IDAHO WHITE-TAILED DEER
MANAGEMENT PLAN
2020-2025
August 7, 2019 Draft
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Cover photo courtesy of Justin Jensen

Team Members

Becky Abel – Regional Wildlife Biologist, Southeast Region
Jana Ashling – Regional Wildlife Biologist, Clearwater Region
Regan Berkley – Regional Wildlife Manager, McCall Subregion
Mark Carson – Regional Conservation Officer, Clearwater Region
Evan DeHammer – Regional Wildlife Biologist, Panhandle Region
Mark Drew – Wildlife Veterinarian, Wildlife Bureau
Micah Ellstrom – Regional Wildlife Manager, Panhandle Region
Brandi Felts – Regional Wildlife Biologist, Clearwater Region
Clay Hickey – Team Co-Leader and Regional Wildlife Manager, Clearwater Region
Jason Husseman – Regional Wildlife Biologist, Salmon Region
Dave Koehler – Regional Wildlife Biologist, Clearwater Region
Daryl Meints – Deer and Elk Program Coordinator, Wildlife Bureau
Barb Moore – Team Co-Leader and Regional Wildlife Biologist, Panhandle Region
Sal Palazzolo – Private Lands/Farmbill Coordinator, Wildlife Bureau
Morgan Pfander – Regional Wildlife Biologist, Clearwater Region
Roger Phillips – Public Information Supervisor, Communications Bureau
Shane Roberts – Principal Wildlife Research Biologist, Wildlife Bureau
Brandon Tycz – Regional Wildlife Biologist, Magic Valley Region
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EXECUTIVE SUMMARY

The white-tailed deer is a valuable big game species in Idaho. White-tailed deer hunting offers generous opportunity, hunters can pursue white-tailed deer in a diversity of habitats across the state with a variety of harvest methods. This includes general-season harvest opportunities for antlerless animals, and hunting during the rut in November. Being a highly adaptable species, white-tailed deer can also be the cause of human-wildlife conflicts. Growing populations of both humans and deer can create conflicts such as agricultural damage, vehicle collisions, and damage to ornamentals and landscaping. Balancing the desires of hunters, landowners, and the citizens of Idaho along with the needs of the species is challenging, however, it is the goal of Idaho Department of Fish and Game (IDFG). This plan provides the guidance to IDFG for management of white-tailed deer in Idaho.

IDFG was established to preserve, protect, perpetuate, and manage fish and wildlife in the state. Statewide species planning documents provide an overview of current status and set statewide management direction to help fulfill that mission. Revision of the 2005-2014 White-tailed Deer Plan was initiated in October 2018. The Planning Team included biologists from each region in the state. This group identified issues and strategies regarding white-tailed deer management in Idaho and used the results of a recent white-tailed deer hunter survey to guide management objectives.

In 2018, 2,922 white-tailed deer hunters responded to the mail survey to assess opinions on a variety of issues associated with white-tailed deer management. An additional 3,757 hunters responded to the email survey and 1,057 hunters submitted responses via the internet. In contrast, 740 deer hunters responded to the mail survey in 2003. The 2018 survey was kept as similar as possible to allow results to be compared to the 2003 findings. Overall, the survey indicated that white-tailed deer hunters in Idaho are satisfied and even more so than in 2003. When asked a series of questions about their satisfaction with their chance to harvest a white-tailed deer, chance to harvest a white-tailed buck, and chance to harvest a mature white-tailed buck, all responses exceeded 2003 results. When hunters were asked about their satisfaction concerning their 2017 hunting experience: amount of access, length of season, number of hunters, quality of experience and timing of season, in all 5 categories significantly more hunters were Satisfied or Very Satisfied than were Dissatisfied or Very Dissatisfied. When asked, “Is there anything else you’d like to tell us about hunting white-tailed deer in Idaho?” the number one response was, “things are good, like current management.”

Despite overall satisfaction from hunters, IDFG recognizes there are contending desires. Some hunters may desire more opportunities to hunt mature bucks or to hunt with special weapons such as muzzleloaders or archery equipment. To meet the demands of the broad spectrum of deer hunters, this plan will provide the framework for implementing a diversity of hunting experiences.

Hunter congestion, including number of non-resident hunters, was a concern for some respondents in the 2018 Idaho White-tailed Deer Hunter Survey. This increase in hunter density has likely been fueled by a steadily increasing white-tailed deer population as well as a corresponding increase in hunters pursuing them. Even so, white-tailed deer hunters were mostly satisfied (46%) or neutral (28%) with the number of hunters during their 2017 hunting experience and only 7% of white-tailed deer hunters were very dissatisfied with the number of hunters. IDFG is committed to addressing hunter congestion in a comprehensive fashion and will be contacting hunters in 2019-2020 to gauge their desire and tolerance for various solutions (see Hunter Congestion Concepts in Appendix C).

To better understand white-tailed deer populations, a research plan has been developed to assess population parameters in north Idaho. The secretive nature of white-tailed deer and the habitats they occupy severely limit
IDFG’s ability to estimate population size and composition. Aerial surveys and other traditional approaches such as spotlight surveys and pellet transects provide inaccurate and imprecise indices. Therefore, managers, also need a cost-effective, reliable method to quantify white-tailed deer population composition and abundance to measure the outcomes of management actions and to better communicate with Idaho’s public regarding white-tailed deer management. Although there has been a large amount of research done concerning white-tailed deer, most has been done in Eastern and Midwestern states or is dated. IDFG has started investigating cause-specific mortality, measures for buck quality, methods for monitoring populations, buck vulnerability, and agriculture depredation prevention. The information gained from this research will guide IDFG in future management of white-tailed deer.
INTRODUCTION

Intent

The intent of the 2020–2025 White-tailed Deer Plan is to:

- Convey Idaho Department of Fish and Game’s (IDFG) goals and the strategies employed to achieve them
- Assist the Fish and Game Commission in developing policies, priorities, and direction for white-tailed deer management in Idaho
- Provide direction to IDFG staff in developing and implementing the state’s white-tailed deer management program
- Assist others in developing plans and implementing programs that support or are compatible with white-tailed deer conservation and management
- Encourage a cooperative approach to address white-tailed deer issues in Idaho. This plan will remain in effect until revised. The next plan revision is scheduled to be completed by 2025.

Authority

This white-tailed deer plan provides the basis for Idaho’s management of white-tailed deer as mandated by the Wildlife Policy of Idaho and Mission Statement for the IDFG, contained in Idaho Code, Section 36-103, which states:

All wildlife, including all wild animals, wild birds, and fish, within the state of Idaho, is hereby declared to be the property of the state of Idaho. It shall be preserved, protected, and managed. It shall only be captured or taken at such times or places, under such conditions, or by such means, or in such a manner, as will preserve, protect, and perpetuate such wildlife, and provide for the citizens of this state and, as by
law permitted to others, continued supplies of such wildlife for hunting, fishing, and trapping.

Statewide Management Direction

This plan is consistent with IDFG’s Strategic Plan (2015), including the following management directions:

Table 1. IDFG strategic plan objectives and corresponding white-tailed deer management direction

<table>
<thead>
<tr>
<th>Strategic Plan Objectives</th>
<th>White-tailed Deer Management Direction</th>
</tr>
</thead>
<tbody>
<tr>
<td>Maintain or Improve Game Populations to meet the Demand for Hunting, Fishing and Trapping</td>
<td>Develop biological studies to improve population estimation, predator impacts and habitat management capabilities</td>
</tr>
<tr>
<td></td>
<td>Implement proactive population management measures to minimize white-tailed deer depredations</td>
</tr>
<tr>
<td></td>
<td>Explore strategies to develop population age structure and buck quality metrics</td>
</tr>
<tr>
<td></td>
<td>Implement regulations to ensure that illegal harvest is minimized and harvest by regulated hunting is maintained</td>
</tr>
<tr>
<td></td>
<td>Manage white-tailed deer populations commensurate with habitat</td>
</tr>
<tr>
<td>Increase the Capacity of Habitat to Support Fish and Wildlife</td>
<td>Engage with land management agencies and other land users and groups to improve the quality and quantity of white-tailed deer habitat throughout Idaho</td>
</tr>
<tr>
<td></td>
<td>Increase IDFG involvement in long and short term land use planning efforts by providing information, analysis and recommendations to improve and preserve white-tailed deer habitats</td>
</tr>
<tr>
<td></td>
<td>Assist landowners to implement programs that provide incentives to improve white-tailed deer habitat on private lands</td>
</tr>
<tr>
<td></td>
<td>Encourage habitat enhancement projects that reduce or eliminate white-tailed deer damage to agricultural or ornamental plantings</td>
</tr>
<tr>
<td>Eliminate the Impacts of Fish and Wildlife Diseases on Fish and Wildlife Populations, Livestock, and Humans</td>
<td>Improve monitoring to minimize the influence of disease as a limiting factor in white-tailed deer populations</td>
</tr>
<tr>
<td></td>
<td>Implement IDFG’s Strategy for Chronic Wasting Disease (CWD; 2018)</td>
</tr>
<tr>
<td>Maintain a Diversity of Fishing, Hunting and Trapping Opportunities.</td>
<td>Continue to offer annual hunting opportunities</td>
</tr>
<tr>
<td></td>
<td>Provide a diversity of hunting opportunities, including socially desirable and biologically sustainable levels of antlerless and mature buck opportunity</td>
</tr>
<tr>
<td></td>
<td>Assess hunter desires for different types of white-tailed deer hunting opportunities</td>
</tr>
</tbody>
</table>
Strategic Plan Objectives | White-tailed Deer Management Direction
--- | ---
Increase the Variety and Distribution of Access to Private Land for Hunting, Fishing and Trapping | Provide incentives and services to landowners who allow public access for white-tailed deer hunting
Maintain Broad Public Support for Hunting, Fishing, Trapping and Viewing | Emphasize ethics, safety and fair chase, in white-tailed deer hunting through Fish and Game education and enforcement programs
Provide technical assistance and permits to local municipalities to address urban deer issues
Improve Citizen Involvement in the Decision-Making Process | Utilize available information platforms, such as social media and web-based applications, to broaden participation in proposal development and agency decision making
Use hunter opinion surveys to measure hunter satisfaction and inform white-tailed deer management decisions
Increase Public Knowledge and Understanding of Idaho’s Fish and Wildlife | Use information technologies to improve public outreach
Provide biological and harvest information as a basis for informing the public about recreational opportunities and important news about white-tailed deer in Idaho

Results from the Previous Planning Period

The previous planning period (2005-2014) emphasized recreational opportunity and hunter days while maintaining buck quality in the harvest. Overall management direction was to maintain levels of recreational opportunity, while also maintaining management objectives. The state was divided into 7 data analysis units (DAU). Objectives for hunters, hunter days of recreation, buck harvest and percent 5-points in the harvest were established for each DAU.

Table 2. Summary of statewide accomplishments from the 2005-2014 planning period

<table>
<thead>
<tr>
<th>Management Direction</th>
<th>Statewide Objective</th>
<th>Results</th>
<th>Conclusions and Recommendations</th>
</tr>
</thead>
</table>
| Maintain recreational hunting opportunity | 35,000 hunters | During the previous three years 57,424 hunters had 406,896 days of recreation | Continue to offer adequate amounts of general hunting to accommodate demand for annual hunting opportunity

| Achieve statewide buck management objectives | 8,700 bucks in the harvest | During the past three years 16,480 bucks in the harvest of which 20% are 5 points or greater | Develop population monitoring techniques to include buck quality. Provide a diversity of buck hunting experiences

| Provide opportunities to manage for higher percentages of mature bucks in some areas | The Northern Forest and Northern Agriculture DAU’s have a goal of 17% 5 points in the harvest while the rest of the DAU’s | During the past three years % 5 points in the harvest were 20% and 22% respectively for the Northern Forest and | Some sportsman have requested additional opportunities for mature buck management and hunting opportunities

DRAFT
<table>
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<th>Results</th>
<th>Conclusions and Recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Eliminate the Clearwater Deer Tag</td>
<td>Create a White-tailed Deer Tag</td>
<td>Created tag and expanded opportunities statewide</td>
<td>The new tag provided more flexibility for hunters while still maintaining protection against trespass issues in north Idaho</td>
</tr>
<tr>
<td>Continue management that results in high hunter satisfaction.</td>
<td>Survey hunters to understand their needs and experiences</td>
<td>2018 survey results show that when asked about their satisfaction with the opportunity to harvest a deer, buck or mature buck, all responses exceeded 2003 survey results.</td>
<td>Overall, hunters are satisfied with their hunting opportunity and experiences but some issues still remain.</td>
</tr>
<tr>
<td>Improve quality of white-tailed deer harvest data</td>
<td>Modify the mandatory harvest report system to better evaluate harvest information</td>
<td>In 2016 IDFG developed an application to better evaluate white-tailed deer harvest data</td>
<td>Additional methods need to be developed to assess buck quality in the harvest</td>
</tr>
<tr>
<td>Explore additional opportunities to reduce deer depredations on private property.</td>
<td>Increase youth and extra antlerless hunting opportunities to address depredation issues on private land</td>
<td>Since 2006, 5 extra antlerless youth hunts and 19 extra antlerless controlled hunts have been added across the state, primarily on or within 1 mile of private agricultural land</td>
<td>Efforts are still required to address white-tailed deer depredations and hunter access on private lands</td>
</tr>
<tr>
<td>Improve hunter access onto and through private land.</td>
<td>Increase hunter access.</td>
<td>In 2017, there are 13 Access YES agreements consisting of 110,000 acres of white-tailed deer habitat</td>
<td>Additional agreements are being developed with IDL and corporate timber companies to maintain public access to hundreds of thousands of acres of white-tailed deer habitat</td>
</tr>
<tr>
<td>More focus on white-tailed deer habitat</td>
<td>Produce Habitat Management Guidelines</td>
<td>As part of the 2005-2014 Management Plan, Habitat Management Guidelines were produced</td>
<td>Work with land management partners and private land owners to consider white-tailed deer in conservation planning</td>
</tr>
</tbody>
</table>

**How the Plan was Developed**

Revision of the 2005-2014 White-tailed Deer Plan was initiated in October 2018. The Planning Team included biologists from each region in the state. This group identified issues and strategies regarding white-tailed deer management in Idaho and used the results of a recent white-tailed deer hunter survey to guide management objectives.

In 2018, 2,922 white-tailed deer hunters responded to the mail survey to assess opinions on a variety of issues associated with white-tailed deer management. An additional 3,757 hunters responded to the email survey and 1,057 hunters submitted responses via the internet. In contrast, 740 deer hunters responded to the mail survey in 2003 (See Appendix A and B).

When analyzing the 2018 data, we took into account where an individual hunted during the 2017 hunting season. Respondents were grouped based on whether they hunted white-tailed deer in northern Idaho (i.e., Regions 1 or 2), southern Idaho (i.e., Regions 3-7), or did not hunt white-tailed deer during 2017. This was done to be consistent with the 2003 White-tailed Deer Hunter Opinion Survey methodology.
In 2018, we specifically targeted white-tailed deer hunters when sampling hunters. However, at the time of the 2003 survey, we did not have information that allowed us to discern white-tailed deer hunters from mule deer hunters. As a result, more individuals who considered themselves primarily mule deer hunters were included in 2003 than in 2018. To make more meaningful comparisons between the surveys, we limited our 2003 sample to individuals that identified as primarily white-tailed deer hunters based on their response to Question 3 (392 individuals).

