

IDAHO DEPARTMENT OF FISH AND GAME

Virgil Moore, Director

Surveys and Inventories

Statewide Report



MULE DEER

July 1, 2013 to June 30, 2014

Prepared by:

Wayne Wakkinen.....	Panhandle Region
George Pauley, Joshua White	Clearwater Region
Craig White, Regan Berkley, Michelle Commons-Kemner,	Southwest Region
Randy Smith.....	Magic Valley Region
Martha Wackenhut, Zach Lockyer	Southeast Region
Daryl Meints, Paul Atwood	Upper Snake Region
Greg Painter	Salmon Region
Mike Elmer	Data Coordinator
David Smith	Technical Records Specialist

Compiled and edited by: Jon Rachael, State Game Manager

2014
Boise, Idaho

Findings in this report are preliminary in nature and not for publication without permission of the Director of the Idaho Department of Fish and Game.

The Idaho Department of Fish and Game adheres to all applicable state and federal laws and regulations related to discrimination on the basis of race, color, national origin, age, gender, or handicap. If you feel you have been discriminated against in any program, activity, or facility of the Idaho Department of Fish and Game, or if you desire further information, please write to: Idaho Department of Fish and Game, PO Box 25, Boise, ID 83707; or the Office of Human Resources, U.S. Fish and Wildlife Service, Department of the Interior, Washington, DC 20240.

This publication will be made available in alternative formats upon request. Please contact the Idaho Department of Fish and Game for assistance.

TABLE OF CONTENTS

STATEWIDE.....	1
Summary.....	1
Antlerless Harvest.....	2
LOWER SALMON	6
PMU 1 (GMUS 11, 11A, 13, 14, 18).....	6
Management Objectives.....	6
Historical Perspective	6
Habitat Issues	6
Biological Issues	8
Inter-specific Issues	9
Predation Issues	9
Winter Feeding Issues.....	9
Harvest	10
Information Requirements	10
WEISER-MCCALL.....	12
PMU 2 (GMUS 22, 23, 24, 31, 32, 32A).....	12
Management Objectives.....	12
Historical Perspective	12
Habitat Issues	12
Biological Issues	12
Inter-specific Issues	13
Predation Issues	13
Winter Feeding Issues.....	13
MIDDLE FORK	15
PMU 3 (GMUS 19A, 20A, 25, 26, 27).....	15
Management Objectives.....	15
Historical Perspective	15
Habitat Issues	16
Biological Issues	16
Inter-specific Issues	16
Predation Issues	17
Winter Feeding Issues.....	17

Information Requirements	17
CENTRAL MOUNTAINS	19
PMU 4 (GMUS 21, 28, 33, 34, 35, 36, 36A, 36B, 49, 50)	19
Management Objectives.....	19
Historical Perspective	19
Habitat Issues	19
Biological Issues	20
Inter-specific Issues	20
Predation Issues	20
Winter Feeding Issues.....	20
Information Requirements	20
BOISE RIVER	23
PMU 5 (GMU 39).....	23
Management Objectives.....	23
Historical Perspective	23
Habitat Issues	23
Biological Issues	23
Inter-specific Issues	24
Predation Issues	24
Winter Feeding Issues.....	24
Information Requirements	24
SMOKY-BENNETT.....	26
PMU 6 (GMUS 43, 44, 45, 48, 52).....	26
Management Objectives.....	26
Historical Perspective	26
Habitat Issues	26
Biological Issues	28
Inter-specific Issues	28
Predation Issues	29
Winter Feeding Issues.....	29
Information Requirements	29
OWYHEE	31
PMU 7 (GMUS 40, 41, 42, 46, 47).....	31
Management Objectives.....	31

Historical Perspective	31
Habitat Issues	31
Biological Issues	32
Inter-specific Issues	32
Predation Issues	32
Winter Feeding Issues	32
Information Requirements	32
SOUTH HILLS	34
PMU 8 (GMUS 54, 55)	34
Management Objectives.....	34
Historical Perspective	34
Habitat Issues	34
Biological Issues	35
Inter-specific Issues	35
Predation Issues	36
Winter Feeding Issues	36
Information Requirements	36
BANNOCK	38
PMU 9 (GMUS 56, 57, 70, 71, 73, 73A, 74, 75, 77, 78)	38
Management Objectives.....	38
Historical Perspective	38
Habitat Issues	39
Biological Issues	39
Inter-specific Issues	40
Predation Issues	40
Winter Feeding Issues	40
Information Requirements	41
CARIBOU	43
PMU 10 (GMUS 66, 66A, 69, 72, 76)	43
Management Objectives.....	43
Historical Perspective	43
Habitat Issues	44
Biological Issues	44

Inter-specific Issues	45
Predation Issues	45
Winter Feeding Issues	46
Information Requirements	46
PALISADES	48
PMU 11 (GMUS 64, 65, 67).....	48
Management Objectives.....	48
Historical Perspective	48
Habitat Issues	48
Biological Issues	48
Inter-specific Issues	49
Predation Issues	49
Winter Feeding Issues	49
Information Requirements	50
ISLAND PARK	52
PMU 12 (GMUS 60, 60A, 61, 62, 62A).....	52
Management Objectives.....	52
Historical Perspective	52
Habitat Issues	52
Biological Issues	53
Inter-specific Issues	54
Predation Issues	54
Winter Feeding Issues	54
Information Requirements	54
MOUNTAIN VALLEY	56
PMU 13 (GMUS 21A, 29, 30, 30A, 37, 37A, 51, 58, 59, 59A).....	56
Management Objectives.....	56
Historical Perspective	56
Habitat Issues	56
Biological Issues	57
Inter-specific Issues	57
Predation Issues	57
Winter Feeding Issues	57

Information Requirements	58
SNAKE RIVER	60
PMU 14 (GMUS 38, 52A, 53, 63, 63A, 68, 68A)	60
Management Objectives.....	60
Historical Perspective	60
Habitat Issues	61
Biological Issues	61
Inter-specific Issues	61
Predation Issues	61
Winter Feeding Issues.....	62
Information Requirements	62
NORTH IDAHO	64
PMU 15 (GMUS 1, 2, 3, 4, 4A, 5, 6, 7, 8, 8A, 9, 10, 10A, 12, 15, 16, 16A, 17, 19, 20)	64
Management Objectives.....	64
Historical Perspective	64
Habitat Issues	65
Biological Issues	65
Inter-specific Issues	65
Predation Issues	66
Winter Feeding Issues.....	66
Harvest	66
Information Requirements	66
APPENDIX A.....	68

LIST OF FIGURES

Figure 1. Mule Deer Statewide Population Management Units.	4
Figure 2. Mule Deer Analysis Statewide.	5
Figure 3. Lower Salmon Mule Deer PMU Status and Objectives.	11
Figure 4. Weiser-McCall Mule Deer PMU Status and Objectives.	14
Figure 5. Middle Fork Mule Deer PMU Status and Objectives.	18
Figure 6. Central Mountains Mule Deer PMU Status and Objectives.	22
Figure 7. Boise River Mule Deer PMU Status and Objectives.	25
Figure 9. Owyhee Mule Deer PMU Status and Objectives.	33
Figure 10. South Hills Mule Deer PMU Status and Objectives.	37
Figure 11. Bannock Mule Deer PMU Status and Objectives.	42
Figure 12. Caribou Mule Deer PMU Status and Objectives.	47
Figure 13. Palisades Mule Deer PMU Status and Objectives.	51
Figure 14. Island Park Mule Deer PMU Status and Objectives.	55
Figure 15. Mountain Valley Mule Deer PMU Status and Objectives.	59
Figure 16. Snake River Mule Deer PMU Status and Objectives.	63
Figure 16. North Idaho Mule Deer PMU Status and Objectives.	67

STATEWIDE REPORT

SURVEYS AND INVENTORY

JOB TITLE: Mule Deer Surveys and Inventories

STUDY NAME: Big Game Population Status, Trends, Use, and Associated Habitat Studies

PERIOD COVERED: July 1, 2013 to June 30, 2014

STATEWIDE

Summary

Mule deer are Idaho's most abundant and most widely distributed big game animal. They provide more recreational opportunity than any other big game species. Mule deer densities are highest south of the Salmon River. North of the Salmon River, white-tailed deer are the dominant deer species, but mule deer populations are scattered throughout northern Idaho where there is suitable habitat.

The 2008-2017 mule deer management plan represents a statewide change in how we monitor mule deer populations. Historically, harvest parameters and periodic GMU-wide surveys were conducted to assess population status. Beginning with this plan, we established a statewide, uniform approach to monitor mule deer populations on an annual basis, thus being more responsive to population changes. The state has been divided into 15 Population Management Units (PMUs) that contain Game Management Units (GMUs) representing similar habitats, discrete mule deer populations, and/or similar management objectives. Periodic complete population estimates, combined with annual data on fawn production, over-winter fawn survival, and adult doe survival will allow us to track population status annually. Buck:doe:fawn ratios will continue to be collected annually in 12 of 15 PMUs.

Antlerless harvest thresholds have been established for each of the trend areas (with few exceptions). These thresholds represent trend area population "goals." We recognize mule deer populations are primarily a function of the environment rather than any direct Department action. These threshold values have been established to define optimum populations taking into account habitat potential, winter range conditions, harvest opportunity, and depredation concerns. As mule deer populations rise and fall, we will recommend harvest opportunity consistent with these population thresholds.

In addition to monitoring trend area populations, the Department will monitor harvest and the percentage of 4+ points in the harvest relative to minimum criterion established by the Commission (Fig 1). Prior to 1998, the telephone harvest survey provided information for harvest. Beginning in 1998, a statewide mandatory report card system was implemented. Given adequate compliance, more precise data on harvest and antler point class will be available than in the past. However, voluntary compliance with the harvest reporting requirement has been declining.

Antlerless Harvest

General season antlerless harvest is an option that may allow managers to influence deer numbers and provide added hunting opportunity when population levels are high enough to allow. Determining whether to have antlerless seasons and the length of a season often results in controversy among hunters and between hunters and wildlife managers. To help guide decisions about antlerless harvest, the following decision model was developed. As new data become available and knowledge increases regarding deer population, response to harvest, refinements will occur.

Three variables are considered in this decision model: population level relative to antlerless threshold values listed for each PMU, animal physical condition, and winter severity. Population level is determined by annual aerial surveys of trend areas; animal condition is determined at Department check stations and/or through hunter interviews; and winter severity is determined by a severity index or fawn mortality if radio-collared animals are available. Each variable is given a relative score and then these scores are summed and the maximum season framework can then be determined.

This decision model is not designed to dictate when the Department will offer general antlerless opportunity; rather, it is intended to guide discussion amongst all of Idaho's mule deer enthusiasts. Additionally, depredation decisions and subsequent actions are not intended to be influenced by the decision model.

DECISION MODEL

Variable Score			
Population Level	Below Threshold	At Threshold	Above Threshold
	-5	5	15
Animal Condition	Poor	Good	
	0	5	
Winter Severity	Severe, >60% Fawn Mortality	Average, 40-60% Fawn Mortality	Mild, <40% Fawn Mortality
	-5	5	10
TOTAL SCORE		SEASON FRAMEWORK	
<10		No Antlerless Harvest	
10		Controlled Harvest	
15		7 Days	
20		14 Days	

DECISION MODEL EXAMPLES:

- | | |
|---|--|
| <p>1) Antlerless Harvest Threshold Value = 2000
 Population Survey = 3000 deer observed
 Animal Condition = good
 Winter Severity = avg. 50% fawn mortality
 Total Score = 15 + 5 + 5 = 25
 Maximum Antlerless Framework = 21+ days</p> | <p>2) Antlerless Harvest Threshold Value = 2000
 Population Survey = 1500 deer observed
 Animal Condition = poor
 Winter Severity = severe, 75% fawn mortality
 Total Score = -5 + 0 + -5 = -10
 Maximum Antlerless Framework = 0 days</p> |
|---|--|

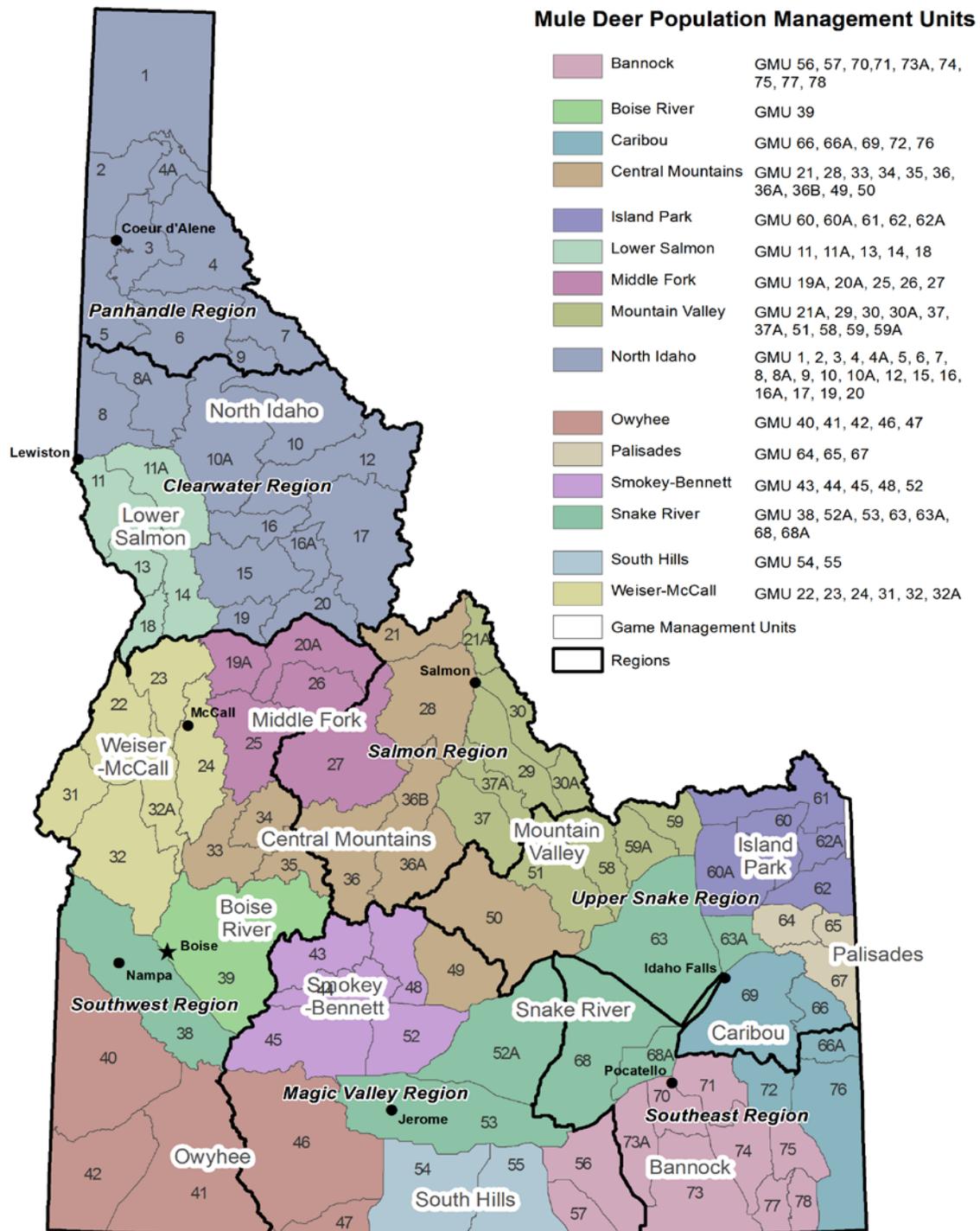


Figure 1. Mule Deer Statewide Population Management Units.

Mule Deer Statewide

Management Objectives

	Short-Term Objective	Long-Term Objective
# of Deer	TBD	TBD
Pop. Goal	Increase	Increase
Hunter Days	>350,000	>450,000

		3-Year Averages
Square Miles =	84,437	Hunters per square mile = 1.00
% Public Land =	69%	Harvest per square mile = 0.28
Major Land Type =	Various	Success Rate = 28%

Population Status

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Deer	245,482	246,705	269,628	280,144	249,903	257,904	281,502			

Note: Estimates in red are based on information other than sightability surveys.

Population Parameters

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fawn:Doe	56	63	61	56	60	61	61	55	63	67
Buck:Doe	19	21	22	16	15	16	21	24	22	21
Fawn Survival	0.54	0.76	0.31	0.69	0.30	0.52	0.68	0.32	0.63	0.61
Adult Doe Survival	ND	ND	0.87	0.89	0.90	0.90	0.95	0.82	0.94	0.95

Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does

Fawn Survival = overwinter fawn survival (December - May), Adult Doe Survival = annual survival (June - May)

Harvest Statistics

	Deer Harvest				
	Hunters	Hunter Days	Antlerless	Antlered	% 4+ Points
2003	136,200	532,044	6,332	19,605	42%
2004	146,500	698,165	6,332	19,605	38%
2005	94,800	399,708	6,746	24,128	38%
2006	91,644	419,892	6,476	22,084	38%
2007	69,421	299,998	6,562	24,207	38%
2008	95,258	461,478	5,574	17,729	38%
2009	91,706	420,977	6,271	17,792	36%
2010	90,539	400,990	6,664	18,589	36%
2011	89,026	423,822	5,776	14,962	40%
2012	86,054	384,327	6,275	18,798	41%
2013	77,721	424,178	5,972	19,941	40%

Note: Harvest data prior to 1998 does not include primitive weapon harvest.

Hunter numbers and hunter days prior to 2005 include white-tailed deer and mule deer hunters.

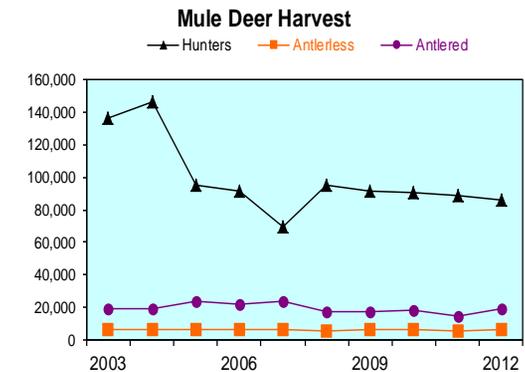
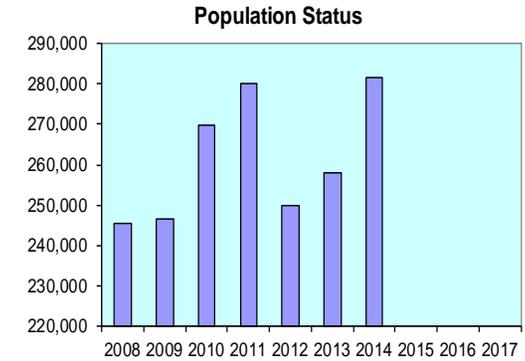


Figure 2. Mule Deer Analysis Statewide.

LOWER SALMON

PMU 1 (GMUs 11, 11A, 13, 14, 18)

Management Objectives

Management objectives for the Lower Salmon (PMU 1, Figure 3) relate to the total number of deer (both a short-term objective and a long-term objective). PMU 1 has not been surveyed to determine total population size since the latest plan was implemented; therefore, these values are yet to be determined. The second objective pertains to the population goal (increase, maintain, or decrease). Both the short-term and long-term objective for PMU 1 are to increase mule deer populations with the exception of GMU 11A where the goal is to decrease population in the short-term object and then maintain. This departure from the rest of the PMU is a continued attempt to address chronic depredations caused largely by mule deer does. The third objective is to provide at 2,500 hunter days in the short-term and at least 3,500 long-term. This goal is currently being met with an average of 6,131 hunter days over the last three years (2011-2013). Additionally, an average of 69% of the bucks harvested in these GMUs over the past three years (2011-2013) have been 4-point or larger with a 55% hunter success rate.

Historical Perspective

Mule deer populations in PMU 1 were historically low. Accounts from Lewis and Clark during the 1800s suggested that very few animals were found throughout Clearwater River country. Populations probably did not change much until the large fires of the early 1900s that converted large expanses of unbroken forest into a mosaic of successional vegetation types, and large numbers of domestic livestock altered grass-dominated habitats into greater amounts of shrub cover. Populations probably peaked during the 1930s-1960s as a result of new, high-quality habitat and lack of competition by other ungulates. As elk and white-tailed deer populations increased and habitat changes including succession, development, and loss of key winter ranges occurred, mule deer populations likely decreased. Information derived from estimates made by Department wildlife managers suggests mule deer numbers in this area declined from around 23,000 in 1960 to about 15,000 in 1990.

Historically, white-tailed deer and mule deer were managed as a “single species” with a single general season harvest framework for both species. In 1973, the Department began to offer some species-specific seasons in Clearwater Region. In 1998, the Clearwater Deer Tag was established to address concerns over trespass complaints. This season framework was continued through the 2004 season. Beginning in 2005, the Clearwater Deer Tag was modified slightly and renamed the White-tailed Deer Tag to provide more flexibility for Idaho hunters while maintaining protection against trespass problems. As part of this new approach, restrictions on the Regular Deer Tag were relaxed, allowing it to again be used in the Clearwater Region through 3 November.

Habitat Issues

Habitat productivity varies widely throughout the PMU with steep, dry, river-canyon grasslands having low annual precipitation, to higher elevation forests having good habitat productivity and greater precipitation. Late successional forest cover types have become fragmented within the area. Various weeds and non-native grasses such as yellow starthistle and cheatgrass have

disturbed expansive acreages of grassland cover types in this PMU. Road density is moderate and access is restricted in many areas. This results in medium to low vulnerability of big game to hunters, especially within the Snake River and Salmon River canyons below White Bird.

Historically, sheep and cattle ranchers homesteaded the canyon lands in this PMU, while farmers settled prairie land. Around the turn of the century, northern GMU 11 and the prairie land in GMU 11A was under intensive use for dry-land agriculture, and numerous orchards were planted in the Lewiston area. As settlement increased, the forested portions of the area were intensively logged, especially on private land. The forests were frequently high-graded, and existing forests still show the scars. In addition, intensive-grazing practices degraded many meadow areas and canyons, allowing invasion of noxious weed species, especially in drier areas.

This PMU contains large tracts of both privately and publicly owned lands. GMUs 11 and 11A are mostly private land except for the Craig Mountain Wildlife Management Area (WMA) along the Snake and Salmon rivers. Most of GMU 13 has been under private ownership since settlement and is managed for agriculture and livestock. Historically, sheepherders ran their flocks in the canyons of GMUs 14 and 18, and logging occurred in the forested areas of these GMUs. GMUs 14 and 18 are two-thirds public lands with the remaining private land located at lower elevations along Salmon River. The majority of Hells Canyon Wilderness Area, designated in 1975, is in GMU 18.

Grazing by cattle is gradually decreasing in the PMU due to reductions in U.S. Forest Service (USFS) and Bureau of Land Management (BLM) allotments, along with land ownership shifting from private to public. Several large ranches remain in private ownership with limited access. Available mule deer winter range is being encroached upon by construction of summer homes and resorts along Snake and Salmon rivers.

Landowners registered enough complaints of mule deer causing damage to small grain, legume, and hay crops during the 1980s that a special mule deer season was developed in the Waha and Maloney Creek areas of GMU 11. This season helped reduce damage complaints, and the Maloney Creek portion of the hunt was eliminated in 1997 due to the decline of mule deer in southern GMU 11. This decline was also experienced in agricultural areas of GMUs 11A, 13, 14, 18, and 23. Landowner complaints in GMU 11A relate primarily to damage caused to rapeseed, bluegrass, and winter wheat. Complaints in GMUs 13, 14, 18, and 23 involve damage to irrigated alfalfa, orchards, standing hay, and stored hay on agricultural land along the Salmon River breaks. Currently, there are only a few depredation concerns involving mule deer in PMU 1. Since 1998, antlerless mule deer have increased in areas surrounding agricultural fields, especially in portions of GMUs 11A and 14.

During 2000, fire burned a large portion of GMU 11 along the Salmon and Snake rivers from Maloney Creek downstream to Dough Creek and all the way to the ridgeline in most places. This fire alteration on the landscape is just now being analyzed for impacts. Grasses and native vegetation are being replanted and many of the bulldozer lines have recovered. Even so, it will be years before the shrub component fully recovers and decades before conifer regeneration provides thermal and hiding cover. During 2007, much of the Snake River face in GMU 11 was

burned by wildfire. That same year, wildfires in GMU 13 and 18 also burned large tracts of wildlife habitat primarily on public lands.

Biological Issues

Poor productivity and declining mature buck numbers as reflected in decreasing fawn:doe:buck ratios, a decrease in total numbers, and a 50% decrease in harvest from the late 1980s to the mid-1990s resulted in concerns for the mule deer herds in these GMUs. In 1992, aerial surveys in GMUs 14 and 18 indicated buck:doe ratios at 7:100 and 13:100, respectively. These concerns led to the implementation of antlered-only controlled hunts beginning in 1998 in GMUs 11, 11A, 13, 14, and 18.

A December 1999 sightability survey in GMU 14 resulted in an estimate of 2,622 mule deer with a buck:doe:fawn ratio of 18:100:50. GMU 14 was resurveyed in December 2004. The survey resulted in an estimate of 2,814 total mule deer with a buck:doe:fawn ratio of 34:100:61.

The composition/trend survey conducted in December 1999 indicated a total population of 1,725 mule deer in the White Bird trend area. This represented a 26% decrease in total numbers from the same sub-GMUs flown during the early 1990s. Subsequent White Bird trend area surveys conducted during the 2001-2002 and 2002-2003 winters indicated a stable population with increasing buck:doe (22:100 average) and fawn:doe (53:100 average) ratios. The survey conducted in 2003-2004 had similar buck:doe (23:100) and fawn:doe (47:100) ratios. However, the total estimate increased by 54% over the 2002-2003 count to 2,654 mule deer. It is likely that this increase can be attributed primarily to a change in deer distribution (due to a significant snowfall event just prior to the survey) rather than an increase in the deer population. The 2005 survey yielded results similar to pre-2004 levels with a total estimate of 1,937 and a buck:doe:fawn ratio of 20:100:63.

In 1990, controlled hunt permit numbers in GMU 11 were reduced significantly. Since then, buck:doe:fawn ratios have improved along with percent four-point bucks and total buck numbers. Due to declines in mule deer populations, GMUs 11A, 13, 14, and 18 were changed from general hunts to controlled hunts in 1998. GMU 11A was surveyed specifically for mule deer for the first time during winter 2003-2004. A total of 1,798 mule deer were estimated with a buck:doe:fawn ratio of 20:100:52.

In December 2008, a total of 21 adult mule deer does were radio-collared in the PMU to evaluate survival rates. A total of 10 were collared in GMU 11, 2 in GMU 13, and 9 were radio-collared GMU 18. As of June 2012, there have been a total of 10 mortalities, 6 in GMU 11, 3 in GMU 18, and 1 in GMU 13, in addition to 1 missing collar in GMU 18.

