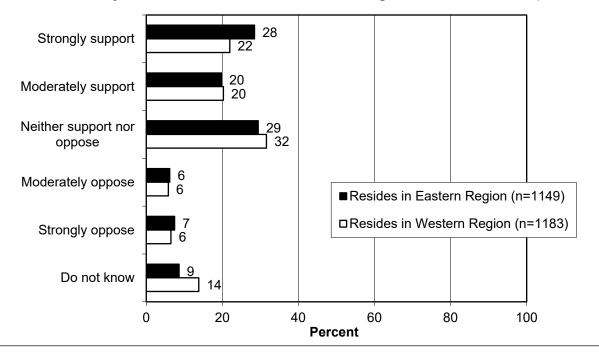
Q92. Would you support or oppose a proposal to eliminate the first spikeonly rifle season in these Units? (Asked of active elk hunters who hunted elk in the Walla Walla, Mt. Emily, or Wenaha WMUs and elk hunters who are very or somewhat interested in hunting elk in these WMUs.)



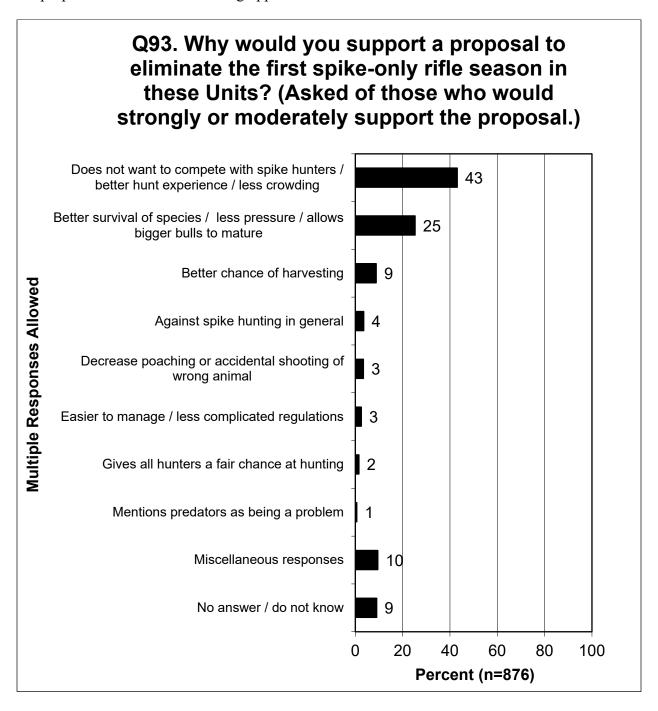
Q92. Would you support or oppose a proposal to eliminate the first spikeonly rifle season in these Units? (Asked of active elk hunters who hunted elk in the Walla Walla, Mt. Emily, or Wenaha WMUs and elk hunters who are very or somewhat interested in hunting elk in these WMUs.)