The draft plan was completed during May 2019 and made available for comment on the IDFG website for 31 days. An email encouraging deer hunters to comment on the plan was sent to nearly 79,000 people, both residents and non-residents. The draft white-tailed deer management plan was viewed by 3,873 people and 228 of these individuals provided comments. The majority of respondents were Idaho residents (95%). Public opinion on the draft plan was also solicited through 11 Open Houses throughout the state. The Fish and Game Commission approved this plan on XXXX.

**Economic Importance of White-tailed Deer**

Every 5 years the U.S. Fish and Wildlife Service (USFWS) surveys hunters, anglers and wildlife watchers across the country. During the 2016 survey, 11.5 million hunters devoted 184 million days to hunting and spent 26.2 billion dollars. The majority of hunters (9.2 million) pursued deer, elk, bear and turkey. Their trip and equipment expenditures totaled 14.9 billion dollars or about $1,619.00 per hunter. Among big game species, deer was the most popular animal pursued, attracting 8.1 million hunters for 115 million days of recreation. Those hunters spent roughly 13.1 billion dollars pursuing deer across the entire country.

Similar to other states with abundant deer populations, white-tailed deer hunting is important to Idaho’s economy. Based on expenditures from the 2016 USFWS survey, white-tailed deer hunters spent nearly 93 million dollars annually from 2016-2018 on their hunt in Idaho.
WHITE-TAILED DEER MANAGEMENT

Idaho is bordered by six states and one Canadian Province. The primary concentration of white-tailed deer in these jurisdictions occurs contiguously across northern Idaho, northeast Washington, northwest Montana, and southeast British Columbia. Southern British Columbia comprises the northern distribution of western white-tailed deer. Few to no white-tailed deer occur as far south as northern Utah and Nevada. Elsewhere, white-tailed deer distribution is patchy in nature in the other states where they occur. In Wyoming, white-tailed deer occur primarily in the Black Hills region (northeastern corner) and some agricultural and riparian dominated areas elsewhere. Most white-tailed deer in Oregon occur in the northeastern portion of the state (a couple of relatively small populations of Columbian white-tailed deer also occur in the extreme western portion of the state).

Of the seven states and Canadian Province mentioned above, Idaho and Washington are the only two that have a white-tailed deer species management plan. This current effort will be the sixth version of Idaho’s white-tailed deer plan. Washington implemented their first white-tailed deer plan in 2010. Additionally, Montana completed two comprehensive reports that summarize the ecology and management of deer in that state (Ecology and Management of Mule Deer and White-tailed Deer in Montana, 1998 and Ecology of White-tailed Deer in the Salish Mountains in Northwest Montana, 2006). These reports function as de facto management plans for Montana.

In northwestern states and provinces where white-tailed deer live predominantly in dense, multi-storied coniferous habitats, managers have consistently found that traditional aerial survey techniques do not produce reliable data. Because complete population censuses are typically impractical, expensive, and in many cases impossible, all of the above-mentioned jurisdictions have relied on harvest-driven approaches to manage white-tailed deer. Fortunately, populations can be reliably monitored and managed using harvest data to assess population status and trend. Additionally, harvest trend can be augmented with various measurements of a particular population’s vital rates to address specific issues or concerns.
Distribution and Abundance in Idaho

The subspecies of white-tailed deer found in Idaho is *Odocoileus virginianus ochrourus*, the northwest white-tailed deer. They are abundant north of the Salmon River and are found along major riparian areas in southern Idaho (Figure 1).

White-tailed deer abundance has varied from low numbers in the late 1800’s to a peak in the 1960s. The declines observed in the 1970s were likely a consequence of heavy harvest and declining habitat quality as forest stands aged. Populations increased again during the 1980s and early 1990s in north-central and northern Idaho. The winter of 1996-97 was one of the most severe on record and white-tailed deer in portions of the Panhandle and Clearwater regions declined substantially. In more recent years, sporadic severe winters likely resulted in above average winter mortality rates primarily in the Panhandle Region. However, current populations in northern Idaho may be approaching levels of peak abundance similar to the 1950s and 1960s in some areas, particularly agricultural areas.
Figure 1. White-tailed deer distribution in Idaho

White-tailed Deer Distribution in Idaho

- Game Management Units
- White-tailed Deer Distribution
**Population Dynamics**

White-tailed deer generally breed in mid to late November, with fawns born late May to early June. Twins are common, and fawn recruitment is most affected by winter weather and predation. The primary natural causes of mortality for adults are disease and predation. Interactions with other ungulates occur throughout Idaho, but in most cases do not have significant adverse effects on white-tailed deer populations.

**Survival**

The three most prominent natural factors affecting white-tailed deer survival in Idaho are winter weather, predation and disease. Deep winter snows are a major influence on population dynamics of white-tailed deer in the northernmost portion of their distribution, including most of Idaho. During the severe 1996-1997 winter, Sime (personal communication 1997) estimated 70% of the white-tailed deer died on her study area in northwestern Montana, including over 90% of fawns. In northern Idaho, natural mortality, including predation and winterkill, averaged 10% annually for does, and 23% for bucks from 1986 through 1995 (IDFG unpublished data).

**Predation**

Predation is an important influence on the population dynamics of white-tailed deer in Idaho. The most common predators of white-tailed deer include coyotes, bobcats, black bears, mountain lions, wolves, and domestic dogs. Predation by black bears is primarily seasonal (i.e., bear predation on young fawns) or opportunistic but predation by mountain lions and wolves occurs throughout the year and likely increases.
during winter when deer are most vulnerable due to deep snow and reduced body condition. The impact of predation on white-tailed deer populations depends on a suite of dynamic factors including the number of predator species, predator density, deer habitat quality, winter severity, and the availability of alternate prey species.

The survival of fawns strongly influences the population size of white-tailed deer the following year. Survival of fawns in Idaho is heavily influenced by the energetic demands of the previous winter on the doe, summer nutrition, predation, and by the energetic demands during their first winter.

Although predator management is a complex issue, it is desired by many sportsmen and is an important tool for IDFG when used appropriately. The Idaho Fish and Game Commission implemented a policy entitled “Policy for Avian and Mammalian Predation Management” to guide IDFG’s implementation of predator management activities in Idaho. Generally, intensive studies are required to understand all potential limiting factors to a population to assess whether predation management is likely to be effective. While we currently have a limited understanding of the factors that influence population changes in white-tailed deer in Idaho, IDFG is initiating research that will investigate these factors (see Research for more details).

**Disease**

Disease in white-tailed deer is multifaceted and can be very complex. In general, white-tailed deer are the most studied free-roaming ruminant in the United States. Extensive disease investigations and documentation have been done in most parts of the country where white-tailed deer reside.

Historically, IDFG has not actively conducted targeted surveillance for diseases or parasites in white-tailed deer specifically. Disease information is therefore limited and obtained opportunistically. Foreyt and Compton (1991) found no evidence of meningeal worm (*Parelaphostrongylus tenuis*) in northern Idaho, and a small number of samples obtained in 1992 were tested for bluetongue virus (BT) antibodies with positive results (MacLachlan et al. 1992).

At this time, the primary diseases of concern in white-tailed deer in Idaho are epizootic hemorrhagic disease (EHD) and BT. EHD is present at low levels within white-tailed deer populations in Idaho, while BT is likely sporadic. Tests from mule deer and elk indicated EHD or BT exposure in 10-20% of the animals tested. White-tailed deer are likely exposed at a higher rate. Isolated outbreaks of hemorrhagic disease have been documented in white-tailed deer in the Clearwater Region during most years since the initial outbreak in 2003. The largest outbreak of EHD documented in Idaho occurred during the late summer through fall of 2003 in the Kamiah area of the Clearwater Region and it killed an estimated 5,000-10,000 deer. Several small outbreaks of BT in white-tailed deer have been documented in the Panhandle Region since 2004.

Although currently not found in Idaho, Chronic Wasting Disease (CWD) may pose problems in the future. It is a prion disease that has been documented in native cervids of the U.S. including elk, mule deer, moose, reindeer, and white-tailed deer. The disease has been found in white-tailed deer in an increasing number of states, warranting continued surveillance in Idaho. IDFG’s monitoring and response to CWD is guided by the IDFG Strategy for CWD (2018).

Meningeal worm has not been documented in white-tailed deer in Idaho but is considered a common parasite of white-tailed deer in central and eastern United States. This parasite does not typically kill white-tailed deer. In other hosts such as moose, elk, and mule deer the neurologic disease caused by
meningeal worm can be fatal. In some states where infected populations of white-tailed deer overlap moose populations, white-tailed deer are managed at lower densities to reduce the potential impact of meningeal worm infections on moose populations.

Disease transmission between domestic Cervidae and wild white-tailed deer is also a concern. Several diseases are known to occur in domestic elk, both in Idaho and other locations, but not in free-ranging white-tailed deer in Idaho. These include giant liver fluke, CWD, and meningeal worm. Giant liver fluke was found on one elk farm in the Upper Snake Region and another in the Magic Valley Region. All elk that die on elk farms in Idaho are tested for CWD and no domestic cervids have tested positive to date. Meningeal worm is present in captive elk in Eastern and Midwestern states, but has not been reported in Idaho. Domestic and wild cervids interact in Idaho, both through wild cervids entering game farms and domestic cervids escaping. Generally, wild cervids that are found within domestic Cervidae farms are lethally removed, but the response depends on a risk assessment jointly conducted by IDFG and the Department of Agriculture. Risk assessment includes evaluating the number of animals involved, the extent and time of contact, record keeping, and previous presence/absence of disease. There are currently two captive white-tailed deer facilities in Idaho. These facilities and continued importation of white-tailed deer represent potential sites for disease introductions and genetic contamination.

Diseases such as CWD, EHD, and tuberculosis (TB), are prominent on a national scale. Information is lacking, however, on exposure and importance of these and other diseases to white-tailed deer in Idaho. Prior to 2019, 15 white-tailed deer were tested for various diseases and 1,932 white-tailed deer were tested for CWD from 1998-2016.

Population Dynamics Management Direction

Management Direction - Develop biological studies to improve population estimation, predator impacts and habitat management capabilities

   **Strategy:** Implement research to estimate adult female and fawn survival rates, document causes of mortality and predation rates to better understand predator-prey interactions, and investigate the role habitat type and quality may play in those relationships. (For additional information about research efforts, see Research section)

   **Strategy:** As additional information about white-tailed deer mortality becomes available through ongoing research, this information will be incorporated into future management decisions

Management Direction - Improve disease monitoring to better understand the influence of disease as a limiting factor in white-tailed deer populations

   **Strategy:** Collect biological samples from all white-tailed deer captured by IDFG personnel

   **Strategy:** When feasible, collect and analyze biological samples from all white-tailed deer that appear ill or have died from disease

   **Strategy:** As information becomes available and circumstances necessitate, develop strategies to reduce or eliminate disease, parasite prevalence, and the risk of spread.

Management Direction - Implement IDFG’s Strategy for CWD (2018)
**Strategy:** Collect sufficient biological samples to achieve the target 95% probability of detecting a 1% prevalence of CWD. Collect samples on a rotating schedule, according to IDFG Strategy for CWD (2018)

**Strategy:** Continue to prohibit importation of white-tailed deer from outside the state and discourage ownership of captive white-tailed deer within the state

**Strategy:** If CWD is found in white-tailed deer or other cervids in Idaho, implement an adaptive management plan outlined by the IDFG Strategy for CWD (2018)

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**Habitat**

White-tailed deer are highly adaptable generalists that utilize diverse habitats across the landscape. Nevertheless, because of seasonal changes in weather, forage availability, and nutritional demands, white-tailed deer require a different mix of habitat components at different times of the year.

Habitat use is determined by the energetic demands of deer throughout the seasons. These demands consist of recovering body condition and supporting fawn development from spring to fall, and minimizing energy loss over winter when caloric demand often exceeds what can be replaced with limited forage availability. In spring, deer utilize low-elevation burned areas, riparian habitats, clear cuts, south to west aspect slopes with open canopy, and agricultural areas to recover lost condition and replenish energy reserves. In summer, deer may follow green-up to higher elevations, while continue to make
extensive use of clear-cut edges, burns, and open forest areas. Deer may also remain in low-elevation habitats that provide adequate combinations of browse and cover throughout the year.

Although it is easy to think of winter range availability and quality as the critical population “bottleneck”, because this is when we typically observe the majority of mortalities. However, research has indicated that the adequate accumulation of energy reserves during the summer is at least as critical as winter range availability and quality to winter survival. The condition of deer entering winter strongly influences their ability to survive (Ozoga and Verme 1970, Taillon et al. 2006, Tollefson et al. 2011). Summer range quality has also been linked to productivity, recruitment, and growth rate in deer (Cheatum and Morton 1946, Cheatum and Severinghaus 1950, Julander et al. 1961, and Verme 1963).

The characteristics of ideal winter range vary somewhat with winter severity. At more northern latitudes, white-tailed deer generally remain below 3000 ft. elevation in heavy conifer stands, which provide superior thermal and shelter qualities during harder winters (Pauley et al. 1993, Poole and Mowat 2005). White-tailed deer in southern Idaho typically frequent thickly vegetated riparian areas and productive cottonwood galleries along river corridors year-round. While some populations of mule deer in southern Idaho make seasonal migrations from summer to winter habitat, white-tailed deer more often make smaller movements along an elevation gradient.

Maintaining a patchwork of habitat types at the local scale is critical to retaining productive white-tailed deer populations. White-tailed deer need a mix of different habitat components, such as areas of high quality forage during the summer and thermal cover during the winter months. Having a mosaic of habitat components on the landscape is often dependent on and maintained by different types of disturbance. Before European settlement in Idaho, natural processes shaped the landscape. Now human activities largely control the type and distribution of habitat through such activities as timber harvest, fire suppression, prescribed fires, land-use conversion, etc. While some of these activities have the potential to mimic natural disturbances and are important in maintaining productive white-tailed deer habitat, balancing the production of different habitat components is essential. This can be achieved by selectively influencing ecological succession with fire and timber management, limiting the impact of invasive species, and keeping wildlife needs in mind in the management and development of public and private lands.

Ecological succession is the process of changes in species composition, structure, and maturation of a plant community over time. This process is important to consider because the ability of a landscape to support white-tailed deer varies with changes in habitat. Typically, most of the forage in late successional or climax forest systems is out of reach for terrestrial herbivores or dominated by low-quality, shade tolerant understory plants. Nevertheless, mature forests are important in a mosaic associated with early to mid-seral stands as they provide critical thermal cover during the winter. Early-seral habitats benefit many wildlife species, including white-tailed deer, because overall plant diversity and forage quality is generally higher in these areas. Having a patchwork of mature and early-seral stands provides a diversity of travel routes, screening and thermal cover, and browse. As such, disturbance sufficient to periodically reset succession is essential to maintaining high quality white-tailed deer habitat. However, this disturbance process is being altered on some industrial timber ground where post-harvest herbicide applications are implemented. This practice is employed to reduce competition between brush and newly planted or naturally regenerated seedlings. This process can temporarily eliminate or reduce early seral stages that benefit white-tailed deer.

Wildfire is one type of disturbance that drives succession and the composition of plant communities. Succession of vegetation post-fire typically provides a period of excellent forage and cover availability for deer. Currently, wildfire frequency and intensity has departed significantly from historical regimes.
throughout many of the forest communities occupied by white-tailed deer. Intense and severe wildfires driven by abnormally heavy fuel loads result in vast areas that recover slowly and remain unusable to deer for long periods of time.

