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Bighorn Sheep at Chelan Butte, Justin Haug WDFW

DISTRICT 7 HUNTING PROSPECTS

Chelan and Douglas counties

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DISTRICT 7 GENERAL OVERVIEW

Split in two by the Columbia River and comprised of Chelan and Douglas counties, the Wenatchee District is at the heart of Washington. From the crest of the Cascade Range to the shrubsteppe of the Columbia Basin, District 7 offers an incredibly diverse array of habitats and hunting opportunities. Hunters in District 7 have access to a variety of small and big game species, with hunting opportunities ranging from agricultural fields and sagebrush to alpine basins tucked away deep in the wilderness.

Douglas County, the eastern half of the district, is a plateau of shrubsteppe, farmlands, and deep basalt coulees. Ownership is mostly private, yet Douglas County offers excellent opportunities to hunt a variety of species. Hunters seeking pheasant, quail, doves, gray partridge, chukar, and mule deer will find extensive areas to hunt across the county. The Game Management Units (GMUs) in Douglas County are 248 (Big Bend), 254 (Saint Andrews), 260 (Foster Creek), 262 (Withrow), 266 (Badger), and 269 (Moses Coulee).

Chelan County descends from a high point of 9,500-feet atop the Cascade Crest at its western boundary down to a low elevation of 800-feet along its eastern border, the Columbia River. Extending approximately 40 miles from the Cascade Crest to the Columbia River, Chelan County encompasses five mountain ranges (Sawtooth, Chelan, Entiat, Chiwaukum, and Wenatchee) providing virtually unlimited terrain.

Home to some of the best mule deer and bighorn sheep hunting in the state, Chelan County is a destination for many hunters. With its large public land base, the county offers almost unlimited opportunities to find a place of your own. Four of the state's six high deer hunt wilderness areas are in Chelan County, as well as three bighorn sheep herds and an increasing mountain goat population. GMUs in Chelan County are 243 (Manson), 244 (Clark), 245 (Chiwawa), 246 (Slide Ridge), 247 (Entiat), 249 (Alpine), 250 (Swakane), and 251 (Mission).

CURRENT SPECIES STATUS

Big game: Almost all the deer harvested in District 7 are mule deer, with very few white-tailed deer. A lesser-known fact is that black-tailed deer also occur in Chelan County along the Cascade Crest, and that mule deer here share more black-tailed genes than hunters realize. Elk are present primarily along the southern edge and central portions of Chelan County. These elk represent the northern extension of the Colockum elk herd, centered to the south in Kittitas County. Black bears roam across almost all habitats in Chelan County. Their densities are higher in the wetter timbered habitats in western Chelan County and near the crest of the Cascades, and at somewhat lower densities in drier habitats farther east. Hunters harvest few black bears in Douglas County, but they do occur in small numbers in brush-filled riparian draws along the

Columbia River and other drainages. Cougars occupy all habitats where deer and elk are located. While most cougar harvests take place during deer and elk seasons, the cougar harvest typically does not meet the harvest guidelines in most years. Winter conditions and fresh snow determine the ease or difficulty of a dedicated cougar hunt. There are three California bighorn sheep herds in the district, the Swakane, Chelan Butte, and Manson herds. The world's record California bighorn sheep came out of the Swakane herd in Chelan County in 2010, and the Chelan Butte herd has become known for producing trophy-class California bighorn rams. Mountain goats occupy most of the high elevation habitat in Chelan County and hunting opportunities for mountain goats exist in two areas bordering Lake Chelan.

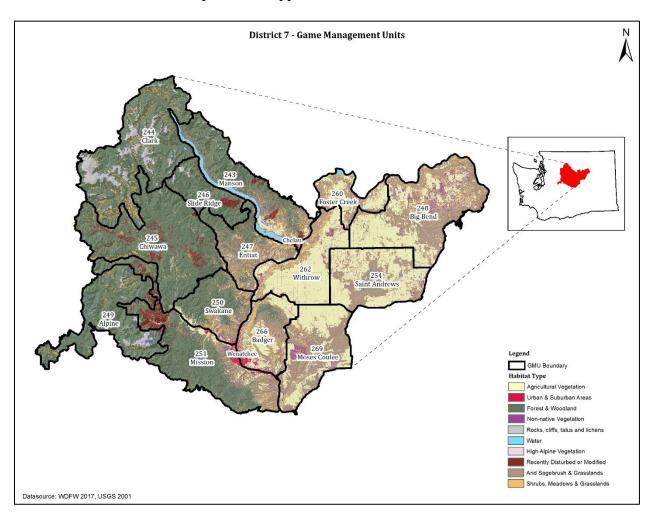
Upland birds: Upland bird hunting is available across the district. Turkey hunting occurs mainly in Chelan County, but numbers are growing in northern Douglas County, and some newly acquired wildlife areas are expanding opportunities. Huntable grouse species are in forested environments in both counties. Hunters can pursue sooty, dusky, spruce, and ruffed grouse in different parts of the district. The three other grouse species present in the district- greater sagegrouse, sharp-tailed grouse, and white-tailed ptarmigan- are protected species in Washington. Chukar partridge require hunters to climb steep ridgelines and traverse rocky slopes to bag their quarry. Valley quail, as their name suggests, prefer gentler terrain, and usually stay in greater numbers near agricultural areas. Gray partridge, or Huns, are found primarily in Douglas County. Doves are hunted in both counties, but most of the success is from Douglas County. There are two ring-necked pheasant release sites in Chelan County (Swakane and Chelan Butte Wildlife Areas).

Small Game: Coyotes are the most widely adaptable species in the state, and as such, occur virtually everywhere. Bobcats are another widely distributed species hunted across a wide range of habitats from high mountains to dry shrubsteppe. Raccoons are almost everywhere, except for the highest peaks and the driest desert. Crows are another small game species available, and likely little pursued. Rabbits and hares offer hunting opportunity throughout the district, with snowshoe hares at higher elevations (mainly in Chelan County) and cottontail rabbits in a variety of habitats in both Douglas and Chelan Counties.

Waterfowl: Ducks and geese offer opportunities in different portions of the district. The bulk of the waterfowl hunting is along the Columbia River, with ducks being the primary focus. Goose hunts are mainly in Douglas County, but opportunities are also available along the Columbia River.

GAME MANAGEMENT UNITS

The 14 GMUs in District 7 run from the crest of the Cascade Range to Moses Coulee and Banks Lake. Units in the west and central Chelan County are high, rugged, and timbered. Eastern Chelan County grades into low elevation dry habitat that winters its mule deer herd. The eastern half of the district lies above the Columbia River and encompasses six GMUs in Douglas County. Shrubsteppe and grasslands comprise native habitat in Douglas County and agricultural lands offer some of the best upland bird opportunities in the district.



Map of District 7 Game Management Units (GMUs).

Each GMU is unique in character and offers a different experience for hunters. GMUs 244 and 249, for example, are legally designated Wilderness Areas administered by the US Forest Service (USFS). There are no roads within these Wilderness Areas and no mechanized vehicles, including bicycles, are allowed for any type of recreation. In turn, these two GMUs offer exceptional hunting experiences for those willing to go on foot or horse. By contrast, GMU 262 is the heart of Douglas County's wheat production, and while not wilderness, provides great

upland bird hunting and open country mule deer hunting where access is granted. GMU 269 offers the most dramatic coulee habitat in the district with stunning landscapes and a variety of hunting opportunities. GMU 260 is in the center of the district's rangeland and features big ranches and big views.

Once you have a GMU in mind, refine your scouting efforts by using the websites below to identify specific hunt areas, WDFW Wildlife Areas, and private lands offering hunting.

- Printable maps of each GMU with its respective land ownership composition and roads can be found on WDFW's website at https://wdfw.wa.gov/hunting/locations/gmu
- Links to WDFW Wildlife Areas: https://wdfw.wa.gov/about/wdfw-lands
- The Public Lands website offers multiple ways to search for and identify public lands in Washington: http://publiclands.org/?plicstate=WA
- WDFW Hunting Regulations Web map tells you which seasons are open and when: https://geodataservices.wdfw.wa.gov/huntregs/
- The Washington Department of Natural Resources even offers LIDAR images if you need detailed topographic information: http://lidarportal.dnr.wa.gov/#47.60443:-120.14992:12

WILDFIRE

This report was written before the full extent of this year's wildfires in north central and northeast Washington was known. Watch for fire condition updates in the monthly Weekender hunting reports, WDFW news releases, or WDFW social media posts.