During the winter of 2009, a species of exotic louse, *Bovicola tibialis*, was documented for the first time in Idaho on a dead mule deer fawn in the city of Riggins. Four city deer sampled later that spring were found to be affected by the lice and had extensive hair loss (self-inflicted) associated with the lice infestation. In early March of 2012, with the help of Wildlife Services, the Department killed 60 deer in an effort to stop the spread of the louse. Test results showed that more than 90% of the deer were infested with *Bovicola tibialis*. Efforts were then made to treat the remaining deer within city limits. In May of 2012, *Bovicola tibialis* was found at lower

densities in other Idaho locations at Salmon, Elk Bend, Emmett, and the Andrus Wildlife Management Area indicating that the louse was not confined to Riggins. Monitoring efforts for the presence of this louse are ongoing.

During February 2013, a composition survey was conducted in GMU's 11, 13, and 18 in conjunction with an elk sightability survey. Due to the timing of the survey, sex structure was not determined. Total deer observed appear to be increasing since the early 2000's in GMUs 11 and 18, although are decreasing in GMU 13. Interestingly, fawns per 100 adults showed an opposite trend and were increasing in GMU 13, indicating deer populations in GMU 13 may be rebounding. Total deer observed in 2013 (3,477) exceeded total deer observed in 1991 (1,333) by 2,144 deer, suggesting substantial population growth. In addition, fawns per 100 total deer were 45:100, up from 31:100 in 1991. Total deer observed in GMU 13 decreased from 5,347 in 1989 to 2,712 in 2013, although fawns per 100 adults increased from 30:100 to 53:100. Total deer observed and fawns per 100 adults also increased in GMU 18 from 2,056 in 1990 to 2,805 in 2013 while fawns per 100 adults decreased moderately from 56:100 to 46:100. Although these data are not as useful as a complete aerial survey, they do provide insight into current trends of these management units.

Inter-specific Issues

A decline in cattle grazing and successive years of drought during the late 1980s and early 1990s may have contributed to rangeland shifting from forbs to grasses. Intensive logging has created extensive brushy areas on winter ranges. These shifts in vegetation have resulted in increases in white-tailed deer and elk populations, creating competition with mule deer on both winter and summer ranges.

Predation Issues

Mountain lion harvest has increased slightly in this area during the past several decades and most likely reflects an increase in mountain lion numbers, which may be contributing to lower deer densities. Bear populations and harvest have remained relatively stable in this PMU. The semi-arid climate and sparse timber limit the extent of highly productive bear foods in GMUs 11, 11A, 13, 14, and 18. However, due to extensive old homestead sites in these GMUs, numerous fruit trees and shrubs were planted and remain in the areas today, providing excellent bear foods in autumn. Some of the largest bears in the state annually come from GMU 11. Bears are not thought to have an effect on deer recruitment in this PMU. The addition of wolves will likely have an impact on black bear, mountain lion, and coyote populations. At some level, predation could benefit deer herds to the extent that it reduces elk competition and keeps deer herds below carrying capacity where they can be more productive. However, excessive levels of predation can also suppress prey populations to undesirable levels. At this point, it is unclear what the net impact of predation will be with the new mix of large predators.

Winter Feeding Issues

Emergency winter feeding of mule deer has not occurred in this PMU in recent history.

Harvest

Total harvest in PMU 1 in 2013 was estimated at 641 mule deer based on mandatory harvest report cards. This represents a 6% decrease in harvest from 2012 (685) and is 7% less than the five-year average of 688. Total hunter numbers were estimated at 1,203 for 2013 compared to 1,161 hunters for 2012. An average of 69% of the bucks harvested in these GMUs over the past three years (2011-2013) have been 4-point or larger with a 55% hunter success rate.

Information Requirements

Harvest and aerial survey information for this PMU are limited. Improved estimates are needed for yearly harvest data. Prior to 1994, all harvest data was for mule deer and white-tailed deer combined. Hunter participation data were first split out by deer species pursued in 2005. Data should continue to be separated for both deer species. The initiation of controlled hunts in GMUs 11A, 13, 14, and 18 in 1998 has resulted in improved harvest information. GMUs 11 and 14 are the only GMUs within this PMU that have been flown for GMU-wide winter range surveys since 1994. The aerial survey of White Bird trend area was flown during the winters of 2000-2005. This survey has now been discontinued and has been replaced with the statewide mule deer monitoring protocol that calls for a sample of search GMUs to be surveyed for composition each year when possible and a complete population survey approximately every 5 years. Budgetary constraints and re-prioritization of surveys have resulted in a lack of implementation of the recently adopted aerial survey schedule in this PMU to date.

Mule Deer Lower Salmon PMU 1 (GMUs 11, 11A, 13, 14, 18)



Management Objectives

	Short-Term Objective	Long-Term Objective
# of Deer	TBD	TBD
Pop. Goal	Increase*	Increase*
Hunter Days	>2,500	>3,500

* Except 11A - Decrease-Maintain

		3-Year Averages
Square Miles =	2,788	Hunters per square mile = 0.43
% Public Land =	37%	Harvest per square mile = 0.24
Major Land Type =	Agriculture/Range	Success Rate = 55%

Population Status

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Deer	ND	ND	ND	ND	ND	ND				

Note: Estimates in red are based on information other than sightability surveys.

Population Parameters

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fawn:Doe	47	63	ND							
Buck:Doe	23	20	ND							
Fawn Survival	ND									
Adult Doe Survival	ND									

Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does

Fawn Survival = overwinter fawn survival (December - May), Adult Doe Survival = annual survival (June - May)

Harvest Statistics

	Hunters	Hunter Days	Deer Harvest		
			Antlerless	Antlered	% 4+ Points
2003	5,453	25183	89	373	68%
2004	6,580	33331	120	584	64%
2005	923	4,145	112	565	76%
2006	778	3,294	155	584	71%
2007	790	3,534	167	598	74%
2008	1,224	5,954	184	523	72%
2009	1,219	6,068	169	572	74%
2010	1,134	5,685	126	586	71%
2011	1,226	6,491	167	493	72%
2012	1,161	5,776	174	511	67%
2013	1,203	6,125	116	525	67%

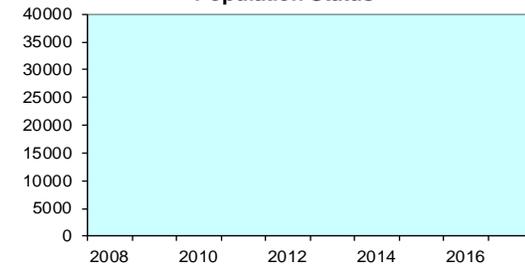
Note: Hunter numbers and hunter days prior to 2005 include white-tailed deer and mule deer hunters.

Previous Trend Area Surveys

GMU	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008
Various	ND	1,662	ND	1,747	1,722	2,645	1,937	ND	ND	ND

Note: ND = no survey data available

Population Status



Mule Deer Harvest

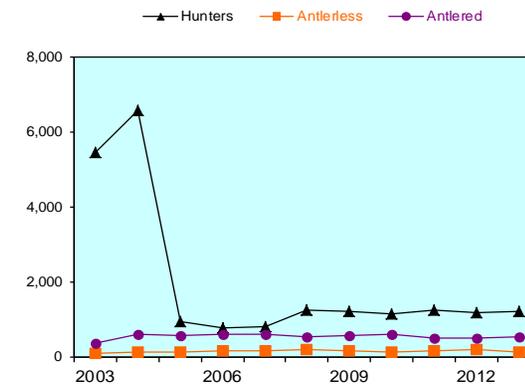


Figure 3. Lower Salmon Mule Deer PMU Status and Objectives.

WEISER-MCCALL

PMU 2 (GMUs 22, 23, 24, 31, 32, 32A)

Management Objectives

Objectives for Weiser-McCall (PMU 2, Figure 4) are to maintain buck harvest above 25% ≥ 4 points in GMUs 23, 24, 31, 32, and 32A and maintain buck:doe ratios from herd composition surveys at or above the statewide minimum of 15 bucks per 100 does. Objectives for GMU 22 are to maintain buck:doe ratios at or above 25 bucks per 100 does and to manage for a “quality” controlled hunt with $>40\%$ 4+ bucks in the harvest. Since fall 2008, the general rifle buck harvest in GMU 22 has been restricted to ≤ 2 point bucks to help meet “quality” management objectives.

Historical Perspective

These GMUs represent a significant portion of the mule deer population and mule deer harvest in the Southwest Region. In the late 1800s, deer herds were reduced by extensive meat hunting throughout the area. Hunting was restricted in the early 1900s. The subsequent increase in deer herds led to large winter mortality in some areas, extensive winter feeding programs, and concern for the status of vegetation on deer winter range.

Over one-third of Idaho’s human population lives near these GMUs. These GMUs provide deer hunting opportunity to over 13,000 hunters per year, but that opportunity has to be closely monitored to prevent over-harvest. This is particularly true because much of this PMU is dominated by open sagebrush habitats where deer are highly vulnerable.

Habitat Issues

Habitats in this PMU vary from the sagebrush-grassland winter ranges to the mountain shrub/forest communities of high elevation summer ranges. The majority of mule deer summer on land administered by USFS. Low-elevation winter ranges consist of private, state, and BLM lands. Logging, grazing, and fires have substantially affected the condition of these ranges. Logging activity has increased shrub fields and provided increased forage for mule deer. The effect of fire on summer ranges has been positive, improving forage conditions for deer. Conversely, effects of fire on low-elevation winter ranges have been more negative. In many cases, fires have reduced important shrub species such as bitterbrush and sagebrush that deer are dependent on during winter. However, cooler spring fires maintain these important shrub species. The proliferation of noxious weeds poses a threat to mule deer winter range.

Biological Issues

Population performance in this area is closely associated with winter severity and body condition of deer when entering the winter period. Buck harvest parameters in general any antlered deer seasons were below 25% 4+ points (20%) in 2013. Aerial survey data indicates buck:doe ratios were 15:100 during winter 2012-2013. Helicopter mechanical issues precluded a 2013-2014 aerial deer survey. Over-winter fawn survival was 91% and doe survival was 98% during winter 2013-2014. In GMU 22, the December 2012 buck:doe ratio was 18:100 compared to 10:100 in December 2007 before general harvest was restricted to ≤ 2 point bucks. Seventy-nine percent of the bucks harvested in the GMU 22 2013 controlled hunt were 4+ points.

Inter-specific Issues

Elk densities are currently high in the McCall and Weiser Elk Zones. These high elk densities may be limiting the ability of the area to support mule deer. There are some white-tailed deer in GMUs 22, 24, 32, and 32A. White-tailed deer populations do not seem to be expanding their distribution. Intensive livestock grazing is present on much of the range. The extent of competition among species is largely unknown.

Predation Issues

Bobcats, coyotes, mountain lions, and black bears occur throughout the PMU. Additionally, in recent years the presence of wolves has been documented in all GMUs in PMU 2. Multiple wolf packs occupy GMUs 22, 23, 24, and 32A. The impact of these large predators on mule deer is largely unknown.

Winter Feeding Issues

Winter feeding has been fairly uncommon in these GMUs. Winter feeding occurred in Weiser and Brownlee Reservoir area during the severe winter of 1992-1993.

Information Requirements

Herd composition surveys will be conducted annually during December. Radio-collared fawns and adult does will provide estimates of annual survival rates. Mule deer population abundance surveys will be conducted every five years, with modeling providing interim population estimates between population surveys. Information on inter-specific competition is needed.

Mule Deer Weiser-McCall PMU 2 (GMUs 22, 23, 24, 31, 32, 32A)



Management Objectives

	Short-Term Objective	Long-Term Objective
# of Deer	35,000	35,000
Pop. Goal	Maintain	Maintain
Hunter Days	>50,000	>50,000

Square Miles =	5,116	3-Year Averages	
% Public Land =	56%	Hunters per square mile =	2.68
Major Land Type =	Rangeland	Harvest per square mile =	0.68
		Success Rate =	25%

Population Status

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Deer			35,269							

Note: Estimates in red are based on information other than sightability surveys.

Population Parameters

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fawn:Doe	75	83	55	46	70	62	63	49	56	ND
Buck:Doe	22	13	12	10	13	18	20	13	15	ND
Fawn Survival	0.20	0.44	0.66	0.68	0.33	0.86	0.47	0.06	0.67	0.91
Adult Doe Survival	0.88	0.89	0.93	0.84	0.84	0.96	0.98	0.83	0.95	0.98

Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does

Fawn Survival = overwinter fawn survival (December - May), Adult Doe Survival = annual survival (June - May)

Harvest Statistics

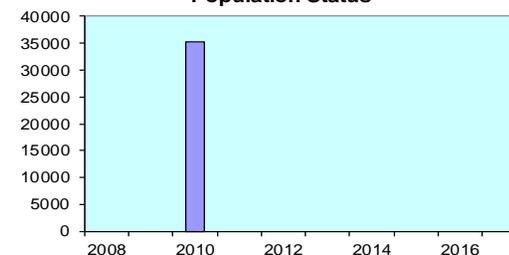
	Deer Harvest				
	Hunters	Hunter Days	Antlerless	Antlered	% 4+ Points
2003	13,558	55,024	1,255	2,960	26%
2004	15,654	70,526	1,426	3,100	27%
2005	14,363	60,742	1,651	4,136	28%
2006	13,321	58,182	1,463	2,805	29%
2007	9,961	40,433	1,410	2,295	32%
2008	12,695	57,977	1,258	2,477	30%
2009	13,462	58,203	1,356	2,907	27%
2010	14,010	58,499	1,705	2,636	29%
2011	13,160	58,373	1,048	1,862	40%
2012	12,938	55,315	1,173	2,554	31%
2013	14,981	64,854	1,033	2,755	31%

Note: Hunter numbers and hunter days prior to 2005 include white-tailed deer and mule deer hunters.

Previous Trend Area Surveys

GMU	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
22	ND	ND	4,091	4,318	3,725	3,193	4,295	ND	4,809	ND
31	ND	ND	3,826	4,450	3,732	3,207	3,834	ND	ND	ND
32	ND	ND	ND	ND	ND	ND	11,443	ND	ND	ND

Population Status



Mule Deer Harvest

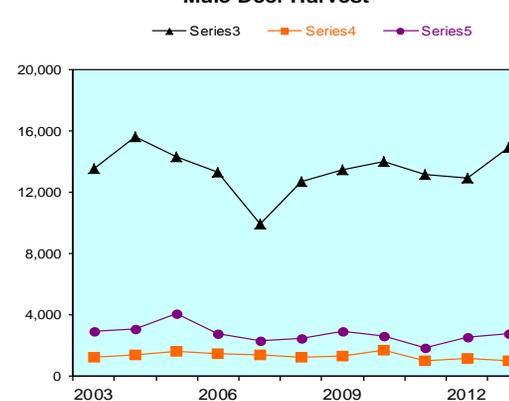


Figure 4. Weiser-McCall Mule Deer PMU Status and Objectives.

MIDDLE FORK

PMU 3 (GMUs 19A, 20A, 25, 26, 27)

Management Objectives

Objectives for Middle Fork (PMU 3, Figure 5) are to maintain >25% 4-points in the buck harvest and maintain buck:doe ratios from herd composition surveys at or above the statewide minimum of 15 bucks per 100 does. In GMU 27, objectives are to maintain >40%, 4-points in the buck harvest and maintain buck:doe ratios from herd composition ratios at or above 25 bucks per 100 does.

Historical Perspective

These GMUs represent the core of Idaho's backcountry; much of the area is designated wilderness. With the rugged, remote terrain and difficult access, management control of deer herds has been difficult at best. The forces of weather, fire, and plant succession have ultimately played a much larger role in deer populations than efforts of wildlife managers. In the late 1800s, human populations reached their peak in the backcountry as gold seekers poured into the area and established mining boom towns. With the miners came year-round big game hunting for meat, followed shortly by intensive livestock grazing. Depleted game herds plus heavy grazing of grass ranges set the stage for a shrub explosion in the early 1900s. At the same time, the mining boom collapsed and deer management emphasized protection from harvest; large "game preserves" were created.

By the 1930s, managers were recognizing that deer herds had grown to levels that were damaging winter ranges. Management emphasis shifted from protection to trying to achieve enough harvest to maintain winter range condition. Seasons were extended from mid-September through November to mid-December. Second and third deer tags were offered in some areas from the 1940s through the 1960s. A mid-September to late November season (Appendix A) has been standard in the backcountry GMUs since the 1950s. Even today, much of the deer harvest is localized around access points such as roads and airstrips.

Ultimately, the shrub winter ranges could not be sustained. More controlled livestock grazing and fire suppression allowed grasses and conifers to out-compete shrub seedlings; shrub ranges began to revert to grasslands and forests. As the habitat went, so went the deer; long-term trend counts in GMU 27 showed a steady decline in deer numbers from the 1920s to the mid-1960s. Since that time, the trend in deer numbers and harvest has been relatively flat. For example, 2,900 deer were counted during a 1968 helicopter deer survey of GMU 27. During helicopter elk surveys in GMU 27 in 1995, 1999, 2002, and 2006 staff counted 2,625-2,911 deer incidental to elk counts.

Hunter harvest in 2013 was approximately 110% of the 10-year average. Hunter days continue to meet objectives, but hunter success has hovered around 30% since 2008. Over-winter doe survival was 100% during the winter of 2013-2014.

Habitat Issues

Habitat ultimately determines deer densities and productivity. In these GMUs where hunter harvest has historically been light, particularly for females, deer herds could be expected to exist much of the time at densities approaching carrying capacity (unless suppressed by predators or temporarily set back by severe winters). Deer herds at or near carrying capacity can be expected to be relatively unproductive, recruiting few fawns, thus few bucks into the population, and these herds can be expected to produce bucks with small antlers. GMU 27 does produce relatively small-antlered bucks for their age, but this has not been definitively tied to deer densities or habitat. Continued shrub-land deterioration, conifer encroachment, and moderate elk populations will probably continue to further erode habitat capacity for deer. Fire may enhance summer ranges and winter ranges in the more moist northern GMUs, but fire is not likely to benefit the more arid southern winter ranges. In the summer of 2000, tens of thousands of acres burned within GMUs 26 and 27. Over time, it will be interesting to verify any correlation to fire and mule deer population performance. Already established in some areas, the spread of noxious weeds such as knapweed, rush skeletonweed, and leafy spurge could ultimately have significant impacts on winter range productivity.

Biological Issues

Very little mule deer aerial survey data has been collected in these GMUs since the 1960s. What data has been collected suggests a fairly stable number of deer since that time. For example, a 1965 helicopter trend count in GMU 27 resulted in a tally of 1,963 deer. The same area flown in 1968 resulted in 2,929 deer observed, while 2,133 deer were counted incidental to elk surveys in 1995. Buck harvests since the mid-1970s in GMU 27 are variable, but indicate no definite upward or downward trend. Similarly, there is no evident trend in percent 4-point bucks in the harvest, which varies annually, but averages approximately 55%. Since large fires in 2000 in the southern portion of the PMU, some outfitters have reported increased deer numbers and antler development. A trend survey was done in GMU 27 in spring 2006 with the estimated number of deer at 2,718. This estimate correlates very well with past surveys. An abundance survey of the entire PMU in February 2011 yielded a population estimate of 10,248 deer, with an estimated 3,750 in the same trend area surveyed in 2006, potentially indicating a large increase.

For the entire PMU, buck harvest has averaged above 60% 4-points, well above the 25% minimum. Similarly, buck:doe ratios always exceed the 15:100 minimum.

Inter-specific Issues

In portions of this zone, elk densities may be having some impact on the area's capacity to produce deer. White-tailed deer, a potentially strong competitor, are rare south of Salmon River but occur at greater densities in the more northern GMUs. In some limited areas, mountain goats and mule deer may be competing for the same mountain mahogany winter ranges. Bighorn sheep also share some ranges, but generally overlap little with deer. Livestock rangeland grazing, another potential source of competition, is generally a very minor activity in most of these GMUs.

Predation Issues

Black bear densities appear to be low to moderate in the southern GMUs and increasing toward the north. Mountain lion densities are at least moderate, perhaps high, and appear to have increased in recent years, probably at least in part due to increased elk densities. Coyotes are common and have an unknown impact on deer populations. Bobcats and golden eagles are present, but are not thought to cause significant predation on deer. Wolves reintroduced by USFWS have become well established in these GMUs. The addition of wolves is likely to have an impact on black bear, mountain lion, and coyote populations. At some level, predation could benefit deer herds to the extent that it reduces elk competition and keeps deer herds below carrying capacity where they can be more productive. However, excessive levels of predation can also suppress prey populations to undesirably low levels. At this point, it is unclear what the net impact of predation is with the new mix of large predators.

Winter Feeding Issues

Winter feeding has not occurred in these remote GMUs.

Information Requirements

Impacts of elk on mule deer production and survival are suspected, but unknown. The most productive deer herds are those maintained at a level well below carrying capacity. Better information is needed to identify appropriate deer densities that will maintain optimum productivity and harvest. The potential impact of the new mix of large predators is unknown. Migratory patterns are largely unknown.

Herd composition surveys will be conducted annually during December. Radio-collared fawns and adult does will provide estimates of survival rates annually. Mule deer total population abundance surveys will be conducted every 5 years, with modeling providing interim population estimates between population surveys.

Mule Deer Middle Fork PMU 3 (GMUs 19A, 20A, 25, 26, 27)



Management Objectives

	Short-Term Objective	Long-Term Objective
# of Deer	TBD	TBD
Pop. Goal	Increase	Increase
Hunter Days	>7,500	>7,500

Square Miles =	4,246	3-Year Averages	
% Public Land =	99%	Hunters per square mile =	0.47
Major Land Type =	Forest	Harvest per square mile =	0.14
		Success Rate =	30%

Population Status

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Deer				10,248						

Note: Estimates in red are based on information other than sightability surveys.

Population Parameters

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fawn:Doe		53		50	54	64	39	50	38	ND
Buck:Doe		31		18	25	23	25	27	35	ND
Fawn Survival	ND	ND	ND	ND	0.24	ND	ND	ND	ND	ND
Adult Doe Survival	ND	ND	ND	ND	0.80	0.95	0.98	0.95	0.89	100.00

Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does

Fawn Survival = overwinter fawn survival (December - May), Adult Doe Survival = annual survival (June - May)

Harvest Statistics

	Hunters	Hunter Days	Deer Harvest		
			Antlerless	Antlered	% 4+ Points
2003	1,321	6,915	17	588	60%
2004	1,389	7,892	54	636	57%
2005	2,237	12,714	56	752	65%
2006	2,383	14,110	33	670	60%
2007	1,336	7,183	40	767	63%
2008	2,292	13,786	37	490	56%
2009	1,952	11,511	16	523	63%
2010	2,142	12,149	30	581	65%
2011	1,917	11,056	30	462	64%
2012	1,931	10,875	24	543	68%
2013	2,112	11,576	45	708	68%

Note: Hunter numbers and hunter days prior to 2005 include white-tailed deer and mule deer hunters.

Previous Trend Area Surveys

GMU	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
27	ND	2,519	2,225	2,468	1,610	2,785	2,154	2,540	2,718	ND

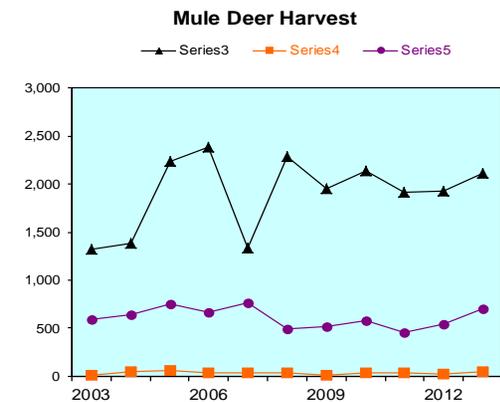
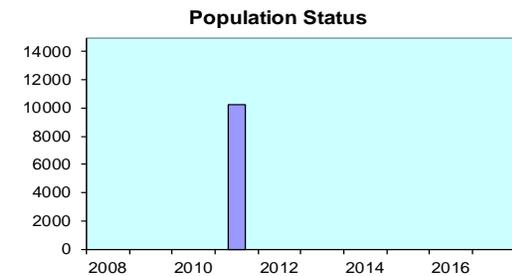


Figure 5. Middle Fork Mule Deer PMU Status and Objectives.

CENTRAL MOUNTAINS

PMU 4 (GMUs 21, 28, 33, 34, 35, 36, 36A, 36B, 49, 50)

Management Objectives

Objectives for Central Mountains (PMU 4, Figure 6) are to maintain ≥ 15 bucks:100 does in post-season surveys and $>25\%$ ≥ 4 -point bucks in the harvest.

Historical Perspective

Mule deer were scarce and harvests low for much of the early part of the twentieth century. From 1917 until the 1940s, parts of GMUs 28 and 36B were designated as no hunting “game preserves”. By the early 1940s, deer herds had expanded to the point that long, either-sex seasons were being offered (early Oct to mid-Nov). This pattern continued into the 1970s, when the antlerless portion of the season began to be shortened and total season length was shortened to include mid-October to mid-November. In 1991, concerns for mature buck escapement led to shifting the deer season earlier so that it ended in October before the rut began. Since 1991, the deer season framework (Appendix A) has been the most conservative these GMUs have seen in at least 50 years. The 2005 hunting season was shifted to 10-31 October in an attempt to establish consistent season framework across the state. However, high fawn mortality during winter 2005-2006 and reduced buck ratios after the 2005 season prompted a reduction in season length after 2005 (10-24 Oct) in the northern GMUs.

Hunter numbers have dropped slightly from an average of 11,420 hunters harvesting 2,630 bucks annually during the 1990s to 10,157 hunters harvesting 2,259 bucks since 2003. Hunter numbers have declined steadily since 2010. Buck harvest in 2013 was 2,358; approximately 99 more than the previous 10-year average. In 2013, hunter numbers and buck harvest increased to 10,024 and 2,358, respectively. This was a significant increase when compared to the four year average from 2009 through 2012 which was 9,205 hunters and 1,844 bucks harvested. Department staff will see if these increases remain high or if 2013 was an anomaly as far as hunters and harvest in PMU.

Habitat Issues

Cattle ranching, livestock grazing, mining, timber harvest, and recreation are dominant human uses of the landscape in PMU 4. Deer depredations on agricultural crops are minor. Intrusion of human development into winter ranges is accelerating.

Habitat ultimately determines deer densities and productivity. However, specific limiting factors within the habitat are poorly understood. Deer herds at or near carrying capacity can be expected to be relatively unproductive, recruiting few fawns, thus few bucks into the population; antlers will be relatively small for the age of the buck; and antler drop will occur relatively early in winter. Deer herds in this group of GMUs exhibit all these traits to some degree, but this has not been definitively tied to deer densities or habitat. In some areas, deer winter in mature stands of mountain mahogany that are relatively stagnant and unproductive. Elk may have removed much of the mountain mahogany forage within reach of deer. Forests are slowly encroaching into shrub and grassland communities. Spread of noxious weeds, such as knapweed and leafy spurge, could ultimately have significant impacts on winter range productivity.

Biological Issues

A trend area in GMU 21 near North Fork was surveyed most years from December 1990 to 2006 and a similar trend area was surveyed in GMU 36B south of Challis from December 1994 to 2005. A total abundance survey was completed in 2011, yielding an estimate of 33,477.

Fawn production in PMU 4 had been increasing since a low of 45 fawns per 100 does in 2000 to a high of 67 fawns per 100 does in 2008. The fawn ratio in 2012 was 50 fawns per 100 does. The buck ratio was the 25 per 100 does in 2012, the highest observed since 2005.

