After nearly being eradicated in the early 1900s, the gray wolf (*Canis lupus*), a native Washington species, has naturally returned to the state.

The first to return to Washington came on their own from existing packs in Idaho, Montana, Wyoming, Oregon, and British Columbia. Although there have been no federal or state efforts to proactively reintroduce wolves to Washington, they have successfully repopulated parts of eastern Washington and the North Cascades.

The first pack with pups was confirmed in Washington in July 2008 in western Okanogan and northern Chelan counties. It represented the first fully documented breeding by wolves in the state since the 1930s. Since then, the state’s wolf population has increased at an average rate of 28 percent each year since wolf population surveys began.

Wolves were designated a state endangered species in 1980. Each year Washington Department of Fish and Wildlife (WDFW) provides information on the recovery of the wolf population in Washington, including the status, distribution, and management of wolves, in an annual report.

One important measure in this report is the number of breeding pairs and confirmed wolf packs in the state. Packs and breeding pairs create the population structure that ensures wolves will be best be able to survive. It is also an indicator of continuing population growth. Additionally, individual dispersing wolves are more likely to break off from growing packs and travel to establish new territories in quality habitat areas.

**Wolf pack territories over 7 years**
Roles in wolf recovery

There are many players in the recovery of Washington’s wolf populations. Wolves continue to inhabit both public and private lands. About half of Washington property is owned by private, tribal, conservation, and other interests. Of that, about 28 percent is federal land, 7 percent is state Department of Natural Resources (DNR) lands, and 1.5 percent is managed by WDFW.

Ranchers graze cattle or sheep during the summer months on their own private lands or on public lands. Making use of public lands for grazing activities is protected by state and federal laws and has long been a part of our nation’s cultural heritage that bolsters the economic foundation of many communities. The end result benefits all of us who depend on farmers and livestock producers to produce and distribute food and other products locally.

WDFW’s role for wolf-livestock coexistence

WDFW is responsible for conserving and recovering wolves, while also addressing the impacts to people and livestock. In areas across the state where wolves live, WDFW staff work with livestock producers and land managers to reduce negative interactions among all of the above. WDFW’s wolf management work is guided by a citizen stakeholder group to address interactions and conflicts with livestock.

We work with livestock producers to provide proactive measures to deter wolf and livestock interactions, respond to and investigate potential incidents when wolves attack livestock (called depredations), advise livestock producers on their rights and options, and help with contracts and paperwork between WDFW and producers. When a depredation is confirmed, WDFW offers compensation to livestock producers.

As a land manager, WDFW has also played a role in setting best practices on our lands for grazing livestock in wolf territory. For example, when endangered wolves den near a livestock grazing area deemed high-risk on WDFW lands, WDFW has worked proactively to find solutions beneficial to wolves, livestock, and livestock producers.

See survey results here: wdfw.wa.gov/sites/default/files/2020-03/2019_wa_resident_attitudes_toward_wolves.pdf

Wolf Advisory Group

WDFW created a Wolf Advisory Group (WAG) in 2013, made up of citizens of Washington State, to provide a broad range of perspectives to help inform management efforts for wolves. Participants range from livestock producers to wolf conservation groups and animal activists to land managers and outdoor recreation organizations to hunting advocates.

Despite their differences in geography, experiences, and ideology, WAG members have learned to bridge the gap in understanding and emotion. Although they may not always agree on certain topics, the group works as a team toward successes for people, wolves, and livestock. In 2019, the WAG has been working to revise the wolf-livestock interaction protocol, with a specific new focus on improving expectations and clarifying duties of range riders.

To view a list of current advisory group members visit wdfw.wa.gov/about/advisory/wag.
Land manager’s role in wolf livestock coexistence

Land managers and owners play a role in wolf recovery by providing good habitat. Forest health treatments can return land to an open, less densely forested state where grassy areas better support deer and elk – the natural prey that wolves prefer. In addition, land managers can ensure that grazing contracts support the ability for producers to adopt measures that may be needed to prevent negative wolf-livestock interactions.