While the department currently has no plans to close any hunting seasons due to wildfires, access restrictions may be in place on many public and private lands in these areas. Wherever you choose to hunt, be sure to check fire conditions, access restrictions, and other emergency rules before you head out. Multiple websites are available to provide regional and statewide wildfire updates.

Resources Management Agency Web Sites

Washington State Department of Fish and Wildlife

http://wdfw.wa.gov/lands/

Washington State Department of Natural Resources

http://www.dnr.wa.gov/

Okanogan-Wenatchee National Forest

http://www.fs.usda.gov/okawen/

Bureau of Land Management

http://www.blm.gov/or/districts/spokane/index.php

Chelan County

http://www.co.chelan.wa.us/

Douglas County

http://www.douglascountywa.net/

Fire monitoring resources

Visit these sites to see where wildfires are active near your favorite hunting spots.

Inciweb: https://inciweb.nwcg.gov/

National Fire Map: https://maps.nwcg.gov/sa/

WA Smoke Blog: https://wasmoke.blogspot.com/ (Map of air quality stations and smoke plumes)

Fire is a natural part of the vegetation communities in eastern Washington and a common occurrence in the Wenatchee District, affecting both forested and shrubsteppe habitats each year. However, fires have increased dramatically in frequency, severity, and size over the past decade, largely due to human influence and the changing climate. Summer and fall are our primary fire

seasons and this reoccurring pattern of fire on dry landscapes has shaped the tree, shrub, and grass species that provide habitat for the game we hunt. A range of species as diverse as mountain goats to quail can either benefit or suffer from a fire within a habitat. Species are also impacted by excluding fire from landscapes where it normally plays a dominant role in maintaining habitat quality.

Last September, the Pearl Hill fire spread across 224,000 acres of shrubsteppe habitats in northern Douglas County. This impacted both upland and riparian habitats in parts of GMUs 260, 262, 254 and 248. Post-fire recovery and restoration in the burn area has been variable depending on burn severity, resources for active restoration, and precipitation. WDFW wildlife areas implemented habitat recovery efforts on units in GMUs 248, 254, and 260. Those efforts focused on weed suppression, seeding native grasses, rebuilding irrigation systems, installing erosion control materials, fence construction, and planting woody vegetation in creeks. Partner organizations including Foster Creek Conservation District, Trout Unlimited, Pheasants Forever, Chelan – Douglas Land Trust, U.S. Bureau of Land Management, and U.S. Fish and Wildlife Service have conducted similar efforts on private and other public lands. These efforts will continue in the coming years to the extent that current and additional funding allows. New riparian plantings and beaver dam analogs in East Foster Creek are designed to stabilize streambanks, help with soil deposition, and provide woody browse in the future.

The South Navarre Campground and surrounding trails on the north side of Lake Chelan have been reopened, but these areas sustained significant damage in the 2017 Uno Peak fire. Hunters need to note that the Safety Harbor dock and campground are closed due to safety hazards.

At the time of this writing, the 2021 wildfire season has been very active, with multiple shrubsteppe and forest fires having occurred already. Central and eastern Washington are experiencing severe drought in 2021, with precipitation up to 50 % below average in places. A record-setting heatwave developed in late June and lasted several days, and July temperatures have remained above average. Fuels are very dry and many plants have experienced sun scorching and are showing signs of stress. Wildfires have currently affected over 25,000 acres of shrubsteppe, grassland and low elevation conifer stands in Chelan and Douglas counties. In early July, the Batterman Road fire burned over 14,000 acres in the Badger Mountain area of Douglas County. In mid-July, the Red Apple fire rapidly burned through approximately 12,000 acres in the foothills north of Wenatchee, burning public and private lands, including parts of the Swakane Unit of the Chelan Wildlife Area. This area is home to the Swakane bighorn sheep herd and provides important winter range for mule deer.

The dangers of active fires and post-fire conditions make land management and public safety a difficult issue for responsible agencies. Following a fire, many areas have restricted access due to safety and resource concerns, and because fire season precedes and/or overlaps hunting seasons, hunter's plans may be impacted. Even when fires have been contained, or the fire is officially

out, the impacts of fire and firefighting can and will restrict access in some areas. Transport of heavy equipment, gear, and firefighters during operations degrade roads despite best efforts, and in many instances, these roads are unrepaired before hunting seasons open. Hunters should expect access restrictions in areas of wildfire activity and plan accordingly.

It is always smart to start making plans early and to monitor conditions and access by contacting the agencies that manage the area you plan to hunt. Cities, counties, companies, and resource management agencies all can place unexpected access restrictions on roads and hunting lands. Make plans, but also have an alternate plan in your back pocket in case conditions change and your new or favorite hunting area is closed. WDFW sets hunting seasons across the entire state. However, local laws, ordinances, and policies set by landowners and jurisdictions could restrict access to public lands even though WDFW hunting seasons are open.

ELK



Photo credit: Pete Lopushinksy.

Most elk harvested in the Wenatchee District come from southern Chelan County where part of the Colockum herd reaches its northern range extension. In 2009, WDFW implemented "true spike" restrictions for most general season harvest opportunities. Branched antler bull opportunities are primarily limited entry hunts.

A few elk harvests are scattered across Douglas County each season, but that harvest is not consistent from year to year. Liberal harvest seasons are in place in Douglas County to keep elk from establishing herds in the agriculture dominated landscape where their presence is unwelcome. Under the 2006 Colockum Elk Management Plan the population objectives for this herd are to manage for approximately 4,500 elk. Winter elk surveys in early 2021 estimated the herd at 4,100 animals. However, elk in Chelan County are not regularly incorporated into these survey efforts, so composition and seasonal distribution of elk is only understood through incidental observations and landowner reports. Elk are known to use Jumpoff Ridge, Tronsen Meadows and areas through upper Mission Creek.

Hunters will note a few changes to elk general seasons and to special permit opportunities for 2021. The most notable change is the reestablishment of the Peshastin Elk Area (EA 2033). This elk area was previously open until 2015. WDFW has noted an increase in elk use in the area which has prompted some concerns from agricultural producers. Elk tend to concentrate in these areas in the winter once sufficient snow has accumulated at higher elevations, driving elk to seek out lower elevation food sources. Access is highly restricted to private lands, so be sure to contact landowners early if you have drawn one of these permits. Permit holders should contact our Wenatchee District Office for additional information.

Other changes of note are some adjustments to general muzzleloader seasons to allow for an early muzzleloader elk season in both GMUs 249 and GMU 251. General season muzzleloader hunters will note that they are no longer restricted to the Tronsen Elk Area (EA 2051). Archery hunters will note that GMU 251 has been opened to early and late general season elk hunts for spike bulls. Hunters harvest roughly 45-55 elk under general seasons in Chelan County each year, and in 2020, 44 were taken. Antlerless harvest varies year to year, with the amount of harvest focus placed on local elk to combat damage in the Malaga Elk Area. In 2020, 168 antlerless permit opportunities resulted in 34 antlerless elk harvested. Success rates between weapon types and overall success varies from year to year. Most of the elk harvested come out of GMU 251, with the remaining few harvested in GMUs 244, 245, and 249, and very small numbers coming inconsistently out of other GMUs. This trend was displayed again in 2020, with few elk harvested outside of GMU 251.

Mature bulls use a portion of southern Chelan County as security and wintering habitat. Elk utilize a wide range of forage including grasses and forbs in the summer months, typically incorporating deciduous shrubby browse as these more palatable plants begin to dry out. Areas where timber harvest or wildfire has occurred, especially adjacent to creek drainages and intact timber stands, can be excellent places to look for elk, as this disturbance stimulates the growth of elk's preferred forage. Cow elk are especially dependent on finding high-quality forage in the summer to prepare their bodies for pregnancy over the winter.

Elk in GMUs 245 through 250 occur at low densities and in small-dispersed bands. Local hunters who live in and work the area are often the hunters that prove to be most successful in harvesting these elk. Elk hunting in GMU 249 consists of a large block of public land and is within the USFS Alpine Lakes Wilderness. While this GMU offers an opportunity for an over the counter archery tag for a branch-antlered bull, elk occur at very low densities here and occupy extremely rugged terrain that does not allow the use of motorized vehicles. Hunters participating in the GMU 249 archery season report surprise at the numbers of other hunters chasing elk.

GMU 251 offers elk opportunity throughout most of the unit. However, elk density is not very high and varies from place to place. Harvest occurs across the GMU, with most of the elk hunting occurring between Blewett Pass to the west, the city of Wenatchee to the east, and

the mountainous and timbered habitat south of State Highway 2. The Mission Unit does have a significant amount of private lands and hunters need to know property boundaries when hunting elk near private ownership.