Fawn monitoring information for the 2011-2012 winter indicated fawn survival was relatively high at 66%, and adult doe survival was 90% within this PMU. Fawn survival fluctuates dramatically usually due to body condition going into winter and winter weather conditions.

Inter-specific Issues

Parts of GMUs 21 and 36B contain high densities of wintering deer. Current high elk densities may be having some impact on the area's capacity to produce deer. This impact may be particularly pronounced during severe winters when deep snow moves elk down onto deer winter ranges. White-tailed deer, a potentially strong competitor, are mostly restricted to private lands along major riparian areas. Pronghorn, bighorn sheep, and mountain goat share some ranges but generally overlap little with mule deer. Livestock rangeland grazing, another potential source of competition, has generally been reduced in recent years.

Predation Issues

Black bear densities appear to be moderate in PMU 4. Mountain lion densities are at least moderate, probably at least in part due to elk densities. Coyotes are common and have an unknown impact on deer populations. Bobcats, red fox, and golden eagles also occur in the area but are not thought to account for significant predation on deer. Reintroduction of gray wolves by USFWS has resulted in establishment of ≥ 20 packs in the PMU. The addition of wolves will likely have an impact on black bear, mountain lion, and coyote populations. At some level, predation could benefit deer herds to the extent that it reduces elk competition and keeps deer herds below habitat carrying capacity where they can be more productive. However, excessive levels of predation can also suppress prey populations to undesirably low levels. At this point, the net impact of predation with the new mix of large predators is unclear.

Winter Feeding Issues

Limited amounts of deer feeding occur about once per decade in the North Fork area. In the Garden Valley area (GMU 33), winter feeding occurs about 2 out of 5 years. During winter 2007-2008 winter feeding occurred during most of February and March. Minor private feeding activities also occur from time to time.

Information Requirements

Annual herd composition surveys are conducted in GMUs 21, 28, 33, 35, 36A, 36B, 49, and 50. Survey methodology was changed in 2008 and population estimates for these GMUs were

conducted in 2011. Impacts of elk on mule deer production and survival are suspected, but not quantified. The most productive deer herds are those maintained at a level well below carrying capacity. Better information is needed to identify appropriate deer densities that will maintain optimum productivity and harvest. Potential impact of the new mix of large predators is unknown.

Mule Deer

Central Mountains PMU 4 (GMUs 21, 28, 33, 34, 35, 36, 36A, 36B, 49, 50)

Management Objectives

	Short-Term Objective	Long-Term Objective
# of Deer	TBD	TBD
Pop. Goal	Maintain	Increase
Hunter Days	>50,000	>50,000

Square Miles =	8,145	3-Year Averages	
% Public Land =	91%	Hunters per square mile =	1.13
Major Land Type =	Forest/Rangeland	Harvest per square mile =	0.29
		Success Rate =	26%



Population Status

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Deer				33,477						

Note: Estimates in red are based on information other than sightability surveys.

Population Parameters

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fawn:Doe	49	58	48	42	67	57	60	62		
Buck:Doe	17	27	14	12	14	20	20	18		
Fawn Survival	0.34	0.77	0.15	0.67	0.22	0.55	0.85	0.48	0.66	0.49
Adult Doe Survival	ND	ND	0.82	0.88	0.89	0.89	0.95	0.87	0.90	0.93

Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does

Fawn Survival = overwinter fawn survival (December - May), Adult Doe Survival = annual survival (June - May)

Harvest Statistics

	Deer Harvest				
	Hunters	Hunter Days	Antlerless	Antlered	% 4+ Points
2003	10,631	44,640	462	2,030	27%
2004	12,483	56,309	757	2,255	32%
2005	11,757	55,684	592	3,241	37%
2006	11,400	54,025	551	2,820	33%
2007	7,748	33,936	635	2,866	34%
2008	10,906	52,955	666	2,005	34%
2009	9,876	46,447	476	1,777	35%
2010	9,406	42,439	517	1,923	30%
2011	8,866	41,937	359	1,783	36%
2012	8,672	39,291	368	1,892	38%
2013	10,024	45,097	353	2,358	39%

Note: Hunter numbers and hunter days prior to 2005 include white-tailed deer and mule deer hunters.

Previous Trend Area Surveys

GMU	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
21	1,226	ND	1,104	1,284	459	1,273	ND	1,218	1,223	1,072
33	2,186	1,971	1,734	ND	ND	ND	1,546	ND	ND	ND
36B	1,840	2,163	1,963	1,568	1,993	2,210	1,721	2,272	2,348	2,344
50	7,063	ND	5,083	5,703	ND	7,983	ND	6,941	ND	ND

Note: ND = no survey data available

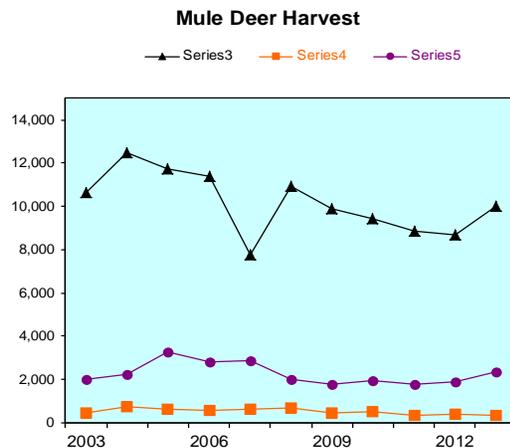
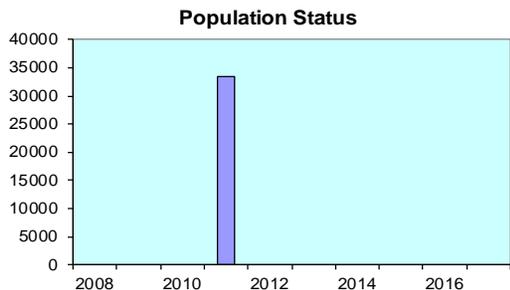


Figure 6. Central Mountains Mule Deer PMU Status and Objectives.

BOISE RIVER PMU 5 (GMU 39)

Management Objectives

Objectives for Boise River (PMU 5, Figure 7) are to maintain buck harvest above 30% ≥ 4 points and maintain buck:doe ratios from herd composition surveys above the statewide minimum of 15 bucks per 100 does.

Historical Perspective

This PMU represents one of the major deer PMUs in the State. In the late 1800s, deer herds were reduced by extensive meat hunting throughout the area. Hunting was restricted in the early 1900s. The subsequent increase in deer herds led to large winter mortality and concern for the status of vegetation on deer winter range.

Habitat Issues

Seasonal habitat needed by mule deer encompasses much of the Boise River drainages and tributaries of the Middle Fork Boise River. The majority of mule deer summer on land administered by USFS. Mule deer typically spend summers in forest habitats and move to lower mountain shrub or sagebrush/grass ranges during winter. Logging, grazing, and fires have substantially affected the condition of these ranges. Logging activity has increased shrub fields and provided increased forage for mule deer. The effect of fire on summer ranges has been positive, improving forage conditions for deer. Conversely, effects of fire on low-elevation winter ranges have been more negative. In many cases, fires have reduced important shrub species such as bitterbrush and sagebrush that deer are dependent on during winter. However, cooler spring fires maintain these important shrub species. The proliferation of noxious weeds poses a threat to mule deer winter range.

In the Boise area, expansion of home developments onto mule deer winter range has been a significant problem. This urban development is impacting wintering areas of one-third of the mule deer herd in PMU5. More recently, proposals to develop the Danskin Front may impact an additional one-third to one-half of the mule deer winter range in this PMU.

Biological Issues

Population performance in this area is closely associated with winter severity and body condition of deer when entering the winter period. Buck harvest parameters were 32% 4+ points in 2013. Aerial surveys to determine buck:doe and fawn:doe information could not be completed during 2013-2014. However, ground efforts to survey deer occurred on Boise River WMA, up the Middle Fork Boise River, and along Danskin Front. A total of 895 deer were classified. Fawn:doe ratio was 60:100 and buck:doe ratio was 13:100. Because we were unable to survey entire subunits, buck:doe ratios are likely not reflective of actual and should not be used to inform management decisions. The fawn:doe ratio was similar to 2012-2013 (64:100) and right at the 10-year average (60:100). Sightability surveys were conducted during winter 2010 with a population estimate of $23,039 \pm 1,039$ mule deer. This is down slightly compared to the previous 3 surveys, but still well within the population threshold of 20,000 deer which informs doeharvest.

Fawn monitoring information for the 2013-2014 winter indicated fawn survival was well above the 10-year average (62%) at 89% and adult doe survival was 100% within this PMU. Due to concerns about deer survival following the Pony/Elk complex fires of summer 2013, we increased our total sample size to 50 fawns, and captured 25 fawns on Boise River WMA (BRWMA) and 25 fawns at Black's Creek portion of BRWMA. Survival at BRWMA was 83% and survival at Blacks Creek was 96%. The winter was very mild followed by average to slightly above average spring moisture. Fawn survival usually fluctuates due to body condition going into winter and winter weather conditions.

Inter-specific Issues

Elk densities are relatively high throughout the area. However, they do not appear high enough to limit mule deer numbers as over-winter survival of mule deer fawns has been high despite deep snows. Instead, it appears there may be carrying capacity issues as mule deer fawn survival was <50% during the very mild winter of 2007 and only 67% during winter 2011 when the first snow did not fall until late January 2012. More recent information suggests that previous year's summer and fall precipitation affects over-winter fawn survival. Lower fawn survival in 2006-07 and 2011-12 may have been a result of poor body condition due to inadequate late summer and fall forage. Intensive livestock grazing is present on much of the range. Competition among species is largely unknown.

Predation Issues

Bobcats, coyotes, mountain lions, black bears, and wolves occur throughout the PMU. There are ≥ 5 wolf packs in PMU 5. Several years of regulated wolf harvest has reduced the overall wolf population in the PMU. The impact of these large predators on mule deer is largely unknown but under investigation.

Winter Feeding Issues

Winter feeding is relatively uncommon in this PMU. Winter feeding last occurred during winter 1992-1993.

Information Requirements

Herd composition counts are conducted annually in GMU 39. Sightability surveys occurred every 2-3 years until 2005. The last survey was during winter 2010. Information on over-winter fawn survival has been collected since 1998 and annual adult doe survival since 2006. Accurate harvest information, annual herd composition counts (especially buck:doe ratios) and annual doe and fawn survival data will continue to be important information required to effectively manage this deer herd.

Mule Deer Boise River PMU 5 (GMU 39)



Management Objectives

	Short-Term Objective	Long-Term Objective
# of Deer	TBD	TBD
Pop. Goal		
Hunter Days	>40,000	>40,000

Square Miles =	2,444	3-Year Averages	
% Public Land =	76%	Hunters per square mile =	4.65
Major Land Type =	Forest/Rangeland	Harvest per square mile =	0.96
		Success Rate =	21%

Population Status

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Deer			23,039							

Note: Estimates in red are based on information other than sightability surveys.

Population Parameters

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fawn:Doe	51	53	56	57	51	47	86	76	62	60
Buck:Doe	15	13	28	16	12	14	25	17	16	13
Fawn Survival	0.38	0.76	0.59	0.46	0.70	0.87	0.75	0.35	0.67	
Adult Doe Survival	ND	ND	0.96	0.95	0.94	0.96	0.94	0.89	0.94	

Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does

Fawn Survival = overwinter fawn survival (December - May), Adult Doe Survival = annual survival (June - May)

Harvest Statistics

	Hunters	Hunter Days	Deer Harvest		
			Antlerless	Antlered	% 4+ Points
2003	9,075	38,020	747	1,664	23%
2004	11,477	50,920	1,063	2,234	35%
2005	10,381	42,288	1,065	2,313	29%
2006	10,712	44,461	1,056	2,174	31%
2007	9,128	37,021	1,269	2,645	33%
2008	11,542	52,147	856	1,197	26%
2009	11,587	49,594	1,146	1,787	29%
2010	11,438	50,612	910	1,526	28%
2011	11,785	52,199	697	1,210	35%
2012	10,660	44,701	968	1,788	38%
2013	11,655	47,780	718	1,649	32%

Note: Hunter numbers and hunter days prior to 2005 include white-tailed deer and mule deer hunters.

Previous Trend Area Surveys

GMU	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
39	22,840	ND	ND	26,058	ND	27,800	ND	26,569	ND	ND

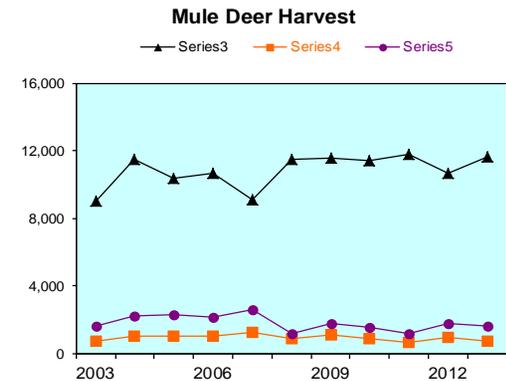
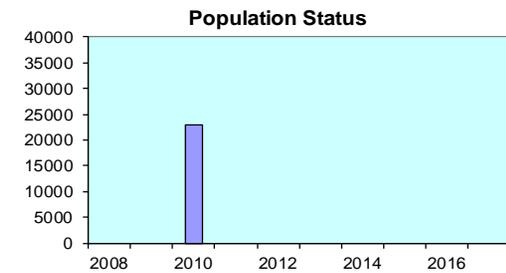


Figure 7. Boise River Mule Deer PMU Status and Objectives.

SMOKY-BENNETT

PMU 6 (GMUs 43, 44, 45, 48, 52)

Management Objectives

Deer populations in Smokey Bennett (PMU 6, Figure 8) will be managed to maintain or exceed 20 bucks per 100 does in the pre-winter population and >45% bucks with four-point or larger antlers in the October harvest.

Historical Perspective

During the late 1800s and early 1900s, mule deer populations in the Smoky-Bennett PMU were reduced to very low levels by unregulated harvest. Miners, market hunters, and other inhabitants of the area relied heavily on deer and elk meat. Mule deer habitat was also greatly altered during this period by excessive livestock use. Dense shrub fields dominated by sagebrush and bitterbrush, replaced plant communities dominated by grasses. This pronounced change in habitat combined with restrictions on deer hunting prompted increases in deer numbers. Hunting seasons were closed or very conservative through 1940. At that time, winter ranges were considered to be over-browsed and in a downward trend, and hunting seasons were designed to reduce deer numbers. Deer numbers remained strong through the 1950s and 1960s. Following a significant decline in numbers during the mid-1970s, deer populations increased again during the late 1980s, a period of prolonged drought conditions and mild winters. During winter 1992-1993, deer populations declined by approximately 50%. Deer had entered the winter in poor physiological condition and high over-winter mortality of fawns and bucks occurred. Since 1993, deer numbers have increased in this area but remain below the population levels of the late 1980s and early 1990s.

Harvest management includes both general (GMUs 43 and 48) and controlled (GMUs 44, 45, and 52) hunting seasons. The controlled hunts are very popular with sportsmen desiring quality, high hunter success, low hunter density, and the opportunity to observe many deer. The Bennett Hills (GMU 45) has had controlled hunting seasons since 1972 and has the most highly sought-after mule deer permits in Idaho. In 2013, drawing odds for the 75-permit October buck hunt was 3.6%. After the 1993 population decline, liberal antlerless hunts were maintained in GMUs 43, 44, and 45 to slow deer population growth and allow recovery of deteriorated winter ranges in GMU 45. Prior to 2008, the management objective was to maintain about 8,000 deer in the King Hill trend area. At this population level, which is less than the maximum biological carrying capacity, depredations are minimal, winter range use is appropriate, and reproductive performance is higher than many other southern Idaho deer herds.

The Bennett Front from Bliss Point to Teapot Dome in GMU 45 provides nearly all of the winter range in this PMU. The number of wintering deer using the Picabo Hills and Black Butte Hills in GMU 52 has declined in recent years.

Habitat Issues

This PMU encompasses about 5,487 mi² of which 24% is managed by USFS, 49% by BLM, 5% by Idaho Department of Lands (IDL), and 22% is private land.

Most of GMU 52 and the southern portion of GMU 45 is primarily arid semi-desert dominated by sagebrush-grass. The Mount Bennett Hills in GMU 45 is a low range of mountains or high plateaus consisting of sagebrush-grass and mixed mountain shrub communities with small pockets of aspen and Douglas fir on northern exposures and more mesic sites. GMUs 43, 44, and 48 include the Soldier, Boulder, and Smoky Mountains. Mountain shrub and mountain big sagebrush communities are common on south-facing exposures while northern exposures are timbered.

Grazing by cattle and domestic sheep is the primary land use on public and private lands. Conflicts tend to be localized rather than widespread and include excessive use of forage on winter ranges and riparian area degradation.

Overall habitat security for deer during hunting season is good in GMUs 43 and 48. Seasonal road closures implemented primarily for elk security also benefit mule deer. Cover is relatively open and road densities are higher in GMUs 44, 45, and 52, necessitating controlled hunts to maintain the desired buck age structure.

Motorized access to Bennett Hills winter ranges is presently unregulated and may be affecting deer use of available habitat. Motorized use can displace deer from preferred areas and can cause deer to expend critical energy reserves needed to survive the winter and produce healthy fawns.

Important habitat issues include: 1) Succession, and in some cases heavy livestock use, has caused a general decline in the health of aspen communities. Many stands have become decadent and/or are being replaced by conifers. 2) Winter ranges, primarily in GMUs 45 and 52 are considered to be limiting mule deer in this PMU. Winter ranges are predominately sagebrush-grass and generally do not have a strong bitterbrush component. Much of the winter habitat has been used heavily by deer and livestock for many years and is considered in poor condition in many areas. Medusahead rye has invaded winter ranges following fires and is considered a serious concern to the long-term health of habitat. The prevalence of cheatgrass has also increased in deer winter habitats following fire and/or prolonged heavy grazing pressures that have depleted other understory species. Rehabilitation and protection of these very critical winter ranges will require careful long-term planning that will maintain adequate browse for wintering deer and improve understory vegetation. Conservation easements and/or acquisition of private lands in strategic locations would also help increase or maintain winter carrying capacity for deer. 3) Timber harvest and consequent road-building activities continue in portions of GMU 43. Access management will continue to be an important issue for deer and elk management. Increased access frequently leads to more conservative and restricted hunting season frameworks. 4) Private interests own or control access to important summer and fall habitats in GMUs 44 and 45. This has been a subject of much concern by hunters unable to gain access to areas they wish to hunt. 5) Depredation problems can become acute during severe winters in the King Hill/Bliss areas of GMU 45. Private land used for growing crops and pasturing livestock occurs along the lower perimeter of deer winter range.

In 2011, the Blair Fire burned nearly 40,000 acres of important winter range that supported 5,000-6,000 deer in most winters. Although rehabilitation efforts have been substantial, the threat

of increases in medusahead and cheatgrass are a serious concern for the long-term health of the habitat. Human access to winter ranges was limited to foot traffic only during the first 2 years following the fire to reduce disturbance to deer and protect rehabilitation efforts. In addition, agreements were signed with several nearby farmers to allow deer unlimited access to winter wheat fields.

On Camas Prairie (GMUs 44 and 45), summer depredation problems on growing alfalfa are common during drought years.

Biological Issues

Prior to the decline in deer in 1993, deer populations exceeded winter range carrying capacity and damage to private property was extreme in some years. The short-term management goal has been to maintain deer populations lower than 1988-1992 levels using antlerless harvest. Despite relatively liberal antlerless harvest, the estimated population in the King Hill trend area increased by 80% from 1994 to 1999. From 2000-2007, trend area deer numbers were stable and averaged 7,684 deer. In 2008 the estimated number of deer in the trend area declined to approximately 6,000 and antlerless permits were reduced by 50%. In recent years, harvest management has been designed to slow the rate of growth near the Blair Fire area to benefit recovery of the habitat and maintain the overall health of the deer herd.

Complete aerial surveys of winter ranges in PMU 6 were conducted during 6-14 February 2008 and 6-12 February 2012 to obtain a total mule deer population estimate. The estimated population in 2012 was $13,251 \pm 236$ (90% bound); 24% higher than the 2008 estimate of $10,700 \pm 201$ deer (90% bound).

Herd composition survey data suggest a decline in reproductive performance measured in December from 78 fawns:100 does (1973-1992) to 65 fawns:100 does (1993-2012). In December 2012, a ratio of 63 fawns:100 does was observed ($n = 1,150$). Antlerless permits for 2008 hunting seasons were reduced by 48% from 2,500 to 1,300 to allow for herd growth. In 2012 1,500 antlerless permits were authorized in the PMU.

The observed December 2012 buck to doe ratio was 41 bucks:100 does, well above the objective of 20 bucks: 100 does (Figure 7).

Inter-specific Issues

PMU 6 supports a substantial population of elk, moose, pronghorn, and at higher elevations, mountain goats. The relationship between deer and elk is presently unclear but in 2008 nearly 1,000 elk were observed during the February deer survey and an overlap in winter use areas was noted. On the Bennett Hills Front deer winter ranges, mule deer will maintain management priority over elk if there are competitive concerns during winter. Most of the pronghorn population from the Camas Prairie and northern portion of GMU 52 migrate to Bennett Hills Front winter ranges and co-occupy winter habitat with mule deer. Mule deer and pronghorn will receive equal management consideration on these winter ranges.

Cattle and domestic sheep have imposed the major forage demand in this PMU since the 1870s. Excessive use by cattle and domestic sheep severely damaged soil and vegetation in the late

1800s and early 1900s. Today, livestock use has been reduced to less than 15% of historic use and competitive concerns remain but tend to be more localized.

Predation Issues

Mountain lions, coyotes, black bears, bobcats, and wolves are potential predators on mule deer in the PMU. In recent years, mountain lion populations are believed to have decreased slightly. Coyote numbers are believed to have increased in the past 30 years; however, they are subject to unregulated hunting and periodic control activities by USDA Wildlife Services. Black bear numbers have increased slightly in recent years but densities are considered relatively low. Wolves inhabit the PMU and are subject to frequent control actions because of depredations on domestic sheep. Elk are the major prey item taken by wolves. Wolf predation is not presently considered an important mortality factor in the deer population.

Winter Feeding Issues

Supplemental winter feeding of deer has not occurred in the past few years and is not considered an important issue in this PMU.

Information Requirements

In 2008 new population monitoring protocol was implemented. Instead of annual green-up counts of deer within the King Hill trend area, complete surveys will be conducted every 4-5 years to provide estimates of the total deer population. Samples of radioed fawns and does will be monitored annually to provide survival estimates. Pre- and post-winter herd composition surveys will be conducted to monitor over-winter fawn mortality, recruitment rate, and the buck to doe ratio.

The Bennett Hills Front has some of the highest wintering deer densities in Idaho and winters a high proportion of the mule deer in Magic Valley Region. There is a need for improved monitoring of winter range condition and trend.

Antler shed hunting has become very popular on Bennett Hills winter ranges. There is concern that shed-antler hunters using motorized vehicles to travel cross-country are causing increased energy expenditures by deer during late winter and early spring when energy reserves are lowest.

Mule Deer Smokey Bennett PMU 6 (GMUs 43, 44, 45, 48, 52)



Management Objectives

	Short-Term Objective	Long-Term Objective
# of Deer	TBD	TBD
Pop. Goal	Increase	Increase
Hunter Days	>20,000	>20,000

		3-Year Averages
Square Miles =	3,982	Hunters per square mile = 1.63
% Public Land =	72%	Harvest per square mile = 0.65
Major Land Type =	Rangeland/Forest	Success Rate = 40%

Population Status

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Deer	10,700				13,251					

Note: Estimates in red are based on information other than sightability surveys.

Population Parameters

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fawn:Doe	51	84	69	71	59	58	60	69	63	48
Buck:Doe	33	38	34	31	29	37	22	49	41	35
Fawn Survival	ND	ND	ND	ND	0.25	0.62	0.86	0.25	0.77	0.83
Adult Doe Survival	ND	ND	ND	ND	0.94	0.94	0.93	0.85	0.96	0.98

Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does

Fawn Survival = overwinter fawn survival (December - May), Adult Doe Survival = annual survival (June - May)

Harvest Statistics

	Deer Harvest				
	Hunters	Hunter Days	Antlerless	Antlered	% 4+ Points
2003	4,951	18,391	1,176	1,451	48%
2004	7,996	33,112	1,459	1,563	42%
2005	5,592	21,381	1,205	1,415	42%
2006	5,494	21,571	1,317	1,439	47%
2007	4,760	17,114	1,250	1,217	46%
2008	5,293	21,758	813	1,289	45%
2009	5,604	22,712	849	1,204	48%
2010	5,751	23,903	898	1,314	50%
2011	6,788	27,219	1,347	1,336	51%
2012	6,104	24,951	1,119	1,428	52%
2013	6,562	26,582	1,072	1,432	50%

Note: Hunter numbers and hunter days prior to 2005 include white-tailed deer and mule deer hunters.

Previous Trend Area Surveys

GMU	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
45	6,550	9,165	8,167	8,042	8,195	6,360	7,878	7,206	8,214	7,380

Note: ND = no survey data available

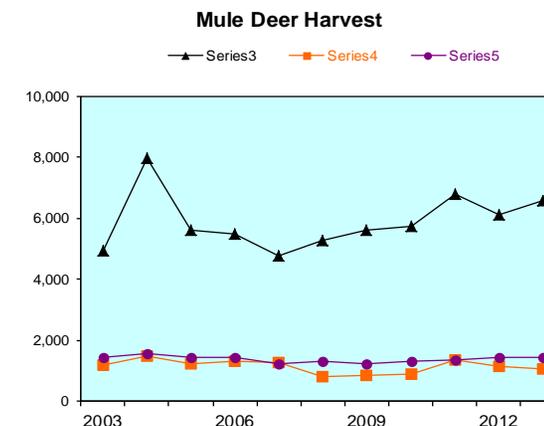
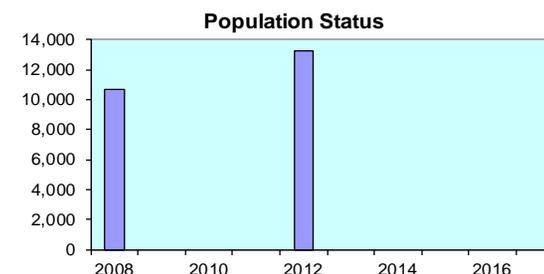


Figure 8. Smokey Bennett Mule Deer PMU Status and Objectives.

OWYHEE

PMU 7 (GMUs 40, 41, 42, 46, 47)

Management Objectives

Post-season buck:doe ratios for Owyhee (PMU 7, Figure 9) will be maintained at a minimum of 25 bucks per 100 does and the percent 4+ points in the harvest will be maintained at no less than 35%.