Livestock producer’s role in wolf-livestock coexistence

Wolves can impact the livelihood of ranchers operating in wolf territory. Livestock producers who take measures to prevent interactions between livestock and wolves are helping to care for their livestock as Washington wolf populations recover. WDFW provided producers $257,000 in reimbursements in 2018, primarily for range riders. That included eight private organizations employing 15 riders. Unfortunately, WDFW was unable to meet demand and could not fund all the efforts that producers were willing to implement due to a lack of financial resources.

66% of Washington’s residents support the department’s work to provide cost-share funding to landowners to address wolf damage to livestock.*

Stay engaged in wolf conservation and management in Washington!

Learn about wolves in Washington: wdfw.wa.gov/wolves
Stay informed about post-recovery planning: wdfw.wa.gov/wolves-post-recovery
Sign up for wolf updates e-mailed to your inbox: wdfw.wa.gov/about/lists
Learn about the Wolf Advisory Group and attend a meeting: wdfw.wa.gov/about/advisory/wag

* Washington Residents’ attitudes toward wolves and wolf management 2019
Types of non-lethal deterrence measures

To discourage wolves from attacking livestock, WDFW staff work with producers to identify and implement non-lethal conflict prevention measures suitable for that individual’s operation. These measures can influence wolf and livestock behavior to prevent or reduce recurring depredations.

The tools best suited for a particular livestock operation will depend on many factors associated with the operation, such as the species of livestock, number of livestock, terrain, landscape conditions, and time of year. More than one measure at a time is often used, based on its effectiveness in a specific situation.

Wolf packs and landscapes differ, and what works for one pack or location may not work for another. It is often a case of experimentation.

**Human presence and range riding** – the regular presence of humans—from range riders, ranch employees, family members or others just being in the area—can deter wolves from frequenting an area. A range rider is a person who patrols pastures on horseback or ATV to monitor the location and well-being of livestock.

**Monitor livestock** – by watching for changes in livestock behavior, condition, and reproductive status, livestock producers can decrease potential damage to their animals by wolves. They are encouraged to remove sick or injured livestock from pastures and manage livestock distribution to minimize wolf-livestock conflict.

**Protecting calving/lambing areas** – Establishing calving or lambing areas away from wolf areas or in pastures near ranch houses allows for easier, more frequent livestock checks and intervention. Producers also often use protective fencing, fladry (red flags that are strung around a pasture and flutter in the wind to deter wolves), or sheds around calving areas.

**Avoiding den and rendezvous sites** – Before grazing season, WDFW conflict specialists work with livestock producers to develop a plan to avoid active den or rendezvous sites, areas where wolves move their young once they are old enough to move around a small distance but not old enough to actively hunt. Land management plans are also developed that incorporate separation of livestock and wolves, such as alternative grazing areas on WDFW lands, route changes, and delayed turn-out dates.

**Using scare devices** – The department helps livestock producers develop hazing strategies to scare wolves off their grazing properties. This can include installing light and noise devices like propane cannons, fox lights, and radio activated-guard systems that alert range riders that wolves are nearby.
Guardian and herding dogs – Some livestock producers use trained, specific breeds of dogs to protect livestock, along with regular human presence.

Strategic carcass sanitation – Appropriate disposal methods for livestock carcasses prevents attracting wolves to grazing areas and reduces the potential for wolf-livestock interactions. Producers target sanitation around active and adjacent pastures in close proximity to livestock.

Permanent and portable fencing – Many producers, landowners, and land managers use predator-resistant or electric fencing on pastures to deter wolves. They can also use these types of fencing to create night pens for open grazing livestock.

Delayed calf turn-out – In forested pastures, producers can delay turning their calves out until they reach 200 pounds. Producers can also keep cow and calf pairs together, so that the mature, larger cows can help protect their young.

WDFW staff are also interested in trying other non-lethal deterrents new to Washington. Potential ideas include reflective collars, bells, and VHF ear tags for cattle (to make locating cattle easier), VHF notification beacons used to alert when animals (cattle or carnivores) leave or enter a designated area (ideal for large grazing settings to confine cattle to or exclude from desired areas), making large stockpiles of deterrents (fladry, fox lights, flood lights, etc.) available for community use, InReach GPS units to provide real time communication with range riders in the field without cell service and real time downloadable track logs, cattle ear tags that collect information on cattle biometrics such as stress, and keeping cattle distanced from wolf activity centers on WDFW lands where alternative grazing pastures exist.

