

2015 Wolf Conflict-Deterrence Updates

Although wolves are active throughout the year, most conflicts with livestock occur from July to September in Washington and other western states. By then, ranchers have moved their livestock out of fenced winter pastures and onto summer grazing lands. Meanwhile, wolf packs begin to focus on finding food to meet their growing nutritional requirements as their pups are weaned and becoming more mobile.

To meet this challenge, the Washington Department of Fish and Wildlife (WDFW) works throughout the year to monitor wolf packs and help ranchers protect their livestock during the summer months. In June 2015, the WDFW Wildlife Program filed **Wolf-Livestock Deterrence Updates** for 15 of the state's 16 known wolf packs,* outlining potential risks for predation and identifying measures in place to minimize attacks on livestock.

These updates reflect WDFW's preparations to deter conflicts between wolves and livestock during the summer of 2015:

- **WDFW Conflict Staff:** WDFW has increased the number of staff around the state to work specifically on wildlife conflict issues related to wolves. As of June, WDFW had 11 wildlife-conflict specialists working with livestock producers in areas with active wolf packs, up from eight in 2013.
- **Damage prevention cooperative agreements:** Since 2013, WDFW has offered cost-sharing arrangements to ranchers who invest in non-lethal measures (e.g. range riders, guard dogs, fladry, and carcass disposal) to protect their livestock. WDFW had 41 active agreements with livestock owners as of June 30, compared with 33 the previous year. Eleven of the current agreements are not reflected in the pack updates, because they are in areas where wolf activity has been reported but no packs have been confirmed.
- **Range riders:** WDFW has five range riders – up from three last year – under contract that wildlife managers can deploy to help ranchers monitor their livestock, remove sick and injured animals, and haze wolves away from active grazing areas. In addition, all 41 livestock owners who have signed cooperative agreements with WDFW qualify for cost-sharing arrangements for range riders.
- **Radio collars:** In the past year, 11 wolves have been captured and fitted with radio collars. There are now 14 active collars on wolves distributed among 10 of the state's 16 known wolf packs. WDFW shares information about the location of collared wolves with qualified ranchers to help them manage their livestock.

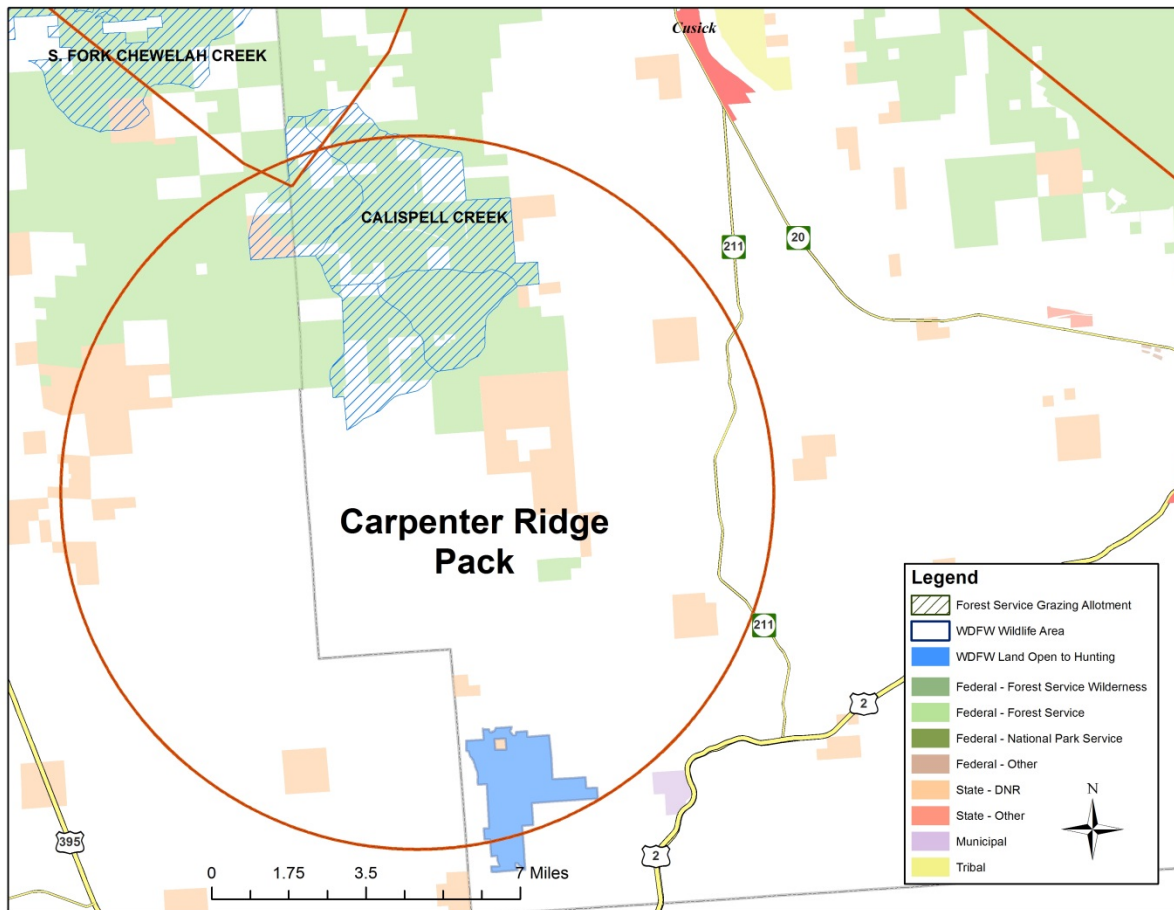
WDFW plans to update its Wolf-Livestock Deterrence Plans periodically as circumstances change.

*The Whitestone Pack's range is within the Confederated Tribes of the Colville Reservation and therefore outside WDFW's jurisdiction.

CARPENTER RIDGE

Latest Revision Date: June 29, 2015

1. Pack Location



2. Pack Information

2014 min number of wolves:

- 2014: Pups produced, pack size was 4 members as of Dec 31, 2014
- 2015: Breeding, denning, and pups likely.

Number of radioed individuals and type of collar:

- There were no active collars in this pack.

Summer trapping plans: Trapping and collaring efforts will be initiated when areas of high wolf activity are located.

General denning area known (yes/no): Not at this time.

3. Wolf-Livestock Conflict

Pack's conflict history: No conflicts or unusual losses reported by producers to date.

Knowledge of allotments/producers/grazing practices in area: There is only one federal allotment with multiple pastures in the area. Contact has been made with the allotment holder. There are a few private livestock owners with a few cattle in each herd. No wolf depredations have been reported on lands with the U.S. Forest Service and mixed USFS/industrial timber ownership..

Outreach with producers (leading up to turn out; plans for check ins throughout summer): WDFW has attended USFS allotment meeting every year since 2010, and again made contact in spring 2015 in the field with the permit holder. He expressed that he has no interest in a WDFW Damage Prevention Agreement or collaboration at that time. Private land grazers will be contacted once information indicates wolf use in their vicinity.

Number of Damage Prevention Cooperative Agreements with livestock producers: No local producers have chosen to enter into Damage Prevention Agreement cost-share agreements with WDFW at this point.

Number of data sharing agreements with producers/counties: Stevens County has a data sharing agreement, but this pack does not have a collared wolf yet.

Plans for verbal communication of wolf locations to area producers: Yes, when data becomes available.

Approaches for sanitation: Stevens County allows disposal of livestock carcasses at its facility by appointment, and WDFW has developed a free disposal site on the Sherman Creek Wildlife Area. We have encouraged producers to properly dispose of carcasses and informed them of the options. WDFW staff recently picked up a road-killed elk on a ranch in the area to avoid attracting wolves to the actively grazed pasture.

Range rider/human presence: A range rider was offered to the allotment holder in spring, but he declined.

Outreach to producers on WDFW lands: NA

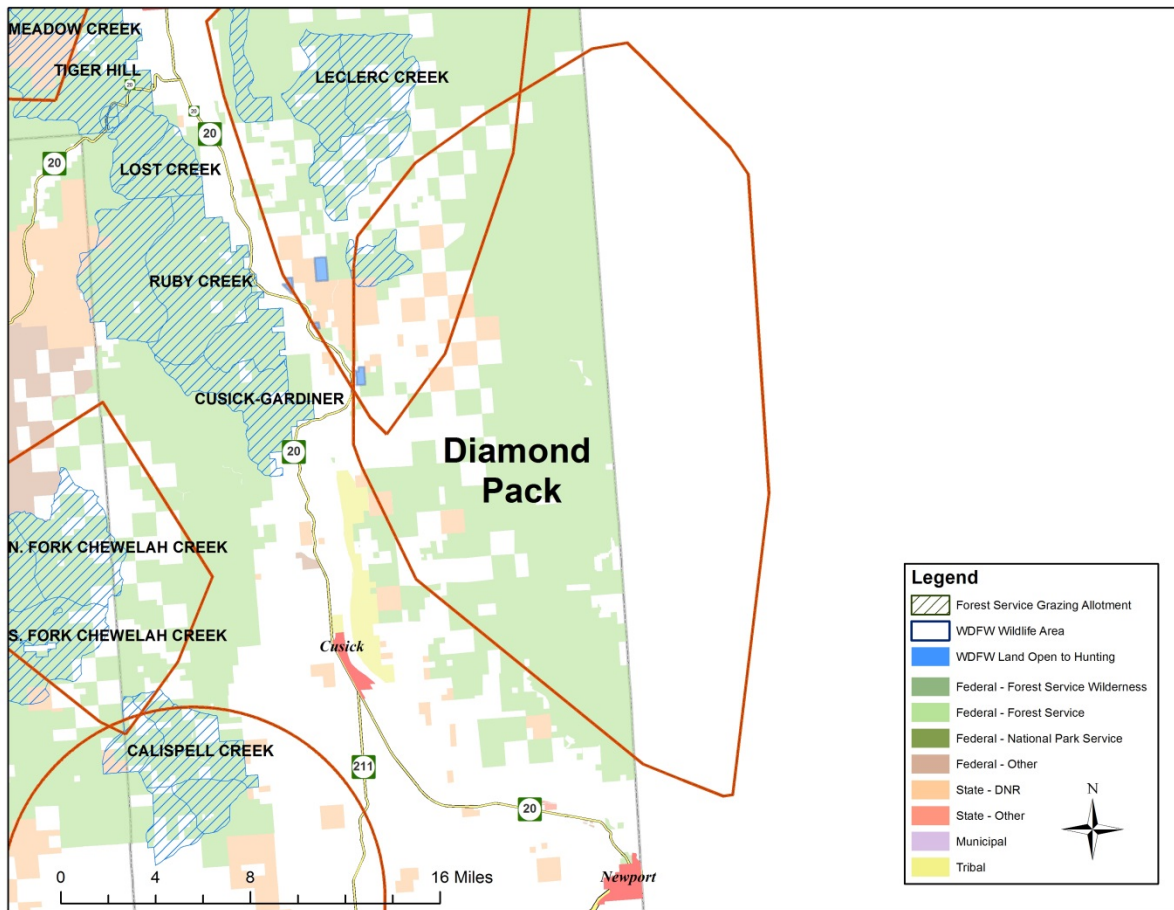
Other items of interest/awareness:

- Road access is highly limited in much of the pack range by cooperative agreement with industrial timberland owners.