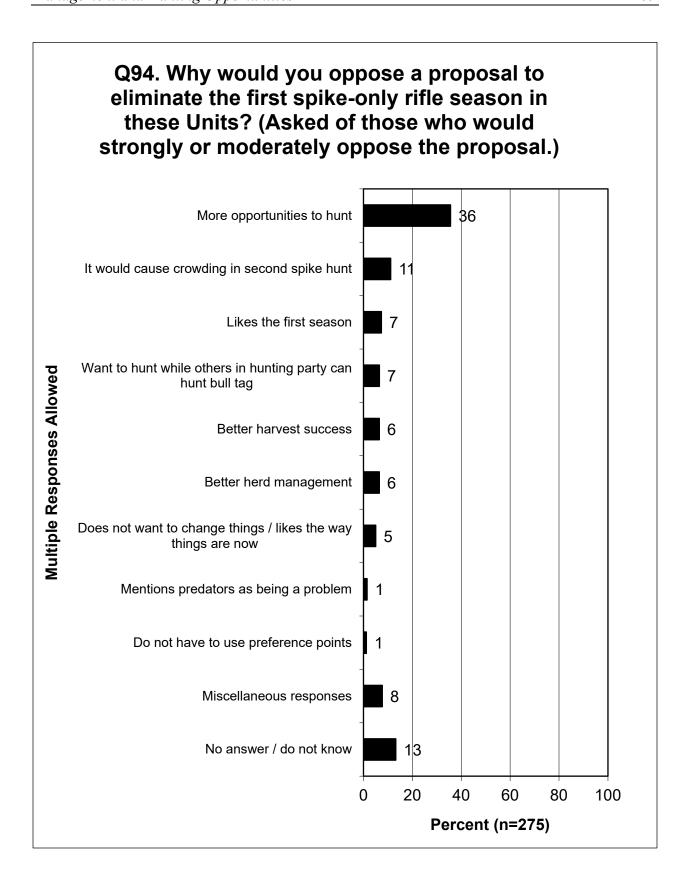


Q92. Would you support or oppose a proposal to eliminate the first spikeonly rifle season in these Units? (Asked of active elk hunters who hunted elk in the Walla Walla, Mt. Emily, or Wenaha WMUs and elk hunters who are very or somewhat interested in hunting elk in these WMUs.)

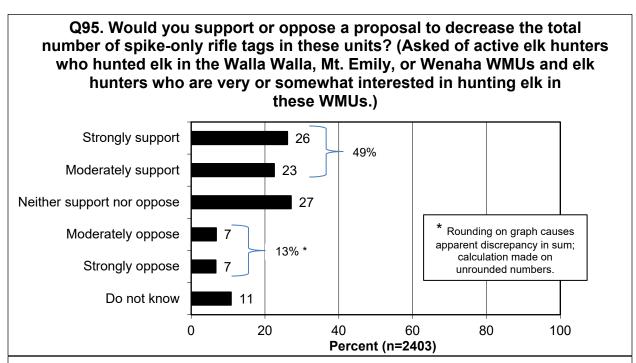


The top reasons to support the proposal to eliminate the first spike-only season is that it allows less crowded hunting and that it is felt to allow bigger elk to grow. The top reason for opposing the proposal is that it limits hunting opportunities.

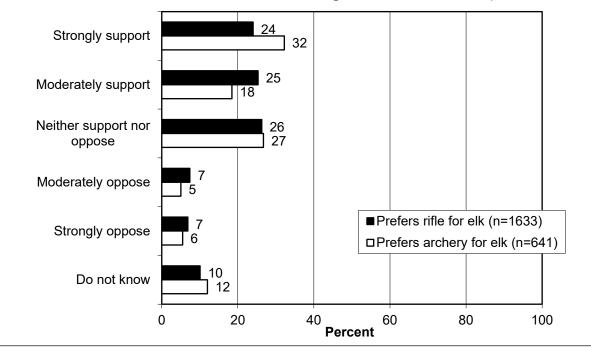




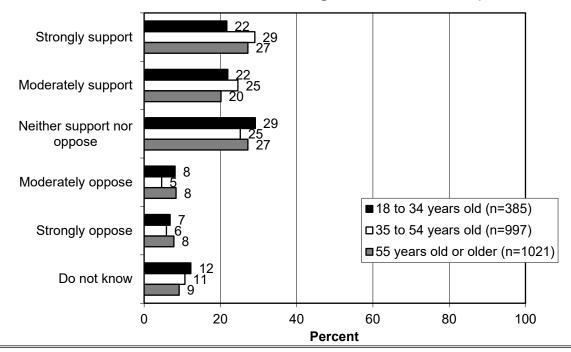
In this line of questioning, the survey again asked questions specifically of those who hunted elk or were interested in hunting elk in the Walla Walla, Mt. Emily, or Wenaha WMUs. Overall, support (49%) far exceeds opposition (13%) to a proposal to decrease the total number of spike-only rifle tags in these units. This question was then crosstabulated by weapon preference, age, and residence.