Historical Perspective

GMUs 40, 41, 42, and 47 have traditionally supported substantial deer herds and provided hunting opportunity for southern Idaho hunters. GMU 46 has never supported a large resident deer herd, but nonetheless has provided important general hunting opportunity. During the 1930s and 1940s, deer populations were low and hunting opportunities were very limited in these GMUs. By the 1950s and 1960s, deer numbers had increased to very high levels and depredation complaints were common. Deer seasons were liberalized and, in some years, extended to mid-December. Hunters who ventured into Owyhee County could take their pick of “a deer behind every bush.” In 1955, an either-sex deer hunt with a two-deer bag limit was authorized in parts of Area 12 and 5,500 deer were harvested. Liberal hunting seasons continued into the early 1970s when an area-wide decline in deer populations resulted in more conservative hunting seasons. During the 1980s, harvest averaged 1,500 bucks and a few hundred does per year. Since 1991, hunters have been restricted to taking two-point or smaller bucks during the general season in GMUs 40, 41, and 42. GMU 47 has been managed with controlled hunts since 1970, and general antlered-only seasons have been maintained in GMU 46. All 5 GMUs have controlled hunts for any buck in November.

These deer herds use habitat in Oregon, Nevada, and Idaho. An unknown portion of the deer herd in western Owyhee County migrates to Oregon during winter. On the eastern side of Owyhee County, substantial numbers of deer migrate north from Nevada to winter in Idaho. This interstate mixing of deer populations makes evaluation of the status of Idaho’s herd very difficult.

Habitat Issues

About 90% of the land area is in public ownership. The BLM manages the majority of the area, and IDL administers smaller segments. The area is primarily high-desert habitat dominated by sagebrush-grass and juniper cover types. Isolated mountain ranges and foothill areas include mixed mountain shrub and aspen types.

There have been several major changes in mule deer habitat over the last 30 years. Fires have destroyed large portions of winter ranges in GMUs 41 and 46. Historically burned areas have been reseeded with crested wheatgrass or have been invaded by cheatgrass and have little browse to support wintering deer. In 2007 the Murphy Complex Fire burned more than 500,000 acres in GMUs 41, 46, and 47 including important winter range. Fire rehabilitation efforts were substantial but deer numbers may decline until the habitat has recovered. In GMU 42, there has been a substantial encroachment of juniper into former summer and winter ranges. In several

areas where juniper has replaced more important browse species, the number of wintering deer has been reduced from several thousand to a few hundred deer.

Biological Issues

Very little mule deer aerial survey data exists for this PMU.

Inter-specific Issues

Currently, elk populations are relatively small throughout the year in this PMU, but greater number of elk are seasonal using parts of this PMU, particularly GMU 41. Recent efforts to document elk in GMU 40 and 42 estimate that there are at least 500-600 elk in those two GMUs. In January 2014, NDOW counted 1,411 elk in GMP 41 in Idaho. Elk numbers increased substantially in GMUs 46 and 47 following the Murphy Complex Fire and the expansive grasslands that were created. At its present population level, this elk herd does not constitute a significant management concern for mule deer.

Livestock grazing is and has been the predominant land use in the area. In the early part of the twentieth century, excessive grazing by livestock combined with fire suppression severely altered plant communities to favor shrubs, and mule deer benefited. Extensive areas have burned during the past several decades and much of the sagebrush steppe was reseeded to crested wheatgrass or was invaded by cheatgrass. The reestablishment of sagebrush to benefit deer may conflict with livestock grazing interests in some areas. Livestock numbers are currently significantly less than during the early part of the twentieth century. Serious conflicts are localized rather than widespread on winter ranges and critical riparian areas.

Predation Issues

Coyotes, bobcats, and mountain lions are the large predators in this area. There are no wolves or black bears in the area.

Winter Feeding Issues

The remoteness of winter deer herds has limited the demand for and the ability to conduct supplemental winter-feeding. No winter-feeding has occurred for many years in these GMUs. The Department will work with the Regional Winter Feeding Advisory Committee to discourage unsanctioned winter-feeding and to identify any situations where feeding may be appropriate.

Information Requirements

The primary data need for these GMUs is population information. Winter ranges contain some mixture of deer from Oregon/Idaho or Nevada/Idaho. Herds can be surveyed in winter, but status of these wintering animals needs to be allocated to the appropriate hunting season herds. This lack of population information on these important deer herds has been a concern to managers and will be addressed in the near future.

Mule Deer Owyhee PMU 7 (GMUs 40, 41, 42, 46, 47)

Management Objectives

	Short-Term Objective	Long-Term Objective
# of Deer	TBD	TBD
Pop. Goal	Increase	Increase
Hunter Days	xx,xxx	xx,xxx

Square Miles =	9,015	3-Year Averages	
% Public Land =	85%	Hunters per square mile =	0.64
Major Land Type =	Desert/Rangeland	Harvest per square mile =	0.19
		Success Rate =	30%



Population Status

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Deer	ND	ND	ND	ND	ND	ND				

Note: Estimates in red are based on information other than sightability surveys.

Population Parameters

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fawn:Doe	ND									
Buck:Doe	ND									
Fawn Survival	ND									
Adult Doe Survival	ND									

Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does

Fawn Survival = overwinter fawn survival (December - May), Adult Doe Survival = annual survival (June - May)

Harvest Statistics

	Deer Harvest				
	Hunters	Hunter Days	Antlerless	Antlered	% 4+ Points
2003	3,382	10,558	12	1,183	24%
2004	4,379	15,416	208	1,251	20%
2005	4,067	13,332	185	1,524	22%
2006	4,442	14,454	259	1,678	19%
2007	3,563	11,948	106	1,442	29%
2008	4,761	17,924	188	1,221	30%
2009	5,033	17,547	242	1,635	22%
2010	5,377	18,754	250	1,698	25%
2011	5,829	20,667	276	1,612	25%
2012	5,354	19,381	223	1,503	28%
2013	6,071	22,418	174	1,416	30%

Note: Hunter numbers and hunter days prior to 2005 include white-tailed deer and mule deer hunters.

Previous Trend Area Surveys

GMU	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
	ND									

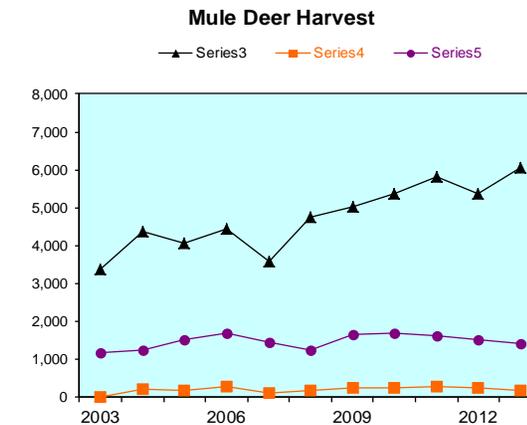
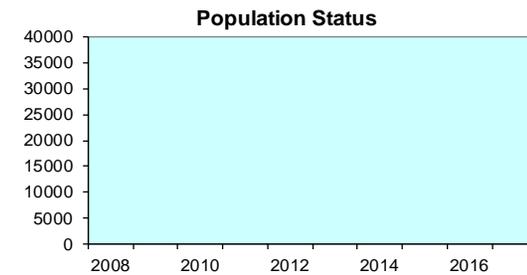


Figure 9. Owyhee Mule Deer PMU Status and Objectives.

SOUTH HILLS

PMU 8 (GMUs 54, 55)

Management Objectives

Deer populations in South Hills (PMU 8, Figure 10) will be managed to maintain or exceed 25 bucks per 100 does in the pre-winter population and >35% bucks with four-point or larger antlers in the October harvest.

Historical Perspective

During the early 1900s, mule deer populations in South Hills PMU were very low, due in part to unregulated harvest. During the late 1800s and early 1900s, heavy use by domestic livestock greatly altered deer habitat. Shrub fields dominated by sagebrush and bitterbrush, replaced plant communities once dominated by grasses. This change in habitat set the stage for dramatic increases in deer numbers. Closed hunting seasons from 1909-1935 and very conservative seasons through 1940 helped allow deer populations to increase. By 1950, deer numbers had reached an estimated 20,000 head in GMU 54 and winter ranges were considered severely over-browsed. Efforts were made to reduce deer populations with both general and controlled season frameworks. Following a significant decline in numbers during the mid-1970s, deer populations increased again during the late 1980s, a period of prolonged drought conditions and mild winters. During winter 1992-1993, deer populations declined by an estimated 35-40%. Deer had entered the winter in poor physiological condition and high over-winter fawn and buck mortality occurred. After the 1993 winter die-off, deer populations in this PMU continued to decline through 1997 and remained relatively stable from 1997-2003. Trend area surveys suggest that deer numbers increased substantially in 2004-2007 compared to 1997-2003 levels.

Since 1970, this PMU has been managed exclusively with controlled firearm seasons. These GMUs are very popular with sportsmen desiring quality, high hunter success, low hunter density, and the opportunity to observe many deer. Following the 1993 population decline, antlerless-only hunts were eliminated. Presently (2012), 200 antlerless permits are available in addition to some youth hunting opportunity that allows a small harvest of antlerless deer.

Segments of the deer populations exhibit interstate movements. In GMUs 54 and 55, there are migrations south to winter ranges in Nevada and Utah, respectively. Harvest management in Utah and Nevada has been compatible with the Department's management objectives. Important winter ranges in this PMU are: Jim Sage (GMU 55), Willow Creek (GMU 55), Dry Creek (GMU 54), and Sugarloaf (GMU 54).

Habitat Issues

This PMU is characterized by isolated mountain ranges surrounded by farmland and sagebrush-grass semi-desert. At low to mid elevations, juniper woodlands are common with mixed mountain shrub and aspen communities occurring along riparian areas and on some north- and east-facing slopes. At higher elevations, pockets of conifers (lodgepole pine, Douglas fir, and subalpine fir) and aspen occur on north- and east-facing aspects and more mesic sites. Primarily, USFS and BLM manage important summer and winter habitats. When deer populations are high, depredation complaints on growing alfalfa are common in GMU 55.

Important habitat issues include: 1) succession, and in some cases heavy livestock use, has caused a general decline in the health of aspen communities. Many stands have become decadent and/or are being replaced by conifers. Where the vigor and size of aspen communities can be improved, prescribed fire should be considered. 2) quality and quantity of winter habitat is considered to be limiting mule deer in this PMU. During the past 30 years, fire has altered much of the critical habitat in GMU 54. The loss of extensive bitterbrush stands on the Dry Creek, Sugarloaf, and Buckbrush Flat winter ranges is expected to have long-term negative effects on deer populations. While sagebrush is beginning to reestablish on some of these winter ranges, bitterbrush recovery has been slow or nonexistent. In GMU 55, the distribution and density of juniper has increased on some winter ranges, replacing important browse for wintering deer. Management should favor the reestablishment and long-term maintenance of shrubs on winter ranges. Bitterbrush plantings should be undertaken in areas where natural recovery is not evident. In some areas, carefully designed projects to remove junipers by burning or chaining may have long-term benefits for mule deer. 3) due to the open nature of the habitat and high road densities in some areas, habitat security for deer during hunting season is considered moderate, although some high security areas exist in all GMUs. Road densities are considered high in GMU 54 and moderate in GMU 55. Several motorized vehicle area closures have been implemented in GMU 54 to provide additional security habitat and non-motorized hunting opportunity. Additional motorized vehicle restrictions may be recommended to maintain quality-hunting opportunity and desired buck age structures in GMU 54.

There were no depredation complaints involving mule deer during the 2009-2011 reporting periods.

Biological Issues

Following the 1993 decline in deer numbers, trend area counts remained relatively low through 2003 and averaged 2,355 deer. Beginning in 2004, populations increased and from 2004-2007 trend area counts averaged 4,036 deer (Figure 9).

During the 2004 to 2013 winters, overwinter fawn survival ranged from 0.22 in 2009 to 0.85 in 2004 winter and averaged 0.61 (SE = 0.07, $n = 8$). Annual estimated survival of adult does averaged 0.93 from 2008-2013 (Figure 9).

Pre-winter composition data indicate a loss of reproductive performance in these deer herds prior to winter. In GMU 54, from 1974-1992, a pre-winter ratio averaged 83 fawns per 100 does compared to 55 fawns per 100 does from 2003-2012. The buck to doe ratio in the PMU is meeting the objective of 25 bucks per 100 does (Figure 9).

Inter-specific Issues

Elk, black bear, and bighorn sheep were eliminated from these GMUs during the late 1800s and early 1900s. Today, a relatively small elk population exists in GMUs 54 and 55. There are currently (2011) no competitive concerns with deer and elk. A small population of California bighorn sheep inhabits the northeast portion of the Sawtooth National Forest in GMU 54 but poses no concern with mule deer management.

Livestock have imposed the major forage demand throughout these GMUs for over a century. Currently, on public lands, livestock management is generally compatible with deer habitat management, although heavy livestock use in some localized areas has negative effects. In the past, conversion of large areas from native sagebrush/grass communities to crested wheatgrass seeding has had negative effects on deer habitat.

Predation Issues

Mountain lions, coyotes, and bobcats are potential predators on mule deer in PMU 8. Mountain lion populations increased markedly in these GMUs, presumably in response to the high deer populations in the late 1980s and early 1990s. Mountain lion harvest doubled, depredations on domestic sheep increased, and the frequency of reported mountain lion observations rose substantially. While the relationship between deer and mountain lions is unclear, mountain lions may have played a role in slowing the recovery in deer herds. There are recent indications from mountain lion hunters and researchers that mountain lion populations have declined, probably in response to the reduced mule deer prey base. Coyote numbers are believed to have increased in the past 30 years; however, they are subject to unregulated hunting and periodic control activities by USDA Wildlife Services. The effect, if any, of coyote predation on mule deer population dynamics is unknown.

Winter Feeding Issues

Supplemental winter feeding of deer has not occurred in the past few years and is not considered an important issue in this PMU.

Information Requirements

Periodic sightability surveys are needed to provide reliable data for population modeling and to monitor changes in winter distribution.

A better understanding of the relationship between road densities and buck survival during hunting season would improve our ability to make sound decisions about access and harvest management.

Mule Deer South Hills PMU 8 (GMUs 54, 55)

Management Objectives

	Short-Term Objective	Long-Term Objective
# of Deer	TBD	TBD
Pop. Goal	Increase	Increase
Hunter Days	>7,500	>10,000

Square Miles =	2,378	3-Year Averages	
% Public Land =	56%	Hunters per square mile =	1.27
Major Land Type =	Rangeland	Harvest per square mile =	0.49
		Success Rate =	38%



Population Status

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Deer		8,903								

Note: Estimates in red are based on information other than sightability surveys.

Population Parameters

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fawn:Doe	66	69	50	46	54	58	60	45	50	47
Buck:Doe	30	29	28	25	16	27	25	27	25	25
Fawn Survival	0.85	0.73	0.45	0.69	0.39	0.22	0.81	ND	0.67	0.65
Adult Doe Survival	ND	ND	ND	ND	0.93	0.89	0.98	0.98	0.88	0.91

Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does

Fawn Survival = overwinter fawn survival (December - May), Adult Doe Survival = annual survival (June - May)

Harvest Statistics

	Deer Harvest				
	Hunters	Hunter Days	Antlerless	Antlered	% 4+ Points
2003	846		47	479	33%
2004	1,852	8,248	109	622	43%
2005	1,457	5,963	97	887	41%
2006	1,757	8,366	184	886	48%
2007	2,006	9,600	205	1,058	49%
2008	2,896	14,492	181	933	47%
2009	2,845	14,382	259	870	49%
2010	2,897	13,382	302	904	44%
2011	3,098	14,852	289	821	46%
2012	2,973	13,947	356	863	48%
2013	3,014	14,052	340	809	51%

Note: Hunter numbers and hunter days prior to 2005 include white-tailed deer and mule deer hunters.

Previous Trend Area Surveys

GMU	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
54	1,745	1,678	1,217	1,306	1,314	1,133	2,018	2,027	ND	2,735
55	675	796	1,022	935	1,301	927	1,504	2,625	3,073	1,054

Note: ND = no survey data available

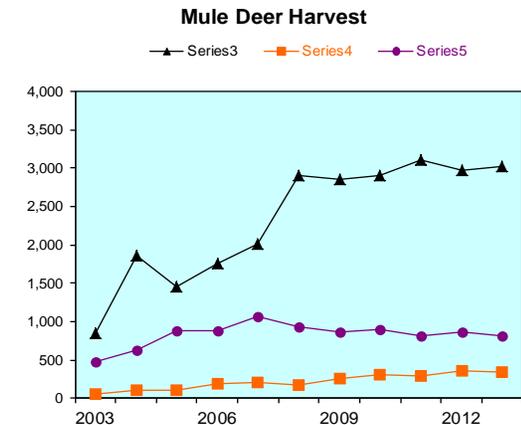
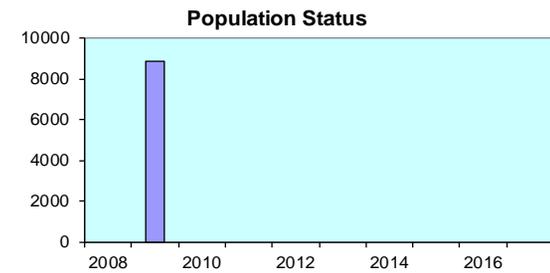


Figure 10. South Hills Mule Deer PMU Status and Objectives.

BANNOCK

PMU 9 (GMUs 56, 57, 70, 71, 73, 73A, 74, 75, 77, 78)

Management Objectives

Objectives for PMU 9 (Figure 11) include maintaining greater than 15 bucks:100 does post-season and a minimum of 40% 4+ points in the harvest.

Historical Perspective

The mule deer population in PMU 9 has fluctuated widely since the mid-1800s. Deer numbers probably declined through the early 1900s, possibly due to unregulated harvest. By 1920, observations of deer were quite rare. Between 1920 and the early 1970s, deer numbers increased dramatically, interrupted briefly by significant winter mortality. Following a significant decline in numbers beginning in 1972, numbers again increased until the late 1980s. The population level attained during this second peak probably did not reach that attained during the 1950s to early 1970s. Overall, mule deer numbers in these GMUs appear to be highly volatile with wide fluctuations over relatively short time periods.

Harvest management during the 1950s and 1960s was designed to maintain or reduce deer numbers in response to what was considered over-browsed winter ranges. Season frameworks in these GMUs (Appendix A) have varied considerably more than elsewhere in southeastern Idaho. General seasons have been the rule, except in GMU 56, which had controlled hunts from 1970-1981. Season lengths have varied from 3 days to 5 weeks. Either-sex opportunity has ranged from none to extra antlerless-only tags available in 1989 and 1990 for GMUs 70, 73, and 73A. Following the winter of 1992-1993, when significant winter mortality occurred, harvest management has been conservative.

Research in the mid-1980s found very low survival of bucks in GMU 73. A two-point only regulation, with short periods of any buck hunting, was enacted there in 1997 after the buck:doe ratio fell below 10:100. Hunter numbers decreased for several years, proportions of older bucks increased somewhat, until harvest of older bucks returned to earlier levels. In 2004, a four-point or greater regulation was enacted in GMUs 70 and 73 in response to public suggestions. The four-point or greater regulation was still in place for GMUs 70 and 73 for the 2007 season and reached a buck:doe ratio of 32:100. However, the four-point restriction was removed in 2008 for GMU 70 and in 2009 for GMU 73 as public support and data did not support continuing with antler restricted season structure. Both GMUs 70 and 73 have remained in controlled hunts with 175 available permits in GMU 70 and unlimited permits available in GMU 73.

In 2008, a 200 permit antlered only controlled hunt was placed in GMU 78, in response to the objective in the 2008-2017 Mule Deer Management Plan to provide quality hunt opportunities in each region.

Major wintering areas in the Bannock PMU are: Pauline (GMU 70), Lead Draw to Walker Creek (GMU 70), Elkhorn Mountain (GMU 73), Malad Face (GMU 73), Samaria Mountain (GMU 73), Hansel Mountains (GMU 73), Rockland Valley (GMU 73A), Knox Canyon (GMU 73A), Juniper (GMU 56), the Hagler Canyon complex (GMU 56), and Sweetzer Pass (GMU 56),

Eightmile (GMU 57), Blackrock Canyon (GMU 71), Portneuf Winter Range (GMU 71), the west facing slopes east of Downey (GMU 74), Hadley Canyon complex (GMU 74), Densmore Creek (GMU 74), and Treasureton (GMU 74), West Bear Lake (GMU 78), Grace Front (GMU 75), and the Oneida Narrows Complex (GMU 77).

Habitat Issues

This PMU represents the least productive habitats in southeastern Idaho. Low productivity habitats combined with variable winter conditions undoubtedly cause mule deer numbers to vary considerably over time. Three main vegetation types predominate: sagebrush-grassland, aspen, and conifer. Other variations of these 3 main types that are important to deer include mixed shrub communities, Utah juniper, and curlleaf mahogany. The current mix of vegetation cover types is a result of intensive grazing by livestock during the early 1900s and ongoing fire suppression efforts. These factors converted what was predominately perennial grass stands into shrublands with depleted or sparse understories. Given that current livestock grazing practices are much more conservative and designed to promote grass, and that the current shrublands are aging, it is believed that the quality of mule deer habitat probably peaked earlier in the twentieth century. The current conversion of aspen to conifer and replacement of mixed shrub and sagebrush communities by juniper probably will reduce habitat suitability for mule deer.

Approximately 41% of the land in PMU 9 is publicly owned. BLM and USFS administer the majority of public land. Fort Hall Indian Reservation makes up approximately 7%, while the remaining 52% is private. Private land is predominately used for rangeland pasture, small grains, and hay production. A substantial amount of private land has been enrolled in the Conservation Reserve Program (CRP). Depredation complaints are generally limited to periods of high deer populations. Predominant land uses of the publicly owned ground include livestock grazing, timber management, and recreation. Of particular concern is the encroachment of human activity, either intense recreational efforts and/or structural developments, in mule deer winter range. Developments from the west side of Pocatello south to Walker Creek in GMU 70 have reduced the potential wintering area for deer. Development along the Portneuf, Hadley Canyon complex, Treasureton, Bear River Valley of GMU 77 and along the West Bear Lake winter range in GMU 78 will undoubtedly reduce the potential for wintering greater numbers of deer.

Open habitat types combined with moderate to high road densities and, in some areas unrestricted ATV travel result in a greater vulnerability of mule deer in this PMU. Use of motorized vehicles for hunting is prohibited in some, but not all GMUs. Other than hunting, motorized travel on the Caribou National Forest within this area is restricted to designated routes during the snow-free period of the year with the specific purpose of reducing impacts to wildlife habitat and reducing wildlife disturbance.

Biological Issues

Recruitment rates, as evidenced by December/January fawn:doe ratios, have ranged from 50 to 75:100 over the past few winters. It is expected that 66 fawns:100 does is adequate to maintain populations with normal winter mortality, while increased recruitment is necessary for population growth. Conversely, recruitment rates less than 66:100 are generally consistent with stable to declining populations.

The winter of 2010-2011 was severe in portions of the Bannock PMU. Overall, doe mortality was 27% in the PMU. Snow depths exceeded 30 inches in GMU 78 and fawn survival was estimated to be extremely low. That loss in deer will likely be reflected in the harvest for several years. Conversely, the subsequent winters in 2011-2012, 2012-2013, and 2013-2014 were extremely mild with a low adult doe mortality rate of 6%, 9%, and 8% respectively. The low overall doe mortality coupled with minimal snow depths is expected to result in higher than average fawn survival.

Inter-specific Issues

Although livestock graze much of the mule deer range in this PMU, interactions of concern are relatively few and tend to be limited to localized areas. Of primary concern are livestock winter feedlot operations that concentrate deer during winter. Of minor concern are a few localized areas (riparian and winter range) of intense livestock pressure.

The current trend of elk occupying mule deer winter range is a potential concern. Some winter range in this PMU do not lend themselves to niche separation by the two species and, therefore, either direct resource competition and/or social intolerance will likely impact mule deer numbers. The Department will seek opportunities to minimize the occupancy by elk in key mule deer winter ranges.

Residential, recreational, and associated development has impacted available deer winter ranges, particularly in GMU 70 and 78. These impacts have likely had direct effects on numbers of deer and will be impossible to mitigate. Continued growth of human populations will necessitate the acknowledgment of impacts to wildlife habitat and populations.

Predation Issues

Major predators of mule deer in this PMU include mountain lions, coyotes, and bobcats. Mountain lion and coyote populations may have increased during the last 30 years. It is unknown specifically what impact these changing predator systems are having on mule deer population dynamics, although a multi-year investigation of the impact of manipulating predator populations indicated small affects.

Winter Feeding Issues

Emergency supplemental feeding of deer occurs periodically; however, these GMUs generally have milder winter conditions than elsewhere in southeastern Idaho. In many cases, emergency feeding is initiated after deer have been attracted to cattle feedlot operations or private citizens began feeding deer early in winter. Both of these circumstances could short-stop deer from reaching more suitable winter range and generally result in high over-winter mortality rates. The Department, working in conjunction with the Winter Feeding Advisory Committee, will discourage livestock operators and other private citizens from encouraging deer use of non-traditional food sources.

Mule deer were provided supplemental winter-feed at a Department-sanctioned, Commission-approved feed site east of Stone (GMU 56) during 12 of 15 winters during 1974-1988. An

estimated 500-1,400 deer were fed annually. The feeding was initiated following the construction of Interstate 84 that blocked the traditional migration of deer from GMU 56 to winter ranges on the south end of Black Pine Mountain (GMU 57) and the east end of the Raft River range in Utah. In the early 1950s, it was estimated that more than 4,000 deer from GMU 56 made the migration. During the open winters associated with the prolonged drought of the late 1980s, deer did not concentrate near the state line for several consecutive years, and the feeding operation was permanently closed down. GMU 56 will be managed for the number of deer that can be supported on winter ranges without an annual winter-feeding effort.

Private citizens, with and without Department assistance, have provided supplemental winter feed for approximately 500 deer in several areas in GMU 73 intermittently.

During winter 2010-2011 emergency winter feeding was conducted in GMU 78. We had as many as 12 feed sites in the GMU and were feeding over 2000 deer. Volunteers fed all these deer, but with snow depths exceeding 30 inches it was difficult for deer to move. Doe survival was low at 73% and fawn survival, though not specifically measured, was very low. Although the 2012-2013 winter was mild, one emergency winter feed site was established in GMU 70 in the area of the Charlotte Fire in southeast Pocatello.

Information Requirements

The Department will explore various means of better quantifying over-winter mortality so that harvest recommendations are more responsive to changing populations.

Recent observed recruitment rates are consistent with either stable or slightly declining populations. A better understanding of factors affecting recruitment rates is needed.

Although habitat succession and change are occurring, it is unknown what specific impacts will occur to deer populations. Furthermore, it is unknown whether the aging of current mule deer habitat leads to ultimately less productive and nutritious vegetation.

The population estimate for the PMU is essential to complete in order to provide a base line for the predictive models that are being built to help reduce our reliance on aerial survey data.

We need to initiate research to document the effect of doe harvest on population productivity, age structure of the population, and that effect on population size. The southeast region has had the most limited antlerless harvest and also has some of the lowest fawn:doe ratios and has seen the lowest increases since the winter of 1992-93. This research would help improve our baseline knowledge of antlerless harvest and allow us to better manage mule deer populations for increased productivity.