DIAMOND

Latest Revision Date: June 29, 2015

1. Pack Location



2. Pack Information

2014 min number of wolves: 2 adults

Number of radioed individuals and type of collar: One with GPS Telonics, but only VHF is functional.

Summer trapping plans: This pack is not a high priority for trapping or collaring, based on the small size of this pack and small potential for conflict with livestock. This may change depending on the needs of WSU's ongoing wolf predation study.

General denning area known (yes/no): No.

3. Wolf-Livestock Conflict

Pack's conflict history: In 2014, the pack was implicated in killing a small number of sheep in Idaho. However, we have not received any reports from Washington producers of depredation events or suspicious livestock losses on the federal grazing allotment.

Knowledge of allotments/producers/grazing practices in area: There is one U.S. Forest Service grazing allotment overlapping with the Diamond wolf pack. Cattle also occur in small numbers on privately owned land east of Lone, along the Pend Oreille River. Reported wolf-cattle interactions have been limited on small private ownerships, although wolf tracks have been observed near bone piles and in creek drainages outside of fenced cattle pastures. Wolf howling has also been heard in the vicinity of these ownerships. No wolf depredations have been observed or reported on USFS and mixed USFS/industrial timber ownership. Loss rates for cattle on the allotment have been consistent over several years of operation at approximately 2 percent. Any change in loss rates will be conveyed to WDFW.

Outreach with producers (leading up to turn out; plans for check ins throughout summer): The Department has attended USFS allotment meeting every year since 2010. WDFW staff members have been in regular contact with livestock owners large and small in this area. We have provided fladry and hazing materials (pyrotechnics) in local situations where wolves have been heard or seen. We have also made recommendations regarding prevention measures and discussed wolf biology with local livestock owners. Outreach efforts are ongoing.

Number of Damage Prevention Cooperative Agreements with livestock producers: While we do not have a formal cost-share agreement with the USFS permit holder, one livestock owner is implementing preventative measures and has also allowed WDFW contract range riders onto their allotment and is participating in WSU's wolf predation study.

Number of data sharing agreements with producers/counties: We have a data sharing agreement in place with the federal permit holder and one with Pend Oreille County.

Plans for verbal communication of wolf locations to area producers: We have not received any requests for information at this time.

Approaches for sanitation: We cover the importance of sanitation in discussions with livestock owners and provided fladry to a landowner to protect his boneyard until he could develop a more permanent alternative.

Range rider/human presence: WDFW contract range riders patrolled federal allotment last year and plan to again this year.

Outreach to producers on WDFW lands: NA

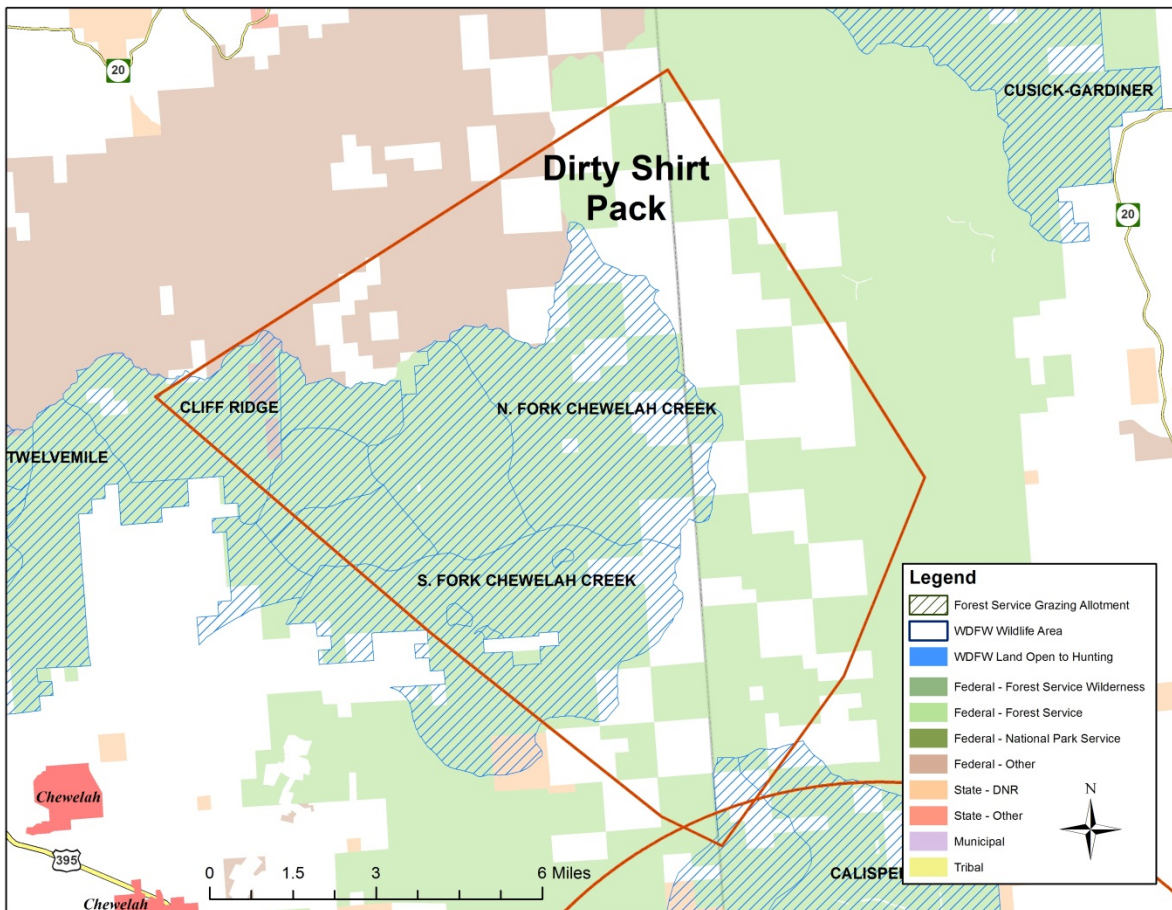
Other items of interest/awareness:

- Grizzly bears are present in this area and also possibly caribou.

DIRTY SHIRT

Latest Revision Date: June 29, 2015

1. Pack Location



2. Pack Information

2014 min number of wolves:

- 2014: Pack has 6 members as of April 2015.
- 2015: Breeding, denning, and pups possible

Number of radioed individuals and type of collar:

- One active GPS collar on an adult female

Summer trapping plans:

- Capture efforts continuing through summer as areas of high wolf activity are found.

General denning area known (yes/no): No

3. Wolf-Livestock Conflict

Pack's conflict history: No conflicts or unusual livestock losses reported by producers to date.

Knowledge of allotments/producers/grazing practices in area: There are four or five U.S. Forest Service grazing allotments with multiple pastures overlapping within the Dirty Shirt wolf pack. On USFS and mixed USFS/industrial timber ownership, no wolf depredations on cattle have been observed or reported. WDFW has attended USFS allotment meetings to talk with permit holders about conflict avoidance measures and Department assistance every year since 2010. Cattle also occur in small numbers on privately owned land east of Chewelah and elsewhere on the periphery of the potential areas occupied by this pack.

Outreach with producers (leading up to turnout; plans for check ins throughout summer): WDFW has attended USFS allotment meeting every year since 2010, and again made contact in late April with the permit holder. He expressed that he has no interest in a Damage Prevention Agreement or collaboration at this time. Private land grazers will be contacted if information indicates wolf use in their vicinity.

Number of Damage Prevention Cooperative Agreements with livestock producers: Local producers have not chosen to enter into Damage Prevention Agreement cost-share agreements with WDFW at this point.

Number of data sharing agreements with producers/counties: Stevens County has a data sharing agreement.

Plans for verbal communication of wolf locations to area producers: Yes, when data becomes available.

Approaches for sanitation: The County allows disposal of livestock carcasses at their facility by appointment and WDFW has developed a free disposal site on the Sherman Creek Wildlife Area. We have encouraged producers to properly dispose of carcasses and informed them of the options. WDFW staff recently disposed of a road-killed elk on a ranch in the area to avoid attracting wolves to the actively grazed pasture.

Range rider/human presence: At this point no one has requested assistance with range riding. A range rider was offered to the allotment holder in late April, but he declined.

Outreach to producers on WDFW lands: NA

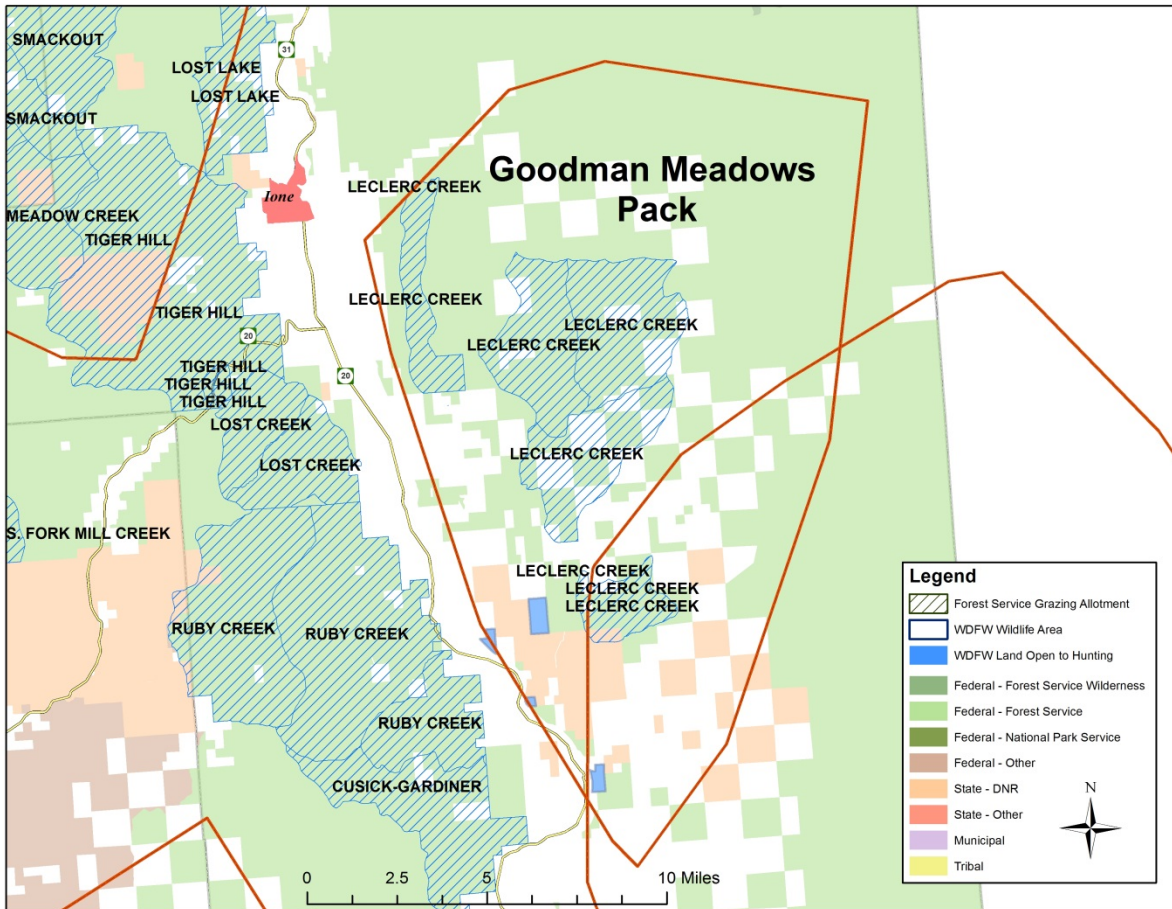
Other items of interest/awareness:

- This area has potential for inclusion in the WSU Research Project once a collar has been placed on a wolf in the pack.