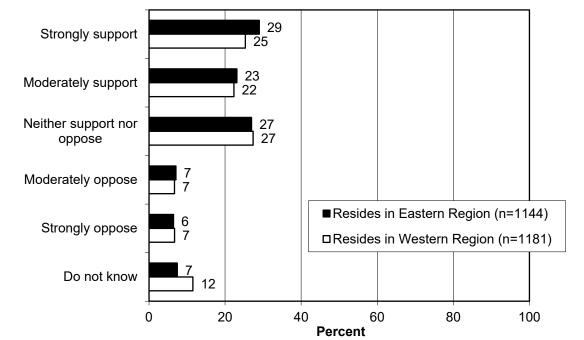
Q95. Would you support or oppose a proposal to decrease the total number of spike-only rifle tags in these Units? (Asked of active elk hunters who hunted elk in the Walla Walla, Mt. Emily, or Wenaha WMUs and elk hunters who are very or somewhat interested in hunting elk in these WMUs.)



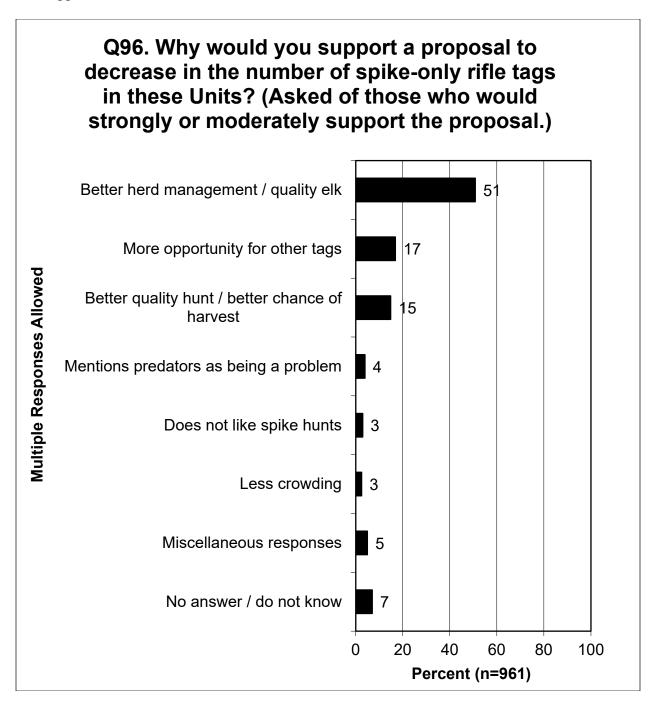
Q95. Would you support or oppose a proposal to decrease the total number of spike-only rifle tags in these Units? (Asked of active elk hunters who hunted elk in the Walla Walla, Mt. Emily, or Wenaha WMUs and elk hunters who are very or somewhat interested in hunting elk in these WMUs.)