Downloadable maps of WDFW Elk Areas in Chelan County, 2032 (Malaga), and 2033 (Peshastin) are available online at: https://wdfw.wa.gov/hunting/special-hunts/deer-elk-areas. The Malaga elk unit offers the greatest numbers of permits for antlerless elk, intending to reduce elk numbers within and along the boundary of the Stemilt Basin agricultural area.

Table 1. Ten-year general season average success and harvest of elk in the top producing GMUs in District 7.

	Modern Firearm		Muzzl	eloader	Archery	
GMU	Avg. Harvest	Avg. Success (%)	Avg. Harvest	Avg. Success (%)	Avg. Harvest	Avg. Success (%)
245	3	3	<1	4	0	0
249					6	9
251	24	5	10	7		

^{*}table does not include multi-season tag holders. Not all GMUs open during all seasons

ELK HOOF DISEASE (TREPONEME BACTERIA)

Since 2008, reports of elk with deformed, broken, or missing hooves have increased dramatically in southwest Washington, with sporadic observations in other areas west of the Cascade Range. WDFW diagnostic research (2009-2014), in conjunction with a panel of scientific advisors, found that these hoof abnormalities were strongly associated with treponeme bacteria, known to cause a hoof disease of cattle, sheep, and goats called digital dermatitis. Although digital dermatitis has affected the livestock industry for decades, Treponeme-Associated Hoof Disease (TAHD) is the first known instance of digital dermatitis in a wild ungulate.

The disease is currently concentrated in southwestern Washington where prevalence is highest in Cowlitz, Wahkiakum and western Lewis County. The disease is also present at lower prevalence in elk herds that are distant and discrete from the core affected area, but **TAHD** has not been detected in the Colockum Herd or anywhere in District 7 at this time. However, hunters are asked to be on the lookout for any signs of this disease.

If you harvest an elk with abnormal looking hooves in eastern Washington (for example, overgrown or broken hoof claws or skin lesions), please report that harvest to your local WDFW regional office. TAHD appears to be highly infectious among elk, but there is no evidence that it affects humans. The hooves of any elk- young or old, male or female- can be affected by TAHD. Tests show TAHD is limited to animals' hooves and does not affect their meat or organs. If the meat looks normal and if hunters harvest, process and cook it practicing good hygiene, it is

^{**} success is harvest: hunter ratio (%)

probably safe to eat. Hunters can help WDFW track TAHD by reporting observations of both affected and unaffected elk on the department's online reporting form (link below).

Report Elk Observations (arcgis.com)

Additionally, anyone who hikes or drives off-road in a known affected area can help minimize the risk of spreading the disease to new areas by removing all mud from their shoes and tires before leaving the area. WDFW is working with scientists, veterinarians, outdoor organizations, tribal governments and others to better understand and manage TAHD. For more information about TAHD, see WDFW's website at https://wdfw.wa.gov/conservation/health/hoof_disease/. Additional information on TAHD and this incentive program can also be found on page 65 of the Big Game Hunting Pamphlet.

DEER



Mule deer hunting is the bread and butter of the Wenatchee District. While the district does support a few white-tailed deer, mule deer dominate hunters' attention. Chelan County has become a destination hunt for many mule deer enthusiasts across Washington, with late season limited entry permits being highly prized. Within District 7, hunters can pursue deer across a range of habitats, including high alpine basins along the crest of the Cascades or expanses of sagebrush in Douglas County.

District 7 deer hunting seasons in 2021 remain largely like those in 2020, with one increase to general season muzzleloader opportunity. Hunters in the early muzzleloader season for whitetail are now able to hunt GMUs 254, 262, 266, and 269, which is more consistent with the GMU availability in the modern firearm season than in years past.

The management goal of a minimum of 25 bucks per 100 does postseason in the Chelan County portion of the district has been successful in providing hunters with opportunities for quality bucks over the last 10 years. Aerial post-hunt population surveys could not be performed for

Chelan County mule deer in 2020 due to safety concerns regarding COVID-19. Biologists were unable to perform these surveys in 2019, as well, due to persistent inclement weather, but 2018 saw a post-hunt estimated buck:doe ratio of 23:100. This represented a significant increase over the previously estimated buck:doe ratio of 18:100. After a hard winter in 2016/17 mule deer populations in Chelan County have been rebuilding. Deer populations have the characteristic of responding quickly to favorable conditions, and because Chelan County has not suffered large-scale habitat alteration, buck numbers have been able to bounce back quickly.

Survey numbers in Douglas County are encouraging, with 2017 post-season surveys estimating the population at approximately 13,000 mule deer. The 2020 post-hunt buck to doe ratio was estimated to be 29:100, which is well above the management objective of 15:100. Buck:doe ratios in Douglas County have been steadily increasing over the past five years. Without the diverse cover provided by mountains and forests, buck escapement is lower in the sagebrush, therefore a smaller portion of the bucks surviving are mature. Expect to see the Douglas County herd increase in size, providing excellent hunting opportunity during general and antlerless permit seasons in these sagebrush and agricultural habitats.

An estimated 2,061 deer were harvested from Chelan and Douglas Counties during the general season in 2020, very similar to 2019's estimated harvest of 2,002 deer. In 2020, harvest was composed of 1,876 bucks and 185 antlerless deer, and these numbers are consistent with previous years' harvest ratios. Such consistency is expected, as permit numbers regulate the antlerless component of the deer harvest each year. As ever, the Entiat Unit (GMU 247) in Chelan County continues to produce the highest harvest level in District 7, with 316 deer harvested in the general season alone in 2020. Second only to the Entiat, the Big Bend Unit (GMU 248) in Douglas County saw the harvest of 287 deer.

Deer harvest has increased in both Chelan and Douglas counties in the past several years (Figures 1 & 2). Harvest has trended upward in Chelan County since 2018 and in Douglas County since 2017. Interestingly, hunters participated in similar numbers during this time frame with two notable exceptions: multiple weapons hunters increased in 2019 by almost 22% over the previous year, and modern firearm participation increased in 2020 by approximately 13% over the previous two years (Figure 3). Despite the significant increase in their numbers from 2019 to 2020, modern firearm hunters spent an average of four days in the field in both 2019 and 2020, and hunter success increased by 1% over that time frame (Figures 4 & 5).

The fact that modern firearm hunters did not need to spend more days in the field on average and experienced a slight increase in success from 2019 to 2020 even with the added competition of more hunters last year is an encouraging sign for District 7's mule deer populations. It suggests that the number of deer available to hunters was either similar between 2019 and 2020 or it increased in that time frame. Additionally, the East Slope Cascades and Columbia Plateau areas have experienced relatively mild winters the past three years, which is promising for fawn

survival and the recruitment of more adult deer into District 7's mule deer populations. Altogether, it appears that the district's 2021 mule deer season is shaping up to be as good or better than that of 2020.

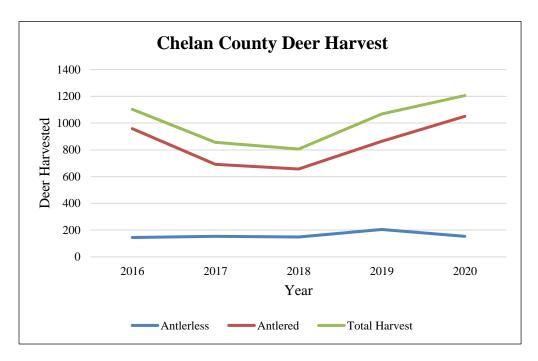


Figure 1. Deer harvest in Chelan County from 2016 to 2020.

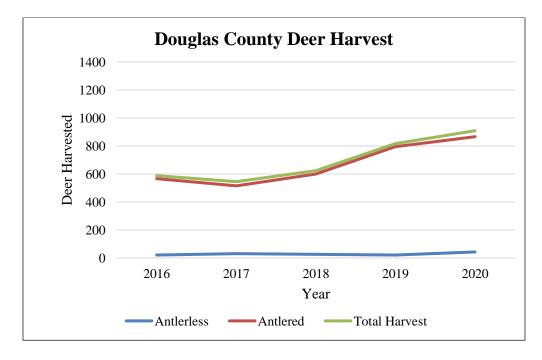


Figure 2. Deer harvest in Douglas County from 2016 to 2020.