GOODMAN MEADOWS

Latest Revision Date: June 29, 2015

1. Pack Location



2. Pack Information

2014 min number of wolves:

- 2014: Pups produced, pack size was 6 members as of Dec 31, 2014
- 2015: Breeding, denning, and pups likely

Number of radioed individuals and type of collar:

- Two active collars as of April 23, 2015 – one Telonics GPS and one VHF (on suspected breeding female)

Summer trapping plans:

- With two collars in this pack, there are no additional trapping efforts anticipated during summer 2015, unless WSU traps to address study objectives.

General denning area known (yes/no): Yes, based on telemetry data, the general vicinity of the denning area is known. However, there are no plans at this time to disturb the den site to document the exact location.

3. Wolf-Livestock Conflict

Pack's conflict history: No conflicts or unusual losses reported by producers to date.

Knowledge of allotments/producers/grazing practices in area: There is one U.S. Forest Service grazing allotment with multiple pastures overlapping with the Goodman Meadows wolf pack. Cattle also occur in small numbers on privately owned land east of Lone, along the Pend Oreille River. Wolf-cattle interactions have been limited on small private ownerships. Wolf tracks have been observed near a creek outside of a fenced cattle pasture and near a boneyard. Wolf howling has been heard in the vicinity of these ownerships. On USFS and mixed USFS/industrial timber ownership, no wolf depredations on cattle have been observed or reported. Loss rates for livestock have been consistent over several years of operation at approximately 2 percent. Any depredations or change in loss rates will be conveyed to WDFW.

Outreach with producers (leading up to turn out; plans for check ins throughout summer): WDFW has attended USFS allotment meeting to talk with permit holders about conflict avoidance measures and Department assistance every year since 2010. WDFW staff members have regular communication with livestock owners in this area. We have provided fladry and hazing materials (pyrotechnics) in local situations where wolves have been heard or seen. We have also made recommendations on prevention measures and discussed wolf biology with local livestock owners. Outreach efforts are on-going.

Number of Damage Prevention Cooperative Agreements with livestock producers: We do not have a formal Damage Prevention Agreement cost-share agreement with the USFS permit holder, but he is implementing preventative measures. He has also allowed WDFW contract range riders onto his allotment and is participating in WSU's research program.

Number of data sharing agreements with producers/counties: We have a data sharing agreement in place with the federal permit holder and one with Pend Oreille County.

Plans for verbal communication of wolf locations to area producers: We verbally share general location information to a small private rancher who requested it.

Approaches for sanitation: We cover the importance of sanitation in discussions with livestock owners and provided fladry to a landowner to protect his boneyard until he could develop a more permanent alternative.

Range rider/human presence: Had WDFW contract range riders on federal allotment last year and plan to again this year.

Outreach to producers on WDFW lands: NA

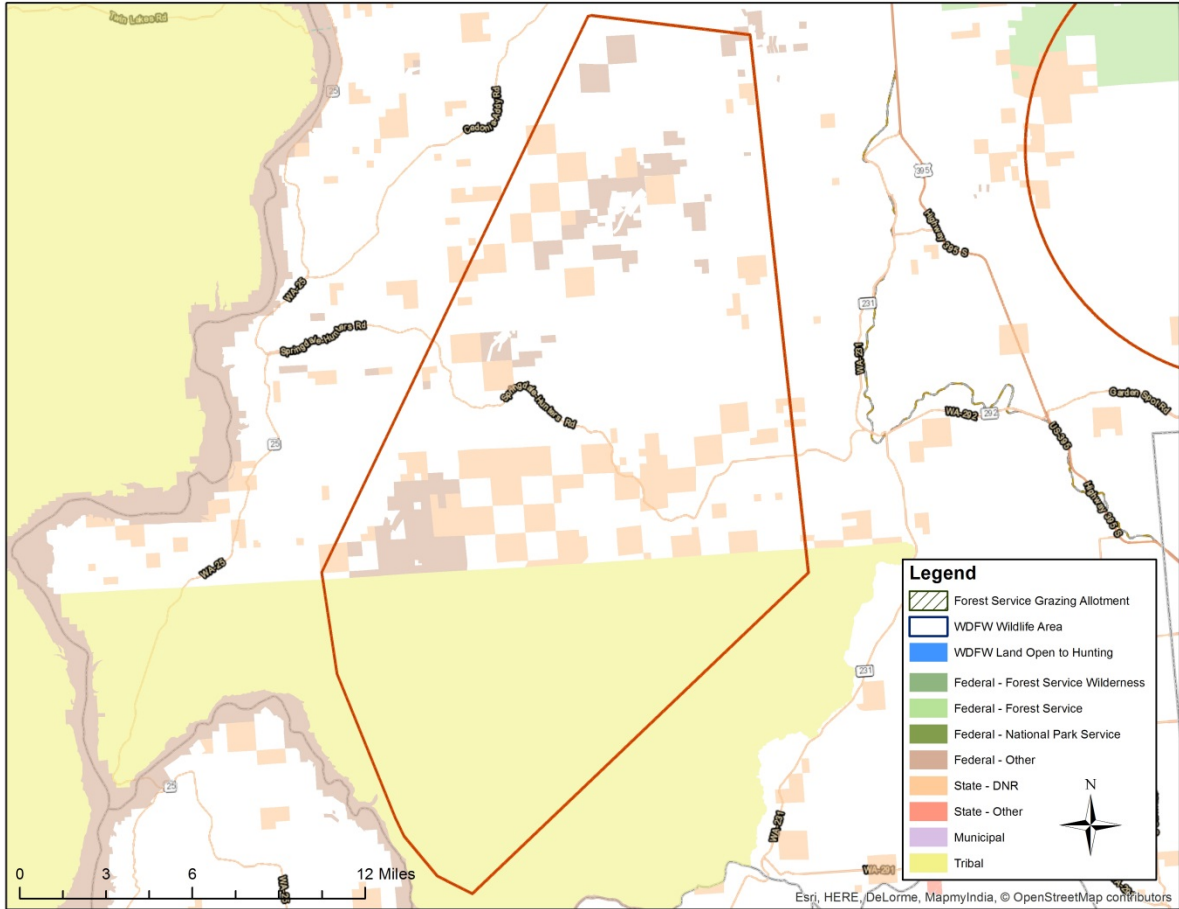
Other items of interest/awareness:

- There are grizzly bears present in this area and potentially caribou.
- Also, as previously mentioned, the USFS allotment holder is participating in the WSU Research Project.

HUCKLEBERRY PACK

Latest Revision Date: June 29, 2015

1. Pack Location



2. Pack Information

2014 min number of wolves: 3 adults and 3 yearlings

Number of radioed individuals and type of collar: 1 adult male collared with a GPS collar

Summer trapping plans: We have plans to trap and place additional collars during the summer months in coordination with the Spokane Tribe of Indians.

General denning area known (yes/no): Yes for 2014.

3. Wolf-Livestock Conflict

Pack's conflict history: Prior to the 2014 grazing season, there were no known wolf-livestock interactions within the Huckleberry territory. During the 2014 grazing season, one sheep producer experienced 26 confirmed wolf depredations and documented more than 200 additional sheep as unknown losses. Substantial efforts to reduce depredations to this producer's herd were employed by WDFW, USDA, and the producer. To address continuing depredations, one wolf was lethally removed from the Huckleberry Pack. Shortly after this removal, the producer moved the herd to a different grazing location outside of the Huckleberry territory. Since the fall of 2014, no more depredations have been documented or reported due to the Huckleberry pack.

Knowledge of allotments/producers/grazing practices in area: Within the 2014-15 Huckleberry Pack territory there is a variety of livestock production and livestock grazing. This includes landowners with a single animal to producers with hundreds of cattle or sheep grazing on open ranges. There are potentially dozens of commercial livestock operations within this wolf territory. Some livestock are on permanent, year-round grazing locations, while some use private commercial timber lands or private estate leases.

Outreach with producers (leading up to turn out; plans for check-ins throughout summer): WDFW personnel have been in contact and working with livestock producers in the Huckleberry Pack territory area since 2010. Coordination with large producers who own and/or graze on allotments within the Huckleberry territory has occurred. Conflict Specialists have discussed different strategies with these producers to reduce interactions with wolves. The local Wildlife Conflict Specialist will also be providing a producer with monthly updates on camera activity, sightings, and reported depredations.

This information will then be emailed by this central producer to other producers in the area. Conflict staff will continue to encourage more producers to participate in both upcoming revisions of the Deterrence Plan, the Working Group, Data Sharing Agreements, and Damage Prevention Cooperative Agreements. . .

Number of Damage Prevention Cooperative Agreements with livestock producers: 3

Number of data sharing agreements with producers/counties: Currently, wolf location data are shared with 4 livestock producers, Stevens County Commissioners, and the Spokane Tribe of Indians.

Plans for verbal communication of wolf locations to area producers: As stated above a monthly email update will be sent to a central producer, who will then send it to others within the area. The email will include information about wolf sightings, general collar location, camera work, and reported depredations. Collar data will be monitored daily/weekly by Conflict Staff and appropriate producers will be notified of any activity.

Approaches for sanitation: The Sherman Creek Compost facility is up and running, along with area DOT dumpsites. Also, some producers are burying livestock carcasses, a strategy encouraged since 2011.

Range rider/human presence: One large sheep producer has hired two full-time herders and a part-time hired hand, and is committed to staying with the sheep while at the grazing allotment. Other producers will be using contract range riders from WDFW according to need. One producer has signed a new

Damage Prevention Cooperative Agreement and another is considering to doing so. One Agreement in 2013 included a range rider on private allotment.

