**IDAHO DEPARTMENT OF FISH AND GAME**

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**Surveys and Inventories**

**2013 Statewide Report**

# MULE DEER

Study I, Job 2

July 1, 2012 to June 30, 2013

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**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, 2012 to June 30, 2013

## STATEWIDE

### Summary

Mule deer are Idaho's most abundant and widely distributed big game animal. They provide more recreational opportunity than any other big game species. Mule deer densities are highest in Idaho 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.

Mule deer are primarily browsers, so most of their diet is composed of the leaves and twigs of shrubs and trees, particularly during winter. Grasses and forbs can be important dietary components, particularly during spring and early summer.

Winter range is a critical component of mule deer habitat. Mule deer are susceptible to high mortality during periods of prolonged deep snow and low temperatures. Winter range has long been recognized as an important habitat component, but our understanding has changed as we have learned more about how deer use it. In the 1950s and 1960s, most of our emphasis was on the food resources on winter range. This was reflected in plantings of bitterbrush and measurements of utilization of browse plants. It was obvious that the food resources of winter range were important, but it could not account for all the variation observed in winter range use.

Even under the best conditions, deer lose weight throughout winter. The best "winter range" a mule deer has is the fat stored in the body during spring, summer, and fall. The condition of a deer at the start of winter depends on the quality of habitat it occupies during the rest of the year. The main strategy of a mule deer in winter is to minimize energy loss and eat enough to prolong fat reserves. Deer commonly seek winter ranges where there is good thermal cover to minimize energy loss. Deer often become very sedentary during winter, moving as little as possible to conserve energy.

Although our view of winter range has changed, its importance has not. Cover, aspect, and elevation are recognized as crucial components, and during certain times, are more important than food. Human disturbance of deer on winter ranges causes them to move from favored sites and waste precious energy. The amount of winter range is important to allow for different snow conditions and fluctuations in deer populations.

Much of Idaho's historic mule deer winter range has been developed for other uses and is now occupied by man. Ranches, farms, subdivisions, and industry located in the foothills and at lower elevations have eliminated winter range. In many parts of Idaho, deer winter range is adequate for the "average" winter, but when severe winters occur, deer are forced to low elevations where they come into conflict with humans. Deer can damage standing and stored crops; most commonly hay, ornamental shrubs, trees, and orchards. Depredations by mule deer can be severe and, in many cases, is an important factor in determining the optimum size of a deer population.

Early spring is an important time of year for mule deer, and spring range is a key component of year-round habitat. Most winter-related mortality actually occurs in early spring. Fawns and old bucks are most likely to die of winter stress. Mortality of does is usually low, but their condition is particularly critical because they are entering the third trimester of pregnancy and development of the fetus taxes their energetic resources. The quality and quantity of nutritious forage in spring (Apr-Jul) has a major effect on production and survival of fawns. The timing of spring green-up is also important. A winter-stressed deer needs good forage as soon as possible in the spring. Cold, late spring weather with late green-up can increase mortality and reduce production.

Summer-fall ranges are obviously important because this is where deer produce fat reserves that will allow survival through winter. Quality of summer-fall forage directly influences pregnancy and ovulation rates and, therefore, fawn production. Late fall is the last opportunity for deer to forage and store fat before moving to winter range. High-quality fall range is important for bucks because their body reserves are reduced by rutting.

Many of Idaho's mule deer are migratory and commonly travel long distances (20-100 miles) from summer range to winter range. Mule deer usually return to the same summer and winter ranges each year. Tagging and radio telemetry studies indicate that deer summering in the same area may go to different winter ranges, sometimes different GMUs or different states. We have also found that deer wintering together can move to entirely different summer ranges. The migratory behavior of deer and the differential distribution of bucks and does complicate the measurement and interpretation of population parameters.

Given mule deer's fidelity for winter ranges, many of man's activities can disrupt or even eliminate migrations, forcing deer to winter on sub-optimal ranges that may increase their mortality rates. Interstate highways, deer-proof fences, and urbanization represent examples of activities that can disrupt migration patterns. Survival through winter is a difficult balance between energy conservation and energy expenditure. Activities that increase energy expense likely increase over-winter mortality.

The structure of mule deer populations varies with habitat and population size. Populations at low density (below carrying capacity) tend to have high reproductive rates which allow for rapid growth. Some populations stabilize at low density because they are susceptible to high mortality during unfavorable conditions. This is typical of populations in marginal habitat.

Populations at high density (near carrying capacity) tend to have low reproductive rates, and a stable age distribution. Population growth is slow, if it occurs at all. Annual production replaces annual mortality. This type of population is commonly found in stable, well-established habitat types, particularly climax forests. A wide spectrum of population structures is found between these two extremes.

Mule deer are best adapted to seral, transitional habitat types. Habitat succession is a continual and dynamic process, and those habitats best suited for mule deer cannot be expected to remain indefinitely or even be managed for on a large enough scale to have significant population effects. Population declines in parts of southern Idaho that were marked by the 1992-1993 winters are a natural process in mule deer dynamics. Populations are expected to increase given favorable environmental conditions. However, the long-term outlook for mule deer statewide is that of slowly diminishing habitat quantity and quality over time. Maintaining healthy populations with harvestable surplus is expected and will continue.

The effect of harvest mortality is highly variable in mule deer. Generally, most annual mortality is not hunter-harvest related. Factors such as predation, malnutrition over winter, accidents, and disease are responsible for most deaths in mule deer populations. Therefore, population response tends to be independent of harvest. Exceptions include antlerless opportunity designed to stabilize or reduce populations and effects of hunter harvest on buck survival and age structure. Hunting seasons designed to offer significantly more opportunity for antlered deer than antlerless deer, or during periods when bucks are vulnerable (rut, winter range), can reduce the proportion of bucks and particularly older bucks in the population. Buck-only seasons will not limit population growth; however, they can affect the number of older bucks. The Idaho Fish and Game Commission (Commission) established a statewide minimum of 15 bucks per 100 does post-season, in the 2008-2017 mule deer management plan. The statewide minimum of 15 bucks:100 does is above that necessary proportion for adequate reproduction.

Proper harvest management for mule deer, given their relative independence to harvest effects, is to adequately monitor populations annually and be responsive to population changes. Liberal seasons can be applied during periods when populations are expanding rapidly and conservative seasons applied when environmental factors are limiting population growth.

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 have 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 or 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:

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

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

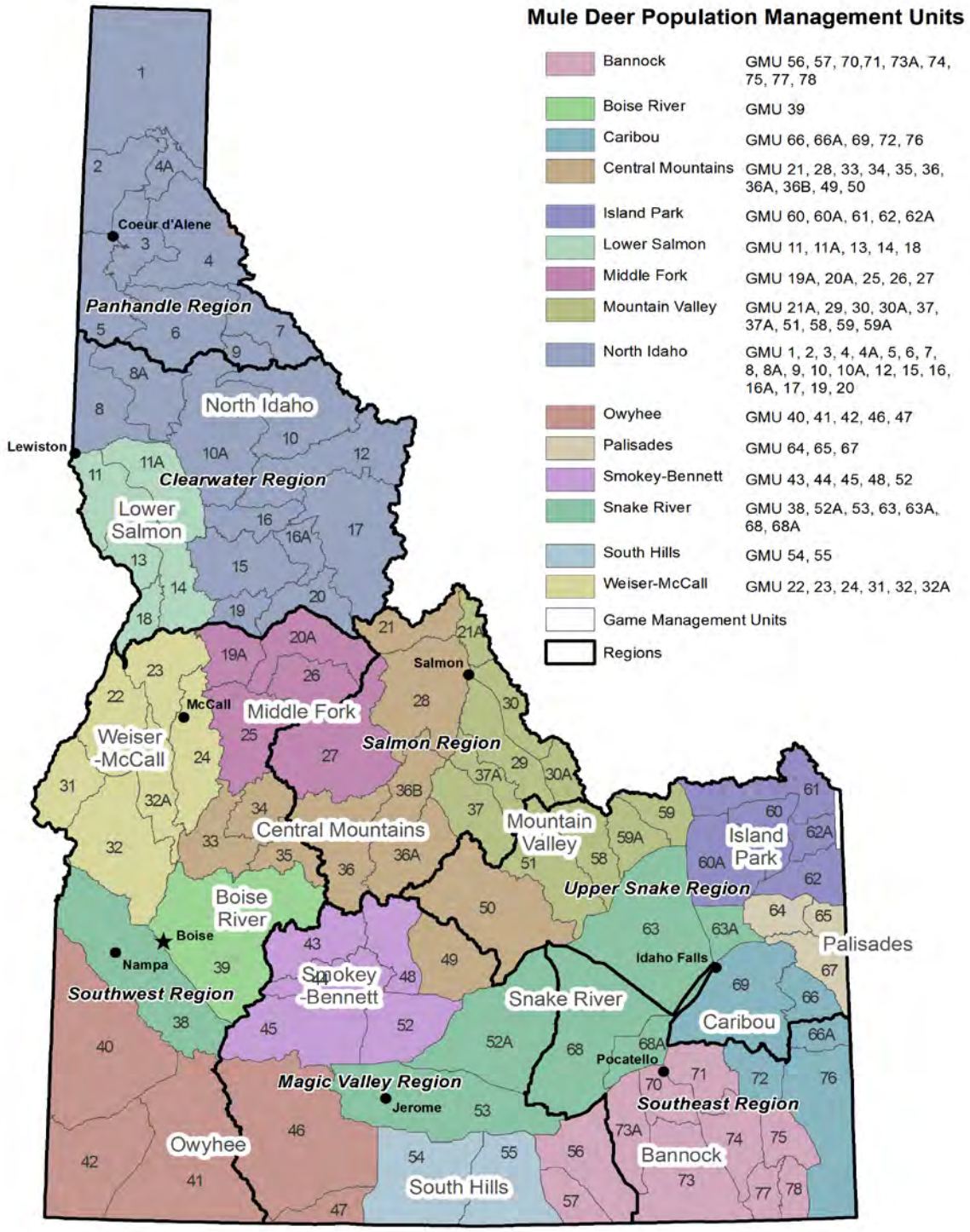



Figure 1. Mule Deer Statewide Population Management Units.