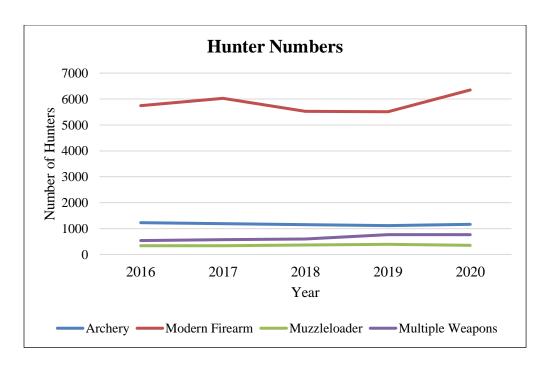


Figure 3. District 7 general season deer hunter numbers from 2016 to 2020.

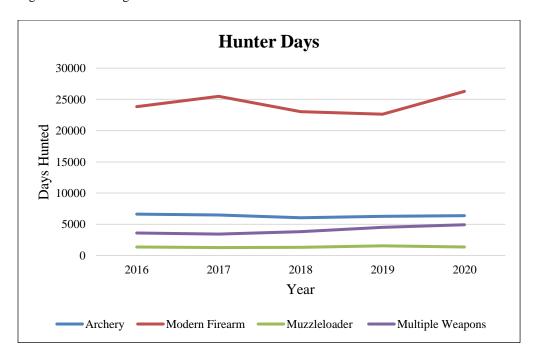


Figure 4. District 7 general season deer hunter days from 2016 to 2020.

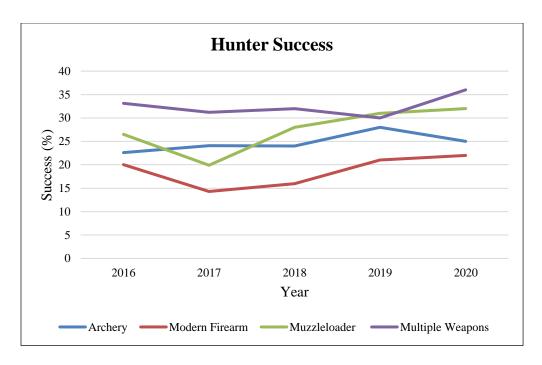


Figure 5. District 7 general season deer hunter success rates from 2016 to 2020.

The nature of general season hunts in Chelan County remains unchanged, with fall weather and deer movements ultimately determining harvest success. The 11-day season moves hunting opportunity later into the month, and over the past few years, this change in season dates has proven to benefit hunters as deer are more likely to have migrated out of summer range as the fall progresses.

The Chelan County mule deer herd spends winters on the breaks along the Columbia River and surrounding foothills but disperses into the large expanse of the Cascades during summer. These movements are characteristic of a strategy used by mule deer to maximize forage quality during summer and minimize energy expenditure during winter. Some Chelan mule deer travel as far as 40 to 50 miles while transitioning between summer and winter range.

In 2019, WDFW received funding from the U.S. Department of the Interior, in association with Secretarial Order 3362 - Improving Habitat Quality in Western Big-Game Winter Range and Migration Corridors, to begin a four-year movement and migration study of mule deer in the East Slope Cascades Mule Deer Management Zone in northcentral Washington State, which includes Chelan County (see WDFW 2016 Washington State Mule Deer Management Plan). This management zone is home to Washington's largest migratory mule deer population, estimated at 47,000 animals.

The primary focus of this study is to model mule deer migration corridors. In January 2020, WDFW captured and collared 40 mule deer does within District 7. The information gleaned from tracking the movements of these deer will aid WDFW in its ongoing management of this prized

deer herd. Over the initial two years of this project, data from collared deer have shown that mule deer in Chelan County are largely migratory, with 90% of study animals migrating from the Wenatchee Foothills to higher elevation sub-alpine habitats. Two primary migratory paths seem to be emerging, one that is south of the Wenatchee River which heads west over Highway 97 towards the Alpine Lakes Wilderness, and another corridor, north of the Wenatchee River that heads west and spends summers around the Lake Wenatchee Basin. It's important to note that this does not represent all possible migration corridors for mule deer in Chelan County but represents the patterns of deer collared in the study focal area.

As early as mid-September, deer start responding to changes in vegetation by moving downward in elevation and occupying north-facing slopes where conditions are cooler, and wetter and forage is of better quality. From mid-September through the onset of winter, deer respond to changes in the quality of the available forage and utilize those areas that best meet their needs. By mid-November, bucks are in condition and focused on breeding. However, before that time (during our October general season), they focus on food and security, not on breeding.

A typical hillside of mule deer habitat in the Cascades will transition through the seasons from bright green in the spring and summer to light green to yellow, to orange, to red, to brown, then to bare branches. While we see changes in color, mule deer are perceiving changes in forage quality. The summer forage that supports deer and allows them to produce young and grow antlers does not retain its high quality all year, so as it changes, so do the habitats that deer occupy.

While hunting on winter ranges may sound appealing, as hunters can see long distances, most Chelan County deer will still be in areas of higher quality forage and greater security during the general seasons. Most deer will be in thicker cover where the food is higher quality, and they have protection. These are usually the brushy north-facing slopes or at elevations much higher than typical open mule deer winter range.

By contrast, Douglas County's mule deer are residents, and the landscape here poses a different set of conditions for deer hunters. Because much of the county is comprised of private lands, hunters have less opportunity to pursue deer freely across habitats, as they must pay attention to ownership boundaries. However, as the Douglas County is composed of relatively open habitat with an extensive road network, deer are more vulnerable here than in the rugged, closed canopy, mountainous terrain of the Cascades. The drier nature of shrubsteppe habitat dictates that deer use those areas where forage quality remains higher longer while balancing the need for security. Optimal hunting areas will include a mixture of sagebrush cover or steep broken rocky terrain and adjacent agricultural fields for forage (mostly winter wheat and canola fields). Large expanses of sagebrush, while not providing the best forage, can give deer the security they need as well.

In the broken coulee county, the topography imparts security and riparian vegetation provides food resources. Deer in these areas often become experts at living in small, secure habitat pockets where they meet their needs and avoid hunters. While most of the county is private, more than 95,500 acres are enrolled in WDFW's Feel Free to Hunt and Hunt by Written Permission hunter access programs. Start scouting now for deer herds on private lands and reach out to landowners before the rush of other hunters descend on them days before the season starts. Many farmers are partial to allowing youth hunters.

Douglas County is a consistent producer of mule deer opportunity, and conditions should be similar in 2021 despite the massive portion of the county that was affected by the Pearl Hill Fire, which burned 224,000 acres of Douglas County in September 2020. Many of these acres have shown regrowth of vegetation, and some of these areas in the initial stages of early succession will likely experience enough fall green-up to provide forage for deer. These areas will increasingly attract more mule deer over the next several years as the revegetation of forbs and grasses and other nutrient-dense forage plants continues to progress.

However, the Pearl Hill Fire burned hot enough to completely denude much of the landscape of large perennials such as sagebrush, bitterbrush, and water birch- plants that provide valuable cover for mule deer. As such, a good strategy for hunting mule deer in Douglas County in 2021 and in the coming years will be to scout the edges of the Pearl Hill burn area, which will provide mule deer with "edge habitat" wherein they have access to both forage and cover. Later into the season, however, expect deer to move away from the burn areas as these lands will provide no forage once fall annuals have died and winter approaches.

Winter conditions in Douglas County are more typical of the Columbia Basin than the Cascades. The core of the Douglas County population is stable, and the harvest of excess bucks does not change the direction of the population. Reductions in antlerless permits help to mitigate the effects of harsher winters, and buck permits are adjusted to maintain success rates and promote the quality aspects of late-season hunts.