Outreach to producers on WDFW lands: N/A

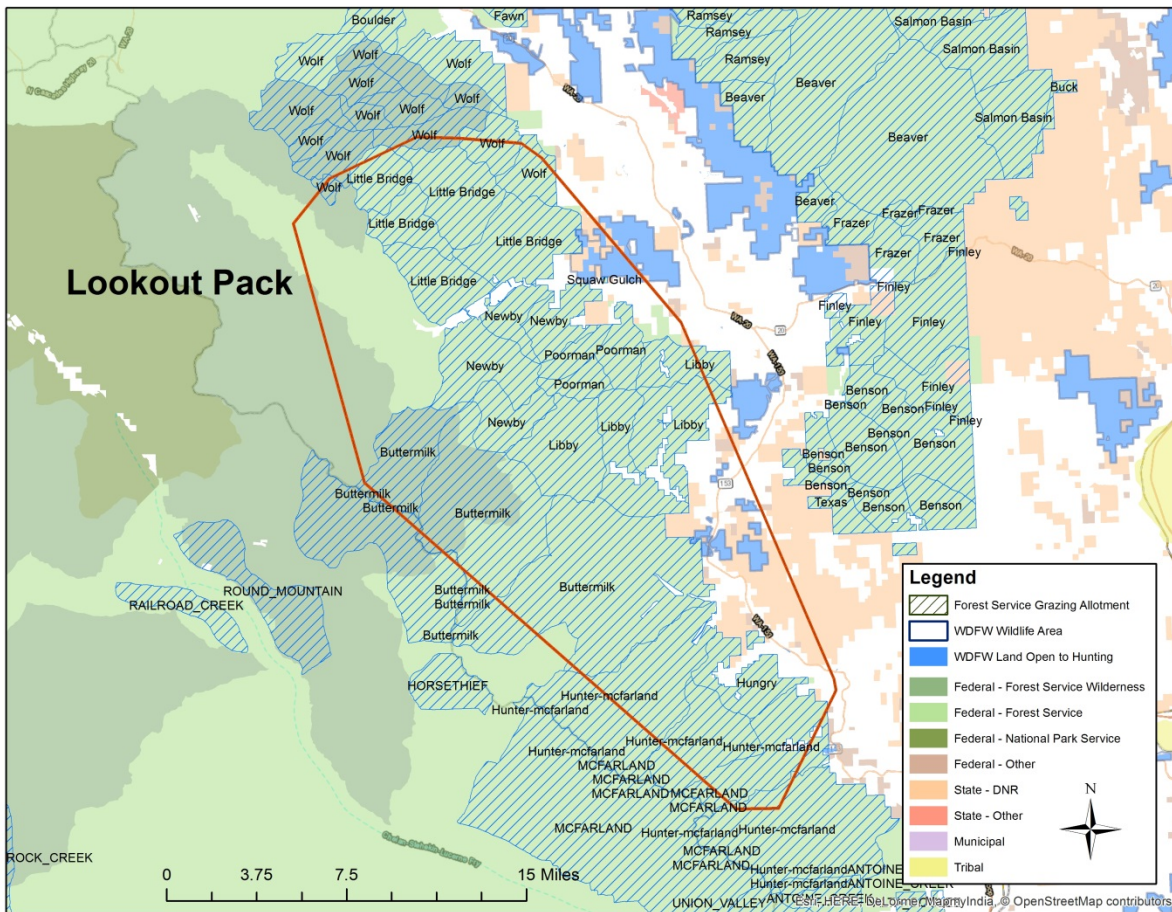
Other items of interest/awareness:

- This pack is co-managed with the Spokane Tribe of Indians
- Fox lights were recently installed around 350 penned domestic sheep on a private lease.
- WDFW is discussing range riders and Damage Prevention Cooperative Agreements with several producers and will continue to do so as funds are available.

Lookout Pack

Latest Revision Date: June 29, 2015

1. Pack Location



2. Pack Information

2014 min number of wolves: 3-5 with pups likely this year

Number of radioed individuals and type of collar: One GPS collar on an adult female wolf.

Summer trapping plans: Opportunistic trapping opportunity by WSU researchers as areas of high wolf activity are found.

Do we know general denning area? We know denning locations for the past two years. Last year's den was within the fire perimeter. Information indicates the wolves are now on U.S. Forest Service allotments in the northern part of their territory, closer to where they denned several years ago.

Overall, this pack's history includes very little recent telemetry data. The southern portion of their territory was just discovered last year with the help of the radio collar.

3. Wolf-Livestock Conflict

Pack's conflict history:

One probable depredation on a calf and two more calves injured in May 2012. Two separate attacks with injuries on dogs in March 2013 and March 2014.

Knowledge of allotments/producers/grazing practices in area: There are few active allotments with one main producer.

Outreach with producers (leading up to turn out; plans for check ins throughout summer):

We are required to check in regularly with the range rider and rancher as part of the conditions of our Damage Prevention Agreement.

Number of Damage Prevention Cooperative Agreements with livestock producers:

We have a Damage Prevention Agreement with the rancher in the north portion of the Lookout Pack's territory. Allotments in the southern part of the territory were burned by a wildfire and now vacant. They were going to be open for bid, but it is unclear how fire damage may affect that situation.

There is a second rancher in the northern part of the pack's territory, but it is unclear how often the wolves wander into their allotments. The radio-collared yearling did use a portion of those allotments later in the 2014 grazing season. However, a yearling located in the summer is not a good indication of the pack as a whole – especially one that ends up dispersing.

Status of formal data sharing agreements with producers/counties:

Although the rancher with the Damage Prevention Agreement does not have internet access, she has indicated she will list her range rider to receive access to information. However, we need to sign a new agreement for this year that includes a different range rider.

Plans for verbal communication of wolf locations to area producers:

The rancher with the Prevention Agreement does not have internet access. In 2014, when WDFW monitored radio-collared wolf locations, the livestock producer wanted us to notify her if the radio-collared animal moved north across a particular canyon. Otherwise, she was not concerned with the locations. When the wolf crossed north of the canyon and stayed north, staff notified the rancher/range rider of the more unusual movements. We can also notify other ranchers in the area if the pack's location changes or a new pack is located, but no other ranchers are as affected by the Lookout Pack as the one with the Prevention Agreement.

Approaches for sanitation: Sanitation is addressed in the Damage Prevention Agreement, and we are considering constructing a compost facility on the Methow Wildlife Area. The rancher agrees to sanitation as stated in her agreement:

- “Remove dead livestock: “Livestock operator/owner will improve sanitation by notifying and coordinating with WDFW staff when dead livestock are buried onsite. Livestock operator/owner will notify WDFW immediately if depredation is suspected. Livestock owner will remove livestock (if practical) that perish for reasons other than depredation and notify WDFW of the location where it was found. Alternatively, the livestock operator/owner or WDFW may hire a contractor to remove the carcass.”
- “Install fladry: If the livestock operator/owner is unable to remove the carcass, then fladry will be installed (if practical) to encircle the carcass and prevent possible scavenging by wolves. Alternatively, the livestock operator/owner or WDFW may hire a contractor to remove the carcass.”

Range rider/human presence

The rancher with the Agreement has been actively a range rider, but has had difficulty finding one.

Outreach to producers on WDFW lands

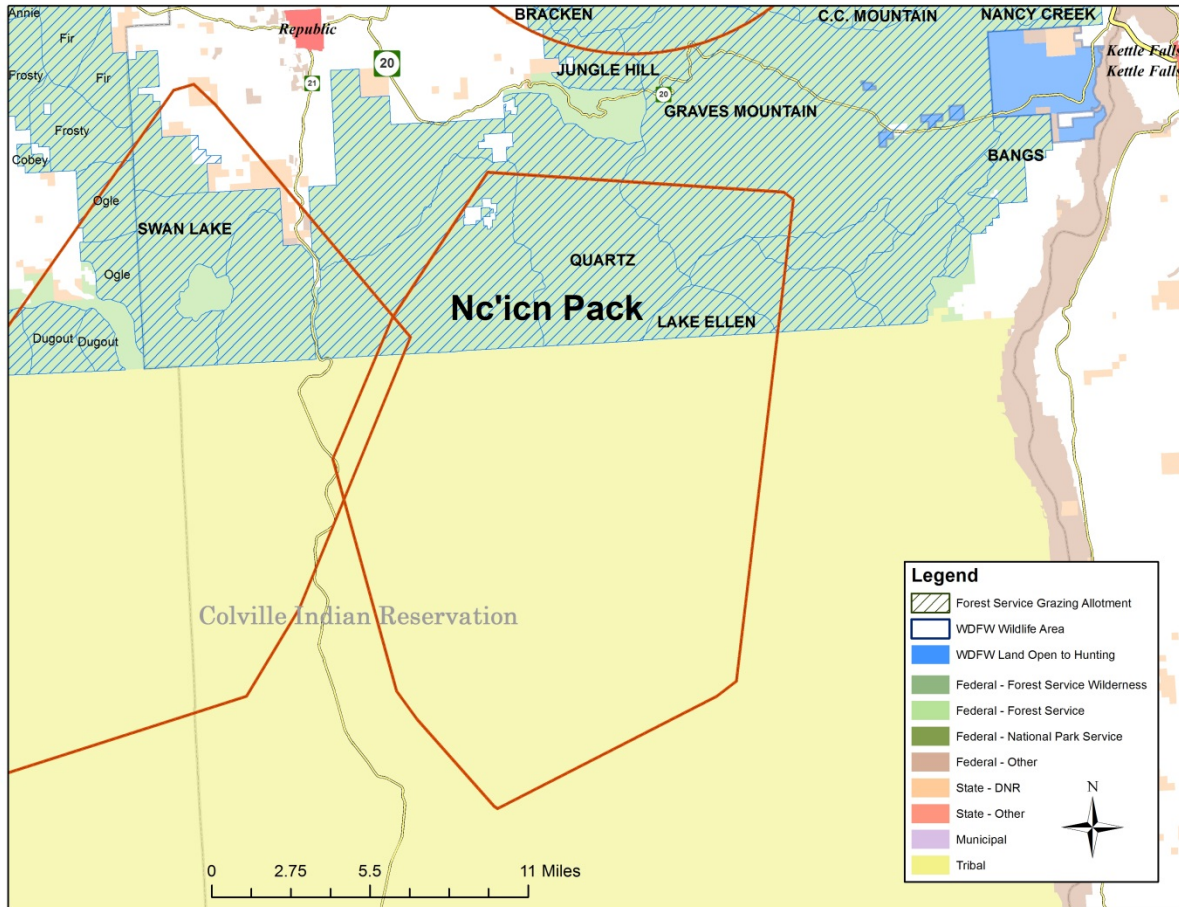
Grazing on some WDFW land is dynamic and being moved to other WDFW lands because of the fire. The Lookout Pack does not currently use WDFW lands. One livestock producer who grazes WDFW land closest to Lookout Pack is part of the WSU wolf-depredation study. Most WDFW permittees are also USFS permittees. Conflict Staff has attended USFS meeting for permittees and cattlemen, and met most WDFW permittees at last year’s meetings.

Any other items of interest/awareness: None

NC'ICN

Latest Revision Date: June 29, 2015

1. Pack Location



2. Pack Information

2014 min number of wolves: 4 adults

Number of radioed individuals and type of collar: The Colville Confederated Tribes (CCT) maintains collars on this pack.

Summer trapping plans: CCT is planning to trap and collar more individuals in this pack.

General denning area known (yes/no): This pack dens on the CCT reservation.

3. Wolf-Livestock Conflict

Pack's conflict history: A livestock producer who holds a U.S. Forest Service permit in the Quartz allotment has reported a higher-than-normal number of missing cattle.

Knowledge of allotments/producers/grazing practices in area: The main USFS allotment holder also grazes on CCT land and has been working with the tribe.

Outreach with producers (leading up to turn out; plans for check ins throughout summer): The local Conflict Specialist attended the Ferry County Cattlemen's meeting in late 2014. WDFW staff has also attended USFS allotment meetings every year since 2010 and did so again this year to explain conflict avoidance techniques and Department programs available.

Number of Damage Prevention Cooperative Agreements with livestock producers: There are two new Damage Prevention Agreements in the USFS allotments.

Number of data sharing agreements with producers/counties: Same as above.

Plans for verbal communication of wolf locations to area producers: The CCT receive the daily data feeds and provide WDFW with updated home range information on an annual basis. At this point, the Department has limited information to communicate to producers.