Mule Deer Bannock PMU 9 (GMUs 56, 57, 70, 71, 73, 73A, 74, 75, 77, 78)



Management Objectives

	Short-Term Objective	Long-Term Objective
# of Deer	TBD	TBD
Pop. Goal	Increase	Increase
Hunter Days	>35,000	>50,000

Square Miles =	5,470	3-Year Averages	
% Public Land =	48%	Hunters per square mile =	1.94
Major Land Type =	Rangeland/Forest	Harvest per square mile =	0.56
		Success Rate =	29%

Population Status

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Deer										

Note: Estimates in red are based on information other than sightability surveys.

Population Parameters

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fawn:Doe	44	58	56	49	54	59	54	56	61	76
Buck:Doe	11	14	17	14	11	15	19	25	23	23
Fawn Survival	0.50	0.73	ND	0.76	0.29	0.38	0.55	ND	ND	ND
Adult Doe Survival	ND	ND	ND	1.00	0.94	0.83	0.73	0.94	0.91	0.92

Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does

Fawn Survival = overwinter fawn survival (December - May), Adult Doe Survival = annual survival (June - May)

Harvest Statistics

	Deer Harvest				
	Hunters	Hunter Days	Antlerless	Antlered	% 4+ Points
2003	10,080	36,303	41	2,332	29%
2004	11,343	2,104	38	2,060	35%
2005	10,525	43,199	23	2,521	43%
2006	10,458	42,556	69	2,678	45%
2007	8,901	34,069	123	3,317	41%
2008	11,278	49,871	177	2,466	46%
2009	10,651	45,392	574	1,969	40%
2010	10,361	42,421	537	2,459	40%
2011	10,147	41,213	423	2,005	44%
2012	10,025	40,840	552	2,822	43%
2013	11,682	48,628	646	2,773	42%

Note: Hunter numbers and hunter days prior to 2005 include white-tailed deer and mule deer hunters.

Previous Trend Area Surveys

GMU	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
56	ND	ND	ND	1,710	1,133	700	1,101	1,357	ND	1,773
71	ND	ND	1,118	920	889	840	697	731	479	ND
73	ND	ND	1,865	3,009	1,510	1,880	2,130	3,169	1,943	ND
73A	ND	ND	1,533	2,100	2,016	1,734	1,121	1,168	1,852	ND
78	ND	ND	1,707	3,150	1,405	1,449	2,852	2,368	1,689	ND

Note: ND = no survey data available

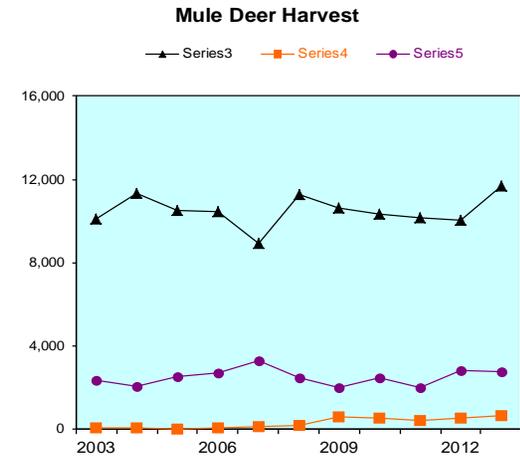
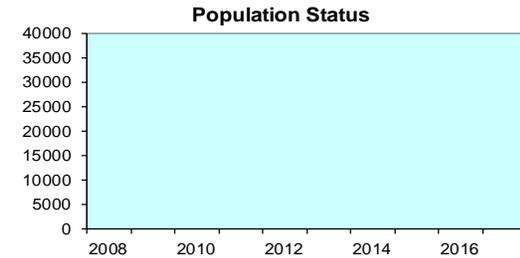


Figure 11. Bannock Mule Deer PMU Status and Objectives.

CARIBOU

PMU 10 (GMUs 66, 66A, 69, 72, 76)

Management Objectives

Deer populations in PMU 10 (Figure 12) will be managed to maintain or exceed 15 bucks:100 does post-season, and a minimum of 30% 4+ points in the harvest.

Historical Perspective

The mule deer population in PMU 10 has fluctuated widely since the mid-1800s. Osborne Russell (1914) did not mention mule deer in this area in the 1840s. Since he liked to hunt deer and noted the presence of other big game in the general area, it is likely deer were not common. Early homesteaders and trappers reported that deer were seen but were less numerous than buffalo, bighorn sheep, and elk. Deer numbers probably declined through the early 1900s, possibly due to unregulated harvest. By 1920, observations of deer were quite rare. Between 1920 and the early 1970s, deer numbers increased dramatically, interrupted briefly by significant winter mortality. Following a significant decline in numbers beginning in 1972, numbers again increased until the late 1980s. The population level attained during this second peak probably did not reach that attained during the 1950s - early 1970s.

Harvest management during the 1950s and 1960s was designed to reduce deer numbers in response to what was considered over-browsed winter ranges. Long general seasons with opportunity for extra deer tags predominated. Following the decline in the early 1970s, harvest management became more conservative with 2-4 week general seasons with varying amounts of either-sex opportunity offered. By the late 1980s, the deer population had increased to a point that a population reduction was desired. The years 1989 and 1990 were marked by four-week general either-sex seasons with extra deer tags available. The population then declined again following a severe winter in 1992-1993. Recently, the population has not recovered to the level of the long-term average. Hunting seasons over the years have been adjusted in an attempt to respond to obvious fluctuations in the population. GMUs 66 and 69 have supported one of the longest running late-season controlled buck hunts in the state (Appendix A). Permits for this hunt have extremely high appeal, but permit numbers have been reduced from a high of 200 permits in the 1980s to only 10 permits in 2005.

An apparent change in the winter distribution of mule deer has occurred, primarily in GMU 76. During the 1950s and 1960s, deer use of the Soda Front (Wood Canyon south to Montpelier) was extensive, while use of the Bear Lake Plateau and the Soda Hills (GMU 72) was minimal. Currently, the Bear Lake Plateau and the Soda Hills represent the two most significant winter ranges for mule deer in GMU 76.

Major wintering areas in this PMU are: Soda Hills (GMU 72), Bear Lake Plateau (GMU 76) and the Tex Creek Winter Range (GMU 69). An unknown number of deer migrate to and winter in Wyoming and Utah.

Habitat Issues

PMU 10 represents the most productive habitats for mule deer in southeastern Idaho. Three main vegetation types predominate: sagebrush-grassland, aspen, and conifer. Other variations of these three main types that are important to deer include mixed brush communities, juniper, and mahogany. The current mix of vegetation cover types is a result of intensive grazing by livestock during the early 1900s and ongoing fire suppression efforts. These factors converted what was predominately perennial grass stands into shrublands. Given that current livestock grazing practices are much more conservative and designed to promote grass, and that current shrublands are aging, it is logical that quality mule deer habitat probably peaked earlier in the twentieth century. Additionally, the current conversion of aspen to conifer and replacement of mixed shrub and sagebrush communities by juniper probably will reduce habitat suitability for mule deer.

The USFS owns approximately 54% of the land in this PMU. The remaining 46% of private ground is predominately used for rangeland pasture, small grains, and hay production. Approximately 250 square miles of the area is Fort Hall Indian Reservation land. A significant portion of private land is now enrolled in CRP. When CRP was new, it was contributing substantially to the area's carrying capacity for deer during all seasons. Since the early 1990s, CRP has become a decadent monoculture of grass and is very undesirable deer habitat. Aspen communities provide valuable fawning habitat for mule deer and have declined in area and quality throughout the PMU. The Tex Creek WMA, partially owned and totally managed by the Department, provides 30,000 acres of prime winter habitat for mule deer, elk, and moose. This land was purchased to mitigate for habitat inundated or destroyed by Ririe, Palisades, and Teton dams.

Depredation complaints are generally limited to periods of high deer populations. Predominant land uses of the publicly-owned lands include livestock grazing, timber management, recreation, and phosphate mining. Of particular concern is the encroachment of human activity, either intense recreational efforts (i.e., over-snow machine travel) and/or structural developments, in mule deer winter range.

Open habitat types combined with moderate road densities, and in some cases unrestricted ATV travel, probably result in a greater vulnerability standard for mule deer in this PMU.

Biological Issues

Recruitment rates, as evidenced by December/January fawn:doe ratios, have ranged from 54 to 66:100 over the past 5 years. It is expected that 66 fawns:100 does is adequate to maintain populations with normal winter mortality, while increased recruitment is necessary for population growth. Conversely, recruitment rates less than 66:100 are generally consistent with stable to declining populations.

A trend count flown in late 2003 in GMUs 66, 66A, and 69 resulted in an estimate of 2,475 total deer, which is well below the 3,340 estimated on the 1999 survey and the antlerless harvest threshold of 3,000. The trend area was flown again in 2005 resulting in an estimate of 1,532 total deer. This downward trend was of great concern. A survey was conducted in 2007 and a total of 3,110 deer were estimated. In the late winter of 2010 the PMU was sightability surveyed

and 24,302 was the total estimated deer population. This is the first survey of the entire area and gave us a good baseline of information. This survey was repeated in the late winter 2013 where the total mule deer estimate was 21,585. The previous survey in 2010 was followed by a severe winter where mule deer mortality rates were high which likely explains some of the decline estimated in this most recent survey.

The winter of 2010-2011 was extremely tough on mule deer in the Caribou PMU with colder than normal temperature and deep snow measuring over 30 inches deep on the flat in Bear Lake County. Fawn survival was not measured but was estimated to be very low. Adult doe survival was the lowest measured ever in the state at 64%. Winter feeding sites were distributed in GMU 76 in Bear Lake County. This caused a decline in the mule deer population throughout the PMU. Conversely, the 2011-2012, 2012-2013, and 2013-2014 winter was mild where overall adult doe survival was measured at 100%, 96%, and 100% respectively. The extremely high adult doe survival coupled with minimal snow depths is expected to result in higher than average fawn survival.

In 2013, both antlered harvest (1,916) and hunter numbers (8,946) reached the second highest totals that have been seen within the PMU over the last 10 years.

Inter-specific Issues

Although livestock graze much of the mule deer range in this PMU, interactions of concern are relatively few and tend to be limited to localized areas. Of primary concern are livestock winter feedlot operations that over-concentrate deer during winter. Of concern are a few localized areas (riparian and winter range) of intense livestock pressure, particularly in GMUs 66, 66A, and 69.

Of greater concern than livestock interactions is the current trend of elk occupying mule deer winter range. Some winter ranges in this PMU do not lend themselves to niche separation by the two species and, therefore, either direct resource competition and/or social intolerance will likely impact mule deer numbers. During 2005 the deer population in GMU 66, 66A, and 69 declined to an all-time low of 1,532 estimated deer as the elk population increased to 5,200. A graduate student recently completed his graduate project on elk/mule deer competition and found that deer and elk competition varied between moderate and severe winters. During moderate winters deer did show increased stress hormones and increased spatial separation from elk, but during severe winters showed decreased stress hormone levels and decreased spatial separation (Atwood 2008). Over the past decade we have witnessed increases in elk numbers on the Soda Hills winter range, and are continuing to monitor changes in deer and elk populations in that area.

Predation Issues

Potentially major predators of mule deer in this PMU include black bears, mountain lions, coyotes, and bobcats. The black bear population is low, but appears to be increasing. Mountain lion and coyote populations are believed to have increased during the last 30 years. Reports of wolves in the PMU are not uncommon, but no established packs are present at this time. It is unknown specifically what impact these changing predator systems are having on mule deer population dynamics.

Winter Feeding Issues

Emergency supplemental feeding of deer occurs approximately every three years. Primary areas include Soda Springs, Georgetown Canyon, Montpelier Canyon, the east shore of Bear Lake and St. Charles Canyon. Deer are fed by interested citizens every year in some areas. In many cases, emergency feeding is initiated after deer have been attracted to cattle feedlot operations or private citizens began feeding deer early in winter. Both of these circumstances could short-stop deer from reaching more suitable winter range and generally result in high over-winter mortality rates. The Department, working in conjunction with the Winter Feeding Advisory Committee, will discourage livestock operators and other private citizens from encouraging deer use of non-traditional food sources.

During the winter of 2010-2011 emergency winter feeding took place in GMU 76 in Bear lake County. A half dozen volunteer feed sites operated for over 2 months. In the valley we used over 150 tons of deer pellets during the operation. Conversely, no emergency winter feeding took place during the 2011-2012 or 2012-2013 winters in the Caribou PMU.

Information Requirements

We have now finished both the baseline sightability survey for PMU 10 as described in the 2008 Mule Deer Management Plan as well as the most recent 2013 survey. We will continue to need composition and survival data for fawns and does.

Harvest information is also important data that we need to continue collecting and enhance the timeliness and the reporting percentage if possible. Harvest information is used for setting seasons on an annual basis. The quality of that data is very important.

We need to start research to assess buck vulnerability. This would help us to better manage seasons and maintain buck:doe ratios within the objectives. This information would help us to better manage mule deer and specifically the buck component of the population.

Many regions manage antlerless mule deer as part of their regular harvest by both youth either sex or controlled permit hunting. We need to initiate research to document the effect of doe harvest on population productivity, age structure of the population, and that effect on population size. The southeast region has had the most limited antlerless harvest and also has some of the lowest fawn:doe ratios and has seen the lowest increases since the winter of 1992-93. This research would help improve our baseline knowledge of antlerless harvest and allow us to better manage mule deer populations for increased productivity.

Literature Cited

Atwood, P. 2009. Interactions between mule deer and elk on winter range at the Tex Creek Wildlife Management Area, Idaho. Masters Thesis, Idaho State University.

Russell, O. 1914. Journal of a Trapper, 1834-1843. Syms-York, Boise, Idaho.

Mule Deer Caribou PMU 10 (GMUs 66, 66A, 69, 72, 76)

Management Objectives

	Short-Term Objective	Long-Term Objective
# of Deer	TBD	TBD
Pop. Goal	Increase	Increase
Hunter Days	>40,000	>50,000

Square Miles =	3,875	3-Year Averages	
% Public Land =	56%	Hunters per square mile =	2.20
Major Land Type =	Rangeland/Forest	Harvest per square mile =	0.47
		Success Rate =	21%



Population Status

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Deer		24,302				21,725				

Note: Estimates in red are based on information other than sightability surveys.

Population Parameters

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fawn:Doe	52	66	59	60	62	64				
Buck:Doe	13	17	13	9	9	12				
Fawn Survival	0.56	0.56	0.36	0.84	0.22	0.32	0.62			
Adult Doe Survival	ND	ND	ND	0.86	0.90	0.89	0.64			

Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does

Fawn Survival = overwinter fawn survival (December - May), Adult Doe Survival = annual survival (June - May)

Harvest Statistics

	Hunters	Hunter Days	Deer Harvest		
			Antlerless	Antlered	% 4+ Points
2003	7,329	28,505	131	1,361	25%
2004	8,738	41,685	125	1,361	30%
2005	8,629	42,593	31	1,694	33%
2006	8,703	43,859	73	1,771	38%
2007	6,689	33,010	134	2,571	27%
2008	9,441	51,870	150	1,554	31%
2009	8,483	42,883	200	1,401	30%
2010	8,510	39,480	399	1,703	33%
2011	8,583	43,118	274	858	39%
2012	8,017	38,290	382	1,585	40%
2013	8,946	42,608	432	1,916	30%

Note: Hunter numbers and hunter days prior to 2005 include white-tailed deer and mule deer hunters.

Previous Trend Area Surveys

GMU	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
69	ND	3,508	ND	2,331	2,730	2,475	ND	1,532	ND	3,110
72	ND	1,826	2,378	4,576	2,877	1,124	1,801	2,552	2,016	ND
76	ND	3,427	3,467	5,106	2,378	2,766	ND	3,531	3,363	ND

Note: ND = no survey data available

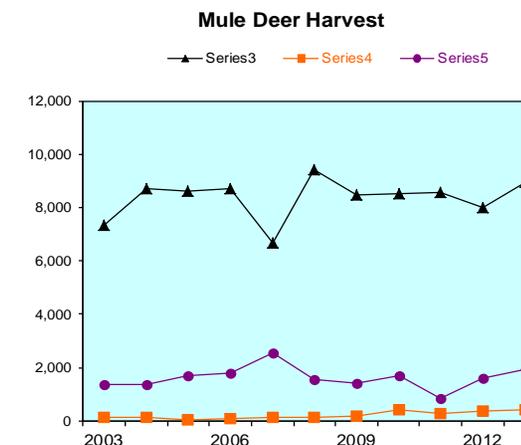
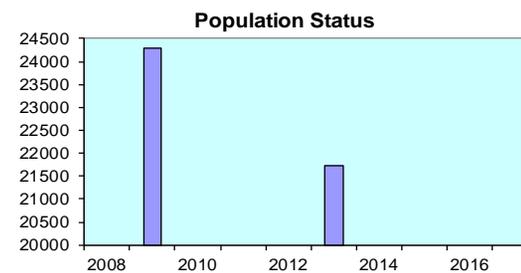


Figure 12. Caribou Mule Deer PMU Status and Objectives.

PALISADES

PMU 11 (GMUs 64, 65, 67)

Management Objectives

Objectives for Palisades (PMU 11, Figure 13) are to maintain a minimum of 15 bucks:100 does in post-season surveys and maintain a minimum of 30% 4+point and larger bucks in the general season harvest. Maintaining this population at a level where it does not cause depredations and require winter-feeding, particularly in Swan Valley and GMU 65, is an ongoing priority. The sightability survey conducted in February 2010 estimated 5,182 mule deer in this PMU.

Historical Perspective

Old records of mule deer in this PMU are sketchy and inconclusive; however, it is probable that they have always been present in unknown density. Early homesteaders reported that deer were scarce. Mule deer populations throughout the region increased in the 1940s and 1950s and remained high through the 1980s. Severe winters in 1988-1989 and 1992-1993 probably took much of the recruitment for those years. The population has rebounded to levels at or above the long-term average. A liberal general season extending 10 days into November was offered in these GMUs until 1990. The recent philosophy has been to move seasons (Appendix A) into October to reduce vulnerability of adult males during the rut. This has been successful in reducing deer harvest and also hunter satisfaction. This PMU offers most of what little backcountry hunting opportunity remains in southeast Idaho.

Habitat Issues

Abundant spring, summer, and fall habitat exists in this area but winter range is limited. Winter range has been lost to agriculture and is currently threatened by home site development. Opportunities to preserve or enhance winter range will be pursued. Winter range on slopes in the vicinity of the mouth of Rainey Creek appears to have suffered from years of overgrazing by elk and mule deer. The area between Table Rock Canyon and Kelly Canyon currently winters high concentrations of mule deer. Mature mountain mahogany stands throughout the PMU may be providing only limited forage in addition to precluding all but a sparse understory of other species. Some bench areas in the Black Canyon to Wolverine Canyon stretch appear to be converting from shrub-dominated to grass-dominated or a conifer community. Most winter range in Swan Valley has been lost to agriculture, brush removal, or development.

Biological Issues

Mule deer in PMU 11 are currently meeting management objectives, including those required to allow general antlerless harvest. Populations were at or near all-time highs prior to the severe 1988-1989 and 1992-1993 winters. Following a decline of unmeasured magnitude, they have recovered to at or above long-term average levels. Distribution has changed, particularly at Rainey Creek, where it was common to feed up to 500 deer through the 1987-1988 winter. Recently, there have been fewer than 200 fed at this location. Strategies designed to increase wintering elk in some parts of the area to offset elimination of the Rainey Creek feed-site will need to be carefully monitored to protect existing mule deer populations. Snowmobile activity may be precluding the use of traditional winter range in the Canyon Creek area.

Management objectives for this PMU are to maintain a minimum of 15 bucks:100 does post-season and 30% ≥ 4 points in the buck harvest. A December 2011 composition survey resulted in an estimate of 23 bucks:100 does. The high buck ratio may have been influenced by the late rutting activity that was observed in mid-December through mid-January. There were large bucks in the doe/fawn groups that were observed during the survey. The high doe mortality the previous winter may also have contributed to the ratio if the bucks did not succumb to winter mortality at a similar rate. The percent ≥ 4 points in the buck harvest from 2003-2013 averaged 47% annually. A trend count in 2006 resulted in an estimate of 2,911 total deer, which far exceeds the antlerless harvest threshold of 1,500 total deer. A complete sightability survey in 2010 generated an estimate of 5,182 deer.

Although the Heise trend area population within this PMU is meeting objectives and appears to be performing very well, the loss of winter range in Swan Valley outside of the trend area has most likely resulted in a one-third overall reduction of the mule deer population in this PMU. Peripheral populations like these need to be monitored to determine the overall status of mule deer in the area.

The Heise winter range in GMU 67 has been the site of an annual winter fawn mortality study since 1998. From 2000-2010 fawn mortality has averaged 55% annually with a high of 92% in 2008 and a low of 8% in 2003. This data reflects the extreme variation in winter conditions on the Heise winter range. Doe survival averaged 90% annually between 2006 and 2010. We did not radio collar and monitor fawns after the winter of 2010 so there is not a survival estimate through May 2012. We did continue to monitor does and their 71% survival rate estimate through May 2011 was the lowest we have recorded there since we started monitoring doe survival in 2006. The effects of the long, harsh winter are evident in this low survival rate. We assumed from the doe survival rate and other rates in the region that the fawns also had a very low survival rate in this DAU. The low survival rate of does in this area prompted us to reduce harvest opportunity in this DAU in 2011, that opportunity was reinstated following 2 mild to moderate winters.

Inter-specific Issues

In addition to mule deer, this PMU supports an elk population and numerous moose. Domestic livestock extensively grazes portions of it. Inter-specific relationships are not monitored and are poorly understood. If the elk population is not carefully managed, conflicts with deer on winter range could develop. During the winter of 2010-2011, we did observe approximately 100 elk using the Heise mule deer winter range where we normally do not observe elk.

Predation Issues

There are no known unique or unusual predator issues affecting mule deer populations in this PMU.

Winter Feeding Issues

Mule deer have been fed during severe winters on an emergency basis below the Palisades Bench, near Heise, and in Canyon Creek. They were fed on a regular basis at the mouth of Rainey Creek along with elk. The elimination of feeding elk at that site has also resulted in the

end of deer feeding. With new and planned home site developments occurring in Swan Valley, new residents will be tempted to bait or feed deer and elk. All such efforts will be discouraged.

Information Requirements

Survey protocol was revised beginning in 2000-2001 and again in 2007-2008. Future plans include the continuation of composition and complete surveys utilizing sightability methodology, as specified by the current mule deer management plan.

Mule Deer Palisades PMU 11 (GMUs 64, 65, 67)



Management Objectives

	Short-Term Objective	Long-Term Objective
# of Deer	TBD	TBD
Pop. Goal	Maintain	Increase
Hunter Days	>7,500	>9,000

		3-Year Averages
Square Miles =	994	Hunters per square mile = 1.48
% Public Land =	52%	Harvest per square mile = 0.19
Major Land Type =	Rangeland/Forest	Success Rate = 13%

Population Status

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Deer										

Note: Estimates in red are based on information other than sightability surveys.

Population Parameters

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fawn:Doe	96	ND	83	ND	67	88	83	65		
Buck:Doe	33	ND	39	ND	21	28	32	43		
Fawn Survival	0.54	0.68	0.16	0.64	0.08	0.52	0.75			
Adult Doe Survival	ND	ND	0.93	0.95	0.88	0.85	0.88	0.71		

Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does

Fawn Survival = overwinter fawn survival (December - May), Adult Doe Survival = annual survival (June - May)

Harvest Statistics

	Deer Harvest				
	Hunters	Hunter Days	Antlerless	Antlered	% 4+ Points
2003	1,496	5,429	64	212	47%
2004	2,206	10,406	70	206	45%
2005	1,757	8,323	123	313	46%
2006	1,796	8,408	107	226	45%
2007	1,509	6,746	96	433	47%
2008	2,010	11,114	60	156	43%
2009	1,744	8,104	38	149	43%
2010	1,893	8,762	65	250	49%
2011	1,456	6,129	27	82	51%
2012	1,394	6,322	28	141	56%
2013	1,551	7,220	68	233	46%

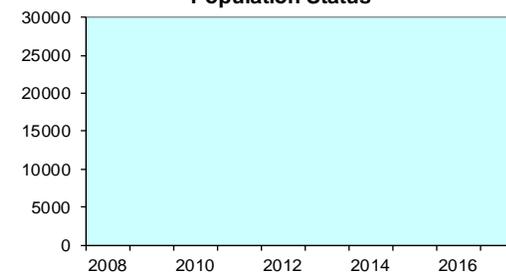
Note: Hunter numbers and hunter days prior to 2005 include white-tailed deer and mule deer hunters.

Previous Trend Area Surveys

GMU	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
67	1,777	ND	ND	1,542	2,252	ND	2,503	ND	2,911	ND

Note: ND = no survey data available

Population Status



Mule Deer Harvest

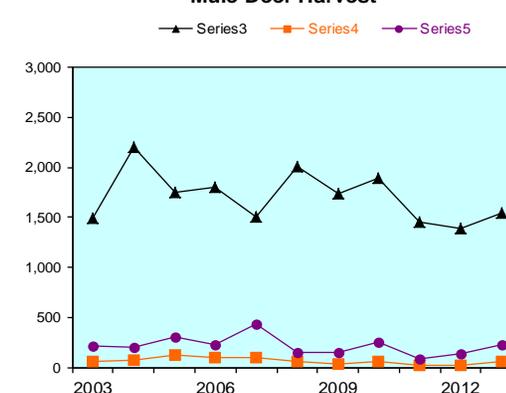


Figure 13. Palisades Mule Deer PMU Status and Objectives.

ISLAND PARK

PMU 12 (GMUs 60, 60A, 61, 62, 62A)

Management Objectives

Objectives for Island Park (PMU 12, Figure 14) are to maintain a minimum of 15 bucks:100 does in post-season surveys and maintain at least 30% 4+ bucks in the general season harvest. Conservative antlerless hunting opportunity in general hunts has limited management options. Controlled hunts have thus far influenced this population only slightly.

Historical Perspective

Since the early to mid-1980s, raw counts on Sand Creek winter range (GMU 60A) indicate that deer populations have at least doubled, steadily increasing from just over 1,300 deer in 1984 to 3,000 or more in 1996, 1997, and 2000. This population has historically been very susceptible to hard winters but is very productive and rebounds quickly. Populations have been built rapidly during periods without severe winter conditions only to crash with the next hard winter. Historically, these population reductions have occurred about every 4-6 years. The winter of 2001-2001 resulted in significant mortality. Due to this, populations were down from the high levels of the late 1990s to an estimate of 1,492 deer in 2003, but in 2004, they had already rebounded to 2,123. The winter of 2007-2008 had average to above average snow conditions. On the Sand Creek winter range, radio-collared fawns had a 55% mortality rate and does had a 10% mortality rate. In February 2008 a complete sightability survey was flown and generated an estimate of 2,397 mule deer (90% bound = 120). The winter of 2010-2011 was long and once again we saw low survival rates in this PMU for fawns (11%) and does (74%). A sightability survey was scheduled for February 2012 to generate the next population estimate. This survey did not happen because of mild weather conditions. We flew a complete survey of the Island Park PMU in 2014, the population estimate was 5,644. The Island Park estimate was 3,826, a 60% increase over the 2008 survey. Conversely, the Teton Canyon estimate was 1,818, a significant decrease from the 2008 estimate of 2,827.