# Mule Deer
## Statewide

**Management Objectives**

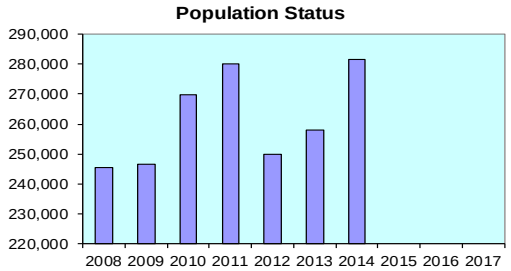
| | Short-Term Objective | Long-Term Objective |
|---|---|---|
| # of Deer | TBD | TBD |
| Pop. Goal | Increase | Increase |
| Hunter Days | >350,000 | >450,000 |

| | | 3-Year Averages | |
|---|---|---|---|
| Square Miles = | 84,437 | | |
| % Public Land = | 69% | Hunters per square mile = | 1.05 |
| Major Land Type = | Various | Harvest per square mile = | 0.28 |
| | | Success Rate = | 27% |

**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 Surival = annual survival (June - May)

**Harvest Statistics**

| | | | Deer Harvest | | |
|---|---|---|---|---|---|
| | Hunters | Hunter Days | Antlerless | Antlered | % 4+ Points |
| 1988 | 148,600 | 978,000 | 19,238 | 41,508 | |
| 1989 | 142,400 | 1,089,800 | 28,670 | 43,650 | |
| 1990 | 154,500 | 1,188,000 | 18,677 | 33,197 | |
| 1991 | 146,500 | 1,810,000 | 15,433 | 26,790 | |
| 1992 | 109,770 | 866,000 | 14,725 | 26,679 | 44% |
| 1993 | 128,000 | 835,000 | 8,884 | 15,863 | 44% |
| 1994 | 133,063 | 655,000 | 5,833 | 18,599 | 44% |
| 1995 | 134,722 | 691,800 | 4,713 | 16,478 | 43% |
| 1996 | 124,795 | 616,500 | 5,028 | 19,318 | 48% |
| 1997 | 147,244 | 503,400 | 3,437 | 17,737 | 38% |
| 1998 | 116,771 | 803,055 | 2,393 | 19,656 | 38% |
| 1999 | 121,364 | 667,898 | 4,695 | 19,955 | 33% |
| 2000 | | | 5,000 | 20,100 | |
| 2001 | 112,320 | 779,879 | 3,800 | 19,600 | 26% |
| 2002 | 124,200 | 761,851 | 5,463 | 17,607 | 33% |
| 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% |

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.

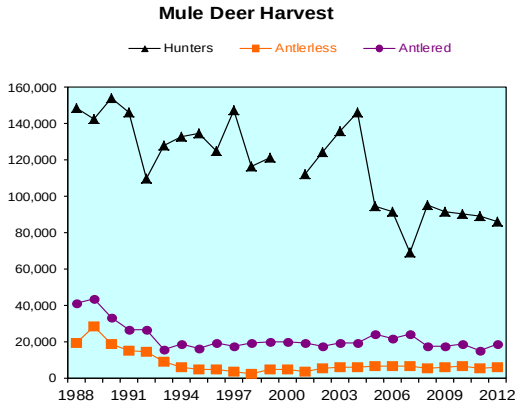



Figure 2. Mule Deer Analysis Statewide.

## 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 5,984 hunter days over the last three years (2010-2012). Additionally, an average of 70% of the bucks harvested in these GMUs over the past three years (2010-2012) have been 4-point or larger with a 59% 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 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

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

## Harvest

Total harvest in PMU 1 in 2012 was estimated at 685 mule deer based on mandatory harvest report cards. This represents a 4% increase in harvest from 2011 (660) and is 2% less than the five-year average of 701. Total hunter numbers were estimated at 1,161 for 2012 compared to 1,126 hunters for 2011. An average of 70% of the bucks harvested in these GMUs over the past three years (2010-2012) have been 4-point or larger with a 59% 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 = | 0.42 |
| % Public Land = | 37% | Harvest per square mile = | 0.25 |
| Major Land Type = | Agriculture/Range | Success Rate = | 58% |

### Population Status

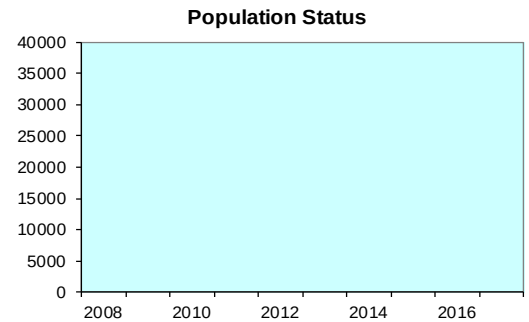
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| # of Deer | ND | ND | ND | ND | ND | ND | | | | |

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 | ND | ND | ND | ND | ND | ND | ND |
| Buck:Doe | 23 | 20 | ND | ND | ND | ND | ND | ND | ND | ND |
| Fawn Survival | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Adult Doe Survival | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |

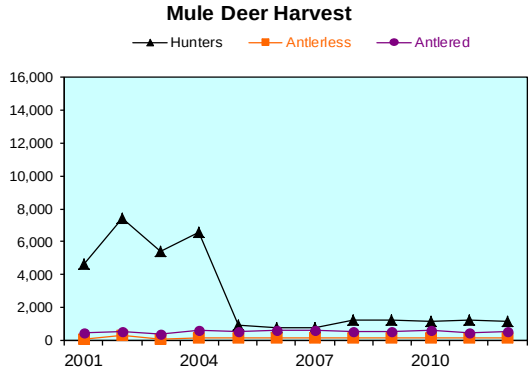
Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does
Fawn Survival = overwinter fawn survival (December - May), Adult Doe Surival = annual survival (June - May)




### Harvest Statistics

| | | | Deer Harvest | | |
|---|---|---|---|---|---|
| | Hunters | Hunter Days | Antlerless | Antlered | % 4+ Points |
| 2001 | 4,626 | 23634 | 105 | 441 | |
| 2002 | 7,445 | 34568 | 295 | 506 | |
| 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% |

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 |
| | | | | | | | | | | |

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 above 25% 4+ points (38%) in 2012. Aerial survey data indicates buck:doe ratios were 16:100 during winter 2011-2012. Over-winter fawn survival was 67% and doe survival was 95% during winter 2011-2012. In GMU 22, the December 2011 buck:doe ratio was 19:100 compared to 10:100 in December 2007 before general harvest was restricted to ≤2 point bucks. Eighty-two percent of the bucks harvested in the GMU 22 2012 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 |

| | | 3-Year Averages | |
|---|---|---|---|
| Square Miles = | 5,116 | Hunters per square mile = | 2.61 |
| % Public Land = | 56% | Harvest per square mile = | 0.72 |
| Major Land Type = | Rangeland | Success Rate = | 27% |

### 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 | |
| Buck:Doe | 22 | 13 | 12 | 10 | 13 | 18 | 20 | 13 | 15 | |
| Fawn Survival | 0.20 | 0.44 | 0.66 | 0.68 | 0.33 | 0.86 | 0.47 | 0.06 | 0.67 | |
| Adult Doe Survival | 0.88 | 0.89 | 0.93 | 0.84 | 0.84 | 0.96 | 0.98 | 0.83 | 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 Surival = annual survival (June - May)

### Harvest Statistics

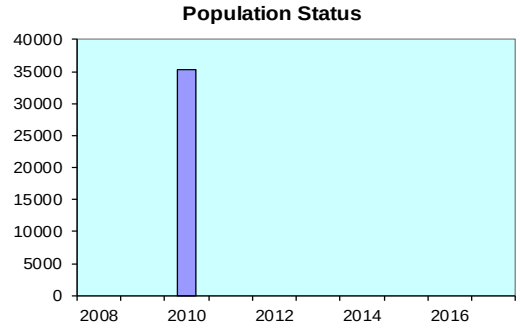
| | | | Deer Harvest | | |
|---|---|---|---|---|---|
| | Hunters | Hunter Days | Antlerless | Antlered | % 4+ Points |
| 2001 | 10,896 | 45,921 | 1,892 | 3,886 | 24% |
| 2002 | 15,752 | 66,762 | 1,998 | 3,223 | 25% |
| 2003 | 13,558 | 55,024 | 1,255 | 2,960 | 26% |
| 2004 | 15,654 | 70,526 | 1,426 | 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% |

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 |

Note: ND = no survey data available



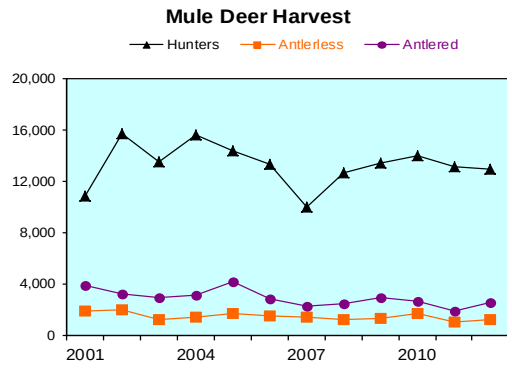




Figure 4. Weiser-McCall Mule Deer PMU Status and Objectives.

## 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.

### 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 2012 was approximately 90% of the 10-year average. Hunter days continue to meet objectives, but hunter success has hovered around 30% since 2008.

### 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 about 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 |

| | | 3-Year Averages | |
|---|---|---|---|
| Square Miles = | 4,246 | Hunters per square mile = | 0.47 |
| % Public Land = | 99% | Harvest per square mile = | 0.13 |
| Major Land Type = | Forest | Success Rate = | 28% |

### Population Status

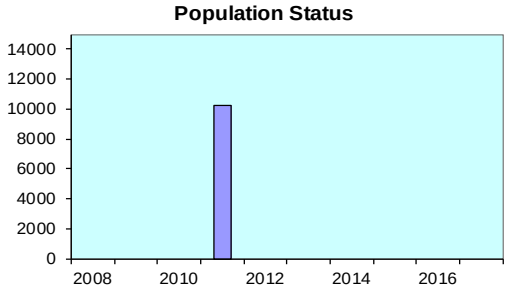
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| # of Deer | | | | 10,248 | | | | | | |

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 | |
| Buck:Doe | | 31 | | 18 | 25 | 23 | 25 | 27 | 35 | |
| Fawn Survival | ND | ND | ND | ND | 0.24 | ND | ND | ND | ND | |
| Adult Doe Survival | ND | ND | ND | ND | 0.80 | 0.95 | 0.98 | 0.95 | 0.89 | |

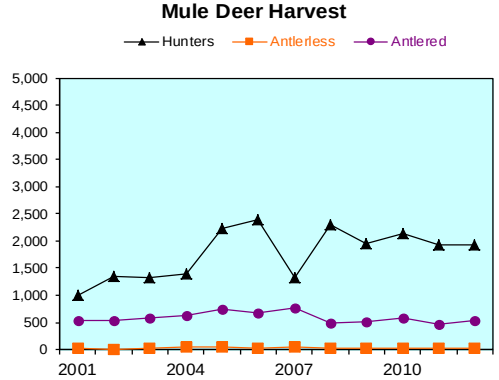
Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does
Fawn Survival = overwinter fawn survival (December - May), Adult Doe Surival = annual survival (June - May)




### Harvest Statistics

| | | | Deer Harvest | | |
|---|---|---|---|---|---|
| | Hunters | Hunter Days | Antlerless | Antlered | % 4+ Points |
| 2001 | 1,012 | 5,066 | 20 | 541 | |
| 2002 | 1,338 | 7,780 | 14 | 543 | |
| 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% |

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 |
| | | | | | | | | | | |

Note: ND = no survey data available

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 2,238 bucks since 2000. Hunter numbers have declined steadily since 2010. Buck harvest in 2012 was 1,892; approximately 367 less than the previous 10-year average.