District 7 also encompasses one Deer Area (2017, North Lake Chelan), a site of localized deer concentration where crop damage is a concern. WDFW provides limited, permit-only opportunities here to harvest antlerless deer to deter mule deer presence and reduce crop damage. See Washington Hunting Seasons & Rules | eRegulations for current permit opportunities and legal boundary descriptions. A map of Deer Area 2017 is available at the link below:

https://wdfw.wa.gov/sites/default/files/webmaps/gohunt/hunt_pdf/Deer_2017.pdf

High buck hunts

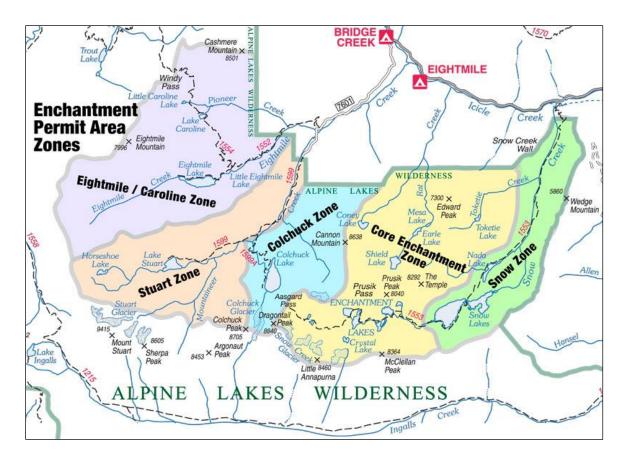
High buck hunts in the Cascade Range are one of the most popular opportunities provided in the district. Each year, hunters don backpacks and ride pack strings into the heart of wilderness areas

to pursue mule deer bucks and black bears. Within District 7, the Alpine Lakes Wilderness, Henry M. Jackson Wilderness, Glacier Peak Wilderness, and the Lake Chelan National Recreation Area define open high buck hunt units. The administrative boundaries of these wildernesses and the recreation area are the hunt boundaries. One misconception that continues to persist surrounds the Sawtooth Wilderness along the north shore of Lake Chelan. **The Chelan-Sawtooth Wilderness is closed to high buck hunt** opportunity Sept. 15-25 but opens for early archery where it overlaps GMU 243.

It is common to have active fires in wilderness areas during our September hunts. We encourage hunters to keep track of fire conditions and contact local USFS offices for updates.

High-quality topographic maps and publicly available aerial imagery can help home in on spots to target for scouting. Because of the complex topography of Chelan County and the vast acreage of dissected terrain and escape cover available to deer during the high hunt, bucks can be difficult to encounter during these seasons. Hunters should scout early, when bucks are still in velvet and protecting their antlers, making them more likely to occupy less densely vegetated habitat and increasing their visibility. During the high hunt deer are still on their abundant summer range, and occur at low densities, making this hunt even more challenging. Hunters need to be aware of permit requirements in the Alpine Lakes Wilderness and the Enchantment Permit Area Zones. Any overnight trips into any of the five zones within the Enchantments require a permit from the U.S. Forest Service (USFS). Permits are distributed through a lottery drawing system and are highly sought after. Hunters who have hunted these zones in the past need to be aware that permitting dates have changed. Without a permit, they may not have access to previously hunted areas.

For more information on regulations surrounding the use of the Enchantment Permit Area Zones, visit the Okanogan-Wenatchee web page or contact USFS directly.



Map of the Enchantment permit area zones within the Alpine Lakes Wilderness on the Okanogan-Wenatchee National Forest.

BLACK BEAR



Hunters are now able to take two bears on the east side of the Cascades, and the statewide season opening date is now Aug. 1. Currently, bear populations in the district are monitored based on harvest statistics and tooth data. However, recently developed passive monitoring methods are being employed across the state to better understand Washington's bear populations. The project will help develop better estimates of bear densities and provide information on the age class and sex structure of the population.

Research conducted in Chelan County indicates that fall forage availability influences reproduction and survivorship of cubs and yearlings. Black bears in Chelan County typically have a large amount of forage available to them and are most predictably found in areas suitable for berry crops, like huckleberries. GMUs 245 and 251 have consistently produced most of the bears harvested from this district. These units, along with all the other GMUs in Chelan County except for 243 (Manson), are part of the East Cascades Bear Management Unit (BMU 6). In total, the East Cascades BMU is comprised of 23 GMUs along the Central Cascades, and the Wenatchee District is normally responsible for a substantial amount of the unit's harvest.

In 2019, Chelan County represented almost 40% of BMU 6's bear harvest. Total District 7 bear harvest within BMU 6 was 138 bears in 2019. An additional 24 bears were harvested in GMU 243, which is included in the Okanogan BMU (BMU 5). This trend continued in 2020, with the

119 bears harvested in Chelan County once again making up nearly 40% of total bear harvest in BMU 6. Additionally, 14 bears were harvested in GMU 243.

Following the establishment of the new black bear hunting regulations, 2019 saw an increase in black bear harvest within the East Cascades Bear Management Unit (BMU 6). Hunters harvested 327 bears in 2019, up from 271 in 2018. From 2008 to 2018, the 10-year average harvest for BMU 6 was 227 bears. Black bear harvest in BMU 6 continued to exceed this average in 2020, with 307 bears harvested. While success relative to effort fluctuates from year to year, participation has been relatively stable, with approximately 4,000-4,600 hunters participating in the black bear season throughout BMU 6 each year.

Hunters can find bears sparsely distributed in small numbers in Douglas County, particularly in brushy riparian draws along the Columbia River and other drainages. Douglas County is part of the Columbia Basin Bear Management Unit (BMU 9), and bear harvest here makes up a far smaller portion of District 7's total. In both 2019 and 2020, seven bears were harvested from Douglas County. Most bears in Douglas County are harvested in GMUs 248 and 260.

Most bears harvested in the district are taken during open deer and elk seasons. Dedicated bear hunters will often hunt early in the season when bears are foraging on predictable annual berry crops and they can find them more easily. The incidental harvest that occurs during open deer and elk seasons is much more dependent on bear behavior and how widely they will have to travel for food.

There is a statewide mandatory requirement to submit a premolar tooth from all harvested black bears by Dec. 1. Please contact the district office if you need assistance with submitting a tooth. For more information, see pg. 68 of the Washington Big Game Regulations pamphlet.

COUGAR

Like black bears, the population monitoring for cougar management comes primarily from harvest data. The opportunity to harvest a cougar in the Wenatchee District expanded under the new season structure in 2012 and remains in place for 2021. In District 7, cougar hunt areas are split into four different Population Management Units (PMU) in Chelan County and a Columbia Basin Population Management Unit, which includes Douglas County. Within each of these hunt areas, harvest guidelines are established based on ungulate habitat and cougar population biology. The 2012 harvest guidelines increased the number of cougars that can be harvested in the county and across the state while maintaining the integrity of the population.

A two-part season is in place, allowing harvest during big game seasons under an early cougar season which opens Sept. 1 – Dec. 31, and a later season, which starts Jan. 1, for a more focused pursuit of cougar when conditions make hunting easier. After Jan. 1, once the harvest guideline for a PMU is reached, a decision is made about whether to leave that hunting area open. In a typical year, one or more PMUs in Chelan County will remain open until the season closes on April 30. While many cougars are harvested opportunistically during general deer and elk seasons in Chelan County, dedicated cougar hunters will wait until snow accumulation allows for tracking later in the winter. Cougars are primarily a predator of deer and so are most active during the periods when deer are most active, which is typically dawn and dusk.

Douglas County also offers good cougar hunting opportunities. Most hunters will focus on the breaks of the Columbia River, Moses Coulee, and Rufus Woods Reservoir. This rough country allows cougars access to deer herds while providing them stalking cover. Successful hunters often wait for snow and track cats on foot. Foster Creek (260), Badger (266), Moses Coulee (269), and Withrow (262) have consistent cougar harvest. There are no notable changes in cougar hunting opportunities for District 7 in 2021.

Table 2. Cougar Harvest in cougar hunt areas in District 7.

Hunt Area	2016	2017	2018	2019	2020
GMUs 242, 243	3	2	7	5	4
GMUs 244, 246, 247	5	7	5	5	4
GMUs 245, 250	5	2	2	4	4
GMUs 249, 251	6	1	5	0	2
Douglas County*	7	4	5	3	**

^{*}GMUs in Douglas County are included in a larger hunt area, which has no harvest guideline.

^{** 2020/21} harvest for GMUs in Douglas County not available at time of writing

BIGHORN SHEEP



Photo courtesy of Tana Thompson

Within Chelan County, WDFW manages three bighorn sheep herds: Swakane, Chelan Butte, and Manson. Each of these herds is the result of multiple translocation efforts, beginning in 1969.

Swakane:

The core range of this herd is within the Swakane Unit of the Chelan Butte Wildlife Area and the surrounding public lands adjacent to the Wildlife Area. Hunting pressure on this herd is low, with only two mature ram permits offered each year. This unit is famed for producing the world record California bighorn in 2010 as scored by Safari Club International. Over the past decade, this herd has increased from approximately 100 animals to a minimum count of 200 animals in 2019. Bands of sheep will be found along the cliffs and steep slopes along the breaks of the Columbia River. Successful permit winners can take advantage of the network of USFS roads to gain access to high points for glassing and scoping for groups of rams. Other opportunities for glassing this herd can be taken from the east side of the Columbia River at pullouts on Highway

97. In recent years, the Swakane herd has expanded its range, and sheep are regularly observed as far north as the Entiat River.