Deer that winter on the Sand Creek winter range summer throughout GMUs 60, 61, 62A, and into Wyoming and Montana, resulting in a low deer density. Consequently, hunting pressure in these GMUs is low and dispersed. The only time hunting pressure is significant on this population is when early snow forces deer down onto their high-desert winter range during the general hunt. The best winter range in GMU 62 was first inundated by the Teton Dam and then more was destroyed by its failure. However, the Teton Canyon is still the most important winter range in GMU 62.

Habitat Issues

The gentle topography lodgepole pine communities of the Island Park caldera and the moderate to steeply-sloped Centennial Mountain Range with lodgepole pine and Douglas-fir communities dominate most deer summer range for this group of GMUs. Most of this summer range occurs on lands administered by USFS.

Winter range is extremely limited for this deer herd. Sand Creek winter range supports a vegetative complex typical of high-desert shrub-steppe dominated by sagebrush. Bitterbrush and

chokecherry are prominent on areas of stabilized sand; Rocky Mountain juniper is locally abundant. Land ownership consists of a checkerboard of state, BLM, and private property.

A 10,000-acre captive elk operation on Siddoway property has fenced off the majority of the South Juniper Hills and portions of the Big Grassy area. Much of this fenced-in property is historic mule deer winter range and is now unavailable to deer. No severe die-off occurred in response to the fence, but long-term effects remain to be seen. In addition, new developments being built in 2008 near the sand dunes are further limiting mule deer migration to the winter range.

A major habitat concern for this winter range is the continual loss of intact sagebrush stands throughout the area, particularly in the southern and western portions of the winter range. Efforts should be made to try and maintain as much of the sagebrush habitat in the southwest portion of the area as possible.

Biological Issues

Winter deer populations have been very high in GMU 60A. In the late 1990s, populations of 3,000-4,500 deer are the highest levels documented for this herd and are over double the antlerless harvest threshold of 1,500 total deer. The absence of a severe winter over nearly a decade during that time undoubtedly contributed to this increase.

Radio-collar information from 2007 to 2010 has confirmed that the majority of the mule deer in Teton Canyon summer in Wyoming. This confounds management because the deer often do not enter Idaho until after normal hunting seasons. Periodic severe winters may keep this population below a level where they cause depredations in winter or where people are providing them food. However, if additional population control is necessary, it may require cooperative management with Wyoming.

Trend counts in the Teton River Canyon fluctuate based on severity of winter. The winter of 2007-2008 had average to above average snow accumulation. The extremely harsh snow conditions around Teton Canyon forced almost all the mule deer to winter in the canyon or on the adjacent rim if accessible.

In 2001, the Sand Creek trend area was flown as a green-up survey in late March. This green-up timed survey was a departure from historical counts that were conducted while deer were on winter range. The 2001 trend count resulted in an estimate of 1,332 deer, down from the 2,866 estimated the previous winter. It is believed that the 2001 estimate was not an accurate reflection of the status of this population, but an artifact of the timing of this survey. Deer were already widely dispersed and a significant component of the population was undoubtedly not accounted for on this survey. More recent surveys have been conducted when deer are still on winter range.

Recruitment data for this trend area indicate the productive nature of this herd. Since 2001, the fawn:doe ratio for the area has averaged 80 fawns per 100 does. The 2012 survey revealed a ratio of 70 fawns per 100 does. The 2012 buck ratio was 29:100.

Since 2003, deer have been radio-collared on winter range in portions of PMU 12 (Sand Creek and Teton Canyon) to measure doe and fawn survival and gather information on distribution and migration routes. Fawn survival has ranged from a high of 84% in 2004 to a low of 11% in 2011. Doe survival has averaged 87% annually since 2006. Dispersal has been monitored and distribution is very widespread with animals summering from the north side of the Centennial Valley in Montana to the east side of Jackson Lake in Wyoming.

Inter-specific Issues

Although deer-elk interactions are not well understood, little evidence exists to support the notion of a negative relationship between mule deer, elk, and moose. White-tailed deer are found throughout most of the PMU but are relatively uncommon.

The new domestic elk operation within the deer winter range has created a situation where wild elk have been attracted to the operation and have started using deer winter range.

Sheep and cattle grazing occur throughout this group of GMUs, which could pose some competitive concerns, especially on winter range during drought years.

Predation Issues

Black bear densities appear to be low and stable in this group of GMUs. Mountain lions are extremely rare. Coyotes are common, especially on Sand Creek Desert winter range. Wolves recently introduced in Yellowstone National Park have become established in this group of GMUs, which could affect other predators and mule deer.

Winter Feeding Issues

No Department-sponsored feeding activities occur in this group of GMUs except under emergency situations. However, social pressure to feed deer arises during any winter of average or greater severity. During the winter of 2007-2008, IDFG fed approximately 800 mule deer on the Sand Creek winter range due to harsh snow conditions.

Information Requirements

Survey protocol was revised beginning in 2000-2001 and again in 2007-2008. Future plans include the continuation of composition and complete surveys utilizing sightability methodology, as specified by the current mule deer management plan.

Mule Deer Island Park PMU 12 (GMUs 60, 60A, 61, 62, 62A)

Management Objectives

	Short-Term Objective	Long-Term Objective
# of Deer	TBD	TBD
Pop. Goal	Increase	Increase
Hunter Days	>17,500	>20,000

Square Miles =	2,886	3-Year Averages	
% Public Land =	62%	Hunters per square mile =	1.08
Major Land Type =	Forest/Desert	Harvest per square mile =	0.20
		Success Rate =	18%



Population Status

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Deer	5224									

Note: Estimates in red are based on information other than sightability surveys.

Population Parameters

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fawn:Doe	75	99	79	ND	64	82	79	73	70	
Buck:Doe	21	43	31	ND	29	23	28	31	29	
Fawn Survival	0.84	ND	ND	ND	0.24	0.52	0.67	0.11		
Adult Doe Survival	ND	ND	0.93	0.95	0.90	0.88	0.84	0.72		

Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does

Fawn Survival = overwinter fawn survival (December - May), Adult Doe Survival = annual survival (June - May)

Harvest Statistics

	Deer Harvest				
	Hunters	Hunter Days	Antlerless	Antlered	% 4+ Points
2003	2,321	8,812	317	328	30%
2004	5,063	27,411	347	461	33%
2005	3,725	19,882	349	456	32%
2006	3,176	19,171	287	488	41%
2007	2,320	11,846	289	601	37%
2008	3,241	17,607	159	298	27%
2009	2,949	15,081	157	339	46%
2010	3,225	15,610	203	427	36%
2011	2,760	13,651	81	246	31%
2012	2,818	14,067	154	419	39%
2013	3,779	17,634	215	580	37%

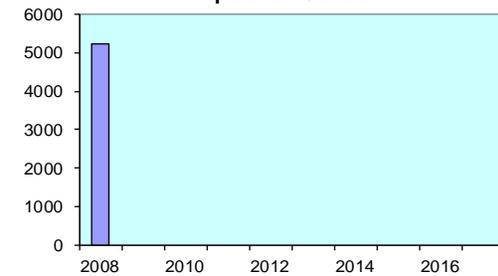
Note: Hunter numbers and hunter days prior to 2005 include white-tailed deer and mule deer hunters.

Previous Trend Area Surveys

GMU	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
60A	4,484	ND	2,866	1,332	2,025	1,492	2,123	ND	1,881	ND
62	ND	ND	1,626	614	1,257	ND	ND	1,775	ND	1,340

Note: ND = no survey data available

Population Status



Mule Deer Harvest

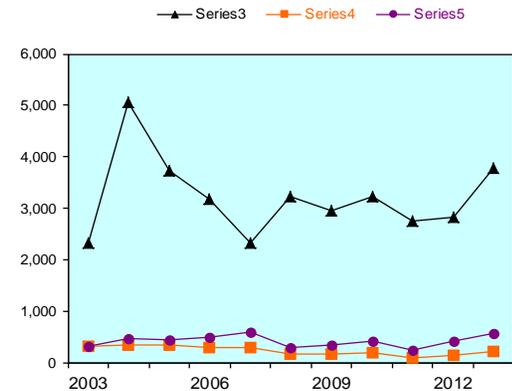


Figure 14. Island Park Mule Deer PMU Status and Objectives.

MOUNTAIN VALLEY

PMU 13 (GMUs 21A, 29, 30, 30A, 37, 37A, 51, 58, 59, 59A)

Management Objectives

Objectives for Mountain Valley (PMU 13, Figure 15) are to maintain ≥ 15 bucks:100 does in post-season surveys and $>25\%$ ≥ 4 -point bucks in the harvest.

Historical Perspective

Mule deer were scarce and harvests low for much of the early part of the twentieth century. By mid-century, mule deer had become the predominant big game animal. Once known for productive mule deer populations, particularly in the Pahsimeroi and Little Lost valleys, these GMUs yielded very large mule deer harvests in the 1950s and 1960s. By the 1970s, harvests had dropped by two-thirds as more conservative management strategies were implemented. Despite 2 decades of very conservative antlerless harvests and increasingly conservative buck seasons, mule deer populations have failed to return to their previous high densities and are stable at moderate levels.

Although deer herds declined well before any significant increase in elk numbers, current high elk densities may be contributing to suppressed deer populations. However, in GMUs 58, 59, and 59A where elk densities have also increased substantially, trend counts suggested that deer populations in the mid-2000s were at or slightly above late 1960s levels. Many of the deer, particularly in Lemhi Valley, migrate to higher-quality summer ranges in Montana, returning to Idaho winter ranges in November.

Habitat Issues

Much of the land in these GMUs is administered by BLM or USFS, with private lands mostly restricted to valley bottoms. Cattle ranching, livestock grazing, and recreation are dominant human uses of the landscape. PMU 13 is generally arid; forage production and deer harvest can be strongly influenced by growing-season precipitation. Deer depredations on agricultural crops are common in GMUs 29, 30, 30A, 37, and 37A and are especially pronounced in dry years. Depredations in GMUs 51, 58, 59, and 59A are limited.

Habitat ultimately determines deer densities and productivity. However, specific limiting factors within the habitat are poorly understood. In some areas, deer winter in mature stands of mountain mahogany that appear relatively stagnant and unproductive. Winter range shrub stands, specifically mountain mahogany, in parts of Little Lost Valley have been lost or degraded. Elk and livestock may have removed much of the mountain mahogany forage within reach of deer. Forests are slowly encroaching into shrub and grassland communities. Spread of noxious weeds, such as knapweed and leafy spurge, could ultimately have significant impacts on winter range productivity.

Traditionally, deer in GMUs 58, 59, and 59A concentrate on winter ranges at the south end of the Beaverhead Range. Heavy snows in the late 1960s placed tremendous pressure on very narrow portions of these GMUs, killing many browse plants. Winter range habitat condition is still poor to fair for many of the bitterbrush and mountain mahogany stands important to wintering deer.

Mountain mahogany, the primary winter browse species, is still heavily hedged with little regeneration. Winter domestic sheep grazing is contributing to this overuse.

Biological Issues

PMU 13 contained 2 trend areas: Leadore (GMUs 30/30A) in Salmon Region and Reno Point (GMUs 58/59A) in Upper Snake Region. Total deer estimated in 2003 for both areas combined (2,563) fell slightly below the previous antlerless harvest threshold of 2,600 for the first time in several years, but rebounded to over 3,100 deer in 2005. A total abundance survey for PMU 13 was scheduled for 2012, but postponed because of low snow pack and unpredictable deer distribution.

The 2013 fawn ratio of 63 fawns per 100 does was up four from 2012, however 2011-2013 winter fawn survival was unusually low at 34%, given the mild winter conditions. Adult doe survival was 92%.

Hunter participation has increased from an average of 4,480 hunters in the 1990s to an average of 5,225 hunters in the 2000s. In 2012, 5,624 hunters hunted mule deer in PMU 13. Harvest increased from 2003-2007 before declining 2008-2012, with an average of 1,310 bucks harvested in the last 10 years. Percent of the buck harvest ≥ 4 points has been at or above objective ($>25\%$) since 2004. Buck ratios have varied near the management objective (minimum of 15 bucks:100 does post-season) in recent years.

Inter-specific Issues

Current high elk densities may be having some impact on the area's capacity to produce deer in all GMUs except 58, 59, and 59A. White-tailed deer, a potentially strong competitor, are mostly restricted to private agricultural lands along major riparian areas. In some limited areas, mountain goats and mule deer may be competing for the same mountain mahogany winter ranges. Pronghorn and bighorn sheep also share the range but generally overlap little with mule deer. Livestock rangeland grazing exists which is another potential source of competition, particularly in the moister summer range habitats and the southern winter ranges.

Predation Issues

Black bear densities appear to be low and stable. Mountain lion densities are low to moderate. Coyotes are common and have an unknown impact on deer populations in this area. Bobcats, red fox, and golden eagles also occur in the area, but are not thought to account for significant predation on deer. In 2010, there were ≥ 7 wolf packs using PMU 13.

Winter Feeding Issues

Because this is an arid area with relatively little snowfall, winter-feeding has not occurred in these GMUs in recent years.

Information Requirements

Impacts of elk on mule deer production and survival are suspected but not quantified. Better information is needed to identify appropriate deer densities that will maintain optimum productivity and harvest.

In winter 2005-2006, the Department placed radio collars on 17 adult deer in GMU 51. This was the first time deer were marked in this GMU and the data collected indicate that deer wintering in this GMU do not move very far to summer range. This is very unusual for this part of Idaho. Adult doe survival was 91% in 2006 and has ranged from 86% to 96% from 2006 to 2010.

Deer in GMU 30 were radio-marked in December 2003 and 2004 as part of the fawn monitoring project in Salmon Region. As suspected, some deer migrated to Montana summer ranges. In some cases, migration distances were significant. One collar was shed approximately 96 km north of the animal's winter range near the Continental Divide in the Anaconda-Pintlar Wilderness.

The mule deer population in GMU 37, though meeting objectives has the attention of hunters who want to see the GMU managed as a "Quality" GMU with habitat enhancements aimed at increasing overall deer numbers and productivity. In 2014, two mule deer does were collared with GPS collars and 8 more are targeted winter, 2015 to track habitat use and analyze vital rates useful in developing appropriate management actions.

Mule Deer

Mountain Valley PMU 13 (GMUs 21A, 29, 30, 30A, 37, 37A, 51, 58, 59, 59A)

Management Objectives

	Short-Term Objective	Long-Term Objective
# of Deer	TBD	TBD
Pop. Goal	Maintain	Increase
Hunter Days	>20,000	>25,000

Square Miles =	4,988	3-Year Averages	
% Public Land =	87%	Hunters per square mile =	1.12
Major Land Type =	Forest/Rangeland	Harvest per square mile =	0.32
		Success Rate =	29%



Population Status

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Deer										

Note: Estimates in red are based on information other than sightability surveys.

Population Parameters

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fawn:Doe	58	37	72	56	54	59	60	59	59	63
Buck:Doe	11	12	23	19	11	13	16	19	15	24
Fawn Survival	0.57	0.88	0.17	0.70	0.26	0.37	0.63	0.27	0.37	0.39
Adult Doe Survival	ND	ND	0.91	0.96	0.90	0.86	0.96	0.87	0.98	0.92

Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does

Fawn Survival = overwinter fawn survival (December - May), Adult Doe Survival = annual survival (June - May)

Harvest Statistics

	Deer Harvest				
	Hunters	Hunter Days	Antlerless	Antlered	% 4+ Points
2003	4,791	16,959	192	1,036	29%
2004	5,721	25,390	109	1,114	38%
2005	5,144	22,054	181	1,642	36%
2006	5,464	22,465	283	1,527	37%
2007	3,956	15,917	265	1,716	34%
2008	6,458	28,093	374	1,396	30%
2009	5,652	24,707	320	1,067	25%
2010	5,135	21,682	269	1,079	25%
2011	5,383	22,277	315	1,171	32%
2012	5,624	24,364	359	1,350	33%
2013	5,678	24,760	303	1,282	33%

Note: Hunter numbers and hunter days prior to 2005 include white-tailed deer and mule deer hunters.

Previous Trend Area Surveys

GMU	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
29	592	521	676	730	885	885	685	ND	ND	ND
30/30A	ND	1,411	1,792	1,453	1,156	1,156	734	805	1,350	1,084
51	ND	500	ND	ND	ND	ND	ND	ND	1,232	ND
58/59A	ND	ND	2,280	1,900	1,407	1,407	ND	2,323	ND	1,740

Note: ND = no survey data available

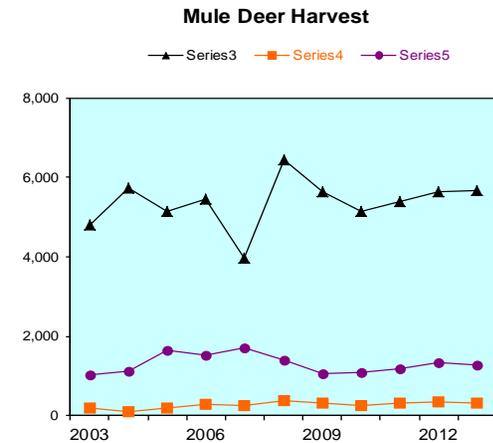
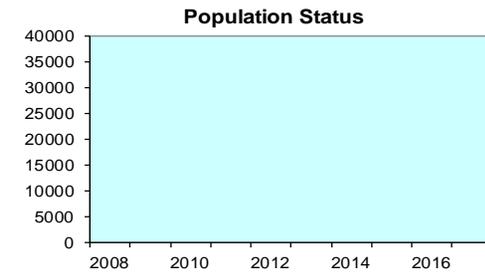


Figure 15. Mountain Valley Mule Deer PMU Status and Objectives.

SNAKE RIVER

PMU 14 (GMUs 38, 52A, 53, 63, 63A, 68, 68A)

Management Objectives

Given the low habitat potential for Snake River (PMU 14, Figure 16) to support high densities of deer and the limited ability to collect reliable population information, the management objective will be to maintain deer and not fall below 30% 4+ points in the antlered deer harvest.

Historical Perspective

The deer population probably has changed very little since historic times in this PMU. Accounts of trappers through this area in the mid-1800s indicated that buffalo, elk, pronghorn, and bighorn sheep were far more common than mule deer. Given the low densities of deer and low priority for deer in this PMU, little data is available to indicate what population trends have occurred through time.

This area contains the irrigated farmland and orchards in the Treasure Valley. There is some high desert habitat in the Snake River Birds of Prey area. The majority of the deer are associated with the Boise, Snake, and Payette River corridors and nearby orchards and vineyards.

It has been reported that mule deer were relatively abundant in GMU 53 around 1900. However, deer habitat was substantially altered with human settlement, which brought an increase in range fires and the development of large-scale irrigation projects. Today, more than half of GMU 53 is irrigated farmland. The northern portion of the GMU contains an extensive tract of land managed by BLM, primarily for livestock grazing. Much of BLM lands have been reseeded to crested wheatgrass, reducing their value for mule deer.

GMU 53 currently has a small resident deer population and cannot support many deer without unacceptable conflicts with agriculture. Depredation complaints from orchards in the Snake River Canyon are common. GMU 53 has some importance as winter range for mule deer from GMUs to the north. Movement of deer into GMU 53 during winter was first noted in the early 1980s following extensive fires and loss of sagebrush habitat in GMU 52A. The number of wintering deer varies considerably depending on winter severity and snow depths. During winter 1985-1986, more than 3,000 mule deer moved into GMU 53 and resulted in 54 depredation complaints. During the severe winter of 2001-2002, large numbers of deer moved into GMU 53, primarily east of Jerome, and resulted in a substantial number of deer-vehicle collisions on Interstate 84.

Harvest management in GMU 53 is currently designed to keep resident deer numbers low. Short-range weapon hunting on the west side of the GMU has been successful in minimizing complaints from orchard owners. On the east side of the GMU, a long archery season from 30 August through 19 December allows a substantial amount of hunting opportunity close to the Magic Valley Region's population centers. In 2001, the state record archery-harvested mule deer buck was taken in GMU 53. Harvest management in the remainder of the GMUs has been a general hunt format, except for GMUs 38, 63A and 68A, where human safety issues have warranted either archery or short-range weapon hunts (Appendix A).

Habitat Issues

This PMU is primarily comprised of dry desert shrub types, thus representing a low productivity area. Potential to support high numbers of mule deer is extremely limited. However, agriculture combined with riparian habitats along the Snake River in GMUs 63A and 68A can provide for higher populations.

The BLM administers the majority of public ground (57%) in PMU 14. Private ground makes up 34% and the Idaho National Laboratory, Fort Hall Indian Reservation, and Craters of the Moon National Park combine for the remaining 12%. Most private ground is used for production of row crops and is situated along the Snake River floodplain. Both mule deer and white-tailed deer periodically create depredation concerns within agricultural zones.

Wildfires continue to play a big role with habitat throughout the PMU. In many cases, fire has replaced climax sagebrush stands with annual and perennial grasses. Large fires occurred in this area again in summer 2006.

Depredation complaints on orchards are common in GMU 38 and both depredation hunts and kill permits are issued on a regular basis. Three mule deer depredation complaints (1 alfalfa and 2 vineyards) occurred in GMU 53 during this reporting period.

Biological Issues

The majority of this PMU lacks potential to support good numbers of mule deer. No reliable population information is available to determine changes and/or trends in populations. Mule deer probably increase somewhat during favorable environmental conditions but can be drastically reduced during significant winter events. White-tailed deer comprise a small percentage of total deer in this area and are primarily restricted to riparian/agriculture habitats of the Snake River floodplain. No information exists as to trends in composition of mule deer versus white-tailed deer. The little movement information we have indicates deer have some rather complicated migration patterns within and in and out of this area.

Inter-specific Issues

Mule deer share the habitat with livestock, elk, pronghorn, and white-tailed deer. It is unknown what impacts an increasing elk population or sympatric whitetails may have on mule deer. It is doubtful that pronghorn have any impact on mule deer population parameters. Much of the Snake River floodplain is used to winter livestock and, in many cases, riparian shrub communities have been significantly degraded. Additionally, a mule deer's social intolerance for livestock may make much of the riparian habitats unavailable to mule deer during winter months.

Predation Issues

Coyotes and bobcats are the predominate predators of mule deer in this PMU. Trends in bobcat numbers are unknown; it is believed that coyotes have increased over the last 30 years. It is unknown whether coyotes are significantly impacting mule deer population dynamics.

Winter Feeding Issues

Emergency supplemental feeding has not been conducted in the past few years. The Department will work closely with Regional Winter Feeding Advisory Committees to evaluate future supplemental feeding issues.

Information Requirements

Given the low potential for supporting high numbers of mule deer throughout this PMU, little population information would be warranted. However, some information would be valuable.

Many feel that illegal harvest of mule deer throughout much of this area poses a significant threat to populations (GMU 63, 68, and 68A). Efforts to substantiate or disprove this concern would prove valuable as resources allow.

Mule Deer Snake River PMU 14 (GMUs 38, 52A, 53, 63, 63A, 68, 68A)



Management Objectives

	Short-Term Objective	Long-Term Objective
# of Deer	TBD	TBD
Pop. Goal	Maintain	Maintain
Hunter Days	>12,000	>12,000

	10,160	3-Year Averages
Square Miles =	10,160	
% Public Land =	57%	Hunters per square mile = 0.37
Major Land Type =	Desert/Agriculture	Harvest per square mile = 0.08
		Success Rate = 23%

Population Status

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Deer										

Note: Estimates in red are based on information other than sightability surveys.

Population Parameters

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fawn:Doe	ND	ND	ND	ND	ND					
Buck:Doe	ND	ND	ND	ND	ND					
Fawn Survival	ND									
Adult Doe Survival	ND									

Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does

Fawn Survival = overwinter fawn survival (December - May), Adult Doe Survival = annual survival (June - May)

Harvest Statistics

	Hunters	Hunter Days	Deer Harvest		
			Antlerless	Antlered	% 4+ Points
2003	3,294	12,690	192	332	24%
2004	4,233	21,237	236	372	35%
2005	2,914	12,208	194	487	30%
2006	3,228	15,220	202	471	33%
2007	2,575	12,568	258	538	38%
2008	3,923	19,891	277	492	41%
2009	4,011	20,331	259	461	35%
2010	3,787	17,861	333	595	32%
2011	3,967	18,836	337	439	34%
2012	3,469	17,113	292	553	40%
2013	4,276	19,472	321	666	37%

Note: Hunter numbers and hunter days prior to 2005 include white-tailed deer and mule deer hunters.

Previous Trend Area Surveys

GMU	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Note: ND = no survey data available

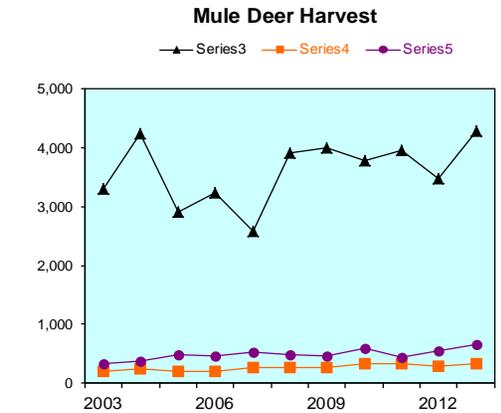
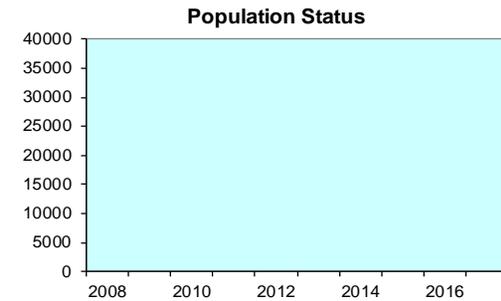


Figure 16. Snake River Mule Deer PMU Status and Objectives.

NORTH IDAHO

PMU 15 (GMUs 1, 2, 3, 4, 4A, 5, 6, 7, 8, 8A, 9, 10, 10A, 12, 15, 16, 16A, 17, 19, 20)

With the recent Mule Deer Management Plan revision and the conversion of the mule deer Analysis Areas to PMU's, some GMUs were not placed into a PMU because either the GMUs have low numbers of mule deer and are managed primarily for whitetails or are located in wilderness areas that result in most mule deer hunting pressure being incidental in nature. There are no plans to conduct aerial surveys in any of these GMUs to monitor mule deer populations. GMUs in this conglomeration, labeled North Idaho (PMU 15, Figure 17) have widely divergent demographic and habitat characteristics as well as highly variable season frameworks.

Management Objectives

Mule deer comprise less than 10% of the deer harvested in this PMU, although in some GMUs (7 and 9) mule deer may comprise nearly 50% of the deer harvested. Aerial surveys are not practical in most of these GMUs because mule deer are scarce and hiding cover is abundant. Aerial surveys are not conducted in other GMUs (16A, 17, 19 and 20) because of their remote wilderness setting and relatively little emphasis on targeting of mule deer by hunters. The only management objective that applies to this PMU under the current plan is to maintain hunter days at $\geq 25,000$. This was met with a 2011-2013 average of 25,963.

Historical Perspective

USFS records and the memories of long-term residents indicate big game, including mule deer, were relatively scarce in the early 1900s. Large-scale fires between 1910 and 1931 created large brush-fields favored by mule deer. This newly created habitat, in combination with a major predator reduction program beginning in the early 1920s, allowed sustained growth of mule deer, white-tailed deer, and elk populations. Despite a series of severe winters, mule deer populations continued to increase and by the mid-1950s, mule deer were estimated by USFS and Department biologists to outnumber white-tailed deer in the central part of the PMU.