### 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 |

| | | 3-Year Averages | |
|---|---|---|---|
| Square Miles = | 8,145 | | |
| % Public Land = | 91% | Hunters per square mile = | 1.10 |
| Major Land Type = | Forest/Rangeland | Harvest per square mile = | 0.28 |
| | | Success Rate = | 25% |

### Population Status

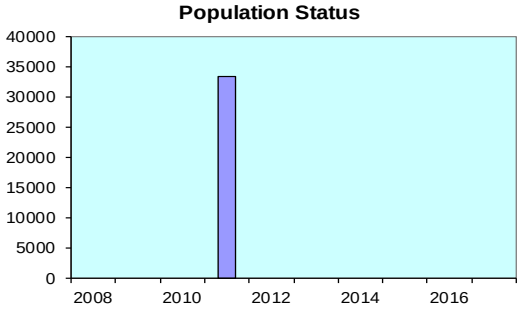
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| # of Deer | | | | 33,477 | | | | | | |

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 |

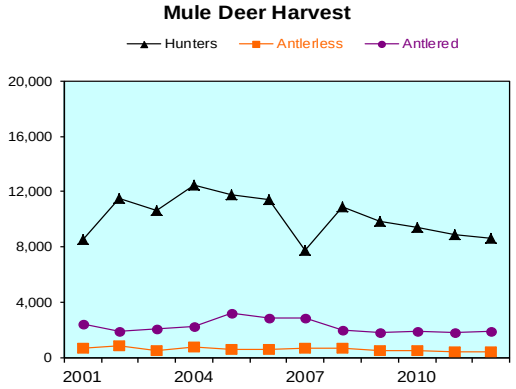
Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does
Fawn Survival = overwinter fawn survival (December - May), Adult Doe Surival = annual survival (June - May)




### Harvest Statistics

| | | | Deer Harvest | | |
|---|---|---|---|---|---|
| | Hunters | Hunter Days | Antlerless | Antlered | % 4+ Points |
| 2001 | 8,578 | 35,122 | 682 | 2,374 | |
| 2002 | 11,559 | 52,611 | 808 | 1,891 | |
| 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% |

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 GMU represents one of the major deer GMUs 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 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 GMU 39. 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 38% 4+ points in 2012. Aerial survey information indicates buck:doe ratios were just below 15:100 objective during winter's 2012-2013 (14 bucks:100 does). Fawn:doe ratios were 64:100, lower that our 2009 high of 86:100, but slightly higher than the 10-year average (60:100). Sightability surveys were conducted during winter 2010 with a population estimate of 23,039 ± 1,039 mule deer. This is down slightly compared to the previous 3 surveys, but still well within our allowable doe harvest threshold of 20,000 deer.

Fawn monitoring information for the 2012-2013 winter indicated fawn survival was slightly above average at 70% and adult doe survival was 96% within this PMU. Fawn survival fluctuates usually 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 lack of adequate forage. Intensive livestock grazing is present on much of the range. Competition among species is largely unknown.

### Predation Issues

Bobcats, coyotes, mountain lions, and black bears occur throughout the PMU. More recently wolves occupy much of the area as there are ≥ 5 packs in GMU 39. 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 GMU. 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 and is scheduled to occur every 5 years thereafter. 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 |

| | | 3-Year Averages | |
|---|---|---|---|
| Square Miles = | 2,444 | Hunters per square mile = | 4.62 |
| % Public Land = | 76% | Harvest per square mile = | 0.97 |
| Major Land Type = | Forest/Rangeland | Success Rate = | 21% |

### Population Status

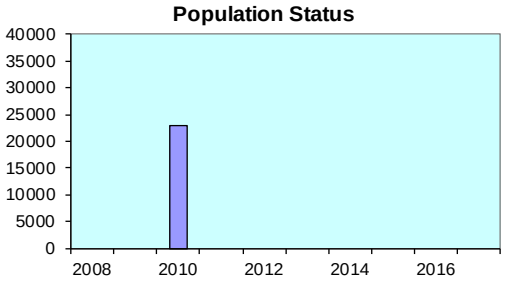
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| # of Deer | | | 23,039 | | | | | | | |

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 | |
| Buck:Doe | 15 | 13 | 28 | 16 | 12 | 14 | 25 | 17 | 16 | |
| 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 | |

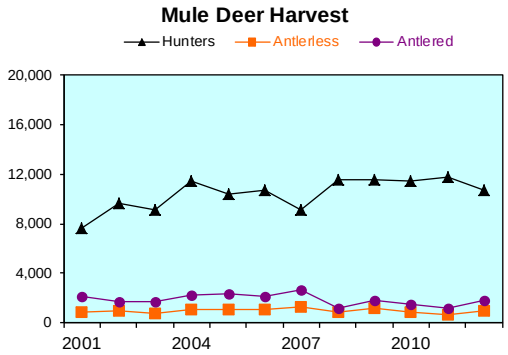
Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does
Fawn Survival = overwinter fawn survival (December - May), Adult Doe Surival = annual survival (June - May)




### Harvest Statistics

| | | | Deer Harvest | | |
|---|---|---|---|---|---|
| | Hunters | Hunter Days | Antlerless | Antlered | % 4+ Points |
| 2001 | 7,650 | 31,258 | 904 | 2,104 | |
| 2002 | 9,606 | 40,829 | 946 | 1,750 | |
| 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% |

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 |

Note: ND = no survey data available

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 2012, drawing odds for the 50-permit October buck hunt was 3.1%. 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 $mi^2$ 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 ± 236 (90% bound); 24% higher than the 2008 estimate of 10,700 ± 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 = | 1.56 |
| % Public Land = | 72% | Harvest per square mile = | 0.62 |
| Major Land Type = | Rangeland/Forest | Success Rate = | 40% |

### Population Status

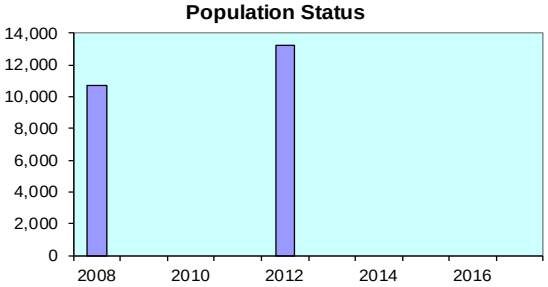
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| # of Deer | 10,700 | | | | 13,251 | | | | | |

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 | ND |
| Buck:Doe | 33 | 38 | 34 | 31 | 29 | 37 | 22 | 49 | 41 | ND |
| 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 |

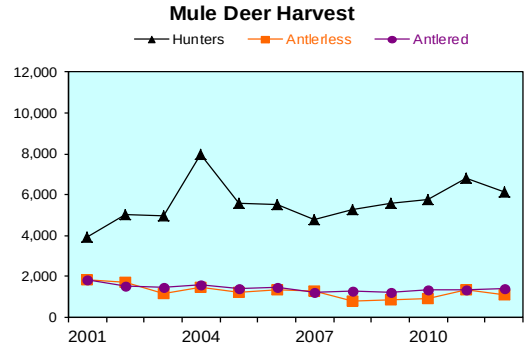
Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does
Fawn Survival = overwinter fawn survival (December - May), Adult Doe Surival = annual survival (June - May)




### Harvest Statistics

| | | | eer Harvest | | |
|---|---|---|---|---|---|
| | Hunters | Hunter Days | Antlerless | Antlered | % 4+ Points |
| 2001 | 3,894 | 14,145 | 1,835 | 1,848 | |
| 2002 | 5,016 | 19,837 | 1,737 | 1,536 | |
| 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% |

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 in this area. There are approximately 200 resident elk east of Highway 51 and about 500-600 elk on the west side of Owyhee County. 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 |

| | | 3-Year Averages | |
|---|---|---|---|
| Square Miles = | 9,015 | Hunters per square mile = | 0.61 |
| % Public Land = | 85% | Harvest per square mile = | 0.21 |
| Major Land Type = | Desert/Rangeland | Success Rate = | 34% |

### Population Status

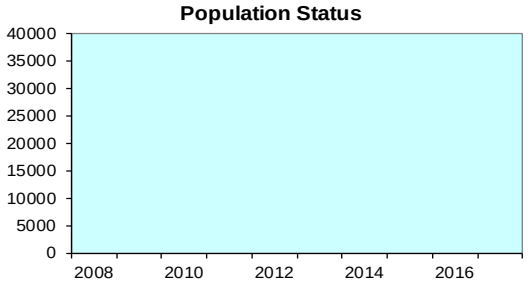
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| # of Deer | ND | ND | ND | ND | ND | ND | | | | |

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 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Buck:Doe | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Fawn Survival | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Adult Doe Survival | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |

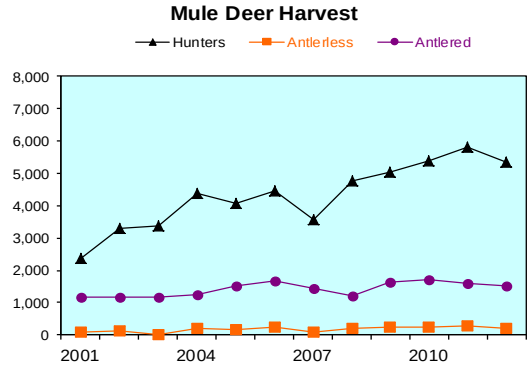
Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does
Fawn Survival = overwinter fawn survival (December - May), Adult Doe Surival = annual survival (June - May)




### Harvest Statistics

| | | | Deer Harvest | | |
|---|---|---|---|---|---|
| | Hunters | Hunter Days | Antlerless | Antlered | % 4+ Points |
| 2001 | 2,362 | 6,940 | 102 | 1,171 | |
| 2002 | 3,316 | 10,711 | 135 | 1,176 | |
| 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% |

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 |
| | | | | | | | | | | |

Note: ND = no survey data available

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 |

| | | 3-Year Averages | |
|---|---|---|---|
| Square Miles = | 2,378 | Hunters per square mile = | 1.26 |
| % Public Land = | 56% | Harvest per square mile = | 0.50 |
| Major Land Type = | Rangeland | Success Rate = | 39% |