Similar to wildfire, sustainable timber practices can benefit white-tailed deer by creating a landscape-level mosaic of seral stages through the distribution of harvest over time (Barkley et al. 2015). Timber harvest can simulate natural disturbance regimes when conducted at appropriate spatial scales and harvest intervals. However, conflicts can arise when forests are managed in such a way that trend the landscape away from its natural range of variability in stand age structure, patch size, and species composition. These forests are often highly fragmented by high road densities, which increase white-tailed deer vulnerability due to increased human activity. Furthermore, increased road densities result in the spread of invasive plants, some of which have the potential to negatively affect habitat quality for native species (Flor & Clay 2009, Trombulak and Frissell 2000).

During the public comment period, some concerns were expressed by sportsmen and sportswomen that timber harvest has increased significantly in recent years on industrial forests, negatively impacting white-tailed deer habitat and their corresponding abundance. To address this concern, IDFG reviewed long term timber harvest data for private, state, and federal lands in Idaho. These data show there has been relatively little change in private timber harvest over the last 50+ years at the statewide scale (Figure 2; Pokharel et al. 2019). Timber harvest on state lands has increased some, but is a relatively small proportion of forested habitat. The largest change has been the decline in timber harvest from federal lands. IDFG recognizes that timber harvest can be intensive at a local scale (e.g., within a stream basin), resulting in dramatic habitat changes at that scale, and potentially affecting deer numbers in localized areas. At the same time, most forest practices result in the stimulation of forage growth and other habitat features, and in a mosaic of habitat types. Habitat changes brought upon by sustainable forestry generally benefit white-tailed deer at the landscape scale. White-tailed deer are habitat generalists well suited to, and somewhat dependent on, periodic habitat disturbances which re-initiate forest succession. Habitat changes that do occur due to timber harvest will typically provide high quality deer habitat within 5-10 years.
**Habitat Management Direction**

**Management Direction**: Engage with land management agencies, tribes and other land users and groups to improve the quality and quantity of white-tailed deer habitat throughout Idaho

**Strategy**: Work with public land management agencies, tribes, timber companies and other land users and groups to encourage landscapes to be managed for a mix of early seral, dense mature forests, and security areas

**Strategy**: Include white-tailed deer habitat needs as part of forest collaborative projects

**Management Direction**: Increase IDFG involvement in long and short term land use planning efforts to improve and preserve white-tailed deer habitats

**Strategy**: Provide information, analysis, and recommendations during forest plan revisions, timber sale proposal evaluations, and other major land use planning efforts to benefit white-tailed deer

**Strategy**: Continue to provide technical assistance to public land management agencies to promote and enhance white-tailed deer habitat and coordinate annually with the USFS

**Strategy**: Work with Idaho Department of Lands to evaluate potential road closures to benefit white-tailed deer and other wildlife species

**Management Direction**: Assist willing landowners to implement programs that provide incentives to improve white-tailed deer habitat on private lands

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*Figure 2. Idaho Timber Harvest by Ownership from 1950-2018 (Pokharel et al. 2019)*

*2018 numbers estimated based on first three quarters*
Strategy: Provide technical assistance to promote and enhance white-tailed deer habitat on private lands

Strategy: Work with private landowners to encourage landscapes to be managed for a mix of early seral, dense mature forests, and security areas

Agriculture and Urban Deer

In 2017, The U.S. Census Bureau reported that Idaho was the fastest growing state in the union (USCB 2017). Private land encompasses approximately 15,889,080 acres or about 29.7% of the state (IDPR 2013). Private land can play an important role in all life cycles of white-tailed deer. Private lands provide food from agriculture commodities as well as safety from extensive hunting pressure.

IDFG concerns stem from large numbers of white-tailed deer in some areas of predominantly private land that periodically cause significant damage to agricultural crops. These situations can occur due to drought conditions, deep snow, wildfire or areas where cropland is adjacent to deer habitat. The diverse objectives of private landowners make many management strategies ineffective on these de facto refuges. Urban/suburban sites also create refuges that negate many management strategies. Many of these urban/suburban landowners feed and enjoy viewing deer, while others are frustrated with landscaping and garden damage.

Idaho Code 36-1108 identifies statutory requirements and appropriate actions IDFG must take to address
nature conservation organizations. For more information on Idaho Fish and Games Depredation Program please refer to A Landowners Guide to Preventing Big Game Damage and Filing Damage Claims. The IDFG works cooperatively with private landowners to provide suitable alternatives or solutions to problems related to depredating deer. Hazing, permanent fencing, harvest season structure, depredation hunts, kill permits, continued use agreements, and perpetual easements are just some of the tools incorporated into depredation management strategies.

In 2017 IDFG received additional funding through legislative action. This has allowed IDFG to take a much more proactive approach to managing depredation issues. For example: during the first 2 years of additional funding, IDFG built over 300 new stackyards on private land to reduce damage to stored forage. This aggressive focus on reducing depredation on agricultural crops by white-tailed deer and other ungulates will continue into the future.

Agriculture and Urban Deer Management Direction

Management Direction- Implement proactive population management measures to minimize white-tailed deer depredations

**Strategy:** In areas with persistent, high rates of depredations, adjust hunting seasons to increase hunting pressure and/or achieve higher harvest

**Strategy:** Use hunting as the primary tool to manage agricultural impacts, including access to private lands

Management Direction- Provide support to landowners in alleviating and preventing white tailed deer damage to growing or stored crops

**Strategy:** Develop deterrent strategies to reduce or prevent white-tailed deer use of agricultural lands or urban areas

**Strategy:** Take proactive measures, to protect stored crops, such as stackyard development or provide panels and Tensar

Management Direction- Provide technical support and assist municipalities experiencing urban deer issues

**Strategy:** Provide educational information to municipalities and groups to help prevent deer damage to gardens/landscaping and recommendations for ornamental plantings

**Strategy:** Provide technical assistance and permits to local municipalities to address urban deer issues
Population Monitoring

Numerous techniques have been used throughout white-tailed deer range to estimate population size, including: mark/recapture, change-in-ratio, change-in-hunter success, catch-per-unit-effort, population reconstruction, and aerial surveys (Lancia et al. 1996).

In much of North America, white-tailed deer are managed using harvest-based, deterministic modeling. Due to the secretive nature of white-tailed deer and the thick vegetative habitats they occupy, most standard population enumeration techniques are inefficient, ineffective, or impossible. IDFG has experimented with various techniques, including aerial surveys and spotlight counts. To date, IDFG has found no single population monitoring technique that provides reliable and cost-effective measures of population demographics and abundance. However, IDFG has been monitoring harvest data as an index to population abundance and distribution since 1975. Additionally, species-specific deer hunter participation information has been collected since 2005 and provides additional information on catch-per-unit-effort indices (i.e., success rates, percent 5 points, days afield to harvest).

Wildlife managers in Idaho have primarily used total harvest and changes in distribution to monitor population trends. Historically, percentage of bucks with 4 or more points on the right antler was used as an index for monitoring buck age structure. However, analyses indicated that the percentage of antlered bucks in the harvest with at least 4 points on 1 antler is relatively insensitive to changes in harvest or hunting season structure, a consequence of the relatively narrow range of hunting mortality rates observed in Idaho white-tailed deer (IDFG unpublished data). In the previous planning process, managers determined that percent 5 points was a more conservative indicator of age and quality of bucks.

It can be reasonably argued that white-tailed deer management in Idaho does not require intensive monitoring because population change is not integrally tied to changes in hunting regulations. However, a solid monitoring program is needed to give managers the ability to know when white-tailed deer populations have changed, to adapt management to those changes, and to better understand and explain the causes to the public. Currently, new survey techniques are being developed using remote cameras to
estimate abundance, monitor fawn:doe and buck:doe ratios, and measure buck quality (see Research for more details).

**Population Monitoring Management Direction**

**Management Direction** - Develop biological studies to improve population estimation, predator impacts, and habitat management capabilities

**Strategy:** Implement research to estimate adult and fawn survival rates, document causes of mortality and predation rates to better understand predator-prey interactions, and investigate the role habitat type and quality may play in those relationships. (For additional information about research efforts, see Research section)

**Strategy:** Develop methods to estimate white-tailed deer abundance and composition

**Strategy:** Develop methods to quantify buck quality metrics

**Strategy:** Explore strategies to develop population age structure and buck quality metrics

**Strategy:** Develop a web-based method for sharing new management tools with the public as they become available

**Strategy:** Explore strategies to include sportsmen and women or interested publics in biological studies or management activities
Harvest Management and Hunting

The History of Hunting White-tailed deer in Idaho

The first hunting regulations for deer in what is now Idaho were implemented in 1863 as part of the Idaho Territory (which included all of Idaho, Montana and part of Wyoming) and closed deer hunting between February 1 and June 30. In 1899, the first bag limit was established and limited take to four deer annually per hunter. During the 1950’s and 1960’s, liberal harvest regimes for deer and elk were instituted to address over-browsing of winter ranges. The first species-specific deer management strategy in Idaho was implemented in 1974 when Game Management Unit (GMU) 11 was closed to mule deer harvest but remained open for general white-tailed deer hunting.

The 1980’s were characterized by increasingly liberal seasons that took advantage of increasing deer populations and were designed to help alleviate conflicts with agricultural producers. During the 1990’s, the effects of drought in southern Idaho exacerbated ongoing population declines, requiring managers to reduce mule deer hunting to short, buck-only seasons. Many displaced hunters headed north to take advantage of the long seasons and expanding white-tailed deer populations. The influx of hunters to north Idaho caused some major trespass issues and landowner conflicts. Therefore, in 1998, the Clearwater Deer Tag (the first and only regional deer tag) was created. Hunters had to choose between hunting the Clearwater Region or elsewhere in the State. This helped to alleviate private property trespass issues associated with the shift in hunter distribution. With the 2004 White-tailed Deer Management Plan, the Clearwater Tag was eliminated and the White-tailed Deer Tag was created. This achieved the same goal as the Clearwater Tag but allow more hunter movement early in the hunting season.

White-tailed Deer Hunting Opportunity and Experience

Idaho deer hunters have various motivations for hunting. These include: spending time with family and friends, seeing deer and other wildlife, being close to nature, getting away from the usual demands of life,
harvesting a deer, putting meat in the freezer, harvesting a mature buck, and others. In comparison to deer hunters in 1987, today’s hunters are older, the social aspects of the hunt are more important, and they are more likely to use an off-highway-vehicle (Sanyal et al. 1989).

Deer hunting has strong ties to Idaho’s history and culture and today’s hunters highly value the opportunity to hunt every year. However, some hunters also desire more opportunities to hunt mature bucks or to hunt with special weapons such as muzzleloaders or archery equipment. To meet the demands of the broad spectrum of deer hunters, this plan will provide the framework for implementing a diversity of hunting experiences.

Hunter Density and Congestion

Hunter congestion is an important factor contributing to hunt quality and hunter satisfaction. However, congestion is based upon an individual’s perspective and crowding tolerance can be quite variable among hunters. Although hunter congestion can be value-based, the number of white-tailed deer hunters per square mile has increased in some GMUs since the previous white-tailed deer planning period (see Figure 3 and Figure 4 for comparison).

During the past three years, densities of white-tailed deer hunters across Idaho averaged 0.83 hunters/mi². However, in parts of north Idaho, white-tailed deer hunter densities averaged as high as 5.91 hunters/mi² in some GMUs. Hunters pursuing different species in the same place (e.g., deer and elk) or hunting during the late season, when snow causes hunters and game to be more concentrated, might exacerbate congestion. This increase in hunter density has likely been fueled by a steadily increasing white-tailed deer population as well as a corresponding increase in hunters pursuing them.

Hunter congestion, including the number of non-resident hunters, was a concern for some respondents in the 2018 Idaho White-tailed Deer Hunter Survey. Even so, white-tailed deer hunters were mostly satisfied (46%) or neutral (28%) with the number of hunters during their 2017 hunting experience and only 7% of white-tailed deer hunters were very dissatisfied with the number of hunters. Of those hunters that were very dissatisfied, 114 commented that they were unhappy with non-resident hunter numbers, and 89 hunters commented that they were unhappy with hunter congestion. In contrast, the 2017 Mule Deer Hunter Satisfaction survey found that 45% of mule deer hunters felt hunter congestion affected the quality of their hunt in 2016 (Unpublished data). Continued growth in white-tailed deer hunter numbers might lead to similar impacts on hunter satisfaction. Solutions to this issue will be bigger than addressing mule deer, white-tailed deer, or elk seasons individually. For example, if mule deer hunts are modified and displace hunters or cause them to pursue other species, white-tailed deer seasons could experience increased congestion issues in the following years. IDFG is committed to addressing hunter congestion in a comprehensive fashion and will be cooperating with the University of Idaho to survey hunters in 2019-2020 to gauge their desire and tolerance for various solutions (see Hunter Congestion Concepts in Appendix C).
Figure 3. Average white-tailed deer hunter density by GMU from 2005-2007

White-tailed Deer Hunters per Square Mile

Average 2005-2007

- 0.00 - 0.99
- 1.00 - 3.49
- 3.50 - 7.06
Figure 4. Average white-tailed deer hunter density by GMU from 2016-2018
Annual hunting opportunity

Unlike several surrounding states, Idaho has continuously offered annual, over-the-counter, any-weapon hunting opportunity for both white-tailed and mule deer. In 2018, 93 of Idaho’s 99 GMUs provided general season hunting opportunity for more than 72,000 mule deer and 55,000 white-tailed deer hunters.

Idaho deer hunters have consistently expressed that they value this annual opportunity. Respondents to the 2017 mule deer hunter survey repeatedly indicated that they would choose the opportunity to hunt every year over less frequent hunting with greater chances at mature bucks. Similarly, 76% of respondents to the 2018 white-tailed deer hunter survey indicated that it is important to be able to hunt a buck every year. When asked whether some GMUs should be managed for large white-tailed bucks, even if that means shorter seasons or controlled hunts, more hunters disagreed (42%) with this concept than favored (33%) it.

Buck management

Buck management, and the availability of mature bucks, is an important issue for white-tailed deer hunters throughout the species’ range. The concept of Quality Deer Management (QDM) arose from hunter dissatisfaction with availability of mature bucks in states where buck mortality from hunting is very high, and deer numbers exceed carrying capacity. Most research on QDM, and subsequent implementation, has occurred in Eastern or Midwestern states (Bowman et al. 2007, Shaw and Harper 2008, Wallingford et al. 2017). In general terms, managing for high quality bucks under this scenario involves reducing the overall deer density to levels below biological carrying capacity by harvesting does and small bucks. This ensures that adequate nutritional resources are available to enable the remaining bucks to grow to their full antler potential. Additional restrictions on hunter opportunity are then implemented to limit harvest on the remaining bucks (e.g. antler point restrictions, controlled hunts or shifting hunting season dates) to increase the survival and availability of large bucks.

White-tailed deer populations and harvest pressure in Idaho differ from those in the Midwest or Eastern part of the US. Consequently, Idaho has not seen a need to adopt this approach. This is primarily due to the fact that white-tailed deer in Idaho exhibit no indications of exceeding carrying capacity and the harvest rate on bucks, and deer in general, is much lower than typically seen in the Midwest and Eastern part of the country. This approach would also be very difficult to apply on a landscape level over the vast acreages of the mixed land ownerships prevalent in northern Idaho. Additionally, hunters in Idaho have indicated a clear preference not be subjected to this type of added restriction and have indicated a high level of satisfaction with recent levels of opportunity and hunt quality.

For comparison, Tennessee cited an all-time high hunter success rate of 46% in 2004. Their hunter success rate in in 2015 was 37%. Also, in 2015, 18.3% of their harvested bucks had 9 points or better (Eastern, total point count from both antlers), which is equivalent to IDFG’s 5 point or greater metric. For comparison, the two northernmost white-tailed deer DAUs in Idaho (where most hunting and harvest occurs) have consistently high hunter success and mature buck harvest. In the Northern Forest DAU, hunter success averaged 45% from 2016-2018 and 20% of the antlered deer harvested were 5 points or greater. In the Northern Agriculture DAU, hunter success averaged 48% from 2016-2018 and 22% of the antlered deer harvested had 5 points or more.