Approaches for sanitation: The Sherman Creek Compost facility is available, and Department staff addresses the importance of sanitation in meetings and discussions with livestock owners.

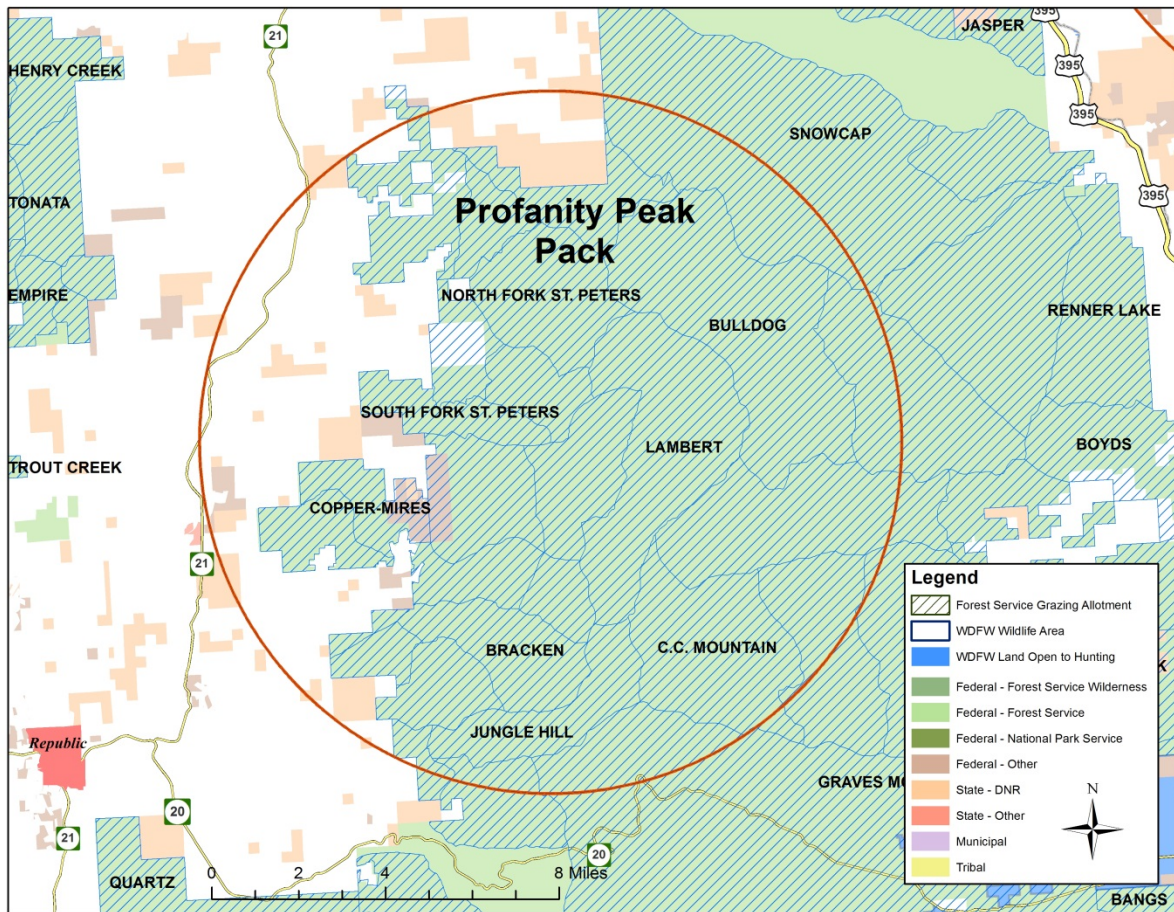
Range rider/human presence:

- Two livestock producers have agreed to cost share this year with Conservation Northwest and WDFW on two allotments.

PROFANITY PEAK

Latest Revision Date: June 29, 2015

1. Pack Location



2. Pack Information

2014 min number of wolves:

- 2014: Pups produced, pack size was 6 members as of Dec 31, 2014
- 2015: Denning and the production of pups likely.

Number of radioed individuals and type of collar:

- Active collar placed on a wolf at the northern extent of this pack's range in May 2015

Summer trapping plans:

- Currently looking for wolf activity in southern area of pack range to trap and deploy additional collars.

General denning area known (yes/no): No

3. Wolf-Livestock Conflict

Pack's conflict history:

- There were three documented depredation incidents involving four cattle in late summer 2014.
- Livestock producers reported that other cattle were killed by wolves, but WDFW could not confirm those attacks.
- Attacks were made on cattle on adjacent lands leased by DNR, but the producer did not report them. WDFW staff viewed photographs of the dead cattle, but could not determine the cause of death.

Knowledge of allotments/producers/grazing practices in area: There are approximately five federal allotments with numerous pastures, one allotment on DNR land, and several private pastures at low elevations. More than 1,000 head of cattle typically graze each summer on the federal allotments.

Outreach with producers (leading up to turn out; plans for check ins throughout summer):

The local Conflict Specialist attended the Ferry County Cattlemen's meeting in late 2014, and has attended the USFS allotment meeting every year since 2010 to explain conflict-avoidance techniques and Department programs available.

Number of Damage Prevention Cooperative Agreements with livestock producers: ; There are no formal agreements at this time.

Number of data sharing agreements with producers/counties: Wolf location data are currently shared with 1 livestock producer and Ferry County Commissioners.

Plans for verbal communication of wolf locations to area producers: Wolf location information will be discussed with producers when available.

Approaches for sanitation: WDFW has removed livestock carcasses from the general area in the past. In addition, we have informed the producers that a free disposal site is available at our Sherman Creek Wildlife Area a few miles east of here.

Range rider/human presence: WDFW is planning to have a range rider patrol Lambert Creek and adjacent allotments, with the producer's permission.

Outreach to producers on WDFW lands: N/A

Other items of interest/awareness:

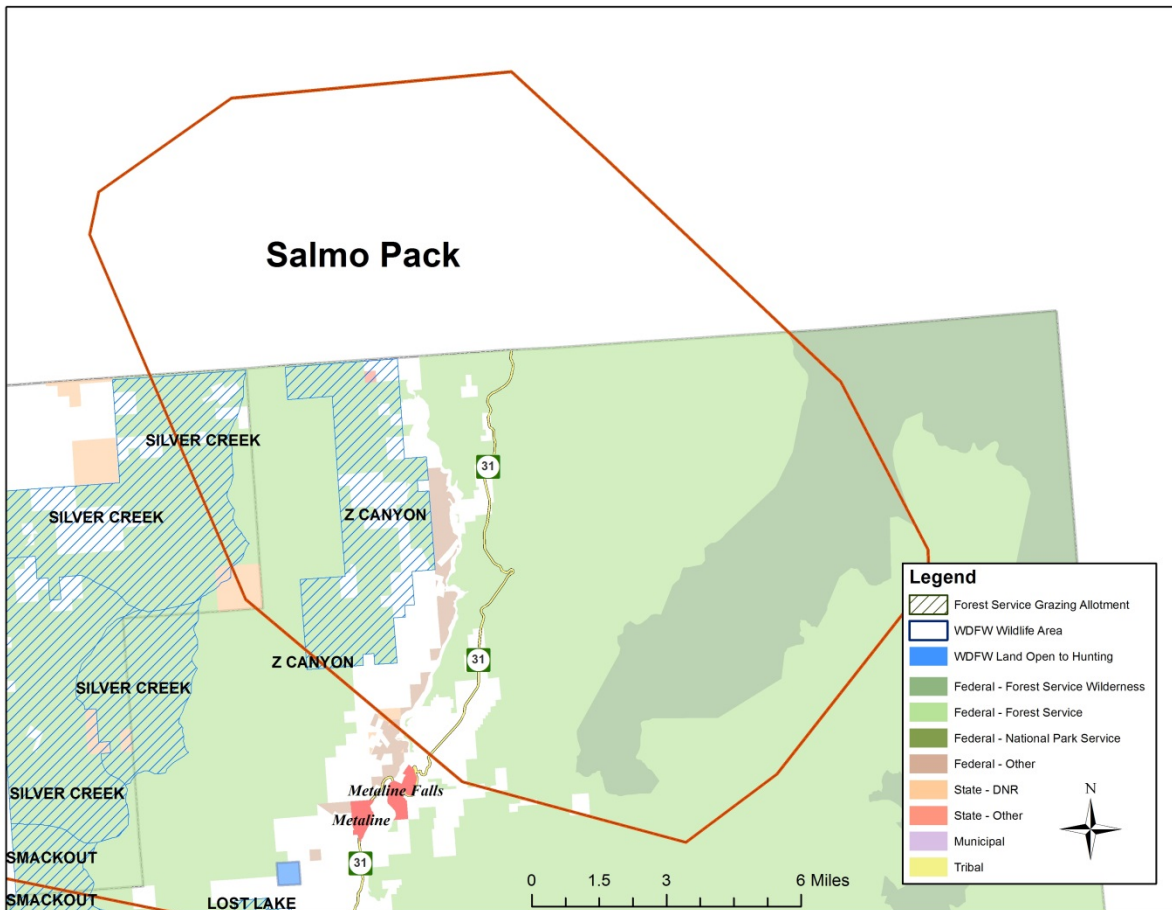
- The Profanity Peak pack is in a relatively roadless area where access is limited. This makes management challenging.

- This pack is located on the north half of the Colville Confederated Tribe's historic reservation and is co-managed by the Tribe and WDFW.

SALMO PACK

Latest Revision Date: June 29, 2015

1. Pack Location



2. Pack Information

2014 minimum number of wolves: Three adults

Number of radioed individuals and type of collar: One Vectronix GPS collar. The GPS is no longer working, but the VHF signal was detected in Feb, 2015

Summer trapping plans: Collaring is not a high priority for this pack, because we do not anticipate much potential conflict with livestock in the immediate future. This is partly because the pack appears to spend an extensive amount of time in British Columbia. If this situation changes, this pack may be scheduled for trapping and collaring.

General denning area known (yes/no): No

3. Wolf-Livestock Conflict

Pack's conflict history: Minimal to none. Pack members were found feeding on a livestock producer's bone pile in 2014, but the landowner addressed that situation.

Knowledge of allotments/producers/grazing practices in area: While there are some small farms with limited numbers of livestock, they have not experienced any problems with wolves. There is one producer with Scottish Highlanders on open range, but he recently indicated he was planning to sell his livestock.

Outreach with producers (leading up to turn out; plans for check ins throughout summer): No current plans, but will be addressed as needed.

Number of Damage Prevention Cooperative Agreements with livestock producers: With no major livestock producers, there has not been any interest in developing a formal agreement. However, we have provided advice to a couple of local landowners with livestock.

Number of data sharing agreements with producers/counties: Pend Oreille County has a data-sharing agreement with the Department, but none are needed with producers at this time.

Plans for verbal communication of wolf locations to area producers: No current plans, but will be addressed as needed.

Approaches for sanitation: Will be addressed when and if necessary.

Range rider/human presence: Not necessary at this time.

Outreach to producers on WDFW lands: Will be conducted as needed.