### 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 | ND |
| Buck:Doe | 30 | 29 | 28 | 25 | 16 | 27 | 25 | 27 | 25 | ND |
| 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 Surival = annual survival (June - May)

### Harvest Statistics

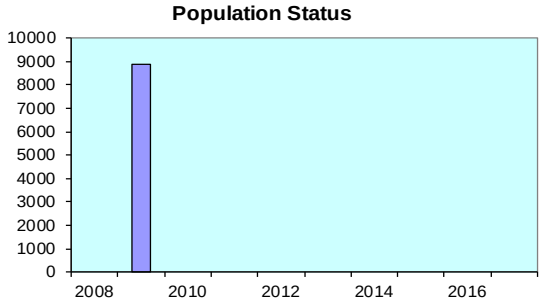
| | | | Deer Harvest | | |
|---|---|---|---|---|---|
| | Hunters | Hunter Days | Antlerless | Antlered | % 4+ Points |
| 2001 | 1,189 | 5,435 | 3 | 579 | |
| 2002 | 1,169 | 5,994 | 1 | 568 | |
| 2003 | 846 | | 47 | 479 | 33% |
| 2004 | 1,852 | 8,248 | 109 | 622 | 43% |
| 2005 | 1,457 | 5,963 | 97 | 887 | 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% |

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



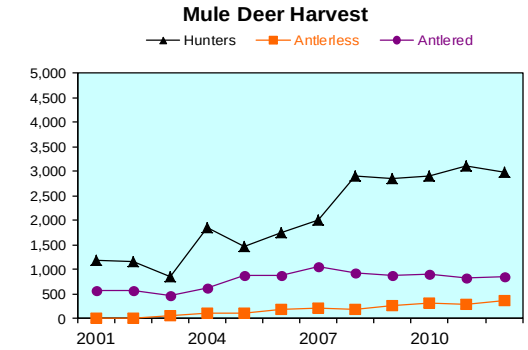




Figure 10. South Hills Mule Deer PMU Status and Objectives.

## 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.

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 productive 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. 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 and 2012-2013 were extremely mild with a low adult doe mortality rate of 6% and 9%, 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 major concern. Some winter range in this PMU does not lend itself 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. 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 over the past 5 years 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.

# 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 |

| | | 3-Year Averages | |
|---|---|---|---|
| Square Miles = | 5,470 | Hunters per square mile = | 1.86 |
| % Public Land = | 48% | Harvest per square mile = | 0.54 |
| Major Land Type = | Rangeland/Forest | Success Rate = | 29% |

### Population Status

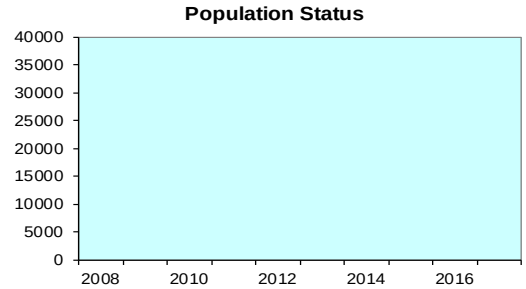
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| # of Deer | | | | | | | | | | |

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 | | | | |
| Buck:Doe | 11 | 14 | 17 | 14 | 11 | 15 | | | | |
| Fawn Survival | 0.50 | 0.73 | ND | 0.76 | 0.29 | 0.38 | 0.55 | | | |
| Adult Doe Survival | ND | ND | ND | 1.00 | 0.94 | 0.83 | 0.73 | | | |

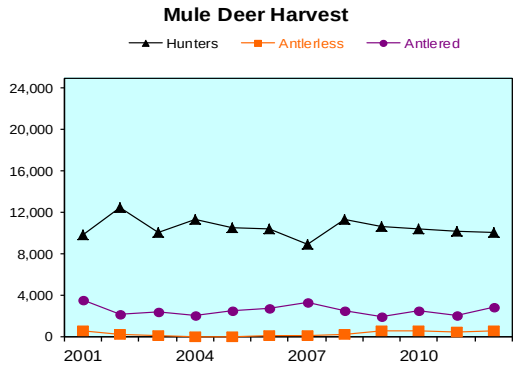
Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does
Fawn Survival = overwinter fawn survival (December - May), Adult Doe Surival = annual survival (June - May)




### Harvest Statistics

| | | | Deer Harvest | | |
|---|---|---|---|---|---|
| | Hunters | Hunter Days | Antlerless | Antlered | % 4+ Points |
| 2001 | 9,813 | 37,067 | 589 | 3,566 | |
| 2002 | 12,510 | 54,905 | 218 | 2,105 | |
| 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% |

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). 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 2010-2011was 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 and 2012-2013 winter was mild where overall adult doe survival was measured at 100% and 96%, respectively. The extremely high adult doe survival 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 over-concentrate deer during winter. Of minor concern are a few localized areas (riparian and winter range) of intense livestock pressure.

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 |

| | | 3-Year Averages | |
|---|---|---|---|
| Square Miles = | 3,875 | Hunters per square mile = | 2.16 |
| % Public Land = | 56% | Harvest per square mile = | 0.45 |
| Major Land Type = | Rangeland/Forest | Success Rate = | 21% |

### Population Status

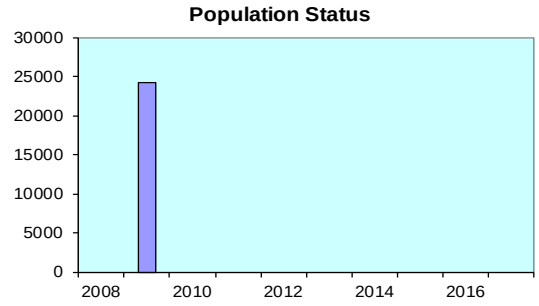
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| # of Deer | | 24,302 | | | | | | | | |

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 | | | |

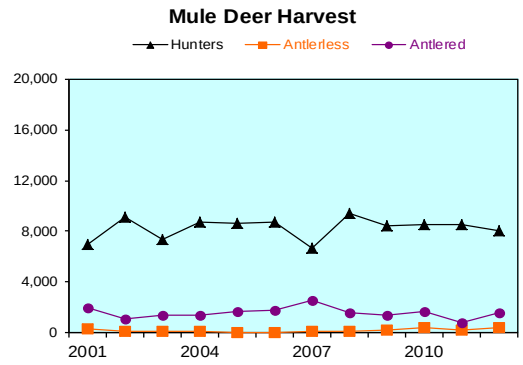
Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does
Fawn Survival = overwinter fawn survival (December - May), Adult Doe Surival = annual survival (June - May)




### Harvest Statistics

| | | | Deer Harvest | | |
|---|---|---|---|---|---|
| | Hunters | Hunter Days | Antlerless | Antlered | % 4+ Points |
| 2001 | 6,958 | 29,832 | 334 | 1,959 | |
| 2002 | 9,078 | 42,073 | 158 | 1,102 | |
| 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% |

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 2003-2011 averaged 46% 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 = | 1.59 |
| % Public Land = | 52% | Harvest per square mile = | 0.20 |
| Major Land Type = | Rangeland/Forest | Success Rate = | 13% |

### Population Status

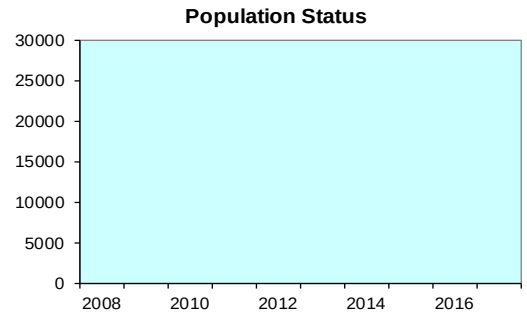
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| # of Deer | | | | | | | | | | |

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 | | |

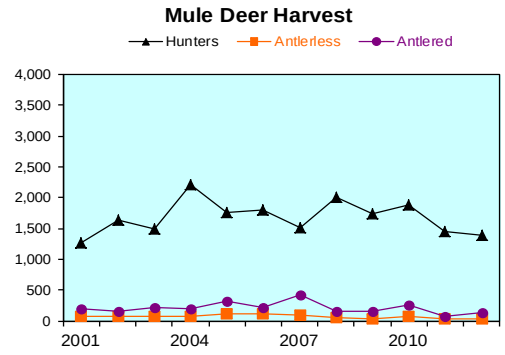
Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does
Fawn Survival = overwinter fawn survival (December - May), Adult Doe Surival = annual survival (June - May)




### Harvest Statistics

| | | | Deer Harvest | | |
|---|---|---|---|---|---|
| | Hunters | Hunter Days | Antlerless | Antlered | % 4+ Points |
| 2001 | 1,264 | 5,075 | 78 | 206 | |
| 2002 | 1,641 | 7,116 | 66 | 152 | |
| 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% |

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

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 1818, a significant decrease from the 2008 estimate of 2827.

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 5,000-acre captive elk operation on Siddoway property has fenced off the majority of the South Juniper Hills. Some of that 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.

**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 low of 11% in 2011 to a high of 84% in 2004. 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 |

| | | 3-Year Averages | |
|---|---|---|---|
| Square Miles = | 2,886 | | |
| % Public Land = | 62% | Hunters per square mile = | 1.02 |
| Major Land Type = | Forest/Desert | Harvest per square mile = | 0.18 |
| | | Success Rate = | 17% |

### Population Status

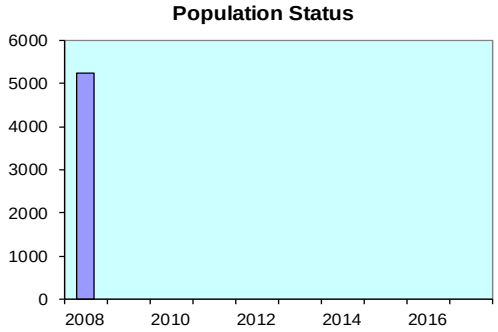
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| # of Deer | 5224 | | | | | | | | | |

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 | | |
| Buck:Doe | 21 | 43 | 31 | ND | 29 | 23 | 28 | 31 | | |
| 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 | | |

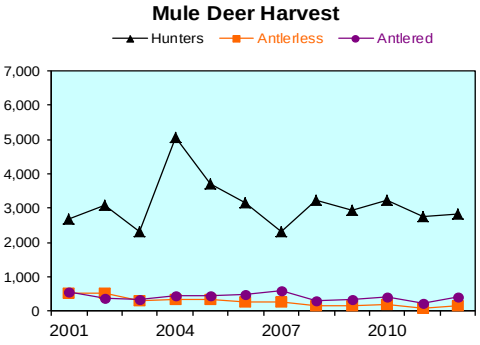
Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does
Fawn Survival = overwinter fawn survival (December - May), Adult Doe Surival = annual survival (June - May)




### Harvest Statistics

| | | | Deer Harvest | | |
|---|---|---|---|---|---|
| | Hunters | Hunter Days | Antlerless | Antlered | % 4+ Points |
| 2001 | 2,692 | 10,868 | 517 | 572 | |
| 2002 | 3,095 | 14,123 | 530 | 386 | |
| 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% |

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

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 2012 fawn ratio of 59 fawns per 100 does was unchanged from 2011, however 2011-2012 winter fawn survival was unusually low at 37%, given the mild winter conditions. Adult doe survival was 98%.