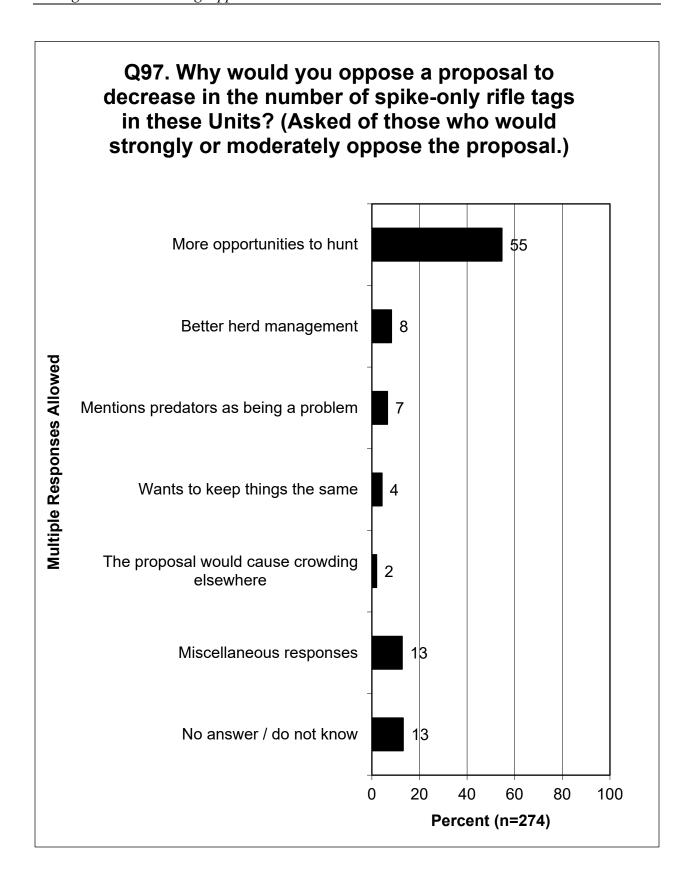


Q95. Would you support or oppose a proposal to decrease the total number of spike-only rifle tags in these Units? (Asked of active elk hunters who hunted elk in the Walla Walla, Mt. Emily, or Wenaha WMUs and elk hunters who are very or somewhat interested in hunting elk in these WMUs.)



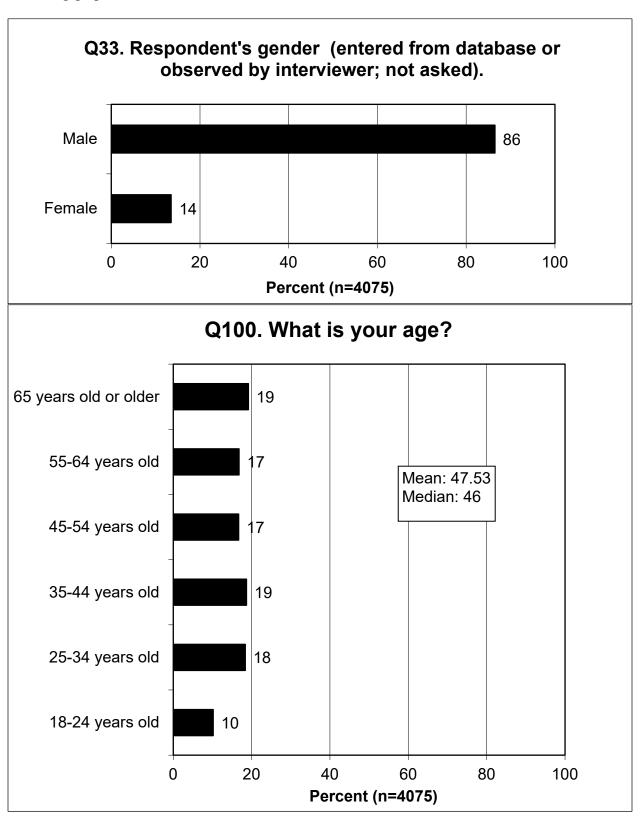
The top reasons for supporting a proposal to decrease the spike-only rifle tags is that it is felt to allow for better herd management, that it provides opportunities for other tags, and that it provides a better quality hunt. The overriding reason for opposing the proposal is that it would limit opportunities to hunt.