80% of Washington's residents share some concern about the impacts wolves may have on livestock once wolves are fully recovered.*
Non-lethal deterrents are working

85% of Washington’s wolf packs were not involved in any documented livestock depredations in 2019.
Lethal removal of wolves

It is WDFW’s responsibility to conserve and manage wolves as a public resource, not only to ensure the recovery and persistence of the population, but also to try to reduce damage they can cause. When non-lethal deterrents do not prevent repeated livestock depredation, WDFW may choose to lethally remove wolves, if there is not likely to be a detrimental population impact. To help WDFW make this difficult decision, a Wolf Advisory Group (WAG) has worked on a wolf-livestock interaction protocol.

When it is necessary to remove wolves from a depredating pack, WDFW uses an incremental approach to removing wolves. It may remove one or two wolves at a time in an attempt to disrupt a pattern of repeated livestock depredation.

The ability to remove wolves is a critical tool in WDFW’s work to reduce the potential for recurrent depredations in the short term while continuing to promote wolf recovery in the long term. WDFW acts to remove wolves as a last resort, only once significant process and consideration have taken place. Funding for lethal removal of wolves comes from the State Wildlife Account (hunting license revenues), not public tax dollars.
Wolves are one of the most divisive wildlife species in Washington and across the west. The Department takes its responsibility to support their return to Washington seriously and is committed to the recovery of wolves in our state. That was the primary goal of the Wolf Conservation and Management Plan when it was developed in 2011, and it has been a key mission of the Department ever since. Indeed, wolves are making a comeback in Washington.

Since 2008, Washington's wolf population has grown by an average of 28 percent per year. Not only is Washington's wolf population growing, but its distribution is also expanding westward in the state. In 2018, the state's first wolf pack of the modern era was confirmed west of the Cascade crest. WDFW is confident that Washington's wolf population is on a path to successful recovery. Furthermore, our state's wolf population is connected to and part of the larger, healthy wolf populations in Idaho, Montana, Wyoming, Oregon, and Canada.

Although media coverage often focuses on conflict among wolves, livestock, and people, successful coexistence is the untold story that plays out daily in most places wolves live in the state. In fact, 85 percent of known wolf packs were not involved in any documented livestock depredation in 2019. Although WDFW remains focused on mitigating conflict with wolves wherever it occurs, the agency is keeping sight of long-term recovery, conservation, and management priorities and objectives for Washington's wolves.

Toward that end, WDFW is working on two concurrent projects related to the future of wolves in Washington. One is a periodic status review, the first review of the species’ status since their listing as endangered in 1980. This review will include an update of the species status report to determine whether wolves warrant their current listing status or should be reclassified. The process involves partnering with the University of Washington to develop population modeling tools based on a decade of data from Washington’s wolves.

The models will estimate survival, recruitment, pack size, and dispersal, along with predicted probability of persistence, time to recovery, and population growth rate. WDFW will use the population model to assess the status of wolves relative to identified recovery criteria. If this status review indicates that a change in state listing status for wolves is warranted a public engagement process (public meetings, opportunity for comment, review of drafts, etc.) will be initiated under the guidelines of the Fish and Wildlife Commission and State Environmental Policy Act. If not, WDFW will recommend that wolves keep their current listing status.

The other project is a post-recovery conservation and management plan for Washington wolves. It will guide long-term wolf conservation and management under state authority once the wolf population in Washington is considered recovered and is no longer designated as state or federally endangered. Given the current pace of wolf recovery, the post-recovery planning process is being initiated proactively because WDFW anticipates it will likely take two to three years to complete. Ideally, the pace of the planning process would match the pace of Washington wolf recovery. Find information about wolf post-recovery planning at wdfw.wa.gov/wolves-post-recovery.

For those who support the return of wolves to our state, their recovery is great news. However, living among large carnivores, especially those that were absent for a generation, is not without its difficulties. Conflict between people and wildlife can be common in areas where both make their home, and there is not always an easy solution to resolve these conflicts. As the authority for the conservation and management of wildlife in our state, WDFW cannot look away and ignore conflicts between people and wildlife when they occur. It is our duty to foster social tolerance for native wildlife species, especially those as controversial as wolves, to ensure their long-term viability in the state. WDFW has welcomed wolves back within its borders and is ready to embrace the challenge.