IDFG has monitored trends in the percentage of antlered bucks in the harvest with five or more points on at least one antler as a measure of buck quality since the development of the 2005-2014 White-tailed Deer Management Plan. Most DAUs called for at least 10% of the buck harvest to be 5 points or better, while
the two most productive DAUs (Northern Forest and Northern Agriculture) called for 17% of the harvest to be 5 points or better. These criteria are calculated on a 3-year running average. All DAUs in the State where white-tailed deer receive management priority over mule deer exceeded (and continue to exceed) these established minimum criteria since the implementation of the prior plan.

However, the relevance of the 5-point minimum criteria has been questioned by some hunters primarily interested in seeing more restrictive quality buck hunting opportunity and management approaches. These hunters correctly note that not all ≥5 point bucks are large and/or mature animals (i.e. some young bucks have ≥5 point antlers).

Age-specific antler point data from 1,045 antlered whitetail bucks checked through the Panhandle Region check stations helped shed light on this issue (Figure 5). Bucks with ≥5 points increased with the age of the animal until ≥7 years of age. Some young bucks had ≥5 point antlers (4 of 763 yearlings, 23 of 135 two-year-olds, and 22 of 59 three-year-olds). At five years of age and older, more than 50% of bucks in an age class had five or more points on at least one antler. Six-year-old bucks achieved the highest percentage of ≥5 points at 70% (even though bucks as old as 14 years of age were checked). This indicates that approximately 30% of whitetail bucks in northern Idaho are genetically predisposed to never exceed four antler points, even though they are large mature bucks.

![Figure 5](image)

**Figure 5. Percentage of bucks with ≥5 points on left antler of 1,045 white-tailed deer bucks checked at Panhandle Region Check Stations (1980-2012)**

IDFG uses this percent ≥5 point statistic as an indicator of buck survival and as a ratio of mature bucks. Given that many of these older deer will never be 5 points or larger this is a conservative approach to monitor and maintain a healthy age structure. To further test this assumption, research will be initiated to study buck vulnerability (see Research for more details).

The 2018 White-tailed Deer Hunter Survey indicated that overwhelming proportions of hunters appreciate the current white-tailed deer hunting opportunities; hunters value being able to hunt white-tailed deer in November (75% for early November, and 77% for late November), feel it is important to be able to hunt bucks annually (76%), and are generally satisfied with their ability to harvest a mature buck (58%). In addition, more hunters disagreed (42%) than agreed (33%) with the proposal that some GMUs should be
managed for large bucks, even if that means shorter seasons or controlled hunts.

**Antlerless harvest**

Antlerless harvest is an important management tool to accomplish a number of management objectives, like: maintain high population productivity by ensuring the population remains below carrying capacity, address depredation concerns on private land, provide additional hunting opportunity, and provide opportunities for hunter recruitment and retention. In many eastern and Midwestern states, hunters are permitted to harvest multiple antlerless deer each year in an effort to both provide opportunity and manage rapidly growing deer populations.

Because white-tailed deer in Idaho have high intrinsic rates of increase, occupy relatively dense forested or riparian habitats, and exhibit relatively low mortality from hunter harvest, hunting opportunity is generous when compared to mule deer. This includes general-season harvest opportunities for antlerless animals, and hunting during the rut in November. Idaho hunters appear to take advantage of either-sex harvest opportunities; just under half (44%) of respondents in the 2018 white-tailed deer hunter survey reported taking an antlerless animal in 2017. Hunters expressed mixed opinions about reducing antlerless white-tailed deer in some areas specifically to resolve depredation problems: 38% agreed with this strategy, while 29% disagreed and 32% remained neutral.

**Hunter access**

According to the 2018 survey of white-tailed deer hunters, 60% of respondents agreed that IDFG should spend more time and resources developing access onto private land for the purpose of hunting. Providing access to sportsmen is an important objective of IDFG. Loss of access can also compromise IDFG’s ability to meet population objectives and manage depredations. Loss of access on public land is also a growing problem. Lack of funding, management restrictions, and hazardous conditions created after fires have all led to a decrease in the amount of trail and road infrastructure on public land. IDFG will continue to work with partner agencies and private entities to improve access for Idaho’s sportsmen. To help address this issue, IDFG has developed a suite of tools.

These tools include:

- The “Access Yes!” program, which is designed to secure access to private land or through private land to landlocked public land. In 2017, approximately 800,000 acres of land were open to the public via the “Access Yes!” program. Half of these lands consisted of private land and half previously landlocked public lands.
- Agreement with Idaho Department of Lands (IDL) for continued access to 2.3 million acres of IDL land. Historically, these lands were open to the public. However, the State manages these trust lands to maximize revenue, which leaves them open to lease. This agreement will ensure Idaho state endowment lands are open to the public for hunting, trapping and fishing.
- A “large tracts” program, which is focused on securing access from landowners who own 50,000 acres or more. Funding for this program is a result of a budget package passed by the Idaho Legislature in 2017, to increase funding that supports public access programs.

In addition to these programs, which are primarily focused on private or state owned lands, IDFG continues to work with federal partners to secure access to federal lands and explore additional tools for maintaining and expanding access.
Harvest Monitoring

Deer harvest data (white-tailed and mule deer combined) has been collected since the early 1930s in Idaho. Various techniques have been used to estimate harvest including check stations, tag returns, voluntary hunter reports, random telephone surveys, and currently, a mandatory harvest report (although not truly mandatory). Although not used to estimate harvest, check stations are operated to provide immediate feedback to wildlife managers about the hunting season, serve as an enforcement tool, provide an opportunity for IDFG personnel and sportsmen to interact, and allow for collection of biological data. Estimates derived from random telephone surveys (1982-1998) and mandatory harvest reports with a follow-up telephone survey of a sample of hunters who failed to file the required report (2001-present), have produced the most reliable results. Information collected includes total hunter numbers, success, species, sex, antler points, GMU, weapon type, and days of effort.

Presumably, total statewide deer harvest during the mid to late 1900s was dominated by mule deer. Beginning in 1975, harvest of mule deer and white-tailed deer was monitored separately. Since 1994, white-tailed deer have comprised 40-50% of the total statewide deer harvest. However, hunter effort was not differentiated between mule deer and white-tailed deer hunts until 2005 when IDFG began species-specific monitoring of hunter participation.

Trends in harvest roughly correspond with trends in deer populations (Montana Fish, Wildlife and Parks 2006). White-tailed deer hunter numbers (Figures 3 and 4), hunter days afield, and harvest (Figures 6 and 7) have been increasing over the past few decades. The highest recorded harvest of white-tailed deer occurred in 2015, with 30,342 animals harvested. Increasing harvest, along with stable to increasing hunter success, suggests that white-tailed deer populations have increased steadily over the past few decades.

According to the 2018 Idaho White-tailed Deer Hunter Survey, 72% of hunters were satisfied with their chance to harvest a white-tailed deer. Hunters were also asked about their chance to harvest a white-tailed buck and a mature white-tailed buck. Seventy-one percent of hunters in 2018 were satisfied with their chance to harvest a white-tailed deer buck and 58% were satisfied with their chance to harvest a mature white-tailed buck (Appendix B).

Harvest Management Direction

Management Direction- Continue to offer annual hunting opportunity for white-tailed deer

   Strategy: Continue to offer general season white-tailed deer hunting opportunities to provide annual hunting experience

Management Direction- Provide a diversity of hunting opportunities, including socially desirable and biologically sustainable levels of antlerless and mature buck opportunity

   Strategy: Continue to offer a diversity of hunting opportunities, including multiple weapon types, where white-tailed deer populations allow

   Strategy: Provide information to hunters to allow them to align hunting desires with available opportunities

   Strategy: Continue to offer long general hunt seasons and rut hunting where populations allow
**Strategy:** Develop methods to quantify buck quality metrics

**Strategy:** Develop a web-based method for sharing new management tools with the public as they become available

**Management Direction:** Assess hunter desires for different types of white-tailed deer hunting opportunities

**Strategy:** Conduct a forced-choice question survey to understand hunter desires for various white-tailed deer harvest strategies

**Strategy:** Work with University of Idaho human dimensions professors to develop a hunter survey regarding satisfaction with current hunting opportunities during the life of this plan
Figure 6. Average white-tailed deer harvest density by GMU from 2005-2007
Figure 7. Average white-tailed deer harvest density by GMU from 2016-2018
Illegal Harvest and Unlawful Commercialization

Illegal harvest and commercialization of white-tailed deer result in lost opportunities for wildlife enthusiasts and hunters. Quantifying illegal activity is inherently problematic. Although dated, available research suggests that illegal harvest may be as high as that of legal harvest (Vilkitis 1968). This level of exploitation, along with commercialization of mature bucks, highlights the need for innovative enforcement and management efforts. Preventive measures, focused enforcement, and reduced commercial opportunities could increase legally harvestable deer numbers.

Because estimates of illegal harvest are lacking, population level impacts can be very difficult to measure. Often, illegal activities occur during the open hunting season, further complicating detection. Illegal harvest can have an additive effect on top of legal harvest. In cases where mature or trophy bucks are illegally taken, this can have a significant impact on herd composition due to the fact that mature and trophy bucks are generally the smallest and most desirable segment of a deer population.

As an ever increasing monetary value is placed on fish and wildlife resources, the incentive to violate game laws may increase as well. Antler buyers, taxidermist, wildlife artists, “trophy collectors”, and sports stores are but a few of those involved in the commercialization of wildlife. If this commercialization was confined to legally harvested animals or shed antlers, there would likely be far less of a problem for deer populations.

IDFG collects data on unlawfully taken big game to identify the timing of unlawful harvest, species, sex, GMUs, violation types and reporting data. The public plays a huge role in unlawfully taken wildlife detections. Currently, over 70% of illegal harvest detections come directly from the public. Upcoming research on white-tailed deer is designed to provide information on population densities and cause specific mortality, which may help to identify more strategies to combat illegal harvest. Protecting the public’s legal use of Idaho wildlife is a primary objective for IDFG.
Illegal Harvest and Unlawful Commercialization Management Direction

Management Direction: IDFG will employ enforcement activities to ensure that illegal harvest is minimized and harvest by regulated hunting is maintained

- **Strategy:** Increase targeted enforcement activities in areas where chronic illegal harvest occurs
- **Strategy:** Provide opportunities to increase public reporting of illegal harvest

Management Direction: Emphasize ethics, safety and fair chase through education and enforcement programs

- **Strategy:** Ensure an Enforcement Officer assists in all Hunter Education classes
- **Strategy:** Create public outreach materials about illegal harvest and how it affects the IDFG’s ability to manage for mature buck hunting opportunity

White-Tailed Deer Research

Mule deer and elk have historically received research emphasis in Idaho. Research on white-tailed deer has occurred sporadically and been primarily focused on behavior patterns, habitat use, food habits, and migration patterns (Thilenius 1960, Pengelly 1961, Thilenius and Hungerford 1967, Gladfelter 1966, Howard 1969, Will 1972, Keay and Peek 1980, Owens 1981, Pauley 1990, Pauley et al. 1993, Baumeister
Idaho wildlife managers need information on basic population ecology, habitat use, survival, mortality, and productivity of white-tailed deer in Idaho so that they can better understand their role in Idaho’s predator-prey dynamics and how harvest management affects their population abundance and composition. The secretive nature of white-tailed deer and the habitats they occupy severely limit IDFG’s ability to estimate population size and composition. Aerial surveys and other traditional approaches such as spotlight surveys and pellet transects provide inaccurate and imprecise indices. Therefore, managers also need a cost-effective, reliable method to quantify white-tailed deer population composition and abundance to measure the outcomes of management actions and to better communicate with Idaho’s public regarding white-tailed deer management. White-tailed deer are also responsible for significant agriculture damage to high-value agriculture crops in Idaho each year, particularly in northern Idaho. Therefore, wildlife managers also need new tools to discourage white-tailed deer use of agriculture. IDFG plans to undertake the following white-tailed deer research projects during the life of this plan to address these questions.

**Population Monitoring**

Moeller et al. (2018) developed three methods (time-to-event, space-to-event, and instantaneous sampling) that utilize remote trail cameras to estimate populations of unmarked animals. Each of the methods rely on an array of remote cameras placed throughout the area of interest (e.g., the area occupied by a population of white-tailed deer). Depending on the method, the cameras are either programmed to take pictures when they are triggered by motion within their field of view or at pre-determined time intervals. The number and timing of animals captured in pictures and the area of the cameras’ fields of view are then used to estimate abundance. The methods can produce separate abundance estimates for different sex and age classes of deer, allowing the calculation of sex and age ratios (e.g., buck:doe and fawn:doe ratios). We will test the applicability of these methods for estimating white-tailed deer abundance and composition in portions of northern Idaho where we will be simultaneously conducting the other projects described here.

**Buck Quality**

IDFG has traditionally used the number of harvested deer with 4 or 5 points on the right antler (depending on which year) as a measure of the number of older age-class bucks in the population. However, there are factors other than age that affect antler development and the number of points (i.e., genetics, nutrition, injuries, etc.), making that metric alone an unreliable indicator of male age structure or antler quality. Flinn et al. (2015) developed a method for accurately measuring the Boone and Crockett score of white-tailed deer antlers from pictures. We will explore the use of a similar, though likely simplified, method of quantifying antler quality from the trail camera pictures collected for the population monitoring study. Our goal will be to develop a method that managers can use to efficiently categorize pictures of male white-tailed deer by antler quality, allowing them to monitor the effects of management actions designed to change antler quality and/or male age structure.

**Cause-Specific Mortality**

White-tailed deer are one of the most studied species in the United States, although the vast majority of that research has been conducted in Midwestern and Eastern States that have fewer large predators, different habitat types, longer growing seasons, and different seasonal weather extremes than Idaho. Therefore, little of that existing knowledge helps us understand the population dynamics and sources of mortality for white-tailed deer in Idaho. Understanding these demographic rates can aid active management of white-tailed deer populations and our understanding of the role of white-tailed deer in the ecosystem.
predator-prey dynamics of Idaho. To effectively manage all of Idaho’s large mammal game species, predators and prey, we must understand how they interact and how manipulation of the abundance of one species will impact the others. Therefore, we plan to capture and GPS-collar adult female white-tailed deer in several north Idaho study areas. Using specialized transmitters, we will then be able to capture and collar their newborn fawns. The fawn collars will expand with them as they grow, allowing us to estimate their survival during their first year of life. These collaring efforts will allow us to estimate adult female and fawn survival rates for the populations, document causes of mortality and predation rates to help us understand predator-prey interactions, and investigate the role habitat type and quality may play in those relationships. We will also use the deer collared for this work to estimate movement rates and spatial separation of populations for the population monitoring project.

**Buck Vulnerability**

We suspect that varying combinations of human access, topography, and habitat types and configurations will result in varying levels of male white-tailed deer vulnerability to hunter harvest, as has been demonstrated with other ungulates (e.g., Proffitt et al 2013). It is important for managers to understand the relationships between the natural and anthropogenic features of a landscape and buck vulnerability to harvest if they are managing for buck age structure/antler quality goals. IDFG plans to study the vulnerability of male white-tailed deer to harvest in several portions of north Idaho which have varying levels of human access and different topographic and vegetation features. A sample of bucks of varying age classes will be marked with GPS transmitters (ear tags and/or expandable collars) to monitor their annual survival, cause-specific mortality, movement rates, and habitat selection. This study will provide a wealth of previously-unknown information on Idaho’s white-tailed deer.