The Red Apple fire in July impacted the southern portion of the Swakane sheep unit. Hunters that have drawn the Swakane bighorn sheep tag may need to take heed of any additional road closures or travel restrictions on Burch Mountain Road this season, however the fire was stopped before it reached Swakane Canyon and the fire is not expected to impact hunting conditions. Indeed, post-fire fall green up may serve as an attraction to bighorns this year.

Chelan Butte:

This herd is central to Chelan Butte, between the Columbia River and the city of Chelan. The Chelan Butte herd typically produces large rams and provides some of the best access to all the sheep herds in Chelan County. A county road bisects the Chelan Butte Wildlife Area, providing access to state and federal lands open for hunting. Some of the best glassing is offered from the hang-gliding launch near the summit of Chelan Butte. For views of the cliffs along the Columbia River, try glassing by boat or from points along Highway 97, east of the Columbia River. Bighorns in this herd tend to stay on the river or east side of Chelan Butte and range north as far as Wells Dam. Hunters have also harvested rams from Deer Mountain, just north of Chelan. The minimum population estimate for the Chelan Butte herd was 150 animals in 2019.

Apart from mature ram hunting opportunities, WDFW offers both ewe and juvenile ram permit hunts for the Chelan Butte herd. In February 2019, WDFW deployed GPS telemetry collars on 10 ewes and two juvenile rams. **Hunters are requested to avoid harvesting a collared animal.** Both the Swakane and Chelan Butte herds tend to start rutting around mid to late October.

Manson:

The Manson herd occupies primarily USFS land on the north shore of Lake Chelan, concentrated between Antilon Creek north to Lone Fir Creek. The Manson herd occupies some of the most rugged and inaccessible terrains of all the Chelan County sheep herds. This herd is most readily accessible by boat on Lake Chelan. USFS maintains several public docks and campgrounds along the Lake Chelan shoreline. Be aware that a Federal Dock Permit is required to use any USFS dock between May 1-Oct. 31. Note: The Safety Harbor dock and campground was closed in 2017 and will not be open in 2021.

The Manson Unit hunt season occurs much later than the season for the Swakane and Chelan Butte herds and is timed when rams should be more concentrated at lower elevations along the lake. Most recent minimum counts estimate the herd at approximately 70-80 animals.

For all three of the Wenatchee District's sheep herds, overwinter survival for adult sheep remains high. Mortality of lambs for the year is characteristic of most sheep populations, where lambs suffer the highest rates of mortality during their first year of life, and the highest mortality of the year immediately after birth. With herds stable to increasing, permit numbers should increase in the future, tracking any increases in ram numbers. WDFW plans to census these herds in fall

2021. However there have been no major changes in herd health or habitat, so populations estimates are not significantly changed from 2019.

Hunters selected under these drawings are encouraged to contact District 7 for additional information. All hunters harvesting a bighorn sheep ram in Washington State are required to have the horn sets measured and plugged by WDFW within 10 days. Hunters should call a WDFW Regional or District Office to schedule an appointment with a biologist.



Each harvested ram must be pinned with an aluminum pin with a unique ID number.

Table 3. Measurement records for harvested mature bighorn rams in District 7 (inches).

Sheep Herd	Number Sampled	Length Max	Base Max	Greatest Spread Max	Length Median	Base Median	Greatest Spread Median
Chelan Butte	32	39.39	15.52	23.40	34.77	14.10	20.92
Manson	15	37.44	15.21	22.62	30.50	14.35	19.11
Swakane	17	39.12	15.09	24.96	35.10	14.24	22.46

^{*} measurements are represented here in inches but recorded in centimeters. WDFW does not measure rams for scoring purposes, and this data should be considered an index only.

^{**}The median is reported to dampen influence of outliers.

MOUNTAIN GOATS



While mountain goats occur in many higher elevation areas in Chelan County, they are currently only hunted along Lake Chelan. Prior years' surveys for these two populations, one on the South Shore of Lake Chelan and one on the North Shore, recorded high enough herd numbers to sustain limited hunting.

Before 2019, the Chelan PUD conducted 12 boat-based surveys per year, but the number of annual boat surveys decreased when WDFW began conducting aerial surveys beginning in the summer of 2019. Boat-based surveys are conducted during the winter, as mountain goats occupy lower elevations closer to the lake in the winter months. In general, during heavy snow years, goats concentrate in higher densities along the lake's edge to winter, providing a better opportunity to observe them.

During the 2018-2019 boat surveys, there was an estimated minimum count of 70 mountain goats on both the north and south shores. Despite this relatively low estimated minimum count, kid:adult ratios had remained stable, hovering around 23 kids/100 adults each year.

Due to the available terrain, rugged topography and tree cover, mountain goats can be incredibly difficult to survey from a boat. The steepness and inaccessibility of the terrain also preclude any type of ground-based survey. For these reasons, WDFW conducted aerial mountain goat

population surveys in the summer 2019 and the winter of 2019-2020, both on the South Shore of Lake Chelan. Although survey coverage was extensive, only approximately 20 goats were observed during each effort. One more attempt was made to comprehensively survey summer range for both the North and South Shore herds in June 2021, and again resulted in the detection of very few goats.

In 2021, special permit levels for both herds will remain the same, but both the North and South Shore herds have been removed from the list of possible locations for the auction and raffle hunts. Dropping these two herds as auction or raffle hunt options is in response to the lack of recent data indicating stable or increasing goat populations on either side of Lake Chelan. WDFW is working diligently to develop an effective solution for surveying the Lake Chelan herds to determine whether these populations can continue to be hunted and if so, at what harvest levels.

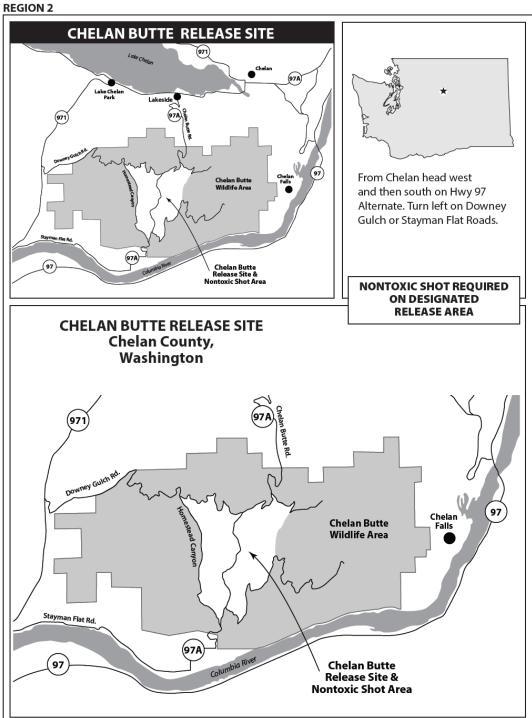
Three mountain goat tags were issued for the Wenatchee District under limited entry drawings this year. In 2020, all three mountain goat permit holders were able to fill their tags. Since 2001, 30 drawing permits have been issued for the Chelan North permit hunt, and 22 goats have been harvested, five of which were nannies. A single permit has been offered each year for the Chelan South permit hunt since 2012, with the first goat being harvested in 2013. Six goats have been harvested from Chelan South since the establishment of the permit hunt, all of which have been billies. Every effort is made to provide hunters with information that will ensure harvest of male goats rather than female goats. A significant amount of research on mountain goats in the United States and Canada indicates that mountain goat populations are particularly vulnerable to declines caused by harvest of female goats.

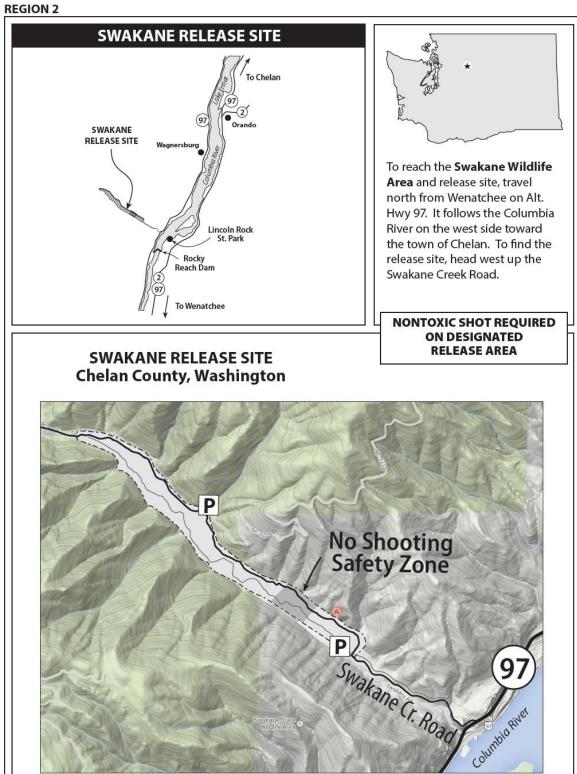
Hunters selected under these drawings are encouraged to contact District 7 for additional information. Hunters who kill a mountain goat in Washington must present the head with horns attached to a WDFW office within 10 days of harvest. Hunters must call ahead to make an appointment with a biologist for inspection of their goat.