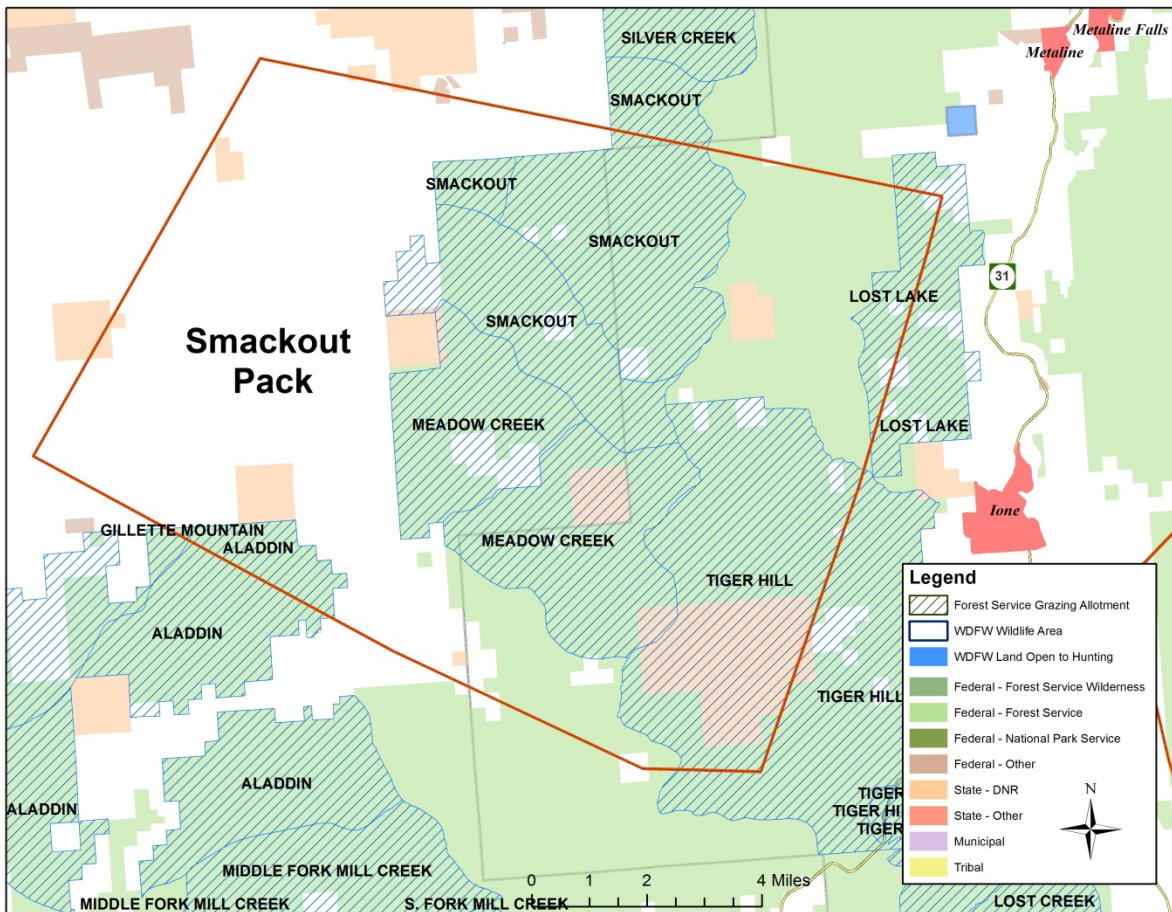
Other items of interest/awareness:

- The Selkirk caribou herd is down to 14 remaining members. Members of the herd sometimes roam into northeast Washington from British Columbia and Idaho, where wolf-control measures are in place to address caribou depredation. Currently, the Salmo Pack does not appear to overlap very much with the caribou, and has not been implicated in depredating on the herd. The priority for placing a better-functioning collar may increase if that situation changes.

SMACKOUT

Latest Revision Date: June 29, 2015

1. Pack Location



2. Pack Information

2014 min number of wolves:

- 2014: Pups produced, pack size was 5 members as of Dec 31, 2014
- 2015: Breeding, denning, and pups likely

Number of radioed individuals and type of collar:

- 2 yearling females (black) captured and equipped with GPS Vectronix WSU study radio-collars deployed on 4/29/2015 and 5/5/15.

Summer trapping plans:

- Trapping began the week of April 27, 2015 and is complete for the summer unless WSU needs others.

General denning area known (yes/no): Yes

3. Wolf-Livestock Conflict

Pack's conflict history: There have been very few depredations reported, although several producers have expressed concerns about higher-than-historic losses. During the summer of 2014, a calf was found dead – possibly killed and certainly scavenged by multiple predators. Scavenging of livestock has occurred over time, but there have been no confirmed wolf depredations.

Knowledge of allotments/producers/grazing practices in area: There are 5-10 federal allotments in the area depending on the delineation of the pack's home range. The livestock in two allotments are managed by a range rider. In addition, WDFW contract range riders will be present during the summer of 2015 in surrounding federal allotments, private timber company lands, and possibly DNR allotments as well. WDFW has extensive history working with producers on public and private lands in the area since 2010. WDFW has also attended USFS allotment meetings every year since 2010 to discuss wolf-livestock conflict prevention and assistance.

Outreach with producers (leading up to turn out; plans for check ins throughout summer): WDFW staff has regular communications with livestock owners in this area. We have provided assistance, advice, fladry, livestock carcass disposal, and hazing assistance during several situations. Communications with this group of livestock owners is continual and outreach efforts are on-going.

Number of Damage Prevention Cooperative Agreements with livestock producers: WDFW has cost-share agreements with four producers under formal WDFW Damage Prevention Cooperative Agreements and a fifth one is being drafted.

Number of data sharing agreements with producers/counties: There are 2 formal agreements in place with livestock producers/range riders and Stevens County has an agreement. Several producers in this area have been asked, but do not want the data.

Plans for verbal communication of wolf locations to area producers: Communications with livestock owners are fairly regular, including verbal communication of wolf locations – especially when wolves are known to be close to livestock operations.

Approaches for sanitation: There has been an extensive history with WDFW staff and/or contractors picking up carcasses or protecting them with fladry since 2011.

Range rider/human presence: A range rider has been managing livestock on two allotments. This year, we have plans to deploy one or more contract range riders on private and federal allotments south of Smackout meadows.

Outreach to producers on WDFW lands: NA

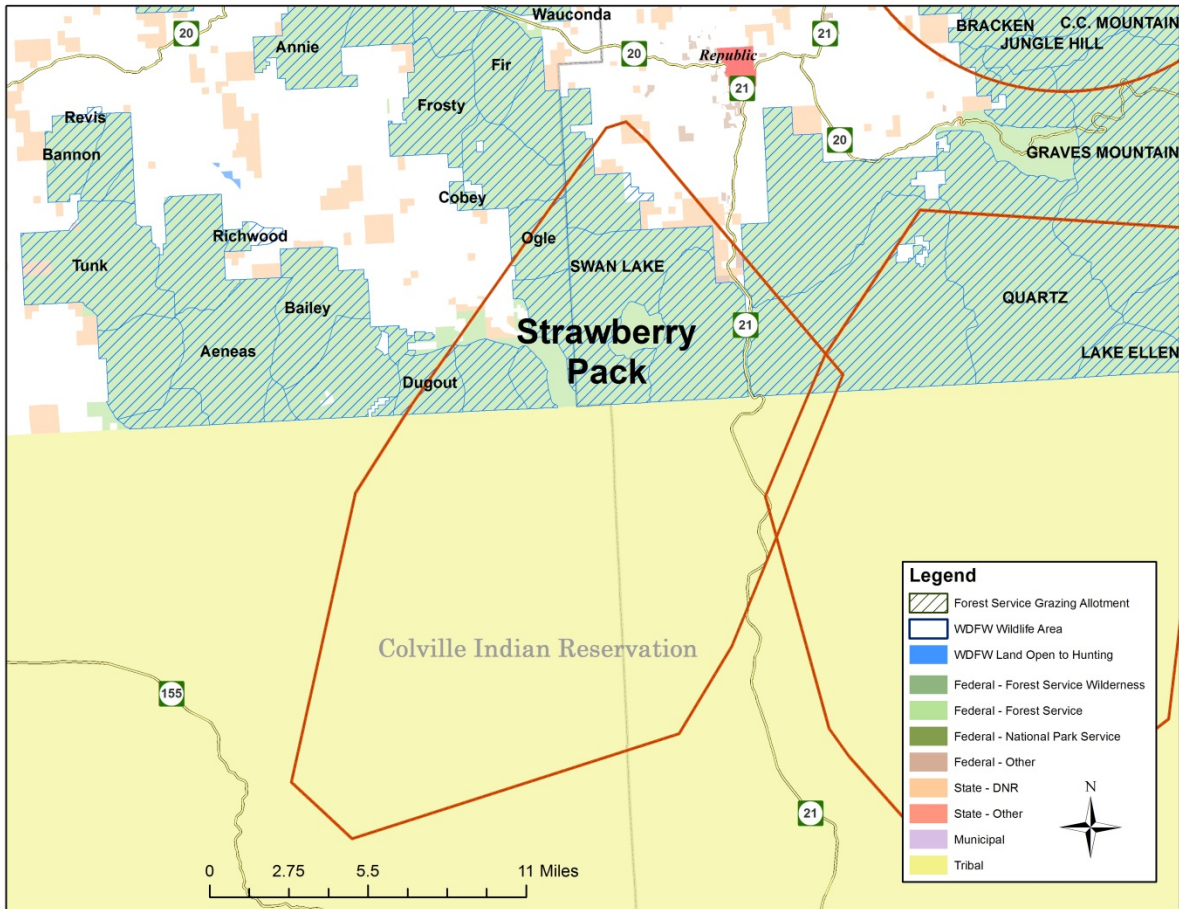
Other items of interest/awareness:

- It is likely that WSU will add the Smackout Pack to its wolf-livestock research project now that wolves have been collared.

STRAWBERRY

Latest Revision Date: June 29, 2015

1. Pack Location



2. Pack Information

2014 min number of wolves: 3 adults

Number of radioed individuals and type of collar: The Colville Confederated Tribes (CCT) maintain collars on this pack.

Summer trapping plans: CCT is planning to trap and collar more individuals in this pack.

General denning area known (yes/no): This pack dens on the CCT reservation.

3. Wolf-Livestock Conflict

Pack's conflict history: The Department is not aware of any reported conflicts in this area.

Knowledge of allotments/producers/grazing practices in area: Limited.

Outreach with producers (leading up to turn out; plans for check ins throughout summer): The local Conflict Specialist attended the Ferry County Cattlemen's meeting in late 2014, and WDFW has attended USFS allotment meeting every year since 2010. In 2015, the Conflict Specialist again focused on conflict avoidance techniques and Department programs available.

Number of Damage Prevention Cooperative Agreements with livestock producers: Because this pack mainly resides on the Colville Reservation, we have not had any contacts regarding an agreement.

Number of data sharing agreements with producers/counties: Same as above.

Plans for verbal communication of wolf locations to area producers: The CCT receives the daily data feeds and provides WDFW with updated home range information on an annual basis. Therefore, the Department does not yet have anything new to communicate to producers.

Approaches for sanitation: The Sherman Creek Compost facility is available, and we cover the importance of sanitation in meetings and discussions with livestock owners.