**Agriculture Depredation Prevention**

Agriculture depredation by ungulates, including white-tailed deer, is not a new issue to Idaho (see Depredation section). A variety of deterrent methods have been used in the past to discourage ungulates from damaging growing and stored crops, including: scare tactics (e.g., propane cannons, cracker shells), permanent exclusion fencing, and lethal removal. These methods are often expensive (e.g., fencing), require significant manpower to maintain over time (e.g., nighttime lethal removal and cracker shells), or become ineffective over time as deer become habituated (e.g., propane cannons). Therefore, we will develop and test new methods to discourage white-tailed deer from utilizing high-value agriculture fields (e.g., lentils and garbanzo beans) in north Idaho. These methods will likely include testing new, automated scare tactics that evoke a predator-prey response in deer (e.g., tactic that includes predator scent and motion), removable modifications to existing fences designed for livestock that would temporarily exclude deer during the depredation season, a taste aversion method that would make the flavor or smell of the crop undesirable to deer without damaging the crop itself, and possibly other new methods. The results of this study will hopefully provide new tools for managers to prevent or minimize agriculture depredations, leading to opportunities to maintain abundant deer populations while simultaneously protecting private property.

<table>
<thead>
<tr>
<th>Project</th>
<th>Anticipated Completion</th>
<th>Anticipated Management Products</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population Monitoring</td>
<td>Initial estimates - 2020</td>
<td>Method for estimating white-tailed deer population abundance and composition from cameras</td>
</tr>
<tr>
<td></td>
<td>Complete evaluation examining changes in estimates across years - 2023</td>
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<tr>
<td>Project</td>
<td>Anticipated Completion</td>
<td>Anticipated Management Products</td>
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<tr>
<td>---------------------------------</td>
<td>------------------------</td>
<td>--------------------------------------------------------------------------------------------------</td>
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<tr>
<td>Buck Quality</td>
<td>2020</td>
<td>Method for quantifying white-tailed buck antler quality across a population</td>
</tr>
<tr>
<td>Cause-specific Mortality</td>
<td></td>
<td>Vital rate estimates and causes of mortality for white-tailed deer neonatal fawns, 6-month old fawns, and adults of both sexes; habitat selection and seasonal movement information</td>
</tr>
<tr>
<td>Buck Vulnerability</td>
<td>2023</td>
<td>Landscape-specific understanding of buck vulnerability to mortality/harvest and recommendations to use this information to achieve desired management outcomes</td>
</tr>
<tr>
<td>Agriculture Depredation Prevention</td>
<td>2020</td>
<td>Methods to reduce white-tailed deer use of high-value agriculture crops in north Idaho</td>
</tr>
</tbody>
</table>

**DATA ANALYSIS UNITS (DAU)**

For data analysis purposes, Idaho was grouped into 7 Data Analysis Units based on population characteristics, ecological issues, and local management considerations. Overall, Idaho can be generalized as predominantly public-owned, with a wide range of terrain, land uses, habitat types, and road densities (see Table 5; Figures 8, 9 and 10). Only in DAU’s where white-tailed deer are the priority deer management species did IDFG...
establish buck harvest criteria.

Based on the hunter opinion survey (see Appendix B), hunter satisfaction is high for the number of days of white-tailed deer hunting opportunity offered under existing hunting seasons, the opportunity to harvest a white-tailed deer, and the opportunity to harvest a mature white-tailed deer buck. The intent of this plan is to continue management that results in high hunter satisfaction. Management direction is to provide minimums of 46,000 hunters with 325,500 days of recreation and the opportunity to harvest at least 13,200 white-tailed deer bucks, of which at least 15% have 5 or more points on either antler. Statewide and DAU minimum objectives for hunters, hunter-days, and buck harvest were set based on 80% of the last 3 year (2016-2018) averages.

**Table 4. Statewide objectives and Status**

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Minimum</th>
<th>3-Year Average</th>
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<tr>
<td>Hunters</td>
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<tr>
<td>Hunter-days of recreation</td>
<td>325,500</td>
<td>406,896</td>
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<tr>
<td>Buck harvest</td>
<td>13,200</td>
<td>16,480</td>
</tr>
<tr>
<td>% ≥5 points</td>
<td>15%</td>
<td>20%</td>
</tr>
</tbody>
</table>

Most white-tailed deer populations are found in DAUs 1-3, located in the northern part of the state. DAUs 4-7 encompass habitat with sparse or concentrated white-tailed deer populations (see Figure 8).

**Table 5. Characteristics of Data Analysis Units (DAUs), 2016-2018**

<table>
<thead>
<tr>
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<tr>
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<td>Major Land Use</td>
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<tr>
<td>Roadless</td>
<td>15%</td>
</tr>
<tr>
<td>Hunters per square mile</td>
<td>3.34</td>
</tr>
<tr>
<td>Harvest per square mile</td>
<td>1.49</td>
</tr>
<tr>
<td>Hunter Success</td>
<td>45%</td>
</tr>
<tr>
<td>Days per harvested</td>
<td>17</td>
</tr>
<tr>
<td>white-tailed deer</td>
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</tr>
<tr>
<td>Percentage of bucks with</td>
<td></td>
</tr>
<tr>
<td>≥5 antler points</td>
<td>20%</td>
</tr>
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</table>
Figure 8. Statewide white-tailed deer Data Analysis Units

White-tailed Deer Data Analysis Units
- DAU 1: Northern Forest
- DAU 2: Central Forest
- DAU 3: Northern Agriculture
- DAU 4: Backcountry
- DAU 5: Rangeland-Riparian Habitat
- DAU 6: Dryland Forest
- DAU 7: Southern Idaho
- Game Management Units
- Regions
Figure 9. Land management patterns of white-tailed deer DAUs in Idaho

White-tailed Deer DAUs

Land Management

- Open Water
- Forest Service
- B.L.M.
- Bureau of Reclamation
- Corps of Engineers
- Department of Agriculture
- Department of Energy
- Department of Interior
- Military Reservations
- National Parks and Monuments
- National Wildlife Service
- Tribal Reservation
- State of Idaho
- Private
- Other

Figure 10. Land cover patterns of white-tailed deer DAUs in Idaho.
DAU 1: Northern Forest

Description

This DAU includes GMUs 1, 2, 3, 4, 4A, and 6 and is characterized by coniferous forest habitat with high road densities in public ownership. White-tailed deer are more abundant than mule deer in this DAU. Hunter densities and harvest success rates are relatively high, and the opportunity to harvest a mature white-tailed deer buck is moderate. Hunters are able to harvest either-sex white-tailed deer during relatively long, general harvest seasons. There are also controlled hunts for extra antlerless white-tailed deer in areas where agricultural conflicts are prevalent.

Historical Perspective

Prior to the 1900s, deer were apparently relatively scarce, existing along rivers and edges of mature conifer stands and within younger stands created by fire, disease, and insects. Deer habitat began to change slowly in the early 1900s as mining, logging, and railroads became more prevalent. The period from 1910 to 1931 included five major fires, each creating hundreds of thousands of acres of younger forests beneficial to white-tailed deer. The newly-created habitat and a major predator control program allowed deer numbers to continue to grow, even through five major die-offs: 1927, 1932, 1946, 1948, and 1949.

Concern about “over-browsed winter ranges” and “too many deer” prompted liberal hunting seasons in an effort to reduce deer numbers in the early 1950s. Long seasons were the rule from 1954 through 1974. By the early 1970s, deer numbers had come down substantially from the peak numbers in the 1950s and 1960s. Since the mid-1970s, the number of white-tailed deer harvested by hunters in the Panhandle have increased from 3,000 per year to 11,000 per year. Timber harvest in the 1970s and 1980s increased the amount of early seral habitat benefiting white-tailed deer in many parts of the Northern Forest DAU. Since the 1990’s, there has been relatively little timber harvest, wildfire, or prescribed burning on federal lands while undisturbed stands continue to age past peak productivity for deer.

Issues

Timber management practices have been changing, including increased harvest on private and state lands and decreased harvest on federal lands. Continued fire suppression has further decreased available early seral habitats on the landscape. Agricultural changes have contributed to white-tailed deer expansion in some areas. These changes have led to shifts in white-tailed deer distributions, with populations increasing along the agricultural/timberland interface.

Human population growth and development of agricultural and timberlands have allowed white-tailed deer numbers to increase. With the rise in deer numbers in these areas, conflicts including cropland depredations and urban deer issues have increased.

Management Direction

Management emphasis will be to maintain white-tailed deer populations that support hunting recreation and hunter satisfaction at recent or higher levels, while minimizing cropland depredations and urban deer issues.
Management Actions

1. Continue to offer annual hunting opportunity and diversity for white-tailed deer across the Northern Forest DAU
   
   a. Offer general either-sex white-tailed deer seasons for all weapon types
   b. Offer long general seasons with late rut hunting opportunity to meet hunter desires

2. Implement proactive population management measures to minimize white-tailed deer depredations
   
   a. Continue to use hunting as the primary tool to manage white-tailed deer impacts to agricultural crops
   b. Continue to offer extra antlerless controlled hunt tags in areas with depredation issues

3. Provide support to landowners in alleviating and preventing white-tailed deer damage to growing or stored crops
   
   a. Provide technical assistance to private landowners experiencing crop damage

4. Engage with land management agencies and other land users and groups to improve the quality and quantity of white-tailed deer habitat
   
   a. Increase early seral habitat in areas with large tracts of mature forest

5. Collaborate with cities and towns regarding urban deer issues
   
   a. Offer information and white-tailed deer management options

Objectives and Status

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<thead>
<tr>
<th>Criterion</th>
<th>Minimum</th>
<th>3-Year Average</th>
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<td>Hunters</td>
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<td>Hunter-days of recreation</td>
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<td>17%</td>
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## DAU 1: Northern Forest

*Units 1, 2, 3, 4, 4A, 6*

### 3-Year Averages (2016-2018)

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<th>Metric</th>
<th>Value</th>
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<td>Harvest per square mile</td>
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</tr>
<tr>
<td>Hunters</td>
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<tr>
<td>Hunter Success</td>
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<tr>
<td>Hunter Days</td>
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<tr>
<td>Days per harvested white-tailed deer</td>
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</tr>
<tr>
<td>Hunters per square mile</td>
<td>3.34</td>
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<tr>
<td>Antlered % ≥5 points</td>
<td>20%</td>
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### DAU Characteristics

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<th>Land Use</th>
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<td>Public land</td>
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</tr>
<tr>
<td>Major land use</td>
<td>Forest</td>
</tr>
<tr>
<td>Roadless Area</td>
<td>15%</td>
</tr>
</tbody>
</table>

### Northern Forest White-tailed Deer Hunter Success

**Graph:**
- **X-axis:** Years (2009-2018)
- **Y-axis:** Percent (0% to 60%)
- **Legend:**
  - Antlered
  - Antlerless
  - Minimum Buck Harvest

### Northern Forest Antlered White-tailed Deer:

**Graph:**
- **Y-axis:** Percent (%≥5 points, Minimum)
- **X-axis:** Years (2009-2018)

### Northern Forest White-tailed Deer Harvest

**Graph:**
- **X-axis:** Years (2009-2018)
- **Legend:**
  - Antlered
  - Antlerless
  - Minimum Buck Harvest

### Northern Forest White-tailed Deer Hunters

**Graph:**
- **X-axis:** Years (2009-2018)
- **Legend:**
  - Regular Deer Tag Hunters
  - White-tailed Deer Tag Holders
  - Controlled Hunt Tag Holders
  - Minimum

### Northern Forest White-tailed Deer Hunter Days

**Graph:**
- **X-axis:** Years (2009-2018)
- **Legend:**
  - Hunter Days
  - Minimum
DAU 2: Central Forest

Description

This DAU includes GMUs 7, 9, 10, 12, 14, 15, 16, 18, 23, and 24. The majority of this DAU consists of coniferous forest habitat with moderate to high road densities. A high percentage of the land in this DAU is under public (USFS) ownership. In general, the northern and western portions of the DAU provide good white-tailed deer habitat, while the heavily forested and higher elevation eastern portion supports white-tailed deer at much lower densities. Hunter densities, success rates, and the opportunity to harvest a mature buck white-tailed deer are all moderate.

Historical Perspective

White-tailed deer populations in this DAU were historically low. Accounts from Lewis and Clark during the 1800s suggested that very few animals were found throughout the Clearwater River country. Populations probably did not change much until the early 1900s when fires converted large expanses of dense coniferous forest into a mosaic of vegetation succession types. Logging also contributed to creating a mosaic of brush fields and uneven-aged forest stands. Populations probably peaked around the 1940s-1950s, followed by a slight decline. Currently, populations are moderate.

Historically, white-tailed deer and mule deer were managed as a “single species;” a single general season harvest framework was established for both species. In 1973 IDFG began to offer species-specific seasons in the Clearwater Region. These units have either-sex hunting seasons in October. During the mid-1980s the white-tailed deer hunting season was extended into mid-November. In 1990 most November white-tailed deer seasons became either-sex hunts.

Issues

Lack of timber harvest and wildfires, resulting in a large proportion of closed canopy forests is the primary habitat concern. Noxious weeds, such as yellow star-thistle and spotted knapweed, are out-competing native vegetation on lower elevation spring and winter ranges.

Management Direction

White-tailed deer are more abundant than mule deer in this DAU. Management emphasis will be to maintain white-tailed deer populations that support hunting recreation and hunter satisfaction at recent or higher levels.

Management Actions

1. Continue to offer annual hunting opportunity and diversity for white-tailed deer across the Central Forest DAU
   a. Offer general either-sex white-tailed deer seasons for multiple weapon types
2. Engage with land management agencies and other land users and groups to improve the quality and quantity of white-tailed deer habitat

   a. Increase early seral habitat in areas with large tracts of mature forest

### Objectives and Status

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<thead>
<tr>
<th>Criterion</th>
<th>Minimum</th>
<th>3-Year Average</th>
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<tbody>
<tr>
<td>Hunters</td>
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<td>Buck harvest</td>
<td>1,800</td>
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</tr>
<tr>
<td>% ≥5 points</td>
<td>10%</td>
<td>15%</td>
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DAU 2: Central Forest
Units 7, 9, 10, 12, 14, 15, 16, 18, 23, 24

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<th>3-Year Averages (2016-2018)</th>
<th>DAU Characteristics</th>
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<tr>
<td>Square Miles</td>
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<td>Hunters</td>
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<td>Hunters per square mile</td>
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</tbody>
</table>

Central Forest White-tailed Deer Hunter Success

Central Forest Antlered White-tailed Deer:
% ≥5 points

Central Forest White-tailed Deer Harvest

Central Forest White-tailed Deer Hunters

Central Forest White-tailed Deer Hunter Days
DAU 3: Northern Agriculture

Description

This DAU includes GMUs 5, 8, 8A, 10A, 11, 11A, and 13. The majority of this DAU consists of private, State, tribal, and federal property and is nearly equally split between dryland agriculture and coniferous forest habitats. This DAU also contains most of the Nez Perce Tribe Reservation. Road densities are moderate to high. Hunter densities, success rates, and the opportunity to harvest a mature buck are amongst the highest in the state. The relatively large private property component of this DAU has led to a number of management challenges including: depredations on agricultural crops, achieving adequate antlerless harvest, and tensions between landowners and sportsmen over access/trespass issues.