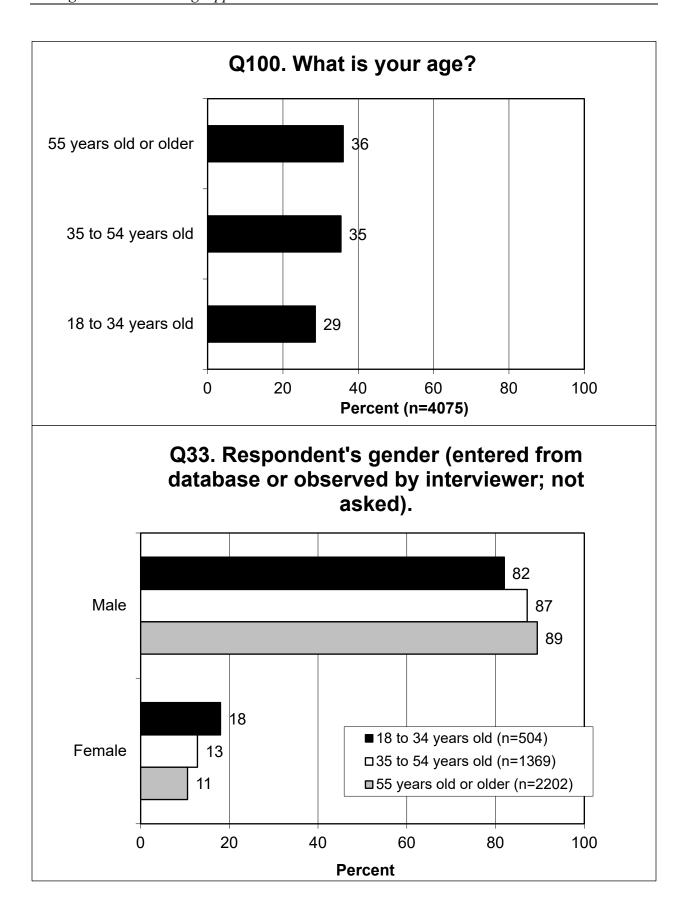


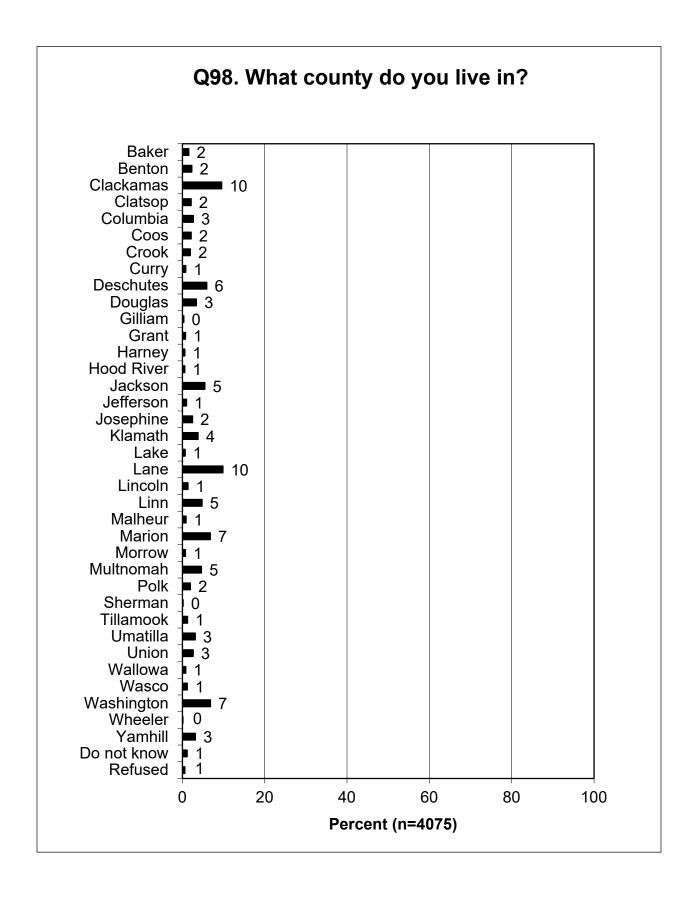


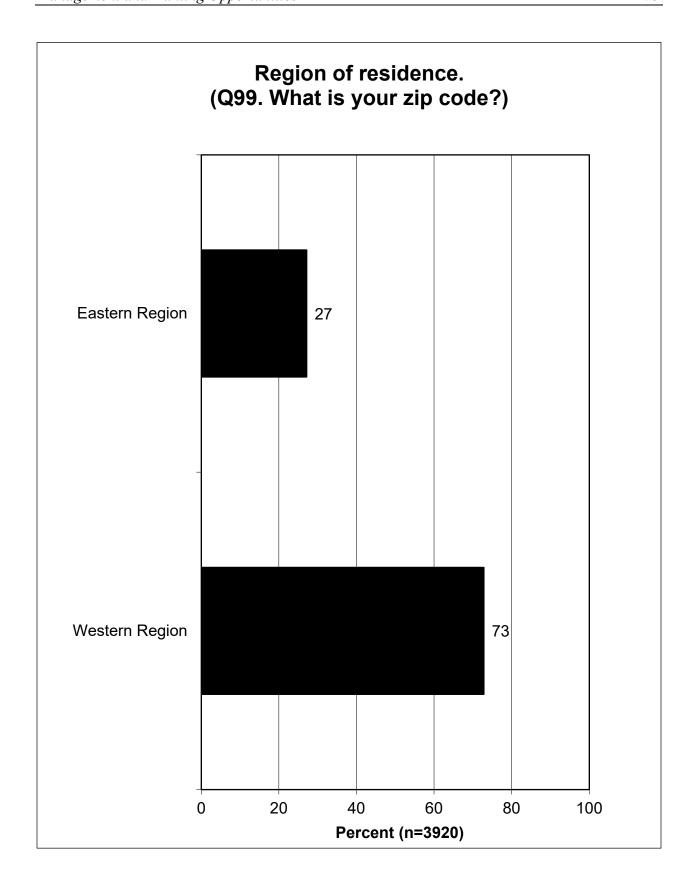
DEMOGRAPHIC INFORMATION

The survey obtained information on gender, age, and county of residence, as shown in the following graphs.









ABOUT RESPONSIVE MANAGEMENT

Responsive Management is an internationally recognized survey research firm specializing in natural resource and outdoor recreation issues. Our mission is to help natural resource and outdoor recreation agencies, businesses, and organizations better understand and work with their constituents, customers, and the public. Focusing only on natural resource and outdoor recreation issues, Responsive Management has conducted telephone, mail, and online surveys, as well as multi-modal surveys, on-site intercepts, focus groups, public meetings, personal interviews, needs assessments, program evaluations, marketing and communication plans, and other forms of human dimensions research measuring how people relate to the natural world for more than 30 years. Utilizing our in-house, full-service survey facilities with 75 professional interviewers, we have conducted studies in all 50 states and 15 countries worldwide, totaling more than 1,000 human dimensions projects *only* on natural resource and outdoor recreation issues.

Responsive Management has conducted research for every state fish and wildlife agency and every federal natural resource agency, including the U.S. Fish and Wildlife Service, the National Park Service, the U.S. Forest Service, Bureau of Land Management, U.S. Coast Guard, and the National Marine Fisheries Service. Additionally, we have also provided research for all the major conservation NGOs including the Archery Trade Association, the American Sportfishing Association, the Association of Fish and Wildlife Agencies, Dallas Safari Club, Ducks Unlimited, Environmental Defense