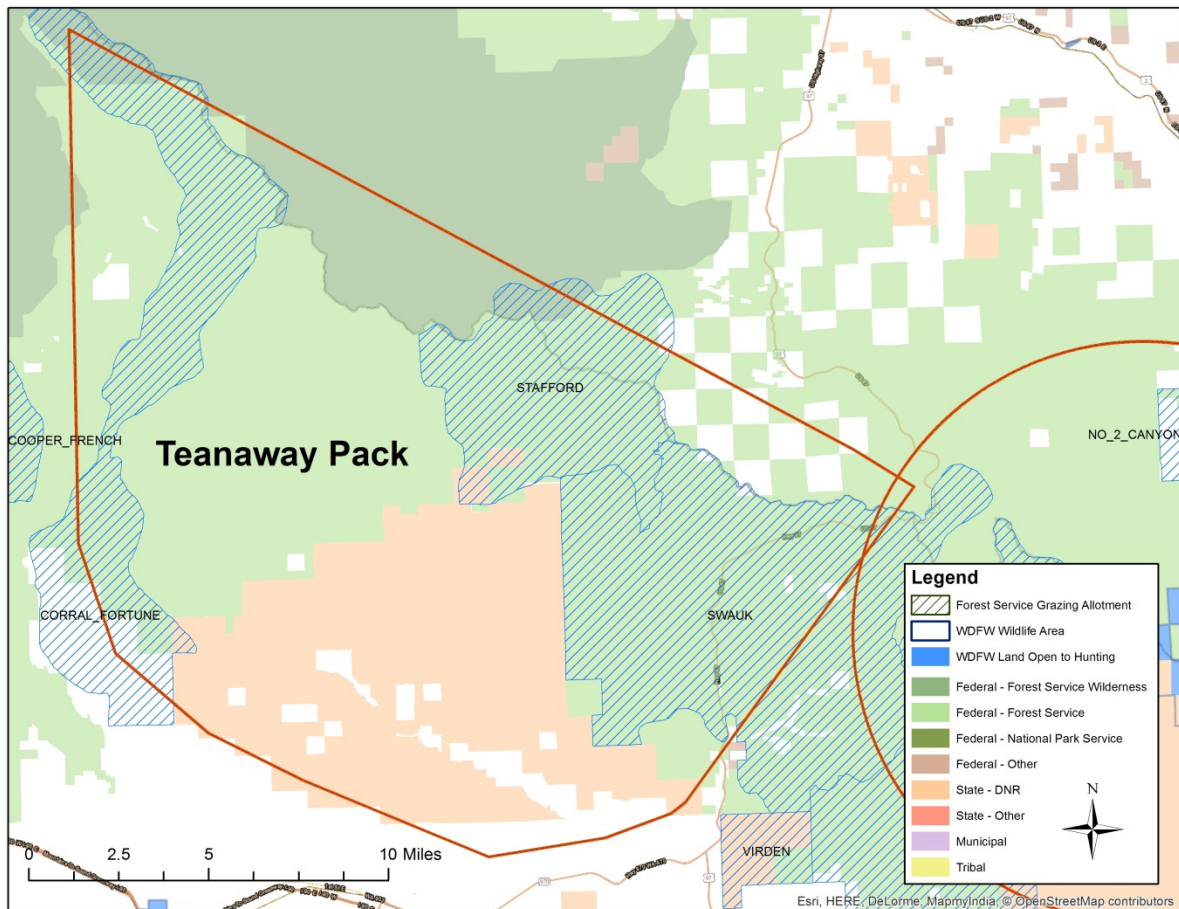
Range rider/human presence: A producer in the area has expressed interest in the possibility of allowing a range rider on his USFS allotment.

Other items of interest/awareness: None.

Teanaway

Latest Revision Date: June 29, 2015

1. Pack Location



2. Pack Information

2014 min number of wolves: WDFW confirmed 4, but there could be as many as 6 based on pup count from last year.

Number of radioed individuals and type of collar: Three, including one male and one female yearling with GPS collars, and the breeding male with a VHF collar.

Summer trapping plans: With three collars, there are no plans for trapping this summer.

General denning area known (yes/no): Yes, based on recent GPS data, the pack appears to be using its historic denning area again this year.

3. Wolf-Livestock Conflict

Pack's conflict history: One interaction left a sheep dog injured on August 24, 2011. No other known conflict incidents.

Knowledge of allotments/producers/grazing practices in area: Most large producers have current Damage Prevention Agreements with WDFW. Some smaller producers who do not graze DNR or USFS allotments do not. Some medium-sized producers have chosen not to enter into agreements at this time. Some hobby farms have agreements, but most do not.

Outreach with producers (leading up to turnout; plans for check ins throughout summer):

- WDFW communicates with producers with WDFW Damage Prevention Agreements whenever new or potential wolf sightings occur in their area.
- Producers with agreements are asked about turnout dates and locations.
- Producers with agreements have daily or weekly check in with range riders and Conflict Specialist.

Number of Damage Prevention Cooperative Agreements with livestock producers: There are currently 4 active agreements, with 4 others pending.

Number of data sharing agreements with producers/counties: One Teanaway producer has a formal data-sharing agreement in place. No county agreement has been requested.

Plans for verbal communication of wolf locations to area producers: Similar to last year, whenever cattle and wolves are together in turnout range. Operators' range riders will be notified by phone when wolf patterns or locations change. Range riders will communicate back to WDFW when cattle use changes.

Approaches for sanitation: Producers are following the guidelines in their agreements.

Range rider/human presence:

- Range riders employed by operators are in place and understand both the grazing areas and the livestock using those areas. They are also in close contact with livestock owners/producers, and have a strong record of preventing wolf and livestock conflicts in the Teanaway and Wenatchee pack areas.
- Agency range riders from 2014 are now under the new contract, and did well last year.

Outreach to producers on WDFW lands: The Teanaway pack does not currently reside on WDFW lands where livestock grazing is authorized. It is likely that dispersing wolves and undocumented packs may use WDFW lands, but grazing plans call for basic wolf conflict prevention measures.

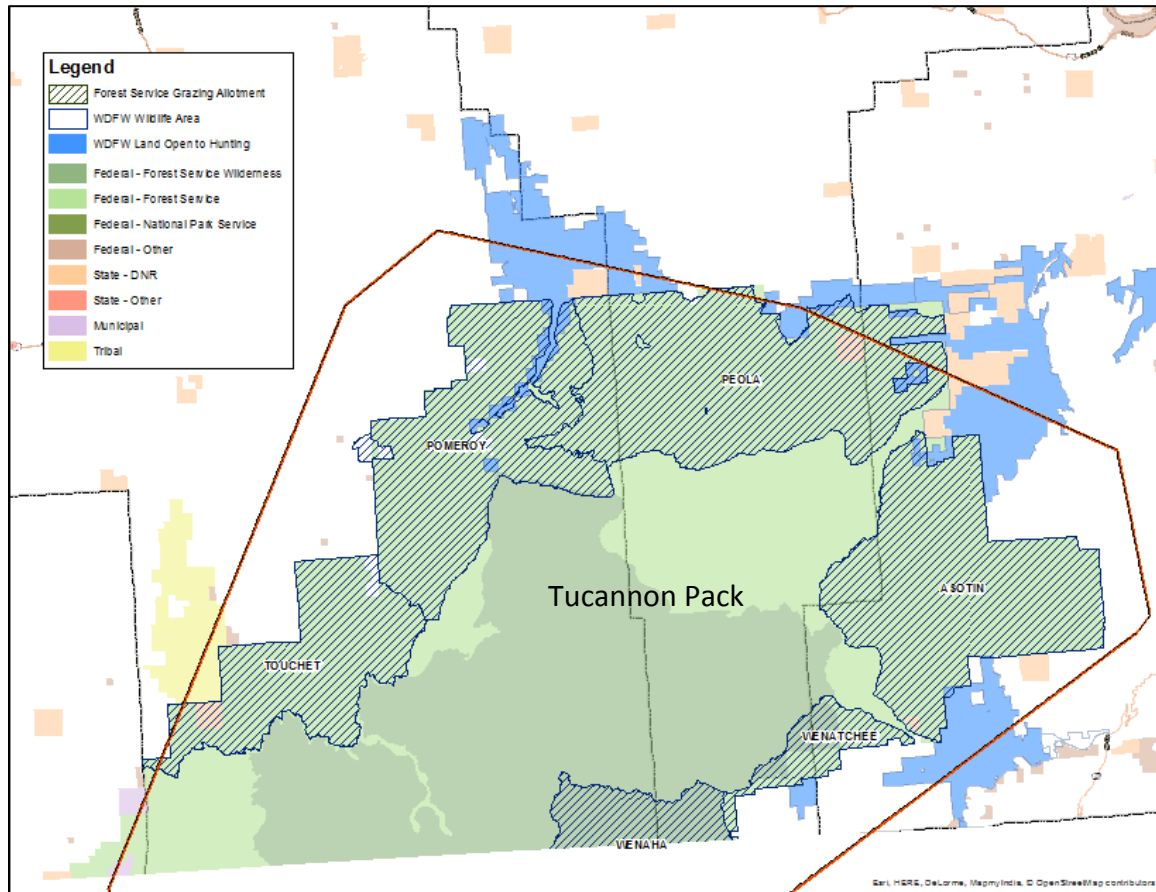
Other items of interest/awareness:

- A GPS-collared alpha female was killed illegally during the fall of 2014.

TUCANNON

Latest Revision Date: June 29, 2015

1. Pack Location



2. Pack Information

2014 min number of wolves: 2 adults

Number of radioed individuals and type of collar: 1 Vectronix VER-T deployed by the Oregon Department of Fish and Wildlife (ODFW). A second collar wolf from Oregon is also travelling in the area, but it's unknown if it's a dispersal event or resident animal at this time.

Summer trapping plans: The collar in this new pack is functioning well. We will attempt to capture and collar other wolves this winter.

General denning area known (yes/no): Not at this time.

3. Wolf-Livestock Conflict

Pack's conflict history: There have been no documented cases of the Tucannon Pack depredating livestock in Washington. However, according to the ODFW website, OR15 came from Oregon's Snake River Pack and has had a collar on it since it was a pup. Before leaving Oregon, OR 15's collar data confirmed that he was involved in both confirmed and probable wolf kills on livestock.

Knowledge of allotments/producers/grazing practices in area: Seven producers have grazing allotments in the Umatilla National Forest. These allotments are split between 17 pasture areas and run from June to October. A total of 1,116 cow/calf pairs will be utilizing these pastures.

Outreach with producers (leading up to turn out; plans for check ins throughout summer): Blue Mountain Conflict Staff have already been in touch with producers who may have livestock in an area occupied by wolves starting in June, when the grazing allotments begin. Starting June 1, three of these producers will be able to view the collar data because they have signed a Sensitive Sharing Agreement with WDFW.

Number of Damage Prevention Cooperative Agreements with livestock producers: There are 16 total agreements throughout the Blue Mountains and 7 are within this pack's current home range.

Number of data sharing agreements with producers/counties: There are currently 3 signed sensitive sharing agreements for collar data beginning June 1.

Plans for verbal communication of wolf locations to area producers: Conflict Staff plan to check the collar data site regularly and update the producer when wolves are in their area.

Approaches for sanitation: Carcasses are to be removed by lime, burial, or hauling away depending on the location.