Concern about over-browsed winter ranges and an overabundance of deer throughout the state, in general, led to aggressive management to reduce the deer population. By the early 1970s, this goal was accomplished and shorter seasons were authorized. Deer seasons in PMU 15 have traditionally allowed hunters to take either mule deer or white-tailed deer under the same tag; however, antlerless harvest is now restricted to white-tailed deer only in the Panhandle Region portion of this PMU.

GMUs 1, 4, 4A, 6, 7 and 9 are predominately timbered with the majority of ownership being private timber companies, IDL, or USFS. Timber harvest began in these GMUs during the early 1900s and increased dramatically in the 1970s. Until the 1930s, wildfire was the primary habitat disturbance mechanism in GMUs 4, 6, 7 and 9. Between 1900 and 1934, the majority of these GMUs were burned by wildfires. From the 1920s to 1990, thousands of miles of roads were built for timber harvest in GMUs 4, 6, 7 and 9. GMUs 2, 3 and 5 are predominately private ownership with significant areas of agricultural and/or residential development. The Snow Peak Wildlife Management Area in GMU 9 is co-managed by the IDFG and the USFS to provide back country recreational opportunities.

GMUs 10, 10A, 12, 15, and 16 are also predominately timberlands with the majority of ownership being private timber companies, IDL, or USFS. Most private ownership is at lower elevations along the breaks of Clearwater River. Timber harvest began in GMU 10A during the early 1900s and increased dramatically in the 1970s. In 1971, Dworshak Reservoir flooded approximately 45 miles of North Fork Clearwater River in GMU 10A and permanently removed thousands of acres of prime low-elevation big game winter range. Until the 1930s, wildfire was the primary habitat disturbance mechanism in GMUs 10, 12, and 16. Between 1900 and 1934, approximately 70% of the Lochsa River drainage was burned by wildfires. From the 1920s to 1990, thousands of miles of roads were built for timber harvest in GMUs 10A, 10, 12, 15, and 16. In 1964, most of the southern portion of GMU 12 was designated as part of the Selway-Bitterroot Wilderness.

GMUs 16A, 17, 19, and 20 represent much of Idaho's backcountry; much of the area is designated wilderness. With the rugged, remote terrain and difficult access, management control of deer herds has been difficult at best. The forces of weather, fire, and plant succession have ultimately played a much larger role in deer populations than efforts of wildlife managers. A mid-September to late November season (Appendix A) has been standard in the backcountry GMUs since the 1950s. Even today, much of the deer harvest is localized around access points such as roads and airstrips and much of the harvest is incidental to elk hunting.

Habitat Issues

Much of the land in PMU 15 is administered by USFS, with private lands mostly restricted to the valley bottoms. Recreation and timber management are the dominant human uses of the landscape in these GMUs. PMU 15 is a generally moist region with nearly continuous canopy coverage. Mule deer mix with white-tailed deer during winter, although there is a tendency for mule deer to winter at slightly higher elevations. Mule deer depredations are nonexistent.

Much of the mule deer habitat in this area is the result of large fires during the early 1900s with some habitat created when large areas were block clear-cut during the 1960s. Currently, both influences have little effect on the landscape, and mule deer habitat can be expected to decline in quantity and quality as succession progresses, turning brush-fields back into timber.

Biological Issues

There is very little known about the ecology of mule deer in the heavily forested environments typical of much of this PMU. The timbered nature of the landscape, combined with the relative scarcity of mule deer concentrations, does not allow aerial surveys to be used to monitor mule deer populations in this area. The influence of hunting on mule deer population dynamics is believed to be minor, based on the minor influence of hunting measured on white-tailed deer populations in the same areas. The high percentage of ≥ 4 -point bucks in the antlered harvest (~50%) is consistent with this hypothesis.

Inter-specific Issues

White-tailed deer, mule deer, and elk have sympatric ranges throughout the year in PMU 15. Mountain goat and moose distribution overlaps that of mule deer in some areas. The effects of

inter-specific competition are unknown but are felt to be of minor consequence at existing population levels.

Predation Issues

Mountain lions, black bears, bobcats, coyotes, and wolves exist throughout the area. In the mid-1990s a major increase in the mountain lion population was detected, leading to increased public concern over the impacts of predation of future mule deer populations. High participation in mountain lion hunting led to record harvests during this period but has since declined. Current mountain lion numbers are assumed to be significantly lower than those found 10-15 years ago. Predation can be an important factor in the population dynamics of mule deer in this PMU. Radio-telemetry studies conducted in the Priest River Basin during the late 1980s and early 1990s indicated this was the case with white-tailed deer. Wolves reintroduced by USFWS in central Idaho in the mid 1990's have become well established in these GMUs. The addition of wolves will likely have an impact on black bear, mountain lion, and coyote populations. At some level, predation could benefit deer herds to the extent that it reduces elk competition and keeps deer herds below carrying capacity where they can be more productive. However, excessive levels of predation can also suppress prey populations to undesirably low levels. At this point, it is unclear what the net impact of predation will be with the new mix of large predators.

Winter Feeding Issues

No emergency winter-feeding has been undertaken since the 1996-1997 winter, when a small numbers of mule deer were fed. The most recent winter (2011-2012) had near normal temperatures and moisture levels, with much of the precipitation coming late (February – April) and in the form of rain at lower elevations. Consequently, there was no call for winter-feeding.

Harvest

Total harvest in PMU 15 in 2013 was estimated at 942 mule deer based on mandatory harvest report cards. This represents a 5% increase in harvest from 2012 (897) and is 5% above the five-year average of 894. Total hunter numbers were estimated at 4,227 for 2013 compared to 4,518 hunters for 2012. An average of 50% of the bucks harvested in these GMUs over the past three years (2011-2013) have been ≥ 4 -point with a 20% hunter success rate.

Information Requirements

With the exception of check station information, the Department did not collect information specific to mule deer harvest in PMU 15 from 1979 to 1995. Hunter effort has only been documented since 1996. Good harvest data is of utmost importance here because aerial surveys are impractical due to heavy tree cover and small, scattered pockets of wintering mule deer. Basic ecological information is lacking on mule deer ecology in heavily timbered environments.

Mule Deer

North Idaho PMU 15 (GMUs 1, 2, 3, 4, 4A, 5, 6, 7, 8, 8A, 9, 10, 10A, 12, 15, 16, 16A, 17, 19, 20)

Management Objectives

	Short-Term Objective	Long-Term Objective
# of Deer	TBD	TBD
Pop. Goal	Maintain	Maintain
Hunter Days	>25,000	>25,000

Square Miles =	16,997	3-Year Averages	
% Public Land =	69%	Hunters per square mile =	0.25
Major Land Type =	Forest	Harvest per square mile =	0.05
		Success Rate =	20%



Population Status

Year	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
# of Deer	ND									

Note: Estimates in red are based on information other than sightability surveys.

Population Parameters

Year	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013
Fawn:Doe	ND									
Buck:Doe	ND									
Fawn Survival	ND									
Adult Doe Survival	ND									

Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does

Fawn Survival = overwinter fawn survival (December - May), Adult Doe Survival = annual survival (June - May)

Harvest Statistics

	Deer Harvest				
	Hunters	Hunter Days	Antlerless	Antlered	% 4+ Points
2003	39,979	236,161	76	700	52%
2004	39,829	238,966	100	1,020	56%
2005	4,651	29,084	169	1,165	56%
2006	4,854	31,337	165	1,326	56%
2007	3,285	20,614	156	1,087	58%
2008	5,808	39,203	112	1,008	56%
2009	5,511	33,037	90	911	52%
2010	4,524	27,565	92	853	46%
2011	4,050	24,899	106	579	48%
2012	4,518	27,618	82	815	52%
2013	4,227	25,372	122	820	50%

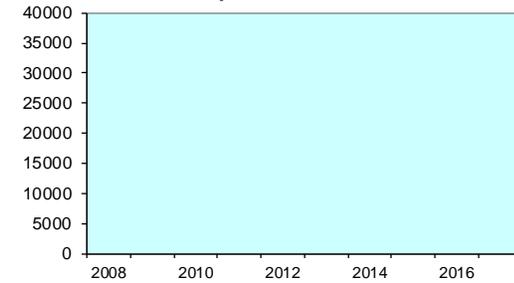
Note: Hunter numbers and hunter days prior to 2005 include white-tailed deer and mule deer hunters.

Previous Trend Area Surveys

GMU	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND

Note: ND = no survey data available

Population Status



Mule Deer Harvest

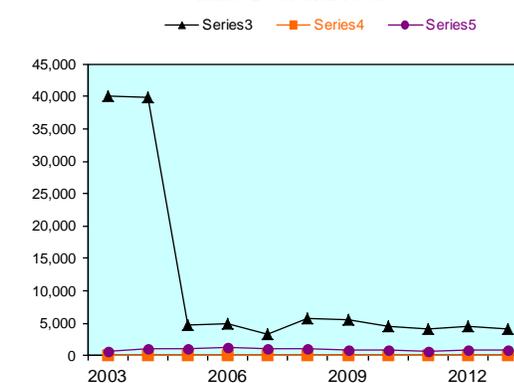
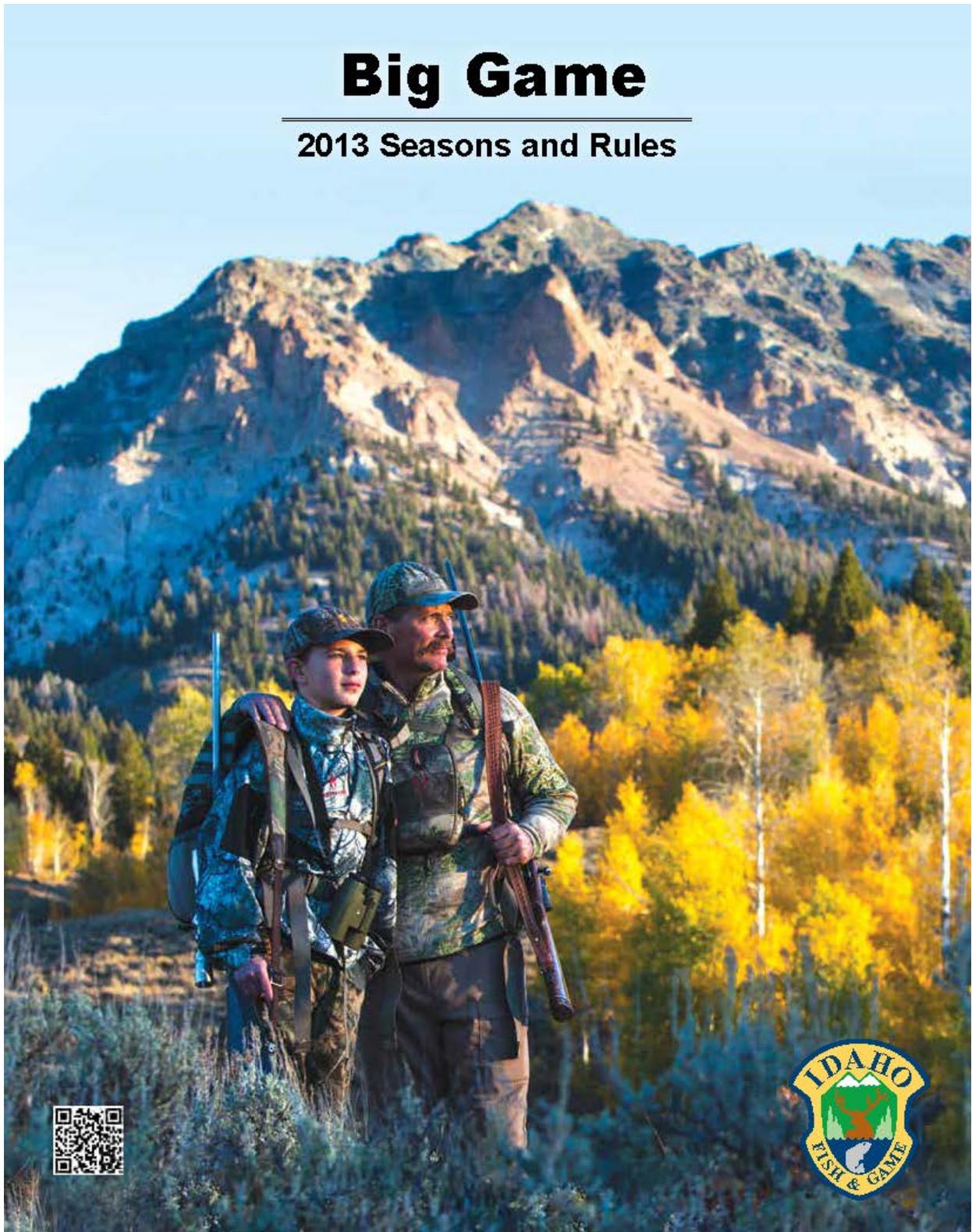


Figure 16. North Idaho Mule Deer PMU Status and Objectives.

Appendix A
IDAHO
2013 SEASON
MULE DEER RULES

Big Game

2013 Seasons and Rules



2013 Deer Hunting Seasons

Hunters with valid Idaho licenses and tags in their possession can hunt mule deer and/or white-tailed deer.

How many deer can I harvest? In general, the answer is one deer per hunter per year. However, a few controlled hunts and depredation hunts offer the opportunity for hunters to harvest additional deer. Deer hunters also may buy leftover nonresident deer tags at the nonresident price to harvest a second deer. A hunter may take only one deer per valid legal tag in his or her possession.

Note: Residents or nonresidents may buy one unsold nonresident general season deer and elk tag at the nonresident price starting August 1, to be used as a second tag.

Youth hunt only: Some deer hunts are for youth only. Only hunters 12-17 years of age with a valid license and tag may hunt antlerless deer in these hunts.

Antlered deer: Deer with at least one antler longer than 3 inches. In antlered only seasons, or any hunt with point restrictions, antlers must accompany the carcass while in transit.

Antlerless deer: Deer without antlers or with antlers shorter than 3 inches may be taken in a season open for antlerless deer or either sex.

Two-point deer: Deer with no more than two points on one side, not including the brow point or tine, and at least one antler longer than 3 inches. A point is an antler projection that is at least 1 inch long and longer than the width of the projection.

Three-point deer: Deer having at least one antler with three or more points, not including the brow point or tine.

Species identification: In seasons restricted to mule deer only or white-tailed deer only, if the head is removed, the fully-haired tail must be left naturally attached to the carcass.

Archery and Muzzleloader Permits

Any person hunting in an archery only season, including controlled hunts, must have their license with archery permit validation.

Any person hunting in a muzzleloader only season, including controlled hunts must have their license with muzzleloader permit validation.

Nonresident Deer and Elk Tags

Nonresident deer and elk tags, **excluding** nonresident junior mentored deer and elk tags, are valid to take a black bear, mountain lion or gray wolf instead of a deer or elk, if a season is open for that species, where and when the deer or elk tag is valid, and if there is an open deer or elk season in that same unit. See page 98.

For information on Chronic Wasting Disease please see Page 36.

Attention Deer Hunters!

Deer hunters may choose either a regular deer tag or a white-tailed deer tag. The regular deer tag is valid for **any** hunt listed under "2013 Regular Deer Tag Seasons" on pages 15-19.

The white-tailed deer tag is valid for white-tailed deer **only**, for any hunt listed under "2013 White-tailed Deer Tag Seasons" on pages 21-24.

Legal Deer in Two-Point Hunts



Spike Deer

Legal buck under 2-point regulations at least 1 antler is 3 inches or longer.



1 x 2 Point Deer

Legal buck under 2-point regulations.



2 x 2 Point Deer

Legal buck under 2-point regulations. Not legal in 3-point or 4-point hunts.



2 x 3 Point Deer

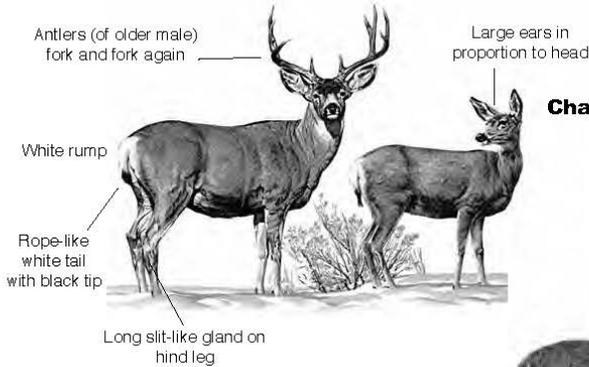
Legal buck under 2-point regulations. Also legal under 3-point regulations.



Point must be 1 inch or longer.

DEER

Characteristics of a mule deer



CAUTION!
Antlers on yearling buck white-tailed and mule deer may look similar.

Characteristics of a white-tailed deer

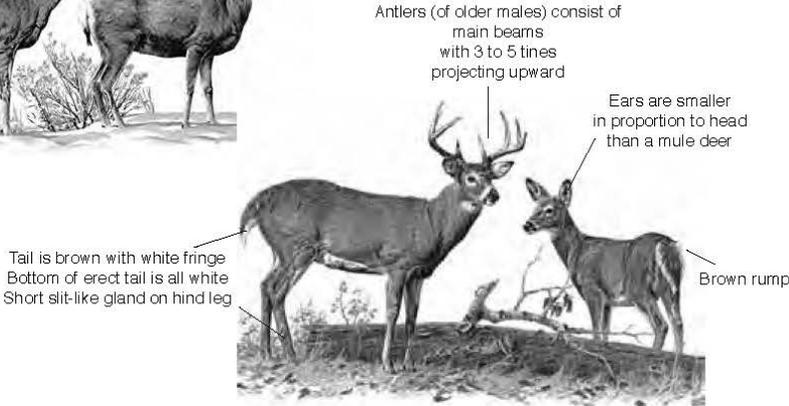


Illustration by Robert Neaves courtesy of Montana Fish, Wildlife & Parks

Definitions

- Antlered** — A deer with an antler or antlers at least 3 inches in length.
- Antlerless** — A deer without antlers or with antlers less than 3 inches in length.

**2013 Regular Deer Tag
General Any Weapon Seasons**

Unit(s)	Antlered	Antlerless	Notes
1	Oct 10 - Oct 31 <i>(White-tailed deer only)</i>	Nov 1 - Dec 1 <i>(White-tailed deer only)</i>	
	Nov 1 - Dec 1		
2, 3, 4A, 5, 6	Oct 10 - Nov 9	Nov 1 - Dec 1 <i>(White-tailed deer only)</i>	<i>See note 1, Page 19</i>
	Nov 10 - Dec 1 <i>(White-tailed deer only)</i>		
4, 7, 9	Oct 10 - Nov 9	Oct 10 - Nov 9 <i>(White-tailed deer only)</i>	
8, 8A, 10, 10A, 12, 15, 16	Oct 10 - Nov 3	Oct 10 - Nov 3	
11, 11A	Oct 10 - Nov 3 <i>(White-tailed deer only)</i>	Oct 10 - Nov 3 <i>(White-tailed deer only)</i>	
13, 14, 18	Oct 10 - Nov 3 <i>(White-tailed deer only)</i>	Oct 10 - Oct 16 <i>(White-tailed deer only)</i>	<i>Unit 13 has limited access</i>
16A, 17, 19, 20	Sep 15 - Nov 18	Sep 15 - Nov 18	
19A	Oct 10 - Oct 31	Oct 10 - Oct 31 <i>(Youth hunt only)</i>	

continued

2013 Regular Deer Tag			
General Any Weapon Seasons - continued			
Unit(s)	Antlered	Antlerless	Notes
20A, 26, 27	Sep 15 - Oct 31	None	
21, 21A, 28, 29, 30, 36, 36A, 36B, 37, 37A	Oct 10 - Oct 24	Oct 10 - Oct 31 (Youth hunt only, Private land only)	See note 3, Page 17, Motorized Hunting Rule Applies in Units 29, 30, 36A, 37 & 37A, See Pages 91-92
22	Oct 10 - Oct 24 (2-point deer only)	Oct 10 - Oct 24 (Youth hunt only)	
23, 24, 25	Oct 10 - Oct 31	Oct 10 - Oct 31 (Youth hunt only)	See note 1, Page 17
30A	None	Oct 10 - Oct 31 (Youth hunt only, Private land only)	Motorized Hunting Rule Applies, See Pages 91-92
31, 32, 32A	Oct 10 - Oct 24	Oct 10 - Oct 24 (Youth hunt only)	See notes 2 & 3, Page 17, Motorized Hunting Rule Applies in Units 32 & 32A, See Pages 91-92
33, 34, 35	Oct 10 - Oct 31	None	
39	Oct 10 - Oct 31	Oct 10 - Oct 31 (Youth hunt only)	
40, 41, 42	Oct 10 - Oct 24 (2-point deer only)	None	See note 3, Page 17
43	Oct 10 - Oct 31	Oct 10 - Oct 31 (Youth hunt only)	
46	Oct 10 - Oct 31	Oct 10 - Oct 31 (Youth hunt only)	See notes 2 & 3, Page 17
48, 49	Oct 10 - Oct 31	Oct 10 - Oct 31 (Youth hunt only)	Motorized Hunting Rule Applies in Unit 49, See Pages 91-92
50, 51, 56, 58, 59, 59A	Oct 10 - Oct 24	Oct 10 - Oct 24 (Youth hunt only)	Motorized Hunting Rule Applies, See Pages 91-92
52A	Oct 10 - Oct 31	Oct 10 - Oct 31 (Youth hunt only)	
60, 61, 62, 62A, 64, 65	Oct 10 - Oct 24	Oct 10 - Oct 24 (Youth hunt only)	See note 3, Page 17
60A	Oct 10 - Oct 24	Oct 10 - Oct 24 (Youth hunt only)	See note 4, Page 17
66, 69	Oct 10 - Oct 24	Oct 10 - Oct 24 (Youth hunt only)	Motorized Hunting Rule Applies, See Pages 91-92
67	Oct 10 - Oct 24	Oct 10 - Oct 24 (Youth hunt only)	See note 5, Page 17
66A, 68, 71, 72, 73A, 74, 76	Oct 10 - Oct 24	Oct 10 - Oct 24 (Youth hunt only)	Motorized Hunting Rule Applies in Units 66A & 76, See Pages 91-92
70, 78	None	Oct 10 - Oct 24 (Youth hunt only)	Motorized Hunting Rule Applies, See Pages 91-92
73	None	Oct 10 - Oct 16 (Youth hunt only)	Motorized Hunting Rule Applies, See Pages 91-92

2013 Regular Deer Tag General Any Weapon Seasons - continued			
Unit(s)	Antlered	Antlerless	Notes
75, 77	Oct 10 - Oct 24	Oct 10 - Oct 24 (Youth hunt only)	Motorized Hunting Rule Applies, See Pages 91-92

REGULAR DEER

Notes:

1. Short-range weapons **only** in that portion of Unit 24 within the following boundary: Beginning in McCall at the junction of State Highway 55 and Boydston Street, then south on Boydston Street to West Valley Road, then west and south along West Valley Road and West Mountain Road to Cabarton Road, then north on Cabarton Road to State Highway 55, then north on State Highway 55 to Farm-To-Market Road, then north on Farm-To-Market Road to Elo Road, then west on Elo Road to State Highway 55, then north on State Highway 55 to the point of beginning.
2. Short-range weapons **only** on the islands in the Snake River.
3. Short-range weapons **only** on C.J. Strike, Chester Wetlands, and Montour Wildlife Management Areas, and Pahsimeroi Access Area.
4. Short-range weapons **only** in that portion of Unit 60A south and east of the North (Henry's) Fork Snake River, and that portion within 1 mile north and west of the North Fork Snake River.
5. Short-range weapons **only** in that portion of Unit 67 south and west of State Highway 26.

"I won an Idaho Super Hunt!"
- Dave Leavitt

In Idaho **34** hunters win the chance every year to hunt world class big game in any open hunt.

You can, too.

208-334-3700
fishandgame.idaho.gov/superhunt
No license required to enter drawing

IDAHO FISH & GAME

f

continued

<http://fishandgame.idaho.gov>

2013 Regular Deer Tag General Archery Only Seasons - Archery Permit Required			
Unit(s)	Antlered	Antlerless	Notes
1, 3, 4, 4A, 5, 6, 7, 9	Aug 30 - Sep 30	Aug 30 - Sep 30 <i>(White-tailed deer only)</i>	
	Dec 10 - Dec 24	Dec 10 - Dec 24 <i>(White-tailed deer only)</i>	
2	Aug 30 - Sep 30	Aug 30 - Sep 30 <i>(White-tailed deer only)</i>	<i>See note 1, Page 19</i>
	Nov 1 - Dec 1	Nov 1 - Dec 1 <i>(White-tailed deer only)</i>	<i>See note 2, Page 19</i>
	Dec 10 - Dec 24	Dec 10 - Dec 24 <i>(White-tailed deer only)</i>	<i>See note 1, Page 19</i>
8, 8A, 10, 10A, 11A, 12, 15, 19A, 21, 21A	Aug 30 - Sep 30	Aug 30 - Sep 30	
22	Aug 30 - Sep 30 <i>(2-point deer only)</i>	Aug 30 - Sep 30	
23, 24, 25, 36, 36B	Aug 30 - Sep 30	Aug 30 - Sep 30	
28	Dec 1 - Dec 31	Dec 1 - Dec 31	
29, 30, 30A, 32, 32A, 36A, 37, 37A	Aug 30 - Sep 30	Aug 30 - Sep 30	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
31, 33, 34, 35	Aug 30 - Sep 30	Aug 30 - Sep 30	
38	Aug 30 - Sep 30	Aug 30 - Sep 30	<i>See note 3, Page 19</i>
39	Nov 10 - Nov 30	Nov 10 - Nov 30	<i>See note 4, Page 19, Part of unit closed</i>
40, 41, 42	Aug 30 - Sep 30 <i>(2-point deer only)</i>	Aug 30 - Sep 30	
43, 46, 52A, 54	Aug 30 - Sep 30	Aug 30 - Sep 30	
47, 48, 49, 50, 51, 56, 57, 58, 59, 59A	Aug 30 - Sep 30	Aug 30 - Sep 30	<i>Motorized Hunting Rule Applies in Units 47, 49, 50, 51, 56, 58, 59 and 59A, See Pages 91-92</i>
55	Nov 25 - Dec 19	Nov 25 - Dec 19	
60, 60A, 62, 64, 65, 66, 67, 69	Aug 30 - Sep 30	Aug 30 - Sep 30	<i>Motorized Hunting Rule Applies in Units 66 & 69, See Pages 91-92</i>
	Nov 1 - Dec 19 <i>(White-tailed deer only)</i>	Nov 1 - Dec 19 <i>(White-tailed deer only)</i>	
61, 62A, 63A	Aug 30 - Sep 30	Aug 30 - Sep 30	
63	Aug 30 - Sep 30	Aug 30 - Sep 30	
	Nov 1 - Dec 19	Nov 1 - Dec 19	
66A, 68, 70, 71, 72, 73, 73A, 74, 75, 76, 77, 78	Aug 30 - Sep 30	Aug 30 - Sep 30	<i>Motorized Hunting Rule Applies in Units 66A, 70, 73, 75, 76, 77 & 78, See Pages 91-92</i>

2013 Regular Deer Tag General Muzzleloader Only Seasons - Muzzleloader Permit Required			
Unit(s)	Antlered	Antlerless	Notes
4, 7, 9	Nov 10 - Dec 1	Nov 10 - Dec 1 <i>(White-tailed deer only)</i>	
39	None	Sep 8 - Sep 30	

2013 Regular Deer Tag General Deer Short Range Weapon Seasons			
Unit(s)	Antlered	Antlerless	Notes
38	Oct 10 - Oct 31	Oct 10 - Nov 24	<i>Very limited access, See note 3, Page 19</i>
45	Oct 10 - Nov 6	Oct 10 - Nov 6	<i>See note 5, Page 19, Motorized Hunting Rule Applies, See Pages 91-92</i>
53	Oct 10 - Nov 6	Oct 10 - Nov 6	<i>See note 6, Page 19, Motorized Hunting Rule Applies, See Pages 91-92</i>
63	Oct 10 - Oct 24	Oct 10 - Oct 24 <i>(Youth hunt only)</i>	

Notes:

1. Farragut State Park and Farragut Wildlife Management Area are **closed**.
2. Farragut State Park and Farragut Wildlife Management Area **only**.
3. That portion of Unit 38 within the Lake Lowell Sector of the Deer Flat National Wildlife Refuge is **controlled hunt only**.
4. **Area Closure:** That portion of Unit 39 within Ada County, **and** that portion of Unit 39 within the following boundary: Beginning at the intersection of State Highway 21 and the Middle Fork Boise River Road (Forest Road 268), east on Forest Road 268 to Cottonwood Creek-Thorn Creek Road (Forest Road 377), to South Fork of Thorn Creek to confluence of Thorn Creek, north and west on Thorn Creek to the confluence with Mores Creek, south and west along the center of Mores Creek including in the Mores Creek arm of Lucky Peak Reservoir to Highway 21 to the point of beginning is **closed**.
5. That portion of Unit 45 south of Interstate 84. The rest of Unit 45 is **controlled hunt only**.
6. That portion of Unit 53 west of U. S. Highway 93. The rest of Unit 53 is **controlled hunt only**.