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.

# 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 = | 1.08 |
| Major Land Type = | Forest/Rangeland | Harvest per square mile = | 0.30 |
| | | Success Rate = | 28% |

### Population Status

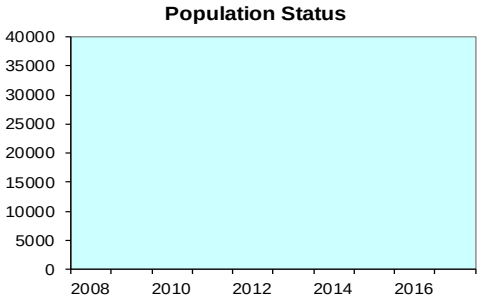
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| # of Deer | | | | | | | | | | |

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 |

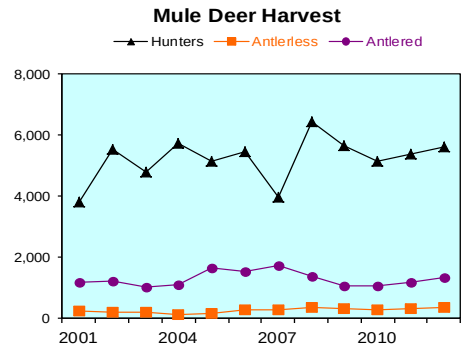
Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does
Fawn Survival = overwinter fawn survival (December - May), Adult Doe Surival = annual survival (June - May)




### Harvest Statistics

| | | | Deer Harvest | | |
|---|---|---|---|---|---|
| | Hunters | Hunter Days | Antlerless | Antlered | % 4+ Points |
| 2001 | 3,826 | 13,534 | 223 | 1,196 | |
| 2002 | 5,550 | 21,266 | 215 | 1,214 | |
| 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% |

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. Only 2 mule deer depredation complaints 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.

# 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 |

| | | 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 | ND | ND | ND | ND | ND |
| Buck:Doe | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Fawn Survival | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Adult Doe Survival | ND | ND | ND | ND | ND | ND | ND | ND | ND | 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 Surival = annual survival (June - May)

### Harvest Statistics

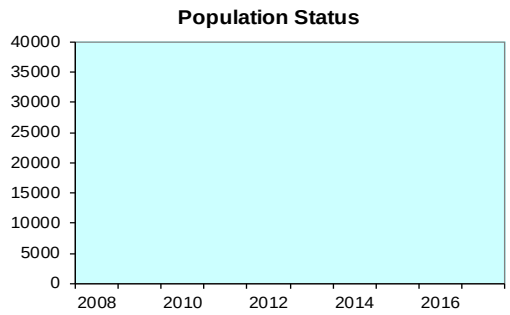
| | | | Deer Harvest | | |
|---|---|---|---|---|---|
| | Hunters | Hunter Days | Antlerless | Antlered | % 4+ Points |
| 2001 | 2,854 | 9,431 | 286 | 492 | |
| 2002 | 3,117 | 14,679 | 231 | 357 | |
| 2003 | 3,294 | 12,690 | 192 | 332 | 24% |
| 2004 | 4,233 | 21,237 | 236 | 372 | 35% |
| 2005 | 2,914 | 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% |

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



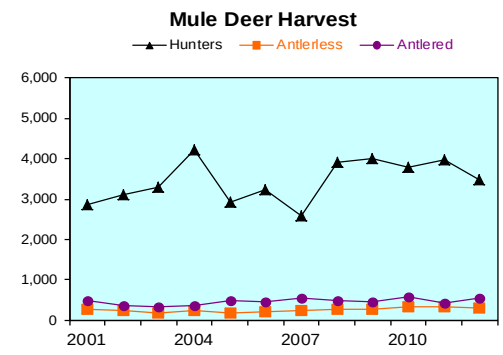




Figure 16. Snake River Mule Deer PMU Status and Objectives.

## 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 2010-2012 average of 26,694.

### 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 2012 was estimated at 897 mule deer based on mandatory harvest report cards. This represents a 31% increase in harvest from 2011 (685) and is 4% below the previous five-year average of 930. Total hunter numbers were estimated at 4,518 for 2012 compared to 4,050 hunters for 2011. An average of 49% of the bucks harvested in these GMUs over the past three years (2010-2012) have been ≥4-point with a 19% 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 |

| | | 3-Year Averages | |
|---|---|---|---|
| Square Miles = | 16,997 | Hunters per square mile = | 0.26 |
| % Public Land = | 69% | Harvest per square mile = | 0.05 |
| Major Land Type = | Forest | Success Rate = | 19% |

### Population Status

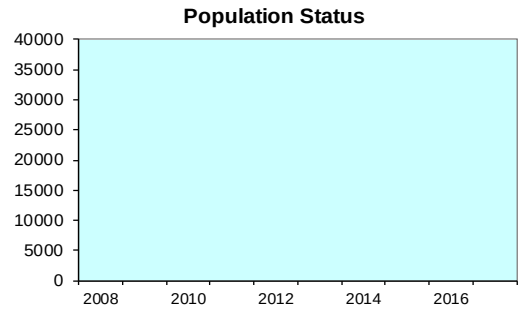
| Year | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 |
|---|---|---|---|---|---|---|---|---|---|---|
| # of Deer | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |

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 | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Buck:Doe | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Fawn Survival | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |
| Adult Doe Survival | ND | ND | ND | ND | ND | ND | ND | ND | ND | ND |

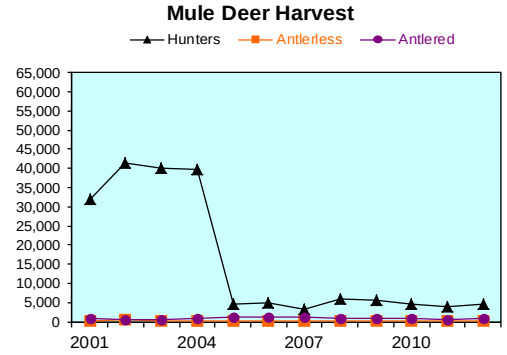
Note: Fawn:Doe expressed as fawns per 100 does, Buck:Doe expressed as bucks per 100 does
Fawn Survival = overwinter fawn survival (December - May), Adult Doe Surival = annual survival (June - May)




### Harvest Statistics

| | | | eer Harvest | | |
|---|---|---|---|---|---|
| | Hunters | Hunter Days | Antlerless | Antlered | % 4+ Points |
| 2001 | 32,125 | 187,205 | 176 | 778 | |
| 2002 | 41,280 | 246,958 | 574 | 622 | |
| 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% |

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. North Idaho Mule Deer PMU Status and Objectives.

**Appendix A**

IDAHO

2012 SEASON

MULE DEER RULES

# Idaho
# Big Game Seasons & Rules
# 2012

**Deer, Elk, Pronghorn**
August 2012 - February 2013

**Black Bear, Mountain Lion, Gray Wolf**
August 2012 - July 2013

Including Controlled Hunts for
Deer, Elk, Pronghorn, and Black Bear

http://fishandgame.idaho.gov

**Deer**
**Elk**
**Pronghorn**
**Black Bear**
**Mountain Lion**
**Gray Wolf**

Make the Call!
1-800-632-5999

# 2012 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 28, 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 Tag for Black Bear, Mountain Lion or Gray Wolf

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 86.

## 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 "2012 Regular Deer Tag Seasons" on pages 9-13.

The white-tailed deer tag is valid for white-tailed deer **only**, for any hunt listed under "2012 White-tailed Deer Tag Seasons" on pages 14-17.

### 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

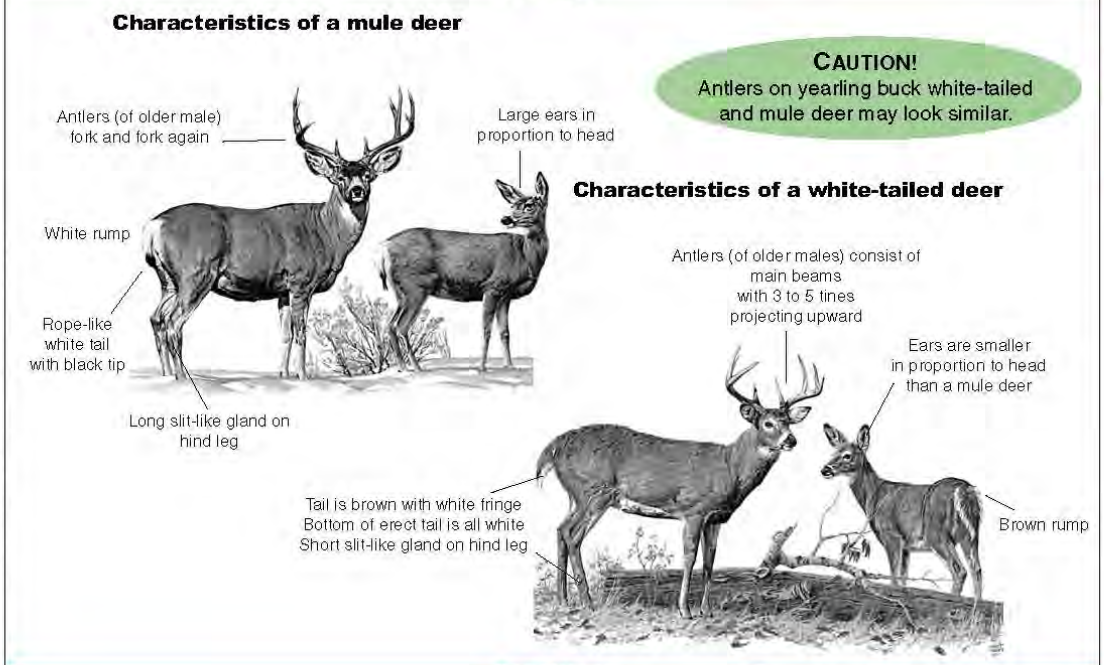



*Illustration by Robert Neaves courtesy of Montana Fish, Wildlife & Parks*

**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.

**2012 Regular Deer Tag General Any-Weapon Seasons**

| Unit(s) | Antlered | Antlerless | Notes |
|---|---|---|---|
| 1 | Oct 10 - Oct 31 *(White-tailed deer only)*<br>Nov 1 - Dec 1 | Nov 1 - Dec 1 *(White-tailed deer only)* | |
| 2, 3, 4A, 5, 6 | Oct 10 - Nov 9<br>Nov 10 - Dec 1 *(White-tailed deer only)* | Nov 1 - Dec 1 *(White-tailed deer only)* | *See note 1, Page 13* |
| 4, 7, 9 | Oct 10 - Nov 9 | Oct 10 - Nov 9 *(White-tailed deer only)* | |
| 8, 8A, 10, 10A, 12, 15, 16 | Oct 10 - Nov 3 | Oct 10 - Nov 3 | |
| 11, 11A | Oct 10 - Nov 3 *(White-tailed deer only)* | Oct 10 - Nov 3 *(White-tailed deer only)* | |
| 13, 14, 18 | Oct 10 - Nov 3 *(White-tailed deer only)* | Oct 10 - Oct 16 *(White-tailed deer only)* | *Unit 13 has limited access* |
| 16A, 17, 19, 20 | Sep 15 - Nov 18 | Sep 15 - Nov 18 | |
| 19A | Oct 10 - Oct 31 | Oct 10 - Oct 31 *(Youth hunt only)* | |
| 20A, 26, 27 | Sep 15 - Oct 31 | None | |