Historical Perspective

White-tailed deer populations in this DAU were historically low. Accounts from Lewis and Clark during the 1800s suggested that very few animals were found throughout the Clearwater River country. Populations probably did not change much until the early 1900s when large fires and settlement by humans, including grazing of domestic livestock and clearing of land for agricultural purposes, changed the landscape. Logging also converted dense coniferous forests into a mosaic of vegetation-succession types and intensified throughout the late 20th century. Currently, populations are at historic highs.

The Clearwater Deer Tag was required to hunt in most of the GMUs (all but GMU 5) in this DAU between 1998 and 2004. This tag was implemented to address trespass complaints on private property by forcing hunters to choose between hunting mule deer in southern Idaho or white-tailed deer and mule deer in the Clearwater Region. Implementation of the Clearwater Tag resulted in a substantial reduction in trespass complaints.

The Clearwater Deer Tag was replaced by the White-tailed Deer Tag in 2005. Under this strategy, more flexibility was given to hunters by relaxing restrictions on the Regular Deer Tag by allowing it to again be used in the Clearwater Region through 3 November and by allowing White-tailed Deer Tag holders to hunt white-tailed deer throughout the state, including the late portion of the white-tailed deer hunt in the Clearwater Region. This change has been met by little resistance from hunters in the Clearwater Region.

Issues

High white-tailed deer populations is the largest issue in this DAU. Issues associated with abundant populations include depredation to agricultural crops and disease die-offs. Cash crops that receive damage from white-tailed deer include wheat, barley, oats, peas, lentils, garbanzo beans, rapeseed, organic vegetables, bluegrass, and hay. Landowners establishing tree plantations, tree farms, and orchards also experience damage by white-tailed deer. The most chronic depredation complaints in this DAU involve white-tailed deer damage to legumes in GMUs 8, 8A, and 11A. These complaints intensify as the legumes near harvest time.

A large-scale Epizootic Hemorrhagic Disease (EHD) outbreak started in the Kamiah area in late July 2003. Previously, EHD had been confirmed only once in the region, when there was a small-scale outbreak near Peck in 2000. The 2003 outbreak ended with a hard frost that interrupted the Culicoides spp. gnat life
cycle in October. While centered on the Kamiah and Kooskia area, white-tailed deer deaths caused by EHD were observed at lower elevations along the Clearwater, South Fork Clearwater, and Salmon Rivers. While actual losses will never be known, localized losses were high (likely 20-80% in some areas). It is estimated that several thousand white-tailed deer died. No major EHD outbreaks have been detected since 2003, however other small scale/isolated outbreaks occur most years in parts of this DAU.

A research project overseen by the Wildlife Health Laboratory was conducted between 2003-2005 to evaluate the prevalence of Culicoides spp. gnats around the Clearwater Region and to perform virus isolation on these gnats. Culicoides spp. gnats can serve as a vector for a variety of wildlife diseases including EHD and bluetongue virus (BT). While no major hemorrhagic disease outbreaks have been detected since the study was completed, isolated reports have been documented intermittently throughout the region. In 2015, an outbreak of BT (type 17) occurred with infected animals observed at low elevation portions of the Clearwater Region, including the lower Salmon, lower South Fork Clearwater and lower Main Clearwater Rivers, and tributaries. Mortalities were also documented in the vicinity of Moscow and Troy. While exact numbers are not known, it is likely that several hundred to a couple thousand deer died from BT during this outbreak. Populations did not appear to be significantly affected as the 2015 white-tailed deer harvest was well above the 3-year average.

Management Direction

White-tailed deer are much more abundant than mule deer in this DAU. Management emphasis will be to maintain hunting recreation and hunter satisfaction at or near recent levels. Additionally, management actions designed to maintain adequate harvest pressure on antlerless white-tailed deer will be a priority in order to address depredation concerns and manage disease outbreaks.

During winter of 2015, a depredation research project was initiated by IDFG in collaboration with the University of Idaho to develop management tools for reducing white-tailed deer depredation of agricultural crops. Specific treatments that will be tested include fear-increasing and nutrition-modifying treatments. The goal of the project will be to determine how various management treatments affect deer behavior and subsequent crop damage, and identify the most effective actions for reducing deer damage to agriculture.

Management Action

1. Continue to offer annual hunting opportunity and diversity for white-tailed deer across the Northern Agriculture DAU
   a. Offer general either-sex white-tailed deer seasons for multiple weapon types
   b. Offer long general seasons with late rut hunting opportunity to meet hunter desires

2. Implement proactive population management measures to minimize white-tailed deer depredations
   a. Continue to use hunting as the primary tool to manage white-tailed deer impacts to agricultural crops
   b. Continue to offer extra antlerless controlled hunt tags in areas with depredation issues

3. Provide support to landowners in alleviating and preventing white tailed deer damage to growing
or stored crops

a. Provide technical assistance to private landowners experiencing crop damage

b. Develop deterrent strategies to reduce or prevent white-tailed deer use of agricultural lands

**Objectives and Status**

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<tr>
<th>Criterion</th>
<th>Minimum</th>
<th>3-Year Average</th>
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<td>Hunters</td>
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<td>Hunter-days of recreation</td>
<td>130,000</td>
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<tr>
<td>Buck harvest</td>
<td>5,200</td>
<td>6,520</td>
</tr>
<tr>
<td>% ≥5 points</td>
<td>17%</td>
<td>22%</td>
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DAU 3: Northern Agriculture

**GMUs 5, 8, 8A, 10A, 11, 11A, 13**

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<tr>
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<tr>
<td><strong>Harvest per square mile</strong></td>
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<td><strong>Hunters</strong></td>
<td>22,351</td>
</tr>
<tr>
<td><strong>Hunter Success</strong></td>
<td>48%</td>
</tr>
<tr>
<td><strong>Public land</strong></td>
<td>26%</td>
</tr>
<tr>
<td><strong>Hunter Days</strong></td>
<td>162,399</td>
</tr>
<tr>
<td><strong>Days per harvested white-tailed deer</strong></td>
<td>15</td>
</tr>
<tr>
<td><strong>Major land use</strong></td>
<td>Agriculture</td>
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<tr>
<td><strong>Hunters per square mile</strong></td>
<td>3.92</td>
</tr>
<tr>
<td><strong>Antlered % ≥5 points</strong></td>
<td>22%</td>
</tr>
<tr>
<td><strong>Roadless Area</strong></td>
<td>1%</td>
</tr>
</tbody>
</table>

**Northern Agriculture White-tailed Deer Hunter Success**

**Northern Agriculture Antlered White-tailed Deer: % ≥5 points**

**Northern Agriculture White-tailed Deer Harvest**

**Northern Agriculture White-tailed Deer Hunters**

**Northern Agriculture White-tailed Deer Hunter Days**
DAU 4: Backcountry

Description

This DAU includes GMUs 16A, 17, 19, 19A, 20, 20A, 26, and 27. The majority of this DAU is classified as wilderness. Land ownership is over 99% USFS. Road densities are extremely low, with most roads acting as peripheral access to the Selway-Bitterroot, Gospel Hump, and Frank Church River of No Return Wilderness Areas. This low road density contributes to relatively low deer vulnerability in the area. Habitat varies from mesic forest conditions in the Selway River drainage to dry, open pine/grassland habitat in the Salmon River drainage. Hunter densities are low and any-weapon seasons are long in this DAU.

Historical Perspective

Little quantifiable information exists on present or historic white-tailed deer populations in this DAU. In the late 1980s and early 1990s, white-tailed deer and mule deer were managed as a “single species” with a single, general, either-sex season framework that ran from 15 September to 18 November. In 1997, the bag limit in this DAU south of the Salmon River was changed to bucks-only in response to deer herd (primarily mule deer) declines from the severe 1992-93 winter. The Clearwater deer tag was established in 1998 for hunting deer in the Clearwater Region, which affected lands in this DAU north of the Salmon River. Further management changes in 2000 included converting general seasons to controlled hunts for deer south of the Salmon River during the more vulnerable periods in late October and November. The Clearwater Deer Tag was replaced by the White-tailed Deer Tag in 2005. The rugged and remote nature of this area will continue to limit the impacts of humans on white-tailed deer and habitat.

Issues

White-tailed deer occur at low numbers in this DAU and supports low levels of hunter participation. The relatively recent reduction in hunter participation is a direct result of a decrease in elk and elk hunters in these backcountry GMUs. Most of the deer harvest has historically been incidental by elk hunters. The last 3 years have seen a modest increase in hunter effort and harvest indicating a partial reversal in low elk hunter participation.

Perhaps the most significant recent habitat issue in portions of the DAU has been increasing infestations of noxious weeds. This DAU has also experienced an increase in wildfire over the last 10-15 years.

Management Direction

Mule deer are more abundant than white-tailed deer in this DAU. White-tailed deer populations will be maintained to support hunting recreation and hunter satisfaction at recent or higher levels.

IDFG has been involved with weed control projects in parts of the DAU, but management actions are limited by wilderness designation as well as logistical considerations. Because the area is predominately designated wilderness, very few habitat management options exist.
Management Action

1. Continue to offer annual hunting opportunity and diversity for white-tailed deer across the Backcountry DAU
   a. Offer general either-sex white-tailed deer seasons for multiple weapon types where populations allow

2. Engage with land management agencies and other land users and groups to improve the quality and quantity of white-tailed deer habitat
   a. Reduce noxious weeds infestations where feasible

Objectives and Status

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Minimum</th>
<th>3-Year Average</th>
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</thead>
<tbody>
<tr>
<td>Hunters</td>
<td>500</td>
<td>648</td>
</tr>
<tr>
<td>Hunter-days of recreation</td>
<td>2,900</td>
<td>3,664</td>
</tr>
<tr>
<td>% ≥5 points</td>
<td>10%</td>
<td>23%</td>
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</table>
DAU 4: Backcountry
Units 16A, 17, 19, 19A, 20, 20A, 26, 27

<table>
<thead>
<tr>
<th>3-Year Averages (2016-2018)</th>
<th>DAU Characteristics</th>
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</thead>
<tbody>
<tr>
<td><strong>Square Miles</strong></td>
<td>5,873</td>
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<tr>
<td><strong>Hunters</strong></td>
<td>648</td>
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<tr>
<td><strong>Hunter Days</strong></td>
<td>3,664</td>
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<tr>
<td><strong>Hunters per square mile</strong></td>
<td>0.11</td>
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<table>
<thead>
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<th>DAU Characteristics</th>
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<tbody>
<tr>
<td><strong>Public land</strong></td>
</tr>
<tr>
<td><strong>Major land use</strong></td>
</tr>
<tr>
<td><strong>Roadless Area</strong></td>
</tr>
</tbody>
</table>

### Backcountry White-tailed Deer Hunter Success

- **Percent**
- **Year**
- **Success Rate**

### Backcountry Antlered White-tailed Deer:

- **% ≥5 points**
- **Year**
- **Success Rate**

### Backcountry White-tailed Deer Harvest

- **Antlered**
- **Antlerless**
- **Year**
- **Number of Deer**

### Backcountry White-tailed Deer Hunters

- **Regular Deer Tag Holders**
- **White-tailed Deer Tag Holders**
- **Controlled Hunt Tag Holders**
- **Year**
- **Number of Hunters**

### Backcountry White-tailed Deer Hunter Days

- **Hunter Days**
- **Minimum**
- **Year**
- **Number of Hunter Days**
DAU 5: Rangeland- Riparian Habitat

Description

This DAU includes GMUs 21, 21A, 28, 29, 30, 30A, 36A, 36B, 37, 37A, 38, 50, 51, 58, 59, 59A, 60, 60A, 62, 63A, 64, 65, 67, and 68A. This DAU is a mix of several habitat types from coniferous forest to rangelands and riparian habitats. Most white-tailed deer habitat is on private lands. White-tailed deer hunter densities are relatively low, success rates are moderate, and the opportunity to harvest a mature buck white-tailed deer is moderate.

Historical Perspective

Historical accounts indicate that white-tailed deer were native to the area. At the turn of the century, white-tailed deer were relatively scarce, most likely because of unregulated subsistence harvest by early settlers. In 1957, white-tailed deer were apparently reintroduced in the river bottoms of the South Fork and North Fork of the Snake River. However, no records from this translocation can be found. Since the early 1980s white-tailed deer have expanded and grown in number. They have moved farther up the South Fork and Henry’s Fork of the Snake River. Currently they exist along rivers and creeks, and have spread into thick conifer and aspen stands in some areas. Within more northern units, white-tailed deer are still limited to riparian corridors along major drainages and numbers appear relatively stable.

Area residents in southern units are reporting that more white-tailed deer inhabit the area. There are no survey data for white-tailed deer, and existing harvest data could be misleading due to inconsistent seasons and an increased popularity of white-tailed deer hunting. However, it does appear that populations have increased.

Local hunters were not traditionally white-tailed deer hunters. The sport is gaining popularity in the area though. This could be due to restricted mule deer seasons, decreased numbers of mule deer in some areas, increases in white-tailed deer populations, and attractive liberal hunting opportunities.

Issues

Because a large proportion of white-tailed deer occur on private lands, hunter access is a significant issue when trying to manage deer populations through hunting. Similarly, apparent increases are creating agricultural depredation issues in some areas. There is concern that white-tailed deer may be encroaching on mule deer habitat and competing for forage and space, and potentially interfering with breeding.

Management Direction

White-tailed deer will be managed in appropriate habitats in this DAU. White-tailed deer populations will be maintained to support hunting recreation and hunter satisfaction at recent or higher levels.

Management Actions

1. Continue to offer annual hunting opportunity and diversity for white-tailed deer across the Rangeland-Riparian DAU
a. Offer general either-sex white-tailed deer seasons for multiple weapon types where populations allow

2. Provide incentives and services to landowners who allow public access for white-tailed deer hunting

a. Use funds from the Access Yes! Program and the Depredation Fee to enhance white-tailed deer hunting opportunity

Objectives and Status

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Minimum</th>
<th>3-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunters</td>
<td>2,500</td>
<td>3,078</td>
</tr>
<tr>
<td>Hunter-days of recreation</td>
<td>17,500</td>
<td>21,676</td>
</tr>
<tr>
<td>% ≥5 points</td>
<td>10%</td>
<td>24%</td>
</tr>
</tbody>
</table>
DAU 5: Rangeland-Riparian Habitat


<table>
<thead>
<tr>
<th>3-Year Averages (2016-2018)</th>
<th>DAU Characteristics</th>
</tr>
</thead>
<tbody>
<tr>
<td>Square Miles</td>
<td>15,418</td>
</tr>
<tr>
<td>Harvest per square mile</td>
<td>0.08</td>
</tr>
<tr>
<td>Hunters</td>
<td>3,078</td>
</tr>
<tr>
<td>Hunter Success</td>
<td>40%</td>
</tr>
<tr>
<td>Public land</td>
<td>72%</td>
</tr>
<tr>
<td>Hunter Days</td>
<td>21,676</td>
</tr>
<tr>
<td>Days per harvested white-tailed deer</td>
<td>55</td>
</tr>
<tr>
<td>Major land use</td>
<td>Rangeland</td>
</tr>
<tr>
<td>Hunters per square mile</td>
<td>0.20</td>
</tr>
<tr>
<td>Antlered % ≥5</td>
<td>24%</td>
</tr>
<tr>
<td>Roadless Area</td>
<td>29%</td>
</tr>
</tbody>
</table>

Rangeland-Riparian White-tailed Deer Hunter Success

Rangeland-Riparian Antlered White-tailed Deer: % ≥5 points

Rangeland-Riparian White-tailed Deer Harvest

Rangeland-Riparian White-tailed Deer Hunters

Rangeland-Riparian White-tailed Deer Hunter Days
DAU 6: Dryland Forest

Description

This DAU includes GMUs 22, 25, 31, 32, 32A, 33, 34, 35, 36, 39, 43, 44, 48, 49, 61, and 62A. This DAU is generally described as having dryland forest habitat. These habitats vary from high elevation lodgepole pine forests (GMUs 62A and 36), mountainous terrain with Douglas fir communities primarily on north and east facing slopes (GMUs 32A, 34, 35, 39, 43 and 48), to relatively open ponderosa pine forests with grass understories (GMUs 22 and 25). Road densities are moderate and approximately 75% of the DAU is in public ownership. White-tailed deer densities are low and the white-tailed deer harvest comprises less than 1% of the statewide harvest.