PHEASANT

The Wenatchee District does not have the reputation as a destination pheasant hunting area in the state, but local hunters have harvested an annual average of approximately 960 pheasants over five years, from 2015 to 2019. In 2020, District 7 pheasant harvest was consistent with this average, with hunters harvesting 982 pheasants. Douglas County offers a couple of locations where wild populations of pheasants sustain themselves, both on public and private land. Hunters should focus on areas with a mixture of native shrubsteppe habitat, Conservation Reserve Program (CRP) grasslands, and wet meadows/wetlands. Your first clue will be weedy and tall vegetation on the roadsides, which provides good cover. Good pheasant hunting can be found in Foster Creek (GMU 260), St. Andrews (GMU 254), and Big Bend (GMU 248).

In Chelan County, WDFW has released cock pheasants annually at both the Swakane and Chelan Butte wildlife units and will continue to do so in 2021. Hunters interested in hunting pheasant release sites in these units can visit the WDFW hunting website for more information: https://wdfw.wa.gov/hunting/locations/pheasant-enhancement





Pheasant release sites in Chelan County.

QUAIL

District 7 offers some of the best quail hunting in the state, with a five-year average (2015-2019) of approximately 10,400 quail harvested in Chelan and Douglas Counties. Although hunter participation was slightly above the five-year average in 2020, the harvest of 9,000 quail was below average. Hunter success in 2020 was likely negatively impacted by the Pearl Hill fire, which spread across 224,000 acres of shrubsteppe habitats in northern Douglas County in September, just before the hunting season. This fire impacted both upland and riparian habitats in parts of GMUs 248, 254, 260, and 262.

While fire can benefit quail in the long run by setting back the successional stage of an area and stimulating forb growth and seed production, the immediate aftermath of the Pearl Hill fire left behind vast areas of severely burned landscapes with no forage or cover available for quail or other upland game birds. Now almost a year after this fire, regrowth of vegetation has begun throughout much of the burn area, providing forage for quail in areas that were desolate in fall 2020. This will likely contribute to increased quail harvest in 2021, with a total harvest more in line with the previous five-year average.

Quail benefit from a variety of agricultural land uses that create the edge habitat on which quail often rely, such as where the edge of an irrigated field meets shrubsteppe. Edges of standing corn, wheat, or other grain fields, medium to heavy cover surrounding harvested fields, and other places where weed and grass seed are readily available are prime places to look for quail. Fortunately, areas such as these are plentiful in Douglas County. Quail are also often found in thick tangles of trees and tall brush, especially near stream beds, valley bottoms with patches of Russian olive, oak or high sage, and weather-break tree lines and fence lines. In Chelan County especially, quail will tend to be found in and around orchards and other irrigated crops. Swakane Canyon also provides great quail opportunity in Chelan County.

Public lands can be tough places to find larger coveys well into the season. To improve success, hunters should seek out those areas without easy access and spend some time seeking permission from private landowners.

For more information, see Quail Hunting.

GRAY PARTRIDGE

Gray partridges or "Huns" as they are commonly called, are more common in Douglas County than in Chelan County, and are associated with grasslands or agricultural areas that are interspersed with patches of sagebrush. Brushy "hedgerows" adjacent to agricultural fields can often harbor Huns in the winter. They occur at low density, with coveys dispersed across larger areas. Look to fields enrolled in the Conservation Reserve Program with lots of grass cover extending into draws, as these are often a good place to find coveys. Covering a wide range of cover types is the best way to locate coveys. While most gray partridges are taken while hunting other species, with a little focus and dedication, you can be successful hunting for Huns.

Hun harvest in 2020 was significantly below the five-year average, with 408 gray partridge harvested in 2020 compared to an average of 822 in the previous five years, 2015-2019. As described above in the quail section, it is likely that this poorer harvest is a direct result of the Pearl Hill Fire, which burned gray partridge habitat in much of Douglas County immediately prior to the season opening, driving birds out of these areas. Although the Columbia Basin continues to experience drought conditions, Hun harvest in 2021 will likely be more in line with the previous five-year average as vegetation regenerates in the burn area.

For more information, see **Hunting Gray (Hungarian) Partridge**.

CHUKAR

More chukar are harvested in District 7 than any other district in the state, with a five-year average of roughly 4,300 chukar harvested from 2015-2019, and 4,860 chukar harvested in 2020. While WDFW conducts no official monitoring of chukar populations, there is every indication that chukars are doing well in north central Washington, and hunter participation has increased in recent years.

Opportunities for chukar hunting are numerous within the district due to a large amount of habitat that falls under public ownership. The breaks of the Columbia River provide the majority of the chukar habitat, along with areas adjacent to Banks Lake and Moses Coulee. On the Chelan County side of the Columbia River, BLM, USFS, DNR, and WDFW all control lands that provide chukar hunting opportunities. Chukar also occur in abundance on the north shore of Lake Chelan in the rocky exposed grassland habitats below the Grade Creek Road. Along the Douglas County breaks, almost all the appropriate chukar habitat falls under private ownership, and landowner permission is required.

Chukar hunting falls into two distinct seasons: without snow and with snow. While trying to negotiate chukar habitat with snow and ice on the ground can be hazardous, there is no doubt that birds become concentrated following the accumulation of snow. Chukar populations throughout Chelan and Douglas Counties will likely remain stable in 2021.

For more information, see Hunting Chukar Partridge.

FOREST GROUSE

In 2021 statewide forest grouse season dates have been shifted back two weeks to Sept. 15th-Jan. 15th. This change is designed to reduce harvest of reproductive age females and allow for brood dispersal, which will help sustain a harvestable population over the long run.

Three species of forest grouse occupy the Wenatchee District: blue grouse (dusky grouse), spruce grouse, and ruffed grouse. Most grouse harvested in District 7 are taken in Chelan County, with fewer dispersed opportunities for ruffed grouse and dusky grouse in Douglas County. Look for coniferous and riparian forests for the best hunting opportunities. GMUs 248 and 266 are your best options here.

Most of the harvest occurs over the opening weekend and then increases again with the general mule deer season. Hunters are asked to deposit one wing and the tail from each harvested grouse in wing barrels, which will be dispersed across Chelan County. For directions and diagrams to assist hunters in retrieving these samples, as well as a list of wing and tail collection barrel locations, see Forest Grouse Wing and Tail Collection.

Hunters can find ruffed grouse in healthy riparian forests and aspen stands at the margin of timbered habitat, and dusky grouse will use timbered stringers that extend down as far as the shrubsteppe. Spruce grouse are restricted to higher elevation conifer forests, usually above the distribution of ponderosa pine. GMUs 243, 244, 245, 246 & 251 offer some of the best grouse hunting opportunities in Chelan County.

Forest grouse harvest in 2020 was down from the previous five-year average, with 1,880 forest grouse harvested last season compared to an average of 2,522 from 2015-2019. However, hunter participation was also below average, and it is likely that forest grouse populations remain stable throughout the district with plenty of hunting opportunity in 2021.

Hunters interested in forest grouse will improve their chances by searching out areas where fewer hunters concentrate. Popular road systems can provide early season hunting. However, due to the numbers of hunters and the vulnerability of hatch-year birds, they often dry up quickly. Chelan County has a relatively limited road system within grouse habitat, and dedicated hunters know where they are, so hunters can increase the productive length of their season by hunting areas on foot away from roads and the bulk of the other hunters.

For more information, see **Hunting Forest Grouse**.

DOVE

Most mourning doves harvested in District 7 are taken in Douglas County, but opportunities for dove hunting exist in Chelan County as well, such as in Swakane Canyon. According to Breeding Bird Survey Data, dove count routes have shown declines over time, and in 2019 an unusually low number of doves were harvested in the district and across the state. However, in 2020 dove harvest increased over the previous year in the district and across the state coming closer to the prior 5-year average. In the district, 1,310 mourning doves were harvested in 2020 as compared to 873 in 2019. It is likely that 2021 mourning dove harvest in the district will be comparable to 2020's numbers.