continued

REGULAR DEER

| 2012 Regular Deer Tag General Any-Weapon Seasons - continued | | | |
|---|---|---|---|
| **Unit(s)** | **Antlered** | **Antlerless** | **Notes** |
| **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 11, Motorized Hunting Rule Applies in Units 29, 30, 36A, 37 & 37A, See Page 79* |
| **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 11* |
| **30A** | None | Oct 10 - Oct 31 *(Youth hunt only, Private land only)* | *Motorized Hunting Rule Applies, See Page 79* |
| **31, 32, 32A** | Oct 10 - Oct 24 | Oct 10 - Oct 24 *(Youth hunt only)* | *See notes 2 & 3, Page 11, Motorized Hunting Rule Applies in Units 32 & 32A, See Page 79* |
| **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 11* |
| **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 11* |
| **48, 49** | Oct 10 - Oct 31 | Oct 10 - Oct 31 *(Youth hunt only)* | *Motorized Hunting Rule Applies in Unit 49, See Page 79* |
| **50, 51, 56, 58, 59, 59A** | Oct 10 - Oct 24 | Oct 10 - Oct 24 *(Youth hunt only)* | *Motorized Hunting Rule Applies, See Page 79* |
| **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 11* |
| **60A** | Oct 10 - Oct 24 | Oct 10 - Oct 24 *(Youth hunt only)* | *See note 4, Page 11* |
| **66, 69** | Oct 10 - Oct 24 | Oct 10 - Oct 24 *(Youth hunt only)* | *Motorized Hunting Rule Applies, See Page 79* |
| **67** | Oct 10 - Oct 24 | Oct 10 - Oct 24 *(Youth hunt only)* | *See note 5, Page 11* |
| **66A, 68, 71, 72, 73A, 74, 76** | Oct 10 - Oct 24 | Oct 10 - Oct 24 *(Youth hunt only)* | *Mandatory check required for antlerless deer in Unit 71, See note 6, Page 11, Motorized Hunting Rule Applies in Units 66A & 76, See Page 79* |
| **70, 78** | None | Oct 10 - Oct 24 *(Youth hunt only)* | *Mandatory check required for antlerless deer in Unit 70, See note 6, Page 11, Motorized Hunting Rule Applies, See Page 79* |
| **73** | None | Oct 10 - Oct 16 *(Youth hunt only)* | *Motorized Hunting Rule Applies, See Page 79* |

| 2012 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 Page 79* |



**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 Boydstun Street, then south on Boydstun 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 (Henrys) 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.
6. Antlerless deer taken during the youth general hunt in Unit 70 and Unit 71 are required to be checked by Idaho Fish and Game. Deer may be checked at the Pocatello Regional Office (weekdays 8 a.m. to 5 p.m.) or at the Inkom Check station (8 a.m. - 8 p.m. Oct 13, 14, 20 and 21) located at the Port of Entry weigh station. The entire unskinned carcass shall be presented for the mandatory check. We are beginning a new project looking at mule deer in the Southeast region. Information collected from this check will be used to better manage mule deer for the future.

continued

REGULAR DEER

| 2012 Regular Deer Tag General Archery-Only Seasons<br>Archery Permit Required | | | |
|---|---|---|---|
| **Unit(s)** | **Antlered** | **Antlerless** | **Notes** |
| **1, 3, 4, 4A, 5, 6, 7, 9** | Aug 30 - Sep 30 | Aug 30 - Sep 30<br>*(White-tailed deer only)* | |
| | Dec 10 - Dec 24 | Dec 10 - Dec 24<br>*(White-tailed deer only)* | |
| **2** | Aug 30 - Sep 30 | Aug 30 - Sep 30<br>*(White-tailed deer only)* | *See note 1, Page 13* |
| | Nov 1 - Dec 1 | Nov 1 - Dec 1<br>*(White-tailed deer only)* | *See note 2, Page 13* |
| | Dec 10 - Dec 24 | Dec 10 - Dec 24<br>*(White-tailed deer only)* | *See note 1, Page 13* |
| **8, 8A, 10, 10A, 11A, 12, 15, 19A, 21, 21A** | Aug 30 - Sep 30 | Aug 30 - Sep 30 | |
| **22** | Aug 30 - Sep 30<br>*(2-point deer only)* | 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 | *Motorized Hunting Rule Applies, See Page 79* |
| **31, 33, 34, 35** | Aug 30 - Sep 30 | Aug 30 - Sep 30 | |
| **38** | Aug 30 - Sep 30 | Aug 30 - Sep 30 | *See note 3, Page 13* |
| **39** | Nov 10 - Nov 30 | Nov 10 - Nov 30 | *See note 4, Page 13, Part of unit* **closed** |
| **40, 41, 42** | Aug 30 - Sep 30<br>*(2-point deer only)* | 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 | *Motorized Hunting Rule Applies in Units 47, 49, 50, 51, 56, 58, 59 and 59A, See Page 79* |
| **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 | *Motorized Hunting Rule Applies in Units 66 & 69, See Page 79* |
| | Nov 1 - Dec 19<br>*(White-tailed deer only)* | Nov 1 - Dec 19<br>*(White-tailed deer only)* | |
| **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 | *Motorized Hunting Rule Applies in Units 66A, 70, 73, 75, 76, 77 & 78, See Page 79* |

| 2012 Regular Deer Tag General Muzzleloader-Only Seasons<br>Muzzleloader Permit Required | | | |
|---|---|---|---|
| **Unit(s)** | **Antlered** | **Antlerless** | **Notes** |
| **4, 7, 9** | Nov 10 - Dec 1 | Nov 10 - Dec 1<br>*(White-tailed deer only)* | |
| **39** | None | Sep 8 - Sep 30 | *Motorized Hunting Rule Applies, See Page 79* |

REGULAR DEER

| 2012 Regular Deer Tag General Deer Short-Range-Weapon Seasons | | | |
|---|---|---|---|
| **Unit(s)** | **Antlered** | **Antlerless** | **Notes** |
| **38** | Oct 10 - Oct 31 | Oct 10 - Nov 24 | *Very limited access, See note 3, Page 13* |
| **45** | Oct 10 - Nov 6 | Oct 10 - Nov 6 | *See note 5, Page 13, Motorized Hunting Rule Applies, See Page 79* |
| **53** | Oct 10 - Nov 6 | Oct 10 - Nov 6 | *See note 6, Page 13, Motorized Hunting Rule Applies, See Page 79* |
| **63** | Oct 10 - Oct 24 | Oct 10 - Oct 24<br>*(Youth hunt only)* | |

**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**.

Make the Call 1-800-632-5999

**Citizens Against Poaching**

To report wildlife violations in Idaho telephone:

**1-800-632-5999**

## Deer Controlled Hunts

**For details on controlled hunt rules and restrictions please See pages 82-84.**

**Hunters: Please check Controlled Hunt Area descriptions on pages 25-27. Hunt Areas may change annually.**

| 2012 Controlled Deer Hunts (13,191 Tags Plus Unlimited Tags) Antlered Deer | | | | |
|---|---|---|---|---|
| **Hunt No.** | **Controlled Hunt Areas** | **Tags** | **Season Dates** | **Notes** |
| **1001** | 1[a] (see pg 25) | 60 | Aug 30- Dec 1 | |
| **1002** | 11 | 74 | Oct 10 - Nov 3 | *Mule deer **only*** |
| **1003** | 11 | 35 | Nov 10 - Nov 24 | *Mule deer **only*** |
| **1004** | 11A | 63 | Oct 10 - Nov 3 | *Mule deer **only**, Very limited access* |
| **1005** | 13 | 200 | Oct 10 - Nov 3 | *Mule deer **only**, See note 1, Page 23* |
| **1006** | 14 | 180 | Oct 10 - Nov 3 | *Mule deer **only*** |
| **1007** | 18 | 120 | Oct 10 - Nov 3 | *Mule deer **only*** |
| **1008** | 19A | 10 | Oct 10 - Nov 24 | |
| **1009** | 20A | Unlimited | Nov 1 - Nov 18 | |
| **1010** | 22 | 60 | Nov 1 - Nov 24 | |
| **1011** | 23 | 25 | Oct 10 - Nov 24 | |
| **1012** | 25 | 10 | Oct 10 - Nov 24 | |
| **1013** | 26 | Unlimited | Nov 1 - Nov 18 | |
| **1014** | 27 | Unlimited | Nov 1 - Nov 18 | *3-point or larger deer **only*** |
| **1015** | 30A | 30 | Oct 10 - Oct 31 | *Motorized Hunting Rule Applies, See Page 79* |
| **1016** | 31 | 30 | Oct 10 - Nov 24 | |
| **1017** | 32 | 40 | Oct 10 - Nov 24 | *See note 2, Page 23, Motorized Hunting Rule Applies, See Page 79* |
| **1018** | 32A | 30 | Oct 10 - Nov 24 | *Motorized Hunting Rule Applies, See Page 79* |
| **1019** | 36A | Unlimited | Oct 26 - Oct 31 | *Motorized Hunting Rule Applies, See Page 79* |
| **1020** | 38[b] (see pg 26) | 5 | Oct 10 - Nov 24 | *Deer Flat National Wildlife Refuge has specific hunting requirements, See note 3, Page 23* |
| **1021** | 39-1 | 199 | Aug 15 - Sep 30 | |
| **1022** | 40 | 195 | Nov 1 - Nov 24 | |
| **1023** | 41-1 | 100 | Nov 1 - Nov 24 | *See note 2, Page 23* |
| **1024** | 42 | 74 | Nov 1 - Nov 24 | |
| **1025** | 44 | 225 | Sep 15 -Oct 31 | |
| **1026** | 45-1[b] (see pg 26) | 50 | Oct 15 - Oct 31 | *See notes 2 & 4, Page 23, Motorized Hunting Rule Applies, See Page 79* |
| **1027** | 47-1 | 90 | Oct 5 - Oct 31 | *Motorized Hunting Rule Applies, See Page 79* |
| **1028** | 47-2[a] (see pg 26) | 10 | Nov 15 - Nov 30 | *Motorized Hunting Rule Applies in Unit 47, See Page 79* |
| **1029** | 48 | 10 | Nov 10 - Nov 24 | |
| **1030** | 49 | 10 | Nov 10 - Nov 24 | *Motorized Hunting Rule Applies, See Page 79* |
| **1031** | 50[b] (see pg 26) | 10 | Oct 10 - Nov 30 | *Portion of Unit **only**, Motorized Hunting Rule Applies, See Page 79* |
| **1032** | 52 | 75 | Oct 5- Oct 31 | *Motorized Hunting Rule Applies, See Page 79* |
| **1033** | 54 | 500 | Oct 5 - Oct 31 | |
| **1034** | 54 | 20 | Nov 15 - Nov 30 | |
| **1035** | 55-1 | 25 | Aug 15 - Sep 24 | |
| **1036** | 55-1 | 375 | Oct 5 - Oct 31 | |