Historical Perspective

Historically, white-tailed deer numbers have remained low in this DAU. Habitats are generally better suited for mule deer. In GMUs 22, 25, and 33, white-tailed deer have increased slightly in recent years and are now common in places, but overall densities remain low. In GMUs 61 and 62A, white-tailed deer are generally associated with riparian habitats along the Henry’s Fork, Camas Creek and tributaries and densities have remained low and stable. In GMUs 34, 35, 39, 43, 44, 48 and 49, white-tailed deer observations are rare.

Historically, hunting seasons have encompassed both mule deer and white-tailed deer, and have allowed take of either species during the deer season.

Issues

Because white-tailed deer occur at low densities in this DAU, most evidence of population increases comes from hunter reports or incidental observations. Some GMUs in this DAU do not currently offer white-tailed deer hunting opportunities because white-tailed deer numbers are so low that such opportunity is not warranted. Where there is evidence of growing populations, or populations sufficient to provide harvest opportunity, hunting regulations will be structured to allow generous harvest of both antlerless and antlered animals.

Management Direction

Potential for increasing white-tailed deer populations in DAU 6 is limited because of habitat and elevational constraints. In most of the DAU, future increases in white-tailed deer numbers will be associated with riparian habitats along major drainages. Mule deer will continue to receive primary management emphasis and white-tailed deer densities and harvest are expected to remain low. The goal in this DAU will be to provide annual hunting opportunity, including antlerless harvest where possible.

Management Actions

1. Continue to offer annual hunting opportunity and diversity for white-tailed deer in portions of the Dryland Forest DAU
   a. Offer general either-sex white-tailed deer seasons for multiple weapon types where populations allow
### Objectives and Status

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Minimum</th>
<th>3-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunters</td>
<td>1,300</td>
<td>1,665</td>
</tr>
<tr>
<td>Hunter-days of recreation</td>
<td>6,700</td>
<td>8,333</td>
</tr>
<tr>
<td>% ≥5 points</td>
<td>10%</td>
<td>10%</td>
</tr>
</tbody>
</table>
DAU 6: Dryland Forest
Units: 22, 25, 31, 32, 32A, 33, 34, 35, 36, 39, 43, 44, 48, 49, 61, 62A

### 3-Year Averages (2016-2018)

<table>
<thead>
<tr>
<th>DAU Characteristics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Square Miles</strong></td>
<td>13,055</td>
</tr>
<tr>
<td><strong>Harvest per square mile</strong></td>
<td>0.03</td>
</tr>
<tr>
<td><strong>Hunters</strong></td>
<td>1,665</td>
</tr>
<tr>
<td><strong>Hunter Success</strong></td>
<td>22%</td>
</tr>
<tr>
<td><strong>Hunter Days</strong></td>
<td>8,333</td>
</tr>
<tr>
<td><strong>Days per harvested white-tailed deer</strong></td>
<td>23</td>
</tr>
<tr>
<td><strong>Hunters per square mile</strong></td>
<td>0.13</td>
</tr>
<tr>
<td><strong>Antlered % ≥5 points</strong></td>
<td>10%</td>
</tr>
</tbody>
</table>

### DAU Characteristics

- Public land: 75%
- Major land use: Forest
- Roadless Area: 35%

---

**Dryland Forest White-tailed Deer Hunter Success**

**Dryland Forest Antlered White-tailed Deer: % ≥5 points**

**Dryland Forest White-tailed Deer Harvest**

**Dryland Forest White-tailed Deer Hunters**

**Dryland Forest White-tailed Deer Hunter Days**
DAU 7: Southern Idaho

Description

This DAU (GMUs 40, 41, 42, 45, 46, 47, 52, 52A, 53, 54, 55, 56, 57, 63, 66, 66A, 68, 69, 70, 71, 72, 73, 73A, 74, 75, 76, 77, and 78) represents a wide spectrum of productivity from dry rangeland to irrigated agriculture. High productivity areas include major riparian areas such as the Snake River drainage, irrigated agricultural areas, and high elevation forested areas. Predominant vegetation types in this DAU include dry shrub, cool shrub, and agricultural types. Approximately 7% of the DAU is comprised of riparian woodland, riparian shrub, and cold forest vegetation types. Current vegetation communities are a result of agricultural practices, fire suppression, and urban development. Riparian areas have decreased and become fragmented due to development and grazing practices. Landscape level fires have increased in frequency throughout this DAU and as a result influenced the vegetation communities towards noxious annuals.

Approximately 58% of the land in this DAU is publicly owned. The BLM administers the majority of the public lands, while the USFS and IDL administer nearly equal amounts of the remaining public land. Other significant non-private ownership consists of Department of Energy land, primarily the INL site, and Bureau of Indian Affairs land, primarily the Fort Hall and Duck Valley Reservations. Approximately 34% of the DAU is comprised of private land. Rangeland is the predominant land use comprising approximately 59% of the DAU. Other significant land uses include dryland agriculture, irrigated agriculture, and forested lands.

White-tailed deer distribution has increased slowly over the past several decades in this DAU. Movement along riparian corridors expanded white-tailed deer distribution throughout the DAU and population numbers have increased in some areas. White-tailed deer populations have the potential to increase with improved irrigation technology and conversion to agricultural commodities throughout the DAU. White-tailed deer remain uncommon and are secondary to mule deer in this DAU with regard to hunter preference.

Historical Perspective

White-tailed deer populations in this DAU have historically been low to non-existent. There are no accounts of white-tailed deer in Osborne Russell’s “Journal of a Trapper” during the 1800’s. White-tailed deer populations remained for the most part non-existent until human settlement, which brought grazing and land clearing for agricultural purposes. These practices provided water and forage suitable for white-tailed deer.

White-tailed deer and mule deer have historically been managed as a “single species.” For the most part, this DAU continues to be managed for mule deer, with the exception of some hunting opportunities specifically for white-tailed deer in the Upper Snake Region.

Issues

White-tailed deer remain low to non-existent in most of this DAU, and as such issues or conflicts are minimal. There is some public concern regarding potential competition between mule deer and white-tailed deer.

Management Direction

Mule deer are more abundant than white-tailed in this DAU. Management emphasis will remain focused on mule deer. However, current objectives are to maintain white-tailed deer populations that support hunting recreation
and hunter satisfaction at recent or higher levels.

Management Actions

1. Continue to offer annual hunting opportunity and diversity for white-tailed deer in portions of the Southern Idaho DAU
   
   a. Offer general either-sex white-tailed deer seasons for multiple weapon types where populations allow

2. Continue to compile incidental observations and reports of white-tailed deer presence in this DAU

Objectives and Status

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Minimum</th>
<th>3-Year Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunters</td>
<td>700</td>
<td>859</td>
</tr>
<tr>
<td>Hunter-days of recreation</td>
<td>3,000</td>
<td>3,763</td>
</tr>
<tr>
<td>% ≥5 points</td>
<td>10%</td>
<td>13%</td>
</tr>
</tbody>
</table>
DAU 7: Southern Idaho

Units: 40, 41, 42, 45, 46, 47, 52, 52A, 53, 54, 55, 56, 57, 63, 66, 66A, 69, 70, 71, 72, 73, 73A, 74, 75, 76, 77, 78

<table>
<thead>
<tr>
<th>3-Year Averages (2016-2018)</th>
<th>DAU Characteristics</th>
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<tbody>
<tr>
<td>Square Miles</td>
<td>Hunters per square mile</td>
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<tr>
<td>30,255</td>
<td>Harvest per square mile</td>
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<tr>
<td>859</td>
<td>Hunter Success</td>
</tr>
<tr>
<td>3,763</td>
<td>Days per harvested white-tailed deer</td>
</tr>
<tr>
<td>0.03</td>
<td>Antlered % ≥5 points</td>
</tr>
<tr>
<td>Public land</td>
<td>62%</td>
</tr>
<tr>
<td>0% 5% 10% 15% 20%</td>
<td>Southern Idaho Antlered White-tailed Deer: % ≥5 points</td>
</tr>
<tr>
<td>Minimum</td>
<td></td>
</tr>
</tbody>
</table>

Southern Idaho White-tailed Deer Hunter Success

Southern Idaho White-tailed Deer Harvest

Southern Idaho White-tailed Deer Hunters

Southern Idaho White-tailed Deer Hunter Days
LITERATURE CITED


Idaho Department of Fish and Game (IDFG). 2000. Policy for avian and mammalian predation management. Idaho Department of Fish and Game, Boise, ID.

Idaho Department of Fish and Game (IDFG). 2018. A landowners guide to preventing big game damage and filing damage claims. Idaho Department of Fish and Game, Boise, ID.

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Taillon, J., D. G. Sauvé, S. D. Côté. 2006. The effects of decreasing winter diet quality on foraging
behavior and life history traits of white-tailed deer fawns. Journal of Wildlife Management 70 (5).


Washington Department of Fish and Wildlife. 2010. Washington state deer management plan: white-tailed deer. Washington Department of Fish and Game, Olympia, WA.

White-tailed Deer Hunting
in Idaho
Understanding the needs and experiences of hunters
First, some questions about your hunting behavior.

Please check only one answer for questions 1 through 3 below.

1. I have hunted for white-tailed deer in Idaho:
   - NEVER
   - 1-5 YEARS
   - 6-10 YEARS
   - OVER 10 YEARS

2. I have hunted for mule deer in Idaho:
   - NEVER
   - 1-5 YEARS
   - 6-10 YEARS
   - OVER 10 YEARS

3. When I go deer hunting in Idaho, I spend most of my time hunting for:
   - MULE DEER
   - WHITE-TAILED DEER

Now, some questions about your Idaho White-tailed Deer hunt.

4. Did you harvest a white-tailed deer in Idaho in the 2017 season?
   (Please check only one response)
   - I DID NOT HUNT WHITE-TAILED DEER IN IDAHO IN 2017
   - NO, I DID NOT HARVEST A WHITE-TAILED DEER IN IDAHO IN 2017
   - YES, WHAT DID YOU HARVEST? (Please check all that apply)
     - LARGE WHITE-TAILED BUCK (ANTLERS EXTEND OUTSIDE THE EARS, 5 OR MORE POINTS A SIDE)
     - MEDIUM WHITE-TAILED BUCK (ANTLERS NOT WIDER THAN THE EARS, 3 - 4 POINTS A SIDE)
     - SMALL WHITE-TAILED BUCK (1 – 2 POINTS A SIDE)
     - ANTLERLESS WHITE-TAILED DEER (DOE OR FAWN)
5. In which unit(s) did you hunt white-tailed deer in Idaho during 2017? (Please refer to the map)

☐ I did not hunt white-tailed deer in Idaho in 2017 (Please skip to question 6 below)

In 2017, I hunted white-tailed deer in the following unit(s):
Please list the unit you hunt most often first.

___, ___ , ___ , ___ , ___ , ___ , ___ , ___

If you are unsure in which unit(s) you hunted, please circle the name(s) of the region(s) on the map that you hunted white-tailed deer in during 2017.

6. Which of the following best describes where you typically hunt white-tailed deer in Idaho?

(Please check only one response)

☐ I hunt in the same unit every year

☐ I hunt in 2 or 3 units every year

☐ I hunt in more than 3 units every year

☐ I hunt in a different unit each year
Private Property Issues: Depredations, Trespass, Access

High numbers of white-tailed deer on some private property are resulting in significant agricultural crop damage. The Department also receives numerous complaints involving damage to gardens and ornamental shrubs and animal-vehicle collisions due to deer.

Several social issues make it difficult to address the problem of too many deer on private property. These include:

1) landowner concerns with hunter numbers, ethics, and trespass;
2) some landowners not allowing hunter access which results in a deer sanctuary situation; and
3) hunter concerns regarding lack of access to private property (resulting in hunters shifting to adjacent public lands).

For the remaining survey please circle only one response that best describes how you feel about the statement made.

How much do you agree or disagree with the following statements?
(Please circle one response for each statement)

7. IDFG should reduce antlerless white-tailed deer on private land to resolve depredation problems.
   - STRONGLY AGREE
   - AGREE
   - NEUTRAL
   - DISAGREE
   - STRONGLY DISAGREE

8. IDFG should spend substantially more time and resources developing access onto private land for the purpose of hunting white-tailed deer.
   - STRONGLY AGREE
   - AGREE
   - NEUTRAL
   - DISAGREE
   - STRONGLY DISAGREE

Hunting Opportunities

Hunting for white-tailed deer may include opportunities such as long seasons, hunting of bucks and does at the same time, the opportunity to take a mule deer if one is encountered, hunting during the rut, and overlap with the elk season. Most white-tailed deer seasons include portions of October and November.

How much do you agree or disagree with the following statements?
(Please circle one response for each statement)

9. I am satisfied with the number of days of white-tailed deer hunting opportunity offered.
   - STRONGLY AGREE
   - AGREE
   - NEUTRAL
   - DISAGREE
   - STRONGLY DISAGREE

10. I am satisfied with my chance to harvest a white-tailed deer.
    - STRONGLY AGREE
    - AGREE
    - NEUTRAL
    - DISAGREE
    - STRONGLY DISAGREE
11. It is important for me to be able to hunt for white-tailed deer at the same time and place as elk.

12. It is important for me to be able to hunt for white-tailed deer at the same time and place as mule deer.

13. It is important for me to be able to hunt white-tailed deer in early November.

14. It is important for me to be able to hunt white-tailed deer in late November.

15. It is important for me to be able to hunt a white-tailed buck every year.

**Buck Management**

Some hunters report encountering fewer and/or smaller bucks than they desire. While the current white-tailed deer management plan objective for the percent of 5-point or larger bucks in the harvest is being met, the Department is receiving input from some hunters wanting to restrict seasons to attempt to increase buck quality.

16. I am satisfied with my chance to harvest a white-tailed buck.

17. I am satisfied with my chance to harvest a mature white-tailed buck.

18. Some units should be managed for large white-tailed bucks, even if it means shorter seasons or controlled hunts. Realizing I might not get to hunt a buck every year, I would accept these types of restrictions in the unit that I hunt.
Finally, some questions about your satisfaction with white-tailed deer hunting in 2017.

19. How satisfied were you with each of the following aspects of your 2017 white-tailed deer hunting experience?

- [ ] I did not hunt white-tailed deer in Idaho in 2017 (Please go to the end of the survey.)

<table>
<thead>
<tr>
<th>Characteristics of Your 2017 Idaho White-Tailed Deer Hunting Experience</th>
<th>How satisfied were you with your 2017 Idaho white-tailed deer hunting experience? (Please circle one response for each statement)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. The length of the season</td>
<td></td>
</tr>
<tr>
<td>B. The timing of the deer season</td>
<td></td>
</tr>
<tr>
<td>C. The number of other hunters you encountered</td>
<td></td>
</tr>
<tr>
<td>D. The amount of access</td>
<td></td>
</tr>
<tr>
<td>E. The overall quality of your white-tailed deer hunting experience</td>
<td></td>
</tr>
</tbody>
</table>

20. If you were “Very Dissatisfied” with any of the characteristics in question 19 please tell us why.

(Please write in your reasons)

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Is there anything else you’d like to tell us about hunting white-tailed deer in Idaho? We would appreciate any comments.