Range rider/human presence: All 16 agreements include extended Range Rider presence.

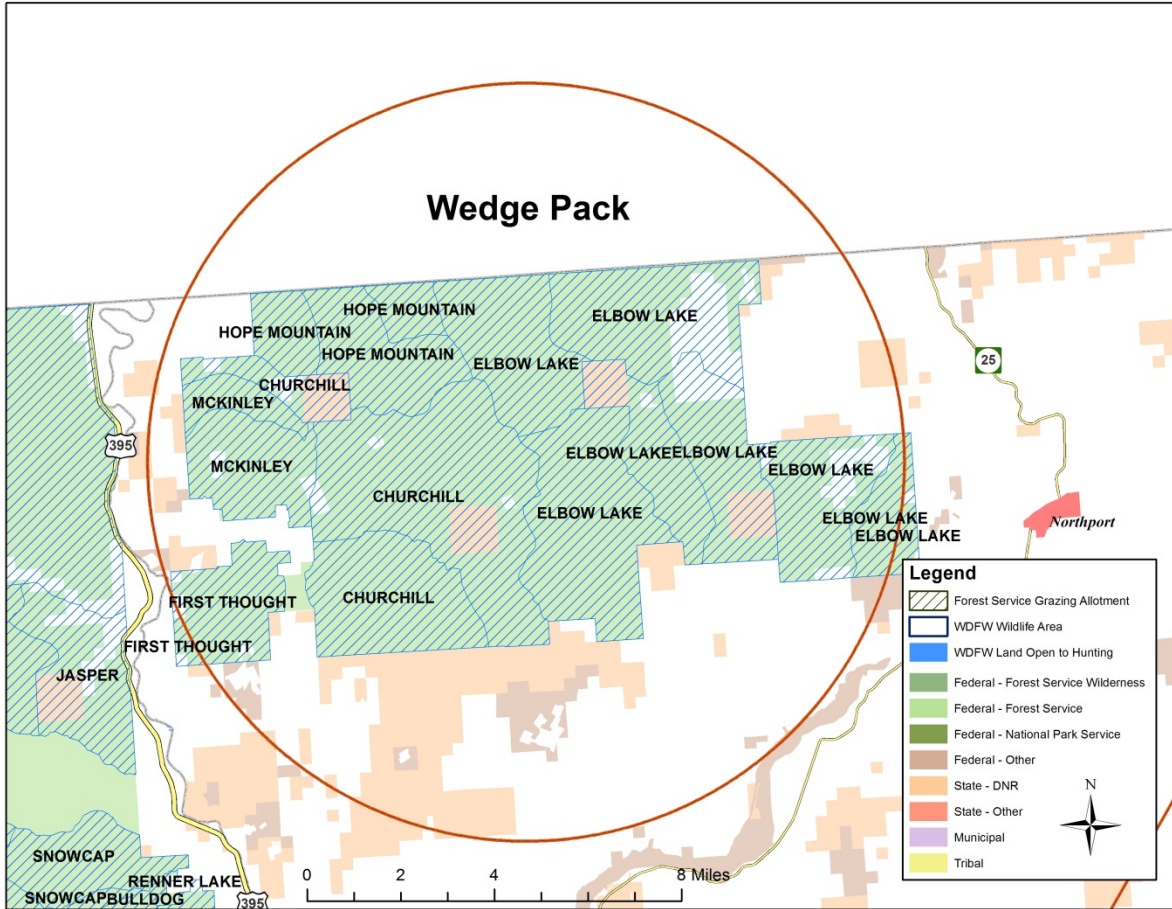
Outreach to producers on WDFW lands: Communications with producers grazing on WDFW wildlife areas are ongoing. Grazing plans are being developed or modified to require preventative measures for wolf conflict avoidance.

Other items of interest/awareness: Several collared wolves from Oregon were documented spending some time in Washington in 2014.

WEDGE

Latest Revision Date: June 29, 2015

1. Pack Location



2. Pack Information

2014 min number of wolves: 2 adults

Number of radioed individuals and type of collar: None

Summer trapping plans: We will attempt to trap and collar members of this pack when we receive information about recent localized activity.

General denning area known (yes/no): No

3. Wolf-Livestock Conflict

Pack's conflict history: One confirmed depredation in 2013 on private land and others suspected. There were numerous confirmed depredations in 2012 on the west side of the Wedge that resulted in lethal action in which WDFW killed seven wolves. There were also depredations suspected on the east side of the Wedge, where a producer reported a large number of cattle missing.

Knowledge of allotments/producers/grazing practices in area: Because of the depredation events in the past, the Department knows most of the allotment holders, the number of livestock they graze, and their grazing/operational practices. There are three producers who lease federal allotments and several others on private pastures in the vicinity.

Outreach with producers (leading up to turn out; plans for check ins throughout summer): WDFW has attended U.S. Forest Service allotment meetings every year since 2010 and did again this year to explain conflict avoidance techniques and Department programs available. WDFW staff has regular communication with livestock owners in this area. We have provided fladry and hazing materials in local situations where wolves have been heard or seen. We have also made recommendations on prevention measures and discussed wolf biology with local livestock owners. Outreach efforts are ongoing.

Number of Damage Prevention Cooperative Agreements with livestock producers: There is one new Damage Prevention Agreement on the east side of the Wedge with a public allotment holder.

Number of data sharing agreements with producers/counties: Because we do not have a collared wolf in this pack, there are no current data sharing agreements with producers. Steven's County has an agreement and is able to monitor all wolf packs in the county.

Plans for verbal communication of wolf locations to area producers: Yes, livestock producers have expressed interest in receiving location information when available.

Approaches for sanitation: We cover the importance of sanitation in meetings and discussions with livestock owners. The Sherman Creek Compost facility is up and running, along with area Department of Transportation dumpsites, and the county facility is available for a fee.

Range rider/human presence: WDFW has had a contract wolf-related range rider in the Wedge in the past and will make them available again in 2015.

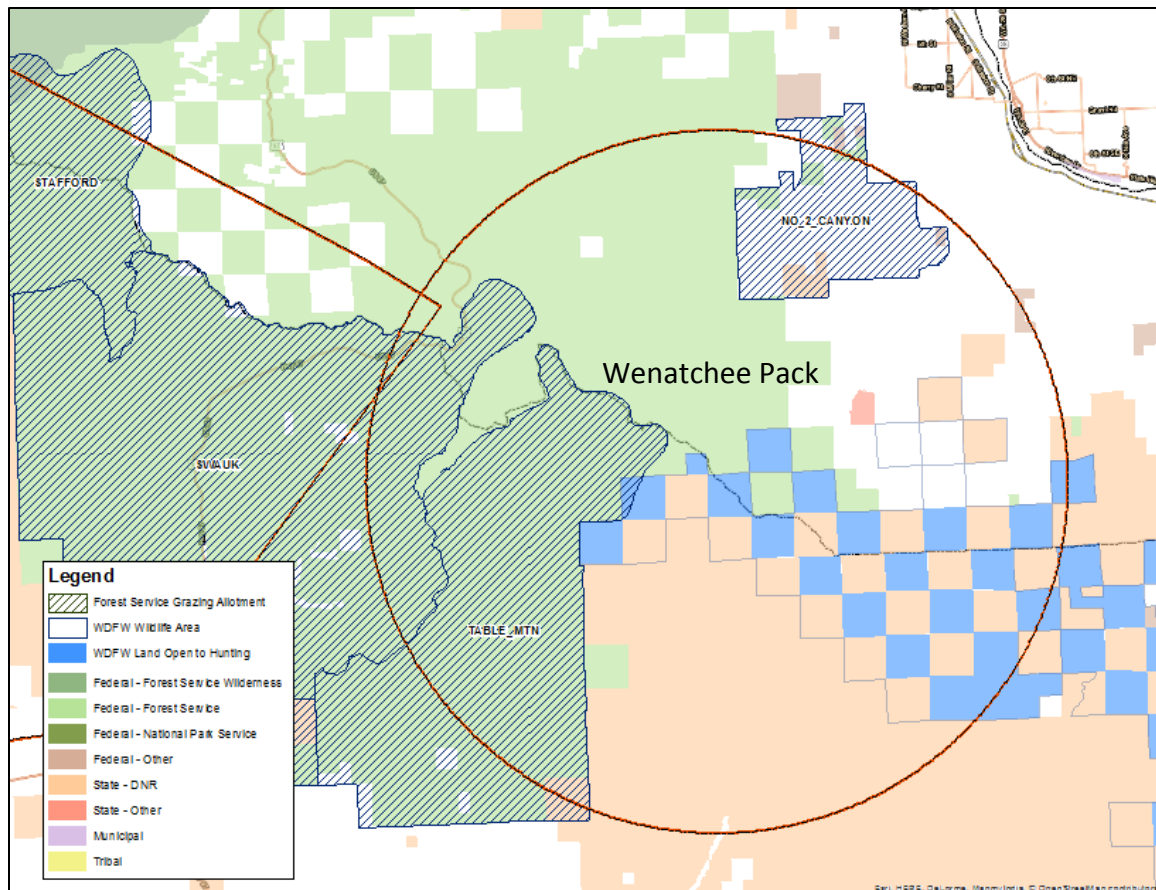
Other items of interest/awareness:

- The Wedge continues to receive a relatively high amount of media and political interest based largely on the pack's history of depredation rather than current wolf activity.
- Grizzly bears are present periodically in the area, which makes wolf management and trapping more challenging.
- This pack is within the Colville Confederated Tribes North Half, so the wolves are co-managed with them.

Wenatchee

Latest Revision Date: June 29, 2015

1. Pack Location



2. Pack Information

2014 min number of wolves: Confirmation of this pack has been challenging over the past year. Reports vary from two wolves observed traveling together in Naneum area to four sets of tracks seen last winter.

Number of radioed individuals and type of collar: None.

Summer trapping plans: WDFW may attempt to trap and collar a member of the pack if an area can be found that is highly used by wolves.

General denning area known (yes/no): No.

3. Wolf-Livestock Conflict

Pack's conflict history: No depredations or greater-than-normal losses of livestock have been reported.

Knowledge of allotments/producers/grazing practices in area: Most large producers have current Damage Prevention Agreements, while some smaller producers who do not graze DNR or USFS allotments do not. Some medium-sized producers and hobby farms have entered into agreements, but most have not.

Outreach with producers (leading up to turnout; plans for check ins throughout summer):

- WDFW communicates with producers with Damage Prevention Agreements when new or potential wolf sightings occur in their area.
- Producers with agreements are asked about turnout dates and locations.
- Producers with agreements have daily or weekly check in with range riders and Conflict Specialist.

Number of Damage Prevention Cooperative Agreements with livestock producers: N/A. Pack territory undefined.

Plans for verbal communication of wolf locations to area producers: Communicate as appropriate, verified wolf sightings. No collared wolves in Wenatchee Pack.

Number of data sharing agreements with producers/counties: N/A.

Approaches for sanitation: Follow agreement guidelines.

Range rider/human presence: N/A.

Outreach to producers on WDFW lands:

- WDFW communicates with producers with Damage Prevention Agreements when new or potential wolf sightings occur in their area.
- Producers with agreements are asked about turnout dates and locations.
- Producers with agreements have daily or weekly check in with range riders and Conflict Specialist.