[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 82-84.**

continued

CONTROLLED DEER

| 2012 Controlled Deer Hunts<br>Antlered Deer - continued | | | | |
|---|---|---|---|---|
| **Hunt No.** | **Controlled Hunt Areas** | **Tags** | **Season Dates** | **Notes** |
| **1037** | 57 | 109 | Oct 5 - Oct 31 | |
| **1038** | 57 | 10 | Nov 15 - Nov 30 | |
| **1039** | 58[a] (see pg 27) | 10 | Oct 10 - Nov 30 | *Motorized Hunting Rule Applies, See Page 79* |
| **1040** | 60-1[a] (see pg 27) | 25 | Oct 10 - Nov 30 | *See note 2, Page 23* |
| **1041** | 62 | 15 | Oct 10 - Nov 30 | |
| **1042** | 66 | 10 | Oct 10 - Nov 30 | *Motorized Hunting Rule Applies, See Page 79* |
| **1043** | 67 | 20 | Oct 10 - Nov 30 | *See note 5, Page 23* |
| **1044** | 69 | 10 | Oct 10 - Nov 30 | *Motorized Hunting Rule Applies, See Page 79* |
| **1045** | 70 | 175 | Aug 30 - Sep 30 | *Archery **only**,*<br>*Motorized Hunting Rule Applies, See Page 79* |
| | | | Oct 10 - Oct 31 | *Motorized Hunting Rule Applies, See Page 79* |
| **1046** | 73 | Unlimited | Oct 10 - Oct 16 | *Motorized Hunting Rule Applies, See Page 79* |
| **1047** | 78 | 200 | Aug 30-Sep 30 | *Archery **only**,*<br>*Motorized Hunting Rule Applies, See Page 79* |
| | | | Oct 10 - Oct 31 | *Motorized Hunting Rule Applies, See Page 79* |

| 2012 Controlled Hunts<br>Antlerless Deer | | | | |
|---|---|---|---|---|
| **Hunt No.** | **Controlled Hunt Areas** | **Tags** | **Season Dates** | **Notes** |
| **1048** | 22 | 150 | Oct 10 - Oct 24 | |
| **1049** | 28[b] (see pg 25) | 30 | Sep 15 - Oct 31 | *Portion of unit **only**, See Page 25* |
| **1050** | 31 | 150 | Oct 10 - Oct 24 | |
| **1051** | 32 | 225 | Oct 10 - Oct 24 | *See note 2, Page 23,*<br>*Motorized Hunting Rule Applies, See Page 79* |
| **1052** | 32A | 225 | Oct 10 - Oct 24 | *Motorized Hunting Rule Applies, See Page 79* |
| **1053** | 39-1 | 1000 | Oct 10 - Oct 31 | |
| **1054** | 43 | 150 | Oct 10 - Oct 31 | |
| **1055** | 44 | 150 | Oct 10 - Nov 9 | |
| **1056** | 45-2 | 250 | Nov 1- Nov 14 | *See notes 2 & 4, Page 23,*<br>*Motorized Hunting Rule Applies, See Page 79* |
| **1057** | 45-3[b] (see pg 26) | 350 | Nov 15 - Nov 30 | *See note 4, Page 23,*<br>*Motorized Hunting Rule Applies, See Page 79* |
| **1058** | 45-4[b] (see pg 26) | 50 | Dec 1 - Dec 15 | *See note 4, Page 23,*<br>*Motorized Hunting Rule Applies, See Page 79* |
| **1059** | 48 | 50 | Oct 10 - Oct 31 | |
| **1060** | 49 | 50 | Oct 10 - Oct 31 | *Motorized Hunting Rule Applies, See Page 79* |
| **1061** | 52 | 100 | Nov 15 - Nov 30 | *Motorized Hunting Rule Applies, See Page 79* |
| **1062** | 54 | 100 | Nov 1 - Nov 14 | |
| **1063** | 55-1 | 100 | Nov 1 - Nov 14 | |
| **1064** | 56 | 100 | Nov 15- Nov 30 | *Motorized Hunting Rule Applies, See Page 79* |

[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 82-84.**

| 2012 Controlled Hunts<br>Either Sex Deer | | | | |
|---|---|---|---|---|
| **Hunt No.** | **Controlled Hunt Areas** | **Tags** | **Season Dates** | **Notes** |
| **1065** | 60-2[a] (see pg 27) | 40 | Oct 5 - Nov 17 | *See note 2, Page 23* |
| **1066** | 62 | 10 | Oct 5 - Nov 8 | |
| **1067** | 63A | 50 | Oct 5 - Nov 15 | *Mule deer **only**, Short range weapons **only*** |
| **1068** | 67 | 20 | Oct 5 - Nov 8 | *See note 5, Page 23* |

| 2012 Controlled Hunts<br>Youth Only Deer | | | | |
|---|---|---|---|---|
| **Hunt No.** | **Controlled Hunt Areas** | **Tags** | **Season Dates** | **Notes** |
| **1069** | 11A | 25 | Oct 10 - Dec 31 | *Either sex* |
| **1070** | 28[b] (see pg 25) | 10 | Sep 15 - Oct 31 | *Either sex,<br>Portion of unit **only**, See Page 25* |
| **1071** | 44 | 150 | Oct 10 - Nov 9 | *Antlerless **only*** |
| **1072** | 45-4[b] (see pg 26) | 50 | Dec 1 - Dec 15 | *Antlerless **only**, See note 4, Page 23,<br>Motorized Hunting Rule Applies, See Page 79* |
| **1073** | 45-6[a] (see pg 26) | 200 | Nov 15 - Nov 30 | *Antlerless **only**, See note 4, Page 23,<br>Motorized Hunting Rule Applies, See Page 79* |
| **1074** | 47-1 | 50 | Oct 5 - Oct 31 | *Either sex, Motorized Hunting Rule Applies, See Page 79* |
| **1075** | 47-1 | 50 | Oct 5 - Oct 31 | *Antlerless **only**, Motorized Hunting Rule Applies, See Page 79* |
| **1076** | 54 | 100 | Oct 5 - Oct 31 | *Either sex* |
| **1077** | 54 | 100 | Oct 5 - Oct 31 | *Antlerless **only*** |
| **1078** | 55-2[a] (see pg 27) | 50 | Oct 5 - Oct 31 | *Either sex* |
| **1079** | 55-2[a] (see pg 27) | 50 | Oct 5 - Oct 31 | *Antlerless **only*** |

| 2012 Controlled Hunts<br>Archery-Only Deer - Archery Permit Required | | | | |
|---|---|---|---|---|
| **Hunt No.** | **Controlled Hunt Areas** | **Tags** | **Season Dates** | **Notes** |
| **1080** | 22 | 25 | Aug 30 - Sep 30 | *Either sex* |
| **1081** | 39-2[b] (see pg 26) | 50 | Nov 16 - Dec 16 | *Either sex, See note 6, Page 23,<br>Roads on Boise River WMA closed to Motorized Travel* |
| **1082** | 40 | 25 | Aug 15 - Sep 30 | *Antlered **only*** |
| **1083** | 41-2[a] (see pg 26) | 25 | Aug 15 - Sep 30 | *Antlered **only*** |
| **1084** | 53[b] (see pg 26) | Unlimited | Aug 30 - Dec 19 | *Either Sex,Motorized Hunting Rule Applies, See Page 79* |
| **1085** | 68A | Unlimited | Aug 30 - Dec 19 | *Either sex* |
| **1086** | 72 | Unlimited | Dec 1 - Dec 19 | *Antlered **only**,<br>Motorized Hunting Rule Applies, See Page 79* |

| 2012 Controlled Hunts<br>Muzzleloader-Only Deer - Muzzleloader Permit Required | | | | |
|---|---|---|---|---|
| **Hunt No.** | **Controlled Hunt Areas** | **Tags** | **Season Dates** | **Notes** |
| **1087** | 8A | 25 | Dec 2 - Dec 14 | *Either sex, White-tailed deer **only*** |
| **1088** | 10A | 25 | Dec 2 - Dec 14 | *Either sex, White-tailed deer **only*** |