FIRST-TIME HUNTERS: DON'T MISS YOUR SHOT AT THE SEASON!

Hunter Education courses fill quickly.
Most courses are offered between January and August.

Click on the Hunter Education icon at the bottom of IDFG's home page to get started, or visit any Fish & Game office.

REGISTER EARLY!

COURSE OPTIONS:

- Classroom:** Recommended for youth under 14 years of age or anyone new to hunting.
- Internet:** Interactive, rigorous self-study course for motivated students; requires a Field Day.
- Workbook:** A self-paced, rigorous self-study course; requires a Field Day.



The Mule Deer Initiative

MAKING THE COMMITMENT TO ENHANCE IDAHO'S MULE DEER POPULATION



The Mule Deer Initiative is an effort by Fish and Game to:

- Protect and improve habitat.
- Improve mule deer numbers.
- Increase hunter satisfaction.



Why do we need the Mule Deer Initiative?

- Mule deer numbers have declined over the past two decades.
- Populations in parts of eastern and southern Idaho are lower than desired.



Mule Deer Initiative projects and goals include:

- Habitat improvement.
- Population management.
- Stepped up enforcement.
- Predator control.
- Access management.
- Provide technical help to land managers.



The Mule Deer Initiative:

- Increased the number of acres improved annually from a few hundred to thousands. Improved 75,000 acres of mule deer habitat since 2010.
- Provided \$100,000 for a multi-million dollar project with other agencies on 32,000 acres of Burley-area mule deer and sage-grouse habitat.
- Planted a million sagebrush, bitterbrush and mountain mahogany shrubs.
- Installed 14 miles of fence along Interstate 15 south of Pocatello, where 1,500 to 2,000 mule deer winter, allowing them to safely use existing underpasses.



Where can I learn more about helping Idaho's Mule deer?

- Visit the Idaho Fish and Game website below or subscribe to an email notification service.

fishandgame.idaho.gov/content/mdl

Deer Controlled Hunts

For details on controlled hunt rules and restrictions please See pages 94-97.

Hunters: Please check Deer Controlled Hunt Area descriptions on pages 33-35. Hunt Areas may change annually.

2013 Controlled Deer Hunts (13,276 Tags Plus Unlimited Tags) Antlered Deer				
Hunt No.	Controlled Hunt Areas	Tags	Season Dates	Notes
1001	1 ^a (see pg 33)	60	Aug 30 - Dec 1	
1002	11	74	Oct 10 - Nov 3	<i>Mule deer only</i>
1003	11	35	Nov 10 - Nov 24	<i>Mule deer only</i>
1004	11A	63	Oct 10 - Nov 3	<i>Mule deer only, Very limited access</i>
1005	13	200	Oct 10 - Nov 3	<i>Mule deer only, See note 1, Page 31</i>
1006	14	180	Oct 10 - Nov 3	<i>Mule deer only</i>
1007	18	120	Oct 10 - Nov 3	<i>Mule deer only</i>
1008	19A	10	Oct 10 - Nov 24	
1009	20A	Unlimited	Nov 1 - Nov 18	
1010	21	5	Oct 10 - Nov 30	
1011	22	60	Nov 1 - Nov 24	
1012	23	25	Oct 10 - Nov 24	
1013	25	10	Oct 10 - Nov 24	
1014	26	Unlimited	Nov 1 - Nov 18	
1015	27	Unlimited	Nov 1 - Nov 18	<i>3-point or larger deer only</i>
1016	28-1	5	Oct 10 - Nov 30	
1017	30	5	Oct 10 - Nov 30	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1018	30A	30	Oct 10 - Oct 31	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1019	31	30	Oct 10 - Nov 24	
1020	32	40	Oct 10 - Nov 24	<i>See note 2, Page 31, Motorized Hunting Rule Applies, See Pages 91-92</i>
1021	32A	30	Oct 10 - Nov 24	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1022	36A	5	Oct 10 - Nov 30	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1023	36B	5	Oct 10 - Nov 30	
1024	38 ^b (see pg 34)	5	Oct 10 - Nov 24	<i>Deer Flat National Wildlife Refuge has specific hunting requirements, Before applying, See note 3, Page 31</i>
1025	39-1	199	Aug 15 - Sep 30	
1026	40	195	Nov 1 - Nov 24	
1027	41-1	100	Nov 1 - Nov 24	<i>See note 2, Page 31</i>
1028	42	74	Nov 1 - Nov 24	
1029	44	225	Sep 15 - Oct 31	
1030	45-1	75	Oct 15 - Oct 31	<i>See notes 2 & 4, Page 31, Motorized Hunting Rule Applies, See Pages 91-92</i>
1031	47-1	90	Oct 5 - Oct 31	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1032	47-2 ^a (see pg 34)	10	Nov 15 - Nov 30	<i>Motorized Hunting Rule Applies in Unit 47, See Pages 91-92</i>
1033	48	10	Nov 10 - Nov 24	
1034	49	10	Nov 10 - Nov 24	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>

CONTROLLED DEER

continued

^a This hunt includes other units or parts of other units. See controlled hunt area descriptions.

^b This hunt includes only a portion of this unit. See controlled hunt area descriptions.

For details on controlled hunt rules and restrictions, please see pages 94-97.

 2013 Controlled Hunts Antlered Deer - continued				
Hunt No.	Controlled Hunt Areas	Tags	Season Dates	Notes
1035	50 ^b (see pg 34)	10	Oct 10 - Nov 30	<i>Portion of Unit only, Motorized Hunting Rule Applies, See Pages 91-92</i>
1036	52-1 ^b (see pg 34)	50	Oct 5 - Oct 31	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1037	54	500	Oct 5 - Oct 31	
1038	54	20	Nov 15 - Nov 30	
1039	55-1	25	Aug 15 - Sep 24	
1040	55-1	375	Oct 5 - Oct 31	
1041	57	109	Oct 5 - Oct 31	
1042	57	10	Nov 15 - Nov 30	
1043	58 ^a (see pg 35)	10	Oct 10 - Nov 30	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1044	60-1 ^a (see pg 35)	25	Oct 10 - Nov 30	<i>See note 2, Page 31</i>
1045	62	15	Oct 10 - Nov 30	
1046	66	10	Oct 10 - Nov 30	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1047	67	20	Oct 10 - Nov 30	<i>See note 5, Page 31</i>
1048	69	10	Oct 10 - Nov 30	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1049	70	175	Aug 30 - Sep 30	<i>Archery only, Motorized Hunting Rule Applies, See Pages 91-92</i>
			Oct 10 - Oct 31	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1050	73	Unlimited	Oct 10 - Oct 16	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1051	78	200	Aug 30 - Sep 30	<i>Archery only, Motorized Hunting Rule Applies, See Pages 91-92</i>
			Oct 10 - Oct 31	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>

**CONTROLLED
DEER**

 2013 Controlled Hunts Antlerless Deer				
Hunt No.	Controlled Hunt Areas	Tags	Season Dates	Notes
1052	22	50	Oct 10 - Oct 24	
1053	28-2 ^b (see pg 33)	30	Sep 15 - Oct 31	<i>Portion of unit only</i>
1054	31	50	Oct 10 - Oct 24	
1055	32	150	Oct 10 - Oct 24	<i>See note 2, Page 31, Motorized Hunting Rule Applies, See Pages 91-92</i>
1056	32A	150	Oct 10 - Oct 24	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1057	39-1	800	Oct 10 - Oct 31	
1058	43	150	Oct 10 - Oct 31	
1059	44	150	Oct 10 - Nov 9	
1060	45-1	250	Nov 1 - Nov 14	<i>See notes 2 & 4, Page 31, Motorized Hunting Rule Applies, See Pages 91-92</i>
1061	45-2 ^b (see pg 34)	350	Nov 15 - Nov 30	<i>See note 4, Page 31, Motorized Hunting Rule Applies, See Pages 91-92</i>
1062	45-3 ^b (see pg 34)	50	Dec 1 - Dec 15	<i>See note 4, Page 31, Motorized Hunting Rule Applies, See Pages 91-92</i>

^a This hunt includes other units or parts of other units. See controlled hunt area descriptions.

^b This hunt includes only a portion of this unit. See controlled hunt area descriptions.

For details on controlled hunt rules and restrictions, please see pages 94-97.

 2013 Controlled Hunts Antlerless Deer - continued				
Hunt No.	Controlled Hunt Areas	Tags	Season Dates	Notes
1063	48	50	Oct 10 - Oct 31	
1064	49	50	Oct 10 - Oct 31	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1065	52-2	100	Nov 15 - Nov 30	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1066	54	100	Nov 1 - Nov 14	
1067	55-1	100	Nov 1 - Nov 14	
1068	56	100	Nov 15 - Nov 30	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>

 2013 Controlled Hunts Either Sex Deer				
Hunt No.	Controlled Hunt Areas	Tags	Season Dates	Notes
1069	60-2 ^a (see pg 35)	200	Oct 5 - Nov 8	<i>See note 2, Page 31</i>
1070	62	100	Oct 5 - Nov 8	
1071	63A	50	Oct 5 - Nov 15	<i>Mule deer only, Short range weapons only</i>
1072	66	25	Oct 5 - Nov 8	
1073	67	75	Oct 5 - Nov 8	<i>See note 5, Page 31</i>

**CONTROLLED
DEER**

 2013 Controlled Hunts Youth Only Deer				
Hunt No.	Controlled Hunt Areas	Tags	Season Dates	Notes
1074	11A	25	Oct 10 - Dec 31	<i>Either sex</i>
1075	28-2 ^b (see pg 33)	15	Sep 15 - Oct 31	<i>Either sex, Portion of Unit only</i>
1076	44	150	Oct 10 - Nov 9	<i>Antlerless only</i>
1077	45-3 ^b (see pg 34)	50	Dec 1 - Dec 15	<i>Antlerless only, See note 4, Page 31, Motorized Hunting Rule Applies, See Pages 91-92</i>
1078	45-4 ^a (see pg 34)	200	Nov 15 - Nov 30	<i>Antlerless only, See note 4, Page 31, Motorized Hunting Rule Applies, See Pages 91-92</i>
1079	47-1	50	Oct 5 - Oct 31	<i>Antlered only, Motorized Hunting Rule Applies, See Pages 91-92</i>
1080	47-1	20	Oct 5 - Oct 31	<i>Antlerless only, Motorized Hunting Rule Applies, See Pages 91-92</i>
1081	54	100	Oct 5 - Oct 31	<i>Antlered only</i>
1082	54	130	Oct 5 - Oct 31	<i>Antlerless only</i>
1083	55-2 ^a (see pg 35)	50	Oct 5 - Oct 31	<i>Antlered only</i>
1084	55-2 ^a (see pg 35)	50	Oct 5 - Oct 31	<i>Antlerless only</i>

^a This hunt includes other units or parts of other units. See controlled hunt area descriptions.

^b This hunt includes only a portion of this unit. See controlled hunt area descriptions.

For details on controlled hunt rules and restrictions, please see pages 94-97.

 2013 Controlled Hunts Archery Only Deer - Archery Permit Required				
Hunt No.	Controlled Hunt Areas	Tags	Season Dates	Notes
1085	22	25	Aug 30 - Sep 30	<i>Either sex</i>
1086	39-2 ^b (see pg 34)	50	Nov 16 - Dec 16	<i>Either sex, See note 6, Page 31, Roads on Boise River WMA closed to Motorized Travel</i>
1087	40	25	Aug 15 - Sep 30	<i>Antlered only</i>
1088	41-2 ^a (see pg 34)	25	Aug 15 - Sep 30	<i>Antlered only</i>
1089	45-1	10	Aug 15 - Sep 15	<i>Antlered only, See notes 2 & 4, Page 31, Motorized Hunting Rule Applies, See Pages 91-92</i>
1090	53 ^b (see pg 34)	Unlimited	Aug 30 - Dec 19	<i>Either Sex, Motorized Hunting Rule Applies, See Pages 91-92</i>
1091	68A	Unlimited	Aug 30 - Dec 19	<i>Either sex</i>
1092	72 ^a (see pg 35)	Unlimited	Nov 16 - Dec 5	<i>Antlered only, Motorized Hunting Rule Applies, See Pages 91-92</i>

 2013 Controlled Hunts Muzzleloader Only Deer - Muzzleloader Permit Required				
Hunt No.	Controlled Hunt Areas	Tags	Season Dates	Notes
1093	8A	25	Oct 10 - Dec 14	<i>Either sex, White-tailed deer only</i>
1094	10A	25	Oct 10 - Dec 14	<i>Either sex, White-tailed deer only</i>
1095	33 ^a (see pg 33)	149	Nov 10 - Nov 30	<i>Antlered only</i>
1096	37 ^a (see pg 34)	73	Nov 25 - Dec 9	<i>Antlered only, Motorized Hunting Rule Applies, See Pages 91-92</i>
1097	43	125	Oct 1 - Oct 9	<i>Either sex</i>
1098	45-1	30	Oct 1 - Oct 14	<i>Antlered only, See notes 2 & 4, Page 31, Motorized Hunting Rule Applies, See Pages 91-92</i>
1099	51 ^a (see pg 34)	100	Nov 1 - Nov 30	<i>Either sex, Motorized Hunting Rule Applies, See Pages 91-92</i>
1100	52-3 ^b (see pg 34)	65	Oct 15 - Nov 14	<i>Antlered only, Motorized Hunting Rule Applies, See Pages 91-92</i>
1101	52A	75	Nov 10 - Nov 24	<i>Either sex, Motorized Hunting Rule Applies, See Pages 91-92</i>
1102	61	Unlimited	Nov 11 - Dec 9	<i>Either sex</i>
1103	64 ^a (see pg 35)	50	Oct 25 - Nov 30	<i>Either sex</i>

**CONTROLLED
DEER**

^a This hunt includes other units or parts of other units. See controlled hunt area descriptions.

^b This hunt includes only a portion of this unit. See controlled hunt area descriptions.

For details on controlled hunt rules and restrictions, please see pages 94-97.

 2013 Controlled Hunts Youth Only - Extra Antlerless Deer				
Hunt No.	Controlled Hunt Areas	Tags	Season Dates	Notes
1104	8-2X ^a (see pg 33)	200	Aug 30 - Dec 20	<i>Private land only, See note 7, Page 31</i>
1105	21X ^a (see pg 33)	50	Sep 1 - Dec 31	<i>Short range weapons only, Private land only, Very limited access</i>
1106	36AX ^a (see pg 34)	35	Sep 1 - Dec 31	<i>Short range weapons only, Private land only, Very limited access</i>
1107	40X ^a (see pg 34)	100	Oct 10 - Nov 24	<i>Portion of Units 40 & 41 only, Very limited access</i>

CONTROLLED DEER

 2013 Controlled Hunts Extra Antlerless Deer				
Hunt No.	Controlled Hunt Areas	Tags	Season Dates	Notes
1108	1X ^b (see pg 33)	300	Aug 30 - Sep 30	<i>Archery only, White-tailed deer only</i>
			Oct 10 - Dec 24	<i>White-tailed deer only</i>
1109	3X ^b (see pg 33)	50	Oct 10 - Dec 1	<i>Private land only, White-tailed deer only</i>
1110	8-1X	350	Aug 30 - Sep 30	<i>Archery only, White-tailed deer only</i>
			Oct 10 - Dec 14	<i>White-tailed deer only</i>
1111	8AX ^b (see pg 33)	350	Aug 30 - Sep 30	<i>Archery only, White-tailed deer only</i>
			Oct 10 - Dec 1	<i>White-tailed deer only</i>
			Dec 2 - Dec 14	<i>Muzzleloader only, White-tailed deer only</i>
1112	10AX ^b (see pg 33)	400	Aug 30 - Sep 30	<i>Archery only, White-tailed deer only</i>
			Oct 10 - Dec 1	<i>White-tailed deer only</i>
			Dec 2 - Dec 14	<i>Muzzleloader only, White-tailed deer only</i>
1113	11X ^b (see pg 33)	100	Oct 10 - Dec 1	<i>Mule Deer or White-tailed Deer</i>
1114	11AX	650	Aug 30 - Sep 30	<i>Archery only, Unit 11A only</i>
			Oct 10 - Dec 14	<i>Mule Deer or White-tailed Deer</i>
1115	15X ^b (see pg 33)	100	Aug 30 - Sep 30	<i>Archery only, White-tailed deer only</i>
			Oct 10 - Nov 20	<i>White-tailed deer only</i>
1116	16X ^b (see pg 33)	100	Dec 5 - Dec 20	<i>Archery only, White-tailed deer only</i>
			Oct 10 - Nov 20	<i>White-tailed deer only</i>
1117	21X ^a (see pg 33)	160	Nov 21 - Dec 9	<i>Muzzleloader only, White-tailed deer only</i>
			Sep 1 - Dec 31	<i>Short range weapons only, Private land only, Very limited access</i>
1118	32X ^b (see pg 33)	100	Aug 1 - Dec 31	<i>Very limited access, Motorized Hunting Rule Applies, See Pages 91-92</i>
1119	36AX ^a (see pg 34)	105	Sep 1 - Dec 31	<i>Short range weapons only, Private land only, Very limited access,</i>
1120	38X ^b (see pg 34)	10	Oct 10 - Oct 29	<i>Deer Flat National Wildlife Refuge has specific hunting requirements, Before applying, See note 3, Page 31</i>

^a This hunt includes other units or parts of other units. See controlled hunt area descriptions.

^b This hunt includes only a portion of this unit. See controlled hunt area descriptions.

For details on controlled hunt rules and restrictions, please see pages 94-97.

2013 Controlled Hunts Extra Antlerless Deer - continued				
Hunt No.	Controlled Hunt Areas	Tags	Season Dates	Notes
1121	38X ^b (see pg 34)	10	Oct 30 - Nov 18	<i>Deer Flat National Wildlife Refuge has specific hunting requirements, Before applying, See note 3, Page 31</i>
1122	38X ^b (see pg 34)	10	Nov 19 - Dec 8	<i>Deer Flat National Wildlife Refuge has specific hunting requirements, Before applying, See note 3, Page 31</i>
1123	38X ^b (see pg 34)	10	Dec 9 - Dec 28	<i>Deer Flat National Wildlife Refuge has specific hunting requirements, Before applying, See note 3, Page 31</i>
1124	50X ^a (see pg 34)	1,200	Aug 30 - Sep 30	<i>Archery only, White-tailed deer only, Motorized Hunting Rule Applies in Units 50, 51, 58, 59, 59A, 66 & 69, See Pages 91-92</i>
			Oct 10 - Oct 31	<i>White-tailed deer only, See notes 5 & 8, Page 31, Motorized Hunting Rule Applies in Units 50, 51, 58, 59, 59A, 66 & 69, See Pages 91-92</i>
			Nov 1 - Dec 19	<i>Archery only, White-tailed deer only, Units 60, 60A, 62, 63, 64, 65, 66, 67 & 69 only Motorized Hunting Rule Applies in Units 66 & 69, See Pages 91-92</i>
			Nov 10 - Dec 9	<i>White-tailed deer only, Units 50, 51, 58, 59, 59A, 61, & 62A only, Motorized Hunting Rule Applies in Units 50, 51, 58, 59 & 59A, See Pages 91-92</i>
1125	63AX	300	Aug 30 - Sep 30	<i>Archery only, White-tailed deer only</i>
			Oct 10 - Oct 31	<i>Short range weapons only, White-tailed deer only</i>
			Nov 1 - Dec 19	<i>Archery only, White-tailed deer only</i>
1126	68AX	100	Aug 30 - Oct 31	<i>Archery only, Very limited access</i>

**CONTROLLED
DEER**

Notes:

1. This hunt has very limited access because of few roads and private property.
2. Short-range weapons **only** on CJ Strike, Chester Wetlands, and Montour Wildlife Management Areas, and all of Units 63 and 63A.
3. Short-range weapons **only**. Portion of Unit 38 within the Deer Flat National Wildlife Refuge (DFNWR) **only**. **Before applying** for this hunt please review the special regulations at <http://www.fws.gov/deerflat/recreation/hunting.html> or contact DFNWR at (208) 467-9278, 13751 Upper Embankment Rd, Nampa, ID 83686.
4. Short-range weapons **only** on the islands in the Snake River.
5. Short-range weapons **only** in that portion of Unit 67 south and west of State Highway 26.
6. Mandatory class required - Anyone drawing a deer controlled archery only hunt tag for this hunt must satisfactorily complete a mandatory hunter education course. The course will be administered by the Southwest Region and will include the hunt boundaries and legal restrictions, and will emphasize proper hunter ethics. Bowhunter education required.
7. All holders of this tag may only hunt during dates that the individual unit is open to General Tag holders. Hunters are also limited to weapon type that the General Season Tag holder must use for the given dates. Private land **only**.
8. Short-range weapons **only** in that portion of Unit 60A south and east of the North (Henry's) Fork Snake River, and that portion within 1 mile north and west of the North Fork Snake River.

^a This hunt includes other units or parts of other units. See controlled hunt area descriptions.

^b This hunt includes only a portion of this unit. See controlled hunt area descriptions.

For details on controlled hunt rules and restrictions, please see pages 94-97.

 2013 Controlled Hunts Outfitter Allocation Deer - Antlered Deer Only				
Hunt No.	Controlled Hunt Areas	Tags	Season Dates	Notes
1127	1 ^a (see pg 33)	1	Aug 30 - Dec 1	
1128	11	1	Oct 10 - Nov 3	<i>Mule deer only</i>
1129	11A	2	Oct 10 - Nov 3	<i>Mule deer only</i>
1130	13	37	Oct 10 - Nov 3	<i>Mule deer only</i>
1131	14	22	Oct 10 - Nov 3	<i>Mule deer only</i>
1132	18	9	Oct 10 - Nov 3	<i>Mule deer only</i>
1133	21	1	Oct 10 - Nov 30	
1134	22	6	Nov 1 - Nov 24	
1135	28-1	1	Oct 10 - Nov 30	
1136	33 ^a (see pg 33)	1	Nov 10 - Nov 24	<i>Muzzleloader only</i>
1137	36A	1	Oct 10 - Nov 30	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1138	36B	1	Oct 10 - Nov 30	
1139	37 ^a (see pg 34)	2	Nov 25 - Dec 9	<i>Muzzleloader only, Motorized Hunting Rule Applies, See Pages 91-92</i>
1140	39-1	1	Aug 15 - Sep 30	
1141	40	5	Nov 1 - Nov 24	
1142	42	1	Nov 1 - Nov 24	
1143	45-1	1	Aug 15 - Sep 15	<i>Antlered only, Archery only, Motorized Hunting Rule Applies, See Pages 91-92</i>
1144	45-1	2	Oct 15 - Oct 31	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1145	47-1	3	Oct 5 - Oct 31	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1146	50 ^b (see pg 34)	1	Oct 10 - Nov 30	<i>Portion of Unit only, Motorized Hunting Rule Applies, See Pages 91-92</i>
1147	54	2	Oct 5 - Oct 31	
1148	54	1	Nov 15 - Nov 30	
1149	55-1	2	Oct 5 - Oct 31	
1150	55-2 ^a (see pg 35)	1	Oct 5 - Oct 31	<i>Youth hunt only, Either sex</i>
1151	57	2	Oct 5 - Oct 31	
1152	70	1	Aug 30 - Sep 30	<i>Archery only, Motorized Hunting Rule Applies, See Pages 91-92</i>
			Oct 10 - Oct 31	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>
1153	78	7	Aug 30 - Sep 30	<i>Archery only, Motorized Hunting Rule Applies, See Pages 91-92</i>
			Oct 10 - Oct 31	<i>Motorized Hunting Rule Applies, See Pages 91-92</i>

Outfitted controlled hunts:
Before submitting an application for an outfitter-allocated controlled hunt, hunters must have a written agreement with an outfitter licensed in the hunt area. Successful applicants must hunt with an outfitter licensed for the hunt area. The outfitter must purchase the hunter's permit and tag by August 20. Successful applicants authorize Idaho Fish and Game to provide names and addresses to the outfitters licensed for that controlled hunt. For a list of licensed outfitters in the applicable controlled hunt area, a sample written agreement, and additional information contact the Idaho Outfitters and Guides Licensing Board at their website - www.oglb.idaho.gov or by calling 208-327-7380.

^a This hunt includes other units or parts of other units. See controlled hunt area descriptions.

^b This hunt includes only a portion of this unit. See controlled hunt area descriptions.

For details on controlled hunt rules and restrictions, please see pages 94-97.

Submitted by:

Wayne Wakkinen
Regional Wildlife Manager

George Pauley
Regional Wildlife Manager

Craig White
Regional Wildlife Manager

Regan Berkley
Regional Wildlife Manager

Randy Smith
Regional Wildlife Manager

Martha Wackenhut
Regional Wildlife Manager

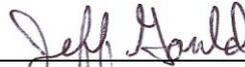
Daryl Meints
Regional Wildlife Manager

Greg Painter
Regional Wildlife Manager

Approved by: IDAHO DEPARTMENT OF FISH AND GAME



Brad Compton
Asst Chief, Bureau of Wildlife
Federal Aid Coordinator



Jeff Gould, Chief
Bureau of Wildlife