Hunters should secure hunting opportunities by contacting growers and getting permission. Look to areas near wetlands, brushy upland streams, agricultural fields, and orchards where birds find both roosting cover and food later in the season. The amount and distribution of CRP (Conservation Reserve Program) fields has increased in Douglas County over the past few years, with new seed mixes providing more diversity in forage within stands. Scouting for these habitats can be a productive way to find new unexploited hunting areas. It may take some extra work and require ranging a little farther from home this fall to find birds.

Hunters should be aware that Eurasian collared doves occur with mourning doves, and the Eurasian collared doves do not count towards daily bag limits. Eurasian collared doves are classified as a deleterious species in Washington and have few regulations governing harvest, so be sure to take a few when the opportunity arises. Most hunters will be familiar with the difference between these two species, but the Eurasian collared dove is a stocky bird with a distinct black collar on the dorsal side of the neck. See the link below for a photo comparison of the two species.

https://www.eregulations.com/washington/hunting/game-bird/other-migratory-game-bird-species-identification

TURKEY



Turkey hunters will be happy to see additional harvest opportunities in District 7 for turkeys this year. The fall season will allow for the harvest of one turkey of either sex in Chelan and Douglas Counties. Spring 2022 will allow for the harvest of two bearded turkeys in Chelan County, where previously the limit had been one.

Merriam's turkeys in Chelan County are the result of the release of over 400 birds between 2000-2002. Turkeys are not native to Washington, but their popularity with hunters make them a prized game species. Turkey densities in the district are relatively concentrated, but populations appear to be increasing in the northern portions of Douglas County and parts of Chelan County. A low level of harvest occurs on public lands, with local hunters being the most successful, as densities are low, and finding seasonal habitat is important.

In Chelan County, the number of turkeys the landscape can support is determined primarily on the amount and availability of wintering habitat under typical snow depths. When winter snow depths reach 20 inches or more, wild turkeys have a difficult time making it through the winter. In areas where turkey can utilize ranches, barnyards, and farms for winter forage, they can show significant survival over winter. In Chelan County, GMUs 245, 250, and 251 produce the greatest turkey harvest.

Hunters should target more consistent turkey producing areas, such as the Colockum Wildlife Area. The Stemilt Basin outside of Wenatchee and canyons of the Wenatchee River between Cashmere and Leavenworth offer good opportunities to find turkeys. Turkeys frequently occur in these areas near the edge of private and public lands. Some recent forest thinning projects on public lands have promise for supporting turkeys in the spring. Areas to focus for turkeys on recently logged USFS lands include Derby Canyon, Yaksum Canyon, Mission Creek, Eagle Creek, and any other canyons that lead off Chumstick Highway between Leavenworth and Plain. Hunters can also find turkeys west through Plain, but they are often on private land. In Douglas County, GMUs 266 and 248 have been producing an increasing number of turkeys. Remember to scout early and get permission to hunt private lands.

WATERFOWL



Photo credit: Adam Neff

Across the country, annual breeding population surveys of waterfowl were not conducted in 2020 or 2021 due to COVID-19 health and safety restrictions. However, data indicate that waterfowl harvest has remained stable in District 7; 10,450 ducks were harvested in 2020 compared to the previous five-year average of 10,118 ducks. In 2019, 6,448 ducks were harvested in District 7, so 2020's harvest marked a significant increase. Canada goose harvest in 2020 remained consistent with the five-year average, which has been below 2,000 individuals every year except 2016.

In 2021, hunters should continue to have good opportunities in traditional areas and where permission to access ponds and lakes can be secured. Hunting along the Columbia River is usually consistent but dictated by local weather patterns. Local production can help early-season success. Later in the season most of the birds are migrants from the north. Most waterfowl harvest in Chelan County is focused along the Columbia River. However, it is important to note that due to county ordinances and the expansion of Wenatchee City Limits, a no-shooting zone

exists from the Odabashian Bridge to the George Sellar Bridge, which connects Wenatchee and East Wenatchee.

The Columbia River is also the primary site for waterfowl hunting in Douglas County. A popular and productive place for waterfowl hunting is the Bridgeport Bar Unit, where ducks form large rafts on the Brewster pool. However, northern Douglas County also has a concentration of small lands and ponds that hold waterfowl. As in most years, the success of the season depends on the timing of migration through the area.

For an excellent introduction to waterfowl hunting, see <u>Let's Go Waterfowl Hunting</u>.

Table 3. Average upland bird and small game harvest and hunter participation in District 7 (Chelan and Douglas Counties) over a five-year period, 2015-2019, as compared to 2020.

5 Year Avg. (2015- 2019)		5 Year Avg. (2015-2019)	
,	2020	,	2020
Harv		Hun	
10434	9000	1298	1,376
4362	4860	942	1,313
1860	1310	195	126
2522	1880	1502	1,243
964	982	649	956
822	408	322	340
10118	10450	817	771
1703	1639	373	452
100	100		100
106	182	66	100
137	48	78	48
26	91	33	35
14	0	5	0
	2019) Harv 10434 4362 1860 2522 964 822 10118 1703	2019) Harvest 10434 9000 4362 4860 1860 1310 2522 1880 964 982 822 408 10118 10450 1703 1639 106 182 137 48 26 91	2019) 2020 Harvest Hur 10434 9000 1298 4362 4860 942 1860 1310 195 2522 1880 1502 964 982 649 822 408 322 10118 10450 817 1703 1639 373 106 182 66 137 48 78 26 91 33

PRIVATE LANDS HUNTER ACCESS

WDFW maintains hunter access agreements with hundreds of willing landowners across the state, which allows for public hunting to occur on private lands. Hunter Access Program lands in District 7 are entirely in Douglas County, where most rural private lands occur. The Pearl Hill fire in 2020 scorched several private land parcels where landowners had access agreements, some of these properties may not be open to hunting this year or offer reduced opportunities. Please respect all closures and be aware of all fire restrictions during hunting season. WDFW lands personnel work closely with agricultural producers to provide access for hunting. As a result, there are thousands of acres in Douglas County to hunt on throughout the season. Access lands are marked with signs displaying contact information, and you can find all private land hunter access areas on this page: https://privatelands.wdfw.wa.gov/private_lands/

In Chelan County, private land hunting opportunities often occur with deer or elk concentration areas, but no formal hunting access agreements exist. As such, hunters in Chelan County must be proactive in gaining permission from landowners. Hunters wishing to apply for tags in the Lake Chelan North Deer Area, the Malaga Elk Area or the Peshastin Elk Area are encouraged to contact the Wenatchee District Office prior to applying.

Table 4. Acres of private lands enrolled in WDFW's Hunting Access Program in District 7 for 2021.

Hunting Access Type	Acres in Douglas County
Feel Free to Hunt	9,694
Hunt by Reservation	2,255
Hunt by Written Permission	70,202
Total	82,151

ADDITIONAL ONLINE TOOLS AND MAPS

As digital technology has rapidly advanced, today's hunters have a myriad of apps and online resources available to them to help plan their hunting trip. While these tools are excellent for focusing your efforts, navigating, and coordinating logistics, they can't replace scouting in the field. Below we present a select list of helpful sites to assist you in planning your hunting trip, which is by no means exhaustive.

USGS Topo maps: downloadable topo maps for the United States

https://www.usgs.gov/core-science-systems/ngp/tnm-delivery/topographic-maps

GoogleEarth: widely known free application for exploring aerial and 3D imagery. Useful for importing and exporting locations.

https://www.google.com/earth/

AgWeather Net: Washington State University maintained an array of weather stations from across Washington. View real-time and historic weather data. Also available as a free app.

https://weather.wsu.edu/

Interactive Snow Depth Map: This map compiles NOAA snow-fall data for the US

http://adamschneider.net/hiking/snow_depth.html

SNOTEL: Clickable map of Washington SNOTEL sites, that allows you to make customizable tables looking at historic and forecast data.

https://www.nrcs.usda.gov/wps/portal/nrcs/detail/or/snow/products/?cid=nrcs142p2 046350

County landownership maps: Most counties in Washington publish web maps with landowner data by parcel. These maps can be used to ensure you are hunting on public lands and to be aware of where private land permissions may be needed.

Chelan County Assessor: https://www.co.chelan.wa.us/assessor/pages/gis-mapping

Douglas County Mapsifter: https://douglaswa-mapsifter.publicaccessnow.com/disclaimer.aspx.