[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 82-84.**

CONTROLLED DEER

| 2012 Controlled Hunts<br>Muzzleloader-Only Deer - Muzzleloader Permit Required - continued | | | | |
|---|---|---|---|---|
| **Hunt No.** | **Controlled Hunt Areas** | **Tags** | **Season Dates** | **Notes** |
| **1089** | 33[a] (see pg 25) | 149 | Nov 10 - Nov 30 | *Antlered **only*** |
| **1090** | 37[a] (see pg 26) | 73 | Nov 25 - Dec 9 | *Antlered **only**,*<br>*Motorized Hunting Rule Applies, See Page 79* |
| **1091** | 43 | 125 | Oct 1 - Oct 9 | *Either sex* |
| **1092** | 45-2 | 30 | Oct 1 - Oct 14 | *Antlered **only**, See notes 2 & 4, Page 23,*<br>*Motorized Hunting Rule Applies, See Page 79* |
| **1093** | 45-5[b] (see pg 26) | 65 | Oct 15 - Oct 31 | *Antlered **only**, See note 4, Page 23,*<br>*Motorized Hunting Rule Applies, See Page 79* |
| **1094** | 51[a] (see pg 26) | 100 | Nov 1 - Nov 30 | *Either sex,*<br>*Motorized Hunting Rule Applies, See Page 79* |
| **1095** | 52A | 75 | Nov 10 - Nov 24 | *Either sex,*<br>*Motorized Hunting Rule Applies, See Page 79* |
| **1096** | 61 | Unlimited | Nov 11 - Dec 9 | *Either sex* |
| **1097** | 64[a] (see pg 27) | 10 | Oct 25 - Nov 30 | *Either sex* |

| 2012 Controlled Hunts<br>Extra Antlerless Deer | | | | |
|---|---|---|---|---|
| **Hunt No.** | **Controlled Hunt Areas** | **Tags** | **Season Dates** | **Notes** |
| **1098** | 1X[b] (see pg 25) | 250 | Aug 30 - Sep 30 | *Archery **only**, White-tailed deer **only*** |
| | | | Oct 10 - Dec 1 | *White-tailed deer **only*** |
| | | | Dec 10 - Dec 24 | *Archery **only**, White-tailed deer **only*** |
| **1099** | 3X[b] (see pg 25) | 50 | Oct 10 - Dec 1 | *Private land **only**, White-tailed deer **only*** |
| **1100** | 8X | 350 | Aug 30 - Sep 30 | *Archery **only**, White-tailed deer **only*** |
| | | | Oct 10 - Dec 14 | *White-tailed deer **only*** |
| **1101** | 8AX[b] (see pg 25) | 350 | Aug 30 - Sep 30 | *Archery **only**, White-tailed deer **only*** |
| | | | Oct 10 - Dec 1 | *White-tailed deer **only*** |
| | | | Dec 2 - Dec 14 | *Muzzleloader **only**, White-tailed deer **only*** |
| **1102** | 10AX[b] (see pg 25) | 400 | Aug 30 - Sep 30 | *Archery **only**, White-tailed deer **only*** |
| | | | Oct 10 - Dec 1 | *White-tailed deer **only*** |
| | | | Dec 2 - Dec 14 | *Muzzleloader **only**, White-tailed deer **only*** |
| **1103** | 11X[b] (see pg 25) | 100 | Oct 10 - Dec 1 | *Mule Deer or White-tailed Deer* |
| **1104** | 11AX[a] (see pg 25) | 650 | Aug 30 - Sep 30 | *Archery **only**, Unit 11A **only*** |
| | | | Oct 10 - Dec 14 | *Mule Deer or White-tailed Deer* |
| **1105** | 15X[b] (see pg 25) | 100 | Aug 30 - Sep 30 | *Archery **only**, White-tailed deer **only*** |
| | | | Oct 10 - Nov 20 | *White-tailed deer **only*** |
| | | | Dec 5 - Dec 20 | *Archery **only**, White-tailed deer **only*** |
| **1106** | 16X[b] (see pg 25) | 100 | Oct 10 - Nov 20 | *White-tailed deer **only*** |
| | | | Nov 21 - Dec 9 | *Muzzleloader **only**, White-tailed deer **only*** |
| **1107** | 21X[a] (see pg 25) | 210 | Sep 1 - Dec 31 | *Short range weapons **only**,*<br>*Private land **only**, Very limited access* |

[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 82-84.**

| 2012 Controlled Hunts<br>Extra Antlerless Deer - continued | | | | |
|---|---|---|---|---|
| **Hunt No.** | **Controlled Hunt Areas** | **Tags** | **Season Dates** | **Notes** |
| **1108** | 32X[b] (see pg 25) | 100 | Aug 1 - Dec 31 | *Very limited access,*<br>*Motorized Hunting Rule Applies, See Page 79* |
| **1109** | 36AX[a] (see pg 25) | 140 | Sep 1 - Dec 31 | *Short range weapons **only**,*<br>*Private land **only**, Very limited access,* |
| **1110** | 38X[b] (see pg 26) | 10 | Oct 10 - Oct 29 | *Deer Flat National Wildlife Refuge has*<br>*specific hunting requirements, See note 3, Page 23* |
| **1111** | 38X[b] (see pg 26) | 10 | Oct 30 - Nov 18 | *Deer Flat National Wildlife Refuge has*<br>*specific hunting requirements, See note 3, Page 23* |
| **1112** | 38X[b] (see pg 26) | 10 | Nov 19 - Dec 8 | *Deer Flat National Wildlife Refuge has*<br>*specific hunting requirements, See note 3, Page 23* |
| **1113** | 38X[b] (see pg 26) | 10 | Dec 9 - Dec 28 | *Deer Flat National Wildlife Refuge*<br>*has specific hunting requirements, See note 3, Page 23* |
| **1114** | 40X[a] (see pg 26) | 100 | Oct 10 - Nov 24 | ***Youth Hunt Only***<br>*Portion of Units 40 & 41 only, Very limited access* |
| **1115** | 50X[a] (see pg 26) | 1,200 | Aug 30 - Sep 30 | *Archery **only**, White-tailed deer **only**,*<br>*Motorized Hunting Rule Applies in Units 50, 51, 58, 59, 59A, 66 & 69, See Page 79* |
| | | | Oct 10 - Oct 31 | *White-tailed deer **only**,*<br>*See notes 5 & 7, Page 23,*<br>*Motorized Hunting Rule Applies in Units 50, 51, 58, 59, 59A, 66 & 69, See Page 79* |
| | | | Nov 1 - Dec 19 | *Archery **only**, White-tailed deer **only**,*<br>*Units 60, 60A, 62, 63, 64, 65, 66, 67 & 69 **only***<br>*Motorized Hunting Rule Applies in Units 66 & 69,*<br>*See Page 79* |
| | | | Nov 10 - Dec 9 | *White-tailed deer **only**,*<br>*Units 50, 51, 58, 59, 59A, 61, & 62A **only**,*<br>*Motorized Hunting Rule Applies in Units 50, 51, 58, 59 & 59A, See Page 79* |
| **1116** | 63AX | 300 | Aug 30 - Sep 30 | *Archery **only**, White-tailed deer **only*** |
| | | | Oct 10 - Oct 31 | *Short range weapons **only**, White-tailed deer **only*** |
| | | | Nov 1 - Dec 19 | *Archery **only**, White-tailed deer **only*** |
| **1117** | 68AX | 100 | Aug 30 - Oct 31 | *Archery **only**, Very limited access* |

**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**. DFNWR has specific hunting requirements. Please contact DFNWR directly for maps and other information relative to this hunt 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 permit 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. Short-range weapons **only** in that portion of Unit 60A south and east of the North (Henrys) 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 82-84.**

CONTROLLED DEER

| 2012 Controlled Hunts<br>Landowner Permission Required Extra Antlerless Deer | | | | |
|---|---|---|---|---|
| **Hunt No.** | **Controlled Hunt Areas** | **Tags** | **Season Dates** | **Notes** |
| **1118** | 55-1X | 30 | Aug 15 - Sep 30 | *See Page 85 for application information* |

| 2012 Controlled Hunts<br>Outfitter Allocation Deer - Antlered Deer Only | | | | |
|---|---|---|---|---|
| **Hunt No.** | **Controlled Hunt Areas** | **Tags** | **Season Dates** | **Notes** |
| **1119** | 1[a] (see pg 25) | 1 | Aug 30 - Dec 1 | |
| **1120** | 11 | 1 | Oct 10 - Nov 3 | *Mule deer* ***only*** |
| **1121** | 11A | 2 | Oct 10 - Nov 3 | *Mule deer* ***only*** |
| **1122** | 13 | 37 | Oct 10 - Nov 3 | *Mule deer* ***only*** |
| **1123** | 14 | 22 | Oct 10 - Nov 3 | *Mule deer* ***only*** |
| **1124** | 18 | 9 | Oct 10 - Nov 3 | *Mule deer* ***only*** |
| **1125** | 22 | 6 | Nov 1 - Nov 24 | |
| **1126** | 33[a] (see pg 25) | 1 | Nov 10 - Nov 24 | *Muzzleloader* ***only*** |
| **1127** | 37[a] (see pg 26) | 2 | Nov 25 - Dec 9 | *Muzzleloader* ***only***,<br>*Motorized Hunting Rule Applies, See Page 79* |
| **1128** | 39-1 | 1 | Aug 15 - Sep 30 | |
| **1129** | 40 | 5 | Nov 1 - Nov 24 | |
| **1130** | 42 | 1 | Nov 1 - Nov 24 | |
| **1131** | 45-1[b] (see pg 26) | 2 | Oct 15 - Oct 31 | *Motorized Hunting Rule Applies, See Page 79* |
| **1132** | 47-1 | 3 | Oct 5 - Oct 31 | *Motorized Hunting Rule Applies, See Page 79* |
| **1133** | 50[b] (see pg 26) | 1 | Oct 10 - Nov 30 | *Portion of Unit* ***only***,<br>*Motorized Hunting Rule Applies, See Page 79* |
| **1134** | 54 | 2 | Oct 5 - Oct 31 | |
| **1135** | 54 | 1 | Nov 15 - Nov 30 | |
| **1136** | 55-1 | 2 | Oct 5 - Oct 31 | |
| **1137** | 55-2[a] (see pg 27) | 1 | Oct 5 - Oct 31 | *Youth hunt* ***only****, Either sex* |
| **1138** | 57 | 2 | Oct 5 - Oct 31 | |
| **1139** | 70 | 1 | Aug 30 - Sep 30 | *Archery* **only**,<br>*Motorized Hunting Rule Applies, See Page 79* |
| | | | Oct 10 - Oct 31 | *Motorized Hunting Rule Applies, See Page 79* |
| **1140** | 78 | 7 | Aug 30 - Sep 30 | *Archery* **only**<br>*Motorized Hunting Rule Applies, See Page 79* |
| | | | Oct 10 - Oct 31 | *Motorized Hunting Rule Applies, See Page 79* |

**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 82-84.**

CONTROLLED DEER

Submitted by:

| | | |
|---|---|---|
| Wayne Wakkinen<br>Regional Wildlife Manager | George Pauley<br>Regional Wildlife Manager | Craig White<br>Regional Wildlife Manager |
| Regan Berkley<br>Regional Wildlife Manager | Randy Smith<br>Regional Wildlife Manager | Martha Wackenhut<br>Regional Wildlife Manager |
| Daryl Meints<br>Regional Wildlife Manager | Greg Painter<br>Regional Wildlife Manager | |

Approved by: IDAHO DEPARTMENT OF FISH AND GAME

| | |
|---|---|
| Brad Compton<br>Asst Chief, Bureau of Wildlife<br>Federal Aid Coordinator | Jeff Gould, Chief<br>Bureau of Wildlife |