________________________________________________________________________
________________________________________________________________________
________________________________________________________________________
________________________________________________________________________

Thank you
APPENDIX B

Idaho White-tailed Deer Hunter Survey Results

Executive Summary
In 2018, 2,922 white-tailed deer hunters responded to our mail survey. An additional 3,757 hunters responded to our email survey and 1,057 hunters submitted responses via the internet. In 2003, 740 deer hunters responded to the mail survey. To be consistent with the 2003 analysis, when analyzing the 2018 data, we post-stratified on the region an individual hunted. The original data were sampled according to where individual hunters lived. We determined the region an individual hunted in based on his or her 2017 Mandatory Hunter Report responses for the hunted upon white-tailed deer tag. These questions were difficult to compare to the 2003 results because during that survey we could only sample “deer hunters” because at the time there was only one kind of deer tag available to purchase. There was no simple way to just target white-tailed deer hunters across the state. We know that most hunters in North Idaho pursue white-tailed deer while most hunters in Southern Idaho pursue mule deer. During the 2017 hunting season 92% of the white-tailed deer taken in the state can from North Idaho. To make meaningful comparisons between surveys, we limited our 2003 sample to individuals that identified as primarily white-tailed deer hunters based on their response to Question 3 (392 individuals).

Experience Level (Q 1, 2 and 3)
In 2018 slightly over one half (52%) of survey respondents had more than 10 years of experience hunting white-tailed deer in Idaho (Q1). Approximately one third (31%) of survey respondents had never hunted mule deer in Idaho, while approximately one third (37%) had more than 10 years’ experience hunting mule deer in Idaho (Q2). Most (79%) of survey respondents reported they spent most of their time hunting for white-tailed deer in Idaho (Q3).

2017 Harvest (Q 4 and 4A)
During the 2017 hunting season 39% of the survey respondents filled their tag (Q4). This question was not asked in 2003. The largest percent of white-tailed deer taken in 2017 were medium bucks and antlerless animals (Q4A). This question was not asked in 2003.

Where Do They Hunt (Q5 and 6)
For survey respondents reporting via mail, the top 5 units hunted in during 2017 were 10A, 1, 3, 2, and 4. For those responding via email, the top 5 units were 10A, 1, 8A, 3, and 2. For those responding via the internet, the top 5 units were 10A, 8A, 8, 11A, and 5 (Q5).
In 2018, slightly more than half (52%) of survey respondents reported that they hunted for white-tailed deer in the same unit every year. This question was not asked in 2003.

Antlerless Harvest and Access to Private Land
Slightly fewer 2018 survey respondents reported either agreeing or strongly agreeing (38%) that IDFG should reduce antlerless white-tailed deer on private land to resolve depredation problems compared to the 2003 survey (40%) (Q7).

Most 2018 survey respondents (60%) reported either agreeing or strongly agreeing that IDFG should spend more time and resources developing access onto private land for the purpose of hunting (Q8). This question was not asked in 2003.
Hunt Opportunity (Q 9, 11, 12, 13, 14, 15)

Overall, more survey respondents reported either agreeing or strongly agreeing with the following statements in 2018 than in 2003: “I am satisfied with the number of days of white-tailed deer hunting opportunity”; 70% in 2018 vs. 60% in 2003 (Q9).

“It is important for me to be able to hunt for white-tailed deer at the same time and place as elk”; 59% in 2018 vs. 55% in 2003 (Q11).

“It is important for me to be able to hunt white-tailed deer in early November”; 75% in 2018 vs. to 73% in 2003 (Q13). “It is important for me to be able to hunt white-tailed deer in late November”; 77% in 2018 vs. to 66% in 2003 (Q14 “It is important for me to be able to hunt a white-tailed buck every year”; 76% agreed or strongly agreed (Q15). This question was not asked in 2003.

Slightly fewer survey respondents reported either agreeing or strongly agreeing with the following statement. “It is important for me to be able to hunt for white-tailed deer at the same time and place as mule deer”; 54% in 2018 vs. 56% in 2003 (Q12).

Hunter Satisfaction (Q 10, 16, 17, 18)

Overall, more survey respondents reported either agreeing or strongly agreeing with the following statements in 2018 than in 2003.

“I am satisfied with my chance to harvest a white-tailed deer”; 72% in 2018 vs. 56 % in 2003 (Q10).

“I am satisfied with my chance to harvest a white-tailed buck”; 71% in 2018 vs. to 53% in 2003 (Q16).

“I am satisfied with my chance to harvest a mature white-tailed buck”; 58% in 2018 vs. 51% in 2003 (Q17).

Overall, in 2018 more survey respondents (42%) disagreed or strongly disagreed than agreed or strongly agreed (33%) when asked if “Some units should be managed for large white-tailed bucks, even if it means shorter seasons or controlled hunts.” (Q18).

2017 Hunting Experience (Q 19)

Most survey respondents were either satisfied or neutral about the ‘Amount of access’ (50% satisfied and 23% neutral), ‘Length of season’ (76% satisfied and 11% neutral), ‘Number of hunters’ (46% satisfied and 28% neutral), ‘Quality of experience’ (69% satisfied and 18% neutral), and ‘Timing of season’ (79% and 12% neutral). In all 5 categories, significantly more survey respondents were satisfied or very satisfied than dissatisfied or very dissatisfied. We did not ask this question in 2003.
APPENDIX C

Hunter Congestion Concepts

White-tailed deer hunters did not list hunter congestion as a major issue in the white-tailed deer hunter survey. When asked about their satisfaction with hunter numbers, 46% were satisfied, 28% were neutral and 25% were not satisfied. Of the written comments from the 2,922 respondents, 89 made comments on hunter congestion. Of the hunters who were dissatisfied with their hunt last year (16% or about 468), only 89 of those (3% of respondents and 19% of dissatisfied hunters) said it was due to hunter congestion.

In contrast to the white-tailed deer survey, the mule deer hunter satisfaction survey had 45% of respondents say that hunter congestion effected their hunt the previous year. This response echoed the results of the previous hunter survey in 2007. Because hunter congestion has continued to be an issue for mule deer hunters, the mule deer species planning team is in the process of addressing the congestion issue. Depending on their approach, changes to mule deer seasons may displace hunters into north Idaho or convert them into white-tailed deer hunters. As such, it is important that the white-tailed deer plan also address issues of hunter congestion, keeping the statewide situation in mind. Additionally, the growing number of white-tailed deer hunters has the potential to effect the quality of the hunter’s experience as some feel it already has in units such as 10A.

A central focus of the hunter congestion teams is to address hunter congestion while maintaining as much opportunity as possible, a key desire expressed by hunters in their survey responses. The white-tailed deer congestion team is also looking to preserve as much of the existing structure as they can since white-tailed deer hunters indicated that they were happy with their current seasons. Most of the current hunt structures affect an individual’s ability to hunt in southern and northern Idaho in the same season.

Most of these proposed approaches will likely reduce existing hunter numbers slightly. The only approach that gives managers the absolute ability to address hunter congestion is a zone approach with caps. All of the other approaches are vulnerable to converting mule deer hunters into white-tailed deer hunters.

All of the approaches would require changes in how non-resident deer hunters are distributed across Idaho. Currently non-resident deer hunters can purchase a limited number of regular/white-tailed deer tags (14,000). When those are sold out an additional 1,500 white-tailed deer tags are available to purchase. Many of these approaches will require the current allocation to be divided up by Tag Type, Regions, DAU’s or Units. IDFG is committed to addressing hunter congestion in a comprehensive fashion and will be cooperating with the University of Idaho to survey hunters in 2019-2020 to gauge their desire and tolerance for various solutions.

Current Structure

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hunters have flexibility in species and area</td>
<td>May not address hunter congestion issues on a statewide level</td>
</tr>
<tr>
<td>Hunters have long either sex seasons that allow use of multiple weapon types</td>
<td>Allows hunters to hunt southern Idaho and northern Idaho for both mule deer and white-tailed deer, so won’t address the issue</td>
</tr>
<tr>
<td>Advantages</td>
<td>Disadvantages</td>
</tr>
<tr>
<td>-----------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Aligned with hunters desires</td>
<td></td>
</tr>
</tbody>
</table>

**Separate Species Deer Tags**

The regular deer tag would be converted to a mule deer tag. This would require hunters to choose what species they want to pursue. This would eliminate some hunters who hunt in north Idaho for white-tailed deer with regular deer tags before November 3rd in the Clearwater Region or anytime in the Panhandle Region. For white-tailed deer hunters, this only eliminates their ability to pursue mule deer in some GMUs but maintains what they currently have.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduce movement at a minor level</td>
<td>Does not address shift of mule deer hunters to white-tailed deer hunting</td>
</tr>
<tr>
<td>Better harvest data (get true effort), not just</td>
<td>May not give southern ID tools to manage white-tailed deer</td>
</tr>
<tr>
<td>reported primarily hunted for species</td>
<td></td>
</tr>
<tr>
<td>No change for current Clearwater Region white-tailed</td>
<td>Does not give hunters flexibility on hunting both species.</td>
</tr>
<tr>
<td>deer hunters</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not aligned with hunters desires</td>
</tr>
<tr>
<td></td>
<td>This is a bigger change for Panhandle hunters who used to be able to harvest</td>
</tr>
<tr>
<td></td>
<td>a white-tailed deer late with regular deer tag</td>
</tr>
<tr>
<td></td>
<td>Requires mule deer-only seasons to be created in some places</td>
</tr>
</tbody>
</table>

**Regional Tags or DAU**

This approach forces hunter to choose a DAU or region to hunt in. This eliminates the hunters’ ability to move between regions or to hunt in southern Idaho and northern Idaho in the same season. This approach allows regions to maintain whatever either species hunting opportunity that they currently have if they want. For most white-tailed deer hunters it would maintain what they currently have.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduces hunter movement at a minor level</td>
<td>Does not address shift of mule deer hunters to white-tailed deer hunting</td>
</tr>
<tr>
<td>Not difficult for many north Idaho hunters</td>
<td>Does not give hunters flexibility in moving throughout state</td>
</tr>
<tr>
<td>Allows more flexibility for either species hunting</td>
<td>DAU hunts would require greater coordination between regions</td>
</tr>
<tr>
<td>or the ability to maintain mule deer and white-tailed</td>
<td></td>
</tr>
<tr>
<td>deer hunts with a single tag</td>
<td></td>
</tr>
<tr>
<td>May only effect a small number of hunters who want</td>
<td>Not aligned with hunters desires</td>
</tr>
<tr>
<td>to hunt more than one GMU/DAU</td>
<td></td>
</tr>
</tbody>
</table>
Northern Idaho and Southern Idaho Tags

This approach forces hunter to choose an area of the state to hunt in. This eliminates the hunters’ ability to move between southern Idaho and northern Idaho in the same season. This approach allows northern Idaho to maintain primarily white-tailed deer seasons while southern Idaho maintains primarily mule deer seasons, however opportunities to hunt both species would be available where populations allow. For most white-tailed deer hunters it would maintain what they currently have.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Reduces hunter movement at a large scale</td>
<td>Does not address shift of mule deer hunters to white-tailed deer hunting</td>
</tr>
<tr>
<td>Not difficult for many north Idaho hunters</td>
<td>Does not give hunters flexibility in moving throughout state</td>
</tr>
<tr>
<td>Allows more flexibility for either species hunting or the ability to maintain mule deer and white-tailed deer hunts with a single tag</td>
<td>Not aligned with hunters desires</td>
</tr>
<tr>
<td>May only effect a small number of hunters who want to hunt more than one portion of the state</td>
<td></td>
</tr>
</tbody>
</table>

Zone System (without caps)

This approach will really be driven by how big (many GMUs) or small (few GMUs) zones are drawn. Large zones would be relatively similar to the DAU approach listed above. Small zones would be most similar to elk zones. This approach also allows for either species hunting if regions want to maintain that opportunity. This has the potential to have a large impact on hunter’s mobility.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flexibility to hunt both species within a Zone</td>
<td>May not address hunter congestion</td>
</tr>
<tr>
<td>Reduces hunter movement and achieves the goal</td>
<td>Restricts where hunters can hunt</td>
</tr>
<tr>
<td>May not require change in season length or opportunity</td>
<td>Not aligned with hunters desires</td>
</tr>
<tr>
<td>Only effects hunters who want to hunt more than one GMU</td>
<td>May reduce hunter participation</td>
</tr>
</tbody>
</table>

Zone System (with caps)

This is as described above but has the additional impact of having a fixed number of hunters. This approach offers the best tools for addressing hunter congestion but it is also the largest departure from what white-tailed deer hunters said they wanted. This would likely only be implemented once a zone system without caps failed to address hunter congestion.
<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can address hunter congestion</td>
<td>May not address proportion of non-resident hunters</td>
</tr>
<tr>
<td>Flexibility to hunt both species with in a Zone</td>
<td>Restricts where hunters can hunt</td>
</tr>
<tr>
<td>Reduces hunter movement and achieves the goal</td>
<td>Not aligned with hunters desires</td>
</tr>
<tr>
<td>May not require change in season length or opportunity</td>
<td>Could reduce hunter participation</td>
</tr>
<tr>
<td>Only effects hunters who want to hunt more than one GMU</td>
<td></td>
</tr>
</tbody>
</table>

**Split Season**

This approach may help spread white-tailed deer hunter pressure throughout the rut. Applicable to white-tailed deer tag holders only due to the option of hunting during the rut. Assuming the rut portion of the hunt receives the most hunter congestion, splitting the rut into two seasons may reduce hunter crowding. This option still allows the ability to hunt during the rut, but only a portion of it.

Option of splitting seasons of units with high density hunters (i.e., 8, 8A, 10A, 11, 11A). Run seasons from October 10 – November 10 and November 11 – December 1 or October 10 – November 15 and November 16 – December 1. Another option could be focused on splitting the top 10 consecutive days of harvest and allowing hunters the option of hunting the first or second portion of the peak harvest.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can address hunter congestion</td>
<td>Hunters may all select the same season</td>
</tr>
<tr>
<td>Portion of season coincides with elk season</td>
<td>May not align with hunter’s desires</td>
</tr>
<tr>
<td>Does not affect regular deer tag holders</td>
<td>Does not limit the total number of hunters</td>
</tr>
<tr>
<td></td>
<td>Limits the number of days hunting</td>
</tr>
</tbody>
</table>

**Stratify Elk and Deer Hunters**

This approach would require shortening some elk hunts and most deer hunts. So you could have an elk hunt that runs from 10/5 – 10/28 (or some similar variant) and white-tailed deer season that runs the month of November. This approach will eliminate some mule deer harvest opportunity in GMUs that don’t have controlled hunts.

<table>
<thead>
<tr>
<th>Advantages</th>
<th>Disadvantages</th>
</tr>
</thead>
<tbody>
<tr>
<td>Can address hunter congestion</td>
<td>May eliminate some mule deer harvest options in north Idaho</td>
</tr>
<tr>
<td>Keeps important early and late November white-tailed deer seasons intact</td>
<td>May not align with hunter’s desires</td>
</tr>
<tr>
<td>Allows white-tailed deer hunter mobility</td>
<td>Does not limit the total number of hunters</td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>--------------------------------------------</td>
</tr>
<tr>
<td>Potentially reduces crowding during elk seasons</td>
<td>Eliminates both elk and deer hunters’ ability to hunt both species at the same time.</td>
</tr>
<tr>
<td></td>
<td>May reduce overall elk and/or deer hunter participation</td>
</tr>
</tbody>
</table>