Fund, the Izaak Walton League of America, the National Rifle Association, the National Shooting Sports Foundation, the National Wildlife Federation, the Recreational Boating and Fishing Foundation, the Rocky Mountain Elk Foundation, Safari Club International, the Sierra Club, Trout Unlimited, and the Wildlife Management Institute.

Other nonprofit and NGO clients include the American Museum of Natural History, the BoatUS Foundation, the National Association of Conservation Law Enforcement Chiefs, the National Association of State Boating Law Administrators, and the Ocean Conservancy. As well, Responsive Management conducts market research and product testing for numerous outdoor recreation manufacturers and industry leaders, such as Winchester Ammunition, Vista Outdoor (whose brands include Federal Premium, CamelBak, Bushnell, Primos, and more), Trijicon, Yamaha, and others. Responsive Management also provides data collection for the nation's top universities, including Auburn University, Clemson University, Colorado State University, Duke University, George Mason University, Michigan State University, Mississippi State University, North Carolina State University, Oregon State University, Penn State University, Rutgers University, Stanford University, Texas Tech, University of California-Davis, University of Florida, University of Montana, University of New Hampshire, University of Southern California, Virginia Tech, West Virginia University, Yale University, and many more.

Our research has been upheld in U.S. Courts, used in peer-reviewed journals, and presented at major wildlife and natural resource conferences around the world. Responsive Management's research has also been featured in many of the nation's top media, including *Newsweek*, *The Wall Street Journal*, *The New York Times*, CNN, National Public Radio, and on the front pages of *The Washington Post* and *USA Today*.